TOWNSHIP of HOPEWELL

MERCER COUNTY

201 WASHINGTON CROSSING – PENNINGTON ROAD
TITUSVILLE, NEW JERSEY 08560-1410

PROJECT / APPLICATION

BLOCK: 93

LOT: 19, 20, 45.01, 46, p/o 60

ADDRESS: 61 NURSERY RD., SCOTCH RD., NURSERY RD., NURSERY RD., 137 NURSERY RD.

PROJECT NAME: MAJOR SUBDIVISION, PRELIMINARY/FINAL AND SITE PLAN, PRELIMINARY/FINAL (VENUE AT HOPEWELL)

SWM Submitted 12/18/24

STORMWATER MANAGEMENT REPORT

VENUE AT HOPEWELL

BLOCK 93, LOTS 19, 20, 45.01, 46 & 60
TOWNSHIP OF HOPEWELL, MERCER COUNTY, NEW JERSEY
BCG# 081391-01-001

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STORMWATER MANAGEMENT REPORT
VENUE AT HOPEWELL
Township of Hopewell
Mercer County, New Jersey

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I. INTRODUCTION

This report has been prepared to describe and document (through engineering calculations and related technical data) the stormwater management system designed for a project known as Venue at Hopewell, which is proposed by Deer Valley Realty, Inc, upon Lots 19, 20, 45.01, 46 & 60 of Block 93 in the Township of Hopewell, Mercer County, New Jersey. This report accompanies a set of drawings entitled "Preliminary and Final Major Subdivision & Preliminary and Final Site Plan for Venue at Hopewell" which were prepared by Bowman Consulting Group, Ltd.; dated June 25, 2024. The set of Preliminary and Final Major Subdivision & Preliminary and Final Site Plans illustrate the existing and proposed conditions upon the subject property, as well as provide details for the various stormwater management facilities described herein. Therefore, this report should be reviewed and considered in conjunction with the above referenced Site Plans.

A. Location and Description of Project Site

The subject property is known on the Township of Hopewell tax map as Block 93, Lots 19, 20, 45.01, 46 & 60, consisting of approximately 185.51 acres in total. The property fronts Nursery Road to the south and Scotch Road to the east with a combination of residential, farmland and undeveloped properties to the south and west.

With respect to soil conditions on the project site, the *NRCS Soil Survey for Mercer County, New Jersey* identifies many types of soils within the project limits. The NRCS Soils Resource Report is included in Appendix 1 of this report. The onsite soils identified were used in the hydrologic and hydraulic modeling for this report.

B. Project Description

The Venue at Hopewell project will include site improvements for the construction of 272 single-family home units, 118 duplex units, 120 COAH Affordable Housing units, and 90 MF-10 Affordable Housing units, for a total of 600 units at the subject property. The proposed project will have corresponding improvements including but not limited to, roads, parking lots, roundabouts, stormwater basins, lighting, utility, landscaping, tennis courts, pickleball courts, a playground, bocce courts, dog parks, and a clubhouse facility. Approximately 128.74 acres of the 185.51-acre tract will be disturbed for the proposed improvement associated with the project.

II. OVERVIEW OF REGULATORY REQUIREMENTS

The storm water management system for the proposed Venue at Hopewell project has been designed to comply with current regulatory requirements and standards. The applicable regulations and standards are as follows:

- The State of New Jersey's "Stormwater Management Rules", as set forth at NJAC 7:8
- Section 17-82 – Stormwater Control of the Township's Ordinances.
- The Stormwater Management requirements of the County of Mercer
- The "Residential Site Improvement Standards" (NJAC 5:21), hereinafter referred to as the "RSIS;" and
- The "Standards for Soil Erosion and Sediment Control in New Jersey"

Compliance with each of the above-referenced standards necessitates the preparation of a storm water management plan and design that addresses multiple considerations with respect to post-development storm water runoff. These considerations are as follows:

- Use of Non-Structural Strategies to the maximum extent practicable
- Maintenance of average annual groundwater recharge volume
- Compliance with applicable Water Quality Management Standards
- "Quantity Control," achieved through peak flow attenuation
- Minimization of erosion and sedimentation
- Assuring effective operation and maintenance for the system

The remainder of this report will detail the manner in which the project's stormwater management design has addressed each of the above considerations, except for the requirements relevant to maintenance. The maintenance requirements will be addressed in a separate document entitled "Stormwater Management System Operations & Maintenance Manual for Venue at Hopewell; Block 93, Lots 19, 20, 45.01, 46 & 60, Township of Hopewell, Mercer County, New Jersey." However, the Maintenance Manual has not been prepared at this time, pending review and approval of the system's design.

The Appendices of this report contain engineering calculations and related technical documentation supporting the project's design as described herein.

III. METHODOLOGIES

This section of this report describes the engineering methodologies employed for the design of the project's storm water management system. All of the methods are specifically referenced in the applicable regulations and/or in one or more of the "References" listed in Section VIII of this report. Most of the methods are specified and/or detailed in *The New Jersey Stormwater Best Management Practices Manual*, hereinafter referred to as "the BMP Manual." Specifically, the various methods used in the preparation of the project's plans and stormwater management design to address each of the multiple considerations described above were as follows:

A. Estimates of Runoff Rates and Volumes

1. Pre-Development versus Post-Development

   The hydrologic estimates and modeling conducted for the design of the storm water management system utilized the "NRCS Methodology" which is specifically referenced for such applications in the BMP Manual. Storm frequencies of 2, 10 and 100-years were modeled, as required to demonstrate compliance with the "quantity control" provisions of the subject Rules. The models were created using the NOAA Type C, 24-hour rainfall. According to data published by the State Office of the Natural Resources Conservation Service the 24-hour rainfall depths for Mercer County for the three existing and future storm frequencies modeled are as follows:

   - 2-year = 3.35 inches
   - 10-year = 5.10 inches
   - 100-year = 8.59 inches

2. Runoff Coefficients and Times of Concentration

   All of the soils within the development area are included in Appendix 1 of this report.

   In addition to CN values, the above referenced NRCS Methodology for estimating stormwater runoff rates also necessitates the determination of a time of concentration for each subwatershed/drainage area.

3. Weighted Average Volume Technique

   As stated in the BMP Manual, variations in cover conditions are not always accurately reflected by calculating a weighted CN value for the entire subwatershed. Rather, a procedure termed the "weighted average volume technique" was presented and recommended in the BMP Manual for such subwatershed areas. Therefore, runoff estimates for the subwatershed areas with directly connected impervious surface considered in the design of the project's stormwater management system utilized the weighted average volume technique. In such cases, two hydrographs (one representing the

impervious area within the area and the other representing the remaining area) were developed for the subwatershed. The hydrograph representing the impervious area was given the suffix "I" for identification, while the hydrograph representing the remainder of the subwatershed area was given the suffix "P".

B. Water Quality Management

Pursuant to applicable standards and regulations, this design consideration was based on the "Water Quality Design Storm" as specified in the BMP manual. Specifically, the storm is based upon a 1.25 inch rainfall event over the course of two hours as specified in Figure 5-2 of the BMP Manual.

C. Ground Water Recharge

Groundwater recharge standards and requirements apply to the proposed improvements associated with the project site and are satisfied by either:

1. Demonstrating through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100 percent of the average annual pre-construction groundwater recharge volume for the site; or

2. Demonstrating through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from pre-construction to post-construction for the projected two-year storm, as defined and determined pursuant to N.J.A.C. 7:8-5.7(d), is infiltrated.

Refer to the Tables and Appendices for details.

D. Erosion and Sedimentation Control

Another key consideration in the development of the project is the minimization of erosion and sedimentation. The greatest potential for erosion and sedimentation will occur during construction, when areas of exposed soils temporarily exist. The "Soil Erosion and Sediment Control Plan," which is included in the set of Site Plans referenced above specifies numerous proven measures for controlling erosion and sedimentation during construction.

This plan is subject to the review and certification by the Mercer County Soil Conservation District.

IV. EXISTING SITE CONDITIONS AND STORMWATER RUNOFF ESTIMATES

This section of this report describes the hydrologic modeling conducted to estimate peak runoff rates and total runoff volumes from the project site under existing conditions. Sheet 1 of 2 contained in **Appendix 4** of this report is an "Existing Conditions" Drainage Area Map prepared for the hydrologic assessment of stormwater runoff from the project site under existing conditions. As illustrated on Sheet 1 of 2, the drainage area was divided

into six watersheds flowing to three separate design points. The area of study includes 249.69 acres.

Design Point 1 is the total existing drainage area that flows to Ewing Creek, which consists of Drainage Area XDA-1 and Drainage Area XDA-2.

Drainage Area XDA-1 encompasses 91.57 acres of land. The area includes 86.99 acres of open space/woods/row crops and 4.58 acres of impervious area. Runoff from this area flows to Ewing Creek.

Drainage Area XDA-2 encompasses 35.20 acres of land, which is all considered to be row crops. Runoff from this area flows to Ewing Creek.

Design Point 2 is the total existing drainage area that flows to Jacobs Creek, which consists of Drainage Area XDA-3 and Drainage Area XDA-4.

Drainage Area XDA-3 encompasses 22.13 acres of land, which is all considered to be woods/row crops. Runoff from this area flows to Jacobs Creek.

Drainage Area XDA-4 encompasses 34.95 acres of land, which is all considered to be woods/row crops. Runoff from this area flows to Jacobs Creek.

Design Point 3 is the total existing drainage area that flows to Woolsey Creek, which consists of Drainage Area XDA-5 and Drainage Area XDA-6.

Drainage Area XDA-5 encompasses 8.76 acres of land, which is all considered to be row crops. Runoff from this area flows to Woolsey Creek.

Drainage Area XDA-6 encompasses 57.08 acres of land. The area includes 56.32 acres of woods/row crops and 0.76 acres of impervious area. Runoff from this area flows to Woolsey Creek.

The path used to estimate the time of concentration for each subwatershed is also illustrated on the subject Drainage Area Map. The calculations for the time of concentration, weighted CN value and peak runoff rates under existing conditions are provided in **Appendix 2.**

The peak rates of runoff for each of the storms studied are summarized in Table No. 1 below.

TABLE NO. 1						
SUMMARY OF EXISTING RUNOFF CONDITIONS						
Drainage Area No.	**Area (Acres)**	**Runoff Curve No.**	**Time of Concentration (Min)**	**Q2 (cfs)**	**Q10 (cfs)**	**Q100 (cfs)**
X-1I	4.58	98	8.9	14.33	21.72	36.01
X-1P	61.77	66	8.9	43.20	120.33	301.76
X-1S	25.22	68	8.9	21.06	53.99	129.91
XDA-1 (subtotal)	**91.57**	**-**	**-**	**78.74**	**195.90**	**467.60**
X-2P	35.20	77	10.4	49.35	100.88	208.47
XDA-2 (subtotal)	**35.20**	**-**	**-**	**49.35**	**100.88**	**208.47**
X-3P	22.13	76	2.6	40.04	82.34	170.78
XDA-3 (subtotal)	**22.13**	**-**	**-**	**40.04**	**82.34**	**170.78**
X-4P	30.2	67	9.8	22.42	59.34	146.16
X-6S	4.75	60	9.8	1.64	6.36	18.54
XDA-4 (subtotal)	**34.95**	**-**	**-**	**24.03**	**65.69**	**164.75**
X-5P	8.76	75	8.8	11.70	24.91	53.03
XDA-5 (subtotal)	**8.76**	**-**	**-**	**11.70**	**24.91**	**53.03**
X-6I	0.76	98	8.9	2.38	3.60	5.97
X-6P	56.32	70	8.9	54.60	131.57	304.79
XDA-6 (subtotal)	**57.08**	**-**	**-**	**56.94**	**135.16**	**310.75**

The total runoff to each design point is summarized in table 2 below.

TABLE NO. 2 TOTAL RUNOFF TO EACH DESIGN POINT						
Storm Freq.	**Design Point 1**	**Design Point 2**	**Design Point 3**	**Design Point 4**	**Design Point 5**	**Design Point 6**
	Peak Runoff	Peak Runoff	Peak Runoff	Peak Runoff	Peak Runoff	Peak Runoff
2	80.58 cfs	50.22 cfs	40.75 cfs	24.68 cfs	11.91 cfs	58.20 cfs
10	201.26 cfs	103.12 cfs	84.19 cfs	67.61 cfs	25.49 cfs	138.68 cfs
100	483.45 cfs	214.50 cfs	175.74 cfs	170.56 cfs	54.62 cfs	320.86 cfs

DESCRIPTION OF PROPOSED CONDITIONS

This section of this report describes the hydrologic modeling conducted to estimate peak runoff rates and total runoff volumes from the project site under proposed conditions. Sheet 2 of 2 contained in **Appendix 4** of this report is a "Proposed Conditions" Drainage Area Map prepared for the hydrologic assessment of stormwater runoff from the project site under proposed conditions. As illustrated on Sheet 2 of 2, the drainage area was divided into six watersheds flowing to six design points, each corresponding to a drainage area. The area of study includes 249.69 acres.

Drainage Area PDA-1 encompasses approximately 90.35 acres of land. The area is comprised of the drainage areas that discharge to bioretention basins B-1 through B-17, and undisturbed areas. Runoff from this area flows to Ewing Creek.

Drainage Area PDA-2 encompasses approximately 33.93 acres of land. The area is comprised of the drainage areas that discharge to bioretention basins B-18 through B-28, and undisturbed areas. Runoff from this area flows to Ewing Creek.

Drainage Area PDA-3 encompasses approximately 29.62 acres of land. The area is comprised of the drainage areas that discharge to bioretention basins B-29 through B-40, and undisturbed areas. Runoff from this area flows to Jacobs Creek.

Drainage Area PDA-4 encompasses approximately 24.35 acres of land. The area is comprised of the drainage areas that discharge to bioretention basins B-41 through B-47, and undisturbed areas. Runoff from this area flows to Jacobs Creek.

Drainage Area PDA-5 encompasses approximately 7.27 acres of land. The area is comprised of the drainage areas that discharge to bioretention basins B-48 through B-50, and undisturbed areas. Runoff from this area flows to Woolsey Creek.

Drainage Area PDA-6 encompasses approximately 56.17 acres of land. The area is comprised of the drainage areas that discharge to bioretention basins B-51 through B-58, and undisturbed areas. Runoff from this area flows to Woolsey Creek.

The calculations for the time of concentration, weighted CN value and peak runoff rates under proposed conditions are provided in **Appendix 3.** The peak rates of runoff for each of the storms studied are summarized in Table No. 5 below.

Drainage Area No.	Area (Acres)	Runoff Curve No.	Current Q2 (cfs)	Future Q2 (cfs)	Current Q10 (cfs)	Future Q10 (cfs)	Current Q100 (cfs)	Future Q100 (cfs)
PDA-1 (subtotal)	**90.348**	**-**	**72.12**	**95.66**	**161.70**	**210.89**	**422.64**	**631.79**
PDA-2 (subtotal)	**33.934**	**-**	**17.28**	**22.79**	**41.09**	**70.83**	**171.00**	**228.71**
PDA-3 (subtotal)	**29.619**	**-**	**13.68**	**17.37**	**38.02**	**61.39**	**136.86**	**185.39**
PDA-4 (subtotal)	**24.349**	**-**	**12.13**	**16.11**	**32.84**	**49.25**	**97.97**	**144.50**
PDA-5 (subtotal)	**7.273**	**-**	**0.99**	**1.33**	**3.27**	**6.18**	**23.23**	**37.99**
PDA-6 (subtotal)	**53.011**	**-**	**52.14**	**69.79**	**118.10**	**151.05**	**279.61**	**390.25**

V. DESCRIPTION OF PROPOSED STORMWATER MANAGEMENT FACILITIES

As illustrated on the accompanying set of Site Plans, there are fifty-eight (58) proposed bioretention basins. Calculations for each bioretention basin are provided in **Appendix 3**.

Proposed Bioretention Basin 1 (B-1) Table No. 4 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 4
PERFORMANCE SUMMARY FOR
PROPOSED BIORETENTION BASIN 1 (B-1)

Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	3.25	0.07	209.48’	0.112	98%
2 future	4.25	0.10	209.66’	0.176	98%
10 current	6.94	0.98	209.83’	0.374	86%
10 future	8.63	2.09	209.95’	0.502	76%

100 current	15.09	8.34	210.42’	1.001	45%
100 future	21.41	12.74	210.79’	1.507	40%

Proposed Bioretention Basin 2 (B-2) Table No. 5 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 5
PERFORMANCE SUMMARY FOR
PROPOSED BIORETENTION BASIN 2 (B-2)

Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	3.74	0.23	209.77’	0.224	94%
2 future	4.53	0.28	209.99’	0.287	94%
10 current	6.61	1.69	210.22’	0.455	74%
10 future	7.89	3.01	210.35’	0.559	62%
100 current	12.67	8.36	210.74’	0.953	34%
100 future	17.32	12.63	210.99’	1.344	27%

Proposed Bioretention Basin 3 (B-3) Table No. 6 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 6
PERFORMANCE SUMMARY FOR
PROPOSED BIORETENTION BASIN 3 (B-3)

Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.79	0.07	214.30’	0.106	99%
2 future	7.03	0.10	214.49’	0.183	99%
10 current	10.26	0.95	214.66’	0.441	91%
10 future	12.25	2.05	214.78’	0.603	83%
100 current	19.69	8.66	215.27’	1.217	56%
100 future	26.93	12.88	215.69’	1.826	52%

Proposed Bioretention Basin 4 (B-4) Table No. 7 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 7 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 4 (B-4)					
Storm Freq.	**Peak Inflow (cfs)**	**Peak Outflow (cfs)**	**Peak Storage**		**Attenuation**
			Elevation	**Volume (af)**	
2 current	4.54	0.15	201.06’	0.266	97%
2 future	5.68	0.18	201.37’	0.330	97%
10 current	8.68	1.66	201.61’	0.552	81%
10 future	10.55	3.25	201.76’	0.696	69%
100 current	17.57	11.03	202.29’	1.256	37%
100 future	24.43	15.40	202.67’	1.819	37%

Proposed Bioretention Basin 5 (B-5) Table No. 8 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 8 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 5 (B-5)					
Storm Freq.	**Peak Inflow (cfs)**	**Peak Outflow (cfs)**	**Peak Storage**		**Attenuation**
			Elevation	**Volume (af)**	
2 current	2.61	0.09	200.21’	0.144	97%
2 future	3.22	0.11	200.34’	0.183	97%
10 current	4.79	0.71	200.47’	0.303	85%
10 future	5.76	1.35	200.56’	0.379	76%
100 current	9.40	4.59	200.84’	0.673	51%
100 future	12.96	7.73	201.06’	0.969	40%

Proposed Bioretention Basin 6 (B-6) Table No. 9 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 9 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 6 (B-6)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	2.71	0.13	199.87’	0.156	95%
2 future	3.23	0.15	200.09’	0.198	95%
10 current	4.56	1.15	200.28’	0.308	75%
10 future	5.38	2.13	200.38’	0.376	60%
100 current	8.42	6.08	200.70’	0.631	28%
100 future	11.37	8.89	200.88’	0.884	22%

Proposed Bioretention Basin 7 (B-7) Table No. 10 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 10 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 7 (B-7)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	3.68	0.12	207.80’	0.194	97%
2 future	4.37	0.14	207.98’	0.241	97%
10 current	6.13	1.05	208.16’	0.383	83%
10 future	7.21	1.98	208.26’	0.471	73%
100 current	11.19	6.35	208.61’	0.806	43%
100 future	15.05	9.20	208.85’	1.139	39%

Proposed Bioretention Basin 8 (B-8) Table No. 11 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 11 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 8 (B-8)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.81	0.12	179.61’	0.233	97%
2 future	5.90	0.14	179.82’	0.283	98%
10 current	8.72	1.13	180.01’	0.496	87%
10 future	10.46	2.26	180.13’	0.635	78%
100 current	17.00	8.19	180.57’	1.166	52%
100 future	23.37	14.37	180.92’	1.697	38%

Proposed Bioretention Basin 9 (B-9) Table No. 12 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 12 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 9 (B-9)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	3.26	0.10	179.45’	0.170	97%
2 future	3.91	0.12	179.60’	0.213	97%
10 current	5.59	0.87	179.76’	0.345	84%
10 future	6.63	1.65	179.85’	0.429	75%
100 current	10.46	5.48	180.17’	0.748	48%
100 future	14.20	10.40	180.37’	1.065	27%

Proposed Bioretention Basin 10 (B-10) Table No. 13 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 13 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 10 (B-10)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	3.75	0.17	180.65’	0.221	96%
2 future	4.48	0.19	180.98’	0.279	96%
10 current	6.36	1.68	181.22’	0.433	74%
10 future	7.51	3.17	181.37’	0.528	58%
100 current	11.79	8.93	181.77’	0.885	24%
100 future	15.93	14.71	181.95’	1.239	8%

Proposed Bioretention Basin 11 (B-11) Table No. 14 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 14 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 11 (B-11)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.93	0.19	181.90’	0.300	96%
2 future	6.06	0.22	182.35’	0.376	96%
10 current	9.02	2.23	182.64’	0.602	75%
10 future	10.85	4.35	182.82’	0.745	60%
100 current	17.70	13.25	183.38’	1.298	25%
100 future	24.38	15.07	183.90’	1.854	38%

Proposed Bioretention Basin 12 (B-12) Table No. 15 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 15 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 12 (B-12)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.92	1.08	202.60’	0.291	78%
2 future	5.81	1.31	202.86’	0.367	77%
10 current	8.07	4.02	203.20’	0.560	50%
10 future	9.45	5.80	203.34’	0.677	39%
100 current	14.54	11.31	203.70’	1.117	22%
100 future	19.48	15.43	203.95’	1.547	21%

Proposed Bioretention Basin 13 (B-13) Table No. 16 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 16 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 13 (B-13)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.52	0.16	193.43’	0.288	97%
2 future	6.55	0.18	193.74’	0.347	97%
10 current	9.20	1.68	193.99’	0.558	82%
10 future	10.81	3.25	194.13’	0.690	70%
100 current	16.80	10.56	194.63’	1.195	37%
100 future	22.60	16.05	194.95’	1.695	29%

Proposed Bioretention Basin 14 (B-14) Table No. 17 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 17 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 14 (B-14)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	3.53	0.15	192.94’	0.218	96%
2 future	4.42	0.17	193.26’	0.281	96%
10 current	6.79	1.63	193.50’	0.459	76%
10 future	8.26	3.17	193.65’	0.572	62%
100 current	13.79	10.06	194.12’	1.011	27%
100 future	19.20	14.02	194.43’	1.454	27%

Proposed Bioretention Basin 15 (B-15) Table No. 18 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 18 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 15 (B-15)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.39	1.04	198.20’	0.325	81%
2 future	6.43	1.24	198.57’	0.411	81%
10 current	9.08	4.65	198.98’	0.634	49%
10 future	10.71	6.93	199.15’	0.770	35%
100 current	16.74	13.76	199.56’	1.282	18%
100 future	22.59	15.83	199.99’	1.786	30%

Proposed Bioretention Basin 16 (B-16) Table No. 19 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 19 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 16 (B-16)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.38	0.15	179.03’	0.273	97%
2 future	6.53	0.17	179.30’	0.330	97%
10 current	9.51	1.50	179.53’	0.559	84%
10 future	11.36	2.98	179.67’	0.706	74%
100 current	18.23	10.40	180.18’	1.272	43%
100 future	24.93	15.12	180.56’	1.835	39%

Proposed Bioretention Basin 17 (B-17) Table No. 20 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 20 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 17 (B-17)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.13	0.12	179.62’	0.240	98%
2 future	6.32	0.14	179.82’	0.290	98%
10 current	9.41	1.14	180.01’	0.524	88%
10 future	11.33	2.26	180.13’	0.676	80%
100 current	18.49	8.23	180.57’	1.257	55%
100 future	25.49	13.50	180.92’	1.837	47%

Proposed Bioretention Basin 18 (B-18) Table No. 21 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 21 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 18 (B-18)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.11	3.15	198.28’	0.316	38%
2 future	6.17	3.77	198.50’	0.402	39%
10 current	8.91	6.85	198.83’	0.627	23%
10 future	10.60	8.66	198.96’	0.766	18%
100 current	16.88	14.79	199.34’	1.290	12%
100 future	23.00	16.12	199.99’	1.809	30%

Proposed Bioretention Basin 19 (B-19) Table No. 22 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 22 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 19 (B-19)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	1.83	0.31	203.05’	0.114	83%
2 future	2.22	0.37	203.28’	0.146	84%
10 current	3.26	1.71	203.51’	0.230	48%
10 future	3.90	2.66	203.60’	0.282	32%
100 current	6.30	5.41	203.82’	0.479	14%
100 future	8.63	7.58	203.97’	0.675	12%

Proposed Bioretention Basin 20 (B-20) Table No. 23 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 23 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 20 (B-20)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.57	2.33	152.36’	0.344	58%
2 future	6.72	3.07	152.52’	0.438	54%
10 current	9.71	5.95	152.81’	0.682	39%
10 future	11.55	7.71	152.94’	0.834	33%
100 current	18.40	9.47	153.59’	1.405	49%
100 future	25.07	10.98	154.31’	1.970	56%

Proposed Bioretention Basin 21 (B-21) Table No. 24 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 24 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 21 (B-21)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.28	0.19	152.23	0.310	96%
2 future	6.42	0.21	152.64’	0.383	97%
10 current	9.40	2.12	152.93’	0.612	77%
10 future	11.24	4.12	153.10’	0.757	63%
100 current	18.11	11.52	153.69’	1.317	36%
100 future	24.80	15.90	154.25’	1.878	36%

Proposed Bioretention Basin 22 (B-22) Table No. 25 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 25 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 22 (B-22)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.83	0.16	149.27’	0.282	97%
2 future	5.98	0.19	149.62’	0.348	97%
10 current	9.02	1.81	149.88’	0.574	80%
10 future	10.90	3.55	150.04’	0.720	67%
100 current	17.95	11.51	150.59’	1.287	36%
100 future	24.84	12.69	151.18’	1.857	49%

Proposed Bioretention Basin 23 (B-23) Table No. 26 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 26 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 23 (B-23)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	3.66	0.70	145.95’	0.215	81%
2 future	4.33	0.89	146.13’	0.272	80%
10 current	6.04	2.69	146.39’	0.416	55%
10 future	7.07	3.95	146.50’	0.505	44%
100 current	10.92	7.98	146.79’	0.835	27%
100 future	14.64	11.27	146.99’	1.159	23%

Proposed Bioretention Basin 24 (B-24) Table No. 27 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 27 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 24 (B-24)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.55	0.53	146.20’	0.338	90%
2 future	6.73	0.63	146.48’	0.433	91%
10 current	9.78	3.10	146.81’	0.680	68%
10 future	11.66	5.18	146.98’	0.834	56%
100 current	18.67	12.41	147.47	1.416	34%
100 future	25.50	13.92	147.98’	1.992	45%

Proposed Bioretention Basin 25 (B-25) Table No. 28 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 28 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 25 (B-25)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.46	0.53	145.82’	0.338	90%
2 future	6.63	0.62	146.20’	0.433	91%
10 current	9.67	3.52	146.57’	0.679	64%
10 future	11.55	5.90	146.76’	0.832	49%
100 current	18.56	12.49	147.30’	1.412	33%
100 future	25.39	13.52	147.95’	1.987	47%

Proposed Bioretention Basin 26 (B-26) Table No. 29 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 29 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 26 (B-26)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.01	0.25	145.66’	0.311	95%
2 future	6.16	0.29	146.08’	0.398	95%
10 current	9.14	2.56	146.40’	0.634	72%
10 future	10.98	4.84	146.59’	0.781	56%
100 current	17.88	11.38	147.22’	1.341	36%
100 future	24.61	12.47	147.97’	1.902	49%

Proposed Bioretention Basin 27 (B-27) Table No. 30 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 30 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 27 (B-27)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.05	3.84	184.80’	0.313	24%
2 future	6.09	4.62	184.95’	0.397	24%
10 current	8.78	7.34	185.21’	0.618	16%
10 future	10.44	9.00	185.33’	0.755	14%
100 current	16.61	15.06	185.69’	1.270	9%
100 future	22.62	20.29	185.99’	1.780	10%

Proposed Bioretention Basin 28 (B-28) Table No. 31 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 31 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 28 (B-28)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.21	3.17	178.99’	0.257	25%
2 future	5.04	4.04	179.08’	0.326	20%
10 current	7.19	6.29	179.24’	0.504	13%
10 future	8.50	7.57	179.32’	0.613	11%
100 current	13.40	12.14	179.58’	1.026	9%
100 future	18.15	15.91	179.83’	1.432	12%

Proposed Bioretention Basin 29 (B-29) Table No. 32 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 32 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 29 (B-29)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	1.19	0.07	187.06’	0.070	94%
2 future	1.45	0.09	187.15’	0.091	94%
10 current	2.13	0.12	187.37’	0.144	95%
10 future	2.55	0.13	187.52’	0.176	95%
100 current	4.11	0.86	187.81’	0.305	79%
100 future	5.63	2.51	187.99’	0.428	55%

Proposed Bioretention Basin 30 (B-30) Table No. 33 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 33 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 30 (B-30)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.39	0.13	176.66’	0.247	97%
2 future	5.57	0.16	176.92’	0.304	97%
10 current	8.71	0.21	177.60’	0.428	98%
10 future	10.69	0.23	178.01’	0.492	98%
100 current	18.11	3.28	178.53’	1.030	82%
100 future	25.37	9.96	178.99’	1.618	61%

Proposed Bioretention Basin 31 (B-31) Table No. 34 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 34 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 31 (B-31)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	1.48	0.13	194.16’	0.088	91%
2 future	1.76	0.15	194.39’	0.112	91%
10 current	2.49	1.05	194.58’	0.173	58%
10 future	2.93	1.81	194.66’	0.210	38%
100 current	4.58	3.95	194.85’	0.350	14%
100 future	6.19	5.48	194.97’	0.488	11%

Proposed Bioretention Basin 32 (B-32) Table No. 35 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 35 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 32 (B-32)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.95	2.89	195.79’	0.295	41%
2 future	5.84	3.37	195.99’	0.371	42%
10 current	8.12	5.92	196.28’	0.565	27%
10 future	9.51	7.44	196.40’	0.684	22%
100 current	14.64	12.65	196.73’	1.126	14%
100 future	19.61	17.42	196.99’	1.559	11%

Proposed Bioretention Basin 33 (B-33) Table No. 36 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 36 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 33 (B-33)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.35	1.63	188.72’	0.264	62%
2 future	5.18	1.92	188.96’	0.333	63%
10 current	7.34	4.37	189.27’	0.513	40%
10 future	8.66	5.86	180.39’	0.624	32%
100 current	13.56	11.01	189.73’	1.040	19%
100 future	18.32	14.93	189.99’	1.449	19%

Proposed Bioretention Basin 34 (B-34) Table No. 37 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 37 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 34 (B-34)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.07	1.15	192.22’	0.320	77%
2 future	6.20	1.36	192.49’	0.410	78%
10 current	9.12	4.23	192.85’	0.645	54%
10 future	10.93	6.27	193.00’	0.791	43%
100 current	17.69	12.97	193.44’	1.347	27%
100 future	24.28	14.19	193.98’	1.900	42%

Proposed Bioretention Basin 35 (B-35) Table No. 38 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 38 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 35 (B-35)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.67	3.45	192.14’	0.348	39%
2 future	6.82	4.12	192.31’	0.442	40%
10 current	9.78	6.95	192.60’	0.687	29%
10 future	11.60	8.74	192.73’	0.838	25%
100 current	18.38	12.11	193.27’	1.406	34%
100 future	24.97	13.76	193.99’	1.967	45%

Proposed Bioretention Basin 36 (B-36) Table No. 39 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 39 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 36 (B-36)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	6.07	1.16	192.34’	0.365	81%
2 future	7.21	1.37	192.57’	0.461	81%
10 current	10.16	3.95	192.90’	0.708	61%
10 future	11.95	5.80	193.05’	0.860	51%
100 current	18.61	11.24	193.48’	1.428	40%
100 future	25.07	12.65	193.99’	1.985	50%

Proposed Bioretention Basin 37 (B-37) Table No. 40 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 40 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 37 (B-37)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.13	0.16	195.23’	0.283	97%
2 future	6.31	0.58	195.33’	0.371	91%
10 current	9.36	2.81	195.58’	0.608	70%
10 future	11.25	4.80	195.74’	0.759	57%
100 current	18.32	10.42	196.26’	1.335	43%
100 future	25.22	11.26	196.83’	1.910	55%

Proposed Bioretention Basin 38 (B-38) Table No. 41 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 41 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 38 (B-38)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	3.95	0.16	206.37’	0.241	96%
2 future	4.86	0.19	206.72’	0.306	96%
10 current	7.23	1.76	206.97’	0.490	76%
10 future	8.70	3.40	207.12’	0.605	61%
100 current	14.20	10.36	207.60’	1.048	27%
100 future	19.57	14.36	207.90’	1.495	27%

Proposed Bioretention Basin 39 (B-39) Table No. 42 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 42 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 39 (B-39)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	3.47	0.78	202.59’	0.217	78%
2 future	4.23	0.94	202.90’	0.278	78%
10 current	6.19	3.59	203.25’	0.436	42%
10 future	7.40	5.31	203.38’	0.535	28%
100 current	11.93	10.24	203.71’	0.909	14%
100 future	16.35	14.35	203.94’	1.280	12%

Proposed Bioretention Basin 40 (B-40) Table No. 43 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 43 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 40 (B-40)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	2.91	0.16	203.51’	0.177	94%
2 future	3.51	0.19	203.85’	0.225	95%
10 current	5.08	1.68	204.10’	0.352	67%
10 future	6.04	3.13	204.24’	0.431	48%
100 current	9.61	8.02	204.60’	0.728	17%
100 future	13.10	11.31	204.79’	1.023	14%

Proposed Bioretention Basin 41 (B-41) Table No. 44 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 44 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 41 (B-41)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	3.35	0.17	183.71’	0.217	95%
2 future	4.21	0.20	184.12’	0.282	95%
10 current	6.49	1.96	184.39’	0.457	70%
10 future	7.91	3.81	184.56’	0.567	52%
100 current	13.25	10.73	185.02’	0.991	19%
100 future	18.48	13.48	185.38’	1.419	27%

Proposed Bioretention Basin 42 (B-42) Table No. 45 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 45 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 42 (B-42)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.11	1.46	183.65’	0.313	71%
2 future	6.13	1.71	184.00’	0.396	72%
10 current	8.74	5.10	184.40’	0.613	42%
10 future	10.35	7.23	184.56’	0.747	30%
100 current	16.31	10.40	185.19’	1.249	36%
100 future	22.10	11.82	185.98’	1.744	47%

Proposed Bioretention Basin 43 (B-43) Table No. 46 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 46 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 43 (B-43)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.82	1.48	178.32’	0.301	69%
2 future	5.85	1.76	178.57’	0.383	70%
10 current	8.52	4.56	178.91’	0.600	47%
10 future	10.17	6.41	179.06’	0.735	37%
100 current	16.31	12.24	179.46’	1.244	25%
100 future	22.30	13.70	179.99’	1.749	39%

Proposed Bioretention Basin 44 (B-44) Table No. 47 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 47 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 44 (B-44)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.73	0.64	167.30’	0.294	86%
2 future	5.76	0.78	167.60	0.376	86%
10 current	8.44	3.46	167.95’	0.593	59%
10 future	10.10	5.57	168.12’	0.728	45%
100 current	16.30	12.48	168.55’	1.239	23%
100 future	22.35	14.55	168.97’	1.746	35%

Proposed Bioretention Basin 45 (B-45) Table No. 48 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 48 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 45 (B-45)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.50	0.27	168.45’	0.264	94%
2 future	5.29	0.31	168.85’	0.331	94%
10 current	7.33	2.41	169.16’	0.505	67%
10 future	8.56	4.31	169.32’	0.611	50%
100 current	13.12	10.55	169.73’	1.005	20%
100 future	17.53	14.67	169.96’	1.389	16%

Proposed Bioretention Basin 46 (B-46) Table No. 49 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 49 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 46 (B-46)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	6.25	0.10	184.30’	0.209	98%
2 future	7.65	0.12	184.44’	0.249	98%
10 current	11.29	0.78	184.58’	0.526	93%
10 future	13.55	1.54	184.68’	0.706	89%
100 current	21.98	5.96	185.04’	1.391	73%
100 future	30.20	11.29	185.37’	2.076	63%

Proposed Bioretention Basin 47 (B-47) Table No. 50 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 50 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 47 (B-47)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.39	0.11	189.35’	0.213	98%
2 future	6.64	0.12	189.51’	0.257	98%
10 current	9.95	0.89	189.67’	0.507	91%
10 future	11.99	1.73	189.77’	0.668	86%
100 current	19.65	6.66	190.16’	1.287	66%
100 future	27.12	12.19	190.50’	1.905	55%

Proposed Bioretention Basin 48 (B-48) Table No. 51 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 51 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 48 (B-48)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.55	0.12	187.94’	0.229	97%
2 future	5.58	0.15	188.16’	0.281	97%
10 current	8.26	0.19	188.74’	0.393	98%
10 future	9.91	0.69	188.86’	0.517	93%
100 current	16.11	5.28	189.29’	1.015	67%
100 future	22.15	16.61	189.61’	1.517	25%

Proposed Bioretention Basin 49 (B-49) Table No. 52 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 52 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 49 (B-49)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.89	0.17	184.88’	0.315	97%
2 future	7.06	0.20	185.24’	0.379	97%
10 current	10.06	1.89	185.51’	0.614	81%
10 future	11.90	3.68	185.67’	0.763	69%
100 current	18.74	11.95	186.21’	1.334	36%
100 future	25.39	13.56	186.74’	1.900	47%

Proposed Bioretention Basin 50 (B-50) Table No. 53 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 53 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 50 (B-50)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.52	0.15	185.22’	0.285	97%
2 future	6.66	0.18	185.51’	0.344	97%
10 current	9.64	1.55	185.75’	0.573	84%
10 future	11.47	3.07	185.90’	0.720	73%
100 current	18.30	10.59	186.41’	1.284	42%
100 future	24.95	14.47	186.81’	1.845	42%

Proposed Bioretention Basin 51 (B-51) Table No. 54 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 54 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 51 (B-51)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	3.10	1.93	188.57’	0.196	38%
2 future	3.79	2.59	188.68’	0.251	32%
10 current	5.59	4.51	188.86’	0.395	19%
10 future	6.70	5.58	188.94’	0.485	17%
100 current	10.84	8.66	189.23’	0.826	20%
100 future	14.89	9.77	189.70’	1.165	34%

Proposed Bioretention Basin 52 (B-52) Table No. 55 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 55 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 52 (B-52)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.99	1.78	194.92’	0.313	64%
2 future	6.07	2.10	195.23’	0.400	65%
10 current	8.89	5.49	195.62’	0.628	38%
10 future	10.63	7.63	195.78’	0.770	28%
100 current	17.13	12.98	196.25’	1.306	24%
100 future	23.47	14.18	196.98’	1.839	40%

Proposed Bioretention Basin 53 (B-53) Table No. 56 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 56 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 53 (B-53)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.29	0.27	202.48’	0.322	95%
2 future	6.38	0.32	202.93’	0.409	95%
10 current	9.22	2.72	203.26’	0.640	70%
10 future	10.96	5.10	203.46’	0.783	53%
100 current	17.46	13.71	203.99’	1.322	21%
100 future	23.78	16.29	204.42’	1.856	32%

Proposed Bioretention Basin 54 (B-54) Table No. 57 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 57 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 54 (B-54)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	5.94	0.21	203.20’	0.343	96%
2 future	7.07	0.24	203.70’	0.422	97%
10 current	9.96	2.52	204.01’	0.654	75%
10 future	11.73	4.88	204.21’	0.798	58%
100 current	18.28	17.94	204.62’	1.345	2%
100 future	24.63	24.27	204.68’	1.892	1%

Proposed Bioretention Basin 55 (B-55) Table No. 58 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 58 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 55 (B-55)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.29	1.39	193.38’	0.264	68%
2 future	5.16	1.65	193.62’	0.336	68%
10 current	7.42	4.22	193.94’	0.522	43%
10 future	8.81	5.82	194.07’	0.637	34%
100 current	13.99	10.53	194.45’	1.070	25%
100 future	19.02	11.86	194.98’	1.498	38%

Proposed Bioretention Basin 56 (B-56) Table No. 59 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 59 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 56 (B-56)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	4.69	1.24	193.33’	0.292	74%
2 future	5.68	1.48	193.59’	0.372	74%
10 current	8.25	4.28	193.94’	0.581	48%
10 future	9.83	6.17	194.09’	0.711	37%
100 current	15.74	12.35	194.48’	1.201	22%
100 future	21.50	13.88	194.98’	1.688	35%

Proposed Bioretention Basin 57 (B-57) Table No. 60 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 60 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 57 (B-57)					
Storm Freq.	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage		Attenuation
			Elevation	Volume (af)	
2 current	2.78	0.59	202.93’	0.170	79%
2 future	3.34	0.70	203.14’	0.216	79%
10 current	4.79	2.40	203.40’	0.336	50%
10 future	5.69	3.58	203.50’	0.410	37%
100 current	9.00	7.28	203.78’	0.687	19%
100 future	12.22	10.28	203.97’	0.962	16%

Proposed Bioretention Basin 58 (B-58) Table No. 61 below summarizes the inflow, outflow, and storage characteristics of the basin.

TABLE NO. 61 PERFORMANCE SUMMARY FOR PROPOSED BIORETENTION BASIN 58 (B-58)					
Storm Freq.	**Peak Inflow (cfs)**	**Peak Outflow (cfs)**	**Peak Storage**		**Attenuation**
			Elevation	**Volume (af)**	
2 current	4.26	0.16	200.24'	0.256	96%
2 future	5.26	0.19	200.59'	0.322	96%
10 current	7.89	1.78	200.85'	0.520	77%
10 future	9.52	3.47	201.00'	0.646	64%
100 current	15.61	11.06	201.51'	1.137	29%
100 future	21.56	14.23	201.89'	1.630	34%

VI. ASSESSMENT OF COMPLIANCE WITH STORMWATER MANAGEMENT REQUIREMENTS

This section of this report is intended to demonstrate that the stormwater management system designed for the Venue at Hopewell project, as above described, is compliant with all of the regulatory requirements pursuant to the applicable Rules. The various considerations relevant to the design of the system were listed in Subsection II of this report. To reiterate, these considerations are as follows:

- Maintenance of average annual groundwater recharge volume
- Compliance with applicable Water Quality Management Standards
- "Quantity Control," achieved through peak flow attenuation
- Providing an effective collection and conveyance system
- Assuring minimization of erosion and sedimentation
- Providing for proper maintenance of the system
- Use of Non-structural strategies

Except for the requirement relevant to the maintenance of the proposed system, this section of this report will address each of the above considerations with respect to complying with the applicable rules and standards. As indicated above, the requirement relevant to system maintenance is addressed in an accompanying report.

A. Maintenance of Average Annual Groundwater Recharge

As stated above, groundwater recharge standards and requirements apply to the proposed improvements associated with the project site and are satisfied by either:

1. Demonstrating through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100 percent of the average annual pre-construction groundwater recharge volume for the site; or

2. Demonstrating through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from pre-construction to post-construction for the projected two-year storm, as defined and determined pursuant to N.J.A.C. 7:8- 5.7(d), is infiltrated.

Refer to the Tables and Appendices for details.

B. Water Quality Management

The project proposes to increase the total impervious coverage on the site by approximately 50.98 acres. As this increase is greater than 0.25 acres, the regulatory requirements at NJAC 7:8-5.5 are applicable.

For the purposes of water quality, the NJDEP considers roof, sidewalks, patios and similar impervious areas "clean" and subsequently do not require TSS removal. The parking structures are included as analogous to pavement as it would generate TSS in runoff.

C. Quantity Control (Peak Flow Attenuation)

Under NJAC 7:8-5.6, there are four ways to satisfy runoff control. For this analysis, subparagraphs 1 and 3 are utilized.

Subparagraph 1 states: "*Demonstrate through hydrologic and hydraulic analysis that for stormwater leaving the site, post-construction runoff hydrographs for the current and projected two-, 10-, and 100-year storm events, as defined and determined pursuant to N.J.A.C. 7:8-5.7(c) and (d), respectively, do not exceed, at any point in time, the pre-construction runoff hydrographs for the same storm events*."

Subparagraph 3 states: "*Design stormwater management measures so that the post-construction peak runoff rates for the two-, 10-, and 100-year storm events are 50, 75, and 80 percent, respectively, of the pre-construction peak runoff rates. The percentages apply only to the post-construction stormwater runoff that is attributable to the portion of the site on which the proposed development or project is to be constructed*."

Table No. 62 & 63 below summarizes the existing and proposed peak runoff from the hydrographs and routing through the bioretention basins for Design Point 1 and demonstrates compliance with the regulatory requirements.

TABLE NO. 62

SUMMARY OF CURRENT EXISTING AND PROPOSED PEAK RATES OF RUNOFF AT DESIGN POINT 1 (DP-1)		
STORM FREQUENCY (YEARS)	**EXISTING (CURRENT) PEAK (cfs)**	**PROPOSED (CURRENT) PEAK (cfs)**
2	80.58	72.12
10	201.26	161.70
100	483.45	422.64

TABLE NO. 63		
SUMMARY OF FUTURE EXISTING AND PROPOSED PEAK RATES OF RUNOFF AT DESIGN POINT 1 (DP-1)		
STORM FREQUENCY (YEARS)	**EXISTING (FUTURE) PEAK (cfs)**	**PROPOSED (FUTURE) PEAK (cfs)**
2	112.85	95.66
10	259.65	210.89
100	716.94	631.79

Table No. 64 & 65 below summarizes the existing and proposed peak runoff from the hydrographs and routing through the bioretention basins for Design Point 2 and demonstrates compliance with the regulatory requirements.

TABLE NO. 64			
SUMMARY OF CURRENT EXISTING AND PROPOSED PEAK RATES OF RUNOFF AT DESIGN POINT 2 (DP-2)			
STORM FREQUENCY (YEARS)	**EXISTING (CURRENT) PEAK (cfs)**	**ALLOWABLE (CURRENT) PEAK (cfs)**	**PROPOSED (CURRENT) PEAK (cfs)**
2	50.22	25.11	17.28
10	103.12	77.34	41.09
100	214.50	171.60	171.00

TABLE NO. 65			
SUMMARY OF FUTURE EXISTING AND PROPOSED PEAK RATES OF RUNOFF AT DESIGN POINT 2 (DP-2)			
STORM FREQUENCY (YEARS)	**EXISTING (FUTURE) PEAK (cfs)**	**ALLOWABLE (FUTURE) PEAK (cfs)**	**PROPOSED (FUTURE) PEAK (cfs)**
2	64.99	32.50	22.79

10	127.12	95.34	70.83
100	301.66	241.33	228.71

Table No. 66 & 67 below summarizes the existing and proposed peak runoff from the hydrographs and routing through the bioretention basins for Design Point 3 and demonstrates compliance with the regulatory requirements.

TABLE NO. 66			
SUMMARY OF CURRENT EXISTING AND PROPOSED PEAK RATES OF RUNOFF AT DESIGN POINT 3			
STORM FREQUENCY (YEARS)	**EXISTING (CURRENT) PEAK (cfs)**	**ALLOWABLE (CURRENT) PEAK (cfs)**	**PROPOSED (CURRENT) PEAK (cfs)**
2	40.75	20.38	13.68
10	84.19	63.14	38.02
100	175.74	140.59	136.86

TABLE NO. 67			
SUMMARY OF FUTURE EXISTING AND PROPOSED PEAK RATES OF RUNOFF AT DESIGN POINT 3			
STORM FREQUENCY (YEARS)	**EXISTING (FUTURE) PEAK (cfs)**	**ALLOWABLE (FUTURE) PEAK (cfs)**	**PROPOSED (FUTURE) PEAK (cfs)**
2	52.87	26.44	17.37
10	103.91	77.93	61.39
100	247.38	197.90	185.39

Table No. 68 & 69 below summarizes the existing and proposed peak runoff from the hydrographs and routing through the bioretention basins for Design Point 4 and demonstrates compliance with the regulatory requirements.

TABLE NO. 68			
SUMMARY OF CURRENT EXISTING AND PROPOSED PEAK RATES OF RUNOFF AT DESIGN POINT 4			
STORM FREQUENCY (YEARS)	**EXISTING (CURRENT) PEAK (cfs)**	**ALLOWABLE (CURRENT) PEAK (cfs)**	**PROPOSED (CURRENT) PEAK (cfs)**
2	24.68	12.34	12.13
10	67.61	50.71	32.84

100	170.56	136.45	97.97

TABLE NO. 69			
SUMMARY OF FUTURE EXISTING AND PROPOSED PEAK RATES OF RUNOFF AT DESIGN POINT 4			
STORM FREQUENCY (YEARS)	**EXISTING (FUTURE) PEAK (cfs)**	**ALLOWABLE (FUTURE) PEAK (cfs)**	**PROPOSED (FUTURE) PEAK (cfs)**
2	36.05	18.03	16.11
10	88.64	66.48	49.25
100	256.39	205.11	144.50

Table No. 70 & 71 below summarizes the existing and proposed peak runoff from the hydrographs and routing through the bioretention basins for Design Point 5 and demonstrates compliance with the regulatory requirements.

TABLE NO. 70			
SUMMARY OF CURRENT EXISTING AND PROPOSED PEAK RATES OF RUNOFF AT DESIGN POINT 5			
STORM FREQUENCY (YEARS)	**EXISTING (CURRENT) PEAK (cfs)**	**ALLOWABLE (CURRENT) PEAK (cfs)**	**PROPOSED (CURRENT) PEAK (cfs)**
2	11.91	5.96	0.99
10	25.49	19.12	3.27
100	54.62	43.70	23.23

TABLE NO. 71			
SUMMARY OF FUTURE EXISTING AND PROPOSED PEAK RATES OF RUNOFF AT DESIGN POINT 5			
STORM FREQUENCY (YEARS)	**EXISTING (FUTURE) PEAK (cfs)**	**ALLOWABLE (FUTURE) PEAK (cfs)**	**PROPOSED (FUTURE) PEAK (cfs)**
2	15.67	7.84	1.33
10	31.72	23.79	6.18

100	77.62	62.10	37.99

Table No. 72 & 73 below summarizes the existing and proposed peak runoff from the hydrographs and routing through the bioretention basins for Design Point 6 and demonstrates compliance with the regulatory requirements.

TABLE NO. 72		
SUMMARY OF CURRENT EXISTING AND PROPOSED PEAK RATES OF RUNOFF AT DESIGN POINT 6		
STORM FREQUENCY (YEARS)	**EXISTING (CURRENT) PEAK (cfs)**	**PROPOSED (CURRENT) PEAK (cfs)**
2	58.20	52.14
10	138.68	118.10
100	320.86	279.61

TABLE NO. 73		
SUMMARY OF FUTURE EXISTING AND PROPOSED PEAK RATES OF RUNOFF AT DESIGN POINT 6		
STORM FREQUENCY (YEARS)	**EXISTING (FUTURE) PEAK (cfs)**	**PROPOSED (FUTURE) PEAK (cfs)**
2	79.99	69.79
10	176.88	151.05
100	468.69	390.25

D. Soil Erosion and Sediment Control Compliance

The project has also been designed to minimize erosion and sedimentation in accordance with *The Standards for Soil Erosion and Sediment Control in New Jersey*" A "Soil Erosion and Sediment Control Plan" is included in the set of project plans, specifying numerous practices to achieve this goal. The project's "Soil Erosion and Sediment Control Plan" is subject to review and approval by the Mercer County Soil Conservation District (MCSCD). The District's certification of the plan is required before any construction may commence.

E. Collection and Conveyance System Design

The project's storm water management system also includes a network of storm sewer pipes to convey the stormwater runoff to and from the various management

facilities. Similarly, stormwater inlets are strategically located to collect runoff from the surface of the ground.

F. Use of Non-Structural Strategies

The design of the project's storm water management system also included the implementation of Non-Structural Strategies. Foremost, redevelopment in itself is a low impact design strategy as it takes under-utilized, previously developed land and creates new uses on it instead of developing virgin forest or farm fields. The site also implements non-structural strategies such as utilizing existing stabilized discharge points and preventative pollution source measures.

VII. REFERENCES

The following documents were relied upon during the preparation of the project's stormwater management plan:

1. New Jersey Stormwater Best Management Practices Manual, New Jersey Department of Environmental Protection; Lat Updated: October 6, 2023.

2. Residential Site Improvement Standards, New Jersey Administrative Code Title 5, Chapter 21; Effective Date: March 30, 2021.

3. Standards for Soil Erosion and Sediment Control in New Jersey, New Jersey State Soil Conservation Committee; January 2014 and revised July 2017.

4. Urban Hydrology for Small Watersheds, United States Department of Agriculture, Soil Conservation Service; June, 1986.

5. Soil Survey of Mercer County, United States Department of Agriculture, Soil Conservation Service.
   < https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

6. NJ-GeoWeb 3.0, New Jersey Department of Environmental Protection, Bureau of GIS. < https://www.nj.gov/dep/gis/geowebsplash.htm>

APPENDIX 1
NRCS SOILS RESOURCE REPORT

STORMWATER MANAGEMENT TESTING REPORT

Venue at Hopewell

Somerset County, New Jersey

December 1, 2023

Prepared For:
US Home Corporation (dba Lennar)
2465 Kuser Road, Floor 3
Hamilton, New Jersey 08690

Attn: Mitchell Newman

Prepared By:
Geo-Technology Associates, Inc.
Geotechnical and Environmental Consultants

14 Worlds Fair Drive, Suite A
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GTA Project No: 31191132x1

GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND
ENVIRONMENTAL CONSULTANTS

A Practicing Geoprofessional Business Association Member Firm

December 1, 2023

US Home Corporation (dba Lennar)
2465 Kuser Road, Floor 3
Hamilton, New Jersey 08690

Attn: Mitchell Newman

Re: Stormwater Management Testing Report
Venue at Hopewell
Hopewell Township, Mercer County, New Jersey

Dear Mitch:

In accordance with our agreement dated October 2, 2023, Geo-Technology Associates, Inc. (GTA) has performed a geotechnical exploration for the planning and design of stormwater management (SWM) facilities related to a proposed residential development to be constructed in Hopewell Township, Mercer County, New Jersey. The exploration consisted of excavating 152 test pits with in-situ infiltration testing, performing 60 basin flood tests, and visually classifying the encountered soils. The results of the field testing, and GTA's recommendations regarding the design and construction of the proposed SWM basins are included in this report.

GTA appreciates the opportunity to have been of assistance to you on this project. Please contact our office at (732) 271-9301 if you have questions or require additional information. Please note that, unless you make other arrangements, GTA will discard all soil samples obtained from the explorations 60 days after the date of this report.

Sincerely,

GEO-TECHNOLOGY ASSOCIATES, INC.

Allison Tether, P.G.
Senior Project Manager

Kyle T. Plaza, P.E.
Associate

Dennis C. Loh, P.E.
Vice President

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1.0 INTRODUCTION

This report presents the results of a geotechnical engineering exploration performed by Geo-Technology Associates, Inc. (GTA) for the planning and design of stormwater management (SWM) facilities related to a proposed residential development in Hopewell Township, Mercer County, New Jersey.

1.1 Study Purpose

GTA conducted this study to develop confirmation-dependent geotechnical engineering recommendations for the proposed SWM facilities to be constructed at the site. The scope of GTA's study included a field exploration and geotechnical engineering analyses. The field exploration included a total of 152 test pit excavations with in-situ infiltration testing and 60 basin flood tests within the proposed SWM basin areas. The conclusions and recommendations presented in this report were derived from engineering analyses of field data and details of the proposed SWM facilities as detailed herein.

1.2 Reference Documents

GTA was provided with a plan prepared by Bowman Consulting Group, Ltd. (Bowman) titled "Test Pit Location Map" dated September 19, 2023. The plan indicates the site boundaries, existing topography, and the layout and dimensions of the proposed SWM basins. The plan was marked up to show the locations of 152 requested test pits with infiltration testing within the proposed SWM basin areas, and 11 of the proposed basins were highlighted to indicate the areas where infiltration was a priority for design purposes. Those 11 basins include a total of 60 test locations, where basin flood testing was requested in addition to in-situ infiltration testing within the overburden soils.

2.0 PROJECT DESCRIPTION

2.1 Site Location

The site is situated north and west of Nursery Road, west of its intersection with Scotch Road. The general location of the site is shown on the Site Location Map, which is Figure 1 in Appendix A of this report.

2.2 Existing Site Conditions

At the time of our study, the central portion of the subject site was predominantly agricultural fields and wooded areas were present in the northwestern and southeastern portions of the site. An existing farm building was located in the southwestern corner of the site with an access drive leading from Nursery Road to the south. The northeastern corner of the site contained debris from

former structures that have since been demolished, and a cleared path led to the area of the former buildings from Nursery Road to the east. A stream running roughly northeast to southwest was present in the southeastern portion of the site, and mapped wetlands were indicated on the plan surrounding the stream channel. Another small stream was present in the northwestern corner of the site, and was also mapped as a wetlands area.

Based on our visual observations and review of the ground surface topography shown on the plan provided to us, the existing ground surface generally slopes gently across the site from about Elevation (EL) 220 feet in the northeastern corner to about EL 200 feet in the central portion of the site. From the central portion of the site, the ground surface slopes moderately down to about EL 150 feet in the southwestern corner of the site and to about EL 160 feet along the stream channels in the northwestern and southeastern corners.

2.3 Proposed SWM Basin Construction

Based on the plan provided to us, we understand that the proposed residential development will include a total of 48 SWM basins ranging in size from about 1,100 square feet to about 85,000 square feet. The plan also indicates 2 areas in the central and northwestern portions of the site where test pits were requested but the proposed basin boundaries were not outlined on the plan.

The project is in the preliminary phases of design and the grading plans have not yet been developed. As such, the proposed basin bottom elevations have not been determined. However, based on conversations with Bowman, we understand the basin bottoms will likely be established at about the central topographic contour within each basin to balance the amount of cuts and fills required for earthwork.

3.0 GEOTECHNICAL ENGINEERING STUDY

3.1 Geologic Review

The subject site is situated within the Piedmont physiographic province characterized by a low rolling plain divided by a series of higher ridges and predominantly underlain by sedimentary rocks of Triassic and Jurassic age. According to the *Surficial Geology of New Jersey* digital data map *(DGS07-2, 2013)* published as ESRI's Geographic Information Systems (GIS) shapefiles by the New Jersey Geological Survey as part of the Digital Geodata Series, the surficial geology of the majority of the site consists of weathered shale, mudstone, and sandstone. This unit is described as reddish-brown, yellow, and light gray silty sand to silty clay with shale, mudstone, or sandstone fragments. The weathered zone can be as much as 10 feet thick overlying shale and mudstone, and up to 30 feet thick overlying sandstone. The surficial geology of the southern portion of the site is mapped

as Aeolian deposits, which consist of yellow-brown and pale brown windblown fine sand and silt. The unit can be as much as 15 feet in thickness.

The site is underlain by the Passaic Formation of the Lower Jurassic and Upper Triassic Period of the Mesozoic Era, as shown on the *Bedrock Geologic Map of Central and Southern New Jersey (1998)* published by the United States Geological Survey. This formation is described as predominantly reddish-brown to maroon and purple, fine-grained sandstone, siltstone, and mudstone separated by olive-gray, dark-gray, or black siltstone or shale.

Please refer to the referenced publications for more detailed descriptions of the geologic members.

3.2 Subsurface Exploration

The subsurface exploration program consisted of excavating a total of 152 test pits with in-situ infiltration testing and performing 60 basin flood tests at the requested locations within the proposed SWM basin areas. The test pits were excavated on October 12, 2023 through November 15, 2023 by J.A. Neary Excavating using a Case CX160 excavator and extended to depths ranging from approximately 3 to 12 feet below the existing ground surface. In-situ infiltration testing was performed adjacent to each of the test pits using a double-ring infiltrometer. The exploration locations were selected, surveyed, and staked in the field by Bowman prior to our exploration. The approximate locations of the explorations performed for this study are shown on the Test Pit Location Plan, which is included as Figure 2 in Appendix A. Detailed descriptions of the subsurface conditions encountered in the test pits are indicated on the Logs of Test Pits, which are included in Appendix B. The ground surface elevations shown on the test pit logs were provided by Bowman. The stakes for Test Pits TP-1131 and TP-1132 could not be located in the field. Therefore, the test pits were located in the field by GTA using a hand-held GPS unit and the ground surface elevations were estimated by interpolating between topographic contours shown on the plans provided to us.

The soil samples retrieved from the test pits were delivered to GTA's laboratory for visual classification by a geotechnical engineer and limited laboratory testing. The soil descriptions indicated on the logs are based on visual observations of the individual soil samples as summarized in the Notes for Exploration Logs included in Appendix B, supplemented by the laboratory test results.

3.3 Subsurface Conditions

The results of the subsurface exploration were, for the most part, consistent with the known site history and geologic mapping of the project site. The specific subsurface conditions at each

exploration location are shown on the individual exploration logs within Appendix B. GTA has summarized the subsurface conditions encountered in the following sections.

3.3.1 Surficial Materials

An approximately 6- to 12-inch-thick layer of topsoil was encountered at the ground surface in all of the explorations performed for this study, averaging about 10 inches. The reported topsoil thicknesses generally represent the upper layer of dark and organic soil.

3.3.2 Existing Fill

Two of the explorations performed for this study (TP-1135 and TP-1136) encountered materials that GTA representatives visually identified as existing fill materials. These explorations were performed in an area of the site that was once developed with residential homes that have been razed. The encountered fill generally extended to depths ranging from about 2 to 4 feet below the ground surface and predominantly consisted of sandy silts with gravel and contained debris including bricks, concrete fragments, plastic, scrap metal, and an abandoned utility line.

3.3.3 Native Soils

Beneath the topsoil and existing fill, where present, the explorations encountered native surficial soils consistent with the geologic mapping of the site. The subsurface profile predominantly consisted of silts with varying amounts of granular materials (ML), silty sands (SM), and silty gravel (GM) soils that graded into highly weathered shale bedrock at all of the exploration locations.

3.3.4 Weathered Rock

GTA defines highly weathered rock (HWR) in test pits by visual identification of the rock plate sizes and increased excavation effort. The surface of HWR was encountered in all of the explorations performed for this study at depths ranging from about 1 to 8 feet below the existing surface grades. Refusal to further excavation was encountered in the test pits at depths ranging from about 4 to 12 feet below the ground surface which can be indicative of more competent bedrock materials.

3.3.5 Groundwater

Groundwater was not encountered in the test pits performed for this study. However, seepage of perched or trapped water was observed in 9 of the test pits (TP-1002, TP-1006, TP-1007, TP-1014, TP-1057, TP-1062, TP-1063, TP-1102, and TP-1150) at depths ranging from about 5 to 10 feet below the ground surface. Perched water conditions should be anticipated at varying depths throughout the site in areas where granular soils are underlain by less permeable, fine-grained soils or rock.

Soil mottling indicative of the seasonal high groundwater (SHGW) level was not observed in the test pits performed for this study. Therefore, we believe the SHGW table is below the depths excavated in the test pits.

3.4 Laboratory Testing

Laboratory testing performed for this study included grain-size distribution and Atterberg limits testing for classification of the soils in accordance with the Unified Soil Classification System (USCS), as well as natural moisture content determinations. Detailed results of the laboratory testing performed for this study are included in Appendix C. The results of the laboratory tests are summarized in the following table:

SUMMARY OF LABORATORY TEST RESULTS

Test Pit Location	Depth (ft.)	LL (%)	PI (%)	USCS Classification	NMC (%)	Fines (%)
TP-1001	3½	NV	NV	SILT (ML)	19.7	91.9
TP-1008	4	NV	NV	Sandy SILT (ML)	22.1	62.1
TP-1012	2	NV	NV	SILT with sand (ML)	22.6	76.0
TP-1016	1	NP	NP	Silty GRAVEL with sand (GM)	19.7	47.1
TP-1017	½	NP	NP	Silty GRAVEL (GM)	17.9	30.9
TP-1022	1	NV	NV	Gravelly SILT (ML)	20.5	63.2
TP-1026	3	NV	NV	Gravelly SILT with sand (ML)	21.6	52.0
TP-1028	1	NV	NV	SILT (ML)	24.2	85.3
TP-1037	2½	NV	NV	Gravelly SILT with sand (ML)	16.4	57.7
TP-1043	1½	NV	NV	SILT (ML)	21.6	91.7
TP-1049	2	NV	NV	SILT with sand (ML)	11.9	70.1
TP-1051	3	NV	NV	Gravelly SILT with sand (ML)	10.0	52.9
TP-1053	3	NV	NV	SILT (ML)	22.1	86.6
TP-1057	4	NV	NV	Lean CLAY (CL)	22.1	96.5
TP-1073	2	NP	NP	Silty GRAVEL with sand (GM)	16.4	29.0
TP-1080	2	NP	NP	Silty GRAVEL (GM)	15.6	31.2
TP-1086	2	32.6	10.5	Lean CLAY (CL)	20.3	89.5
TP-1094	2	NV	NV	SILT (ML)	22.7	92.3

Test Pit Location	Depth (ft.)	LL (%)	PI (%)	USCS Classification	NMC (%)	Fines (%)
TP-1098	2	NV	NV	SILT with sand (ML)	19.4	76.1
TP-1104	1	33.9	12.2	Lean CLAY with sand (CL)	23.7	79.5
TP-1119	1	NP	NP	Gravelly SILT with sand (ML)	16.4	52.2
TP-1121	2	NV	NV	SILT (ML)	15.2	99.6
TP-1127	2	NV	NV	Sandy SILT with gravel (ML)	14.5	58.3
TP-1135A	2	32.0	8.3	SILT (ML)	22.2	93.8
TP-1149	1½	NV	NV	Sandy SILT (ML)	23.0	68.3

Note: LL=Liquid Limit, PI=Plasticity Index, NV=Not Verified, NP=Non-Plastic, NMC=Natural Moisture Content, Fines=Material passing the #200 sieve

3.5 Infiltration Test Results

In-situ infiltration testing was performed within the overburden soils at 147 of the 152 test pit locations at depths ranging from about 6 inches to 5 feet below the existing surface grades. The tests were performed using a double-ring infiltrometer in general accordance with Chapter 12 of the New Jersey Stormwater Best Management Practices Manual (Chapter 12). Infiltration tests were attempted at the remaining 5 locations; however, the equipment could not be properly seated to prevent leaking due to the amount of gravel and shale fragments within the soils to be tested, and the tests were abandoned.

The depths of the tests performed at the site and measured infiltration rates are summarized in the Subsurface Summary Table included in Appendix C.

3.6 Basin Flood Test Results

Due to the presence of shallow bedrock at the site, basin flood testing was performed at 60 locations to establish the permeability rate of the bedrock in accordance with Subsection A3 of Chapter 12. A basin flood test involves excavating a “basin” with a minimum bottom area of 50 square feet. If groundwater is observed within the basin, the basin flood test shall not be used. If no groundwater is observed, the basin shall be filled with 12 inches (about 375 gallons) of water and allowed to drain completely. If the time required for the basin to drain is greater than 24 hours, the test shall be terminated, and the rock shall be considered to be a massive rock substratum. If the basin drains completely within 24 hours, the basin shall be filled with another 12 inches of water. If the basin drains completely within 24 hours of the second filling, the rock shall be

considered to be fractured rock substratum, and suitable for infiltration with a design infiltration rate of 0.5 inches per hour.

Sixty basins with dimensions of approximately 10 feet by 5 feet were excavated at the requested locations. The excavations for the basin flood tests were terminated at depths ranging from about 4 to 9½ feet below the ground surface within the weathered rock that was encountered. Following excavation, the basins were filled with 12 inches of water and the water levels were checked 24 hours after filling. Following the initial 24-hour presoak period, it was observed that 39 of the basins did not drain completely. Therefore, the shale bedrock at these locations should be considered a massive rock substratum per Chapter 12 and is not suitable for infiltration.

Following the initial 24-hour presoak period, it was observed that the water drained completely from within the remaining 21 basins. These basins were refilled to 12 inches above the basin bottom levels. Following the second 24-hour period, it was observed that all 21 basins had completely drained again. Therefore, per Chapter 12, the shale bedrock at these locations should be classified as a fractured rock substratum with a design infiltration rate of 0.5 inches per hour.

Please refer to the Subsurface Summary Table included in Appendix C for more detailed information regarding the individual test locations and depths of basin flood tests performed.

4.0 CONCLUSIONS

The primary conditions that affect the capacity to infiltrate water are the soil gradation and density properties and the presence of hydraulically restrictive layers such as silt or clay (fines), rock, or groundwater, each of which would restrict the flow of water into the underlying aquifer. The subsurface profile encountered at the site generally consisted of fine-grained soils (ML, CL) and residual silty sand (SM) and silty gravel (GM) soils, overlying highly weathered shale bedrock. The surface of weathered rock was encountered in all of the explorations performed for this study at depths ranging from about 1 to 8 feet below the existing surface grades. Static groundwater seepage was not observed in the test pits.

In general, the more granular portions of the residual overburden soils tested generally appeared receptive to infiltration with measured infiltration rates ranging up to 24 inches per hour. However, the fine-grained residual soils and the granular residual soils containing appreciable amounts of fines were generally not receptive or only slightly receptive to infiltration, which is typical for soils with high fines contents. The overall results of the testing across the site resulted in variable infiltration rates: 92 of the 147 locations tested (approximately 63%) resulted in a measured infiltration rate of zero (0) inches per hour, 34 of the locations tested (approximately 23%) resulted

in infiltration rates of less than 1 inch per hour, and the remaining 21 of the locations (approximately 14%) resulted in infiltration rates greater than 1 inch per hour.

Chapter 12 requires that infiltration tests be performed within the most restrictive layer within 8 feet of the proposed infiltration elevations. Therefore, per the Chapter 12 guidance, basin flood testing was performed to establish the permeability rate of the bedrock at 60 requested locations. The basin flood tests failed at 39 of the 60 test locations and passed at the remaining 21 locations. The mixed results are typical for the site geology.

5.0 ADDITIONAL SERVICES

We recommended that GTA be retained during construction of the subject project to provide geotechnical consultation and construction observation and testing services as outlined below:

- Review final site plans to evaluate if they conform to the intent of this report.
- Provide on-site observation during SWM basin construction.
- Perform infiltration testing following construction of the proposed SWM basins to verify design rate.

6.0 LIMITATIONS

This report, including all supporting test pit logs, field data, field notes, laboratory test data, calculations, estimates and other documents prepared by GTA in connection with this Project have been prepared for the exclusive use of US Home Corporation (Lennar; Client) pursuant to the Agreement between GTA and Client dated October 2, 2023, and in accordance with generally accepted engineering practice. All terms and conditions set forth in the Agreement and the General Provisions attached thereto are incorporated herein by reference. No warranty, express or implied, is made herein. Use and reproduction of this report by any other person without the expressed written permission of GTA and Client is unauthorized and such use is at the sole risk of the user.

The analysis and recommendations contained in this report are based on the data obtained from limited observation and testing of the encountered materials. Test pits indicate subsurface conditions only at specific locations and times, and only at the depths penetrated. They do not necessarily reflect strata or variations that may exist between the exploration locations. Consequently, the analysis and recommendations must be considered preliminary until the subsurface conditions can be verified by direct observation at the time of construction. If variations of subsurface conditions from those described in this report are noted during construction, recommendations in this report may need to be re-evaluated.

In the event that any changes in the nature, design, or location of the facilities are planned, the conclusions and recommendations contained in this report should not be considered valid unless the changes are reviewed, and conclusions of this report are verified in writing. GTA is not responsible for any claims, damages, or liability associated with interpretation of subsurface data or reuse of the subsurface data or engineering analysis without the expressed written authorization of GTA.

The scope of our services for this geotechnical exploration did not include any environmental assessment or investigation for the presence or absence of wetlands, or hazardous or toxic materials in the soil, surface water, groundwater, or air, on or below or around this site. Any statements in this report or on the logs regarding odors or unusual or suspicious items or conditions observed are strictly for the information of our Client.

This report and the attached logs are instruments of service. The subject matter of this report is limited to the facts and matters stated herein. Absence of a reference to any other conditions or subject matter shall not be construed by the reader to imply approval by the writer.

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for information purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration*** by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

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e-mail: info@geoprofessional.org www.geoprofessional.org

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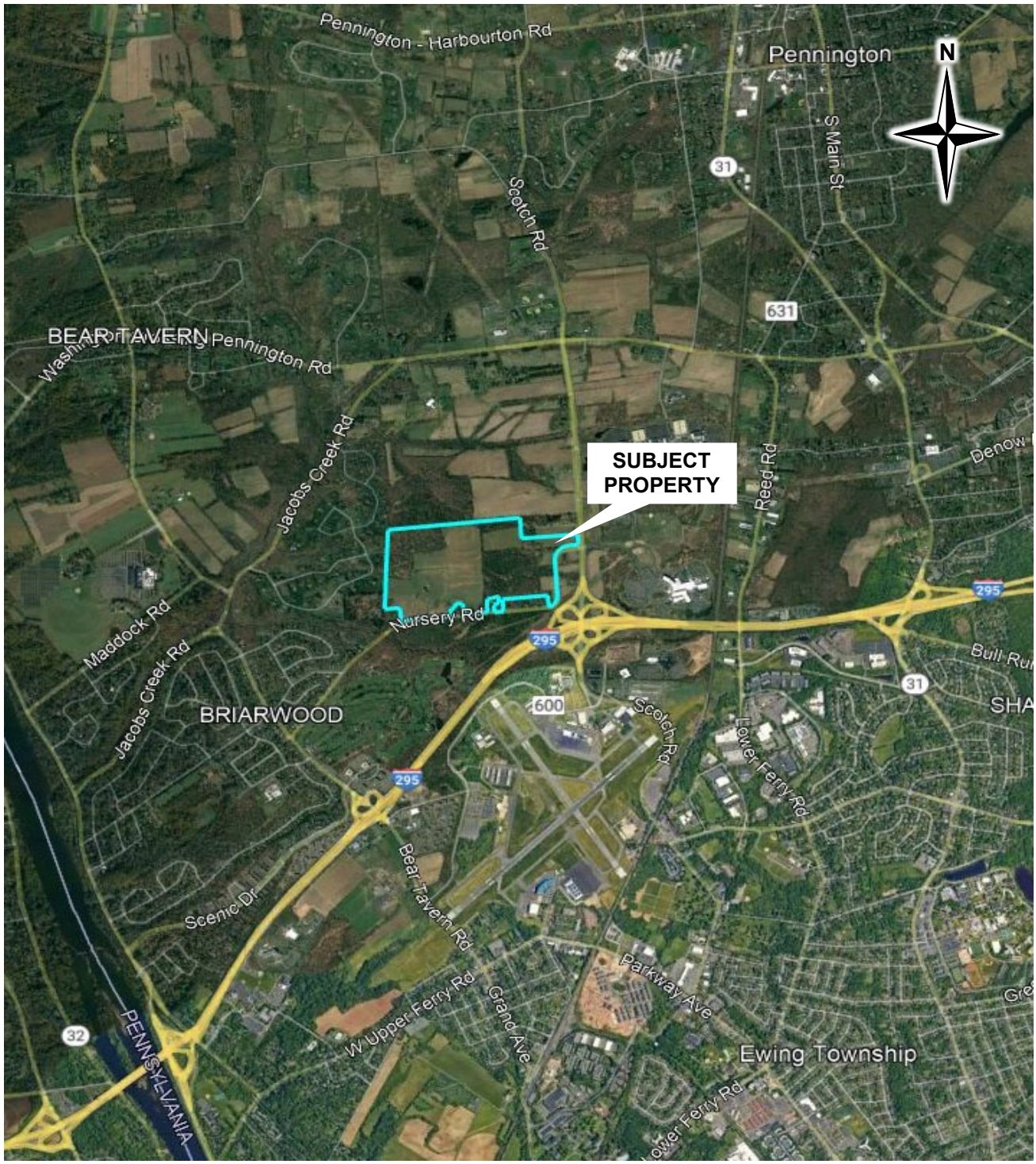
APPENDIX A

Figures



Note: Site boundary is approximate.

SITE LOCATION MAP

14 Worlds Fair Drive, Suite A
Somerset, New Jersey 08873
(732) 271-9301
fax (732) 271-9306

GEO-TECHNOLOGY ASSOCIATES, INC.

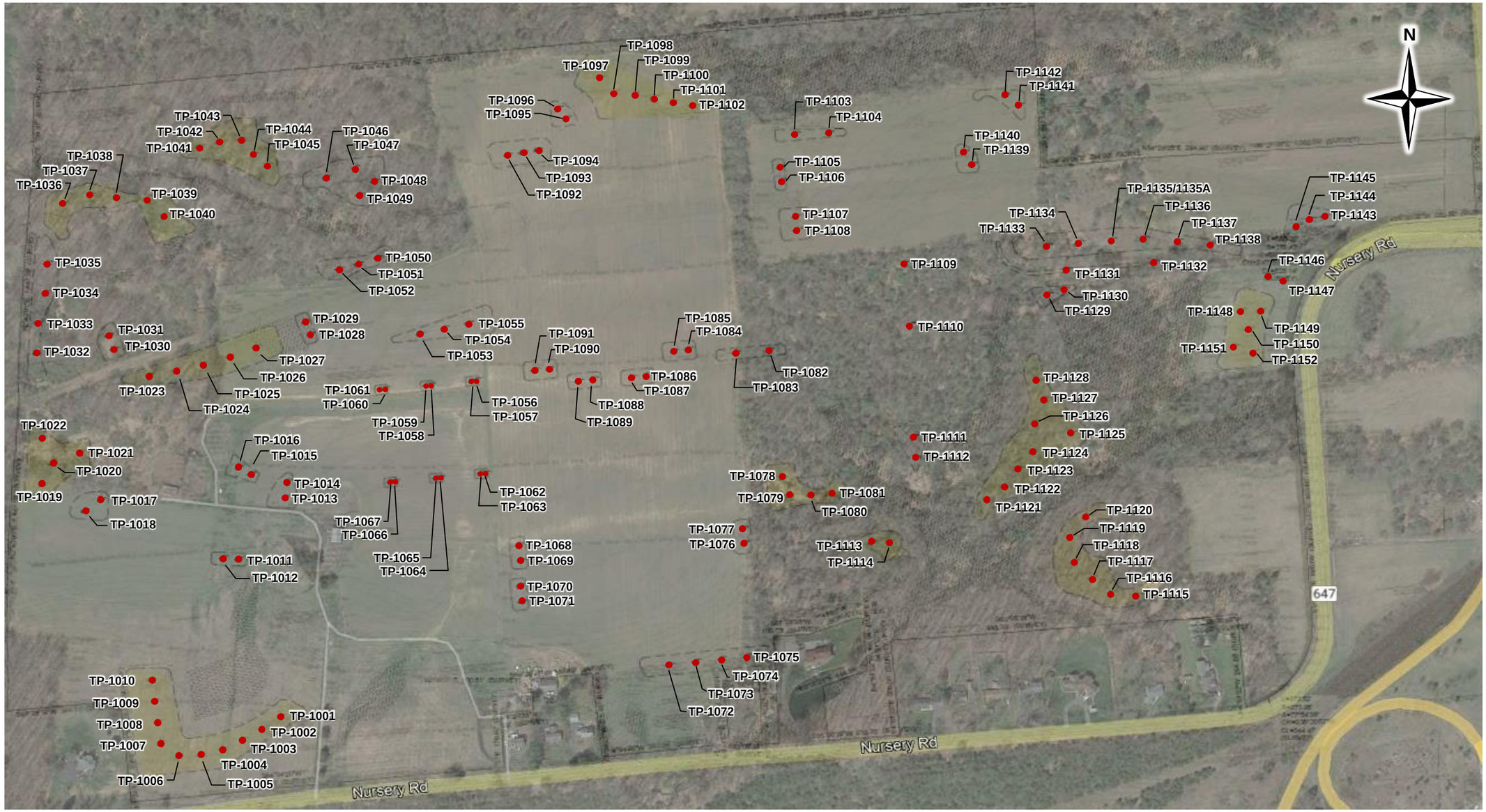
VENUE AT HOPEWELL

Hopewell Township,
Mercer County, New Jersey

Prepared For: Lennar

SOURCE: Google Maps		
SCALE: NTS	DATE: DEC. 2023	PROJECT #: 31191132x1

Figure 1



* Base plan prepared by Bowman Consulting titled "Test Pit Locations Map" dated September 19, 2023 overlaid on Google Earth aerial image.

LEGEND:

TP-100X ● Indicates the numbers and approximate locations of test pits performed by GTA for this study.

TEST PIT LOCATION PLAN

GTA

14 Worlds Fair Drive, Suite A
Somerset, New Jersey 08873
(732) 271-9301
fax (732) 271-9306

GEO-TECHNOLOGY ASSOCIATES, INC.

VENUE AT HOPEWELL

Hopewell Township,
Mercer County, New Jersey

Prepared For: Lennar

DESIGN BY: *	DRAWN BY: AMT	REVIEWED BY: KTP
SCALE: NTS	DATE: DEC. 2023	PROJECT #: 31191132x1

Figure 2

APPENDIX B

Subsurface Summary Table

Lennar - Venue at Hopewell

Subsurface Summary Table

Date: 12/1/2023

GTA Project No.: 31191132x1

		GROUND SURFACE		DEPTH		BEDROCK				INFILTRATION TEST RESULTS					
Test Pit Number	**Stake Number**	**Ground Surface EL (Ft.)**	**Topsoil (In.)**	**Total Depth (Ft.)**	**Bottom of Excavation EL (Ft.)**	**Top of HW Rock (Ft.)**	**Top of HW Rock EL (Ft.)**	**Refusal Depth (Ft.)**	**Refusal EL (Ft.)**	**In-situ Infiltration Test Depth (Ft.)**	**In-situ Infiltration Test EL (Ft.)**	**Measured Infiltration Rate (in/hr)**	**Basin Flood Test Depth (Ft.)**	**Basin Flood Test EL (Ft.)**	**Basin Flood Test Results (PASS/FAIL)**
TP-1001	5000	155.7	10	9	146.7	6	149.7	9	146.7	3.5	152.2	0	8	147.7	FAIL
TP-1002	5001	153.8	10	8	145.8	6	147.8	8	145.8	4	149.8	0	8	145.8	FAIL
TP-1003	5002	151.8	8	11	140.8	5.5	146.3	11	140.8	3	148.8	0	8	143.8	PASS
TP-1004	5003	150.6	10	12	138.6	6.5	144.1	12	138.6	5	145.6	1/2	9.5	141.1	PASS
TP-1005	5004	149.2	10	10	139.2	8	141.2	10	139.2	3.5	145.7	0	9	140.2	FAIL
TP-1006	5005	147.1	10	10	137.1	7.5	139.6	10	137.1	4	143.1	0	9	138.1	FAIL
TP-1007	5006	149.1	6	11	138.1	7.5	141.6	11	138.1	5	144.1	1/2	8	141.1	FAIL
TP-1008	5007	151.3	10	9	142.3	6	145.3	9	142.3	4	147.3	0	8	143.3	PASS
TP-1009	5008	154.2	10	8	146.2	6	148.2	8	146.2	3	151.2	0	8	146.2	PASS
TP-1010	5009	158.5	10	10	148.5	6	152.5	10	148.5	4	154.5	3	8	150.5	PASS
TP-1011	5061	187.2	10	6	181.2	3	184.2	6	181.2	1	186.2	4-1/2			
TP-1012	5062	189.1	10	7	182.1	4	185.1	7	182.1	2	187.1	0			
TP-1013	5060	198.8	10	5	193.8	2.5	196.3	5	193.8	1	197.8	0			
TP-1014	5059	198.5	10	6	192.5	3	195.5	6	192.5	1	197.5	0			
TP-1015	5058	195.9	10	5	190.9	3	192.9	5	190.9	1	194.9	0			
TP-1016	5057	194.5	10	5	189.5	3	191.5	5	189.5	1	193.5	1/2			
TP-1017	5056	192.7	6	6	186.7	1.5	191.2	6	186.7	0.5	192.2	24			
TP-1018	5055	192.3	6	6	186.3	2.5	189.8	6	186.3	1	191.3	3			
TP-1019	5012	187.7	8	6	182.2	1.5	186.2	5.5	182.2	0.5	187.2	12	5	182.7	FAIL
TP-1020	5011	182.4	10	6	176.4	1.5	180.9	6	176.4	1	181.4	0	5	177.4	FAIL
TP-1021	5010	181.7	10	6	175.7	3	178.7	6	175.7	1	180.7	1/2	5	176.7	FAIL
TP-1022	5013	182.8	10	5	177.8	2	180.8	5	177.8	1	181.8	1/2	4	178.8	FAIL
TP-1023	5014	189.3	10	6	183.3	4	185.3	6	183.3	2	187.3	0	6	183.3	FAIL
TP-1024	5015	190.3	10	8	182.3	4	186.3	8	182.3	2.5	187.8	0	7	183.3	PASS
TP-1025	5016	191.2	10	7	184.2	4	187.2	7	184.2	2	189.2	0	6	185.2	FAIL
TP-1026	5017	192.7	6	8	184.7	5	187.7	8	184.7	3	189.7	1/2	7	185.7	PASS
TP-1027	5019	193.6	6	4	189.6	2	191.6	4	189.6	1	192.6	1/2	4	189.6	FAIL
TP-1028	5145	194.1	12	6	188.1	4	190.1	6	188.1	2	192.1	0			
TP-1029	5146	193.4	10	5.5	187.9	4	189.4	5.5	187.9	2	191.4	1/2			
TP-1030	5147	187.0	10	5	182.0	3	184.0	5	182.0	1	186.0	0			
TP-1031	5148	186.3	10	5.5	180.8	4	182.3	5.5	180.8	2	184.3	0			
TP-1032	5149	182.9	8	5	177.9	3	179.9	5	177.9	1	181.9	0			
TP-1033	5150	183.6	10	5.5	178.1	3	180.6	5.5	178.1	1	182.6	0			
TP-1034	5151	194.3	12	6	188.3	3.5	190.8	6	188.3	1.5	192.8	1/2			
TP-1035	5152	181.2	10	5.5	175.7	2.5	178.7	5.5	175.7	1	180.2	1			
TP-1036	5020	168.9	10	7	161.9	4.5	164.4	7	161.9	3	165.9	1/8	7	161.9	FAIL
TP-1037	5021	169.4	10	7.5	161.9	5	164.4	7.5	161.9	3	166.4	1/8	7	162.4	FAIL
TP-1038	5022	172.9	10	8	164.9	5.5	167.4	8	164.9	3.5	169.4	3	7	165.9	FAIL
TP-1039	5023	174.8	12	8	166.8	4	170.8	8	166.8	2	172.8	1-1/2	7	167.8	FAIL
TP-1040	5024	179.8	6	7	172.8	3.5	176.3	7	172.8	1.5	178.3	0	6	173.8	FAIL
TP-1041	5025	177.5	6	6.5	171.0	2.5	175.0	6.5	171.0	0.5	177.0	1/2	5	172.5	PASS
TP-1042	5026	179.3	6	6	173.3	2	177.3	6	173.3	1	178.3	0	5	174.3	FAIL
TP-1043	5027	183.8	6	6	177.8	3	180.8	6	177.8	1	182.8	0	5	178.8	FAIL

		GROUND SURFACE		DEPTH		BEDROCK				INFILTRATION TEST RESULTS					
Test Pit Number	Stake Number	Ground Surface EL (Ft.)	Topsoil (In.)	Total Depth (Ft.)	Bottom of Excavation EL (Ft.)	Top of HW Rock (Ft.)	Top of HW Rock EL (Ft.)	Refusal Depth (Ft.)	Refusal EL (Ft.)	In-situ Infiltration Test Depth (Ft.)	In-situ Infiltration Test EL (Ft.)	Measured Infiltration Rate (in/hr)	Basin Flood Test Depth (Ft.)	Basin Flood Test EL (Ft.)	Basin Flood Test Results (PASS/FAIL)
TP-1044	5028	182.7	8	6	176.7	3	179.7	6	176.7	1	181.7	0	4.5	178.2	PASS
TP-1045	5029	183.4	8	7	176.4	5	178.4	7	176.4	3	180.4	1/2	7	176.4	FAIL
TP-1046	5085	188.5	12	6	182.5	4	184.5	6	182.5	2	186.5	1/4			
TP-1047	5086	191.9	6	6	185.9	1.5	190.4	6	185.9	0.5	191.4	0			
TP-1048	5087	193.4	8	7	186.4	4	189.4	7	186.4	2	191.4	0			
TP-1049	5088	189.9	10	8	181.9	3	186.9	8	181.9	1	188.9	0			
TP-1050	5082	190.4	10	6	184.4	4	186.4	6	184.4	2	188.4	0			
TP-1051	5083	190.3	8	6.5	183.8	4.5	185.8	6.5	183.8	2.5	187.8	0			
TP-1052	5084	189.6	10	6	183.6	4	185.6	6	183.6	2	187.6	0			
TP-1053	5079	199.4	12	4.5	194.9	3.5	195.9	4.5	194.9	1.5	197.9	1/2			
TP-1054	5080	200.3	12	5	195.3	4	196.3	5	195.3	2	198.3	0			
TP-1055	5081	200.9	12	6	194.9	4	196.9	6	194.9	2	198.9	0			
TP-1056	5073	200.9	8	10	190.9	6.5	194.4	10	190.9	4	196.9	0			
TP-1057	5074	201.0	8	12	189.0	6.5	194.5	12	189.0	4	197.0	0			
TP-1058	5075	200.1	8	5	195.1	2	198.1	5	195.1	1	199.1	0			
TP-1059	5076	200.0	8	5	195.0	2.5	197.5	5	195.0	1	199.0	0			
TP-1060	5077	197.6	8	7	190.6	1.5	196.1	7	190.6	1	196.6	1-1/2			
TP-1061	5078	197.3	8	7	190.3	3	194.3	7	190.3	1	196.3	0			
TP-1062	5072	203.7	10	8	195.7	5	198.7	8	195.7	3	200.7	0			
TP-1063	5071	203.5	10	8	195.5	4.5	199.0	8	195.5	2.5	201.0	0			
TP-1064	5070	203.8	10	5	198.8	2	201.8	5	198.8	1.5	202.3	0			
TP-1065	5069	204.1	10	5.5	198.6	2	202.1	5.5	198.6	1	203.1	0			
TP-1066	5068	204.1	10	5.5	198.6	1.5	202.6	5.5	198.6	1	203.1	0			
TP-1067	5067	204.1	10	6	198.1	1.5	202.6	6	198.1	1	203.1	0			
TP-1068	5066	206.6	10	5	201.6	3	203.6	5	201.6	1	205.6	0			
TP-1069	5065	206.9	8	5.5	201.4	1.5	205.4	5.5	201.4	1	205.9	* *N/A*			
TP-1070	5064	205.7	8	7	198.7	1.5	204.2	7	198.7	1	204.7	* *N/A*			
TP-1071	5063	204.2	12	5	199.2	2.5	201.7	5	199.2	1	203.2	* *N/A*			
TP-1072	5121	186.1	10	7	179.1	3	183.1	7	179.1	1	185.1	2			
TP-1073	5120	183.8	10	7.5	176.3	3	180.8	7.5	176.3	1	182.8	2			
TP-1074	5119	181.4	10	7	174.4	3	178.4	7	174.4	1	180.4	2			
TP-1075	5118	179.8	10	6	173.8	3	176.8	6	173.8	1	178.8	2			
TP-1076	5117	200.3	10	6.5	193.8	3	197.3	6.5	193.8	1	199.3	0			
TP-1077	5116	201.2	10	6	195.2	3	198.2	6	195.2	1	200.2	0			
TP-1078	5030	197.6	10	8	189.6	5	192.6	8	189.6	3	194.6	0	8	189.6	PASS
TP-1079	5031	196.9	8	5	191.9	3	193.9	5	191.9	1	195.9	0	5	191.9	FAIL
TP-1080	5032	194.9	8	7	187.9	3	191.9	7	187.9	1	193.9	0	5	189.9	FAIL
TP-1081	5033	192.8	8	7	185.8	2	190.8	7	185.8	1	191.8	0	5	187.8	FAIL
TP-1082	5106	208.4	10	8	200.4	4	204.4	8	200.4	2	206.4	0			
TP-1083	5107	208.7	10	6	202.7	3	205.7	6	202.7	1	207.7	0			
TP-1084	5108	208.9	10	6	202.9	3	205.9	6	202.9	1	207.9	0			
TP-1085	5109	208.7	10	6.5	202.2	4	204.7	6.5	202.2	2	206.7	0			
TP-1086	5110	207.7	10	6	201.7	4.5	203.2	6	201.7	2.5	205.2	0			
TP-1087	5111	207.3	10	6	201.3	4.5	202.8	6	201.3	2.5	204.8	0			
TP-1088	5112	206.4	10	7.5	198.9	5.5	200.9	7.5	198.9	3.5	202.9	0			
TP-1089	5113	205.5	10	8	197.5	6.5	199.0	8	197.5	4.5	201.0	0			
TP-1090	5114	205.0	10	6.5	198.5	4.5	200.5	6.5	198.5	2.5	202.5	0			

		GROUND SURFACE		DEPTH		BEDROCK				INFILTRATION TEST RESULTS					
Test Pit Number	Stake Number	Ground Surface EL (Ft.)	Topsoil (In.)	Total Depth (Ft.)	Bottom of Excavation EL (Ft.)	Top of HW Rock (Ft.)	Top of HW Rock EL (Ft.)	Refusal Depth (Ft.)	Refusal EL (Ft.)	In-situ Infiltration Test Depth (Ft.)	In-situ Infiltration Test EL (Ft.)	Measured Infiltration Rate (in/hr)	Basin Flood Test Depth (Ft.)	Basin Flood Test EL (Ft.)	Basin Flood Test Results (PASS/FAIL)
TP-1091	5115	204.4	10	7	197.4	5	199.4	7	197.4	3	201.4	1/2			
TP-1092	5089	196.5	12	9.5	187.0	5	191.5	9.5	187.0	1	195.5	1			
TP-1093	5090	196.9	12	7.5	189.4	5	191.9	7.5	189.4	3	193.9	0			
TP-1094	5091	196.9	10	6	190.9	3	193.9	6	190.9	1	195.9	0			
TP-1095	5092	194.6	12	5	189.6	3	191.6	5	189.6	1	193.6	0			
TP-1096	5093	195.2	12	5.5	189.7	3	192.2	5.5	189.7	1	194.2	0			
TP-1097	5094	190.1	10	6	184.1	3	187.1	6	184.1	1	189.1	0	5	185.1	PASS
TP-1098	5095	189.9	10	7	182.9	3.5	186.4	7	182.9	1.5	188.4	1/4	6	183.9	FAIL
TP-1099	5096	189.5	6	5	184.5	2	187.5	5	184.5	0.5	189.0	0	4.5	185.0	PASS
TP-1100	5097	189.5	6	4	185.5	1	188.5	4	185.5	0.5	189.0	1/4	4	185.5	FAIL
TP-1101	5098	191.6	6	5.5	186.1	2.5	189.1	5.5	186.1	0.5	191.1	0	4.5	187.1	PASS
TP-1102	5099	192.3	12	8.5	183.8	5	187.3	8.5	183.8	3	189.3	0	6	186.3	FAIL
TP-1103	5100	195.2	12	6	189.2	3.5	191.7	6	189.2	1	194.2	0			
TP-1104	5101	196.2	12	8	188.2	4	192.2	8	188.2	2	194.2	0			
TP-1105	5102	198.3	12	7	191.3	4	194.3	7	191.3	2	196.3	1			
TP-1106	5103	199.1	12	7	192.1	4	195.1	7	192.1	2	197.1	0			
TP-1107	5104	200.6	12	5	195.6	3	197.6	5	195.6	1	199.6	1-1/2			
TP-1108	5105	201.7	12	7	194.7	4	197.7	7	194.7	2	199.7	1			
TP-1109	5125	211.5	12	6	205.5	4	207.5	6	205.5	2	209.5	1/2			
TP-1110	5124	207.1	12	6	201.1	4	203.1	6	201.1	2	205.1	0			
TP-1111	5123	187.6	6	6	181.6	1	186.6	6	181.6	0.75	186.9	* *N/A*			
TP-1112	5122	185.2	12	6	179.2	6	179.2	6	179.2	1	184.2	0			
TP-1113	5035	182.4	10	6.5	175.9	3	179.4	6.5	175.9	1	181.4	0	5	177.4	FAIL
TP-1114	5034	187.2	12	6	181.2	3	184.2	6	181.2	1	186.2	0	5	182.2	FAIL
TP-1115	5049	200.4	8	7	193.4	3	197.4	7	193.4	1	199.4	0	7	193.4	PASS
TP-1116	5048	195.7	10	7	188.7	3.5	192.2	7	188.7	1.5	194.2	0	7	188.7	PASS
TP-1117	5047	192.3	10	8	184.3	2.5	189.8	8	184.3	1	191.3	1/2	5	187.3	PASS
TP-1118	5046	187.0	8	8	179.0	4	183.0	8	179.0	2	185.0	1/2	6	181.0	PASS
TP-1119	5045	182.3	8	8	174.3	3	179.3	8	174.3	1	181.3	6	5	177.3	FAIL
TP-1120	5044	195.6	10	7	188.6	2.5	193.1	7	188.6	1	194.6	6	5	190.6	FAIL
TP-1121	5036	180.7	10	7	173.7	4.5	176.2	7	173.7	2.5	178.2	0	6.5	174.2	FAIL
TP-1122	5037	182.6	10	5.5	177.1	2.5	180.1	5.5	177.1	1	181.6	0	4.5	178.1	FAIL
TP-1123	5038	184.4	10	5.5	178.9	2.5	181.9	5.5	178.9	1	183.4	1/4	4.5	179.9	FAIL
TP-1124	5039	187.8	10	5.5	182.3	3	184.8	5.5	182.3	1	186.8	0	5	182.8	PASS
TP-1125	5040	189.0	10	7	182.0	3	186.0	7	182.0	1	188.0	* *N/A*	5	184.0	** FAIL
TP-1126	5041	190.7	10	7	183.7	5	185.7	7	183.7	3	187.7	1/4	7	183.7	FAIL
TP-1127	5042	199.2	8	6	193.2	4	195.2	6	193.2	2	197.2	0	6	193.2	PASS
TP-1128	5043	193.5	10	6	187.5	4	189.5	6	187.5	2	191.5	0	6	187.5	FAIL
TP-1129	5139	209.0	8	8	201.0	3	206.0	8	201.0	1	208.0	1/4			
TP-1130	5138	207.4	8	10	197.4	4	203.4	10	197.4	2	205.4	1/4			
TP-1131	***N/A	212	10	6	206.0	3	209.0	6	206.0	1	211.0	12			
TP-1132	***N/A	210	10	6	204.0	4	206.0	6	204.0	2	208.0	1/2			
TP-1133	5130	212.5	10	6	206.5	4	208.5	6	206.5	2	210.5	1/2			
TP-1134	5131	213.9	8	6.5	207.4	4.5	209.4	6.5	207.4	2.5	211.4	0			
TP-1135	5132	214.4	8	3	211.4										
TP-1135A	5132	214.4	8	6	208.4	4	210.4	6	208.4	2	212.4	1/2			
TP-1136	5133	214.6	6	6	208.6	4	210.6	6	208.6	2	212.6	1/2			

		GROUND SURFACE		DEPTH		BEDROCK				INFILTRATION TEST RESULTS					
Test Pit Number	Stake Number	Ground Surface EL (Ft.)	Topsoil (In.)	Total Depth (Ft.)	Bottom of Excavation EL (Ft.)	Top of HW Rock (Ft.)	Top of HW Rock EL (Ft.)	Refusal Depth (Ft.)	Refusal EL (Ft.)	In-situ Infiltration Test Depth (Ft.)	In-situ Infiltration Test EL (Ft.)	Measured Infiltration Rate (in/hr)	Basin Flood Test Depth (Ft.)	Basin Flood Test EL (Ft.)	Basin Flood Test Results (PASS/FAIL)
TP-1137	5134	213.7	8	6.5	207.2	4	209.7	6.5	207.2	2	211.7	1/4			
TP-1138	5135	211.9	8	7	204.9	3.5	208.4	7	204.9	1.5	210.4	9			
TP-1139	5126	206.8	12	5	201.8	3	203.8	5	201.8	1	205.8	0			
TP-1140	5127	205.1	8	4	201.1	2	203.1	4	201.1	1	204.1	1/2			
TP-1141	5129	201.6	8	5	196.6	3	198.6	5	196.6	1	200.6	0			
TP-1142	5128	200.0	8	5	195.0	4	196.0	5	195.0	2	198.0	1/2			
TP-1143	5142	213.3	10	8	205.3	4	209.3	8	205.3	2	211.3	0			
TP-1144	5141	213.4	10	7	206.4	3.5	209.9	7	206.4	1.5	211.9	0			
TP-1145	5140	213.2	10	6.5	206.7	4	209.2	6.5	206.7	2	211.2	0			
TP-1146	5144	207.1	10	7	200.1	4	203.1	7	200.1	1.5	205.6	0			
TP-1147	5143	207.1	10	8	199.1	4	203.1	8	199.1	2	205.1	1/2			
TP-1148	5054	202.3	12	4	198.3	2	200.3	4	198.3	1	201.3	1/2	4	198.3	FAIL
TP-1149	5053	202.8	12	7	195.8	3.5	199.3	7	195.8	1.5	201.3	1/2	5	197.8	PASS
TP-1150	5052	200.2	12	7	193.2	3.5	196.7	7	193.2	1.5	198.7	0	5	195.2	PASS
TP-1151	5051	197.6	10	7	190.6	3	194.6	7	190.6	1	196.6	0	5	192.6	FAIL
TP-1152	5050	197.5	12	7	190.5	4	193.5	7	190.5	2	195.5	0	6	191.5	FAIL

NOTES:

* *Infiltration test attempted. Double-ring could not be properly seated to prevent leaking due to shallow rock.*

** *Basin flood test attempted. Terminated due to water seepage.*

*** *Missing stake number, could not be located in the field.*

APPENDIX C

Exploration Logs

NOTES FOR EXPLORATION LOGS

KEY TO USCS TERMINOLOGY AND GRAPHIC SYMBOLS

MAJOR DIVISIONS (BASED UPON ASTM D 2488)				SYMBOLS GRAPHIC	SYMBOLS LETTER
COARSE-GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LESS THAN 15% PASSING THE NO. 200 SIEVE)			GW
					GP
		GRAVELS WITH FINES (MORE THAN 15% PASSING THE NO. 200 SIEVE)			GM
					GC
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LESS THAN 15% PASSING THE NO. 200 SIEVE)			SW
					SP
		SANDS WITH FINES (MORE THAN 15% PASSING THE NO. 200 SIEVE)			SM
					SC
FINE-GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILT OR CLAY (<15% RETAINED ON THE NO. 200 SIEVE) SILT OR CLAY WITH SAND OR GRAVEL (15% TO 30% RETAINED ON THE NO. 200 SIEVE) SANDY OR GRAVELLY SILT OR CLAY (>30% RETAINED ON THE NO. 200 SIEVE)	SILTS AND LEAN CLAYS LIQUID LIMIT LESS THAN 50			ML
					CL
					OL
		ELASTIC SILTS AND FAT CLAYS LIQUID LIMIT GREATER THAN 50			MH
					CH
					OH
HIGHLY ORGANIC SOILS					PT

NOTE: DUAL SYMBOLS ARE USED TO INDICATE COARSE-GRAINED SOILS WHICH CONTAIN AN ESTIMATED 5 TO 15% FINES BASED ON VISUAL CLASSIFICATION OR BETWEEN 5 AND 12% FINES BASED ON LABORATORY TESTING; AND FINE-GRAINED SOILS WHEN THE PLOT OF LIQUID LIMIT & PLASTICITY INDEX VALUES FALLS IN THE PLASTICITY CHART'S CROSS-HATCHED AREA. FINE-GRAINED SOILS ARE CLASSIFIED AS ORGANIC (OL OR OH) WHEN ENOUGH ORGANIC PARTICLES ARE PRESENT TO INFLUENCE ITS PROPERTIES. LABORATORY TEST RESULTS ARE USED TO SUPPLEMENT SOIL CLASSIFICATION BY THE VISUAL-MANUAL PROCEDURES OF ASTM D 2488.

ADDITIONAL TERMINOLOGY AND GRAPHIC SYMBOLS

	DESCRIPTION		GRAPHIC SYMBOLS
ADDITIONAL DESIGNATIONS	TOPSOIL		
	MAN MADE FILL		
	GLACIAL TILL		
	COBBLES AND BOULDERS		
RESIDUAL SOIL DESIGNATIONS	DESCRIPTION	"N" VALUE	
	HIGHLY WEATHERED ROCK	50 TO 50/1"	
	PARTIALLY WEATHERED ROCK	MORE THAN 50 BLOWS FOR 1" OF PENETRATION OR LESS, AUGER PENETRABLE	

COARSE-GRAINED SOILS
(GRAVEL AND SAND)

DESIGNATION	BLOWS PER FOOT (BPF) "N"
VERY LOOSE	0 - 4
LOOSE	5 - 10
MEDIUM DENSE	11 - 30
DENSE	31 - 50
VERY DENSE	>50

NOTE: "N" VALUE DETERMINED AS PER ASTM D 1586

FINE-GRAINED SOILS
(SILT AND CLAY)

CONSISTENCY	BPF "N"
VERY SOFT	<2
SOFT	2 - 4
MEDIUM STIFF	5 - 8
STIFF	9 - 15
VERY STIFF	16 - 30
HARD	>30

NOTE: ADDITIONAL DESIGNATIONS TO ADVANCE SAMPLER INDICATED IN BLOW COUNT COLUMN:
WOH = WEIGHT OF HAMMER
WOR = WEIGHT OF ROD(S)

SAMPLE TYPE

DESIGNATION	SYMBOL
SOIL SAMPLE	S-
SHELBY TUBE	U-
ROCK CORE	R-

WATER DESIGNATION

DESCRIPTION	SYMBOL
ENCOUNTERED DURING DRILLING	▽
UPON COMPLETION OF DRILLING	▼
24 HOURS AFTER COMPLETION	▼

NOTE: WATER OBSERVATIONS WERE MADE AT THE TIME INDICATED. POROSITY OF SOIL STRATA, WEATHER CONDITIONS, SITE TOPOGRAPHY, ETC. MAY CAUSE WATER LEVEL CHANGES.

LOG OF TEST PIT NO. TP-1001 (Stake #5000)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/12/2023**
DATE COMPLETED: **10/12/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **155.7 Ft.**
DATUM: **TOPO**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
154.9				10 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, SILT [Silt per USDA]	
	2				
				- Brown (7.5YR 5/3) at 3 Ft.	
151.7	4	GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration test = 0 in/hr at 3-1/2 Ft. - NMC = 19.7%
149.7	6	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	8				- Basin Flood Test performed at 8 Ft.
146.7				Test pit complete at 9 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1001 (Stake #5000)

LOG OF TEST PIT NO. TP-1002 (Stake #5001)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/12/2023**
DATE COMPLETED: **10/12/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **153.8 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
153.0		ML		Brown (7.5YR 4/4), moist, SILT with sand [Silt Loam per USDA]	
	2				
				- Brown (7.5YR 5/3) at 3 Ft.	
	4				- Infiltration rate = 0 in/hr at 4 Ft.
148.8		GM		Red-brown (5YR 4/4), wet, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Slight perched water seepage at 5 Ft.
147.8	6	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
145.8	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 8 Ft.
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1002 (Stake #5001)

LOG OF TEST PIT NO. TP-1003 (Stake #5002)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/12/2023**
DATE COMPLETED: **10/12/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **151.8 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
151.1				8 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				
				- Brown (7.5YR 5/3) at 3 Ft.	- Infiltration rate = 0 in/hr at 3 Ft.
147.8	4	GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
146.3		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
	8				- Basin Flood Test performed at 8 Ft.
	10				
140.8				Test pit complete at 11 Ft. due to refusal on highly-weathered rock.	
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1003 (Stake #5002)

LOG OF TEST PIT NO. TP-1004 (Stake #5003)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/12/2023**
DATE COMPLETED: **10/12/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **150.6 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
149.8		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				
				- Brown (7.5YR 5/3) at 3 Ft.	
	4				
145.6		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0.5 in/hr at 5 Ft.
	6				
144.1		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	8				
	10				- Basin Flood Test performed at 9-1/2 Ft.
138.6	12			Test pit complete at 12 Ft. due to refusal on highly-weathered rock.	
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1004 (Stake #5003)

LOG OF TEST PIT NO. TP-1005 (Stake #5004)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/12/2023**
DATE COMPLETED: **10/12/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **149.2 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
148.4		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				
					- Infiltration rate = 0 in/hr at 3-1/2 Ft.
145.2	4	GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
	6				
141.2	8	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	- Basin Flood Test performed at 9 Ft.
139.2	10			Test pit complete at 10 Ft. due to refusal on highly-weathered rock.	
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1005 (Stake #5004)

LOG OF TEST PIT NO. TP-1006 (Stake #5005)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/12/2023**
DATE COMPLETED: **10/12/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **147.1 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
146.3				10 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				
				- Red-brown (5YR 4/4) at 3 Ft.	
	4				- Infiltration rate = 0 in/hr at 4 Ft.
142.1		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
	6				
139.6		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	- Slight perched water seepage at 7-1/2 Ft.
	8				- Basin Flood Test performed at 9 Ft.
137.1	10			Test pit complete at 10 Ft. due to refusal on highly-weathered rock.	- Slight trapped water seepage at 10 Ft.
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1006 (Stake #5005)

LOG OF TEST PIT NO. TP-1007 (Stake #5006)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/13/2023**
DATE COMPLETED: **10/13/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **149.1 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
148.6				6 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2			- Brown (7.5YR 5/3) at 2 Ft.	
				- Red-brown (5YR 4/4) at 3 Ft.	
	4				- Infiltration rate = 0.5 in/hr at 5 Ft.
143.1	6	GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
141.6		HW		Red-brown (5YR 5/3), moist, Highly-weathered ROCK (Shale)	- Slight perched water seepage at 7-1/2 Ft. - Basin Flood Test performed at 8 Ft. after slight seepage ceased.
	8				
	10				
138.1				Test pit complete at 11 Ft. due to refusal on highly-weathered rock.	
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1007 (Stake #5006)

LOG OF TEST PIT NO. TP-1008 (Stake #5007)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/13/2023**
DATE COMPLETED: **10/13/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **151.3 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
150.5		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				
				- Brown (7.5YR 5/3) at 3 Ft.	
	4			- Red-brown (5YR 4/4) at 4 Ft.	- Infiltration rate = 0 in/hr at 4 Ft. - NMC = 22.1%
146.3		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
145.3	6	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	8				- Basin Flood Test performed at 8 Ft.
142.3				Test pit complete at 9 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1008 (Stake #5007)

LOG OF TEST PIT NO. TP-1009 (Stake #5008)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/13/2023**
DATE COMPLETED: **10/13/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **154.2 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
153.4		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				
151.2		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 3 Ft.
	4				
148.2	6	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
146.2	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 8 Ft.
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1009 (Stake #5008)

LOG OF TEST PIT NO. TP-1010 (Stake #5009)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/13/2023**
DATE COMPLETED: **10/13/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **158.5**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
157.7		ML		Red-brown (5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				
155.5		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
	4				- Infiltration rate = 3 in/hr at 4 Ft.
152.5	6	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	8				- Basin Flood Test at 8 Ft.
148.5	10			Test pit complete at 10 Ft. due to refusal on highly-weathered rock.	
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1010 (Stake #5009)

LOG OF TEST PIT NO. TP-1011 (Stake #5061)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/18/2023**
DATE COMPLETED: **10/18/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **187.2 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
186.4		ML		Red-brown (5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 4.5 in/hr at 1 Ft.
	2				
184.2		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
181.2	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1011 (Stake #5061)

LOG OF TEST PIT NO. TP-1012 (Stake #5062)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/18/2023**
DATE COMPLETED: **10/18/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **189.1 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
188.3		ML		Red-brown (5YR 4/4), moist, SILT with sand [Silt Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft. - NMC = 22.6%
185.1	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
182.1				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1012 (Stake #5062)

LOG OF TEST PIT NO. TP-1013 (Stake #5060)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/19/2023**
DATE COMPLETED: **10/19/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **198.8 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
198.0				10 In. of Topsoil	
		ML		Red-brown (5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
196.3		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
193.8				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1013 (Stake #5060)

LOG OF TEST PIT NO. TP-1014 (Stake #5059)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/19/2023**
DATE COMPLETED: **10/19/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **198.5 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
197.7				10 In. of Topsoil	
	2	ML		Red-brown (5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
195.5	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
192.5	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	- Slight trapped water seepage at 6 Ft.
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1014 (Stake #5059)

LOG OF TEST PIT NO. TP-1015 (Stake #5058)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/18/2023**
DATE COMPLETED: **10/18/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **195.9 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
195.1				10 In. of Topsoil	
	2	ML		Red-brown (5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
192.9	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
190.9	6			Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1015 (Stake #5058)

LOG OF TEST PIT NO. TP-1016 (Stake #5057)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/18/2023**
DATE COMPLETED: **10/18/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **194.5 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
193.7		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0.5 in/hr at 1 Ft. - NMC = 19.7%
	2				
191.5		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
189.5				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1016 (Stake #5057)

LOG OF TEST PIT NO. TP-1017 (Stake #5056)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/18/2023**
DATE COMPLETED: **10/18/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **192.7 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
192.2				6 In. of Topsoil	- Infiltration rate = 24 in/hr at 1/2 Ft. - NMC = 17.9%
		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL [Gravelly Sand per USDA]	
191.2		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	2				
	4				
186.7	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1017 (Stake #5056)

LOG OF TEST PIT NO. TP-1018 (Stake #5055)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/18/2023**
DATE COMPLETED: **10/18/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **192.3 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
191.8				6 In. of Topsoil	
		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 3 in/hr at 1 Ft.
	2				
189.8		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
186.3	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1018 (Stake #5055)

LOG OF TEST PIT NO. TP-1019 (Stake #5012)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/13/2023**
DATE COMPLETED: **10/13/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **187.7 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
187.0				8 In. of Topsoil	- Infiltration rate = 12 in/hr at 1/2 Ft.
		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
186.2	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
182.2	6			Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 5 Ft.
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1019 (Stake #5012)

LOG OF TEST PIT NO. TP-1020 (Stake #5011)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/13/2023**
DATE COMPLETED: **10/13/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **182.4 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
181.6		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
180.9	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				- Basin Flood Test performed at 5 Ft.
176.4	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1020 (Stake #5011)

LOG OF TEST PIT NO. TP-1021 (Stake #5010)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/17/2023**
DATE COMPLETED: **10/17/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **181.7 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
180.9		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 0.5 in/hr at 1 Ft.
	2				
178.7		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				- Basin Flood Test performed at 5 Ft.
175.7	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1021 (Stake #5010)

LOG OF TEST PIT NO. TP-1022 (Stake #5013)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/17/2023**
DATE COMPLETED: **10/17/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **182.8 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
182.0				10 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Gravelly SILT [Silt Loam per USDA]	- Infiltration rate = 0.5 in/hr at 1 Ft. - NMC = 20.5%
180.8	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				- Basin Flood Test performed at 4 Ft.
177.8				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1022 (Stake #5013)

LOG OF TEST PIT NO. TP-1023 (Stake #5014)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/18/2023**
DATE COMPLETED: **10/18/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **189.3 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
188.5				10 In. of Topsoil	
		ML		Brown (10YR 5/3), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
185.3	4				
		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
183.3	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 6 Ft.
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1023 (Stake #5014)

LOG OF TEST PIT NO. TP-1024 (Stake #5015)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

GROUNDWATER ENCOUNTERED: **N/E**
DATE STARTED: **10/18/2023**
GROUND SURFACE ELEVATION: **190.3 Ft.**
DATE COMPLETED: **10/18/2023**
DATUM: **Survey**
CONTRACTOR: **J.A. Neary Excavating**
LOGGED BY: **AFS**
EQUIPMENT: **Case CX160**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
189.5				10 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 2-1/2 Ft.
	2				
186.3	4				
		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	- Basin Flood Test performed at 7 Ft.
	6				
182.3	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1024 (Stake #5015)

LOG OF TEST PIT NO. TP-1025 (Stake #5016)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/18/2023**
DATE COMPLETED: **10/18/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **191.2 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
190.4				10 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration test = 0 in/hr at 2 Ft.
187.2	4				
		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				- Basin Flood Test performed at 6 Ft.
184.2				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1025 (Stake #5016)

LOG OF TEST PIT NO. TP-1026 (Stake #5017)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/17/2023**
DATE COMPLETED: **10/17/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **192.7 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
192.2	0			6 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Gravelly SILT with sand [Silt Loam per USDA]	- Infiltration rate = 0.5 in/hr at 3 Ft. - NMC = 21.6%
187.7	6	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	- Basin Flood Test performed at 7 Ft.
184.7	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1026 (Stake #5017)

LOG OF TEST PIT NO. TP-1027 (Stake #5019)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/17/2023**
DATE COMPLETED: **10/17/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **193.6 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
193.1	0			6 In. of Topsoil	
		GM		Brown (7.5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0.5 in/hr at 1 Ft.
191.6	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
189.6	4			Test pit complete at 4 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 4 Ft.
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1027 (Stake #5019)

LOG OF TEST PIT NO. TP-1028 (Stake #5145)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/20/2023**
DATE COMPLETED: **10/20/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **194.1 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
193.1		ML		Brown (7.5YR 5/3), moist, SILT [Silt per USDA]	- NMC = 24.2% - Infiltration rate = 0 in/hr at 2 Ft.
	2				
190.6		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
190.1	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
188.1	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1028 (Stake #5145)

LOG OF TEST PIT NO. TP-1029 (Stake #5146)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/20/2023**
DATE COMPLETED: **10/20/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **193.4 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
192.6		ML		Red-brown (5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration rate = 0.5 in/hr at 2 Ft.
190.4		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
189.4	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
187.9				Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1029 (Stake #5146)

LOG OF TEST PIT NO. TP-1030 (Stake #5147)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/14/2023**
DATE COMPLETED: **11/14/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **187.0 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
186.2		ML		Brown (7.5YR 4/4), moist, SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
185.0	2	GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
184.0		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
182.0				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1030 (Stake #5147)

LOG OF TEST PIT NO. TP-1031 (Stake #5148)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/14/2023**
DATE COMPLETED: **11/14/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **186.3 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
185.5		ML		Dark yellow-brown (10YR 4/6), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
183.3		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
182.3	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
180.8				Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1031 (Stake #5148)

LOG OF TEST PIT NO. TP-1032 (Stake #5149)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/14/2023**
DATE COMPLETED: **11/14/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **182.9 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
182.2				8 In. of Topsoil	
		ML		Dark yellow-brown (10YR 4/6), moist, SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
180.9	2	SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	
179.9		HW		Very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	4				
177.9				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1032 (Stake #5149)

LOG OF TEST PIT NO. TP-1033 (Stake #5150)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/14/2023**
DATE COMPLETED: **11/14/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **183.6 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
182.8		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
180.6		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
178.1				Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1033 (Stake #5150)

LOG OF TEST PIT NO. TP-1034 (Stake #5151)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/14/2023**
DATE COMPLETED: **11/14/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **194.3 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
193.3		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0.5 in/hr at 1-1/2 Ft.
	2				
190.8		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
188.3	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1034 (Stake #5151)

LOG OF TEST PIT NO. TP-1035 (Stake #5152)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/14/2023**
DATE COMPLETED: **11/14/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **181.2 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
180.4		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 1 in/hr at 1 Ft.
	2				
178.7		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
175.7				Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1035 (Stake #5152)

LOG OF TEST PIT NO. TP-1036 (Stake #5020)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/23/2023**
DATE COMPLETED: **10/23/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **168.9 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
168.1		ML		Dark yellow-brown (10YR 3/6), moist, SILT with sand [Silt Loam per USDA]	
	2				
					- Infiltration rate = 0.125 in/hr at 3 Ft.
	4				
164.4		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
161.9				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 7 Ft.
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1036 (Stake #5020)

LOG OF TEST PIT NO. TP-1037 (Stake #5021)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/23/2023**
DATE COMPLETED: **10/23/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **169.4 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
168.6		ML		Red-brown (5YR 4/4), moist, Gravelly SILT with sand [Silt Loam per USDA]	
	2				- NMC = 16.4%
					- Infiltration rate = 0.125 in/hr at 3 Ft.
	4				
164.4		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
161.9					- Basin Flood Test performed at 7 Ft.
				Test pit complete at 7-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1037 (Stake #5021)

LOG OF TEST PIT NO. TP-1038 (Stake #5022)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/23/2023**
DATE COMPLETED: **10/23/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **172.9 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
172.1				10 In. of Topsoil	
		SM		Dark brown (7.5YR 3/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	
	2				
169.4					
	4	GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 3 in/hr at 3-1/2 Ft.
167.4					
	6	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
					- Basin Flood Test performed at 7 Ft.
164.9	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1038 (Stake #5022)

LOG OF TEST PIT NO. TP-1039 (Stake #5023)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/23/2023**
DATE COMPLETED: **10/23/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **174.8 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
173.8		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
	2				- Infiltration rate = 1.5 in/hr at 2 Ft.
170.8	4				
		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				- Basin Flood Test performed at 7 Ft.
166.8	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1039 (Stake #5023)

LOG OF TEST PIT NO. TP-1040 (Stake #5024)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/23/2023**
DATE COMPLETED: **10/23/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **179.8 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
179.3				6 In. of Topsoil	
		ML		Brown (7.5YR 4/6), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 1-1/2 Ft.
176.3					
		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
	6				- Basin Flood Test performed at 6 Ft.
172.8				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1040 (Stake #5024)

LOG OF TEST PIT NO. TP-1041 (Stake #5025)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/24/2023**
DATE COMPLETED: **10/24/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **177.5 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
177.0				6 In. of Topsoil	
		SM		Dark yellow-brown (10YR 4/6), moist, Silty SAND [Sandy Loam per USDA]	- Infiltration rate = 0.5 in/hr at 1/2 Ft.
	2				
175.0		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
					- Basin Flood Test performed at 5 Ft.
	6				
171.0				Test pit complete at 6-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1041 (Stake #5025)

LOG OF TEST PIT NO. TP-1042 (Stake #5026)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/24/2023**
DATE COMPLETED: **10/24/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **179.3 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
178.8				6 In. of Topsoil	
		SM		Brown (7.5YR 4/6), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
177.3	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				- Basin Flood Test performed at 5 Ft.
173.3	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1042 (Stake #5026)

LOG OF TEST PIT NO. TP-1043 (Stake #5027)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/24/2023**
DATE COMPLETED: **10/24/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **183.8 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
183.3				6 In. of Topsoil	
		ML		Brown (7.5YR 4/6), moist, SILT [Silt per USDA]	- Infiltration rate = 0 in/hr at 1 Ft. - NMC = 21.6%
	2	ML			
180.8		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				- Basin Flood Test performed at 5 Ft.
177.8	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1043 (Stake #5027)

LOG OF TEST PIT NO. TP-1044 (Stake #5028)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/24/2023**
DATE COMPLETED: **10/24/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **182.7 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
182.1				8 In. of Topsoil	
		ML		Brown (7.5YR 4/6), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
179.7		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				- Basin Flood Test performed at 4-1/2 Ft.
176.7	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1044 (Stake #5028)

LOG OF TEST PIT NO. TP-1045 (Stake #5029)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/24/2023**
DATE COMPLETED: **10/24/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **183.4 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
182.8	0			8 In. of Topsoil	
		SM		Brown (7.5YR 4/6), moist, Silty SAND [Sandy Loam per USDA]	
180.9	2	GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0.5 in/hr at 3 Ft.
178.4	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
176.4	6			Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 7 Ft.
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1045 (Stake #5029)

LOG OF TEST PIT NO. TP-1046 (Stake #5085)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/26/2023**
DATE COMPLETED: **10/26/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **188.5 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
187.5		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration rate = 0.25 in/hr at 2 Ft.
184.5	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
182.5	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1046 (Stake #5085)

LOG OF TEST PIT NO. TP-1047 (Stake #5086)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/26/2023**
DATE COMPLETED: **10/26/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **191.9 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
191.4				6 In. of Topsoil	- Infiltration rate = 0 in/hr at 1/2 Ft.
		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
190.4		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	2				
	4				
185.9	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1047 (Stake #5086)

LOG OF TEST PIT NO. TP-1048 (Stake #5087)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/26/2023**
DATE COMPLETED: **10/26/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **193.4 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
192.8				8 In. of Topsoil	
		ML		Brown (7.5YR 4/6) and red-brown (5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
189.4	4				
		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
186.4				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1048 (Stake #5087)

LOG OF TEST PIT NO. TP-1049 (Stake #5088)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/26/2023**
DATE COMPLETED: **10/26/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **189.9 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
189.1		ML		Dark yellow-brown (10YR 4/6), moist, SILT with sand [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft. - NMC = 11.9%
	2				
186.9		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
	6				
181.9	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1049 (Stake #5088)

LOG OF TEST PIT NO. TP-1050 (Stake #5082)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/26/2023**
DATE COMPLETED: **10/26/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **190.4 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
189.6		SM		Brown (7.5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
186.4	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
184.4	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1050 (Stake #5082)

LOG OF TEST PIT NO. TP-1051 (Stake #5083)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/26/2023**
DATE COMPLETED: **10/26/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **190.3 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
189.7				8 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2			- Red-brown (5YR 4/4), moist, Gravelly SILT with sand [Loam per USDA] at 2-1/2 Ft.	- Infiltration rate = 0 in/hr at 2-1/2 Ft. - NMC = 10.0%
	4				
185.8		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
183.8				Test pit complete at 6-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1051 (Stake #5083)

LOG OF TEST PIT NO. TP-1052 (Stake #5084)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/26/2023**
DATE COMPLETED: **10/26/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **189.6 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
188.8				10 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
				- with gravel at 3 Ft.	
185.6	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
183.6	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1052 (Stake #5084)

LOG OF TEST PIT NO. TP-1053 (Stake #5079)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/20/2023**
DATE COMPLETED: **10/20/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **199.4 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
198.4		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0.5 in/hr at 1-1/2 Ft.
	2			- Brown (7.5YR 5/3) at 3 Ft.	- NMC = 22.1%
195.9		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
194.9				Test pit complete at 4-1/2 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1053 (Stake #5079)

LOG OF TEST PIT NO. TP-1054 (Stake #5080)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/20/2023**
DATE COMPLETED: **10/20/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **200.3 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
199.3		CL		Dark yellow-brown (10YR 4/6), moist, Sandy Lean CLAY [Clay per USDA]	
198.3	2	ML		Dark yellow-brown (10YR 4/6) and light brown-gray (10YR 6/2), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 2 Ft.
196.3	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
195.3				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1054 (Stake #5080)

LOG OF TEST PIT NO. TP-1055 (Stake #5081)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/20/2023**
DATE COMPLETED: **10/20/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **200.9 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0			12 In. of Topsoil	
199.9	2	ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA] - Red-brown (5YR 4/4), with gravel at 2 Ft.	- Infiltration rate = 0 in/hr at 2 Ft.
196.9	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
194.9	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1055 (Stake #5081)

LOG OF TEST PIT NO. TP-1056 (Stake #5073)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/19/2023**
DATE COMPLETED: **10/19/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **200.9 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
200.2				8 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, SILT [Silt Loam per USDA]	
	2				
	4				- Infiltration rate = 0 in/hr at 4 Ft.
				- Red-brown (5YR 4/4), with gravel at 5 Ft.	
	6				
194.4		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	- Slight perched water seepage at 6-1/2 Ft.
	8				
190.9	10			Test pit complete at 10 Ft. due to refusal on highly-weathered rock.	
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1056 (Stake #5073)

LOG OF TEST PIT NO. TP-1057 (Stake #5074)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/19/2023**
DATE COMPLETED: **10/19/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **201.0 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				8 In. of Topsoil	
200.3		CL		Dark yellow-brown (10YR 4/6), moist, Lean CLAY [Clay per USDA]	
	2				
	4				- NMC = 22.1% - Infiltration rate = 0 in/hr at 4 Ft.
196.0		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL [Gravelly Sand per USDA]	
	6				
194.5		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	- Rapid perched water seepage at 6-1/2 Ft.
	8				
	10				
189.0	12			Test pit complete at 12 Ft. due to refusal on highly-weathered rock.	
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1057 (Stake #5074)

LOG OF TEST PIT NO. TP-1058 (Stake #5075)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/19/2023**
DATE COMPLETED: **10/19/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **200.1 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
199.4	0			8 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
198.1	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
195.1				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1058 (Stake #5075)

LOG OF TEST PIT NO. TP-1059 (Stake #5076)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/19/2023**
DATE COMPLETED: **10/19/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **200.0 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
199.3				8 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
197.5	2				
		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
195.0				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1059 (Stake #5076)

LOG OF TEST PIT NO. TP-1060 (Stake #5077)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/19/2023**
DATE COMPLETED: **10/19/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **197.6 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
196.9				8 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 1.5 in/hr at 1 Ft.
196.1	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
	6				
190.6	8			Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1060 (Stake #5077)

LOG OF TEST PIT NO. TP-1061 (Stake #5078)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/19/2023**
DATE COMPLETED: **10/19/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **197.3 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
196.6				8 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
194.3		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
	6				
190.3				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1061 (Stake #5078)

LOG OF TEST PIT NO. TP-1062 (Stake #5072)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/27/2023**
DATE COMPLETED: **10/27/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **203.7 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
202.9		ML		Dark yellow-brown (10YR 4/6), moist, SILT [Silt per USDA]	
	2				
200.7		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 0 in/hr at 3 Ft.
	4				
198.7		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	- Rapid perched water seepage at 5 Ft.
	6				
195.7	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1062 (Stake #5072)

LOG OF TEST PIT NO. TP-1063 (Stake #5071)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/27/2023**
DATE COMPLETED: **10/27/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **203.5 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
202.7				10 In. of Topsoil	
		ML		Red-brown (5YR 4/3), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 2-1/2 Ft.
	2				
	4				
199.0		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	- Rapid trapped water seepage at 5 Ft.
	6				
195.5	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1063 (Stake #5071)

LOG OF TEST PIT NO. TP-1064 (Stake #5070)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/27/2023**
DATE COMPLETED: **10/27/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **203.8 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
203.0				10 In. of Topsoil	
		GM		Dark brown (10YR 3/3), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
201.8	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	- Infiltration rate = 0 in/hr at 1-1/2 Ft.
	4				
198.8				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1064 (Stake #5070)

LOG OF TEST PIT NO. TP-1065 (Stake #5069)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/27/2023**
DATE COMPLETED: **10/27/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **204.1 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
203.3		GM		Dark brown (10YR 3/3), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
202.1	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
198.6	6			Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1065 (Stake #5069)

LOG OF TEST PIT NO. TP-1066 (Stake #5068)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/27/2023**
DATE COMPLETED: **10/27/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **204.1 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
203.3		GM		Dark brown (10YR 3/3), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
202.6	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
198.6	6			Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1066 (Stake #5068)

LOG OF TEST PIT NO. TP-1067 (Stake #5067)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/27/2023**
DATE COMPLETED: **10/27/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **204.1 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
203.3		GM		Dark brown (10YR 3/3), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
202.6		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	2				
	4				
198.1	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1067 (Stake #5067)

LOG OF TEST PIT NO. TP-1068 (Stake #5066)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/27/2023**
DATE COMPLETED: **10/27/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **206.6 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
205.8				10 In. of Topsoil	
	2	ML		Dark yellow-brown (10YR 4/6), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
203.6	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
201.6				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1068 (Stake #5066)

LOG OF TEST PIT NO. TP-1069 (Stake #5065)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/27/2023**
DATE COMPLETED: **10/27/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **206.9 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
206.3				8 In. of Topsoil	
		GM		Brown (10YR 4/3), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration test attempted at 1 Ft.
205.4	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
201.4	6			Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1069 (Stake #5065)

LOG OF TEST PIT NO. TP-1070 (Stake #5064)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/27/2023**
DATE COMPLETED: **10/27/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **205.7 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
205.1				8 In. of Topsoil	
		GM		Dark yellow-brown (10YR 4/6), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration test attempted at 1 Ft.
204.2	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
	6				
198.7				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1070 (Stake #5064)

LOG OF TEST PIT NO. TP-1071 (Stake #5063)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/27/2023**
DATE COMPLETED: **10/27/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **204.2 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0			12 In. of Topsoil	
203.2	2	GM		Dark brown (10YR 3/3), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration test attempted at 1 Ft.
201.7	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
199.2	6			Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1071 (Stake #5063)

LOG OF TEST PIT NO. TP-1072 (Stake #5121)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/02/2023**
DATE COMPLETED: **11/02/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **186.1 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
185.3		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 2 in/hr at 1 Ft.
	2				
183.1		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
	6				
179.1				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1072 (Stake #5121)

LOG OF TEST PIT NO. TP-1073 (Stake #5120)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/02/2023**
DATE COMPLETED: **11/02/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **183.8 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
183.0		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 2 in/hr at 1 Ft. - NMC = 16.4%
	2				
180.8		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
	6				
176.3				Test pit complete at 7-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1073 (Stake #5120)

LOG OF TEST PIT NO. TP-1074 (Stake #5119)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/02/2023**
DATE COMPLETED: **11/02/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **181.4 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
180.6		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 2 in/hr at 1 Ft.
	2				
178.4		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
	6				
174.4				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1074 (Stake #5119)

LOG OF TEST PIT NO. TP-1075 (Stake #5118)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/02/2023**
DATE COMPLETED: **11/02/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **179.8 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
179.0		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 2 in/hr at 1 Ft.
	2				
176.8		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
173.8	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1075 (Stake #5118)

LOG OF TEST PIT NO. TP-1076 (Stake #5117)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/02/2023**
DATE COMPLETED: **11/02/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **200.3 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
199.5		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
198.3	2	GM		Brown (7.5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
197.3		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	4				
	6				
193.8				Test pit complete at 6-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1076 (Stake #5117)

LOG OF TEST PIT NO. TP-1077 (Stake #5116)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/02/2023**
DATE COMPLETED: **11/02/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **201.2 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
200.4		ML		Dark yellow-brown (10YR 3/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
199.2	2	GM		Dark yellow-brown (10YR 3/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
198.2		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	4				
195.2	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1077 (Stake #5116)

LOG OF TEST PIT NO. TP-1078 (Stake #5030)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/30/2023**
DATE COMPLETED: **10/30/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **197.6 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
196.8				10 In. of Topsoil	
		ML		Yellow-brown (10YR 5/6), moist, Sandy SILT [Silt Loam per USDA]	
	2				
194.6		GM		Dark yellow-brown (10YR 4/6), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 3 Ft.
	4				
192.6		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	6				
189.6	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 8 Ft.
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1078 (Stake #5030)

Sheet 1 of 1

LOG OF TEST PIT NO. TP-1079 (Stake #5031)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/30/2023**
DATE COMPLETED: **10/30/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **196.9 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0			8 In. of Topsoil	
196.2		GM		Dark yellow-brown (10YR 4/6), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
193.9		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	4				
191.9				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 5 Ft.
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1079 (Stake #5031)

LOG OF TEST PIT NO. TP-1080 (Stake #5032)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/30/2023**
DATE COMPLETED: **10/30/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **194.9 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
194.2				8 In. of Topsoil	
		GM		Brown (7.5YR 4/4), moist, Silty GRAVEL [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft. - NMC = 15.6%
	2				
191.9		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	4				
					- Basin Flood Test performed at 5 Ft.
	6				
187.9				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1080 (Stake #5032)

LOG OF TEST PIT NO. TP-1081 (Stake #5033)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/30/2023**
DATE COMPLETED: **10/30/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **192.8 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
192.1	0			8 In. of Topsoil	
	2	GM		Brown (7.5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
190.8		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	4				
	6				- Basin Flood Test performed at 5 Ft.
185.8	8			Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1081 (Stake #5033)

Sheet 1 of 1

LOG OF TEST PIT NO. TP-1082 (Stake #5106)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/02/2023**
DATE COMPLETED: **11/02/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **208.4 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
207.6				10 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
204.4	4				
		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
200.4	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1082 (Stake #5106)

LOG OF TEST PIT NO. TP-1083 (Stake #5107)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/02/2023**
DATE COMPLETED: **11/02/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **208.7 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
207.9				10 In. of Topsoil	
	2	ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
205.7	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
202.7	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1083 (Stake #5107)

LOG OF TEST PIT NO. TP-1084 (Stake #5108)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/03/2023**
DATE COMPLETED: **11/03/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **208.9 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
208.1				10 In. of Topsoil	
	2	SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
205.9	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
202.9	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1084 (Stake #5108)

LOG OF TEST PIT NO. TP-1085 (Stake #5109)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/03/2023**
DATE COMPLETED: **11/03/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **208.7 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
207.9				10 In. of Topsoil	
		ML		Red-brown (5YR 4/4), moist, SILT with sand [Silt Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
206.2		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	
204.7	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
202.2				Test pit complete at 6-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1085 (Stake #5109)

LOG OF TEST PIT NO. TP-1086 (Stake #5110)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/03/2023**
DATE COMPLETED: **11/03/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **207.7 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
206.9		Cl		Red-brown (5YR 4/4), moist, Lean CLAY [Clay per USDA]	
	2				- NMC = 20.3%
204.7		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 0 in/hr at 2-1/2 Ft.
	4				
203.2		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
201.7	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1086 (Stake #5110)

LOG OF TEST PIT NO. TP-1087 (Stake #5111)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/03/2023**
DATE COMPLETED: **11/03/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **207.3 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
206.5		ML		Brown (7.5YR 4/6), moist, SILT with sand [Silt Loam per USDA]	
	2				
204.3		SM		Brown (10YR 4/6), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 0 in/hr at 2-1/2 Ft.
	4				
202.8		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
201.3	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1087 (Stake #5111)

LOG OF TEST PIT NO. TP-1088 (Stake #5112)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/03/2023**
DATE COMPLETED: **11/03/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **206.4 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
205.6				10 In. of Topsoil	
		ML		Dark yellow-brown (10YR 4/6), moist, SILT with sand [Silt Loam per USDA]	
	2				
202.4	4				- Infiltration rate = 0 in/hr at 3-1/2 Ft.
		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	
200.9					
	6	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
198.9					
	8			Test pit complete at 7-1/2 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1088 (Stake #5112)

LOG OF TEST PIT NO. TP-1089 (Stake #5113)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/03/2023**
DATE COMPLETED: **11/03/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **205.5 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
204.7		ML		Dark yellow-brown (10YR 4/6), moist, SILT with sand [Silt Loam per USDA]	
	2				
	4				- Infiltration rate = 0 in/hr at 4-1/2 Ft.
200.5		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	
	6				
199.0		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
197.5	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1089 (Stake #5113)

LOG OF TEST PIT NO. TP-1090 (Stake #5114)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/03/2023**
DATE COMPLETED: **11/03/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **205.0 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
204.2				10 In. of Topsoil	
	2	ML		Dark yellow-brown (10YR 4/6), moist, SILT with sand [Silt Loam per USDA]	
202.0		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 0 in/hr at 2-1/2 Ft.
200.5	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
198.5	6			Test pit complete at 6-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1090 (Stake #5114)

LOG OF TEST PIT NO. TP-1091 (Stake #5115)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/03/2023**
DATE COMPLETED: **11/03/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **204.4 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
203.6		ML		Dark yellow-brown (10YR 4/6), moist, SILT with sand [Silt Loam per USDA]	
	2				
201.4		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 0.5 in/hr at 3 Ft.
	4				
199.4		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
197.4				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1091 (Stake #5115)

LOG OF TEST PIT NO. TP-1092 (Stake #5089)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/25/2023**
DATE COMPLETED: **10/25/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **196.5 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
195.5		ML		Dark yellow-brown (10YR 4/6), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 1 in/hr at 1 Ft.
	2				
193.5		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
	4				
191.5		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
	8				
187.0				Test pit complete at 9-1/2 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1092 (Stake #5089)

LOG OF TEST PIT NO. TP-1093 (Stake #5090)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/25/2023**
DATE COMPLETED: **10/25/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **196.9 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
195.9	0			12 In. of Topsoil	
	2	ML		Dark yellow-brown (10YR 4/6), moist, Sandy SILT [Silt Loam per USDA]	
193.9	4	GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 3 Ft.
191.9	6	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
189.4	8			Test pit complete at 7-1/2 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1093 (Stake #5090)

LOG OF TEST PIT NO. TP-1094 (Stake #5091)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/25/2023**
DATE COMPLETED: **10/25/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **196.9 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
196.1				10 In. of Topsoil	
	2	ML		Dark yellow-brown (10YR 4/6), moist, SILT [Silt per USDA]	- Infiltration rate = 0 in/hr at 1 Ft. - NMC = 22.7%
193.9	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
190.9	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1094 (Stake #5091)

LOG OF TEST PIT NO. TP-1095 (Stake #5092)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/25/2023**
DATE COMPLETED: **10/25/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **194.6 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
193.6		ML		Dark yellow-brown (10YR 4/6), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
191.6		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
189.6				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1095 (Stake #5092)

LOG OF TEST PIT NO. TP-1096 (Stake #5093)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/25/2023**
DATE COMPLETED: **10/25/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **195.2 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
194.2		ML		Dark yellow-brown (10YR 4/6), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
192.2		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
189.7				Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1096 (Stake #5093)

LOG OF TEST PIT NO. TP-1097 (Stake #5094)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/25/2023**
DATE COMPLETED: **10/25/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **190.1 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
189.3		SM		Red-brown (5YR 4/4), moist, Silty SAND [Sandy Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
187.1		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				- Basin Flood Test performed at 5 Ft.
184.1	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1097 (Stake #5094)

LOG OF TEST PIT NO. TP-1098 (Stake #5095)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/25/2023**
DATE COMPLETED: **10/25/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **189.9 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
189.1				10 In. of Topsoil	
		ML		Red-brown (5YR 4/4), moist, SILT with sand [Silt Loam per USDA]	- Infiltration rate = 0.25 in/hr at 1-1/2 Ft. - NMC = 19.4%
186.4	2				
	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				- Basin Flood Test performed at 6 Ft.
182.9				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1098 (Stake #5095)

LOG OF TEST PIT NO. TP-1099 (Stake #5096)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/25/2023**
DATE COMPLETED: **10/25/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **189.5 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
189.0	0			6 In. of Topsoil	
		ML		Red-brown (5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1/2 Ft.
187.5	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
184.5				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 4-1/2 Ft.
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1099 (Stake #5096)

LOG OF TEST PIT NO. TP-1100 (Stake #5097)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/25/2023**
DATE COMPLETED: **10/25/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **189.5 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
189.0				6 In. of Topsoil	
		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 0.25 in/hr at 1/2 Ft.
188.5		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	2				
185.5	4			Test pit complete at 4 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 4 Ft.
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1100 (Stake #5097)

LOG OF TEST PIT NO. TP-1101 (Stake #5098)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/25/2023**
DATE COMPLETED: **10/25/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **191.6 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
191.1				6 In. of Topsoil	
		ML		Brown (7.5YR 4/4), moist, Sandy SILT with gravel [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1/2 Ft.
	2				
189.1		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				- Basin Flood Test performed at 4-1/2 Ft.
186.1				Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1101 (Stake #5098)

LOG OF TEST PIT NO. TP-1102 (Stake #5099)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/25/2023**
DATE COMPLETED: **10/25/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **192.3 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0			12 In. of Topsoil	
191.3	2	ML		Dark yellow-brown (10YR 4/6), moist, SILT with sand and gravel [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 3 Ft.
187.3	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	- Moderate trapped water seepage at 6 Ft. - Basin Flood Test attempted at 6 Ft. Terminated due to water seepage.
183.8	6			Test pit complete at 8-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1102 (Stake #5099)

LOG OF TEST PIT NO. TP-1103 (Stake #5100)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/10/2023**
DATE COMPLETED: **11/10/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **195.2 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0			12 In. of Topsoil	
194.2	2	ML		Brown (7.5YR 4/4), moist, Sandy SILT with gravel [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
192.2		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL [Gravelly Sand per USDA]	
191.7	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
189.2	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1103 (Stake #5100)

LOG OF TEST PIT NO. TP-1104 (Stake #5101)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/10/2023**
DATE COMPLETED: **11/10/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **196.2 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
195.2		CL		Brown (7.5YR 4/4), moist, Lean CLAY with sand [Clay per USDA]	- NMC = 23.7% - Infiltration rate = 0 in/hr at 2 Ft.
	2				
193.2		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL [Gravelly Sand per USDA]	
192.2	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
188.2	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1104 (Stake #5101)

LOG OF TEST PIT NO. TP-1105 (Stake #5102)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/10/2023**
DATE COMPLETED: **11/10/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **198.3 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0			12 In. of Topsoil	
197.3		ML		Brown (7.5YR 4/4), moist, SILT with sand and gravel [Silt Loam per USDA]	
	2				- Infiltration rate = 1 in/hr at 2 Ft.
195.3		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL [Gravelly Sand per USDA]	
194.3	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
191.3				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1105 (Stake #5102)

LOG OF TEST PIT NO. TP-1106 (Stake #5103)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/10/2023**
DATE COMPLETED: **11/10/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **199.1 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
198.1		ML		Brown (7.5YR 4/6), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
196.1		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL [Gravelly Sand per USDA]	
195.1	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
192.1				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1106 (Stake #5103)

LOG OF TEST PIT NO. TP-1107 (Stake #5104)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/13/2023**
DATE COMPLETED: **11/13/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **200.6 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
199.6		ML		Brown (7.5YR 5/3), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 1.5 in/hr at 1 Ft.
	2				
197.6		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
195.6				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1107 (Stake #5104)

LOG OF TEST PIT NO. TP-1108 (Stake #5105)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/13/2023**
DATE COMPLETED: **11/13/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **201.7 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0			12 In. of Topsoil	
200.7		ML		Brown (7.5YR 4/6), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 1 in/hr at 2 Ft.
197.7	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
194.7	7			Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1108 (Stake #5105)

LOG OF TEST PIT NO. TP-1109 (Stake #5125)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/13/2023**
DATE COMPLETED: **11/13/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **211.5 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
210.5		SM		Red-brown (5YR 5/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	
	2				- Infiltration rate = 0.5 in/hr at 2 Ft.
207.5	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
205.5	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1109 (Stake #5125)

LOG OF TEST PIT NO. TP-1110 (Stake #5124)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/13/2023**
DATE COMPLETED: **11/13/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **207.1 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
206.1		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
203.1	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
201.1	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1110 (Stake #5124)

LOG OF TEST PIT NO. TP-1111 (Stake #5123)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/15/2023**
DATE COMPLETED: **11/15/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **187.6 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
187.1				6 In. of Topsoil	
		GM		Dark yellow-brown (10YR 4/6), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
186.6		HW		Very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	- Infiltration test attempted at 9 In.
	2				
	4				
181.6	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1111 (Stake #5123)

LOG OF TEST PIT NO. TP-1112 (Stake #5122)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/15/2023**
DATE COMPLETED: **11/15/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **185.2 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0			12 In. of Topsoil	
184.2	2	GM		Brown (7.5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
182.2	4	HW		Very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
179.2	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1112 (Stake #5122)

LOG OF TEST PIT NO. TP-1113 (Stake #5035)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/30/2023**
DATE COMPLETED: **10/30/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **182.4 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
181.6		GM		Dark yellow-brown (10YR 4/6), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
179.4		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	4				
					- Basin Flood Test performed at 5 Ft.
	6				
175.9				Test pit complete at 6-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1113 (Stake #5035)

LOG OF TEST PIT NO. TP-1114 (Stake #5034)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/30/2023**
DATE COMPLETED: **10/30/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **187.2 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
186.2		GM		Yellow-brown (10YR 5/6), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
184.2		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	4				- Basin Flood Test performed at 5 Ft.
181.2	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1114 (Stake #5034)

LOG OF TEST PIT NO. TP-1115 (Stake #5049)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/7/2023**
DATE COMPLETED: **11/7/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **200.4 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
199.8				8 In. of Topsoil	
		CL		Red-brown (5YR 4/4), moist, Sandy Lean CLAY [Clay per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
197.4		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
	6				
193.4				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 7 Ft.
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1115 (Stake #5049)

LOG OF TEST PIT NO. TP-1116 (Stake #5048)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/7/2023**
DATE COMPLETED: **11/7/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **195.7 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
194.9				10 In. of Topsoil	
		SM		Dark yellow-brown (10YR 3/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 0 in/hr at 1-1/2 Ft.
	2				
192.2					
	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
188.7				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 7 Ft.
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1116 (Stake #5048)

LOG OF TEST PIT NO. TP-1117 (Stake #5047)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/7/2023**
DATE COMPLETED: **11/7/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **192.3 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
191.5		SM		Dark yellow-brown (10YR 3/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 0.5 in/hr at 1 Ft.
	2				
189.8		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
					- Basin Flood Test performed at 5 Ft.
	6				
184.3	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1117 (Stake #5047)

LOG OF TEST PIT NO. TP-1118 (Stake #5046)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/7/2023**
DATE COMPLETED: **11/7/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **187.0 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
186.4	0			8 In. of Topsoil	
	2	SM		Dark yellow-brown (10YR 3/4), moist, Silty SAND [Sandy Loam per USDA]	- Infiltration rate = 0.5 in/hr at 2 Ft.
183.0	4	HW		Red-brown (5YR 4/4) and gray (7.5YR 5/1), moist, Highly-weathered ROCK (Shale)	
	6				- Basin Flood Test performed at 6 Ft.
179.0	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1118 (Stake #5046)

LOG OF TEST PIT NO. TP-1119 (Stake #5045)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/7/2023**
DATE COMPLETED: **11/7/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **182.3 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
181.7				8 In. of Topsoil	
		ML		Dark yellow-brown (10YR 3/4), moist, Gravelly SILT with sand [Gravelly Silt Loam per USDA]	- Infiltration rate = 6 in/hr at 1 Ft. - NMC = 16.4%
	2				
179.3		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
	6				- Basin Flood Test performed at 5 Ft.
174.3	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1119 (Stake #5045)

LOG OF TEST PIT NO. TP-1120 (Stake #5044)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/7/2023**
DATE COMPLETED: **11/7/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **195.6 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
194.8		GM		Brown (7.5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 6 in/hr at 1 Ft.
	2				
193.1		HW		Red-brown (5YR 4/4) and gray (7.5YR 5/1), moist, Highly-weathered ROCK (Shale)	
	4				
					- Basin Flood Test performed at 5 Ft.
	6				
188.6				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1120 (Stake #5044)

LOG OF TEST PIT NO. TP-1121 (Stake #5036)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/31/2023**
DATE COMPLETED: **10/31/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **180.7 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
179.9		ML		Dark yellow-brown (10YR 4/6), moist, SILT [Silt per USDA]	- NMC = 15.2% - Infiltration rate = 0 in/hr at 2-1/2 Ft.
	2				
	4				
176.2		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	6				
173.7				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 6-1/2 Ft.
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1121 (Stake #5036)

LOG OF TEST PIT NO. TP-1122 (Stake #5037)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/31/2023**
DATE COMPLETED: **10/31/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **182.6 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
181.8		GM		Brown (7.5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
180.1		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	4				- Basin Flood Test performed at 4-1/2 Ft.
177.1				Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1122 (Stake #5037)

LOG OF TEST PIT NO. TP-1123 (Stake #5038)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/31/2023**
DATE COMPLETED: **10/31/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **184.4 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
183.6		GM		Dark yellow-brown (10YR 4/6), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0.25 in/hr at 1 Ft.
	2				
181.9		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	4				- Basin Flood Test performed at 4-1/2 Ft.
178.9				Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1123 (Stake #5038)

LOG OF TEST PIT NO. TP-1124 (Stake #5039)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/31/2023**
DATE COMPLETED: **10/31/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **187.8 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
187.0		GM		Brown (7.5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
184.8		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	4				
182.3					- Basin Flood Test performed at 5 Ft.
	6			Test pit complete at 5-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1124 (Stake #5039)

LOG OF TEST PIT NO. TP-1125 (Stake #5040)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/31/2023**
DATE COMPLETED: **10/31/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **189.0 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
188.2		GM		Brown (7.5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration test attempted at 1 Ft.
	2				
186.0		HW		Red-brown (5YR 4/4) to very dark gray (5YR 3/1), moist, Highly-weathered ROCK (Shale)	
	4				
					- Basin Flood Test performed at 5 Ft.
	6				
182.0				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1125 (Stake #5040)

LOG OF TEST PIT NO. TP-1126 (Stake #5041)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/31/2023**
DATE COMPLETED: **10/31/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **190.7 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
189.9				10 In. of Topsoil	
		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	
	2				
					- Infiltration rate = 0.25 in/hr at 3 Ft.
	4				
185.7		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
183.7				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 7 Ft.
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1126 (Stake #5041)

LOG OF TEST PIT NO. TP-1127 (Stake #5042)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/31/2023**
DATE COMPLETED: **10/31/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **199.2 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
198.5				8 In. of Topsoil	
		ML		Red-brown (5YR 4/4), moist, Sandy SILT with gravel [Silt Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
196.2		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- NMC = 14.5%
195.2	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
193.2	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 6 Ft.
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1127 (Stake #5042)

LOG OF TEST PIT NO. TP-1128 (Stake #5043)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **10/31/2023**
DATE COMPLETED: **10/31/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **193.5 Ft.**
DATUM: **Survey**
LOGGED BY: **VP**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
192.7		SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
190.5		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
189.5	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
187.5	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 6 Ft.
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1128 (Stake #5043)

LOG OF TEST PIT NO. TP-1129 (Stake #5139)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/9/2023**
DATE COMPLETED: **11/9/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **209.0 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
208.4				8 In. of Topsoil	
		ML		Red-brown (5YR 4/4), moist, SILT with sand [Silt Loam per USDA]	- Infiltration rate = 0.25 in/hr at 1 Ft.
	2				
206.0		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
	6				
201.0	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1129 (Stake #5139)

LOG OF TEST PIT NO. TP-1130 (Stake #5138)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/9/2023**
DATE COMPLETED: **11/9/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **207.4 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
206.8				8 In. of Topsoil	
		ML		Brown (7.5YR 4/6), moist, Sandy SILT with gravel [Silt Loam per USDA]	
	2				- Infiltration rate = 0.25 in/hr at 2 Ft.
203.4	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
	8				
197.4	10			Test pit complete at 10 Ft. due to refusal on highly-weathered rock.	
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1130 (Stake #5138)

LOG OF TEST PIT NO. TP-1131

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/13/2023**
DATE COMPLETED: **11/13/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **212 Ft.**
DATUM: **TOPO**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0			10 In. of Topsoil	
211.2		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 12 in/hr at 1 Ft.
209.0	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
206.0	4			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation are approximate.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1131

LOG OF TEST PIT NO. TP-1132

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/13/2023**
DATE COMPLETED: **11/13/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **210 Ft.**
DATUM: **TOPO**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
209.2				10 In. of Topsoil	
		ML		Dark brown (7.5YR 3/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration rate = 0.5 in/hr at 2 Ft.
				- with gravel at 3 Ft.	
206.0	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
204.0	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation are approximate.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1132

LOG OF TEST PIT NO. TP-1133 (Stake #5130)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/9/2023**
DATE COMPLETED: **11/9/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **212.5 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
211.7		ML		Brown (7.5YR 4/6), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration rate = 0.5 in/hr at 2 Ft.
208.5	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
206.5	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1133 (Stake #5130)

LOG OF TEST PIT NO. TP-1134 (Stake #5131)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/9/2023**
DATE COMPLETED: **11/9/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **213.9 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
213.3	0			8 In. of Topsoil	
	2	ML		Red-brown (5YR 4/4), moist, Sandy SILT with gravel [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 2-1/2 Ft.
209.4	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
207.4	6			Test pit complete at 6-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1134 (Stake #5131)

LOG OF TEST PIT NO. TP-1135 (Stake #5132)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/9/2023**
DATE COMPLETED: **11/9/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **214.4 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
213.8				8 In. of Topsoil	
				FILL - Red-brown (5YR 4/4), moist, sandy silt with bricks [Silt Loam per USDA]	
	2			- with an abandoned metal pipe (possibly water line) at 2-1/2 Ft.	
211.4				Test pit terminated at 3 Ft. due to existing utility.	- Offset 3 Ft. to the west and continued at TP-1135A.
	4				
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1135 (Stake #5132)

LOG OF TEST PIT NO. TP-1135A (Stake #5132)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/9/2023**
DATE COMPLETED: **11/9/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **214.4 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
213.8				8 In. of Topsoil	
		ML		Red-brown (5YR 4/4), moist, SILT [Silt per USDA]	
	2			- with gravel at 2-1/2 Ft.	- Infiltration rate = 0.5 in/hr at 2 Ft. - NMC = 22.2%
210.4	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
208.4	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1135A (Stake #5132)

LOG OF TEST PIT NO. TP-1136 (Stake #5133)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/9/2023**
DATE COMPLETED: **11/9/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **214.6 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
214.1				6 In. of Topsoil	
				FILL - Red-brown (5YR 4/4), moist, sandy silt with gravel [Silt Loam per USDA] - with concrete fragments at 1 Ft.	
	2			- with plastic and scrap metal at 2 Ft.	- Infiltration rate = 0.5 in/hr at 2 Ft.
210.6	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
208.6	6			Test pit complete at 6 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1136 (Stake #5133)

LOG OF TEST PIT NO. TP-1137 (Stake #5134)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/9/2023**
DATE COMPLETED: **11/9/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **213.7 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
213.1	0			8 In. of Topsoil	
	2	SM		Red-brown (5YR 4/4), moist, Silty SAND with gravel [Sandy Loam per USDA]	- Infiltration rate = 0.25 in/hr at 2 Ft.
209.7	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
207.2	6			Test pit complete at 6-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1137 (Stake #5134)

LOG OF TEST PIT NO. TP-1138 (Stake #5135)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/9/2023**
DATE COMPLETED: **11/9/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **211.9 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
211.3				8 In. of Topsoil	
		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 9 in/hr at 1-1/2 Ft.
	2				
208.4					
	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
204.9				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1138 (Stake #5135)

LOG OF TEST PIT NO. TP-1139 (Stake #5126)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/10/2023**
DATE COMPLETED: **11/10/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **206.8 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
205.8		ML		Red-brown (5YR 4/4), moist, Sandy SILT with gravel [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
203.8		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
201.8				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1139 (Stake #5126)

LOG OF TEST PIT NO. TP-1140 (Stake #5127)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/10/2023**
DATE COMPLETED: **11/10/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **205.1 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
204.5				8 In. of Topsoil	
		ML		Red-brown (5YR 4/4), moist, Sandy SILT with gravel [Silt Loam per USDA]	- Infiltration rate = 0.5 in/hr at 1 Ft.
203.1	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
201.1	4			Test pit complete at 4 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1140 (Stake #5127)

LOG OF TEST PIT NO. TP-1141 (Stake #5129)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/10/2023**
DATE COMPLETED: **11/10/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **201.6 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
201.0				8 In. of Topsoil	
		ML		Red-brown (5YR 4/4), moist, Sandy SILT with gravel [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2				
198.6		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
196.6				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1141 (Stake #5129)

LOG OF TEST PIT NO. TP-1142 (Stake #5128)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/10/2023**
DATE COMPLETED: **11/10/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **200.0 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
199.4				8 In. of Topsoil	
		ML		Red-brown (5YR 4/4), moist, Sandy SILT with gravel [Silt Loam per USDA]	- Infiltration rate = 0.5 in/hr at 2 Ft.
	2				
196.0	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
195.0				Test pit complete at 5 Ft. due to refusal on highly-weathered rock.	
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1142 (Stake #5128)

LOG OF TEST PIT NO. TP-1143 (Stake #5142)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/8/2023**
DATE COMPLETED: **11/8/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **213.3 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
212.5				10 In. of Topsoil	
		ML		Red-brown (5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
				- with gravel at 3 Ft.	
209.3	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
205.3	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1143 (Stake #5142)

LOG OF TEST PIT NO. TP-1144 (Stake #5141)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/8/2023**
DATE COMPLETED: **11/8/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **213.4 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
212.6		ML		Brown (7.5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1-1/2 Ft.
	2				
				- with gravel at 3 Ft.	
209.9		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
	6				
206.4				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1144 (Stake #5141)

LOG OF TEST PIT NO. TP-1145 (Stake #5140)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/8/2023**
DATE COMPLETED: **11/8/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **213.2 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
212.4		CL		Red-brown (5YR 4/4), moist, Sandy Lean CLAY [Clay per USDA]	
	2				- Infiltration rate = 0 in/hr at 2 Ft.
				- with gravel at 3 Ft.	
209.2	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
206.7				Test pit complete at 6-1/2 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1145 (Stake #5140)

LOG OF TEST PIT NO. TP-1146 (Stake #5144)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/8/2023**
DATE COMPLETED: **11/8/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **207.1 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
206.3	0			10 In. of Topsoil	
	2	ML		Dark yellow-brown (10YR 4/6), moist, SILT with sand [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1-1/2 Ft.
203.1	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
200.1	6			Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1146 (Stake #5144)

LOG OF TEST PIT NO. TP-1147 (Stake #5143)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/8/2023**
DATE COMPLETED: **11/8/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **207.1 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
206.3				10 In. of Topsoil	
		SM		Dark yellow-brown (10YR 4/6), moist, Silty SAND [Sandy Loam per USDA]	
	2				- Infiltration rate = 0.5 in/hr at 2 Ft.
204.1		ML		Dark yellow-brown (10YR 3/4), moist, SILT with sand and gravel [Silt Loam per USDA]	
203.1	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				
199.1	8			Test pit complete at 8 Ft. due to refusal on highly-weathered rock.	
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1147 (Stake #5143)

LOG OF TEST PIT NO. TP-1148 (Stake #5054)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/6/2023**
DATE COMPLETED: **11/6/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **202.3 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
201.3		ML		Red-brown (5YR 4/4), moist, SILT with sand and gravel [Silt Loam per USDA]	- Infiltration rate = 0.5 in/hr at 1 Ft.
200.8		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
200.3	2	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
198.3	4			Test pit complete at 4 Ft. due to refusal on highly-weathered rock.	- Basin Flood Test performed at 4 Ft.
	6				
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

LOG OF TEST PIT NO. TP-1148 (Stake #5054)

LOG OF TEST PIT NO. TP-1149 (Stake #5053)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/6/2023**
DATE COMPLETED: **11/6/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **202.8 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
201.8				12 In. of Topsoil	
	2	ML		Red-brown (5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	- Infiltration rate = 0.5 in/hr at 1-1/2 Ft. - NMC = 23.0%
199.8		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
199.3	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	- Basin Flood Test performed at 5 Ft.
	6				
195.8				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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LOG OF TEST PIT NO. TP-1149 (Stake #5053)

LOG OF TEST PIT NO. TP-1150 (Stake #5052)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/6/2023**
DATE COMPLETED: **11/6/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **200.2 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				12 In. of Topsoil	
199.2		ML		Red-brown (5YR 4/4), moist, SILT with sand [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1-1/2 Ft.
	2				
197.7		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	
196.7		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
					- Basin Flood Test performed at 5 Ft.
	6				
193.2				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	- Moderate water seepage at 7 Ft.
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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LOG OF TEST PIT NO. TP-1150 (Stake #5052)

LOG OF TEST PIT NO. TP-1151 (Stake #5051)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/6/2023**
DATE COMPLETED: **11/6/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **197.6 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
				10 In. of Topsoil	
196.8		ML		Red-brown (5YR 4/4), moist, SILT with sand [Silt Loam per USDA]	- Infiltration rate = 0 in/hr at 1 Ft.
	2			- with gravel at 2 Ft.	
194.6		HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	4				
					- Basin Flood Test performed at 5 Ft.
	6				
190.6				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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LOG OF TEST PIT NO. TP-1151 (Stake #5051)

LOG OF TEST PIT NO. TP-1152 (Stake #5050)

PROJECT: **Venue at Hopewell**
PROJECT LOCATION: **Hopewell Township, New Jersey**
CLIENT: **Lennar**

PROJECT NO.: **31191132x1**

DATE STARTED: **11/6/2023**
DATE COMPLETED: **11/6/2023**
CONTRACTOR: **J.A. Neary Excavating**
EQUIPMENT: **Case CX160**

GROUNDWATER ENCOUNTERED: **N/E**
GROUND SURFACE ELEVATION: **197.5 Ft.**
DATUM: **Survey**
LOGGED BY: **AFS**
CHECKED BY: **AMT**

ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION	REMARKS
	0				
196.5				12 In. of Topsoil	
	2	ML		Red-brown (5YR 4/4), moist, Sandy SILT [Silt Loam per USDA]	
195.0		GM		Red-brown (5YR 4/4), moist, Silty GRAVEL with sand [Gravelly Sand per USDA]	- Infiltration rate = 0 in/hr at 2 Ft.
193.5	4	HW		Red-brown (5YR 4/4), moist, Highly-weathered ROCK (Shale)	
	6				- Basin Flood Test performed at 6 Ft.
190.5				Test pit complete at 7 Ft. due to refusal on highly-weathered rock.	
	8				
	10				
	12				
	14				
	16				
	18				

NOTES: **Location and elevation provided by Bowman.**
Backfilled on completion.

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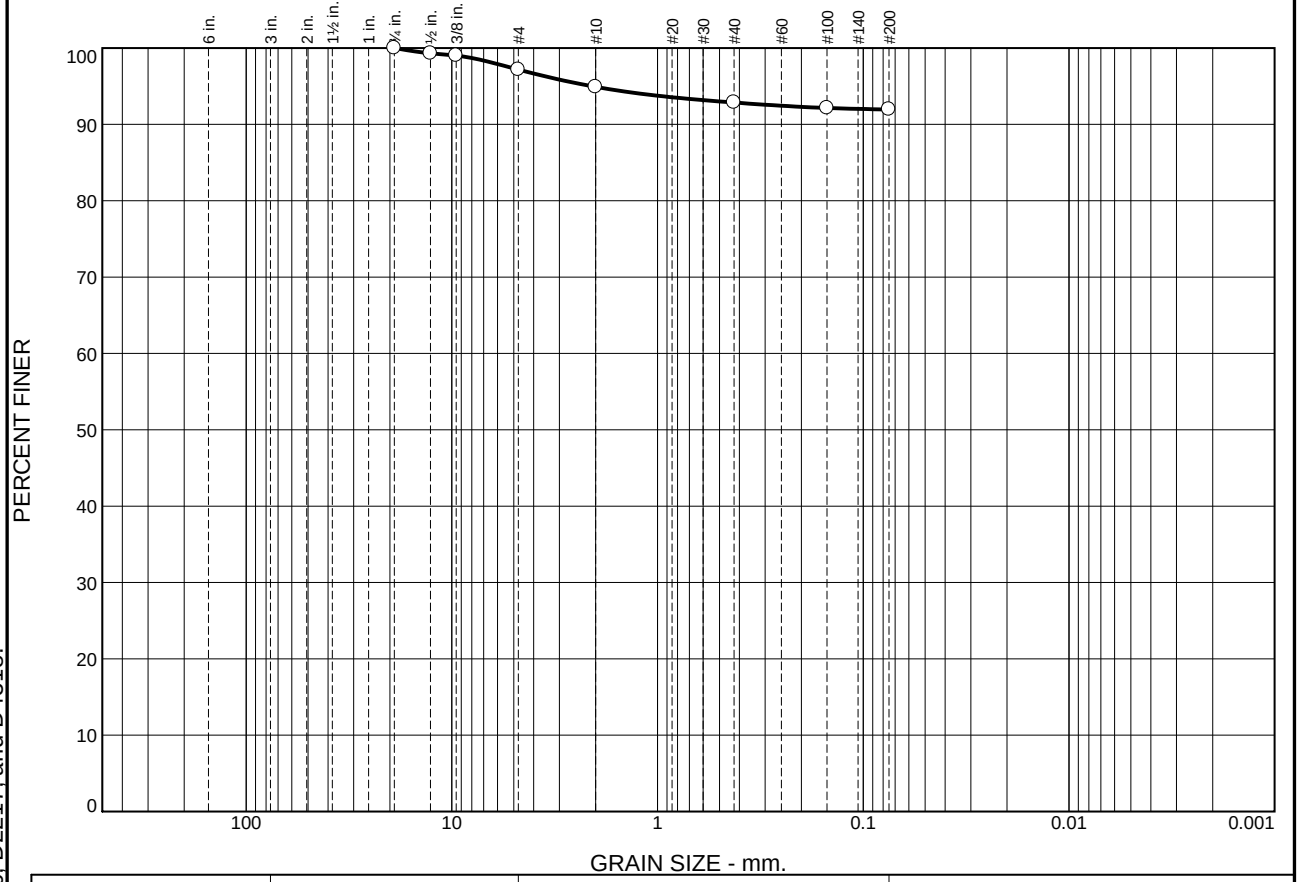
LOG OF TEST PIT NO. TP-1152 (Stake #5050)

APPENDIX D

Laboratory Data

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	2.8	2.3	2.0	1.0	91.9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV								

Material Description	USCS	AASHTO
○ SILT	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1001 (Stake #5000) **Depth:** 3.5

Remarks:

○NMC = 19.7%

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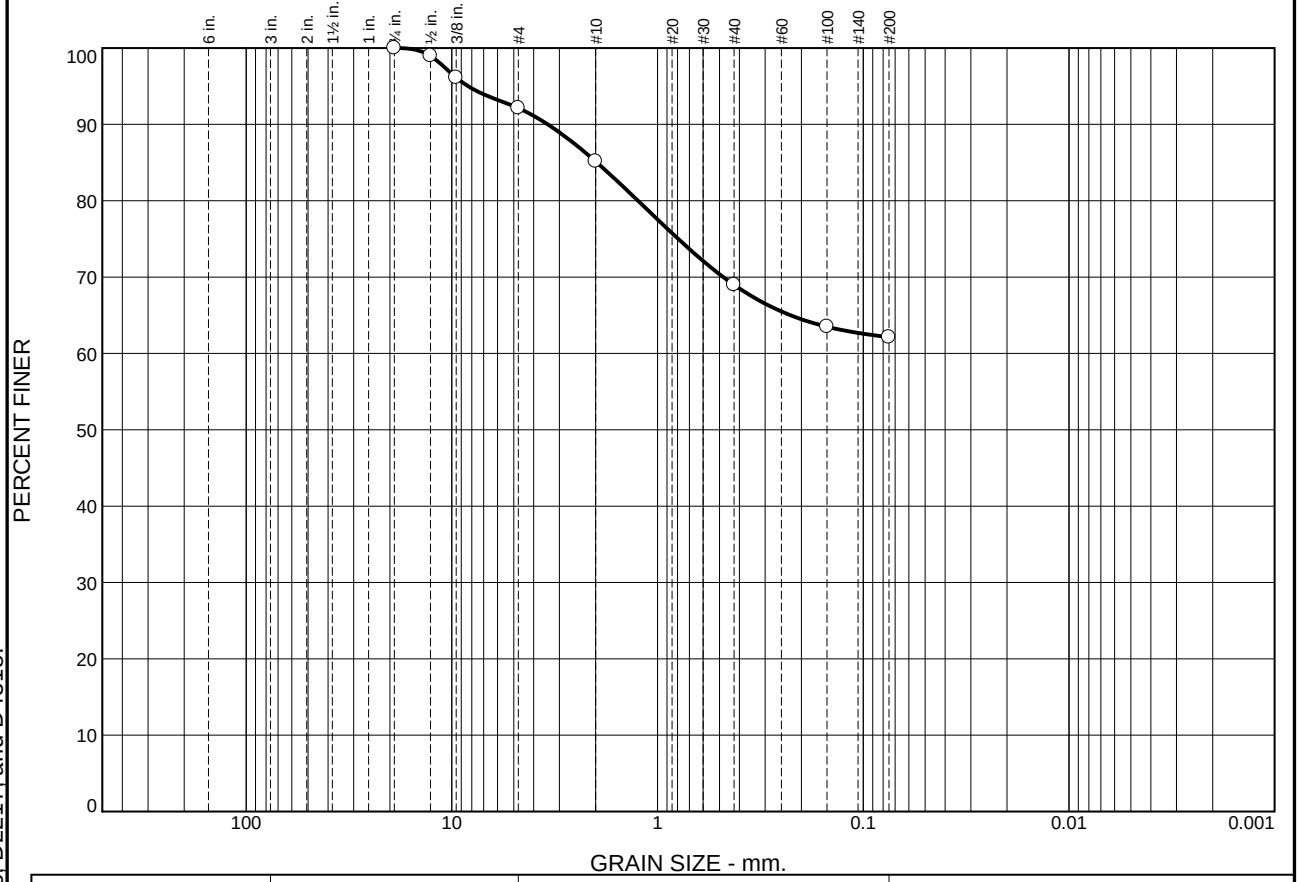
Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR/AFS **Checked By:** AFS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	7.9	7.0	16.1	6.9	62.1	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV	1.9723							

Material Description	USCS	AASHTO
○ Sandy SILT	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1008 (Stake #5007) **Depth:** 4

Remarks:

○NMC = 22.1%

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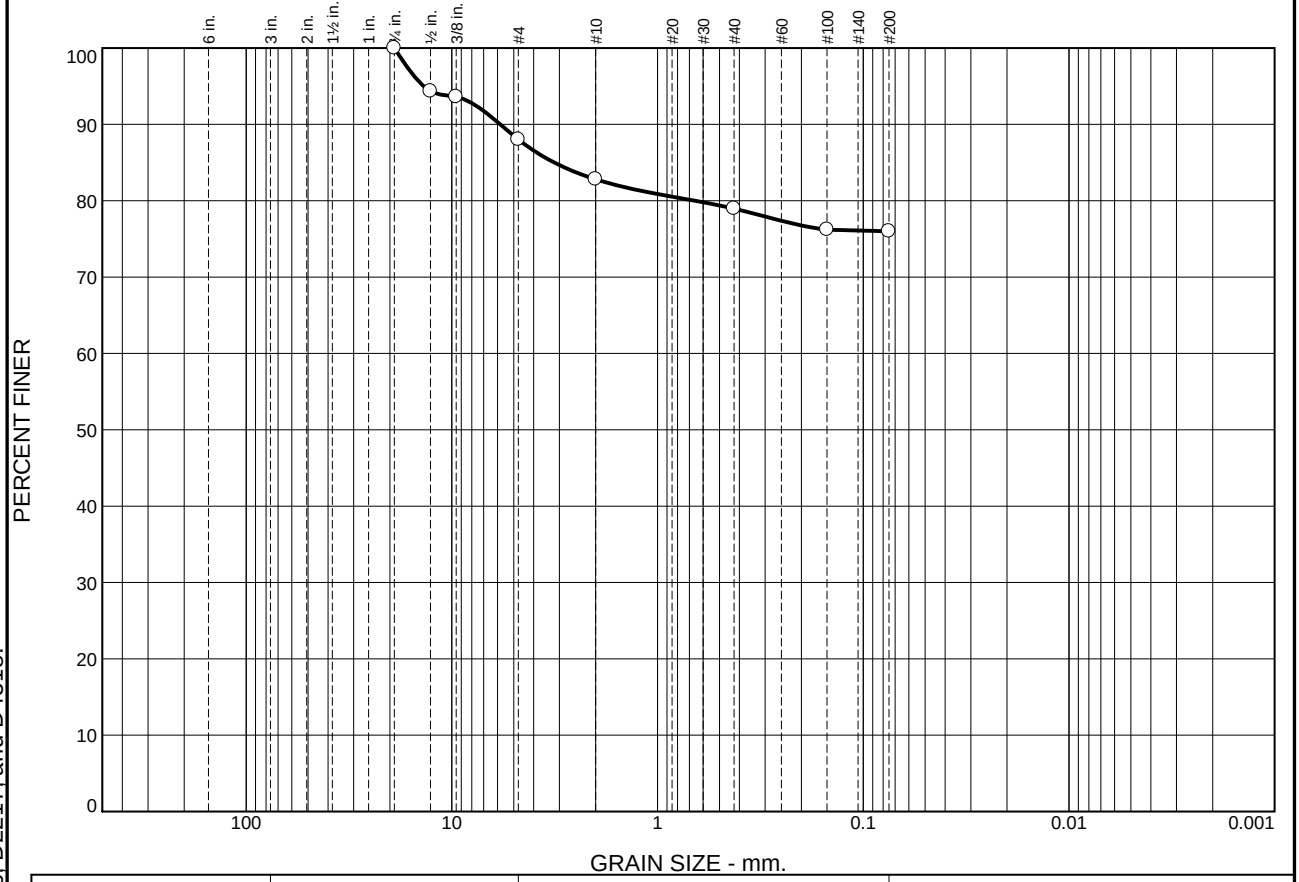
Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR/AFS **Checked By:** AFS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	12.0	5.2	3.8	3.0	76.0	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV	3.1768							

Material Description	USCS	AASHTO
○ SILT with sand	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1012 (Stake #5062) **Depth:** 2

Remarks:

○NMC = 22.6%

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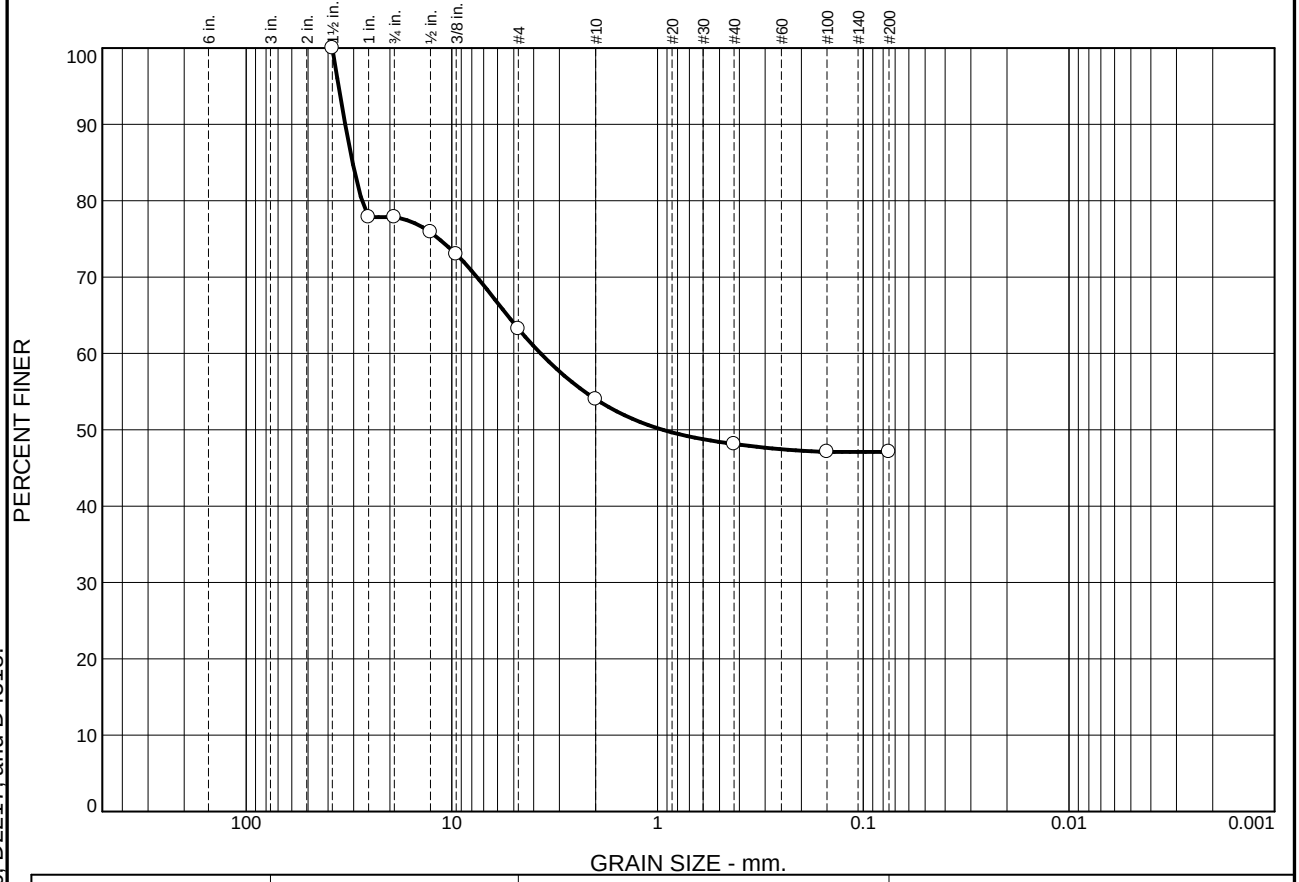
Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR/AFS **Checked By:** AFS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	22.2	14.6	9.2	5.9	1.0	47.1	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NP	NP	30.3913	3.7018	0.9440					

Material Description	USCS	AASHTO
○ Silty GRAVEL with sand	GM	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1016 (Stake #5057) **Depth:** 1

Remarks:

○NMC = 19.7%

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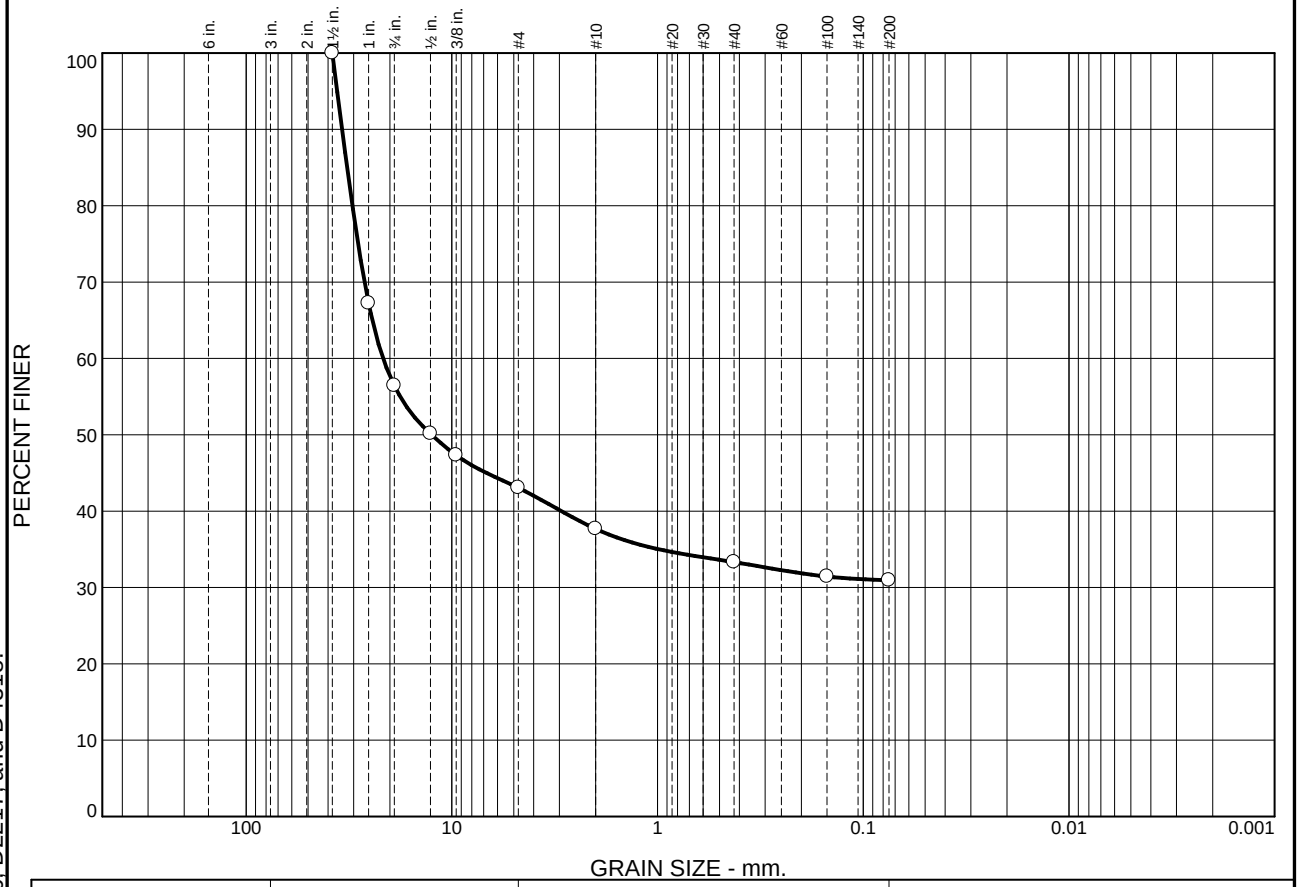
Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR/AFS **Checked By:** AFS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	43.5	13.4	5.4	4.4	2.4	30.9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NP	NP	32.2903	21.5948	12.5370					

	Material Description	USCS	AASHTO
○	Silty GRAVEL	GM	A-2-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1017 (Stake #5056) **Depth:** 0.5

Remarks:

○NMC = 17.9%

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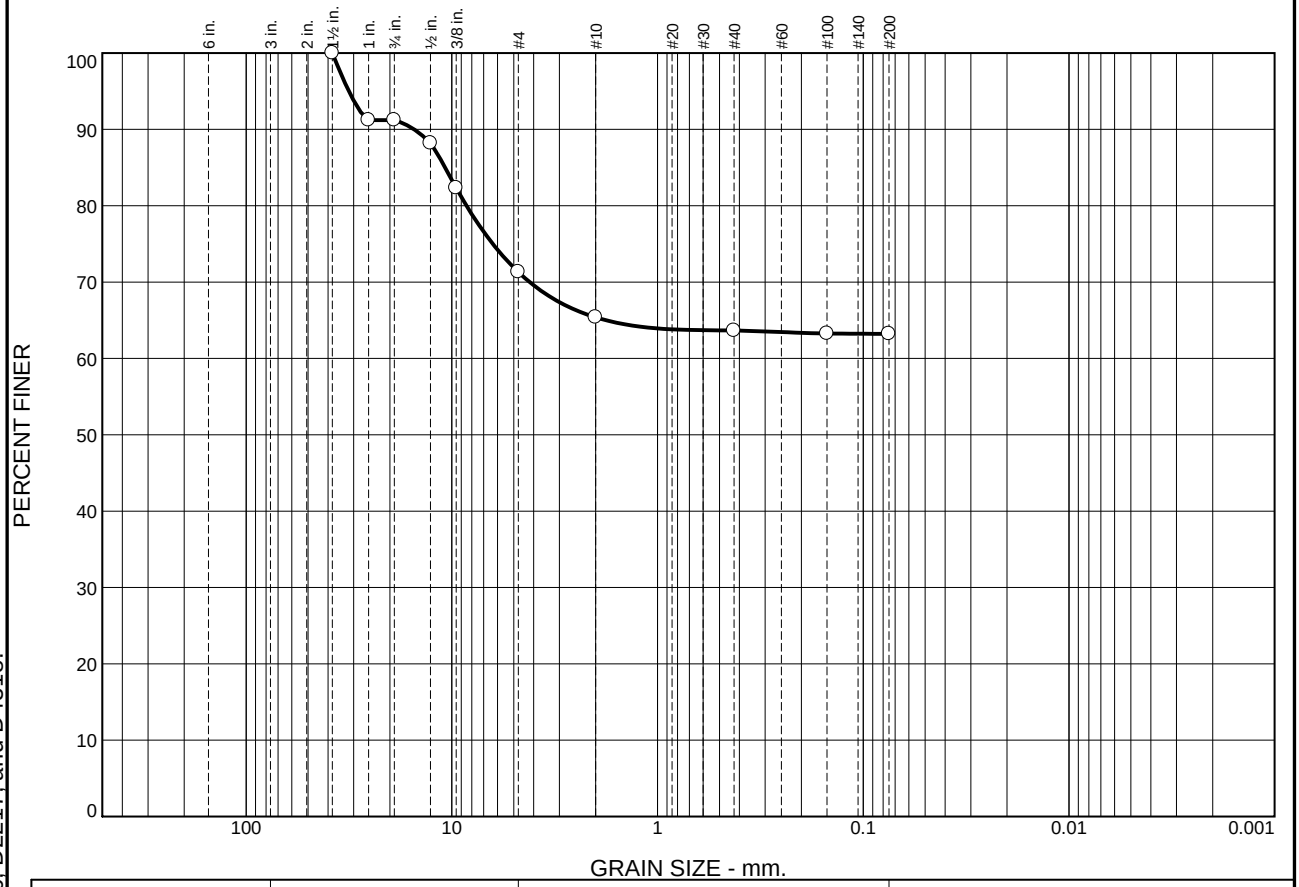
Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR/AFS **Checked By:** AFS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	8.8	19.9	5.9	1.7	0.5	63.2	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV	10.7831							

Material Description	USCS	AASHTO
○ Gravelly SILT	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1022 (Stake #5013) **Depth:** 1

Remarks:

○NMC = 20.5%

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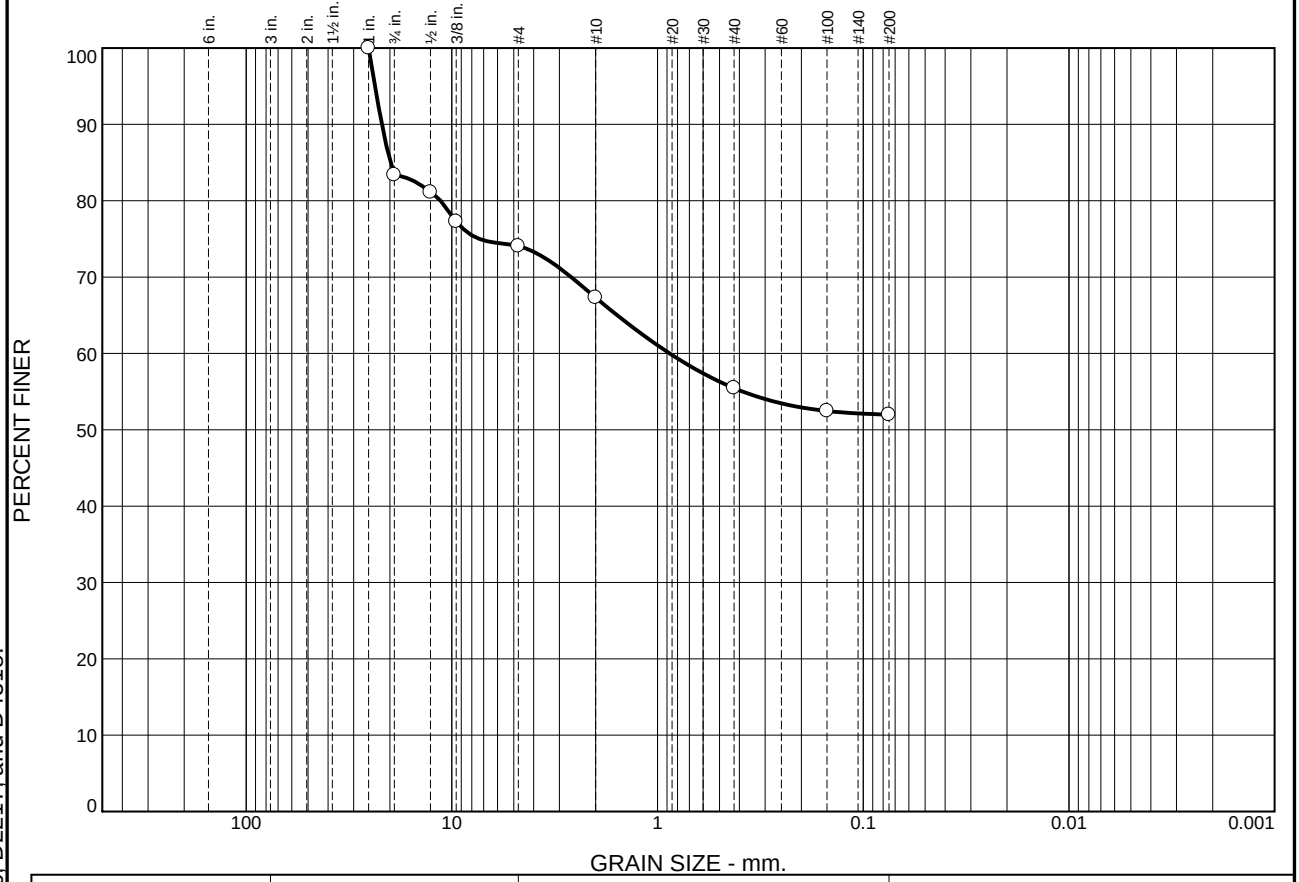
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR/AFS **Checked By:** AFS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	16.6	9.3	6.8	11.8	3.5	52.0	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV	19.8849	0.8729						

	Material Description	USCS	AASHTO
○	Gravelly SILT with sand	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1026 (Stake #5017) **Depth:** 3

Remarks:

○NMC = 21.6%

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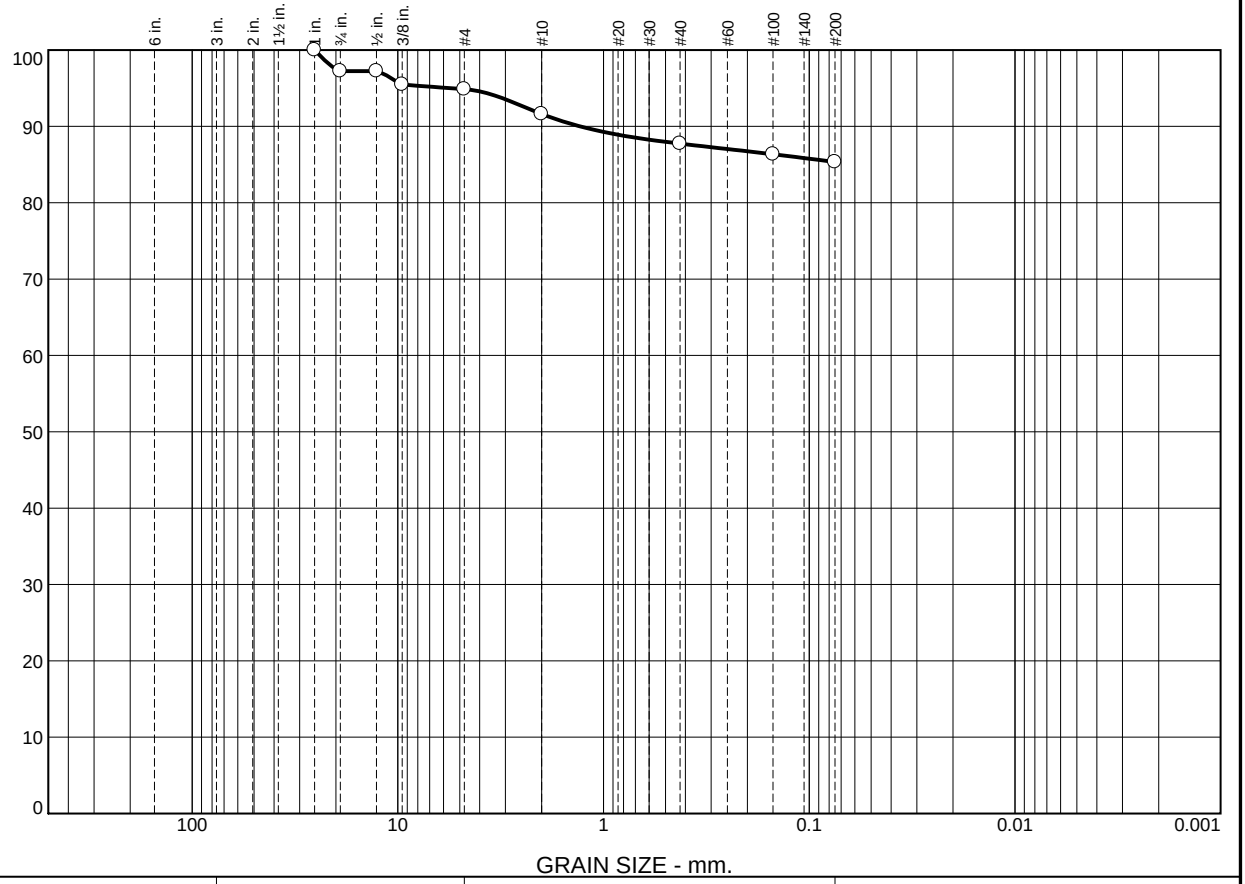
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR/AFS **Checked By:** AFS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	2.8	2.3	3.3	3.9	2.4	85.3	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV								

Material Description	USCS	AASHTO
○ SILT	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1028 (Stake #5145) **Depth:** 1

Remarks:

○NMC = 24.2%

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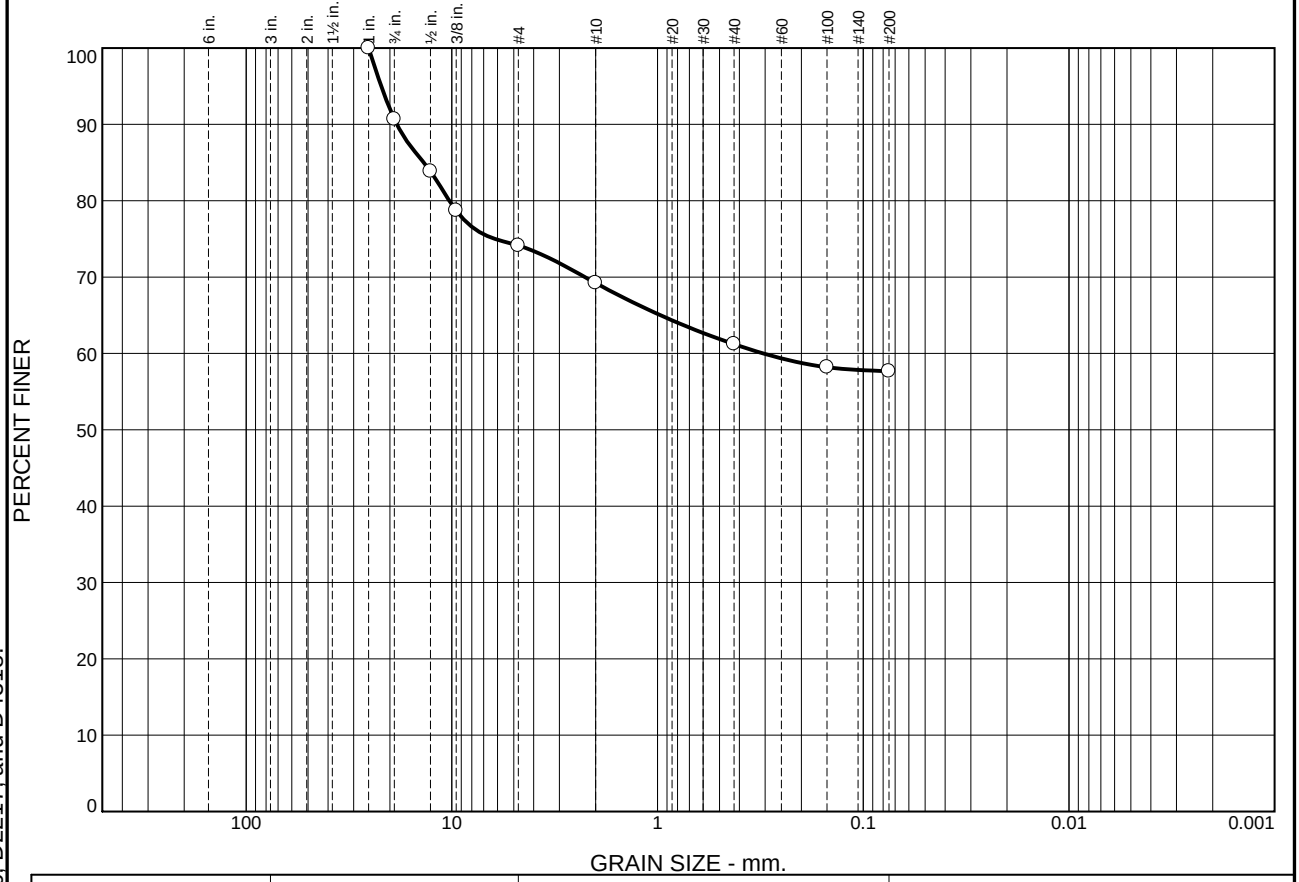
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AFS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	9.3	16.6	4.9	8.0	3.5	57.7	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV	13.6923	0.3063						

Material Description	USCS	AASHTO
○ Gravelly SILT with sand	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1037 (Stake #5021) **Depth:** 2.5

Remarks:

○NMC = 16.4%

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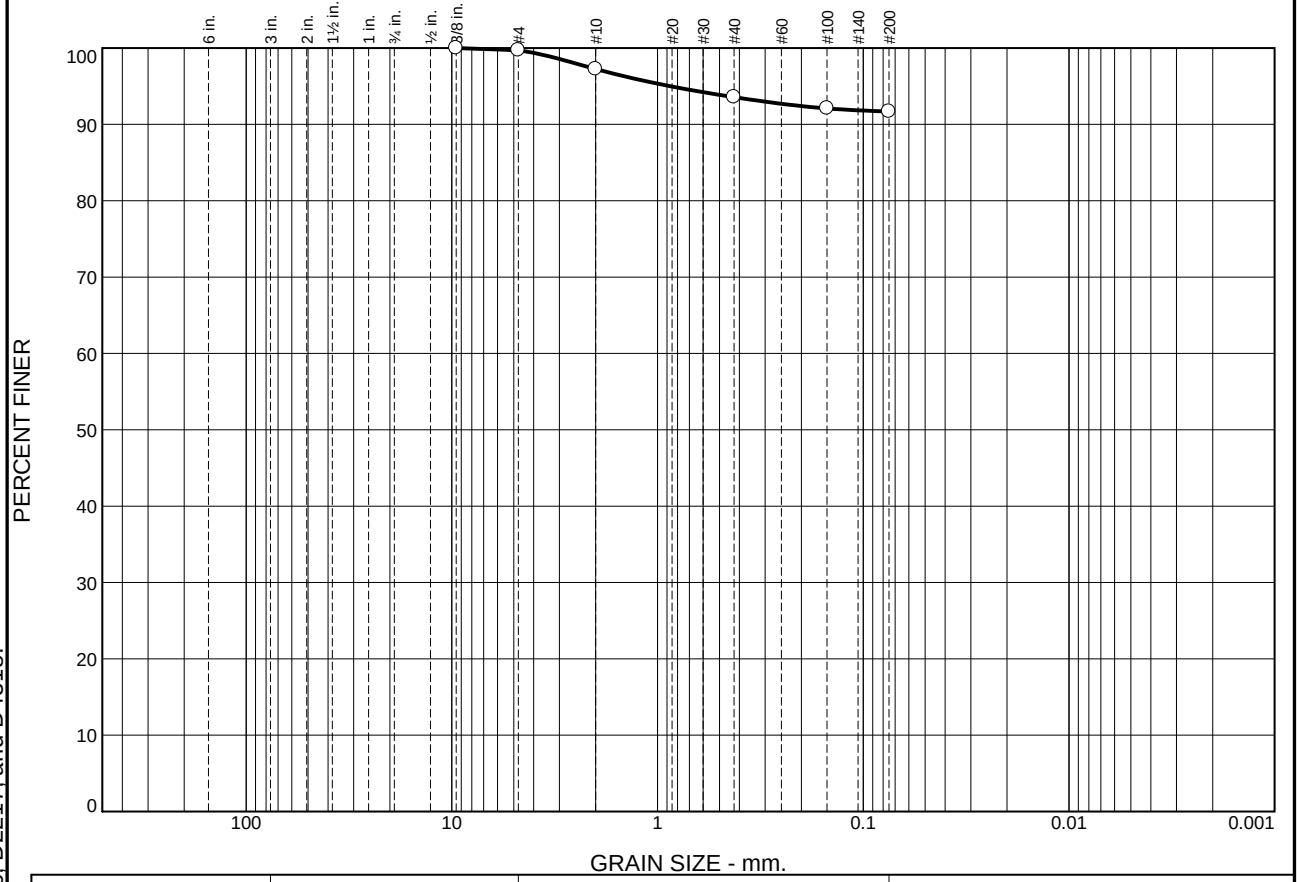
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** VP

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.3	2.5	3.6	1.9	91.7	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV								

Material Description	USCS	AASHTO
○ SILT	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1043 (Stake #5027) **Depth:** 1.5

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Somerset, NJ 08873

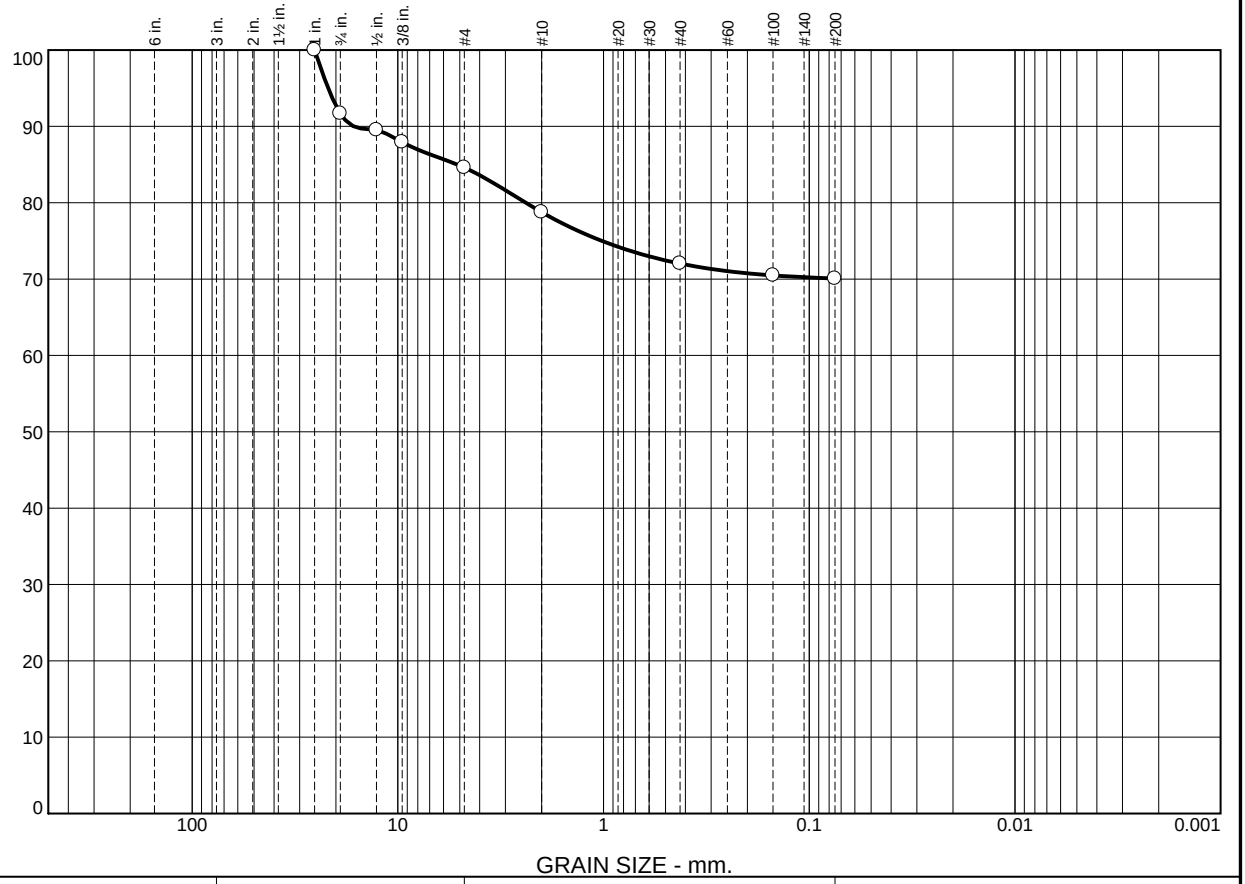
Remarks:
○NMC = 21.6%

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** VP

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	8.3	7.1	5.8	6.8	1.9	70.1	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV	5.1460							

Material Description	USCS	AASHTO
○ SILT with sand	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1049 (Stake #5088) **Depth:** 2

Remarks:

○NMC =11.9%

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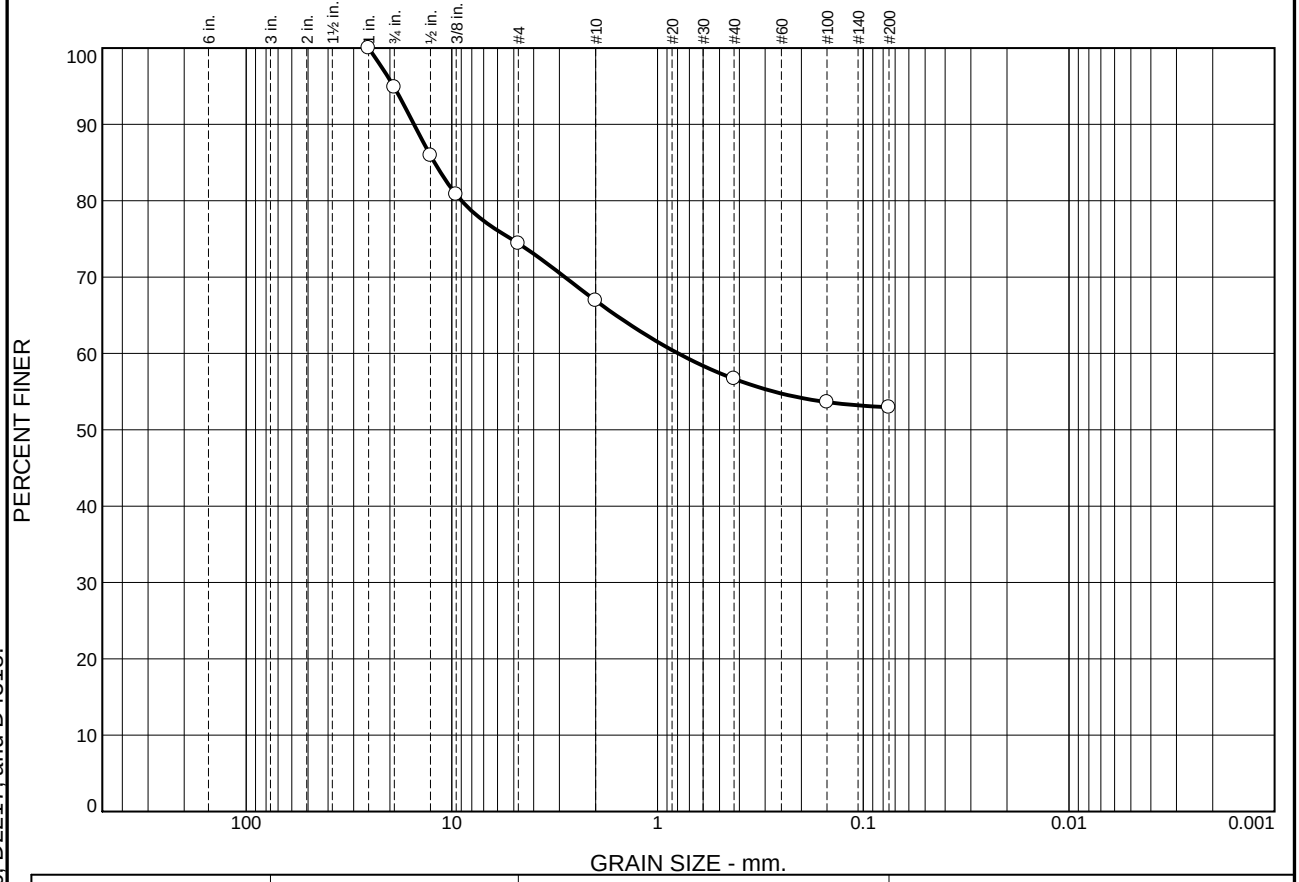
Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** VP

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	5.1	20.5	7.5	10.2	3.8	52.9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV	12.1406	0.7932						

Material Description	USCS	AASHTO
○ Gravelly SILT with sand	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1051 (Stake #5083) **Depth:** 3

Remarks:

○NMC = 10.0%

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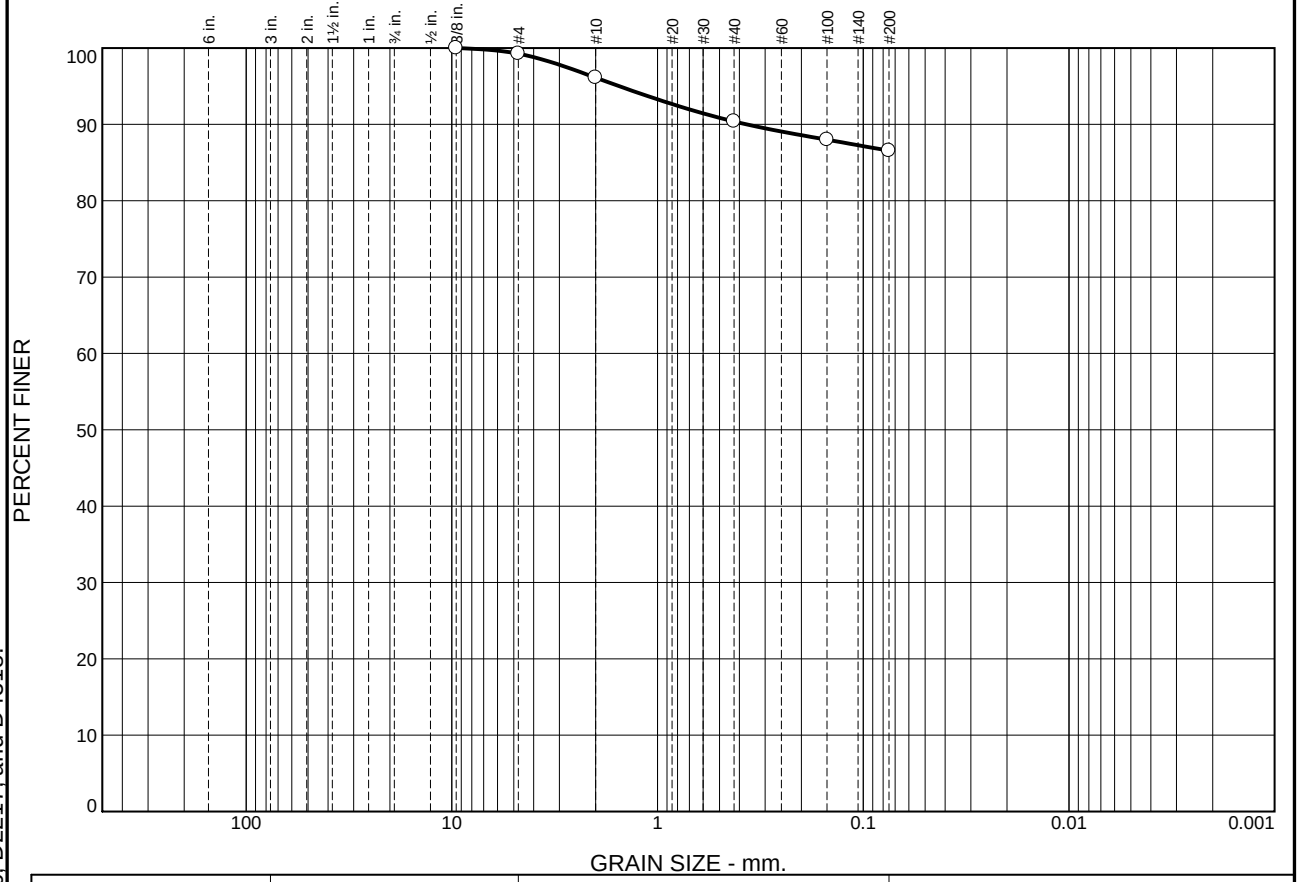
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** VP

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.7	3.2	5.7	3.8	86.6	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV								

Material Description	USCS	AASHTO
○ SILT	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1053 (Stake #5079) **Depth:** 3

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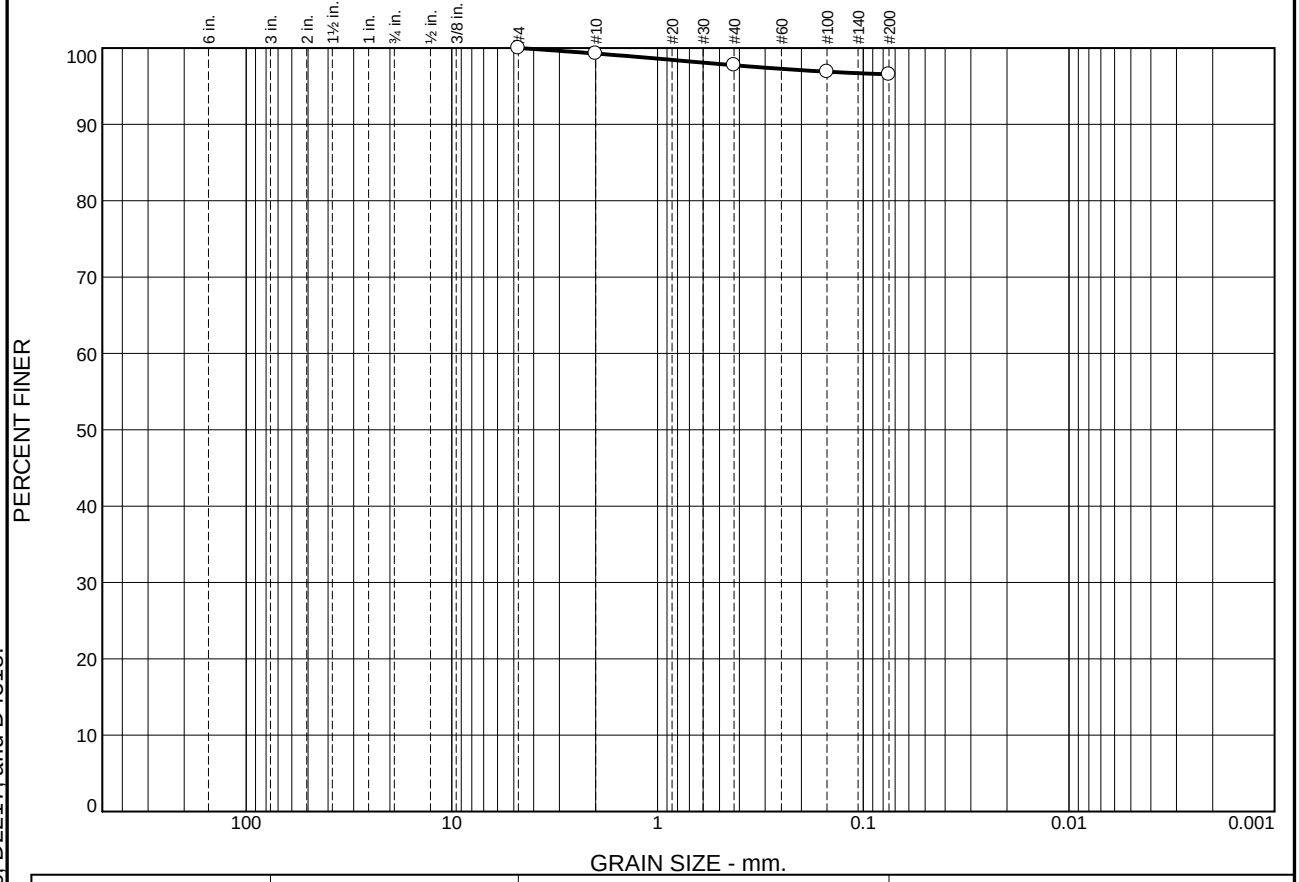
Remarks:
○NMC = 22.1%

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AFS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	0.7	1.5	1.3	96.5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV								

Material Description	USCS	AASHTO
○ Lean CLAY	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1057 (Stake #5074) **Depth:** 4

Remarks:

○NMC = 22.1%

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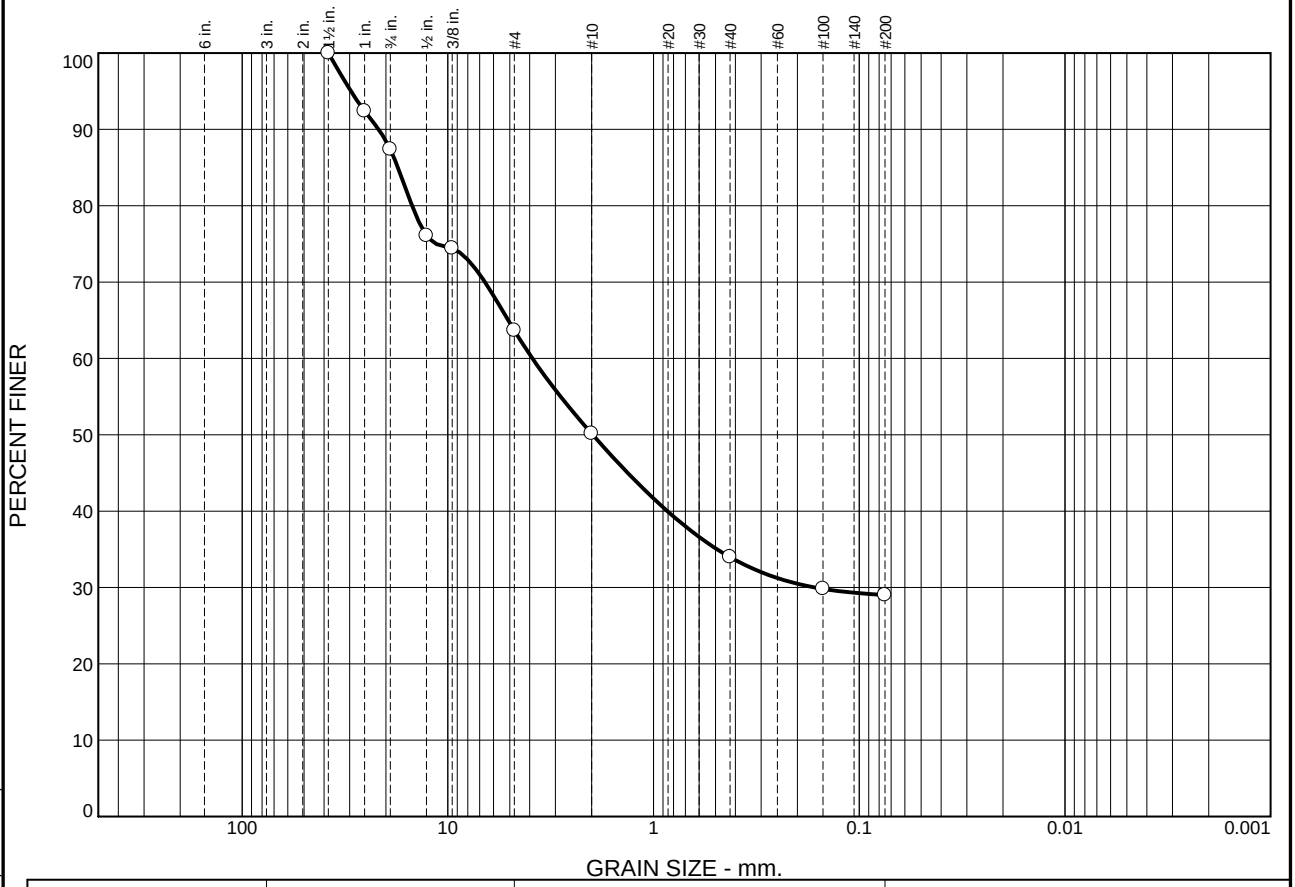
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR/AFS **Checked By:** AFS

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	12.6	23.7	13.5	16.2	5.0	29.0	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NP	NP	17.4890	3.8804	1.9764	0.1644				

	Material Description	USCS	AASHTO
○	Silty GRAVEL with sand	GM	A-2-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1073 (Stake #5120) **Depth:** 2

Remarks:

○NMC = 16.4%

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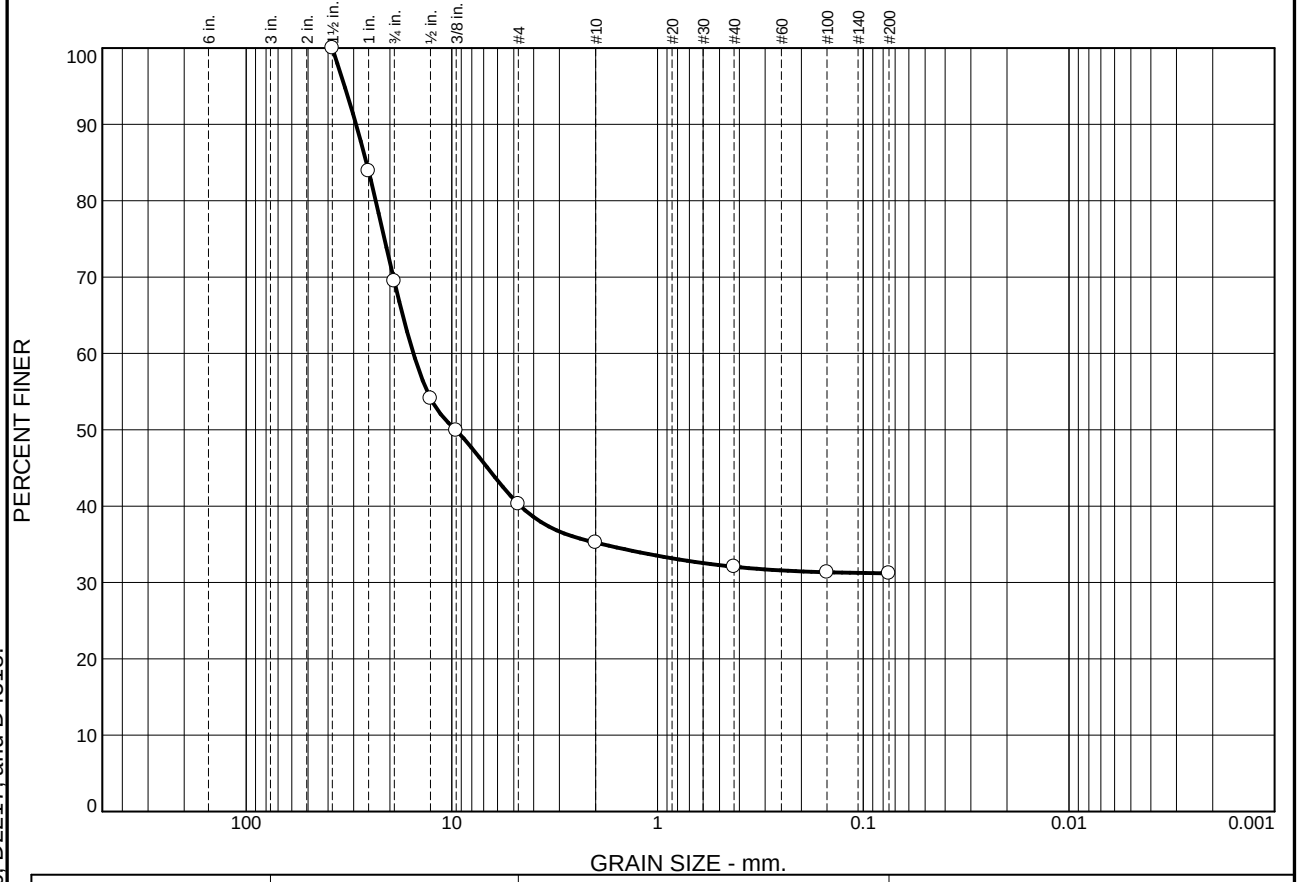
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AMT

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	30.5	29.2	5.1	3.1	0.9	31.2	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NP	NP	26.0136	15.3722	9.5923					

	Material Description	USCS	AASHTO
○	Silty GRAVEL	GM	A-2-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1080 (Stake #5032) **Depth:** 2

Remarks:

○NMC = 15.6%

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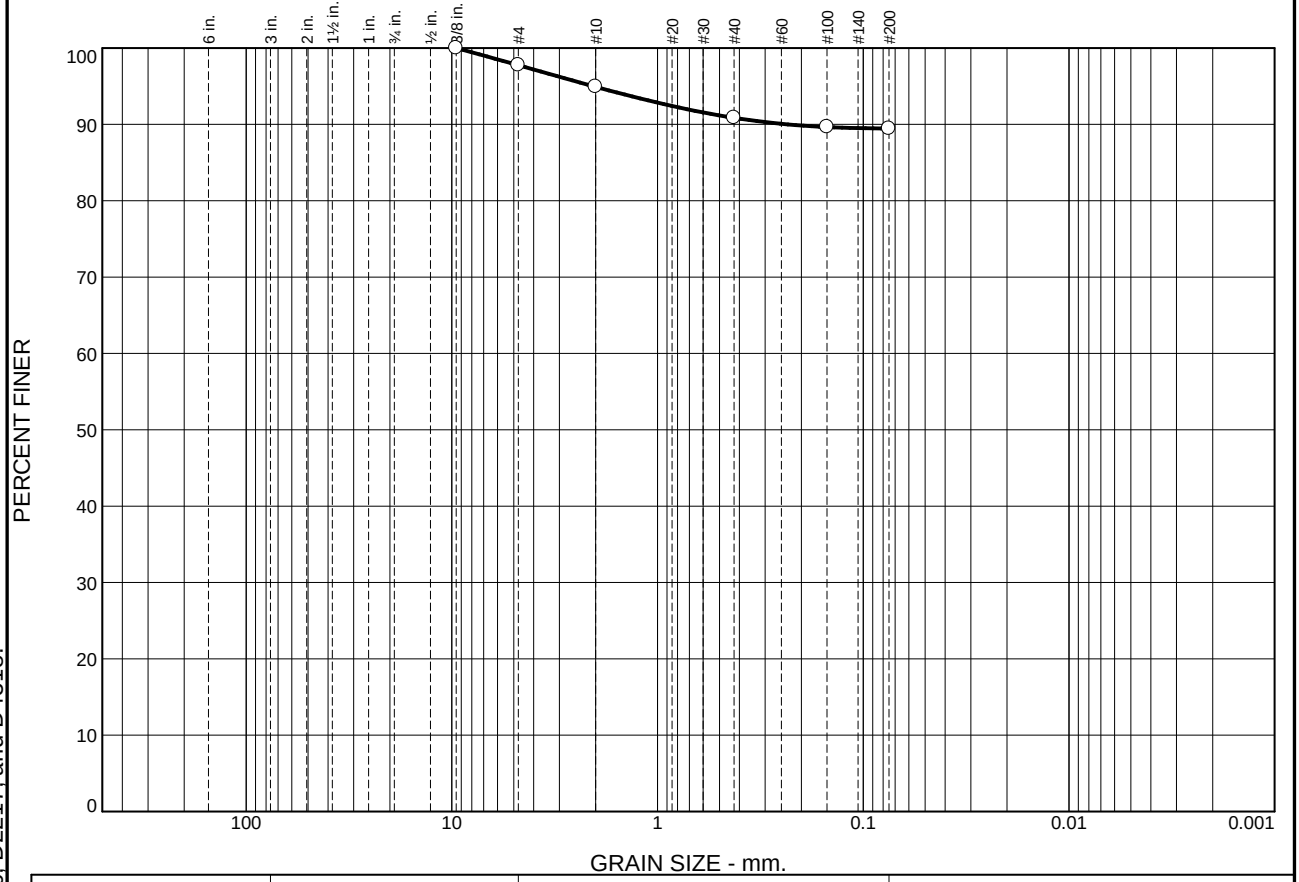
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AMT

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	2.2	2.9	4.0	1.4	89.5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	32.6	22.1								

Material Description	USCS	AASHTO
○ Lean CLAY	CL	A-6(10)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1086 (Stake #5110) **Depth:** 2

Remarks:

○NMC = 20.3%

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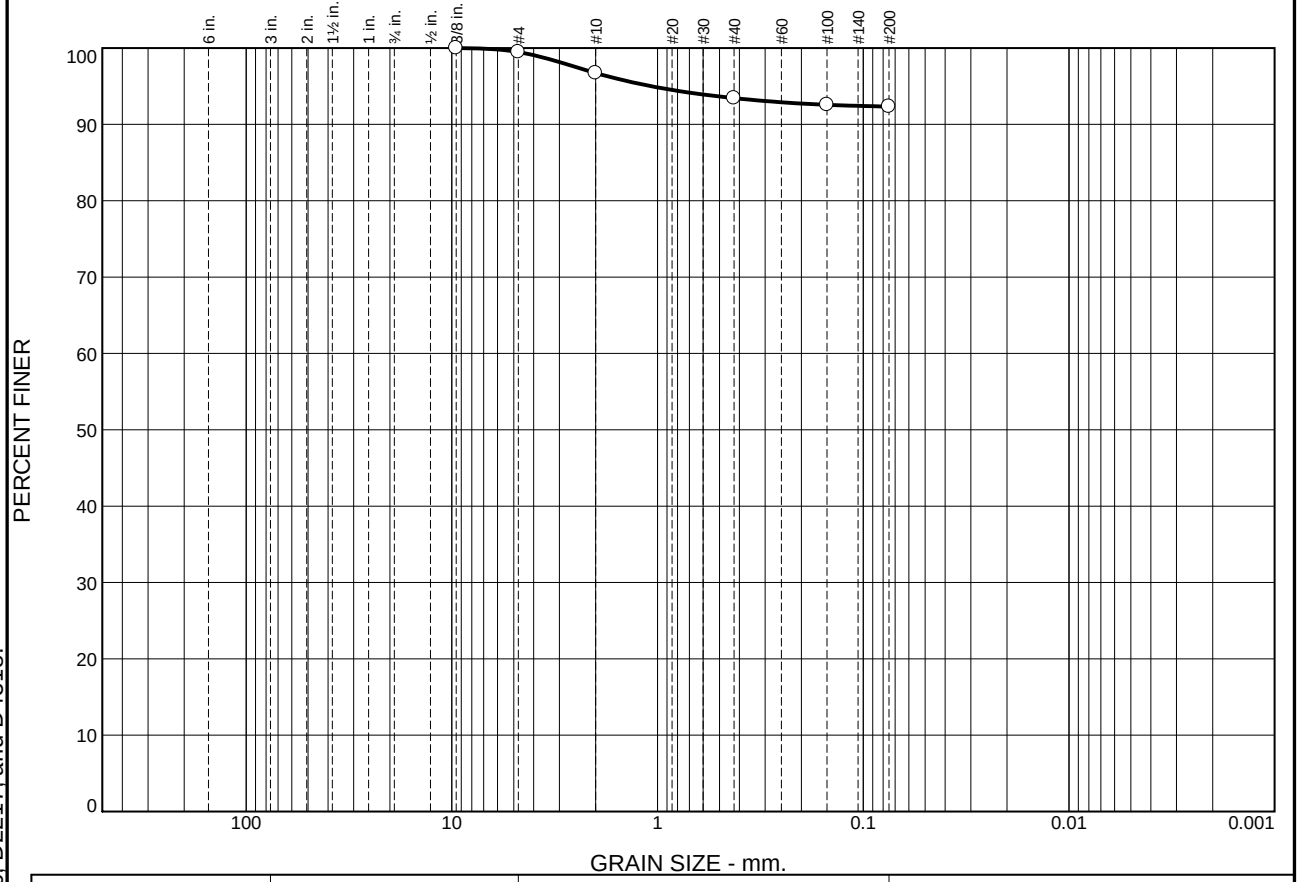
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AMT

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.5	2.8	3.3	1.1	92.3	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV								

Material Description	USCS	AASHTO
○ SILT	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1094 (Stake #5091) **Depth:** 2

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Somerset, NJ 08873

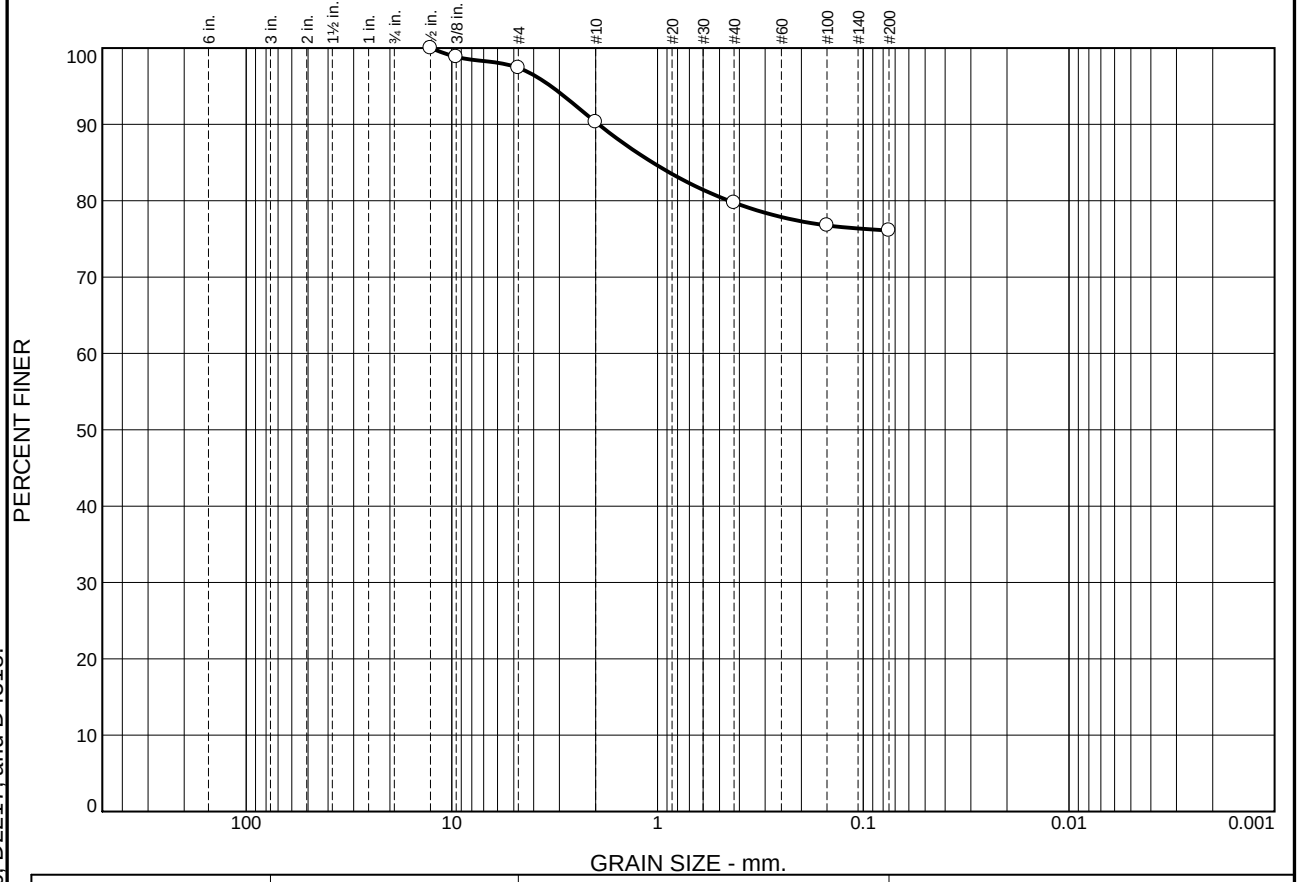
Remarks:
○NMC = 22.7%

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AMT

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	2.6	7.1	10.5	3.7	76.1	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV	1.0567							

Material Description	USCS	AASHTO
○ SILT with sand	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1098 (Stake #5095) **Depth:** 2

Remarks:

○NMC = 19.4%

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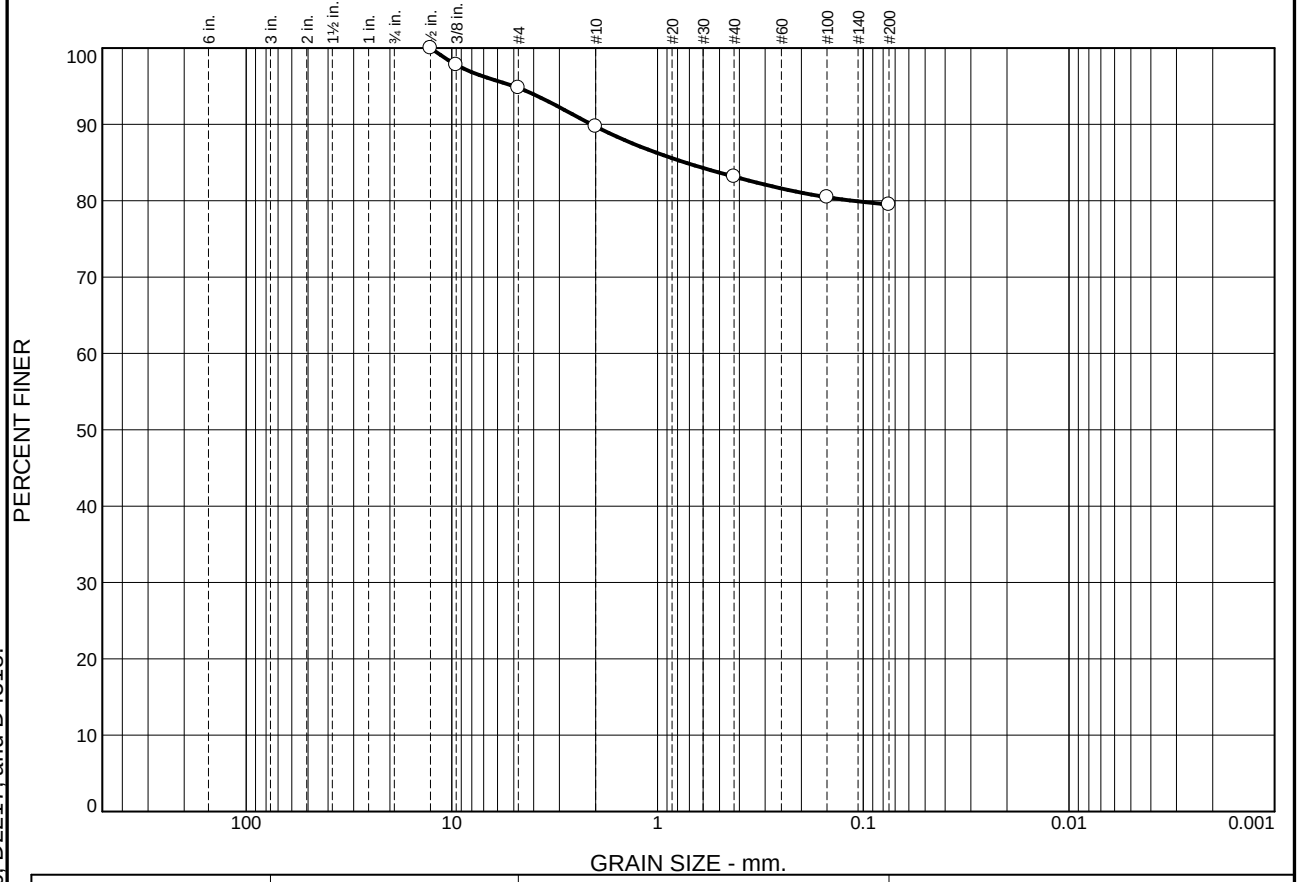
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AMT

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	5.2	5.1	6.5	3.7	79.5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	33.9	21.7	0.7321							

Material Description	USCS	AASHTO
○ Lean CLAY with sand	CL	A-6(9)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1104 (Stake #5101) **Depth:** 1

Remarks:

○NMC = 23.7%

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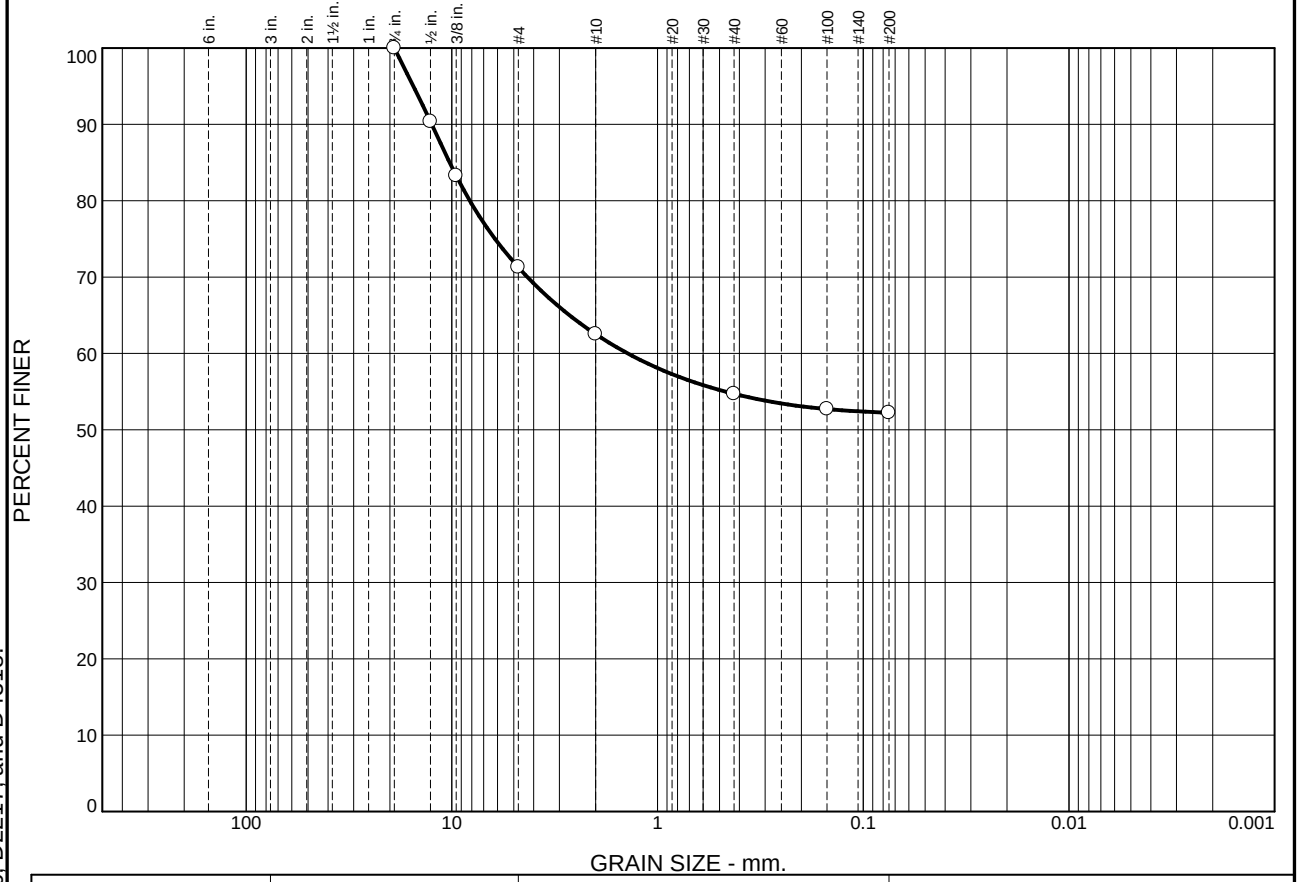
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AMT

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	28.7	8.8	7.8	2.5	52.2	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NP	NP	10.2464	1.3963						

Material Description	USCS	AASHTO
○ Gravelly SILT with sand	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1119 (Stake #5045) **Depth:** 1

Remarks:

○NMC = 16.4%

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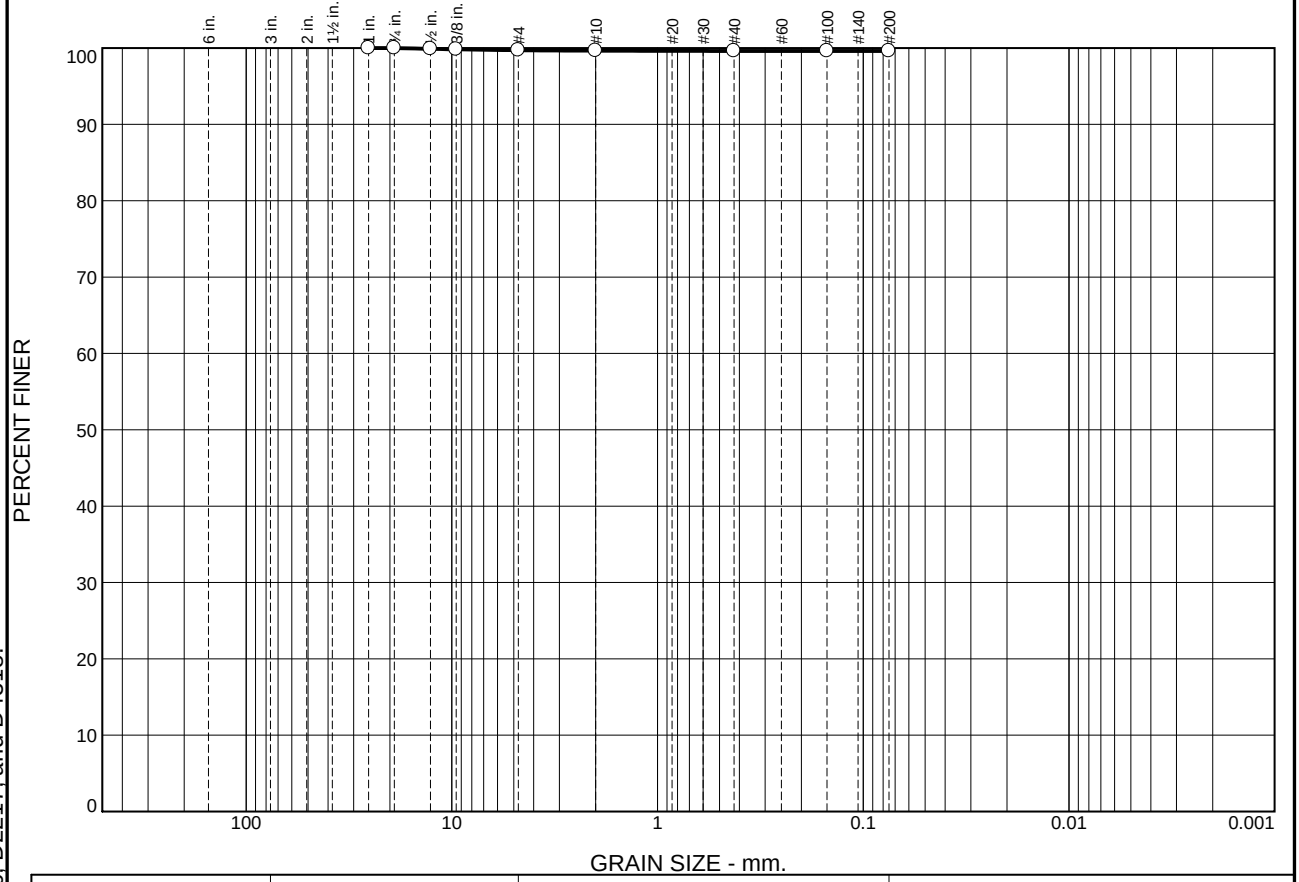
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AMT

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.3	0.0	0.1		99.6	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV								

Material Description	USCS	AASHTO
○ SILT	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1121 (Stake #5036) **Depth:** 2

Remarks:

○NMC = 15.2%

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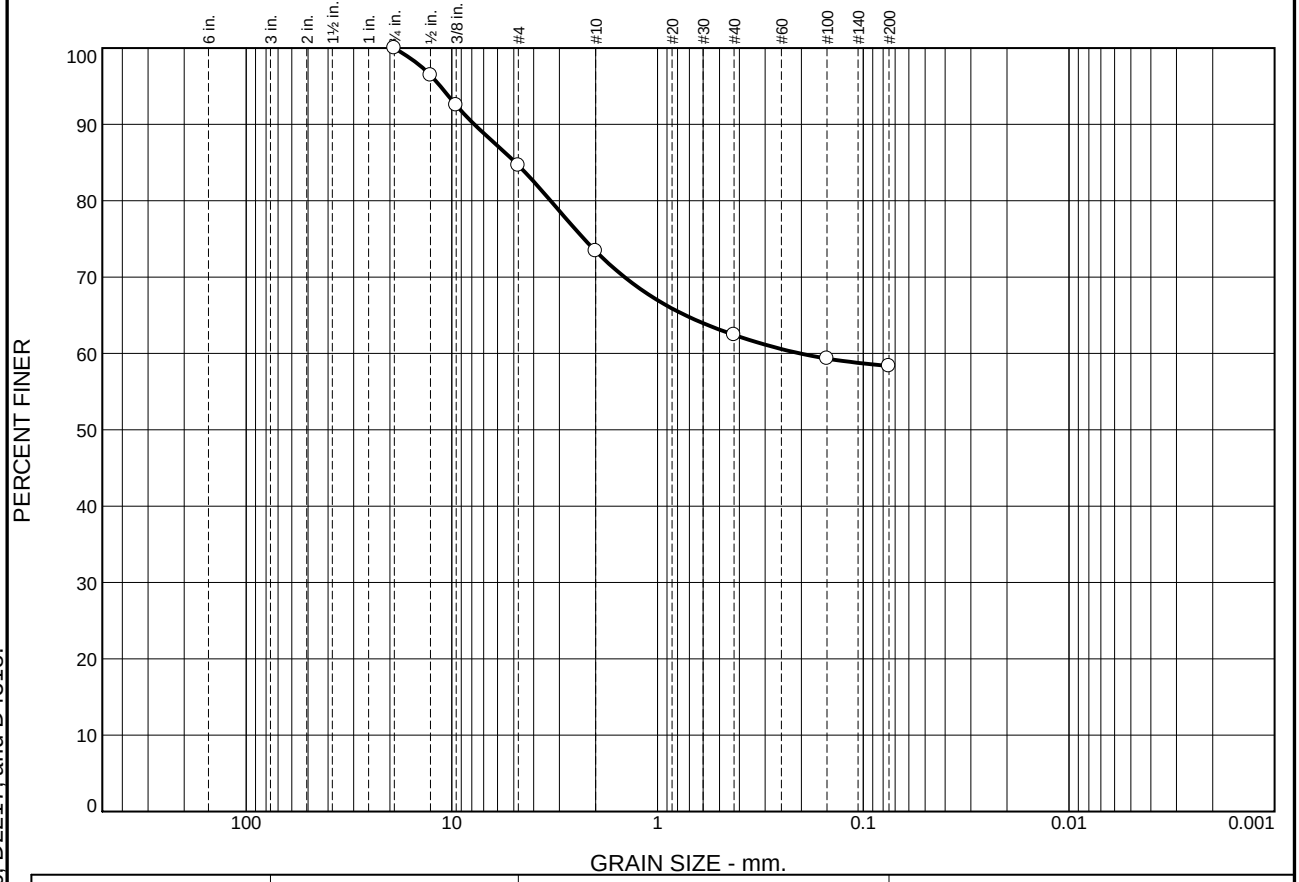
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AMT

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	15.4	11.2	11.0	4.1	58.3	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV	4.9059	0.2030						

Material Description	USCS	AASHTO
○ Sandy SILT with gravel	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1127 (Stake #5042) **Depth:** 2

Remarks:

○NMC = 14.5%

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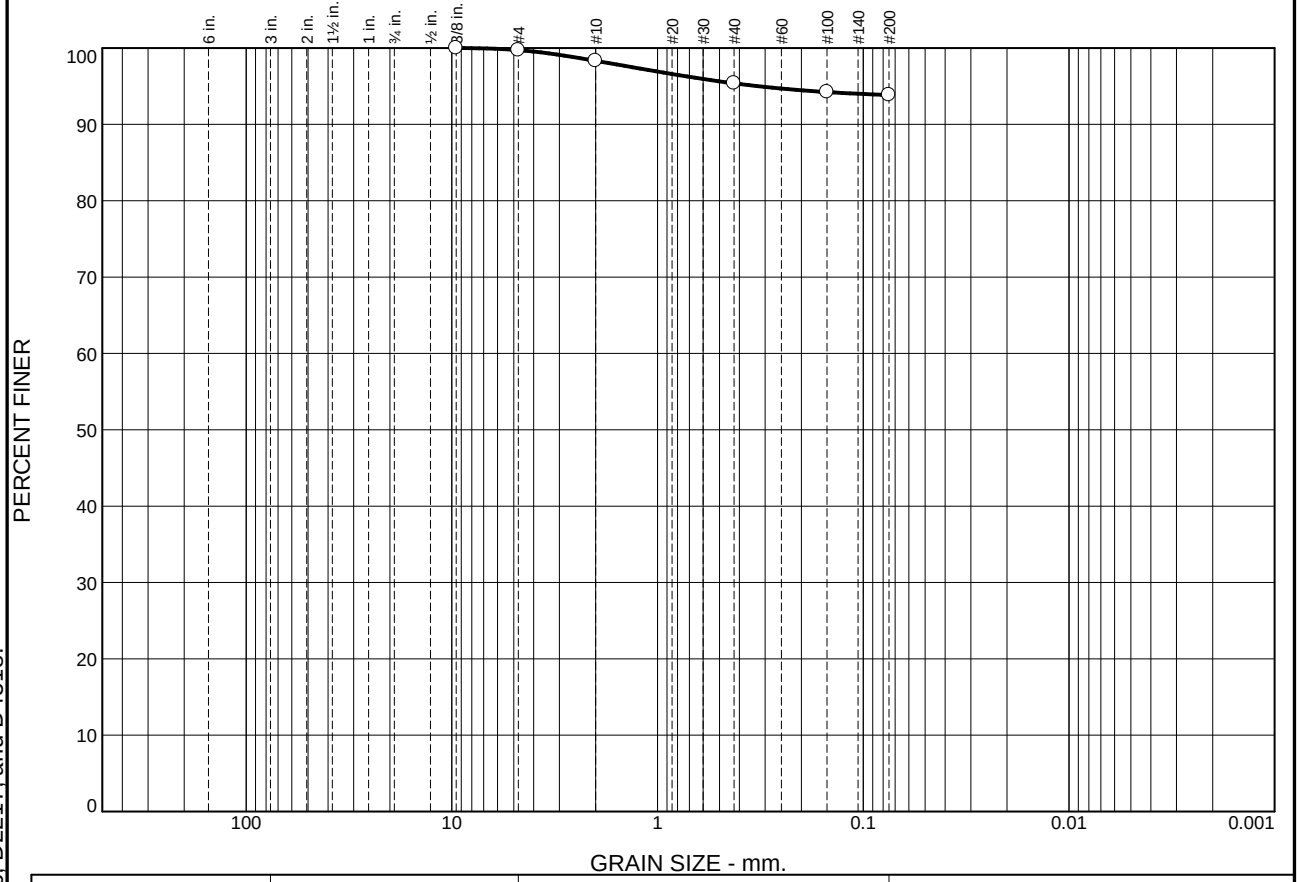
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AMT

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.3	1.4	2.9	1.6	93.8	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	32.0	23.7								

	Material Description	USCS	AASHTO
○	SILT	ML	A-4(8)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1135A (Stake #5132) **Depth:** 2

Remarks:

○NMC = 22.2%

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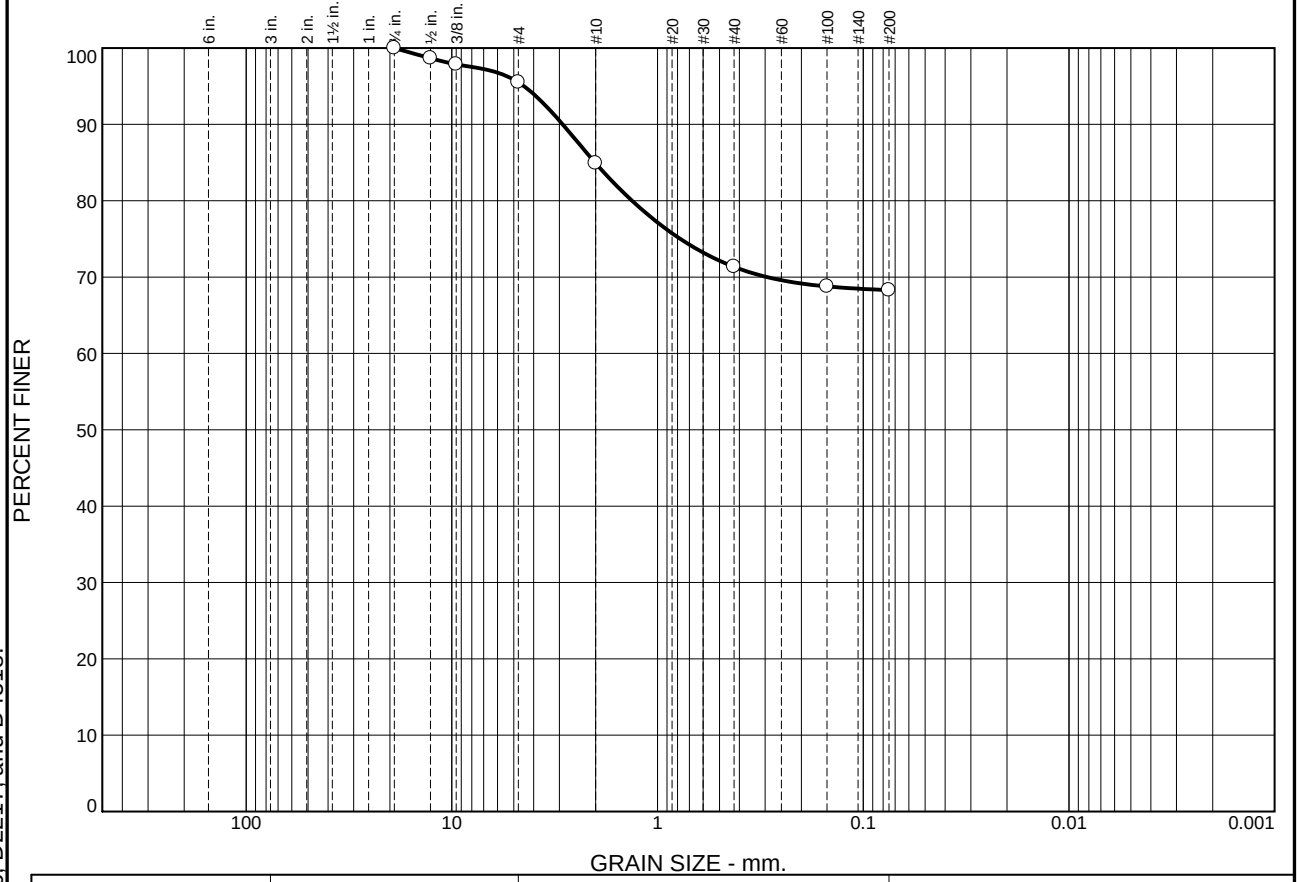
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AMT

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	4.5	10.6	13.6	3.0	68.3	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	NV	NV	2.0132							

Material Description	USCS	AASHTO
○ Sandy SILT	ML	A-4(0)

Project No. 31191132x1 **Client:** Lennar

Project: Venue at Hopewell

○ **Source of Sample:** TP-1149 (Stake #5053) **Depth:** 1.5

Remarks:

○NMC = 23.0%

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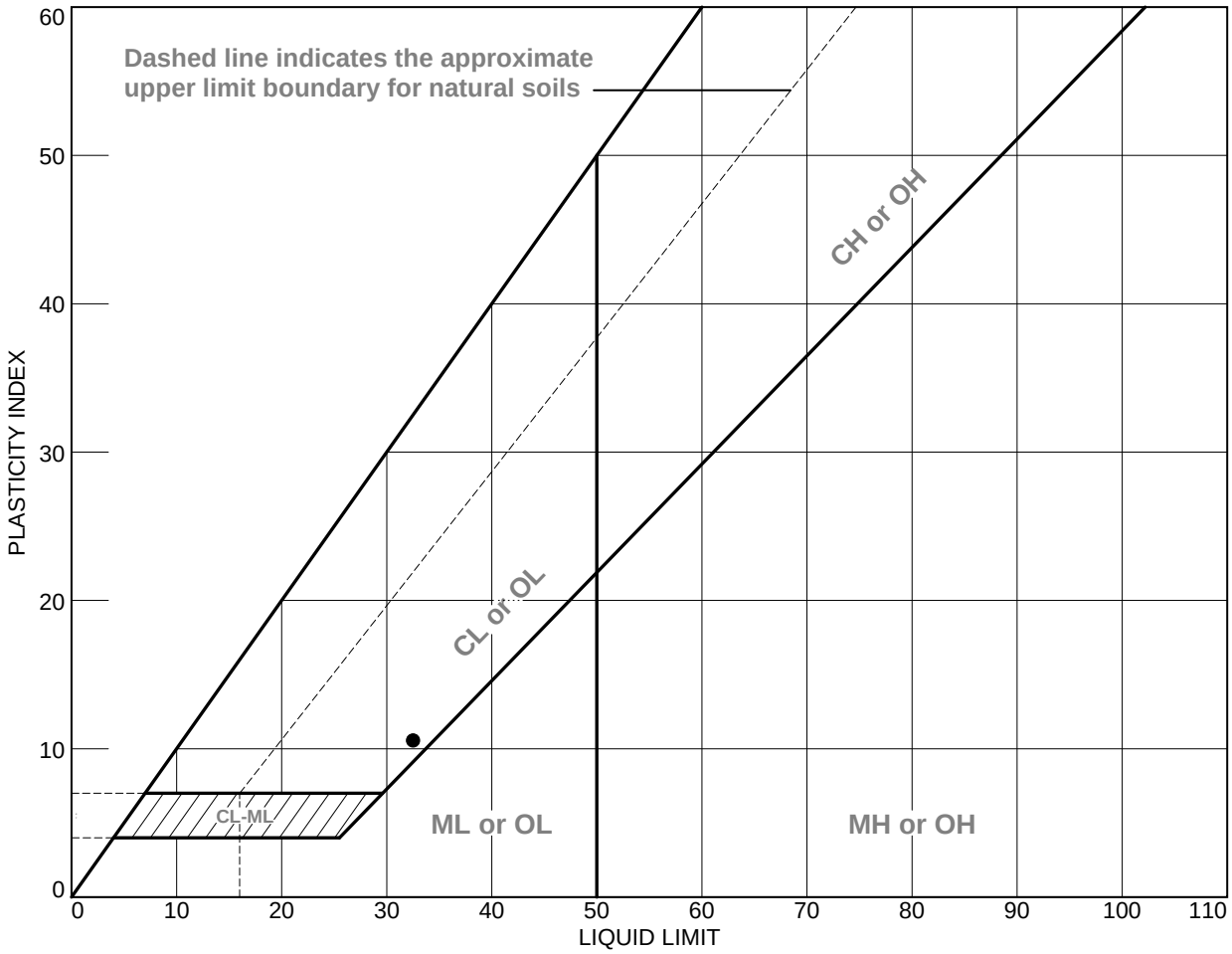
Somerset, NJ 08873

Figure

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

Tested By: RR **Checked By:** AMT

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



SOIL DATA

SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	TP-1086 (Stake #5110)		2	20.3	22.1	32.6	10.5	CL

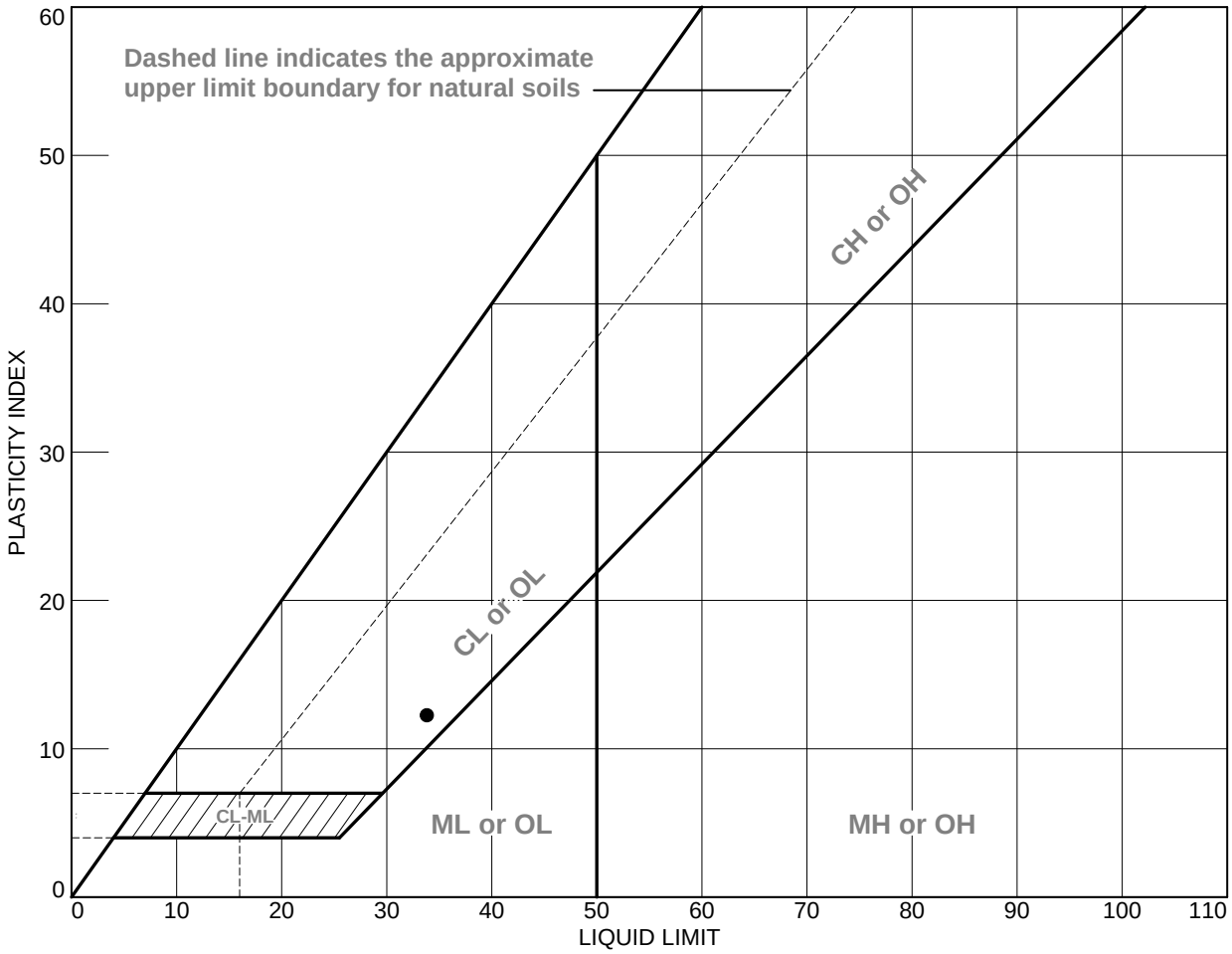
ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

Client: Lennar
Project: Venue at Hopewell
Project No.: 31191132x1 **Figure**

Tested By: RR **Checked By:** AMT

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



SOIL DATA

SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	TP-1104 (Stake #5101)		1	23.7	21.7	33.9	12.2	CL

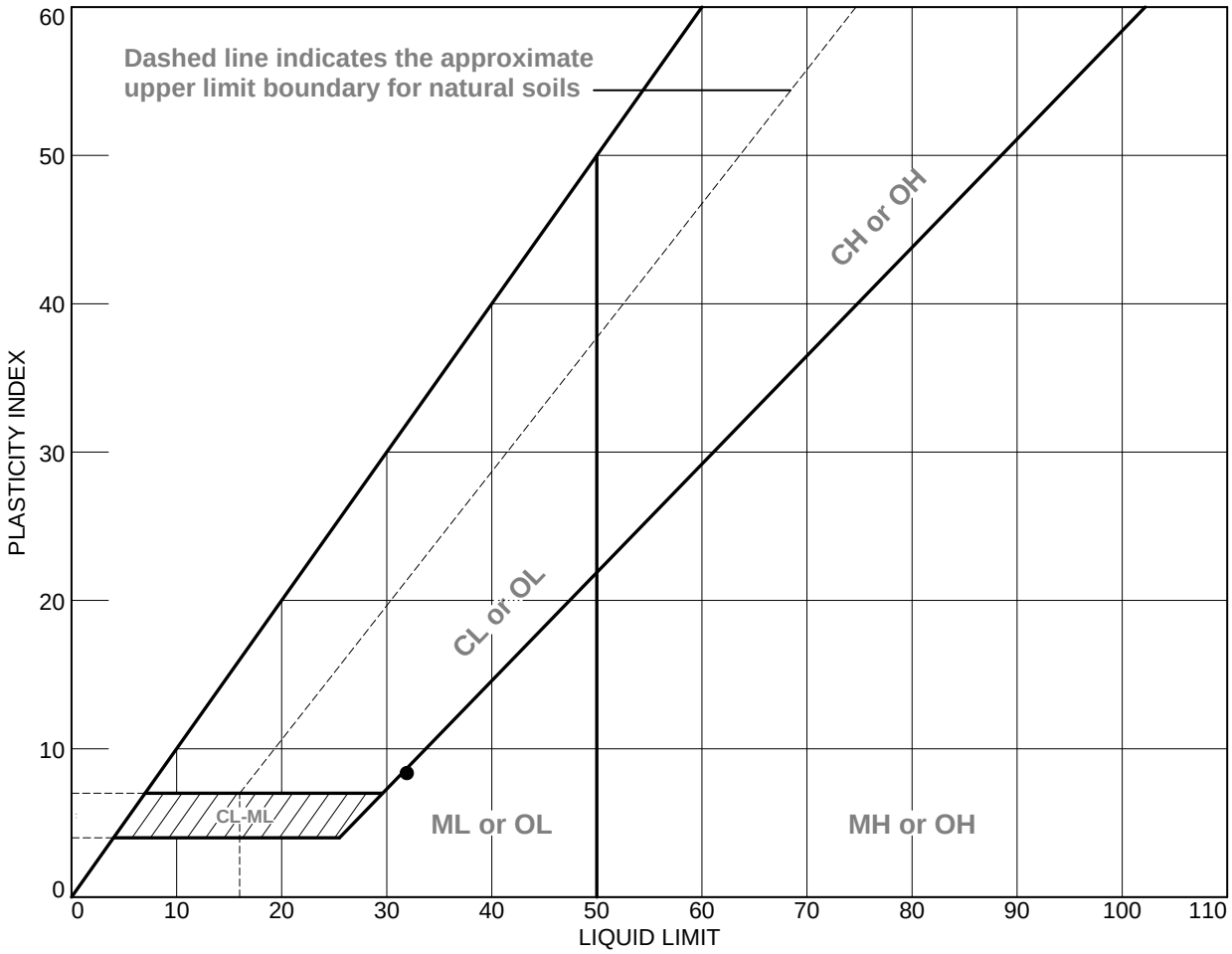
ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

Client: Lennar
Project: Venue at Hopewell
Project No.: 31191132x1 **Figure**

Tested By: RR **Checked By:** AMT

LIQUID AND PLASTIC LIMITS TEST REPORT - ASTM D4318



SOIL DATA

SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	TP-1135A (Stake #5132)		2	22.2	23.7	32.0	8.3	ML

ASTM Specifications performed my include: D421, D422, D2216, D2217, and D4318.

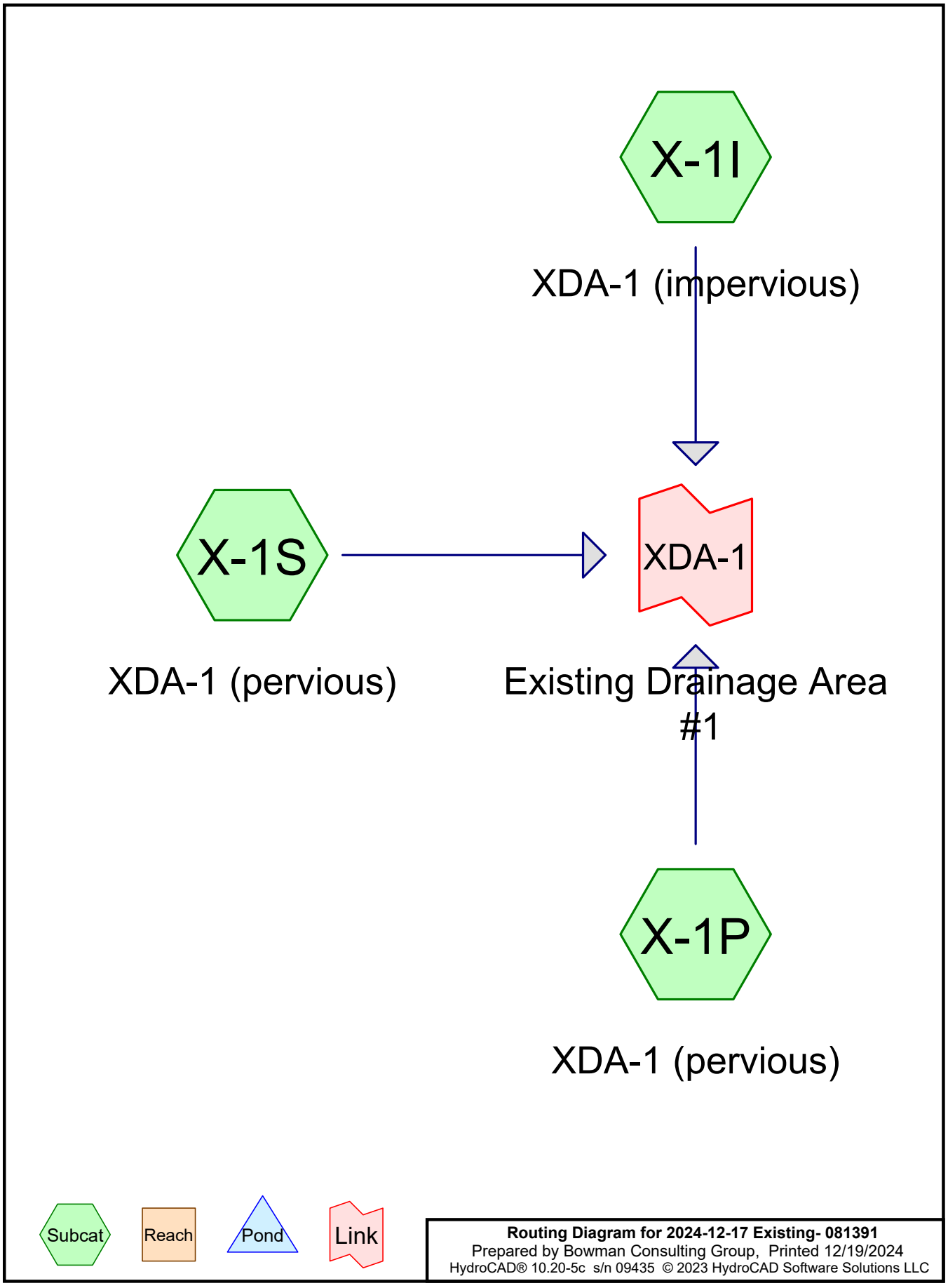
GEO-TECHNOLOGY ASSOCIATES, INC.
14 Worlds Fair Drive, Suite A
Somerset, NJ 08873

Client: Lennar
Project: Venue at Hopewell

Project No.: 31191132x1 **Figure**

Tested By: AFS **Checked By:** AMT

APPENDIX 2
TR-55 CALCULATIONS – EXISTING CONDITIONS



Routing Diagram for 2024-12-17 Existing- 081391
Prepared by Bowman Consulting Group, Printed 12/19/2024
HydroCAD® 10.20-5c s/n 09435 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment X-1I: XDA-1 (impervious)

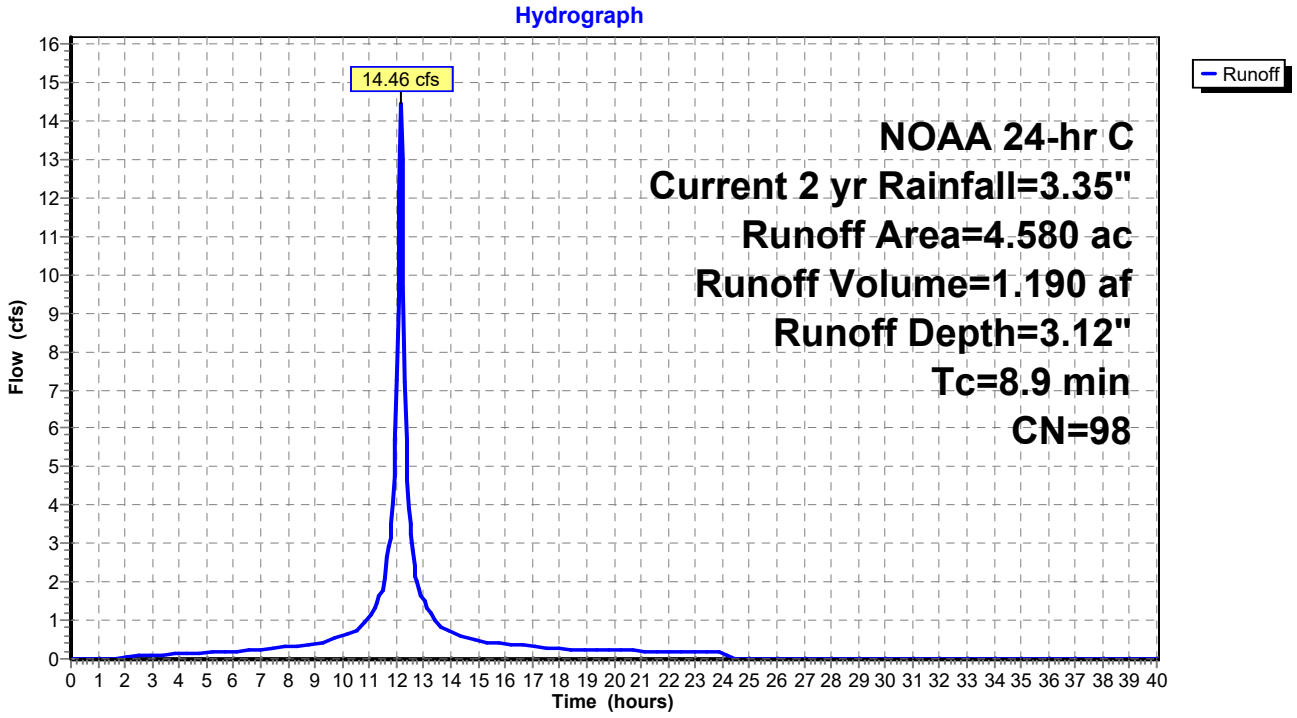
Runoff = 14.46 cfs @ 12.16 hrs, Volume= 1.190 af, Depth= 3.12"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	4.580	98	
	4.580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1I: XDA-1 (impervious)



Summary for Subcatchment X-1P: XDA-1 (pervious)

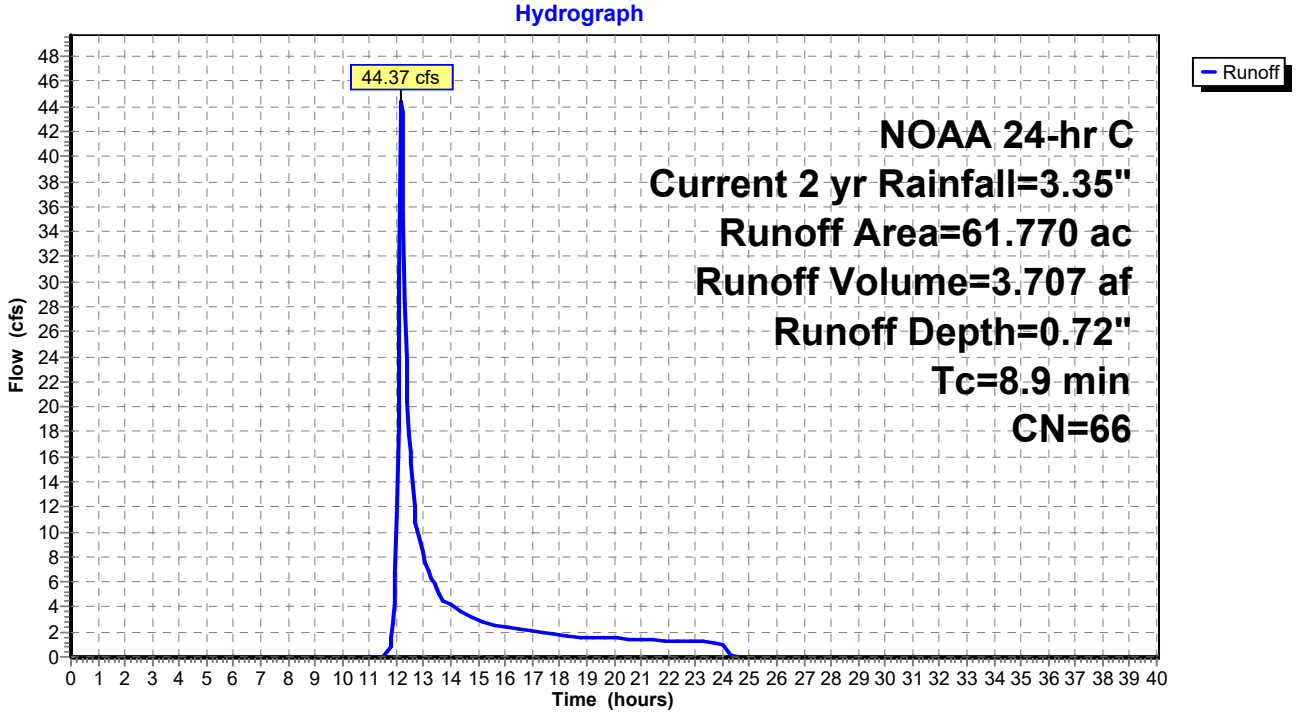
Runoff = 44.37 cfs @ 12.18 hrs, Volume= 3.707 af, Depth= 0.72"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
20.810	55	Woods, Good, HSG B
14.490	70	Woods, Good, HSG C
6.630	77	Woods, Good, HSG D
10.000	71	Row crops, C&T, Good, HSG B
6.300	78	Row crops, C&T, Good, HSG C
0.320	81	Row crops, C&T, Good, HSG D
61.770	66	Weighted Average
61.770		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1P: XDA-1 (pervious)



Summary for Subcatchment X-1S: XDA-1 (pervious)

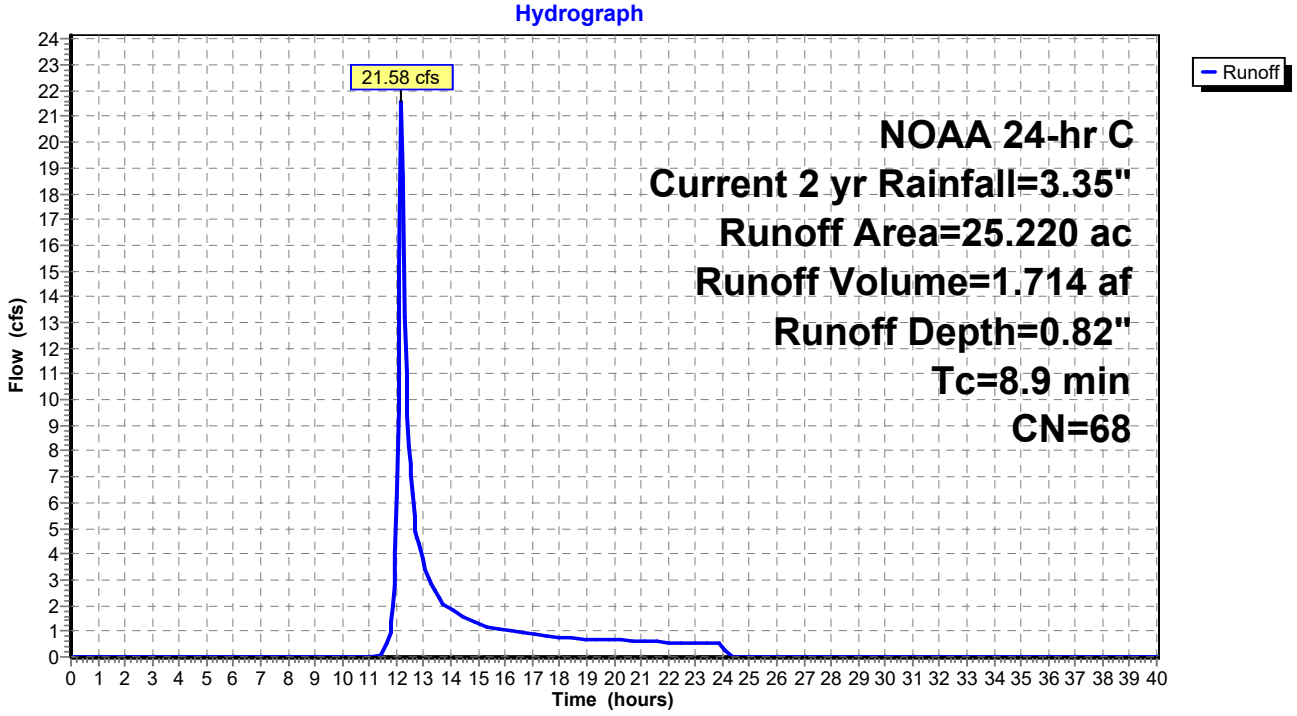
Runoff = 21.58 cfs @ 12.17 hrs, Volume= 1.714 af, Depth= 0.82"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
5.130	55	Woods, Good, HSG B
2.350	70	Woods, Good, HSG C
0.060	77	Woods, Good, HSG D
8.280	71	Row crops, C&T, Good, HSG B
6.020	78	Row crops, C&T, Good, HSG C
0.160	81	Row crops, C&T, Good, HSG D
25.220	68	Weighted Average
25.220		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1S: XDA-1 (pervious)

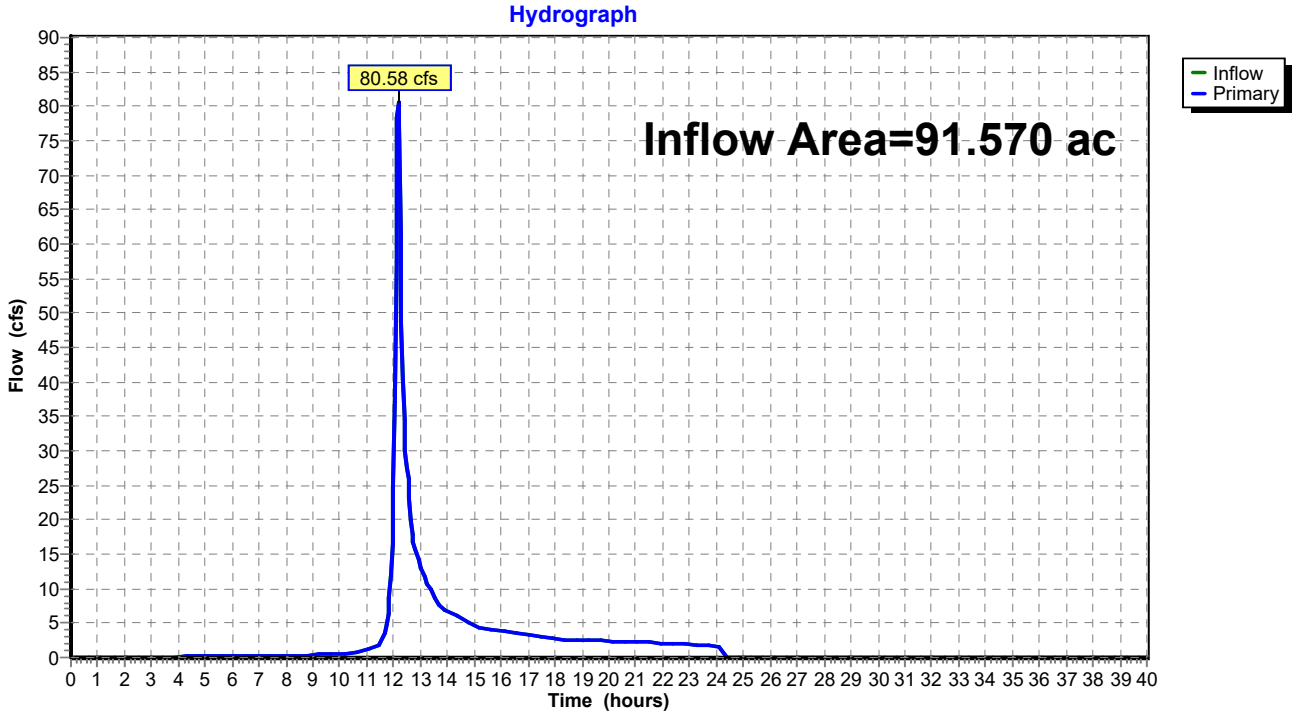


Summary for Link XDA-1: Existing Drainage Area #1

Inflow Area = 91.570 ac, 5.00% Impervious, Inflow Depth = 0.87" for Current 2 yr event
Inflow = 80.58 cfs @ 12.17 hrs, Volume= 6.611 af
Primary = 80.58 cfs @ 12.17 hrs, Volume= 6.611 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-1: Existing Drainage Area #1



Summary for Subcatchment X-1I: XDA-1 (impervious)

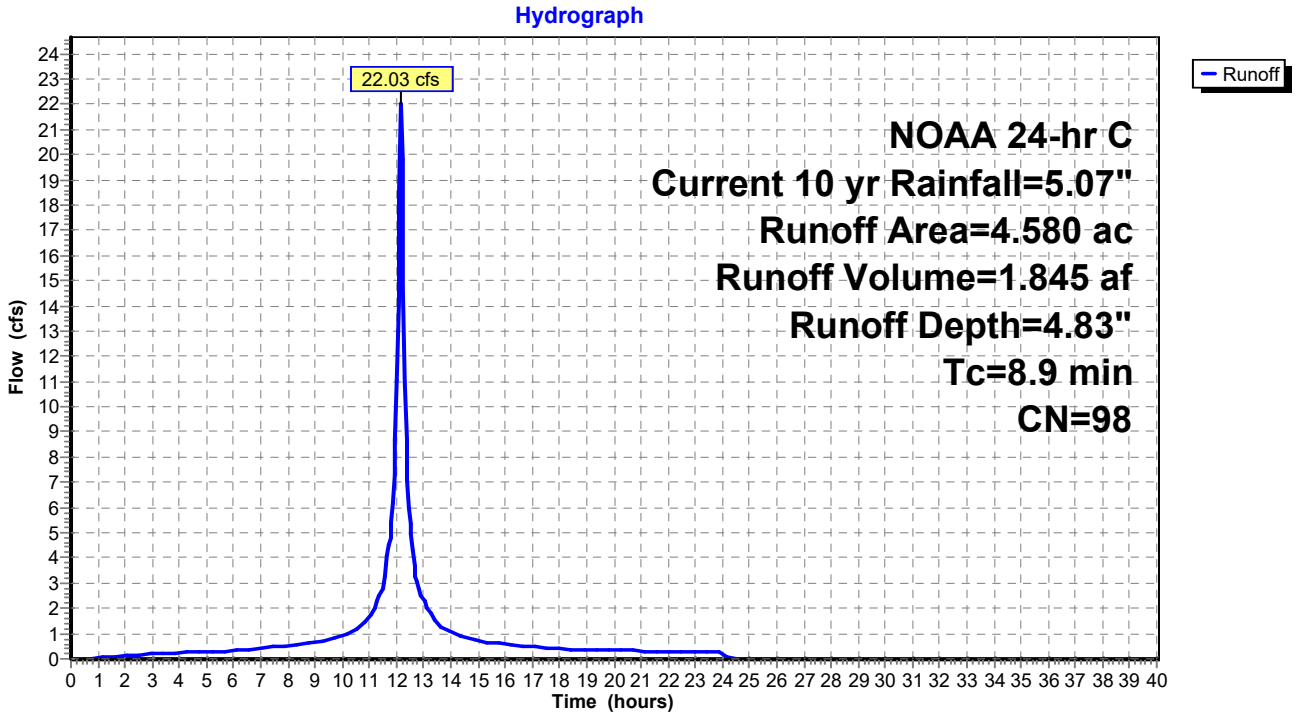
Runoff = 22.03 cfs @ 12.16 hrs, Volume= 1.845 af, Depth= 4.83"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.07"

	Area (ac)	CN	Description
*	4.580	98	
	4.580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1I: XDA-1 (impervious)



Summary for Subcatchment X-1P: XDA-1 (pervious)

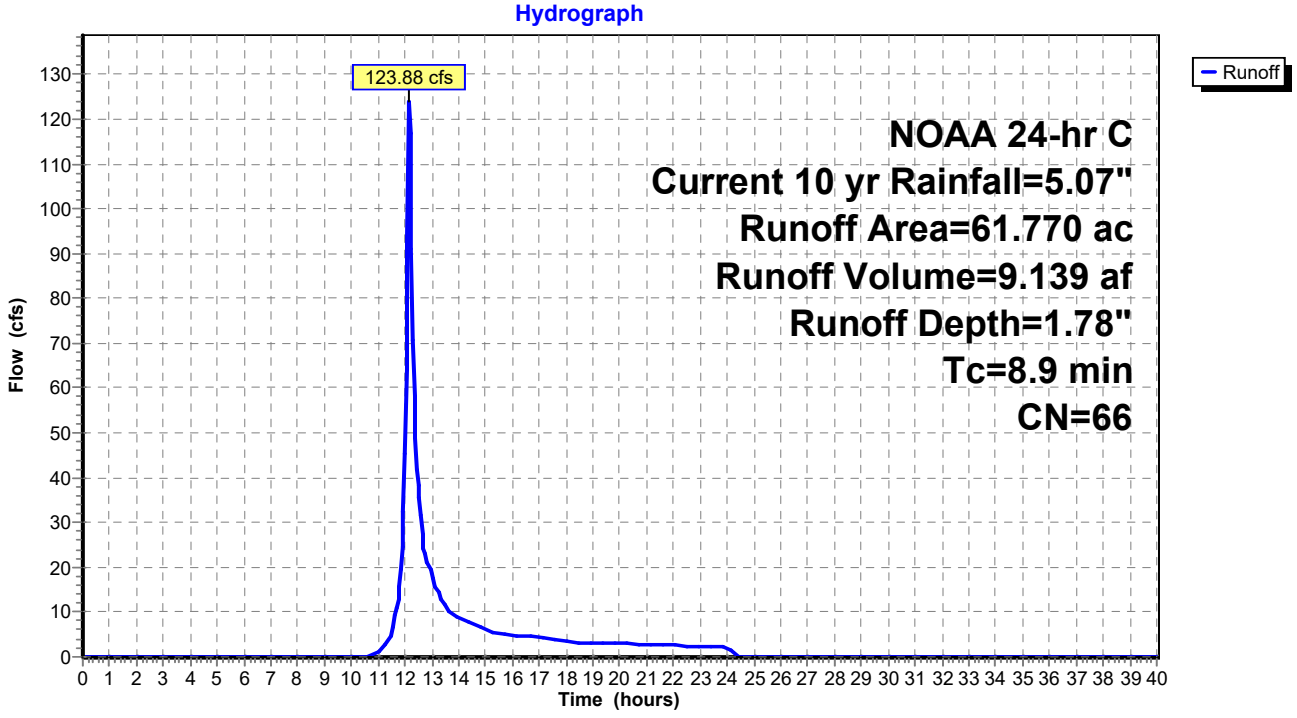
Runoff = 123.88 cfs @ 12.17 hrs, Volume= 9.139 af, Depth= 1.78"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.07"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
20.810	55	Woods, Good, HSG B
14.490	70	Woods, Good, HSG C
6.630	77	Woods, Good, HSG D
10.000	71	Row crops, C&T, Good, HSG B
6.300	78	Row crops, C&T, Good, HSG C
0.320	81	Row crops, C&T, Good, HSG D
61.770	66	Weighted Average
61.770		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1P: XDA-1 (pervious)



Summary for Subcatchment X-1S: XDA-1 (pervious)

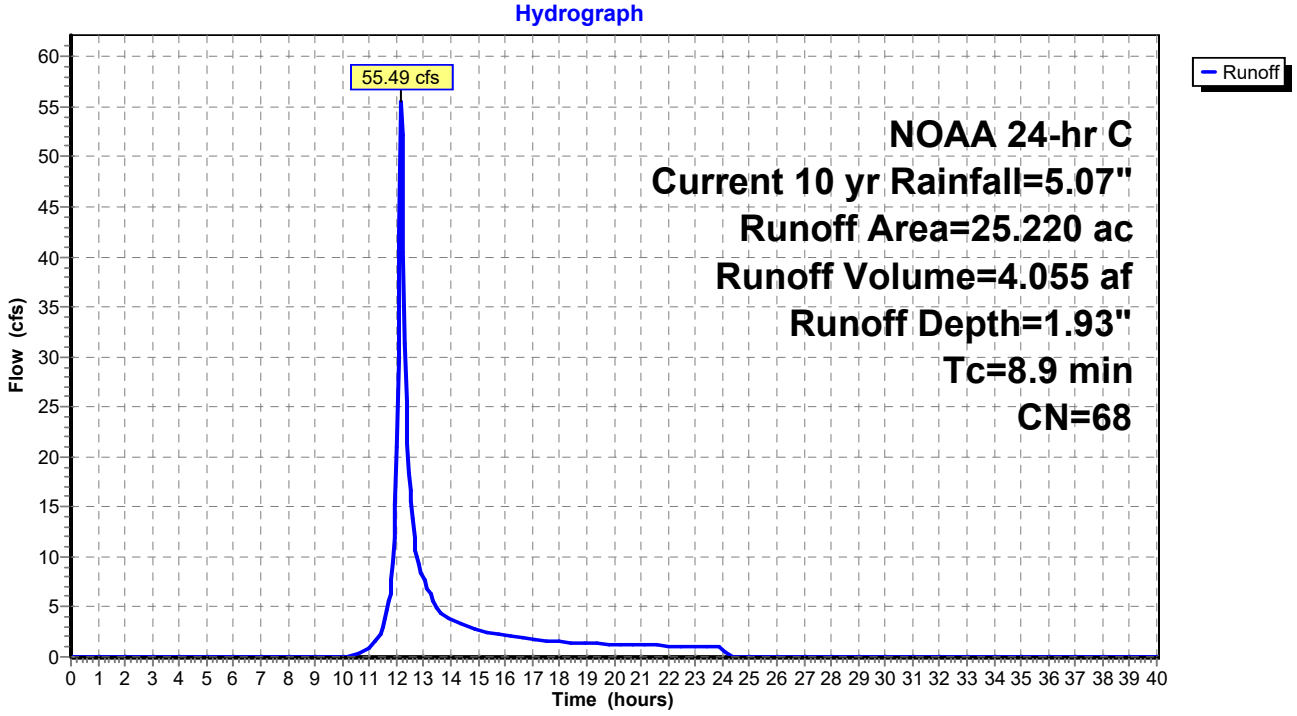
Runoff = 55.49 cfs @ 12.17 hrs, Volume= 4.055 af, Depth= 1.93"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.07"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
5.130	55	Woods, Good, HSG B
2.350	70	Woods, Good, HSG C
0.060	77	Woods, Good, HSG D
8.280	71	Row crops, C&T, Good, HSG B
6.020	78	Row crops, C&T, Good, HSG C
0.160	81	Row crops, C&T, Good, HSG D
25.220	68	Weighted Average
25.220		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1S: XDA-1 (pervious)

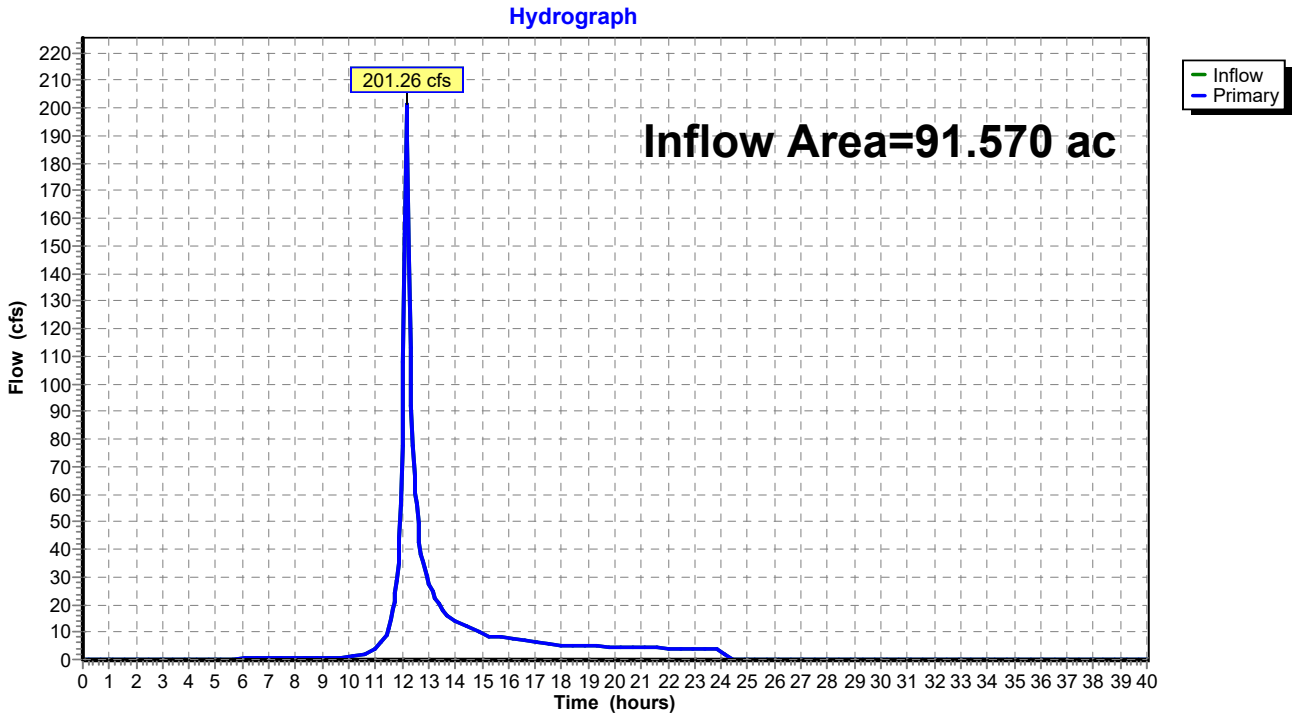


Summary for Link XDA-1: Existing Drainage Area #1

Inflow Area = 91.570 ac, 5.00% Impervious, Inflow Depth = 1.97" for Current 10 yr event
Inflow = 201.26 cfs @ 12.17 hrs, Volume= 15.039 af
Primary = 201.26 cfs @ 12.17 hrs, Volume= 15.039 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-1: Existing Drainage Area #1



Summary for Subcatchment X-1I: XDA-1 (impervious)

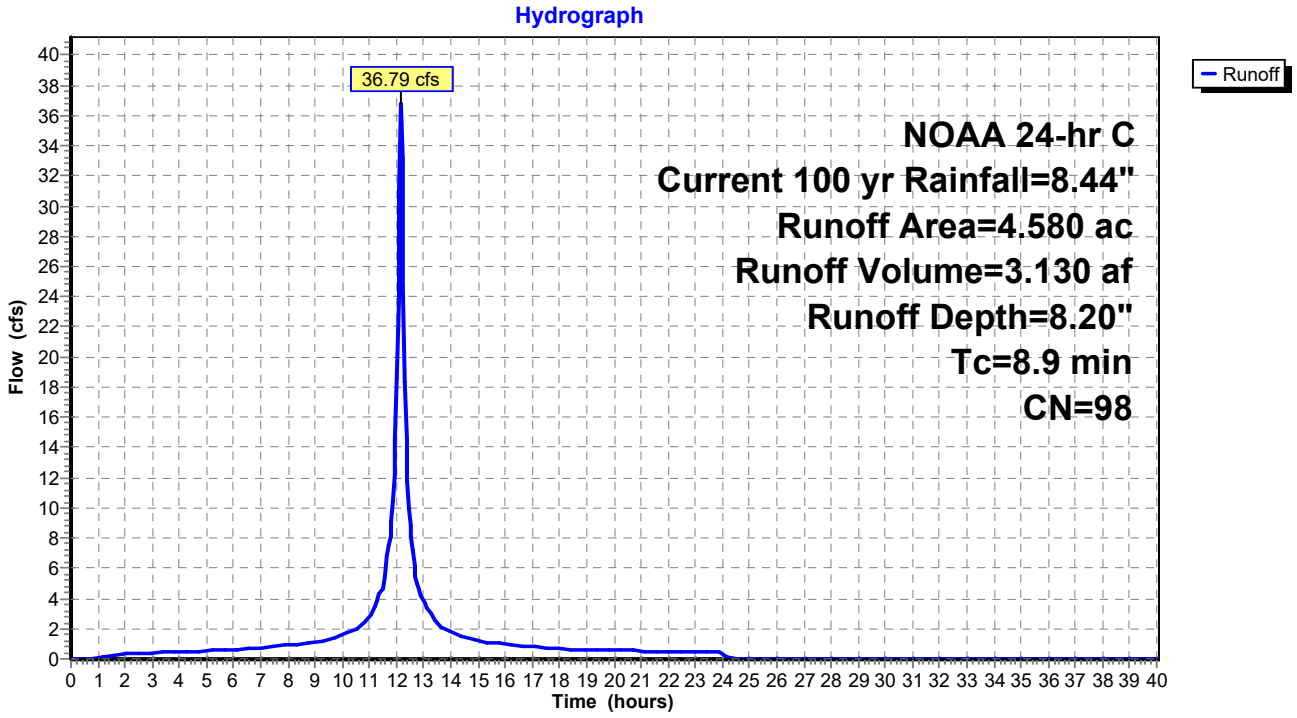
Runoff = 36.79 cfs @ 12.16 hrs, Volume= 3.130 af, Depth= 8.20"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.44"

	Area (ac)	CN	Description
*	4.580	98	
	4.580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1I: XDA-1 (impervious)



Summary for Subcatchment X-1P: XDA-1 (pervious)

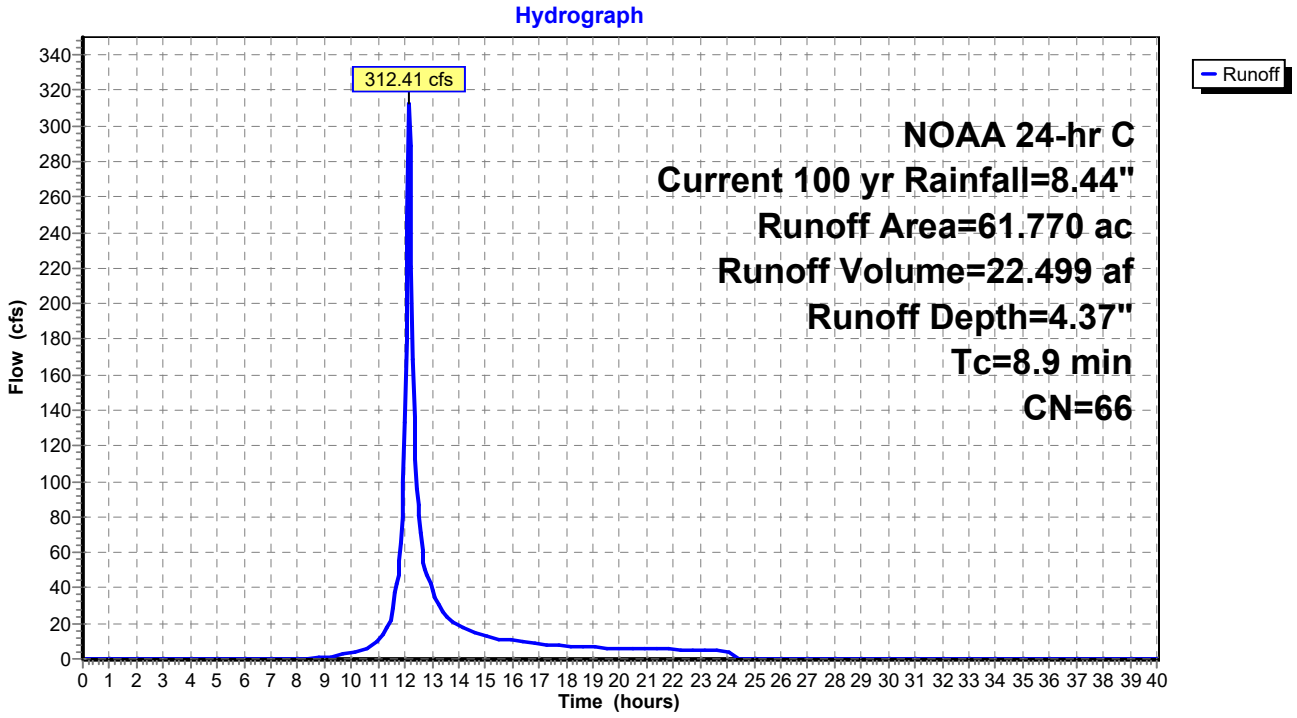
Runoff = 312.41 cfs @ 12.16 hrs, Volume= 22.499 af, Depth= 4.37"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.44"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
20.810	55	Woods, Good, HSG B
14.490	70	Woods, Good, HSG C
6.630	77	Woods, Good, HSG D
10.000	71	Row crops, C&T, Good, HSG B
6.300	78	Row crops, C&T, Good, HSG C
0.320	81	Row crops, C&T, Good, HSG D
61.770	66	Weighted Average
61.770		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1P: XDA-1 (pervious)



Summary for Subcatchment X-1S: XDA-1 (pervious)

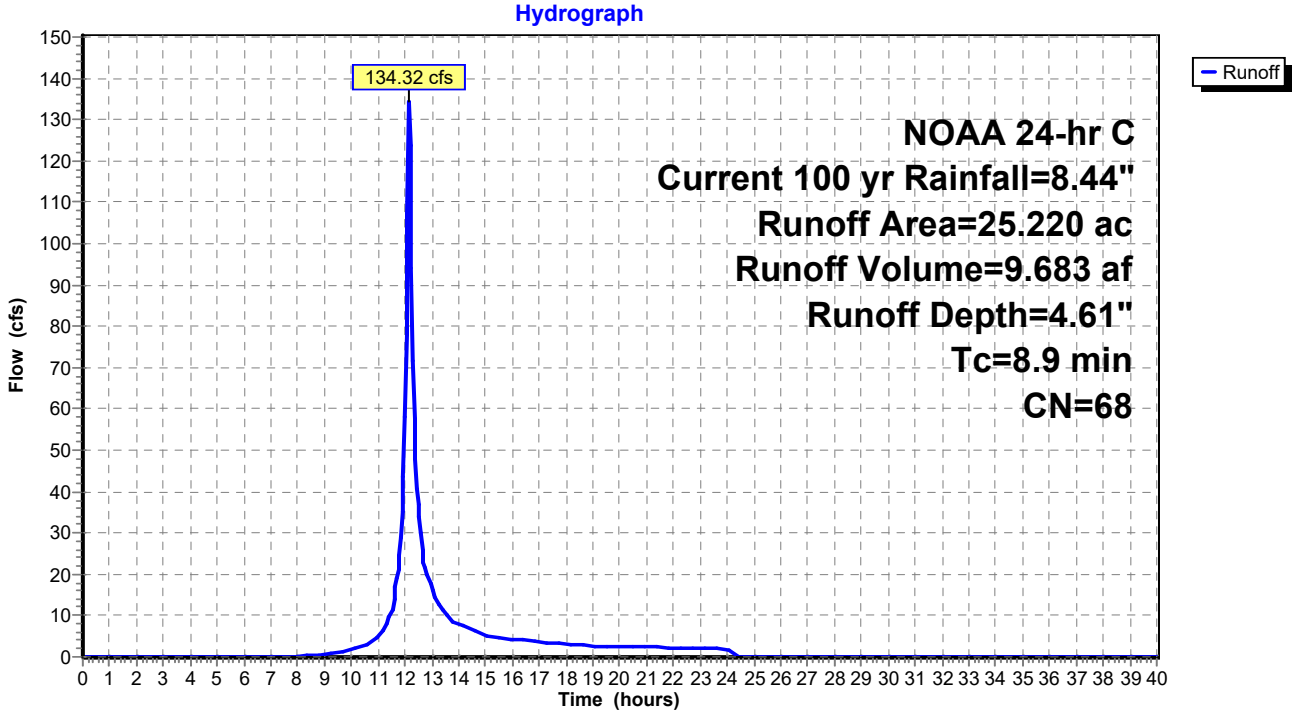
Runoff = 134.32 cfs @ 12.16 hrs, Volume= 9.683 af, Depth= 4.61"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.44"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
5.130	55	Woods, Good, HSG B
2.350	70	Woods, Good, HSG C
0.060	77	Woods, Good, HSG D
8.280	71	Row crops, C&T, Good, HSG B
6.020	78	Row crops, C&T, Good, HSG C
0.160	81	Row crops, C&T, Good, HSG D
25.220	68	Weighted Average
25.220		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1S: XDA-1 (pervious)

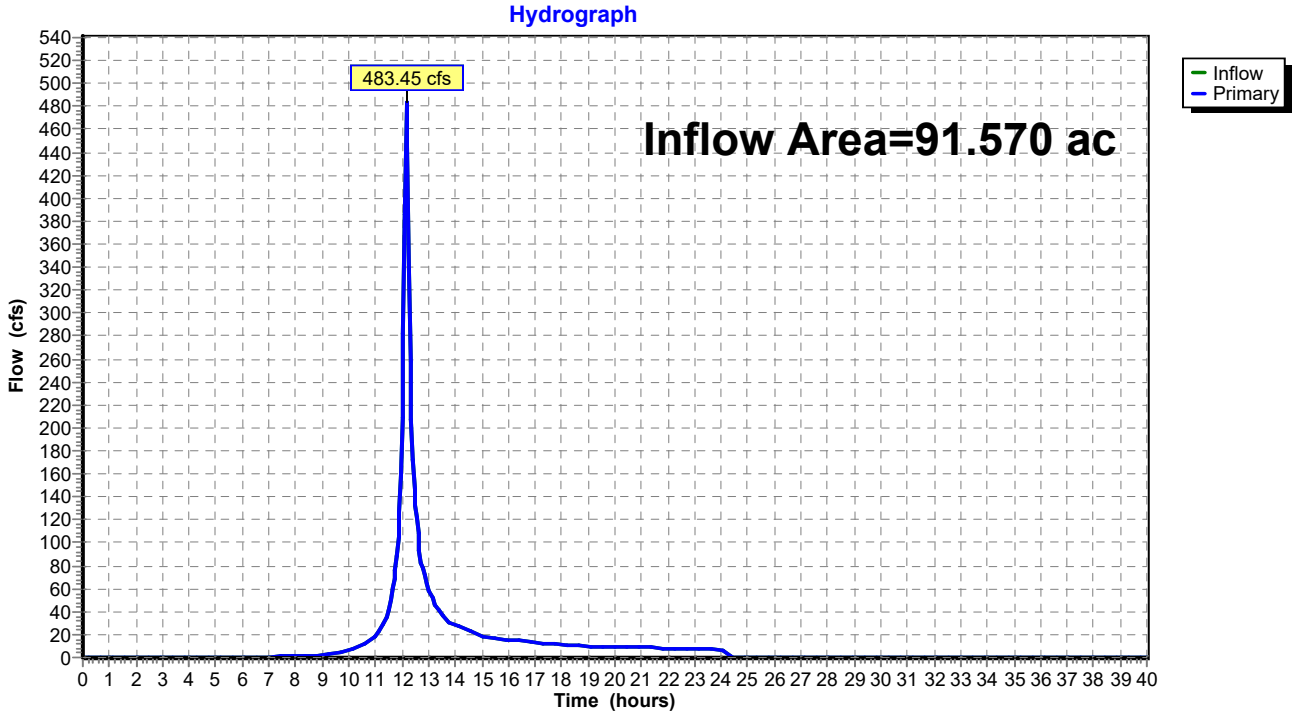


Summary for Link XDA-1: Existing Drainage Area #1

Inflow Area = 91.570 ac, 5.00% Impervious, Inflow Depth = 4.63" for Current 100 yr event
Inflow = 483.45 cfs @ 12.16 hrs, Volume= 35.312 af
Primary = 483.45 cfs @ 12.16 hrs, Volume= 35.312 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-1: Existing Drainage Area #1



Summary for Subcatchment X-1I: XDA-1 (impervious)

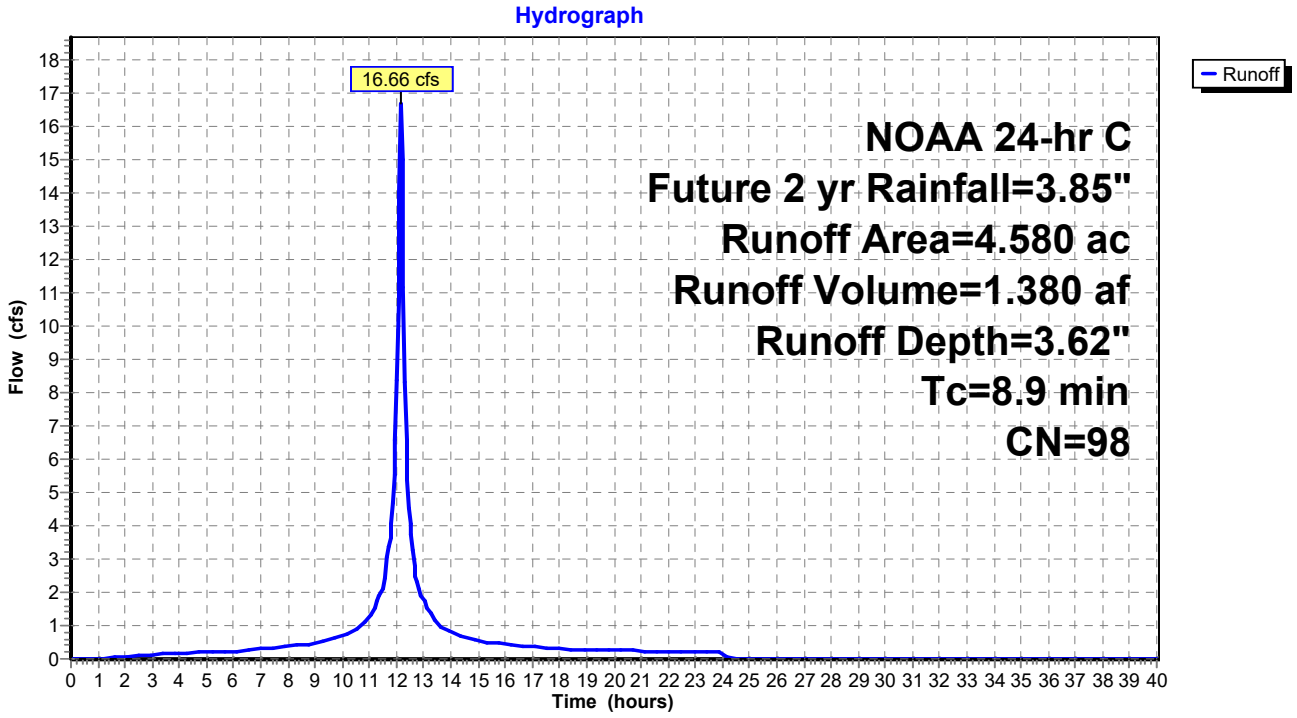
Runoff = 16.66 cfs @ 12.16 hrs, Volume= 1.380 af, Depth= 3.62"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	4.580	98	
	4.580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1I: XDA-1 (impervious)



Summary for Subcatchment X-1P: XDA-1 (pervious)

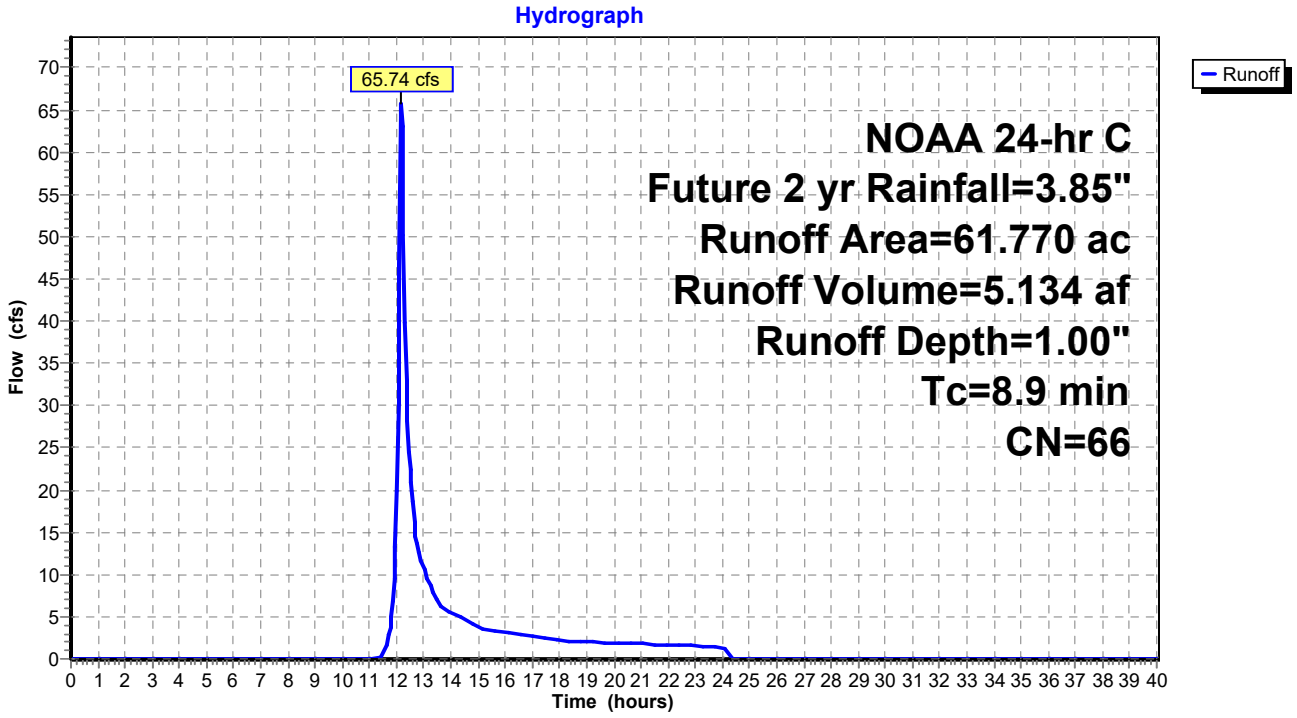
Runoff = 65.74 cfs @ 12.17 hrs, Volume= 5.134 af, Depth= 1.00"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
20.810	55	Woods, Good, HSG B
14.490	70	Woods, Good, HSG C
6.630	77	Woods, Good, HSG D
10.000	71	Row crops, C&T, Good, HSG B
6.300	78	Row crops, C&T, Good, HSG C
0.320	81	Row crops, C&T, Good, HSG D
61.770	66	Weighted Average
61.770		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1P: XDA-1 (pervious)



Summary for Subcatchment X-1S: XDA-1 (pervious)

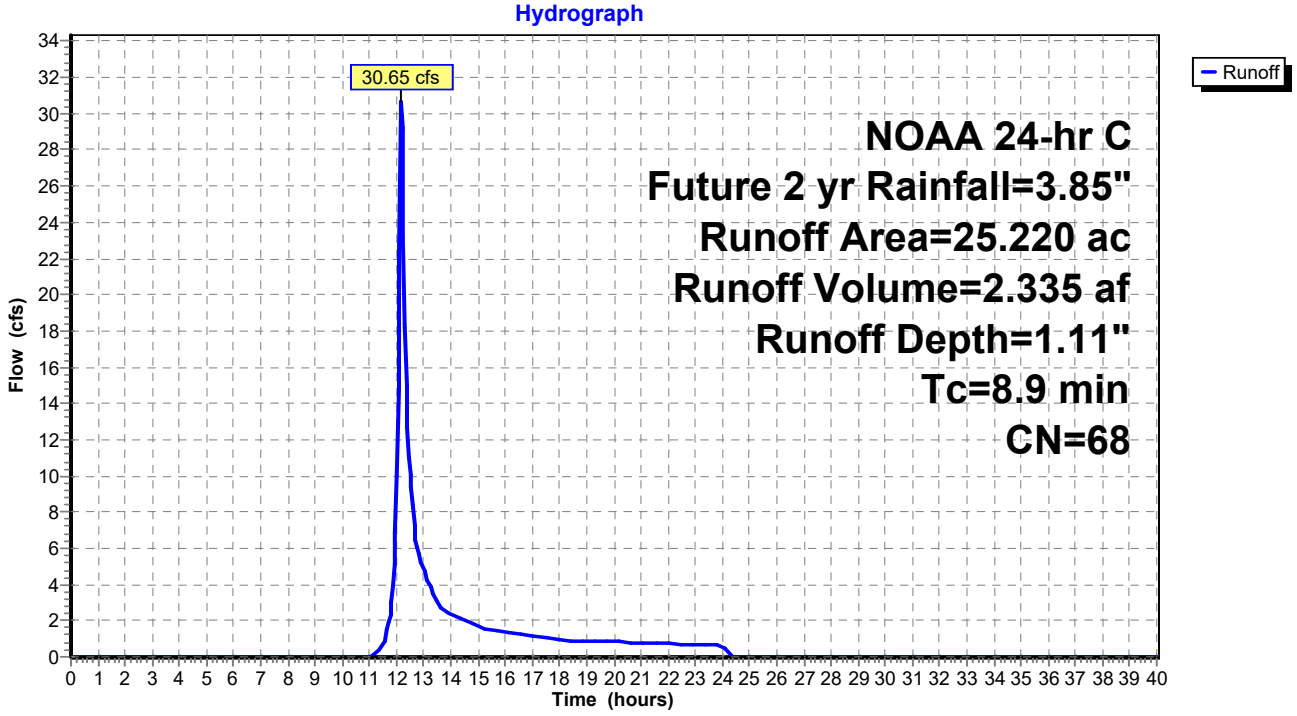
Runoff = 30.65 cfs @ 12.17 hrs, Volume= 2.335 af, Depth= 1.11"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
5.130	55	Woods, Good, HSG B
2.350	70	Woods, Good, HSG C
0.060	77	Woods, Good, HSG D
8.280	71	Row crops, C&T, Good, HSG B
6.020	78	Row crops, C&T, Good, HSG C
0.160	81	Row crops, C&T, Good, HSG D
25.220	68	Weighted Average
25.220		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1S: XDA-1 (pervious)

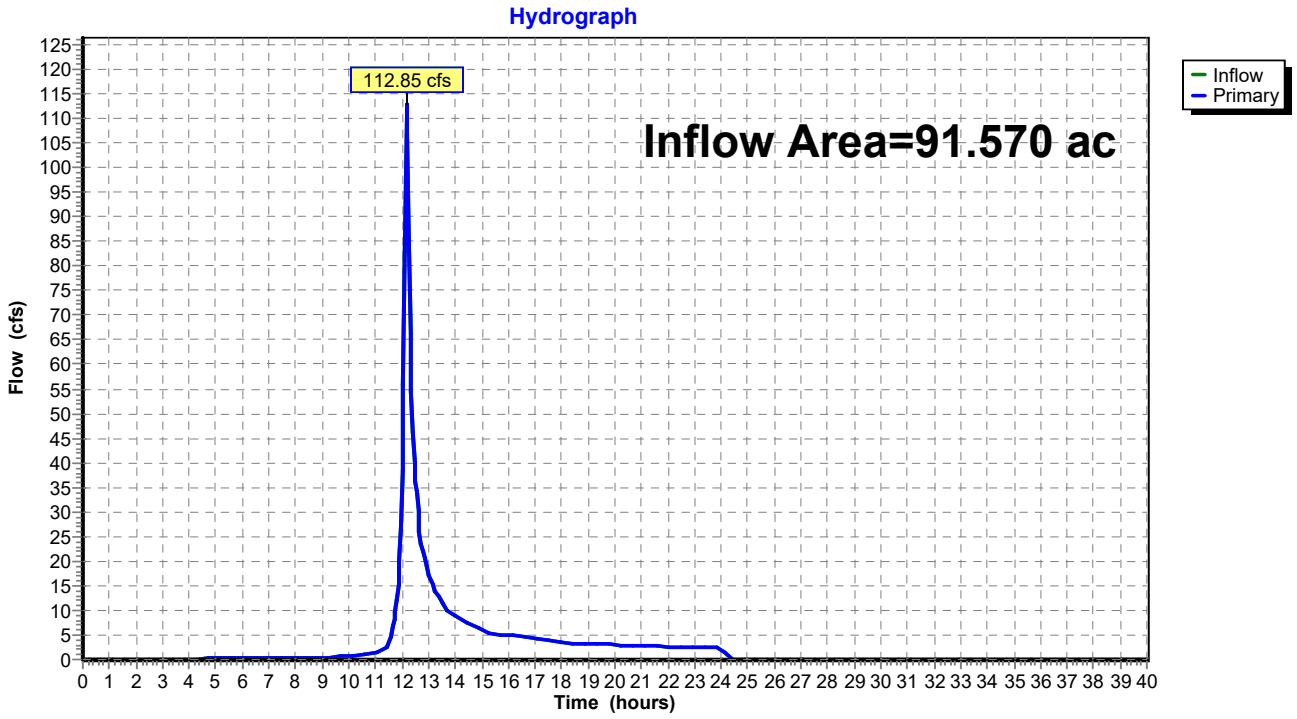


Summary for Link XDA-1: Existing Drainage Area #1

Inflow Area = 91.570 ac, 5.00% Impervious, Inflow Depth = 1.16" for Future 2 yr event
Inflow = 112.85 cfs @ 12.17 hrs, Volume= 8.849 af
Primary = 112.85 cfs @ 12.17 hrs, Volume= 8.849 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-1: Existing Drainage Area #1



Summary for Subcatchment X-1I: XDA-1 (impervious)

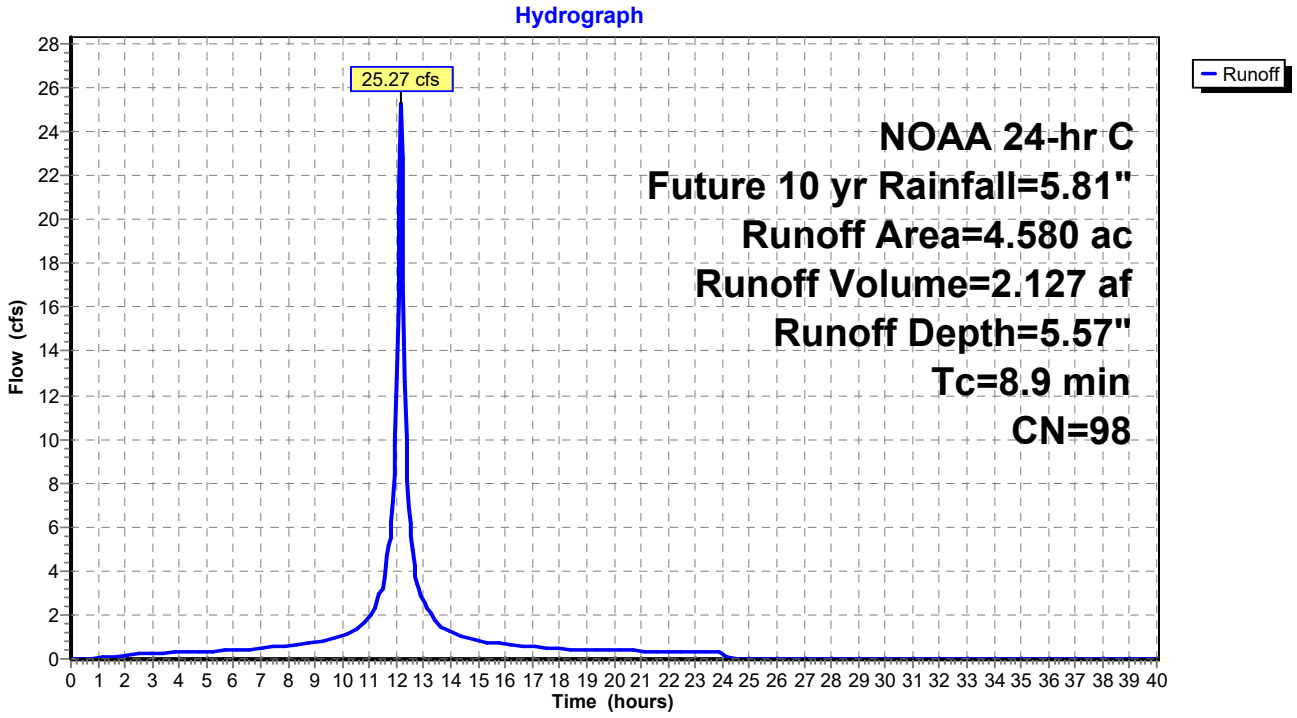
Runoff = 25.27 cfs @ 12.16 hrs, Volume= 2.127 af, Depth= 5.57"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.81"

	Area (ac)	CN	Description
*	4.580	98	
	4.580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1I: XDA-1 (impervious)



Summary for Subcatchment X-1P: XDA-1 (pervious)

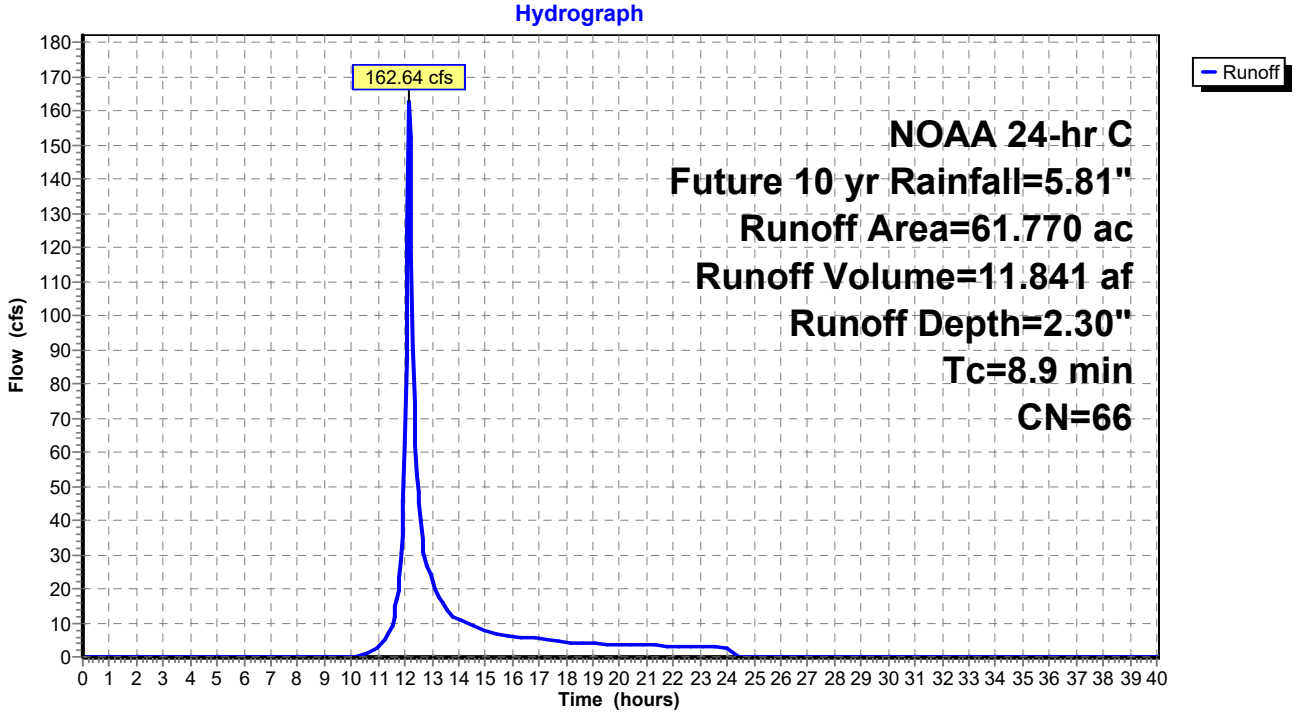
Runoff = 162.64 cfs @ 12.17 hrs, Volume= 11.841 af, Depth= 2.30"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.81"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
20.810	55	Woods, Good, HSG B
14.490	70	Woods, Good, HSG C
6.630	77	Woods, Good, HSG D
10.000	71	Row crops, C&T, Good, HSG B
6.300	78	Row crops, C&T, Good, HSG C
0.320	81	Row crops, C&T, Good, HSG D
61.770	66	Weighted Average
61.770		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1P: XDA-1 (pervious)



Summary for Subcatchment X-1S: XDA-1 (pervious)

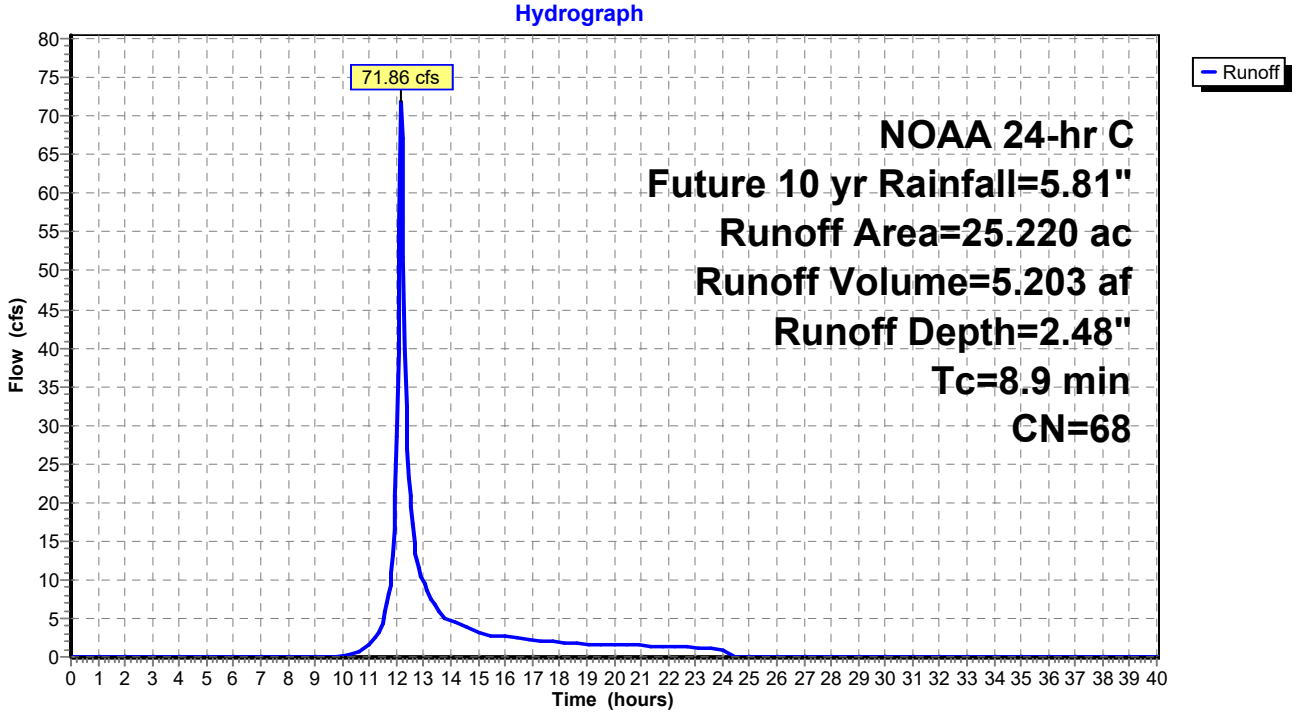
Runoff = 71.86 cfs @ 12.16 hrs, Volume= 5.203 af, Depth= 2.48"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.81"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
5.130	55	Woods, Good, HSG B
2.350	70	Woods, Good, HSG C
0.060	77	Woods, Good, HSG D
8.280	71	Row crops, C&T, Good, HSG B
6.020	78	Row crops, C&T, Good, HSG C
0.160	81	Row crops, C&T, Good, HSG D
25.220	68	Weighted Average
25.220		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1S: XDA-1 (pervious)

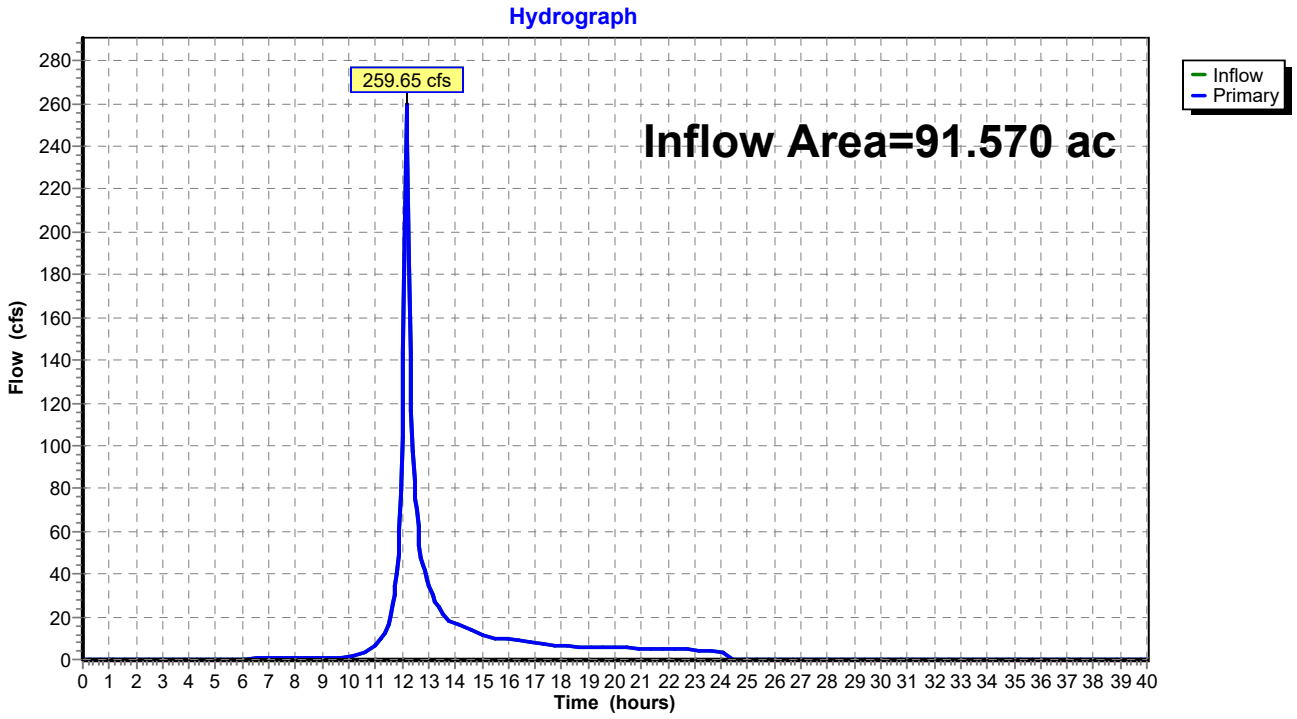


Summary for Link XDA-1: Existing Drainage Area #1

Inflow Area = 91.570 ac, 5.00% Impervious, Inflow Depth = 2.51" for Future 10 yr event
Inflow = 259.65 cfs @ 12.16 hrs, Volume= 19.171 af
Primary = 259.65 cfs @ 12.16 hrs, Volume= 19.171 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-1: Existing Drainage Area #1



Summary for Subcatchment X-1I: XDA-1 (impervious)

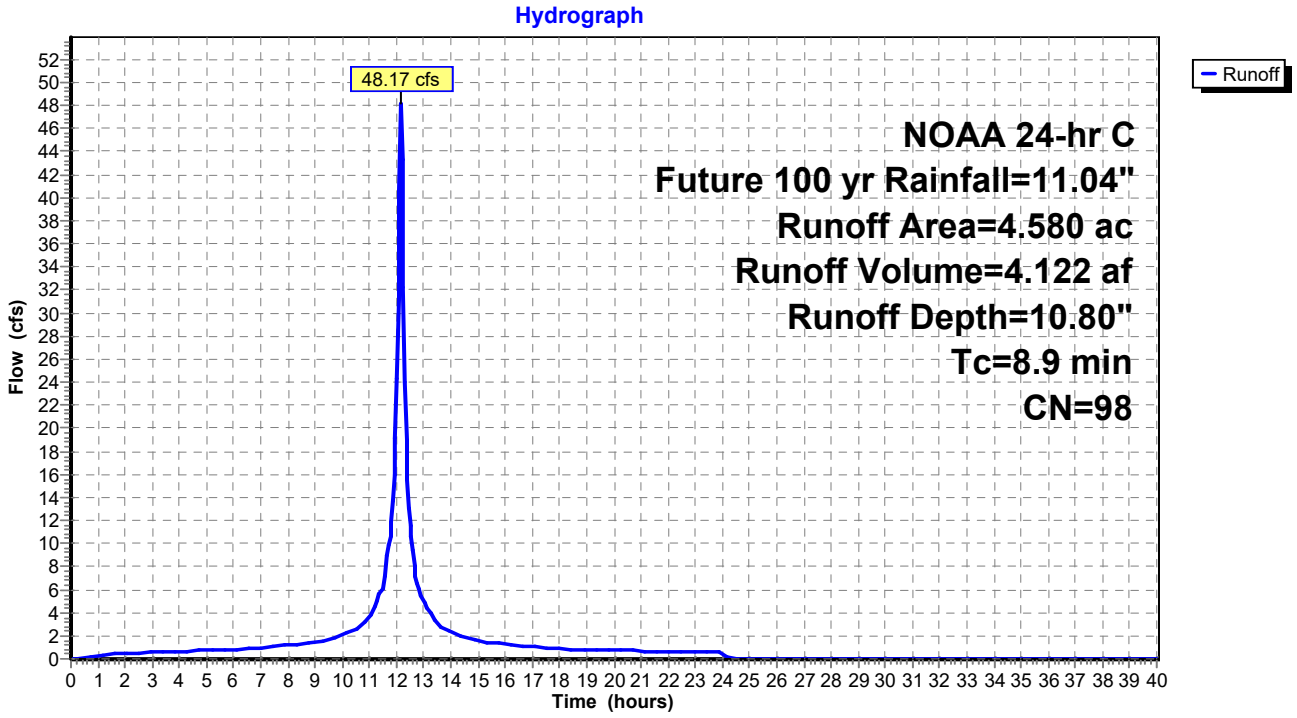
Runoff = 48.17 cfs @ 12.16 hrs, Volume= 4.122 af, Depth=10.80"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.04"

	Area (ac)	CN	Description
*	4.580	98	
	4.580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1I: XDA-1 (impervious)



Summary for Subcatchment X-1P: XDA-1 (pervious)

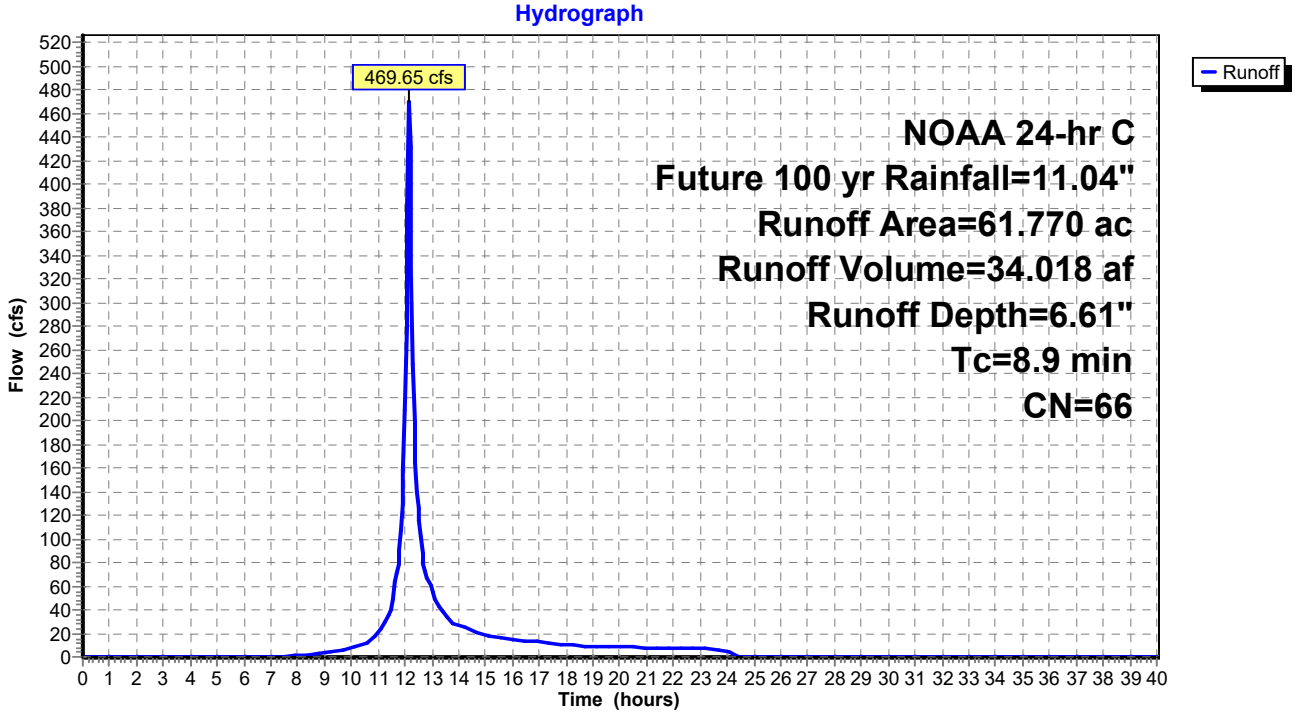
Runoff = 469.65 cfs @ 12.16 hrs, Volume= 34.018 af, Depth= 6.61"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.04"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
20.810	55	Woods, Good, HSG B
14.490	70	Woods, Good, HSG C
6.630	77	Woods, Good, HSG D
10.000	71	Row crops, C&T, Good, HSG B
6.300	78	Row crops, C&T, Good, HSG C
0.320	81	Row crops, C&T, Good, HSG D
61.770	66	Weighted Average
61.770		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1P: XDA-1 (pervious)



Summary for Subcatchment X-1S: XDA-1 (pervious)

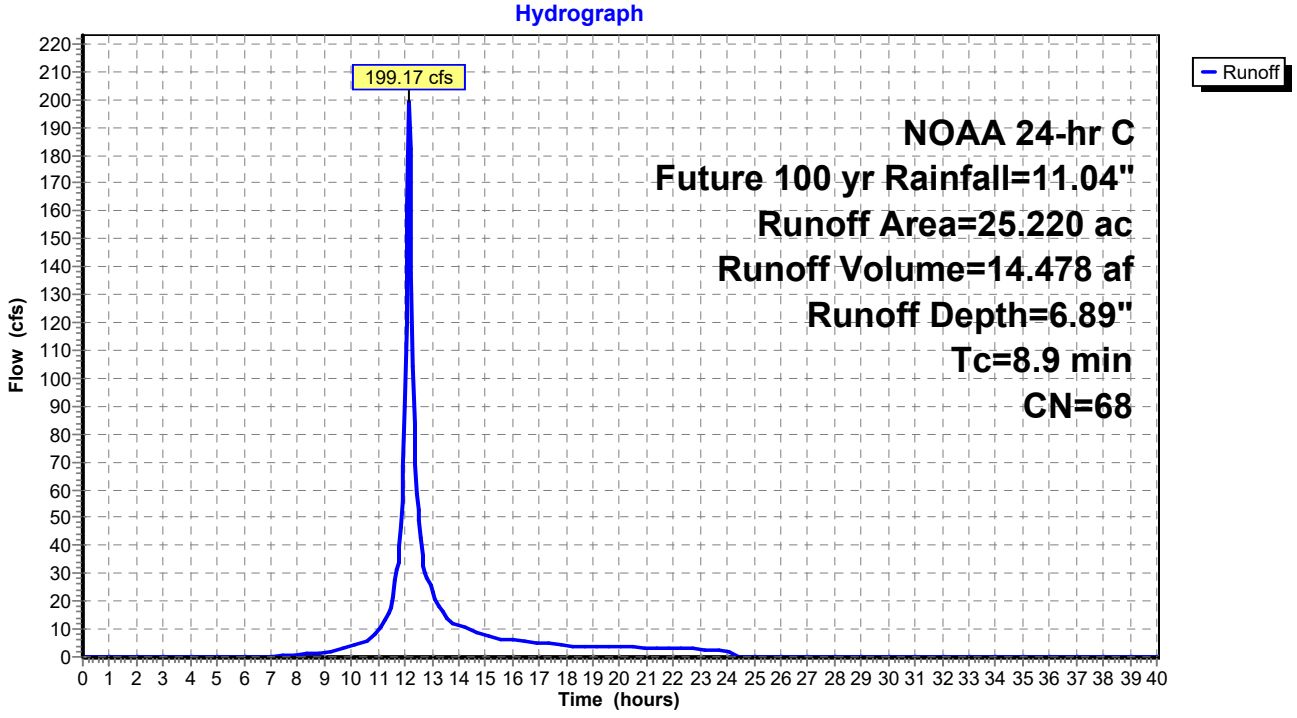
Runoff = 199.17 cfs @ 12.16 hrs, Volume= 14.478 af, Depth= 6.89"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.04"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
5.130	55	Woods, Good, HSG B
2.350	70	Woods, Good, HSG C
0.060	77	Woods, Good, HSG D
8.280	71	Row crops, C&T, Good, HSG B
6.020	78	Row crops, C&T, Good, HSG C
0.160	81	Row crops, C&T, Good, HSG D
25.220	68	Weighted Average
25.220		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1S: XDA-1 (pervious)

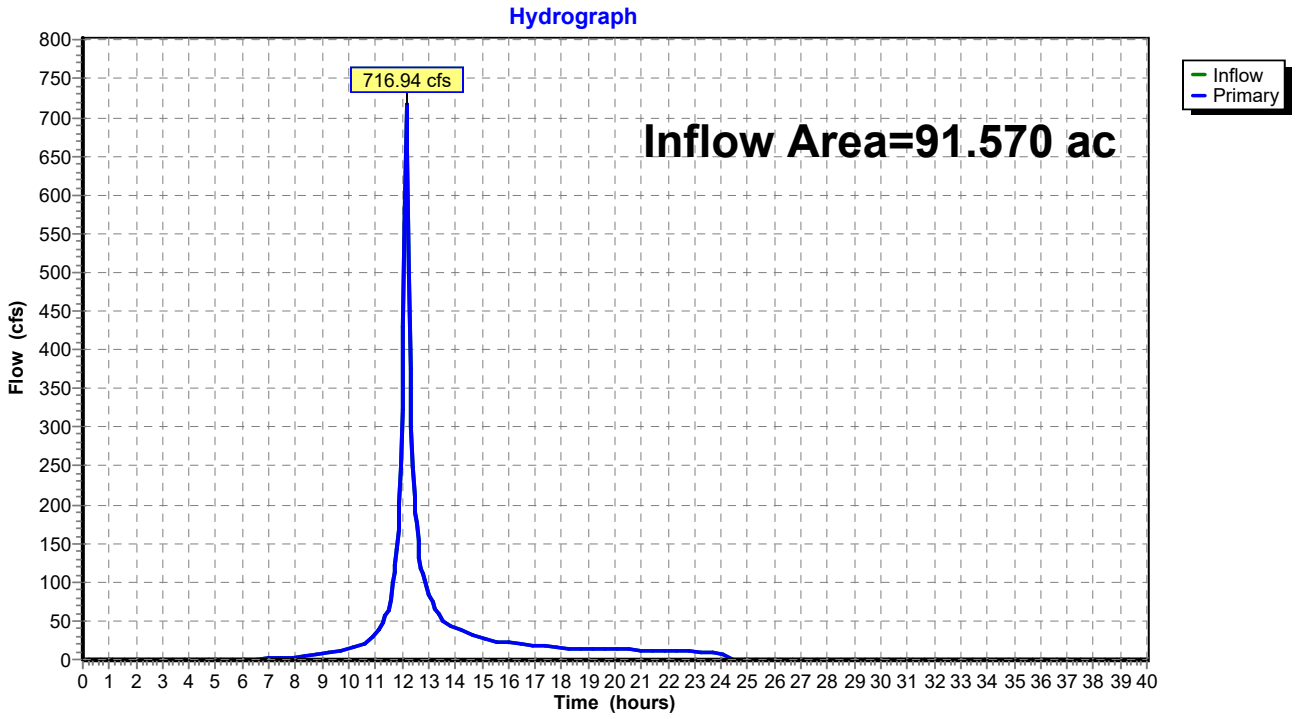


Summary for Link XDA-1: Existing Drainage Area #1

Inflow Area = 91.570 ac, 5.00% Impervious, Inflow Depth = 6.90" for Future 100 yr event
Inflow = 716.94 cfs @ 12.16 hrs, Volume= 52.617 af
Primary = 716.94 cfs @ 12.16 hrs, Volume= 52.617 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-1: Existing Drainage Area #1



Summary for Subcatchment X-1I: XDA-1 (impervious)

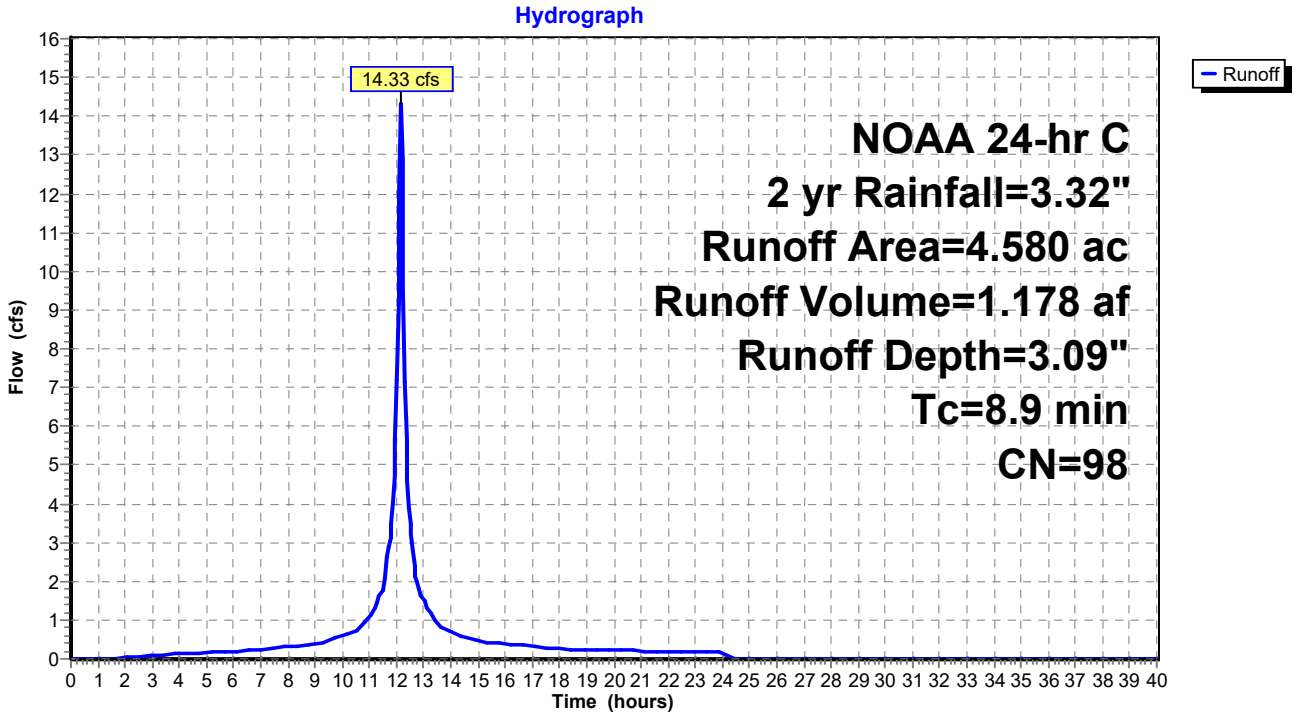
Runoff = 14.33 cfs @ 12.16 hrs, Volume= 1.178 af, Depth= 3.09"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 2 yr Rainfall=3.32"

	Area (ac)	CN	Description
*	4.580	98	
	4.580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1I: XDA-1 (impervious)



Summary for Subcatchment X-1P: XDA-1 (pervious)

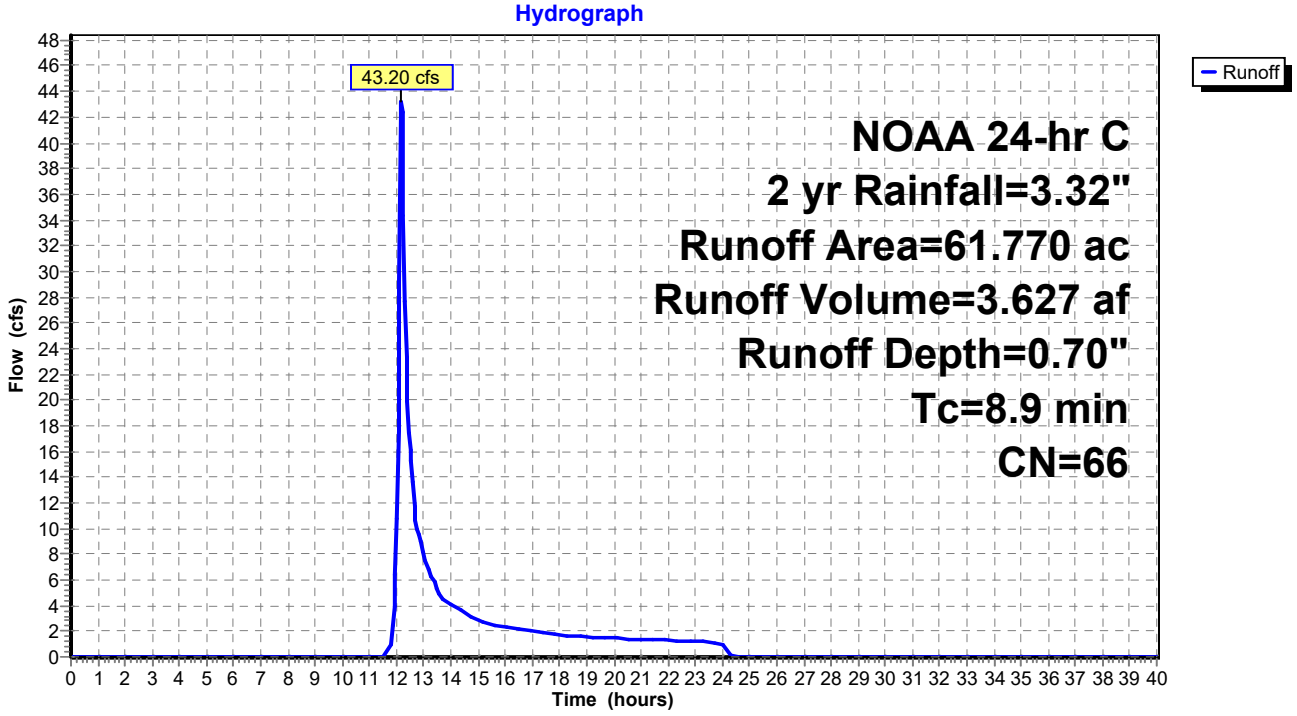
Runoff = 43.20 cfs @ 12.18 hrs, Volume= 3.627 af, Depth= 0.70"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 2 yr Rainfall=3.32"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
20.810	55	Woods, Good, HSG B
14.490	70	Woods, Good, HSG C
6.630	77	Woods, Good, HSG D
10.000	71	Row crops, C&T, Good, HSG B
6.300	78	Row crops, C&T, Good, HSG C
0.320	81	Row crops, C&T, Good, HSG D
61.770	66	Weighted Average
61.770		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1P: XDA-1 (pervious)



Summary for Subcatchment X-1S: XDA-1 (pervious)

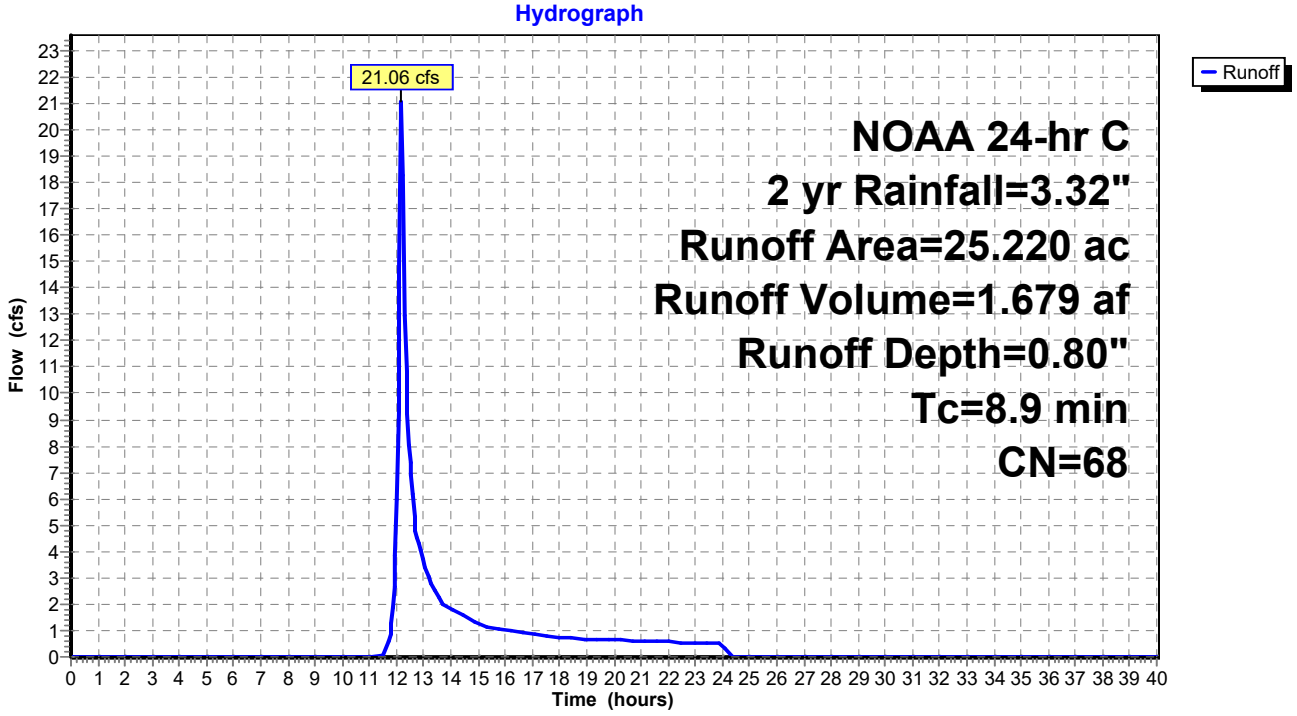
Runoff = 21.06 cfs @ 12.17 hrs, Volume= 1.679 af, Depth= 0.80"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 2 yr Rainfall=3.32"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
5.130	55	Woods, Good, HSG B
2.350	70	Woods, Good, HSG C
0.060	77	Woods, Good, HSG D
8.280	71	Row crops, C&T, Good, HSG B
6.020	78	Row crops, C&T, Good, HSG C
0.160	81	Row crops, C&T, Good, HSG D
25.220	68	Weighted Average
25.220		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1S: XDA-1 (pervious)

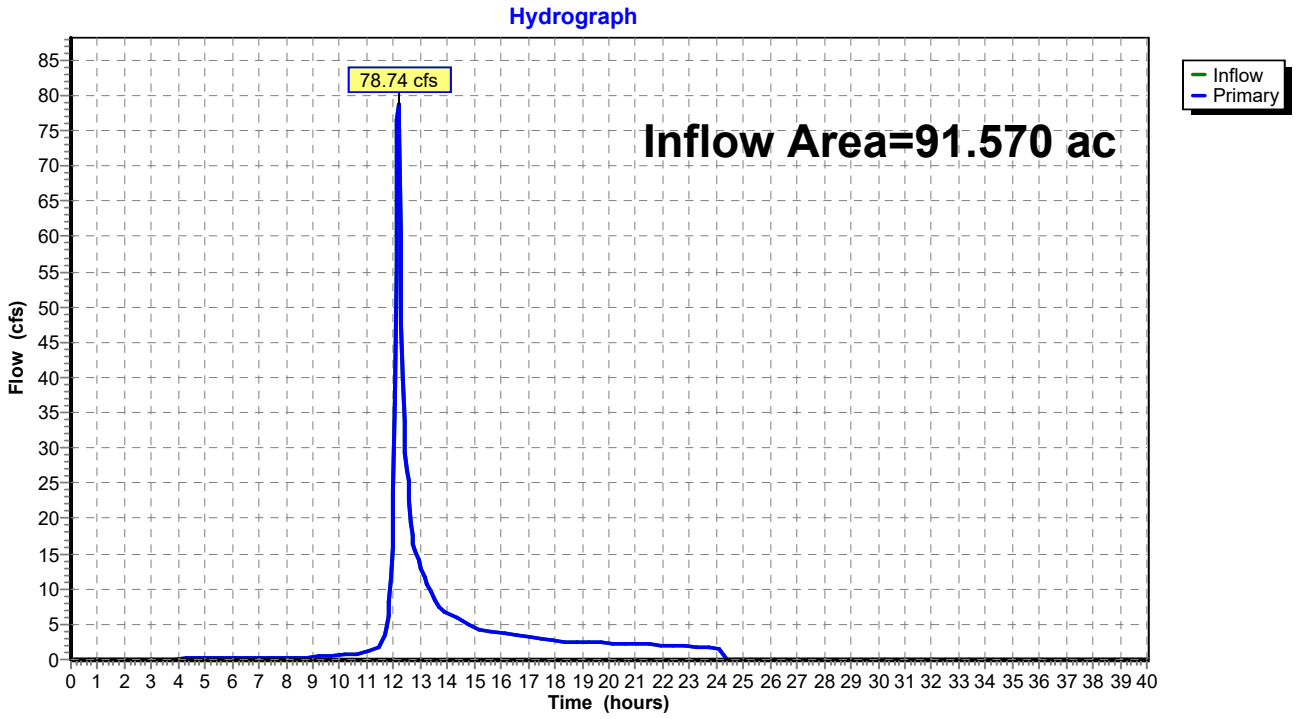


Summary for Link XDA-1: Existing Drainage Area #1

Inflow Area = 91.570 ac, 5.00% Impervious, Inflow Depth = 0.85" for 2 yr event
Inflow = 78.74 cfs @ 12.17 hrs, Volume= 6.484 af
Primary = 78.74 cfs @ 12.17 hrs, Volume= 6.484 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-1: Existing Drainage Area #1



Summary for Subcatchment X-1I: XDA-1 (impervious)

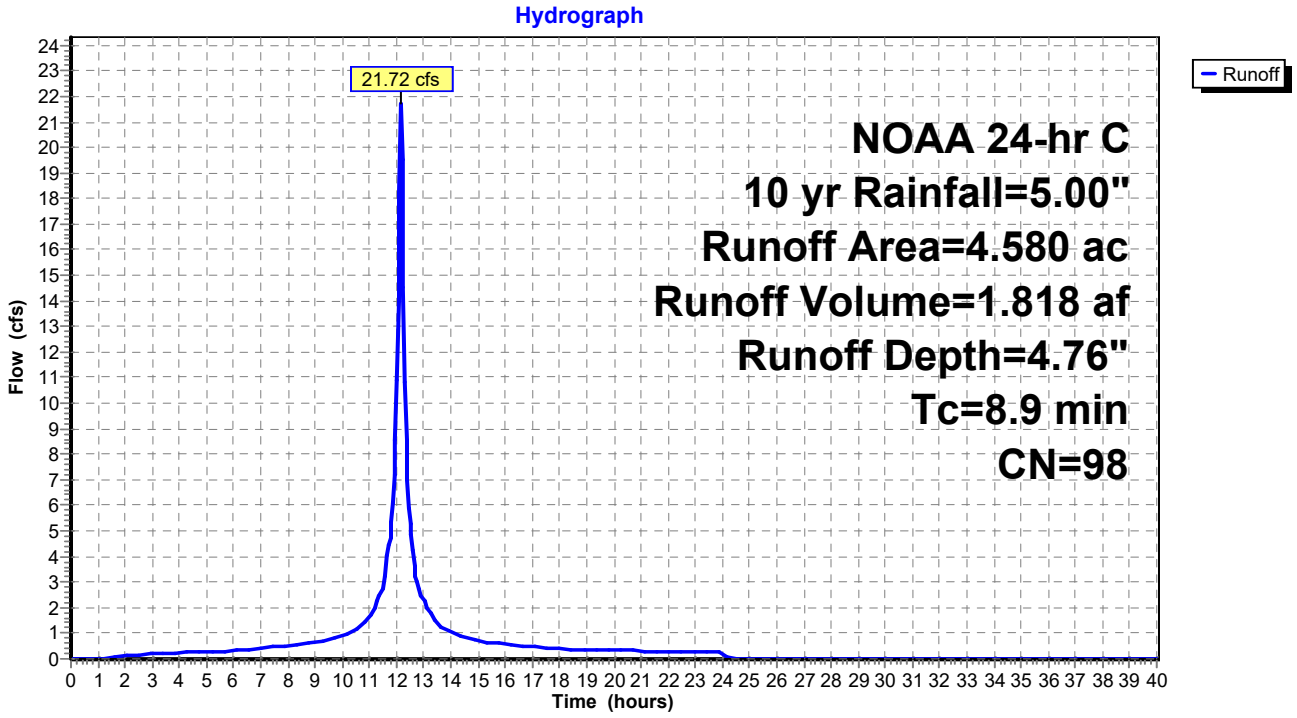
Runoff = 21.72 cfs @ 12.16 hrs, Volume= 1.818 af, Depth= 4.76"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 10 yr Rainfall=5.00"

	Area (ac)	CN	Description
*	4.580	98	
	4.580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1I: XDA-1 (impervious)



Summary for Subcatchment X-1P: XDA-1 (pervious)

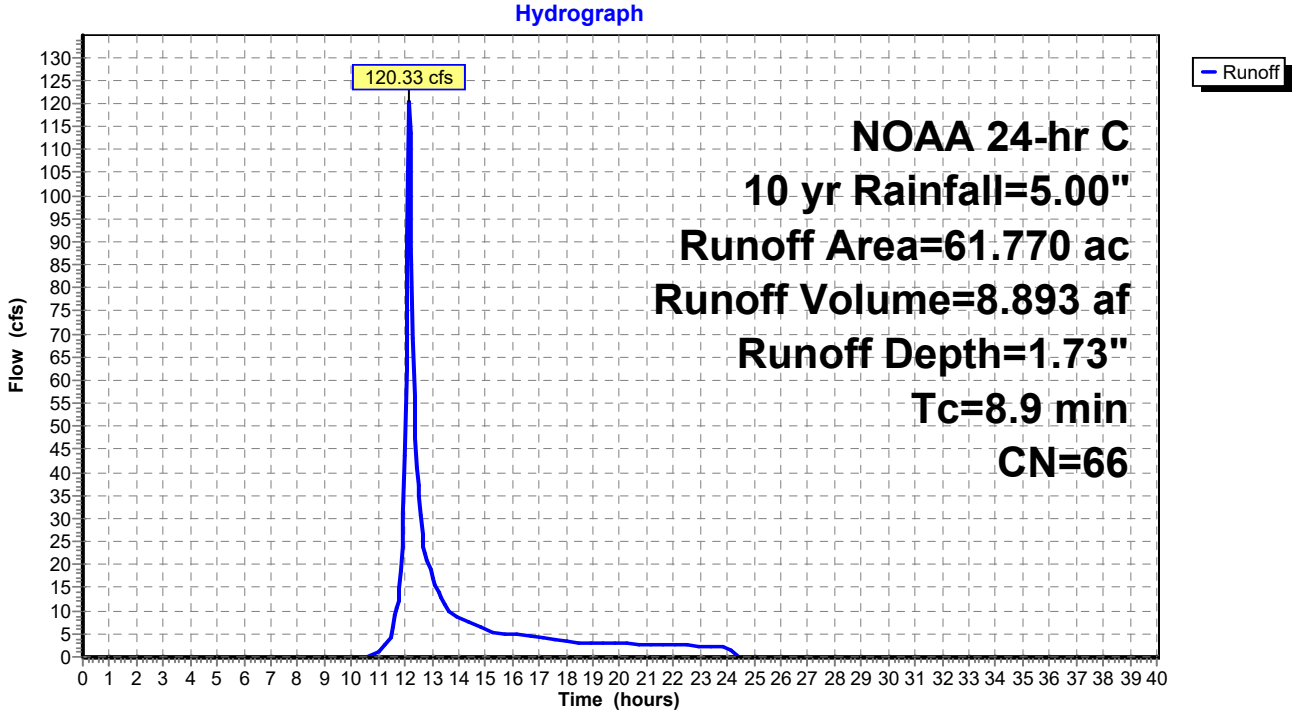
Runoff = 120.33 cfs @ 12.17 hrs, Volume= 8.893 af, Depth= 1.73"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 10 yr Rainfall=5.00"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
20.810	55	Woods, Good, HSG B
14.490	70	Woods, Good, HSG C
6.630	77	Woods, Good, HSG D
10.000	71	Row crops, C&T, Good, HSG B
6.300	78	Row crops, C&T, Good, HSG C
0.320	81	Row crops, C&T, Good, HSG D
61.770	66	Weighted Average
61.770		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1P: XDA-1 (pervious)



Summary for Subcatchment X-1S: XDA-1 (pervious)

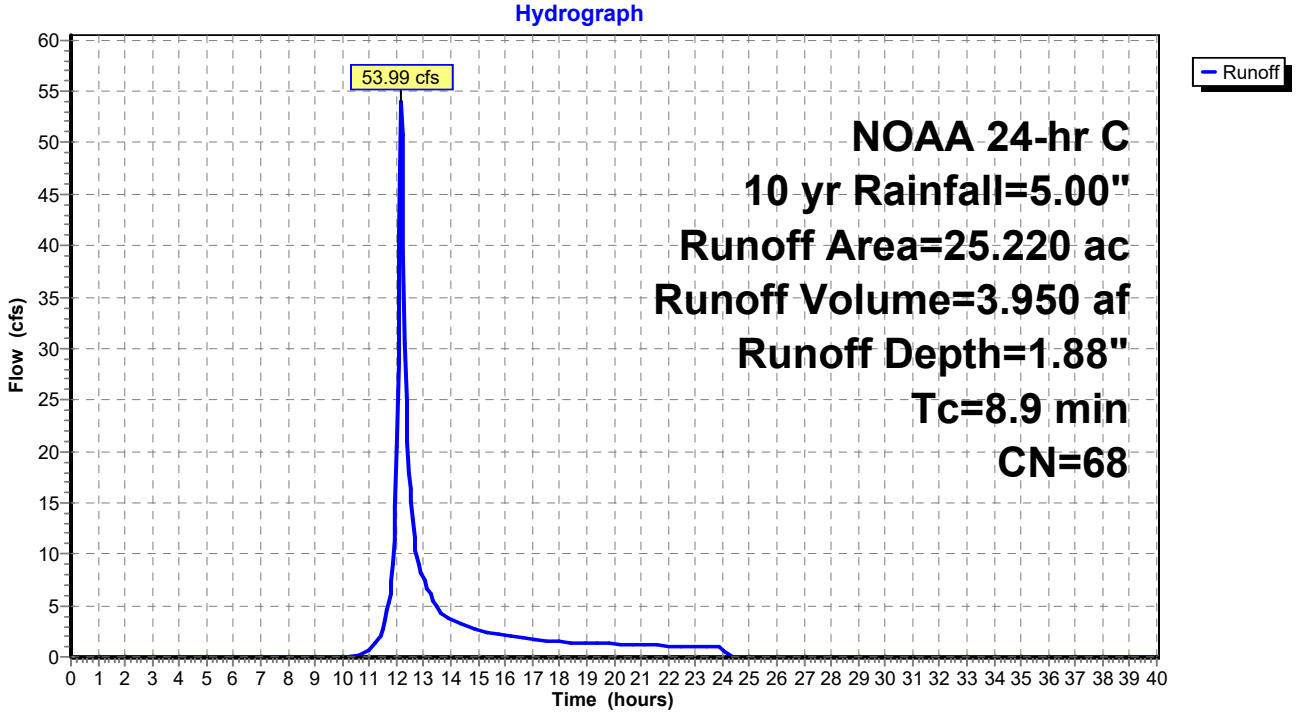
Runoff = 53.99 cfs @ 12.17 hrs, Volume= 3.950 af, Depth= 1.88"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 10 yr Rainfall=5.00"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
5.130	55	Woods, Good, HSG B
2.350	70	Woods, Good, HSG C
0.060	77	Woods, Good, HSG D
8.280	71	Row crops, C&T, Good, HSG B
6.020	78	Row crops, C&T, Good, HSG C
0.160	81	Row crops, C&T, Good, HSG D
25.220	68	Weighted Average
25.220		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1S: XDA-1 (pervious)

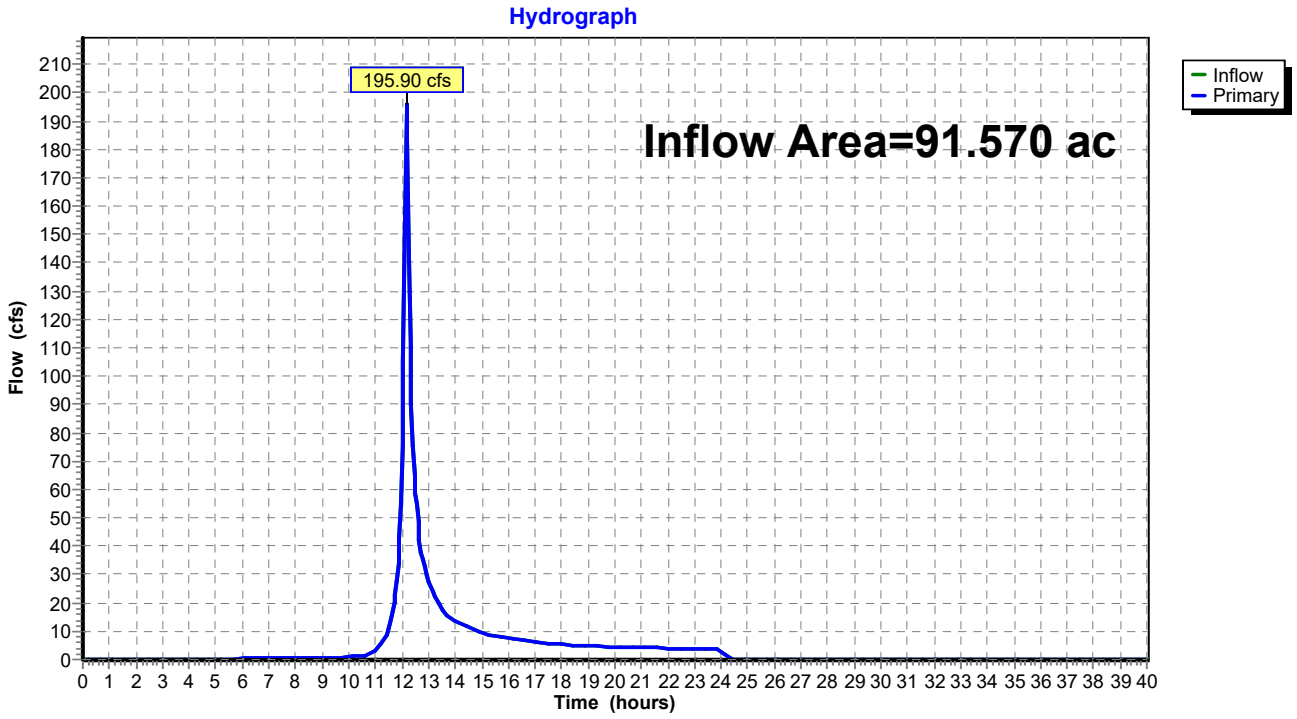


Summary for Link XDA-1: Existing Drainage Area #1

Inflow Area = 91.570 ac, 5.00% Impervious, Inflow Depth = 1.92" for 10 yr event
Inflow = 195.90 cfs @ 12.17 hrs, Volume= 14.661 af
Primary = 195.90 cfs @ 12.17 hrs, Volume= 14.661 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-1: Existing Drainage Area #1



Summary for Subcatchment X-1I: XDA-1 (impervious)

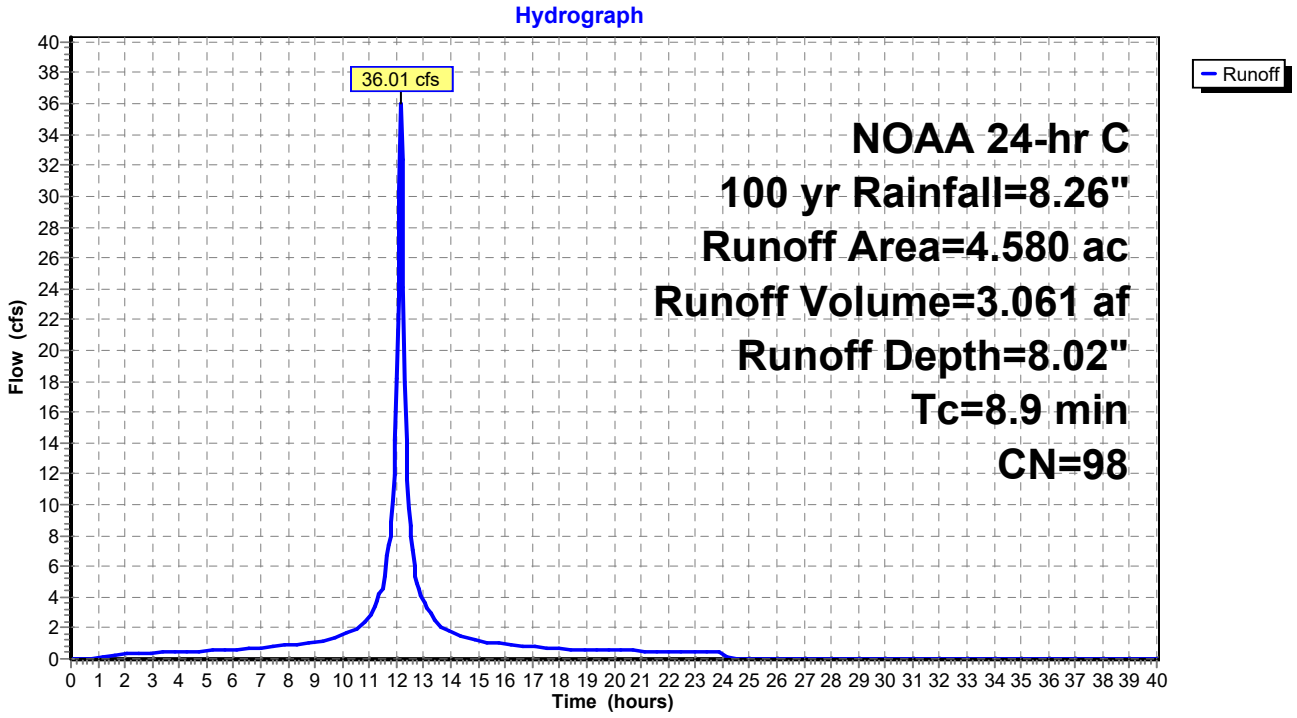
Runoff = 36.01 cfs @ 12.16 hrs, Volume= 3.061 af, Depth= 8.02"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 100 yr Rainfall=8.26"

	Area (ac)	CN	Description
*	4.580	98	
	4.580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1I: XDA-1 (impervious)



Summary for Subcatchment X-1P: XDA-1 (pervious)

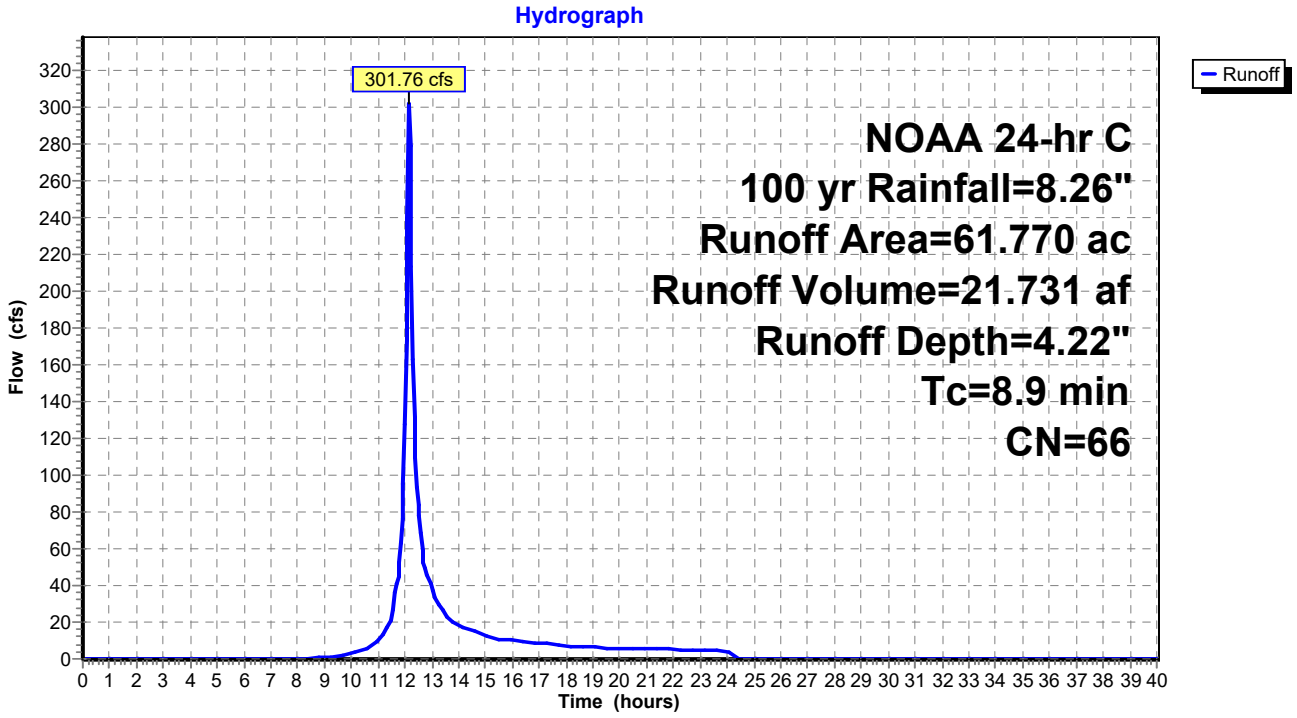
Runoff = 301.76 cfs @ 12.16 hrs, Volume= 21.731 af, Depth= 4.22"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 100 yr Rainfall=8.26"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
20.810	55	Woods, Good, HSG B
14.490	70	Woods, Good, HSG C
6.630	77	Woods, Good, HSG D
10.000	71	Row crops, C&T, Good, HSG B
6.300	78	Row crops, C&T, Good, HSG C
0.320	81	Row crops, C&T, Good, HSG D
61.770	66	Weighted Average
61.770		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1P: XDA-1 (pervious)



Summary for Subcatchment X-1S: XDA-1 (pervious)

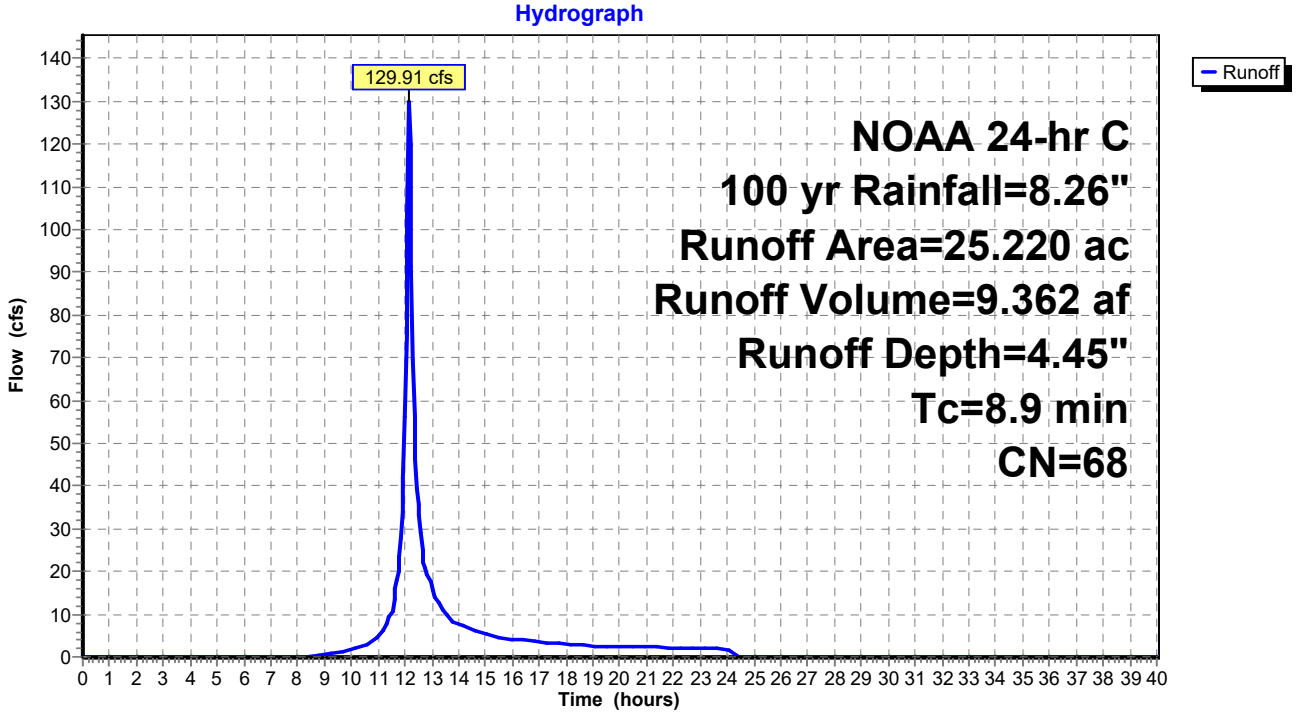
Runoff = 129.91 cfs @ 12.16 hrs, Volume= 9.362 af, Depth= 4.45"
Routed to Link XDA-1 : Existing Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 100 yr Rainfall=8.26"

Area (ac)	CN	Description
3.220	61	>75% Grass cover, Good, HSG B
5.130	55	Woods, Good, HSG B
2.350	70	Woods, Good, HSG C
0.060	77	Woods, Good, HSG D
8.280	71	Row crops, C&T, Good, HSG B
6.020	78	Row crops, C&T, Good, HSG C
0.160	81	Row crops, C&T, Good, HSG D
25.220	68	Weighted Average
25.220		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-1S: XDA-1 (pervious)

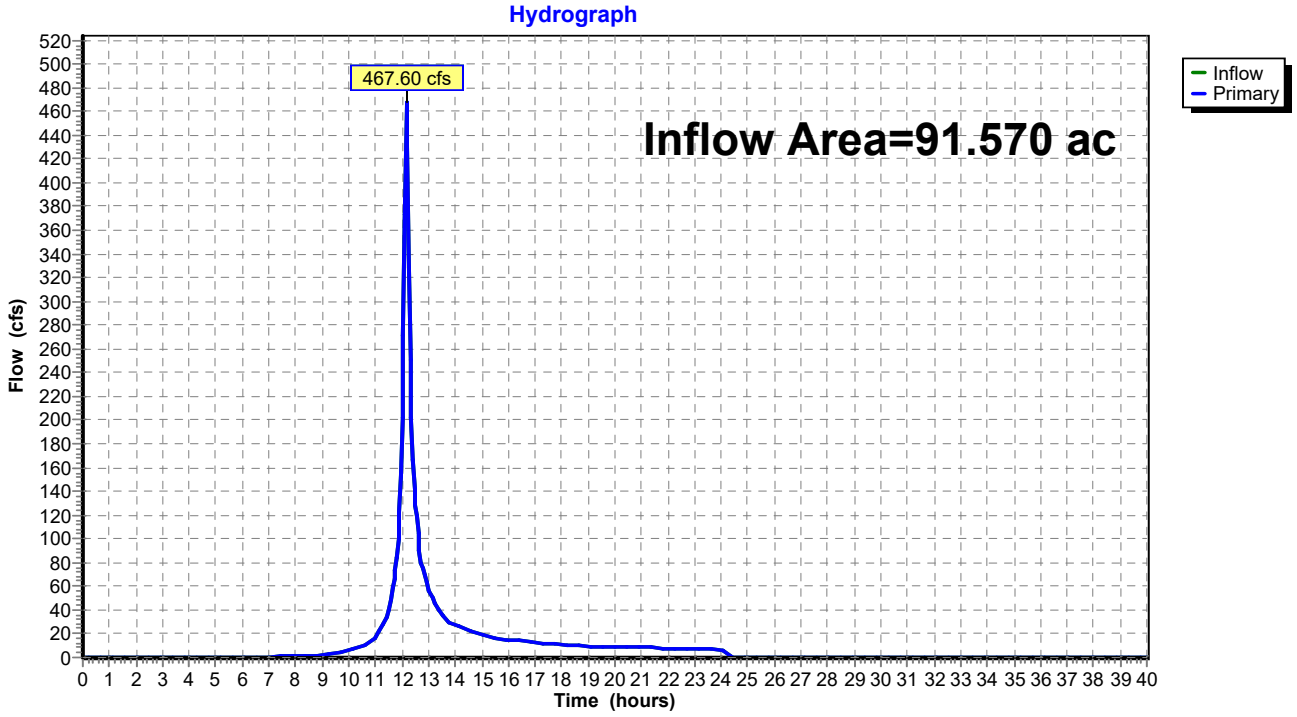


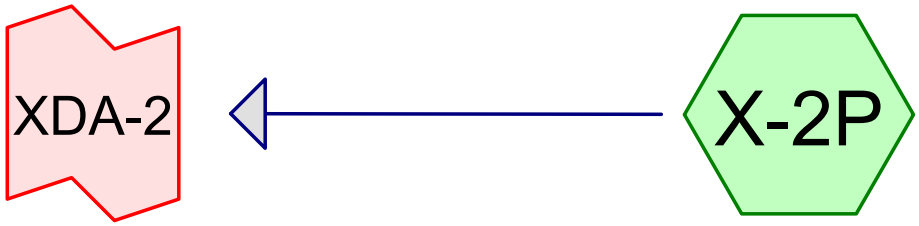
Summary for Link XDA-1: Existing Drainage Area #1

Inflow Area = 91.570 ac, 5.00% Impervious, Inflow Depth = 4.48" for 100 yr event
Inflow = 467.60 cfs @ 12.16 hrs, Volume= 34.154 af
Primary = 467.60 cfs @ 12.16 hrs, Volume= 34.154 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-1: Existing Drainage Area #1





Existing Drainage Area #2

XDA-2 (pervious)

Subcat Reach Pond Link

Routing Diagram for 2024-12-17 Existing- 081391
Prepared by Bowman Consulting Group, Printed 12/19/2024
HydroCAD® 10.20-5c s/n 09435 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment X-2P: XDA-2 (pervious)

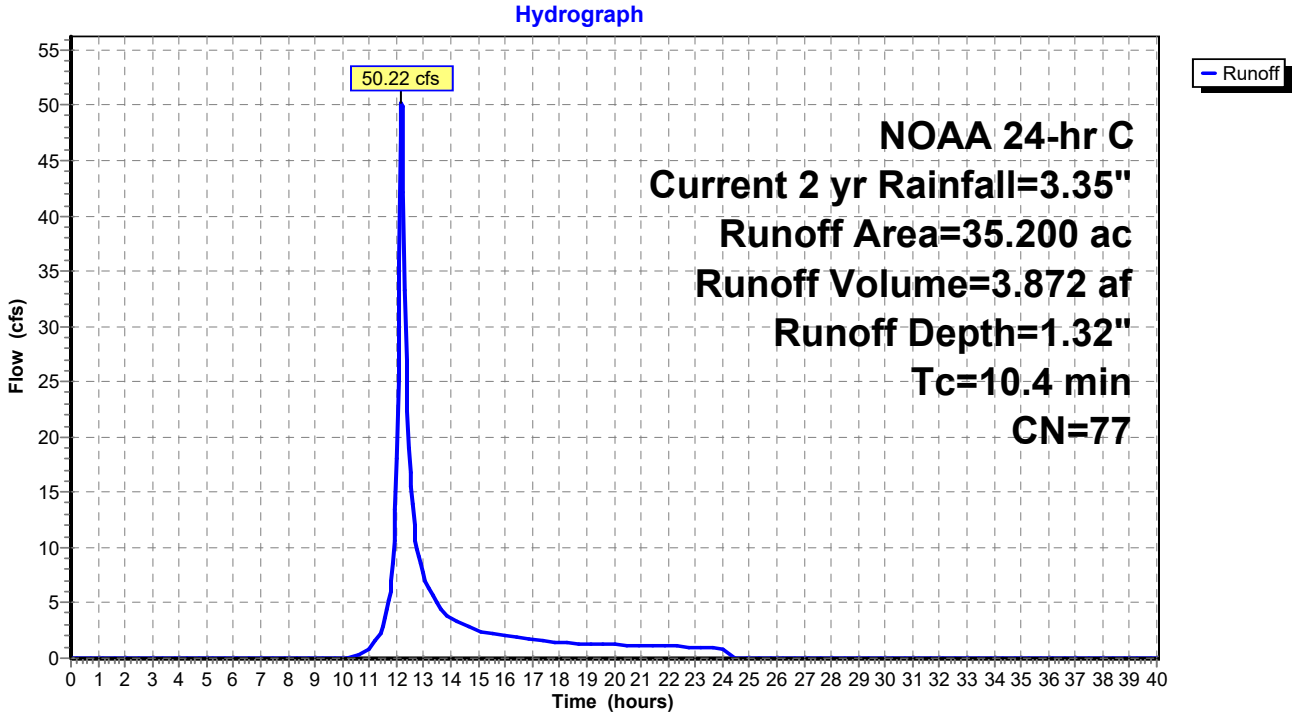
Runoff = 50.22 cfs @ 12.19 hrs, Volume= 3.872 af, Depth= 1.32"
Routed to Link XDA-2 : Existing Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
5.890	71	Row crops, C&T, Good, HSG B
27.320	78	Row crops, C&T, Good, HSG C
1.990	81	Row crops, C&T, Good, HSG D
35.200	77	Weighted Average
35.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4					**Direct Entry,**

Subcatchment X-2P: XDA-2 (pervious)

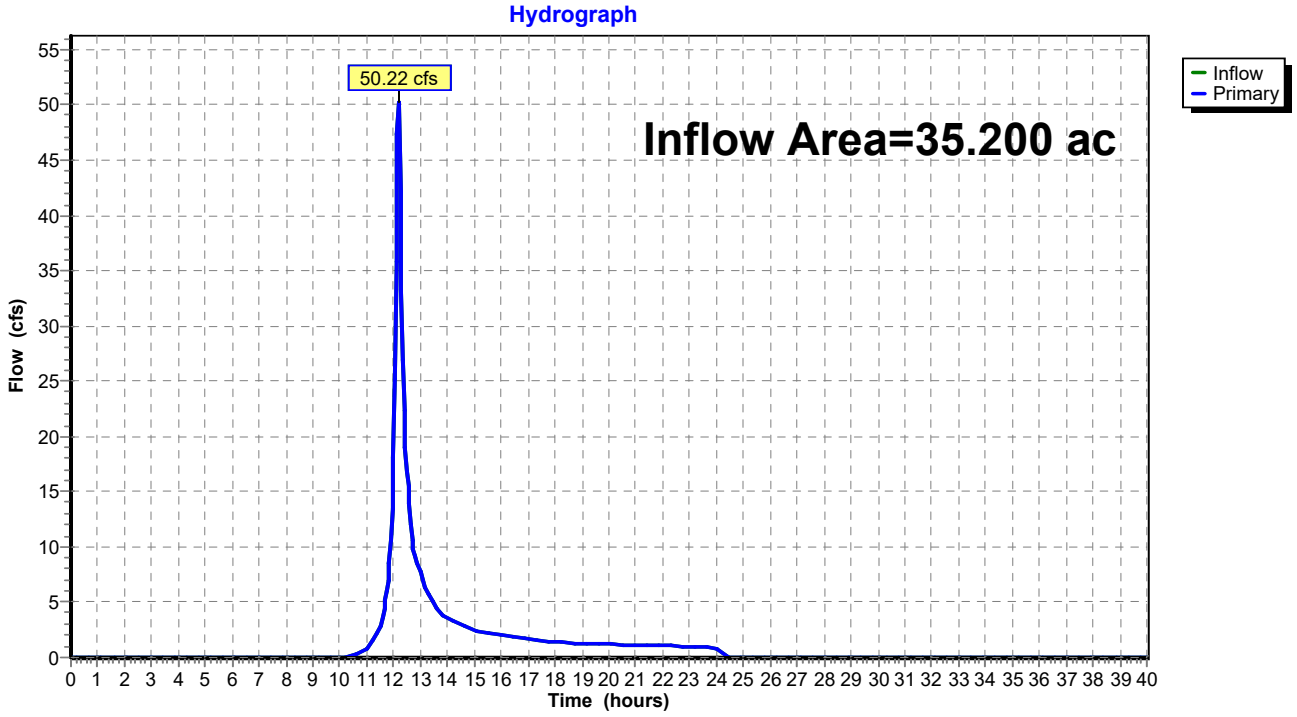


Summary for Link XDA-2: Existing Drainage Area #2

Inflow Area = 35.200 ac, 0.00% Impervious, Inflow Depth = 1.32" for Current 2 yr event
Inflow = 50.22 cfs @ 12.19 hrs, Volume= 3.872 af
Primary = 50.22 cfs @ 12.19 hrs, Volume= 3.872 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-2: Existing Drainage Area #2



Summary for Subcatchment X-2P: XDA-2 (pervious)

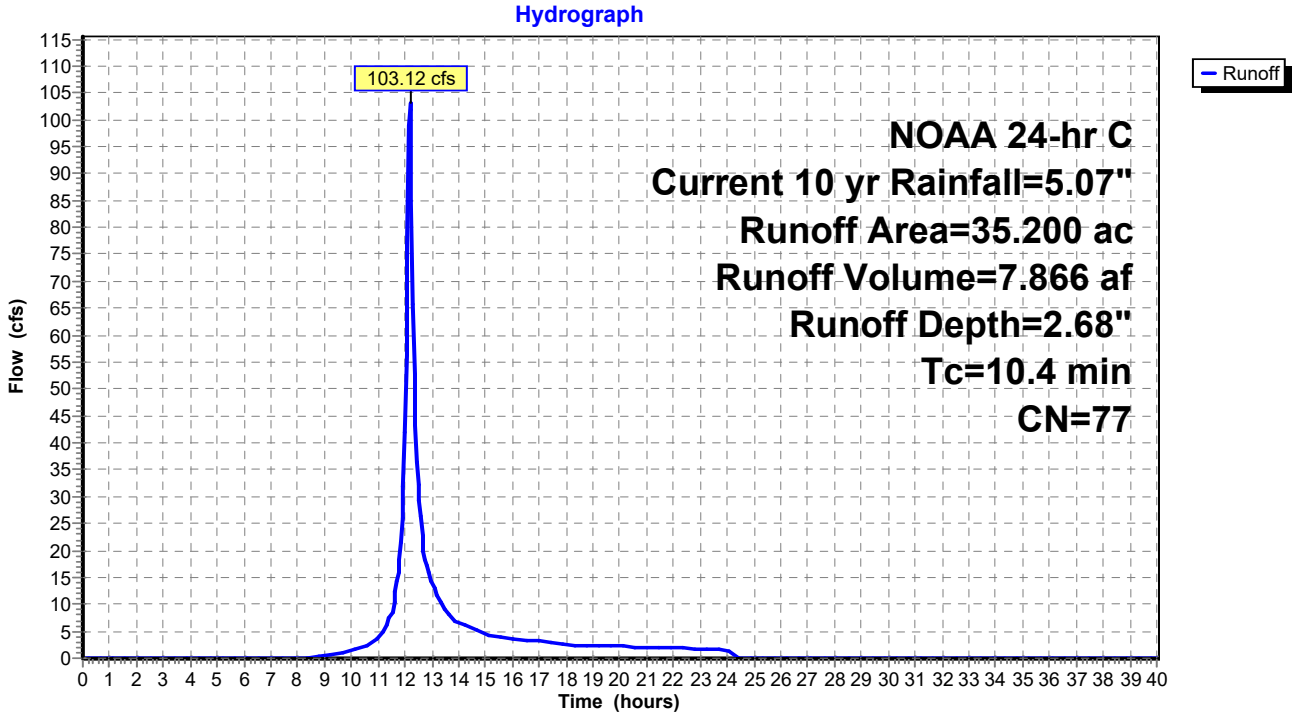
Runoff = 103.12 cfs @ 12.18 hrs, Volume= 7.866 af, Depth= 2.68"
Routed to Link XDA-2 : Existing Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.07"

Area (ac)	CN	Description
5.890	71	Row crops, C&T, Good, HSG B
27.320	78	Row crops, C&T, Good, HSG C
1.990	81	Row crops, C&T, Good, HSG D
35.200	77	Weighted Average
35.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4					**Direct Entry,**

Subcatchment X-2P: XDA-2 (pervious)

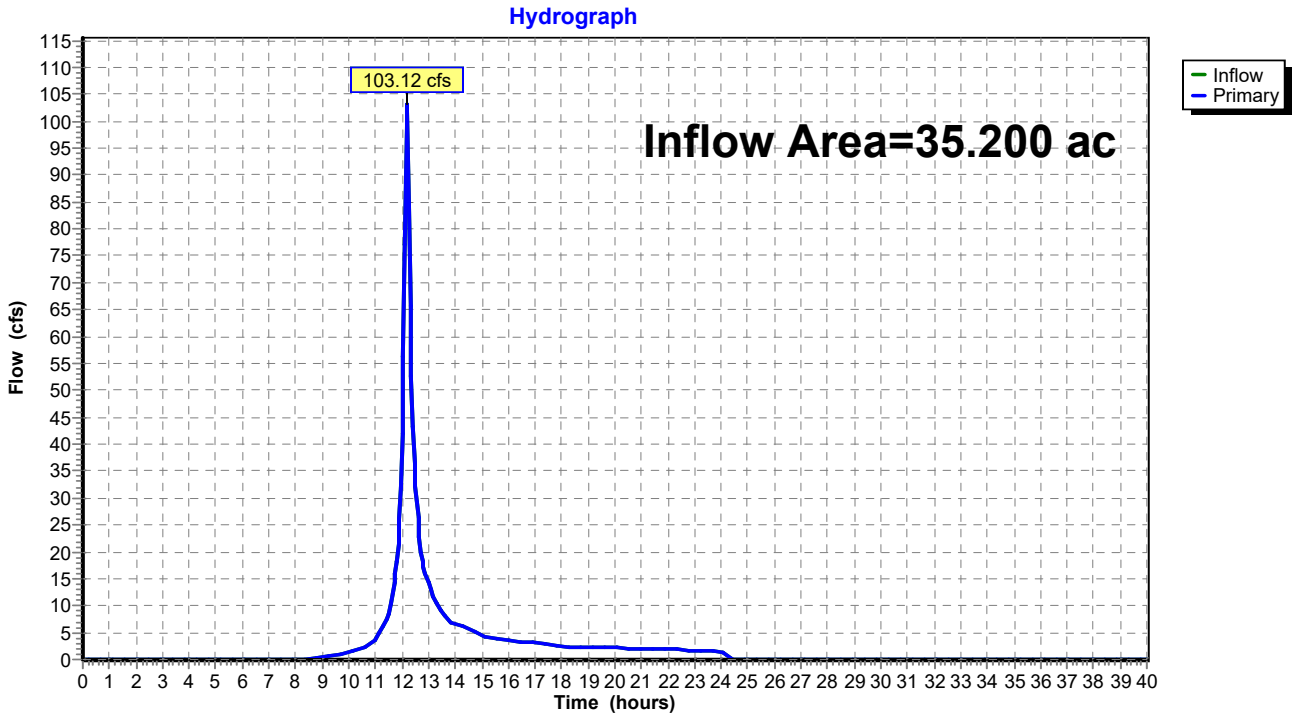


Summary for Link XDA-2: Existing Drainage Area #2

Inflow Area = 35.200 ac, 0.00% Impervious, Inflow Depth = 2.68" for Current 10 yr event
Inflow = 103.12 cfs @ 12.18 hrs, Volume= 7.866 af
Primary = 103.12 cfs @ 12.18 hrs, Volume= 7.866 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-2: Existing Drainage Area #2



Summary for Subcatchment X-2P: XDA-2 (pervious)

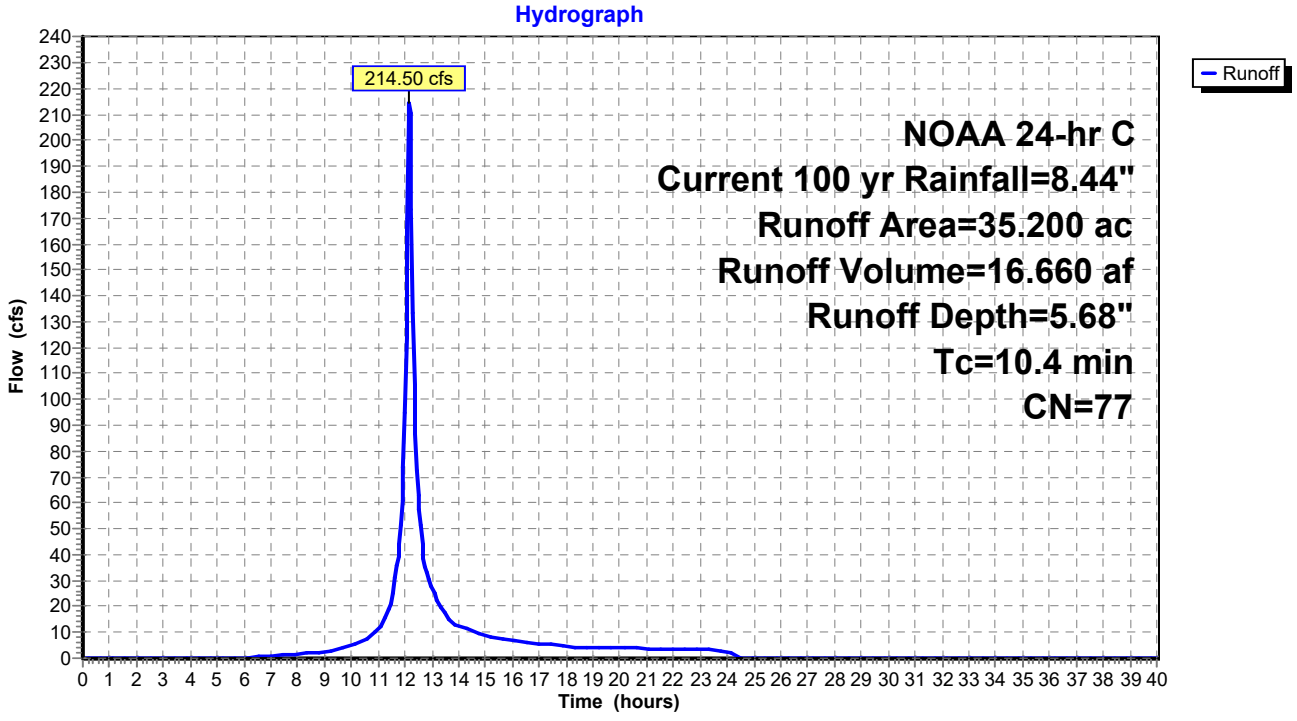
Runoff = 214.50 cfs @ 12.18 hrs, Volume= 16.660 af, Depth= 5.68"
Routed to Link XDA-2 : Existing Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.44"

Area (ac)	CN	Description
5.890	71	Row crops, C&T, Good, HSG B
27.320	78	Row crops, C&T, Good, HSG C
1.990	81	Row crops, C&T, Good, HSG D
35.200	77	Weighted Average
35.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4					**Direct Entry,**

Subcatchment X-2P: XDA-2 (pervious)

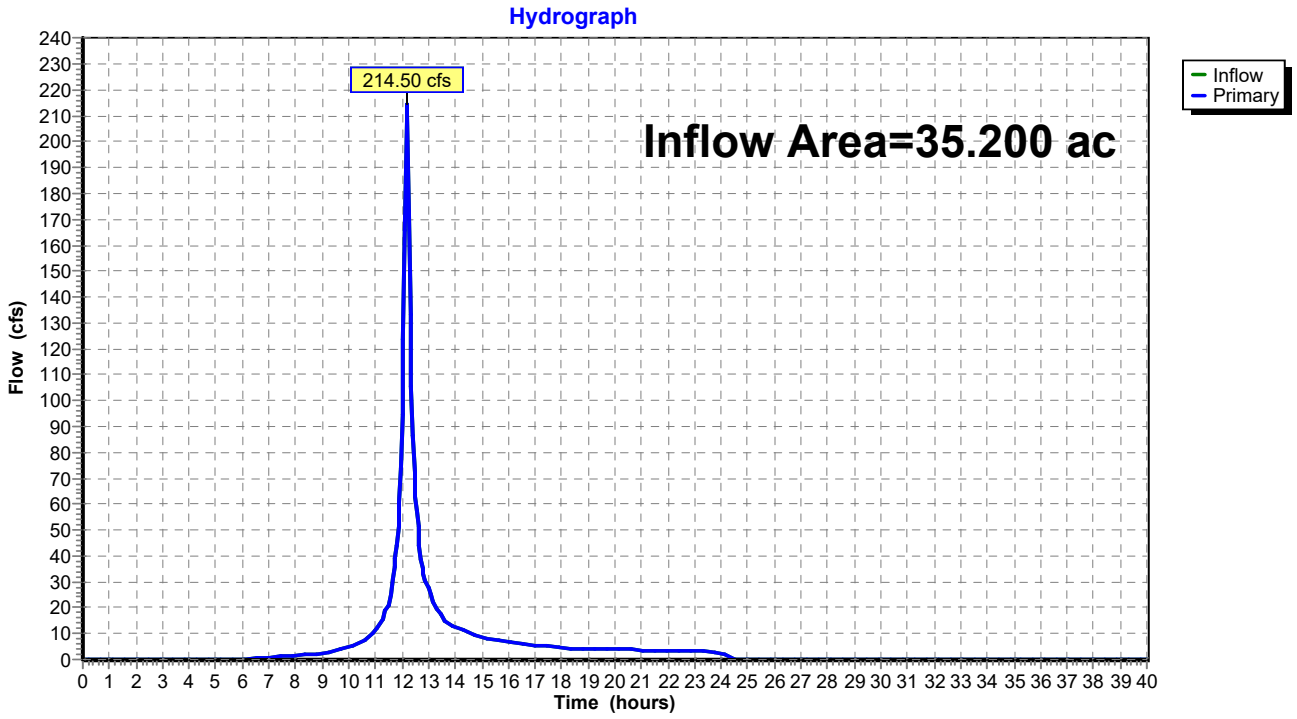


Summary for Link XDA-2: Existing Drainage Area #2

Inflow Area = 35.200 ac, 0.00% Impervious, Inflow Depth = 5.68" for Current 100 yr event
Inflow = 214.50 cfs @ 12.18 hrs, Volume= 16.660 af
Primary = 214.50 cfs @ 12.18 hrs, Volume= 16.660 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-2: Existing Drainage Area #2



Summary for Subcatchment X-2P: XDA-2 (pervious)

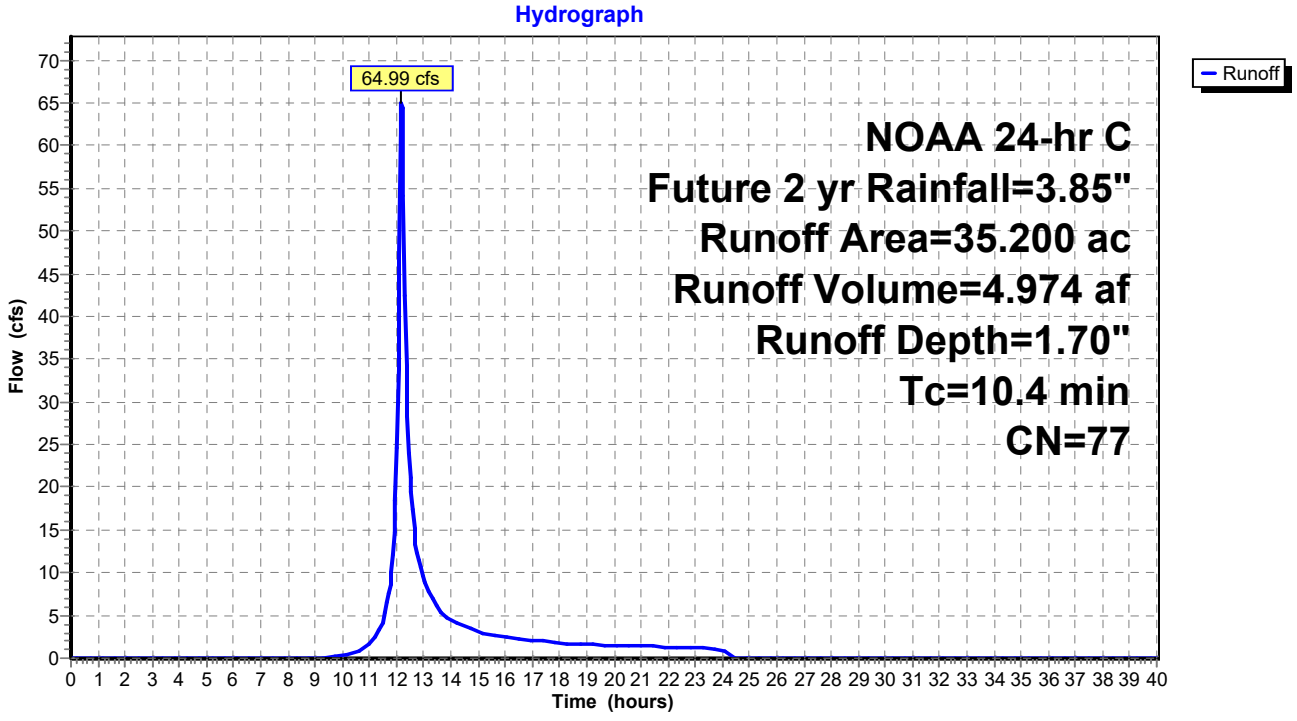
Runoff = 64.99 cfs @ 12.19 hrs, Volume= 4.974 af, Depth= 1.70"
Routed to Link XDA-2 : Existing Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
5.890	71	Row crops, C&T, Good, HSG B
27.320	78	Row crops, C&T, Good, HSG C
1.990	81	Row crops, C&T, Good, HSG D
35.200	77	Weighted Average
35.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4					**Direct Entry,**

Subcatchment X-2P: XDA-2 (pervious)

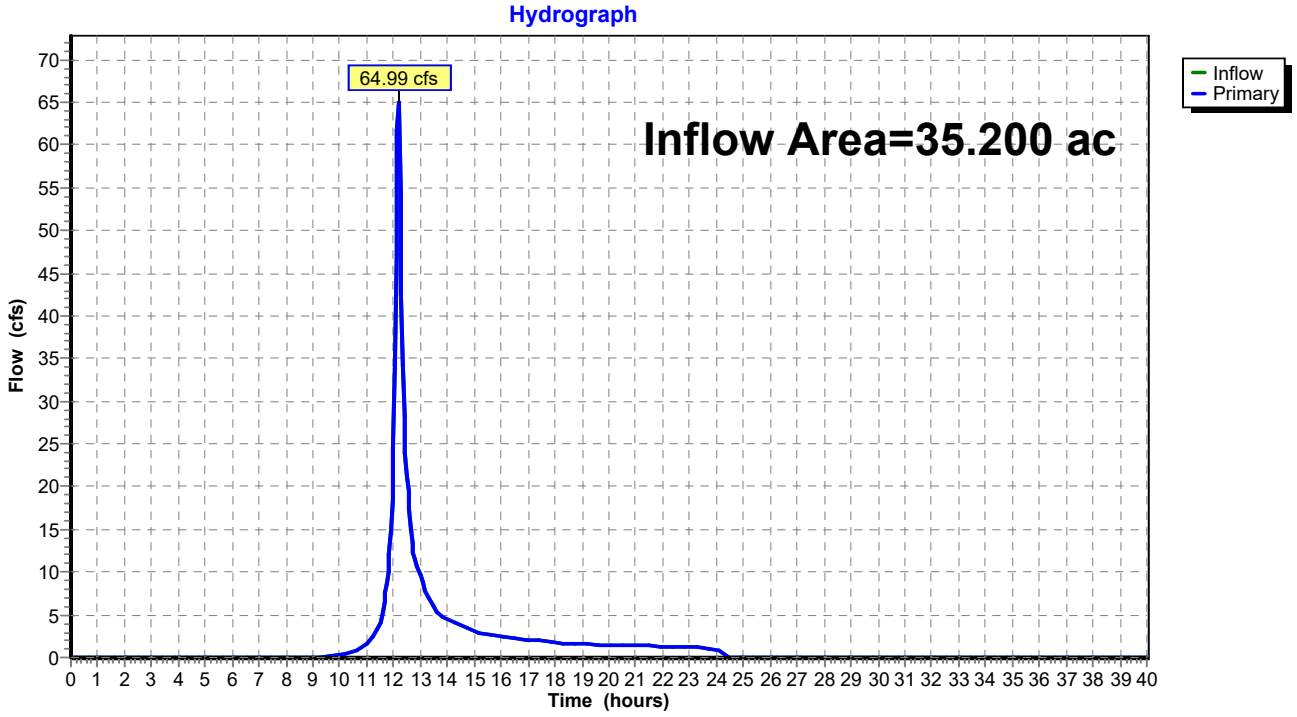


Summary for Link XDA-2: Existing Drainage Area #2

Inflow Area = 35.200 ac, 0.00% Impervious, Inflow Depth = 1.70" for Future 2 yr event
Inflow = 64.99 cfs @ 12.19 hrs, Volume= 4.974 af
Primary = 64.99 cfs @ 12.19 hrs, Volume= 4.974 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-2: Existing Drainage Area #2



Summary for Subcatchment X-2P: XDA-2 (pervious)

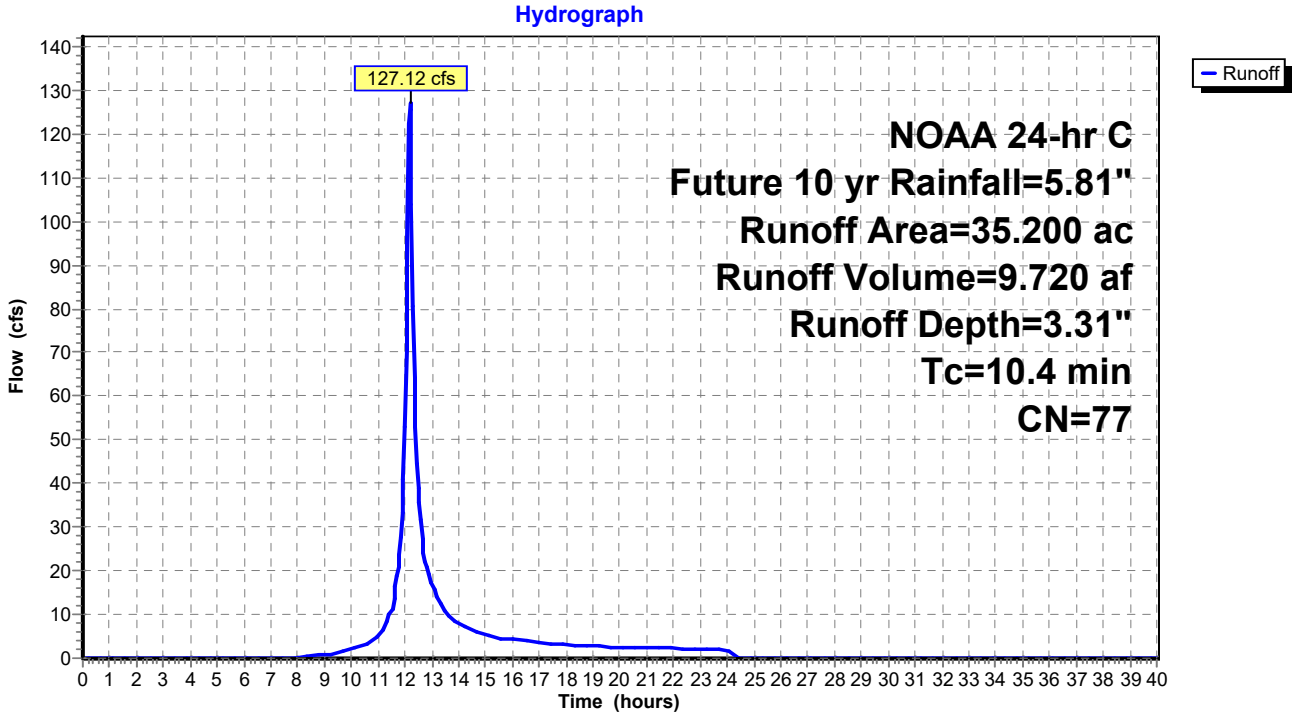
Runoff = 127.12 cfs @ 12.18 hrs, Volume= 9.720 af, Depth= 3.31"
Routed to Link XDA-2 : Existing Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.81"

Area (ac)	CN	Description
5.890	71	Row crops, C&T, Good, HSG B
27.320	78	Row crops, C&T, Good, HSG C
1.990	81	Row crops, C&T, Good, HSG D
35.200	77	Weighted Average
35.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4					**Direct Entry,**

Subcatchment X-2P: XDA-2 (pervious)

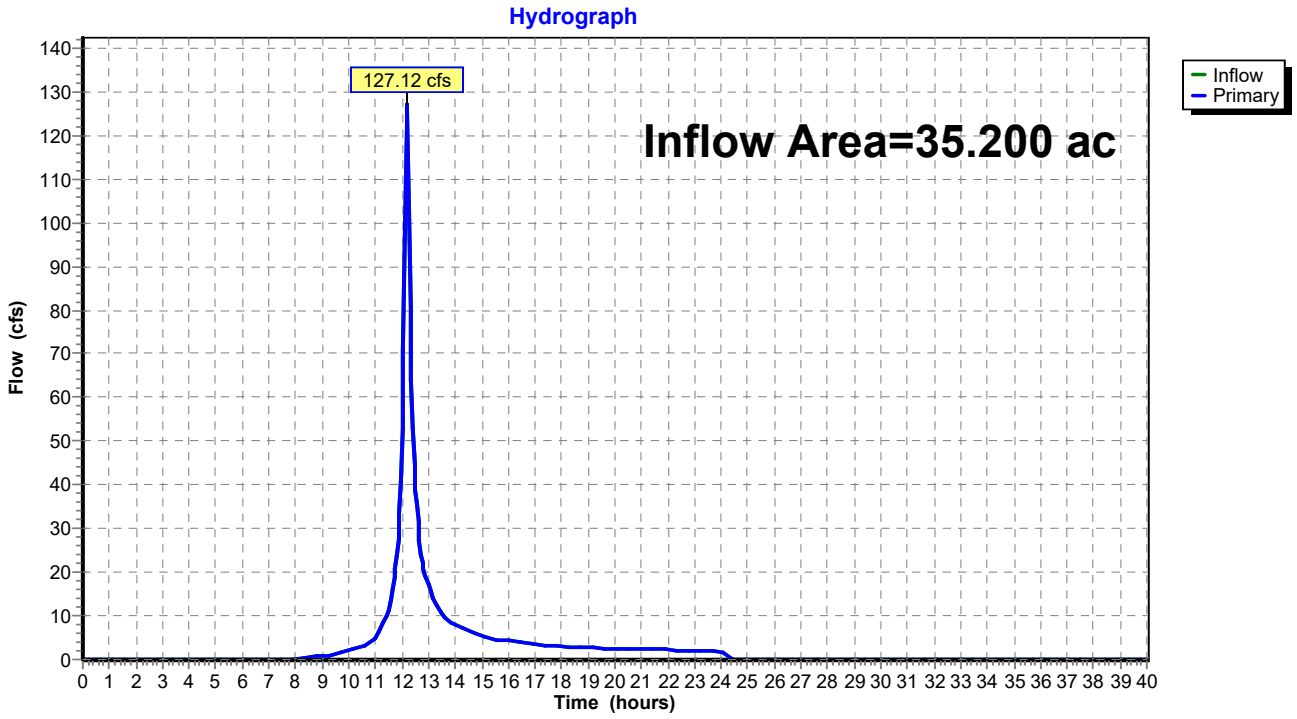


Summary for Link XDA-2: Existing Drainage Area #2

Inflow Area = 35.200 ac, 0.00% Impervious, Inflow Depth = 3.31" for Future 10 yr event
Inflow = 127.12 cfs @ 12.18 hrs, Volume= 9.720 af
Primary = 127.12 cfs @ 12.18 hrs, Volume= 9.720 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-2: Existing Drainage Area #2



Summary for Subcatchment X-2P: XDA-2 (pervious)

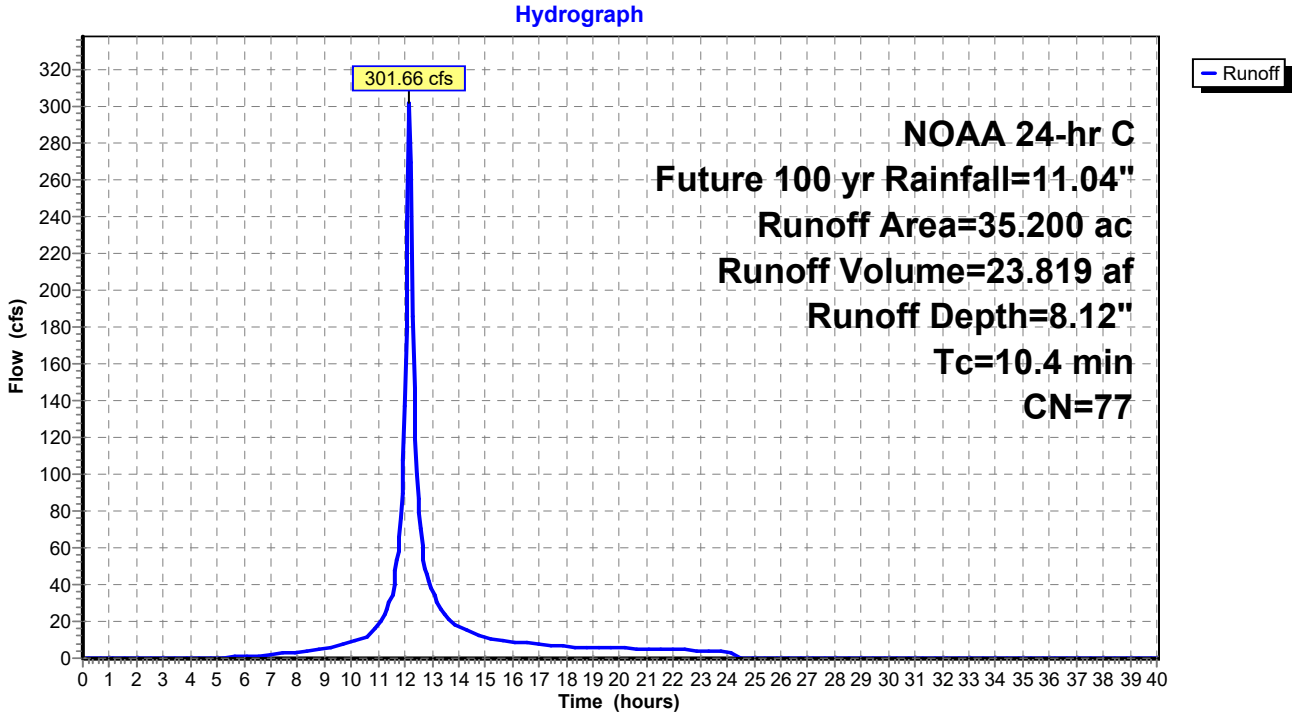
Runoff = 301.66 cfs @ 12.18 hrs, Volume= 23.819 af, Depth= 8.12"
Routed to Link XDA-2 : Existing Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.04"

Area (ac)	CN	Description
5.890	71	Row crops, C&T, Good, HSG B
27.320	78	Row crops, C&T, Good, HSG C
1.990	81	Row crops, C&T, Good, HSG D
35.200	77	Weighted Average
35.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4					**Direct Entry,**

Subcatchment X-2P: XDA-2 (pervious)

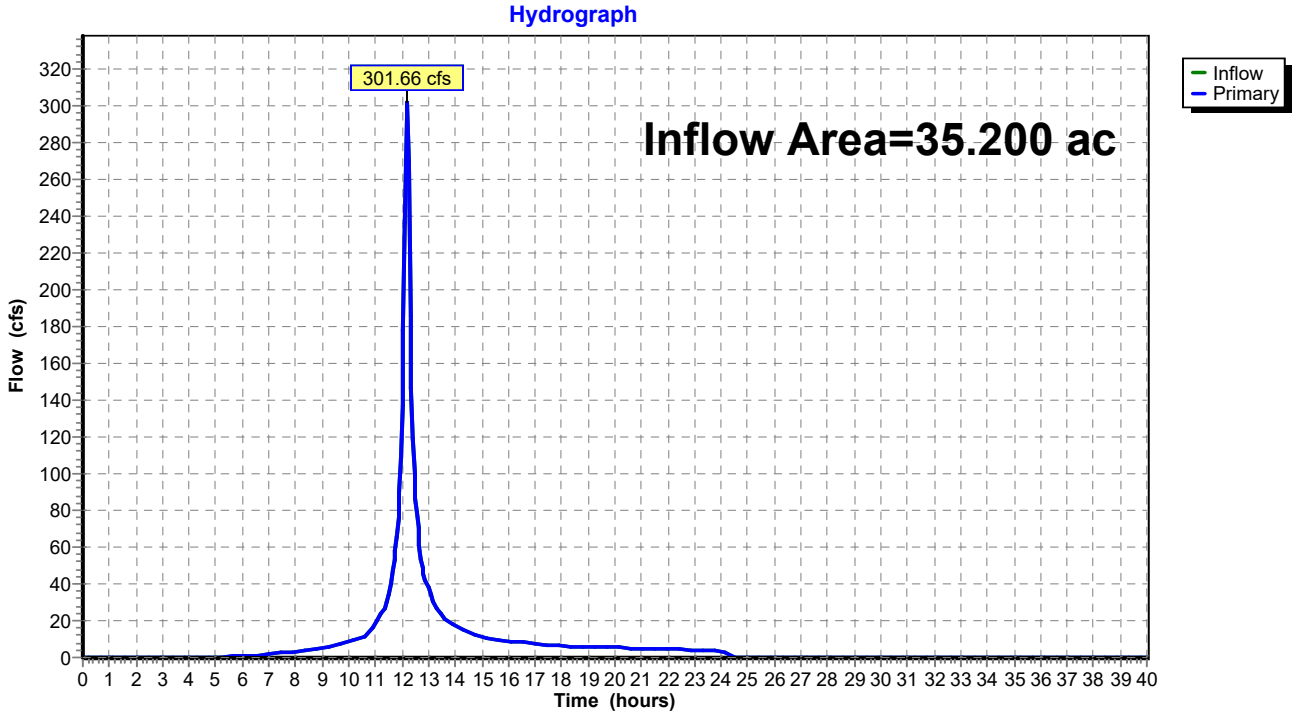


Summary for Link XDA-2: Existing Drainage Area #2

Inflow Area = 35.200 ac, 0.00% Impervious, Inflow Depth = 8.12" for Future 100 yr event
Inflow = 301.66 cfs @ 12.18 hrs, Volume= 23.819 af
Primary = 301.66 cfs @ 12.18 hrs, Volume= 23.819 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-2: Existing Drainage Area #2



Summary for Subcatchment X-2P: XDA-2 (pervious)

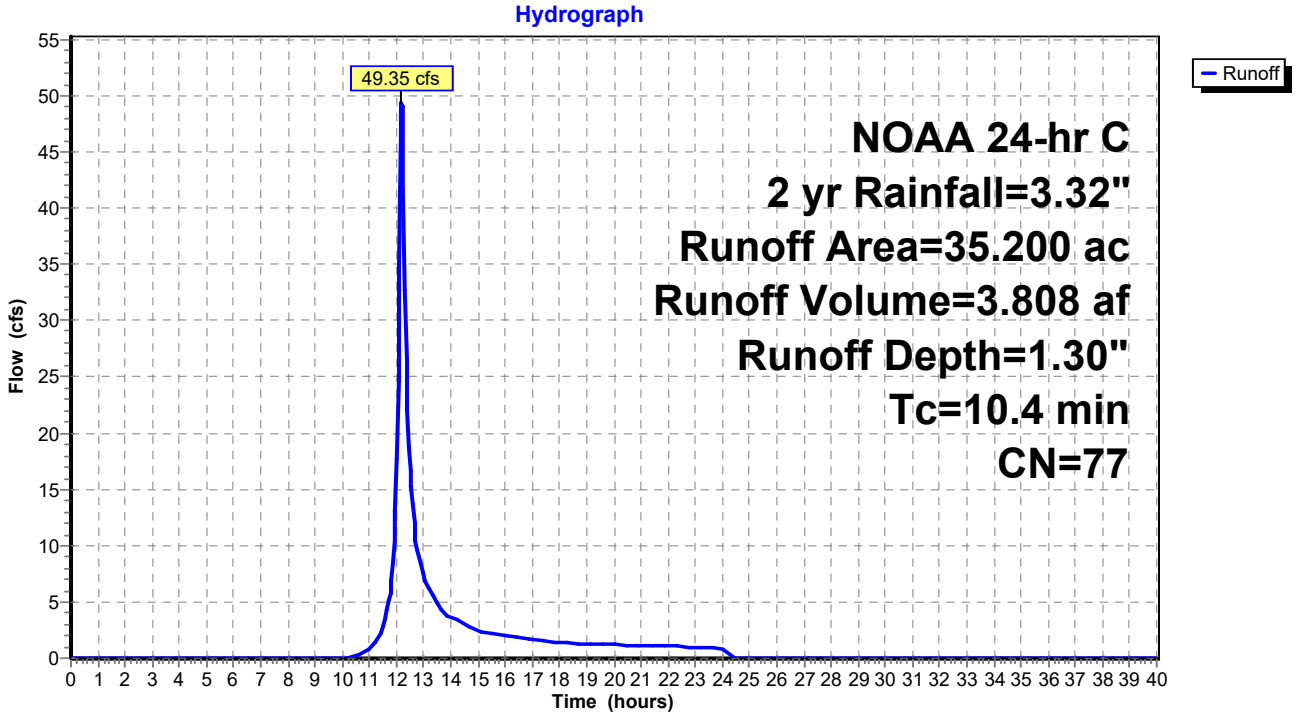
Runoff = 49.35 cfs @ 12.19 hrs, Volume= 3.808 af, Depth= 1.30"
Routed to Link XDA-2 : Existing Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 2 yr Rainfall=3.32"

Area (ac)	CN	Description
5.890	71	Row crops, C&T, Good, HSG B
27.320	78	Row crops, C&T, Good, HSG C
1.990	81	Row crops, C&T, Good, HSG D
35.200	77	Weighted Average
35.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4					**Direct Entry,**

Subcatchment X-2P: XDA-2 (pervious)

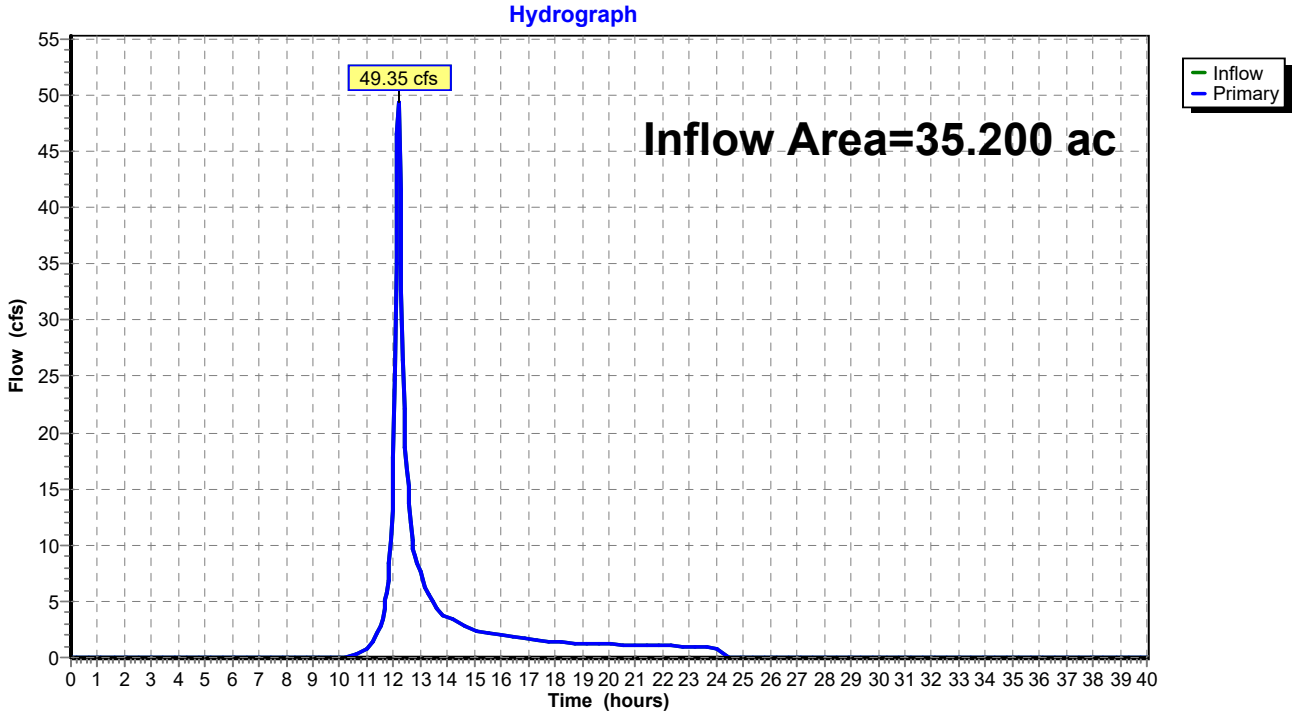


Summary for Link XDA-2: Existing Drainage Area #2

Inflow Area = 35.200 ac, 0.00% Impervious, Inflow Depth = 1.30" for 2 yr event
Inflow = 49.35 cfs @ 12.19 hrs, Volume= 3.808 af
Primary = 49.35 cfs @ 12.19 hrs, Volume= 3.808 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-2: Existing Drainage Area #2



Summary for Subcatchment X-2P: XDA-2 (pervious)

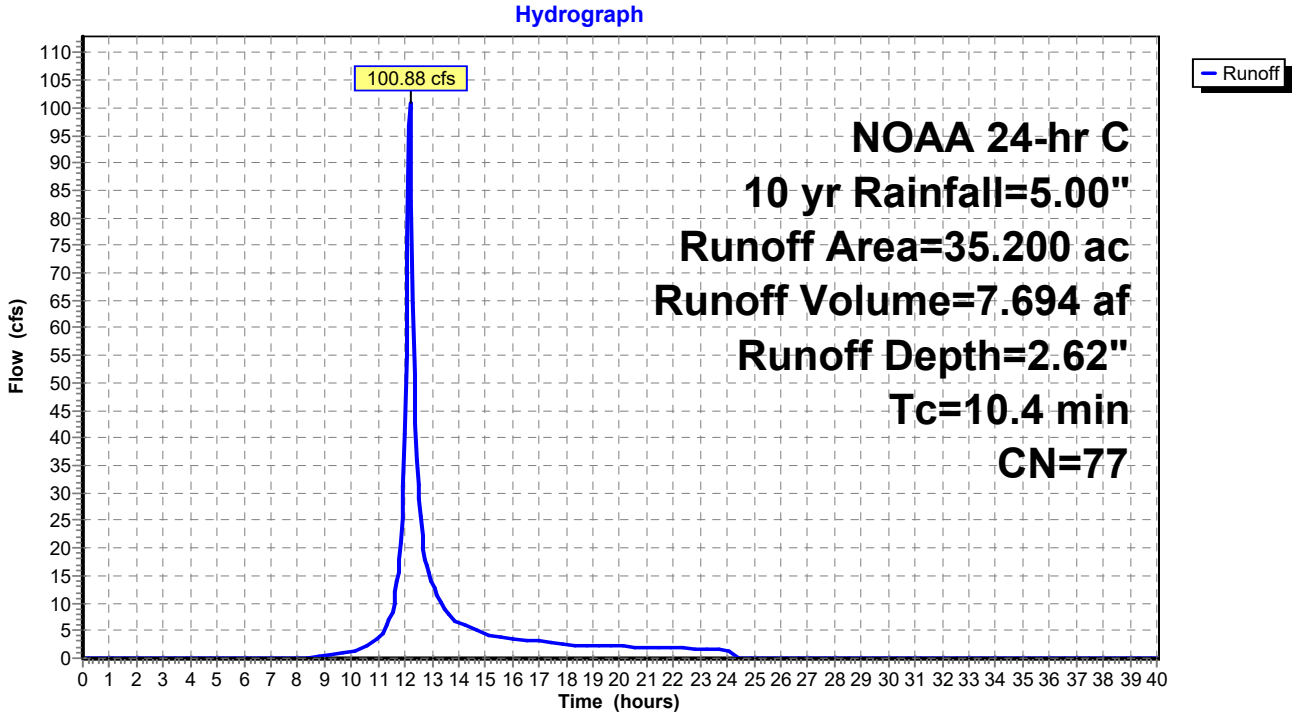
Runoff = 100.88 cfs @ 12.18 hrs, Volume= 7.694 af, Depth= 2.62"
Routed to Link XDA-2 : Existing Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 10 yr Rainfall=5.00"

Area (ac)	CN	Description
5.890	71	Row crops, C&T, Good, HSG B
27.320	78	Row crops, C&T, Good, HSG C
1.990	81	Row crops, C&T, Good, HSG D
35.200	77	Weighted Average
35.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4					**Direct Entry,**

Subcatchment X-2P: XDA-2 (pervious)

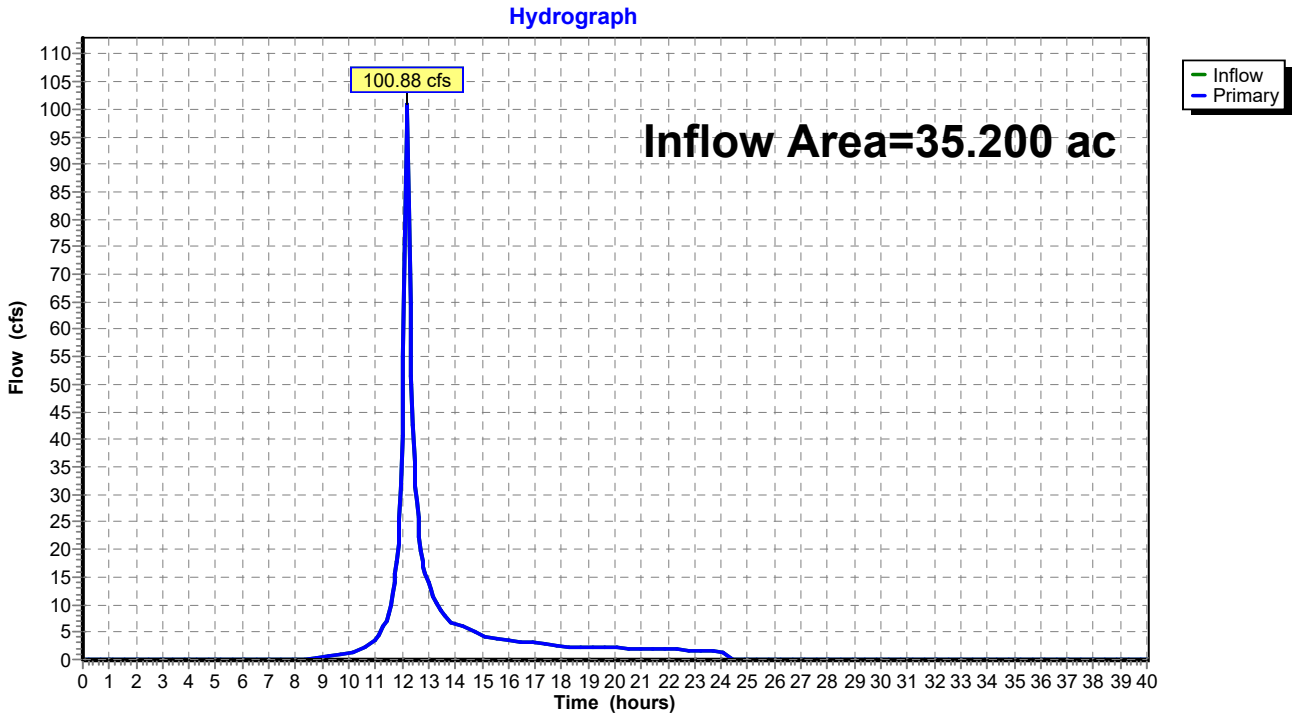


Summary for Link XDA-2: Existing Drainage Area #2

Inflow Area = 35.200 ac, 0.00% Impervious, Inflow Depth = 2.62" for 10 yr event
Inflow = 100.88 cfs @ 12.18 hrs, Volume= 7.694 af
Primary = 100.88 cfs @ 12.18 hrs, Volume= 7.694 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-2: Existing Drainage Area #2



Summary for Subcatchment X-2P: XDA-2 (pervious)

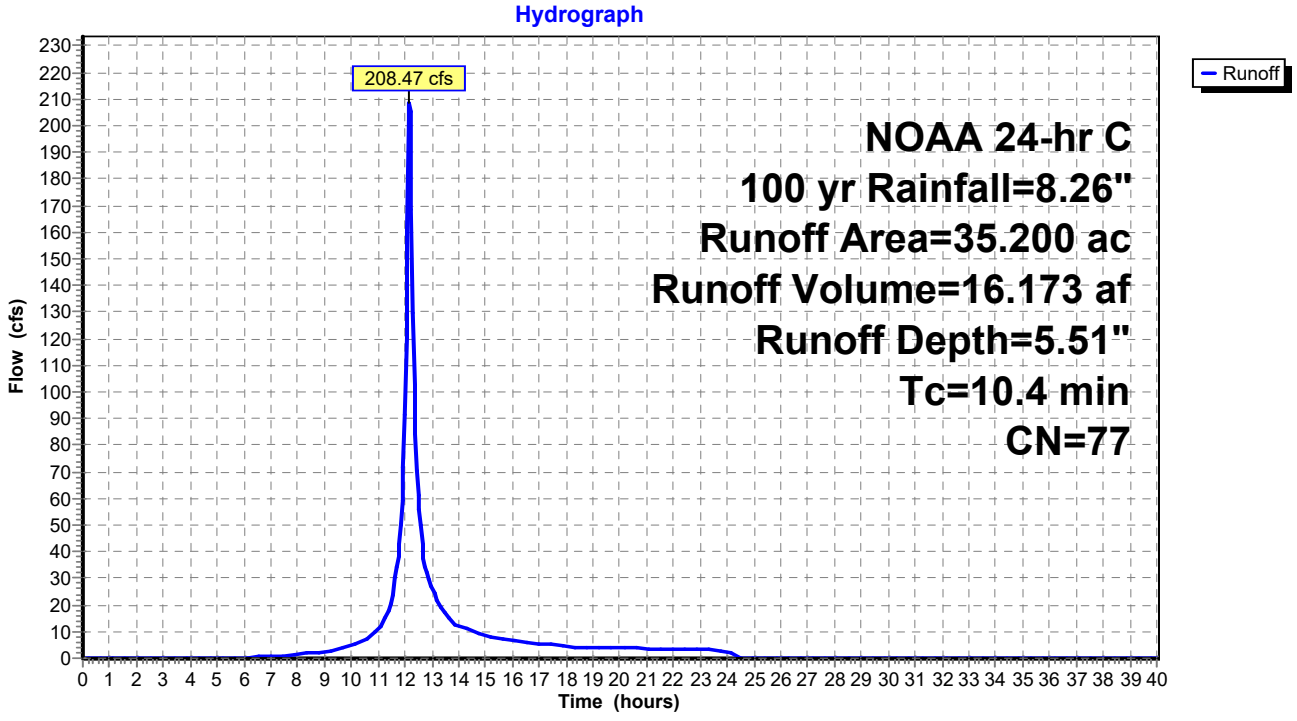
Runoff = 208.47 cfs @ 12.18 hrs, Volume= 16.173 af, Depth= 5.51"
Routed to Link XDA-2 : Existing Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 100 yr Rainfall=8.26"

Area (ac)	CN	Description
5.890	71	Row crops, C&T, Good, HSG B
27.320	78	Row crops, C&T, Good, HSG C
1.990	81	Row crops, C&T, Good, HSG D
35.200	77	Weighted Average
35.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4					**Direct Entry,**

Subcatchment X-2P: XDA-2 (pervious)

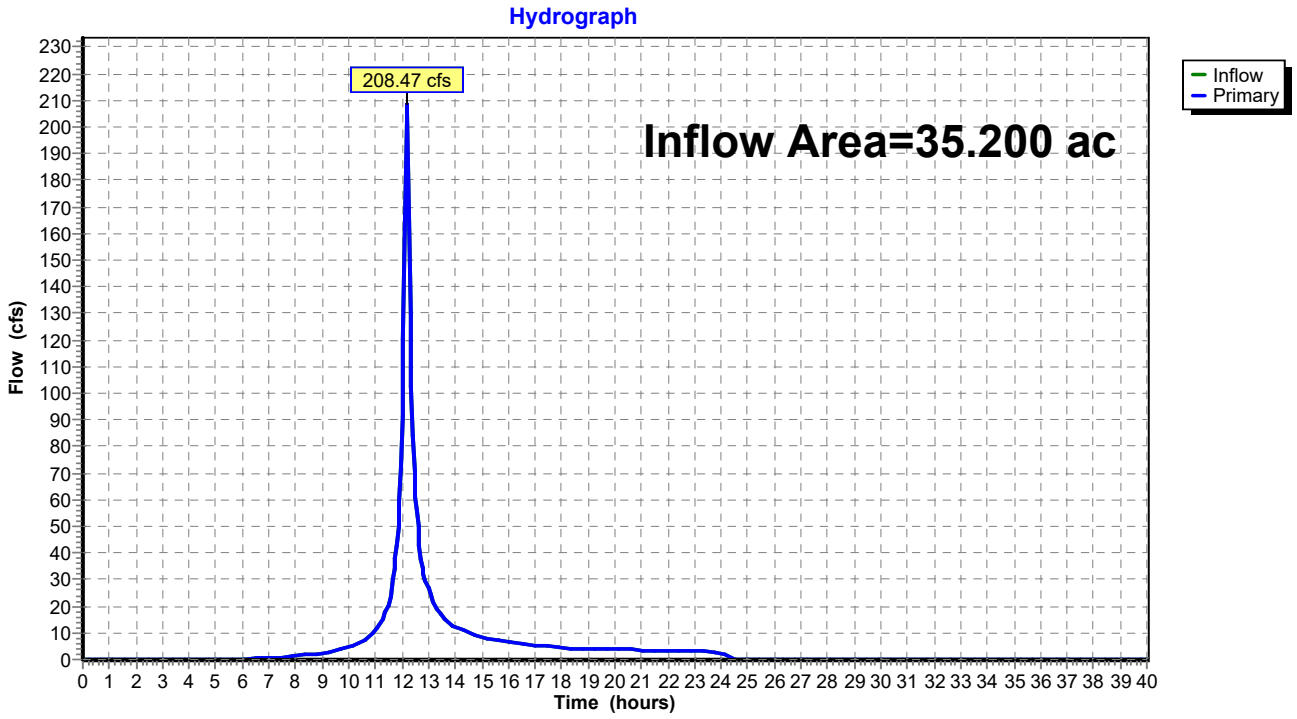


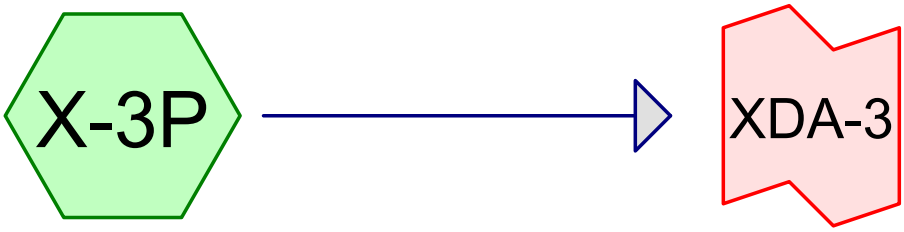
Summary for Link XDA-2: Existing Drainage Area #2

Inflow Area = 35.200 ac, 0.00% Impervious, Inflow Depth = 5.51" for 100 yr event
Inflow = 208.47 cfs @ 12.18 hrs, Volume= 16.173 af
Primary = 208.47 cfs @ 12.18 hrs, Volume= 16.173 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-2: Existing Drainage Area #2





XDA-3 (pervious)

Existing Drainage Area #3

Subcat Reach Pond Link

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Summary for Subcatchment X-3P: XDA-3 (pervious)

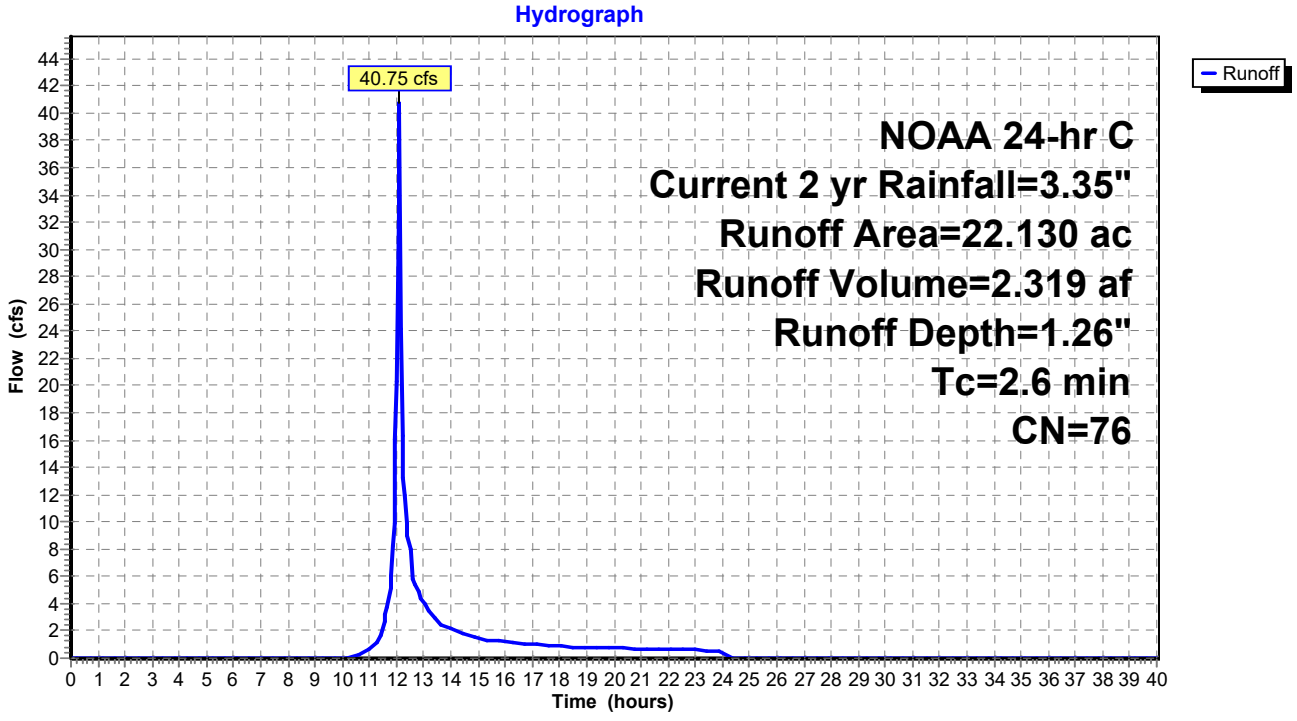
Runoff = 40.75 cfs @ 12.09 hrs, Volume= 2.319 af, Depth= 1.26"
Routed to Link XDA-3 : Existing Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
6.110	70	Woods, Good, HSG C
0.900	71	Row crops, C&T, Good, HSG B
15.120	78	Row crops, C&T, Good, HSG C
22.130	76	Weighted Average
22.130		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6					**Direct Entry,**

Subcatchment X-3P: XDA-3 (pervious)

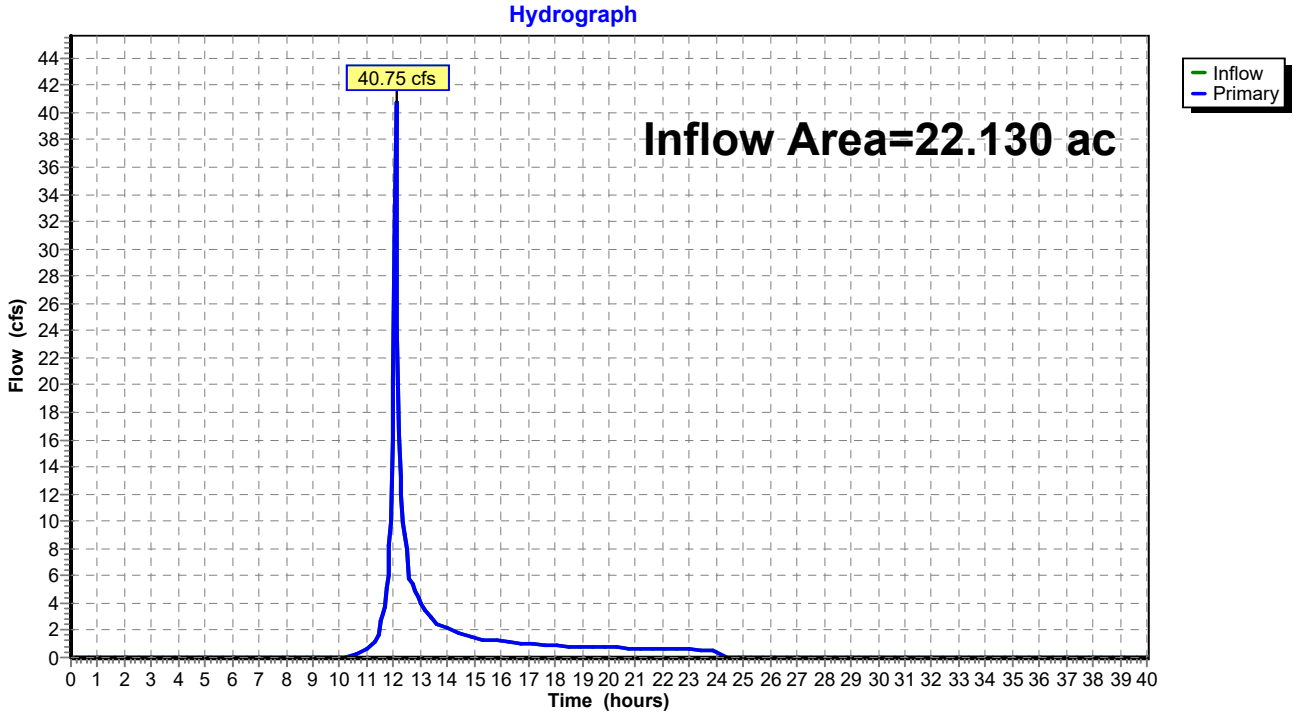


Summary for Link XDA-3: Existing Drainage Area #3

Inflow Area = 22.130 ac, 0.00% Impervious, Inflow Depth = 1.26" for Current 2 yr event
Inflow = 40.75 cfs @ 12.09 hrs, Volume= 2.319 af
Primary = 40.75 cfs @ 12.09 hrs, Volume= 2.319 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-3: Existing Drainage Area #3



Summary for Subcatchment X-3P: XDA-3 (pervious)

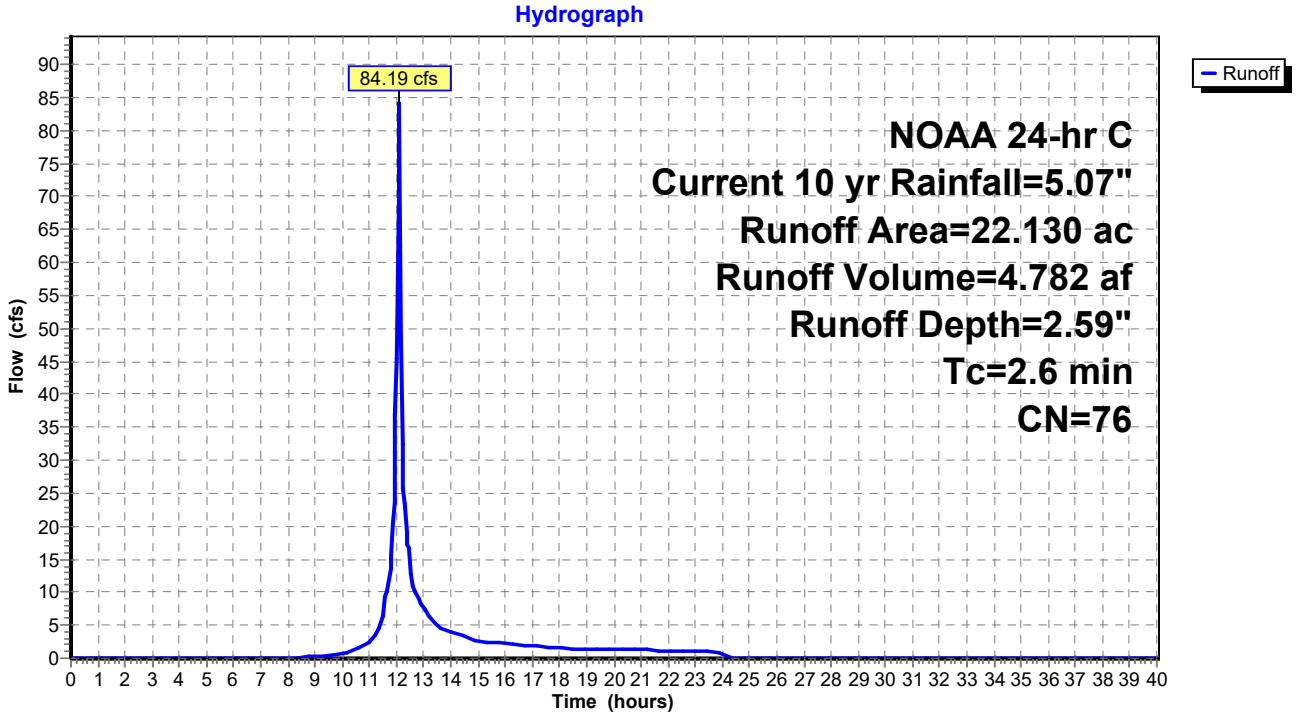
Runoff = 84.19 cfs @ 12.09 hrs, Volume= 4.782 af, Depth= 2.59"
Routed to Link XDA-3 : Existing Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.07"

Area (ac)	CN	Description
6.110	70	Woods, Good, HSG C
0.900	71	Row crops, C&T, Good, HSG B
15.120	78	Row crops, C&T, Good, HSG C
22.130	76	Weighted Average
22.130		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6					**Direct Entry,**

Subcatchment X-3P: XDA-3 (pervious)

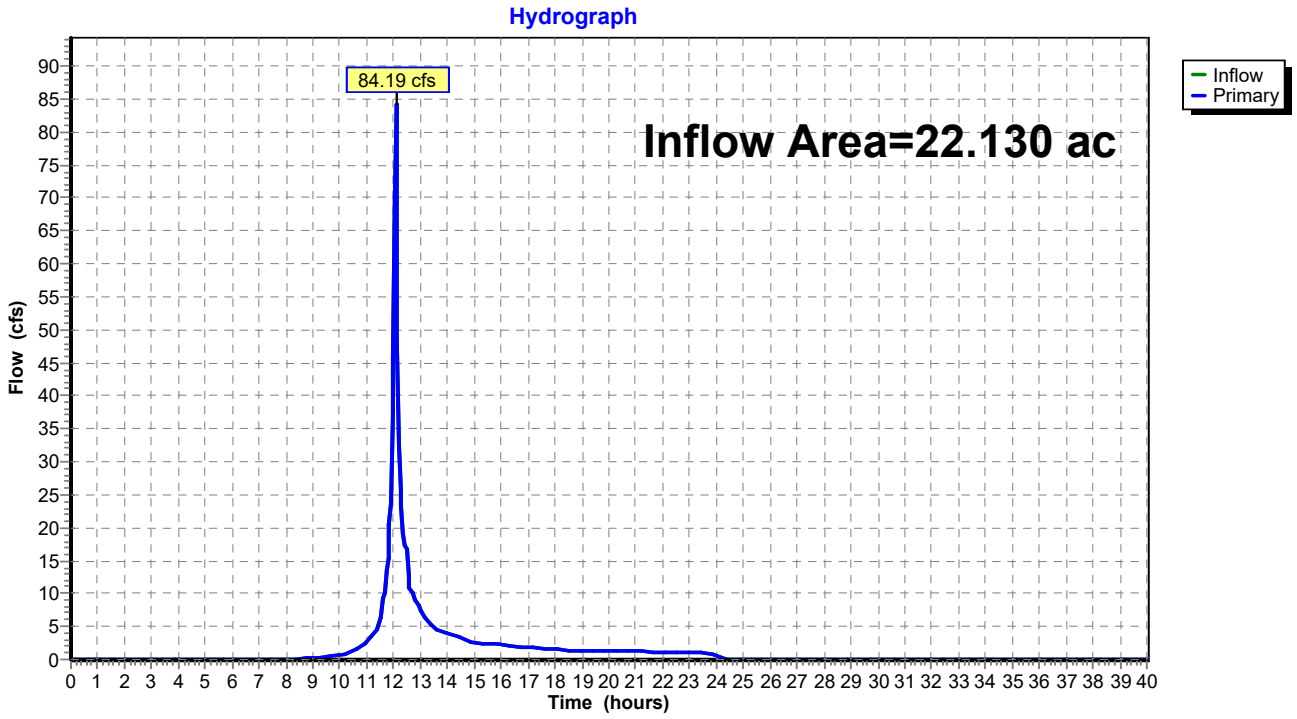


Summary for Link XDA-3: Existing Drainage Area #3

Inflow Area = 22.130 ac, 0.00% Impervious, Inflow Depth = 2.59" for Current 10 yr event
Inflow = 84.19 cfs @ 12.09 hrs, Volume= 4.782 af
Primary = 84.19 cfs @ 12.09 hrs, Volume= 4.782 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-3: Existing Drainage Area #3



Summary for Subcatchment X-3P: XDA-3 (pervious)

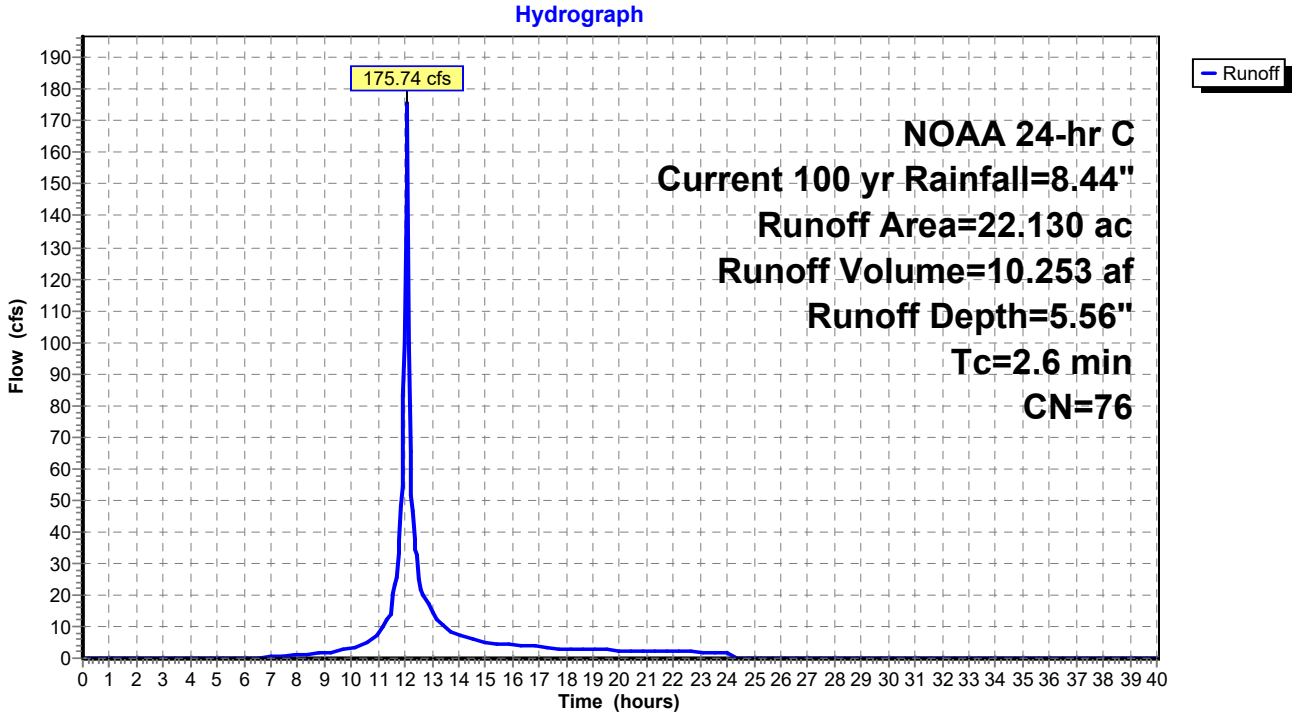
Runoff = 175.74 cfs @ 12.09 hrs, Volume= 10.253 af, Depth= 5.56"
Routed to Link XDA-3 : Existing Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.44"

Area (ac)	CN	Description
6.110	70	Woods, Good, HSG C
0.900	71	Row crops, C&T, Good, HSG B
15.120	78	Row crops, C&T, Good, HSG C
22.130	76	Weighted Average
22.130		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6					**Direct Entry,**

Subcatchment X-3P: XDA-3 (pervious)

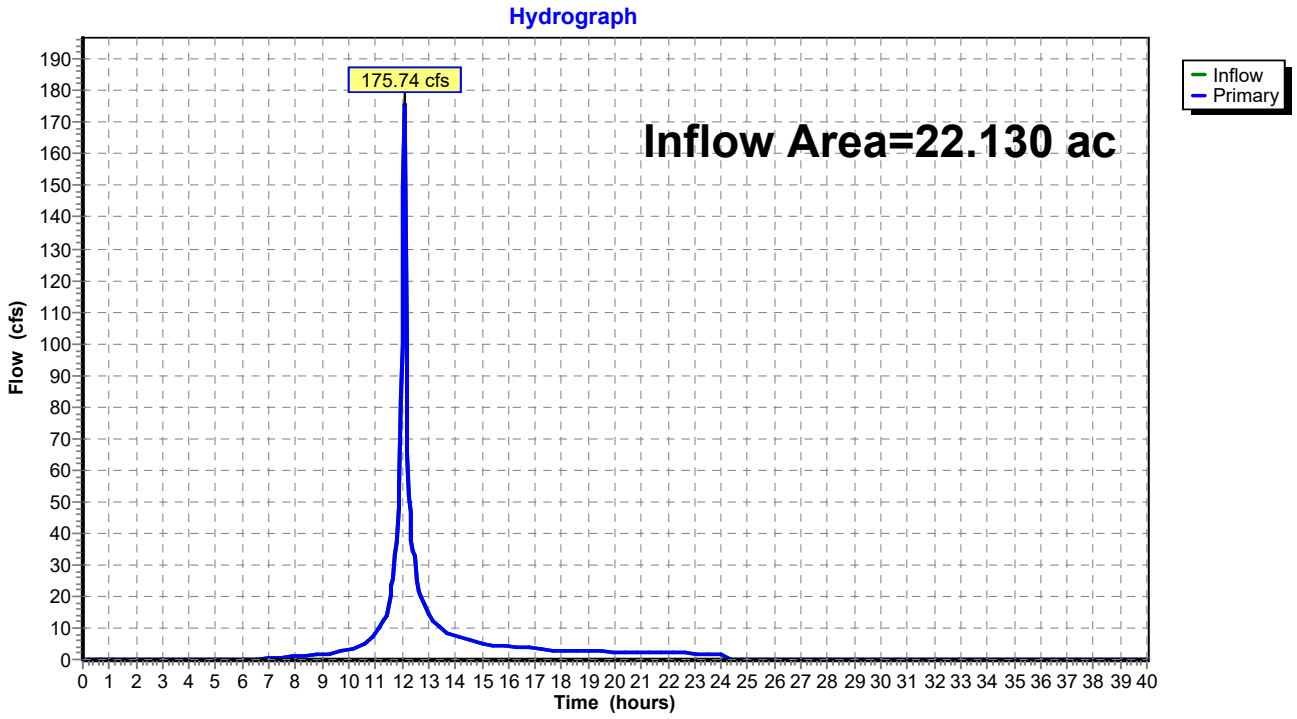


Summary for Link XDA-3: Existing Drainage Area #3

Inflow Area = 22.130 ac, 0.00% Impervious, Inflow Depth = 5.56" for Current 100 yr event
Inflow = 175.74 cfs @ 12.09 hrs, Volume= 10.253 af
Primary = 175.74 cfs @ 12.09 hrs, Volume= 10.253 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-3: Existing Drainage Area #3



Summary for Subcatchment X-3P: XDA-3 (pervious)

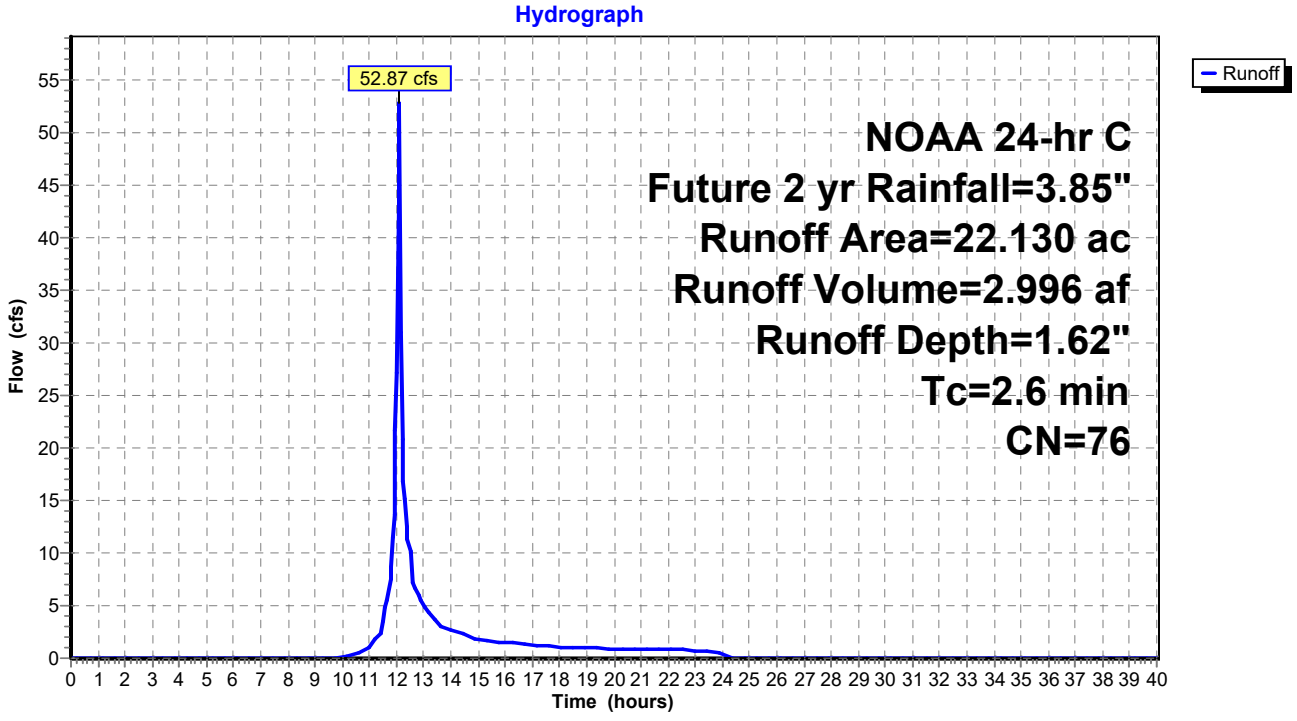
Runoff = 52.87 cfs @ 12.09 hrs, Volume= 2.996 af, Depth= 1.62"
Routed to Link XDA-3 : Existing Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
6.110	70	Woods, Good, HSG C
0.900	71	Row crops, C&T, Good, HSG B
15.120	78	Row crops, C&T, Good, HSG C
22.130	76	Weighted Average
22.130		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6					**Direct Entry,**

Subcatchment X-3P: XDA-3 (pervious)

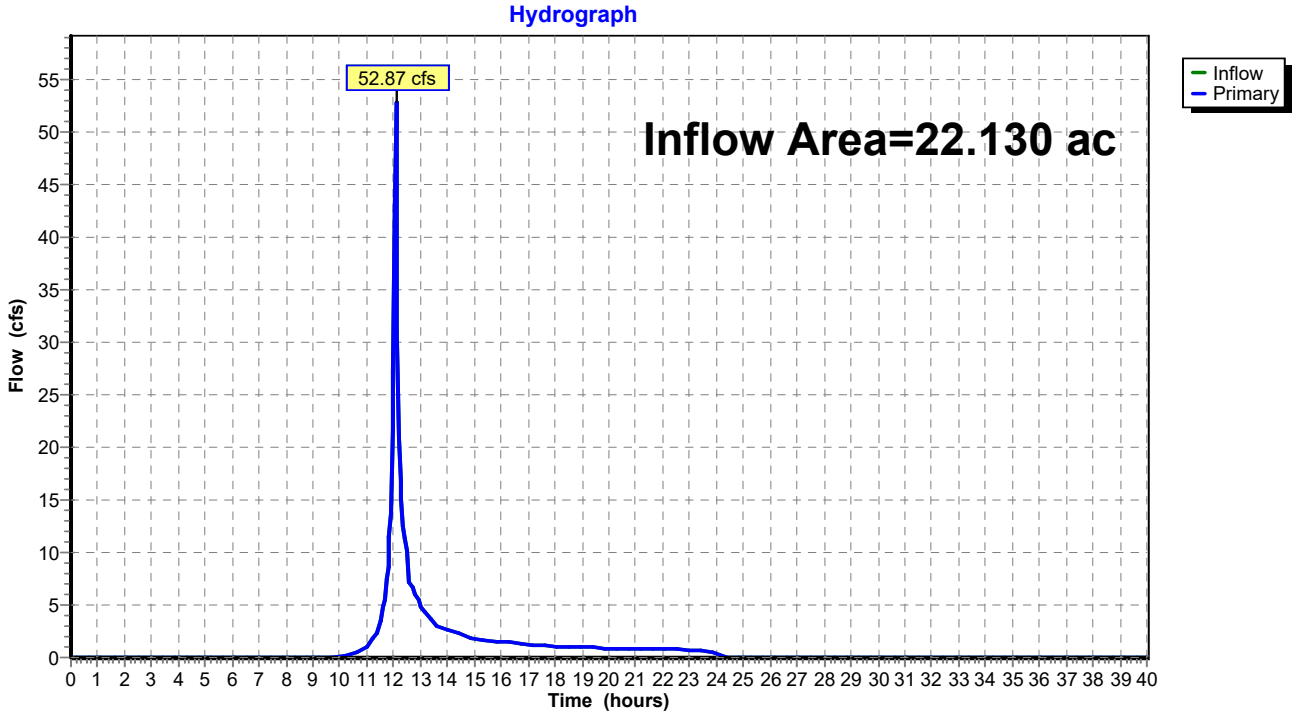


Summary for Link XDA-3: Existing Drainage Area #3

Inflow Area = 22.130 ac, 0.00% Impervious, Inflow Depth = 1.62" for Future 2 yr event
Inflow = 52.87 cfs @ 12.09 hrs, Volume= 2.996 af
Primary = 52.87 cfs @ 12.09 hrs, Volume= 2.996 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-3: Existing Drainage Area #3



Summary for Subcatchment X-3P: XDA-3 (pervious)

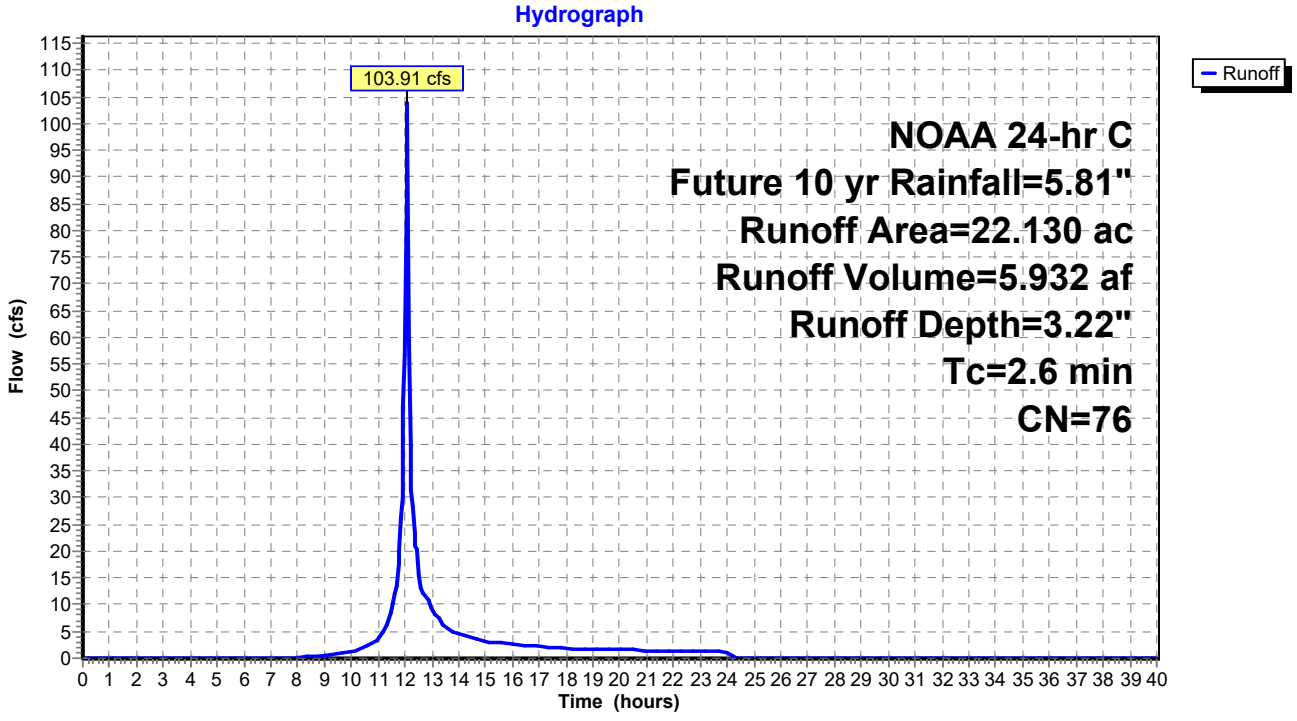
Runoff = 103.91 cfs @ 12.09 hrs, Volume= 5.932 af, Depth= 3.22"
Routed to Link XDA-3 : Existing Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.81"

Area (ac)	CN	Description
6.110	70	Woods, Good, HSG C
0.900	71	Row crops, C&T, Good, HSG B
15.120	78	Row crops, C&T, Good, HSG C
22.130	76	Weighted Average
22.130		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6					**Direct Entry,**

Subcatchment X-3P: XDA-3 (pervious)

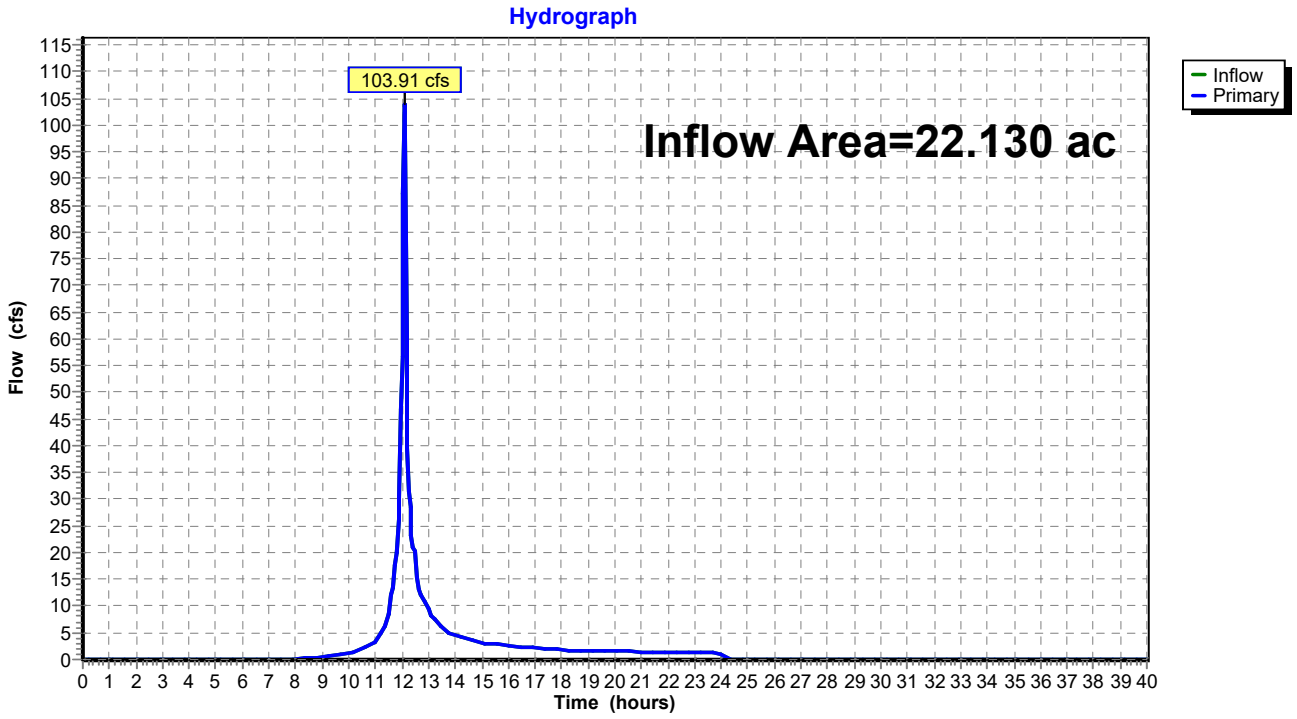


Summary for Link XDA-3: Existing Drainage Area #3

Inflow Area = 22.130 ac, 0.00% Impervious, Inflow Depth = 3.22" for Future 10 yr event
Inflow = 103.91 cfs @ 12.09 hrs, Volume= 5.932 af
Primary = 103.91 cfs @ 12.09 hrs, Volume= 5.932 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-3: Existing Drainage Area #3



Summary for Subcatchment X-3P: XDA-3 (pervious)

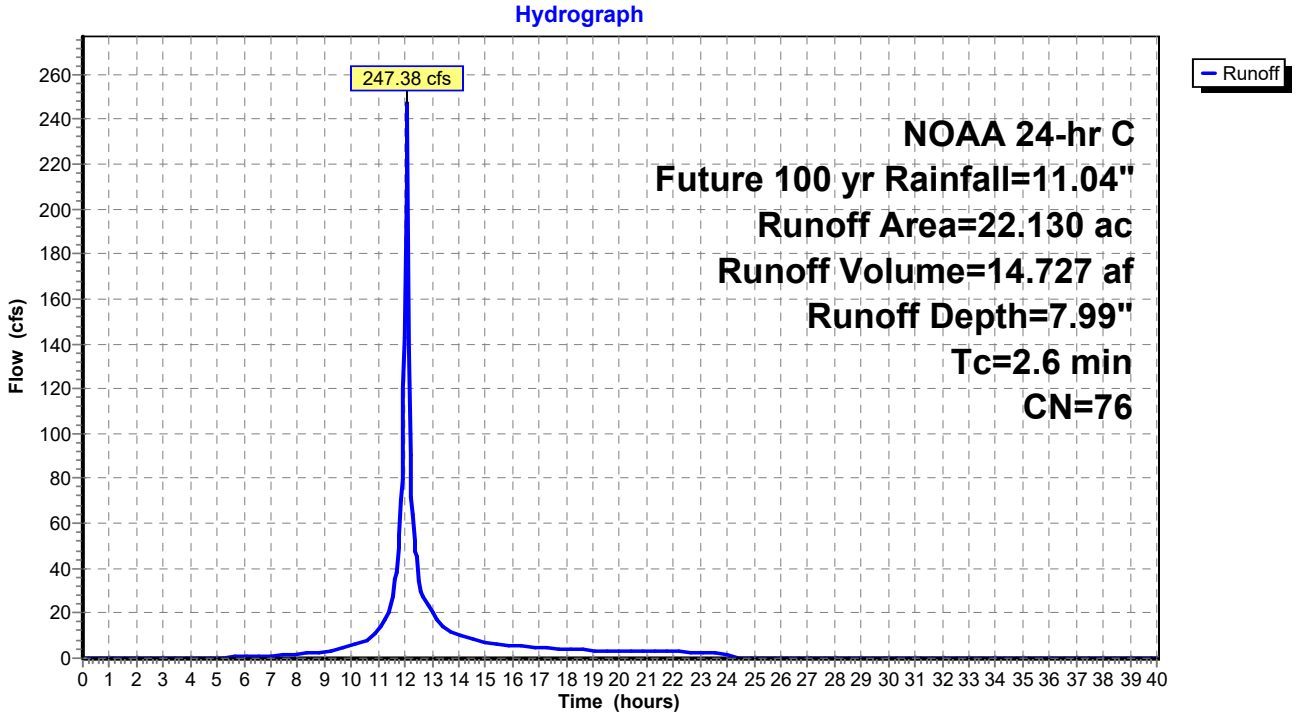
Runoff = 247.38 cfs @ 12.09 hrs, Volume= 14.727 af, Depth= 7.99"
Routed to Link XDA-3 : Existing Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.04"

Area (ac)	CN	Description
6.110	70	Woods, Good, HSG C
0.900	71	Row crops, C&T, Good, HSG B
15.120	78	Row crops, C&T, Good, HSG C
22.130	76	Weighted Average
22.130		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6					**Direct Entry,**

Subcatchment X-3P: XDA-3 (pervious)

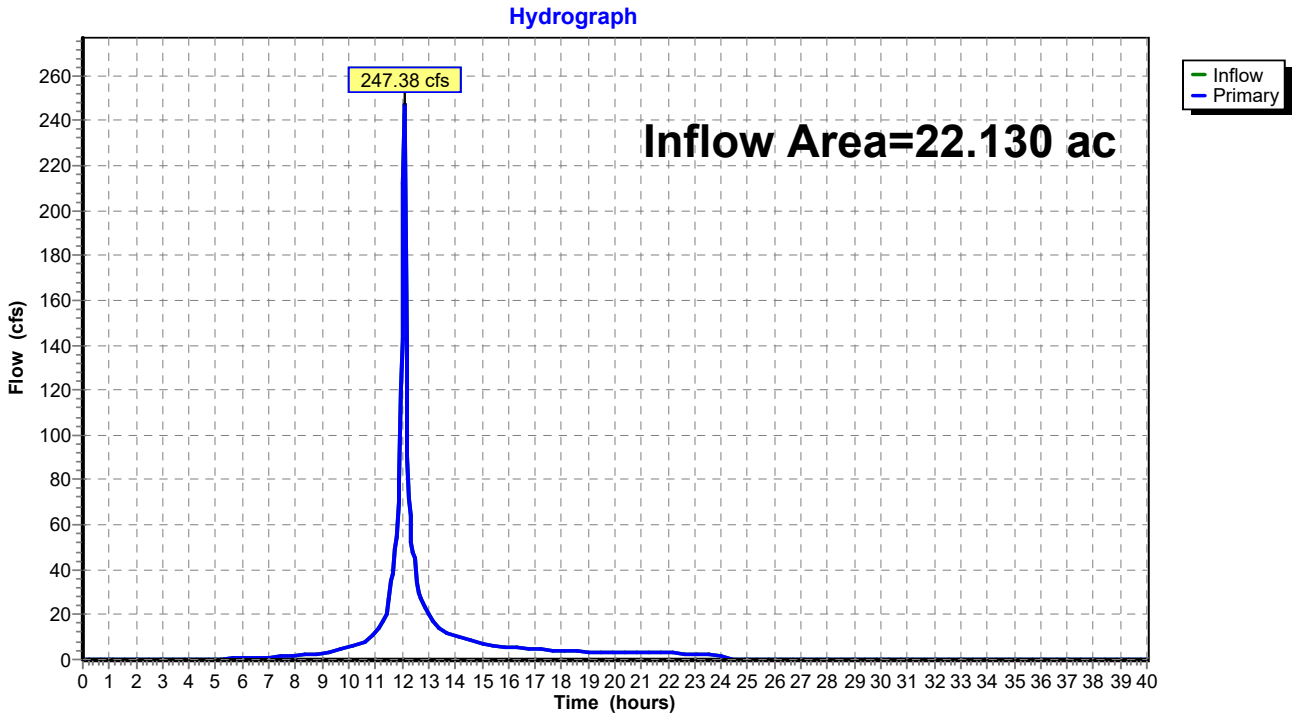


Summary for Link XDA-3: Existing Drainage Area #3

Inflow Area = 22.130 ac, 0.00% Impervious, Inflow Depth = 7.99" for Future 100 yr event
Inflow = 247.38 cfs @ 12.09 hrs, Volume= 14.727 af
Primary = 247.38 cfs @ 12.09 hrs, Volume= 14.727 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-3: Existing Drainage Area #3



Summary for Subcatchment X-3P: XDA-3 (pervious)

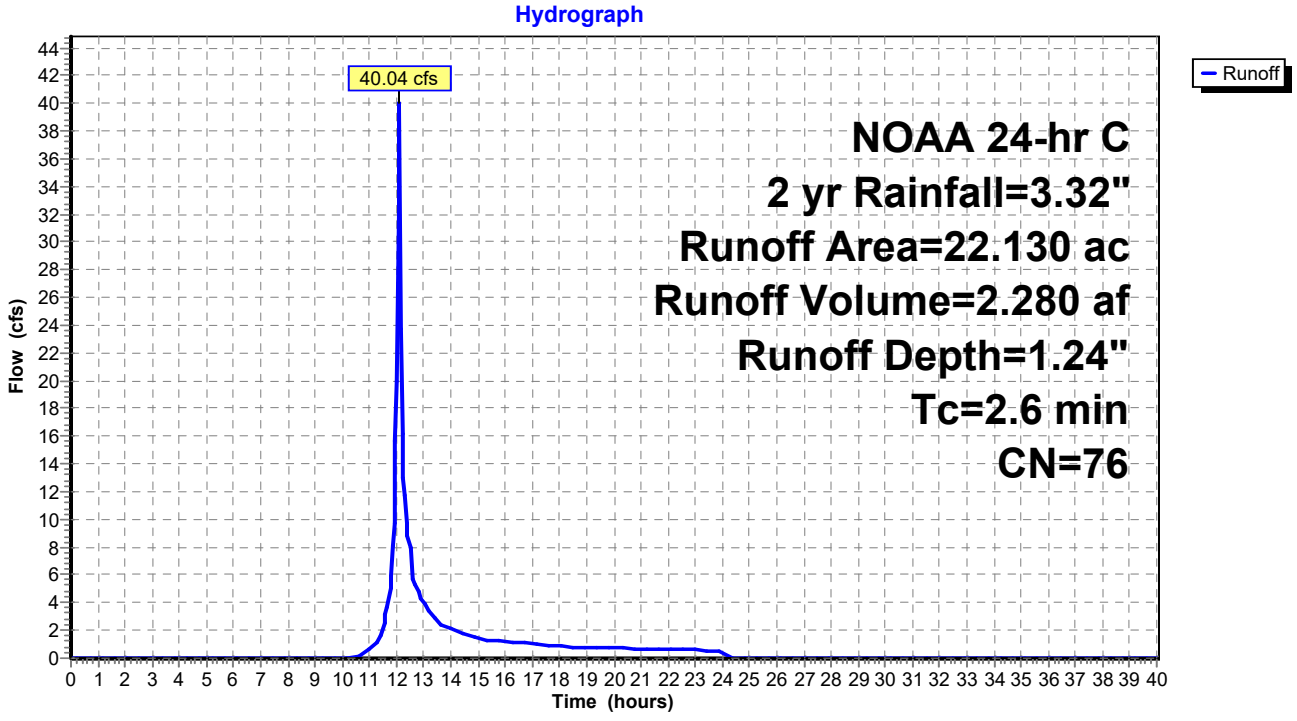
Runoff = 40.04 cfs @ 12.09 hrs, Volume= 2.280 af, Depth= 1.24"
Routed to Link XDA-3 : Existing Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 2 yr Rainfall=3.32"

Area (ac)	CN	Description
6.110	70	Woods, Good, HSG C
0.900	71	Row crops, C&T, Good, HSG B
15.120	78	Row crops, C&T, Good, HSG C
22.130	76	Weighted Average
22.130		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6					**Direct Entry,**

Subcatchment X-3P: XDA-3 (pervious)

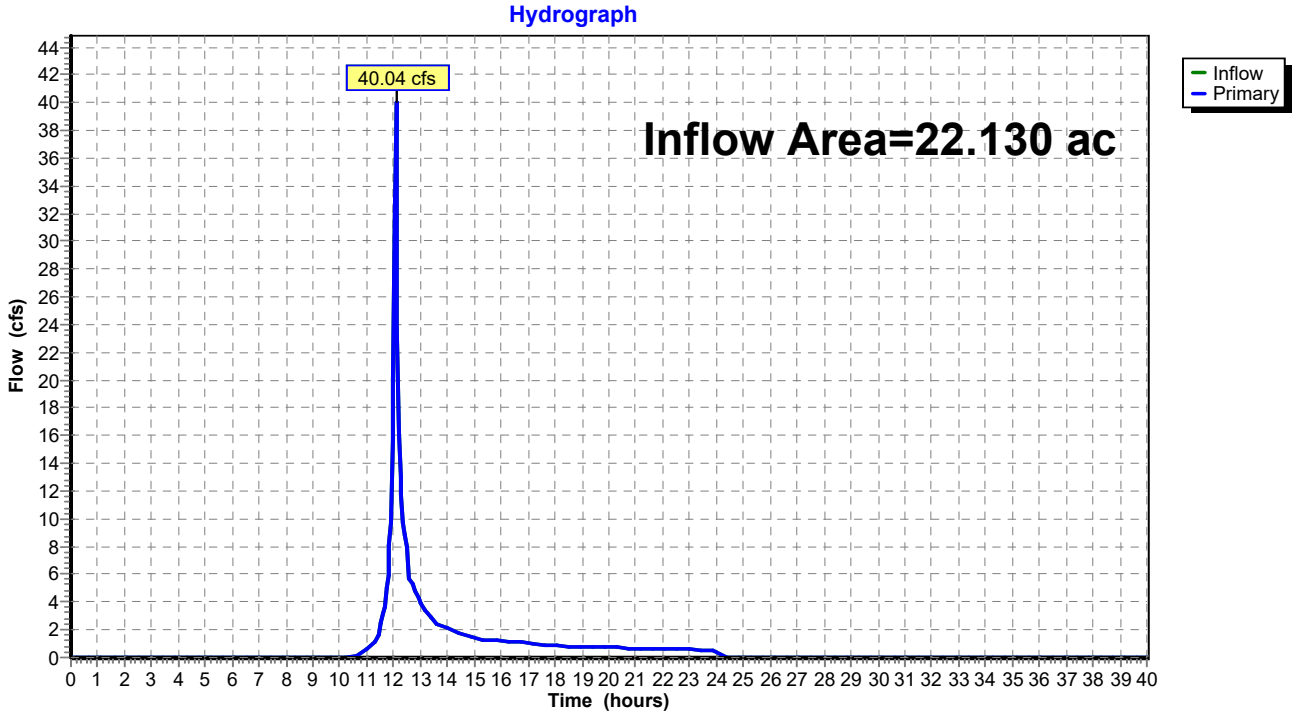


Summary for Link XDA-3: Existing Drainage Area #3

Inflow Area = 22.130 ac, 0.00% Impervious, Inflow Depth = 1.24" for 2 yr event
Inflow = 40.04 cfs @ 12.09 hrs, Volume= 2.280 af
Primary = 40.04 cfs @ 12.09 hrs, Volume= 2.280 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-3: Existing Drainage Area #3



Summary for Subcatchment X-3P: XDA-3 (pervious)

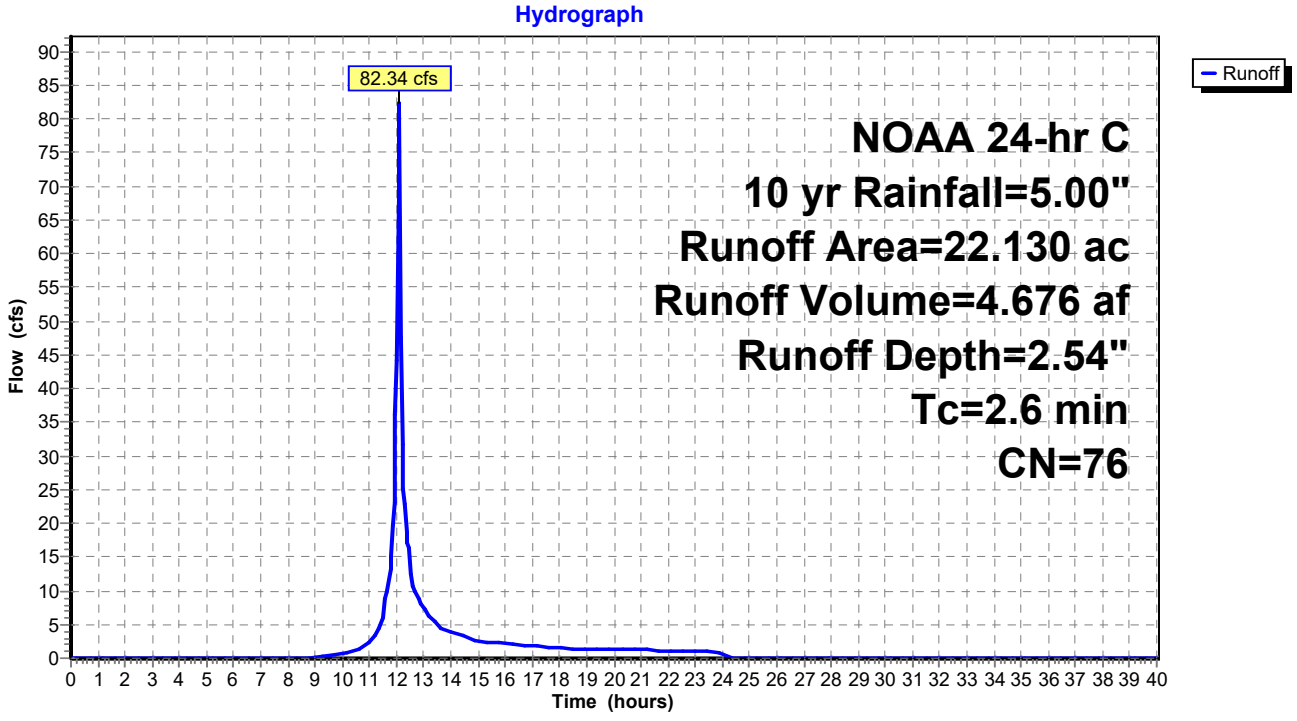
Runoff = 82.34 cfs @ 12.09 hrs, Volume= 4.676 af, Depth= 2.54"
Routed to Link XDA-3 : Existing Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 10 yr Rainfall=5.00"

Area (ac)	CN	Description
6.110	70	Woods, Good, HSG C
0.900	71	Row crops, C&T, Good, HSG B
15.120	78	Row crops, C&T, Good, HSG C
22.130	76	Weighted Average
22.130		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6					**Direct Entry,**

Subcatchment X-3P: XDA-3 (pervious)

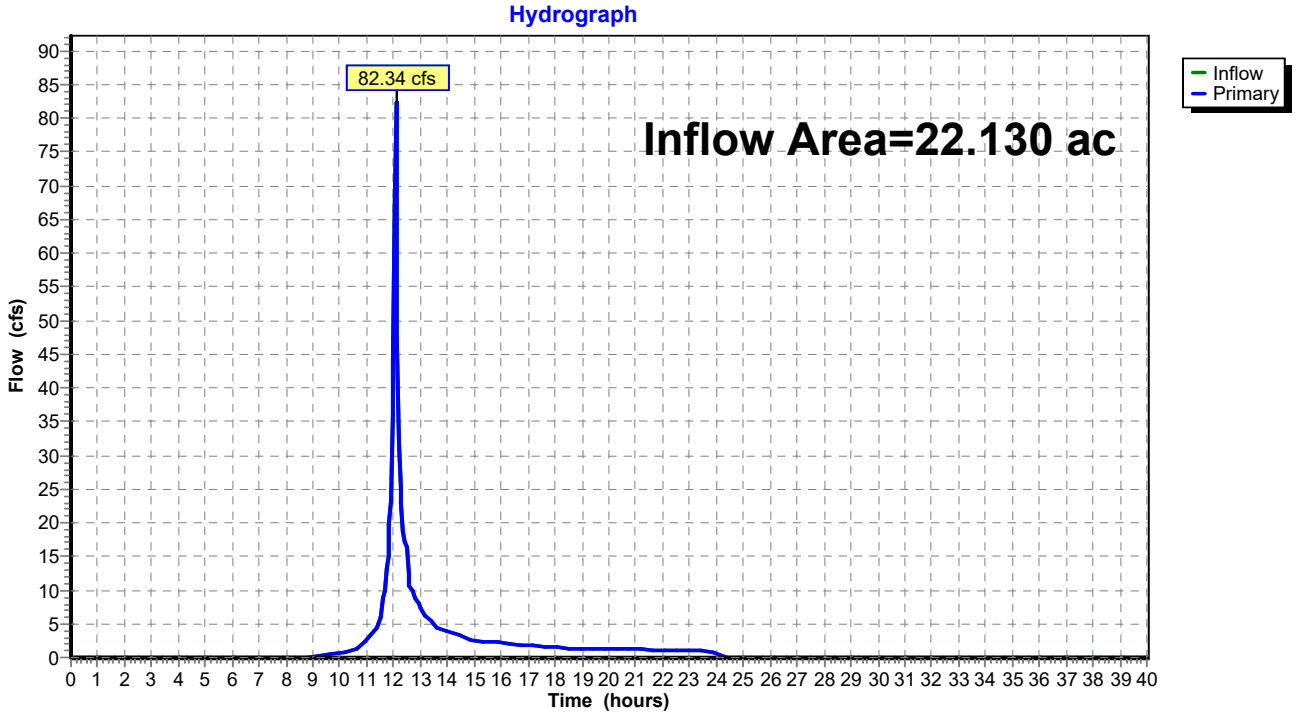


Summary for Link XDA-3: Existing Drainage Area #3

Inflow Area = 22.130 ac, 0.00% Impervious, Inflow Depth = 2.54" for 10 yr event
Inflow = 82.34 cfs @ 12.09 hrs, Volume= 4.676 af
Primary = 82.34 cfs @ 12.09 hrs, Volume= 4.676 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-3: Existing Drainage Area #3



Summary for Subcatchment X-3P: XDA-3 (pervious)

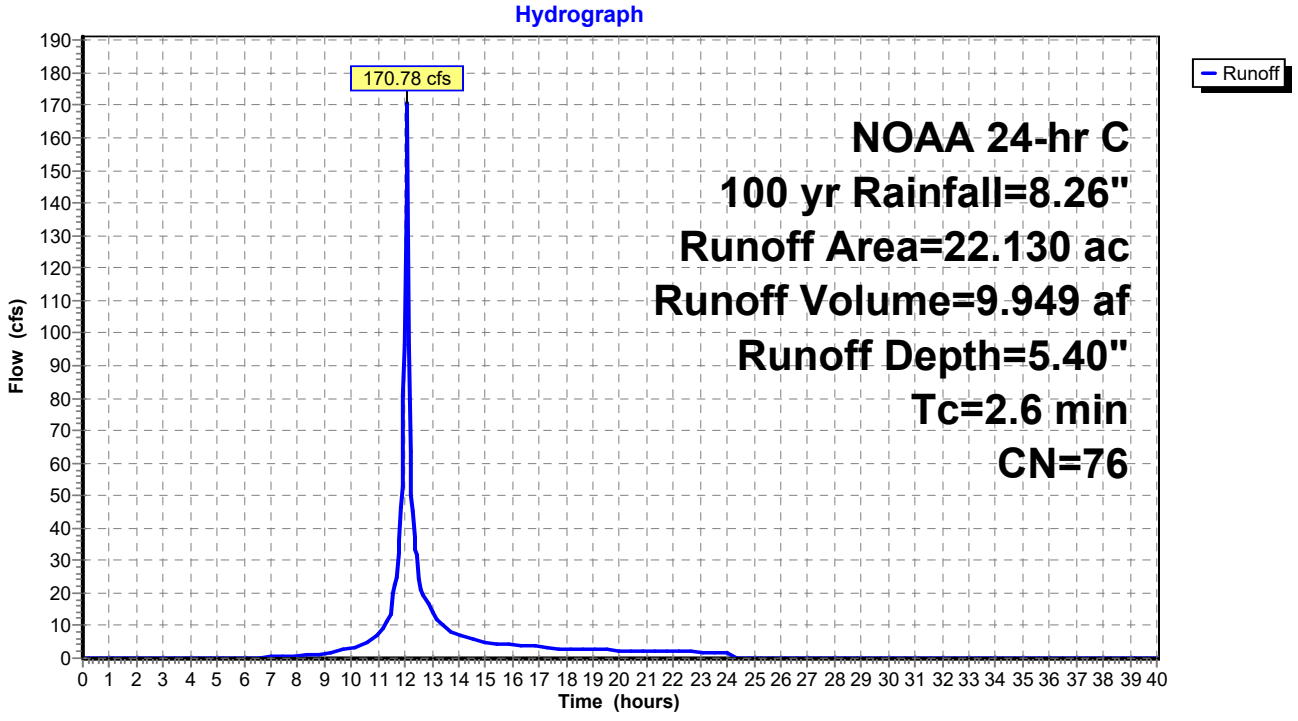
Runoff = 170.78 cfs @ 12.09 hrs, Volume= 9.949 af, Depth= 5.40"
Routed to Link XDA-3 : Existing Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 100 yr Rainfall=8.26"

Area (ac)	CN	Description
6.110	70	Woods, Good, HSG C
0.900	71	Row crops, C&T, Good, HSG B
15.120	78	Row crops, C&T, Good, HSG C
22.130	76	Weighted Average
22.130		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6					**Direct Entry,**

Subcatchment X-3P: XDA-3 (pervious)

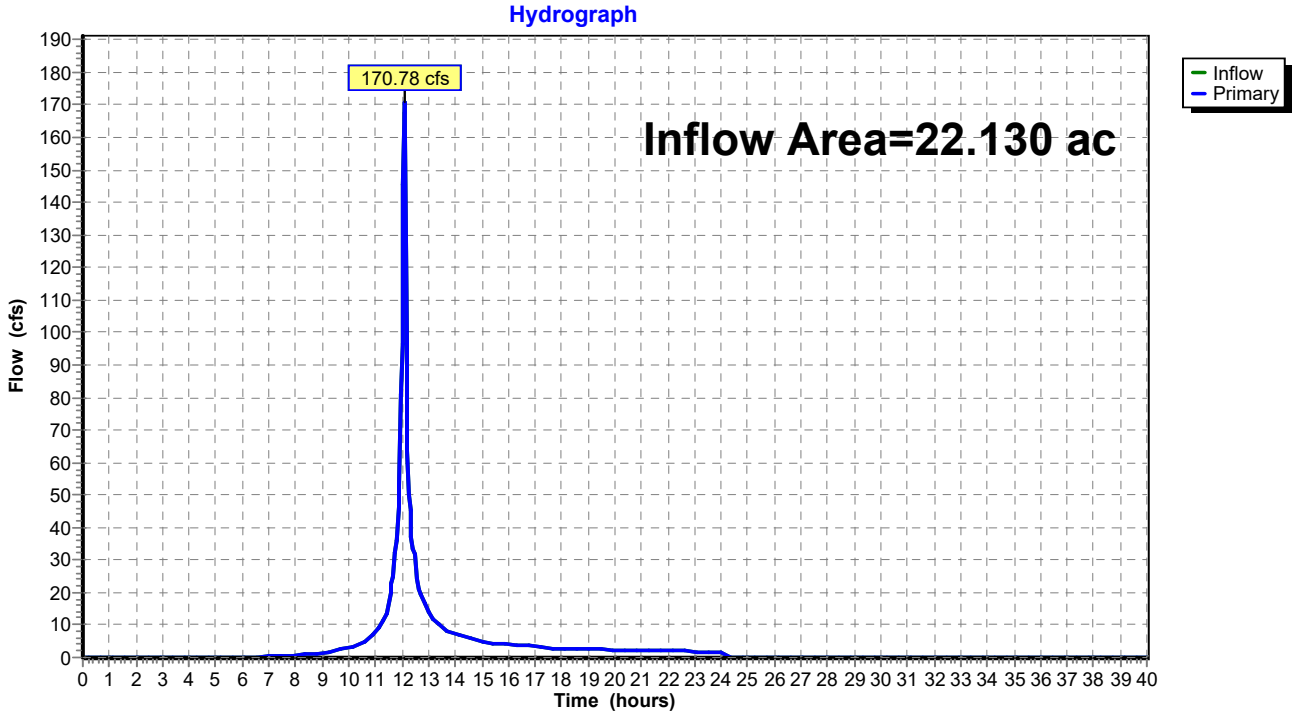


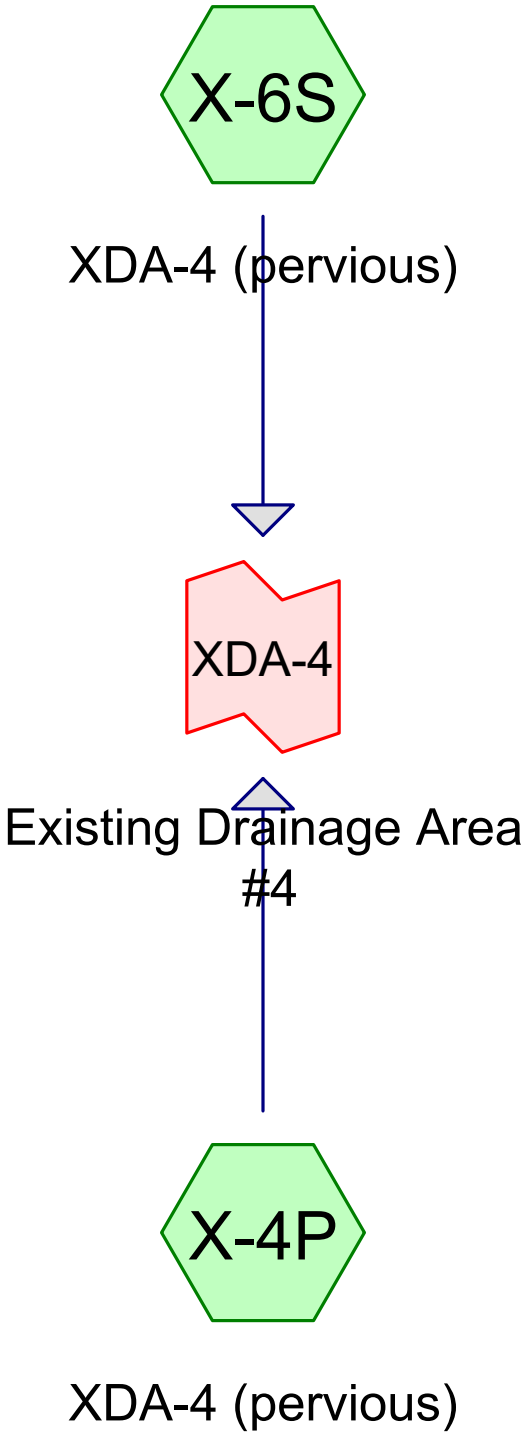
Summary for Link XDA-3: Existing Drainage Area #3

Inflow Area = 22.130 ac, 0.00% Impervious, Inflow Depth = 5.40" for 100 yr event
Inflow = 170.78 cfs @ 12.09 hrs, Volume= 9.949 af
Primary = 170.78 cfs @ 12.09 hrs, Volume= 9.949 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-3: Existing Drainage Area #3





Subcat Reach Pond Link

Routing Diagram for 2024-12-17 Existing- 081391
Prepared by Bowman Consulting Group, Printed 12/19/2024
HydroCAD® 10.20-5c s/n 09435 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment X-4P: XDA-4 (pervious)

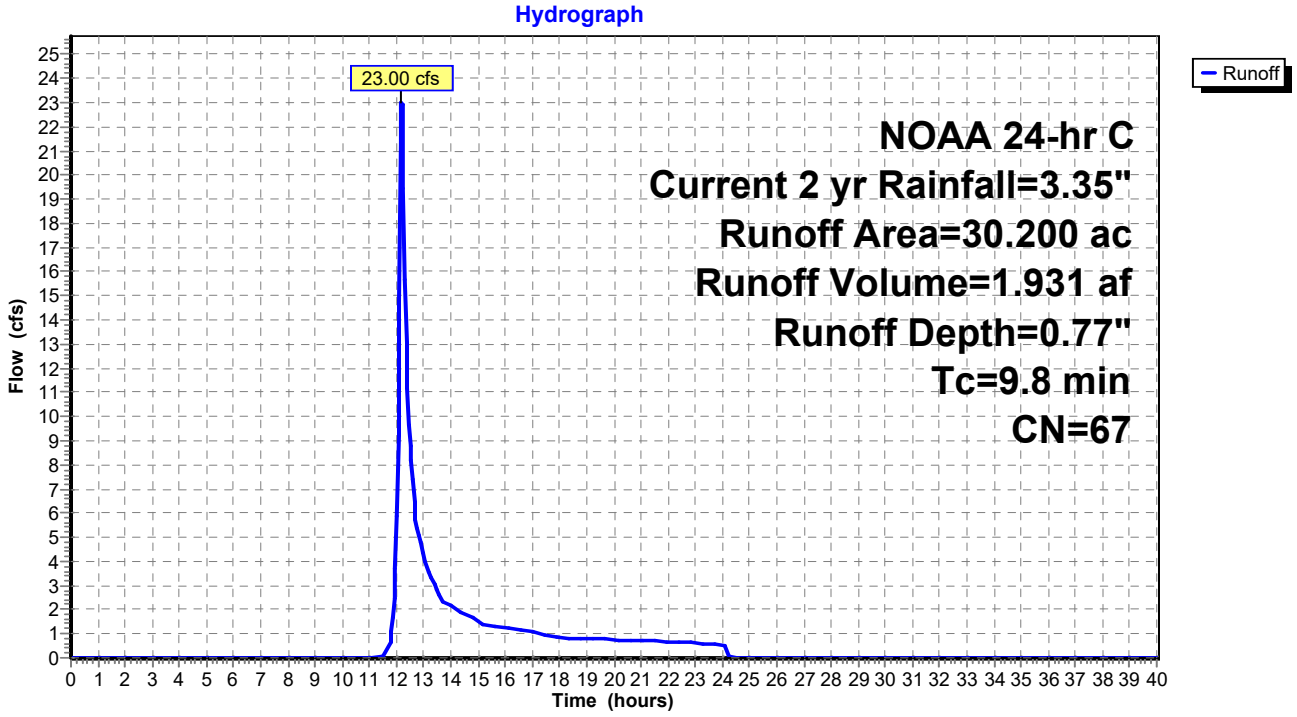
Runoff = 23.00 cfs @ 12.19 hrs, Volume= 1.931 af, Depth= 0.77"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
11.700	55	Woods, Good, HSG B
7.940	70	Woods, Good, HSG C
1.310	77	Woods, Good, HSG D
0.560	71	Row crops, C&T, Good, HSG B
8.690	78	Row crops, C&T, Good, HSG C
30.200	67	Weighted Average
30.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-4P: XDA-4 (pervious)



Summary for Subcatchment X-6S: XDA-4 (pervious)

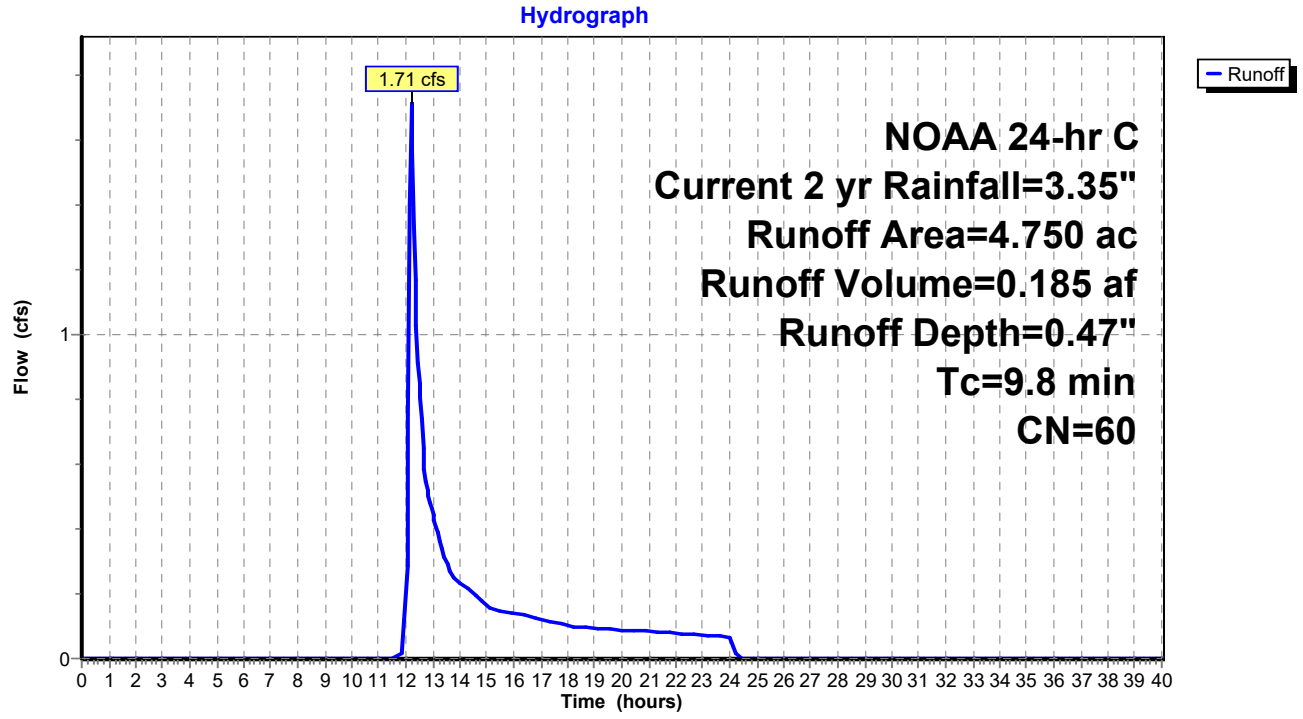
Runoff = 1.71 cfs @ 12.21 hrs, Volume= 0.185 af, Depth= 0.47"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
3.240	55	Woods, Good, HSG B
1.510	70	Woods, Good, HSG C
4.750	60	Weighted Average
4.750		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-6S: XDA-4 (pervious)

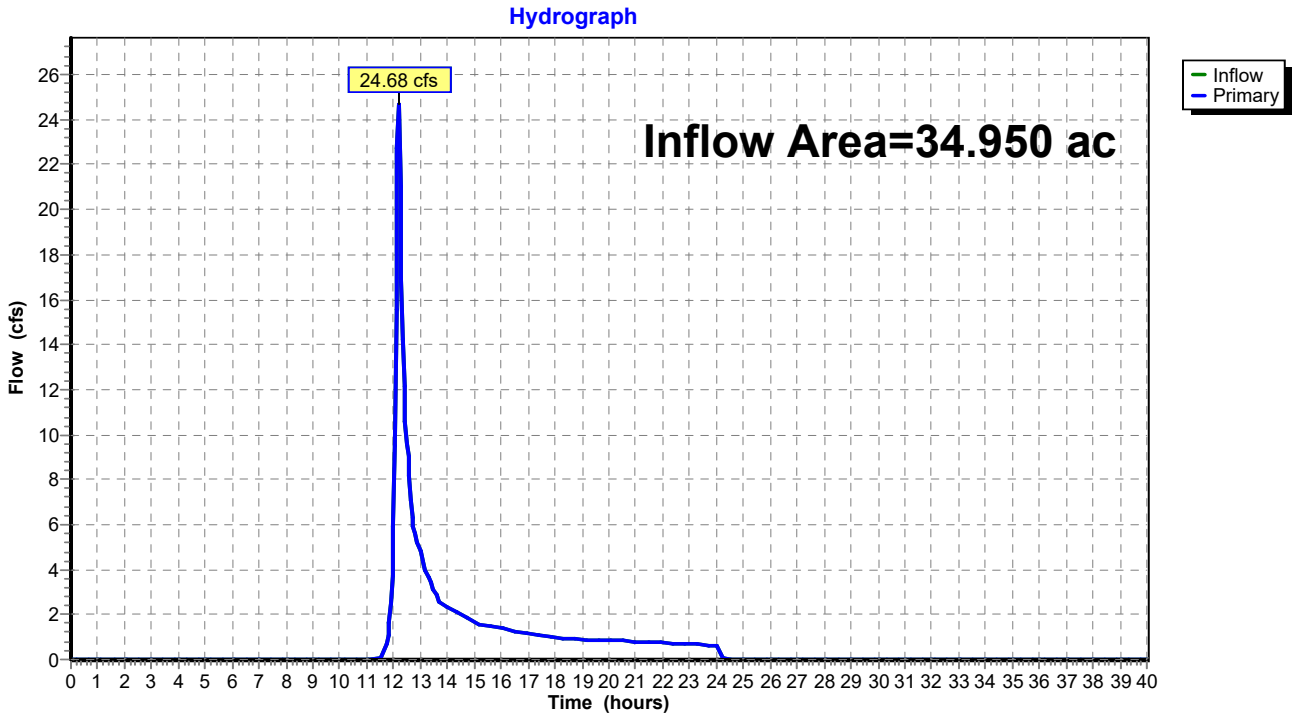


Summary for Link XDA-4: Existing Drainage Area #4

Inflow Area = 34.950 ac, 0.00% Impervious, Inflow Depth = 0.73" for Current 2 yr event
Inflow = 24.68 cfs @ 12.19 hrs, Volume= 2.116 af
Primary = 24.68 cfs @ 12.19 hrs, Volume= 2.116 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-4: Existing Drainage Area #4



Summary for Subcatchment X-4P: XDA-4 (pervious)

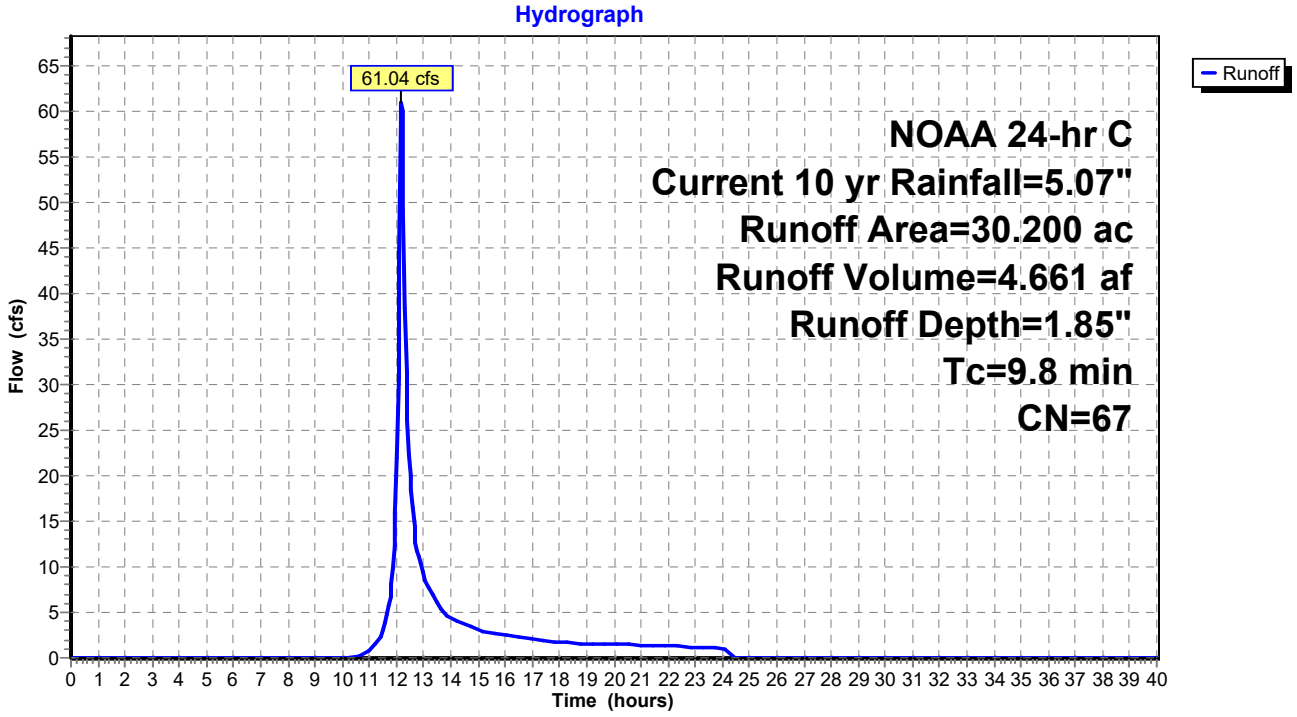
Runoff = 61.04 cfs @ 12.18 hrs, Volume= 4.661 af, Depth= 1.85"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.07"

Area (ac)	CN	Description
11.700	55	Woods, Good, HSG B
7.940	70	Woods, Good, HSG C
1.310	77	Woods, Good, HSG D
0.560	71	Row crops, C&T, Good, HSG B
8.690	78	Row crops, C&T, Good, HSG C
30.200	67	Weighted Average
30.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-4P: XDA-4 (pervious)



Summary for Subcatchment X-6S: XDA-4 (pervious)

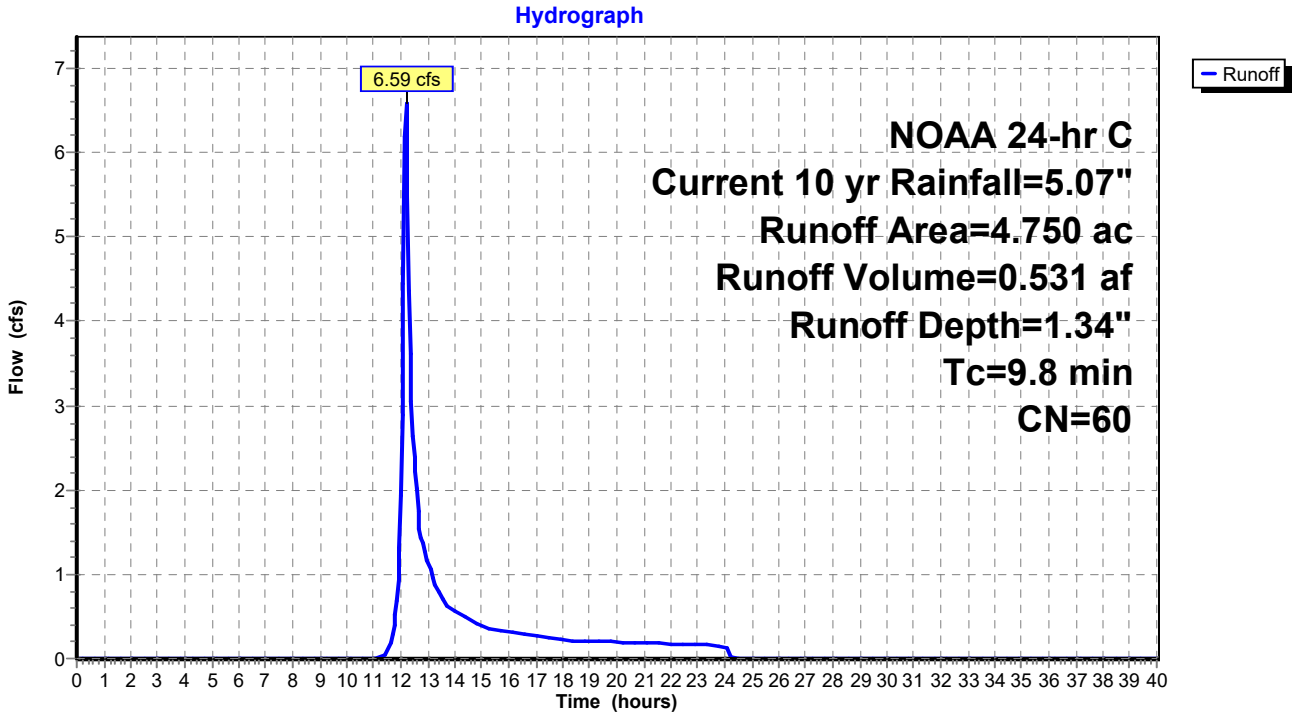
Runoff = 6.59 cfs @ 12.19 hrs, Volume= 0.531 af, Depth= 1.34"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.07"

Area (ac)	CN	Description
3.240	55	Woods, Good, HSG B
1.510	70	Woods, Good, HSG C
4.750	60	Weighted Average
4.750		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-6S: XDA-4 (pervious)

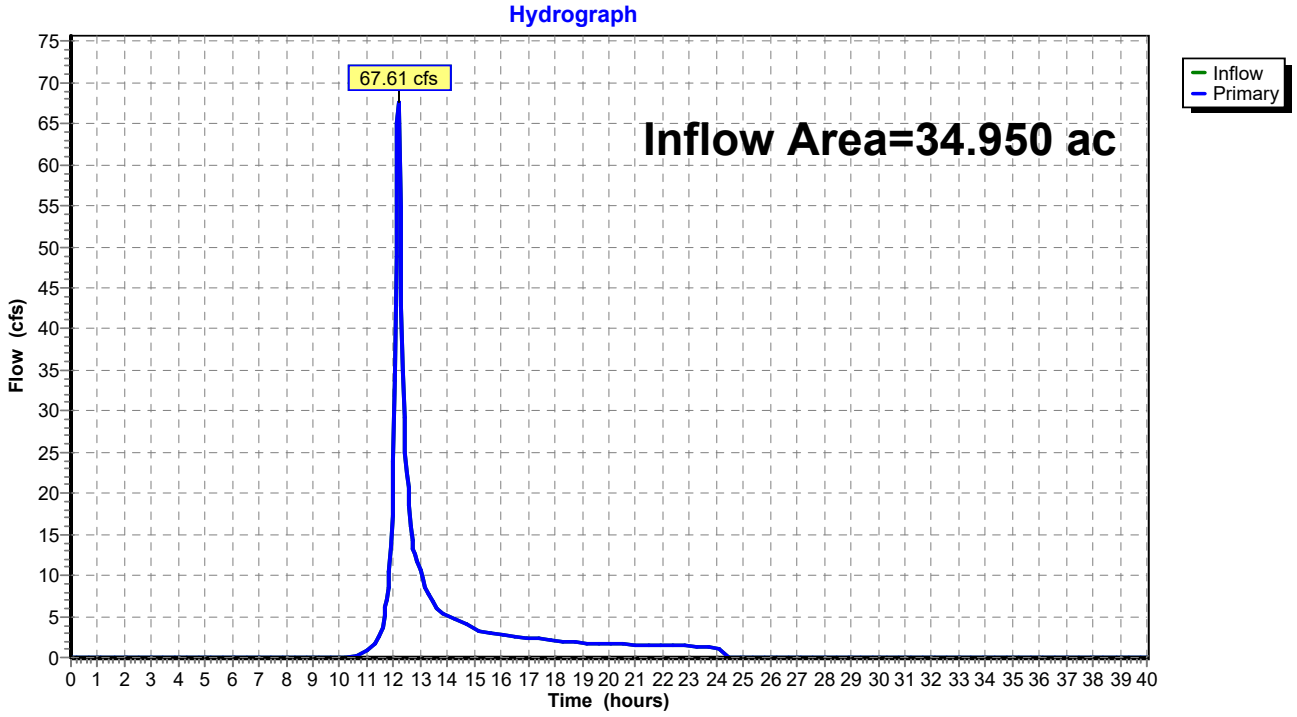


Summary for Link XDA-4: Existing Drainage Area #4

Inflow Area = 34.950 ac, 0.00% Impervious, Inflow Depth = 1.78" for Current 10 yr event
Inflow = 67.61 cfs @ 12.18 hrs, Volume= 5.192 af
Primary = 67.61 cfs @ 12.18 hrs, Volume= 5.192 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-4: Existing Drainage Area #4



Summary for Subcatchment X-4P: XDA-4 (pervious)

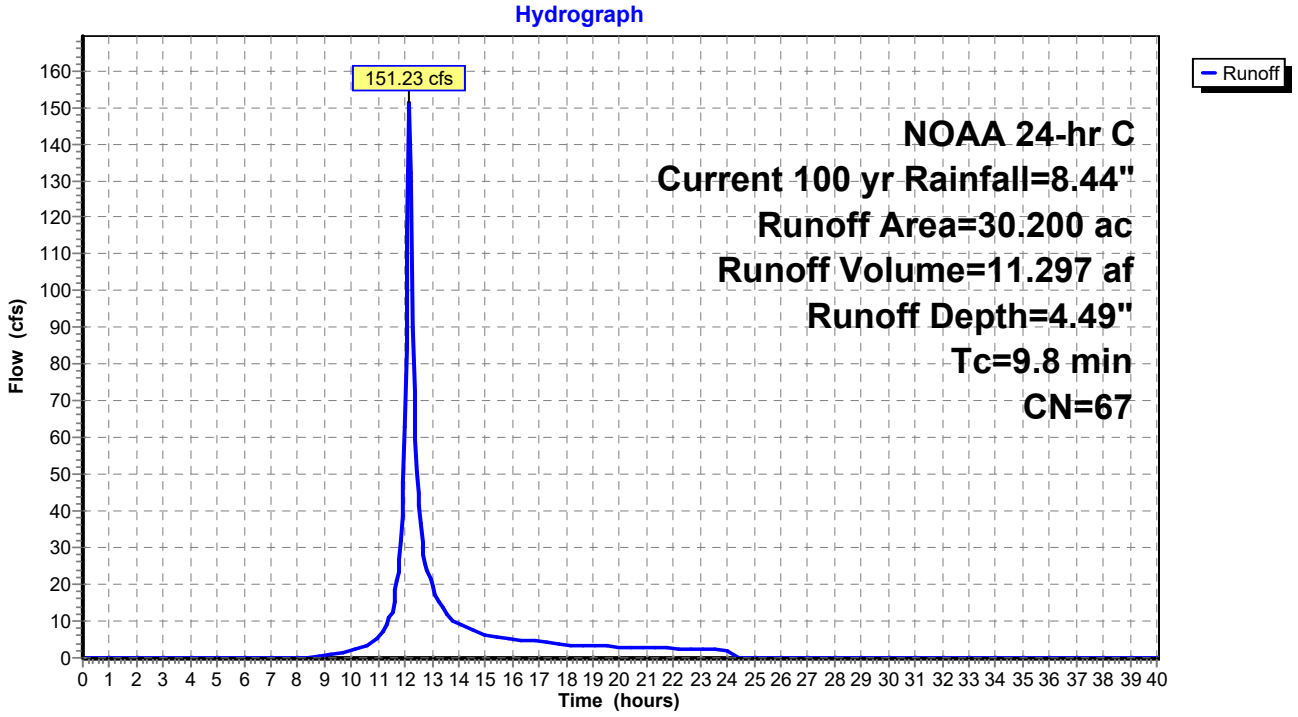
Runoff = 151.23 cfs @ 12.17 hrs, Volume= 11.297 af, Depth= 4.49"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.44"

Area (ac)	CN	Description
11.700	55	Woods, Good, HSG B
7.940	70	Woods, Good, HSG C
1.310	77	Woods, Good, HSG D
0.560	71	Row crops, C&T, Good, HSG B
8.690	78	Row crops, C&T, Good, HSG C
30.200	67	Weighted Average
30.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-4P: XDA-4 (pervious)



Summary for Subcatchment X-6S: XDA-4 (pervious)

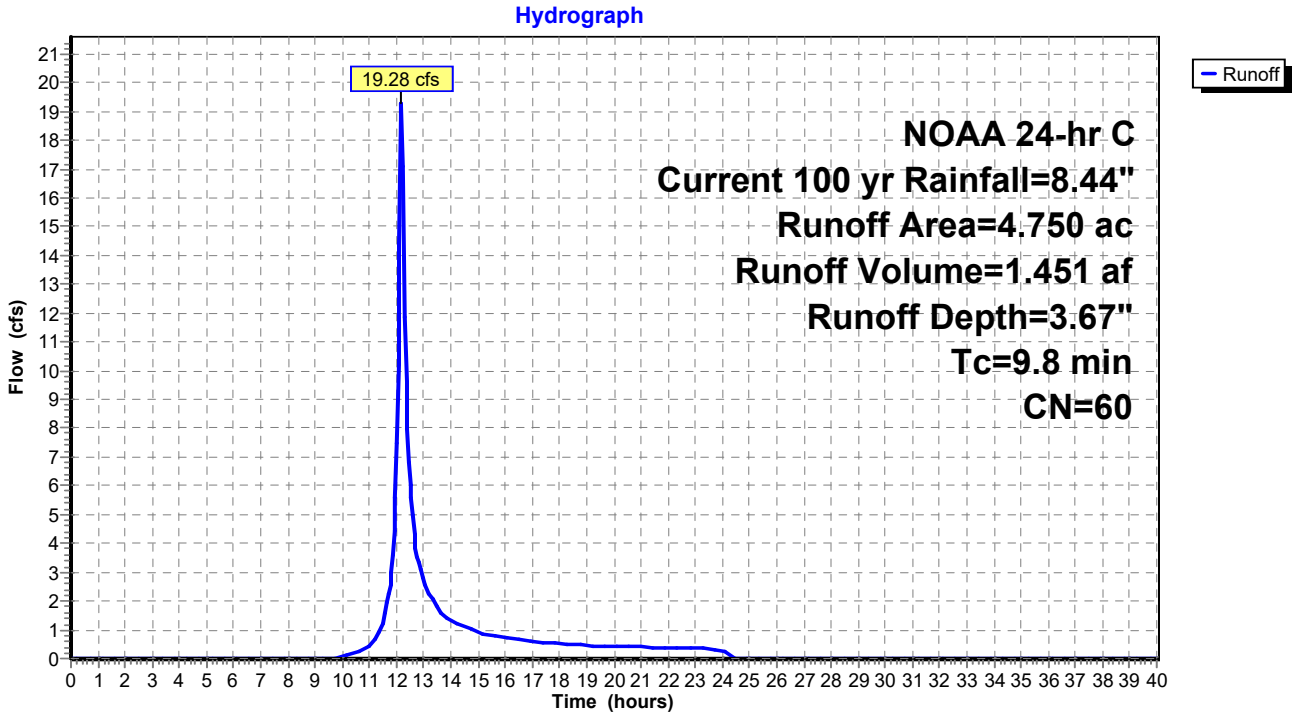
Runoff = 19.28 cfs @ 12.18 hrs, Volume= 1.451 af, Depth= 3.67"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.44"

Area (ac)	CN	Description
3.240	55	Woods, Good, HSG B
1.510	70	Woods, Good, HSG C
4.750	60	Weighted Average
4.750		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-6S: XDA-4 (pervious)

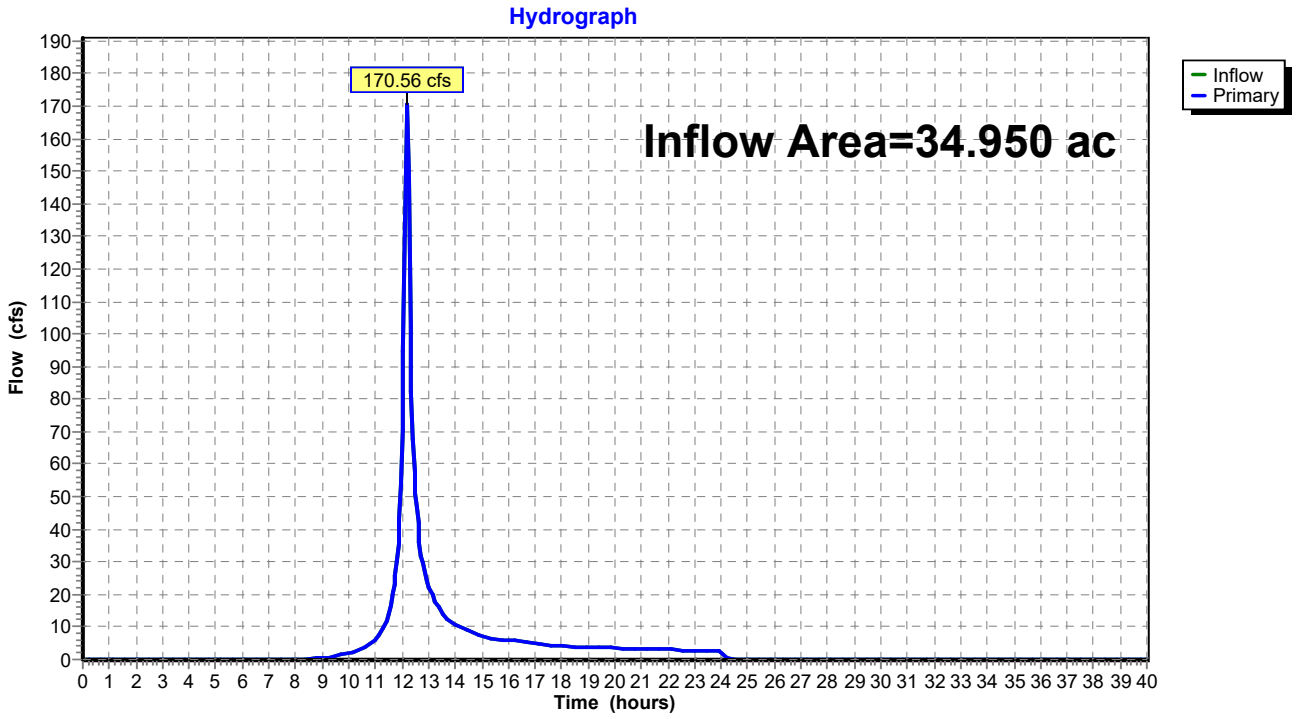


Summary for Link XDA-4: Existing Drainage Area #4

Inflow Area = 34.950 ac, 0.00% Impervious, Inflow Depth = 4.38" for Current 100 yr event
Inflow = 170.56 cfs @ 12.17 hrs, Volume= 12.749 af
Primary = 170.56 cfs @ 12.17 hrs, Volume= 12.749 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-4: Existing Drainage Area #4



Summary for Subcatchment X-4P: XDA-4 (pervious)

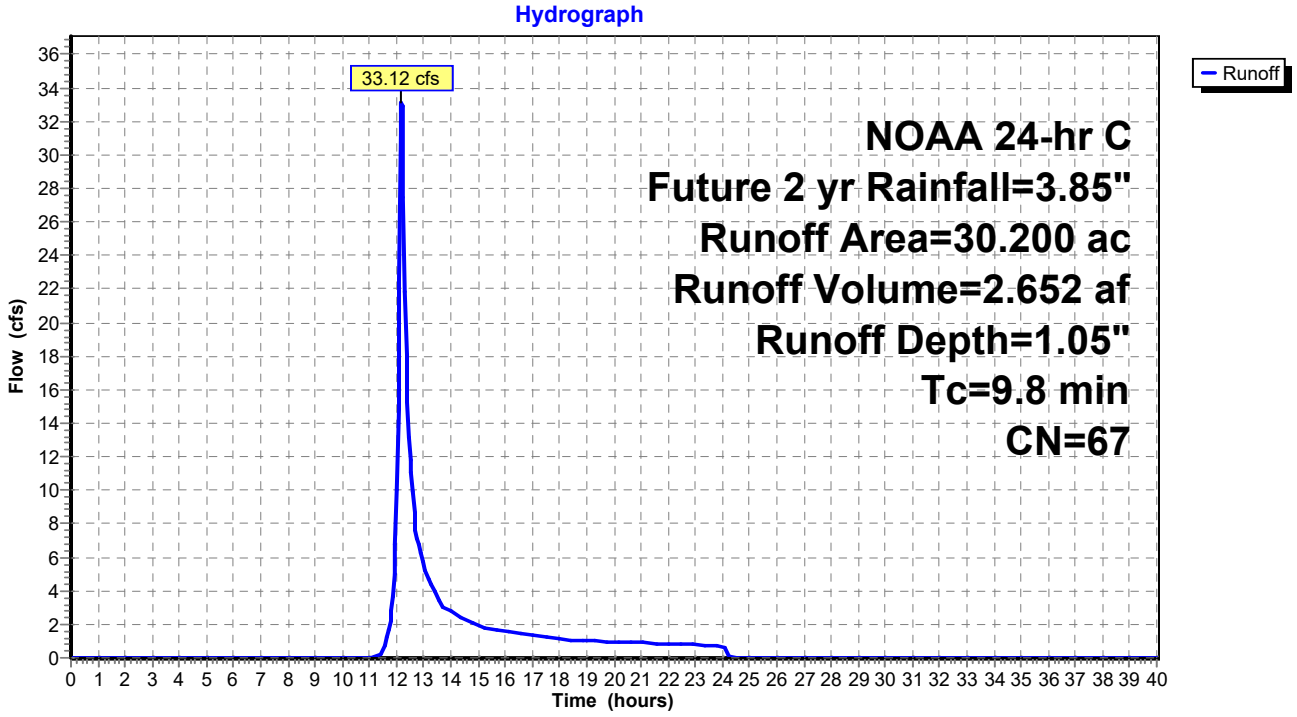
Runoff = 33.12 cfs @ 12.19 hrs, Volume= 2.652 af, Depth= 1.05"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
11.700	55	Woods, Good, HSG B
7.940	70	Woods, Good, HSG C
1.310	77	Woods, Good, HSG D
0.560	71	Row crops, C&T, Good, HSG B
8.690	78	Row crops, C&T, Good, HSG C
30.200	67	Weighted Average
30.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-4P: XDA-4 (pervious)



Summary for Subcatchment X-6S: XDA-4 (pervious)

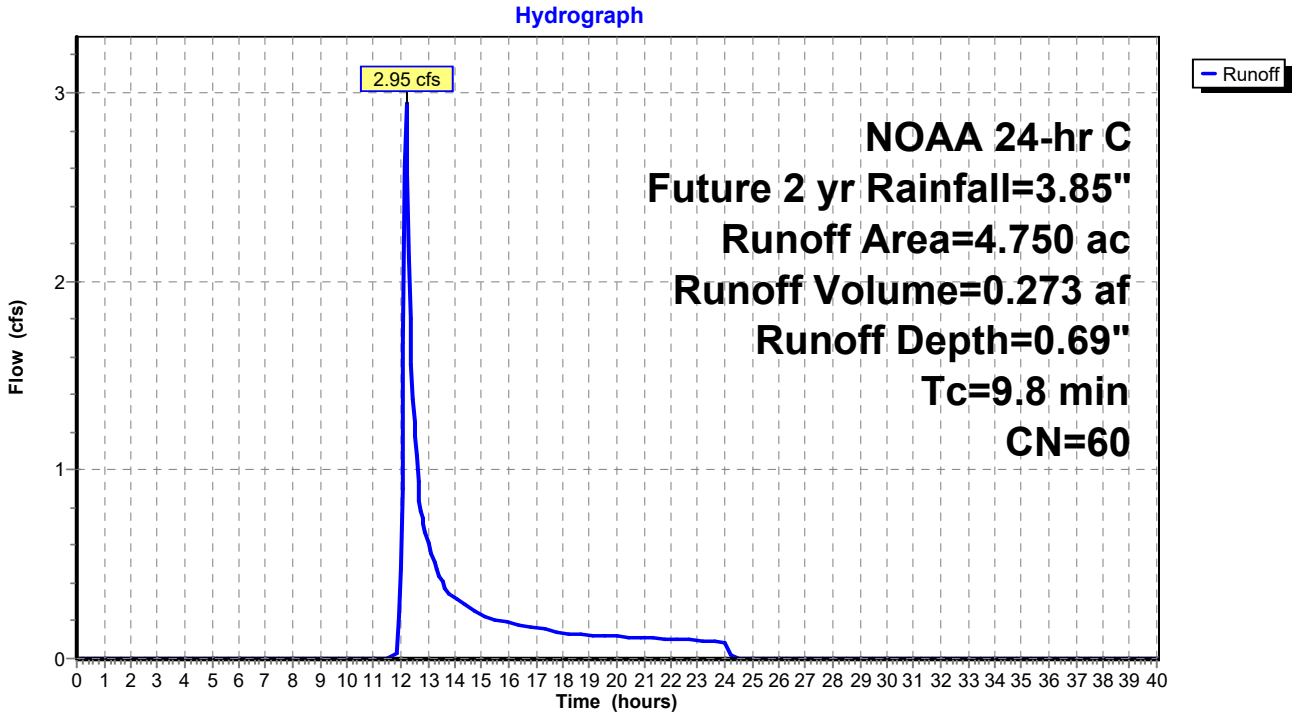
Runoff = 2.95 cfs @ 12.20 hrs, Volume= 0.273 af, Depth= 0.69"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
3.240	55	Woods, Good, HSG B
1.510	70	Woods, Good, HSG C
4.750	60	Weighted Average
4.750		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-6S: XDA-4 (pervious)

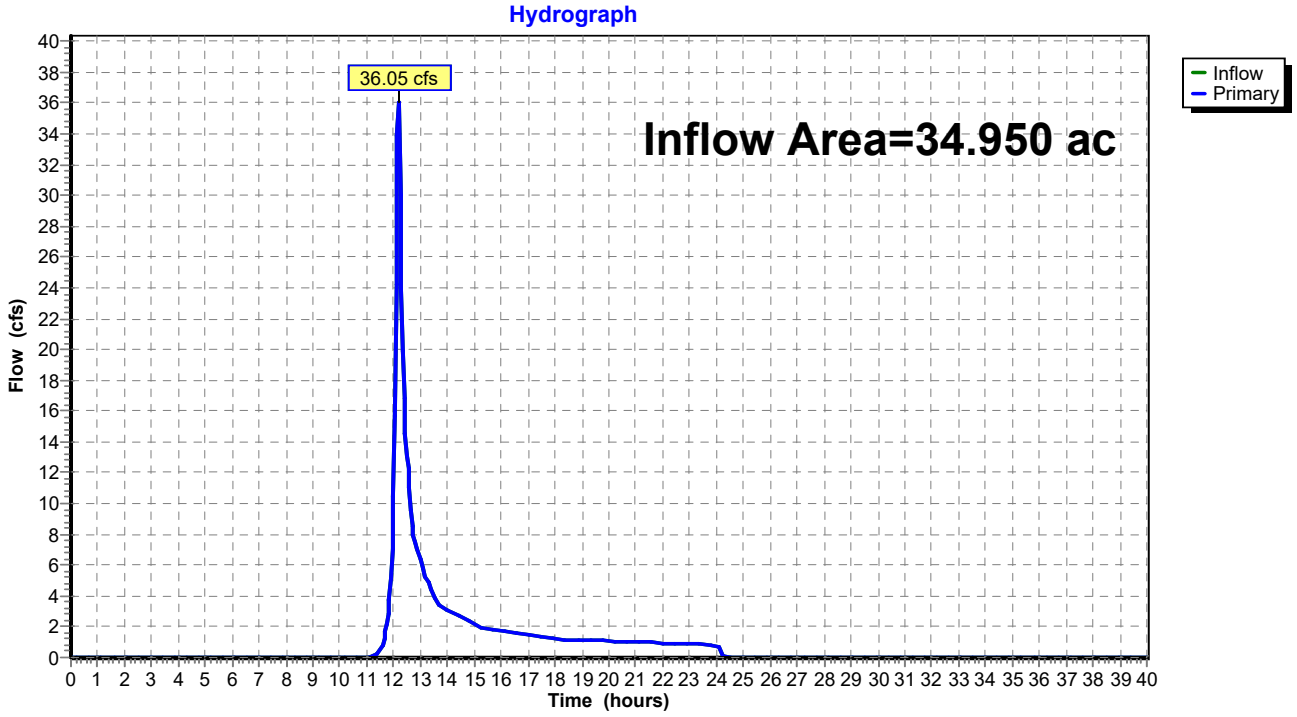


Summary for Link XDA-4: Existing Drainage Area #4

Inflow Area = 34.950 ac, 0.00% Impervious, Inflow Depth = 1.00" for Future 2 yr event
Inflow = 36.05 cfs @ 12.19 hrs, Volume= 2.925 af
Primary = 36.05 cfs @ 12.19 hrs, Volume= 2.925 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-4: Existing Drainage Area #4



Summary for Subcatchment X-4P: XDA-4 (pervious)

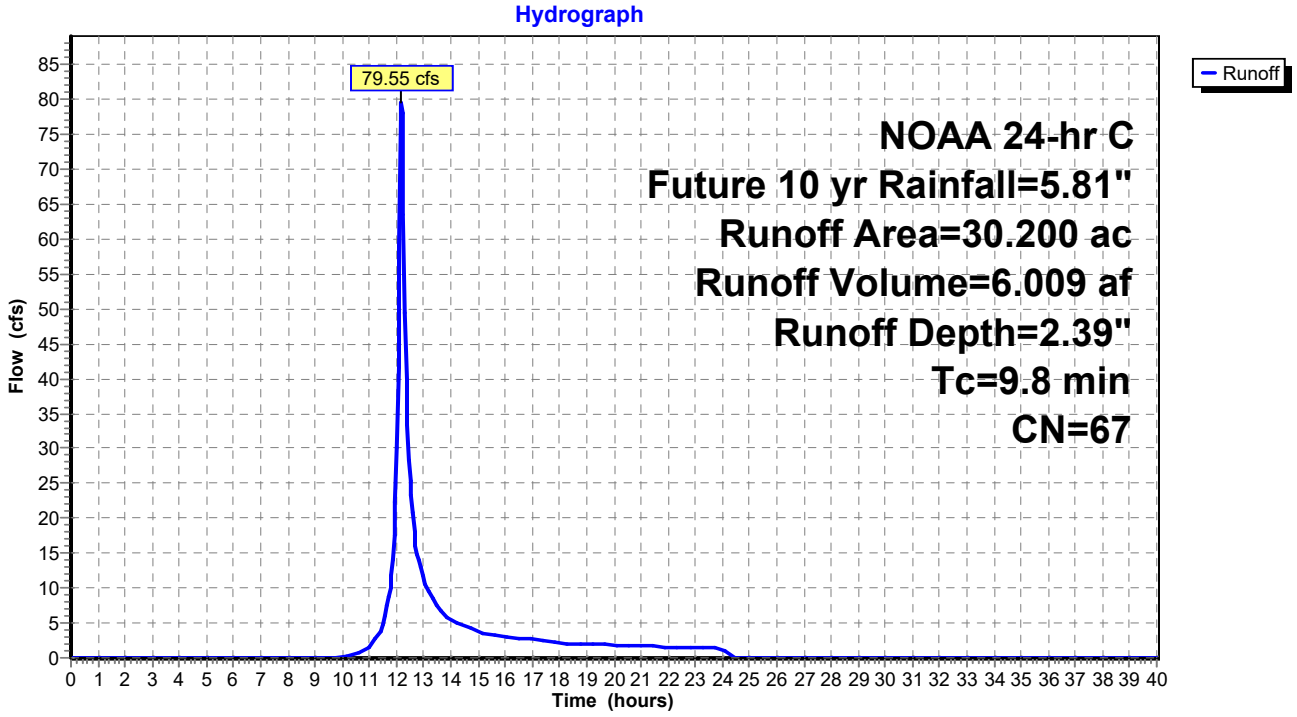
Runoff = 79.55 cfs @ 12.18 hrs, Volume= 6.009 af, Depth= 2.39"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.81"

Area (ac)	CN	Description
11.700	55	Woods, Good, HSG B
7.940	70	Woods, Good, HSG C
1.310	77	Woods, Good, HSG D
0.560	71	Row crops, C&T, Good, HSG B
8.690	78	Row crops, C&T, Good, HSG C
30.200	67	Weighted Average
30.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-4P: XDA-4 (pervious)



Summary for Subcatchment X-6S: XDA-4 (pervious)

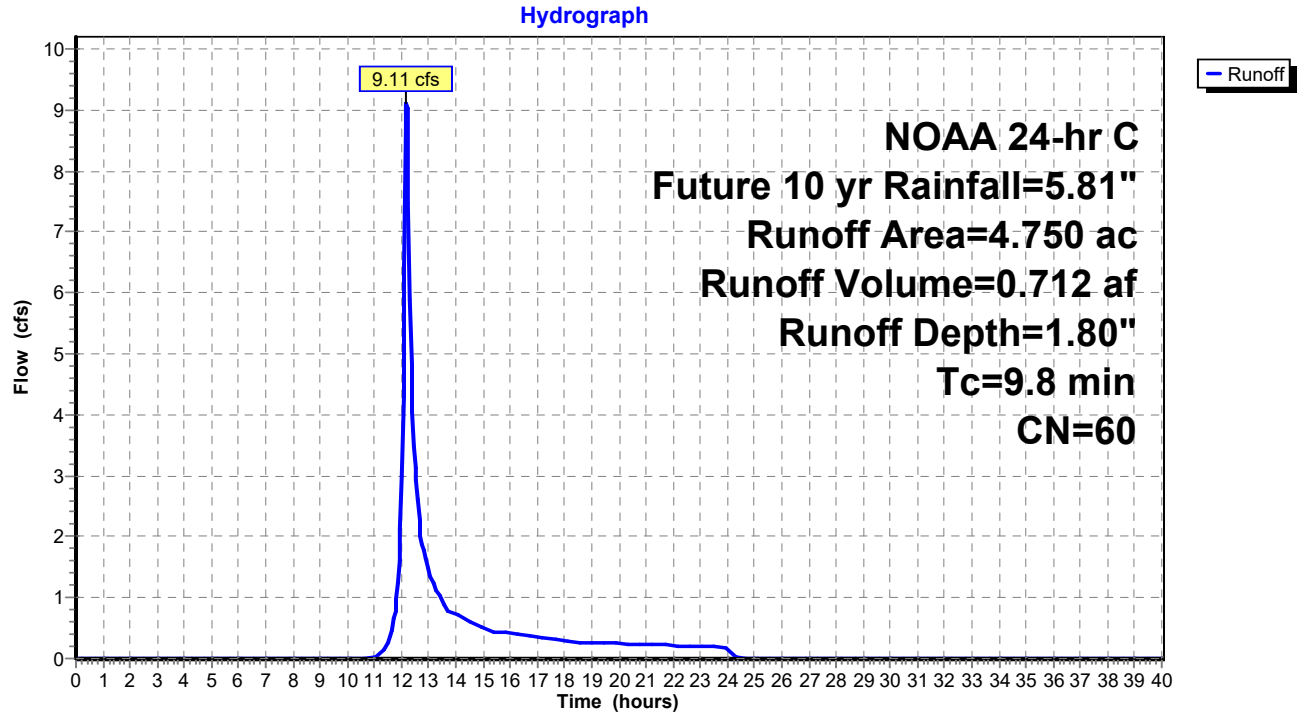
Runoff = 9.11 cfs @ 12.18 hrs, Volume= 0.712 af, Depth= 1.80"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.81"

Area (ac)	CN	Description
3.240	55	Woods, Good, HSG B
1.510	70	Woods, Good, HSG C
4.750	60	Weighted Average
4.750		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-6S: XDA-4 (pervious)

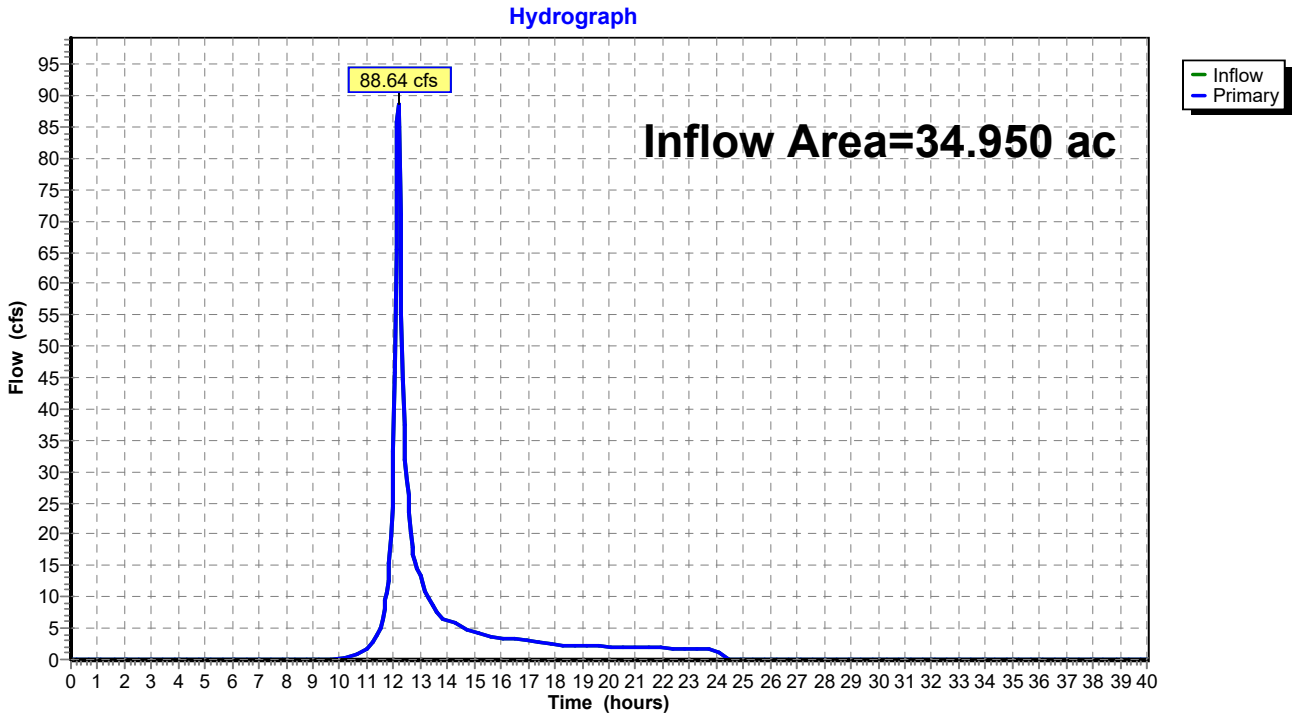


Summary for Link XDA-4: Existing Drainage Area #4

Inflow Area = 34.950 ac, 0.00% Impervious, Inflow Depth = 2.31" for Future 10 yr event
Inflow = 88.64 cfs @ 12.18 hrs, Volume= 6.721 af
Primary = 88.64 cfs @ 12.18 hrs, Volume= 6.721 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-4: Existing Drainage Area #4



Summary for Subcatchment X-4P: XDA-4 (pervious)

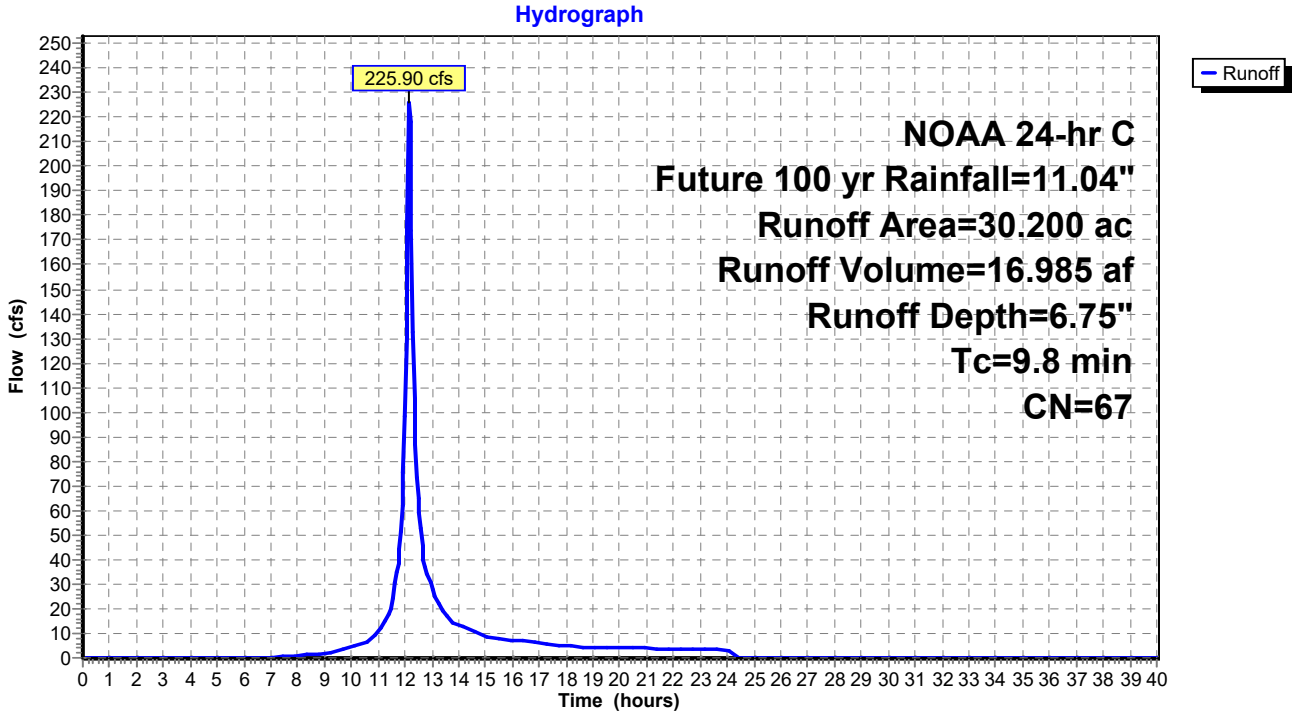
Runoff = 225.90 cfs @ 12.17 hrs, Volume= 16.985 af, Depth= 6.75"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.04"

Area (ac)	CN	Description
11.700	55	Woods, Good, HSG B
7.940	70	Woods, Good, HSG C
1.310	77	Woods, Good, HSG D
0.560	71	Row crops, C&T, Good, HSG B
8.690	78	Row crops, C&T, Good, HSG C
30.200	67	Weighted Average
30.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-4P: XDA-4 (pervious)



Summary for Subcatchment X-6S: XDA-4 (pervious)

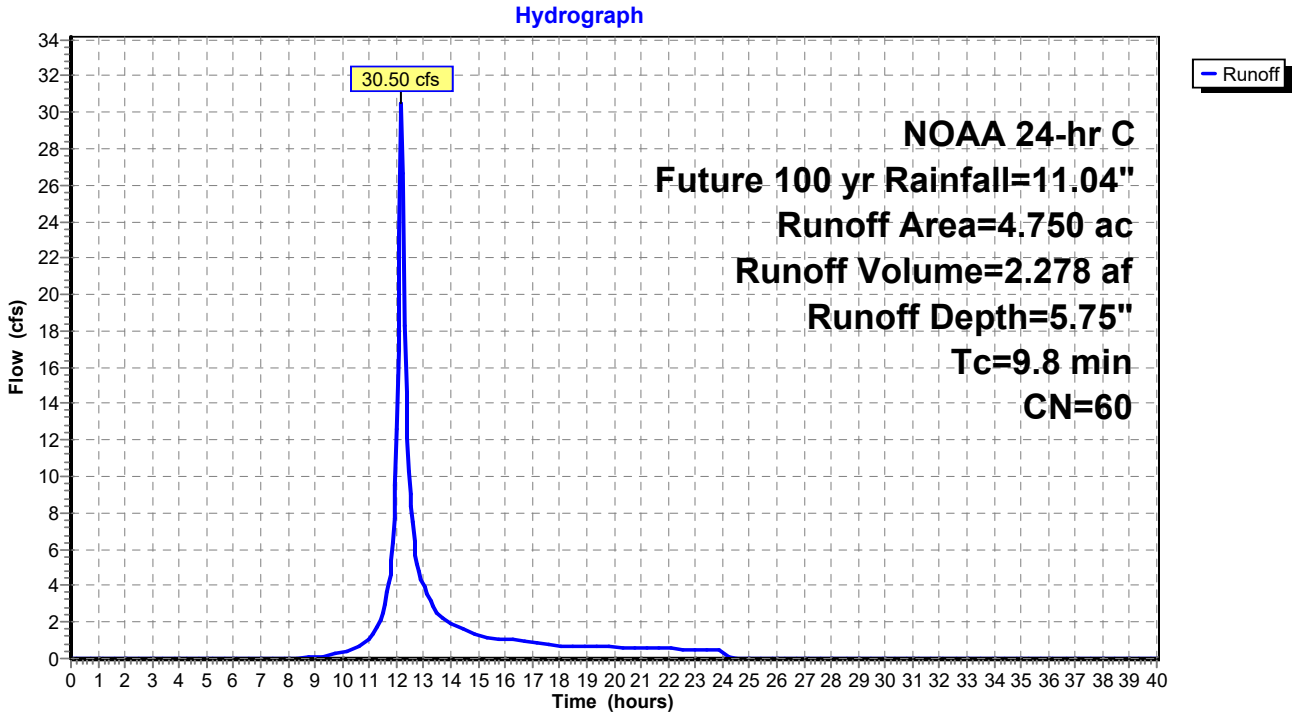
Runoff = 30.50 cfs @ 12.17 hrs, Volume= 2.278 af, Depth= 5.75"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.04"

Area (ac)	CN	Description
3.240	55	Woods, Good, HSG B
1.510	70	Woods, Good, HSG C
4.750	60	Weighted Average
4.750		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-6S: XDA-4 (pervious)

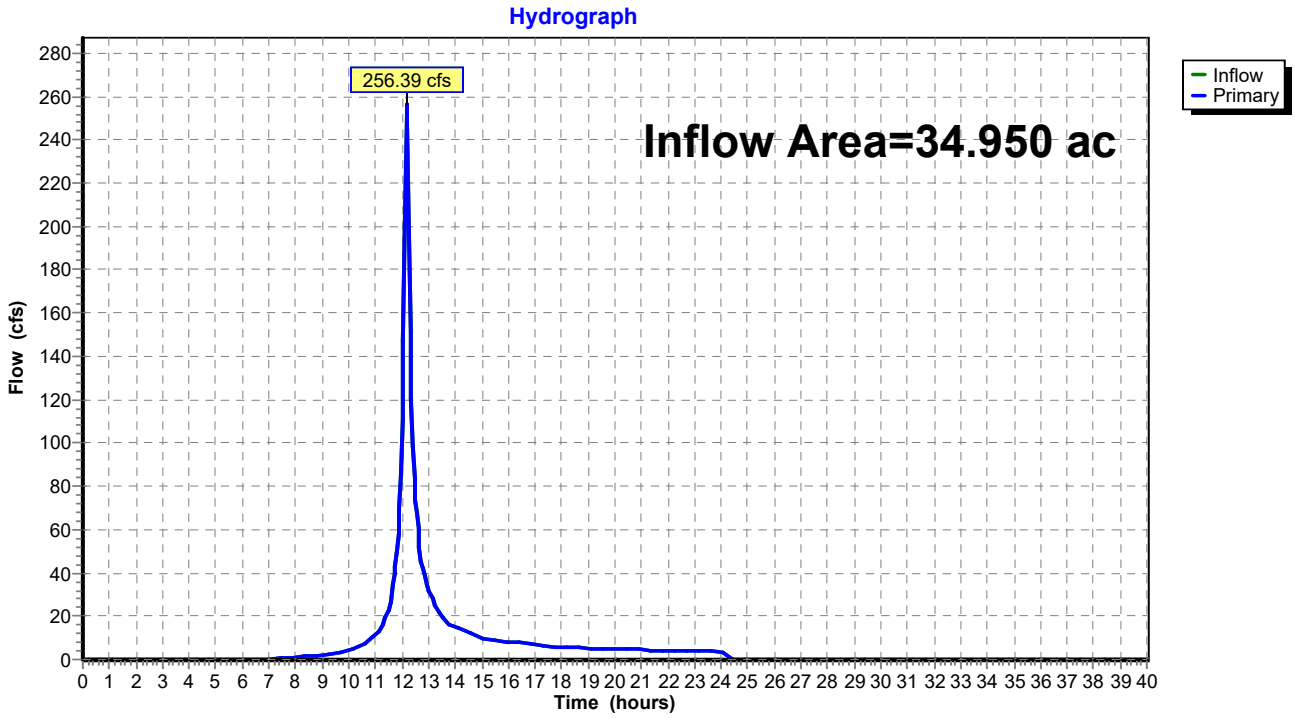


Summary for Link XDA-4: Existing Drainage Area #4

Inflow Area = 34.950 ac, 0.00% Impervious, Inflow Depth = 6.61" for Future 100 yr event
Inflow = 256.39 cfs @ 12.17 hrs, Volume= 19.263 af
Primary = 256.39 cfs @ 12.17 hrs, Volume= 19.263 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-4: Existing Drainage Area #4



Summary for Subcatchment X-4P: XDA-4 (pervious)

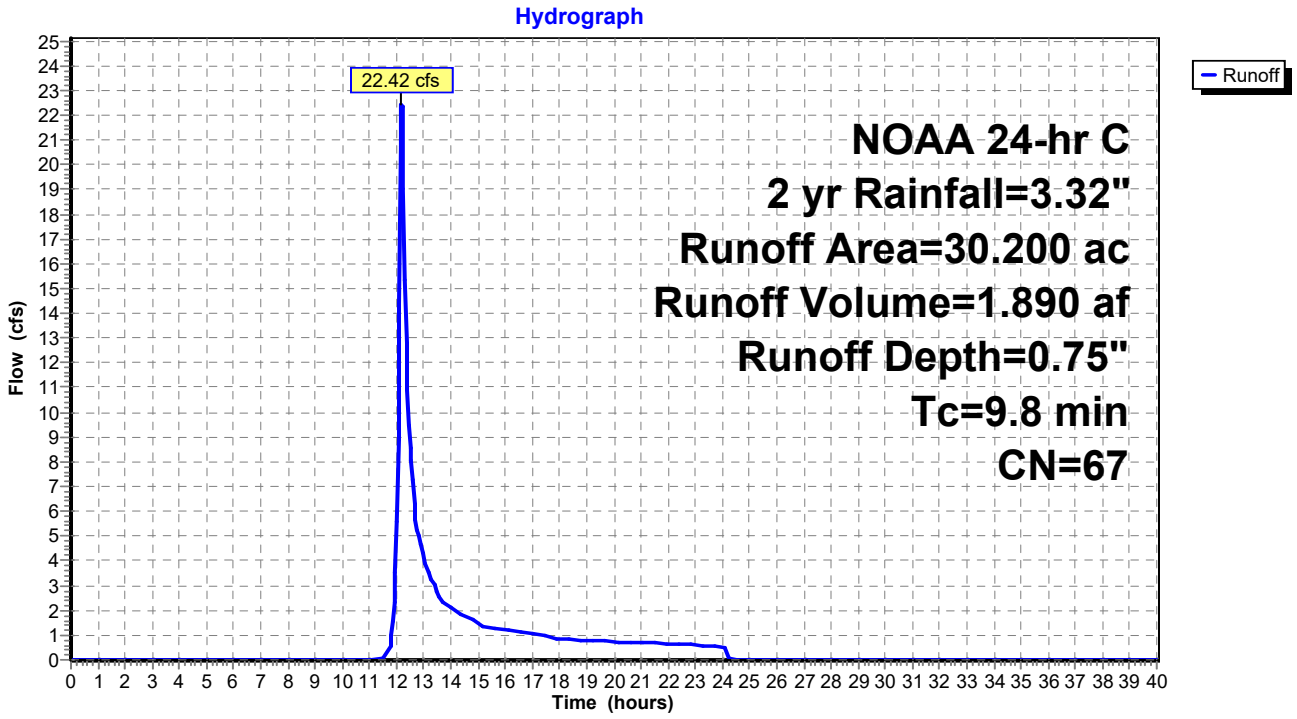
Runoff = 22.42 cfs @ 12.19 hrs, Volume= 1.890 af, Depth= 0.75"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 2 yr Rainfall=3.32"

Area (ac)	CN	Description
11.700	55	Woods, Good, HSG B
7.940	70	Woods, Good, HSG C
1.310	77	Woods, Good, HSG D
0.560	71	Row crops, C&T, Good, HSG B
8.690	78	Row crops, C&T, Good, HSG C
30.200	67	Weighted Average
30.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-4P: XDA-4 (pervious)



Summary for Subcatchment X-6S: XDA-4 (pervious)

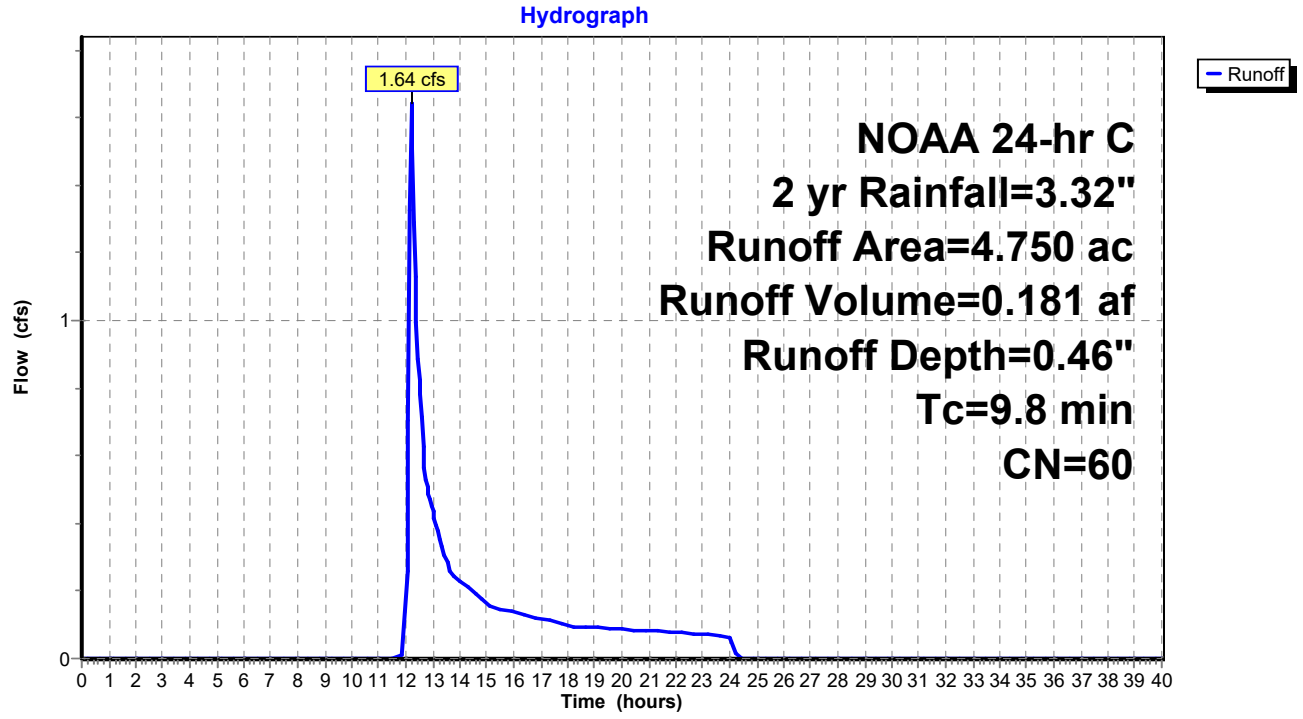
Runoff = 1.64 cfs @ 12.21 hrs, Volume= 0.181 af, Depth= 0.46"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 2 yr Rainfall=3.32"

Area (ac)	CN	Description
3.240	55	Woods, Good, HSG B
1.510	70	Woods, Good, HSG C
4.750	60	Weighted Average
4.750		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-6S: XDA-4 (pervious)

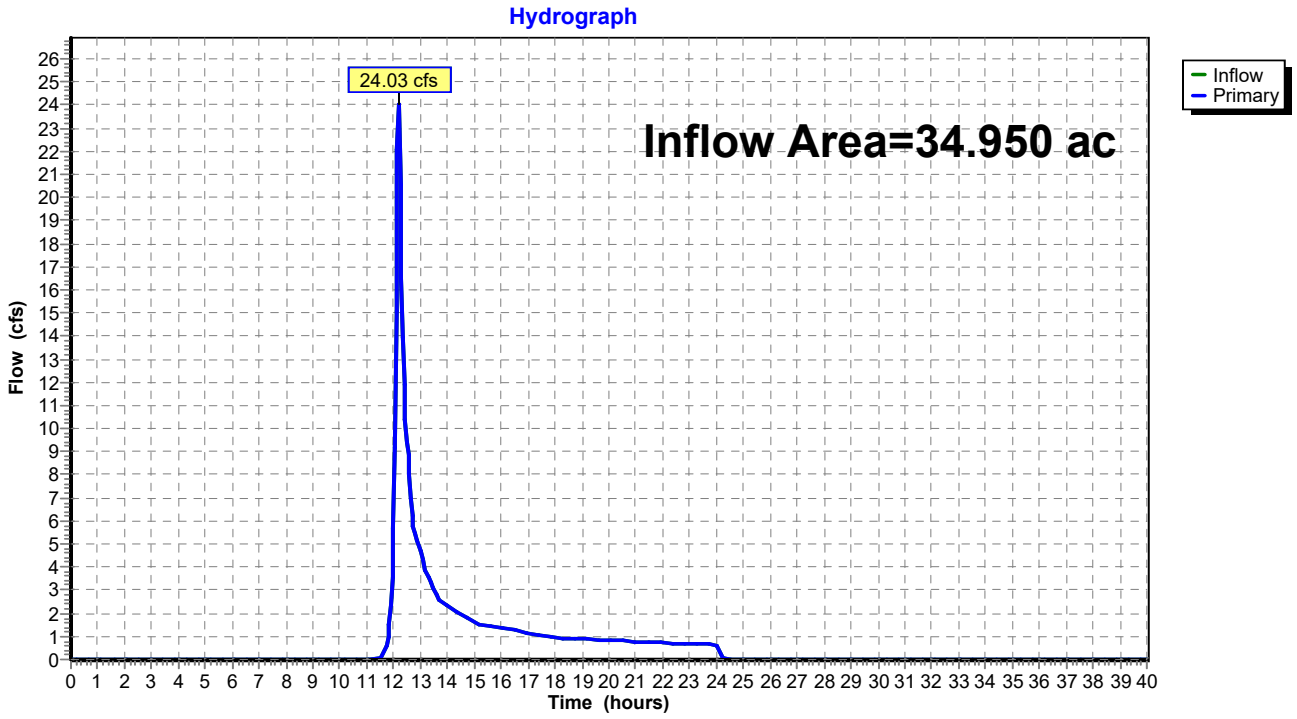


Summary for Link XDA-4: Existing Drainage Area #4

Inflow Area = 34.950 ac, 0.00% Impervious, Inflow Depth = 0.71" for 2 yr event
Inflow = 24.03 cfs @ 12.19 hrs, Volume= 2.070 af
Primary = 24.03 cfs @ 12.19 hrs, Volume= 2.070 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-4: Existing Drainage Area #4



Summary for Subcatchment X-4P: XDA-4 (pervious)

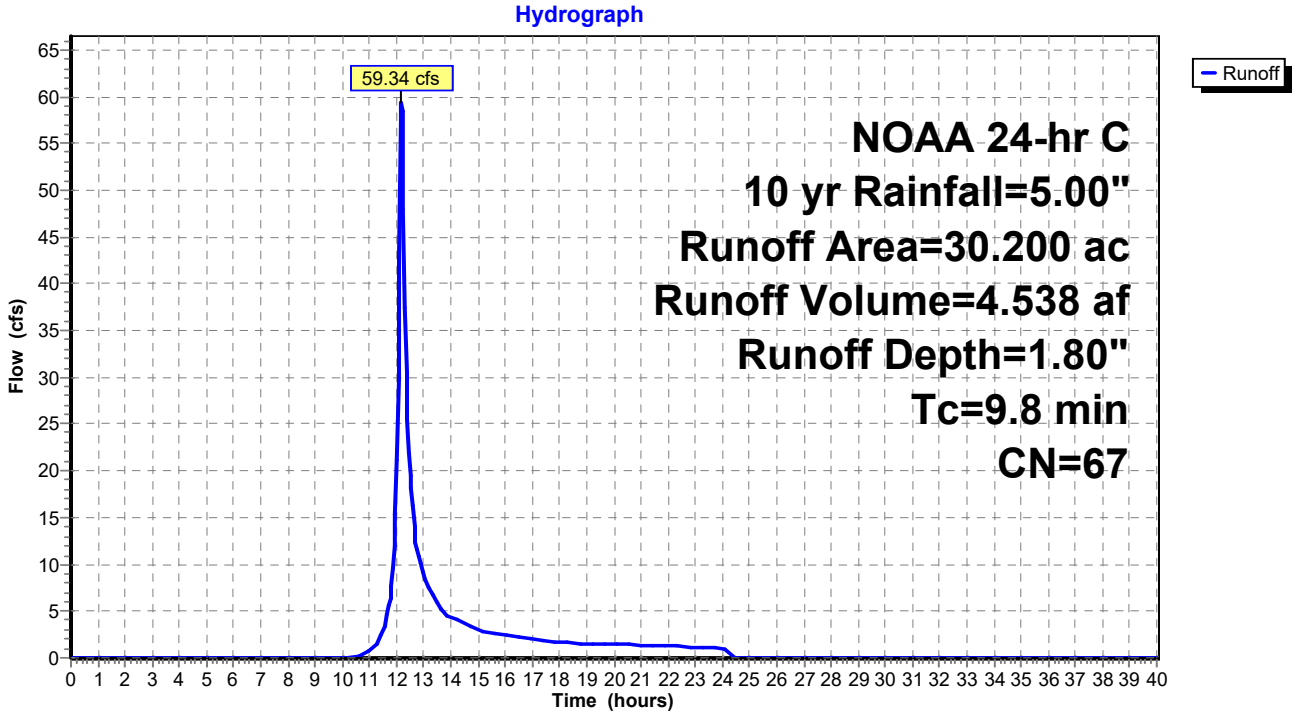
Runoff = 59.34 cfs @ 12.18 hrs, Volume= 4.538 af, Depth= 1.80"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 10 yr Rainfall=5.00"

Area (ac)	CN	Description
11.700	55	Woods, Good, HSG B
7.940	70	Woods, Good, HSG C
1.310	77	Woods, Good, HSG D
0.560	71	Row crops, C&T, Good, HSG B
8.690	78	Row crops, C&T, Good, HSG C
30.200	67	Weighted Average
30.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-4P: XDA-4 (pervious)



Summary for Subcatchment X-6S: XDA-4 (pervious)

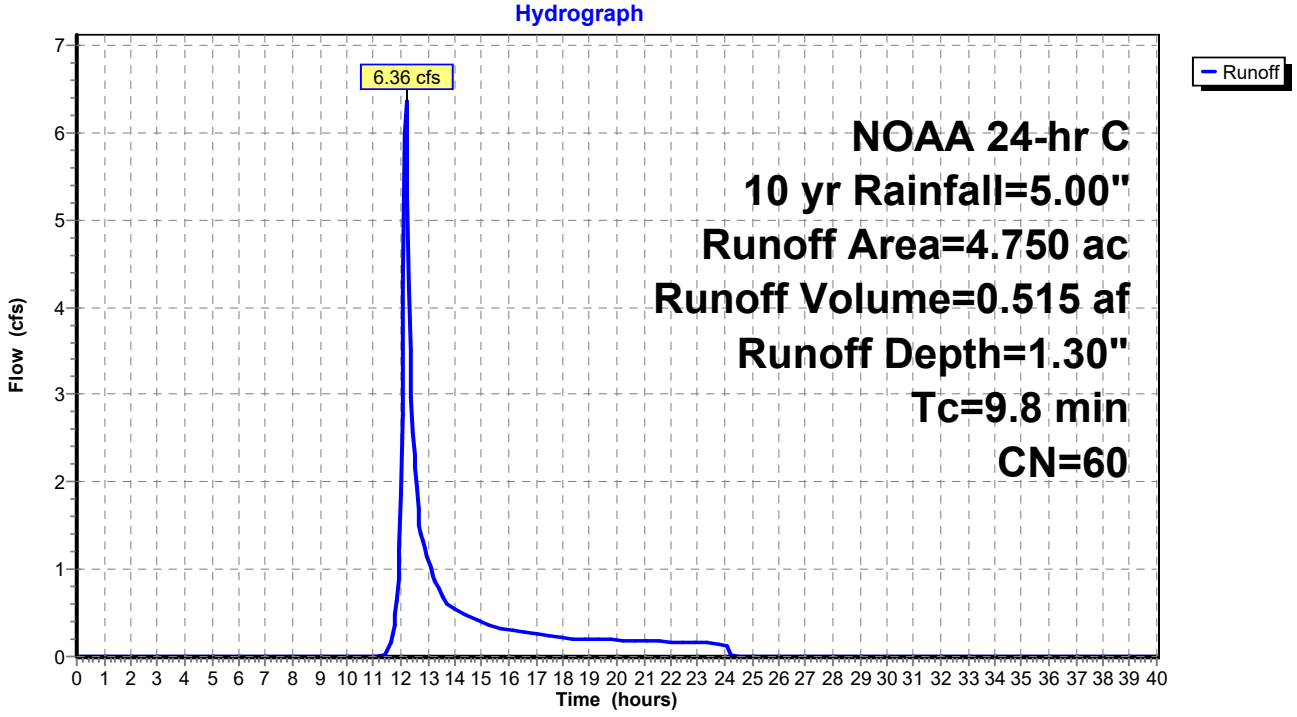
Runoff = 6.36 cfs @ 12.19 hrs, Volume= 0.515 af, Depth= 1.30"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 10 yr Rainfall=5.00"

Area (ac)	CN	Description
3.240	55	Woods, Good, HSG B
1.510	70	Woods, Good, HSG C
4.750	60	Weighted Average
4.750		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-6S: XDA-4 (pervious)

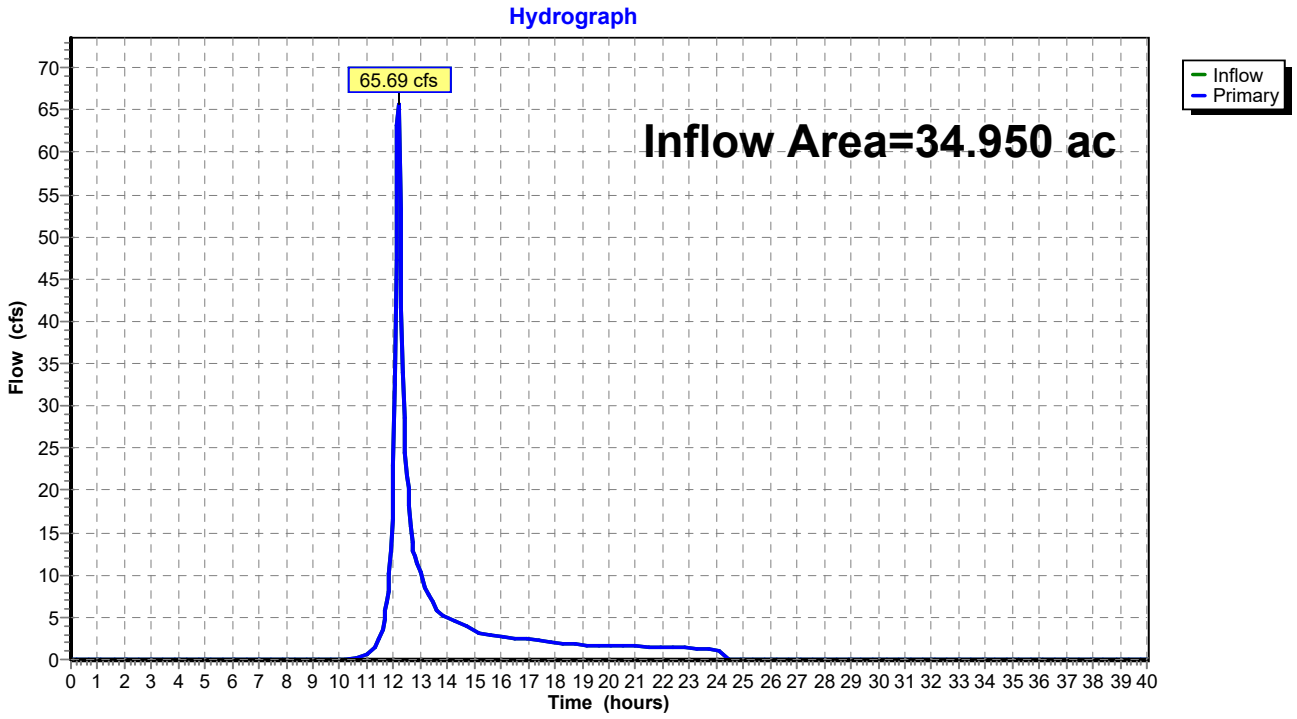


Summary for Link XDA-4: Existing Drainage Area #4

Inflow Area = 34.950 ac, 0.00% Impervious, Inflow Depth = 1.73" for 10 yr event
Inflow = 65.69 cfs @ 12.18 hrs, Volume= 5.053 af
Primary = 65.69 cfs @ 12.18 hrs, Volume= 5.053 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-4: Existing Drainage Area #4



Summary for Subcatchment X-4P: XDA-4 (pervious)

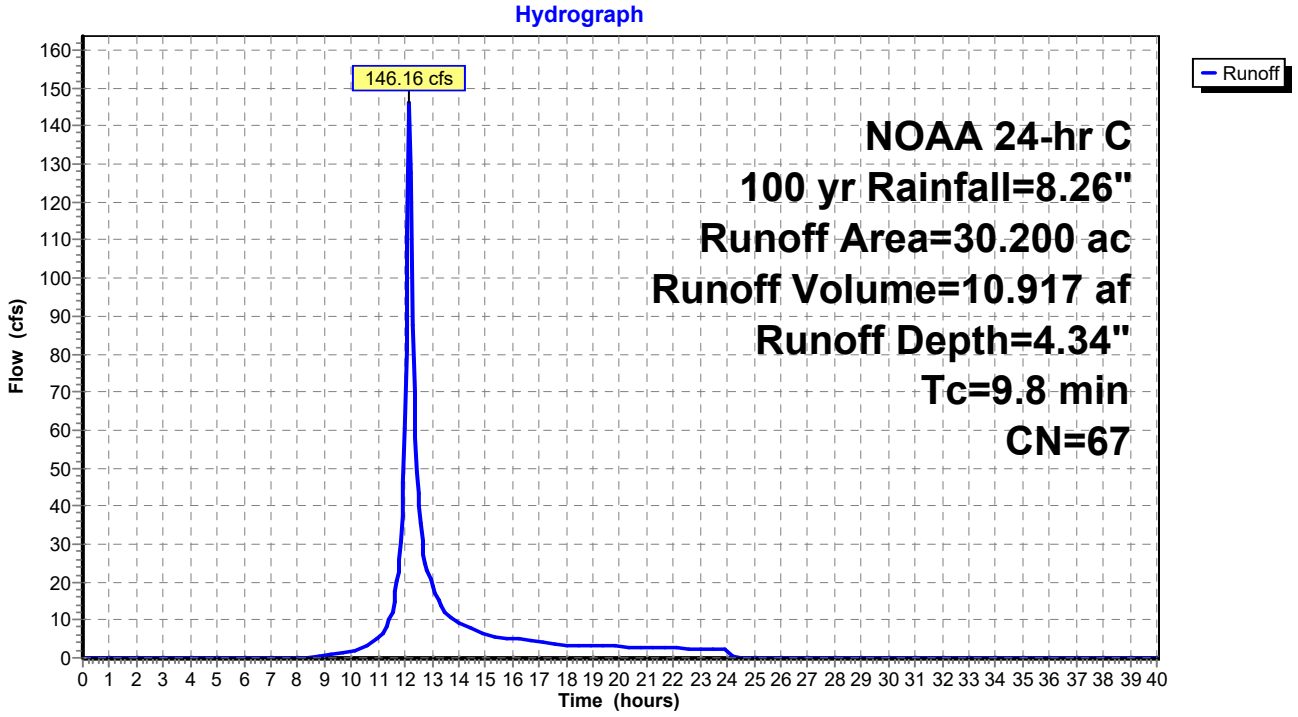
Runoff = 146.16 cfs @ 12.17 hrs, Volume= 10.917 af, Depth= 4.34"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 100 yr Rainfall=8.26"

Area (ac)	CN	Description
11.700	55	Woods, Good, HSG B
7.940	70	Woods, Good, HSG C
1.310	77	Woods, Good, HSG D
0.560	71	Row crops, C&T, Good, HSG B
8.690	78	Row crops, C&T, Good, HSG C
30.200	67	Weighted Average
30.200		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-4P: XDA-4 (pervious)



Summary for Subcatchment X-6S: XDA-4 (pervious)

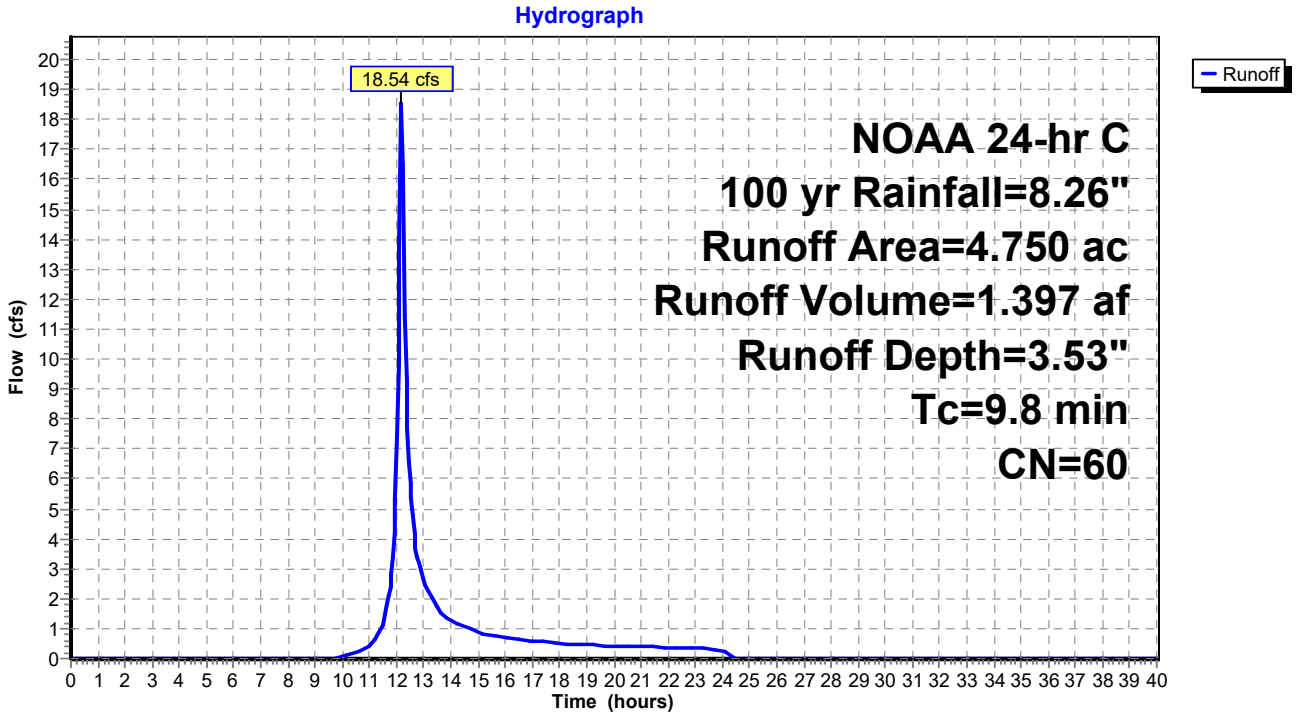
Runoff = 18.54 cfs @ 12.18 hrs, Volume= 1.397 af, Depth= 3.53"
Routed to Link XDA-4 : Existing Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 100 yr Rainfall=8.26"

Area (ac)	CN	Description
3.240	55	Woods, Good, HSG B
1.510	70	Woods, Good, HSG C
4.750	60	Weighted Average
4.750		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.8					**Direct Entry,**

Subcatchment X-6S: XDA-4 (pervious)

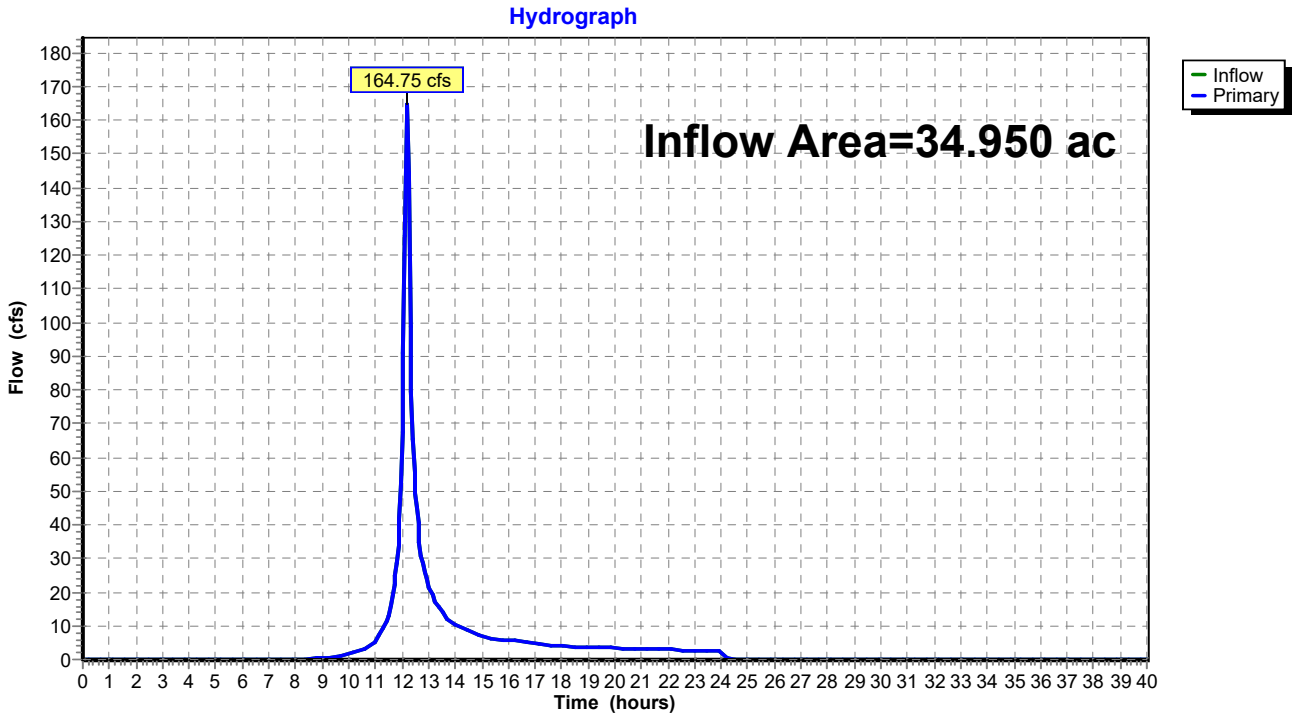


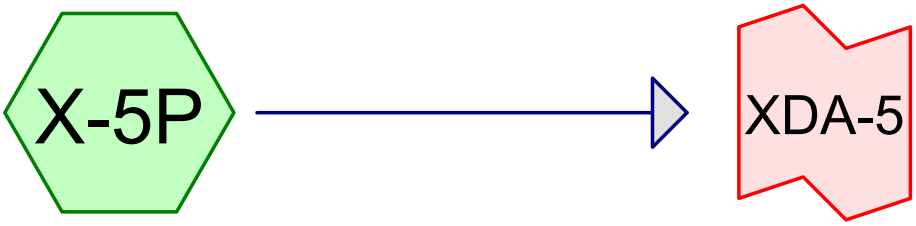
Summary for Link XDA-4: Existing Drainage Area #4

Inflow Area = 34.950 ac, 0.00% Impervious, Inflow Depth = 4.23" for 100 yr event
Inflow = 164.75 cfs @ 12.17 hrs, Volume= 12.314 af
Primary = 164.75 cfs @ 12.17 hrs, Volume= 12.314 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-4: Existing Drainage Area #4





XDA-5 (pervious)

Existing Drainage Area #5

Subcat Reach Pond Link

Summary for Subcatchment X-5P: XDA-5 (pervious)

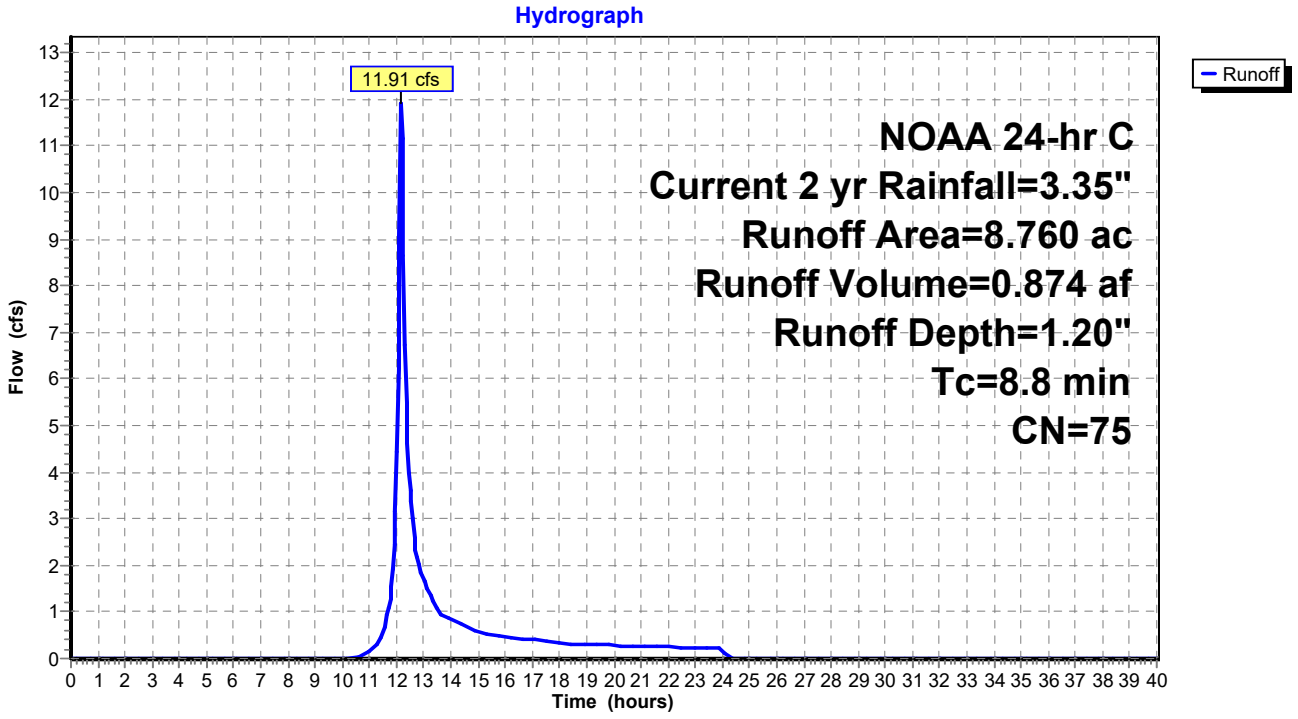
Runoff = 11.91 cfs @ 12.17 hrs, Volume= 0.874 af, Depth= 1.20"
Routed to Link XDA-5 : Existing Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
3.790	71	Row crops, C&T, Good, HSG B
4.970	78	Row crops, C&T, Good, HSG C
8.760	75	Weighted Average
8.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.8					**Direct Entry,**

Subcatchment X-5P: XDA-5 (pervious)

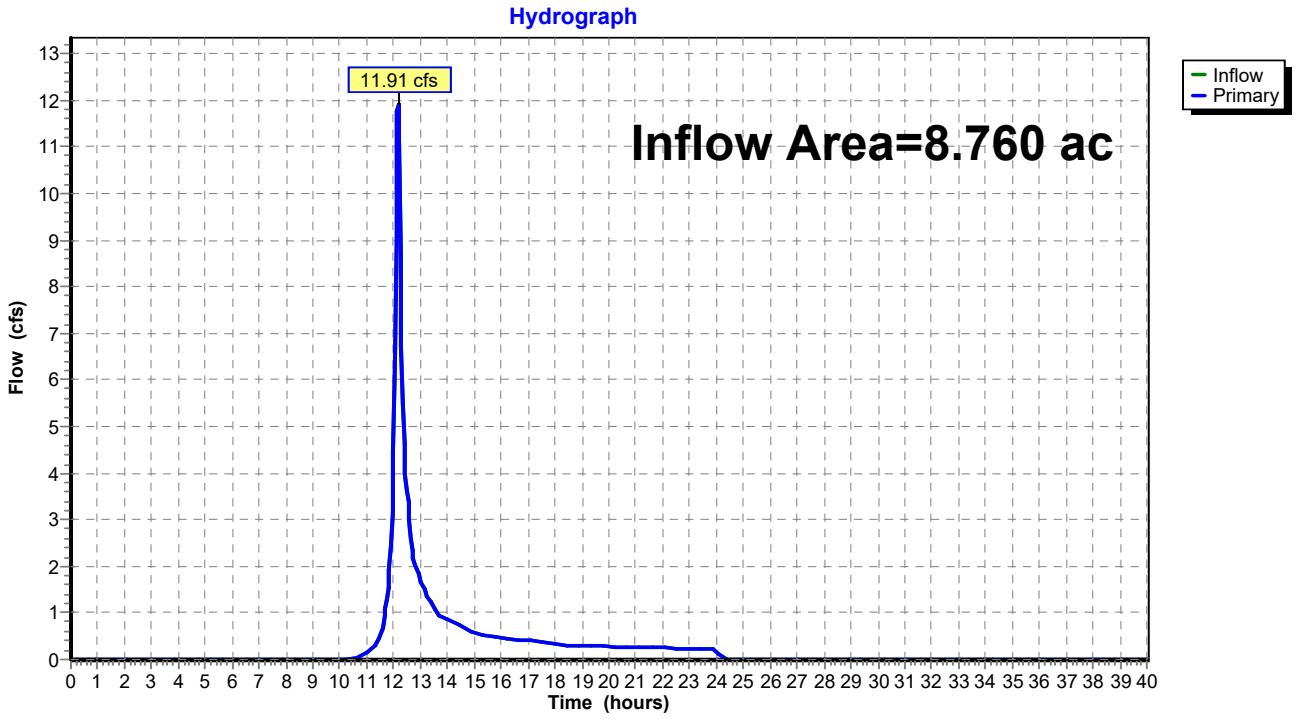


Summary for Link XDA-5: Existing Drainage Area #5

Inflow Area = 8.760 ac, 0.00% Impervious, Inflow Depth = 1.20" for Current 2 yr event
Inflow = 11.91 cfs @ 12.17 hrs, Volume= 0.874 af
Primary = 11.91 cfs @ 12.17 hrs, Volume= 0.874 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-5: Existing Drainage Area #5



Summary for Subcatchment X-5P: XDA-5 (pervious)

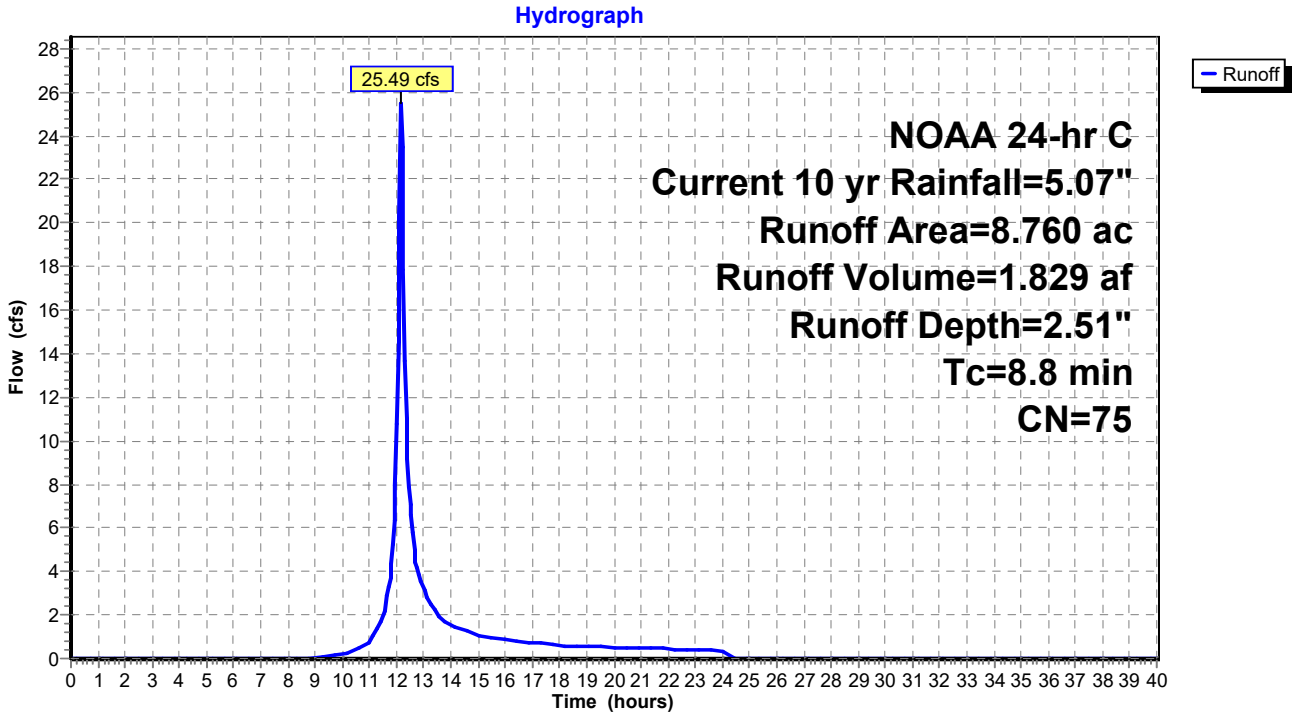
Runoff = 25.49 cfs @ 12.16 hrs, Volume= 1.829 af, Depth= 2.51"
Routed to Link XDA-5 : Existing Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.07"

Area (ac)	CN	Description
3.790	71	Row crops, C&T, Good, HSG B
4.970	78	Row crops, C&T, Good, HSG C
8.760	75	Weighted Average
8.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.8					**Direct Entry,**

Subcatchment X-5P: XDA-5 (pervious)

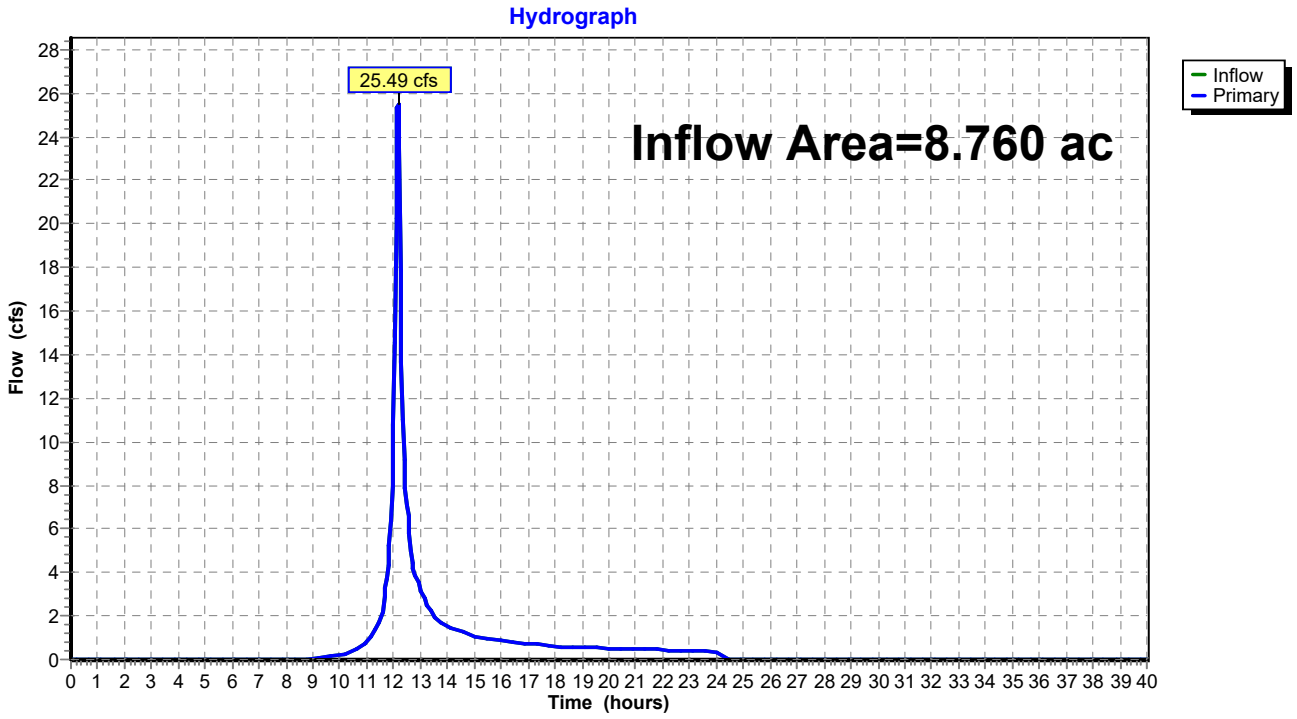


Summary for Link XDA-5: Existing Drainage Area #5

Inflow Area = 8.760 ac, 0.00% Impervious, Inflow Depth = 2.51" for Current 10 yr event
Inflow = 25.49 cfs @ 12.16 hrs, Volume= 1.829 af
Primary = 25.49 cfs @ 12.16 hrs, Volume= 1.829 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-5: Existing Drainage Area #5



Summary for Subcatchment X-5P: XDA-5 (pervious)

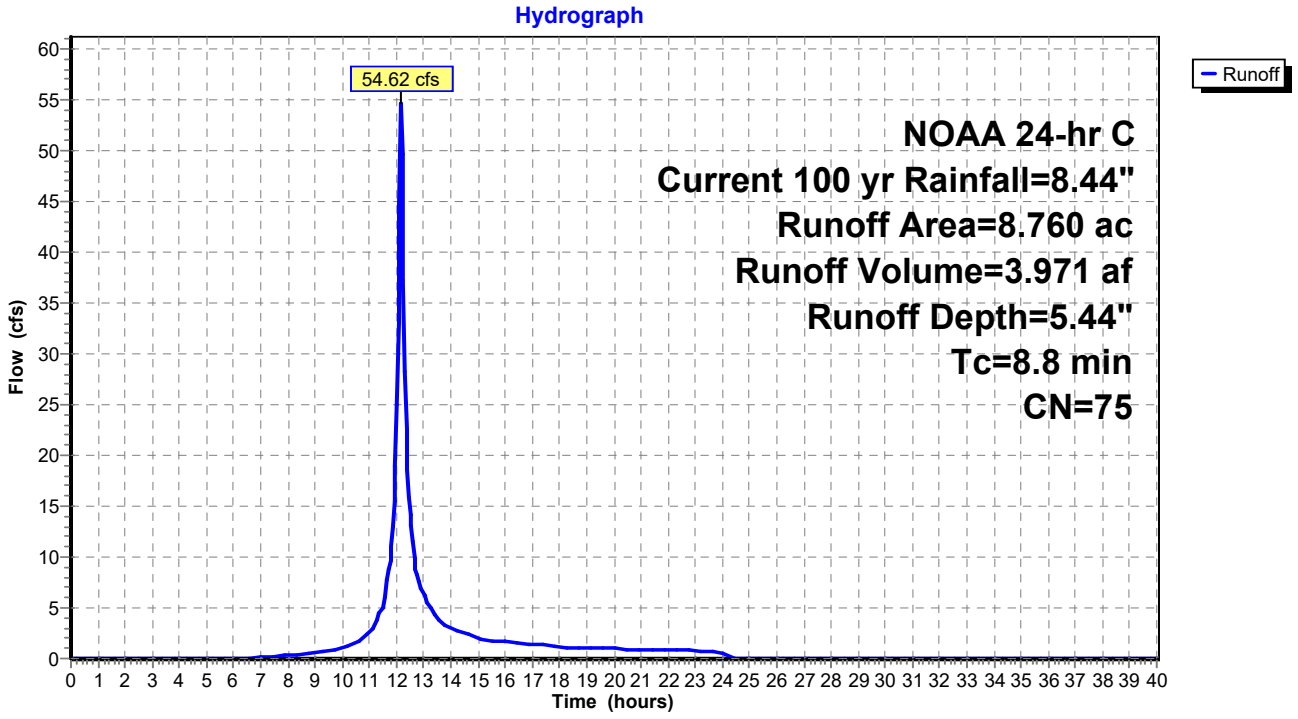
Runoff = 54.62 cfs @ 12.16 hrs, Volume= 3.971 af, Depth= 5.44"
Routed to Link XDA-5 : Existing Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.44"

Area (ac)	CN	Description
3.790	71	Row crops, C&T, Good, HSG B
4.970	78	Row crops, C&T, Good, HSG C
8.760	75	Weighted Average
8.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.8					**Direct Entry,**

Subcatchment X-5P: XDA-5 (pervious)

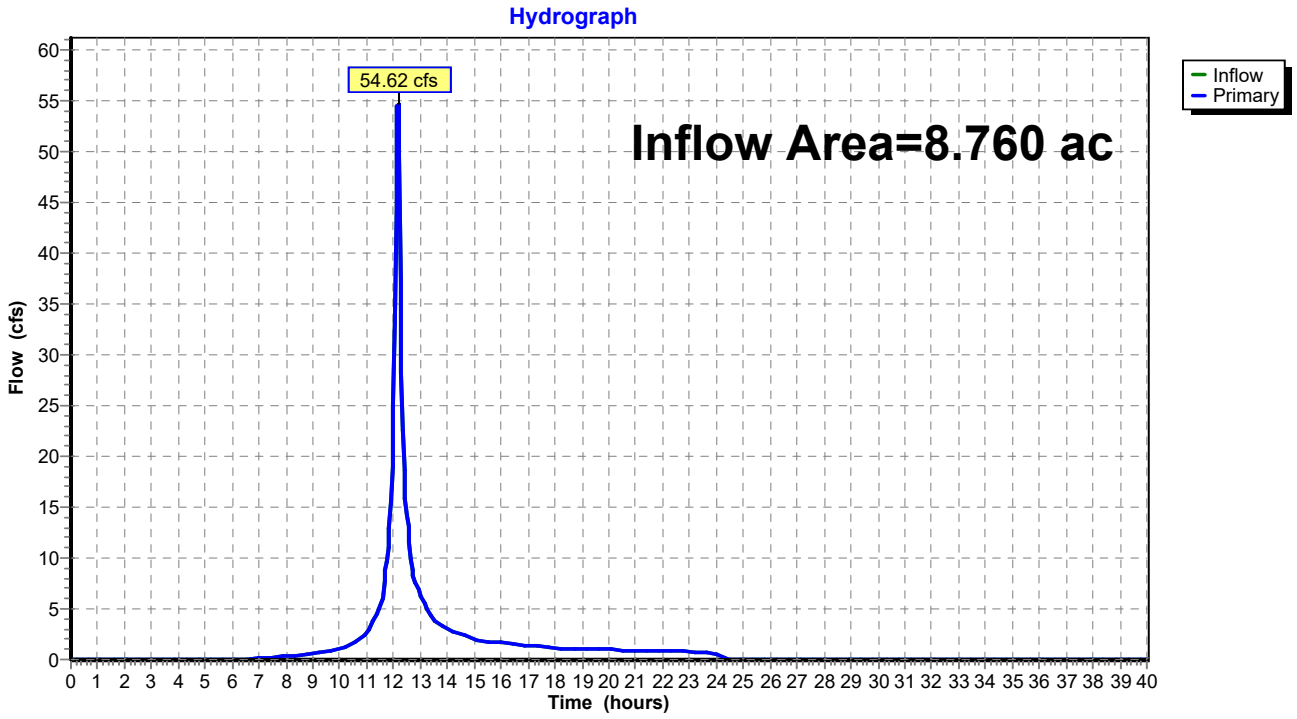


Summary for Link XDA-5: Existing Drainage Area #5

Inflow Area = 8.760 ac, 0.00% Impervious, Inflow Depth = 5.44" for Current 100 yr event
Inflow = 54.62 cfs @ 12.16 hrs, Volume= 3.971 af
Primary = 54.62 cfs @ 12.16 hrs, Volume= 3.971 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-5: Existing Drainage Area #5



Summary for Subcatchment X-5P: XDA-5 (pervious)

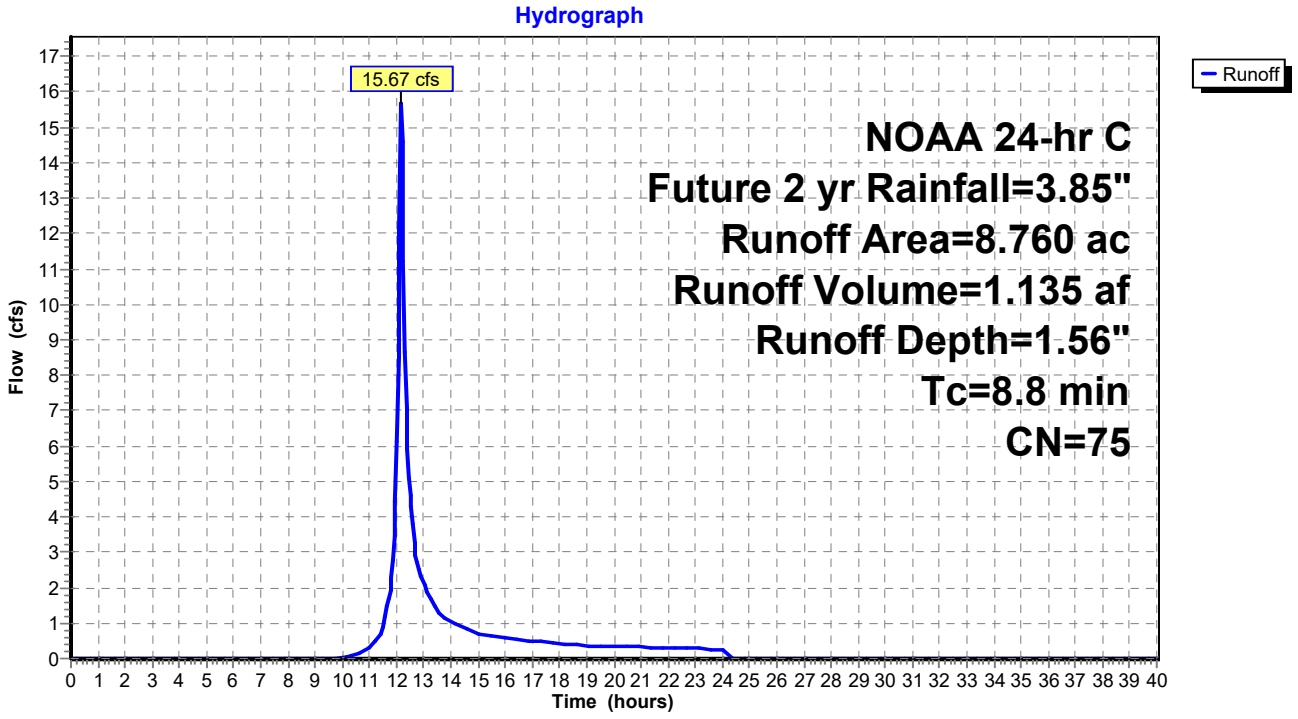
Runoff = 15.67 cfs @ 12.16 hrs, Volume= 1.135 af, Depth= 1.56"
Routed to Link XDA-5 : Existing Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
3.790	71	Row crops, C&T, Good, HSG B
4.970	78	Row crops, C&T, Good, HSG C
8.760	75	Weighted Average
8.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.8					**Direct Entry,**

Subcatchment X-5P: XDA-5 (pervious)

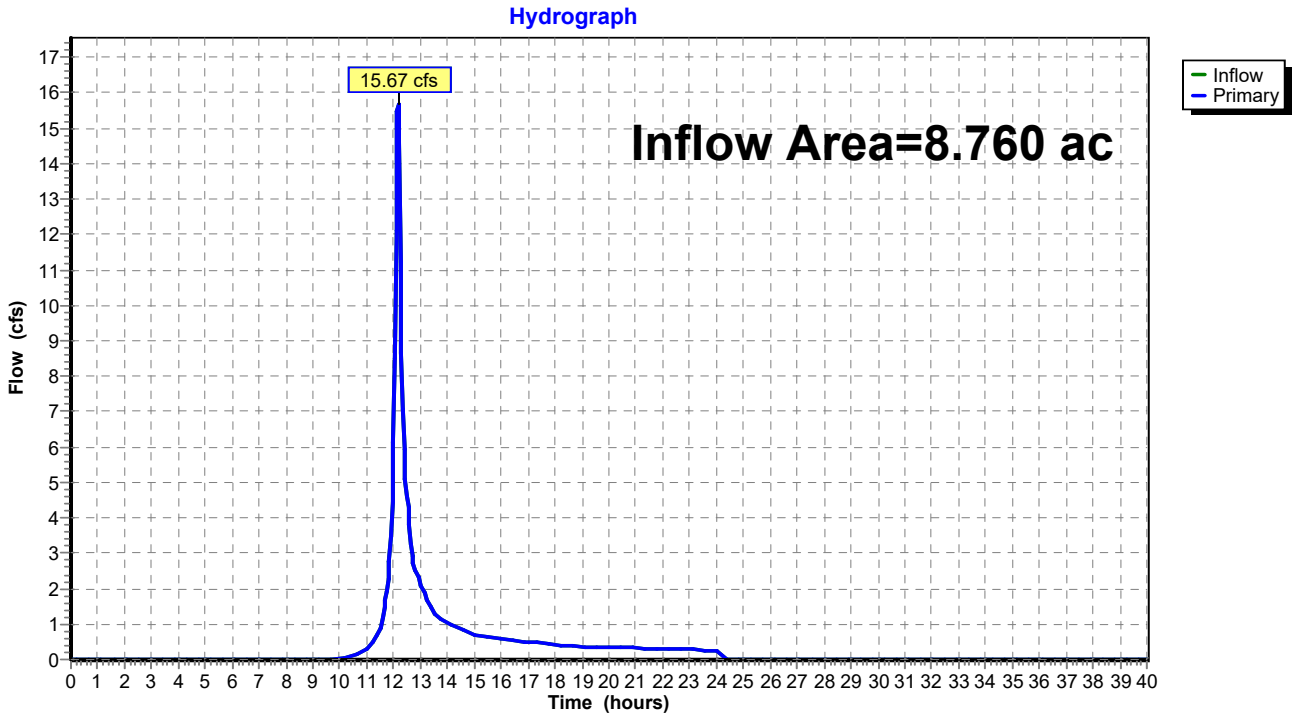


Summary for Link XDA-5: Existing Drainage Area #5

Inflow Area = 8.760 ac, 0.00% Impervious, Inflow Depth = 1.56" for Future 2 yr event
Inflow = 15.67 cfs @ 12.16 hrs, Volume= 1.135 af
Primary = 15.67 cfs @ 12.16 hrs, Volume= 1.135 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-5: Existing Drainage Area #5



Summary for Subcatchment X-5P: XDA-5 (pervious)

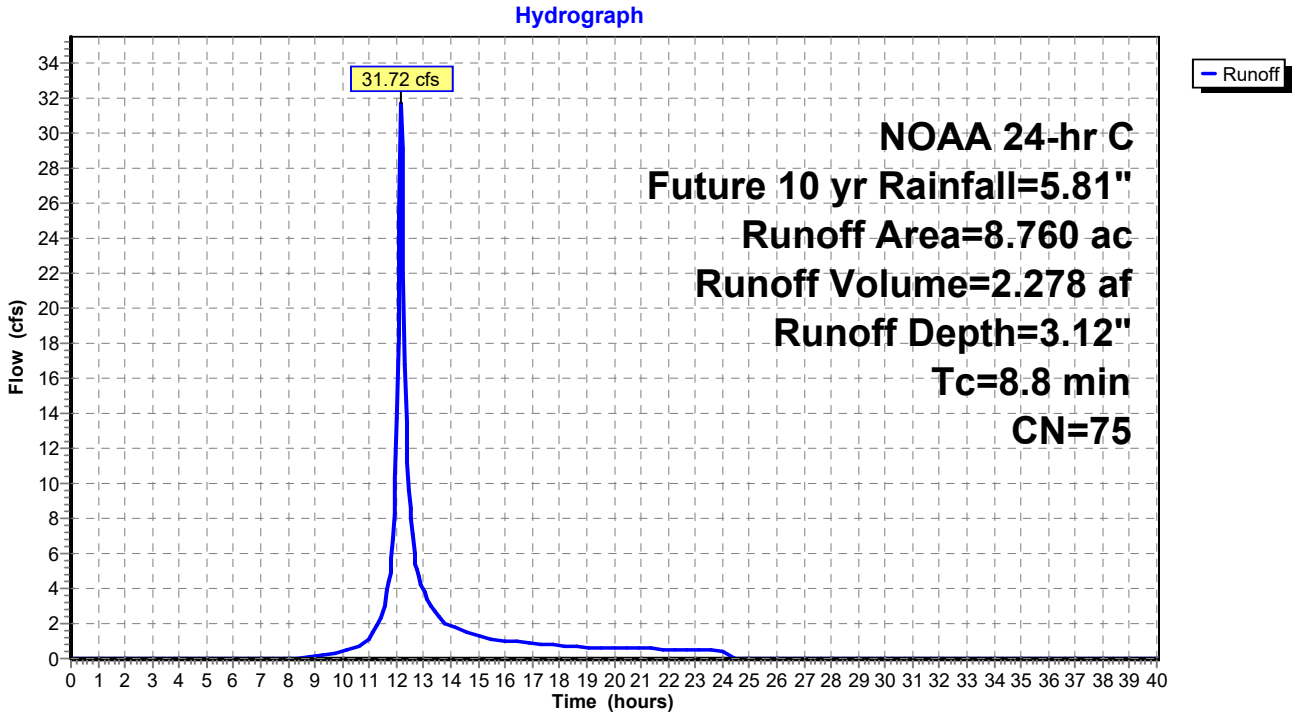
Runoff = 31.72 cfs @ 12.16 hrs, Volume= 2.278 af, Depth= 3.12"
Routed to Link XDA-5 : Existing Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.81"

Area (ac)	CN	Description
3.790	71	Row crops, C&T, Good, HSG B
4.970	78	Row crops, C&T, Good, HSG C
8.760	75	Weighted Average
8.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.8					**Direct Entry,**

Subcatchment X-5P: XDA-5 (pervious)

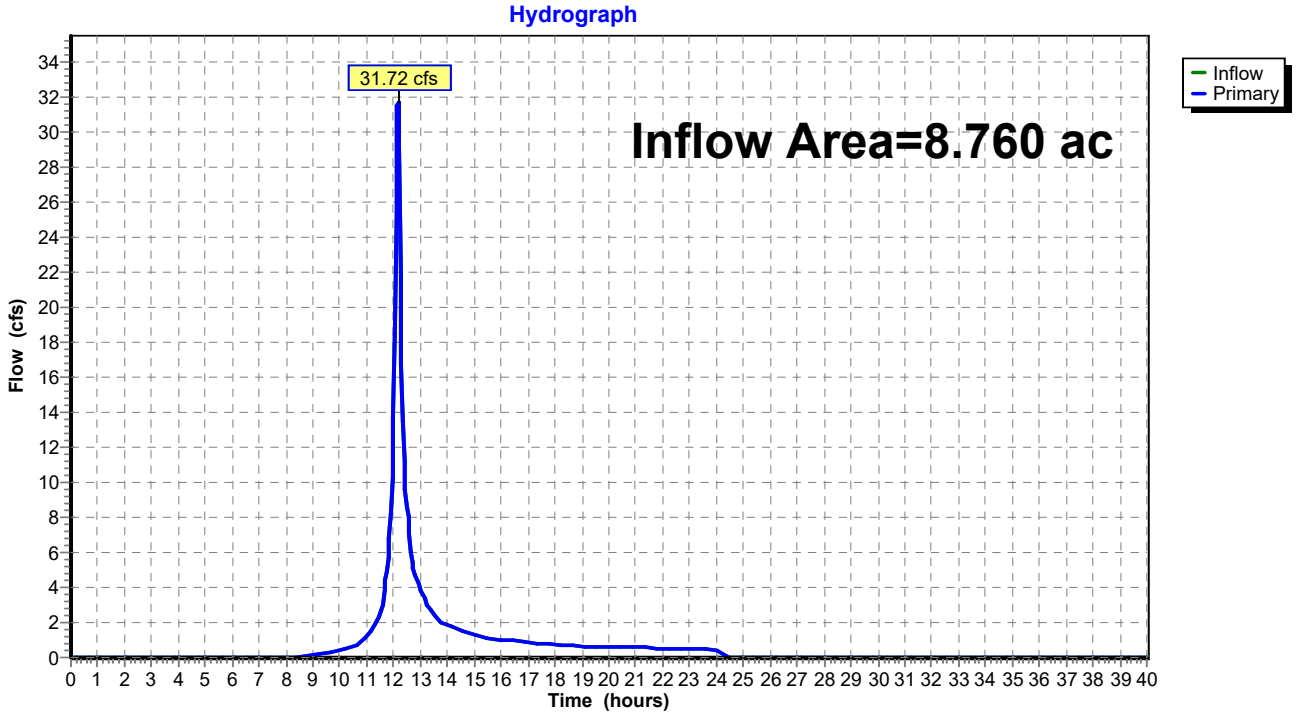


Summary for Link XDA-5: Existing Drainage Area #5

Inflow Area = 8.760 ac, 0.00% Impervious, Inflow Depth = 3.12" for Future 10 yr event
Inflow = 31.72 cfs @ 12.16 hrs, Volume= 2.278 af
Primary = 31.72 cfs @ 12.16 hrs, Volume= 2.278 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-5: Existing Drainage Area #5



Summary for Subcatchment X-5P: XDA-5 (pervious)

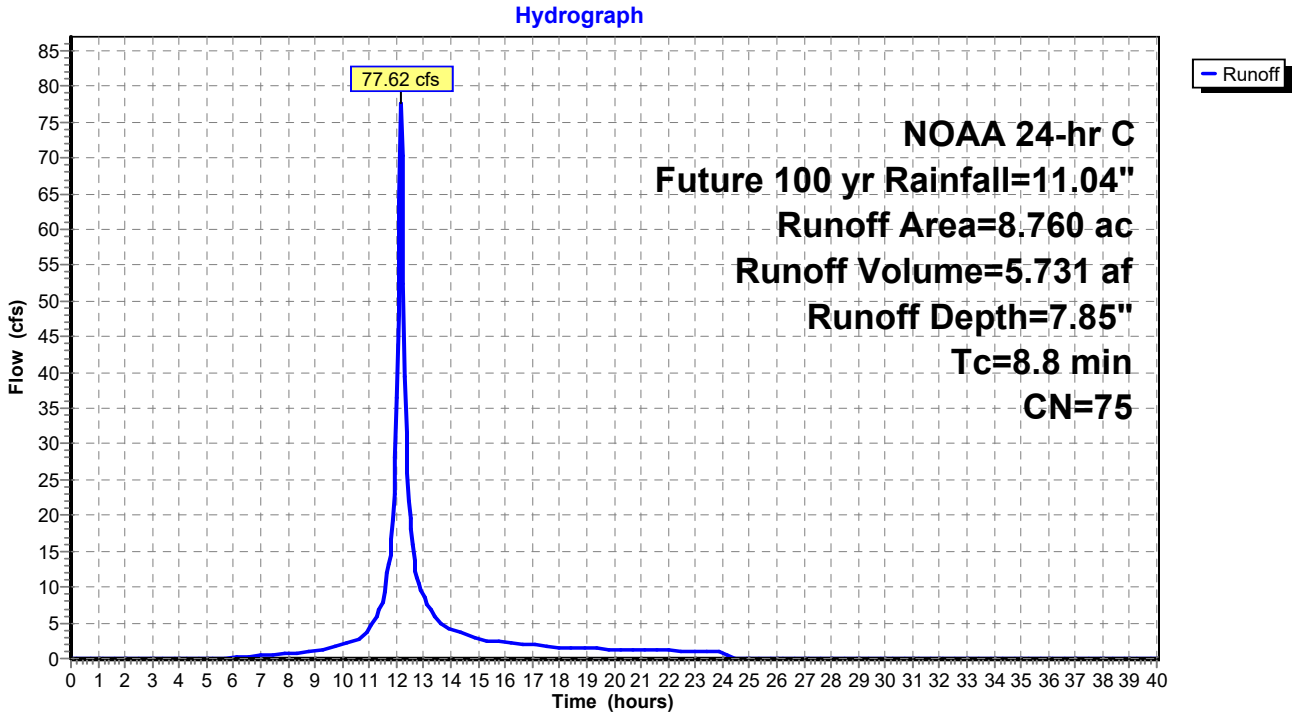
Runoff = 77.62 cfs @ 12.16 hrs, Volume= 5.731 af, Depth= 7.85"
Routed to Link XDA-5 : Existing Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.04"

Area (ac)	CN	Description
3.790	71	Row crops, C&T, Good, HSG B
4.970	78	Row crops, C&T, Good, HSG C
8.760	75	Weighted Average
8.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.8					**Direct Entry,**

Subcatchment X-5P: XDA-5 (pervious)

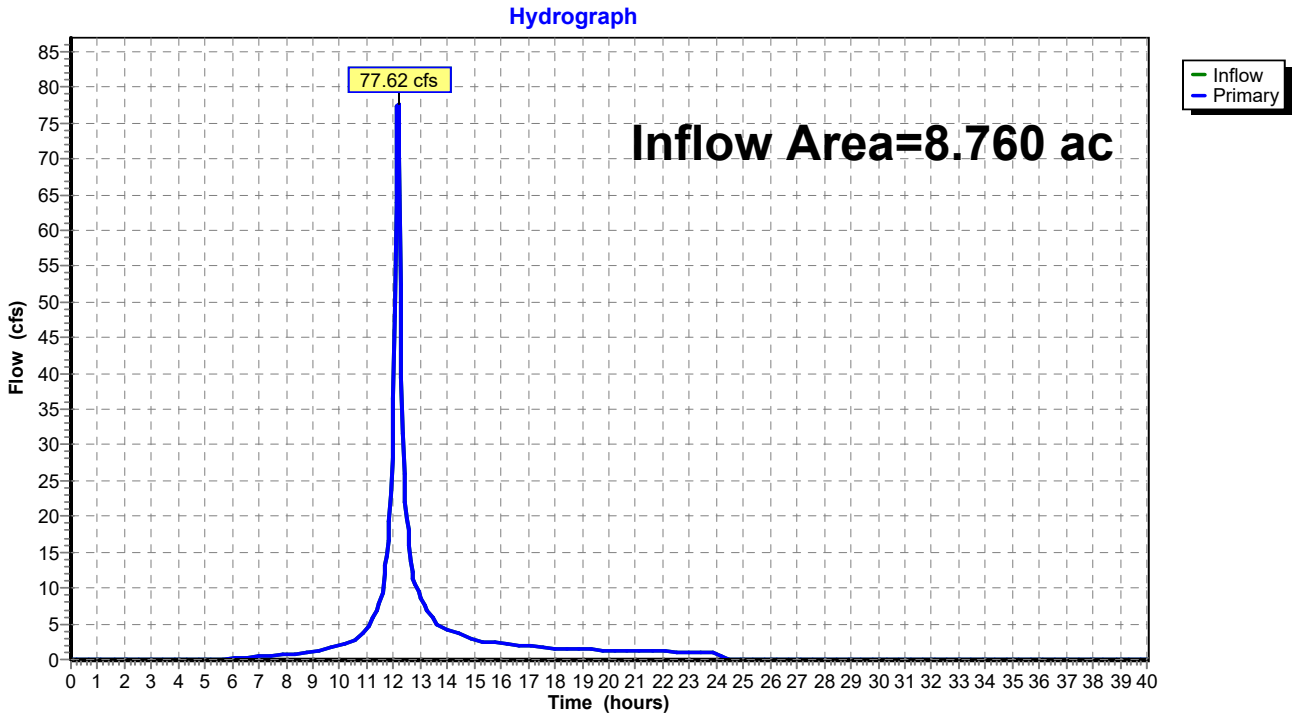


Summary for Link XDA-5: Existing Drainage Area #5

Inflow Area = 8.760 ac, 0.00% Impervious, Inflow Depth = 7.85" for Future 100 yr event
Inflow = 77.62 cfs @ 12.16 hrs, Volume= 5.731 af
Primary = 77.62 cfs @ 12.16 hrs, Volume= 5.731 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-5: Existing Drainage Area #5



Summary for Subcatchment X-5P: XDA-5 (pervious)

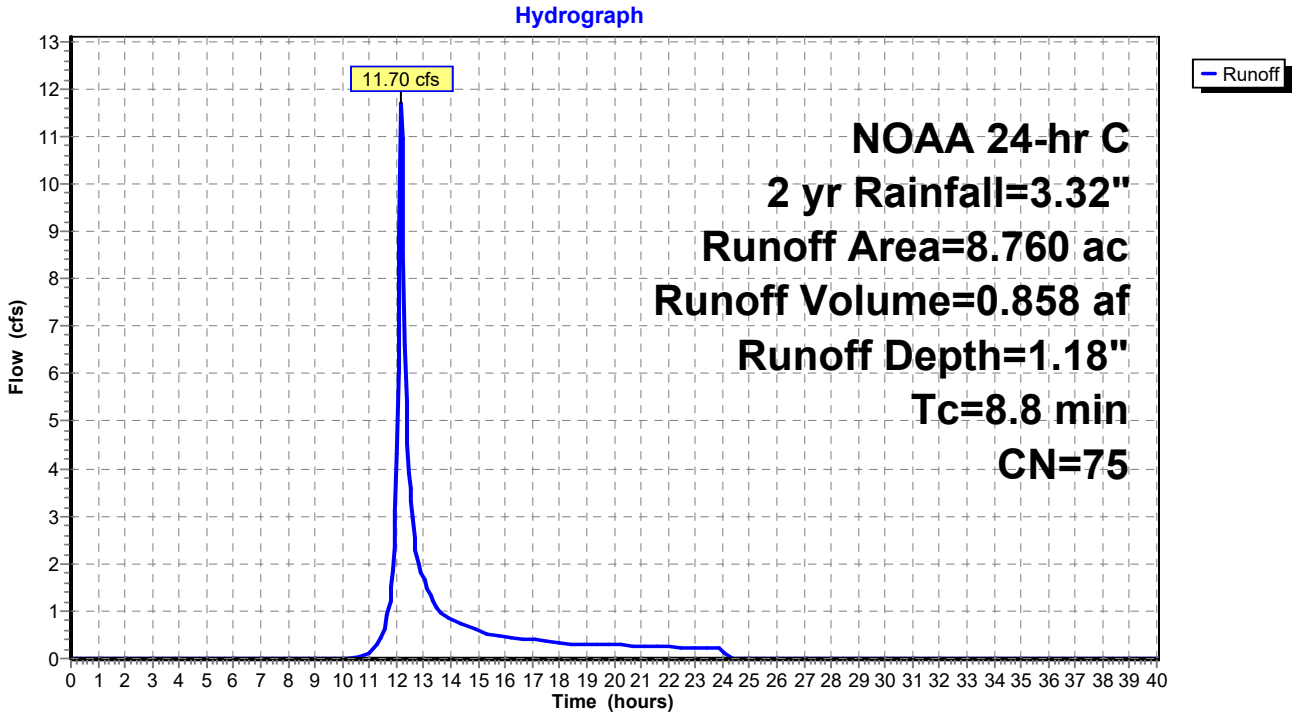
Runoff = 11.70 cfs @ 12.17 hrs, Volume= 0.858 af, Depth= 1.18"
Routed to Link XDA-5 : Existing Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 2 yr Rainfall=3.32"

Area (ac)	CN	Description
3.790	71	Row crops, C&T, Good, HSG B
4.970	78	Row crops, C&T, Good, HSG C
8.760	75	Weighted Average
8.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.8					**Direct Entry,**

Subcatchment X-5P: XDA-5 (pervious)

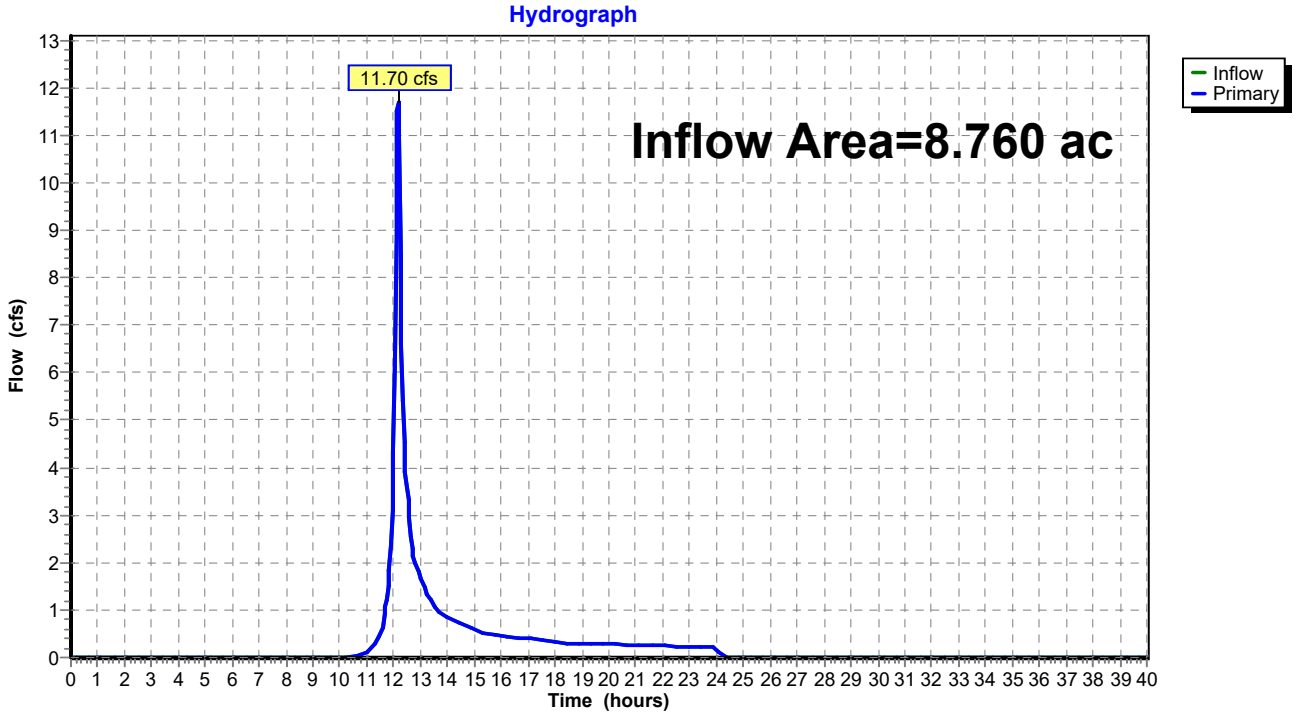


Summary for Link XDA-5: Existing Drainage Area #5

Inflow Area = 8.760 ac, 0.00% Impervious, Inflow Depth = 1.18" for 2 yr event
Inflow = 11.70 cfs @ 12.17 hrs, Volume= 0.858 af
Primary = 11.70 cfs @ 12.17 hrs, Volume= 0.858 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-5: Existing Drainage Area #5



Summary for Subcatchment X-5P: XDA-5 (pervious)

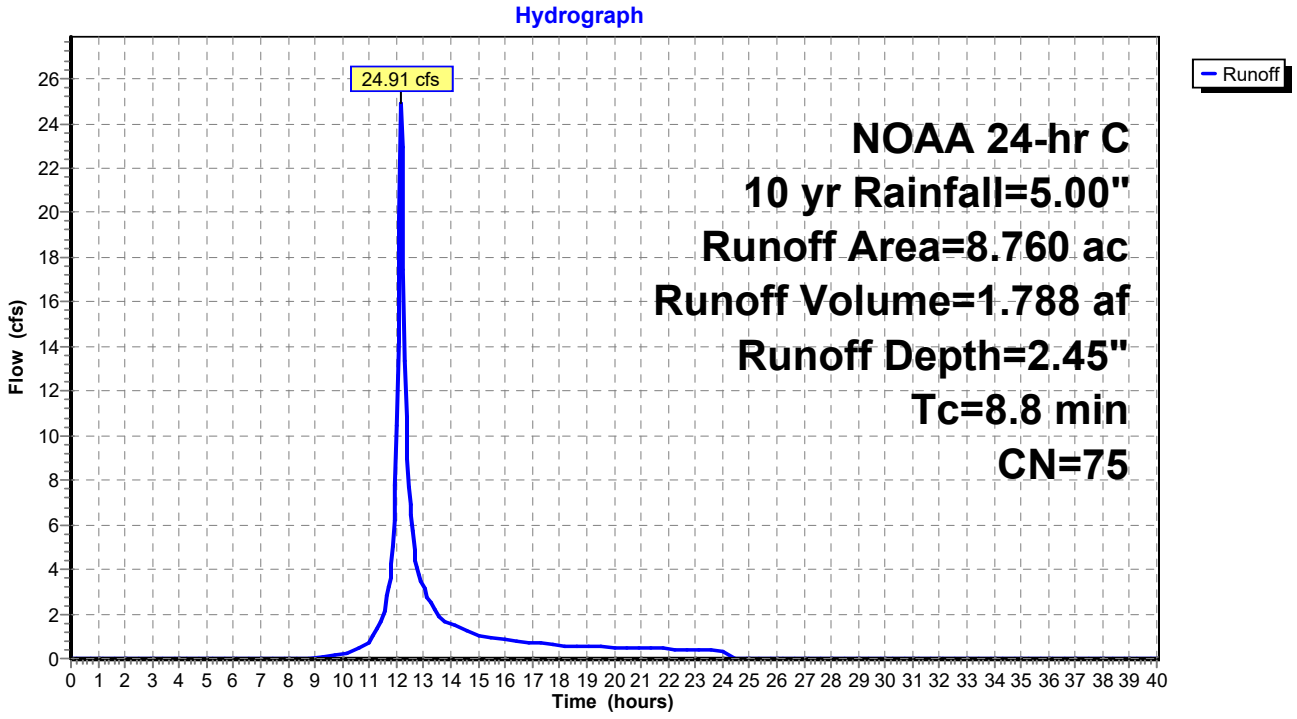
Runoff = 24.91 cfs @ 12.16 hrs, Volume= 1.788 af, Depth= 2.45"
Routed to Link XDA-5 : Existing Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 10 yr Rainfall=5.00"

Area (ac)	CN	Description
3.790	71	Row crops, C&T, Good, HSG B
4.970	78	Row crops, C&T, Good, HSG C
8.760	75	Weighted Average
8.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.8					**Direct Entry,**

Subcatchment X-5P: XDA-5 (pervious)

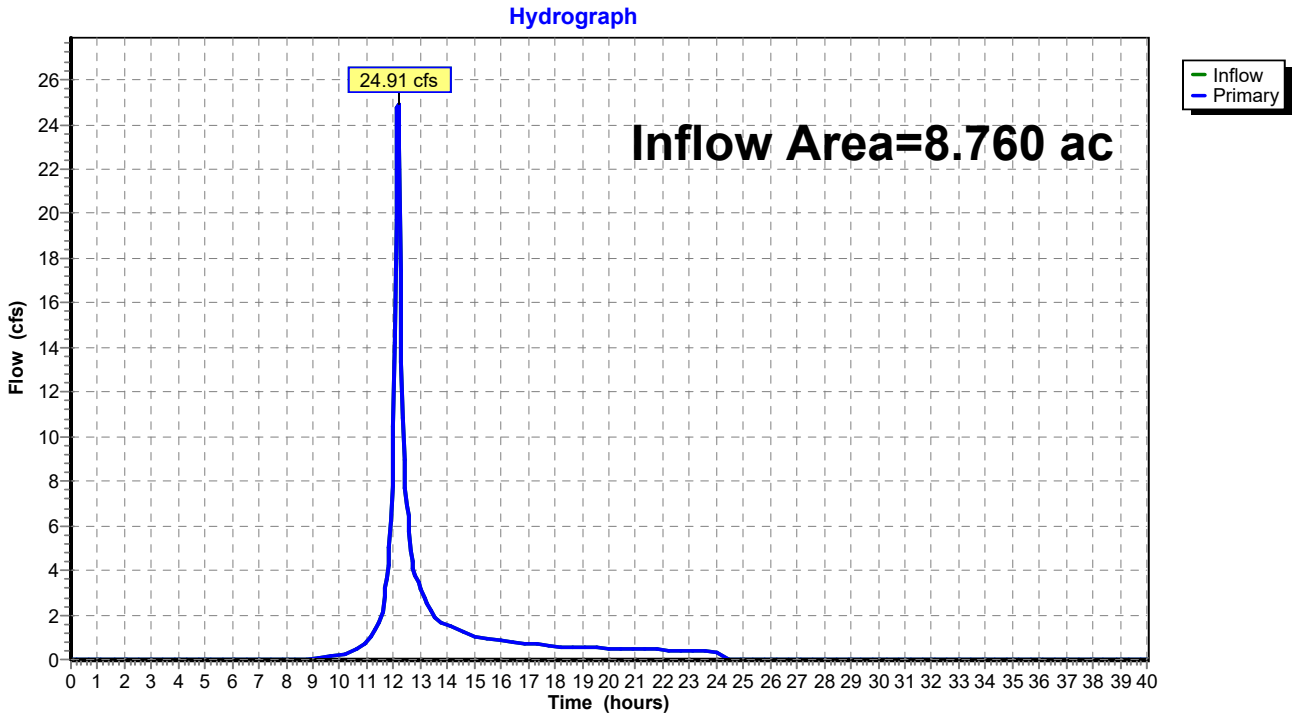


Summary for Link XDA-5: Existing Drainage Area #5

Inflow Area = 8.760 ac, 0.00% Impervious, Inflow Depth = 2.45" for 10 yr event
Inflow = 24.91 cfs @ 12.16 hrs, Volume= 1.788 af
Primary = 24.91 cfs @ 12.16 hrs, Volume= 1.788 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-5: Existing Drainage Area #5



Summary for Subcatchment X-5P: XDA-5 (pervious)

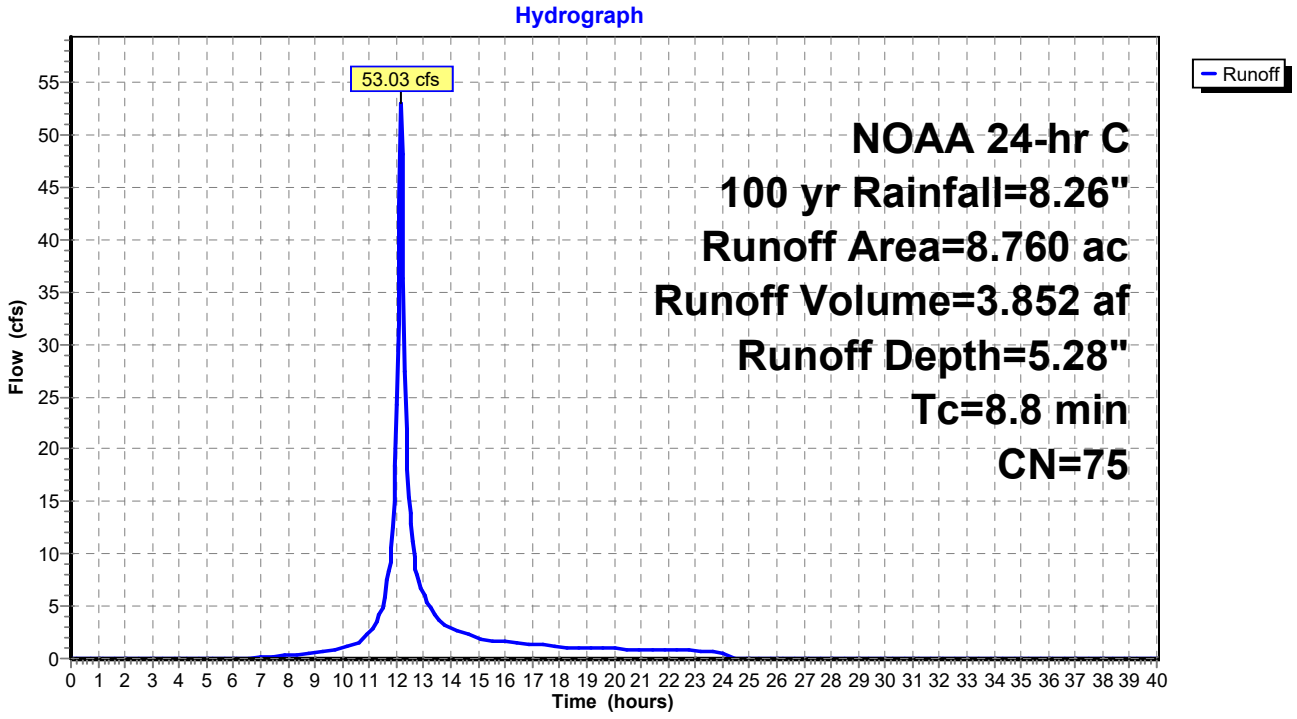
Runoff = 53.03 cfs @ 12.16 hrs, Volume= 3.852 af, Depth= 5.28"
Routed to Link XDA-5 : Existing Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 100 yr Rainfall=8.26"

Area (ac)	CN	Description
3.790	71	Row crops, C&T, Good, HSG B
4.970	78	Row crops, C&T, Good, HSG C
8.760	75	Weighted Average
8.760		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.8					**Direct Entry,**

Subcatchment X-5P: XDA-5 (pervious)

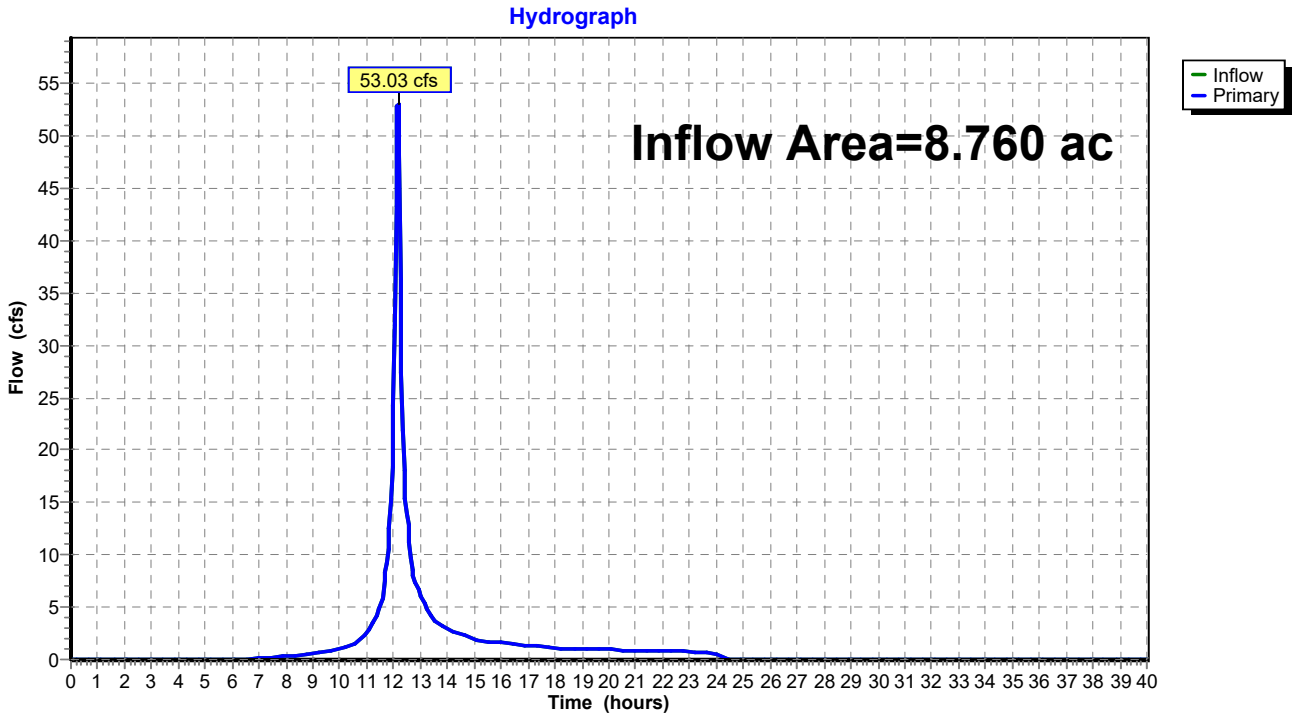


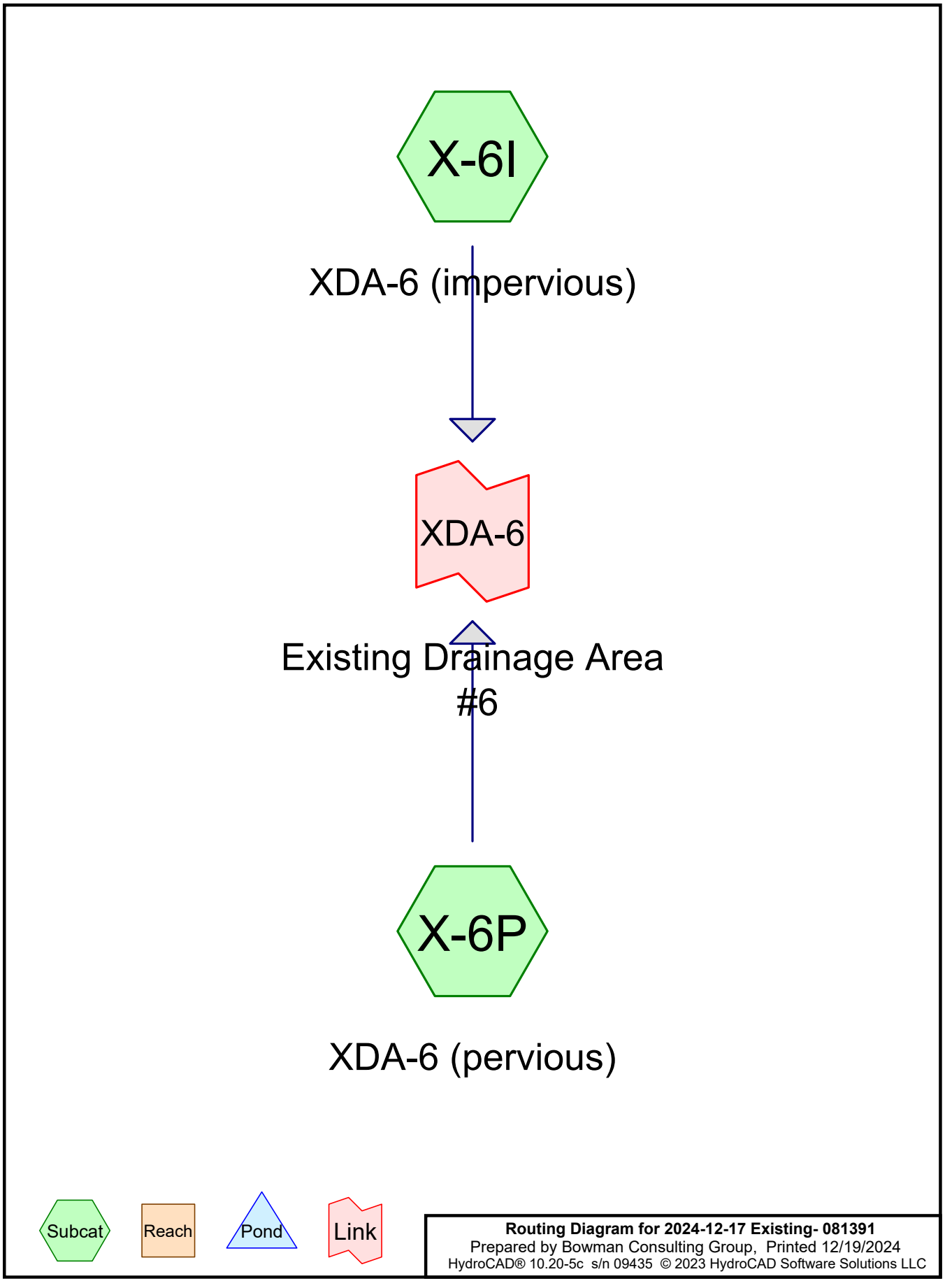
Summary for Link XDA-5: Existing Drainage Area #5

Inflow Area = 8.760 ac, 0.00% Impervious, Inflow Depth = 5.28" for 100 yr event
Inflow = 53.03 cfs @ 12.16 hrs, Volume= 3.852 af
Primary = 53.03 cfs @ 12.16 hrs, Volume= 3.852 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-5: Existing Drainage Area #5





Routing Diagram for 2024-12-17 Existing- 081391
Prepared by Bowman Consulting Group, Printed 12/19/2024
HydroCAD® 10.20-5c s/n 09435 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment X-6I: XDA-6 (impervious)

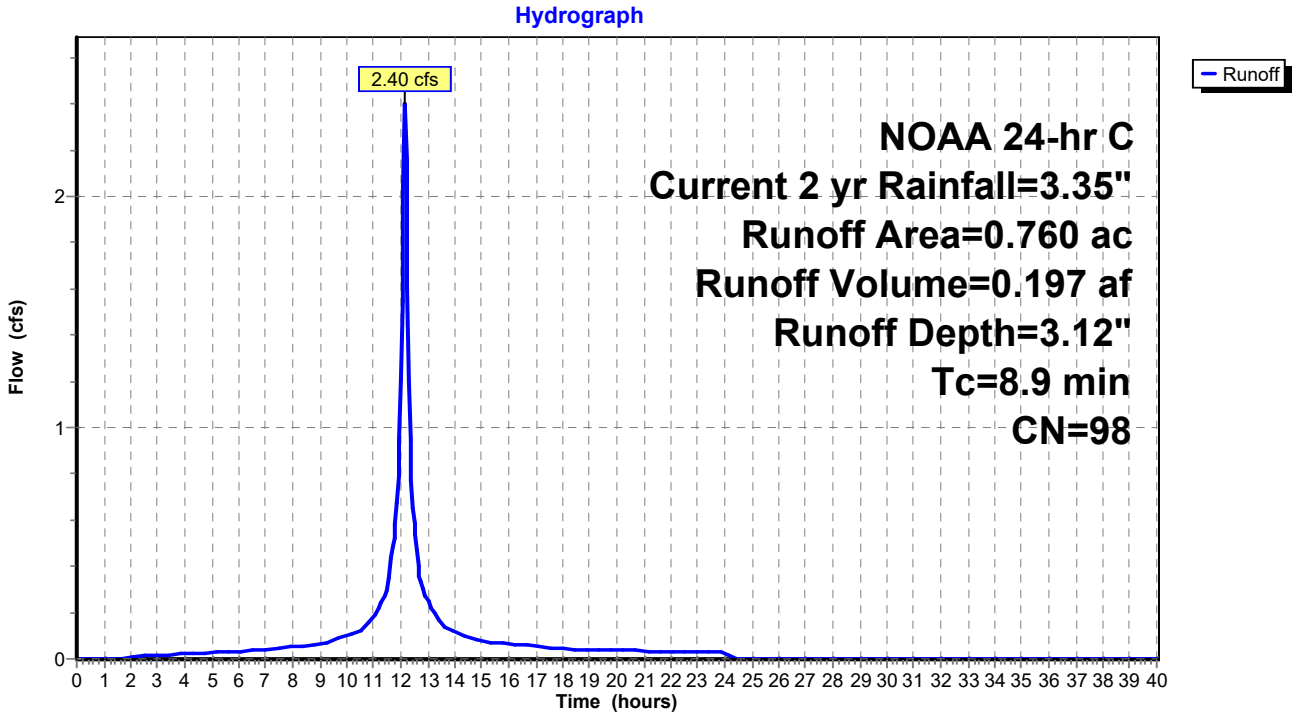
Runoff = 2.40 cfs @ 12.16 hrs, Volume= 0.197 af, Depth= 3.12"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.760	98	
	0.760		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6I: XDA-6 (impervious)



Summary for Subcatchment X-6P: XDA-6 (pervious)

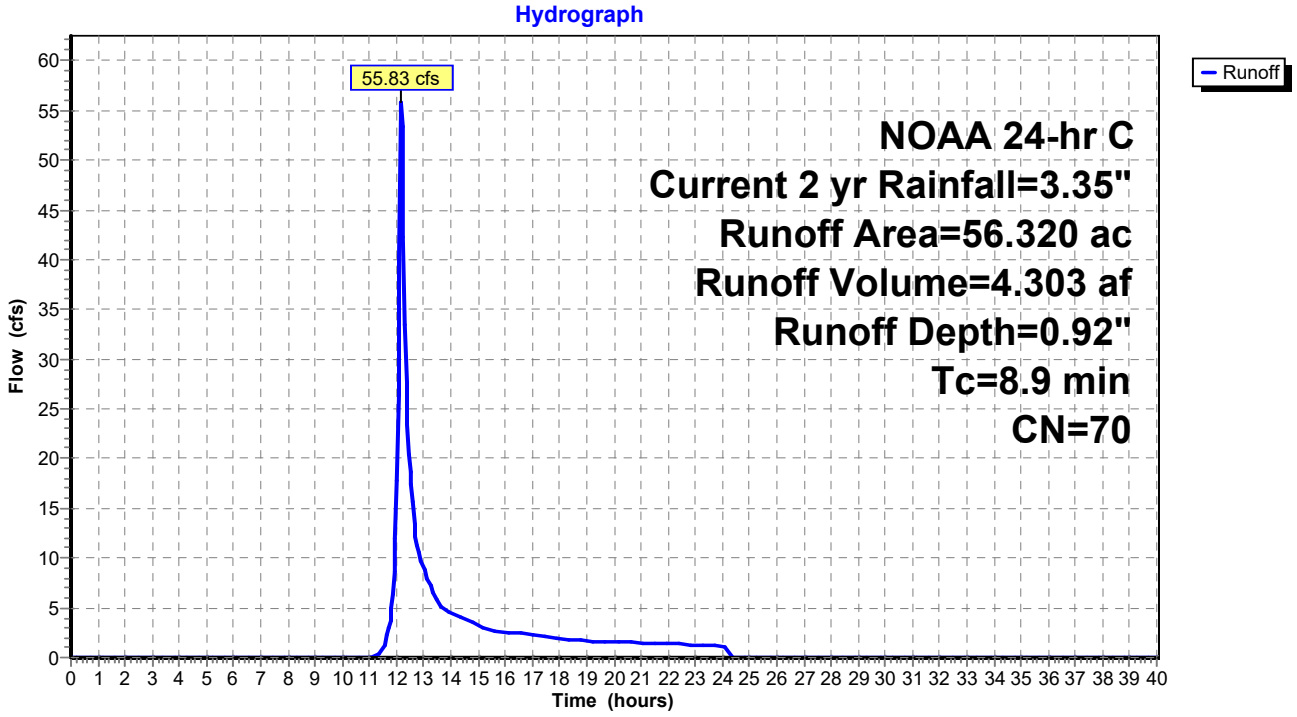
Runoff = 55.83 cfs @ 12.17 hrs, Volume= 4.303 af, Depth= 0.92"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
6.820	55	Woods, Good, HSG B
10.710	70	Woods, Good, HSG C
4.480	77	Woods, Good, HSG D
29.650	71	Row crops, C&T, Good, HSG B
4.540	78	Row crops, C&T, Good, HSG C
0.120	81	Row crops, C&T, Good, HSG D
56.320	70	Weighted Average
56.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6P: XDA-6 (pervious)

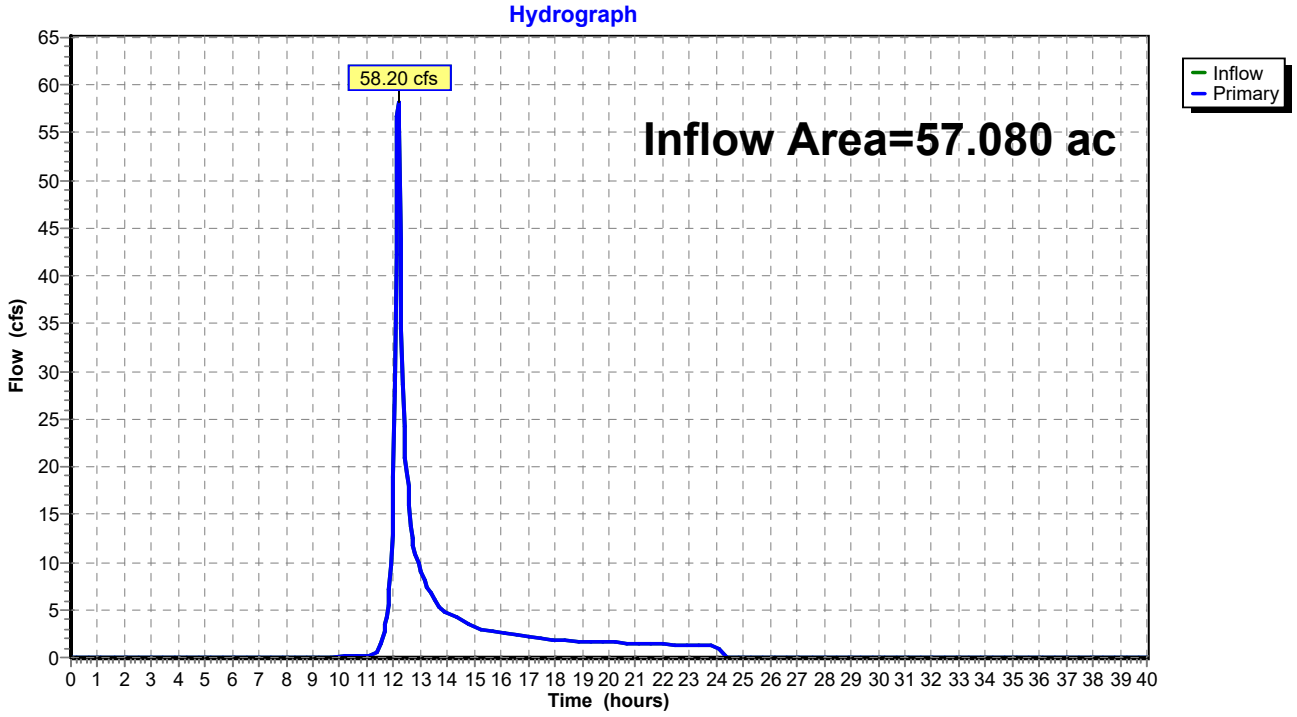


Summary for Link XDA-6: Existing Drainage Area #6

Inflow Area = 57.080 ac, 1.33% Impervious, Inflow Depth = 0.95" for Current 2 yr event
Inflow = 58.20 cfs @ 12.17 hrs, Volume= 4.500 af
Primary = 58.20 cfs @ 12.17 hrs, Volume= 4.500 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-6: Existing Drainage Area #6



Summary for Subcatchment X-6I: XDA-6 (impervious)

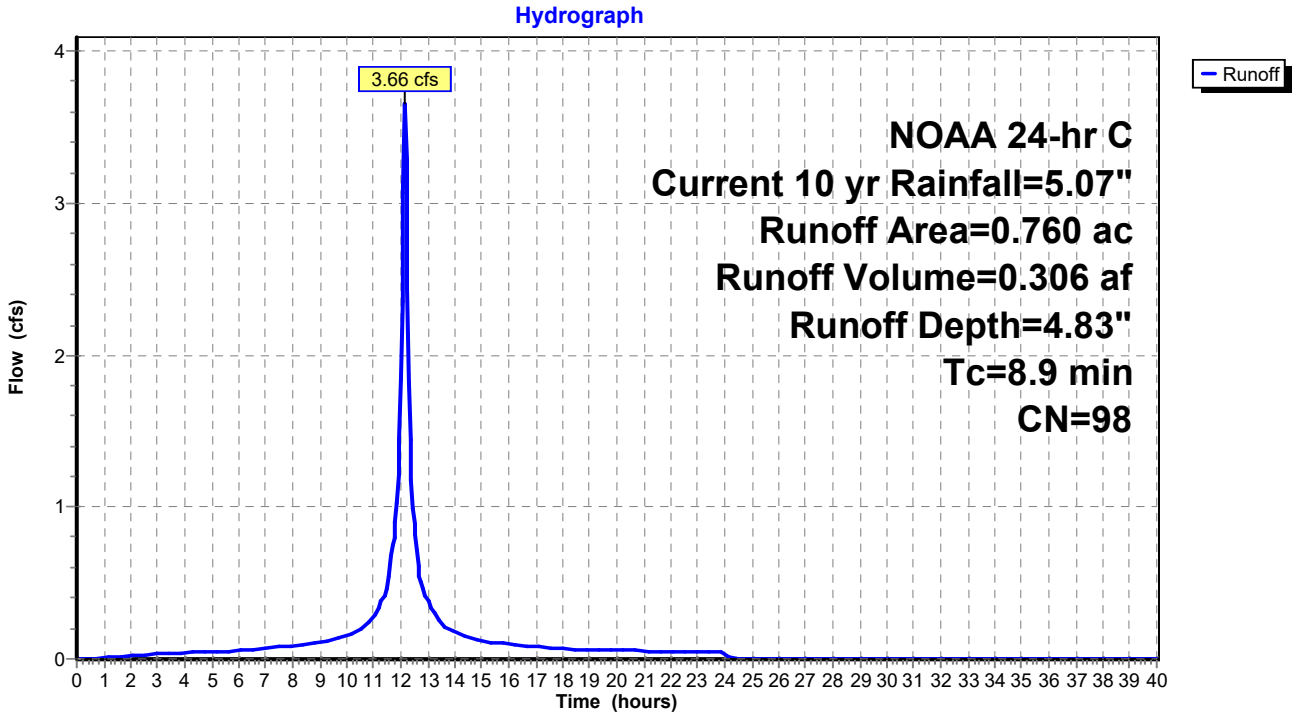
Runoff = 3.66 cfs @ 12.16 hrs, Volume= 0.306 af, Depth= 4.83"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.07"

	Area (ac)	CN	Description
*	0.760	98	
	0.760		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6I: XDA-6 (impervious)



Summary for Subcatchment X-6P: XDA-6 (pervious)

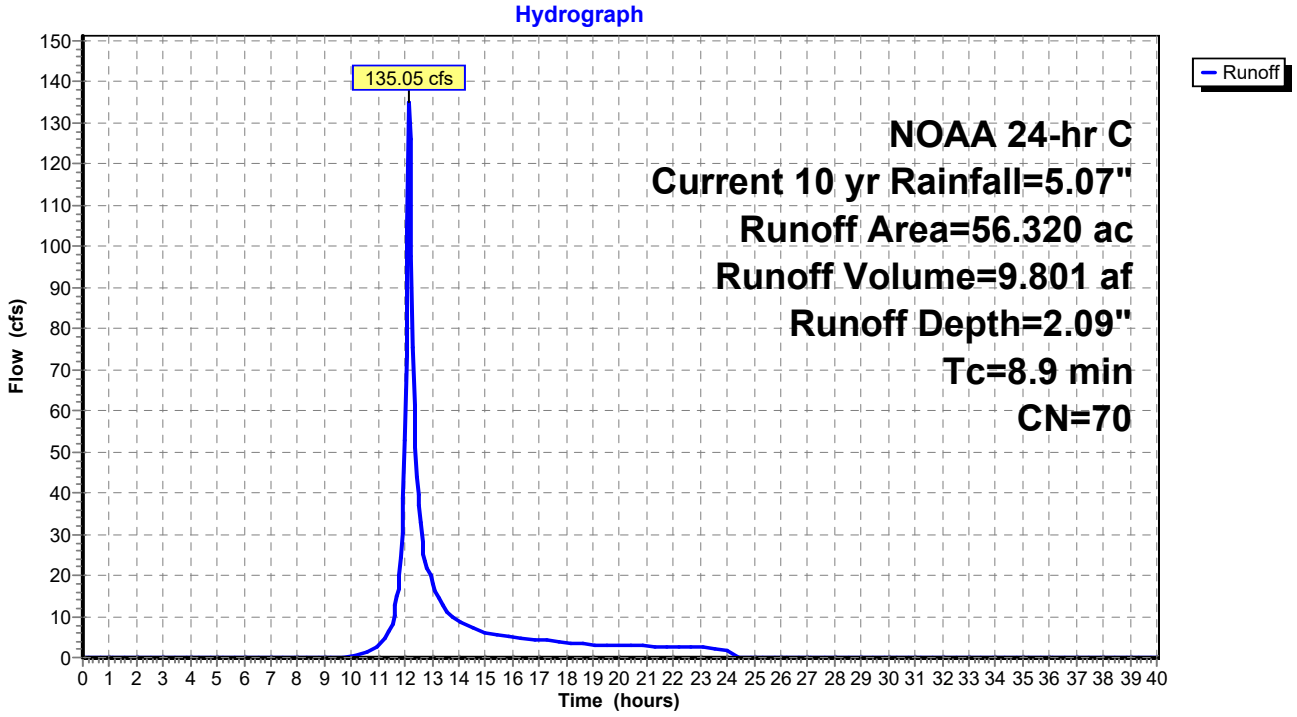
Runoff = 135.05 cfs @ 12.17 hrs, Volume= 9.801 af, Depth= 2.09"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.07"

Area (ac)	CN	Description
6.820	55	Woods, Good, HSG B
10.710	70	Woods, Good, HSG C
4.480	77	Woods, Good, HSG D
29.650	71	Row crops, C&T, Good, HSG B
4.540	78	Row crops, C&T, Good, HSG C
0.120	81	Row crops, C&T, Good, HSG D
56.320	70	Weighted Average
56.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6P: XDA-6 (pervious)

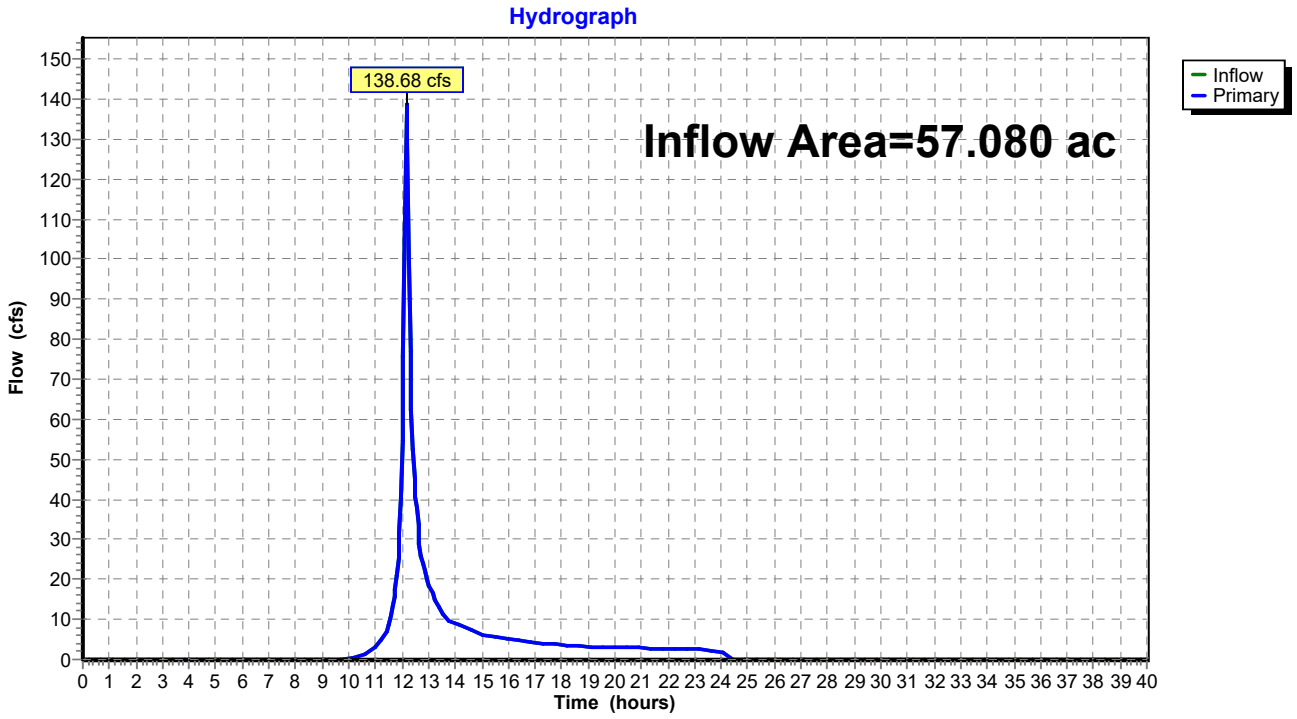


Summary for Link XDA-6: Existing Drainage Area #6

Inflow Area = 57.080 ac, 1.33% Impervious, Inflow Depth = 2.12" for Current 10 yr event
Inflow = 138.68 cfs @ 12.16 hrs, Volume= 10.108 af
Primary = 138.68 cfs @ 12.16 hrs, Volume= 10.108 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-6: Existing Drainage Area #6



Summary for Subcatchment X-6I: XDA-6 (impervious)

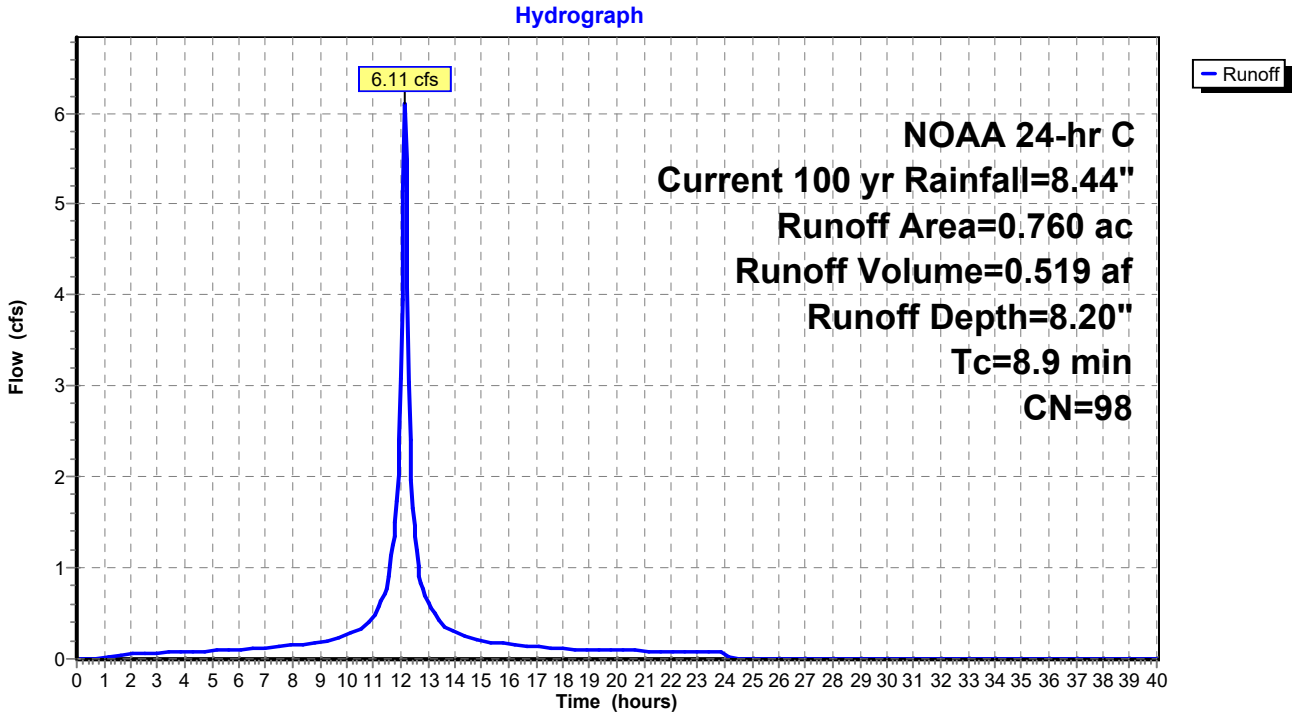
Runoff = 6.11 cfs @ 12.16 hrs, Volume= 0.519 af, Depth= 8.20"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.44"

	Area (ac)	CN	Description
*	0.760	98	
	0.760		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6I: XDA-6 (impervious)



Summary for Subcatchment X-6P: XDA-6 (pervious)

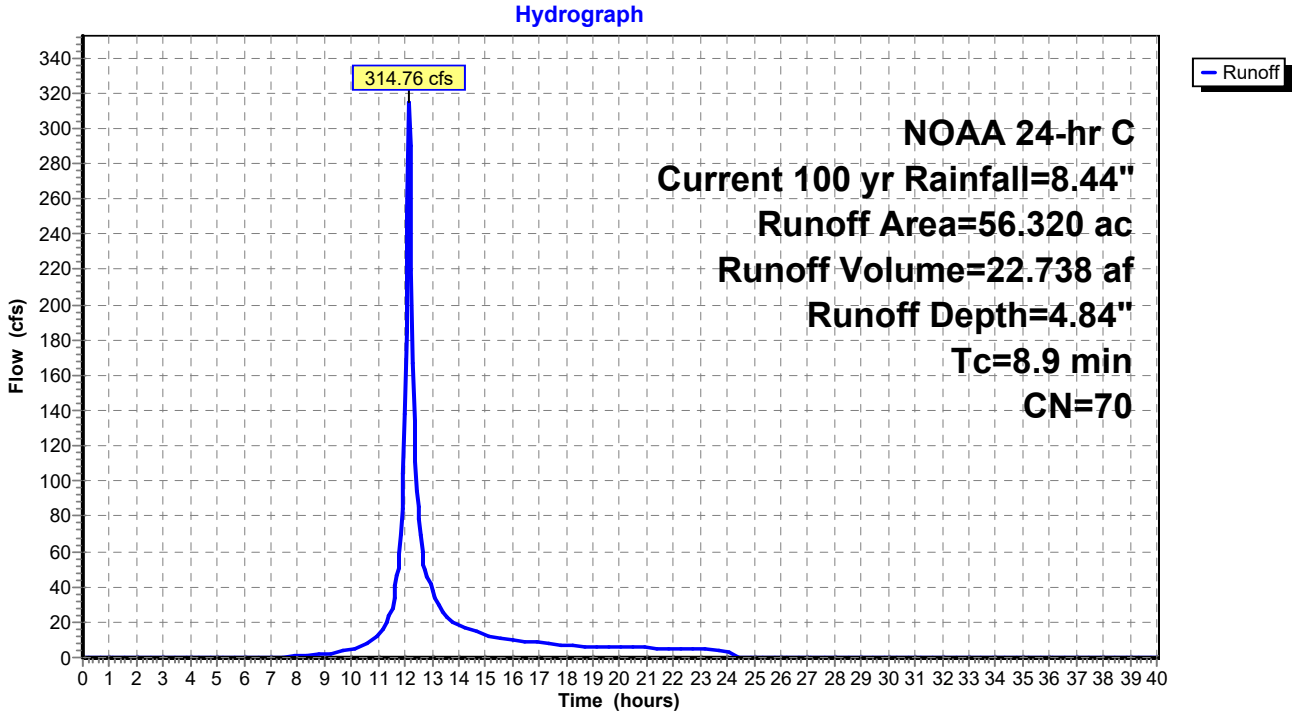
Runoff = 314.76 cfs @ 12.16 hrs, Volume= 22.738 af, Depth= 4.84"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.44"

Area (ac)	CN	Description
6.820	55	Woods, Good, HSG B
10.710	70	Woods, Good, HSG C
4.480	77	Woods, Good, HSG D
29.650	71	Row crops, C&T, Good, HSG B
4.540	78	Row crops, C&T, Good, HSG C
0.120	81	Row crops, C&T, Good, HSG D
56.320	70	Weighted Average
56.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6P: XDA-6 (pervious)

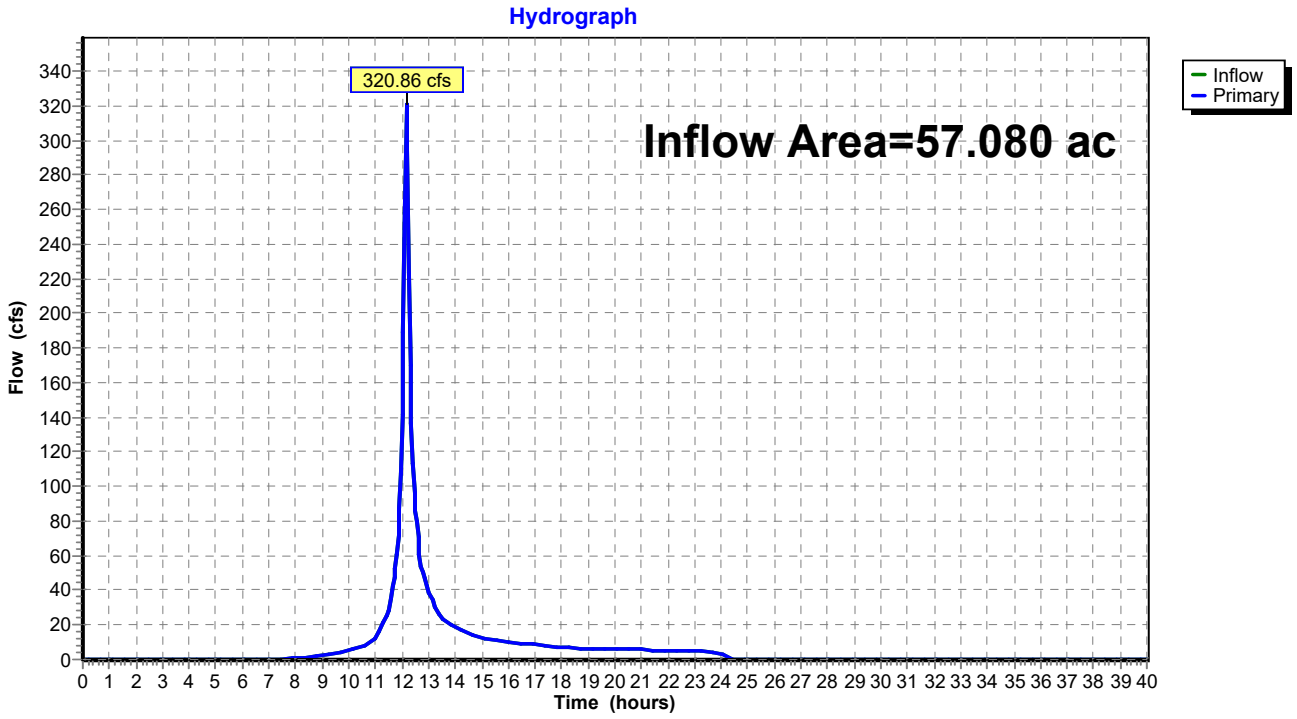


Summary for Link XDA-6: Existing Drainage Area #6

Inflow Area = 57.080 ac, 1.33% Impervious, Inflow Depth = 4.89" for Current 100 yr event
Inflow = 320.86 cfs @ 12.16 hrs, Volume= 23.257 af
Primary = 320.86 cfs @ 12.16 hrs, Volume= 23.257 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-6: Existing Drainage Area #6



Summary for Subcatchment X-6I: XDA-6 (impervious)

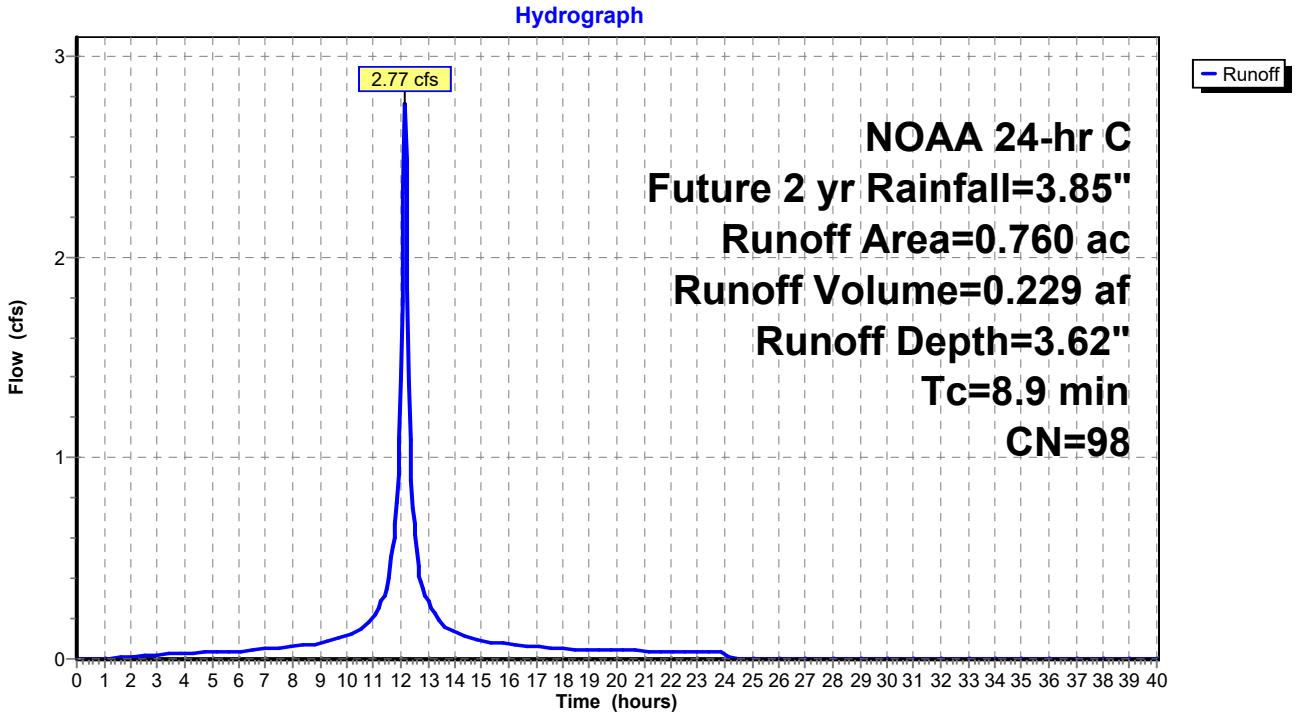
Runoff = 2.77 cfs @ 12.16 hrs, Volume= 0.229 af, Depth= 3.62"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.760	98	
	0.760		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6I: XDA-6 (impervious)



Summary for Subcatchment X-6P: XDA-6 (pervious)

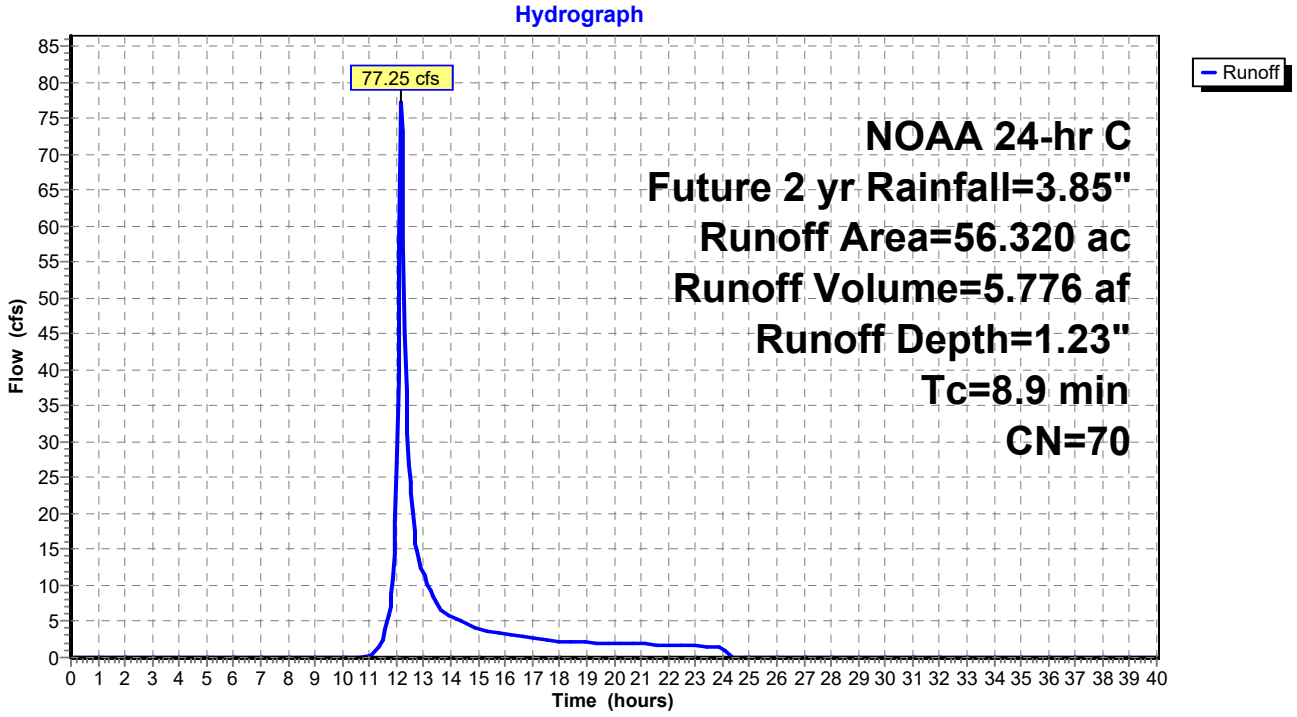
Runoff = 77.25 cfs @ 12.17 hrs, Volume= 5.776 af, Depth= 1.23"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
6.820	55	Woods, Good, HSG B
10.710	70	Woods, Good, HSG C
4.480	77	Woods, Good, HSG D
29.650	71	Row crops, C&T, Good, HSG B
4.540	78	Row crops, C&T, Good, HSG C
0.120	81	Row crops, C&T, Good, HSG D
56.320	70	Weighted Average
56.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6P: XDA-6 (pervious)

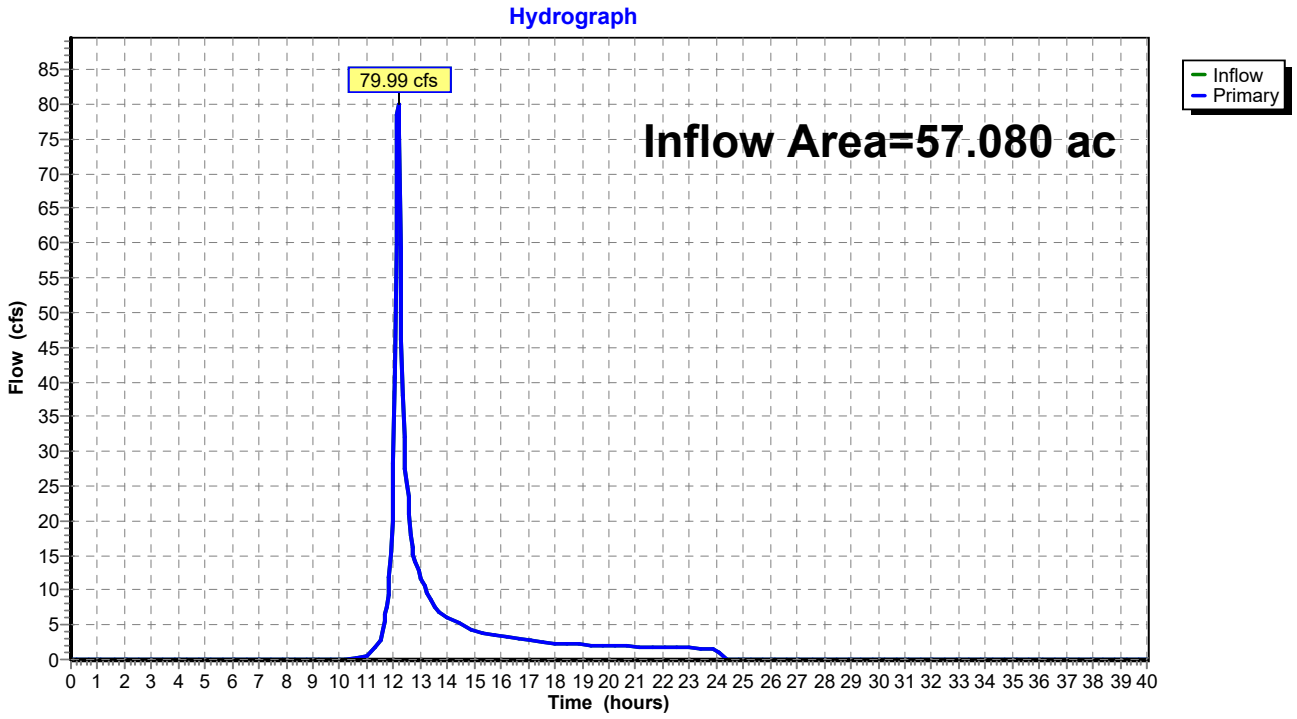


Summary for Link XDA-6: Existing Drainage Area #6

Inflow Area = 57.080 ac, 1.33% Impervious, Inflow Depth = 1.26" for Future 2 yr event
Inflow = 79.99 cfs @ 12.17 hrs, Volume= 6.005 af
Primary = 79.99 cfs @ 12.17 hrs, Volume= 6.005 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-6: Existing Drainage Area #6



Summary for Subcatchment X-6I: XDA-6 (impervious)

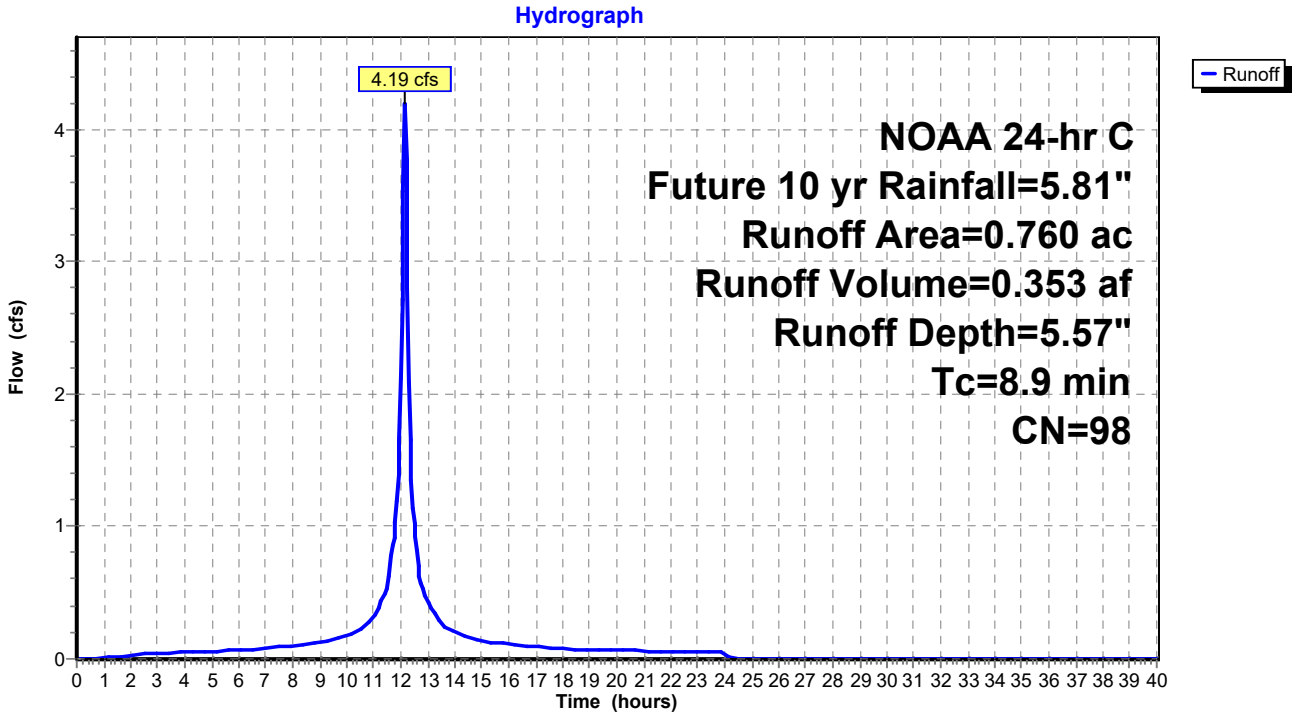
Runoff = 4.19 cfs @ 12.16 hrs, Volume= 0.353 af, Depth= 5.57"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.81"

	Area (ac)	CN	Description
*	0.760	98	
	0.760		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6I: XDA-6 (impervious)



Summary for Subcatchment X-6P: XDA-6 (pervious)

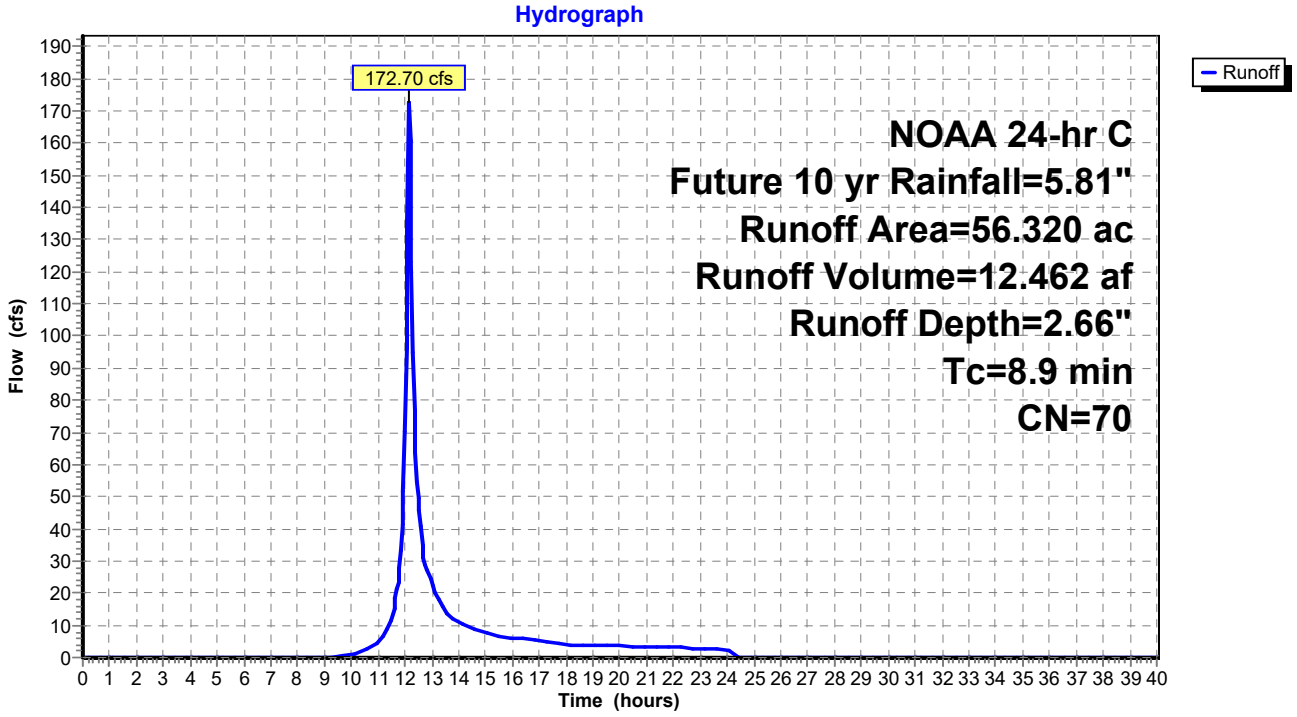
Runoff = 172.70 cfs @ 12.16 hrs, Volume= 12.462 af, Depth= 2.66"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.81"

Area (ac)	CN	Description
6.820	55	Woods, Good, HSG B
10.710	70	Woods, Good, HSG C
4.480	77	Woods, Good, HSG D
29.650	71	Row crops, C&T, Good, HSG B
4.540	78	Row crops, C&T, Good, HSG C
0.120	81	Row crops, C&T, Good, HSG D
56.320	70	Weighted Average
56.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6P: XDA-6 (pervious)

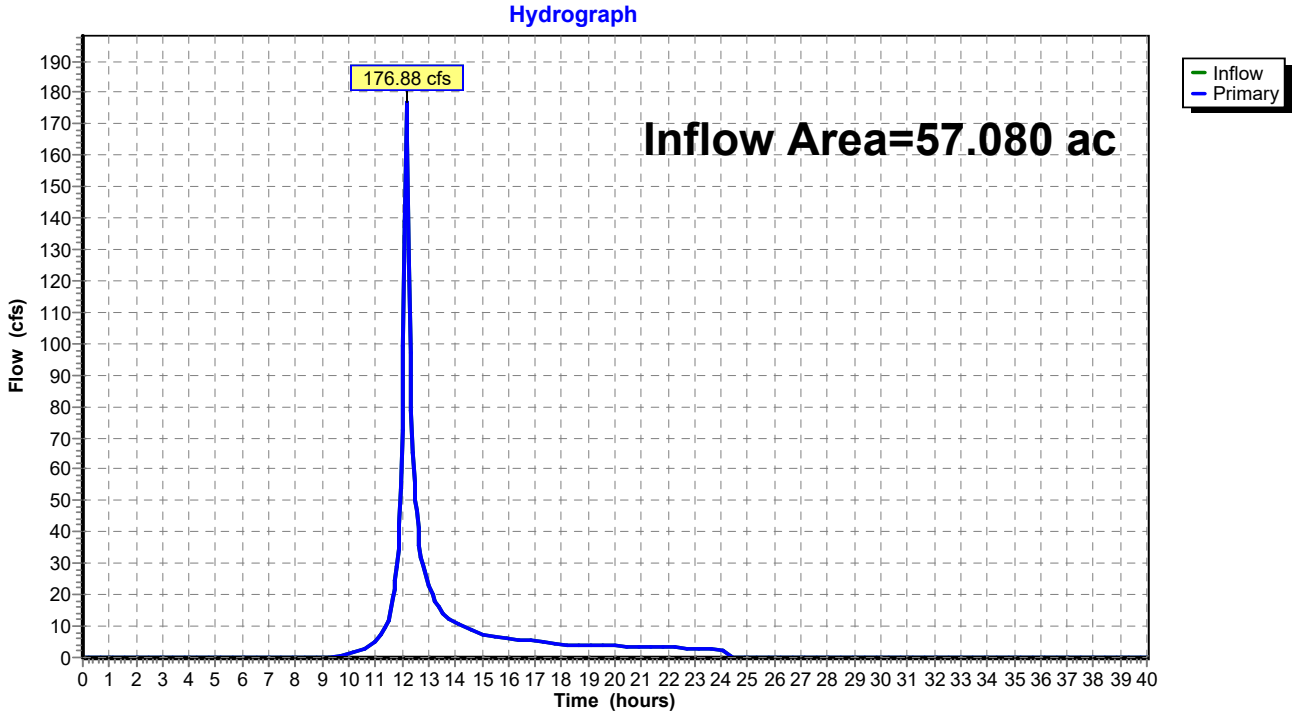


Summary for Link XDA-6: Existing Drainage Area #6

Inflow Area = 57.080 ac, 1.33% Impervious, Inflow Depth = 2.69" for Future 10 yr event
Inflow = 176.88 cfs @ 12.16 hrs, Volume= 12.815 af
Primary = 176.88 cfs @ 12.16 hrs, Volume= 12.815 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-6: Existing Drainage Area #6



Summary for Subcatchment X-6I: XDA-6 (impervious)

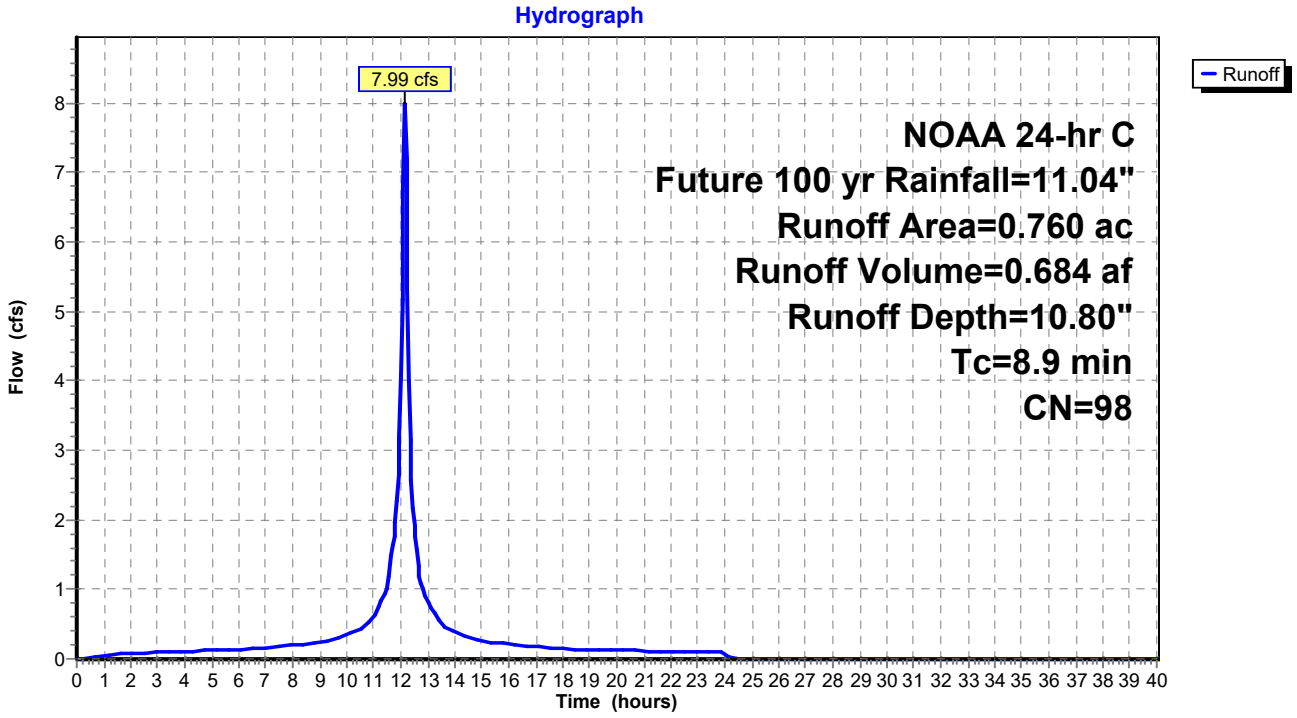
Runoff = 7.99 cfs @ 12.16 hrs, Volume= 0.684 af, Depth=10.80"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.04"

	Area (ac)	CN	Description
*	0.760	98	
	0.760		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6I: XDA-6 (impervious)



Summary for Subcatchment X-6P: XDA-6 (pervious)

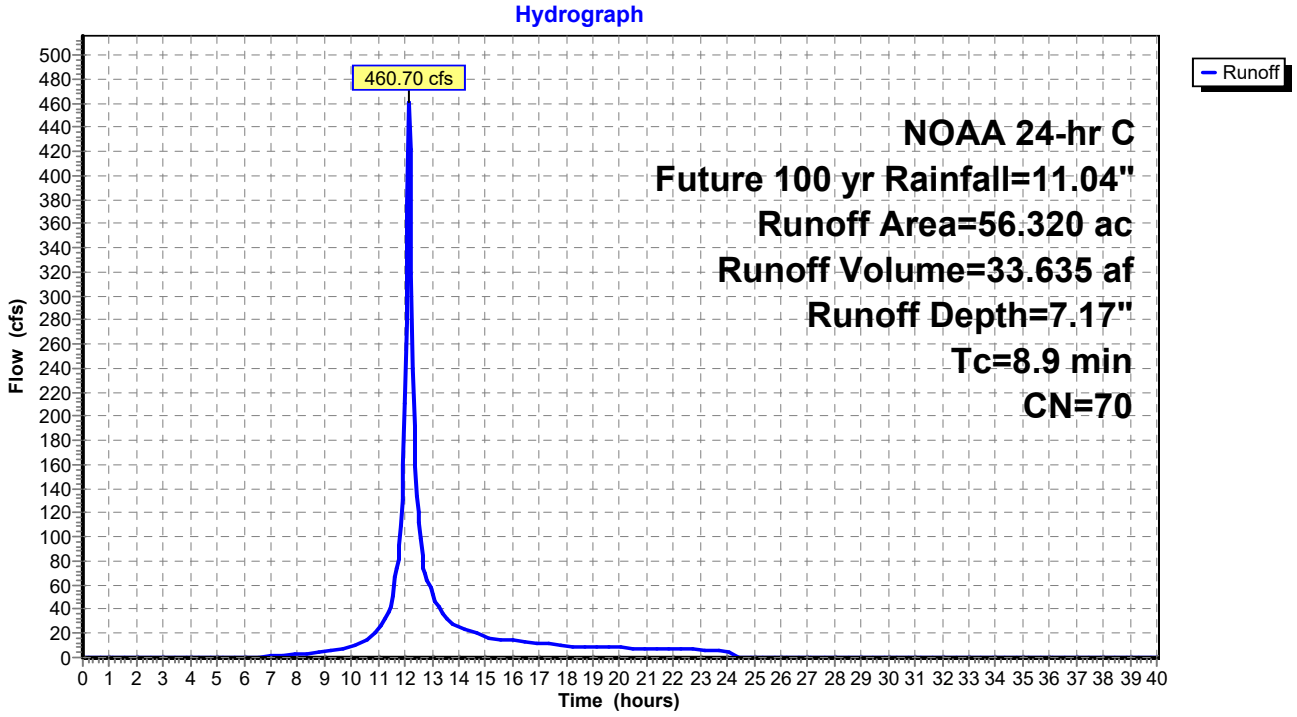
Runoff = 460.70 cfs @ 12.16 hrs, Volume= 33.635 af, Depth= 7.17"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.04"

Area (ac)	CN	Description
6.820	55	Woods, Good, HSG B
10.710	70	Woods, Good, HSG C
4.480	77	Woods, Good, HSG D
29.650	71	Row crops, C&T, Good, HSG B
4.540	78	Row crops, C&T, Good, HSG C
0.120	81	Row crops, C&T, Good, HSG D
56.320	70	Weighted Average
56.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6P: XDA-6 (pervious)

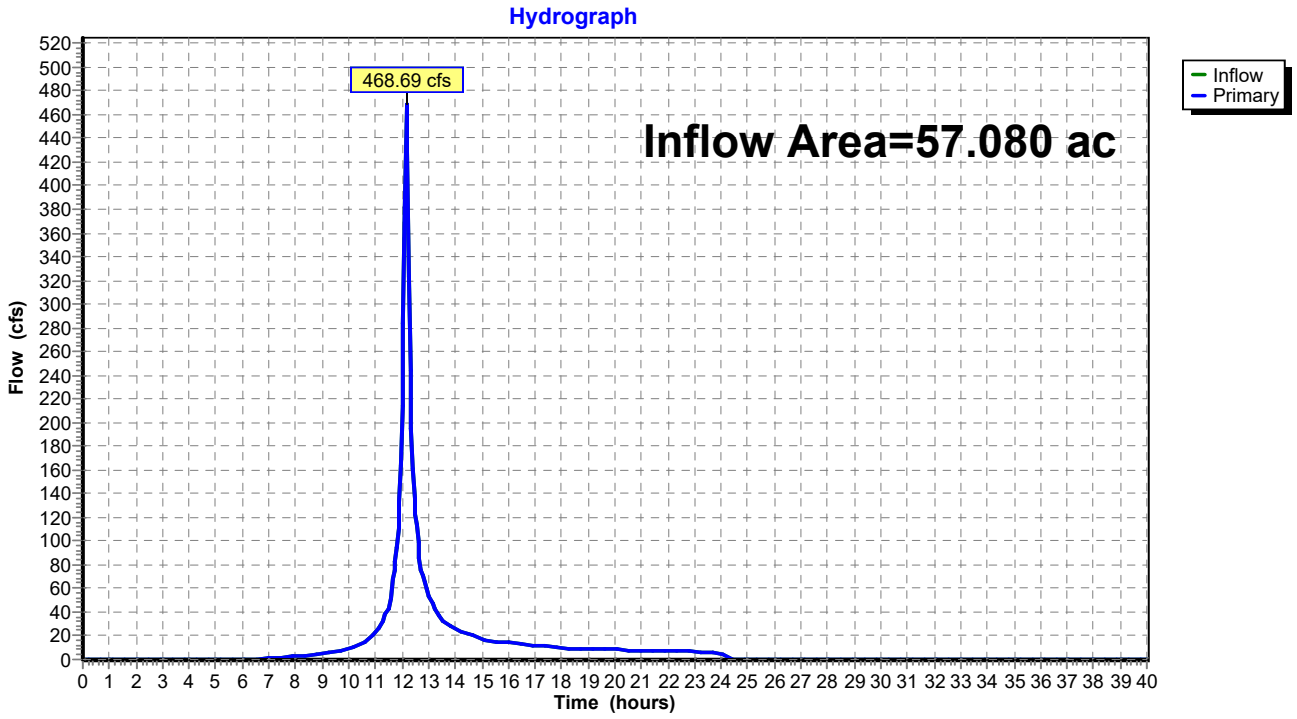


Summary for Link XDA-6: Existing Drainage Area #6

Inflow Area = 57.080 ac, 1.33% Impervious, Inflow Depth = 7.21" for Future 100 yr event
Inflow = 468.69 cfs @ 12.16 hrs, Volume= 34.319 af
Primary = 468.69 cfs @ 12.16 hrs, Volume= 34.319 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-6: Existing Drainage Area #6



Summary for Subcatchment X-6I: XDA-6 (impervious)

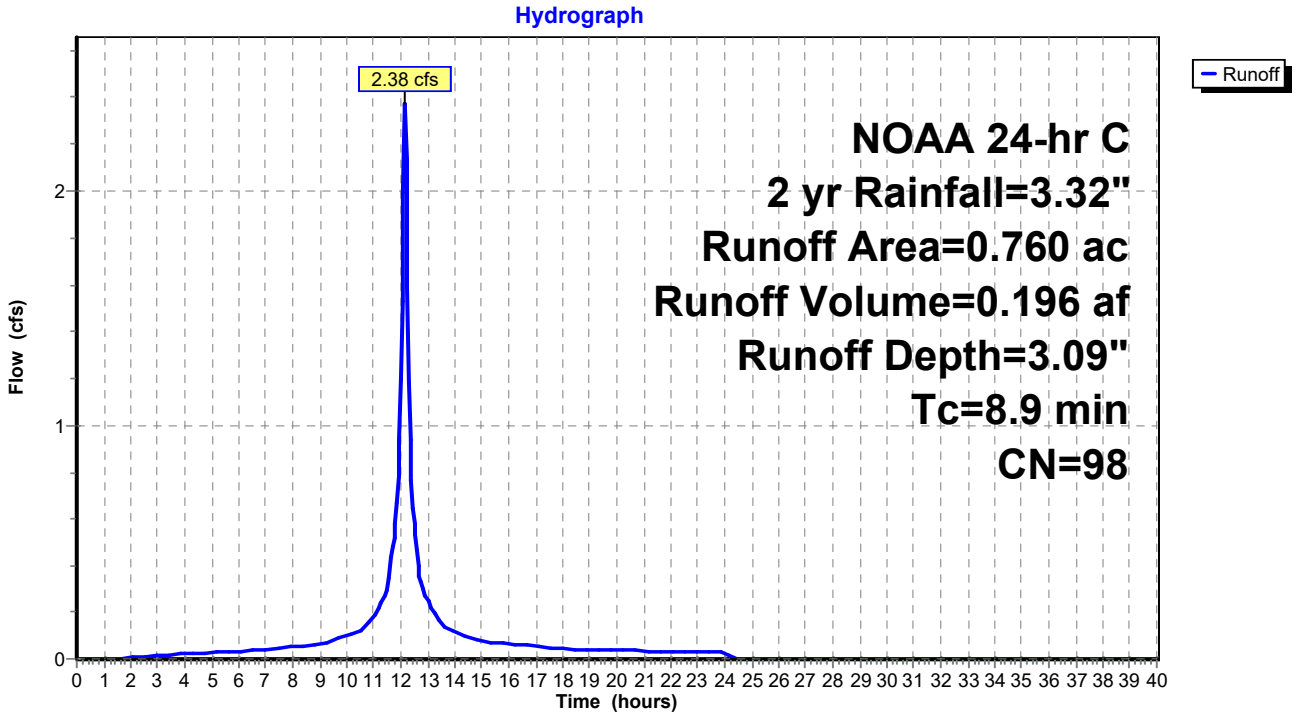
Runoff = 2.38 cfs @ 12.16 hrs, Volume= 0.196 af, Depth= 3.09"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 2 yr Rainfall=3.32"

	Area (ac)	CN	Description
*	0.760	98	
	0.760		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6I: XDA-6 (impervious)



Summary for Subcatchment X-6P: XDA-6 (pervious)

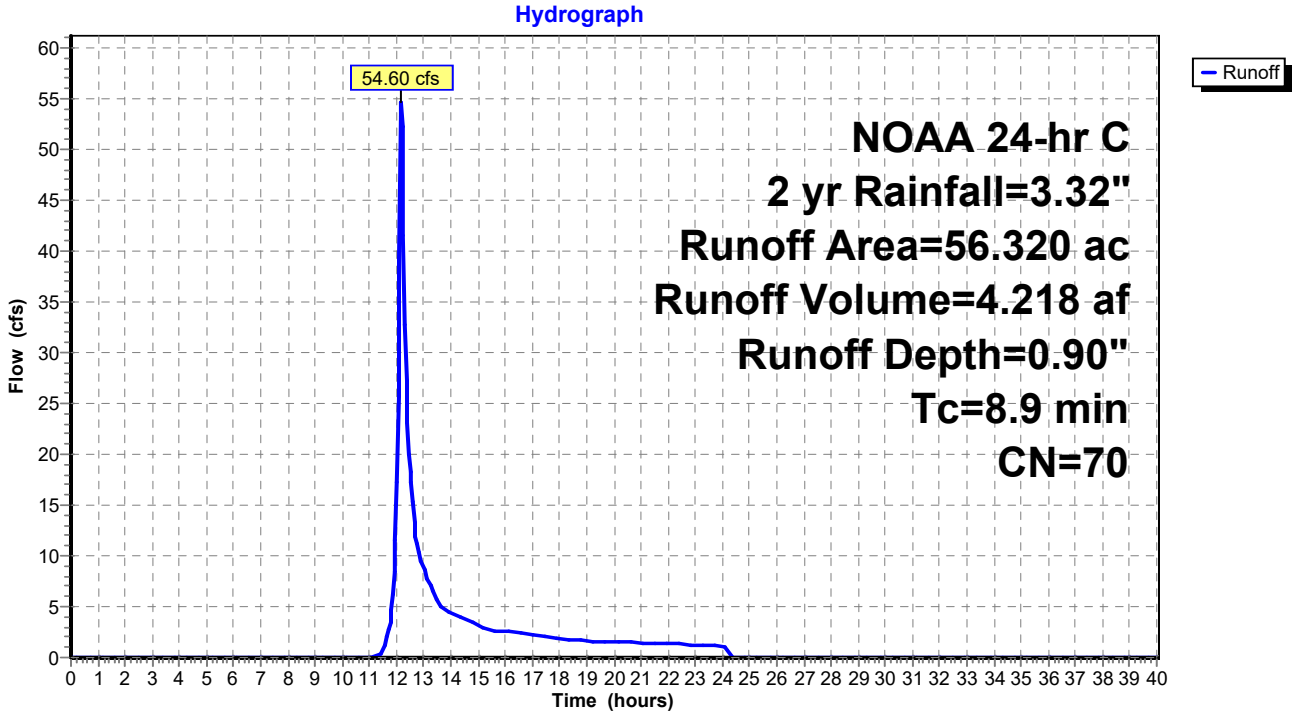
Runoff = 54.60 cfs @ 12.17 hrs, Volume= 4.218 af, Depth= 0.90"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 2 yr Rainfall=3.32"

Area (ac)	CN	Description
6.820	55	Woods, Good, HSG B
10.710	70	Woods, Good, HSG C
4.480	77	Woods, Good, HSG D
29.650	71	Row crops, C&T, Good, HSG B
4.540	78	Row crops, C&T, Good, HSG C
0.120	81	Row crops, C&T, Good, HSG D
56.320	70	Weighted Average
56.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6P: XDA-6 (pervious)

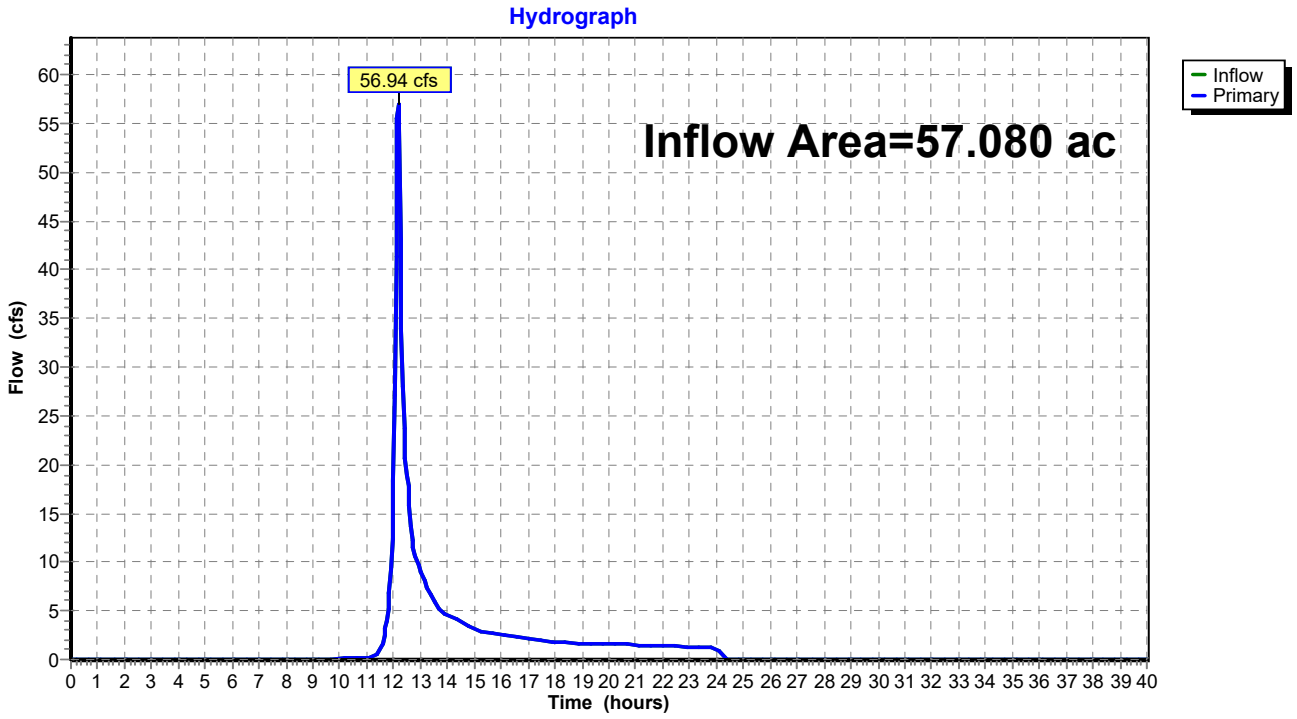


Summary for Link XDA-6: Existing Drainage Area #6

Inflow Area = 57.080 ac, 1.33% Impervious, Inflow Depth = 0.93" for 2 yr event
Inflow = 56.94 cfs @ 12.17 hrs, Volume= 4.414 af
Primary = 56.94 cfs @ 12.17 hrs, Volume= 4.414 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-6: Existing Drainage Area #6



Summary for Subcatchment X-6I: XDA-6 (impervious)

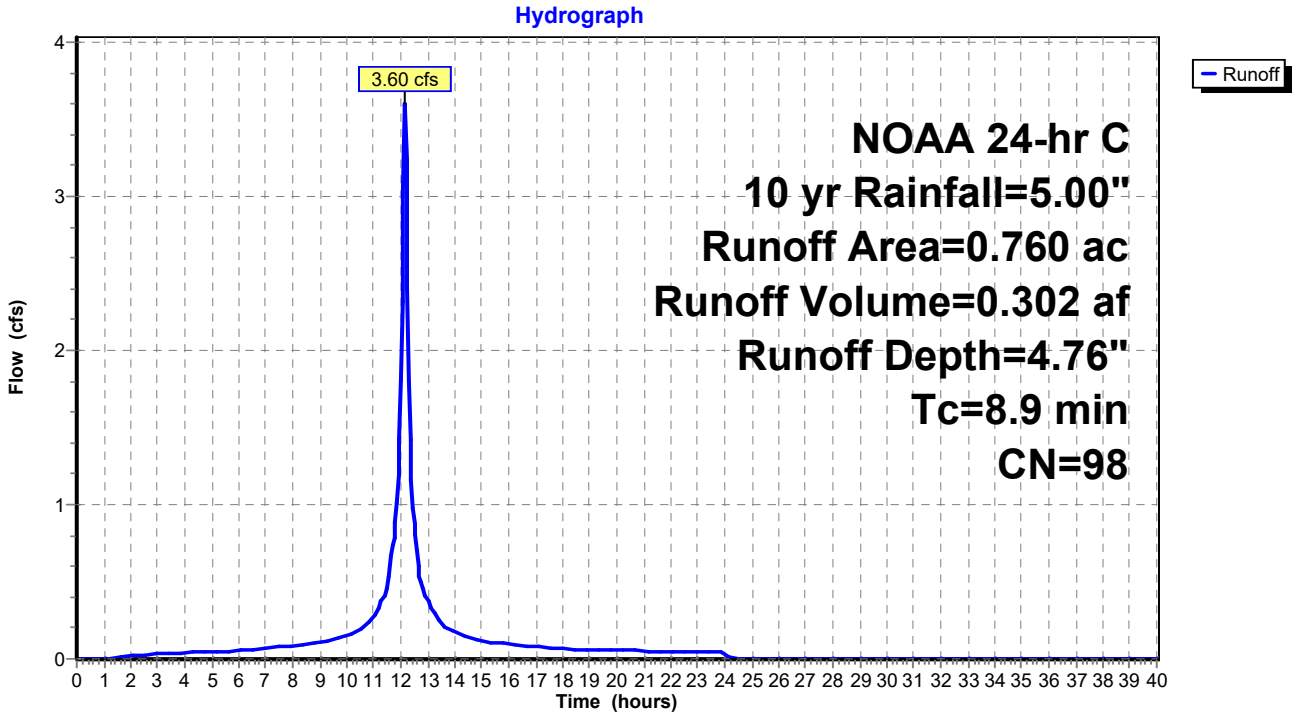
Runoff = 3.60 cfs @ 12.16 hrs, Volume= 0.302 af, Depth= 4.76"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 10 yr Rainfall=5.00"

	Area (ac)	CN	Description
*	0.760	98	
	0.760		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6I: XDA-6 (impervious)



Summary for Subcatchment X-6P: XDA-6 (pervious)

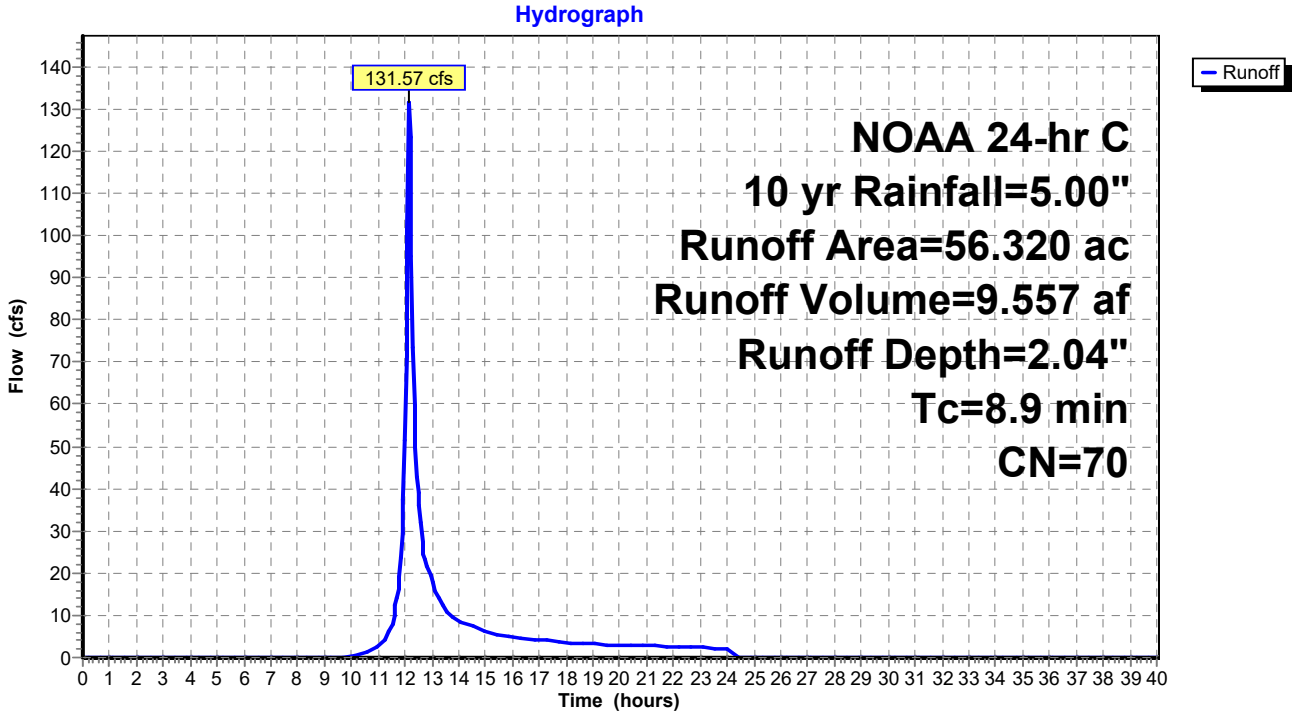
Runoff = 131.57 cfs @ 12.17 hrs, Volume= 9.557 af, Depth= 2.04"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 10 yr Rainfall=5.00"

Area (ac)	CN	Description
6.820	55	Woods, Good, HSG B
10.710	70	Woods, Good, HSG C
4.480	77	Woods, Good, HSG D
29.650	71	Row crops, C&T, Good, HSG B
4.540	78	Row crops, C&T, Good, HSG C
0.120	81	Row crops, C&T, Good, HSG D
56.320	70	Weighted Average
56.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6P: XDA-6 (pervious)

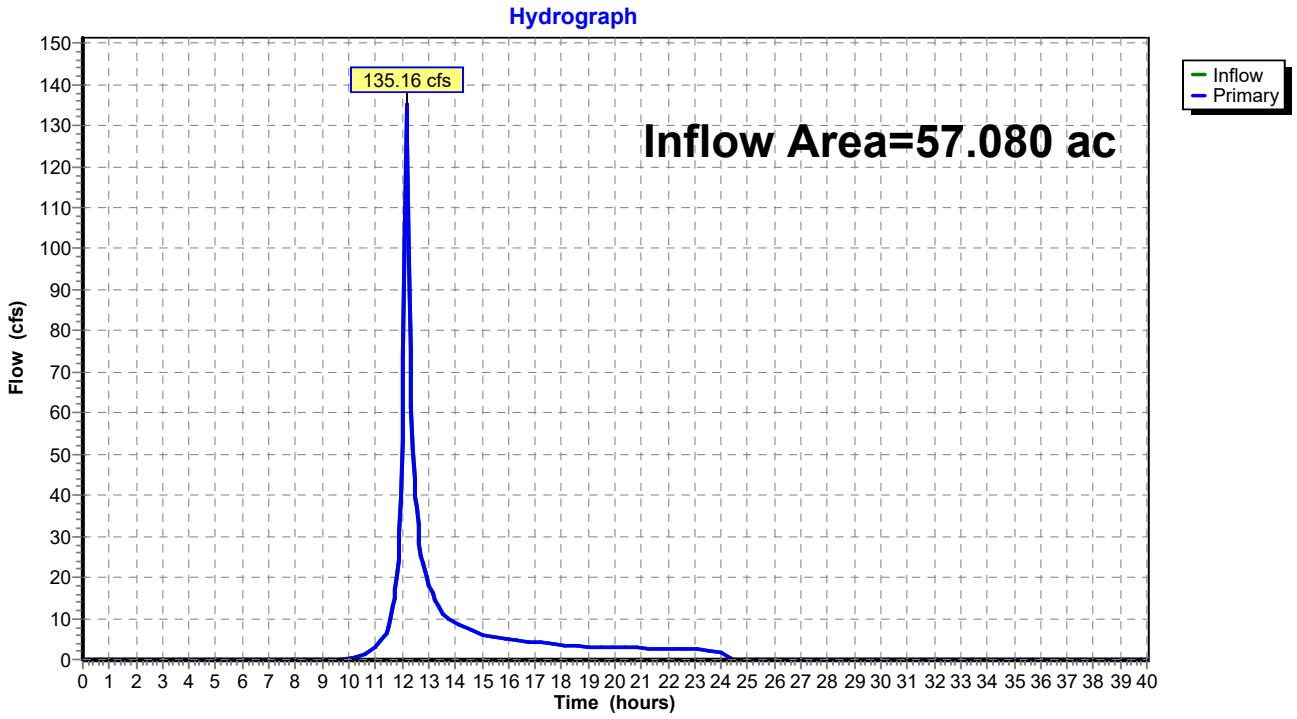


Summary for Link XDA-6: Existing Drainage Area #6

Inflow Area = 57.080 ac, 1.33% Impervious, Inflow Depth = 2.07" for 10 yr event
Inflow = 135.16 cfs @ 12.17 hrs, Volume= 9.859 af
Primary = 135.16 cfs @ 12.17 hrs, Volume= 9.859 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-6: Existing Drainage Area #6



Summary for Subcatchment X-6I: XDA-6 (impervious)

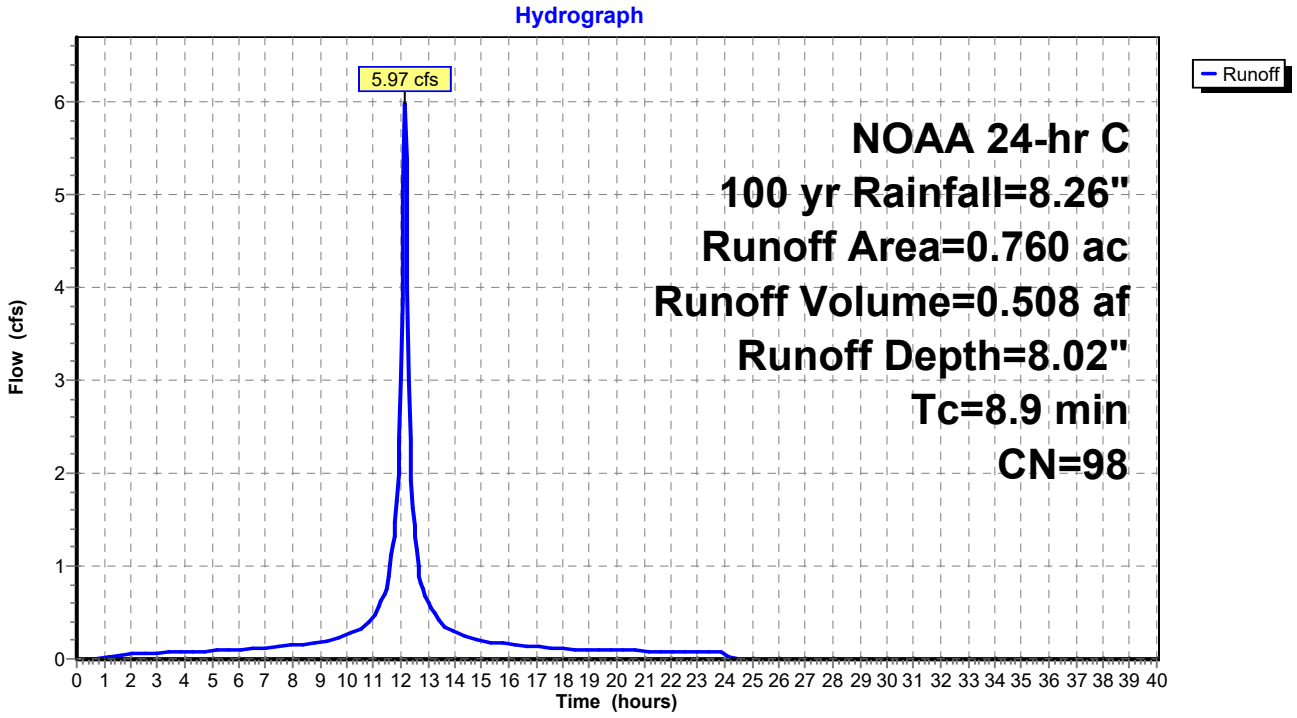
Runoff = 5.97 cfs @ 12.16 hrs, Volume= 0.508 af, Depth= 8.02"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 100 yr Rainfall=8.26"

	Area (ac)	CN	Description
*	0.760	98	
	0.760		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6I: XDA-6 (impervious)



Summary for Subcatchment X-6P: XDA-6 (pervious)

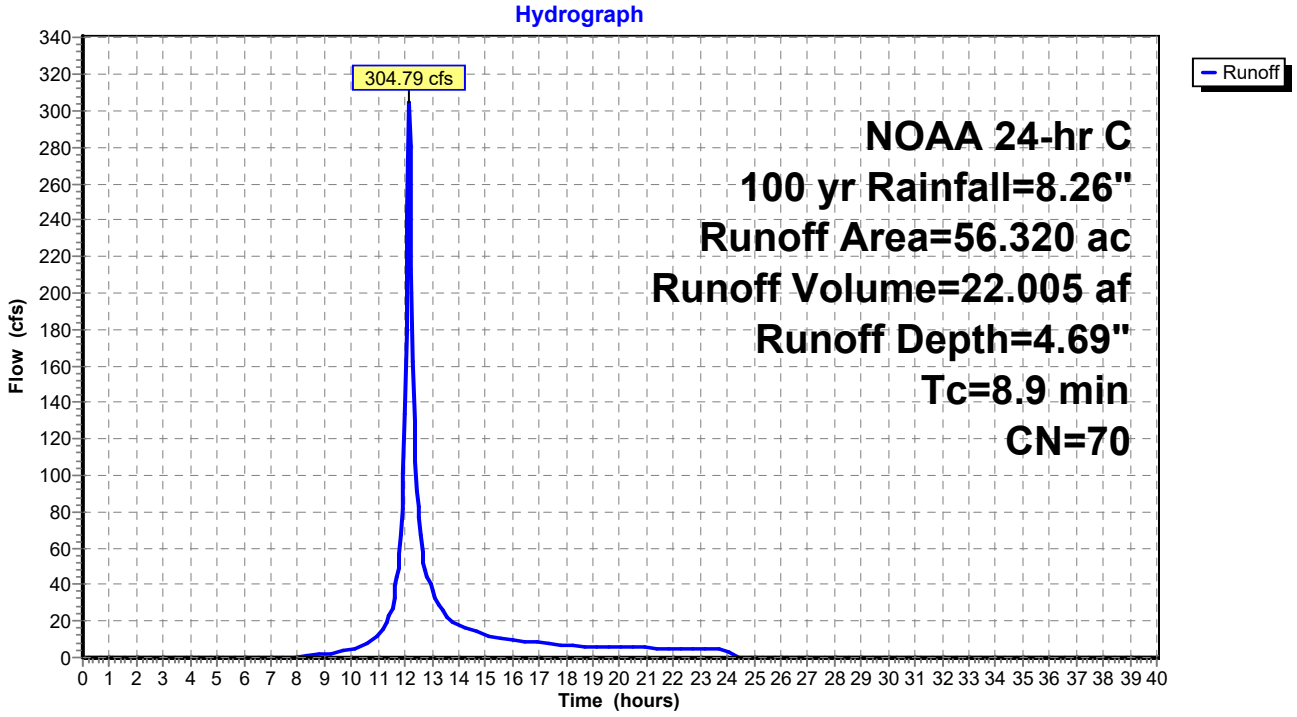
Runoff = 304.79 cfs @ 12.16 hrs, Volume= 22.005 af, Depth= 4.69"
Routed to Link XDA-6 : Existing Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C 100 yr Rainfall=8.26"

Area (ac)	CN	Description
6.820	55	Woods, Good, HSG B
10.710	70	Woods, Good, HSG C
4.480	77	Woods, Good, HSG D
29.650	71	Row crops, C&T, Good, HSG B
4.540	78	Row crops, C&T, Good, HSG C
0.120	81	Row crops, C&T, Good, HSG D
56.320	70	Weighted Average
56.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9					**Direct Entry,**

Subcatchment X-6P: XDA-6 (pervious)

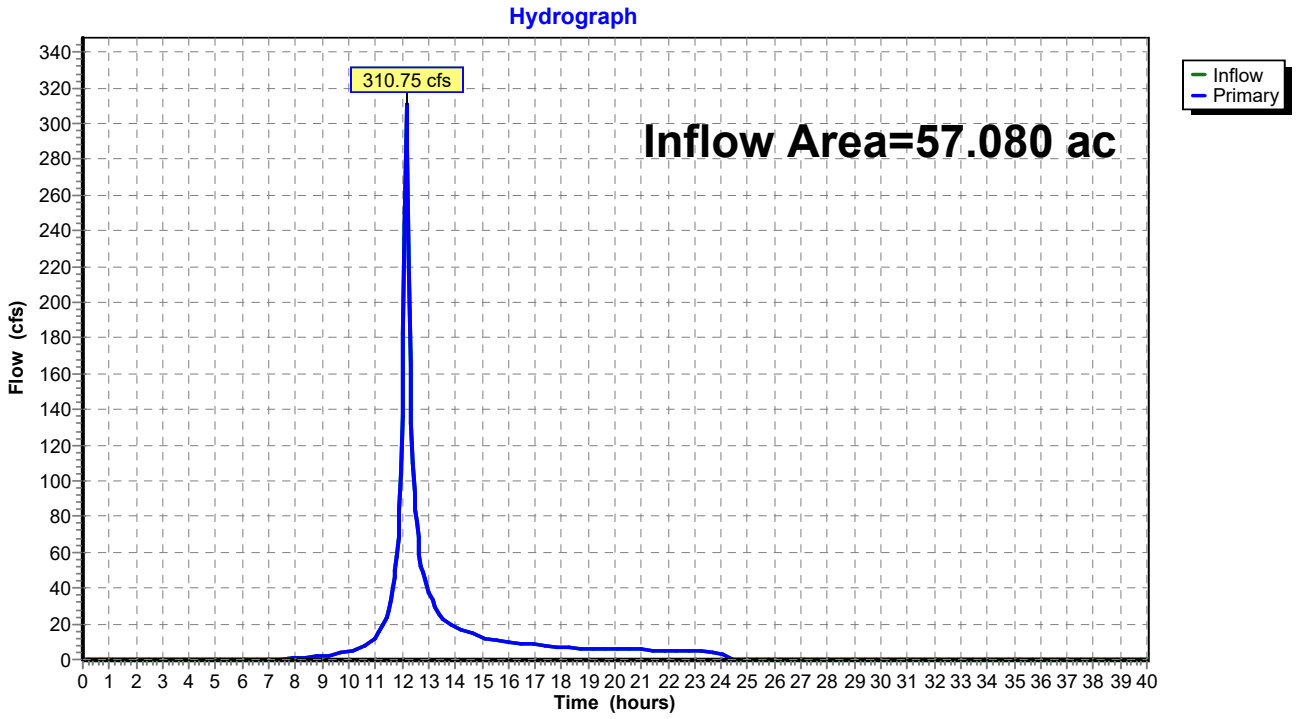


Summary for Link XDA-6: Existing Drainage Area #6

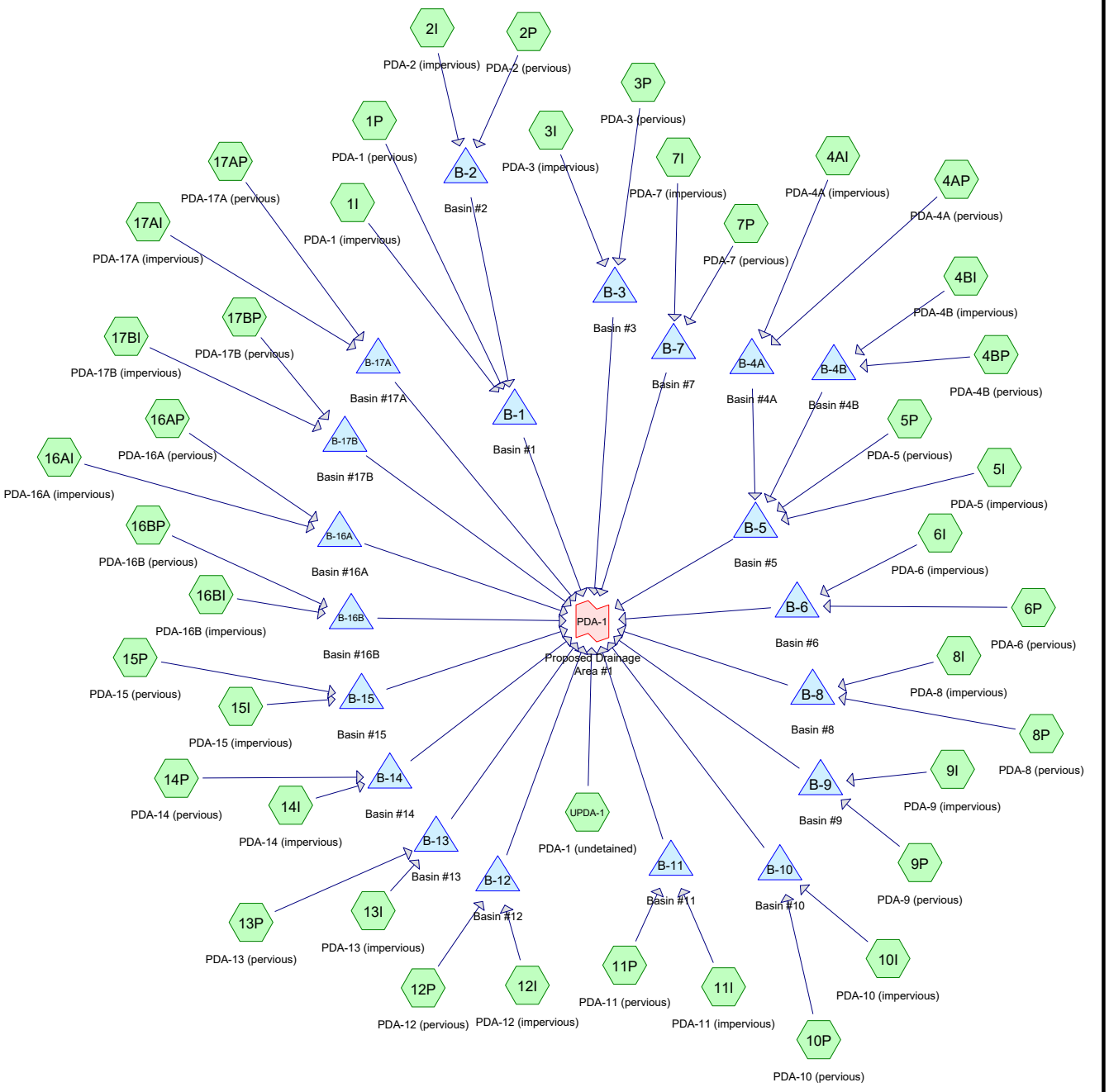
Inflow Area = 57.080 ac, 1.33% Impervious, Inflow Depth = 4.73" for 100 yr event
Inflow = 310.75 cfs @ 12.16 hrs, Volume= 22.513 af
Primary = 310.75 cfs @ 12.16 hrs, Volume= 22.513 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link XDA-6: Existing Drainage Area #6



APPENDIX 3
TR-55 CALCULATIONS – PROPOSED CONDITIONS



Routing Diagram for 2024-12-17 Proposed- 081391_1
Prepared by Bowman Consulting Group, Printed 12/19/2024
HydroCAD® 10.20-5c s/n 09435 © 2023 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	Current 2 yr	NOAA 24-hr	C	Default	24.00	1	3.35	2
2	Current 10 yr	NOAA 24-hr	C	Default	24.00	1	5.10	2
3	Current 100 yr	NOAA 24-hr	C	Default	24.00	1	8.59	2
4	Future 2 yr	NOAA 24-hr	C	Default	24.00	1	3.85	2
5	Future 10 yr	NOAA 24-hr	C	Default	24.00	1	5.85	2
6	Future 100 yr	NOAA 24-hr	C	Default	24.00	1	11.23	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
75.275	74	>75% Grass cover, Good, HSG C (1P, 2P, 3P, 4AP, 4BP, 5P, 6P, 7P, 8P, 9P, 10P, 11P, 12P, 13P, 14P, 15P, 16AP, 16BP, 17AP, 17BP, UPDA-1)
1.245	98	Concrete, HSG C (2I, 3I, 4AI, 4BI, 6I, 7I, 9I, 10I, 11I, 12I, 13I, 14I, 15I, 16AI, 16BI)
0.907	98	Paved roads w/curbs & sewers, HSG C (11I)
6.769	98	Pavement, HSG C (2I, 3I, 4AI, 4BI, 6I, 7I, 9I, 10I, 12I, 13I, 14I, 15I, 16AI, 16BI)
5.664	98	Roof, HSG C (2I, 6I, 8I, 9I, 10I, 12I, 13I, 14I, 15I, 16AI, 16BI, 17AI, 17BI)
0.231	98	Roofs, HSG C (11I)
0.257	98	Unconnected roofs, HSG C (3I)

Summary for Subcatchment 1I: PDA-1 (impervious)

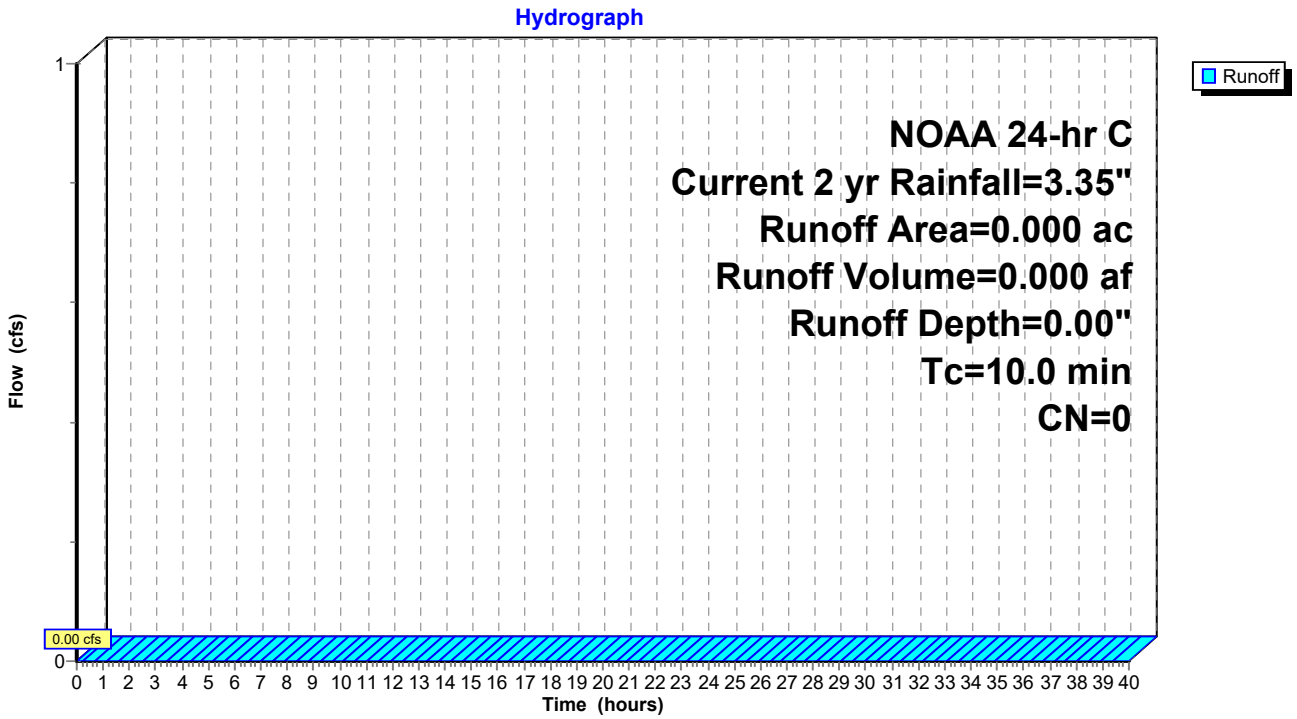
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-1 : Basin #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.000	98	Concrete, HSG C
	0.000	0	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 1I: PDA-1 (impervious)



Summary for Subcatchment 1P: PDA-1 (pervious)

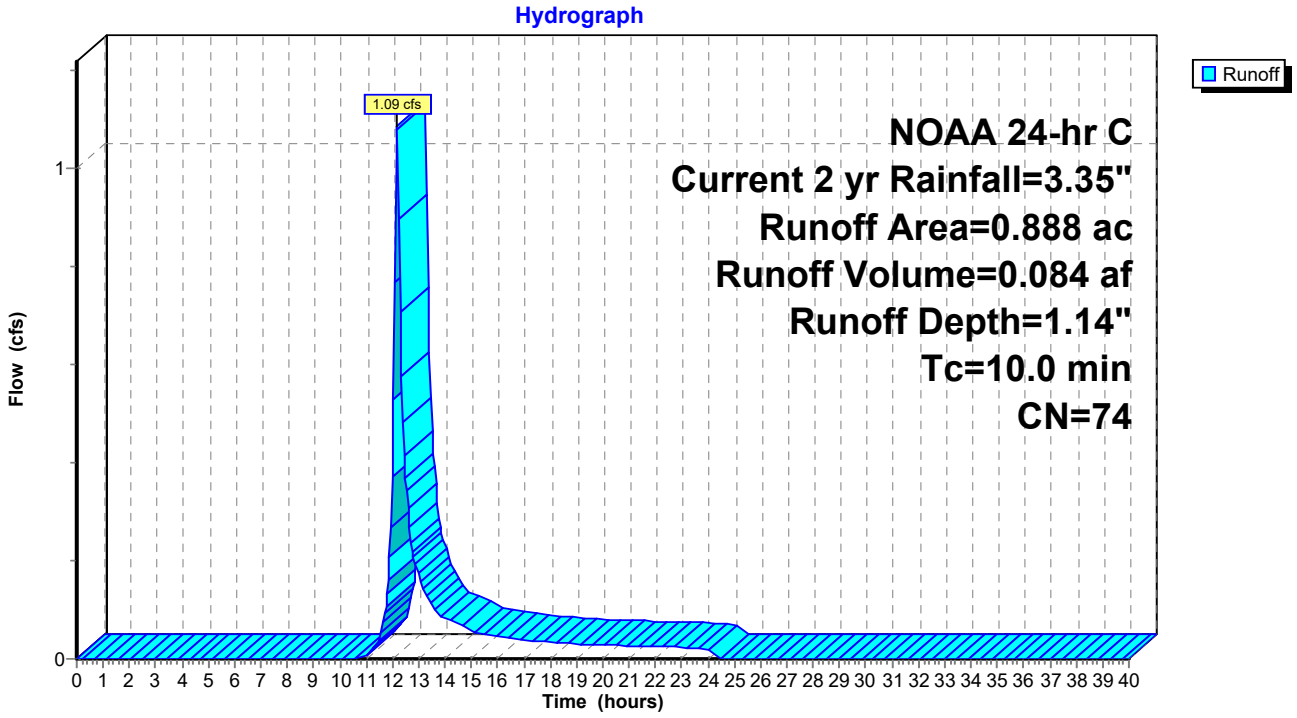
Runoff = 1.09 cfs @ 12.18 hrs, Volume= 0.084 af, Depth= 1.14"
Routed to Pond B-1 : Basin #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.888	74	>75% Grass cover, Good, HSG C
0.888		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 1P: PDA-1 (pervious)



Summary for Subcatchment 2l: PDA-2 (impervious)

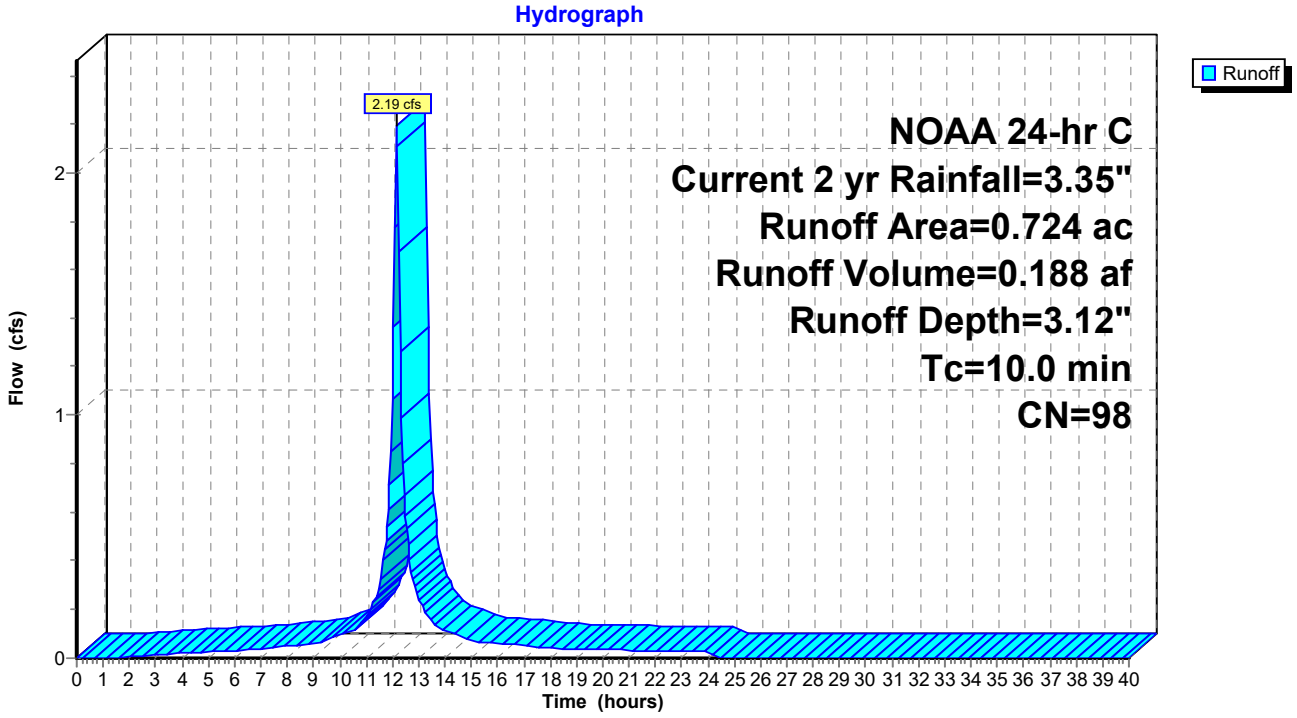
Runoff = 2.19 cfs @ 12.17 hrs, Volume= 0.188 af, Depth= 3.12"
Routed to Pond B-2 : Basin #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.490	98	Roof, HSG C
*	0.196	98	Pavement, HSG C
*	0.038	98	Concrete, HSG C
	0.724	98	Weighted Average
	0.724		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 2l: PDA-2 (impervious)



Summary for Subcatchment 2P: PDA-2 (pervious)

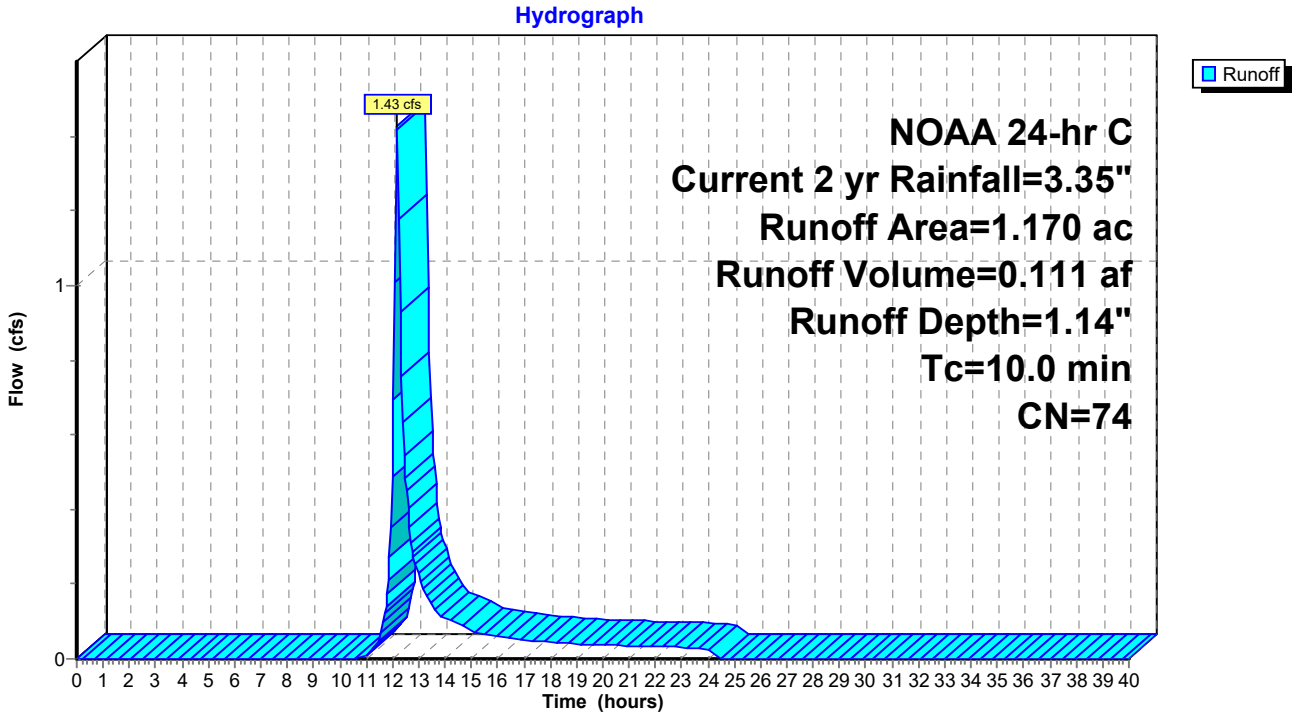
Runoff = 1.43 cfs @ 12.18 hrs, Volume= 0.111 af, Depth= 1.14"
Routed to Pond B-2 : Basin #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.170	74	>75% Grass cover, Good, HSG C
1.170		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 2P: PDA-2 (pervious)



Summary for Subcatchment 3l: PDA-3 (impervious)

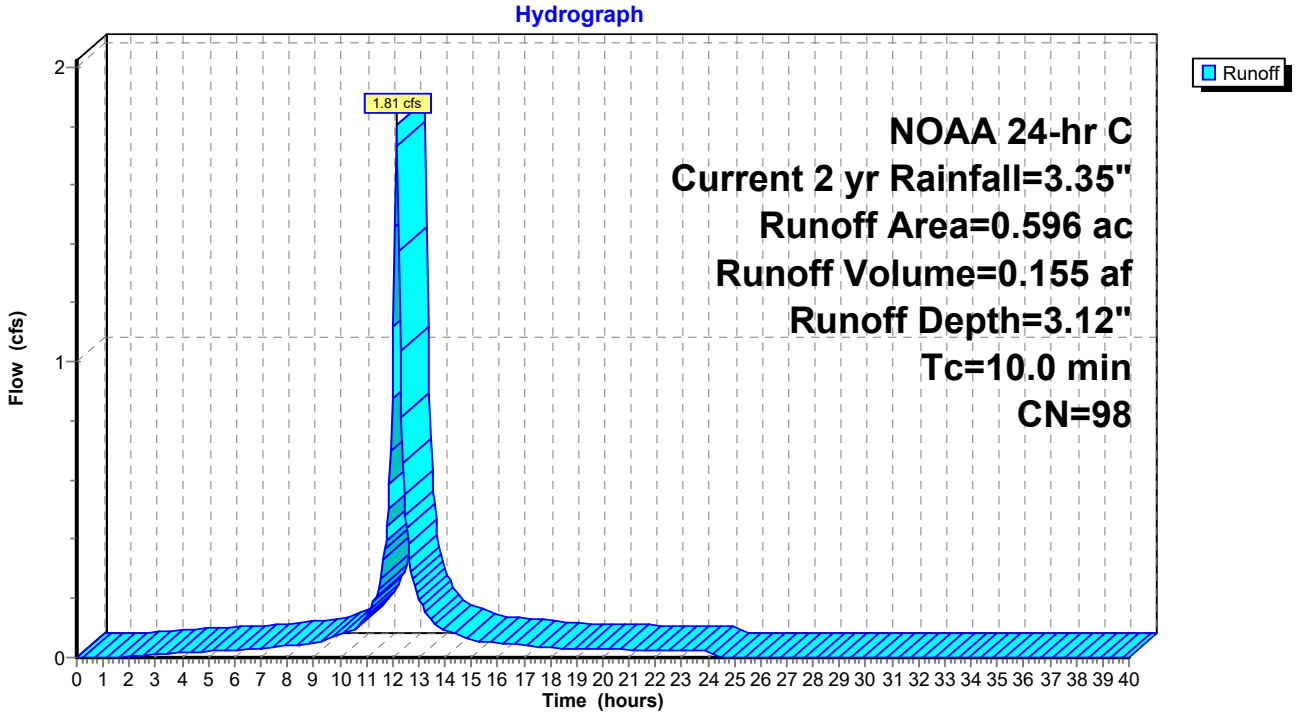
Runoff = 1.81 cfs @ 12.17 hrs, Volume= 0.155 af, Depth= 3.12"
Routed to Pond B-3 : Basin #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.304	98	Pavement, HSG C
*	0.035	98	Concrete, HSG C
	0.257	98	Unconnected roofs, HSG C
	0.596	98	Weighted Average
	0.596		100.00% Impervious Area
	0.257		43.12% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 3l: PDA-3 (impervious)



Summary for Subcatchment 3P: PDA-3 (pervious)

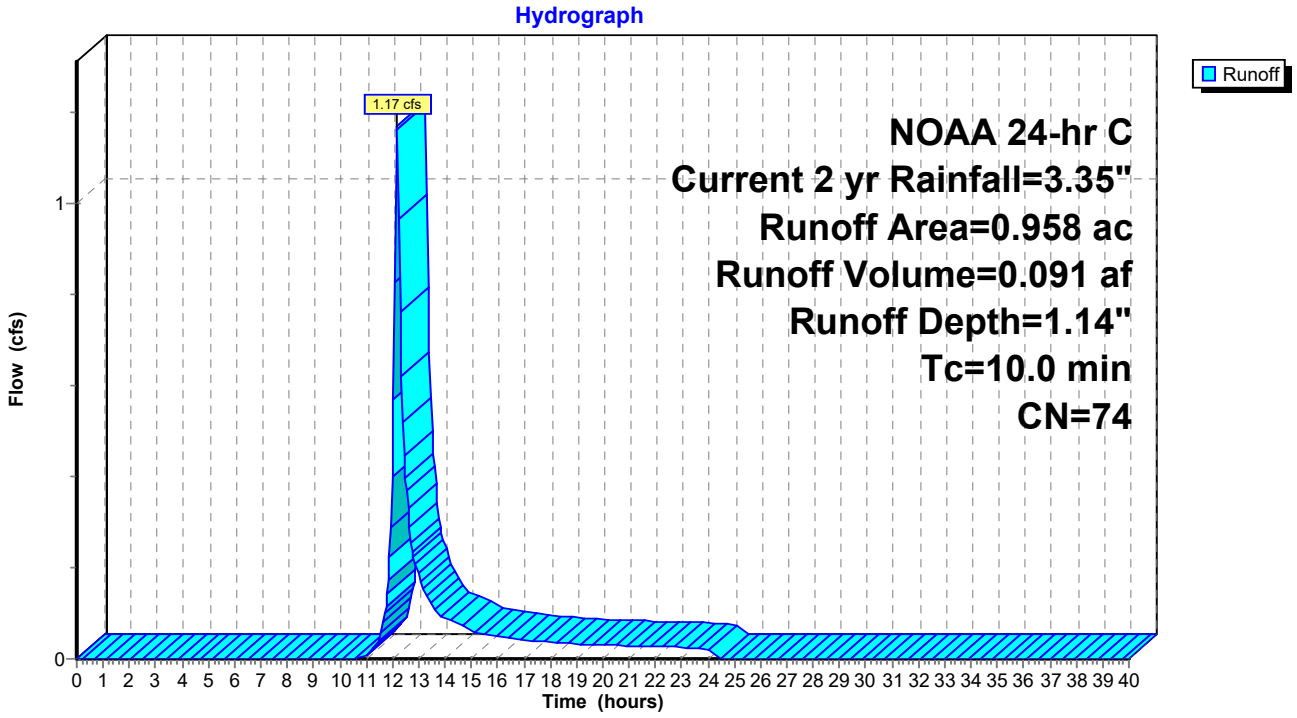
Runoff = 1.17 cfs @ 12.18 hrs, Volume= 0.091 af, Depth= 1.14"
Routed to Pond B-3 : Basin #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.958	74	>75% Grass cover, Good, HSG C
0.958		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 3P: PDA-3 (pervious)



Summary for Subcatchment 4AI: PDA-4A (impervious)

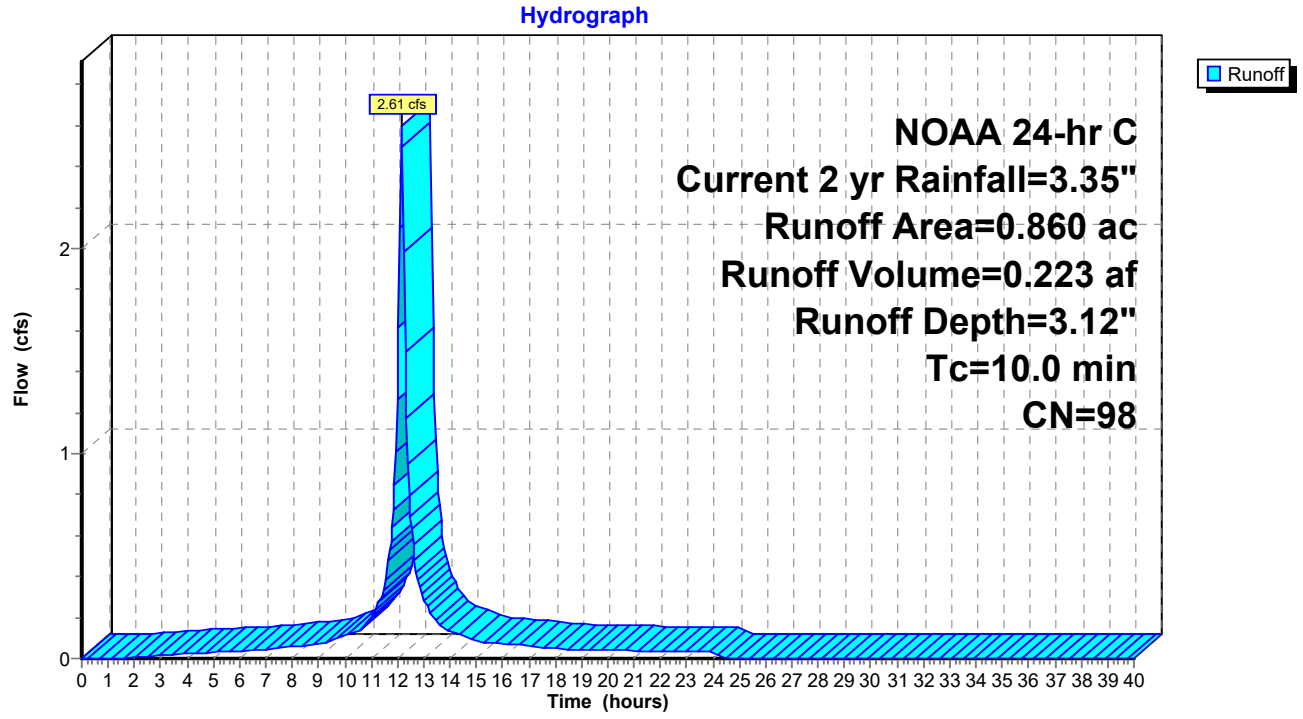
Runoff = 2.61 cfs @ 12.17 hrs, Volume= 0.223 af, Depth= 3.12"
Routed to Pond B-4A : Basin #4A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.742	98	Pavement, HSG C
*	0.118	98	Concrete, HSG C
	0.860	98	Weighted Average
	0.860		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4AI: PDA-4A (impervious)



Summary for Subcatchment 4AP: PDA-4A (pervious)

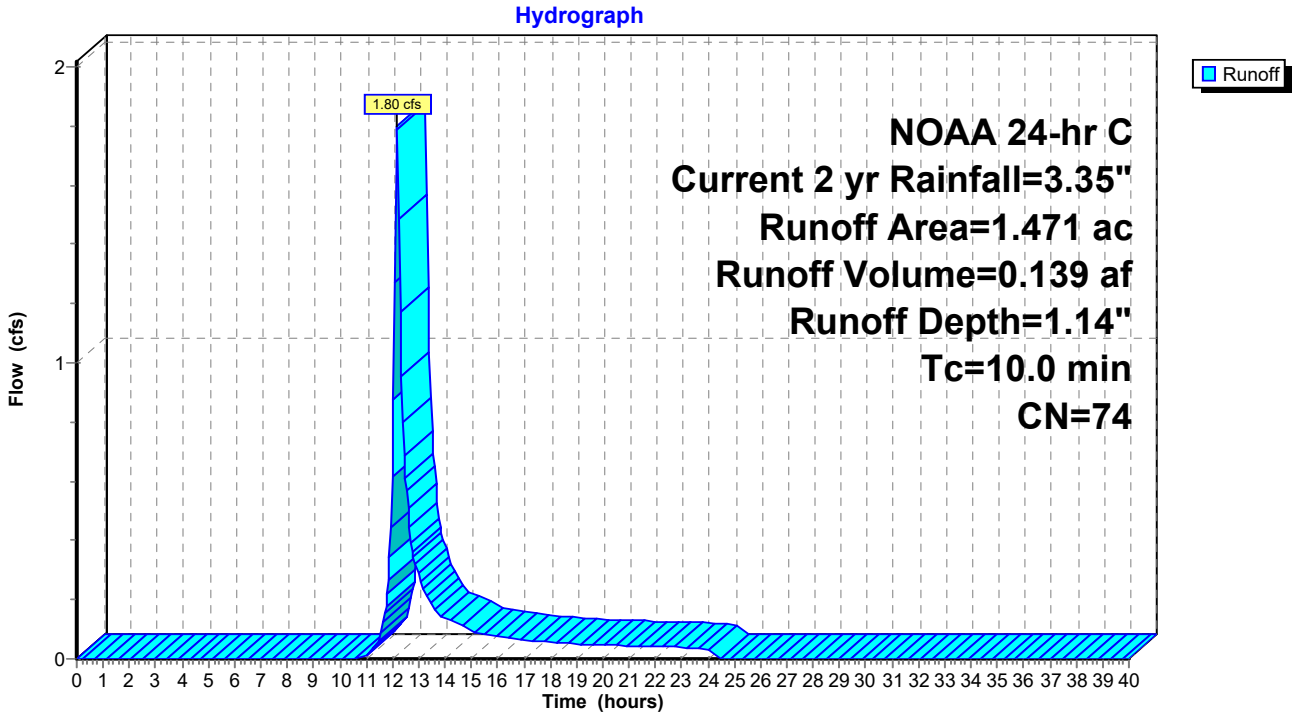
Runoff = 1.80 cfs @ 12.18 hrs, Volume= 0.139 af, Depth= 1.14"
Routed to Pond B-4A : Basin #4A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.471	74	>75% Grass cover, Good, HSG C
1.471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4AP: PDA-4A (pervious)



Summary for Subcatchment 4BI: PDA-4B (impervious)

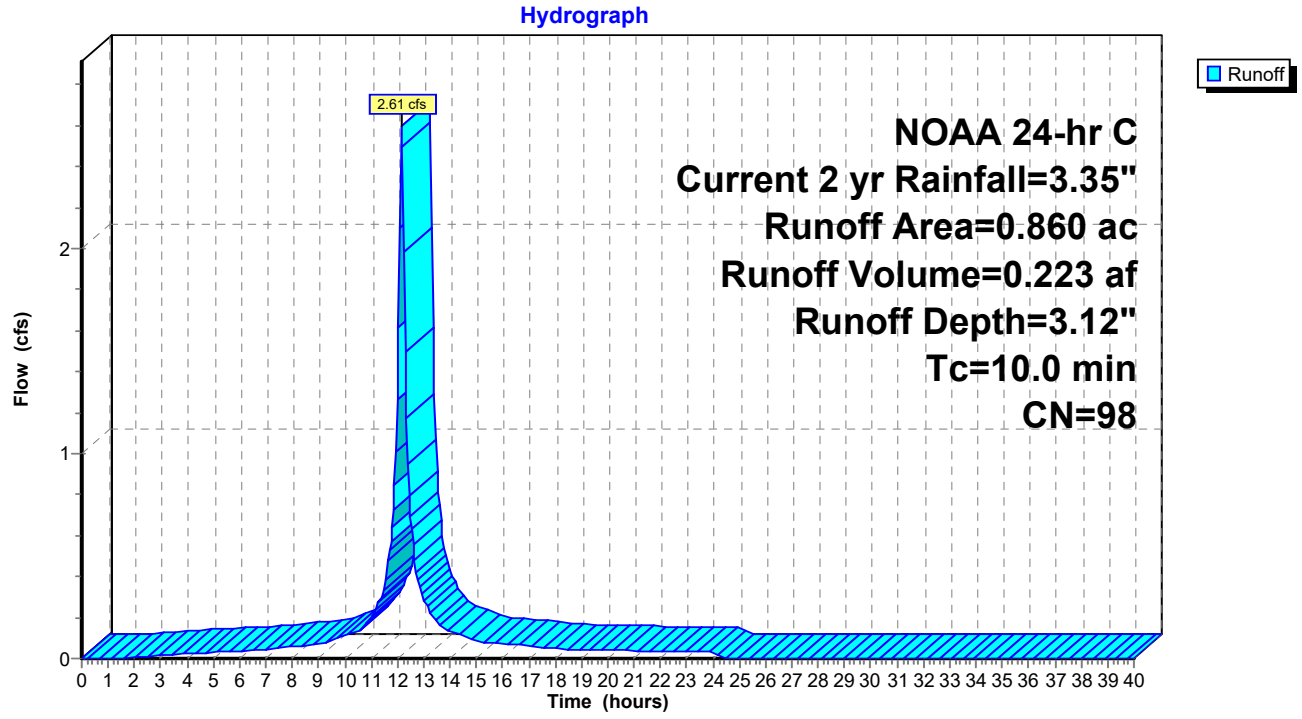
Runoff = 2.61 cfs @ 12.17 hrs, Volume= 0.223 af, Depth= 3.12"
Routed to Pond B-4B : Basin #4B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.742	98	Pavement, HSG C
*	0.118	98	Concrete, HSG C
	0.860	98	Weighted Average
	0.860		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4BI: PDA-4B (impervious)



Summary for Subcatchment 4BP: PDA-4B (pervious)

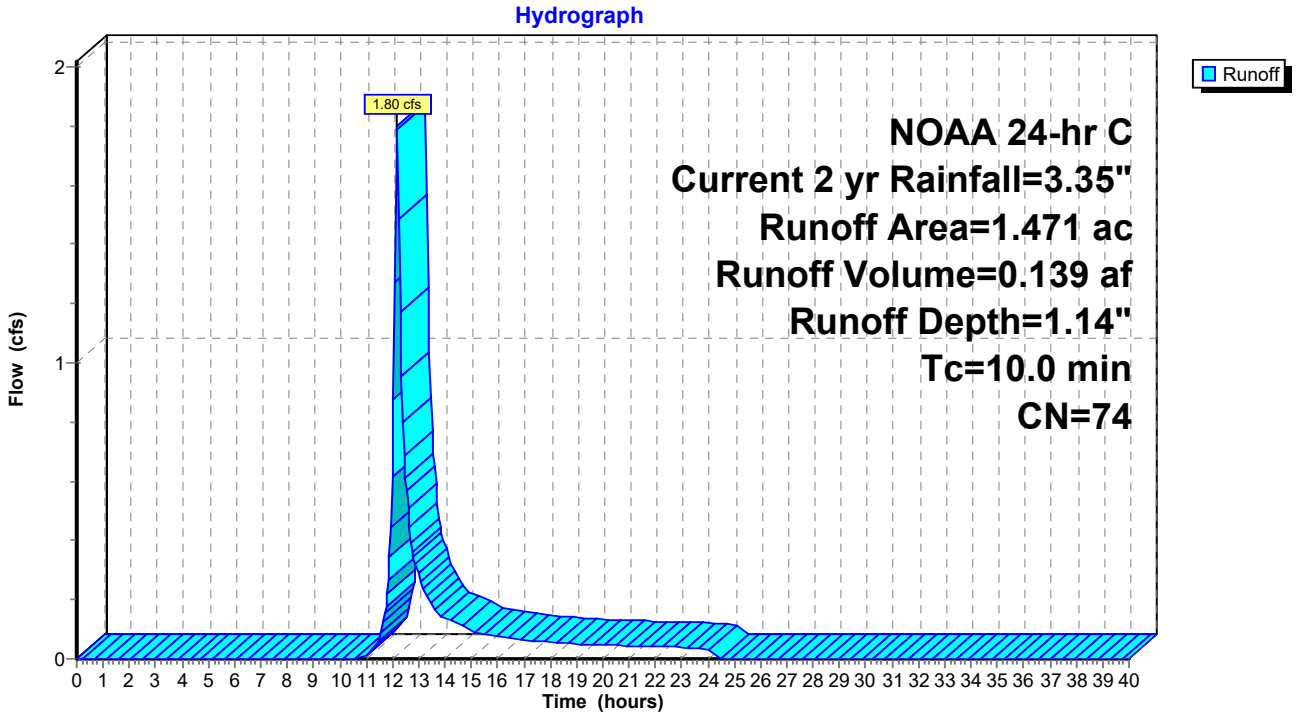
Runoff = 1.80 cfs @ 12.18 hrs, Volume= 0.139 af, Depth= 1.14"
Routed to Pond B-4B : Basin #4B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.471	74	>75% Grass cover, Good, HSG C
1.471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4BP: PDA-4B (pervious)



Summary for Subcatchment 5l: PDA-5 (impervious)

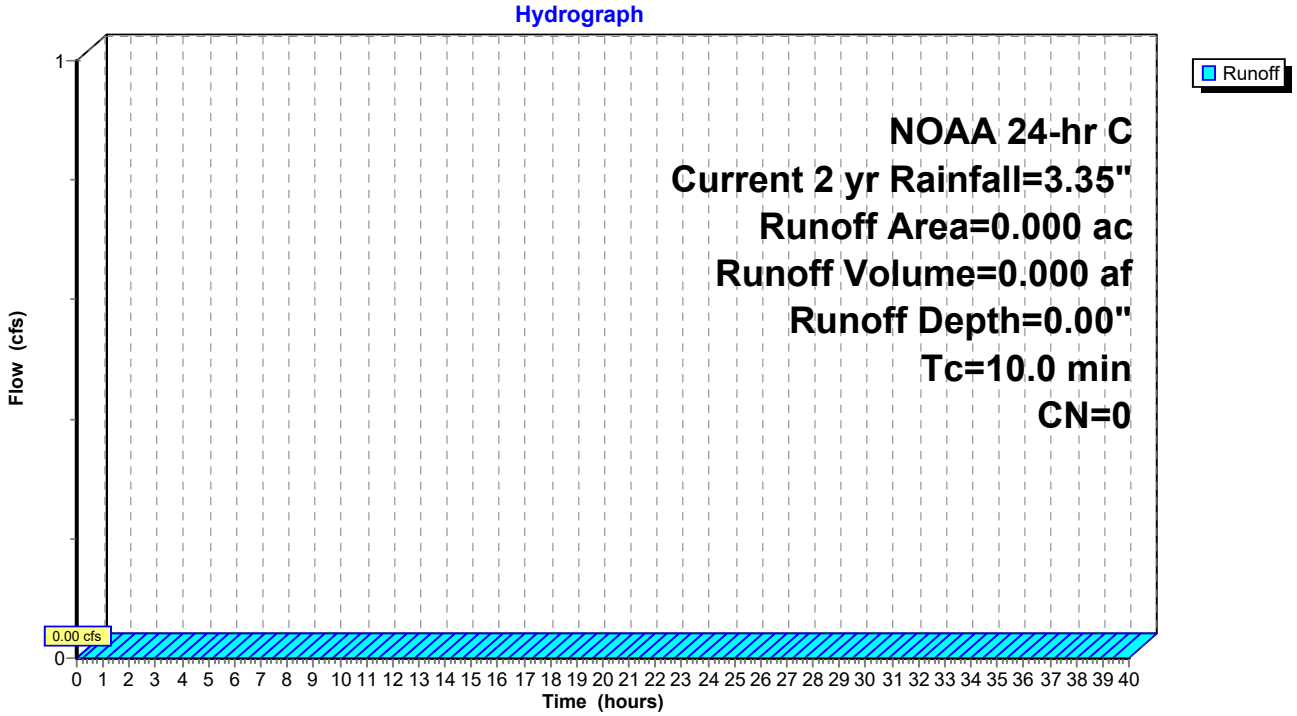
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-5 : Basin #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.000	98	Concrete, HSG C
	0.000	0	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 5l: PDA-5 (impervious)



Summary for Subcatchment 5P: PDA-5 (pervious)

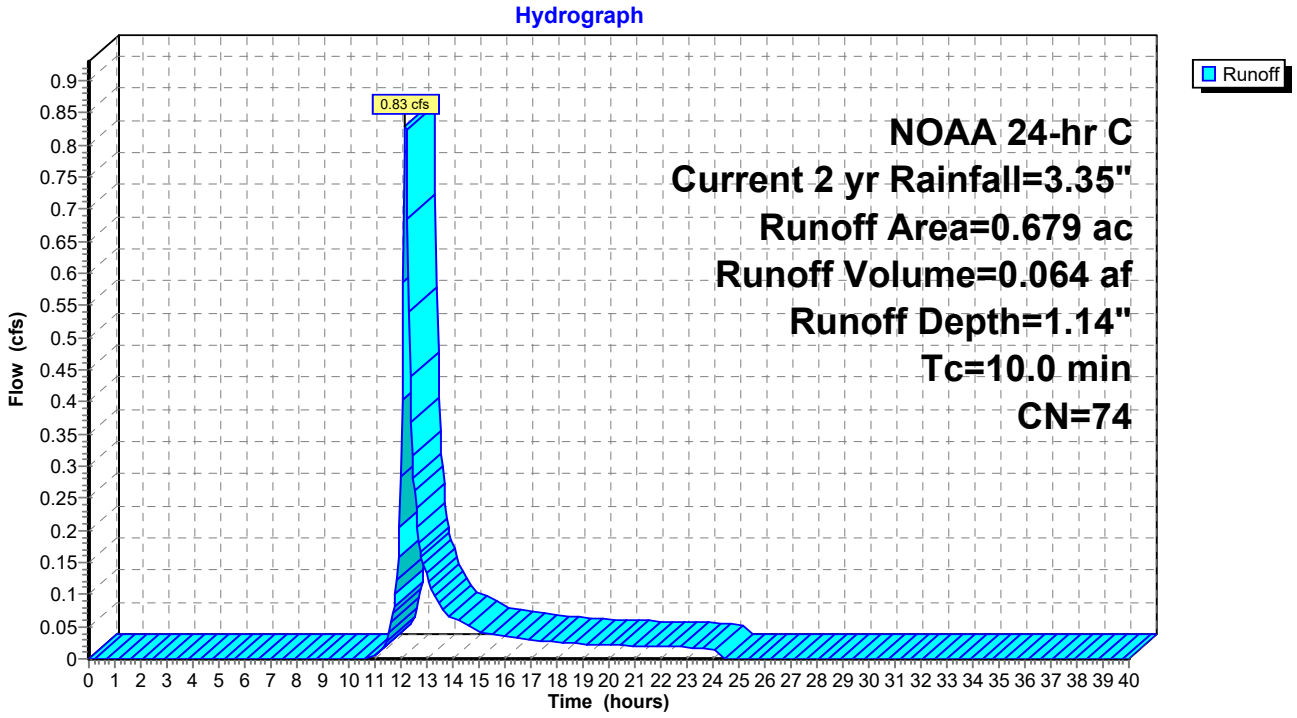
Runoff = 0.83 cfs @ 12.18 hrs, Volume= 0.064 af, Depth= 1.14"
Routed to Pond B-5 : Basin #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.679	74	>75% Grass cover, Good, HSG C
0.679		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 5P: PDA-5 (pervious)



Summary for Subcatchment 6l: PDA-6 (impervious)

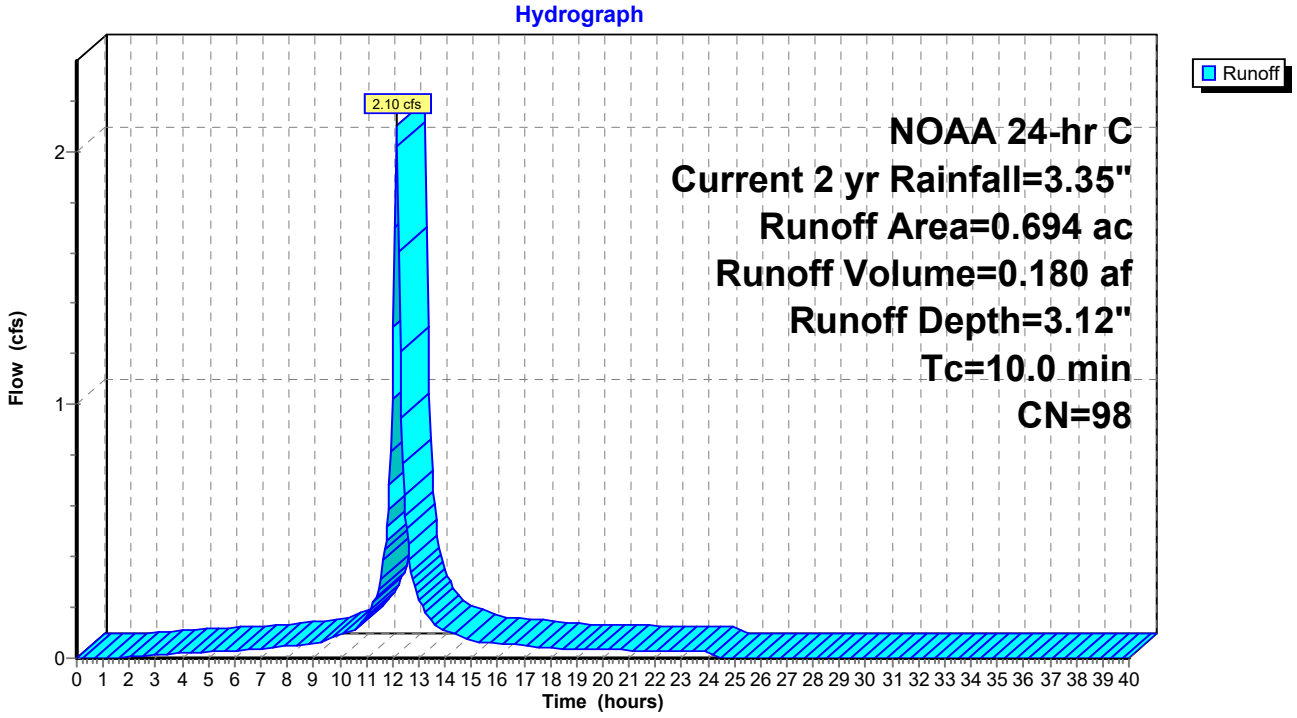
Runoff = 2.10 cfs @ 12.17 hrs, Volume= 0.180 af, Depth= 3.12"
Routed to Pond B-6 : Basin #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.459	98	Pavement, HSG C
*	0.129	98	Roof, HSG C
*	0.106	98	Concrete, HSG C
	0.694	98	Weighted Average
	0.694		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 6l: PDA-6 (impervious)



Summary for Subcatchment 6P: PDA-6 (pervious)

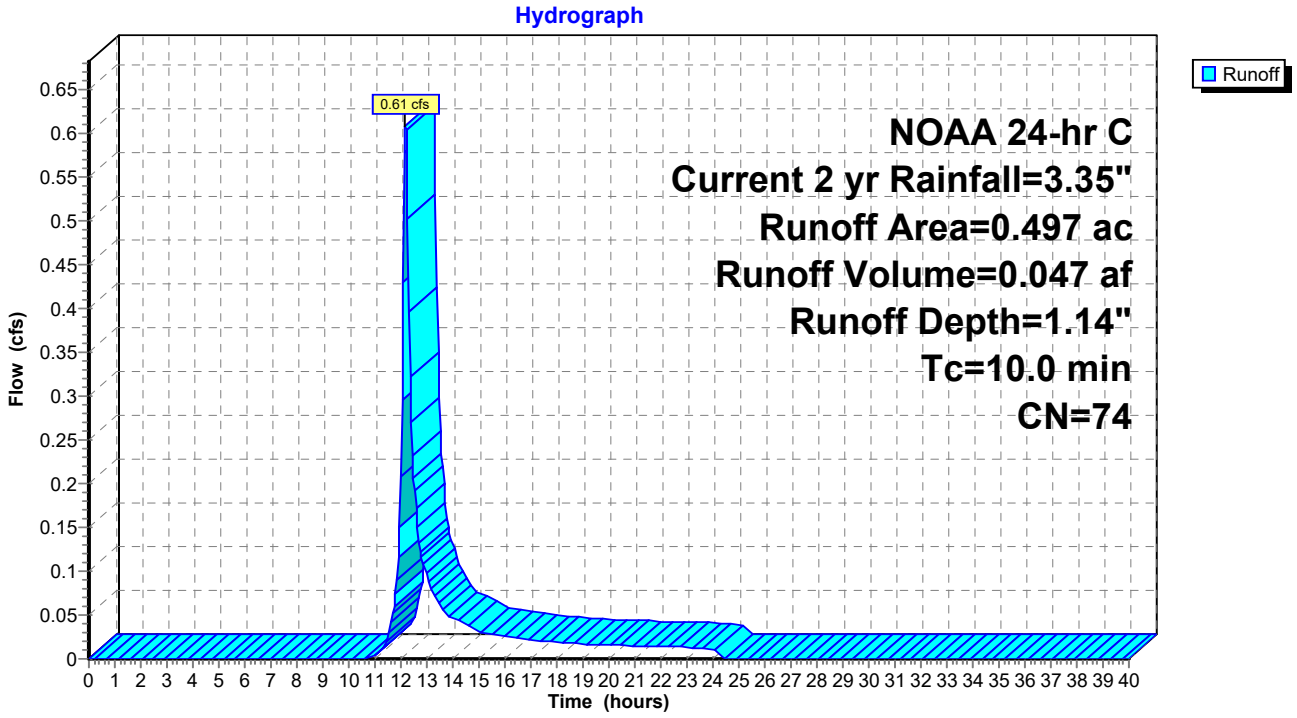
Runoff = 0.61 cfs @ 12.18 hrs, Volume= 0.047 af, Depth= 1.14"
Routed to Pond B-6 : Basin #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.497	74	>75% Grass cover, Good, HSG C
0.497		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 6P: PDA-6 (pervious)



Summary for Subcatchment 7I: PDA-7 (impervious)

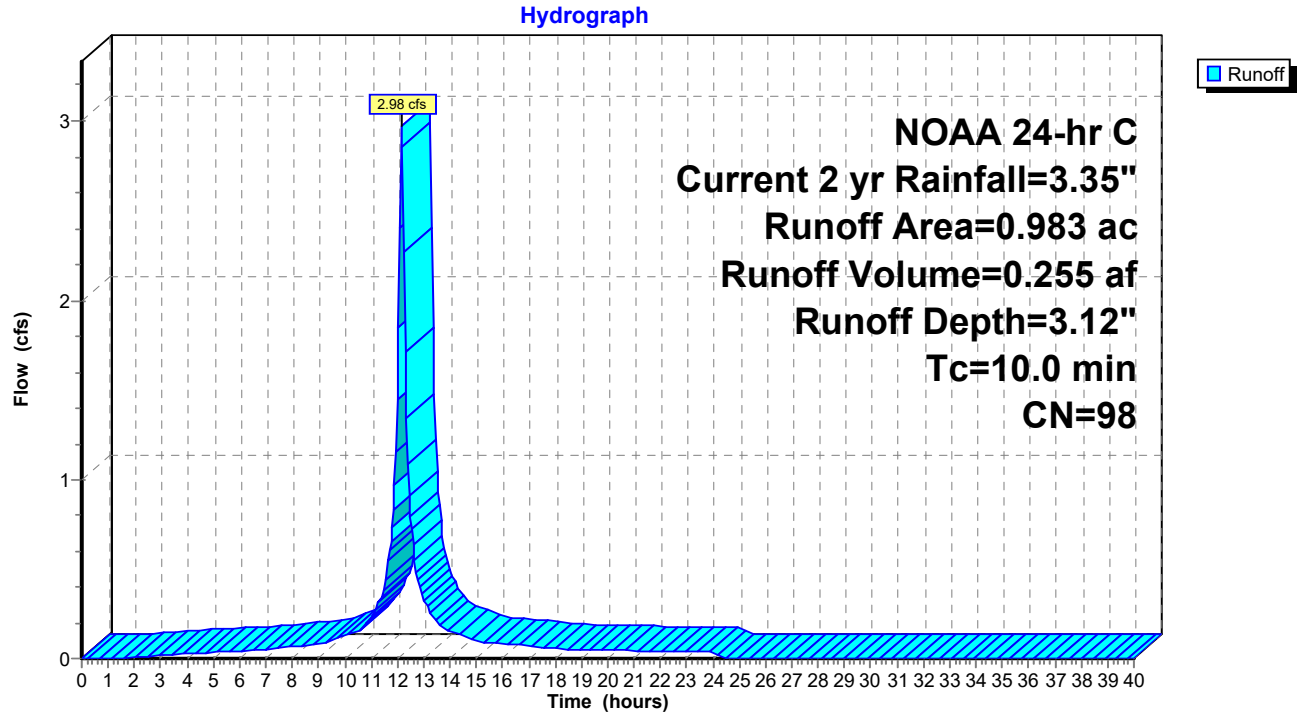
Runoff = 2.98 cfs @ 12.17 hrs, Volume= 0.255 af, Depth= 3.12"
Routed to Pond B-7 : Basin #7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.886	98	Pavement, HSG C
*	0.097	98	Concrete, HSG C
	0.983	98	Weighted Average
	0.983		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 7I: PDA-7 (impervious)



Summary for Subcatchment 7P: PDA-7 (pervious)

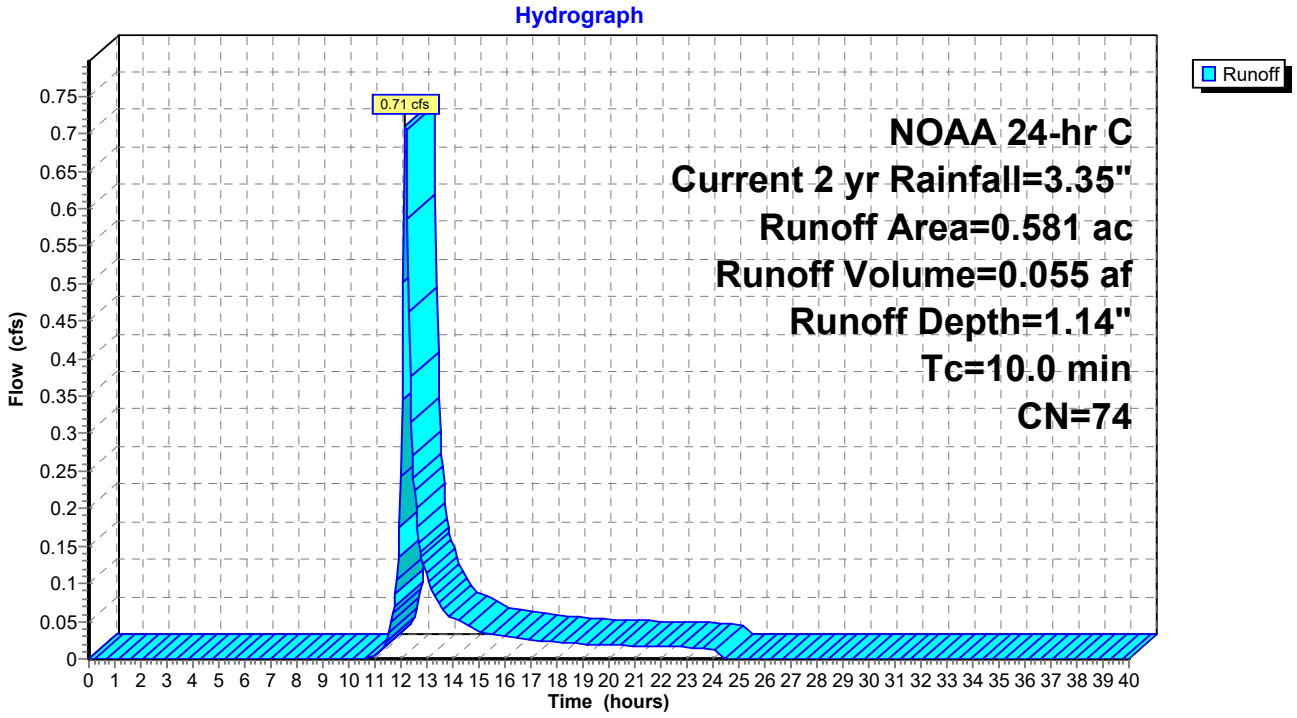
Runoff = 0.71 cfs @ 12.18 hrs, Volume= 0.055 af, Depth= 1.14"
Routed to Pond B-7 : Basin #7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.581	74	>75% Grass cover, Good, HSG C
0.581		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 7P: PDA-7 (pervious)



Summary for Subcatchment 8I: PDA-8 (impervious)

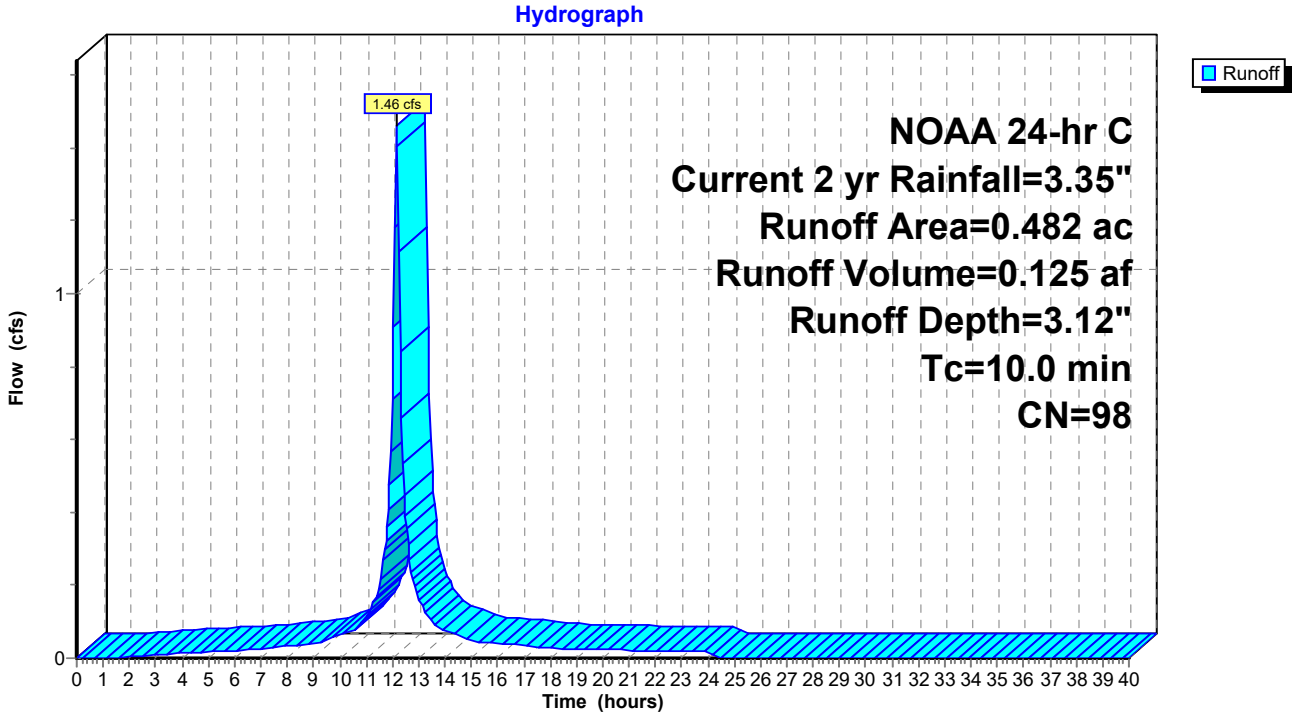
Runoff = 1.46 cfs @ 12.17 hrs, Volume= 0.125 af, Depth= 3.12"
Routed to Pond B-8 : Basin #8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.482	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.482	98	Weighted Average
	0.482		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8I: PDA-8 (impervious)



Summary for Subcatchment 8P: PDA-8 (pervious)

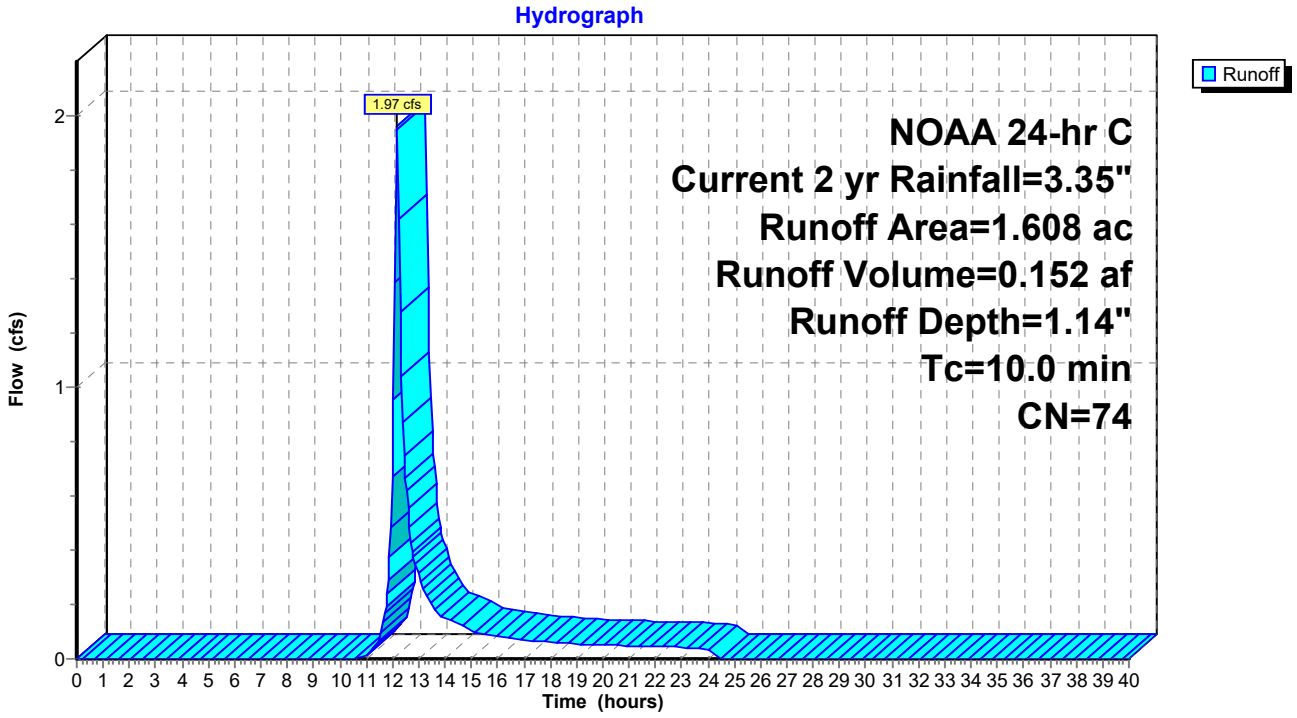
Runoff = 1.97 cfs @ 12.18 hrs, Volume= 0.152 af, Depth= 1.14"
Routed to Pond B-8 : Basin #8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.608	74	>75% Grass cover, Good, HSG C
1.608		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8P: PDA-8 (pervious)



Summary for Subcatchment 9I: PDA-9 (impervious)

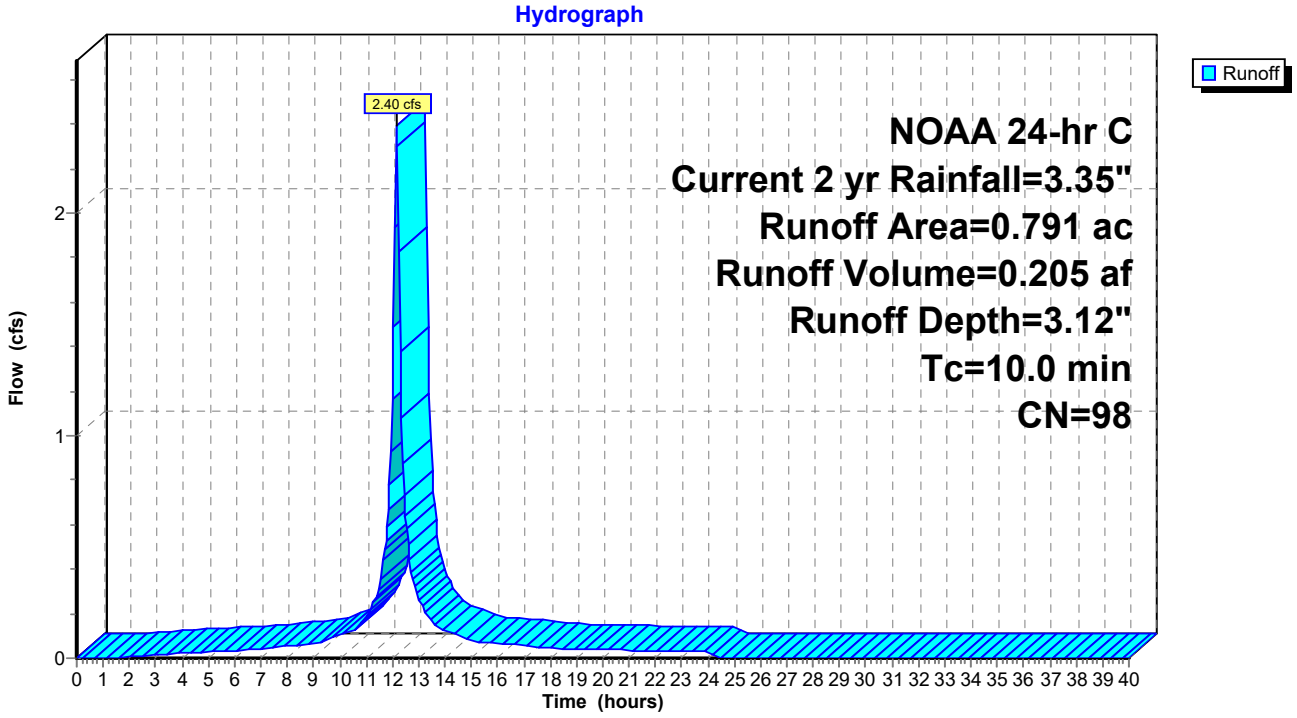
Runoff = 2.40 cfs @ 12.17 hrs, Volume= 0.205 af, Depth= 3.12"
Routed to Pond B-9 : Basin #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.286	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.055	98	Concrete, HSG C
	0.791	98	Weighted Average
	0.791		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 9I: PDA-9 (impervious)



Summary for Subcatchment 9P: PDA-9 (pervious)

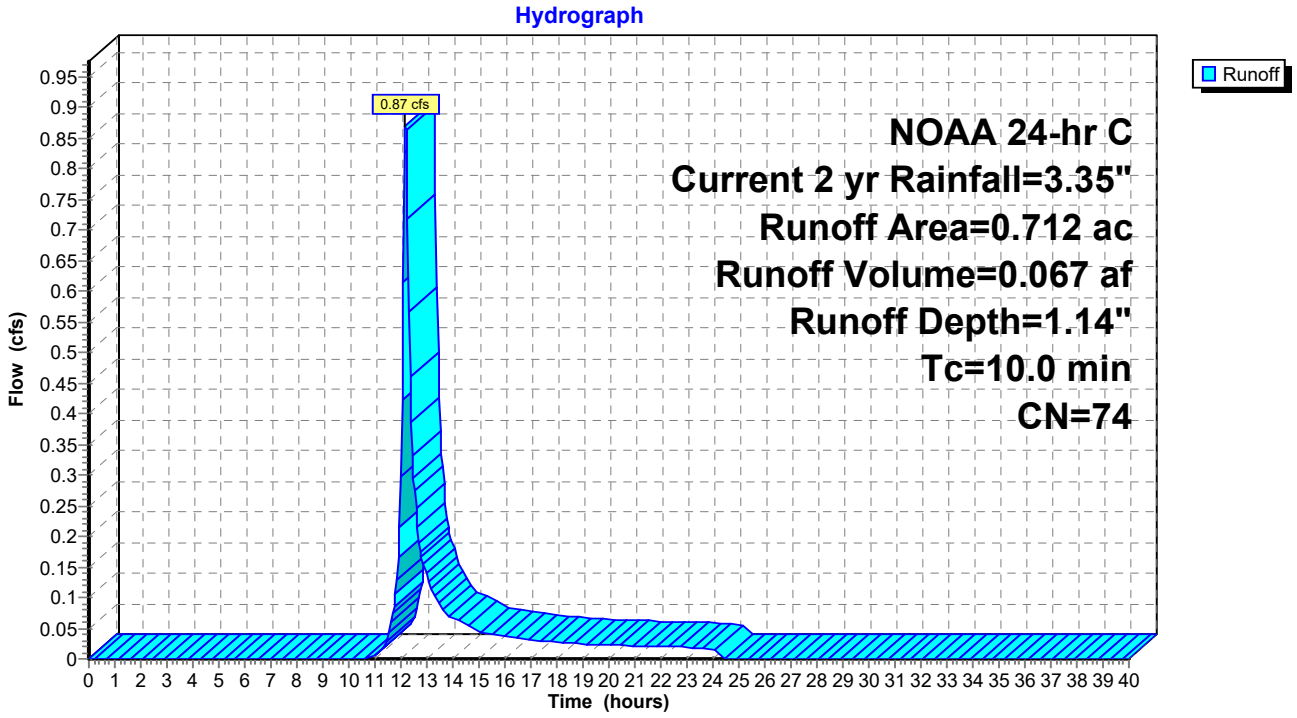
Runoff = 0.87 cfs @ 12.18 hrs, Volume= 0.067 af, Depth= 1.14"
Routed to Pond B-9 : Basin #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.712	74	>75% Grass cover, Good, HSG C
0.712		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 9P: PDA-9 (pervious)



Summary for Subcatchment 10l: PDA-10 (impervious)

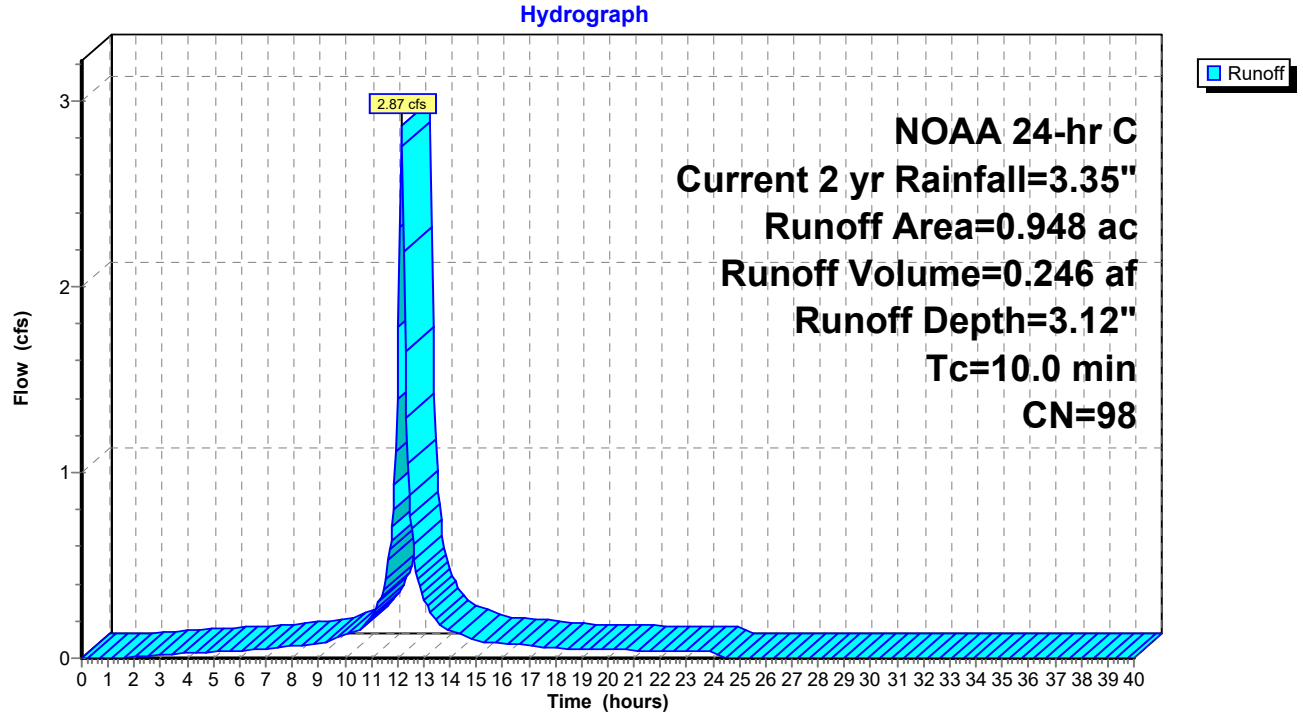
Runoff = 2.87 cfs @ 12.17 hrs, Volume= 0.246 af, Depth= 3.12"
Routed to Pond B-10 : Basin #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.570	98	Pavement, HSG C
*	0.321	98	Roof, HSG C
*	0.057	98	Concrete, HSG C
	0.948	98	Weighted Average
	0.948		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10l: PDA-10 (impervious)



Summary for Subcatchment 10P: PDA-10 (pervious)

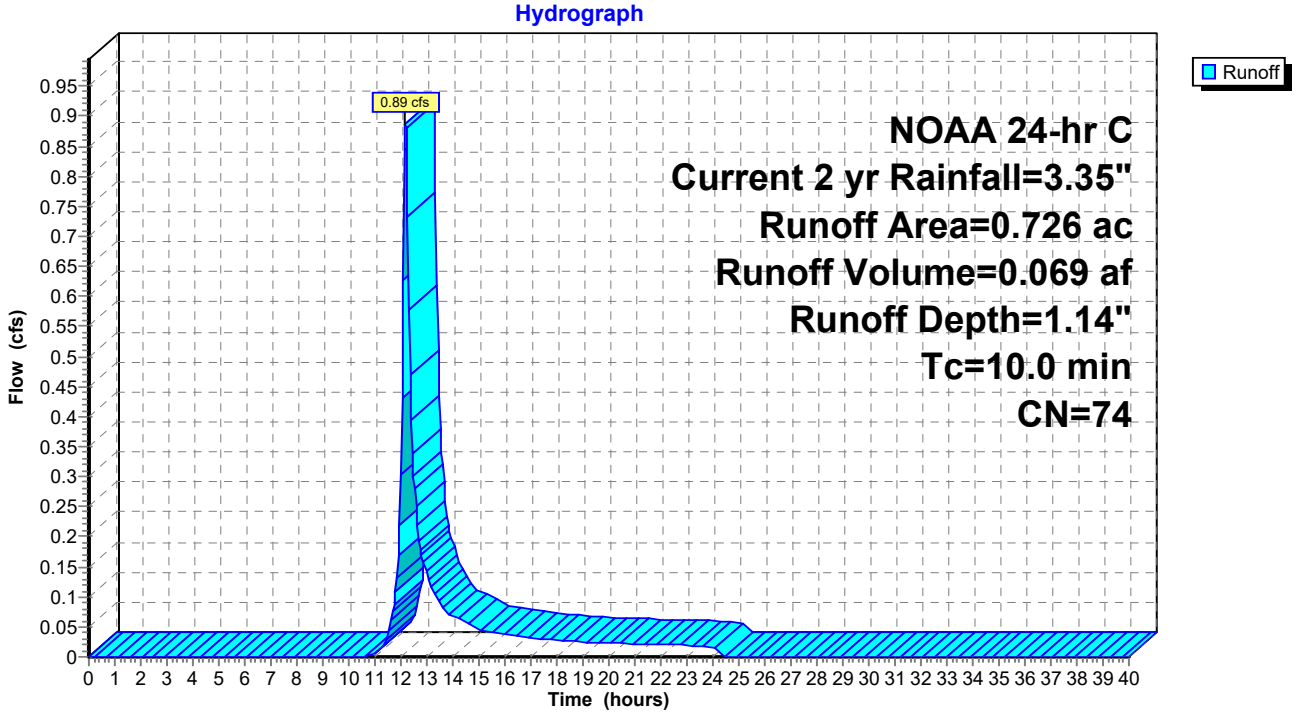
Runoff = 0.89 cfs @ 12.18 hrs, Volume= 0.069 af, Depth= 1.14"
Routed to Pond B-10 : Basin #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.726	74	>75% Grass cover, Good, HSG C
0.726		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10P: PDA-10 (pervious)



Summary for Subcatchment 11I: PDA-11 (impervious)

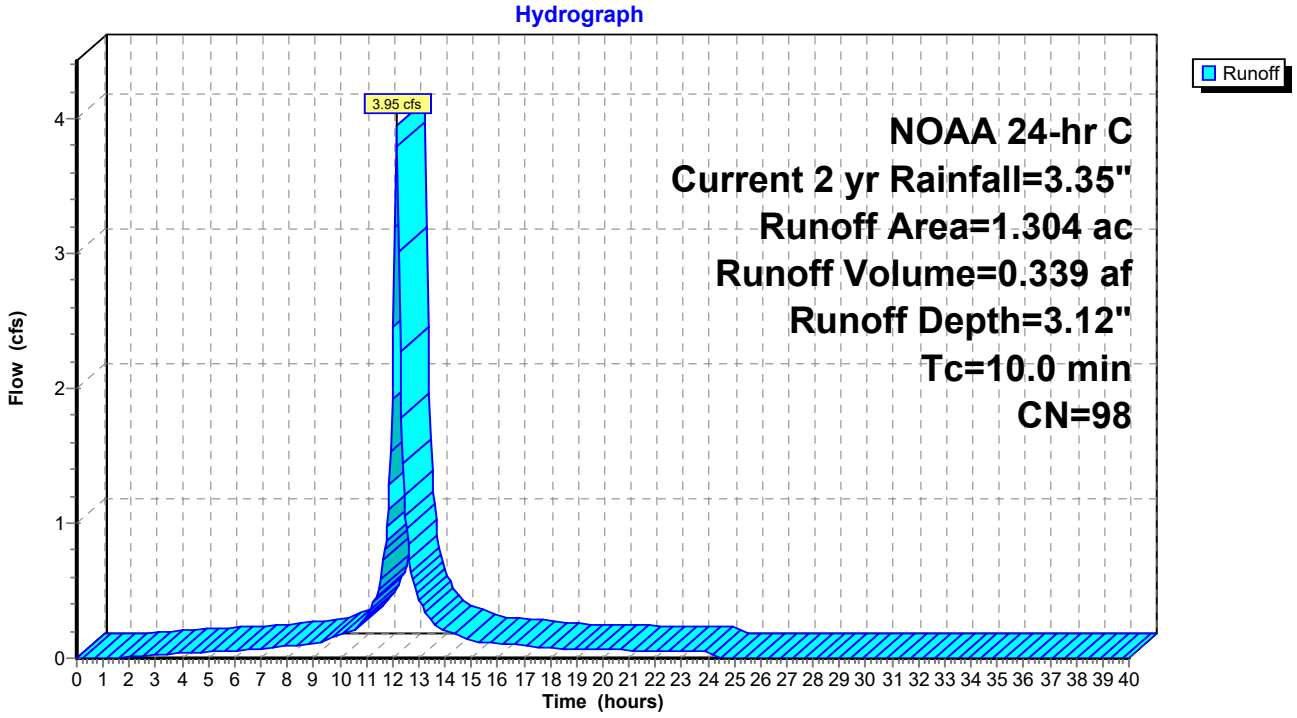
Runoff = 3.95 cfs @ 12.17 hrs, Volume= 0.339 af, Depth= 3.12"
Routed to Pond B-11 : Basin #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.166	98	Concrete, HSG C
	0.231	98	Roofs, HSG C
	0.907	98	Paved roads w/curbs & sewers, HSG C
	1.304	98	Weighted Average
	1.304		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 11I: PDA-11 (impervious)



Summary for Subcatchment 11P: PDA-11 (pervious)

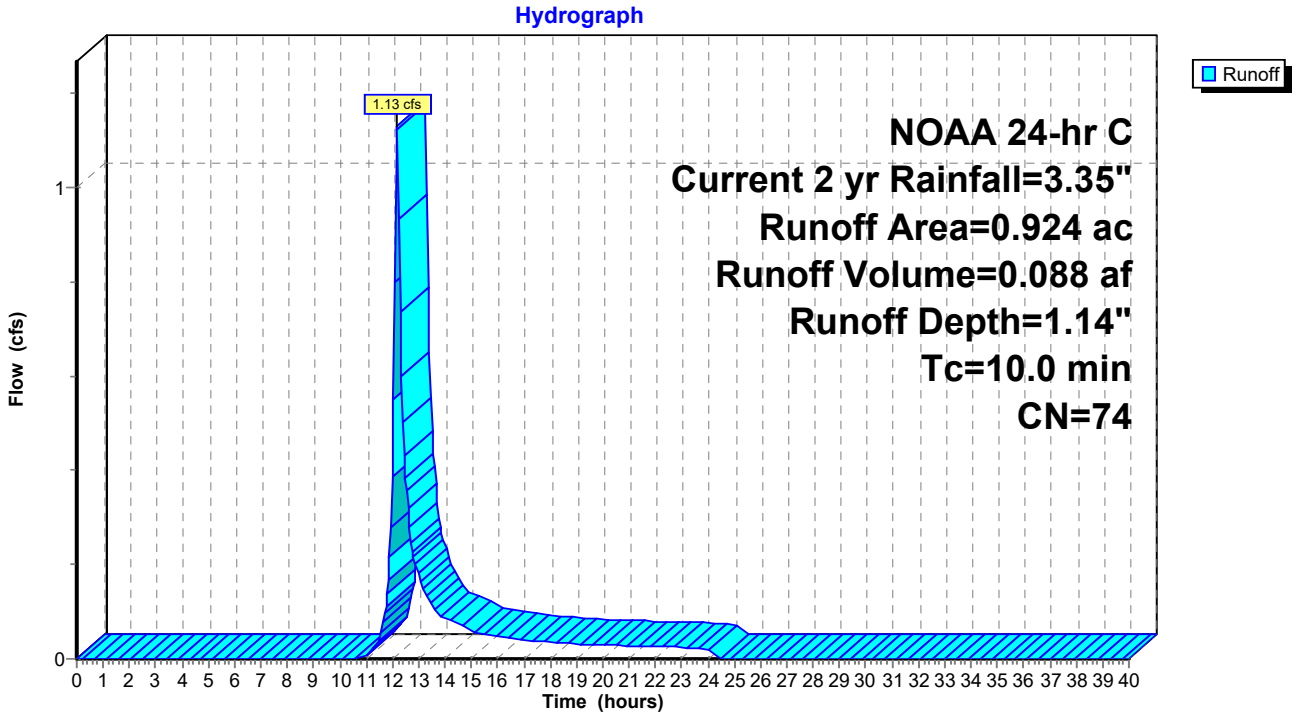
Runoff = 1.13 cfs @ 12.18 hrs, Volume= 0.088 af, Depth= 1.14"
Routed to Pond B-11 : Basin #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.924	74	>75% Grass cover, Good, HSG C
0.924		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 11P: PDA-11 (pervious)



Summary for Subcatchment 12l: PDA-12 (impervious)

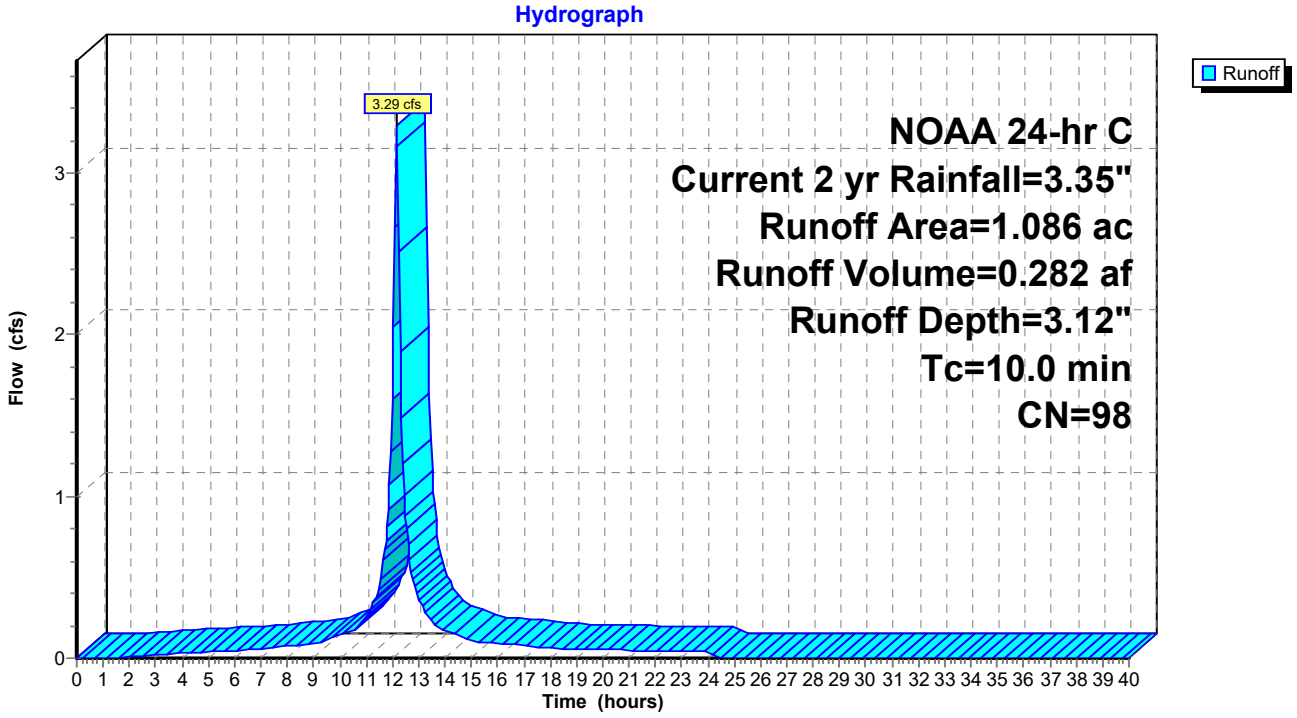
Runoff = 3.29 cfs @ 12.17 hrs, Volume= 0.282 af, Depth= 3.12"
Routed to Pond B-12 : Basin #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.404	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.039	98	Concrete, HSG C
	1.086	98	Weighted Average
	1.086		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 12l: PDA-12 (impervious)



Summary for Subcatchment 12P: PDA-12 (pervious)

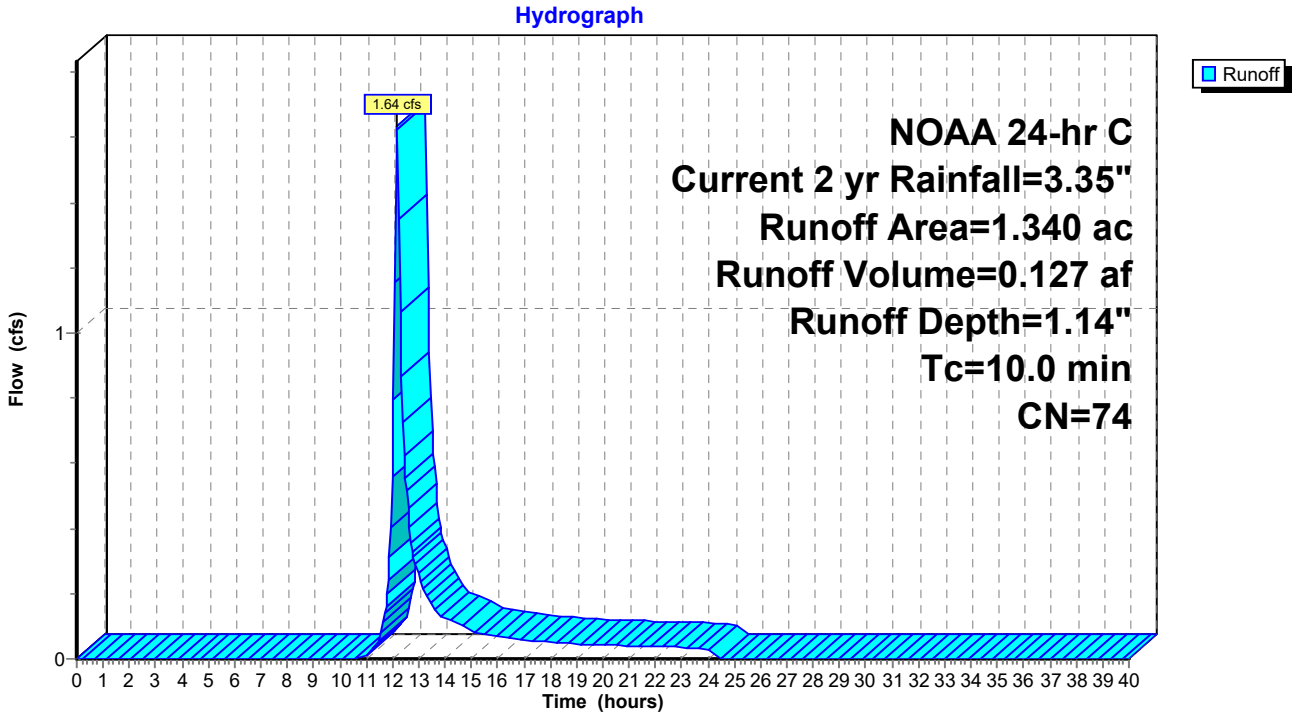
Runoff = 1.64 cfs @ 12.18 hrs, Volume= 0.127 af, Depth= 1.14"
Routed to Pond B-12 : Basin #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.340	74	>75% Grass cover, Good, HSG C
1.340		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 12P: PDA-12 (pervious)



Summary for Subcatchment 13I: PDA-13 (impervious)

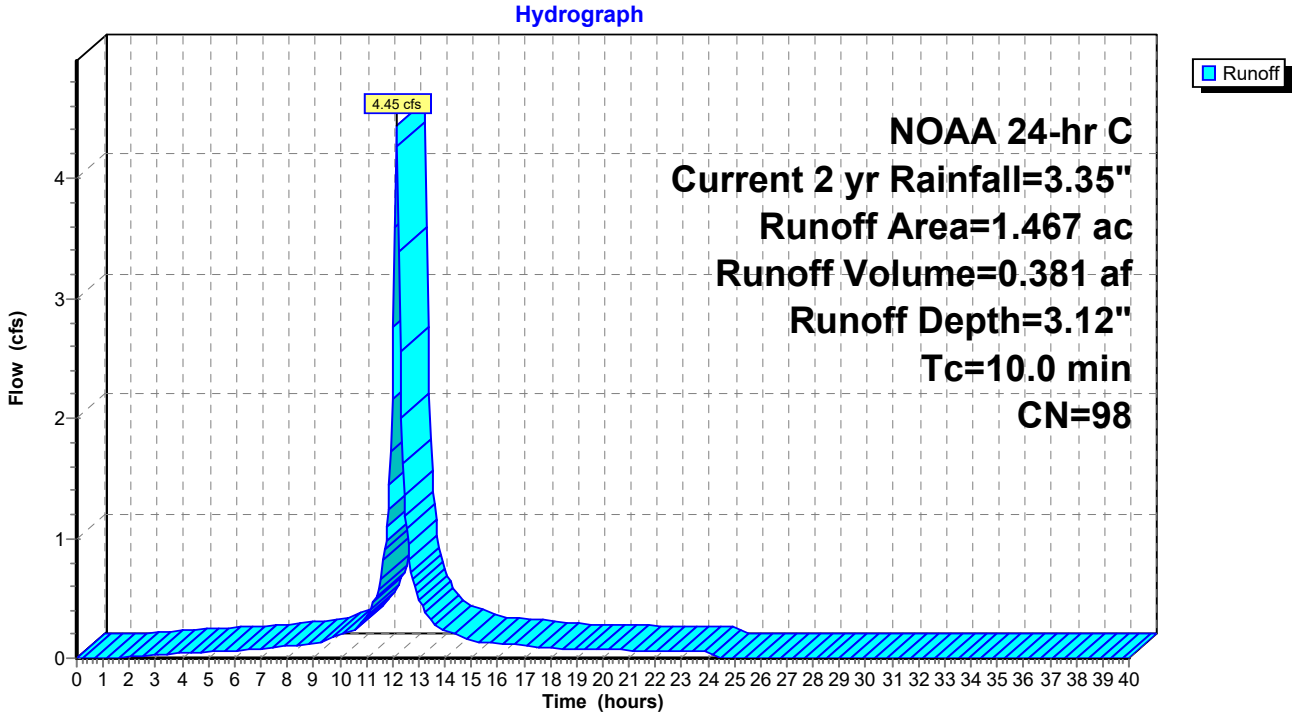
Runoff = 4.45 cfs @ 12.17 hrs, Volume= 0.381 af, Depth= 3.12"
Routed to Pond B-13 : Basin #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.678	98	Pavement, HSG C
*	0.707	98	Roof, HSG C
*	0.082	98	Concrete, HSG C
	1.467	98	Weighted Average
	1.467		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 13I: PDA-13 (impervious)



Summary for Subcatchment 13P: PDA-13 (pervious)

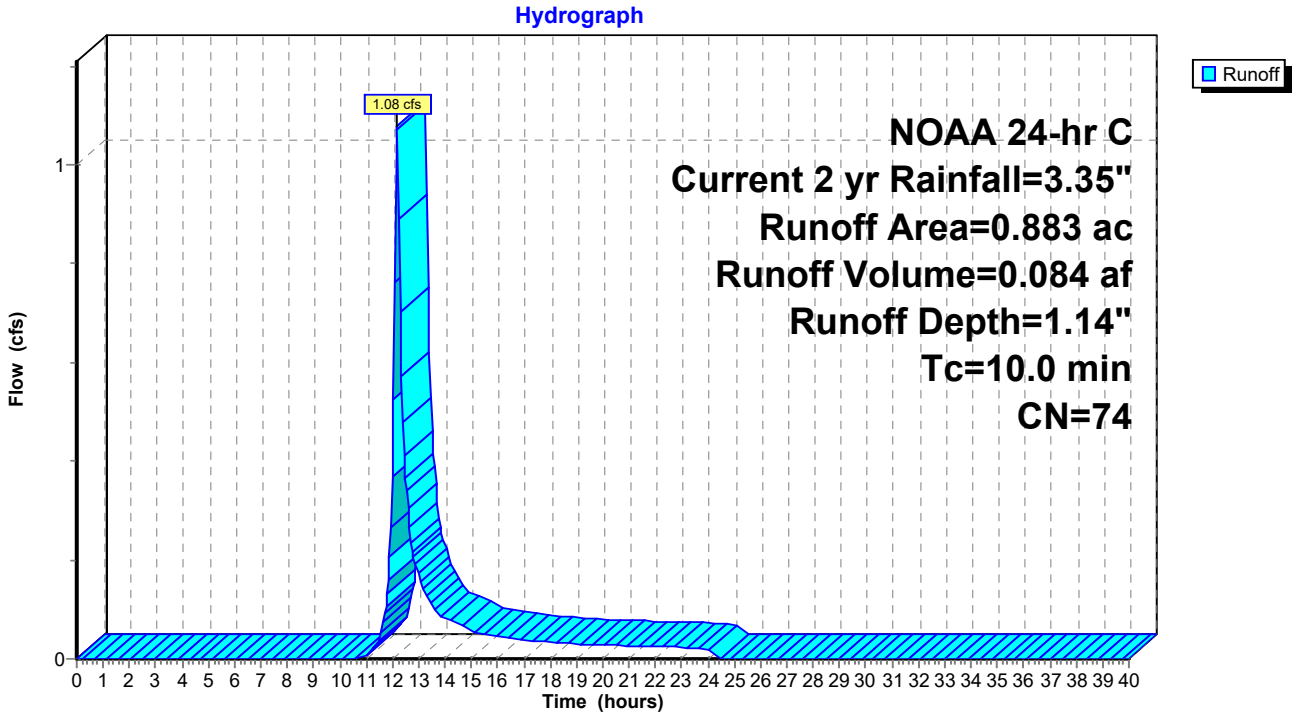
Runoff = 1.08 cfs @ 12.18 hrs, Volume= 0.084 af, Depth= 1.14"
Routed to Pond B-13 : Basin #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.883	74	>75% Grass cover, Good, HSG C
0.883		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 13P: PDA-13 (pervious)



Summary for Subcatchment 14l: PDA-14 (impervious)

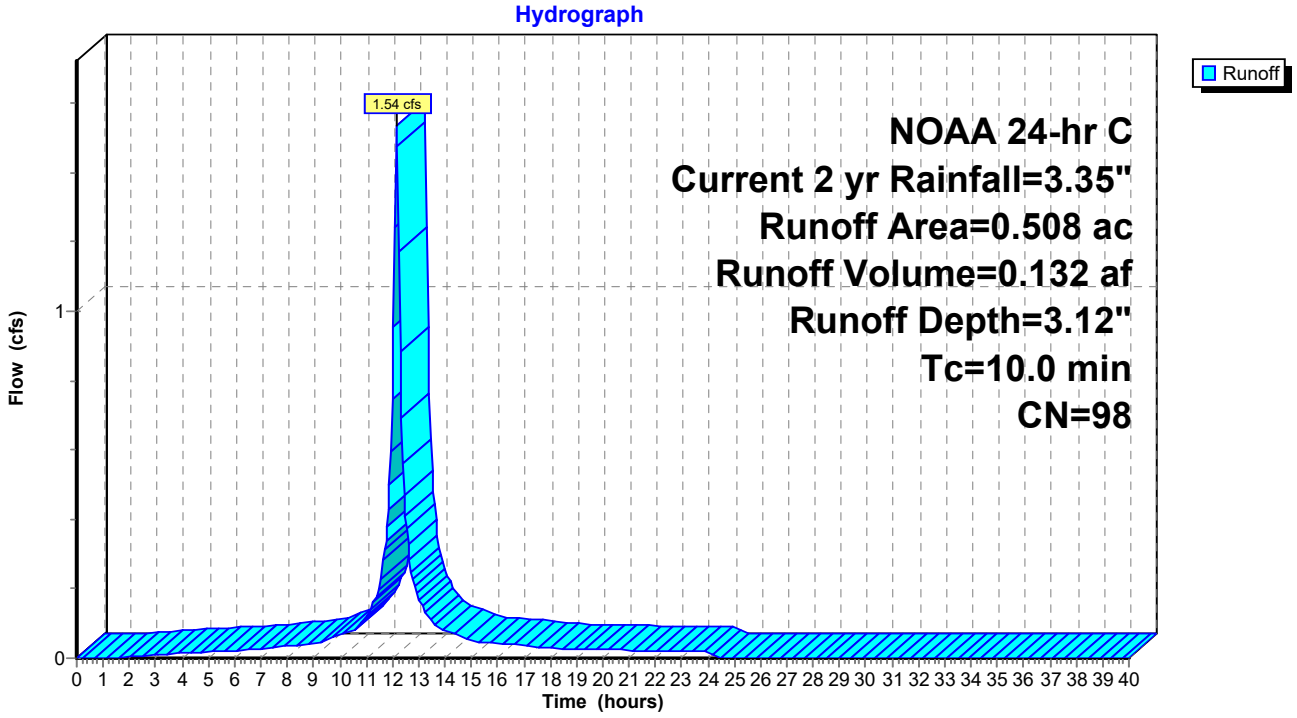
Runoff = 1.54 cfs @ 12.17 hrs, Volume= 0.132 af, Depth= 3.12"
Routed to Pond B-14 : Basin #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.308	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	0.508	98	Weighted Average
	0.508		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 14l: PDA-14 (impervious)



Summary for Subcatchment 14P: PDA-14 (pervious)

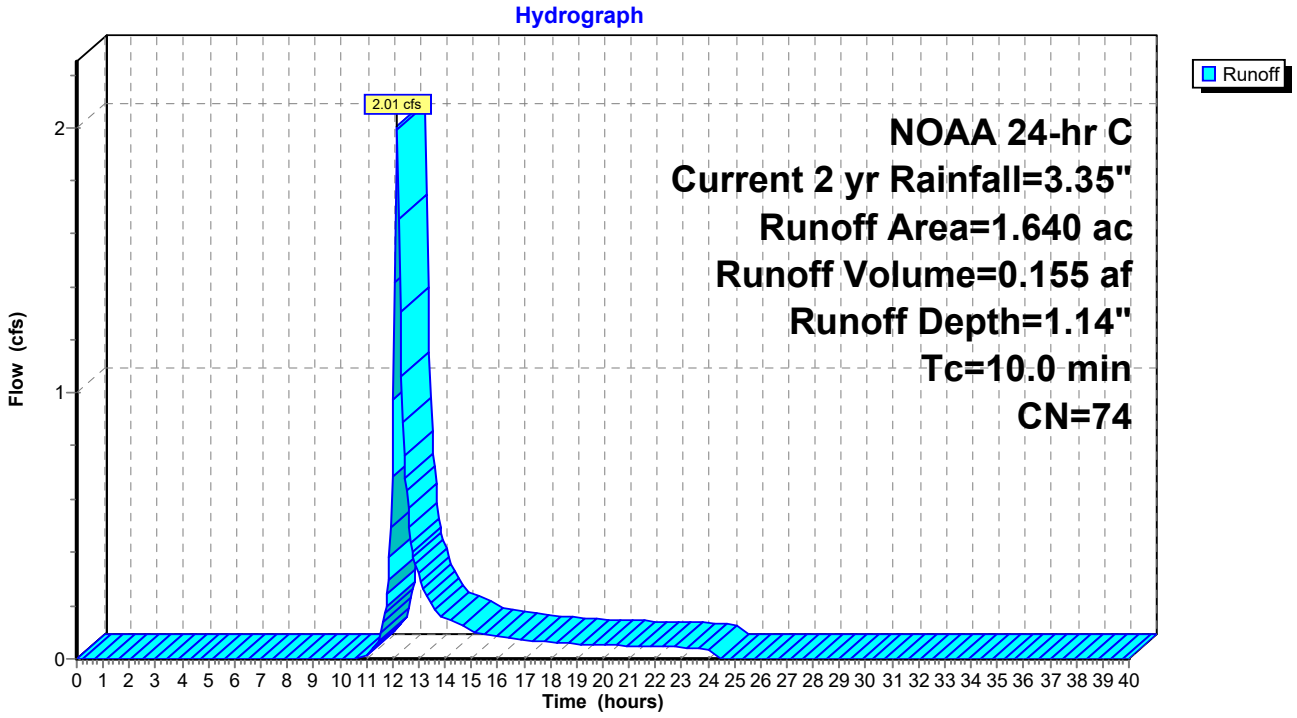
Runoff = 2.01 cfs @ 12.18 hrs, Volume= 0.155 af, Depth= 1.14"
Routed to Pond B-14 : Basin #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.640	74	>75% Grass cover, Good, HSG C
1.640		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 14P: PDA-14 (pervious)



Summary for Subcatchment 15l: PDA-15 (impervious)

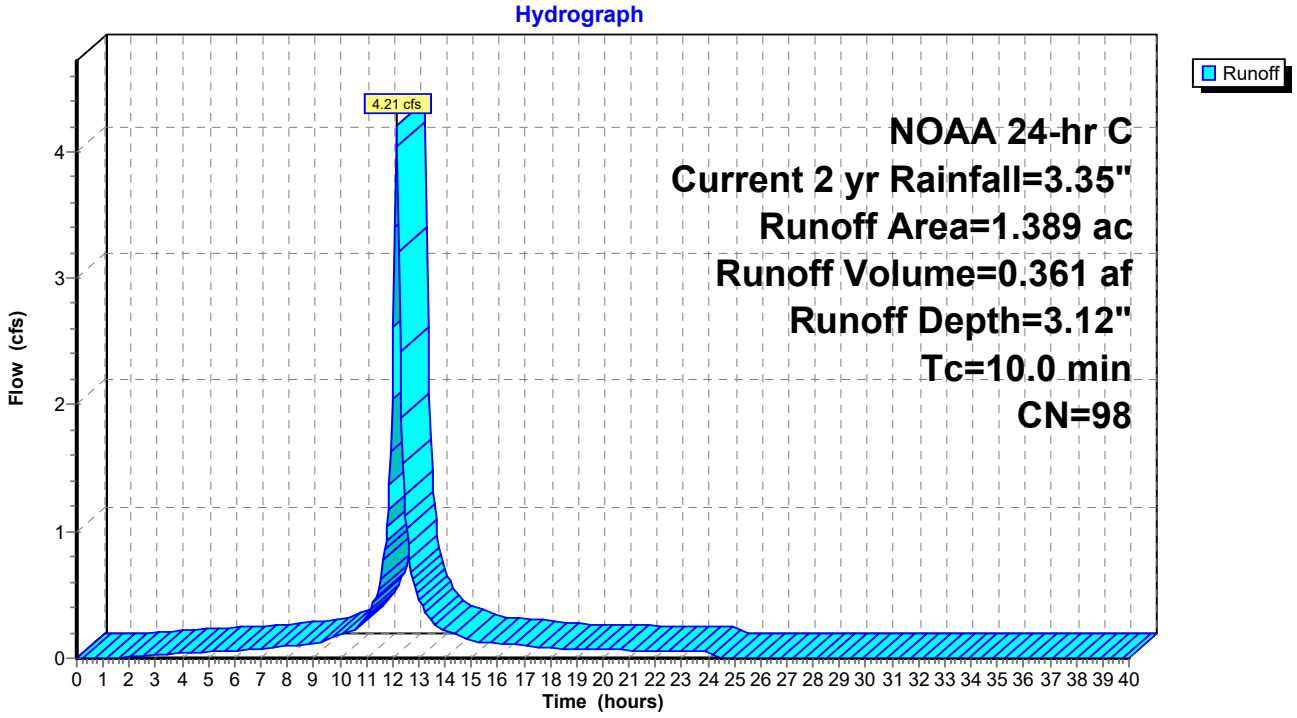
Runoff = 4.21 cfs @ 12.17 hrs, Volume= 0.361 af, Depth= 3.12"
Routed to Pond B-15 : Basin #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.501	98	Pavement, HSG C
*	0.836	98	Roof, HSG C
*	0.052	98	Concrete, HSG C
	1.389	98	Weighted Average
	1.389		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 15l: PDA-15 (impervious)



Summary for Subcatchment 15P: PDA-15 (pervious)

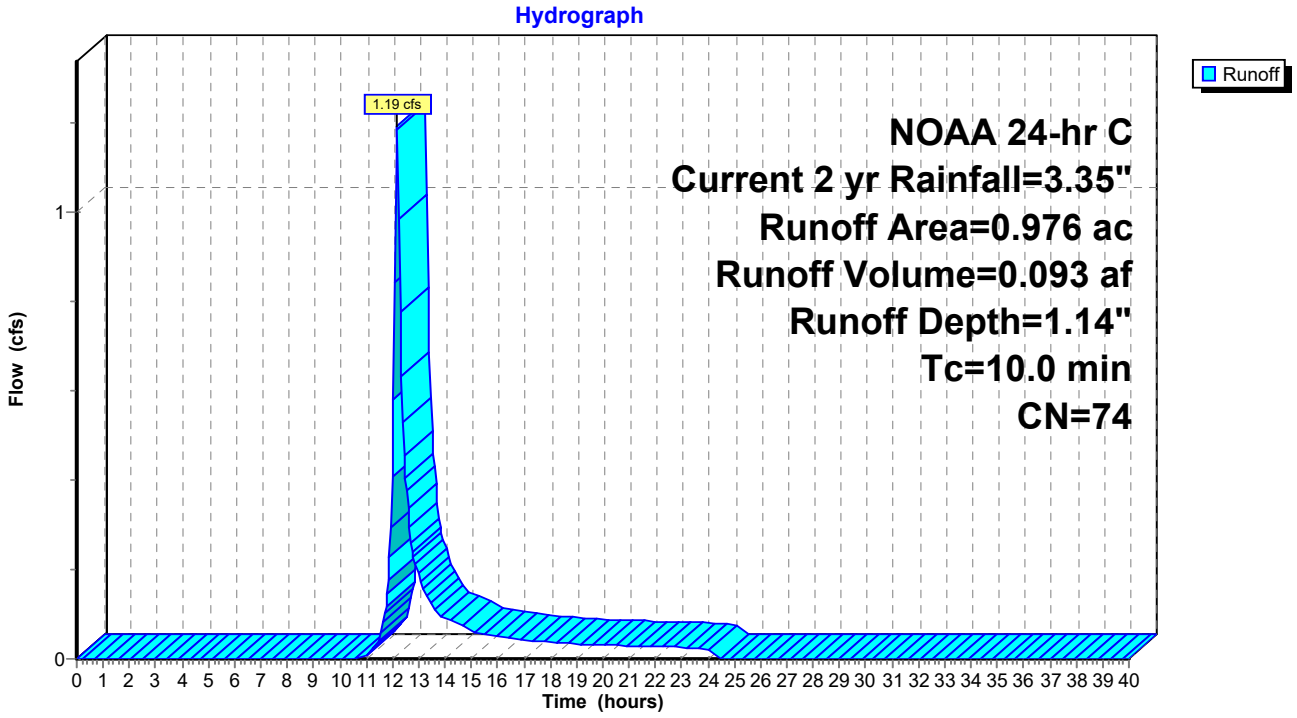
Runoff = 1.19 cfs @ 12.18 hrs, Volume= 0.093 af, Depth= 1.14"
Routed to Pond B-15 : Basin #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.976	74	>75% Grass cover, Good, HSG C
0.976		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 15P: PDA-15 (pervious)



Summary for Subcatchment 16AI: PDA-16A (impervious)

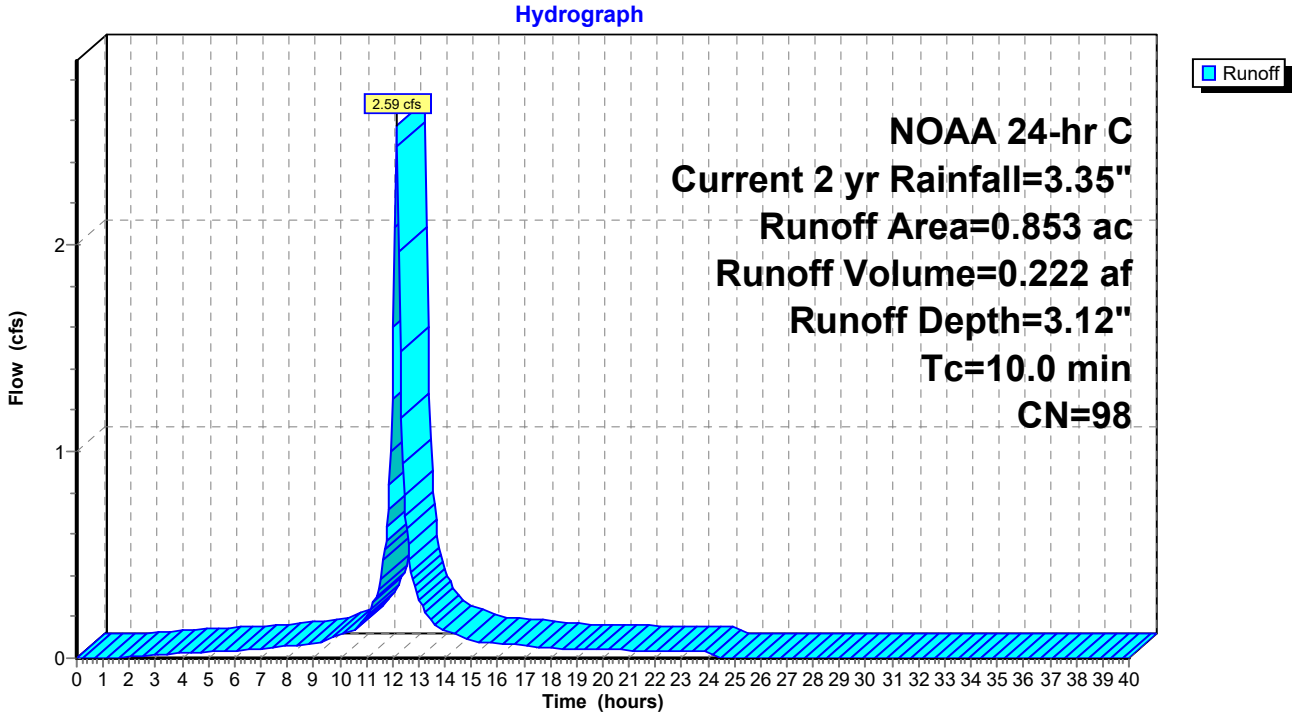
Runoff = 2.59 cfs @ 12.17 hrs, Volume= 0.222 af, Depth= 3.12"
Routed to Pond B-16A : Basin #16A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.072	98	Pavement, HSG C
*	0.771	98	Roof, HSG C
*	0.010	98	Concrete, HSG C
	0.853	98	Weighted Average
	0.853		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16AI: PDA-16A (impervious)



Summary for Subcatchment 16AP: PDA-16A (pervious)

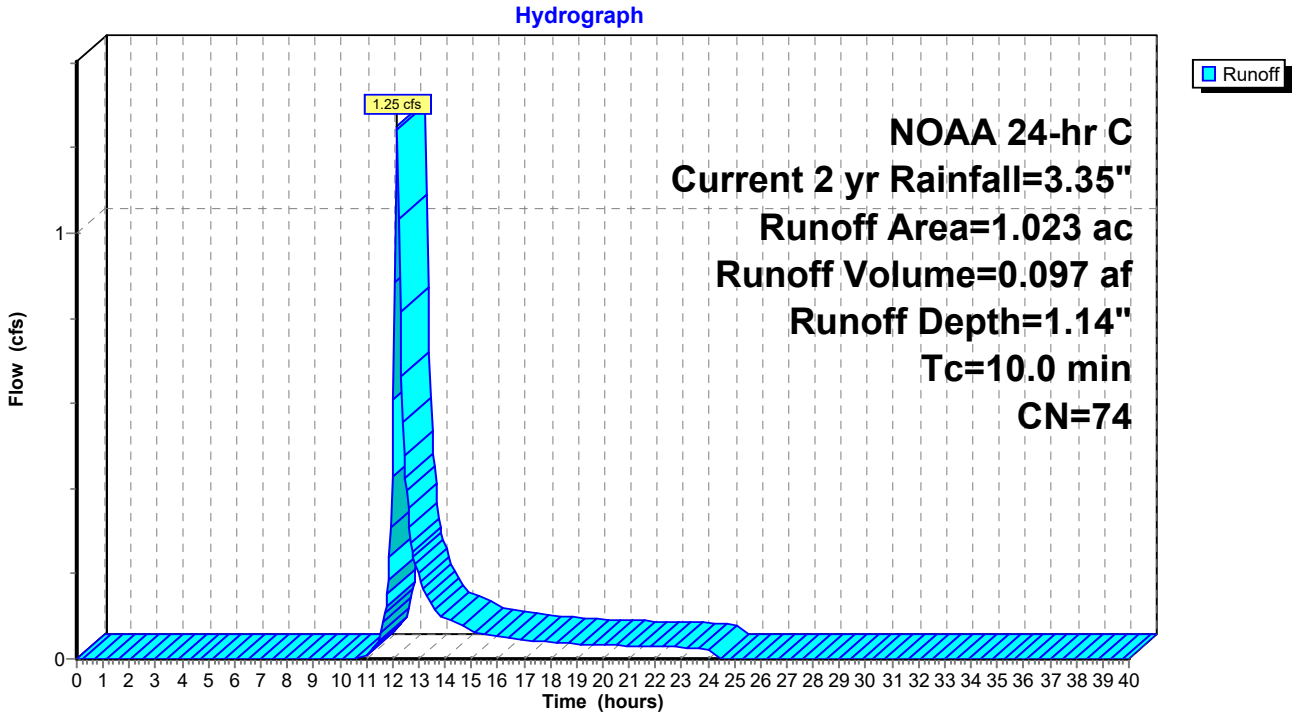
Runoff = 1.25 cfs @ 12.18 hrs, Volume= 0.097 af, Depth= 1.14"
Routed to Pond B-16A : Basin #16A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.023	74	>75% Grass cover, Good, HSG C
1.023		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16AP: PDA-16A (pervious)



Summary for Subcatchment 16BI: PDA-16B (impervious)

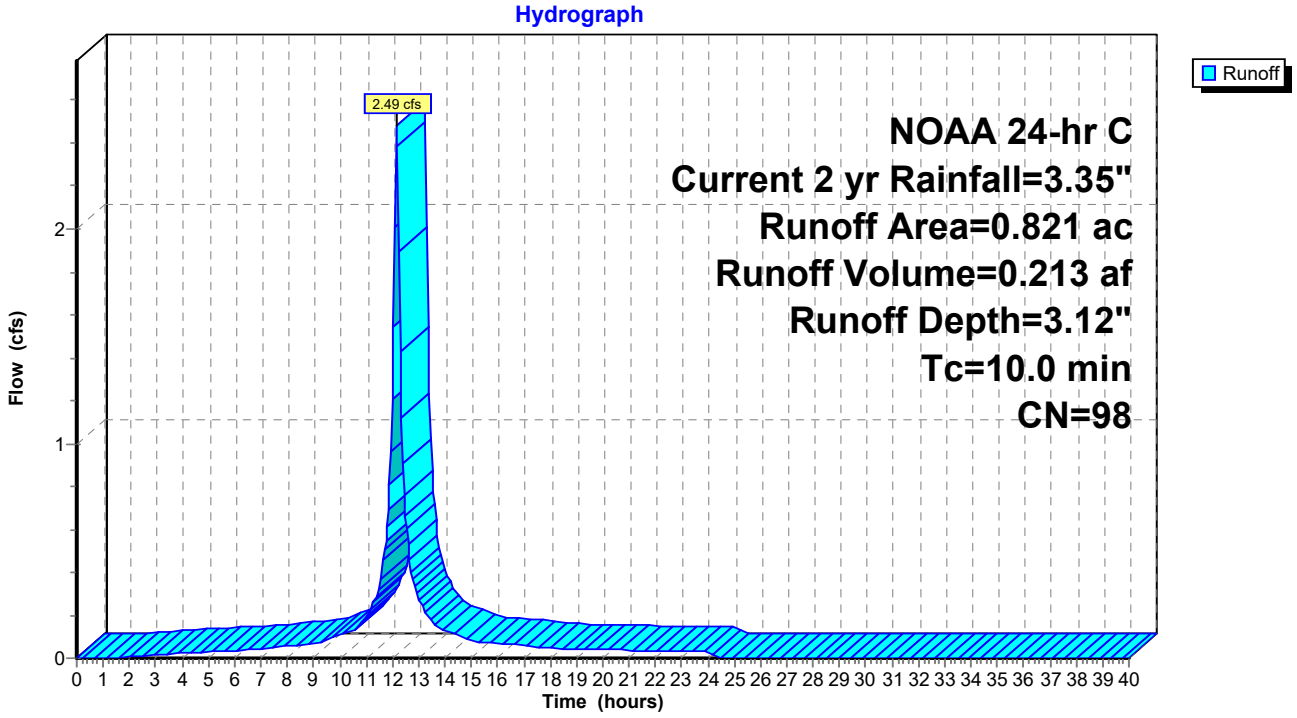
Runoff = 2.49 cfs @ 12.17 hrs, Volume= 0.213 af, Depth= 3.12"
Routed to Pond B-16B : Basin #16B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.621	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	0.821	98	Weighted Average
	0.821		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16BI: PDA-16B (impervious)



Summary for Subcatchment 16BP: PDA-16B (pervious)

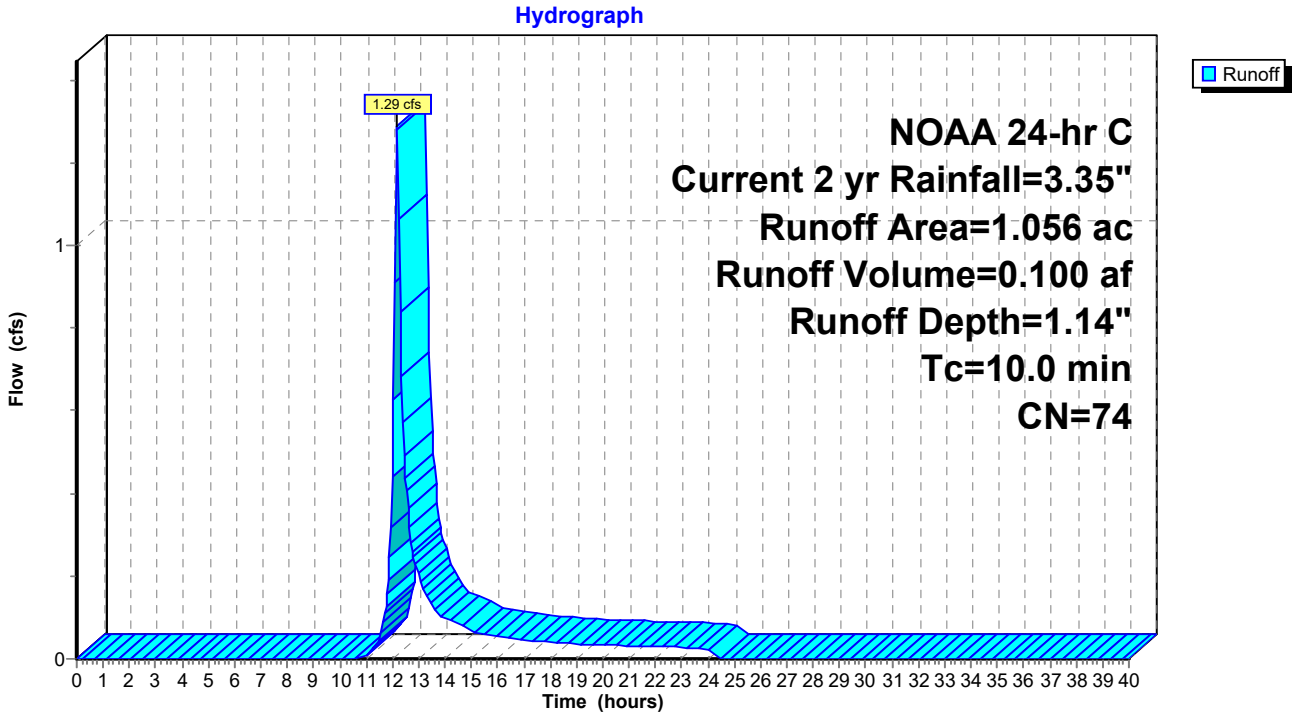
Runoff = 1.29 cfs @ 12.18 hrs, Volume= 0.100 af, Depth= 1.14"
Routed to Pond B-16B : Basin #16B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.056	74	>75% Grass cover, Good, HSG C
1.056		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16BP: PDA-16B (pervious)



Summary for Subcatchment 17AI: PDA-17A (impervious)

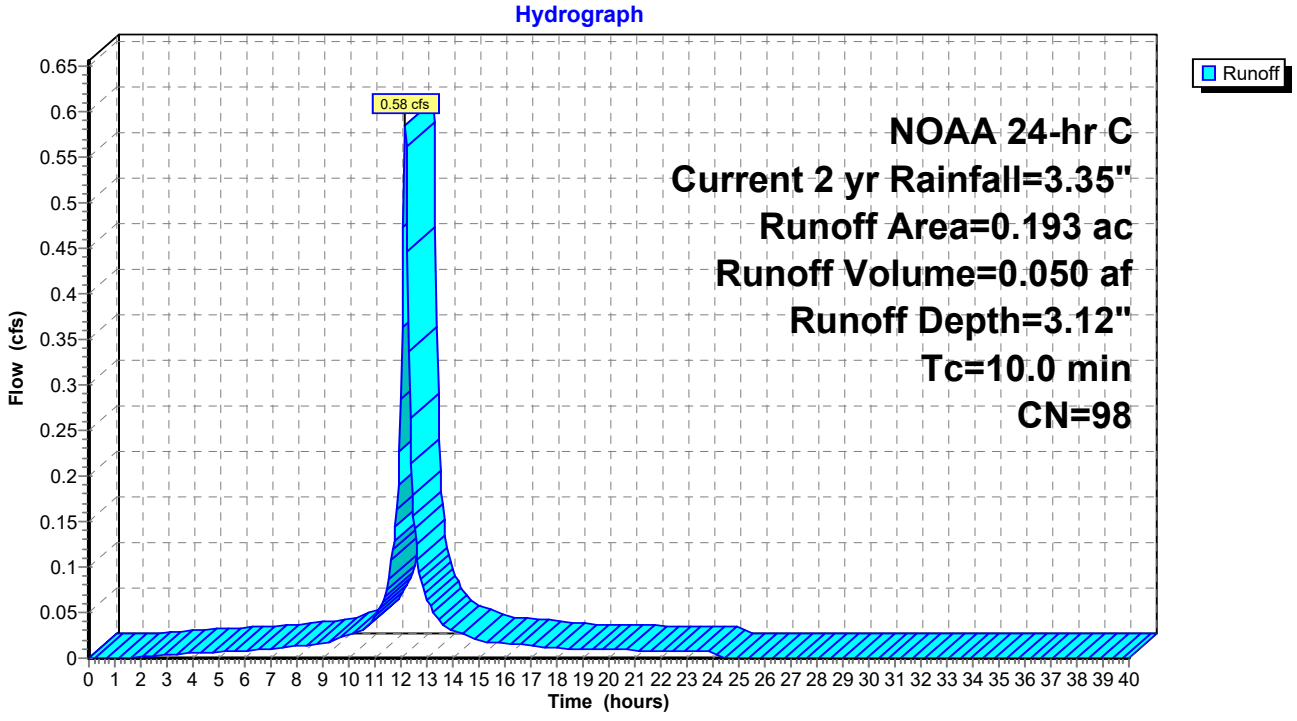
Runoff = 0.58 cfs @ 12.17 hrs, Volume= 0.050 af, Depth= 3.12"
Routed to Pond B-17A : Basin #17A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.193	98	Roof, HSG C
	0.000	98	Paved roads w/curbs & sewers, HSG C
*	0.000	98	Concrete, HSG C
	0.193	98	Weighted Average
	0.193		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17AI: PDA-17A (impervious)



Summary for Subcatchment 17AP: PDA-17A (pervious)

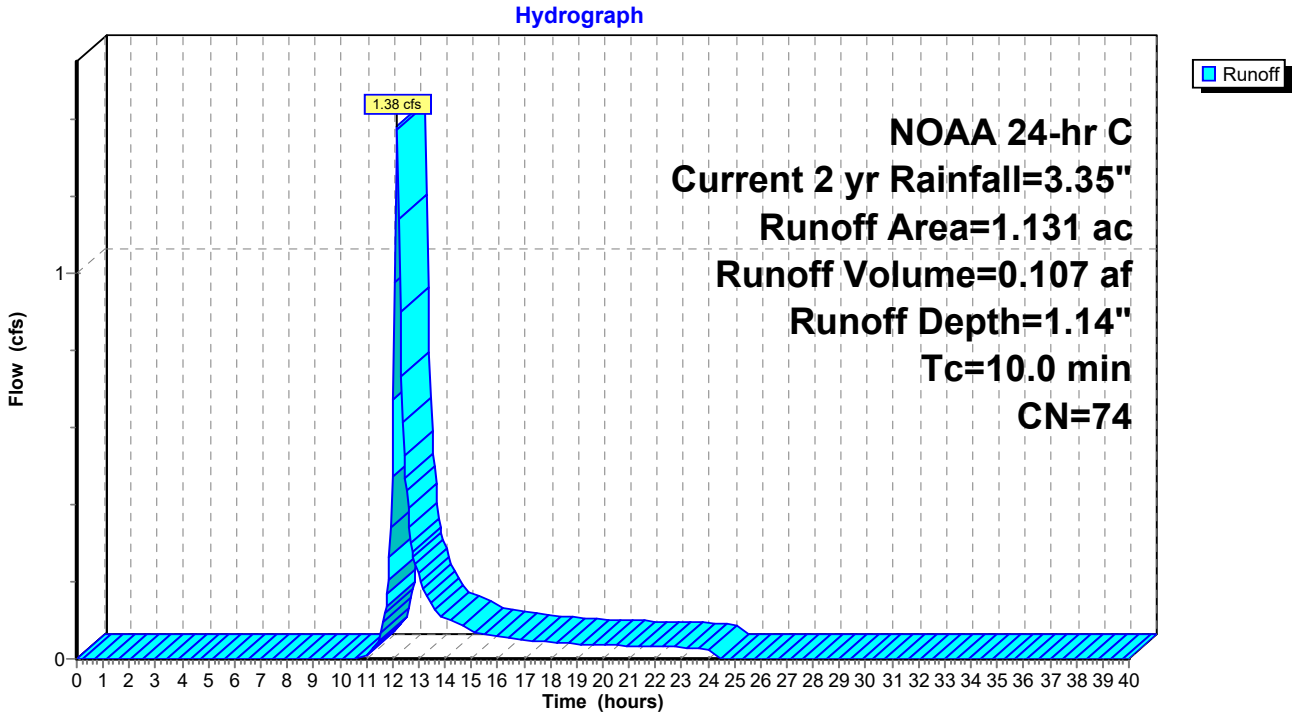
Runoff = 1.38 cfs @ 12.18 hrs, Volume= 0.107 af, Depth= 1.14"
Routed to Pond B-17A : Basin #17A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.131	74	>75% Grass cover, Good, HSG C
1.131		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17AP: PDA-17A (pervious)



Summary for Subcatchment 17BI: PDA-17B (impervious)

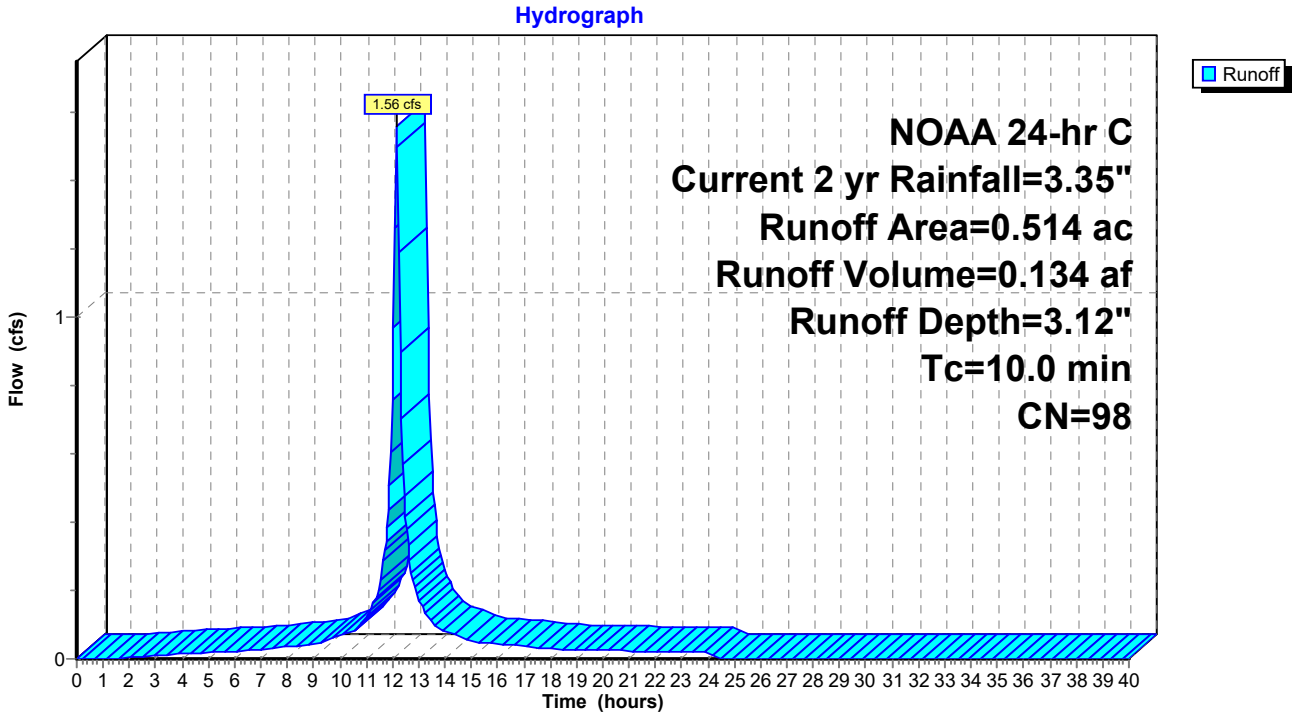
Runoff = 1.56 cfs @ 12.17 hrs, Volume= 0.134 af, Depth= 3.12"
Routed to Pond B-17B : Basin #17B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.514	98	Roof, HSG C
	0.514		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17BI: PDA-17B (impervious)



Summary for Subcatchment 17BP: PDA-17B (pervious)

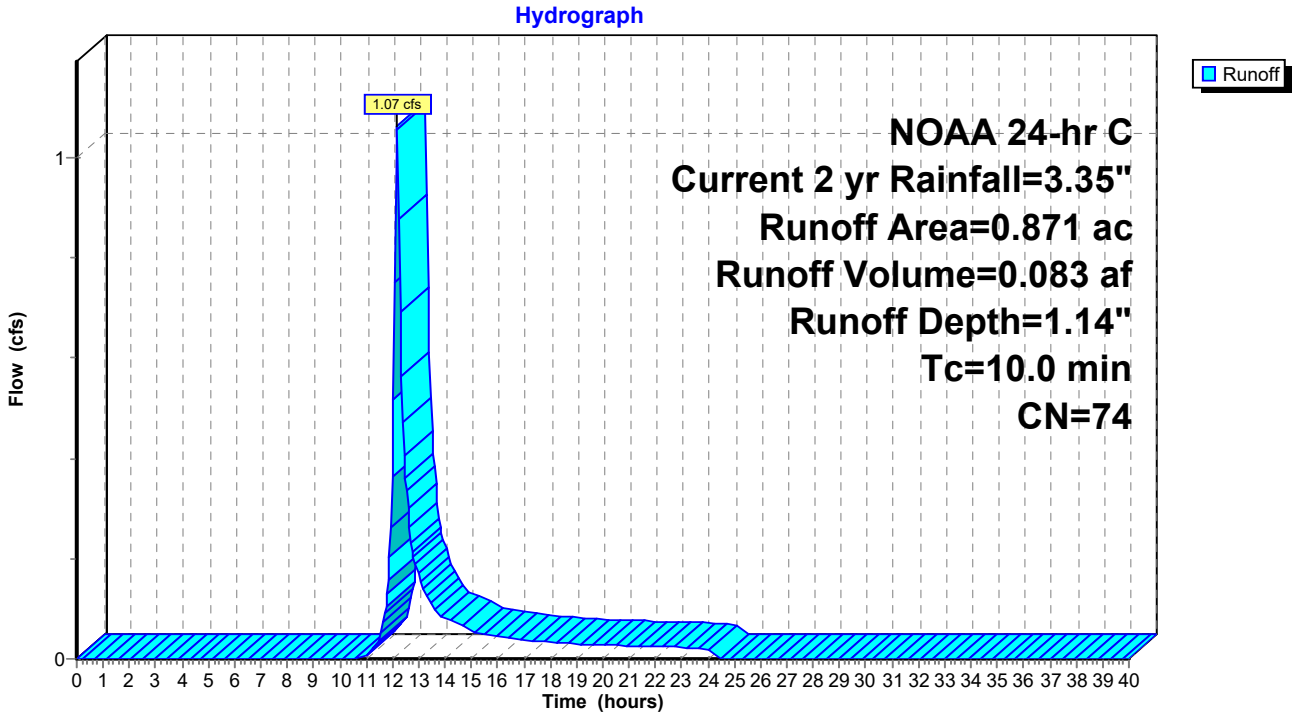
Runoff = 1.07 cfs @ 12.18 hrs, Volume= 0.083 af, Depth= 1.14"
Routed to Pond B-17B : Basin #17B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.871	74	>75% Grass cover, Good, HSG C
0.871		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17BP: PDA-17B (pervious)



Summary for Subcatchment UPDA-1: PDA-1 (undetained)

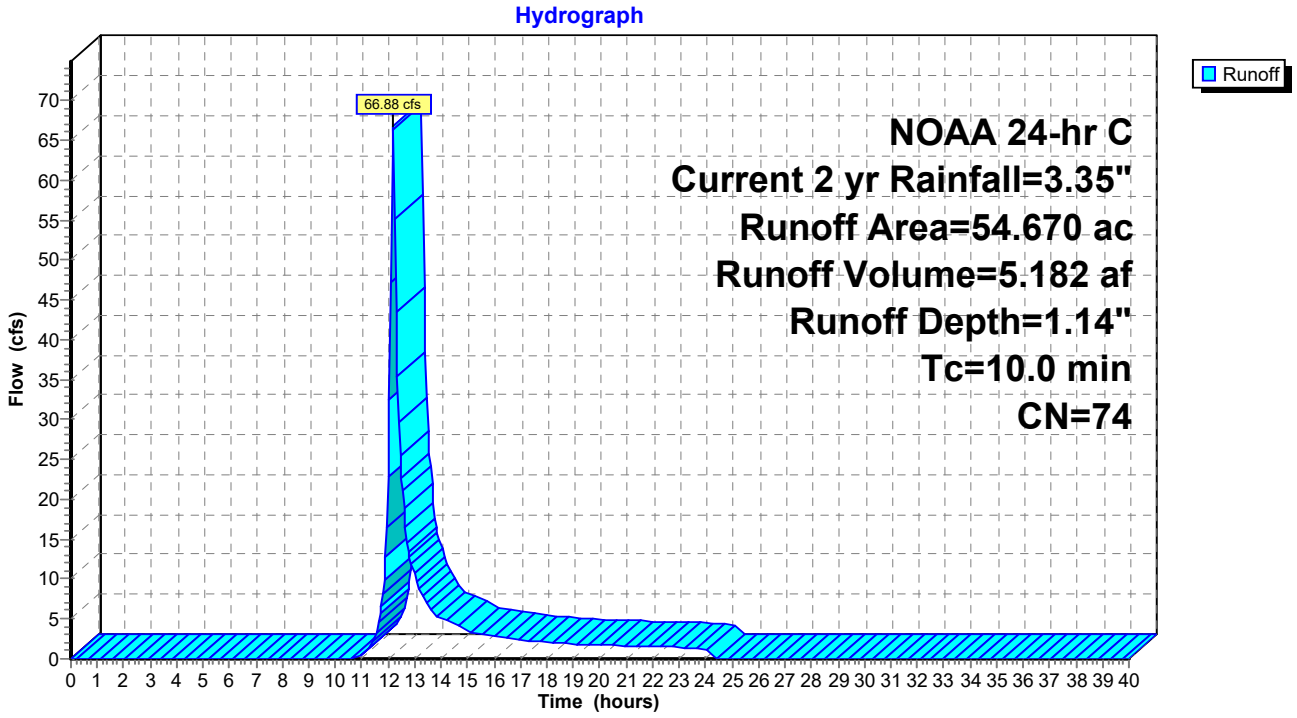
Runoff = 66.88 cfs @ 12.18 hrs, Volume= 5.182 af, Depth= 1.14"
Routed to Link PDA-1 : Proposed Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
54.670	74	>75% Grass cover, Good, HSG C
54.670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-1: PDA-1 (undetained)



Summary for Pond B-1: Basin #1

Inflow Area = 2.782 ac, 26.02% Impervious, Inflow Depth = 0.36" for Current 2 yr event
Inflow = 1.09 cfs @ 12.18 hrs, Volume= 0.084 af
Outflow = 0.02 cfs @ 22.91 hrs, Volume= 0.031 af, Atten= 98%, Lag= 643.7 min
Primary = 0.02 cfs @ 22.91 hrs, Volume= 0.031 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 209.29' @ 22.91 hrs Surf.Area= 10,458 sf Storage= 2,956 cf

Plug-Flow detention time= 754.5 min calculated for 0.031 af (37% of inflow)
Center-of-Mass det. time= 615.6 min (1,482.1 - 866.5)

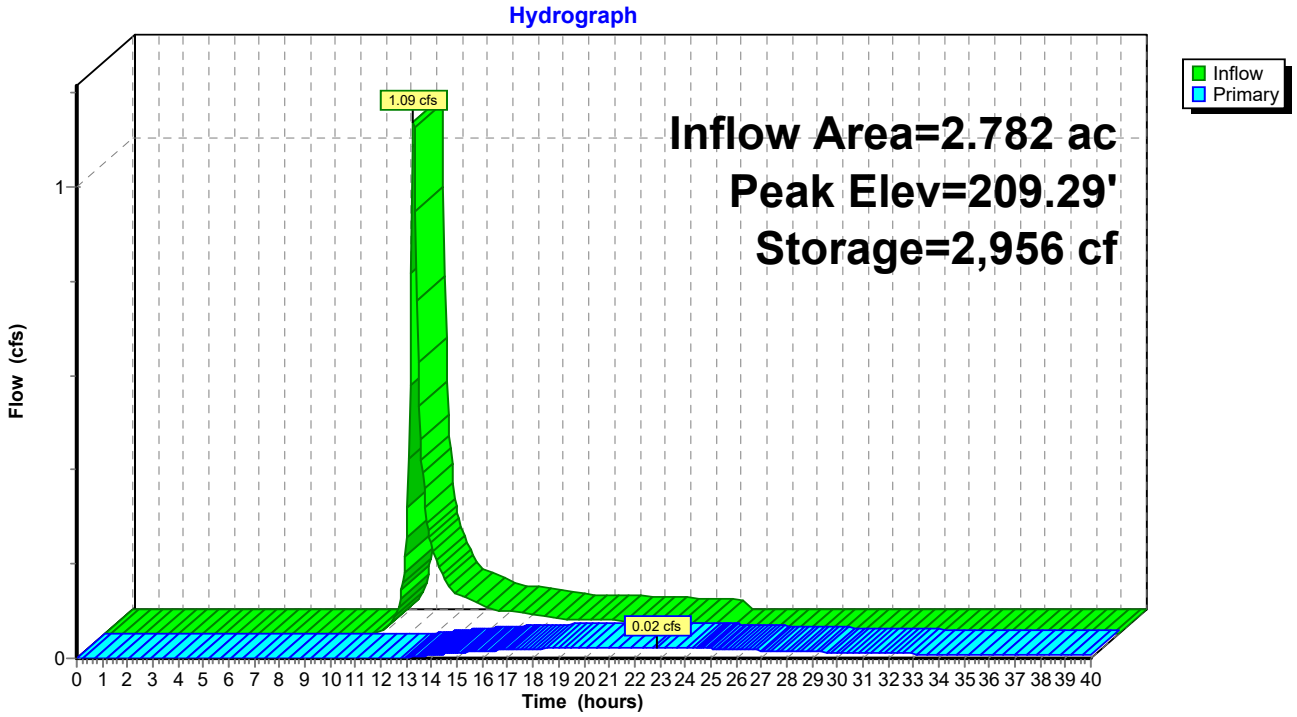
Volume	Invert	Avail.Storage	Storage Description
#1	209.00'	34,903 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
209.00	10,187	0	0
210.00	11,133	10,660	10,660
211.00	12,113	11,623	22,283
212.00	13,126	12,620	34,903

Device	Routing	Invert	Outlet Devices
#1	Primary	207.65'	**18.0" Round Culvert** L= 276.0' Ke= 0.500 Inlet / Outlet Invert= 207.65' / 204.00' S= 0.0132 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	209.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	209.67'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	210.80'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.02 cfs @ 22.91 hrs HW=209.29' (Free Discharge)
- **1=Culvert** (Passes 0.02 cfs of 8.01 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.02 cfs @ 1.16 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-1: Basin #1



Stage-Discharge for Pond B-1: Basin #1

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
209.00	0.00	210.04	3.03	211.08	31.14
209.02	0.00	210.06	3.27	211.10	33.28
209.04	0.00	210.08	3.51	211.12	35.53
209.06	0.00	210.10	3.76	211.14	37.86
209.08	0.00	210.12	4.01	211.16	40.30
209.10	0.00	210.14	4.27	211.18	42.83
209.12	0.00	210.16	4.53	211.20	45.46
209.14	0.00	210.18	4.80	211.22	48.24
209.16	0.00	210.20	5.07	211.24	51.13
209.18	0.00	210.22	5.35	211.26	54.12
209.20	0.00	210.24	5.63	211.28	57.21
209.22	0.00	210.26	5.92	211.30	60.41
209.24	0.01	210.28	6.21	211.32	63.72
209.26	0.01	210.30	6.50	211.34	67.13
209.28	0.02	210.32	6.80	211.36	70.65
209.30	0.03	210.34	7.10	211.38	74.28
209.32	0.03	210.36	7.41	211.40	78.01
209.34	0.04	210.38	7.72	211.42	81.30
209.36	0.05	210.40	8.03	211.44	84.65
209.38	0.05	210.42	8.35	211.46	88.04
209.40	0.06	210.44	8.67	211.48	91.49
209.42	0.06	210.46	9.00	211.50	94.99
209.44	0.07	210.48	9.33	211.52	98.55
209.46	0.07	210.50	9.66	211.54	102.15
209.48	0.07	210.52	10.00	211.56	105.80
209.50	0.08	210.54	10.34	211.58	109.50
209.52	0.08	210.56	10.68	211.60	113.25
209.54	0.08	210.58	11.03	211.62	117.13
209.56	0.09	210.60	11.37	211.64	121.06
209.58	0.09	210.62	11.73	211.66	125.04
209.60	0.09	210.64	12.08	211.68	129.07
209.62	0.10	210.66	12.44	211.70	133.15
209.64	0.10	210.68	12.61	211.72	137.29
209.66	0.10	210.70	12.64	211.74	141.48
209.68	0.12	210.72	12.66	211.76	145.72
209.70	0.17	210.74	12.69	211.78	150.00
209.72	0.26	210.76	12.71	211.80	154.34
209.74	0.35	210.78	12.73	211.82	158.62
209.76	0.47	210.80	12.76	211.84	162.95
209.78	0.59	210.82	13.11	211.86	167.31
209.80	0.73	210.84	13.74	211.88	171.72
209.82	0.88	210.86	14.56	211.90	176.17
209.84	1.03	210.88	15.51	211.92	180.66
209.86	1.20	210.90	16.60	211.94	185.19
209.88	1.37	210.92	17.79	211.96	189.77
209.90	1.56	210.94	19.10	211.98	194.38
209.92	1.75	210.96	20.50	212.00	**199.03**
209.94	1.94	210.98	21.99		
209.96	2.15	211.00	23.56		
209.98	2.36	211.02	25.31		
210.00	2.58	211.04	27.15		
210.02	2.80	211.06	29.10		

Summary for Pond B-10: Basin #10

Inflow Area = 1.674 ac, 56.63% Impervious, Inflow Depth = 2.26" for Current 2 yr event
Inflow = 3.75 cfs @ 12.17 hrs, Volume= 0.315 af
Outflow = 1.09 cfs @ 12.50 hrs, Volume= 0.223 af, Atten= 71%, Lag= 19.4 min
Primary = 1.09 cfs @ 12.50 hrs, Volume= 0.223 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.43' @ 12.50 hrs Surf.Area= 5,356 sf Storage= 6,815 cf

Plug-Flow detention time= 217.8 min calculated for 0.223 af (71% of inflow)
Center-of-Mass det. time= 118.7 min (902.2 - 783.5)

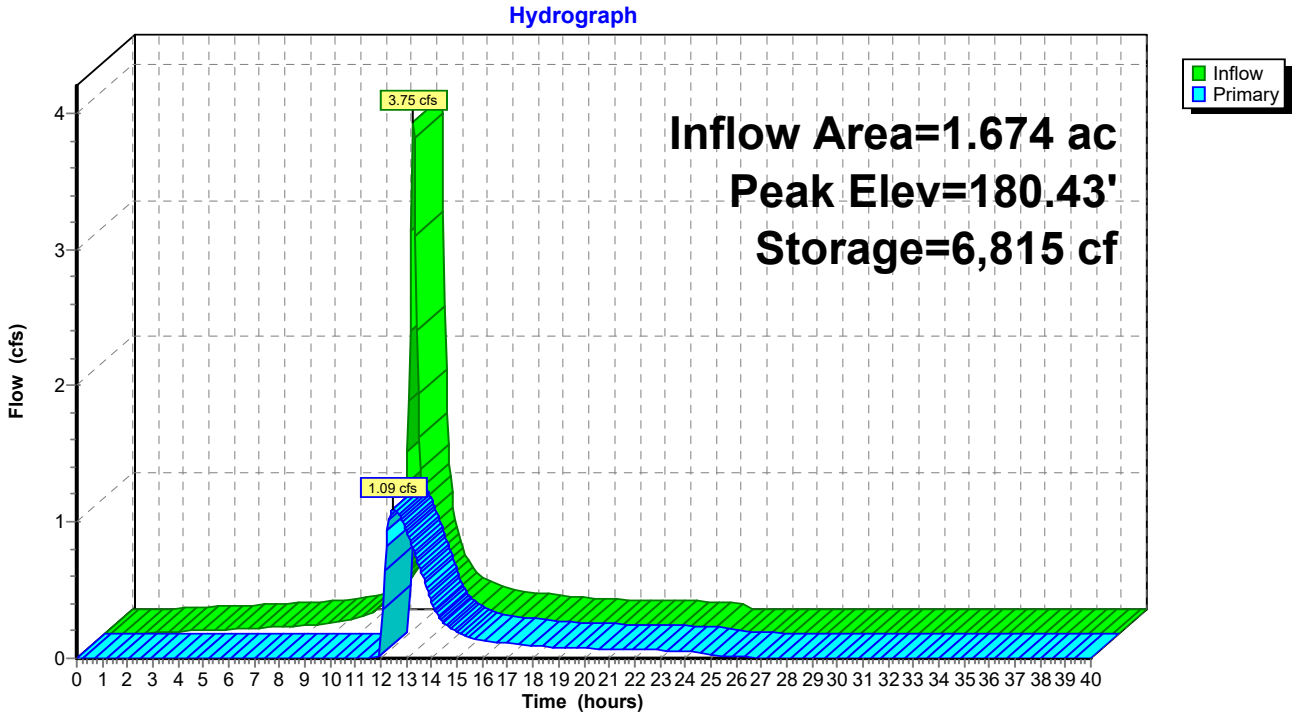
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	23,473 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	4,220	0	0
180.00	5,003	4,612	4,612
181.00	5,833	5,418	10,030
182.00	6,710	6,272	16,301
183.00	7,633	7,172	23,473

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 52.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 176.00' S= 0.0317 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.88'	**24.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	182.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.09 cfs @ 12.50 hrs HW=180.43' (Free Discharge)
- **1=Culvert** (Passes 1.09 cfs of 12.11 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.09 cfs @ 3.27 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-10: Basin #10



Stage-Discharge for Pond B-10: Basin #10

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.41	181.08	1.70	182.12	2.90
179.02	0.00	180.06	0.48	181.10	1.71	182.14	3.05
179.04	0.00	180.08	0.54	181.12	1.73	182.16	3.21
179.06	0.00	180.10	0.58	181.14	1.74	182.18	3.38
179.08	0.00	180.12	0.63	181.16	1.76	182.20	3.56
179.10	0.00	180.14	0.67	181.18	1.77	182.22	3.75
179.12	0.00	180.16	0.71	181.20	1.78	182.24	3.94
179.14	0.00	180.18	0.74	181.22	1.80	182.26	4.14
179.16	0.00	180.20	0.78	181.24	1.81	182.28	4.35
179.18	0.00	180.22	0.81	181.26	1.83	182.30	4.57
179.20	0.00	180.24	0.84	181.28	1.84	182.32	4.79
179.22	0.00	180.26	0.87	181.30	1.86	182.34	5.02
179.24	0.00	180.28	0.90	181.32	1.87	182.36	5.26
179.26	0.00	180.30	0.93	181.34	1.88	182.38	5.50
179.28	0.00	180.32	0.96	181.36	1.90	182.40	5.75
179.30	0.00	180.34	0.98	181.38	1.91	182.42	6.00
179.32	0.00	180.36	1.01	181.40	1.92	182.44	6.26
179.34	0.00	180.38	1.03	181.42	1.94	182.46	6.52
179.36	0.00	180.40	1.06	181.44	1.95	182.48	6.79
179.38	0.00	180.42	1.08	181.46	1.96	182.50	7.07
179.40	0.00	180.44	1.11	181.48	1.98	182.52	7.34
179.42	0.00	180.46	1.13	181.50	1.99	182.54	7.63
179.44	0.00	180.48	1.15	181.52	2.00	182.56	7.91
179.46	0.00	180.50	1.17	181.54	2.02	182.58	8.21
179.48	0.00	180.52	1.20	181.56	2.03	182.60	8.50
179.50	0.00	180.54	1.22	181.58	2.04	182.62	8.80
179.52	0.00	180.56	1.24	181.60	2.05	182.64	9.11
179.54	0.00	180.58	1.26	181.62	2.07	182.66	9.42
179.56	0.00	180.60	1.28	181.64	2.08	182.68	9.73
179.58	0.00	180.62	1.30	181.66	2.09	182.70	10.05
179.60	0.00	180.64	1.32	181.68	2.10	182.72	10.37
179.62	0.00	180.66	1.34	181.70	2.11	182.74	10.69
179.64	0.00	180.68	1.36	181.72	2.13	182.76	11.02
179.66	0.00	180.70	1.38	181.74	2.14	182.78	11.35
179.68	0.00	180.72	1.40	181.76	2.15	182.80	11.69
179.70	0.00	180.74	1.41	181.78	2.16	182.82	12.03
179.72	0.00	180.76	1.43	181.80	2.17	182.84	12.37
179.74	0.00	180.78	1.45	181.82	2.19	182.86	12.71
179.76	0.00	180.80	1.47	181.84	2.20	182.88	13.06
179.78	0.00	180.82	1.48	181.86	2.21	182.90	13.42
179.80	0.00	180.84	1.50	181.88	2.22	182.92	13.77
179.82	0.00	180.86	1.52	181.90	2.23	182.94	14.13
179.84	0.00	180.88	1.54	181.92	2.24	182.96	14.61
179.86	0.00	180.90	1.55	181.94	2.26	182.98	15.46
179.88	0.00	180.92	1.57	181.96	2.27	183.00	**16.53**
179.90	0.02	180.94	1.59	181.98	2.28		
179.92	0.05	180.96	1.60	182.00	2.29		
179.94	0.09	180.98	1.62	182.02	2.34		
179.96	0.15	181.00	1.63	182.04	2.42		
179.98	0.20	181.02	1.65	182.06	2.52		
180.00	0.27	181.04	1.66	182.08	2.63		
180.02	0.34	181.06	1.68	182.10	2.76		

Summary for Pond B-11: Basin #11

Inflow Area = 2.228 ac, 58.53% Impervious, Inflow Depth = 2.30" for Current 2 yr event
Inflow = 5.07 cfs @ 12.17 hrs, Volume= 0.426 af
Outflow = 0.18 cfs @ 15.14 hrs, Volume= 0.292 af, Atten= 96%, Lag= 178.2 min
Primary = 0.18 cfs @ 15.14 hrs, Volume= 0.292 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 182.35' @ 15.14 hrs Surf.Area= 6,596 sf Storage= 13,318 cf

Plug-Flow detention time= 705.1 min calculated for 0.292 af (68% of inflow)
Center-of-Mass det. time= 602.0 min (1,384.1 - 782.1)

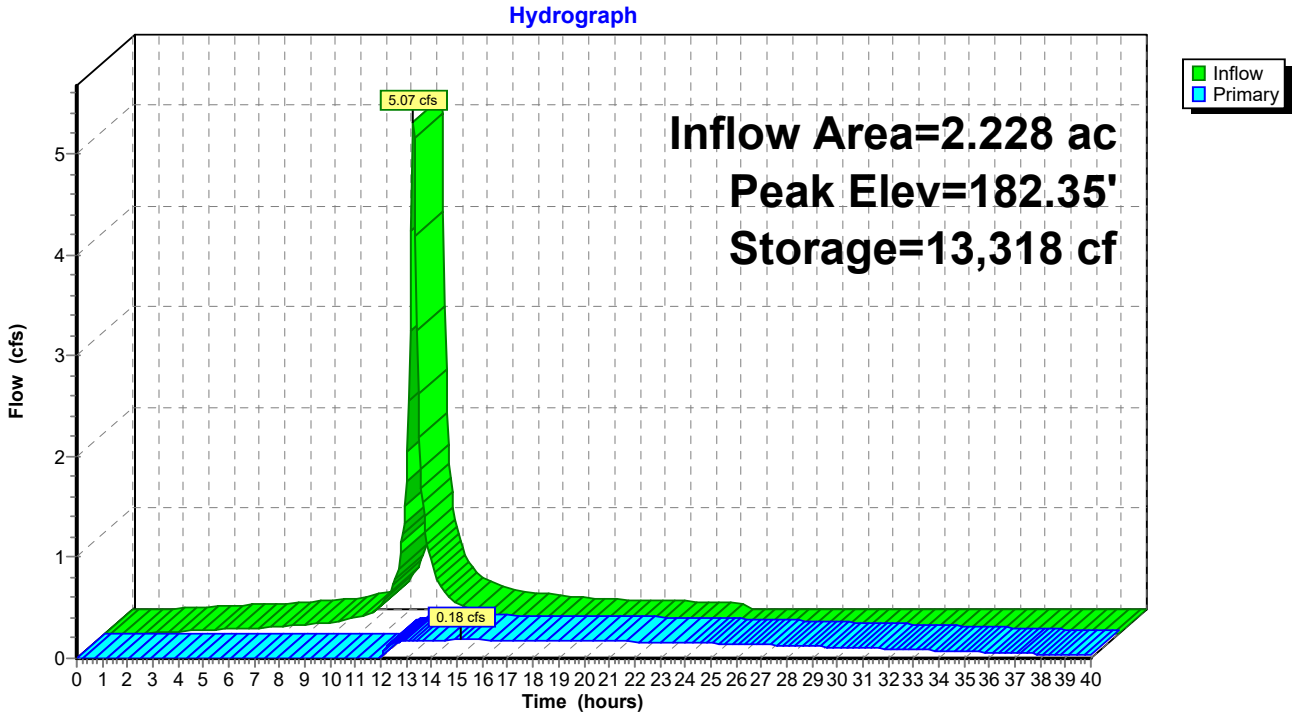
Volume	Invert	Avail.Storage	Storage Description
#1	180.00'	43,224 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.00	4,780	0	0
181.00	5,522	5,151	5,151
182.00	6,306	5,914	11,065
183.00	7,135	6,721	17,786
184.00	8,007	7,571	25,357
185.00	8,923	8,465	33,822
186.00	9,882	9,403	43,224

Device	Routing	Invert	Outlet Devices
#1	Primary	178.65'	**18.0" Round Culvert** L= 131.0' Ke= 0.500 Inlet / Outlet Invert= 178.65' / 178.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	181.00'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	183.91'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.18 cfs @ 15.14 hrs HW=182.35' (Free Discharge)
- **1=Culvert** (Passes 0.18 cfs of 12.13 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.37 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-11: Basin #11



Stage-Discharge for Pond B-11: Basin #11

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
180.00	0.00	182.60	0.20	185.20	223.74
180.05	0.00	182.65	0.20	185.25	236.23
180.10	0.00	182.70	0.21	185.30	248.97
180.15	0.00	182.75	0.21	185.35	262.16
180.20	0.00	182.80	0.36	185.40	275.68
180.25	0.00	182.85	0.63	185.45	289.46
180.30	0.00	182.90	0.97	185.50	303.52
180.35	0.00	182.95	1.38	185.55	317.86
180.40	0.00	183.00	1.84	185.60	332.46
180.45	0.00	183.05	2.35	185.65	347.33
180.50	0.00	183.10	2.89	185.70	362.47
180.55	0.00	183.15	3.48	185.75	377.88
180.60	0.00	183.20	4.10	185.80	393.54
180.65	0.00	183.25	4.75	185.85	409.47
180.70	0.00	183.30	5.43	185.90	425.67
180.75	0.00	183.35	6.14	185.95	442.37
180.80	0.00	183.40	6.88	186.00	**459.42**
180.85	0.00	183.45	7.64		
180.90	0.00	183.50	8.43		
180.95	0.00	183.55	9.24		
181.00	0.00	183.60	10.07		
181.05	0.00	183.65	10.93		
181.10	0.02	183.70	11.80		
181.15	0.03	183.75	12.69		
181.20	0.05	183.80	13.60		
181.25	0.06	183.85	14.53		
181.30	0.07	183.90	15.07		
181.35	0.08	183.95	16.09		
181.40	0.09	184.00	18.41		
181.45	0.10	184.05	21.50		
181.50	0.10	184.10	25.19		
181.55	0.11	184.15	29.60		
181.60	0.12	184.20	34.67		
181.65	0.12	184.25	40.36		
181.70	0.13	184.30	46.66		
181.75	0.13	184.35	53.67		
181.80	0.14	184.40	61.37		
181.85	0.14	184.45	69.72		
181.90	0.15	184.50	78.75		
181.95	0.15	184.55	87.28		
182.00	0.16	184.60	95.90		
182.05	0.16	184.65	104.83		
182.10	0.16	184.70	114.08		
182.15	0.17	184.75	123.79		
182.20	0.17	184.80	133.86		
182.25	0.18	184.85	144.25		
182.30	0.18	184.90	154.96		
182.35	0.18	184.95	165.77		
182.40	0.19	185.00	176.78		
182.45	0.19	185.05	188.06		
182.50	0.19	185.10	199.59		
182.55	0.20	185.15	211.51		

Summary for Pond B-12: Basin #12

Inflow Area = 2.426 ac, 44.77% Impervious, Inflow Depth = 2.02" for Current 2 yr event
Inflow = 4.92 cfs @ 12.17 hrs, Volume= 0.409 af
Outflow = 1.07 cfs @ 12.63 hrs, Volume= 0.304 af, Atten= 78%, Lag= 27.4 min
Primary = 1.07 cfs @ 12.63 hrs, Volume= 0.304 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 202.74' @ 12.63 hrs Surf.Area= 5,909 sf Storage= 9,157 cf

Plug-Flow detention time= 255.9 min calculated for 0.304 af (74% of inflow)
Center-of-Mass det. time= 161.9 min (955.2 - 793.3)

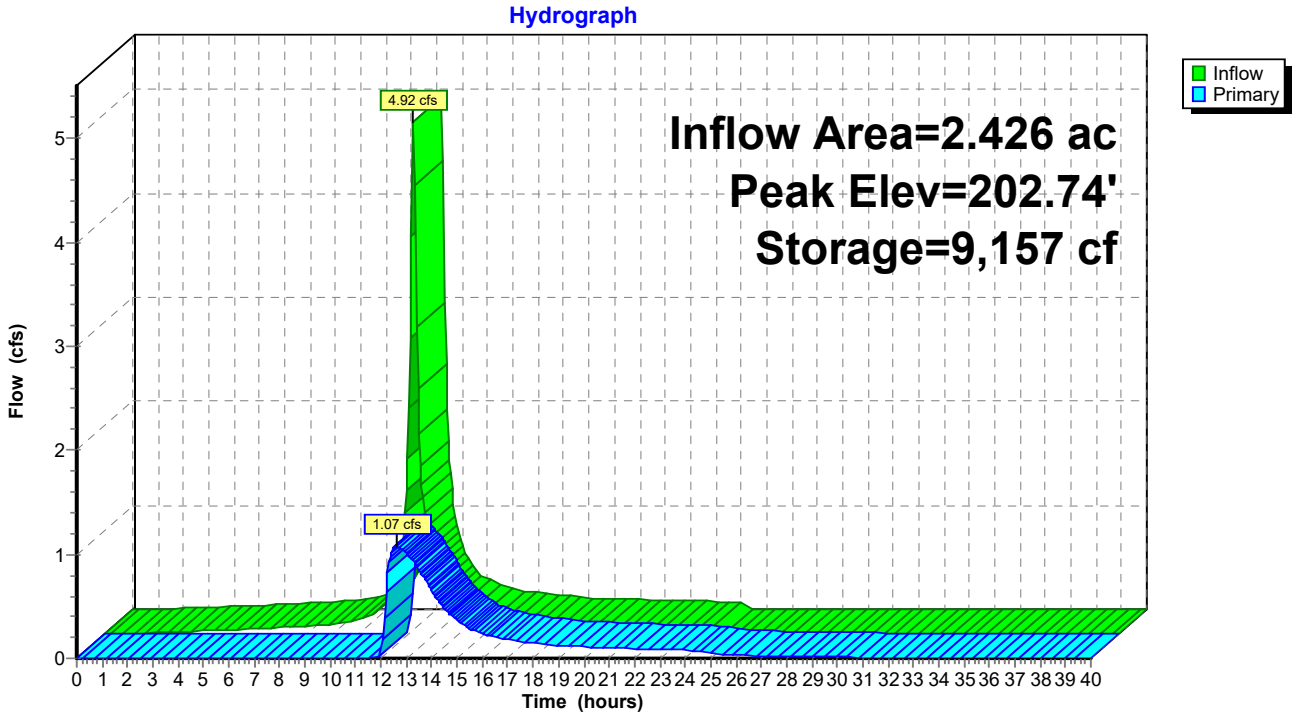
Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	24,487 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,623	0	0
202.00	5,350	4,987	4,987
203.00	6,105	5,728	10,714
204.00	6,883	6,494	17,208
205.00	7,674	7,279	24,487

Device	Routing	Invert	Outlet Devices
#1	Primary	199.65'	**18.0" Round Culvert** L= 238.0' Ke= 0.500 Inlet / Outlet Invert= 199.65' / 195.50' S= 0.0174 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.90'	**7.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.02'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.07 cfs @ 12.63 hrs HW=202.74' (Free Discharge)
- **1=Culvert** (Passes 1.07 cfs of 13.02 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.07 cfs @ 3.50 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-12: Basin #12



Stage-Discharge for Pond B-12: Basin #12

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	202.04	0.07	203.08	1.57	204.12	15.64
201.02	0.00	202.06	0.08	203.10	1.69	204.14	15.66
201.04	0.00	202.08	0.11	203.12	1.82	204.16	15.69
201.06	0.00	202.10	0.13	203.14	1.96	204.18	15.71
201.08	0.00	202.12	0.15	203.16	2.12	204.20	15.73
201.10	0.00	202.14	0.18	203.18	2.28	204.22	15.75
201.12	0.00	202.16	0.21	203.20	2.46	204.24	15.77
201.14	0.00	202.18	0.24	203.22	2.64	204.26	15.79
201.16	0.00	202.20	0.27	203.24	2.83	204.28	15.82
201.18	0.00	202.22	0.30	203.26	3.03	204.30	15.84
201.20	0.00	202.24	0.34	203.28	3.24	204.32	15.86
201.22	0.00	202.26	0.37	203.30	3.45	204.34	15.88
201.24	0.00	202.28	0.41	203.32	3.67	204.36	15.90
201.26	0.00	202.30	0.45	203.34	3.90	204.38	15.92
201.28	0.00	202.32	0.48	203.36	4.13	204.40	15.95
201.30	0.00	202.34	0.52	203.38	4.37	204.42	15.97
201.32	0.00	202.36	0.56	203.40	4.62	204.44	15.99
201.34	0.00	202.38	0.60	203.42	4.87	204.46	16.01
201.36	0.00	202.40	0.63	203.44	5.12	204.48	16.03
201.38	0.00	202.42	0.67	203.46	5.38	204.50	16.05
201.40	0.00	202.44	0.70	203.48	5.65	204.52	16.41
201.42	0.00	202.46	0.74	203.50	5.92	204.54	17.03
201.44	0.00	202.48	0.77	203.52	6.20	204.56	17.84
201.46	0.00	202.50	0.80	203.54	6.48	204.58	18.80
201.48	0.00	202.52	0.82	203.56	6.77	204.60	19.88
201.50	0.00	202.54	0.85	203.58	7.06	204.62	21.07
201.52	0.00	202.56	0.87	203.60	7.35	204.64	22.37
201.54	0.00	202.58	0.90	203.62	7.65	204.66	23.77
201.56	0.00	202.60	0.92	203.64	7.95	204.68	25.26
201.58	0.00	202.62	0.94	203.66	8.26	204.70	26.83
201.60	0.00	202.64	0.97	203.68	8.57	204.72	28.57
201.62	0.00	202.66	0.99	203.70	8.89	204.74	30.41
201.64	0.00	202.68	1.01	203.72	9.21	204.76	32.36
201.66	0.00	202.70	1.03	203.74	9.53	204.78	34.40
201.68	0.00	202.72	1.05	203.76	9.86	204.80	36.54
201.70	0.00	202.74	1.07	203.78	10.19	204.82	38.78
201.72	0.00	202.76	1.09	203.80	10.52	204.84	41.12
201.74	0.00	202.78	1.11	203.82	10.86	204.86	43.55
201.76	0.00	202.80	1.13	203.84	11.20	204.88	46.08
201.78	0.00	202.82	1.15	203.86	11.54	204.90	48.71
201.80	0.00	202.84	1.17	203.88	11.89	204.92	51.48
201.82	0.00	202.86	1.19	203.90	12.24	204.94	54.37
201.84	0.00	202.88	1.21	203.92	12.60	204.96	57.35
201.86	0.00	202.90	1.22	203.94	12.95	204.98	60.45
201.88	0.00	202.92	1.24	203.96	13.31	205.00	**63.65**
201.90	0.00	202.94	1.26	203.98	13.68		
201.92	0.00	202.96	1.28	204.00	14.04		
201.94	0.01	202.98	1.29	204.02	14.41		
201.96	0.01	203.00	1.31	204.04	14.78		
201.98	0.02	203.02	1.33	204.06	15.16		
202.00	0.03	203.04	1.38	204.08	15.54		
202.02	0.05	203.06	1.46	204.10	15.62		

Summary for Pond B-13: Basin #13

Inflow Area = 2.350 ac, 62.43% Impervious, Inflow Depth = 2.37" for Current 2 yr event
Inflow = 5.52 cfs @ 12.17 hrs, Volume= 0.465 af
Outflow = 0.16 cfs @ 16.40 hrs, Volume= 0.285 af, Atten= 97%, Lag= 253.6 min
Primary = 0.16 cfs @ 16.40 hrs, Volume= 0.285 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.74' @ 16.40 hrs Surf.Area= 9,431 sf Storage= 15,116 cf

Plug-Flow detention time= 785.0 min calculated for 0.285 af (61% of inflow)
Center-of-Mass det. time= 672.5 min (1,452.0 - 779.4)

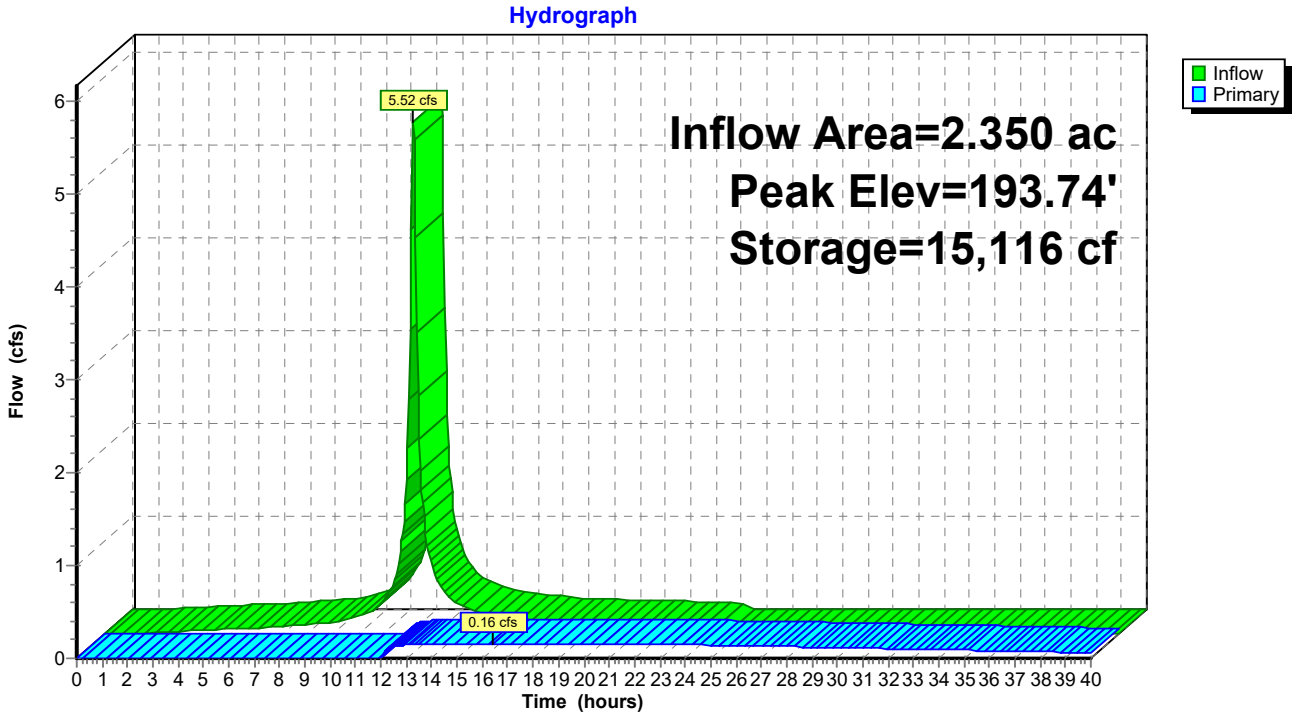
Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	38,667 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	7,975	0	0
193.00	8,804	8,390	8,390
194.00	9,654	9,229	17,619
195.00	10,522	10,088	27,707
196.00	11,399	10,961	38,667

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 57.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0465 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.70'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.95'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.96'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.16 cfs @ 16.40 hrs HW=193.74' (Free Discharge)
- **1=Culvert** (Passes 0.16 cfs of 13.01 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.16 cfs @ 4.65 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-13: Basin #13



Stage-Discharge for Pond B-13: Basin #13

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.00	0.00	193.04	0.08	194.08	0.79	195.12	23.38
192.02	0.00	193.06	0.08	194.10	0.94	195.14	25.23
192.04	0.00	193.08	0.09	194.12	1.10	195.16	27.06
192.06	0.00	193.10	0.09	194.14	1.26	195.18	28.83
192.08	0.00	193.12	0.09	194.16	1.44	195.20	30.69
192.10	0.00	193.14	0.10	194.18	1.62	195.22	32.66
192.12	0.00	193.16	0.10	194.20	1.81	195.24	34.72
192.14	0.00	193.18	0.10	194.22	2.01	195.26	36.89
192.16	0.00	193.20	0.10	194.24	2.21	195.28	39.15
192.18	0.00	193.22	0.11	194.26	2.42	195.30	41.51
192.20	0.00	193.24	0.11	194.28	2.64	195.32	43.96
192.22	0.00	193.26	0.11	194.30	2.86	195.34	46.51
192.24	0.00	193.28	0.11	194.32	3.09	195.36	49.16
192.26	0.00	193.30	0.12	194.34	3.33	195.38	51.96
192.28	0.00	193.32	0.12	194.36	3.57	195.40	54.87
192.30	0.00	193.34	0.12	194.38	3.81	195.42	57.88
192.32	0.00	193.36	0.12	194.40	4.07	195.44	60.99
192.34	0.00	193.38	0.12	194.42	4.32	195.46	64.21
192.36	0.00	193.40	0.13	194.44	4.59	195.48	67.53
192.38	0.00	193.42	0.13	194.46	4.85	195.50	70.97
192.40	0.00	193.44	0.13	194.48	5.13	195.52	74.50
192.42	0.00	193.46	0.13	194.50	5.40	195.54	78.15
192.44	0.00	193.48	0.13	194.52	5.68	195.56	81.90
192.46	0.00	193.50	0.14	194.54	5.97	195.58	85.21
192.48	0.00	193.52	0.14	194.56	6.26	195.60	88.58
192.50	0.00	193.54	0.14	194.58	6.55	195.62	91.99
192.52	0.00	193.56	0.14	194.60	6.85	195.64	95.46
192.54	0.00	193.58	0.14	194.62	7.15	195.66	98.98
192.56	0.00	193.60	0.15	194.64	7.46	195.68	102.55
192.58	0.00	193.62	0.15	194.66	7.77	195.70	106.17
192.60	0.00	193.64	0.15	194.68	8.09	195.72	109.84
192.62	0.00	193.66	0.15	194.70	8.40	195.74	113.56
192.64	0.00	193.68	0.15	194.72	8.72	195.76	117.33
192.66	0.00	193.70	0.16	194.74	9.05	195.78	121.22
192.68	0.00	193.72	0.16	194.76	9.38	195.80	125.17
192.70	0.00	193.74	0.16	194.78	9.71	195.82	129.17
192.72	0.00	193.76	0.16	194.80	10.05	195.84	133.22
192.74	0.00	193.78	0.16	194.82	10.39	195.86	137.32
192.76	0.01	193.80	0.16	194.84	10.73	195.88	141.48
192.78	0.01	193.82	0.17	194.86	11.07	195.90	145.68
192.80	0.02	193.84	0.17	194.88	11.42	195.92	149.94
192.82	0.02	193.86	0.17	194.90	11.77	195.94	154.25
192.84	0.03	193.88	0.17	194.92	12.13	195.96	158.60
192.86	0.04	193.90	0.17	194.94	12.49	195.98	162.90
192.88	0.05	193.92	0.17	194.96	12.85	196.00	**167.24**
192.90	0.05	193.94	0.17	194.98	13.54		
192.92	0.06	193.96	0.19	195.00	14.52		
192.94	0.06	193.98	0.25	195.02	15.67		
192.96	0.06	194.00	0.33	195.04	16.98		
192.98	0.07	194.02	0.42	195.06	18.41		
193.00	0.07	194.04	0.53	195.08	19.96		
193.02	0.08	194.06	0.66	195.10	21.62		

Summary for Pond B-14: Basin #14

Inflow Area = 2.148 ac, 23.65% Impervious, Inflow Depth = 1.61" for Current 2 yr event
Inflow = 3.53 cfs @ 12.18 hrs, Volume= 0.287 af
Outflow = 0.14 cfs @ 15.25 hrs, Volume= 0.216 af, Atten= 96%, Lag= 184.0 min
Primary = 0.14 cfs @ 15.25 hrs, Volume= 0.216 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.27' @ 15.25 hrs Surf.Area= 6,819 sf Storage= 8,296 cf

Plug-Flow detention time= 632.2 min calculated for 0.216 af (75% of inflow)
Center-of-Mass det. time= 535.1 min (1,352.9 - 817.7)

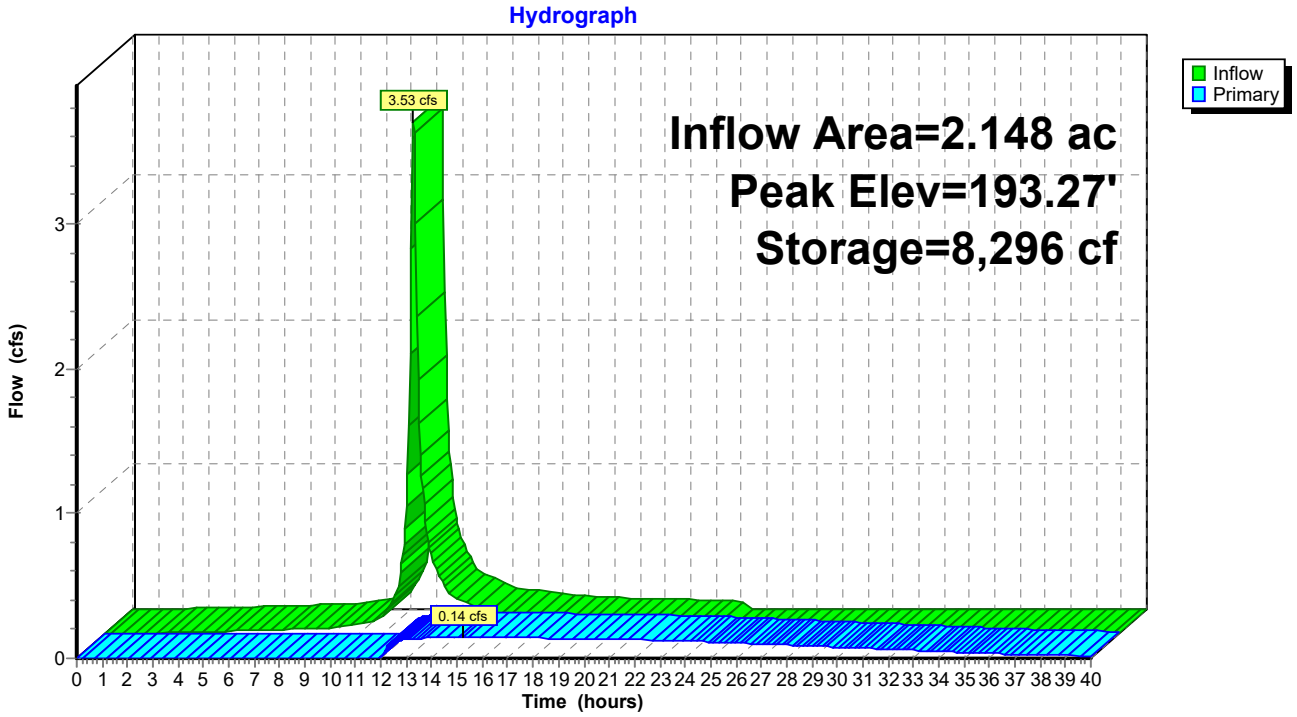
Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	28,705 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	6,224	0	0
193.00	6,689	6,457	6,457
194.00	7,167	6,928	13,385
195.00	7,657	7,412	20,797
196.00	8,160	7,909	28,705

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 194.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0137 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.40'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.45'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.44'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.14 cfs @ 15.25 hrs HW=193.27' (Free Discharge)
- **1=Culvert** (Passes 0.14 cfs of 11.64 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.14 cfs @ 4.22 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-14: Basin #14



Stage-Discharge for Pond B-14: Basin #14

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.00	0.00	193.04	0.12	194.08	6.54	195.12	92.90
192.02	0.00	193.06	0.12	194.10	6.84	195.14	96.41
192.04	0.00	193.08	0.12	194.12	7.14	195.16	99.96
192.06	0.00	193.10	0.13	194.14	7.45	195.18	103.57
192.08	0.00	193.12	0.13	194.16	7.76	195.20	107.23
192.10	0.00	193.14	0.13	194.18	8.07	195.22	110.93
192.12	0.00	193.16	0.13	194.20	8.39	195.24	114.69
192.14	0.00	193.18	0.13	194.22	8.71	195.26	118.57
192.16	0.00	193.20	0.14	194.24	9.04	195.28	122.50
192.18	0.00	193.22	0.14	194.26	9.37	195.30	126.48
192.20	0.00	193.24	0.14	194.28	9.70	195.32	130.52
192.22	0.00	193.26	0.14	194.30	10.03	195.34	134.61
192.24	0.00	193.28	0.14	194.32	10.37	195.36	138.75
192.26	0.00	193.30	0.15	194.34	10.72	195.38	142.94
192.28	0.00	193.32	0.15	194.36	11.06	195.40	147.18
192.30	0.00	193.34	0.15	194.38	11.41	195.42	151.47
192.32	0.00	193.36	0.15	194.40	11.76	195.44	155.82
192.34	0.00	193.38	0.15	194.42	12.12	195.46	160.10
192.36	0.00	193.40	0.16	194.44	12.47	195.48	164.43
192.38	0.00	193.42	0.16	194.46	13.17	195.50	168.80
192.40	0.00	193.44	0.16	194.48	14.14	195.52	173.21
192.42	0.00	193.46	0.17	194.50	15.29	195.54	177.66
192.44	0.00	193.48	0.23	194.52	16.59	195.56	182.16
192.46	0.01	193.50	0.31	194.54	17.89	195.58	186.69
192.48	0.01	193.52	0.41	194.56	19.09	195.60	191.27
192.50	0.02	193.54	0.52	194.58	20.40	195.62	195.89
192.52	0.02	193.56	0.64	194.60	21.80	195.64	200.54
192.54	0.03	193.58	0.78	194.62	23.29	195.66	205.31
192.56	0.04	193.60	0.93	194.64	24.88	195.68	210.12
192.58	0.05	193.62	1.08	194.66	26.62	195.70	214.98
192.60	0.05	193.64	1.25	194.68	28.47	195.72	219.87
192.62	0.06	193.66	1.42	194.70	30.42	195.74	224.81
192.64	0.06	193.68	1.60	194.72	32.47	195.76	229.79
192.66	0.06	193.70	1.79	194.74	34.62	195.78	234.81
192.68	0.07	193.72	1.99	194.76	36.86	195.80	239.88
192.70	0.07	193.74	2.20	194.78	39.21	195.82	244.98
192.72	0.08	193.76	2.41	194.80	41.65	195.84	250.13
192.74	0.08	193.78	2.62	194.82	44.18	195.86	255.41
192.76	0.08	193.80	2.85	194.84	46.82	195.88	260.73
192.78	0.09	193.82	3.08	194.86	49.60	195.90	266.10
192.80	0.09	193.84	3.31	194.88	52.49	195.92	271.51
192.82	0.09	193.86	3.55	194.90	55.48	195.94	276.96
192.84	0.10	193.88	3.80	194.92	58.58	195.96	282.46
192.86	0.10	193.90	4.05	194.94	61.79	195.98	288.00
192.88	0.10	193.92	4.31	194.96	65.10	196.00	**293.59**
192.90	0.10	193.94	4.57	194.98	68.51		
192.92	0.11	193.96	4.84	195.00	72.04		
192.94	0.11	193.98	5.11	195.02	75.67		
192.96	0.11	194.00	5.39	195.04	79.41		
192.98	0.11	194.02	5.67	195.06	82.70		
193.00	0.12	194.04	5.96	195.08	86.05		
193.02	0.12	194.06	6.25	195.10	89.45		

Summary for Pond B-15: Basin #15

Inflow Area = 2.365 ac, 58.73% Impervious, Inflow Depth = 2.30" for Current 2 yr event
Inflow = 5.39 cfs @ 12.17 hrs, Volume= 0.453 af
Outflow = 1.02 cfs @ 12.67 hrs, Volume= 0.326 af, Atten= 81%, Lag= 29.8 min
Primary = 1.02 cfs @ 12.67 hrs, Volume= 0.326 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 198.47' @ 12.67 hrs Surf.Area= 5,072 sf Storage= 10,807 cf

Plug-Flow detention time= 265.0 min calculated for 0.326 af (72% of inflow)
Center-of-Mass det. time= 167.0 min (948.9 - 782.0)

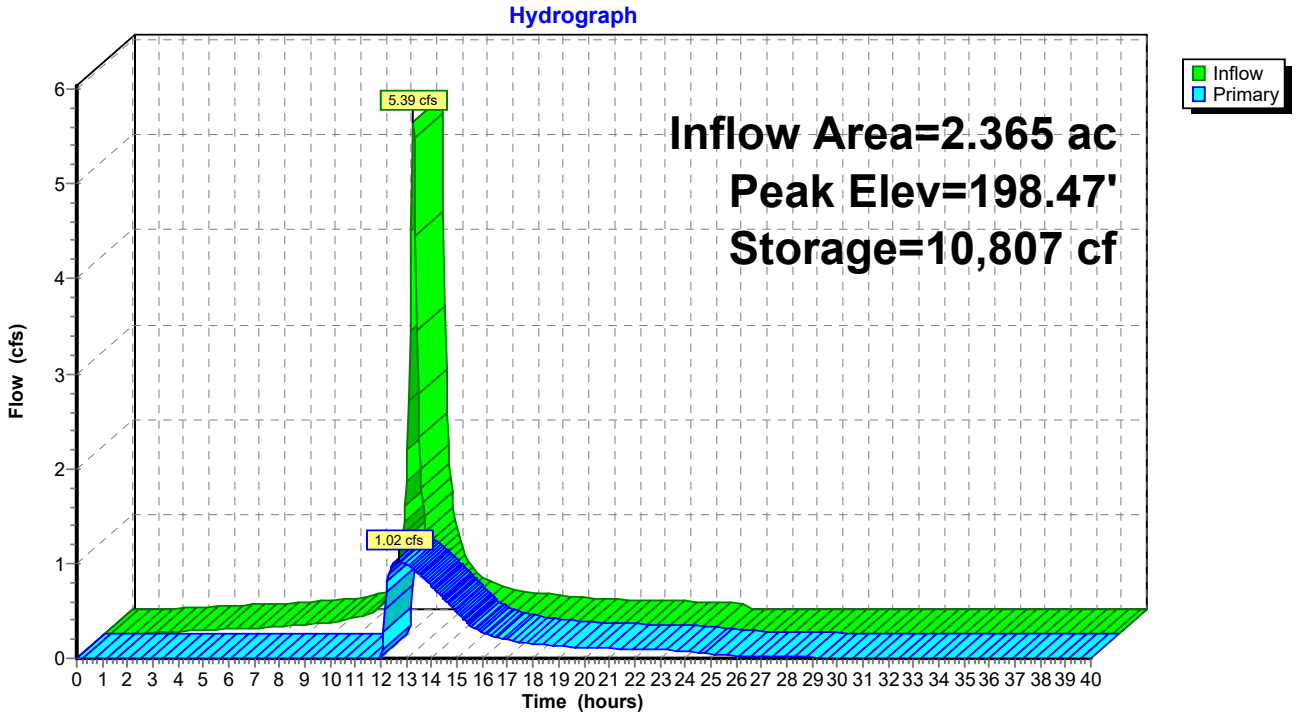
Volume	Invert	Avail.Storage	Storage Description
#1	196.00'	19,269 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.00	3,706	0	0
197.00	4,236	3,971	3,971
198.00	4,795	4,516	8,487
199.00	5,384	5,090	13,576
200.00	6,002	5,693	19,269

Device	Routing	Invert	Outlet Devices
#1	Primary	194.65'	**18.0" Round Culvert** L= 203.0' Ke= 0.500 Inlet / Outlet Invert= 194.65' / 192.00' S= 0.0131 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	197.35'	**6.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	198.58'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	199.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.02 cfs @ 12.67 hrs HW=198.47' (Free Discharge)
- **1=Culvert** (Passes 1.02 cfs of 13.85 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.02 cfs @ 4.44 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-15: Basin #15



Stage-Discharge for Pond B-15: Basin #15

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.00	0.00	197.04	0.00	198.08	0.75	199.12	6.41
196.02	0.00	197.06	0.00	198.10	0.77	199.14	6.70
196.04	0.00	197.08	0.00	198.12	0.78	199.16	6.99
196.06	0.00	197.10	0.00	198.14	0.80	199.18	7.28
196.08	0.00	197.12	0.00	198.16	0.81	199.20	7.58
196.10	0.00	197.14	0.00	198.18	0.83	199.22	7.89
196.12	0.00	197.16	0.00	198.20	0.84	199.24	8.19
196.14	0.00	197.18	0.00	198.22	0.86	199.26	8.51
196.16	0.00	197.20	0.00	198.24	0.87	199.28	8.82
196.18	0.00	197.22	0.00	198.26	0.89	199.30	9.14
196.20	0.00	197.24	0.00	198.28	0.90	199.32	9.46
196.22	0.00	197.26	0.00	198.30	0.91	199.34	9.79
196.24	0.00	197.28	0.00	198.32	0.93	199.36	10.12
196.26	0.00	197.30	0.00	198.34	0.94	199.38	10.46
196.28	0.00	197.32	0.00	198.36	0.95	199.40	10.79
196.30	0.00	197.34	0.00	198.38	0.97	199.42	11.14
196.32	0.00	197.36	0.00	198.40	0.98	199.44	11.48
196.34	0.00	197.38	0.00	198.42	0.99	199.46	11.83
196.36	0.00	197.40	0.01	198.44	1.00	199.48	12.18
196.38	0.00	197.42	0.02	198.46	1.02	199.50	12.53
196.40	0.00	197.44	0.03	198.48	1.03	199.52	12.89
196.42	0.00	197.46	0.04	198.50	1.04	199.54	13.25
196.44	0.00	197.48	0.05	198.52	1.05	199.56	13.61
196.46	0.00	197.50	0.07	198.54	1.06	199.58	13.98
196.48	0.00	197.52	0.09	198.56	1.08	199.60	14.35
196.50	0.00	197.54	0.11	198.58	1.09	199.62	14.72
196.52	0.00	197.56	0.13	198.60	1.13	199.64	15.09
196.54	0.00	197.58	0.15	198.62	1.21	199.66	15.42
196.56	0.00	197.60	0.18	198.64	1.31	199.68	15.44
196.58	0.00	197.62	0.20	198.66	1.43	199.70	15.47
196.60	0.00	197.64	0.23	198.68	1.55	199.72	15.49
196.62	0.00	197.66	0.26	198.70	1.69	199.74	15.52
196.64	0.00	197.68	0.29	198.72	1.84	199.76	15.54
196.66	0.00	197.70	0.32	198.74	2.00	199.78	15.57
196.68	0.00	197.72	0.35	198.76	2.17	199.80	15.59
196.70	0.00	197.74	0.38	198.78	2.35	199.82	15.62
196.72	0.00	197.76	0.41	198.80	2.54	199.84	15.64
196.74	0.00	197.78	0.44	198.82	2.73	199.86	15.66
196.76	0.00	197.80	0.47	198.84	2.94	199.88	15.69
196.78	0.00	197.82	0.50	198.86	3.15	199.90	15.71
196.80	0.00	197.84	0.52	198.88	3.36	199.92	15.74
196.82	0.00	197.86	0.55	198.90	3.58	199.94	15.76
196.84	0.00	197.88	0.57	198.92	3.81	199.96	15.79
196.86	0.00	197.90	0.59	198.94	4.05	199.98	15.81
196.88	0.00	197.92	0.61	198.96	4.29	200.00	**15.95**
196.90	0.00	197.94	0.63	198.98	4.54		
196.92	0.00	197.96	0.65	199.00	4.79		
196.94	0.00	197.98	0.66	199.02	5.05		
196.96	0.00	198.00	0.68	199.04	5.31		
196.98	0.00	198.02	0.70	199.06	5.58		
197.00	0.00	198.04	0.72	199.08	5.85		
197.02	0.00	198.06	0.74	199.10	6.13		

Summary for Pond B-16A: Basin #16A

Inflow Area = 1.876 ac, 45.47% Impervious, Inflow Depth = 2.04" for Current 2 yr event
Inflow = 3.83 cfs @ 12.17 hrs, Volume= 0.319 af
Outflow = 2.04 cfs @ 12.33 hrs, Volume= 0.239 af, Atten= 47%, Lag= 9.3 min
Primary = 2.04 cfs @ 12.33 hrs, Volume= 0.239 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.74' @ 12.33 hrs Surf.Area= 3,855 sf Storage= 5,544 cf

Plug-Flow detention time= 184.8 min calculated for 0.239 af (75% of inflow)
Center-of-Mass det. time= 90.2 min (882.8 - 792.6)

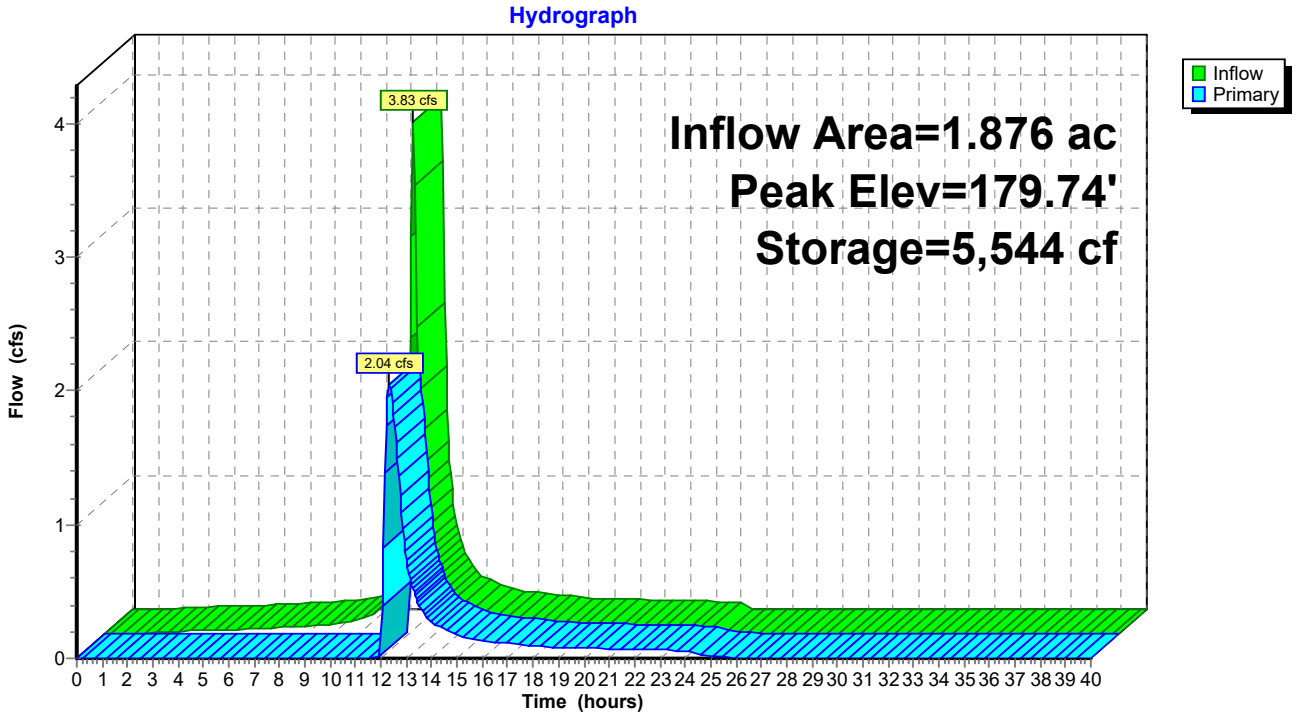
Volume	Invert	Avail.Storage	Storage Description
#1	178.00'	16,318 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
178.00	2,543	0	0
179.00	3,287	2,915	2,915
180.00	4,059	3,673	6,588
181.00	4,858	4,459	11,047
182.00	5,685	5,272	16,318

Device	Routing	Invert	Outlet Devices
#1	Primary	176.65'	**18.0" Round Culvert** L= 53.0' Ke= 0.500 Inlet / Outlet Invert= 176.65' / 172.00' S= 0.0877 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.16'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.03 cfs @ 12.33 hrs HW=179.73' (Free Discharge)
- **1=Culvert** (Passes 2.03 cfs of 13.00 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.03 cfs @ 3.05 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-16A: Basin #16A



Stage-Discharge for Pond B-16A: Basin #16A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.00	0.00	179.04	0.00	180.08	3.69	181.12	16.41
178.02	0.00	179.06	0.00	180.10	3.89	181.14	16.46
178.04	0.00	179.08	0.00	180.12	4.10	181.16	16.50
178.06	0.00	179.10	0.00	180.14	4.32	181.18	16.54
178.08	0.00	179.12	0.00	180.16	4.54	181.20	16.59
178.10	0.00	179.14	0.00	180.18	4.77	181.22	16.63
178.12	0.00	179.16	0.00	180.20	5.01	181.24	16.67
178.14	0.00	179.18	0.02	180.22	5.25	181.26	16.72
178.16	0.00	179.20	0.05	180.24	5.50	181.28	16.76
178.18	0.00	179.22	0.09	180.26	5.76	181.30	16.80
178.20	0.00	179.24	0.15	180.28	6.02	181.32	16.85
178.22	0.00	179.26	0.20	180.30	6.29	181.34	16.89
178.24	0.00	179.28	0.27	180.32	6.56	181.36	16.93
178.26	0.00	179.30	0.34	180.34	6.84	181.38	16.97
178.28	0.00	179.32	0.41	180.36	7.12	181.40	17.02
178.30	0.00	179.34	0.49	180.38	7.41	181.42	17.06
178.32	0.00	179.36	0.57	180.40	7.70	181.44	17.10
178.34	0.00	179.38	0.66	180.42	8.00	181.46	17.14
178.36	0.00	179.40	0.75	180.44	8.30	181.48	17.19
178.38	0.00	179.42	0.85	180.46	8.60	181.50	17.23
178.40	0.00	179.44	0.95	180.48	8.91	181.52	17.27
178.42	0.00	179.46	1.05	180.50	9.23	181.54	17.31
178.44	0.00	179.48	1.16	180.52	9.55	181.56	17.35
178.46	0.00	179.50	1.27	180.54	9.87	181.58	17.40
178.48	0.00	179.52	1.36	180.56	10.19	181.60	17.44
178.50	0.00	179.54	1.44	180.58	10.52	181.62	17.48
178.52	0.00	179.56	1.51	180.60	10.86	181.64	17.52
178.54	0.00	179.58	1.58	180.62	11.20	181.66	17.56
178.56	0.00	179.60	1.65	180.64	11.54	181.68	17.60
178.58	0.00	179.62	1.71	180.66	11.88	181.70	17.64
178.60	0.00	179.64	1.77	180.68	12.23	181.72	17.69
178.62	0.00	179.66	1.83	180.70	12.58	181.74	17.73
178.64	0.00	179.68	1.89	180.72	12.94	181.76	17.77
178.66	0.00	179.70	1.94	180.74	13.29	181.78	17.81
178.68	0.00	179.72	2.00	180.76	13.66	181.80	17.85
178.70	0.00	179.74	2.05	180.78	14.02	181.82	17.89
178.72	0.00	179.76	2.10	180.80	14.39	181.84	17.93
178.74	0.00	179.78	2.15	180.82	14.76	181.86	17.97
178.76	0.00	179.80	2.20	180.84	15.13	181.88	18.01
178.78	0.00	179.82	2.24	180.86	15.51	181.90	18.05
178.80	0.00	179.84	2.29	180.88	15.87	181.92	18.09
178.82	0.00	179.86	2.33	180.90	15.92	181.94	18.13
178.84	0.00	179.88	2.38	180.92	15.96	181.96	18.29
178.86	0.00	179.90	2.42	180.94	16.01	181.98	18.82
178.88	0.00	179.92	2.48	180.96	16.05	182.00	**19.56**
178.90	0.00	179.94	2.57	180.98	16.10		
178.92	0.00	179.96	2.69	181.00	16.14		
178.94	0.00	179.98	2.83	181.02	16.19		
178.96	0.00	180.00	2.98	181.04	16.23		
178.98	0.00	180.02	3.14	181.06	16.28		
179.00	0.00	180.04	3.31	181.08	16.32		
179.02	0.00	180.06	3.50	181.10	16.37		

Summary for Pond B-16B: Basin #16B

Inflow Area = 1.877 ac, 43.74% Impervious, Inflow Depth = 2.00" for Current 2 yr event
Inflow = 3.77 cfs @ 12.17 hrs, Volume= 0.313 af
Outflow = 1.24 cfs @ 12.46 hrs, Volume= 0.234 af, Atten= 67%, Lag= 17.1 min
Primary = 1.24 cfs @ 12.46 hrs, Volume= 0.234 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.68' @ 12.46 hrs Surf.Area= 4,236 sf Storage= 6,183 cf

Plug-Flow detention time= 196.2 min calculated for 0.234 af (75% of inflow)
Center-of-Mass det. time= 100.5 min (894.7 - 794.2)

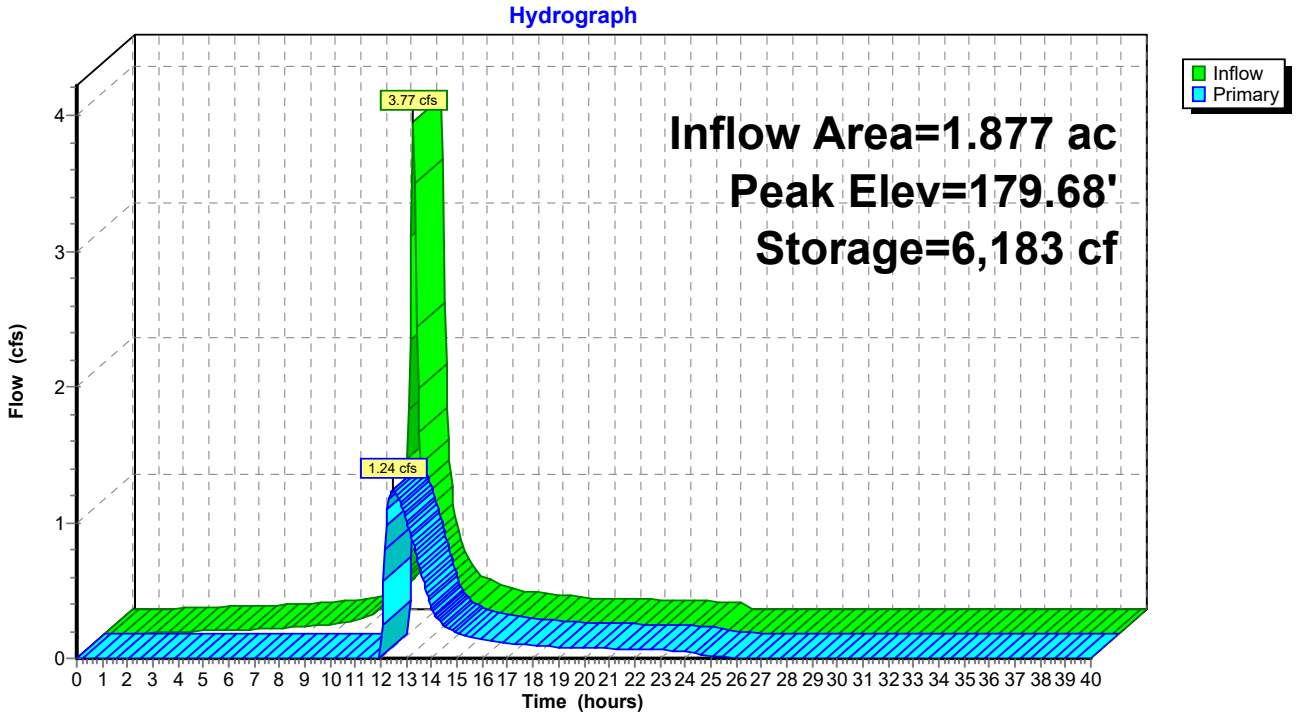
Volume	Invert	Avail.Storage	Storage Description
#1	178.00'	17,892 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
178.00	3,145	0	0
179.00	3,781	3,463	3,463
180.00	4,451	4,116	7,579
181.00	5,149	4,800	12,379
182.00	5,877	5,513	17,892

Device	Routing	Invert	Outlet Devices
#1	Primary	176.65'	**18.0" Round Culvert** L= 53.0' Ke= 0.500 Inlet / Outlet Invert= 176.65' / 172.00' S= 0.0877 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.00'	**24.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	180.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.67'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.24 cfs @ 12.46 hrs HW=179.68' (Free Discharge)
- **1=Culvert** (Passes 1.24 cfs of 12.84 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.24 cfs @ 3.71 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-16B: Basin #16B



Stage-Discharge for Pond B-16B: Basin #16B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.00	0.00	179.04	0.05	180.08	1.90	181.12	55.73
178.02	0.00	179.06	0.09	180.10	2.03	181.14	58.79
178.04	0.00	179.08	0.15	180.12	2.17	181.16	61.96
178.06	0.00	179.10	0.20	180.14	2.33	181.18	65.24
178.08	0.00	179.12	0.27	180.16	2.50	181.20	68.62
178.10	0.00	179.14	0.34	180.18	2.67	181.22	72.10
178.12	0.00	179.16	0.41	180.20	2.85	181.24	75.70
178.14	0.00	179.18	0.48	180.22	3.05	181.26	79.40
178.16	0.00	179.20	0.54	180.24	3.25	181.28	82.94
178.18	0.00	179.22	0.58	180.26	3.45	181.30	86.27
178.20	0.00	179.24	0.63	180.28	3.67	181.32	89.66
178.22	0.00	179.26	0.67	180.30	3.89	181.34	93.11
178.24	0.00	179.28	0.71	180.32	4.11	181.36	96.60
178.26	0.00	179.30	0.74	180.34	4.35	181.38	100.15
178.28	0.00	179.32	0.78	180.36	4.59	181.40	103.75
178.30	0.00	179.34	0.81	180.38	4.83	181.42	107.40
178.32	0.00	179.36	0.84	180.40	5.08	181.44	111.09
178.34	0.00	179.38	0.87	180.42	5.34	181.46	114.84
178.36	0.00	179.40	0.90	180.44	5.60	181.48	118.67
178.38	0.00	179.42	0.93	180.46	5.87	181.50	122.59
178.40	0.00	179.44	0.96	180.48	6.14	181.52	126.57
178.42	0.00	179.46	0.98	180.50	6.42	181.54	130.59
178.44	0.00	179.48	1.01	180.52	6.70	181.56	134.67
178.46	0.00	179.50	1.03	180.54	6.99	181.58	138.80
178.48	0.00	179.52	1.06	180.56	7.28	181.60	142.98
178.50	0.00	179.54	1.08	180.58	7.57	181.62	147.21
178.52	0.00	179.56	1.11	180.60	7.87	181.64	151.50
178.54	0.00	179.58	1.13	180.62	8.18	181.66	155.83
178.56	0.00	179.60	1.15	180.64	8.48	181.68	160.16
178.58	0.00	179.62	1.17	180.66	8.80	181.70	164.48
178.60	0.00	179.64	1.20	180.68	9.23	181.72	168.84
178.62	0.00	179.66	1.22	180.70	10.04	181.74	173.25
178.64	0.00	179.68	1.24	180.72	11.07	181.76	177.70
178.66	0.00	179.70	1.26	180.74	12.26	181.78	182.19
178.68	0.00	179.72	1.28	180.76	13.59	181.80	186.72
178.70	0.00	179.74	1.30	180.78	15.04	181.82	191.29
178.72	0.00	179.76	1.32	180.80	16.61	181.84	195.90
178.74	0.00	179.78	1.34	180.82	18.28	181.86	200.55
178.76	0.00	179.80	1.36	180.84	20.04	181.88	205.28
178.78	0.00	179.82	1.38	180.86	21.90	181.90	210.08
178.80	0.00	179.84	1.40	180.88	23.89	181.92	214.93
178.82	0.00	179.86	1.41	180.90	26.01	181.94	219.82
178.84	0.00	179.88	1.43	180.92	28.24	181.96	224.75
178.86	0.00	179.90	1.45	180.94	30.57	181.98	229.73
178.88	0.00	179.92	1.47	180.96	33.01	182.00	**234.74**
178.90	0.00	179.94	1.48	180.98	35.54		
178.92	0.00	179.96	1.50	181.00	38.18		
178.94	0.00	179.98	1.52	181.02	40.92		
178.96	0.00	180.00	1.54	181.04	43.75		
178.98	0.00	180.02	1.59	181.06	46.69		
179.00	0.00	180.04	1.67	181.08	49.75		
179.02	0.02	180.06	1.78	181.10	52.77		

Summary for Pond B-17A: Basin #17A

Inflow Area = 1.324 ac, 14.58% Impervious, Inflow Depth = 1.43" for Current 2 yr event
Inflow = 1.96 cfs @ 12.18 hrs, Volume= 0.157 af
Outflow = 0.11 cfs @ 14.68 hrs, Volume= 0.127 af, Atten= 95%, Lag= 150.0 min
Primary = 0.11 cfs @ 14.68 hrs, Volume= 0.127 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.71' @ 14.68 hrs Surf.Area= 6,212 sf Storage= 4,149 cf

Plug-Flow detention time= 496.7 min calculated for 0.127 af (81% of inflow)
Center-of-Mass det. time= 414.7 min (1,247.4 - 832.7)

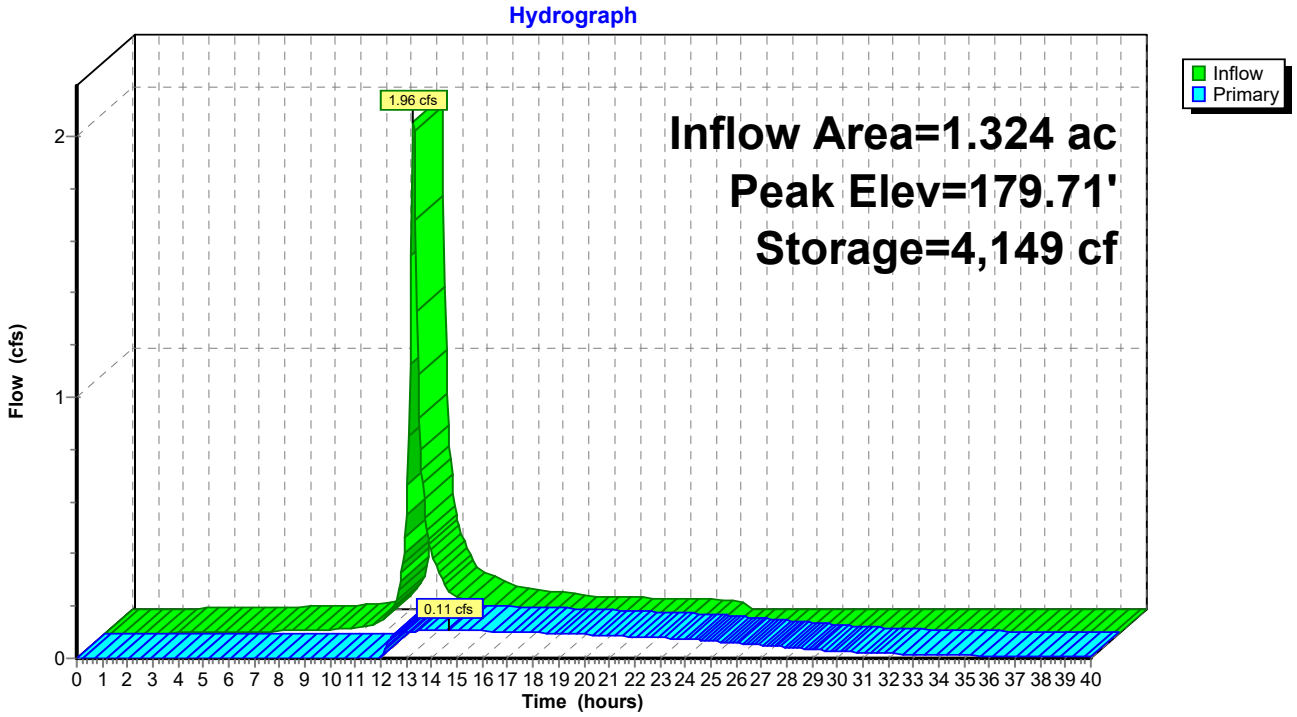
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	30,377 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	5,508	0	0
180.00	6,502	6,005	6,005
181.00	7,552	7,027	13,032
182.00	8,658	8,105	21,137
183.00	9,821	9,240	30,377

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 177.00' S= 0.0163 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.18'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.11 cfs @ 14.68 hrs HW=179.71' (Free Discharge)
- **1=Culvert** (Passes 0.11 cfs of 9.73 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.11 cfs @ 3.13 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-17A: Basin #17A



Stage-Discharge for Pond B-17A: Basin #17A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.14	181.08	0.22	182.12	9.08
179.02	0.00	180.06	0.14	181.10	0.22	182.14	10.74
179.04	0.00	180.08	0.15	181.12	0.22	182.16	12.52
179.06	0.00	180.10	0.15	181.14	0.22	182.18	14.45
179.08	0.00	180.12	0.15	181.16	0.22	182.20	16.49
179.10	0.00	180.14	0.15	181.18	0.23	182.22	18.64
179.12	0.00	180.16	0.15	181.20	0.23	182.24	20.90
179.14	0.00	180.18	0.16	181.22	0.23	182.26	23.26
179.16	0.00	180.20	0.16	181.24	0.23	182.28	25.73
179.18	0.00	180.22	0.16	181.26	0.23	182.30	28.30
179.20	0.00	180.24	0.16	181.28	0.23	182.32	30.97
179.22	0.00	180.26	0.16	181.30	0.23	182.34	33.75
179.24	0.01	180.28	0.16	181.32	0.23	182.36	36.66
179.26	0.01	180.30	0.17	181.34	0.24	182.38	39.70
179.28	0.02	180.32	0.17	181.36	0.24	182.40	42.85
179.30	0.02	180.34	0.17	181.38	0.24	182.42	46.11
179.32	0.03	180.36	0.17	181.40	0.24	182.44	49.49
179.34	0.04	180.38	0.17	181.42	0.24	182.46	52.97
179.36	0.05	180.40	0.17	181.44	0.24	182.48	56.57
179.38	0.05	180.42	0.17	181.46	0.24	182.50	60.28
179.40	0.06	180.44	0.18	181.48	0.24	182.52	64.09
179.42	0.06	180.46	0.18	181.50	0.24	182.54	68.03
179.44	0.06	180.48	0.18	181.52	0.25	182.56	71.80
179.46	0.07	180.50	0.18	181.54	0.25	182.58	75.38
179.48	0.07	180.52	0.18	181.56	0.25	182.60	79.01
179.50	0.08	180.54	0.18	181.58	0.25	182.62	82.71
179.52	0.08	180.56	0.19	181.60	0.25	182.64	86.46
179.54	0.08	180.58	0.19	181.62	0.25	182.66	90.26
179.56	0.09	180.60	0.19	181.64	0.25	182.68	94.12
179.58	0.09	180.62	0.19	181.66	0.25	182.70	98.03
179.60	0.09	180.64	0.19	181.68	0.25	182.72	102.00
179.62	0.10	180.66	0.19	181.70	0.26	182.74	106.02
179.64	0.10	180.68	0.19	181.72	0.26	182.76	110.13
179.66	0.10	180.70	0.20	181.74	0.26	182.78	114.33
179.68	0.10	180.72	0.20	181.76	0.26	182.80	118.59
179.70	0.11	180.74	0.20	181.78	0.26	182.82	122.90
179.72	0.11	180.76	0.20	181.80	0.26	182.84	127.27
179.74	0.11	180.78	0.20	181.82	0.26	182.86	131.70
179.76	0.11	180.80	0.20	181.84	0.26	182.88	136.18
179.78	0.12	180.82	0.20	181.86	0.26	182.90	140.71
179.80	0.12	180.84	0.20	181.88	0.26	182.92	145.30
179.82	0.12	180.86	0.21	181.90	0.27	182.94	149.94
179.84	0.12	180.88	0.21	181.92	0.27	182.96	154.58
179.86	0.12	180.90	0.21	181.94	0.27	182.98	159.22
179.88	0.13	180.92	0.21	181.96	0.39	183.00	**163.90**
179.90	0.13	180.94	0.21	181.98	0.88		
179.92	0.13	180.96	0.21	182.00	1.58		
179.94	0.13	180.98	0.21	182.02	2.48		
179.96	0.13	181.00	0.22	182.04	3.55		
179.98	0.14	181.02	0.22	182.06	4.76		
180.00	0.14	181.04	0.22	182.08	6.09		
180.02	0.14	181.06	0.22	182.10	7.53		

Summary for Pond B-17B: Basin #17B

Inflow Area = 1.385 ac, 37.11% Impervious, Inflow Depth = 1.87" for Current 2 yr event
Inflow = 2.61 cfs @ 12.18 hrs, Volume= 0.216 af
Outflow = 0.12 cfs @ 14.75 hrs, Volume= 0.147 af, Atten= 95%, Lag= 154.2 min
Primary = 0.12 cfs @ 14.75 hrs, Volume= 0.147 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.87' @ 14.75 hrs Surf.Area= 7,879 sf Storage= 6,404 cf

Plug-Flow detention time= 615.7 min calculated for 0.147 af (68% of inflow)
Center-of-Mass det. time= 508.7 min (1,309.5 - 800.9)

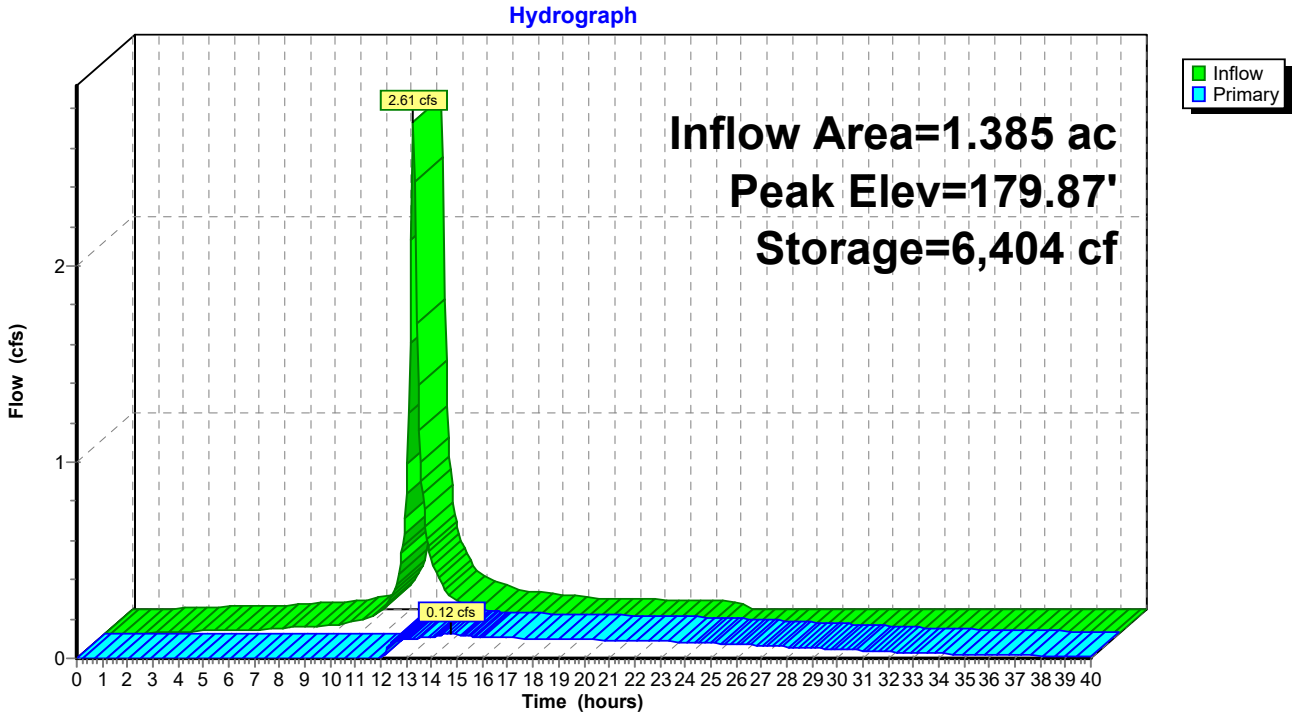
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	37,242 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	6,855	0	0
180.00	8,033	7,444	7,444
181.00	9,268	8,651	16,095
182.00	10,560	9,914	26,009
183.00	11,907	11,234	37,242

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 177.00' S= 0.0163 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.35'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.86'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.12 cfs @ 14.75 hrs HW=179.87' (Free Discharge)
- **1=Culvert** (Passes 0.12 cfs of 10.31 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.11 cfs @ 3.10 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.01 cfs @ 0.32 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-17B: Basin #17B



Stage-Discharge for Pond B-17B: Basin #17B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	1.12	181.08	13.93	182.12	24.68
179.02	0.00	180.06	1.29	181.10	13.98	182.14	26.23
179.04	0.00	180.08	1.46	181.12	14.03	182.16	27.91
179.06	0.00	180.10	1.65	181.14	14.08	182.18	29.72
179.08	0.00	180.12	1.85	181.16	14.14	182.20	31.64
179.10	0.00	180.14	2.05	181.18	14.19	182.22	33.66
179.12	0.00	180.16	2.25	181.20	14.24	182.24	35.77
179.14	0.00	180.18	2.47	181.22	14.29	182.26	37.98
179.16	0.00	180.20	2.69	181.24	14.34	182.28	40.29
179.18	0.00	180.22	2.92	181.26	14.39	182.30	42.70
179.20	0.00	180.24	3.15	181.28	14.44	182.32	45.20
179.22	0.00	180.26	3.39	181.30	14.49	182.34	47.80
179.24	0.00	180.28	3.63	181.32	14.54	182.36	50.53
179.26	0.00	180.30	3.88	181.34	14.59	182.38	53.38
179.28	0.00	180.32	4.14	181.36	14.64	182.40	56.34
179.30	0.00	180.34	4.40	181.38	14.69	182.42	59.40
179.32	0.00	180.36	4.67	181.40	14.74	182.44	62.57
179.34	0.00	180.38	4.94	181.42	14.79	182.46	65.84
179.36	0.00	180.40	5.21	181.44	14.84	182.48	69.22
179.38	0.00	180.42	5.49	181.46	14.88	182.50	72.70
179.40	0.00	180.44	5.77	181.48	14.93	182.52	76.29
179.42	0.01	180.46	6.06	181.50	14.98	182.54	79.99
179.44	0.01	180.48	6.35	181.52	15.03	182.56	83.53
179.46	0.02	180.50	6.65	181.54	15.08	182.58	86.87
179.48	0.03	180.52	6.95	181.56	15.13	182.60	90.26
179.50	0.03	180.54	7.26	181.58	15.17	182.62	93.70
179.52	0.04	180.56	7.56	181.60	15.22	182.64	97.19
179.54	0.05	180.58	7.88	181.62	15.27	182.66	100.74
179.56	0.05	180.60	8.19	181.64	15.32	182.68	104.34
179.58	0.06	180.62	8.51	181.66	15.36	182.70	107.98
179.60	0.06	180.64	8.84	181.68	15.41	182.72	111.68
179.62	0.07	180.66	9.17	181.70	15.46	182.74	115.42
179.64	0.07	180.68	9.50	181.72	15.50	182.76	119.25
179.66	0.07	180.70	9.83	181.74	15.55	182.78	123.17
179.68	0.08	180.72	10.17	181.76	15.60	182.80	127.14
179.70	0.08	180.74	10.51	181.78	15.64	182.82	131.17
179.72	0.08	180.76	10.85	181.80	15.69	182.84	135.25
179.74	0.09	180.78	11.20	181.82	15.74	182.86	139.37
179.76	0.09	180.80	11.55	181.84	15.78	182.88	143.55
179.78	0.09	180.82	11.90	181.86	15.83	182.90	147.78
179.80	0.10	180.84	12.26	181.88	15.87	182.92	152.07
179.82	0.10	180.86	12.62	181.90	15.92	182.94	156.40
179.84	0.10	180.88	12.98	181.92	15.96	182.96	160.73
179.86	0.10	180.90	13.35	181.94	16.01	182.98	165.05
179.88	0.14	180.92	13.51	181.96	16.17	183.00	**169.41**
179.90	0.21	180.94	13.56	181.98	16.71		
179.92	0.30	180.96	13.61	182.00	17.46		
179.94	0.41	180.98	13.67	182.02	18.36		
179.96	0.53	181.00	13.72	182.04	19.41		
179.98	0.66	181.02	13.77	182.06	20.57		
180.00	0.80	181.04	13.83	182.08	21.84		
180.02	0.95	181.06	13.88	182.10	23.21		

Summary for Pond B-2: Basin #2

Inflow Area = 1.894 ac, 38.23% Impervious, Inflow Depth = 1.89" for Current 2 yr event
Inflow = 3.62 cfs @ 12.17 hrs, Volume= 0.299 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond B-1 : Basin #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 210.28' @ 24.60 hrs Surf.Area= 8,703 sf Storage= 13,023 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

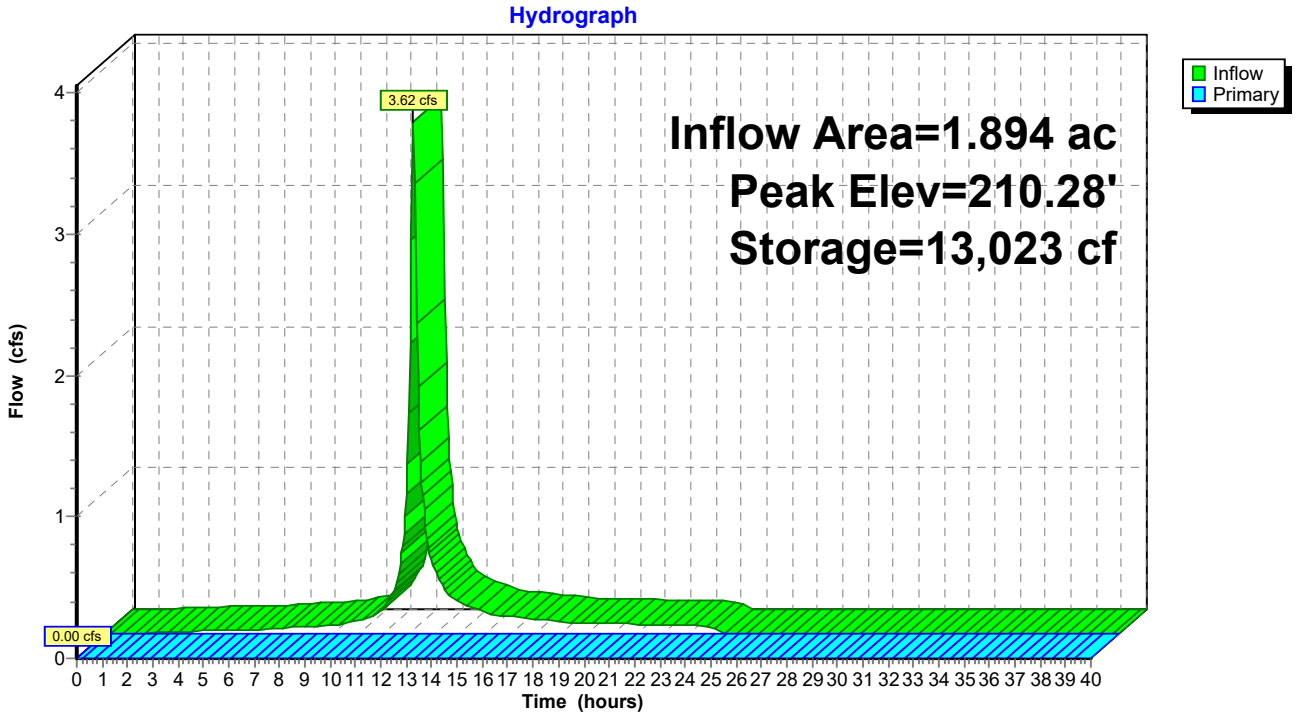
Volume	Invert	Avail.Storage	Storage Description
#1	208.30'	29,385 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
208.30	0	0	0
209.00	7,501	2,625	2,625
210.00	8,431	7,966	10,591
211.00	9,390	8,911	19,502
212.00	10,376	9,883	29,385

Device	Routing	Invert	Outlet Devices
#1	Primary	211.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=208.30' (Free Discharge)
1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-2: Basin #2



Stage-Discharge for Pond B-2: Basin #2

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
208.30	0.00	209.34	0.00	210.38	0.00	211.42	0.00
208.32	0.00	209.36	0.00	210.40	0.00	211.44	0.00
208.34	0.00	209.38	0.00	210.42	0.00	211.46	0.00
208.36	0.00	209.40	0.00	210.44	0.00	211.48	0.00
208.38	0.00	209.42	0.00	210.46	0.00	211.50	0.00
208.40	0.00	209.44	0.00	210.48	0.00	211.52	0.33
208.42	0.00	209.46	0.00	210.50	0.00	211.54	0.94
208.44	0.00	209.48	0.00	210.52	0.00	211.56	1.72
208.46	0.00	209.50	0.00	210.54	0.00	211.58	2.66
208.48	0.00	209.52	0.00	210.56	0.00	211.60	3.72
208.50	0.00	209.54	0.00	210.58	0.00	211.62	4.89
208.52	0.00	209.56	0.00	210.60	0.00	211.64	6.17
208.54	0.00	209.58	0.00	210.62	0.00	211.66	7.55
208.56	0.00	209.60	0.00	210.64	0.00	211.68	9.01
208.58	0.00	209.62	0.00	210.66	0.00	211.70	10.57
208.60	0.00	209.64	0.00	210.68	0.00	211.72	12.28
208.62	0.00	209.66	0.00	210.70	0.00	211.74	14.11
208.64	0.00	209.68	0.00	210.72	0.00	211.76	16.03
208.66	0.00	209.70	0.00	210.74	0.00	211.78	18.05
208.68	0.00	209.72	0.00	210.76	0.00	211.80	20.17
208.70	0.00	209.74	0.00	210.78	0.00	211.82	22.39
208.72	0.00	209.76	0.00	210.80	0.00	211.84	24.70
208.74	0.00	209.78	0.00	210.82	0.00	211.86	27.11
208.76	0.00	209.80	0.00	210.84	0.00	211.88	29.62
208.78	0.00	209.82	0.00	210.86	0.00	211.90	32.23
208.80	0.00	209.84	0.00	210.88	0.00	211.92	34.99
208.82	0.00	209.86	0.00	210.90	0.00	211.94	37.85
208.84	0.00	209.88	0.00	210.92	0.00	211.96	40.82
208.86	0.00	209.90	0.00	210.94	0.00	211.98	43.89
208.88	0.00	209.92	0.00	210.96	0.00	212.00	**47.07**
208.90	0.00	209.94	0.00	210.98	0.00		
208.92	0.00	209.96	0.00	211.00	0.00		
208.94	0.00	209.98	0.00	211.02	0.00		
208.96	0.00	210.00	0.00	211.04	0.00		
208.98	0.00	210.02	0.00	211.06	0.00		
209.00	0.00	210.04	0.00	211.08	0.00		
209.02	0.00	210.06	0.00	211.10	0.00		
209.04	0.00	210.08	0.00	211.12	0.00		
209.06	0.00	210.10	0.00	211.14	0.00		
209.08	0.00	210.12	0.00	211.16	0.00		
209.10	0.00	210.14	0.00	211.18	0.00		
209.12	0.00	210.16	0.00	211.20	0.00		
209.14	0.00	210.18	0.00	211.22	0.00		
209.16	0.00	210.20	0.00	211.24	0.00		
209.18	0.00	210.22	0.00	211.26	0.00		
209.20	0.00	210.24	0.00	211.28	0.00		
209.22	0.00	210.26	0.00	211.30	0.00		
209.24	0.00	210.28	0.00	211.32	0.00		
209.26	0.00	210.30	0.00	211.34	0.00		
209.28	0.00	210.32	0.00	211.36	0.00		
209.30	0.00	210.34	0.00	211.38	0.00		
209.32	0.00	210.36	0.00	211.40	0.00		

Summary for Pond B-3: Basin #3

Inflow Area = 1.554 ac, 38.35% Impervious, Inflow Depth = 1.90" for Current 2 yr event
Inflow = 2.97 cfs @ 12.17 hrs, Volume= 0.246 af
Outflow = 0.13 cfs @ 14.96 hrs, Volume= 0.233 af, Atten= 96%, Lag= 167.0 min
Primary = 0.13 cfs @ 14.96 hrs, Volume= 0.233 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 213.60' @ 14.96 hrs Surf.Area= 11,605 sf Storage= 6,469 cf

Plug-Flow detention time= 589.5 min calculated for 0.233 af (95% of inflow)
Center-of-Mass det. time= 560.3 min (1,359.8 - 799.6)

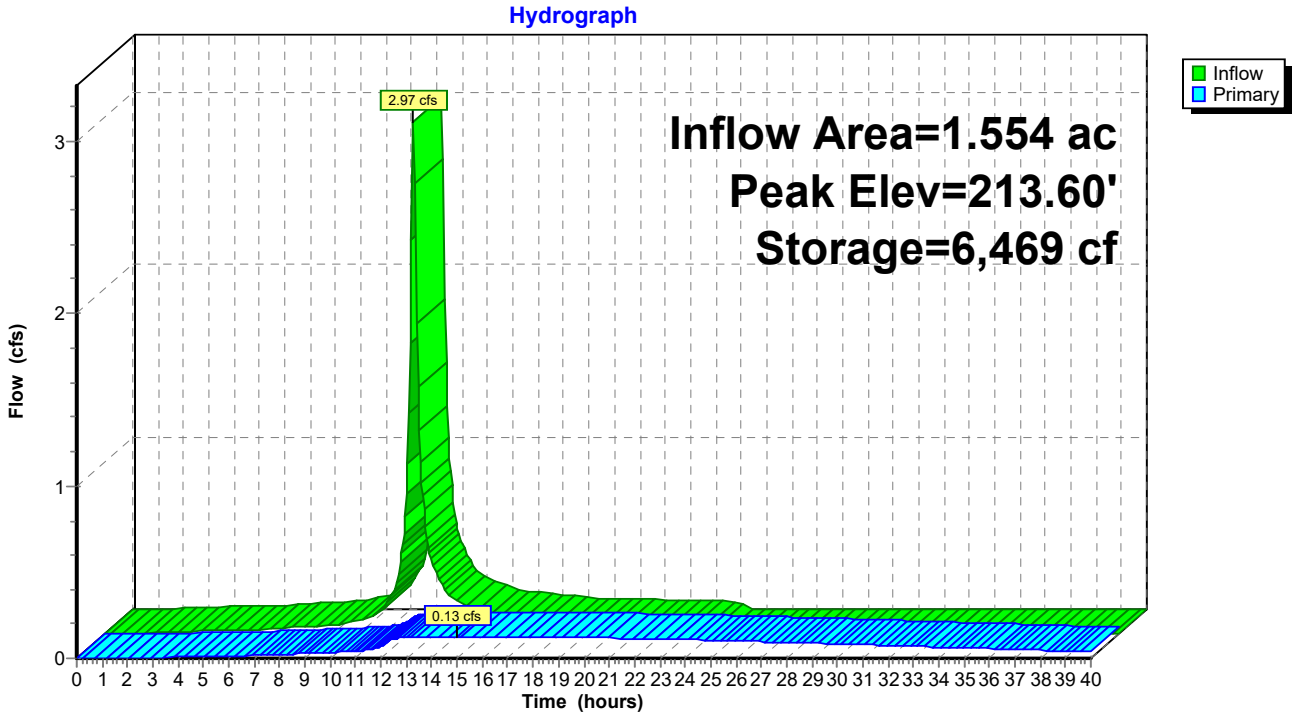
Volume	Invert	Avail.Storage	Storage Description
#1	213.00'	56,991 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
213.00	9,992	0	0
214.00	12,685	11,339	11,339
215.00	15,435	14,060	25,399
216.00	18,241	16,838	42,237
216.75	21,104	14,754	56,991

Device	Routing	Invert	Outlet Devices
#1	Primary	212.30'	**18.0" Round Culvert** L= 151.0' Ke= 0.500 Inlet / Outlet Invert= 212.30' / 202.00' S= 0.0682 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.77 sf
#2	Device 1	212.90'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	215.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	216.70'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.13 cfs @ 14.96 hrs HW=213.60' (Free Discharge)
- **1=Culvert** (Passes 0.13 cfs of 6.31 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.71 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-3: Basin #3



Stage-Discharge for Pond B-3: Basin #3

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
213.00	0.00	214.04	0.17	215.08	0.24	216.12	6.48
213.02	0.02	214.06	0.17	215.10	0.24	216.14	6.77
213.04	0.03	214.08	0.17	215.12	0.24	216.16	7.07
213.06	0.04	214.10	0.17	215.14	0.24	216.18	7.38
213.08	0.05	214.12	0.17	215.16	0.24	216.20	7.69
213.10	0.05	214.14	0.17	215.18	0.24	216.22	8.00
213.12	0.06	214.16	0.18	215.20	0.24	216.24	8.31
213.14	0.06	214.18	0.18	215.22	0.24	216.26	8.63
213.16	0.06	214.20	0.18	215.24	0.25	216.28	8.96
213.18	0.07	214.22	0.18	215.26	0.25	216.30	9.28
213.20	0.07	214.24	0.18	215.28	0.25	216.32	9.61
213.22	0.08	214.26	0.18	215.30	0.25	216.34	9.95
213.24	0.08	214.28	0.19	215.32	0.25	216.36	10.28
213.26	0.08	214.30	0.19	215.34	0.25	216.38	10.62
213.28	0.09	214.32	0.19	215.36	0.25	216.40	10.97
213.30	0.09	214.34	0.19	215.38	0.25	216.42	11.31
213.32	0.09	214.36	0.19	215.40	0.25	216.44	11.66
213.34	0.10	214.38	0.19	215.42	0.26	216.46	12.02
213.36	0.10	214.40	0.19	215.44	0.26	216.48	12.37
213.38	0.10	214.42	0.20	215.46	0.26	216.50	12.73
213.40	0.10	214.44	0.20	215.48	0.26	216.52	13.09
213.42	0.11	214.46	0.20	215.50	0.26	216.54	13.46
213.44	0.11	214.48	0.20	215.52	0.30	216.56	13.83
213.46	0.11	214.50	0.20	215.54	0.37	216.58	14.20
213.48	0.11	214.52	0.20	215.56	0.45	216.60	14.57
213.50	0.12	214.54	0.20	215.58	0.56	216.62	14.95
213.52	0.12	214.56	0.20	215.60	0.68	216.64	15.33
213.54	0.12	214.58	0.21	215.62	0.81	216.66	15.71
213.56	0.12	214.60	0.21	215.64	0.95	216.68	16.09
213.58	0.12	214.62	0.21	215.66	1.10	216.70	16.26
213.60	0.13	214.64	0.21	215.68	1.26	216.72	16.63
213.62	0.13	214.66	0.21	215.70	1.43	216.74	**17.28**
213.64	0.13	214.68	0.21	215.72	1.61		
213.66	0.13	214.70	0.21	215.74	1.79		
213.68	0.13	214.72	0.22	215.76	1.98		
213.70	0.14	214.74	0.22	215.78	2.18		
213.72	0.14	214.76	0.22	215.80	2.39		
213.74	0.14	214.78	0.22	215.82	2.61		
213.76	0.14	214.80	0.22	215.84	2.83		
213.78	0.14	214.82	0.22	215.86	3.05		
213.80	0.15	214.84	0.22	215.88	3.28		
213.82	0.15	214.86	0.22	215.90	3.52		
213.84	0.15	214.88	0.22	215.92	3.77		
213.86	0.15	214.90	0.23	215.94	4.01		
213.88	0.15	214.92	0.23	215.96	4.27		
213.90	0.16	214.94	0.23	215.98	4.53		
213.92	0.16	214.96	0.23	216.00	4.79		
213.94	0.16	214.98	0.23	216.02	5.06		
213.96	0.16	215.00	0.23	216.04	5.34		
213.98	0.16	215.02	0.23	216.06	5.61		
214.00	0.16	215.04	0.23	216.08	5.90		
214.02	0.17	215.06	0.24	216.10	6.19		

Summary for Pond B-4A: Basin #4A

Inflow Area = 2.331 ac, 36.89% Impervious, Inflow Depth = 1.87" for Current 2 yr event
Inflow = 4.38 cfs @ 12.18 hrs, Volume= 0.363 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond B-5 : Basin #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 204.59' @ 24.60 hrs Surf.Area= 5,240 sf Storage= 15,804 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

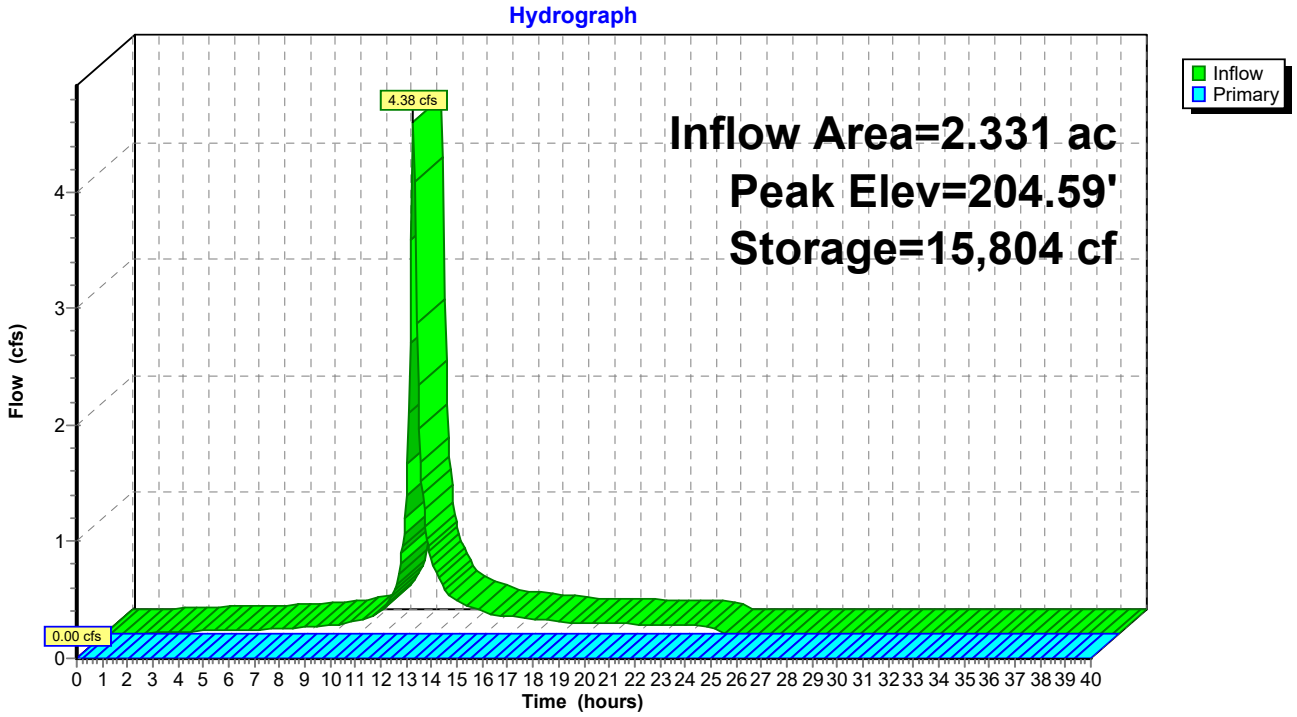
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	20,963 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	1,891	0	0
201.00	2,495	2,193	2,193
202.00	3,169	2,832	5,025
203.00	3,912	3,541	8,566
204.00	4,724	4,318	12,884
205.00	5,604	5,164	18,048
205.50	6,057	2,915	20,963

Device	Routing	Invert	Outlet Devices
#1	Primary	205.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-4A: Basin #4A



Stage-Discharge for Pond B-4A: Basin #4A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	0.00	205.20	0.00
200.05	0.00	202.65	0.00	205.25	0.00
200.10	0.00	202.70	0.00	205.30	0.00
200.15	0.00	202.75	0.00	205.35	0.00
200.20	0.00	202.80	0.00	205.40	0.00
200.25	0.00	202.85	0.00	205.45	0.00
200.30	0.00	202.90	0.00	205.50	**1.31**
200.35	0.00	202.95	0.00		
200.40	0.00	203.00	0.00		
200.45	0.00	203.05	0.00		
200.50	0.00	203.10	0.00		
200.55	0.00	203.15	0.00		
200.60	0.00	203.20	0.00		
200.65	0.00	203.25	0.00		
200.70	0.00	203.30	0.00		
200.75	0.00	203.35	0.00		
200.80	0.00	203.40	0.00		
200.85	0.00	203.45	0.00		
200.90	0.00	203.50	0.00		
200.95	0.00	203.55	0.00		
201.00	0.00	203.60	0.00		
201.05	0.00	203.65	0.00		
201.10	0.00	203.70	0.00		
201.15	0.00	203.75	0.00		
201.20	0.00	203.80	0.00		
201.25	0.00	203.85	0.00		
201.30	0.00	203.90	0.00		
201.35	0.00	203.95	0.00		
201.40	0.00	204.00	0.00		
201.45	0.00	204.05	0.00		
201.50	0.00	204.10	0.00		
201.55	0.00	204.15	0.00		
201.60	0.00	204.20	0.00		
201.65	0.00	204.25	0.00		
201.70	0.00	204.30	0.00		
201.75	0.00	204.35	0.00		
201.80	0.00	204.40	0.00		
201.85	0.00	204.45	0.00		
201.90	0.00	204.50	0.00		
201.95	0.00	204.55	0.00		
202.00	0.00	204.60	0.00		
202.05	0.00	204.65	0.00		
202.10	0.00	204.70	0.00		
202.15	0.00	204.75	0.00		
202.20	0.00	204.80	0.00		
202.25	0.00	204.85	0.00		
202.30	0.00	204.90	0.00		
202.35	0.00	204.95	0.00		
202.40	0.00	205.00	0.00		
202.45	0.00	205.05	0.00		
202.50	0.00	205.10	0.00		
202.55	0.00	205.15	0.00		

Summary for Pond B-4B: Basin #4B

Inflow Area = 2.331 ac, 36.89% Impervious, Inflow Depth = 1.87" for Current 2 yr event
Inflow = 4.38 cfs @ 12.18 hrs, Volume= 0.363 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond B-5 : Basin #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 204.36' @ 24.60 hrs Surf.Area= 5,691 sf Storage= 15,804 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

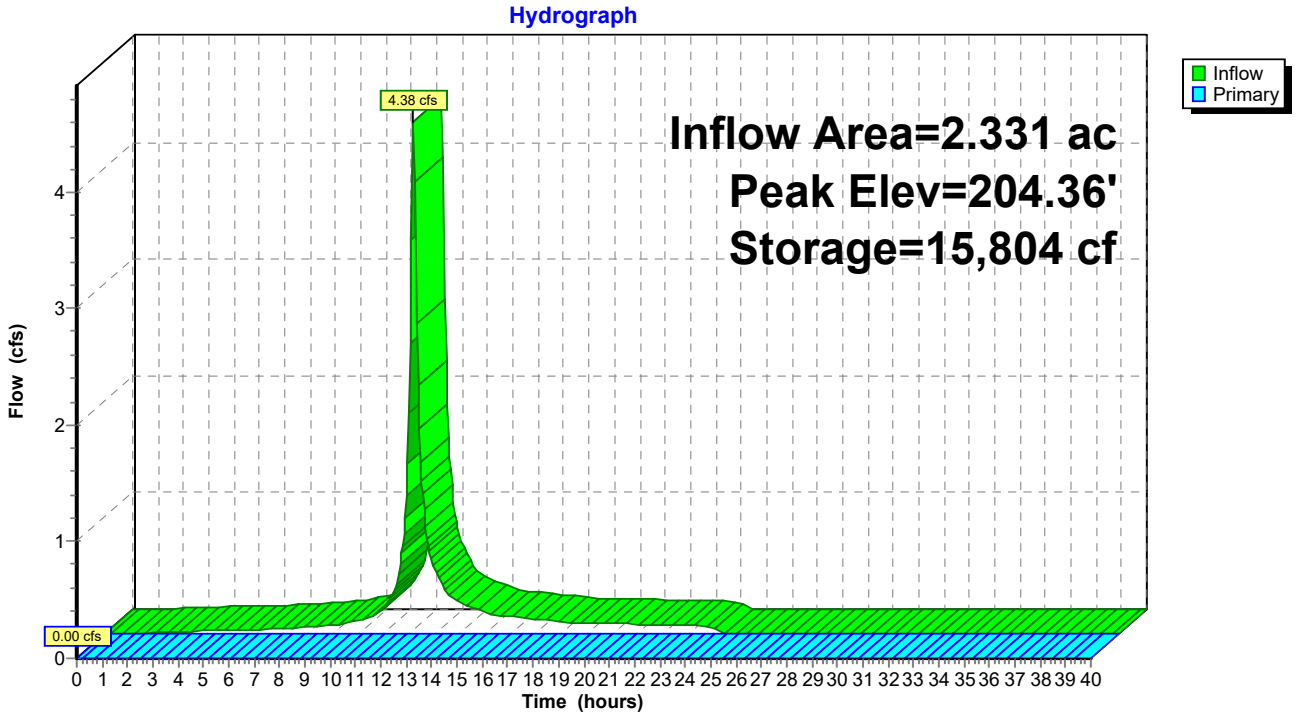
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	22,995 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	1,852	0	0
201.00	2,571	2,212	2,212
202.00	3,384	2,978	5,189
203.00	4,292	3,838	9,027
204.00	5,294	4,793	13,820
205.00	6,393	5,844	19,664
205.50	6,934	3,332	22,995

Device	Routing	Invert	Outlet Devices
#1	Primary	205.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-4B: Basin #4B



Stage-Discharge for Pond B-4B: Basin #4B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	0.00	205.20	0.00
200.05	0.00	202.65	0.00	205.25	0.00
200.10	0.00	202.70	0.00	205.30	0.00
200.15	0.00	202.75	0.00	205.35	0.00
200.20	0.00	202.80	0.00	205.40	0.00
200.25	0.00	202.85	0.00	205.45	0.00
200.30	0.00	202.90	0.00	205.50	**1.31**
200.35	0.00	202.95	0.00		
200.40	0.00	203.00	0.00		
200.45	0.00	203.05	0.00		
200.50	0.00	203.10	0.00		
200.55	0.00	203.15	0.00		
200.60	0.00	203.20	0.00		
200.65	0.00	203.25	0.00		
200.70	0.00	203.30	0.00		
200.75	0.00	203.35	0.00		
200.80	0.00	203.40	0.00		
200.85	0.00	203.45	0.00		
200.90	0.00	203.50	0.00		
200.95	0.00	203.55	0.00		
201.00	0.00	203.60	0.00		
201.05	0.00	203.65	0.00		
201.10	0.00	203.70	0.00		
201.15	0.00	203.75	0.00		
201.20	0.00	203.80	0.00		
201.25	0.00	203.85	0.00		
201.30	0.00	203.90	0.00		
201.35	0.00	203.95	0.00		
201.40	0.00	204.00	0.00		
201.45	0.00	204.05	0.00		
201.50	0.00	204.10	0.00		
201.55	0.00	204.15	0.00		
201.60	0.00	204.20	0.00		
201.65	0.00	204.25	0.00		
201.70	0.00	204.30	0.00		
201.75	0.00	204.35	0.00		
201.80	0.00	204.40	0.00		
201.85	0.00	204.45	0.00		
201.90	0.00	204.50	0.00		
201.95	0.00	204.55	0.00		
202.00	0.00	204.60	0.00		
202.05	0.00	204.65	0.00		
202.10	0.00	204.70	0.00		
202.15	0.00	204.75	0.00		
202.20	0.00	204.80	0.00		
202.25	0.00	204.85	0.00		
202.30	0.00	204.90	0.00		
202.35	0.00	204.95	0.00		
202.40	0.00	205.00	0.00		
202.45	0.00	205.05	0.00		
202.50	0.00	205.10	0.00		
202.55	0.00	205.15	0.00		

Summary for Pond B-5: Basin #5

Inflow Area = 5.341 ac, 32.20% Impervious, Inflow Depth = 0.14" for Current 2 yr event
Inflow = 0.83 cfs @ 12.18 hrs, Volume= 0.064 af
Outflow = 0.03 cfs @ 17.12 hrs, Volume= 0.044 af, Atten= 96%, Lag= 296.0 min
Primary = 0.03 cfs @ 17.12 hrs, Volume= 0.044 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.16' @ 17.12 hrs Surf.Area= 11,813 sf Storage= 1,827 cf

Plug-Flow detention time= 638.5 min calculated for 0.044 af (68% of inflow)
Center-of-Mass det. time= 527.2 min (1,393.7 - 866.5)

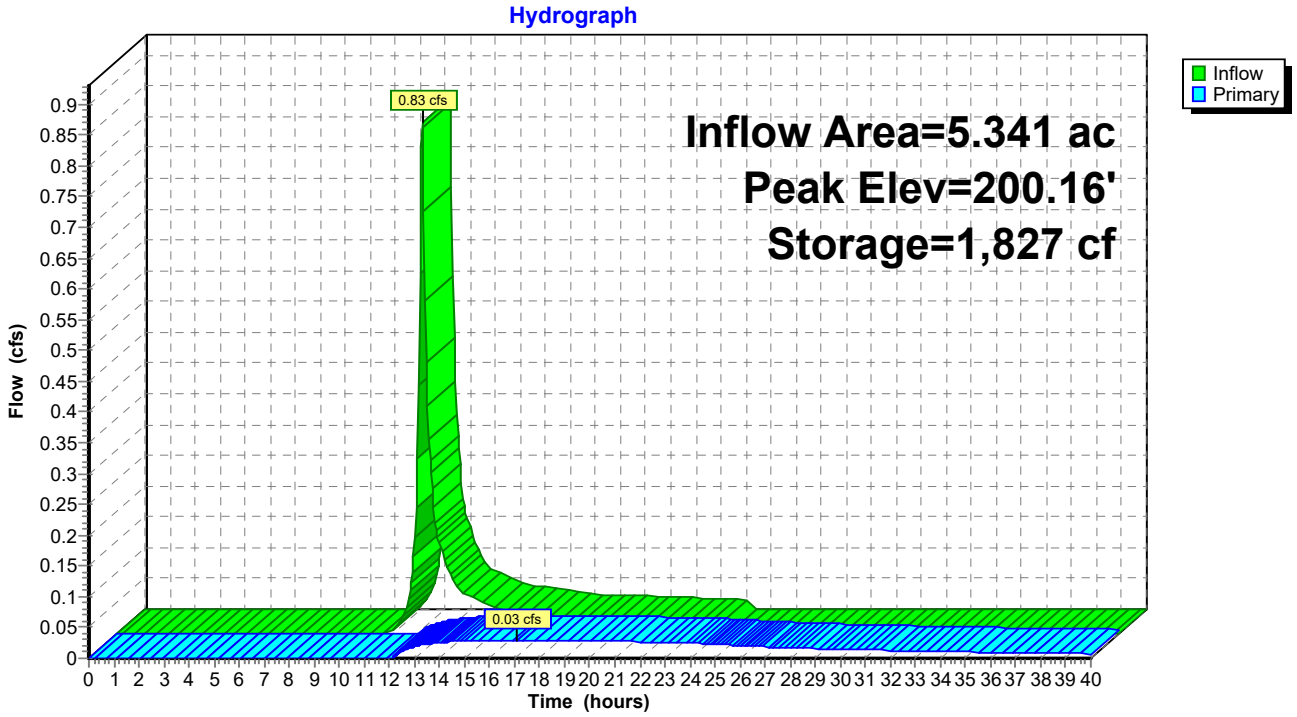
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	91,976 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	11,631	0	0
201.00	12,798	12,215	12,215
202.00	14,009	13,404	25,618
203.00	15,262	14,636	40,254
204.00	16,558	15,910	56,164
205.00	17,896	17,227	73,391
206.00	19,275	18,586	91,976

Device	Routing	Invert	Outlet Devices
#1	Primary	198.65'	**18.0" Round Culvert** L= 70.0' Ke= 0.500 Inlet / Outlet Invert= 198.65' / 196.00' S= 0.0379 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	200.02'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	205.00'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.03 cfs @ 17.12 hrs HW=200.16' (Free Discharge)
- **1=Culvert** (Passes 0.03 cfs of 7.40 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.03 cfs @ 1.25 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-5: Basin #5



Stage-Discharge for Pond B-5: Basin #5

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	15.22	205.20	31.06
200.05	0.00	202.65	15.34	205.25	35.63
200.10	0.01	202.70	15.46	205.30	40.84
200.15	0.03	202.75	15.57	205.35	46.65
200.20	0.05	202.80	15.69	205.40	53.07
200.25	0.06	202.85	15.80	205.45	60.25
200.30	0.07	202.90	15.92	205.50	68.08
200.35	0.08	202.95	16.03	205.55	76.57
200.40	0.09	203.00	16.14	205.60	85.74
200.45	0.09	203.05	16.26	205.65	94.09
200.50	0.10	203.10	16.37	205.70	102.78
200.55	0.11	203.15	16.48	205.75	111.78
200.60	0.11	203.20	16.59	205.80	121.09
200.65	0.12	203.25	16.70	205.85	130.90
200.70	0.12	203.30	16.80	205.90	141.05
200.75	0.13	203.35	16.91	205.95	151.51
200.80	0.13	203.40	17.02	206.00	**162.29**
200.85	0.14	203.45	17.12		
200.90	0.14	203.50	17.23		
200.95	0.15	203.55	17.33		
201.00	0.15	203.60	17.44		
201.05	0.16	203.65	17.54		
201.10	0.16	203.70	17.64		
201.15	0.17	203.75	17.75		
201.20	0.17	203.80	17.85		
201.25	0.17	203.85	17.95		
201.30	0.32	203.90	18.05		
201.35	0.59	203.95	18.15		
201.40	0.94	204.00	18.25		
201.45	1.35	204.05	18.35		
201.50	1.81	204.10	18.45		
201.55	2.31	204.15	18.54		
201.60	2.86	204.20	18.64		
201.65	3.45	204.25	18.74		
201.70	4.07	204.30	18.83		
201.75	4.72	204.35	18.93		
201.80	5.40	204.40	19.03		
201.85	6.11	204.45	19.12		
201.90	6.85	204.50	19.22		
201.95	7.61	204.55	19.31		
202.00	8.40	204.60	19.40		
202.05	9.21	204.65	19.50		
202.10	10.05	204.70	19.59		
202.15	10.90	204.75	19.68		
202.20	11.77	204.80	19.77		
202.25	12.67	204.85	19.86		
202.30	13.58	204.90	19.95		
202.35	14.51	204.95	20.05		
202.40	14.74	205.00	20.14		
202.45	14.86	205.05	21.54		
202.50	14.98	205.10	24.03		
202.55	15.10	205.15	27.25		

Summary for Pond B-6: Basin #6

Inflow Area = 1.191 ac, 58.27% Impervious, Inflow Depth = 2.29" for Current 2 yr event
Inflow = 2.71 cfs @ 12.17 hrs, Volume= 0.227 af
Outflow = 0.22 cfs @ 13.41 hrs, Volume= 0.156 af, Atten= 92%, Lag= 74.5 min
Primary = 0.22 cfs @ 13.41 hrs, Volume= 0.156 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.14' @ 13.41 hrs Surf.Area= 6,155 sf Storage= 6,551 cf

Plug-Flow detention time= 542.4 min calculated for 0.156 af (69% of inflow)
Center-of-Mass det. time= 441.1 min (1,223.4 - 782.3)

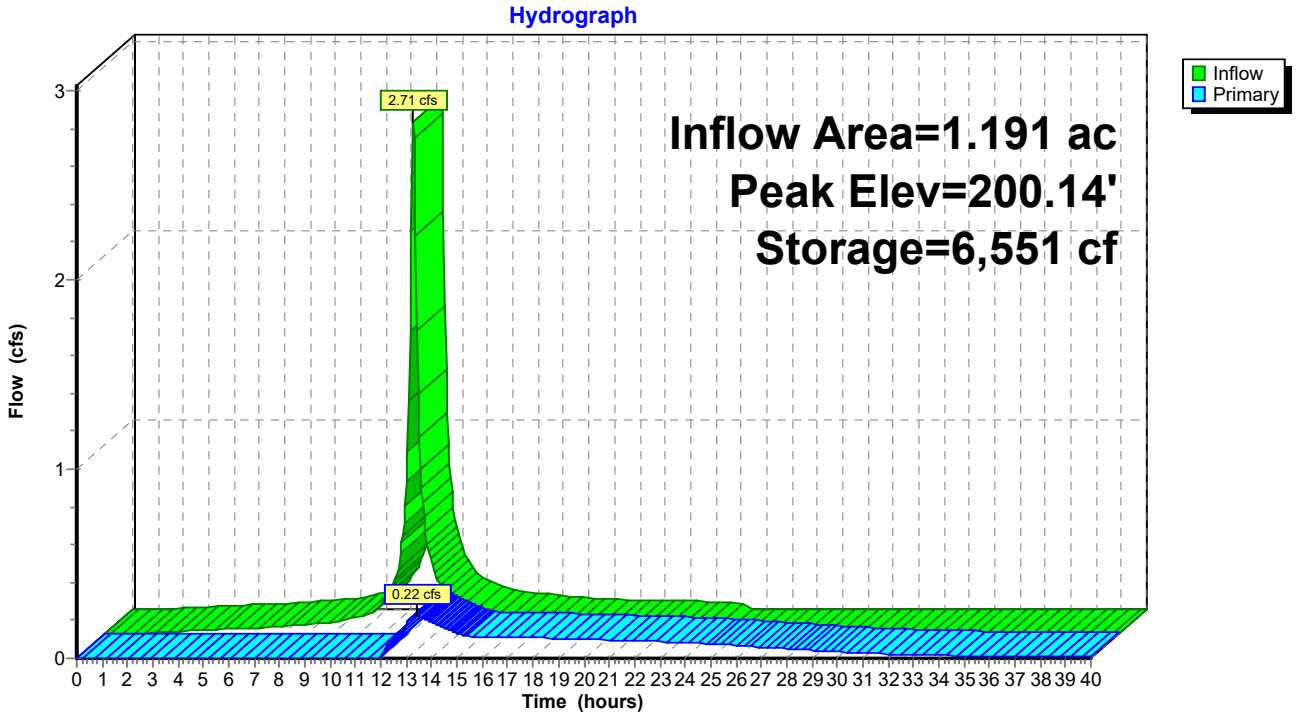
Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	35,769 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.00	5,389	0	0
200.00	6,060	5,725	5,725
201.00	6,761	6,411	12,135
202.00	7,490	7,126	19,261
203.00	8,247	7,869	27,129
204.00	9,032	8,640	35,769

Device	Routing	Invert	Outlet Devices
#1	Primary	197.65'	**18.0" Round Culvert** L= 627.0' Ke= 0.500 Inlet / Outlet Invert= 197.65' / 194.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.50'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.10'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	200.89'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.21 cfs @ 13.41 hrs HW=200.14' (Free Discharge)
- **1=Culvert** (Passes 0.21 cfs of 8.48 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.12 cfs @ 3.51 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.09 cfs @ 0.61 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-6: Basin #6



Stage-Discharge for Pond B-6: Basin #6

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.00	0.00	201.60	92.90
199.05	0.00	201.65	101.92
199.10	0.00	201.70	111.29
199.15	0.00	201.75	121.13
199.20	0.00	201.80	131.29
199.25	0.00	201.85	141.77
199.30	0.00	201.90	152.52
199.35	0.00	201.95	163.34
199.40	0.00	202.00	174.42
199.45	0.00	202.05	185.76
199.50	0.00	202.10	197.39
199.55	0.00	202.15	209.42
199.60	0.02	202.20	221.71
199.65	0.03	202.25	234.27
199.70	0.05	202.30	247.13
199.75	0.06	202.35	260.43
199.80	0.07	202.40	274.02
199.85	0.08	202.45	287.88
199.90	0.09	202.50	302.02
199.95	0.10	202.55	316.42
200.00	0.10	202.60	331.10
200.05	0.11	202.65	346.04
200.10	0.12	202.70	361.25
200.15	0.27	202.75	376.73
200.20	0.54	202.80	392.46
200.25	0.89	202.85	408.46
200.30	1.30	202.90	424.79
200.35	1.76	202.95	441.63
200.40	2.26	203.00	458.76
200.45	2.81	203.05	476.18
200.50	3.40	203.10	493.88
200.55	4.02	203.15	511.86
200.60	4.67	203.20	530.12
200.65	5.36	203.25	548.67
200.70	6.07	203.30	567.49
200.75	6.81	203.35	586.60
200.80	7.57	203.40	605.86
200.85	8.36	203.45	624.84
200.90	9.27	203.50	644.05
200.95	10.92	203.55	663.51
201.00	13.53	203.60	683.20
201.05	16.82	203.65	703.12
201.10	20.73	203.70	723.28
201.15	25.39	203.75	743.67
201.20	30.67	203.80	764.30
201.25	36.56	203.85	785.16
201.30	43.08	203.90	806.43
201.35	50.34	203.95	828.68
201.40	58.26	204.00	**851.20**
201.45	66.84		
201.50	75.82		
201.55	84.20		

Summary for Pond B-7: Basin #7

Inflow Area = 1.564 ac, 62.85% Impervious, Inflow Depth = 2.38" for Current 2 yr event
Inflow = 3.68 cfs @ 12.17 hrs, Volume= 0.310 af
Outflow = 0.12 cfs @ 15.66 hrs, Volume= 0.194 af, Atten= 97%, Lag= 209.2 min
Primary = 0.12 cfs @ 15.66 hrs, Volume= 0.194 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 207.80' @ 15.66 hrs Surf.Area= 9,929 sf Storage= 9,933 cf

Plug-Flow detention time= 733.3 min calculated for 0.194 af (63% of inflow)
Center-of-Mass det. time= 622.5 min (1,401.7 - 779.1)

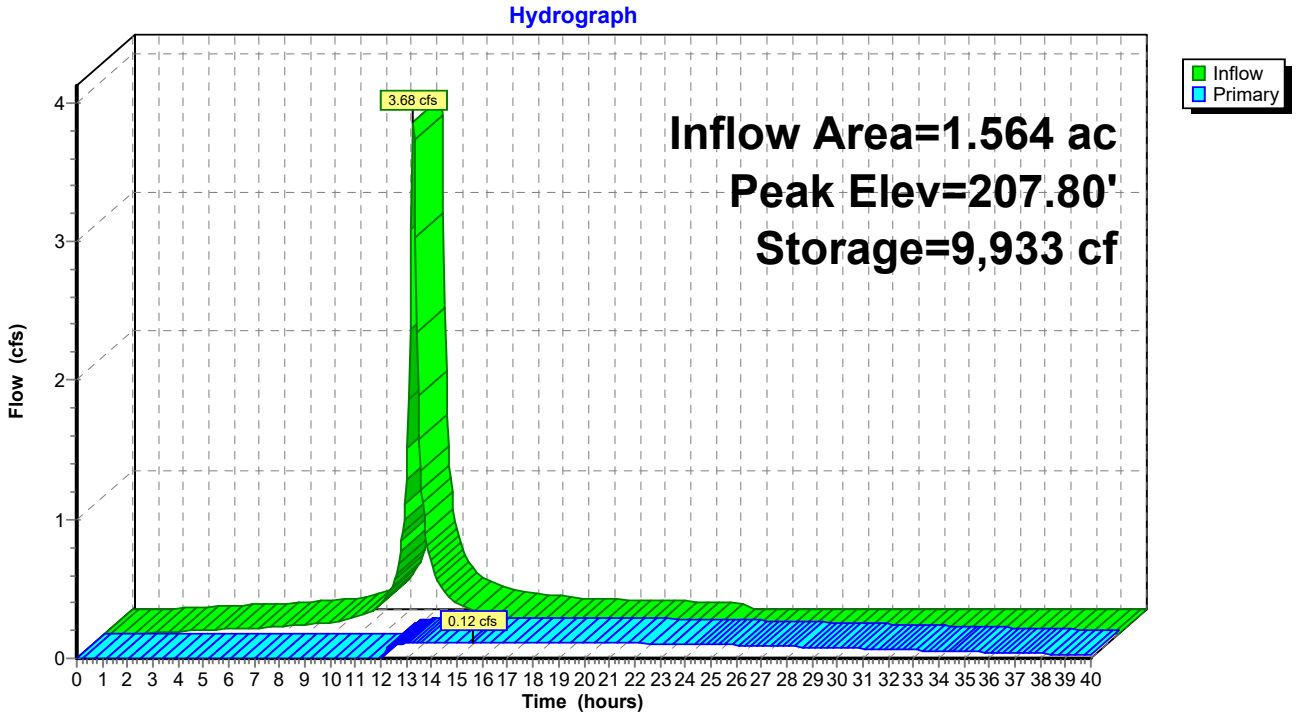
Volume	Invert	Avail.Storage	Storage Description
#1	206.47'	48,130 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.47	0	0	0
207.00	8,989	2,382	2,382
208.00	10,166	9,578	11,960
209.00	11,395	10,781	22,740
210.00	12,681	12,038	34,778
211.00	14,023	13,352	48,130

Device	Routing	Invert	Outlet Devices
#1	Primary	206.47'	**18.0" Round Culvert** L= 94.0' Ke= 0.500 Inlet / Outlet Invert= 206.47' / 206.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	207.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	207.99'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	208.86'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.12 cfs @ 15.66 hrs HW=207.80' (Free Discharge)
- **1=Culvert** (Passes 0.12 cfs of 5.25 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.12 cfs @ 3.49 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-7: Basin #7



Stage-Discharge for Pond B-7: Basin #7

Elevation (feet)	Primary (cfs)
206.47	0.00
206.52	0.00
206.57	0.00
206.62	0.00
206.67	0.00
206.72	0.00
206.77	0.00
206.82	0.00
206.87	0.00
206.92	0.00
206.97	0.00
207.02	0.00
207.07	0.00
207.12	0.00
207.17	0.00
207.22	0.00
207.27	0.02
207.32	0.03
207.37	0.05
207.42	0.06
207.47	0.07
207.52	0.08
207.57	0.09
207.62	0.10
207.67	0.10
207.72	0.11
207.77	0.12
207.82	0.12
207.87	0.13
207.92	0.13
207.97	0.14
208.02	0.21
208.07	0.44
208.12	0.76
208.17	1.15
208.22	1.59
208.27	2.07
208.32	2.61
208.37	3.18
208.42	3.78
208.47	4.42
208.52	5.10
208.57	5.80
208.62	6.52
208.67	7.28
208.72	8.06
208.77	8.86
208.82	9.08
208.87	9.37
208.92	11.14
208.97	13.87
209.02	17.29
209.07	21.32
209.12	26.09
209.17	31.48
209.22	37.48
209.27	44.11
209.32	51.48
209.37	59.50
209.42	68.19
209.47	77.27
209.52	85.75
209.57	94.55
209.62	103.67
209.67	113.13
209.72	123.06
209.77	133.31
209.82	143.89
209.87	154.72
209.92	165.63
209.97	176.80
210.02	188.23
210.07	199.94
210.12	212.05
210.17	224.43
210.22	237.07
210.27	250.01
210.32	263.40
210.37	277.07
210.42	291.01
210.47	305.22
210.52	319.70
210.57	334.45
210.62	349.47
210.67	364.76
210.72	380.30
210.77	396.12
210.82	412.19
210.87	428.58
210.92	445.50
210.97	**462.70**

Summary for Pond B-8: Basin #8

Inflow Area = 2.090 ac, 23.06% Impervious, Inflow Depth = 1.59" for Current 2 yr event
Inflow = 3.41 cfs @ 12.18 hrs, Volume= 0.278 af
Outflow = 0.10 cfs @ 17.38 hrs, Volume= 0.178 af, Atten= 97%, Lag= 311.9 min
Primary = 0.10 cfs @ 17.38 hrs, Volume= 0.178 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.64' @ 17.38 hrs Surf.Area= 13,912 sf Storage= 8,637 cf

Plug-Flow detention time= 754.3 min calculated for 0.178 af (64% of inflow)
Center-of-Mass det. time= 638.9 min (1,457.5 - 818.6)

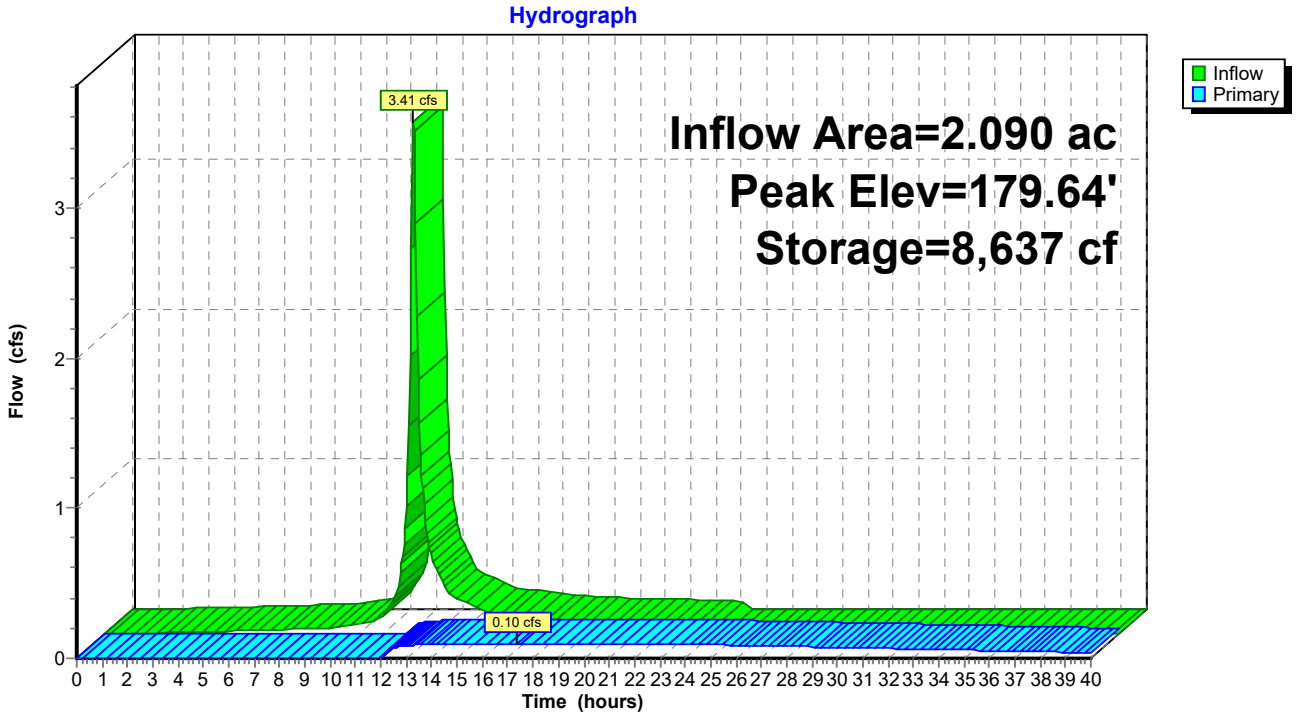
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	44,379 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	13,283	0	0
180.00	14,274	13,779	13,779
181.00	15,293	14,784	28,562
182.00	16,341	15,817	44,379

Device	Routing	Invert	Outlet Devices
#1	Primary	178.23'	**18.0" Round Culvert** L= 46.0' Ke= 0.500 Inlet / Outlet Invert= 178.23' / 178.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.83'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.10 cfs @ 17.38 hrs HW=179.64' (Free Discharge)
- **1=Culvert** (Passes 0.10 cfs of 5.51 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.10 cfs @ 2.89 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-8: Basin #8



Stage-Discharge for Pond B-8: Basin #8

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	1.76	181.08	26.70
179.02	0.00	180.06	1.96	181.10	28.75
179.04	0.00	180.08	2.16	181.12	30.89
179.06	0.00	180.10	2.37	181.14	33.13
179.08	0.00	180.12	2.59	181.16	35.47
179.10	0.00	180.14	2.81	181.18	37.91
179.12	0.00	180.16	3.04	181.20	40.44
179.14	0.00	180.18	3.28	181.22	43.07
179.16	0.00	180.20	3.52	181.24	45.82
179.18	0.00	180.22	3.77	181.26	48.70
179.20	0.00	180.24	4.02	181.28	51.68
179.22	0.00	180.26	4.28	181.30	54.77
179.24	0.01	180.28	4.54	181.32	57.97
179.26	0.01	180.30	4.81	181.34	61.27
179.28	0.02	180.32	5.08	181.36	64.67
179.30	0.03	180.34	5.36	181.38	68.18
179.32	0.03	180.36	5.64	181.40	71.80
179.34	0.04	180.38	5.93	181.42	75.52
179.36	0.05	180.40	6.22	181.44	79.09
179.38	0.05	180.42	6.51	181.46	82.45
179.40	0.06	180.44	6.81	181.48	85.86
179.42	0.06	180.46	7.11	181.50	89.33
179.44	0.07	180.48	7.42	181.52	92.84
179.46	0.07	180.50	7.73	181.54	96.41
179.48	0.07	180.52	8.04	181.56	100.03
179.50	0.08	180.54	8.36	181.58	103.70
179.52	0.08	180.56	8.68	181.60	107.42
179.54	0.08	180.58	9.01	181.62	111.19
179.56	0.09	180.60	9.34	181.64	115.04
179.58	0.09	180.62	9.67	181.66	118.98
179.60	0.09	180.64	9.90	181.68	122.98
179.62	0.10	180.66	9.98	181.70	127.03
179.64	0.10	180.68	10.07	181.72	131.13
179.66	0.10	180.70	10.15	181.74	135.28
179.68	0.10	180.72	10.24	181.76	139.48
179.70	0.11	180.74	10.32	181.78	143.73
179.72	0.11	180.76	10.40	181.80	148.03
179.74	0.11	180.78	10.49	181.82	152.38
179.76	0.11	180.80	10.57	181.84	156.73
179.78	0.12	180.82	10.65	181.86	161.07
179.80	0.13	180.84	10.85	181.88	165.46
179.82	0.19	180.86	11.42	181.90	169.88
179.84	0.27	180.88	12.20	181.92	174.35
179.86	0.37	180.90	13.14	181.94	178.86
179.88	0.48	180.92	14.22	181.96	183.41
179.90	0.60	180.94	15.41	181.98	188.00
179.92	0.74	180.96	16.72	182.00	**192.63**
179.94	0.89	180.98	18.12		
179.96	1.04	181.00	19.62		
179.98	1.21	181.02	21.20		
180.00	1.39	181.04	22.91		
180.02	1.57	181.06	24.76		

Summary for Pond B-9: Basin #9

Inflow Area = 1.503 ac, 52.63% Impervious, Inflow Depth = 2.18" for Current 2 yr event
Inflow = 3.26 cfs @ 12.17 hrs, Volume= 0.273 af
Outflow = 0.10 cfs @ 16.15 hrs, Volume= 0.168 af, Atten= 97%, Lag= 238.9 min
Primary = 0.10 cfs @ 16.15 hrs, Volume= 0.168 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.78' @ 16.15 hrs Surf.Area= 11,489 sf Storage= 8,709 cf

Plug-Flow detention time= 737.7 min calculated for 0.168 af (61% of inflow)
Center-of-Mass det. time= 623.8 min (1,410.4 - 786.5)

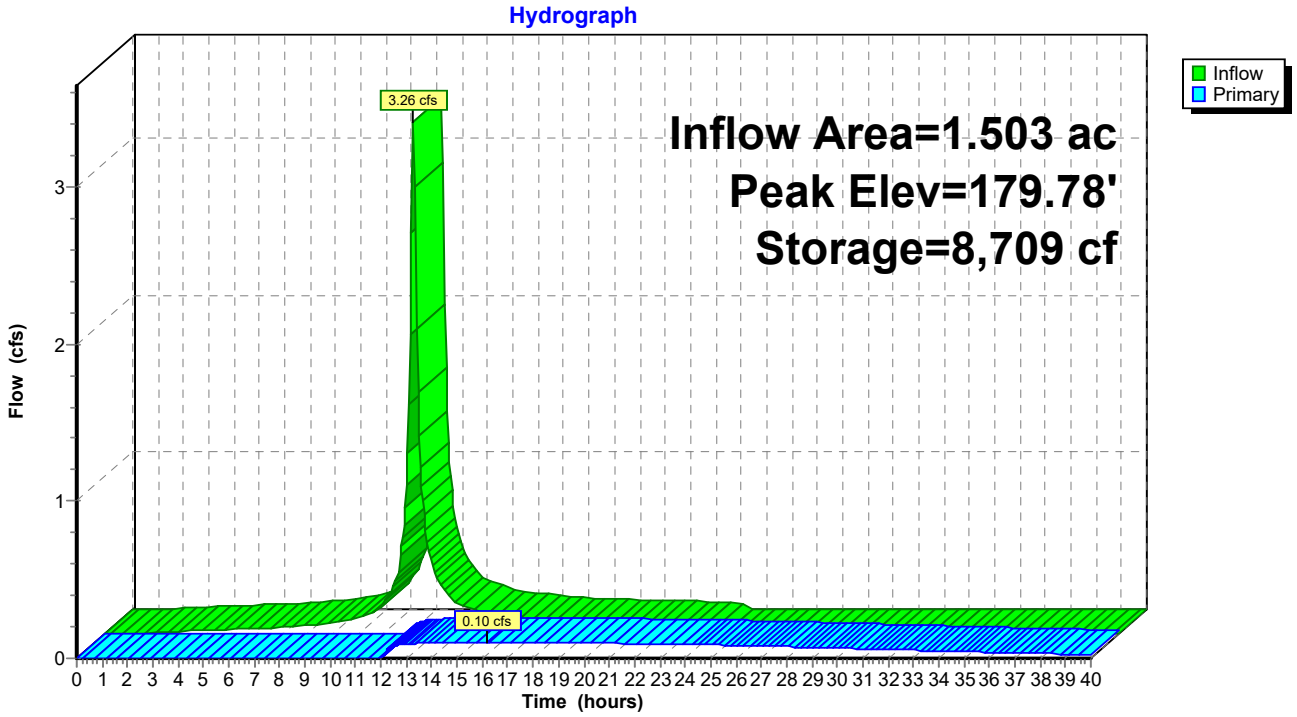
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	36,641 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	10,720	0	0
180.00	11,700	11,210	11,210
181.00	12,708	12,204	23,414
182.00	13,745	13,227	36,641

Device	Routing	Invert	Outlet Devices
#1	Primary	178.23'	**18.0" Round Culvert** L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 178.23' / 178.00' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.30'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.93'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.10 cfs @ 16.15 hrs HW=179.78' (Free Discharge)
- **1=Culvert** (Passes 0.10 cfs of 6.36 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.10 cfs @ 2.97 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-9: Basin #9



Stage-Discharge for Pond B-9: Basin #9

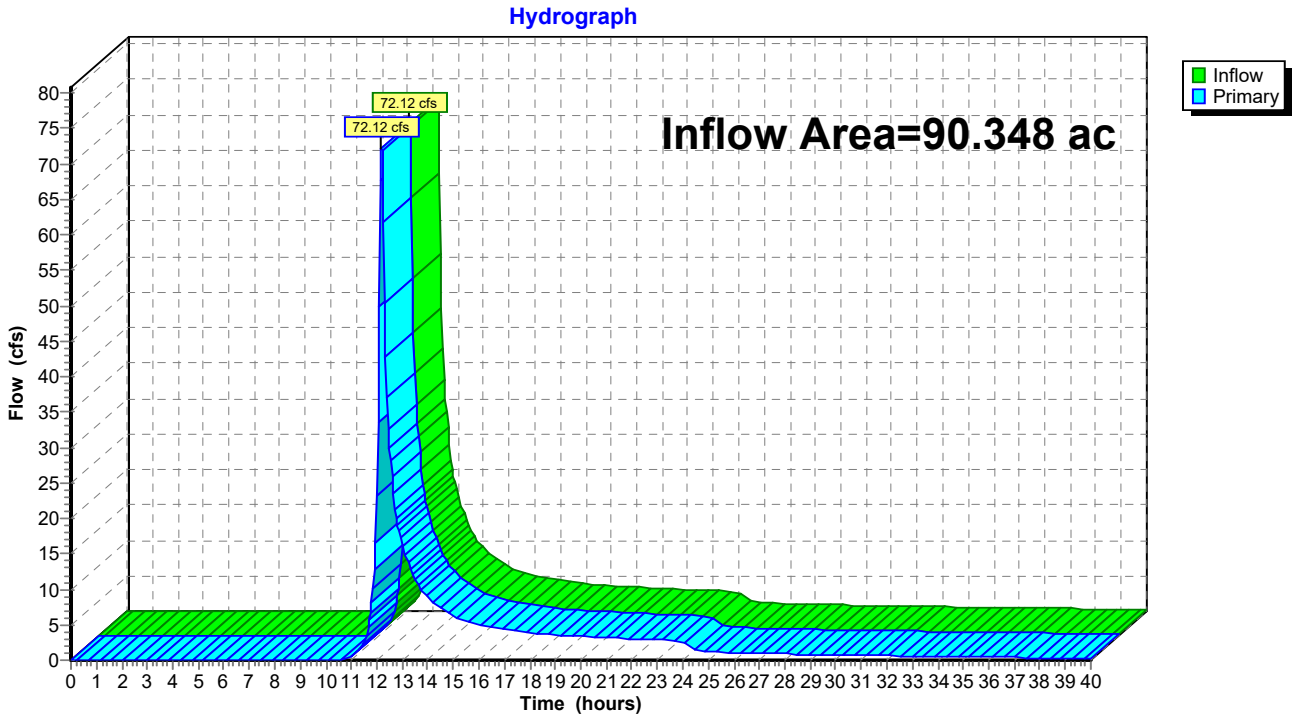
Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.61	181.08	11.70
179.02	0.00	180.06	0.74	181.10	11.77
179.04	0.00	180.08	0.89	181.12	11.84
179.06	0.00	180.10	1.05	181.14	11.92
179.08	0.00	180.12	1.21	181.16	11.99
179.10	0.00	180.14	1.39	181.18	12.06
179.12	0.00	180.16	1.57	181.20	12.13
179.14	0.00	180.18	1.76	181.22	12.20
179.16	0.00	180.20	1.96	181.24	12.27
179.18	0.00	180.22	2.16	181.26	12.34
179.20	0.00	180.24	2.37	181.28	12.41
179.22	0.00	180.26	2.59	181.30	12.48
179.24	0.00	180.28	2.81	181.32	12.55
179.26	0.00	180.30	3.04	181.34	12.62
179.28	0.00	180.32	3.28	181.36	12.69
179.30	0.00	180.34	3.52	181.38	12.76
179.32	0.00	180.36	3.77	181.40	12.83
179.34	0.00	180.38	4.02	181.42	12.89
179.36	0.01	180.40	4.28	181.44	12.96
179.38	0.01	180.42	4.54	181.46	13.03
179.40	0.02	180.44	4.81	181.48	13.09
179.42	0.02	180.46	5.08	181.50	13.16
179.44	0.03	180.48	5.36	181.52	13.22
179.46	0.04	180.50	5.64	181.54	13.29
179.48	0.05	180.52	5.93	181.56	13.35
179.50	0.05	180.54	6.22	181.58	13.42
179.52	0.06	180.56	6.51	181.60	13.48
179.54	0.06	180.58	6.81	181.62	13.55
179.56	0.06	180.60	7.11	181.64	13.61
179.58	0.07	180.62	7.42	181.66	13.67
179.60	0.07	180.64	7.73	181.68	13.74
179.62	0.08	180.66	8.04	181.70	13.80
179.64	0.08	180.68	8.36	181.72	13.86
179.66	0.08	180.70	8.68	181.74	13.93
179.68	0.09	180.72	9.01	181.76	13.99
179.70	0.09	180.74	9.34	181.78	14.05
179.72	0.09	180.76	9.67	181.80	14.11
179.74	0.10	180.78	10.01	181.82	14.17
179.76	0.10	180.80	10.35	181.84	14.23
179.78	0.10	180.82	10.69	181.86	14.29
179.80	0.10	180.84	10.77	181.88	14.35
179.82	0.11	180.86	10.85	181.90	14.41
179.84	0.11	180.88	10.93	181.92	14.47
179.86	0.11	180.90	11.01	181.94	14.53
179.88	0.11	180.92	11.09	181.96	14.71
179.90	0.12	180.94	11.17	181.98	15.26
179.92	0.12	180.96	11.24	182.00	**16.02**
179.94	0.13	180.98	11.32		
179.96	0.19	181.00	11.40		
179.98	0.27	181.02	11.47		
180.00	0.37	181.04	11.55		
180.02	0.48	181.06	11.62		

Summary for Link PDA-1: Proposed Drainage Area #1

Inflow Area = 90.348 ac, 16.68% Impervious, Inflow Depth > 1.14" for Current 2 yr event
Inflow = 72.12 cfs @ 12.19 hrs, Volume= 8.580 af
Primary = 72.12 cfs @ 12.19 hrs, Volume= 8.580 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-1: Proposed Drainage Area #1



Summary for Subcatchment 1I: PDA-1 (impervious)

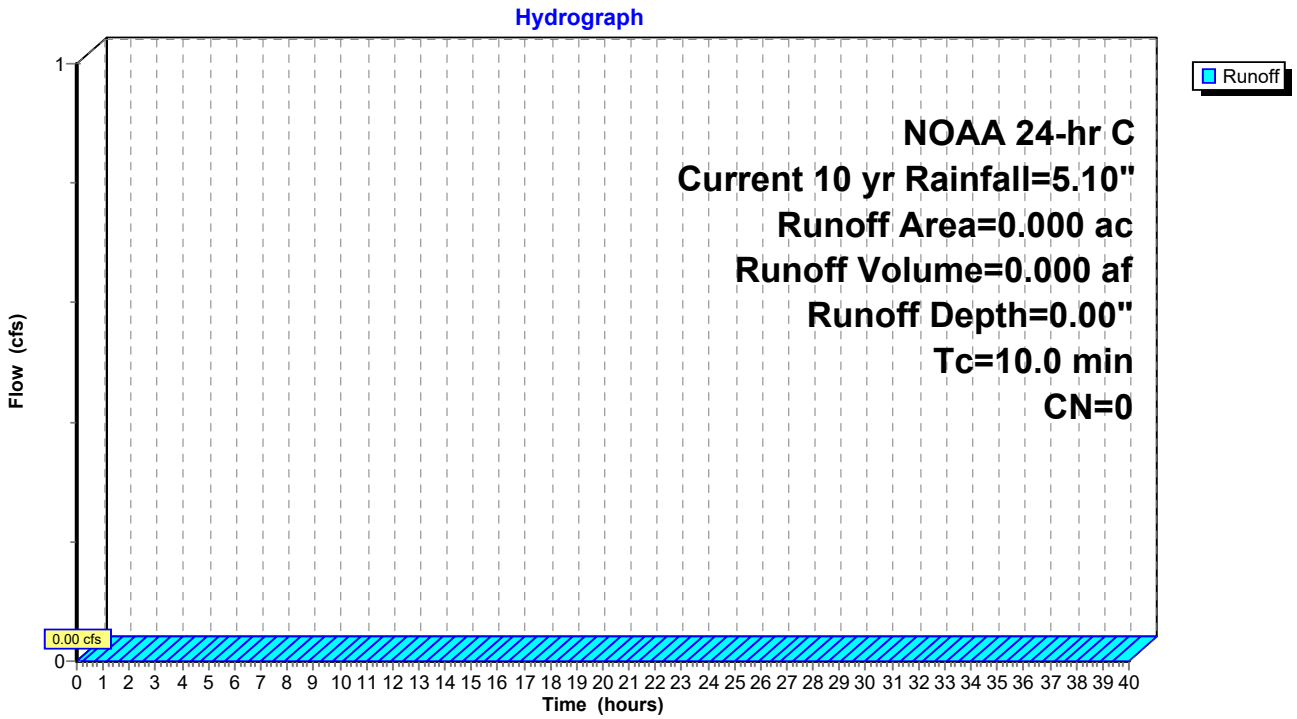
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-1 : Basin #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.000	98	Concrete, HSG C
	0.000	0	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 1I: PDA-1 (impervious)



Summary for Subcatchment 1P: PDA-1 (pervious)

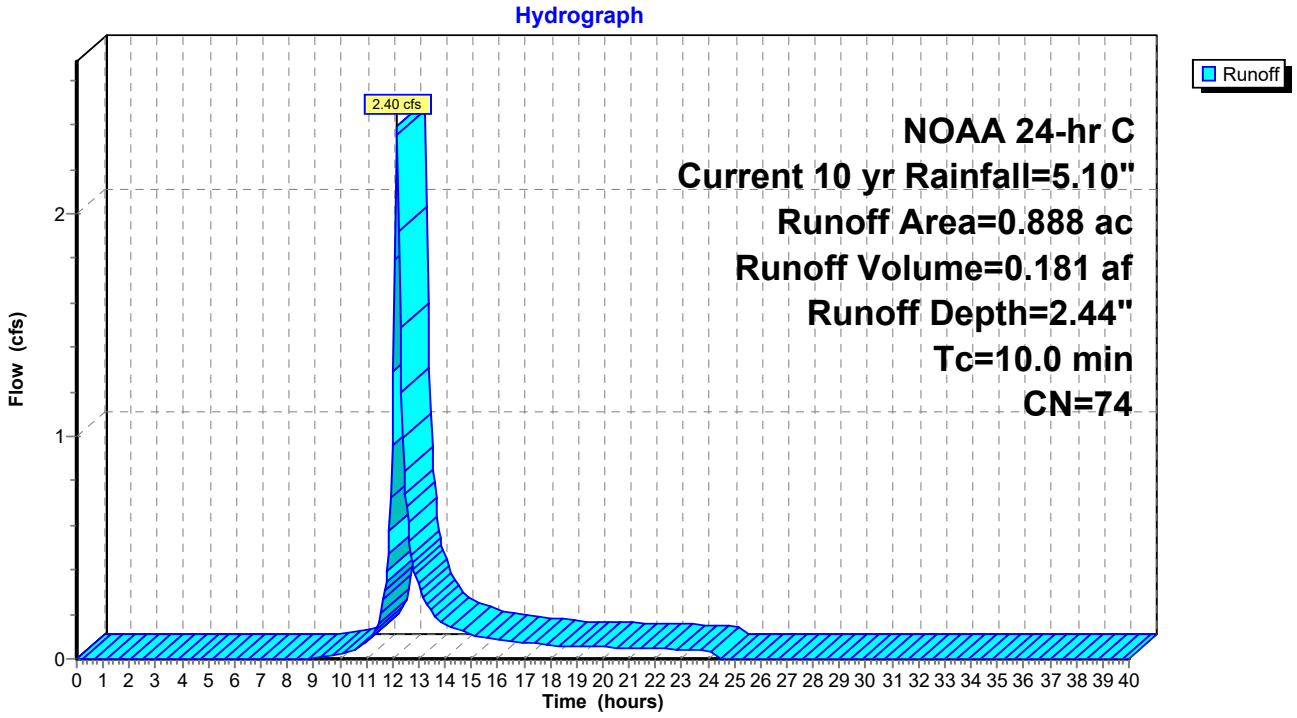
Runoff = 2.40 cfs @ 12.18 hrs, Volume= 0.181 af, Depth= 2.44"
Routed to Pond B-1 : Basin #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.888	74	>75% Grass cover, Good, HSG C
0.888		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 1P: PDA-1 (pervious)



Summary for Subcatchment 2l: PDA-2 (impervious)

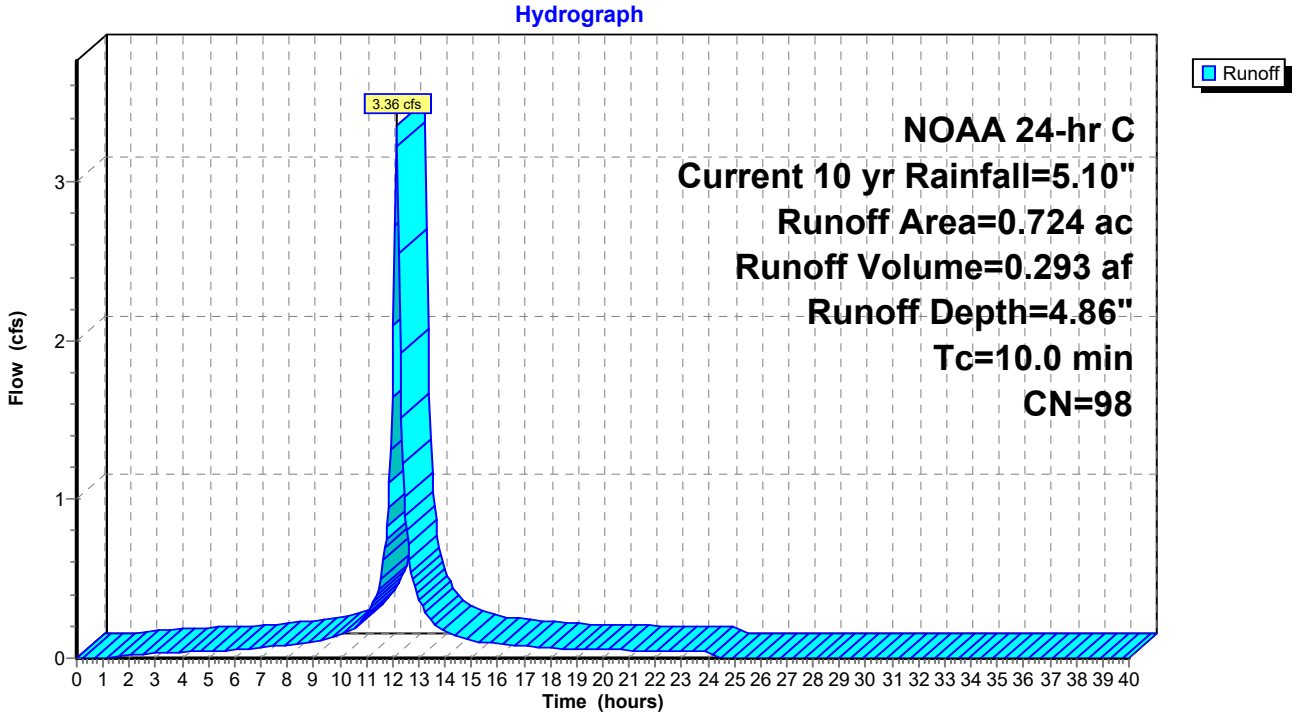
Runoff = 3.36 cfs @ 12.17 hrs, Volume= 0.293 af, Depth= 4.86"
Routed to Pond B-2 : Basin #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.490	98	Roof, HSG C
*	0.196	98	Pavement, HSG C
*	0.038	98	Concrete, HSG C
	0.724	98	Weighted Average
	0.724		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 2l: PDA-2 (impervious)



Summary for Subcatchment 2P: PDA-2 (pervious)

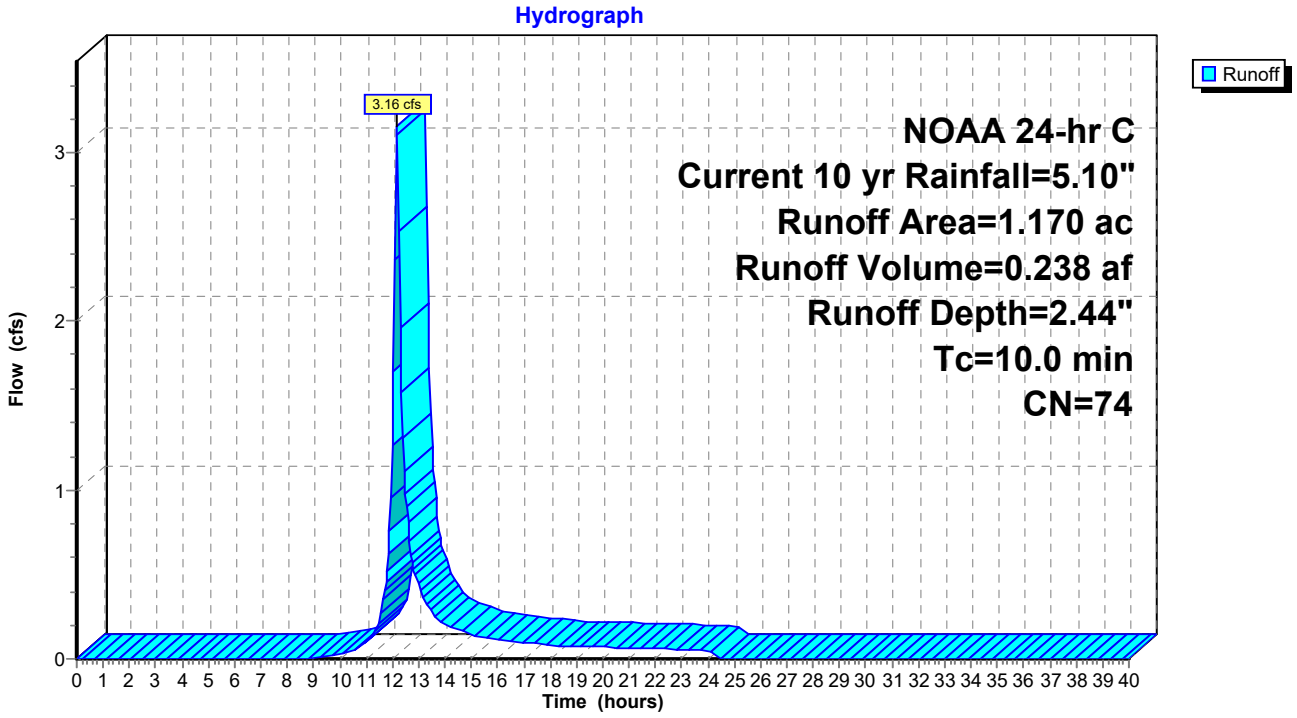
Runoff = 3.16 cfs @ 12.18 hrs, Volume= 0.238 af, Depth= 2.44"
Routed to Pond B-2 : Basin #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.170	74	>75% Grass cover, Good, HSG C
1.170		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 2P: PDA-2 (pervious)



Summary for Subcatchment 3I: PDA-3 (impervious)

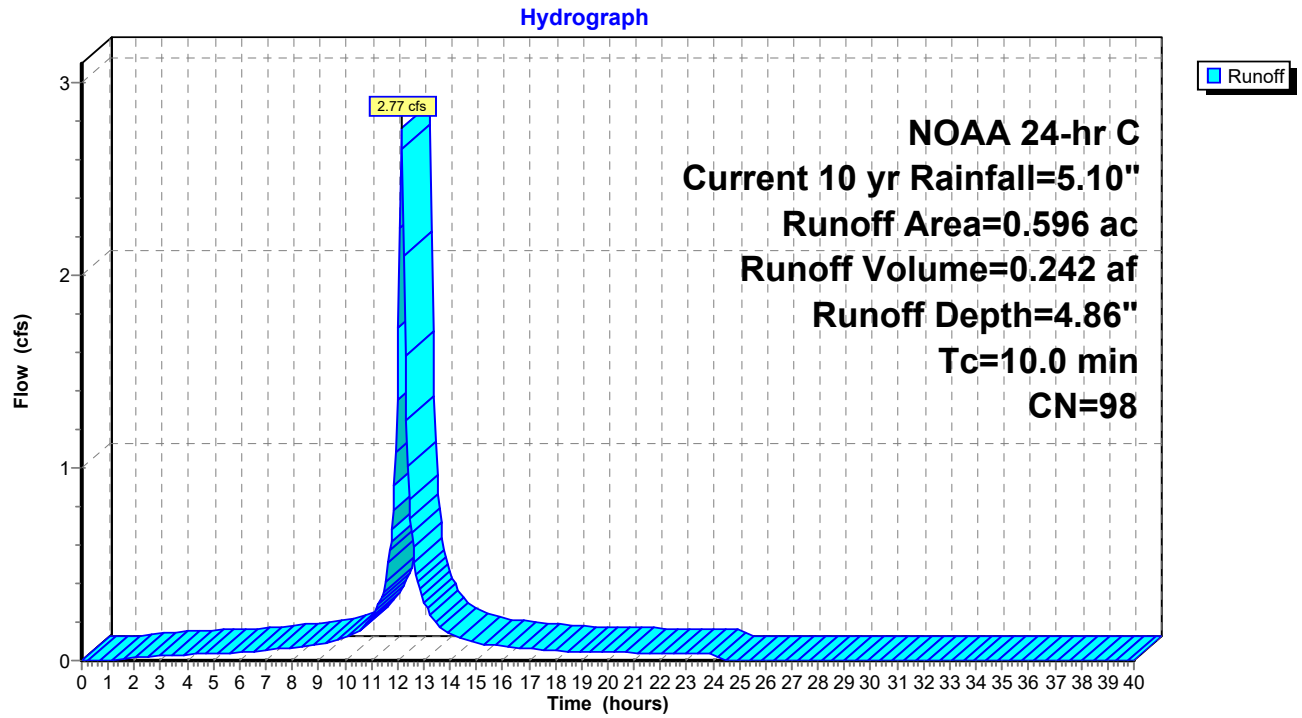
Runoff = 2.77 cfs @ 12.17 hrs, Volume= 0.242 af, Depth= 4.86"
Routed to Pond B-3 : Basin #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.304	98	Pavement, HSG C
*	0.035	98	Concrete, HSG C
	0.257	98	Unconnected roofs, HSG C
	0.596	98	Weighted Average
	0.596		100.00% Impervious Area
	0.257		43.12% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 3I: PDA-3 (impervious)



Summary for Subcatchment 3P: PDA-3 (pervious)

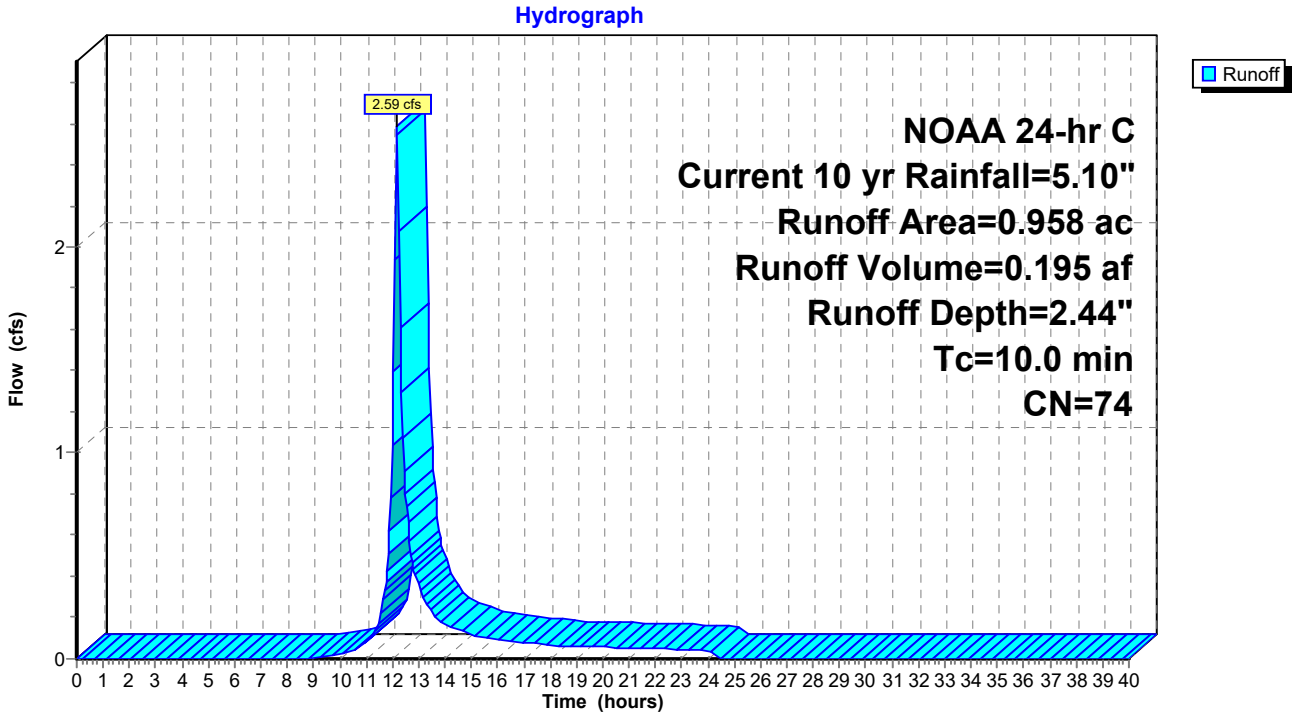
Runoff = 2.59 cfs @ 12.18 hrs, Volume= 0.195 af, Depth= 2.44"
Routed to Pond B-3 : Basin #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.958	74	>75% Grass cover, Good, HSG C
0.958		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 3P: PDA-3 (pervious)



Summary for Subcatchment 4AI: PDA-4A (impervious)

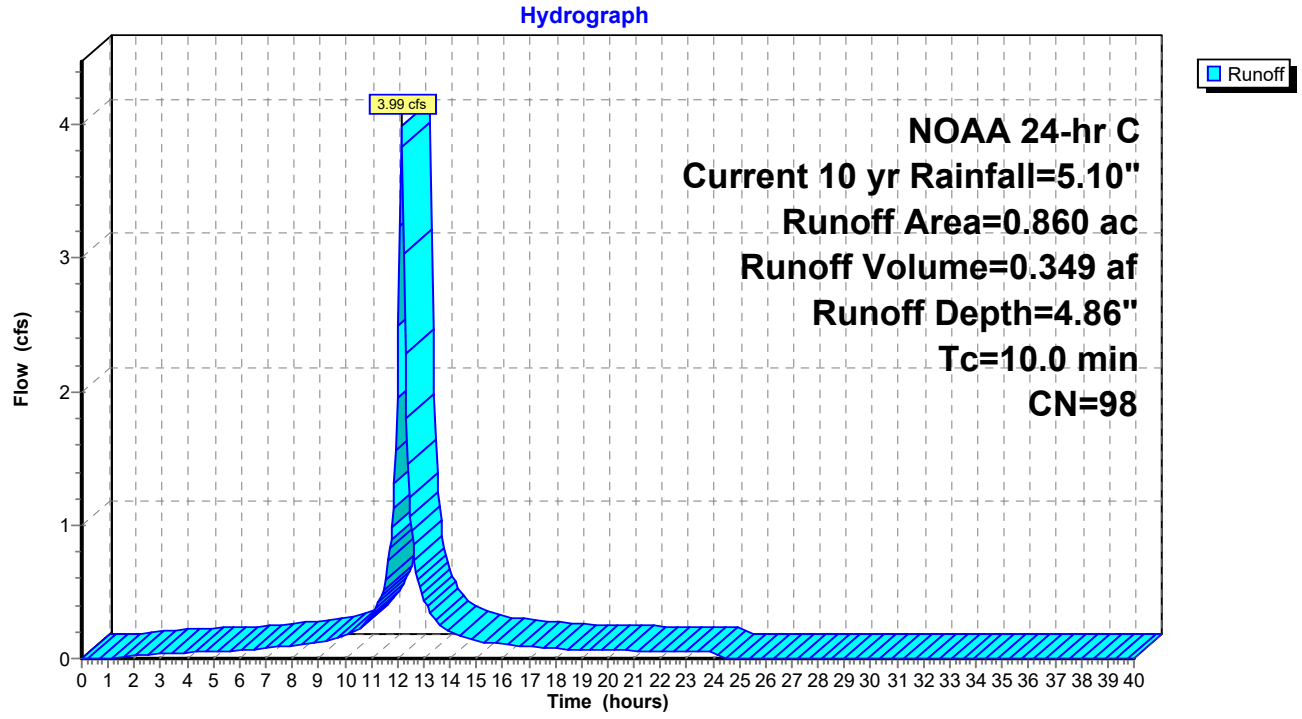
Runoff = 3.99 cfs @ 12.17 hrs, Volume= 0.349 af, Depth= 4.86"
Routed to Pond B-4A : Basin #4A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.742	98	Pavement, HSG C
*	0.118	98	Concrete, HSG C
	0.860	98	Weighted Average
	0.860		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4AI: PDA-4A (impervious)



Summary for Subcatchment 4AP: PDA-4A (pervious)

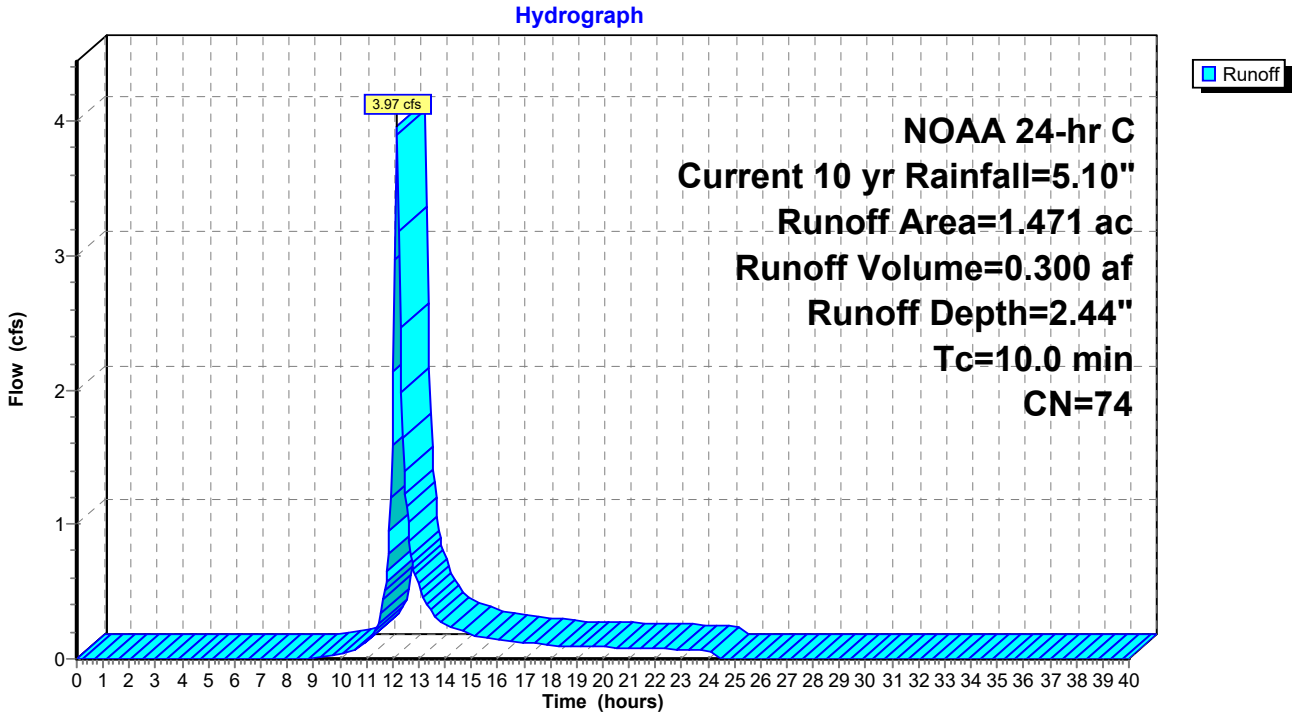
Runoff = 3.97 cfs @ 12.18 hrs, Volume= 0.300 af, Depth= 2.44"
Routed to Pond B-4A : Basin #4A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.471	74	>75% Grass cover, Good, HSG C
1.471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4AP: PDA-4A (pervious)



Summary for Subcatchment 4BI: PDA-4B (impervious)

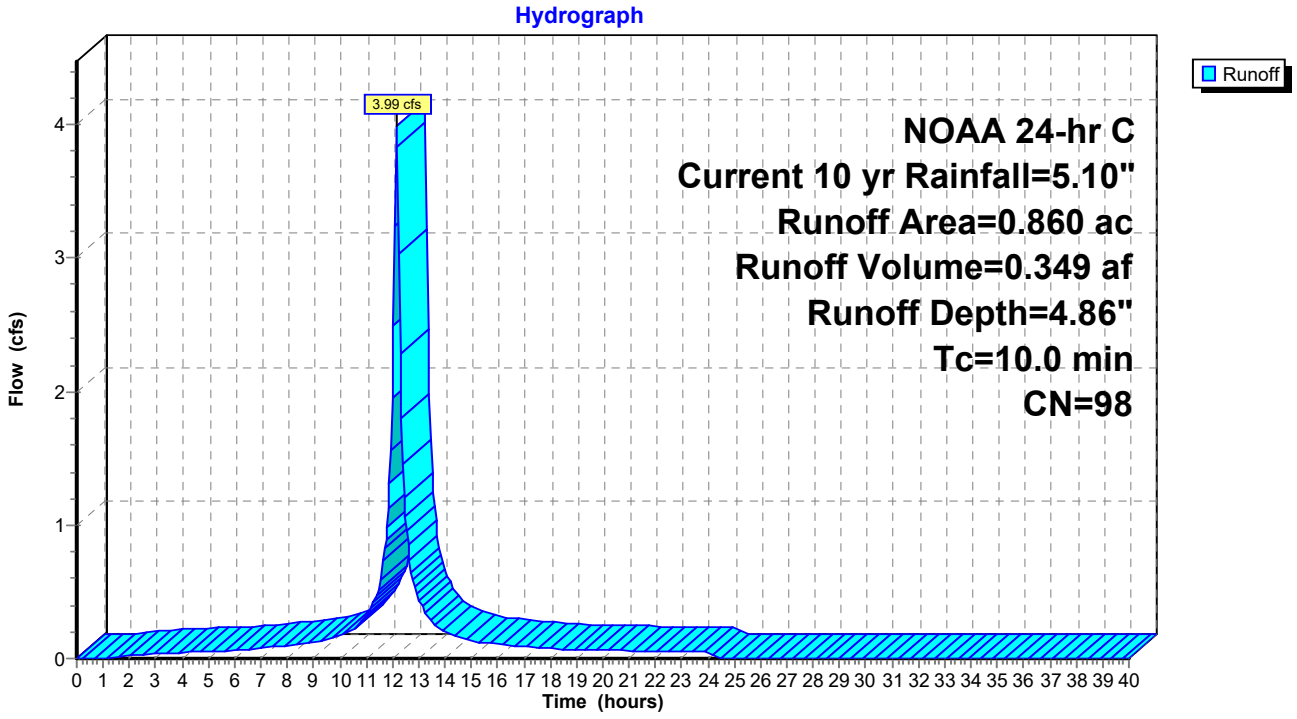
Runoff = 3.99 cfs @ 12.17 hrs, Volume= 0.349 af, Depth= 4.86"
Routed to Pond B-4B : Basin #4B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.742	98	Pavement, HSG C
*	0.118	98	Concrete, HSG C
	0.860	98	Weighted Average
	0.860		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4BI: PDA-4B (impervious)



Summary for Subcatchment 4BP: PDA-4B (pervious)

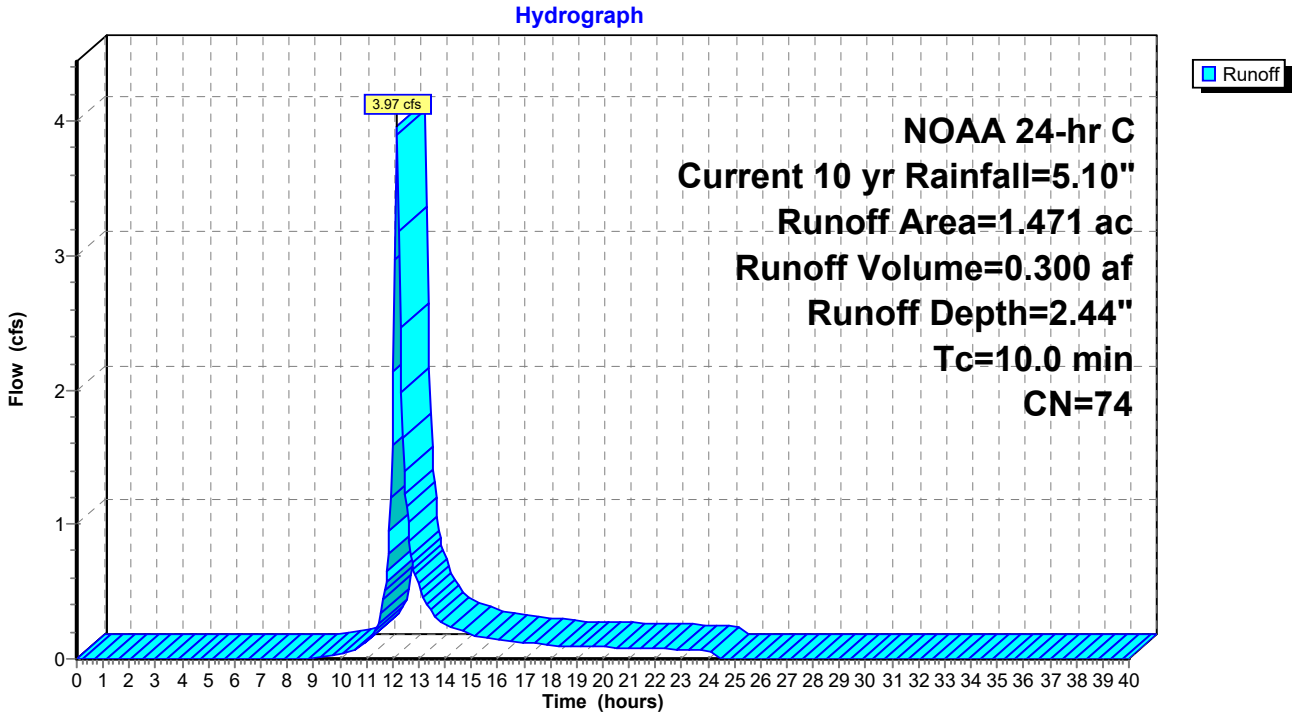
Runoff = 3.97 cfs @ 12.18 hrs, Volume= 0.300 af, Depth= 2.44"
Routed to Pond B-4B : Basin #4B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.471	74	>75% Grass cover, Good, HSG C
1.471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4BP: PDA-4B (pervious)



Summary for Subcatchment 5l: PDA-5 (impervious)

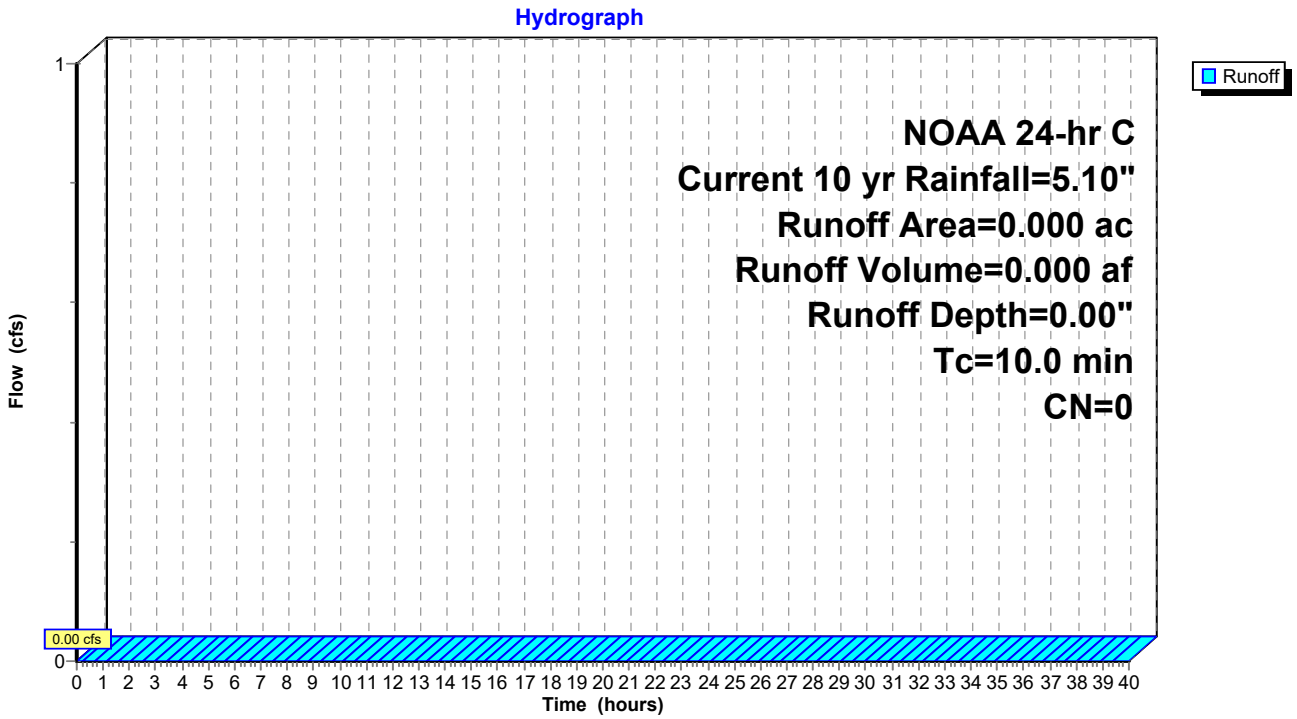
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-5 : Basin #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.000	98	Concrete, HSG C
	0.000	0	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 5l: PDA-5 (impervious)



Summary for Subcatchment 5P: PDA-5 (pervious)

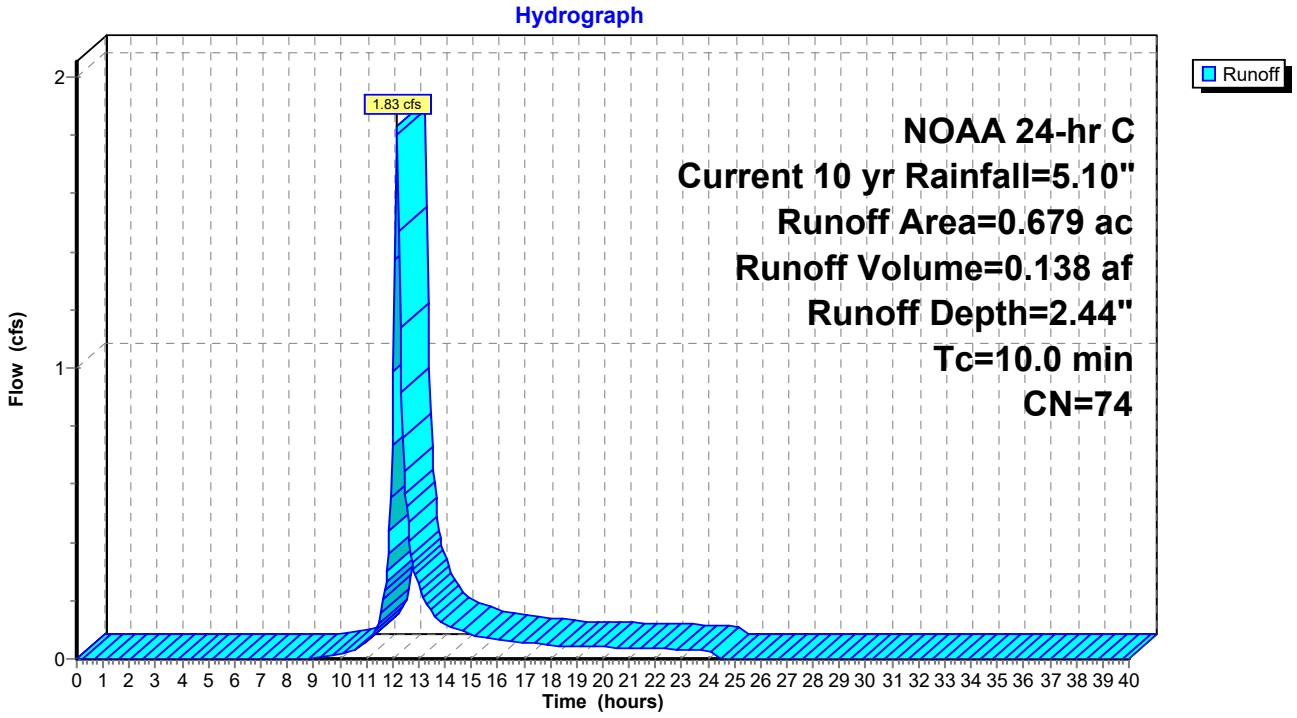
Runoff = 1.83 cfs @ 12.18 hrs, Volume= 0.138 af, Depth= 2.44"
Routed to Pond B-5 : Basin #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.679	74	>75% Grass cover, Good, HSG C
0.679		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 5P: PDA-5 (pervious)



Summary for Subcatchment 6I: PDA-6 (impervious)

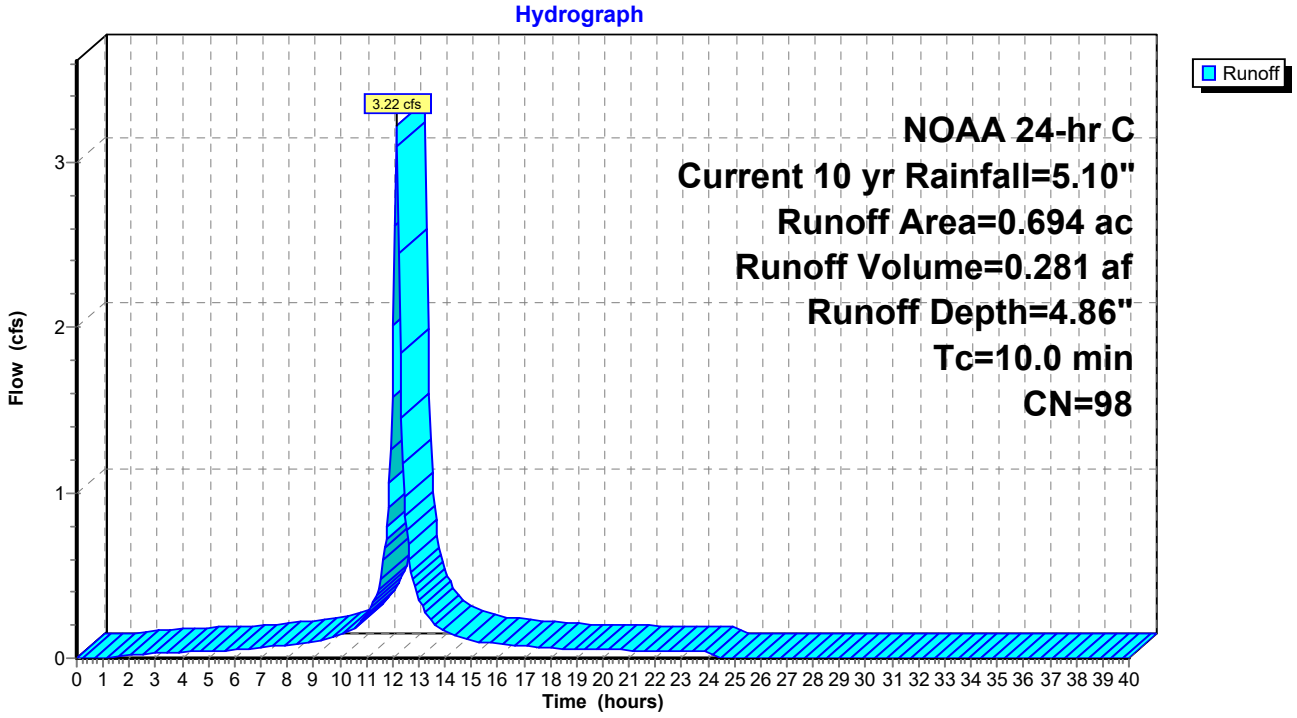
Runoff = 3.22 cfs @ 12.17 hrs, Volume= 0.281 af, Depth= 4.86"
Routed to Pond B-6 : Basin #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.459	98	Pavement, HSG C
*	0.129	98	Roof, HSG C
*	0.106	98	Concrete, HSG C
	0.694	98	Weighted Average
	0.694		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 6I: PDA-6 (impervious)



Summary for Subcatchment 6P: PDA-6 (pervious)

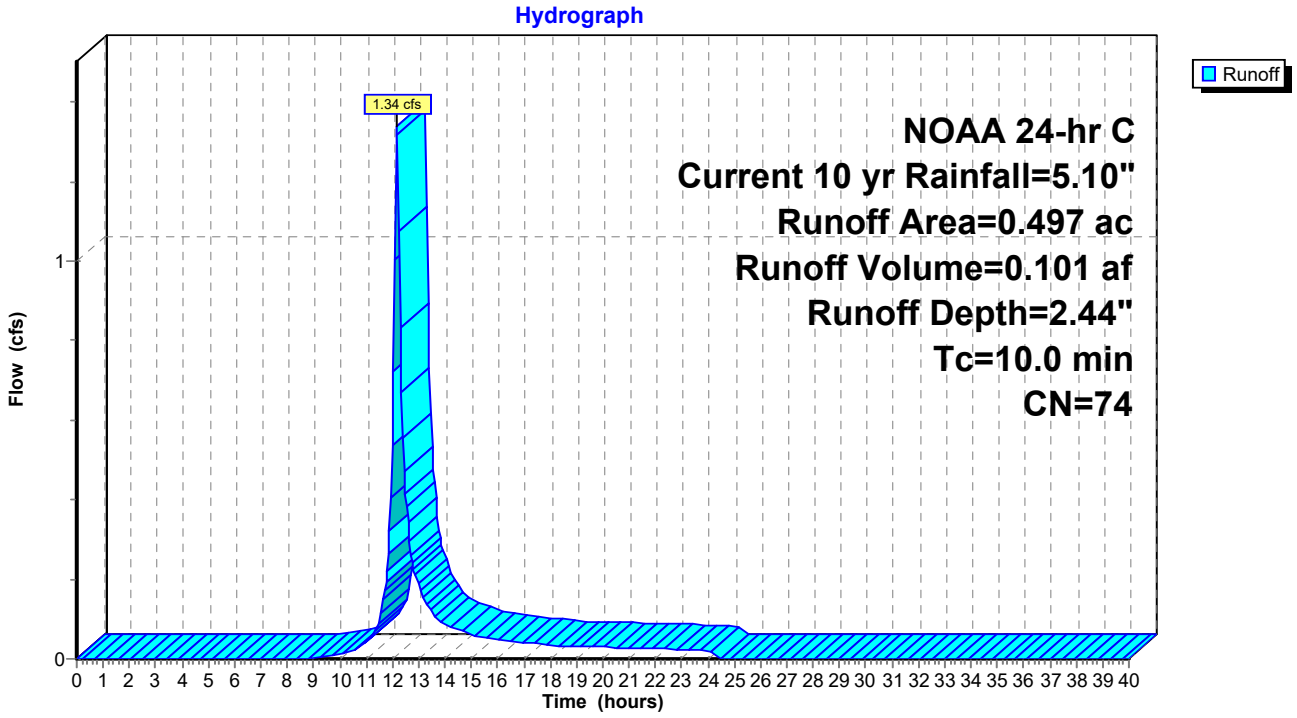
Runoff = 1.34 cfs @ 12.18 hrs, Volume= 0.101 af, Depth= 2.44"
Routed to Pond B-6 : Basin #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.497	74	>75% Grass cover, Good, HSG C
0.497		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 6P: PDA-6 (pervious)



Summary for Subcatchment 7I: PDA-7 (impervious)

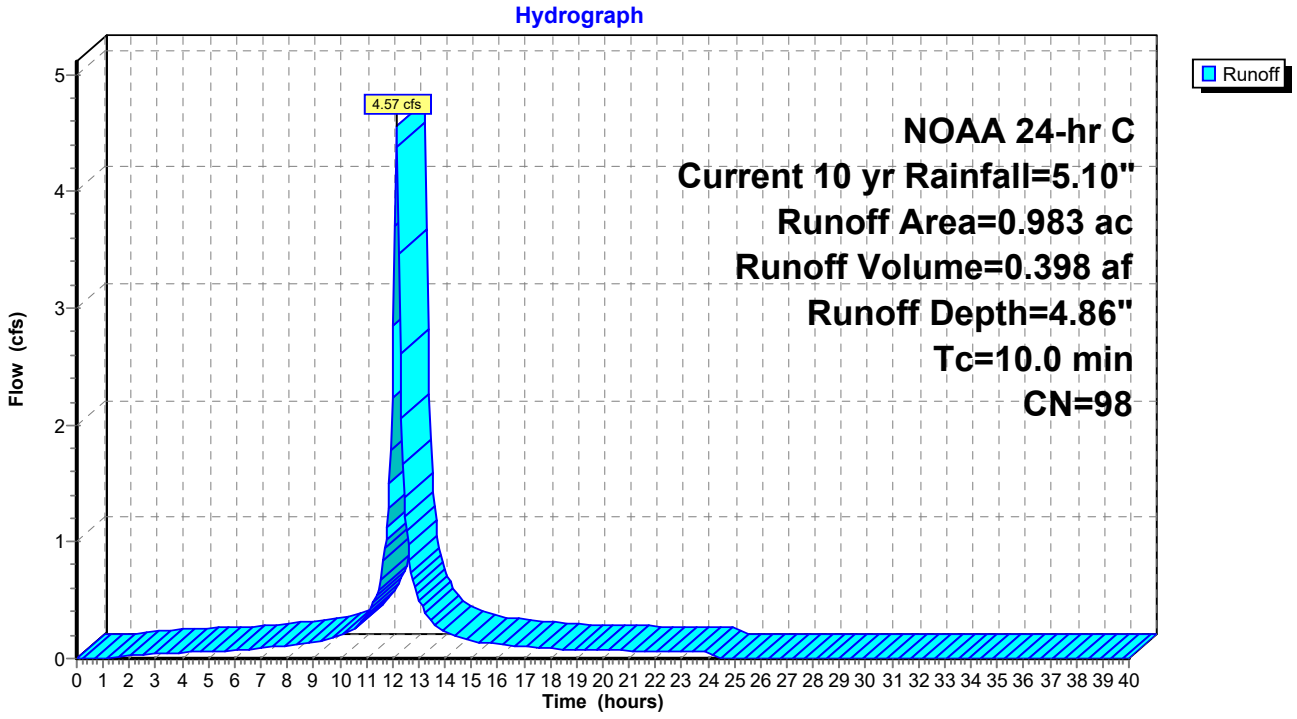
Runoff = 4.57 cfs @ 12.17 hrs, Volume= 0.398 af, Depth= 4.86"
Routed to Pond B-7 : Basin #7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.886	98	Pavement, HSG C
*	0.097	98	Concrete, HSG C
	0.983	98	Weighted Average
	0.983		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 7I: PDA-7 (impervious)



Summary for Subcatchment 7P: PDA-7 (pervious)

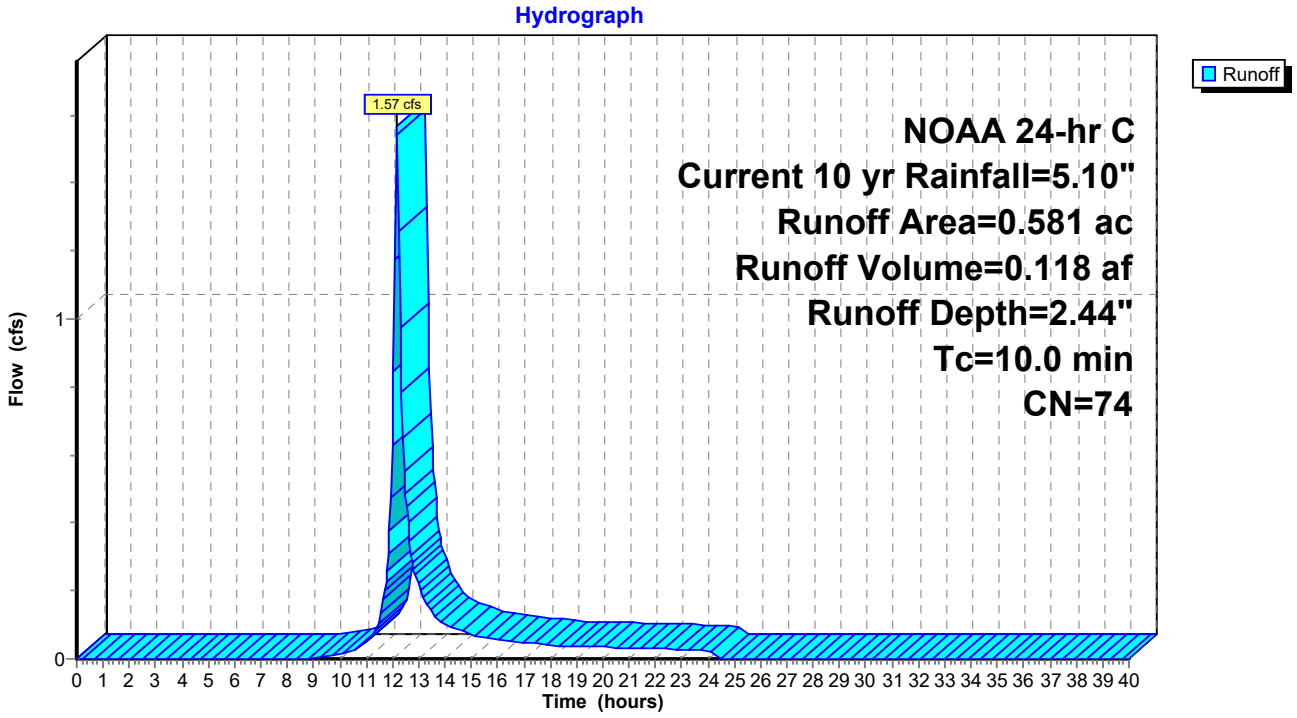
Runoff = 1.57 cfs @ 12.18 hrs, Volume= 0.118 af, Depth= 2.44"
Routed to Pond B-7 : Basin #7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.581	74	>75% Grass cover, Good, HSG C
0.581		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 7P: PDA-7 (pervious)



Summary for Subcatchment 8I: PDA-8 (impervious)

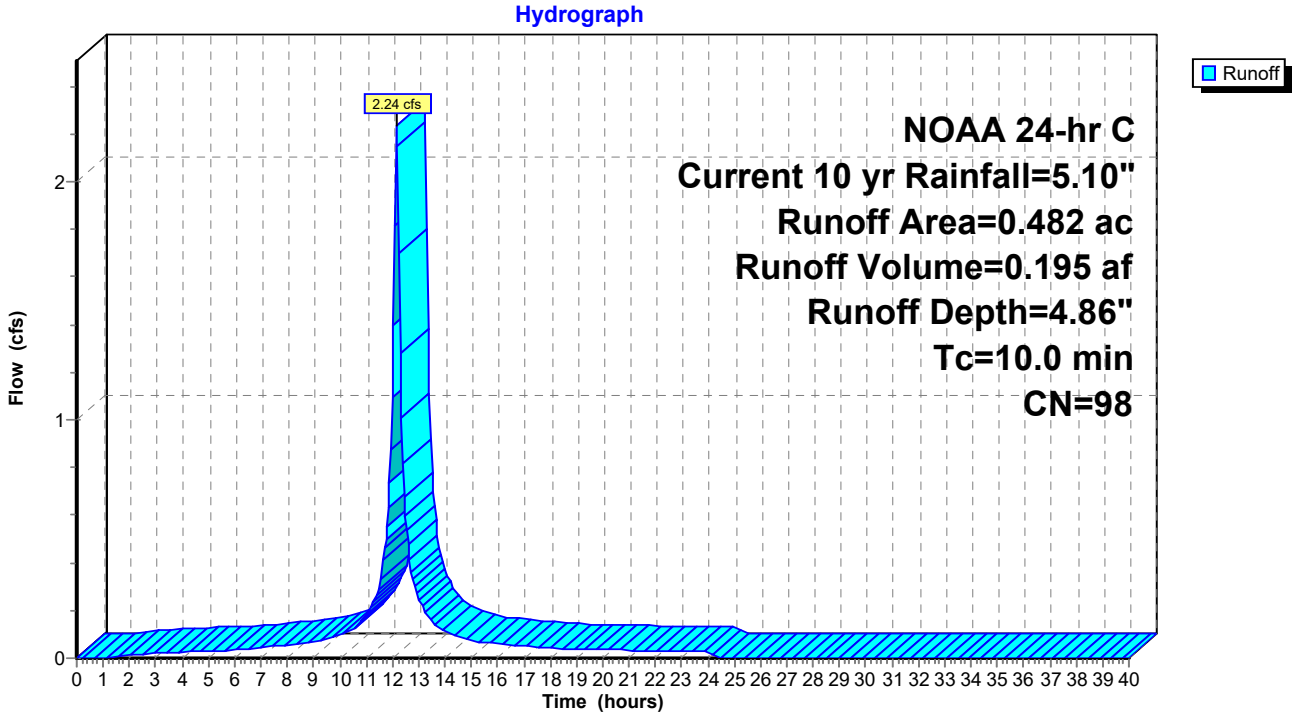
Runoff = 2.24 cfs @ 12.17 hrs, Volume= 0.195 af, Depth= 4.86"
Routed to Pond B-8 : Basin #8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.482	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.482	98	Weighted Average
	0.482		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8I: PDA-8 (impervious)



Summary for Subcatchment 8P: PDA-8 (pervious)

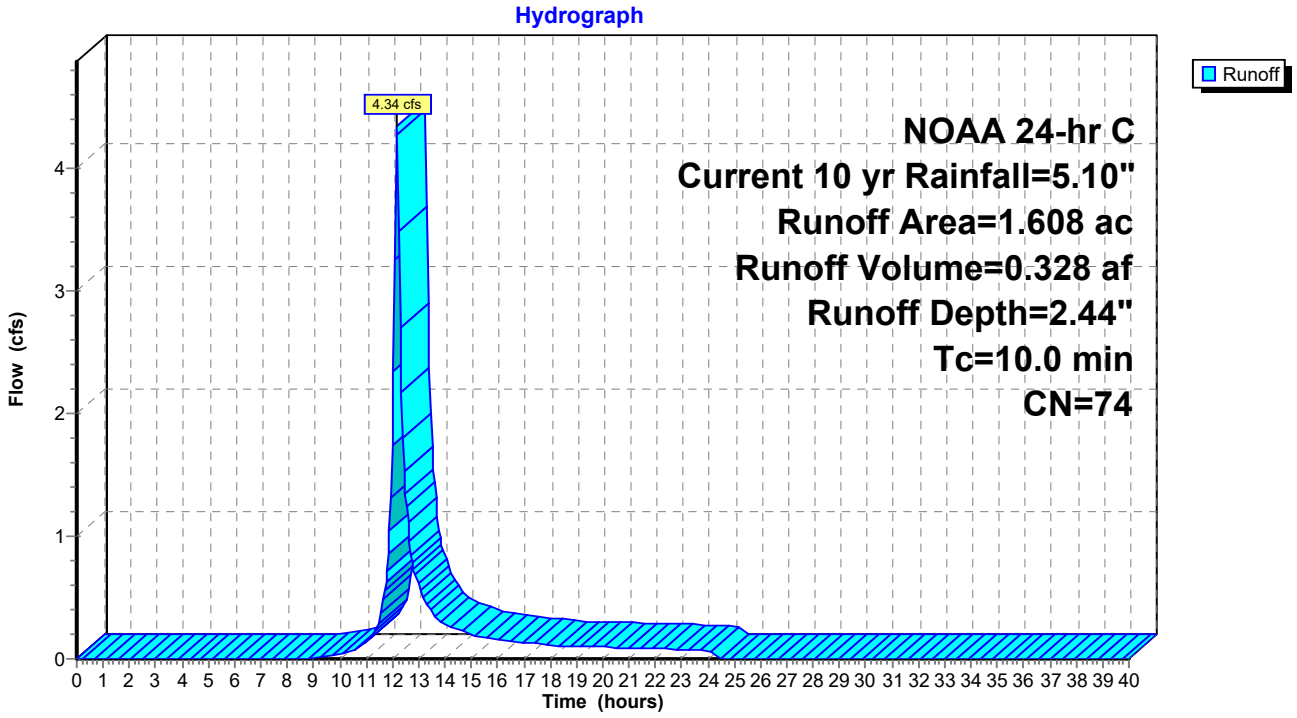
Runoff = 4.34 cfs @ 12.18 hrs, Volume= 0.328 af, Depth= 2.44"
Routed to Pond B-8 : Basin #8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.608	74	>75% Grass cover, Good, HSG C
1.608		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8P: PDA-8 (pervious)



Summary for Subcatchment 9I: PDA-9 (impervious)

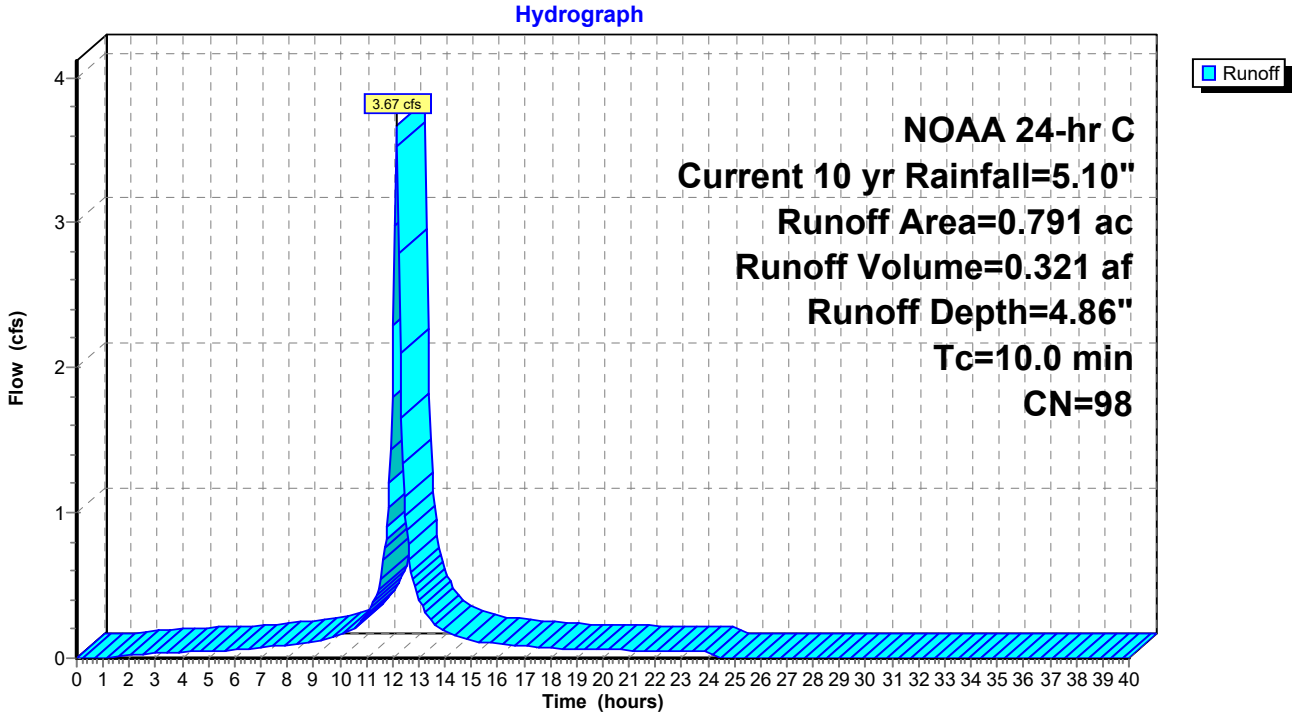
Runoff = 3.67 cfs @ 12.17 hrs, Volume= 0.321 af, Depth= 4.86"
Routed to Pond B-9 : Basin #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.286	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.055	98	Concrete, HSG C
	0.791	98	Weighted Average
	0.791		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 9I: PDA-9 (impervious)



Summary for Subcatchment 9P: PDA-9 (pervious)

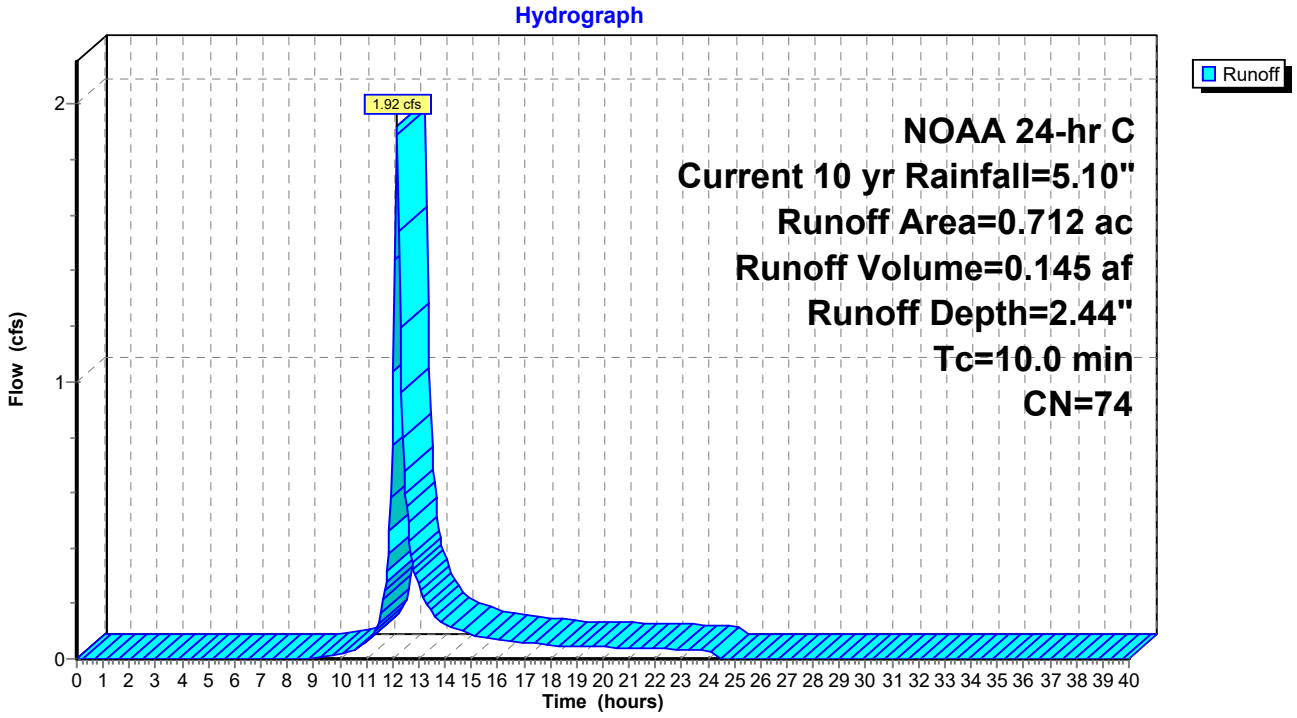
Runoff = 1.92 cfs @ 12.18 hrs, Volume= 0.145 af, Depth= 2.44"
Routed to Pond B-9 : Basin #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.712	74	>75% Grass cover, Good, HSG C
0.712		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 9P: PDA-9 (pervious)



Summary for Subcatchment 10l: PDA-10 (impervious)

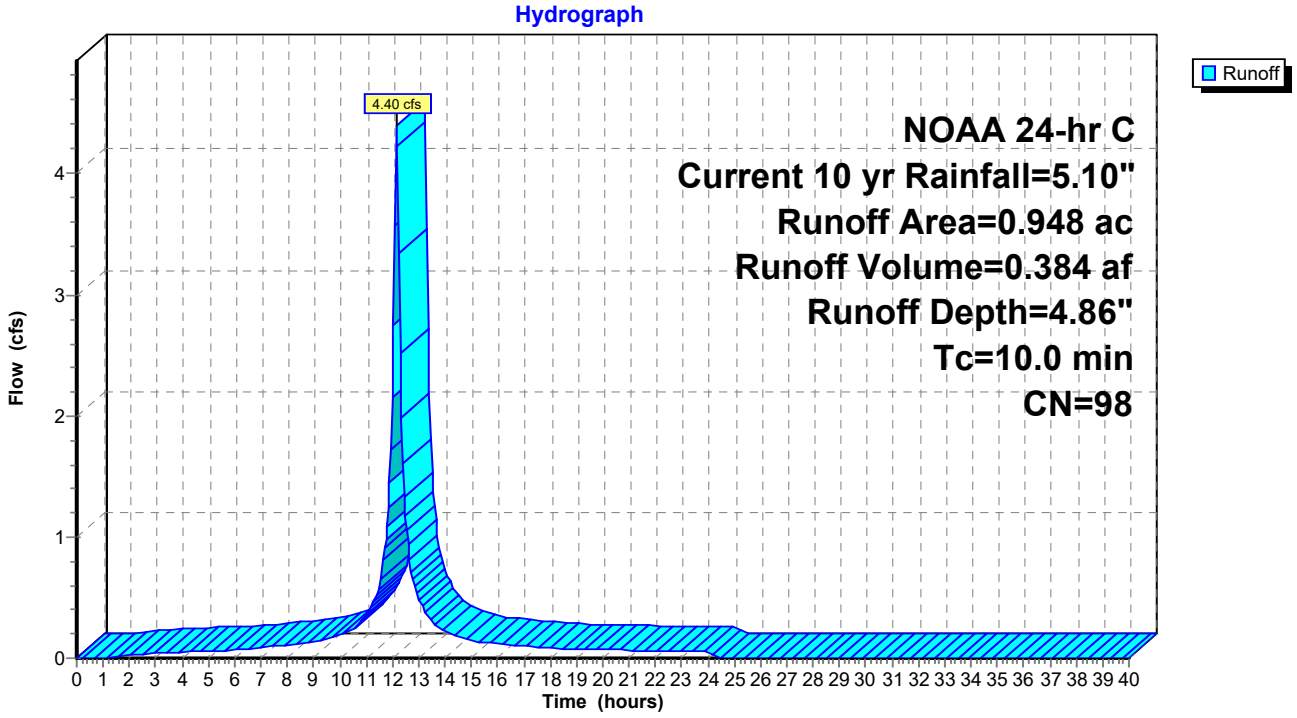
Runoff = 4.40 cfs @ 12.17 hrs, Volume= 0.384 af, Depth= 4.86"
Routed to Pond B-10 : Basin #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.570	98	Pavement, HSG C
*	0.321	98	Roof, HSG C
*	0.057	98	Concrete, HSG C
	0.948	98	Weighted Average
	0.948		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10l: PDA-10 (impervious)



Summary for Subcatchment 10P: PDA-10 (pervious)

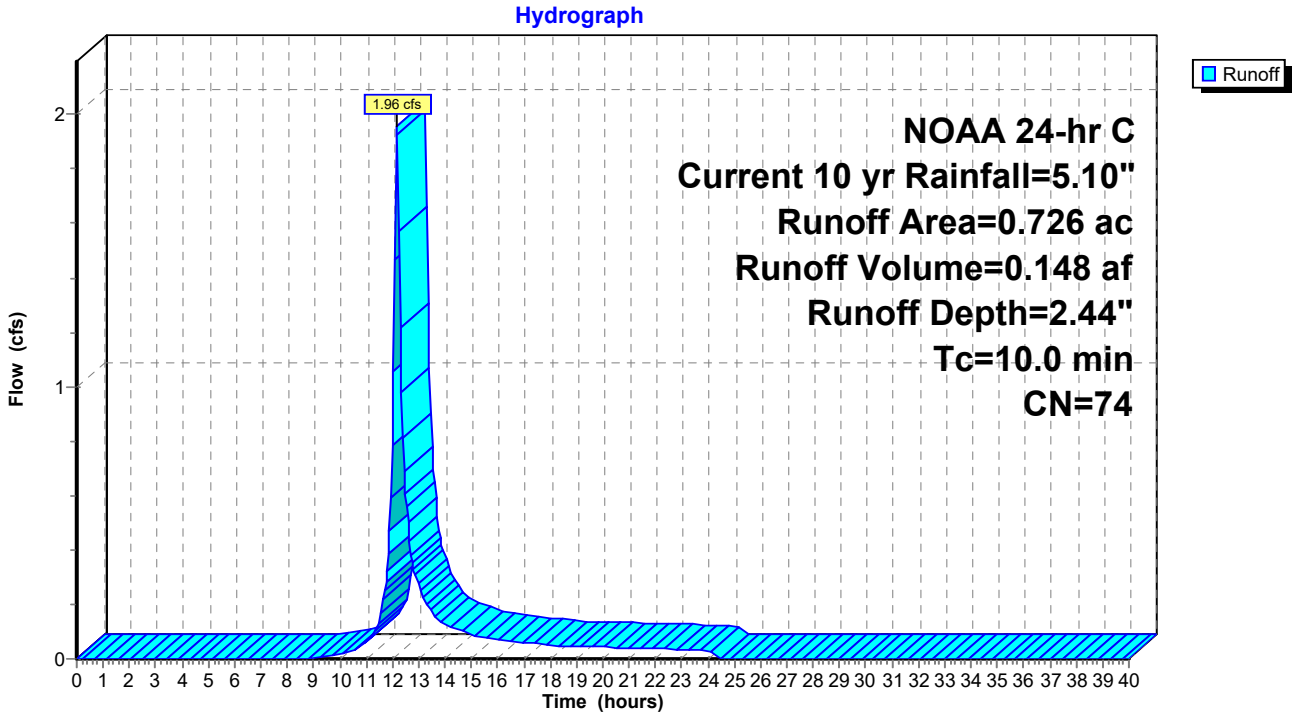
Runoff = 1.96 cfs @ 12.18 hrs, Volume= 0.148 af, Depth= 2.44"
Routed to Pond B-10 : Basin #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.726	74	>75% Grass cover, Good, HSG C
0.726		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10P: PDA-10 (pervious)



Summary for Subcatchment 11I: PDA-11 (impervious)

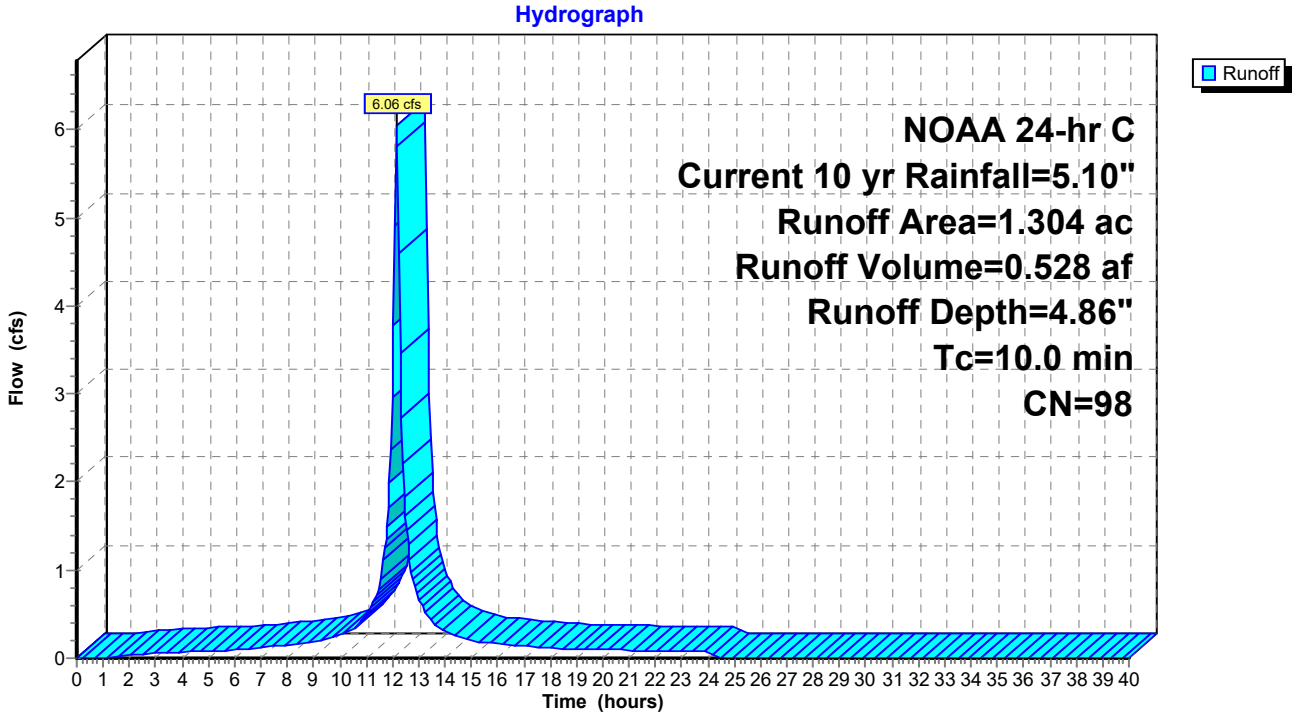
Runoff = 6.06 cfs @ 12.17 hrs, Volume= 0.528 af, Depth= 4.86"
Routed to Pond B-11 : Basin #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.166	98	Concrete, HSG C
	0.231	98	Roofs, HSG C
	0.907	98	Paved roads w/curbs & sewers, HSG C
	1.304	98	Weighted Average
	1.304		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 11I: PDA-11 (impervious)



Summary for Subcatchment 11P: PDA-11 (pervious)

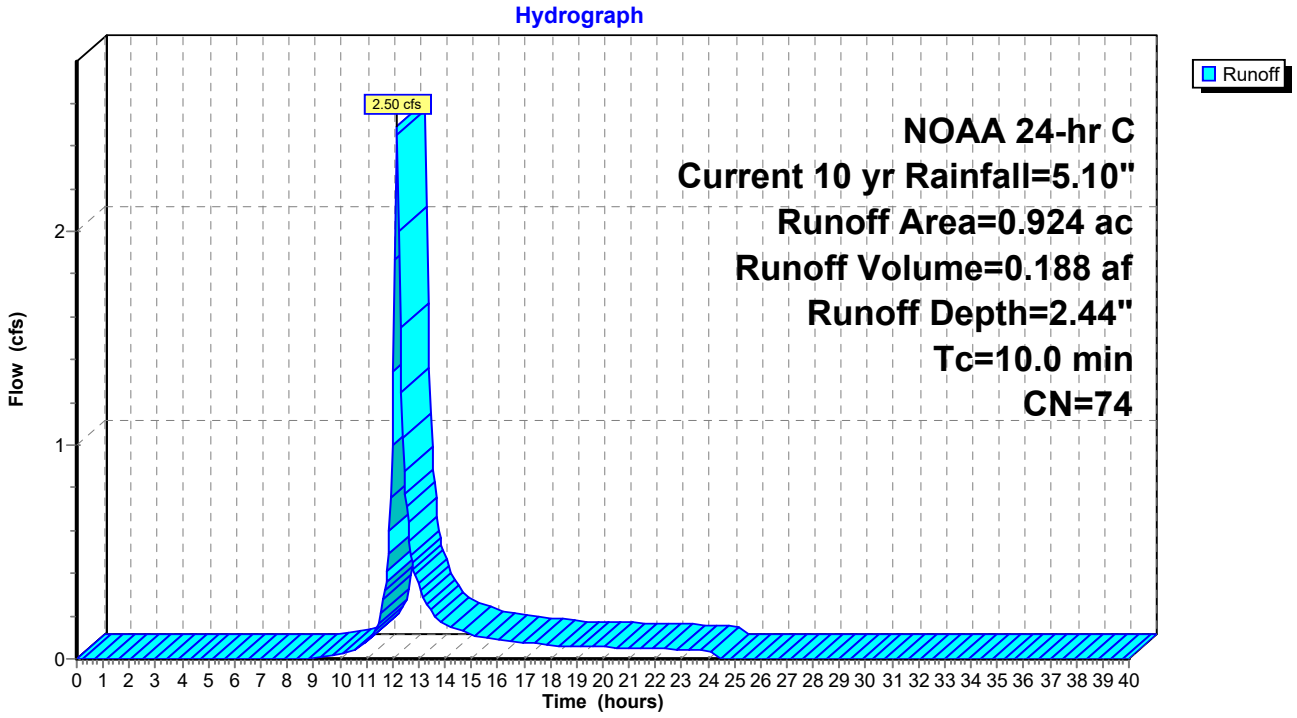
Runoff = 2.50 cfs @ 12.18 hrs, Volume= 0.188 af, Depth= 2.44"
Routed to Pond B-11 : Basin #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.924	74	>75% Grass cover, Good, HSG C
0.924		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 11P: PDA-11 (pervious)



Summary for Subcatchment 12l: PDA-12 (impervious)

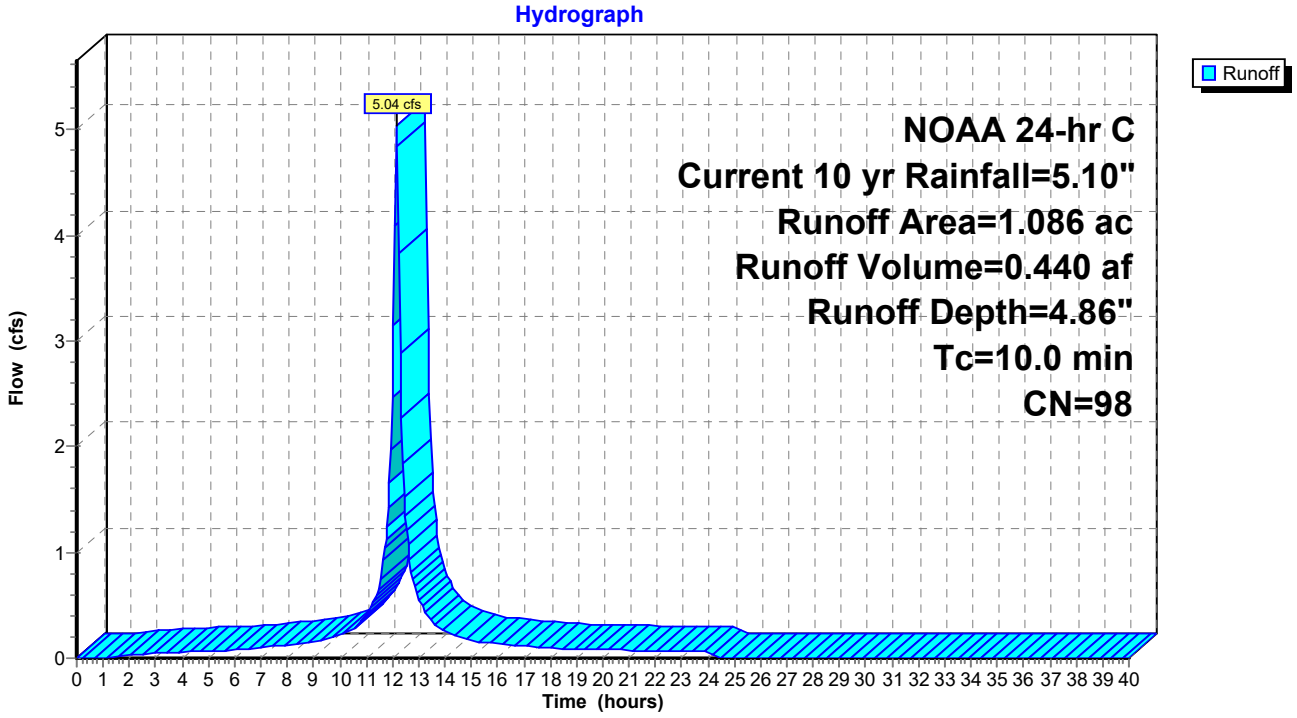
Runoff = 5.04 cfs @ 12.17 hrs, Volume= 0.440 af, Depth= 4.86"
Routed to Pond B-12 : Basin #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.404	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.039	98	Concrete, HSG C
	1.086	98	Weighted Average
	1.086		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 12l: PDA-12 (impervious)



Summary for Subcatchment 12P: PDA-12 (pervious)

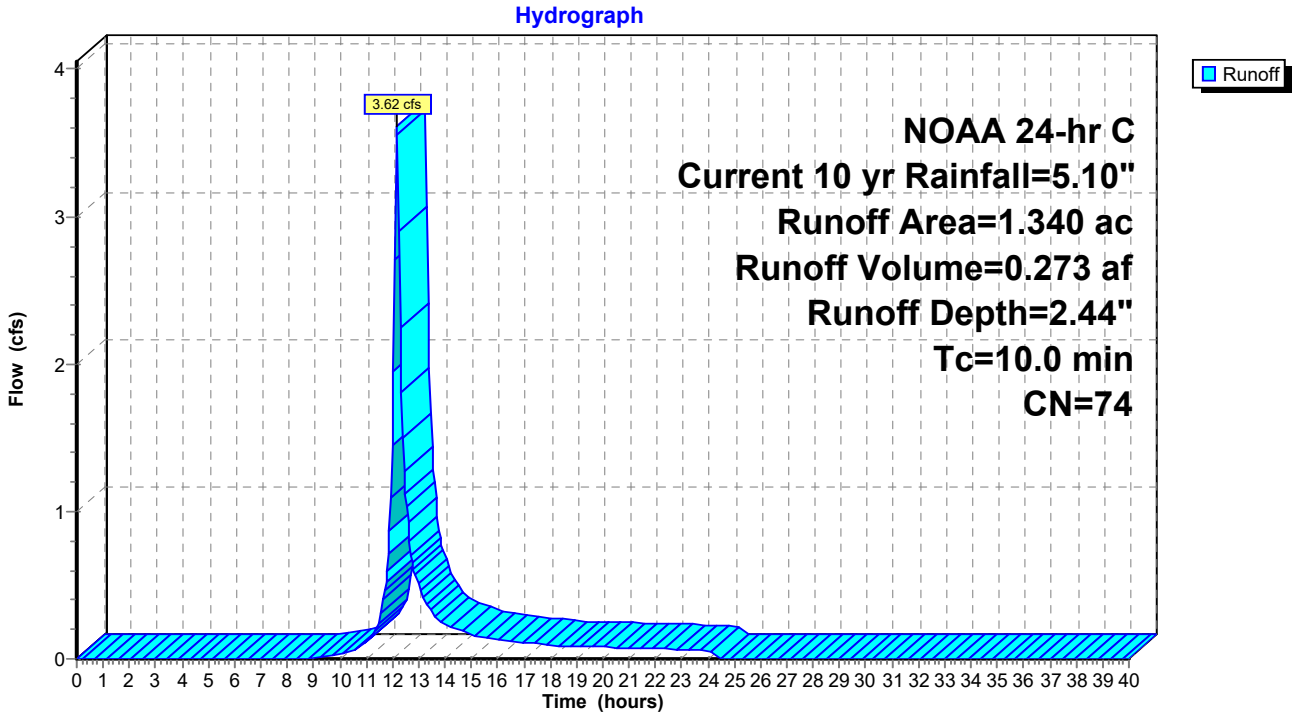
Runoff = 3.62 cfs @ 12.18 hrs, Volume= 0.273 af, Depth= 2.44"
Routed to Pond B-12 : Basin #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.340	74	>75% Grass cover, Good, HSG C
1.340		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 12P: PDA-12 (pervious)



Summary for Subcatchment 13I: PDA-13 (impervious)

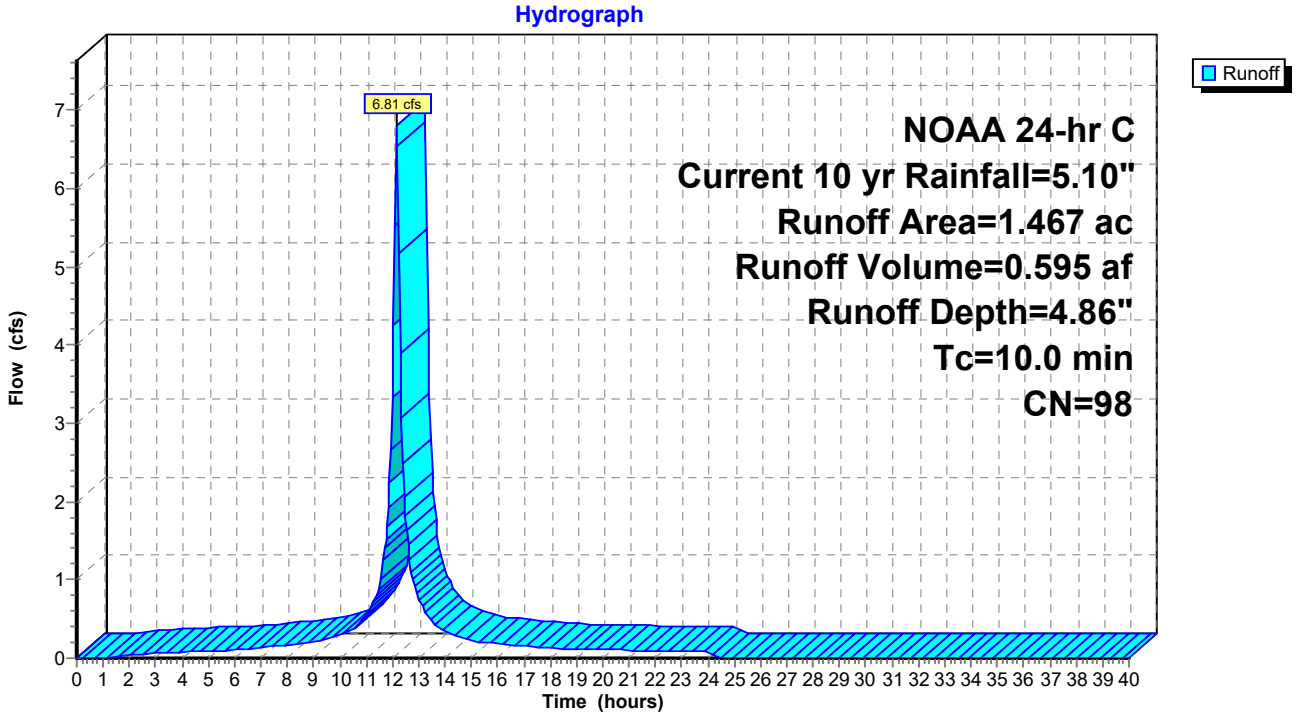
Runoff = 6.81 cfs @ 12.17 hrs, Volume= 0.595 af, Depth= 4.86"
Routed to Pond B-13 : Basin #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.678	98	Pavement, HSG C
*	0.707	98	Roof, HSG C
*	0.082	98	Concrete, HSG C
	1.467	98	Weighted Average
	1.467		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 13I: PDA-13 (impervious)



Summary for Subcatchment 13P: PDA-13 (pervious)

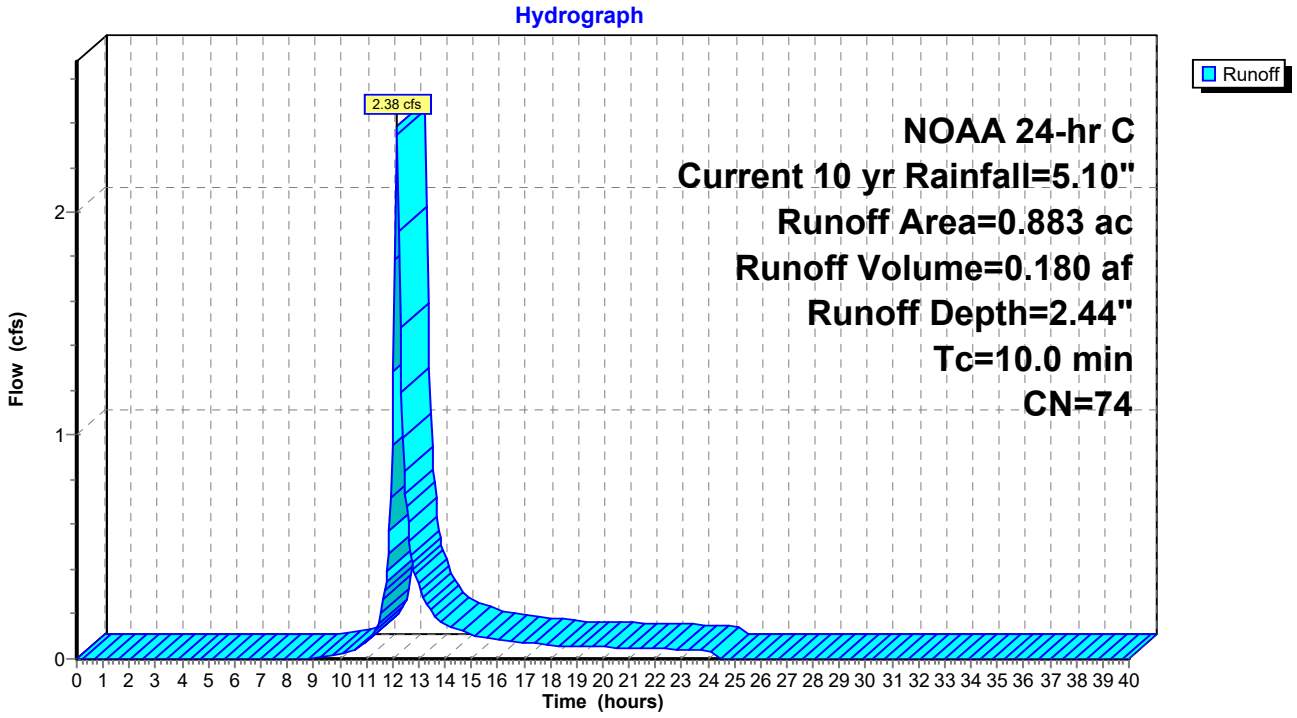
Runoff = 2.38 cfs @ 12.18 hrs, Volume= 0.180 af, Depth= 2.44"
Routed to Pond B-13 : Basin #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.883	74	>75% Grass cover, Good, HSG C
0.883		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 13P: PDA-13 (pervious)



Summary for Subcatchment 14I: PDA-14 (impervious)

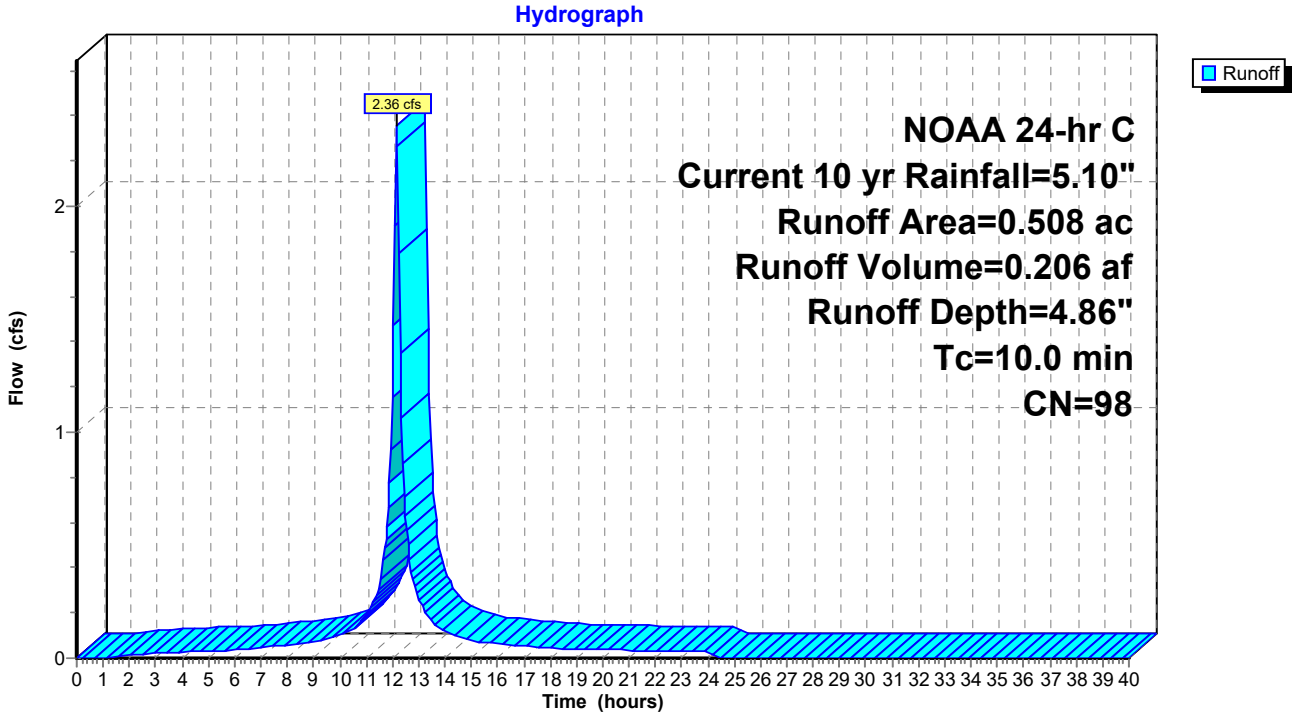
Runoff = 2.36 cfs @ 12.17 hrs, Volume= 0.206 af, Depth= 4.86"
Routed to Pond B-14 : Basin #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.308	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	0.508	98	Weighted Average
	0.508		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 14I: PDA-14 (impervious)



Summary for Subcatchment 14P: PDA-14 (pervious)

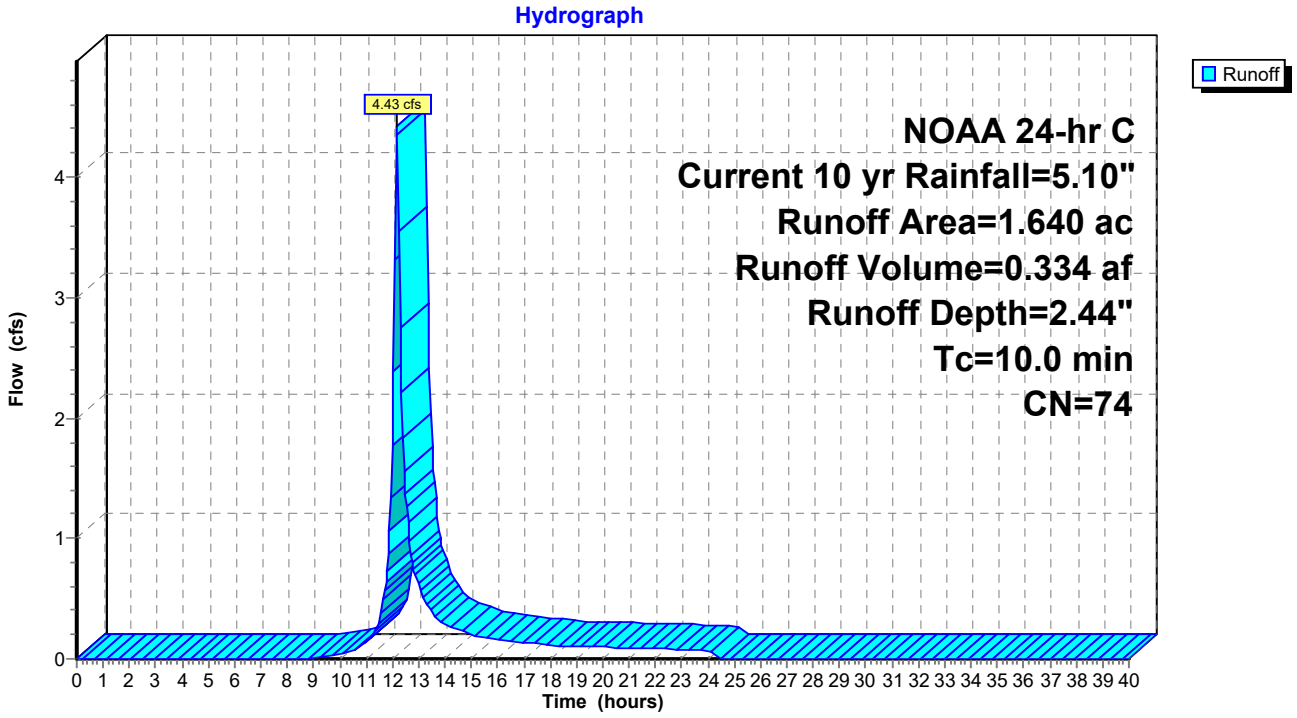
Runoff = 4.43 cfs @ 12.18 hrs, Volume= 0.334 af, Depth= 2.44"
Routed to Pond B-14 : Basin #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.640	74	>75% Grass cover, Good, HSG C
1.640		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 14P: PDA-14 (pervious)



Summary for Subcatchment 15l: PDA-15 (impervious)

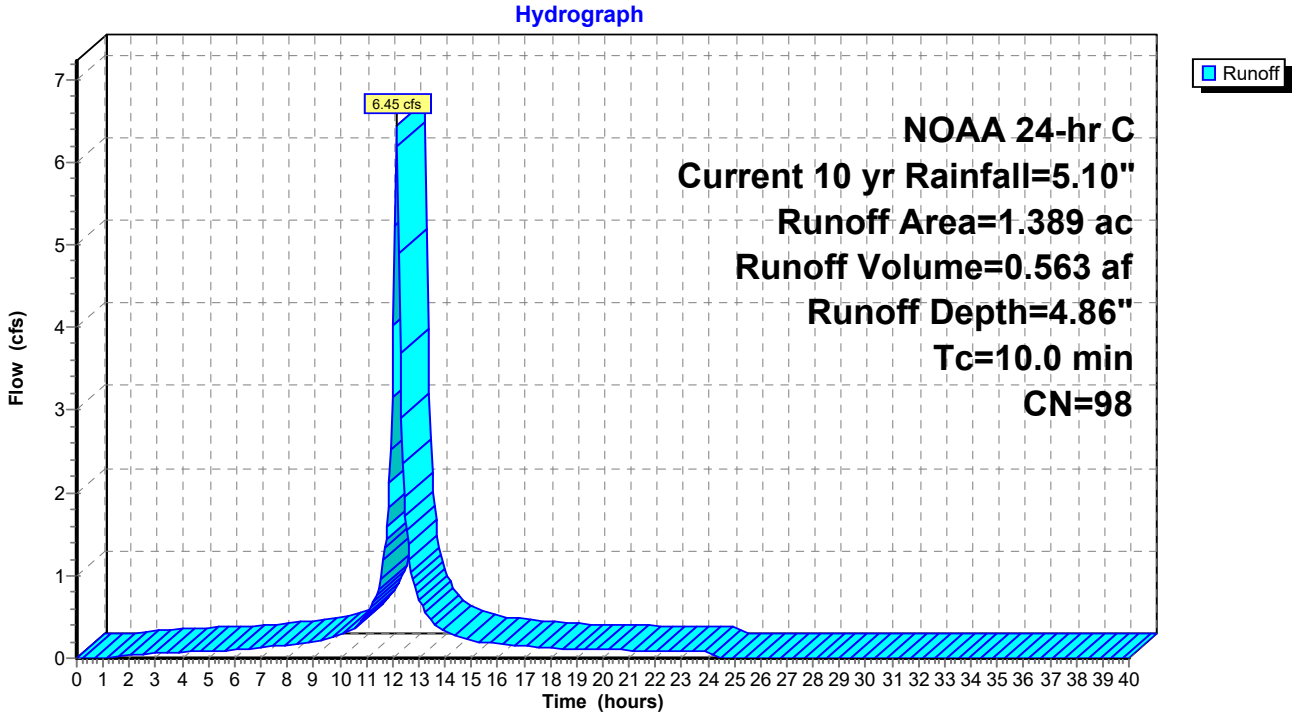
Runoff = 6.45 cfs @ 12.17 hrs, Volume= 0.563 af, Depth= 4.86"
Routed to Pond B-15 : Basin #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.501	98	Pavement, HSG C
*	0.836	98	Roof, HSG C
*	0.052	98	Concrete, HSG C
	1.389	98	Weighted Average
	1.389		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 15l: PDA-15 (impervious)



Summary for Subcatchment 15P: PDA-15 (pervious)

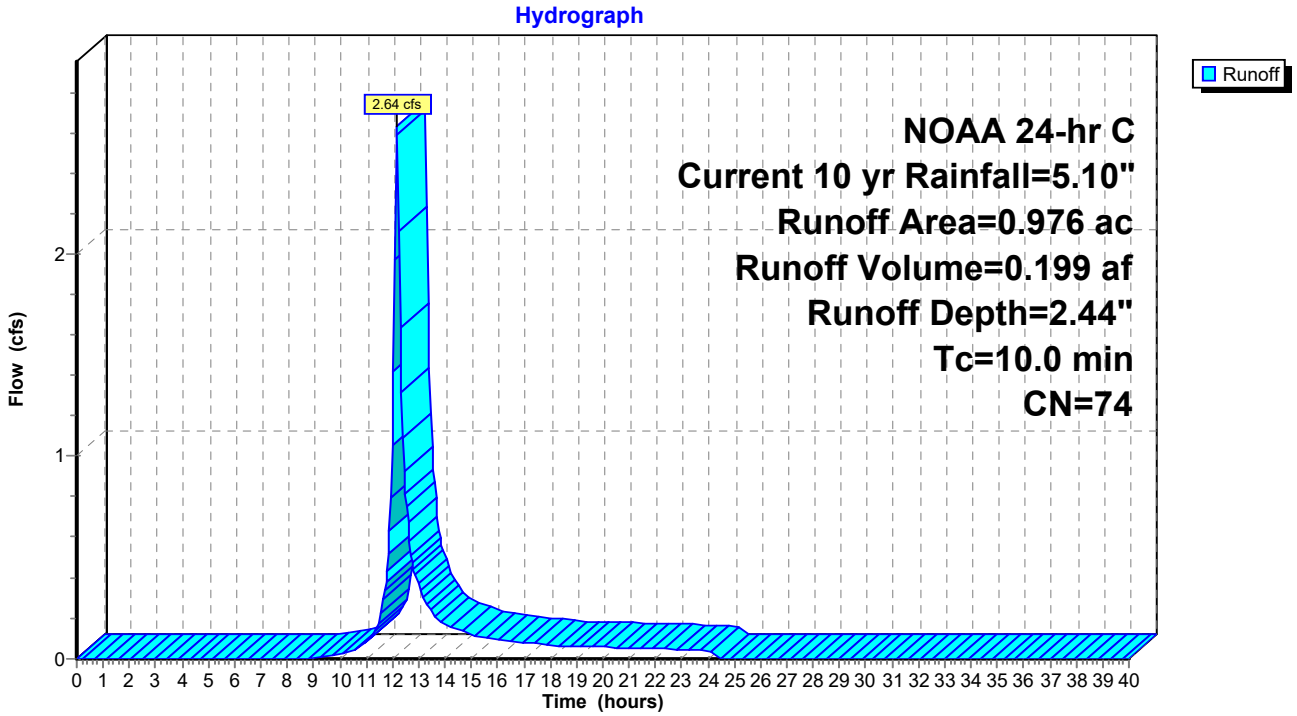
Runoff = 2.64 cfs @ 12.18 hrs, Volume= 0.199 af, Depth= 2.44"
Routed to Pond B-15 : Basin #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.976	74	>75% Grass cover, Good, HSG C
0.976		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 15P: PDA-15 (pervious)



Summary for Subcatchment 16AI: PDA-16A (impervious)

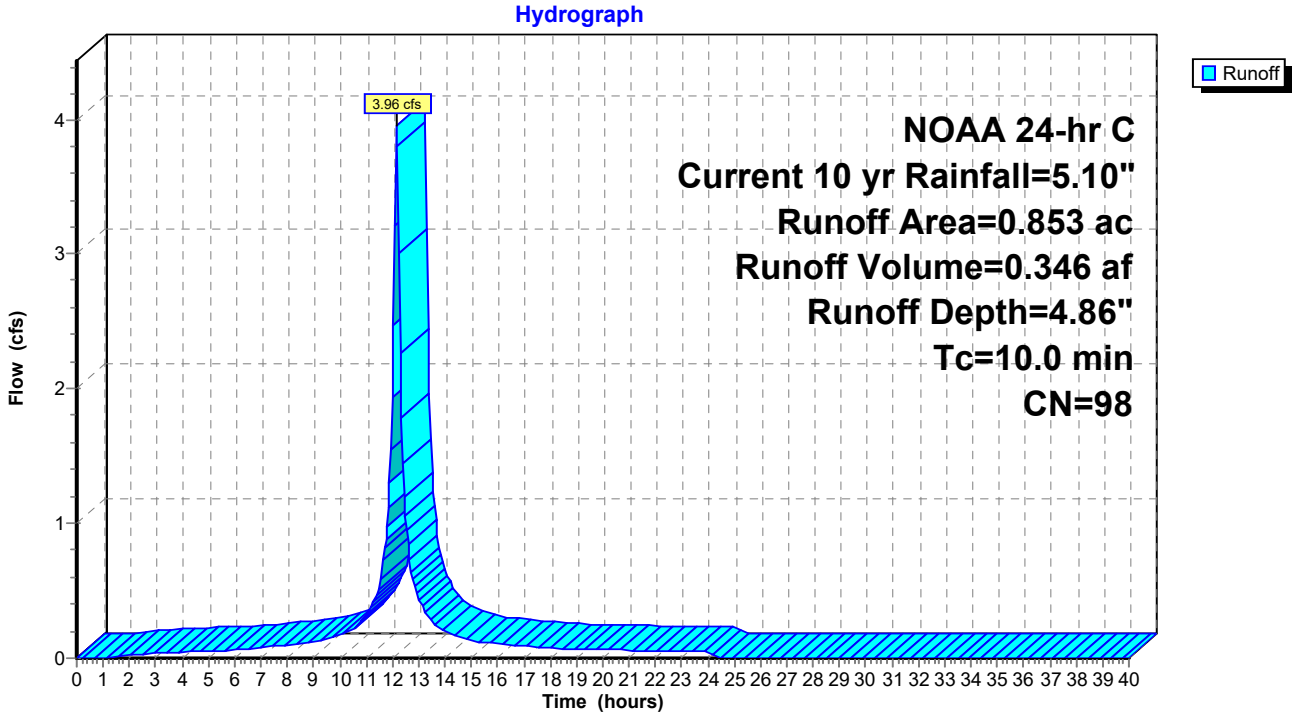
Runoff = 3.96 cfs @ 12.17 hrs, Volume= 0.346 af, Depth= 4.86"
Routed to Pond B-16A : Basin #16A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.072	98	Pavement, HSG C
*	0.771	98	Roof, HSG C
*	0.010	98	Concrete, HSG C
	0.853	98	Weighted Average
	0.853		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16AI: PDA-16A (impervious)



Summary for Subcatchment 16AP: PDA-16A (pervious)

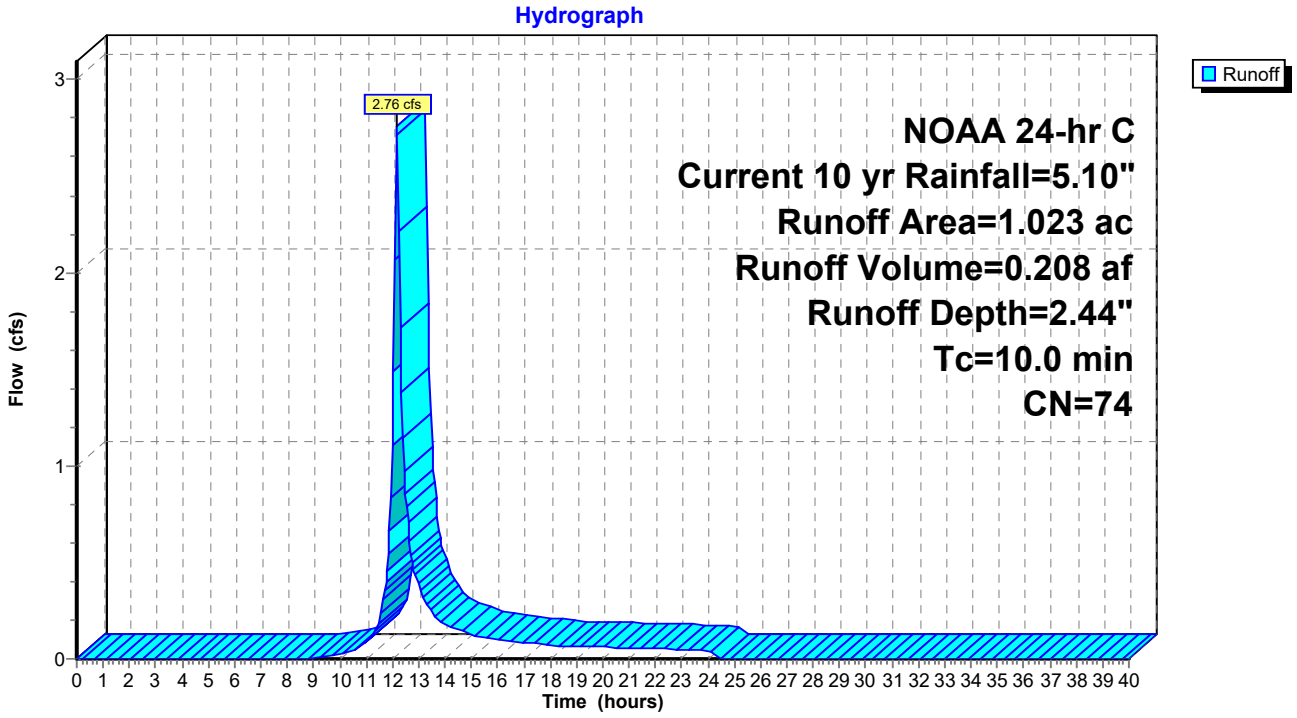
Runoff = 2.76 cfs @ 12.18 hrs, Volume= 0.208 af, Depth= 2.44"
Routed to Pond B-16A : Basin #16A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.023	74	>75% Grass cover, Good, HSG C
1.023		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16AP: PDA-16A (pervious)



Summary for Subcatchment 16BI: PDA-16B (impervious)

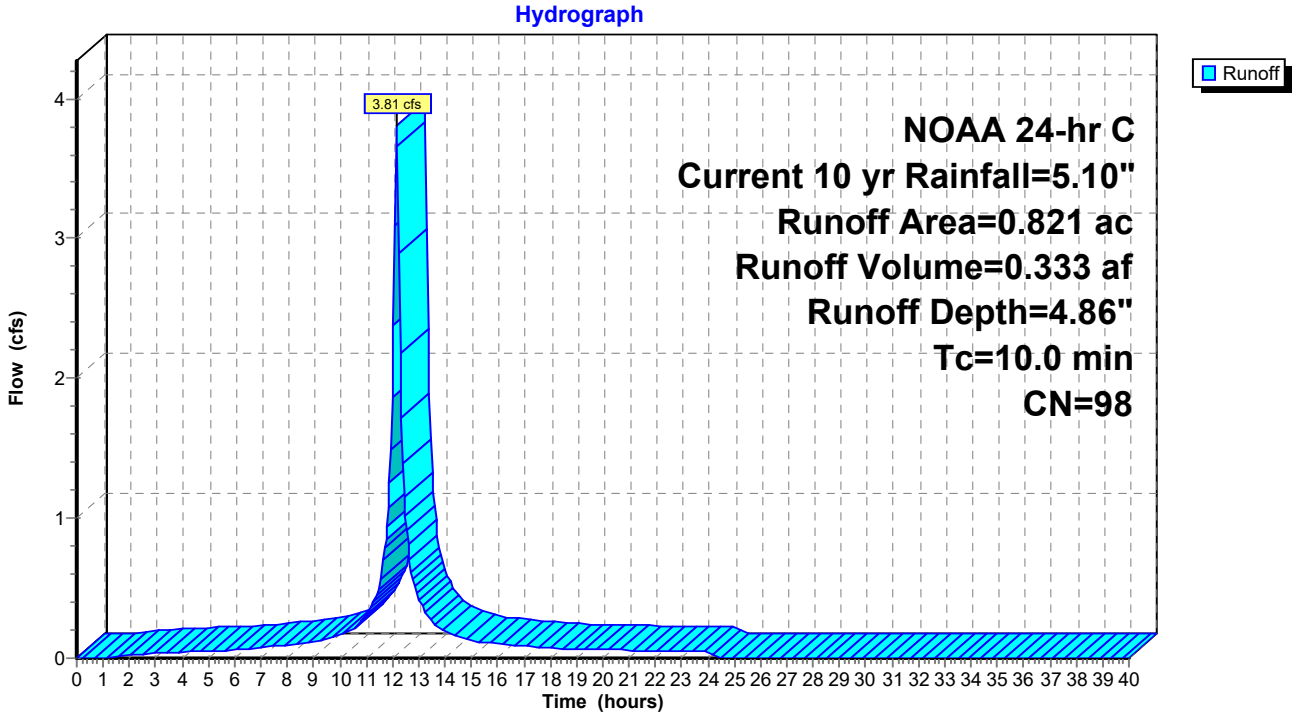
Runoff = 3.81 cfs @ 12.17 hrs, Volume= 0.333 af, Depth= 4.86"
Routed to Pond B-16B : Basin #16B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.621	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	0.821	98	Weighted Average
	0.821		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16BI: PDA-16B (impervious)



Summary for Subcatchment 16BP: PDA-16B (pervious)

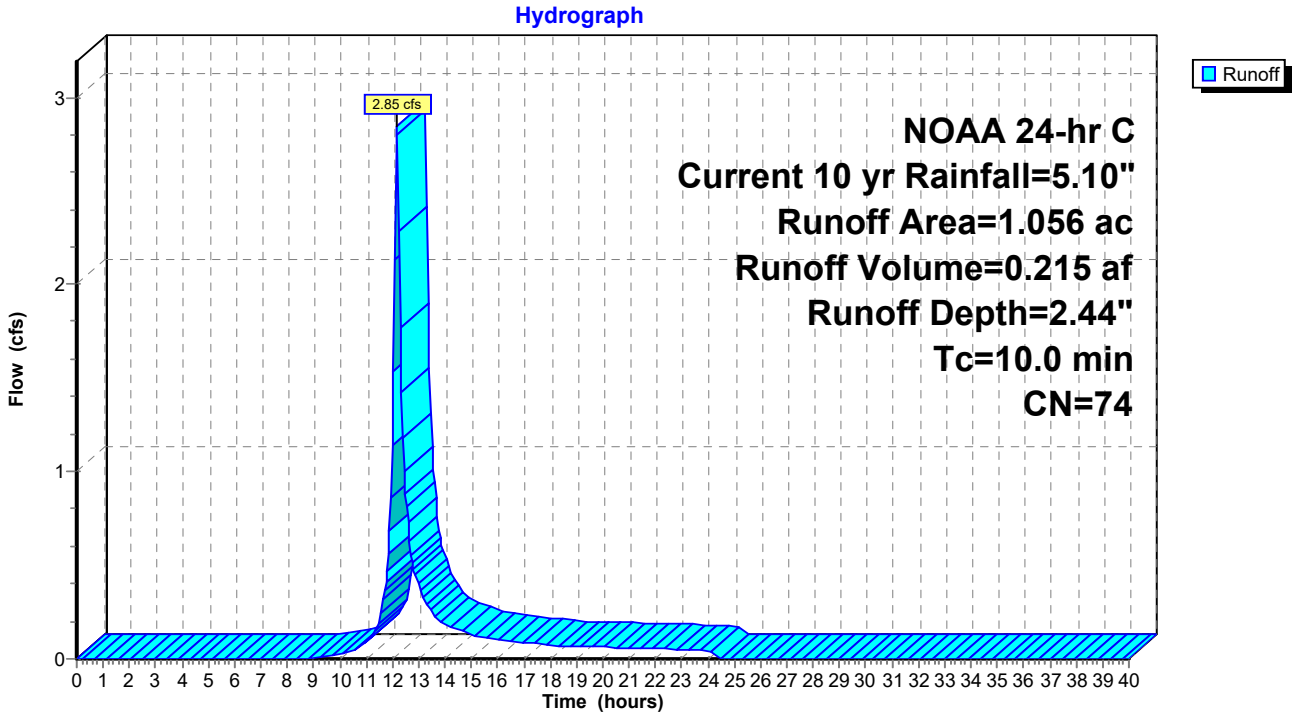
Runoff = 2.85 cfs @ 12.18 hrs, Volume= 0.215 af, Depth= 2.44"
Routed to Pond B-16B : Basin #16B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.056	74	>75% Grass cover, Good, HSG C
1.056		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16BP: PDA-16B (pervious)



Summary for Subcatchment 17AI: PDA-17A (impervious)

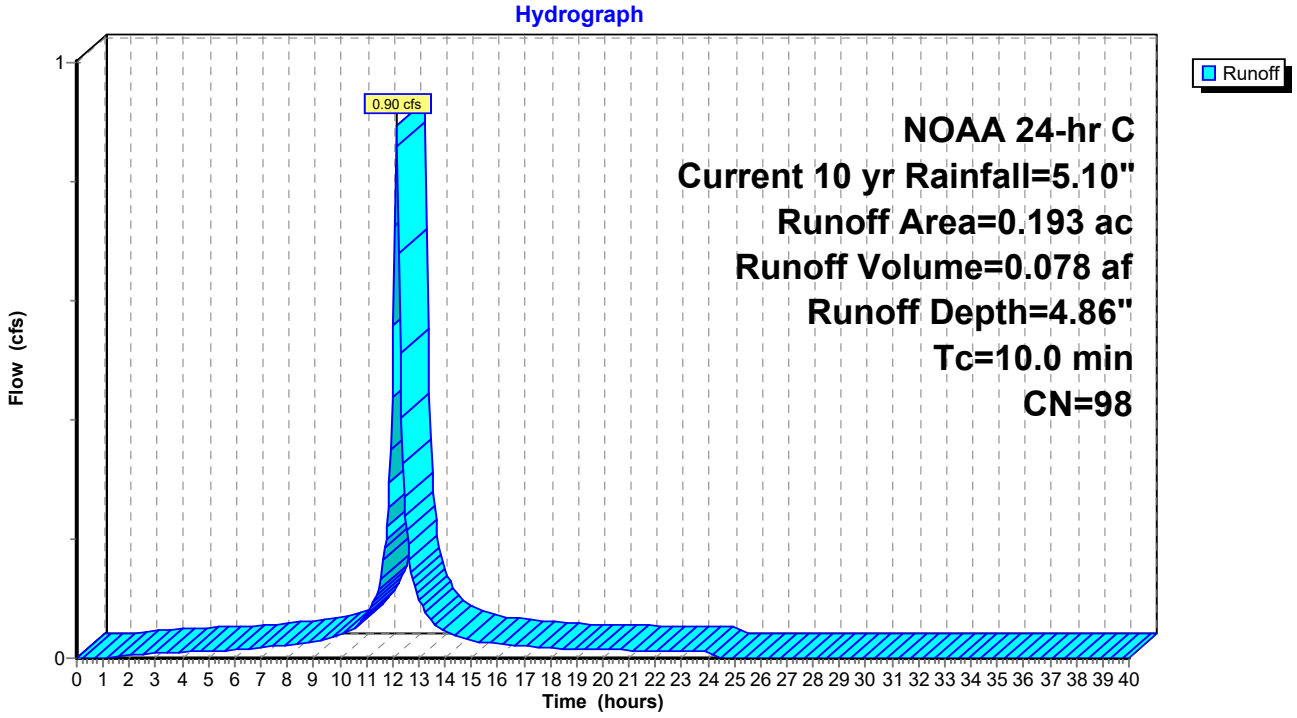
Runoff = 0.90 cfs @ 12.17 hrs, Volume= 0.078 af, Depth= 4.86"
Routed to Pond B-17A : Basin #17A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.193	98	Roof, HSG C
	0.000	98	Paved roads w/curbs & sewers, HSG C
*	0.000	98	Concrete, HSG C
	0.193	98	Weighted Average
	0.193		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17AI: PDA-17A (impervious)



Summary for Subcatchment 17AP: PDA-17A (pervious)

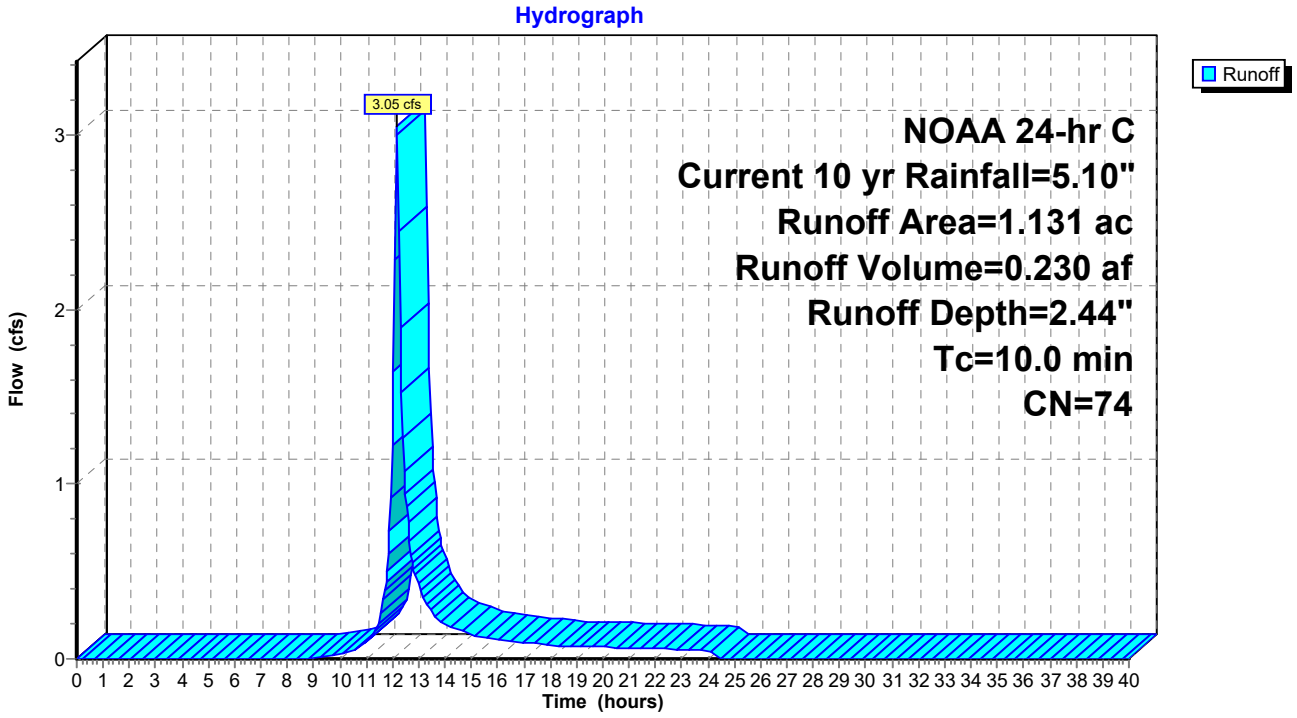
Runoff = 3.05 cfs @ 12.18 hrs, Volume= 0.230 af, Depth= 2.44"
Routed to Pond B-17A : Basin #17A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.131	74	>75% Grass cover, Good, HSG C
1.131		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17AP: PDA-17A (pervious)



Summary for Subcatchment 17BI: PDA-17B (impervious)

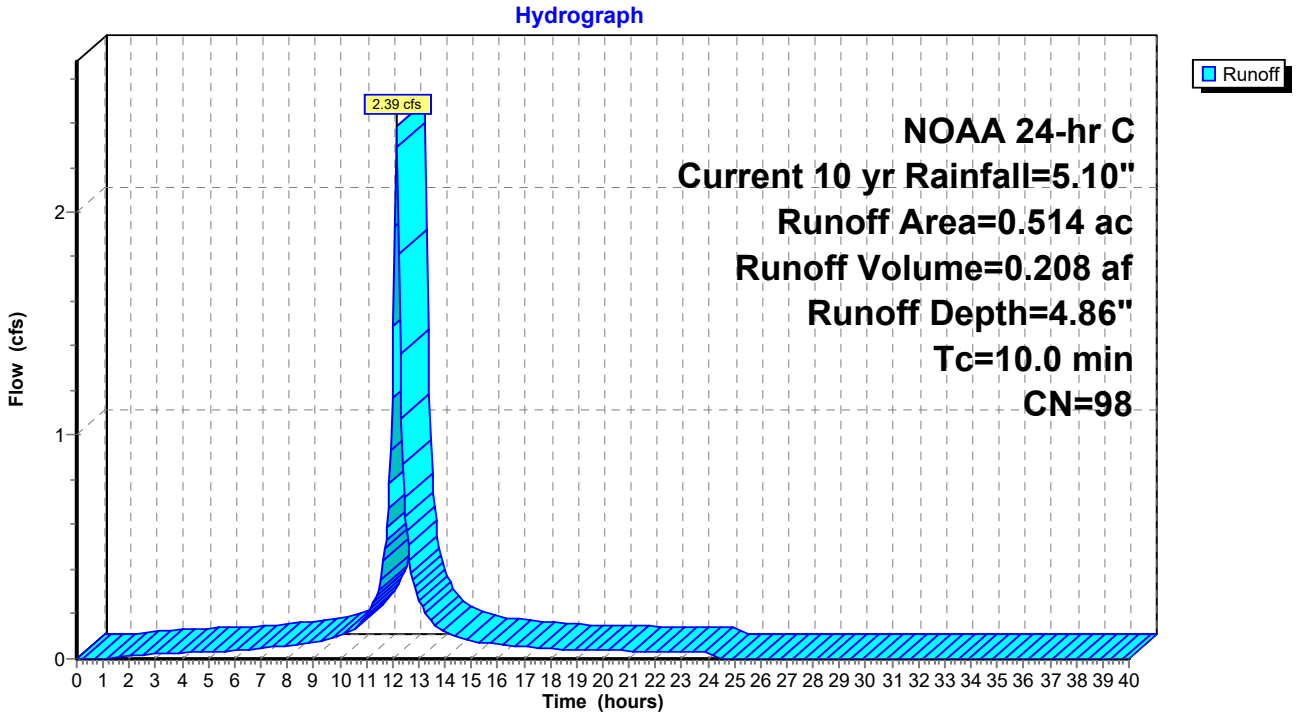
Runoff = 2.39 cfs @ 12.17 hrs, Volume= 0.208 af, Depth= 4.86"
Routed to Pond B-17B : Basin #17B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.514	98	Roof, HSG C
	0.514		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17BI: PDA-17B (impervious)



Summary for Subcatchment 17BP: PDA-17B (pervious)

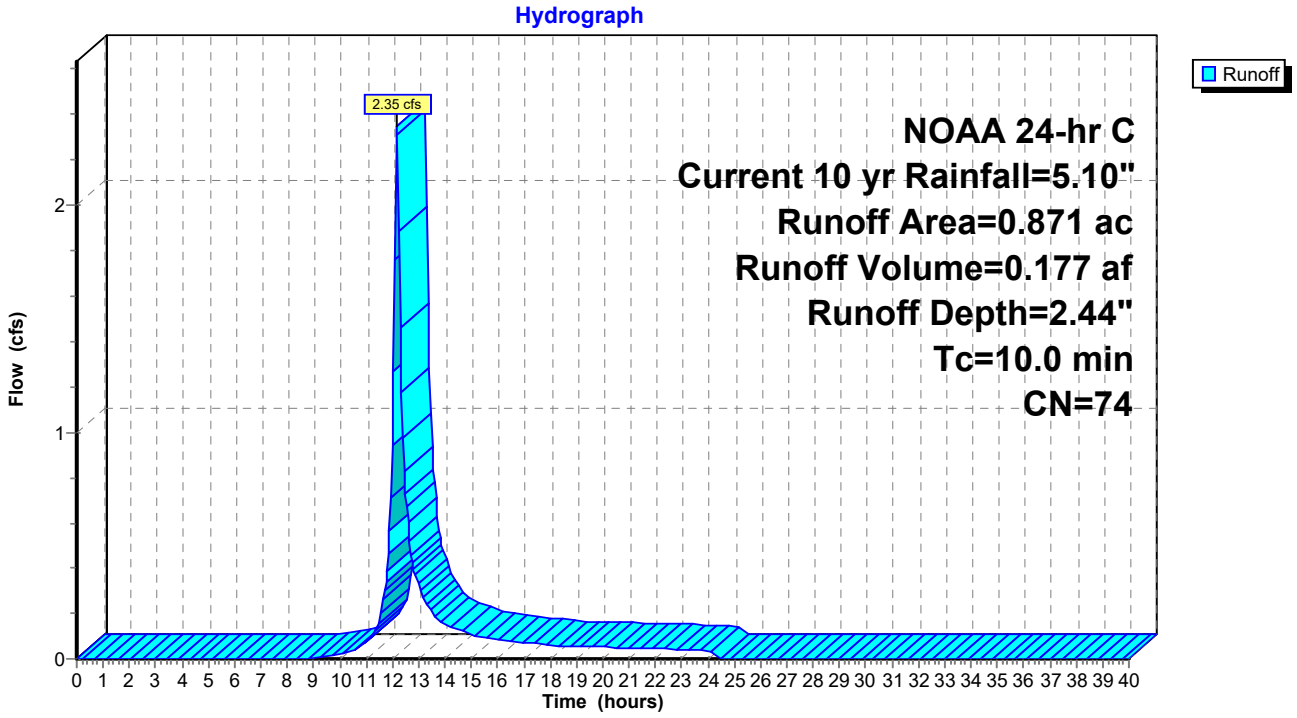
Runoff = 2.35 cfs @ 12.18 hrs, Volume= 0.177 af, Depth= 2.44"
Routed to Pond B-17B : Basin #17B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.871	74	>75% Grass cover, Good, HSG C
0.871		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17BP: PDA-17B (pervious)



Summary for Subcatchment UPDA-1: PDA-1 (undetained)

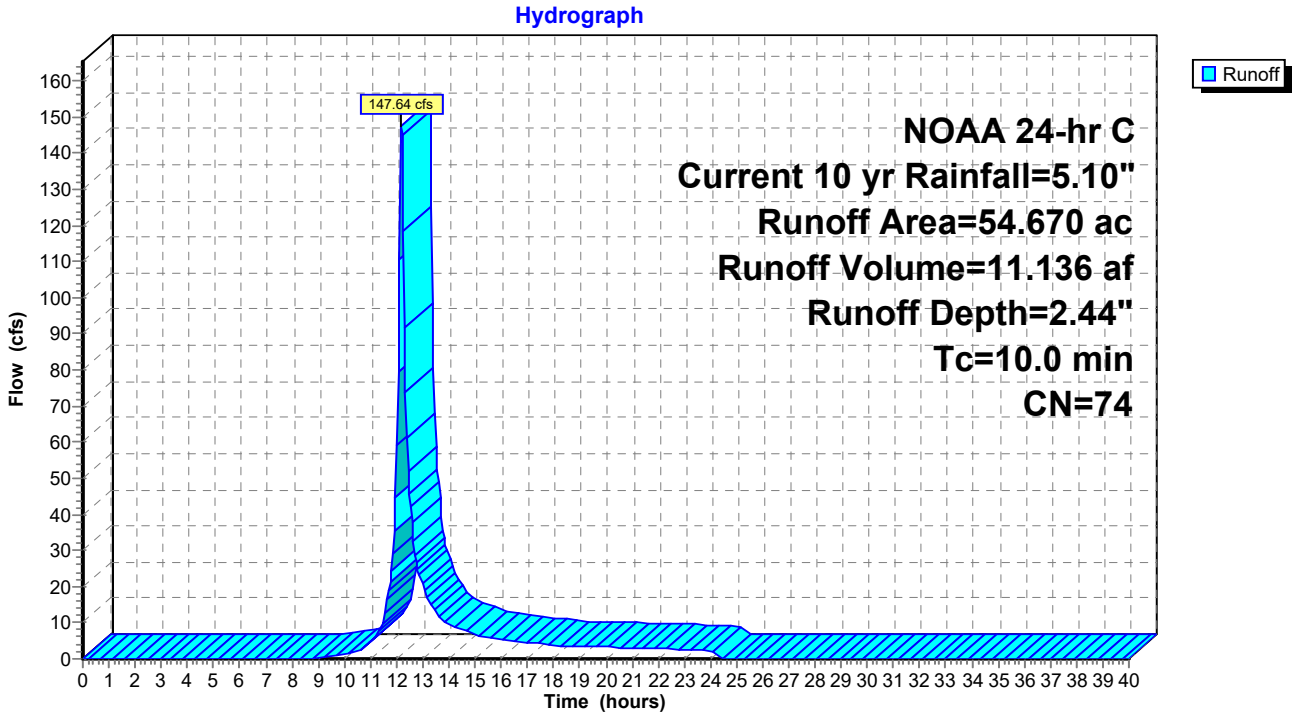
Runoff = 147.64 cfs @ 12.18 hrs, Volume= 11.136 af, Depth= 2.44"
Routed to Link PDA-1 : Proposed Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
54.670	74	>75% Grass cover, Good, HSG C
54.670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-1: PDA-1 (undetained)



Summary for Pond B-1: Basin #1

Inflow Area = 2.782 ac, 26.02% Impervious, Inflow Depth = 0.78" for Current 10 yr event
Inflow = 2.40 cfs @ 12.18 hrs, Volume= 0.181 af
Outflow = 0.08 cfs @ 16.55 hrs, Volume= 0.120 af, Atten= 97%, Lag= 262.4 min
Primary = 0.08 cfs @ 16.55 hrs, Volume= 0.120 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 209.51' @ 16.55 hrs Surf.Area= 10,670 sf Storage= 5,324 cf

Plug-Flow detention time= 633.6 min calculated for 0.120 af (67% of inflow)
Center-of-Mass det. time= 526.1 min (1,369.6 - 843.5)

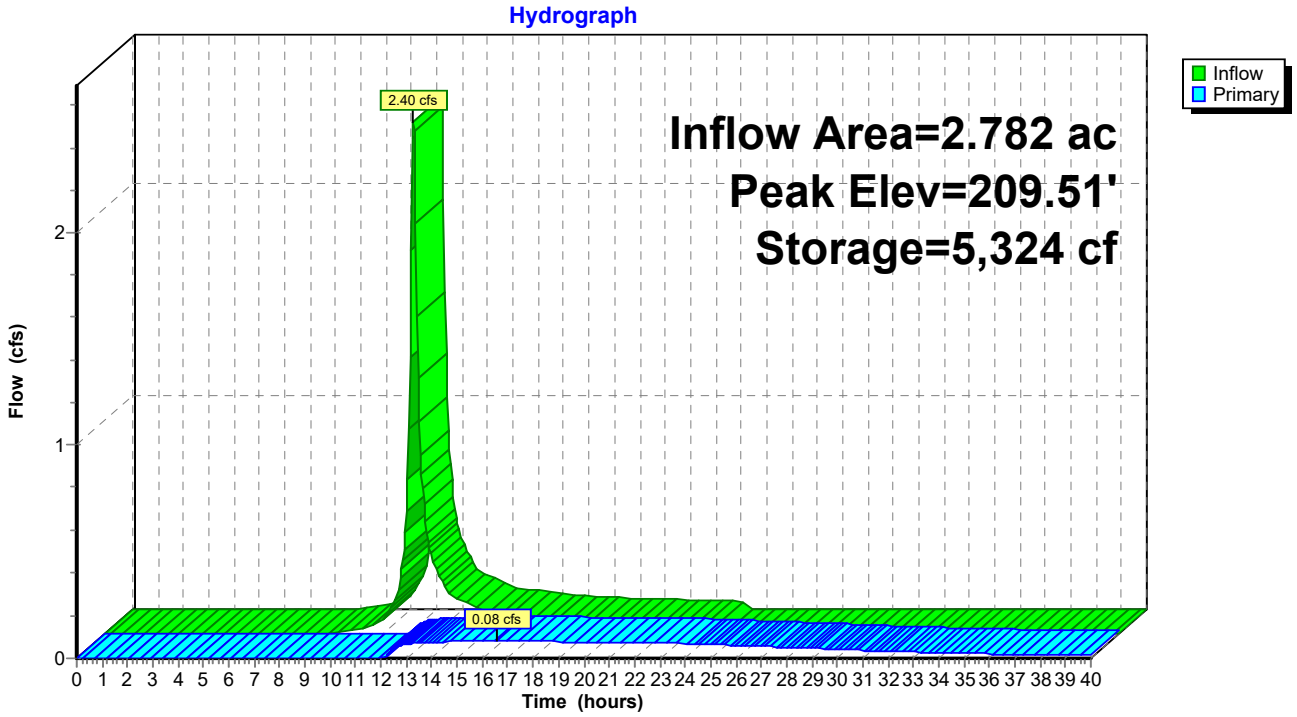
Volume	Invert	Avail.Storage	Storage Description
#1	209.00'	34,903 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
209.00	10,187	0	0
210.00	11,133	10,660	10,660
211.00	12,113	11,623	22,283
212.00	13,126	12,620	34,903

Device	Routing	Invert	Outlet Devices
#1	Primary	207.65'	**18.0" Round Culvert** L= 276.0' Ke= 0.500 Inlet / Outlet Invert= 207.65' / 204.00' S= 0.0132 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	209.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	209.67'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	210.80'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.08 cfs @ 16.55 hrs HW=209.51' (Free Discharge)
- **1=Culvert** (Passes 0.08 cfs of 8.97 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.08 cfs @ 2.34 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-1: Basin #1



Stage-Discharge for Pond B-1: Basin #1

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
209.00	0.00	210.04	3.03	211.08	31.14
209.02	0.00	210.06	3.27	211.10	33.28
209.04	0.00	210.08	3.51	211.12	35.53
209.06	0.00	210.10	3.76	211.14	37.86
209.08	0.00	210.12	4.01	211.16	40.30
209.10	0.00	210.14	4.27	211.18	42.83
209.12	0.00	210.16	4.53	211.20	45.46
209.14	0.00	210.18	4.80	211.22	48.24
209.16	0.00	210.20	5.07	211.24	51.13
209.18	0.00	210.22	5.35	211.26	54.12
209.20	0.00	210.24	5.63	211.28	57.21
209.22	0.00	210.26	5.92	211.30	60.41
209.24	0.01	210.28	6.21	211.32	63.72
209.26	0.01	210.30	6.50	211.34	67.13
209.28	0.02	210.32	6.80	211.36	70.65
209.30	0.03	210.34	7.10	211.38	74.28
209.32	0.03	210.36	7.41	211.40	78.01
209.34	0.04	210.38	7.72	211.42	81.30
209.36	0.05	210.40	8.03	211.44	84.65
209.38	0.05	210.42	8.35	211.46	88.04
209.40	0.06	210.44	8.67	211.48	91.49
209.42	0.06	210.46	9.00	211.50	94.99
209.44	0.07	210.48	9.33	211.52	98.55
209.46	0.07	210.50	9.66	211.54	102.15
209.48	0.07	210.52	10.00	211.56	105.80
209.50	0.08	210.54	10.34	211.58	109.50
209.52	0.08	210.56	10.68	211.60	113.25
209.54	0.08	210.58	11.03	211.62	117.13
209.56	0.09	210.60	11.37	211.64	121.06
209.58	0.09	210.62	11.73	211.66	125.04
209.60	0.09	210.64	12.08	211.68	129.07
209.62	0.10	210.66	12.44	211.70	133.15
209.64	0.10	210.68	12.61	211.72	137.29
209.66	0.10	210.70	12.64	211.74	141.48
209.68	0.12	210.72	12.66	211.76	145.72
209.70	0.17	210.74	12.69	211.78	150.00
209.72	0.26	210.76	12.71	211.80	154.34
209.74	0.35	210.78	12.73	211.82	158.62
209.76	0.47	210.80	12.76	211.84	162.95
209.78	0.59	210.82	13.11	211.86	167.31
209.80	0.73	210.84	13.74	211.88	171.72
209.82	0.88	210.86	14.56	211.90	176.17
209.84	1.03	210.88	15.51	211.92	180.66
209.86	1.20	210.90	16.60	211.94	185.19
209.88	1.37	210.92	17.79	211.96	189.77
209.90	1.56	210.94	19.10	211.98	194.38
209.92	1.75	210.96	20.50	212.00	**199.03**
209.94	1.94	210.98	21.99		
209.96	2.15	211.00	23.56		
209.98	2.36	211.02	25.31		
210.00	2.58	211.04	27.15		
210.02	2.80	211.06	29.10		

Summary for Pond B-10: Basin #10

Inflow Area = 1.674 ac, 56.63% Impervious, Inflow Depth = 3.81" for Current 10 yr event
Inflow = 6.36 cfs @ 12.17 hrs, Volume= 0.532 af
Outflow = 1.71 cfs @ 12.52 hrs, Volume= 0.440 af, Atten= 73%, Lag= 21.1 min
Primary = 1.71 cfs @ 12.52 hrs, Volume= 0.440 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 181.09' @ 12.52 hrs Surf.Area= 5,914 sf Storage= 10,574 cf

Plug-Flow detention time= 180.8 min calculated for 0.440 af (83% of inflow)
Center-of-Mass det. time= 104.7 min (882.3 - 777.6)

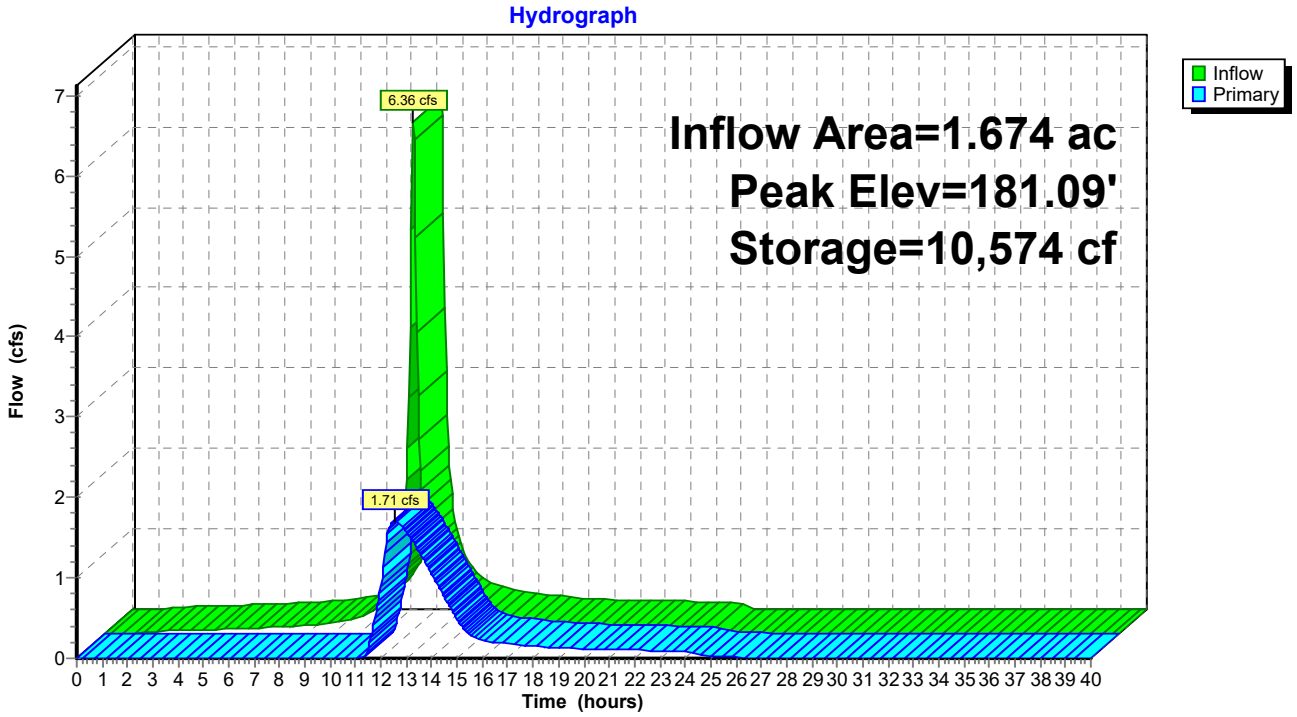
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	23,473 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	4,220	0	0
180.00	5,003	4,612	4,612
181.00	5,833	5,418	10,030
182.00	6,710	6,272	16,301
183.00	7,633	7,172	23,473

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 52.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 176.00' S= 0.0317 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.88'	**24.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	182.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.70 cfs @ 12.52 hrs HW=181.09' (Free Discharge)
- **1=Culvert** (Passes 1.70 cfs of 13.96 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.70 cfs @ 5.11 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-10: Basin #10



Stage-Discharge for Pond B-10: Basin #10

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.41	181.08	1.70	182.12	2.90
179.02	0.00	180.06	0.48	181.10	1.71	182.14	3.05
179.04	0.00	180.08	0.54	181.12	1.73	182.16	3.21
179.06	0.00	180.10	0.58	181.14	1.74	182.18	3.38
179.08	0.00	180.12	0.63	181.16	1.76	182.20	3.56
179.10	0.00	180.14	0.67	181.18	1.77	182.22	3.75
179.12	0.00	180.16	0.71	181.20	1.78	182.24	3.94
179.14	0.00	180.18	0.74	181.22	1.80	182.26	4.14
179.16	0.00	180.20	0.78	181.24	1.81	182.28	4.35
179.18	0.00	180.22	0.81	181.26	1.83	182.30	4.57
179.20	0.00	180.24	0.84	181.28	1.84	182.32	4.79
179.22	0.00	180.26	0.87	181.30	1.86	182.34	5.02
179.24	0.00	180.28	0.90	181.32	1.87	182.36	5.26
179.26	0.00	180.30	0.93	181.34	1.88	182.38	5.50
179.28	0.00	180.32	0.96	181.36	1.90	182.40	5.75
179.30	0.00	180.34	0.98	181.38	1.91	182.42	6.00
179.32	0.00	180.36	1.01	181.40	1.92	182.44	6.26
179.34	0.00	180.38	1.03	181.42	1.94	182.46	6.52
179.36	0.00	180.40	1.06	181.44	1.95	182.48	6.79
179.38	0.00	180.42	1.08	181.46	1.96	182.50	7.07
179.40	0.00	180.44	1.11	181.48	1.98	182.52	7.34
179.42	0.00	180.46	1.13	181.50	1.99	182.54	7.63
179.44	0.00	180.48	1.15	181.52	2.00	182.56	7.91
179.46	0.00	180.50	1.17	181.54	2.02	182.58	8.21
179.48	0.00	180.52	1.20	181.56	2.03	182.60	8.50
179.50	0.00	180.54	1.22	181.58	2.04	182.62	8.80
179.52	0.00	180.56	1.24	181.60	2.05	182.64	9.11
179.54	0.00	180.58	1.26	181.62	2.07	182.66	9.42
179.56	0.00	180.60	1.28	181.64	2.08	182.68	9.73
179.58	0.00	180.62	1.30	181.66	2.09	182.70	10.05
179.60	0.00	180.64	1.32	181.68	2.10	182.72	10.37
179.62	0.00	180.66	1.34	181.70	2.11	182.74	10.69
179.64	0.00	180.68	1.36	181.72	2.13	182.76	11.02
179.66	0.00	180.70	1.38	181.74	2.14	182.78	11.35
179.68	0.00	180.72	1.40	181.76	2.15	182.80	11.69
179.70	0.00	180.74	1.41	181.78	2.16	182.82	12.03
179.72	0.00	180.76	1.43	181.80	2.17	182.84	12.37
179.74	0.00	180.78	1.45	181.82	2.19	182.86	12.71
179.76	0.00	180.80	1.47	181.84	2.20	182.88	13.06
179.78	0.00	180.82	1.48	181.86	2.21	182.90	13.42
179.80	0.00	180.84	1.50	181.88	2.22	182.92	13.77
179.82	0.00	180.86	1.52	181.90	2.23	182.94	14.13
179.84	0.00	180.88	1.54	181.92	2.24	182.96	14.61
179.86	0.00	180.90	1.55	181.94	2.26	182.98	15.46
179.88	0.00	180.92	1.57	181.96	2.27	183.00	**16.53**
179.90	0.02	180.94	1.59	181.98	2.28		
179.92	0.05	180.96	1.60	182.00	2.29		
179.94	0.09	180.98	1.62	182.02	2.34		
179.96	0.15	181.00	1.63	182.04	2.42		
179.98	0.20	181.02	1.65	182.06	2.52		
180.00	0.27	181.04	1.66	182.08	2.63		
180.02	0.34	181.06	1.68	182.10	2.76		

Summary for Pond B-11: Basin #11

Inflow Area = 2.228 ac, 58.53% Impervious, Inflow Depth = 3.86" for Current 10 yr event
Inflow = 8.55 cfs @ 12.17 hrs, Volume= 0.717 af
Outflow = 1.98 cfs @ 12.59 hrs, Volume= 0.560 af, Atten= 77%, Lag= 25.2 min
Primary = 1.98 cfs @ 12.59 hrs, Volume= 0.560 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 183.01' @ 12.59 hrs Surf.Area= 7,147 sf Storage= 17,886 cf

Plug-Flow detention time= 549.7 min calculated for 0.560 af (78% of inflow)
Center-of-Mass det. time= 463.8 min (1,240.0 - 776.2)

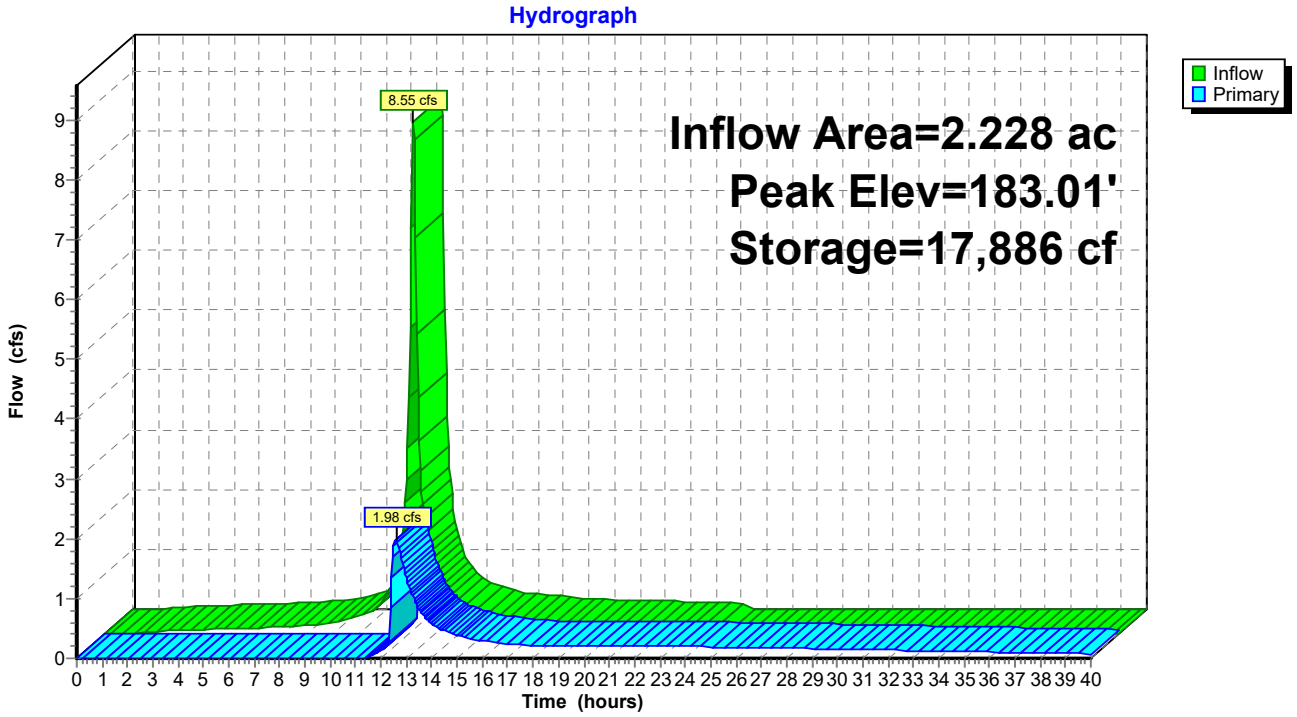
Volume	Invert	Avail.Storage	Storage Description
#1	180.00'	43,224 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.00	4,780	0	0
181.00	5,522	5,151	5,151
182.00	6,306	5,914	11,065
183.00	7,135	6,721	17,786
184.00	8,007	7,571	25,357
185.00	8,923	8,465	33,822
186.00	9,882	9,403	43,224

Device	Routing	Invert	Outlet Devices
#1	Primary	178.65'	**18.0" Round Culvert** L= 131.0' Ke= 0.500 Inlet / Outlet Invert= 178.65' / 178.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	181.00'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	183.91'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.97 cfs @ 12.59 hrs HW=183.01' (Free Discharge)
- **1=Culvert** (Passes 1.97 cfs of 13.47 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.65 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.75 cfs @ 1.68 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-11: Basin #11



Stage-Discharge for Pond B-11: Basin #11

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
180.00	0.00	182.60	0.20	185.20	223.74
180.05	0.00	182.65	0.20	185.25	236.23
180.10	0.00	182.70	0.21	185.30	248.97
180.15	0.00	182.75	0.21	185.35	262.16
180.20	0.00	182.80	0.36	185.40	275.68
180.25	0.00	182.85	0.63	185.45	289.46
180.30	0.00	182.90	0.97	185.50	303.52
180.35	0.00	182.95	1.38	185.55	317.86
180.40	0.00	183.00	1.84	185.60	332.46
180.45	0.00	183.05	2.35	185.65	347.33
180.50	0.00	183.10	2.89	185.70	362.47
180.55	0.00	183.15	3.48	185.75	377.88
180.60	0.00	183.20	4.10	185.80	393.54
180.65	0.00	183.25	4.75	185.85	409.47
180.70	0.00	183.30	5.43	185.90	425.67
180.75	0.00	183.35	6.14	185.95	442.37
180.80	0.00	183.40	6.88	186.00	**459.42**
180.85	0.00	183.45	7.64		
180.90	0.00	183.50	8.43		
180.95	0.00	183.55	9.24		
181.00	0.00	183.60	10.07		
181.05	0.00	183.65	10.93		
181.10	0.02	183.70	11.80		
181.15	0.03	183.75	12.69		
181.20	0.05	183.80	13.60		
181.25	0.06	183.85	14.53		
181.30	0.07	183.90	15.07		
181.35	0.08	183.95	16.09		
181.40	0.09	184.00	18.41		
181.45	0.10	184.05	21.50		
181.50	0.10	184.10	25.19		
181.55	0.11	184.15	29.60		
181.60	0.12	184.20	34.67		
181.65	0.12	184.25	40.36		
181.70	0.13	184.30	46.66		
181.75	0.13	184.35	53.67		
181.80	0.14	184.40	61.37		
181.85	0.14	184.45	69.72		
181.90	0.15	184.50	78.75		
181.95	0.15	184.55	87.28		
182.00	0.16	184.60	95.90		
182.05	0.16	184.65	104.83		
182.10	0.16	184.70	114.08		
182.15	0.17	184.75	123.79		
182.20	0.17	184.80	133.86		
182.25	0.18	184.85	144.25		
182.30	0.18	184.90	154.96		
182.35	0.18	184.95	165.77		
182.40	0.19	185.00	176.78		
182.45	0.19	185.05	188.06		
182.50	0.19	185.10	199.59		
182.55	0.20	185.15	211.51		

Summary for Pond B-12: Basin #12

Inflow Area = 2.426 ac, 44.77% Impervious, Inflow Depth = 3.53" for Current 10 yr event
Inflow = 8.66 cfs @ 12.17 hrs, Volume= 0.713 af
Outflow = 4.35 cfs @ 12.34 hrs, Volume= 0.608 af, Atten= 50%, Lag= 10.2 min
Primary = 4.35 cfs @ 12.34 hrs, Volume= 0.608 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.38' @ 12.34 hrs Surf.Area= 6,399 sf Storage= 13,075 cf

Plug-Flow detention time= 191.0 min calculated for 0.608 af (85% of inflow)
Center-of-Mass det. time= 122.5 min (909.6 - 787.2)

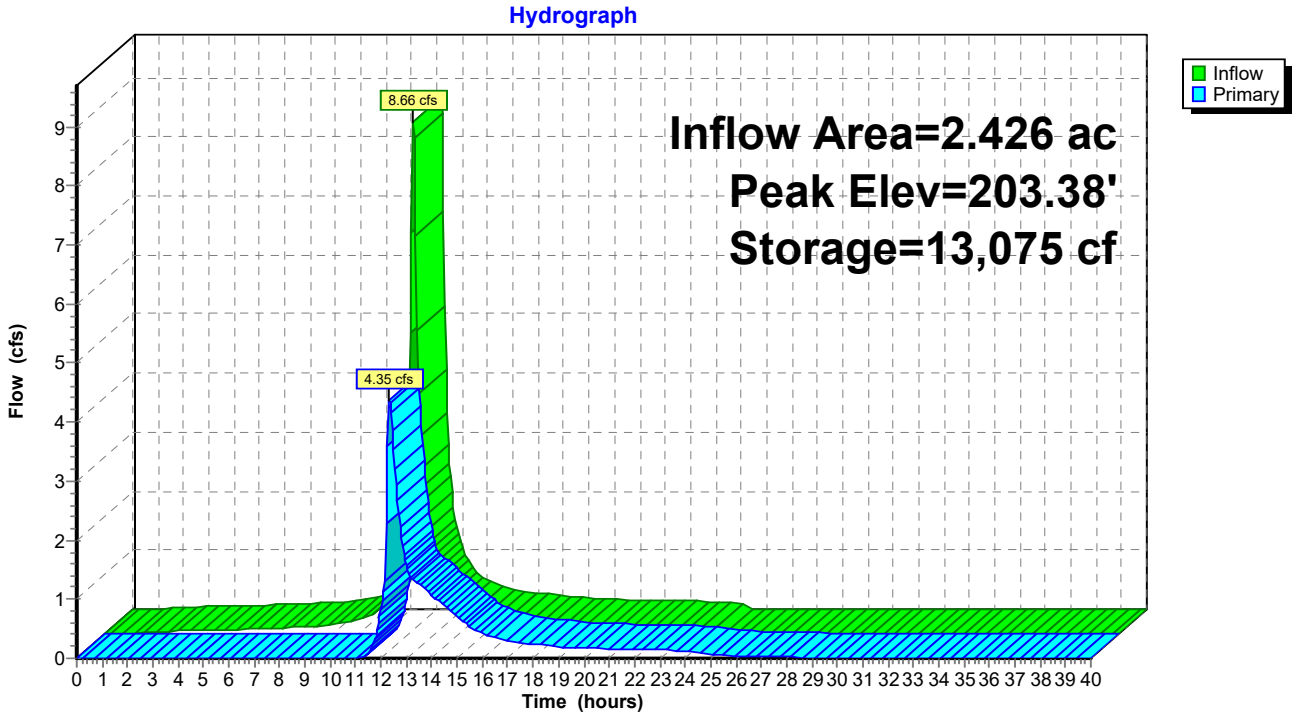
Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	24,487 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,623	0	0
202.00	5,350	4,987	4,987
203.00	6,105	5,728	10,714
204.00	6,883	6,494	17,208
205.00	7,674	7,279	24,487

Device	Routing	Invert	Outlet Devices
#1	Primary	199.65'	**18.0" Round Culvert** L= 238.0' Ke= 0.500 Inlet / Outlet Invert= 199.65' / 195.50' S= 0.0174 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.90'	**7.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.02'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.33 cfs @ 12.34 hrs HW=203.38' (Free Discharge)
- **1=Culvert** (Passes 4.33 cfs of 14.68 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.59 cfs @ 5.19 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.73 cfs @ 1.95 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-12: Basin #12



Stage-Discharge for Pond B-12: Basin #12

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	202.04	0.07	203.08	1.57	204.12	15.64
201.02	0.00	202.06	0.08	203.10	1.69	204.14	15.66
201.04	0.00	202.08	0.11	203.12	1.82	204.16	15.69
201.06	0.00	202.10	0.13	203.14	1.96	204.18	15.71
201.08	0.00	202.12	0.15	203.16	2.12	204.20	15.73
201.10	0.00	202.14	0.18	203.18	2.28	204.22	15.75
201.12	0.00	202.16	0.21	203.20	2.46	204.24	15.77
201.14	0.00	202.18	0.24	203.22	2.64	204.26	15.79
201.16	0.00	202.20	0.27	203.24	2.83	204.28	15.82
201.18	0.00	202.22	0.30	203.26	3.03	204.30	15.84
201.20	0.00	202.24	0.34	203.28	3.24	204.32	15.86
201.22	0.00	202.26	0.37	203.30	3.45	204.34	15.88
201.24	0.00	202.28	0.41	203.32	3.67	204.36	15.90
201.26	0.00	202.30	0.45	203.34	3.90	204.38	15.92
201.28	0.00	202.32	0.48	203.36	4.13	204.40	15.95
201.30	0.00	202.34	0.52	203.38	4.37	204.42	15.97
201.32	0.00	202.36	0.56	203.40	4.62	204.44	15.99
201.34	0.00	202.38	0.60	203.42	4.87	204.46	16.01
201.36	0.00	202.40	0.63	203.44	5.12	204.48	16.03
201.38	0.00	202.42	0.67	203.46	5.38	204.50	16.05
201.40	0.00	202.44	0.70	203.48	5.65	204.52	16.41
201.42	0.00	202.46	0.74	203.50	5.92	204.54	17.03
201.44	0.00	202.48	0.77	203.52	6.20	204.56	17.84
201.46	0.00	202.50	0.80	203.54	6.48	204.58	18.80
201.48	0.00	202.52	0.82	203.56	6.77	204.60	19.88
201.50	0.00	202.54	0.85	203.58	7.06	204.62	21.07
201.52	0.00	202.56	0.87	203.60	7.35	204.64	22.37
201.54	0.00	202.58	0.90	203.62	7.65	204.66	23.77
201.56	0.00	202.60	0.92	203.64	7.95	204.68	25.26
201.58	0.00	202.62	0.94	203.66	8.26	204.70	26.83
201.60	0.00	202.64	0.97	203.68	8.57	204.72	28.57
201.62	0.00	202.66	0.99	203.70	8.89	204.74	30.41
201.64	0.00	202.68	1.01	203.72	9.21	204.76	32.36
201.66	0.00	202.70	1.03	203.74	9.53	204.78	34.40
201.68	0.00	202.72	1.05	203.76	9.86	204.80	36.54
201.70	0.00	202.74	1.07	203.78	10.19	204.82	38.78
201.72	0.00	202.76	1.09	203.80	10.52	204.84	41.12
201.74	0.00	202.78	1.11	203.82	10.86	204.86	43.55
201.76	0.00	202.80	1.13	203.84	11.20	204.88	46.08
201.78	0.00	202.82	1.15	203.86	11.54	204.90	48.71
201.80	0.00	202.84	1.17	203.88	11.89	204.92	51.48
201.82	0.00	202.86	1.19	203.90	12.24	204.94	54.37
201.84	0.00	202.88	1.21	203.92	12.60	204.96	57.35
201.86	0.00	202.90	1.22	203.94	12.95	204.98	60.45
201.88	0.00	202.92	1.24	203.96	13.31	205.00	**63.65**
201.90	0.00	202.94	1.26	203.98	13.68		
201.92	0.00	202.96	1.28	204.00	14.04		
201.94	0.01	202.98	1.29	204.02	14.41		
201.96	0.01	203.00	1.31	204.04	14.78		
201.98	0.02	203.02	1.33	204.06	15.16		
202.00	0.03	203.04	1.38	204.08	15.54		
202.02	0.05	203.06	1.46	204.10	15.62		

Summary for Pond B-13: Basin #13

Inflow Area = 2.350 ac, 62.43% Impervious, Inflow Depth = 3.95" for Current 10 yr event
Inflow = 9.20 cfs @ 12.17 hrs, Volume= 0.774 af
Outflow = 1.96 cfs @ 12.62 hrs, Volume= 0.564 af, Atten= 79%, Lag= 26.9 min
Primary = 1.96 cfs @ 12.62 hrs, Volume= 0.564 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.22' @ 12.62 hrs Surf.Area= 9,841 sf Storage= 19,717 cf

Plug-Flow detention time= 543.9 min calculated for 0.564 af (73% of inflow)
Center-of-Mass det. time= 448.5 min (1,222.0 - 773.4)

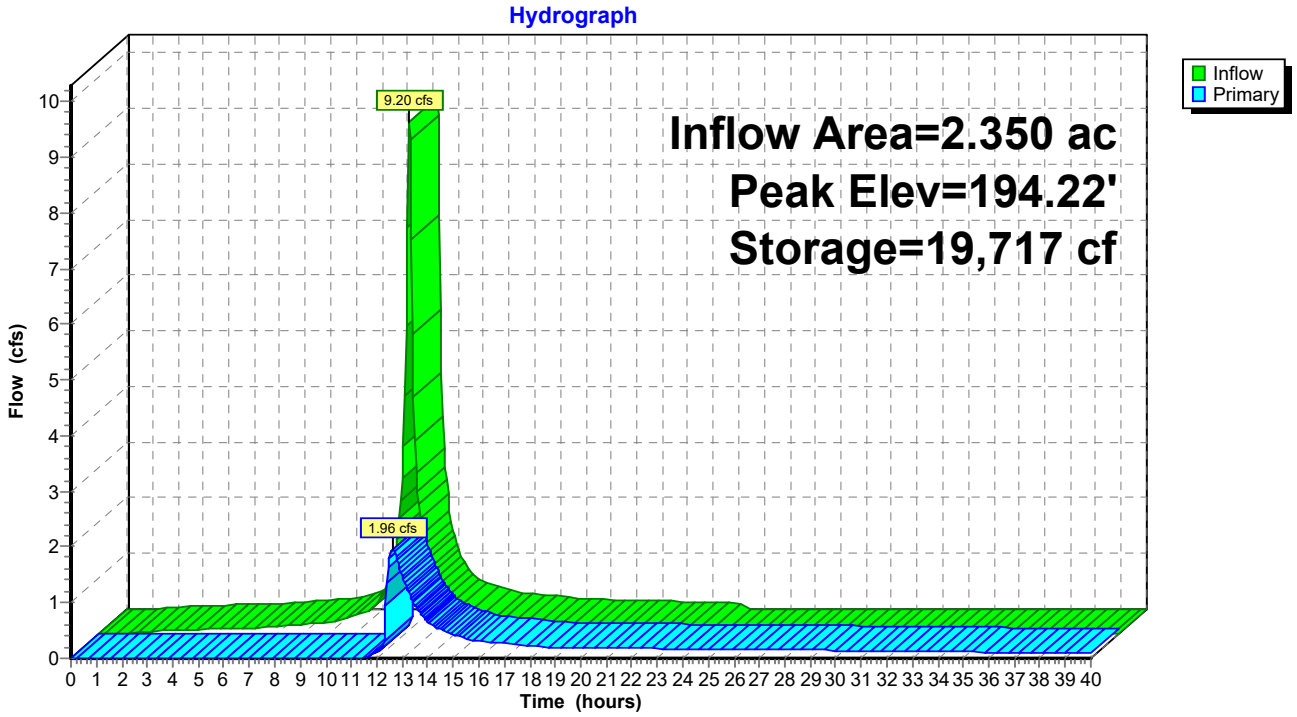
Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	38,667 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	7,975	0	0
193.00	8,804	8,390	8,390
194.00	9,654	9,229	17,619
195.00	10,522	10,088	27,707
196.00	11,399	10,961	38,667

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 57.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0465 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.70'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.95'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.96'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.95 cfs @ 12.62 hrs HW=194.21' (Free Discharge)
- **1=Culvert** (Passes 1.95 cfs of 14.28 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.72 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.76 cfs @ 1.68 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-13: Basin #13



Stage-Discharge for Pond B-13: Basin #13

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.00	0.00	193.04	0.08	194.08	0.79	195.12	23.38
192.02	0.00	193.06	0.08	194.10	0.94	195.14	25.23
192.04	0.00	193.08	0.09	194.12	1.10	195.16	27.06
192.06	0.00	193.10	0.09	194.14	1.26	195.18	28.83
192.08	0.00	193.12	0.09	194.16	1.44	195.20	30.69
192.10	0.00	193.14	0.10	194.18	1.62	195.22	32.66
192.12	0.00	193.16	0.10	194.20	1.81	195.24	34.72
192.14	0.00	193.18	0.10	194.22	2.01	195.26	36.89
192.16	0.00	193.20	0.10	194.24	2.21	195.28	39.15
192.18	0.00	193.22	0.11	194.26	2.42	195.30	41.51
192.20	0.00	193.24	0.11	194.28	2.64	195.32	43.96
192.22	0.00	193.26	0.11	194.30	2.86	195.34	46.51
192.24	0.00	193.28	0.11	194.32	3.09	195.36	49.16
192.26	0.00	193.30	0.12	194.34	3.33	195.38	51.96
192.28	0.00	193.32	0.12	194.36	3.57	195.40	54.87
192.30	0.00	193.34	0.12	194.38	3.81	195.42	57.88
192.32	0.00	193.36	0.12	194.40	4.07	195.44	60.99
192.34	0.00	193.38	0.12	194.42	4.32	195.46	64.21
192.36	0.00	193.40	0.13	194.44	4.59	195.48	67.53
192.38	0.00	193.42	0.13	194.46	4.85	195.50	70.97
192.40	0.00	193.44	0.13	194.48	5.13	195.52	74.50
192.42	0.00	193.46	0.13	194.50	5.40	195.54	78.15
192.44	0.00	193.48	0.13	194.52	5.68	195.56	81.90
192.46	0.00	193.50	0.14	194.54	5.97	195.58	85.21
192.48	0.00	193.52	0.14	194.56	6.26	195.60	88.58
192.50	0.00	193.54	0.14	194.58	6.55	195.62	91.99
192.52	0.00	193.56	0.14	194.60	6.85	195.64	95.46
192.54	0.00	193.58	0.14	194.62	7.15	195.66	98.98
192.56	0.00	193.60	0.15	194.64	7.46	195.68	102.55
192.58	0.00	193.62	0.15	194.66	7.77	195.70	106.17
192.60	0.00	193.64	0.15	194.68	8.09	195.72	109.84
192.62	0.00	193.66	0.15	194.70	8.40	195.74	113.56
192.64	0.00	193.68	0.15	194.72	8.72	195.76	117.33
192.66	0.00	193.70	0.16	194.74	9.05	195.78	121.22
192.68	0.00	193.72	0.16	194.76	9.38	195.80	125.17
192.70	0.00	193.74	0.16	194.78	9.71	195.82	129.17
192.72	0.00	193.76	0.16	194.80	10.05	195.84	133.22
192.74	0.00	193.78	0.16	194.82	10.39	195.86	137.32
192.76	0.01	193.80	0.16	194.84	10.73	195.88	141.48
192.78	0.01	193.82	0.17	194.86	11.07	195.90	145.68
192.80	0.02	193.84	0.17	194.88	11.42	195.92	149.94
192.82	0.02	193.86	0.17	194.90	11.77	195.94	154.25
192.84	0.03	193.88	0.17	194.92	12.13	195.96	158.60
192.86	0.04	193.90	0.17	194.94	12.49	195.98	162.90
192.88	0.05	193.92	0.17	194.96	12.85	196.00	**167.24**
192.90	0.05	193.94	0.17	194.98	13.54		
192.92	0.06	193.96	0.19	195.00	14.52		
192.94	0.06	193.98	0.25	195.02	15.67		
192.96	0.06	194.00	0.33	195.04	16.98		
192.98	0.07	194.02	0.42	195.06	18.41		
193.00	0.07	194.04	0.53	195.08	19.96		
193.02	0.08	194.06	0.66	195.10	21.62		

Summary for Pond B-14: Basin #14

Inflow Area = 2.148 ac, 23.65% Impervious, Inflow Depth = 3.02" for Current 10 yr event
Inflow = 6.79 cfs @ 12.17 hrs, Volume= 0.540 af
Outflow = 2.00 cfs @ 12.51 hrs, Volume= 0.460 af, Atten= 71%, Lag= 20.0 min
Primary = 2.00 cfs @ 12.51 hrs, Volume= 0.460 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.72' @ 12.51 hrs Surf.Area= 7,033 sf Storage= 11,401 cf

Plug-Flow detention time= 431.9 min calculated for 0.459 af (85% of inflow)
Center-of-Mass det. time= 364.2 min (1,172.9 - 808.7)

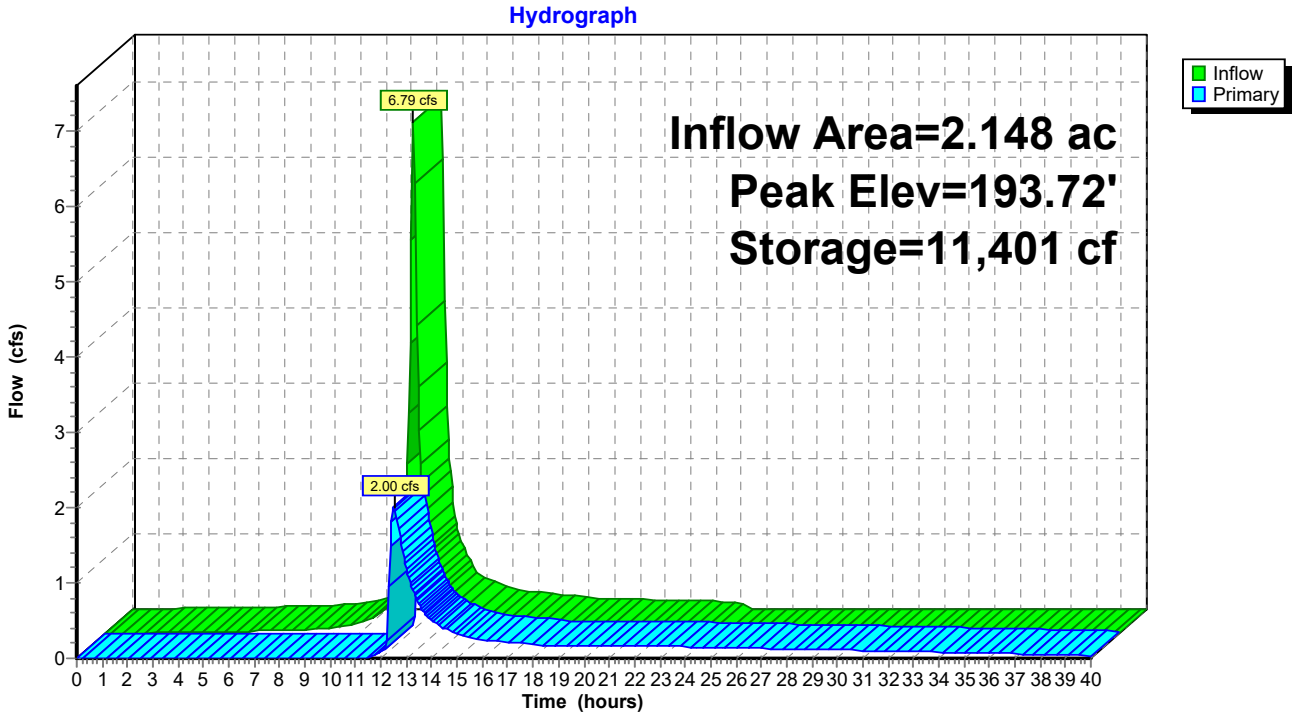
Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	28,705 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	6,224	0	0
193.00	6,689	6,457	6,457
194.00	7,167	6,928	13,385
195.00	7,657	7,412	20,797
196.00	8,160	7,909	28,705

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 194.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0137 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.40'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.45'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.44'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.99 cfs @ 12.51 hrs HW=193.72' (Free Discharge)
- **1=Culvert** (Passes 1.99 cfs of 12.96 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.31 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.81 cfs @ 1.70 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-14: Basin #14



Stage-Discharge for Pond B-14: Basin #14

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.00	0.00	193.04	0.12	194.08	6.54	195.12	92.90
192.02	0.00	193.06	0.12	194.10	6.84	195.14	96.41
192.04	0.00	193.08	0.12	194.12	7.14	195.16	99.96
192.06	0.00	193.10	0.13	194.14	7.45	195.18	103.57
192.08	0.00	193.12	0.13	194.16	7.76	195.20	107.23
192.10	0.00	193.14	0.13	194.18	8.07	195.22	110.93
192.12	0.00	193.16	0.13	194.20	8.39	195.24	114.69
192.14	0.00	193.18	0.13	194.22	8.71	195.26	118.57
192.16	0.00	193.20	0.14	194.24	9.04	195.28	122.50
192.18	0.00	193.22	0.14	194.26	9.37	195.30	126.48
192.20	0.00	193.24	0.14	194.28	9.70	195.32	130.52
192.22	0.00	193.26	0.14	194.30	10.03	195.34	134.61
192.24	0.00	193.28	0.14	194.32	10.37	195.36	138.75
192.26	0.00	193.30	0.15	194.34	10.72	195.38	142.94
192.28	0.00	193.32	0.15	194.36	11.06	195.40	147.18
192.30	0.00	193.34	0.15	194.38	11.41	195.42	151.47
192.32	0.00	193.36	0.15	194.40	11.76	195.44	155.82
192.34	0.00	193.38	0.15	194.42	12.12	195.46	160.10
192.36	0.00	193.40	0.16	194.44	12.47	195.48	164.43
192.38	0.00	193.42	0.16	194.46	13.17	195.50	168.80
192.40	0.00	193.44	0.16	194.48	14.14	195.52	173.21
192.42	0.00	193.46	0.17	194.50	15.29	195.54	177.66
192.44	0.00	193.48	0.23	194.52	16.59	195.56	182.16
192.46	0.01	193.50	0.31	194.54	17.89	195.58	186.69
192.48	0.01	193.52	0.41	194.56	19.09	195.60	191.27
192.50	0.02	193.54	0.52	194.58	20.40	195.62	195.89
192.52	0.02	193.56	0.64	194.60	21.80	195.64	200.54
192.54	0.03	193.58	0.78	194.62	23.29	195.66	205.31
192.56	0.04	193.60	0.93	194.64	24.88	195.68	210.12
192.58	0.05	193.62	1.08	194.66	26.62	195.70	214.98
192.60	0.05	193.64	1.25	194.68	28.47	195.72	219.87
192.62	0.06	193.66	1.42	194.70	30.42	195.74	224.81
192.64	0.06	193.68	1.60	194.72	32.47	195.76	229.79
192.66	0.06	193.70	1.79	194.74	34.62	195.78	234.81
192.68	0.07	193.72	1.99	194.76	36.86	195.80	239.88
192.70	0.07	193.74	2.20	194.78	39.21	195.82	244.98
192.72	0.08	193.76	2.41	194.80	41.65	195.84	250.13
192.74	0.08	193.78	2.62	194.82	44.18	195.86	255.41
192.76	0.08	193.80	2.85	194.84	46.82	195.88	260.73
192.78	0.09	193.82	3.08	194.86	49.60	195.90	266.10
192.80	0.09	193.84	3.31	194.88	52.49	195.92	271.51
192.82	0.09	193.86	3.55	194.90	55.48	195.94	276.96
192.84	0.10	193.88	3.80	194.92	58.58	195.96	282.46
192.86	0.10	193.90	4.05	194.94	61.79	195.98	288.00
192.88	0.10	193.92	4.31	194.96	65.10	196.00	**293.59**
192.90	0.10	193.94	4.57	194.98	68.51		
192.92	0.11	193.96	4.84	195.00	72.04		
192.94	0.11	193.98	5.11	195.02	75.67		
192.96	0.11	194.00	5.39	195.04	79.41		
192.98	0.11	194.02	5.67	195.06	82.70		
193.00	0.12	194.04	5.96	195.08	86.05		
193.02	0.12	194.06	6.25	195.10	89.45		

Summary for Pond B-15: Basin #15

Inflow Area = 2.365 ac, 58.73% Impervious, Inflow Depth = 3.86" for Current 10 yr event
Inflow = 9.08 cfs @ 12.17 hrs, Volume= 0.762 af
Outflow = 5.62 cfs @ 12.30 hrs, Volume= 0.634 af, Atten= 38%, Lag= 7.8 min
Primary = 5.62 cfs @ 12.30 hrs, Volume= 0.634 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 199.06' @ 12.30 hrs Surf.Area= 5,423 sf Storage= 13,916 cf

Plug-Flow detention time= 197.8 min calculated for 0.633 af (83% of inflow)
Center-of-Mass det. time= 125.1 min (901.2 - 776.1)

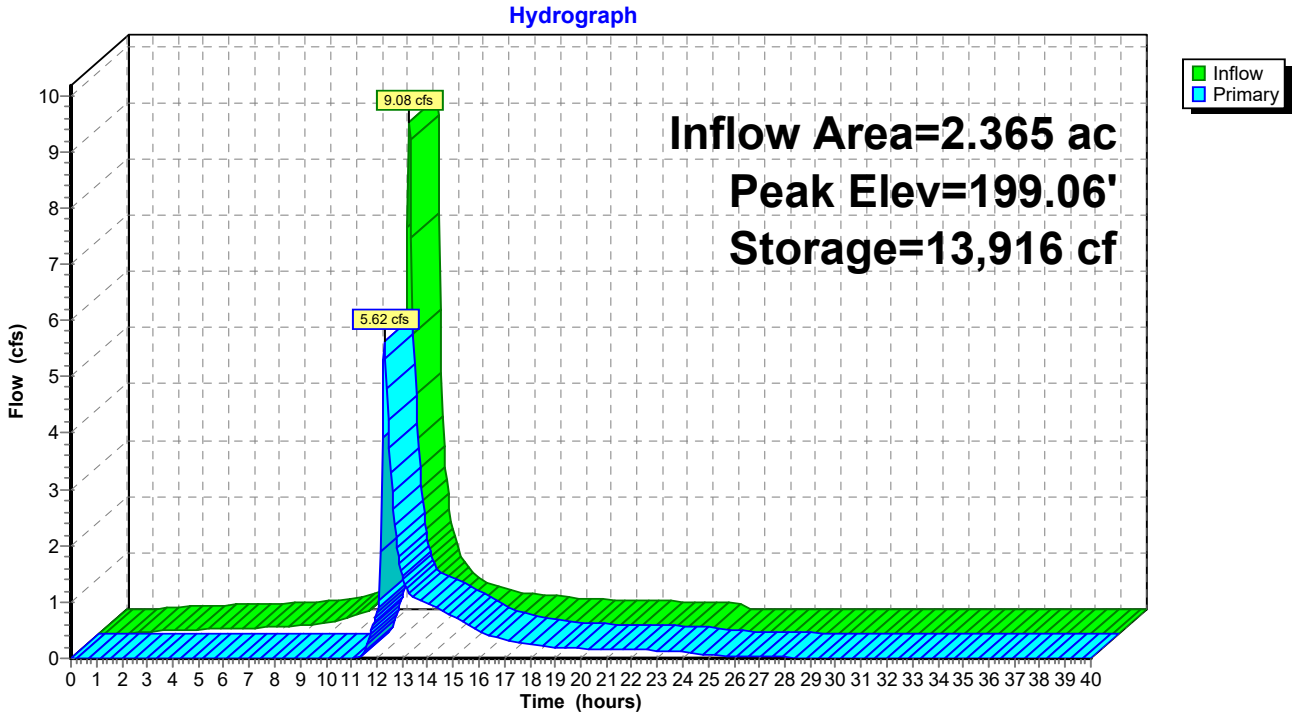
Volume	Invert	Avail.Storage	Storage Description
#1	196.00'	19,269 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.00	3,706	0	0
197.00	4,236	3,971	3,971
198.00	4,795	4,516	8,487
199.00	5,384	5,090	13,576
200.00	6,002	5,693	19,269

Device	Routing	Invert	Outlet Devices
#1	Primary	194.65'	**18.0" Round Culvert** L= 203.0' Ke= 0.500 Inlet / Outlet Invert= 194.65' / 192.00' S= 0.0131 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	197.35'	**6.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	198.58'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	199.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.61 cfs @ 12.30 hrs HW=199.06' (Free Discharge)
- **1=Culvert** (Passes 5.61 cfs of 14.65 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.33 cfs @ 5.78 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.28 cfs @ 2.27 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-15: Basin #15



Stage-Discharge for Pond B-15: Basin #15

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.00	0.00	197.04	0.00	198.08	0.75	199.12	6.41
196.02	0.00	197.06	0.00	198.10	0.77	199.14	6.70
196.04	0.00	197.08	0.00	198.12	0.78	199.16	6.99
196.06	0.00	197.10	0.00	198.14	0.80	199.18	7.28
196.08	0.00	197.12	0.00	198.16	0.81	199.20	7.58
196.10	0.00	197.14	0.00	198.18	0.83	199.22	7.89
196.12	0.00	197.16	0.00	198.20	0.84	199.24	8.19
196.14	0.00	197.18	0.00	198.22	0.86	199.26	8.51
196.16	0.00	197.20	0.00	198.24	0.87	199.28	8.82
196.18	0.00	197.22	0.00	198.26	0.89	199.30	9.14
196.20	0.00	197.24	0.00	198.28	0.90	199.32	9.46
196.22	0.00	197.26	0.00	198.30	0.91	199.34	9.79
196.24	0.00	197.28	0.00	198.32	0.93	199.36	10.12
196.26	0.00	197.30	0.00	198.34	0.94	199.38	10.46
196.28	0.00	197.32	0.00	198.36	0.95	199.40	10.79
196.30	0.00	197.34	0.00	198.38	0.97	199.42	11.14
196.32	0.00	197.36	0.00	198.40	0.98	199.44	11.48
196.34	0.00	197.38	0.00	198.42	0.99	199.46	11.83
196.36	0.00	197.40	0.01	198.44	1.00	199.48	12.18
196.38	0.00	197.42	0.02	198.46	1.02	199.50	12.53
196.40	0.00	197.44	0.03	198.48	1.03	199.52	12.89
196.42	0.00	197.46	0.04	198.50	1.04	199.54	13.25
196.44	0.00	197.48	0.05	198.52	1.05	199.56	13.61
196.46	0.00	197.50	0.07	198.54	1.06	199.58	13.98
196.48	0.00	197.52	0.09	198.56	1.08	199.60	14.35
196.50	0.00	197.54	0.11	198.58	1.09	199.62	14.72
196.52	0.00	197.56	0.13	198.60	1.13	199.64	15.09
196.54	0.00	197.58	0.15	198.62	1.21	199.66	15.42
196.56	0.00	197.60	0.18	198.64	1.31	199.68	15.44
196.58	0.00	197.62	0.20	198.66	1.43	199.70	15.47
196.60	0.00	197.64	0.23	198.68	1.55	199.72	15.49
196.62	0.00	197.66	0.26	198.70	1.69	199.74	15.52
196.64	0.00	197.68	0.29	198.72	1.84	199.76	15.54
196.66	0.00	197.70	0.32	198.74	2.00	199.78	15.57
196.68	0.00	197.72	0.35	198.76	2.17	199.80	15.59
196.70	0.00	197.74	0.38	198.78	2.35	199.82	15.62
196.72	0.00	197.76	0.41	198.80	2.54	199.84	15.64
196.74	0.00	197.78	0.44	198.82	2.73	199.86	15.66
196.76	0.00	197.80	0.47	198.84	2.94	199.88	15.69
196.78	0.00	197.82	0.50	198.86	3.15	199.90	15.71
196.80	0.00	197.84	0.52	198.88	3.36	199.92	15.74
196.82	0.00	197.86	0.55	198.90	3.58	199.94	15.76
196.84	0.00	197.88	0.57	198.92	3.81	199.96	15.79
196.86	0.00	197.90	0.59	198.94	4.05	199.98	15.81
196.88	0.00	197.92	0.61	198.96	4.29	200.00	**15.95**
196.90	0.00	197.94	0.63	198.98	4.54		
196.92	0.00	197.96	0.65	199.00	4.79		
196.94	0.00	197.98	0.66	199.02	5.05		
196.96	0.00	198.00	0.68	199.04	5.31		
196.98	0.00	198.02	0.70	199.06	5.58		
197.00	0.00	198.04	0.72	199.08	5.85		
197.02	0.00	198.06	0.74	199.10	6.13		

Summary for Pond B-16A: Basin #16A

Inflow Area = 1.876 ac, 45.47% Impervious, Inflow Depth = 3.54" for Current 10 yr event
Inflow = 6.72 cfs @ 12.17 hrs, Volume= 0.554 af
Outflow = 4.74 cfs @ 12.27 hrs, Volume= 0.475 af, Atten= 30%, Lag= 6.1 min
Primary = 4.74 cfs @ 12.27 hrs, Volume= 0.475 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.18' @ 12.27 hrs Surf.Area= 4,201 sf Storage= 7,321 cf

Plug-Flow detention time= 135.0 min calculated for 0.474 af (86% of inflow)
Center-of-Mass det. time= 68.3 min (854.9 - 786.6)

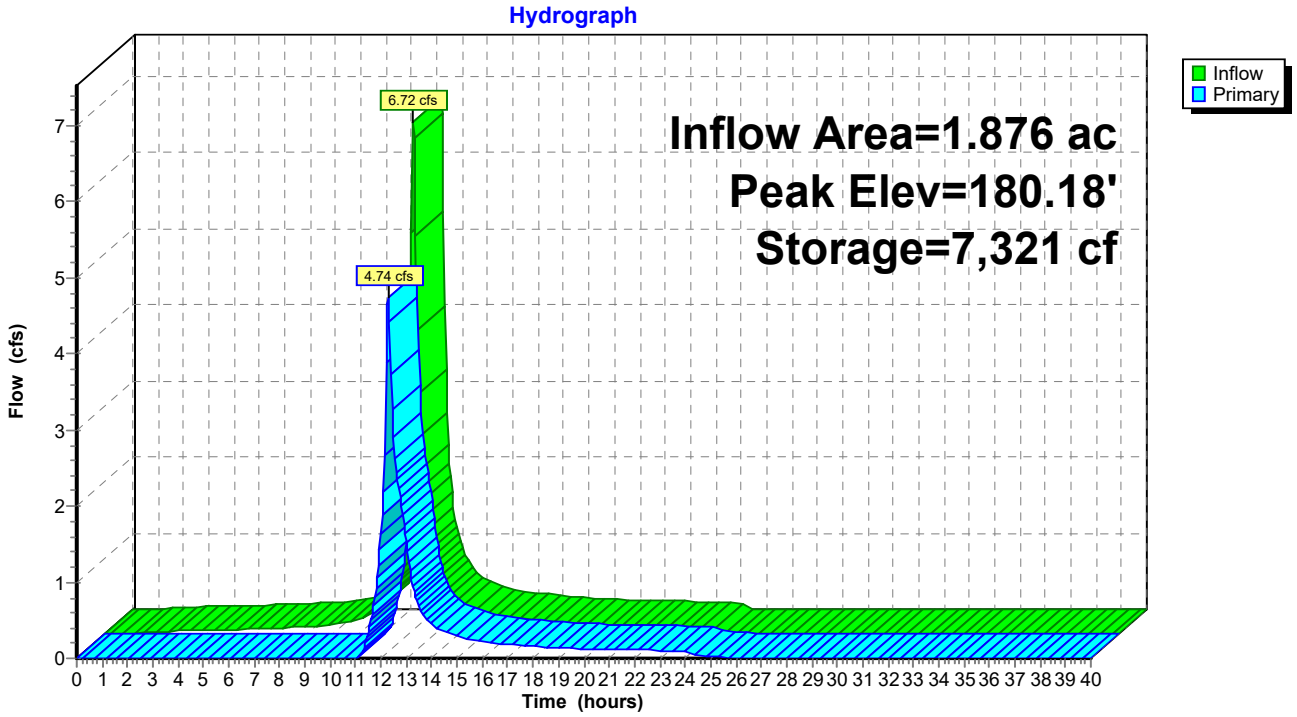
Volume	Invert	Avail.Storage	Storage Description
#1	178.00'	16,318 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
178.00	2,543	0	0
179.00	3,287	2,915	2,915
180.00	4,059	3,673	6,588
181.00	4,858	4,459	11,047
182.00	5,685	5,272	16,318

Device	Routing	Invert	Outlet Devices
#1	Primary	176.65'	**18.0" Round Culvert** L= 53.0' Ke= 0.500 Inlet / Outlet Invert= 176.65' / 172.00' S= 0.0877 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.16'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.64 cfs @ 12.27 hrs HW=180.17' (Free Discharge)
- **1=Culvert** (Passes 4.64 cfs of 14.16 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.94 cfs @ 4.41 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.70 cfs @ 1.66 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-16A: Basin #16A



Stage-Discharge for Pond B-16A: Basin #16A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.00	0.00	179.04	0.00	180.08	3.69	181.12	16.41
178.02	0.00	179.06	0.00	180.10	3.89	181.14	16.46
178.04	0.00	179.08	0.00	180.12	4.10	181.16	16.50
178.06	0.00	179.10	0.00	180.14	4.32	181.18	16.54
178.08	0.00	179.12	0.00	180.16	4.54	181.20	16.59
178.10	0.00	179.14	0.00	180.18	4.77	181.22	16.63
178.12	0.00	179.16	0.00	180.20	5.01	181.24	16.67
178.14	0.00	179.18	0.02	180.22	5.25	181.26	16.72
178.16	0.00	179.20	0.05	180.24	5.50	181.28	16.76
178.18	0.00	179.22	0.09	180.26	5.76	181.30	16.80
178.20	0.00	179.24	0.15	180.28	6.02	181.32	16.85
178.22	0.00	179.26	0.20	180.30	6.29	181.34	16.89
178.24	0.00	179.28	0.27	180.32	6.56	181.36	16.93
178.26	0.00	179.30	0.34	180.34	6.84	181.38	16.97
178.28	0.00	179.32	0.41	180.36	7.12	181.40	17.02
178.30	0.00	179.34	0.49	180.38	7.41	181.42	17.06
178.32	0.00	179.36	0.57	180.40	7.70	181.44	17.10
178.34	0.00	179.38	0.66	180.42	8.00	181.46	17.14
178.36	0.00	179.40	0.75	180.44	8.30	181.48	17.19
178.38	0.00	179.42	0.85	180.46	8.60	181.50	17.23
178.40	0.00	179.44	0.95	180.48	8.91	181.52	17.27
178.42	0.00	179.46	1.05	180.50	9.23	181.54	17.31
178.44	0.00	179.48	1.16	180.52	9.55	181.56	17.35
178.46	0.00	179.50	1.27	180.54	9.87	181.58	17.40
178.48	0.00	179.52	1.36	180.56	10.19	181.60	17.44
178.50	0.00	179.54	1.44	180.58	10.52	181.62	17.48
178.52	0.00	179.56	1.51	180.60	10.86	181.64	17.52
178.54	0.00	179.58	1.58	180.62	11.20	181.66	17.56
178.56	0.00	179.60	1.65	180.64	11.54	181.68	17.60
178.58	0.00	179.62	1.71	180.66	11.88	181.70	17.64
178.60	0.00	179.64	1.77	180.68	12.23	181.72	17.69
178.62	0.00	179.66	1.83	180.70	12.58	181.74	17.73
178.64	0.00	179.68	1.89	180.72	12.94	181.76	17.77
178.66	0.00	179.70	1.94	180.74	13.29	181.78	17.81
178.68	0.00	179.72	2.00	180.76	13.66	181.80	17.85
178.70	0.00	179.74	2.05	180.78	14.02	181.82	17.89
178.72	0.00	179.76	2.10	180.80	14.39	181.84	17.93
178.74	0.00	179.78	2.15	180.82	14.76	181.86	17.97
178.76	0.00	179.80	2.20	180.84	15.13	181.88	18.01
178.78	0.00	179.82	2.24	180.86	15.51	181.90	18.05
178.80	0.00	179.84	2.29	180.88	15.87	181.92	18.09
178.82	0.00	179.86	2.33	180.90	15.92	181.94	18.13
178.84	0.00	179.88	2.38	180.92	15.96	181.96	18.29
178.86	0.00	179.90	2.42	180.94	16.01	181.98	18.82
178.88	0.00	179.92	2.48	180.96	16.05	182.00	**19.56**
178.90	0.00	179.94	2.57	180.98	16.10		
178.92	0.00	179.96	2.69	181.00	16.14		
178.94	0.00	179.98	2.83	181.02	16.19		
178.96	0.00	180.00	2.98	181.04	16.23		
178.98	0.00	180.02	3.14	181.06	16.28		
179.00	0.00	180.04	3.31	181.08	16.32		
179.02	0.00	180.06	3.50	181.10	16.37		

Summary for Pond B-16B: Basin #16B

Inflow Area = 1.877 ac, 43.74% Impervious, Inflow Depth = 3.50" for Current 10 yr event
Inflow = 6.66 cfs @ 12.17 hrs, Volume= 0.548 af
Outflow = 3.69 cfs @ 12.32 hrs, Volume= 0.468 af, Atten= 45%, Lag= 9.0 min
Primary = 3.69 cfs @ 12.32 hrs, Volume= 0.468 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.28' @ 12.32 hrs Surf.Area= 4,648 sf Storage= 8,862 cf

Plug-Flow detention time= 147.8 min calculated for 0.468 af (85% of inflow)
Center-of-Mass det. time= 80.5 min (868.5 - 788.1)

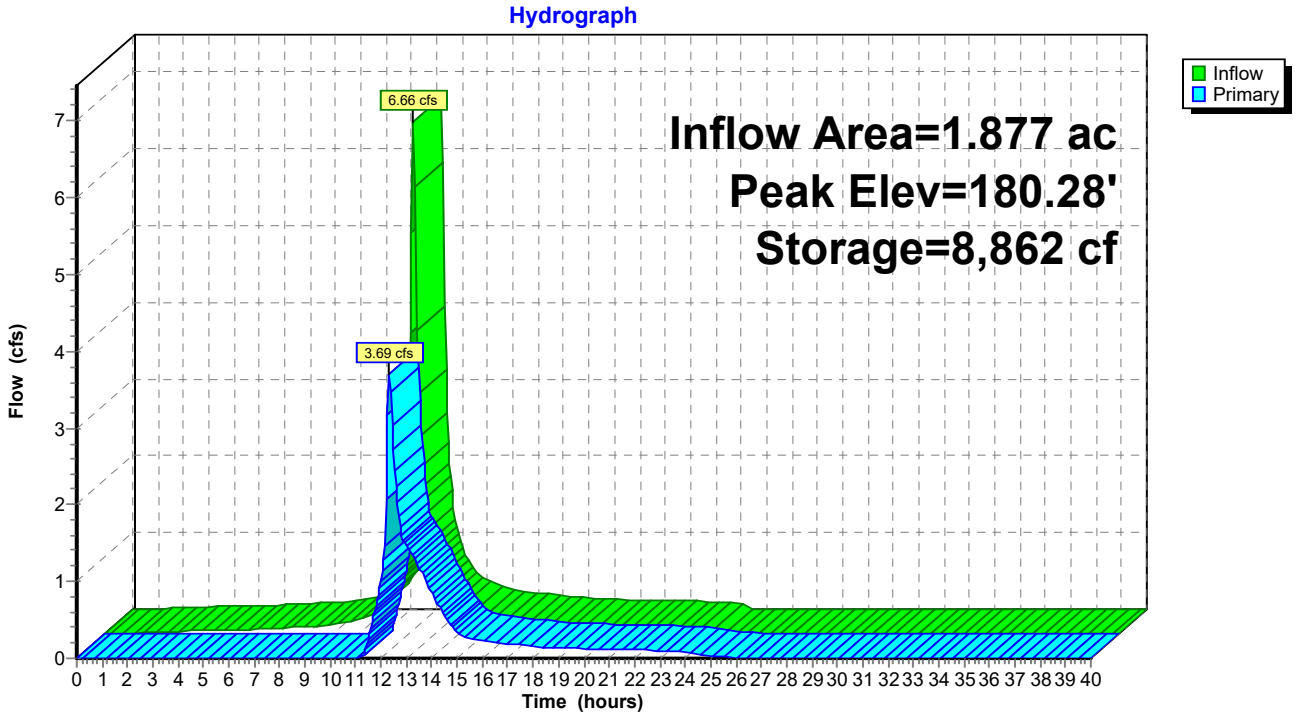
Volume	Invert	Avail.Storage	Storage Description
#1	178.00'	17,892 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
178.00	3,145	0	0
179.00	3,781	3,463	3,463
180.00	4,451	4,116	7,579
181.00	5,149	4,800	12,379
182.00	5,877	5,513	17,892

Device	Routing	Invert	Outlet Devices
#1	Primary	176.65'	**18.0" Round Culvert** L= 53.0' Ke= 0.500 Inlet / Outlet Invert= 176.65' / 172.00' S= 0.0877 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.00'	**24.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	180.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.67'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.62 cfs @ 12.32 hrs HW=180.28' (Free Discharge)
- **1=Culvert** (Passes 3.62 cfs of 14.43 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.75 cfs @ 5.26 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.87 cfs @ 1.72 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-16B: Basin #16B



Stage-Discharge for Pond B-16B: Basin #16B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.00	0.00	179.04	0.05	180.08	1.90	181.12	55.73
178.02	0.00	179.06	0.09	180.10	2.03	181.14	58.79
178.04	0.00	179.08	0.15	180.12	2.17	181.16	61.96
178.06	0.00	179.10	0.20	180.14	2.33	181.18	65.24
178.08	0.00	179.12	0.27	180.16	2.50	181.20	68.62
178.10	0.00	179.14	0.34	180.18	2.67	181.22	72.10
178.12	0.00	179.16	0.41	180.20	2.85	181.24	75.70
178.14	0.00	179.18	0.48	180.22	3.05	181.26	79.40
178.16	0.00	179.20	0.54	180.24	3.25	181.28	82.94
178.18	0.00	179.22	0.58	180.26	3.45	181.30	86.27
178.20	0.00	179.24	0.63	180.28	3.67	181.32	89.66
178.22	0.00	179.26	0.67	180.30	3.89	181.34	93.11
178.24	0.00	179.28	0.71	180.32	4.11	181.36	96.60
178.26	0.00	179.30	0.74	180.34	4.35	181.38	100.15
178.28	0.00	179.32	0.78	180.36	4.59	181.40	103.75
178.30	0.00	179.34	0.81	180.38	4.83	181.42	107.40
178.32	0.00	179.36	0.84	180.40	5.08	181.44	111.09
178.34	0.00	179.38	0.87	180.42	5.34	181.46	114.84
178.36	0.00	179.40	0.90	180.44	5.60	181.48	118.67
178.38	0.00	179.42	0.93	180.46	5.87	181.50	122.59
178.40	0.00	179.44	0.96	180.48	6.14	181.52	126.57
178.42	0.00	179.46	0.98	180.50	6.42	181.54	130.59
178.44	0.00	179.48	1.01	180.52	6.70	181.56	134.67
178.46	0.00	179.50	1.03	180.54	6.99	181.58	138.80
178.48	0.00	179.52	1.06	180.56	7.28	181.60	142.98
178.50	0.00	179.54	1.08	180.58	7.57	181.62	147.21
178.52	0.00	179.56	1.11	180.60	7.87	181.64	151.50
178.54	0.00	179.58	1.13	180.62	8.18	181.66	155.83
178.56	0.00	179.60	1.15	180.64	8.48	181.68	160.16
178.58	0.00	179.62	1.17	180.66	8.80	181.70	164.48
178.60	0.00	179.64	1.20	180.68	9.23	181.72	168.84
178.62	0.00	179.66	1.22	180.70	10.04	181.74	173.25
178.64	0.00	179.68	1.24	180.72	11.07	181.76	177.70
178.66	0.00	179.70	1.26	180.74	12.26	181.78	182.19
178.68	0.00	179.72	1.28	180.76	13.59	181.80	186.72
178.70	0.00	179.74	1.30	180.78	15.04	181.82	191.29
178.72	0.00	179.76	1.32	180.80	16.61	181.84	195.90
178.74	0.00	179.78	1.34	180.82	18.28	181.86	200.55
178.76	0.00	179.80	1.36	180.84	20.04	181.88	205.28
178.78	0.00	179.82	1.38	180.86	21.90	181.90	210.08
178.80	0.00	179.84	1.40	180.88	23.89	181.92	214.93
178.82	0.00	179.86	1.41	180.90	26.01	181.94	219.82
178.84	0.00	179.88	1.43	180.92	28.24	181.96	224.75
178.86	0.00	179.90	1.45	180.94	30.57	181.98	229.73
178.88	0.00	179.92	1.47	180.96	33.01	182.00	**234.74**
178.90	0.00	179.94	1.48	180.98	35.54		
178.92	0.00	179.96	1.50	181.00	38.18		
178.94	0.00	179.98	1.52	181.02	40.92		
178.96	0.00	180.00	1.54	181.04	43.75		
178.98	0.00	180.02	1.59	181.06	46.69		
179.00	0.00	180.04	1.67	181.08	49.75		
179.02	0.02	180.06	1.78	181.10	52.77		

Summary for Pond B-17A: Basin #17A

Inflow Area = 1.324 ac, 14.58% Impervious, Inflow Depth = 2.80" for Current 10 yr event
Inflow = 3.94 cfs @ 12.18 hrs, Volume= 0.309 af
Outflow = 0.17 cfs @ 14.94 hrs, Volume= 0.270 af, Atten= 96%, Lag= 165.6 min
Primary = 0.17 cfs @ 14.94 hrs, Volume= 0.270 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.39' @ 14.94 hrs Surf.Area= 6,916 sf Storage= 8,653 cf

Plug-Flow detention time= 606.1 min calculated for 0.270 af (88% of inflow)
Center-of-Mass det. time= 545.9 min (1,366.3 - 820.4)

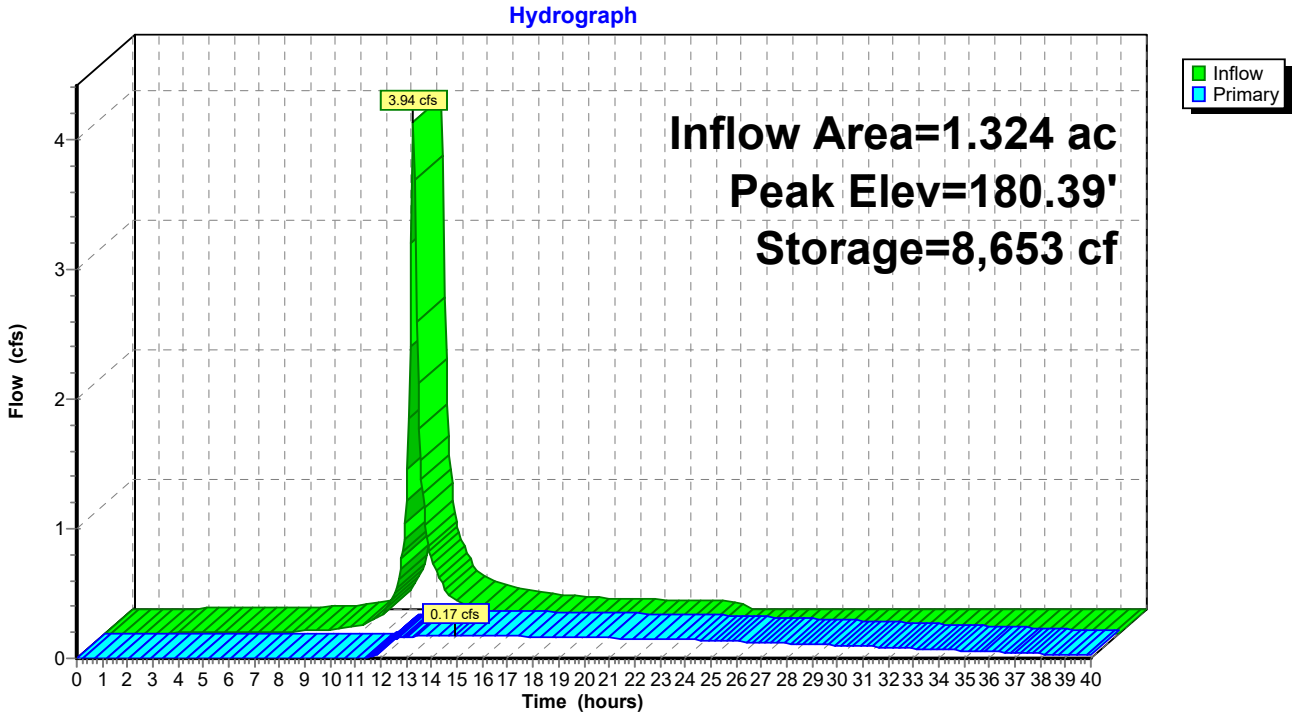
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	30,377 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	5,508	0	0
180.00	6,502	6,005	6,005
181.00	7,552	7,027	13,032
182.00	8,658	8,105	21,137
183.00	9,821	9,240	30,377

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 177.00' S= 0.0163 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.18'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.17 cfs @ 14.94 hrs HW=180.39' (Free Discharge)
- **1=Culvert** (Passes 0.17 cfs of 12.02 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 5.07 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-17A: Basin #17A



Stage-Discharge for Pond B-17A: Basin #17A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.14	181.08	0.22	182.12	9.08
179.02	0.00	180.06	0.14	181.10	0.22	182.14	10.74
179.04	0.00	180.08	0.15	181.12	0.22	182.16	12.52
179.06	0.00	180.10	0.15	181.14	0.22	182.18	14.45
179.08	0.00	180.12	0.15	181.16	0.22	182.20	16.49
179.10	0.00	180.14	0.15	181.18	0.23	182.22	18.64
179.12	0.00	180.16	0.15	181.20	0.23	182.24	20.90
179.14	0.00	180.18	0.16	181.22	0.23	182.26	23.26
179.16	0.00	180.20	0.16	181.24	0.23	182.28	25.73
179.18	0.00	180.22	0.16	181.26	0.23	182.30	28.30
179.20	0.00	180.24	0.16	181.28	0.23	182.32	30.97
179.22	0.00	180.26	0.16	181.30	0.23	182.34	33.75
179.24	0.01	180.28	0.16	181.32	0.23	182.36	36.66
179.26	0.01	180.30	0.17	181.34	0.24	182.38	39.70
179.28	0.02	180.32	0.17	181.36	0.24	182.40	42.85
179.30	0.02	180.34	0.17	181.38	0.24	182.42	46.11
179.32	0.03	180.36	0.17	181.40	0.24	182.44	49.49
179.34	0.04	180.38	0.17	181.42	0.24	182.46	52.97
179.36	0.05	180.40	0.17	181.44	0.24	182.48	56.57
179.38	0.05	180.42	0.17	181.46	0.24	182.50	60.28
179.40	0.06	180.44	0.18	181.48	0.24	182.52	64.09
179.42	0.06	180.46	0.18	181.50	0.24	182.54	68.03
179.44	0.06	180.48	0.18	181.52	0.25	182.56	71.80
179.46	0.07	180.50	0.18	181.54	0.25	182.58	75.38
179.48	0.07	180.52	0.18	181.56	0.25	182.60	79.01
179.50	0.08	180.54	0.18	181.58	0.25	182.62	82.71
179.52	0.08	180.56	0.19	181.60	0.25	182.64	86.46
179.54	0.08	180.58	0.19	181.62	0.25	182.66	90.26
179.56	0.09	180.60	0.19	181.64	0.25	182.68	94.12
179.58	0.09	180.62	0.19	181.66	0.25	182.70	98.03
179.60	0.09	180.64	0.19	181.68	0.25	182.72	102.00
179.62	0.10	180.66	0.19	181.70	0.26	182.74	106.02
179.64	0.10	180.68	0.19	181.72	0.26	182.76	110.13
179.66	0.10	180.70	0.20	181.74	0.26	182.78	114.33
179.68	0.10	180.72	0.20	181.76	0.26	182.80	118.59
179.70	0.11	180.74	0.20	181.78	0.26	182.82	122.90
179.72	0.11	180.76	0.20	181.80	0.26	182.84	127.27
179.74	0.11	180.78	0.20	181.82	0.26	182.86	131.70
179.76	0.11	180.80	0.20	181.84	0.26	182.88	136.18
179.78	0.12	180.82	0.20	181.86	0.26	182.90	140.71
179.80	0.12	180.84	0.20	181.88	0.26	182.92	145.30
179.82	0.12	180.86	0.21	181.90	0.27	182.94	149.94
179.84	0.12	180.88	0.21	181.92	0.27	182.96	154.58
179.86	0.12	180.90	0.21	181.94	0.27	182.98	159.22
179.88	0.13	180.92	0.21	181.96	0.39	183.00	**163.90**
179.90	0.13	180.94	0.21	181.98	0.88		
179.92	0.13	180.96	0.21	182.00	1.58		
179.94	0.13	180.98	0.21	182.02	2.48		
179.96	0.13	181.00	0.22	182.04	3.55		
179.98	0.14	181.02	0.22	182.06	4.76		
180.00	0.14	181.04	0.22	182.08	6.09		
180.02	0.14	181.06	0.22	182.10	7.53		

Summary for Pond B-17B: Basin #17B

Inflow Area = 1.385 ac, 37.11% Impervious, Inflow Depth = 3.34" for Current 10 yr event
Inflow = 4.74 cfs @ 12.17 hrs, Volume= 0.386 af
Outflow = 1.60 cfs @ 12.45 hrs, Volume= 0.315 af, Atten= 66%, Lag= 16.4 min
Primary = 1.60 cfs @ 12.45 hrs, Volume= 0.315 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.09' @ 12.45 hrs Surf.Area= 8,150 sf Storage= 8,210 cf

Plug-Flow detention time= 380.4 min calculated for 0.314 af (81% of inflow)
Center-of-Mass det. time= 302.7 min (1,096.9 - 794.2)

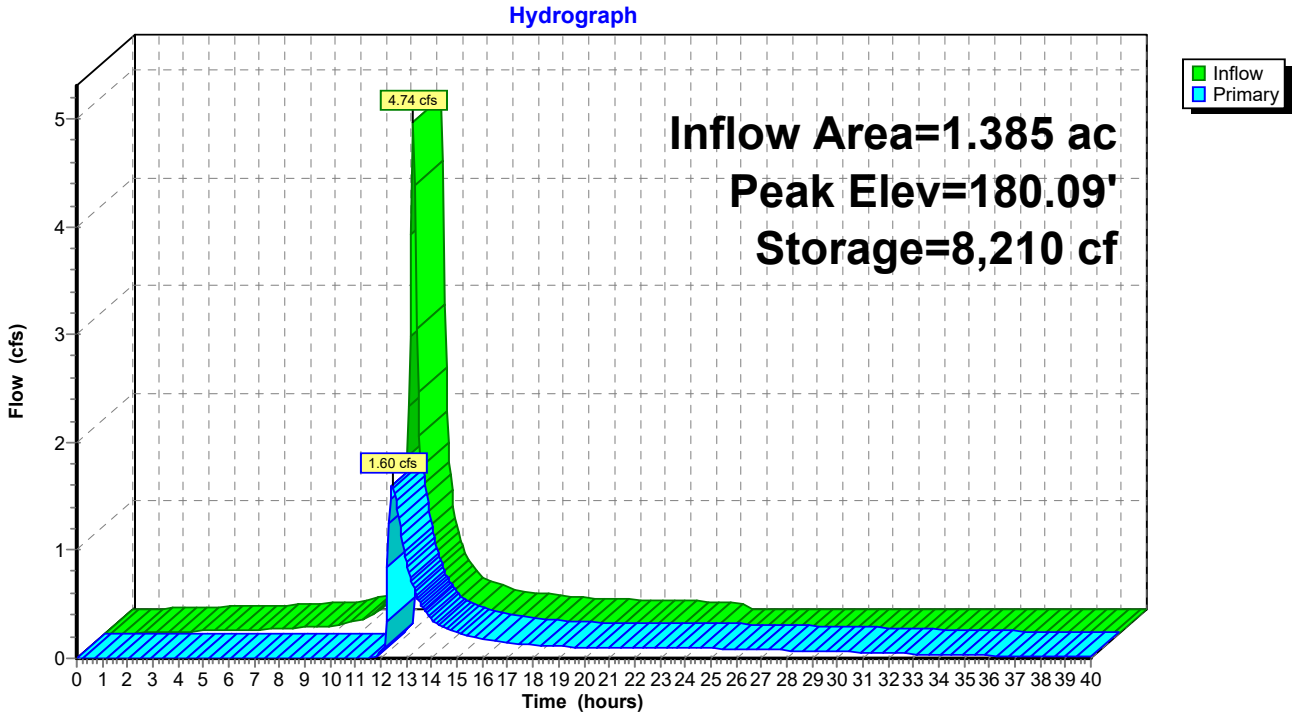
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	37,242 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	6,855	0	0
180.00	8,033	7,444	7,444
181.00	9,268	8,651	16,095
182.00	10,560	9,914	26,009
183.00	11,907	11,234	37,242

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 177.00' S= 0.0163 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.35'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.86'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.60 cfs @ 12.45 hrs HW=180.09' (Free Discharge)
- **1=Culvert** (Passes 1.60 cfs of 11.08 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.85 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.47 cfs @ 1.58 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-17B: Basin #17B



Stage-Discharge for Pond B-17B: Basin #17B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	1.12	181.08	13.93	182.12	24.68
179.02	0.00	180.06	1.29	181.10	13.98	182.14	26.23
179.04	0.00	180.08	1.46	181.12	14.03	182.16	27.91
179.06	0.00	180.10	1.65	181.14	14.08	182.18	29.72
179.08	0.00	180.12	1.85	181.16	14.14	182.20	31.64
179.10	0.00	180.14	2.05	181.18	14.19	182.22	33.66
179.12	0.00	180.16	2.25	181.20	14.24	182.24	35.77
179.14	0.00	180.18	2.47	181.22	14.29	182.26	37.98
179.16	0.00	180.20	2.69	181.24	14.34	182.28	40.29
179.18	0.00	180.22	2.92	181.26	14.39	182.30	42.70
179.20	0.00	180.24	3.15	181.28	14.44	182.32	45.20
179.22	0.00	180.26	3.39	181.30	14.49	182.34	47.80
179.24	0.00	180.28	3.63	181.32	14.54	182.36	50.53
179.26	0.00	180.30	3.88	181.34	14.59	182.38	53.38
179.28	0.00	180.32	4.14	181.36	14.64	182.40	56.34
179.30	0.00	180.34	4.40	181.38	14.69	182.42	59.40
179.32	0.00	180.36	4.67	181.40	14.74	182.44	62.57
179.34	0.00	180.38	4.94	181.42	14.79	182.46	65.84
179.36	0.00	180.40	5.21	181.44	14.84	182.48	69.22
179.38	0.00	180.42	5.49	181.46	14.88	182.50	72.70
179.40	0.00	180.44	5.77	181.48	14.93	182.52	76.29
179.42	0.01	180.46	6.06	181.50	14.98	182.54	79.99
179.44	0.01	180.48	6.35	181.52	15.03	182.56	83.53
179.46	0.02	180.50	6.65	181.54	15.08	182.58	86.87
179.48	0.03	180.52	6.95	181.56	15.13	182.60	90.26
179.50	0.03	180.54	7.26	181.58	15.17	182.62	93.70
179.52	0.04	180.56	7.56	181.60	15.22	182.64	97.19
179.54	0.05	180.58	7.88	181.62	15.27	182.66	100.74
179.56	0.05	180.60	8.19	181.64	15.32	182.68	104.34
179.58	0.06	180.62	8.51	181.66	15.36	182.70	107.98
179.60	0.06	180.64	8.84	181.68	15.41	182.72	111.68
179.62	0.07	180.66	9.17	181.70	15.46	182.74	115.42
179.64	0.07	180.68	9.50	181.72	15.50	182.76	119.25
179.66	0.07	180.70	9.83	181.74	15.55	182.78	123.17
179.68	0.08	180.72	10.17	181.76	15.60	182.80	127.14
179.70	0.08	180.74	10.51	181.78	15.64	182.82	131.17
179.72	0.08	180.76	10.85	181.80	15.69	182.84	135.25
179.74	0.09	180.78	11.20	181.82	15.74	182.86	139.37
179.76	0.09	180.80	11.55	181.84	15.78	182.88	143.55
179.78	0.09	180.82	11.90	181.86	15.83	182.90	147.78
179.80	0.10	180.84	12.26	181.88	15.87	182.92	152.07
179.82	0.10	180.86	12.62	181.90	15.92	182.94	156.40
179.84	0.10	180.88	12.98	181.92	15.96	182.96	160.73
179.86	0.10	180.90	13.35	181.94	16.01	182.98	165.05
179.88	0.14	180.92	13.51	181.96	16.17	183.00	**169.41**
179.90	0.21	180.94	13.56	181.98	16.71		
179.92	0.30	180.96	13.61	182.00	17.46		
179.94	0.41	180.98	13.67	182.02	18.36		
179.96	0.53	181.00	13.72	182.04	19.41		
179.98	0.66	181.02	13.77	182.06	20.57		
180.00	0.80	181.04	13.83	182.08	21.84		
180.02	0.95	181.06	13.88	182.10	23.21		

Summary for Pond B-2: Basin #2

Inflow Area = 1.894 ac, 38.23% Impervious, Inflow Depth = 3.37" for Current 10 yr event
Inflow = 6.52 cfs @ 12.17 hrs, Volume= 0.532 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond B-1 : Basin #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 211.38' @ 24.60 hrs Surf.Area= 9,767 sf Storage= 23,162 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

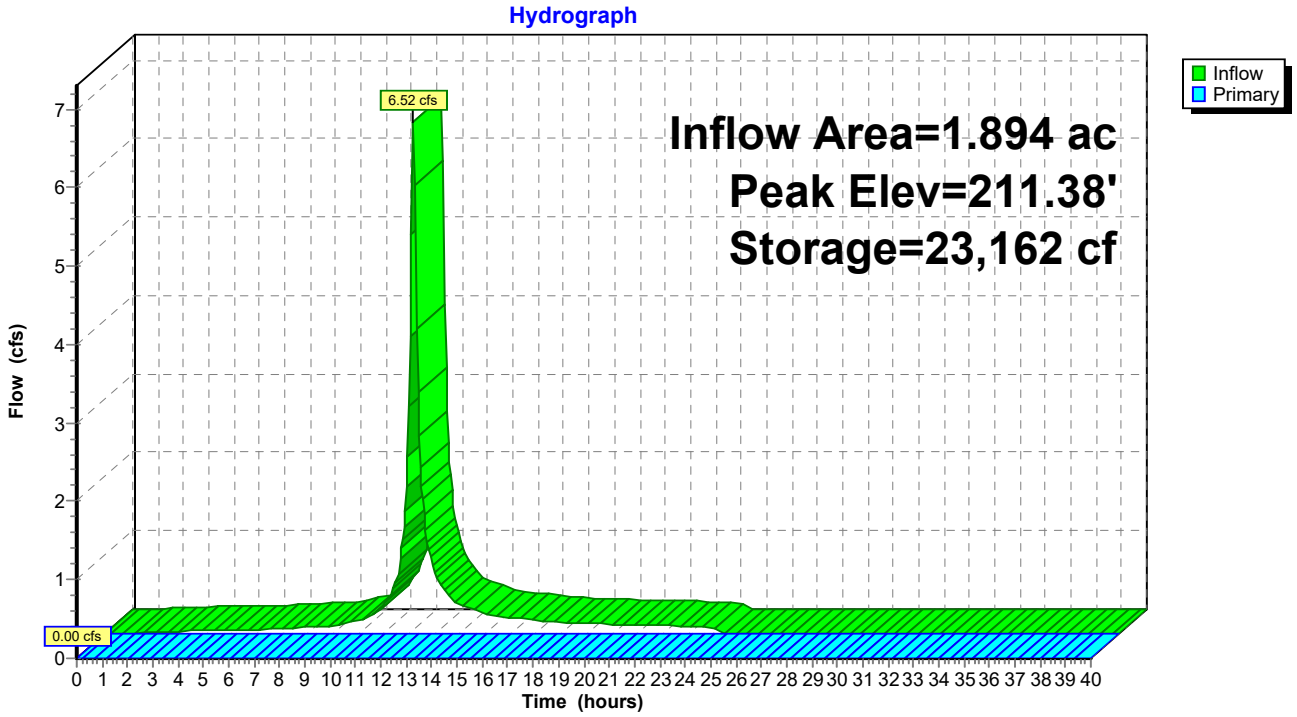
Volume	Invert	Avail.Storage	Storage Description
#1	208.30'	29,385 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
208.30	0	0	0
209.00	7,501	2,625	2,625
210.00	8,431	7,966	10,591
211.00	9,390	8,911	19,502
212.00	10,376	9,883	29,385

Device	Routing	Invert	Outlet Devices
#1	Primary	211.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=208.30' (Free Discharge)
1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-2: Basin #2



Stage-Discharge for Pond B-2: Basin #2

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
208.30	0.00	209.34	0.00	210.38	0.00	211.42	0.00
208.32	0.00	209.36	0.00	210.40	0.00	211.44	0.00
208.34	0.00	209.38	0.00	210.42	0.00	211.46	0.00
208.36	0.00	209.40	0.00	210.44	0.00	211.48	0.00
208.38	0.00	209.42	0.00	210.46	0.00	211.50	0.00
208.40	0.00	209.44	0.00	210.48	0.00	211.52	0.33
208.42	0.00	209.46	0.00	210.50	0.00	211.54	0.94
208.44	0.00	209.48	0.00	210.52	0.00	211.56	1.72
208.46	0.00	209.50	0.00	210.54	0.00	211.58	2.66
208.48	0.00	209.52	0.00	210.56	0.00	211.60	3.72
208.50	0.00	209.54	0.00	210.58	0.00	211.62	4.89
208.52	0.00	209.56	0.00	210.60	0.00	211.64	6.17
208.54	0.00	209.58	0.00	210.62	0.00	211.66	7.55
208.56	0.00	209.60	0.00	210.64	0.00	211.68	9.01
208.58	0.00	209.62	0.00	210.66	0.00	211.70	10.57
208.60	0.00	209.64	0.00	210.68	0.00	211.72	12.28
208.62	0.00	209.66	0.00	210.70	0.00	211.74	14.11
208.64	0.00	209.68	0.00	210.72	0.00	211.76	16.03
208.66	0.00	209.70	0.00	210.74	0.00	211.78	18.05
208.68	0.00	209.72	0.00	210.76	0.00	211.80	20.17
208.70	0.00	209.74	0.00	210.78	0.00	211.82	22.39
208.72	0.00	209.76	0.00	210.80	0.00	211.84	24.70
208.74	0.00	209.78	0.00	210.82	0.00	211.86	27.11
208.76	0.00	209.80	0.00	210.84	0.00	211.88	29.62
208.78	0.00	209.82	0.00	210.86	0.00	211.90	32.23
208.80	0.00	209.84	0.00	210.88	0.00	211.92	34.99
208.82	0.00	209.86	0.00	210.90	0.00	211.94	37.85
208.84	0.00	209.88	0.00	210.92	0.00	211.96	40.82
208.86	0.00	209.90	0.00	210.94	0.00	211.98	43.89
208.88	0.00	209.92	0.00	210.96	0.00	212.00	**47.07**
208.90	0.00	209.94	0.00	210.98	0.00		
208.92	0.00	209.96	0.00	211.00	0.00		
208.94	0.00	209.98	0.00	211.02	0.00		
208.96	0.00	210.00	0.00	211.04	0.00		
208.98	0.00	210.02	0.00	211.06	0.00		
209.00	0.00	210.04	0.00	211.08	0.00		
209.02	0.00	210.06	0.00	211.10	0.00		
209.04	0.00	210.08	0.00	211.12	0.00		
209.06	0.00	210.10	0.00	211.14	0.00		
209.08	0.00	210.12	0.00	211.16	0.00		
209.10	0.00	210.14	0.00	211.18	0.00		
209.12	0.00	210.16	0.00	211.20	0.00		
209.14	0.00	210.18	0.00	211.22	0.00		
209.16	0.00	210.20	0.00	211.24	0.00		
209.18	0.00	210.22	0.00	211.26	0.00		
209.20	0.00	210.24	0.00	211.28	0.00		
209.22	0.00	210.26	0.00	211.30	0.00		
209.24	0.00	210.28	0.00	211.32	0.00		
209.26	0.00	210.30	0.00	211.34	0.00		
209.28	0.00	210.32	0.00	211.36	0.00		
209.30	0.00	210.34	0.00	211.38	0.00		
209.32	0.00	210.36	0.00	211.40	0.00		

Summary for Pond B-3: Basin #3

Inflow Area = 1.554 ac, 38.35% Impervious, Inflow Depth = 3.37" for Current 10 yr event
Inflow = 5.35 cfs @ 12.17 hrs, Volume= 0.437 af
Outflow = 0.17 cfs @ 15.97 hrs, Volume= 0.358 af, Atten= 97%, Lag= 227.8 min
Primary = 0.17 cfs @ 15.97 hrs, Volume= 0.358 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 214.09' @ 15.97 hrs Surf.Area= 12,926 sf Storage= 12,463 cf

Plug-Flow detention time= 700.5 min calculated for 0.358 af (82% of inflow)
Center-of-Mass det. time= 623.4 min (1,416.4 - 793.0)

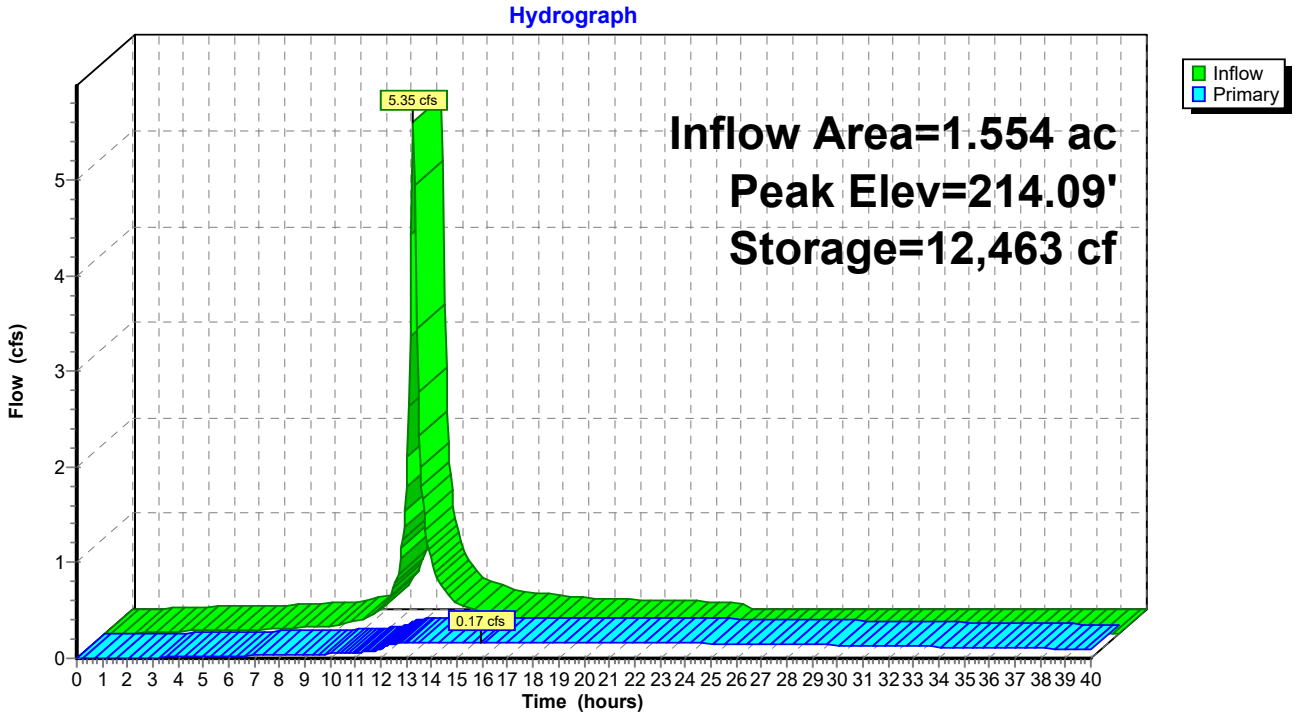
Volume	Invert	Avail.Storage	Storage Description
#1	213.00'	56,991 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
213.00	9,992	0	0
214.00	12,685	11,339	11,339
215.00	15,435	14,060	25,399
216.00	18,241	16,838	42,237
216.75	21,104	14,754	56,991

Device	Routing	Invert	Outlet Devices
#1	Primary	212.30'	**18.0" Round Culvert** L= 151.0' Ke= 0.500 Inlet / Outlet Invert= 212.30' / 202.00' S= 0.0682 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.77 sf
#2	Device 1	212.90'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	215.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	216.70'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.17 cfs @ 15.97 hrs HW=214.09' (Free Discharge)
- **1=Culvert** (Passes 0.17 cfs of 8.67 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 5.01 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-3: Basin #3



Stage-Discharge for Pond B-3: Basin #3

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
213.00	0.00	214.04	0.17	215.08	0.24	216.12	6.48
213.02	0.02	214.06	0.17	215.10	0.24	216.14	6.77
213.04	0.03	214.08	0.17	215.12	0.24	216.16	7.07
213.06	0.04	214.10	0.17	215.14	0.24	216.18	7.38
213.08	0.05	214.12	0.17	215.16	0.24	216.20	7.69
213.10	0.05	214.14	0.17	215.18	0.24	216.22	8.00
213.12	0.06	214.16	0.18	215.20	0.24	216.24	8.31
213.14	0.06	214.18	0.18	215.22	0.24	216.26	8.63
213.16	0.06	214.20	0.18	215.24	0.25	216.28	8.96
213.18	0.07	214.22	0.18	215.26	0.25	216.30	9.28
213.20	0.07	214.24	0.18	215.28	0.25	216.32	9.61
213.22	0.08	214.26	0.18	215.30	0.25	216.34	9.95
213.24	0.08	214.28	0.19	215.32	0.25	216.36	10.28
213.26	0.08	214.30	0.19	215.34	0.25	216.38	10.62
213.28	0.09	214.32	0.19	215.36	0.25	216.40	10.97
213.30	0.09	214.34	0.19	215.38	0.25	216.42	11.31
213.32	0.09	214.36	0.19	215.40	0.25	216.44	11.66
213.34	0.10	214.38	0.19	215.42	0.26	216.46	12.02
213.36	0.10	214.40	0.19	215.44	0.26	216.48	12.37
213.38	0.10	214.42	0.20	215.46	0.26	216.50	12.73
213.40	0.10	214.44	0.20	215.48	0.26	216.52	13.09
213.42	0.11	214.46	0.20	215.50	0.26	216.54	13.46
213.44	0.11	214.48	0.20	215.52	0.30	216.56	13.83
213.46	0.11	214.50	0.20	215.54	0.37	216.58	14.20
213.48	0.11	214.52	0.20	215.56	0.45	216.60	14.57
213.50	0.12	214.54	0.20	215.58	0.56	216.62	14.95
213.52	0.12	214.56	0.20	215.60	0.68	216.64	15.33
213.54	0.12	214.58	0.21	215.62	0.81	216.66	15.71
213.56	0.12	214.60	0.21	215.64	0.95	216.68	16.09
213.58	0.12	214.62	0.21	215.66	1.10	216.70	16.26
213.60	0.13	214.64	0.21	215.68	1.26	216.72	16.63
213.62	0.13	214.66	0.21	215.70	1.43	216.74	**17.28**
213.64	0.13	214.68	0.21	215.72	1.61		
213.66	0.13	214.70	0.21	215.74	1.79		
213.68	0.13	214.72	0.22	215.76	1.98		
213.70	0.14	214.74	0.22	215.78	2.18		
213.72	0.14	214.76	0.22	215.80	2.39		
213.74	0.14	214.78	0.22	215.82	2.61		
213.76	0.14	214.80	0.22	215.84	2.83		
213.78	0.14	214.82	0.22	215.86	3.05		
213.80	0.15	214.84	0.22	215.88	3.28		
213.82	0.15	214.86	0.22	215.90	3.52		
213.84	0.15	214.88	0.22	215.92	3.77		
213.86	0.15	214.90	0.23	215.94	4.01		
213.88	0.15	214.92	0.23	215.96	4.27		
213.90	0.16	214.94	0.23	215.98	4.53		
213.92	0.16	214.96	0.23	216.00	4.79		
213.94	0.16	214.98	0.23	216.02	5.06		
213.96	0.16	215.00	0.23	216.04	5.34		
213.98	0.16	215.02	0.23	216.06	5.61		
214.00	0.16	215.04	0.23	216.08	5.90		
214.02	0.17	215.06	0.24	216.10	6.19		

Summary for Pond B-4A: Basin #4A

Inflow Area = 2.331 ac, 36.89% Impervious, Inflow Depth = 3.34" for Current 10 yr event
Inflow = 7.97 cfs @ 12.17 hrs, Volume= 0.648 af
Outflow = 0.47 cfs @ 13.93 hrs, Volume= 0.174 af, Atten= 94%, Lag= 105.2 min
Primary = 0.47 cfs @ 13.93 hrs, Volume= 0.174 af
Routed to Pond B-5 : Basin #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 205.47' @ 13.93 hrs Surf.Area= 6,028 sf Storage= 20,770 cf

Plug-Flow detention time= 451.4 min calculated for 0.174 af (27% of inflow)
Center-of-Mass det. time= 268.1 min (1,062.5 - 794.4)

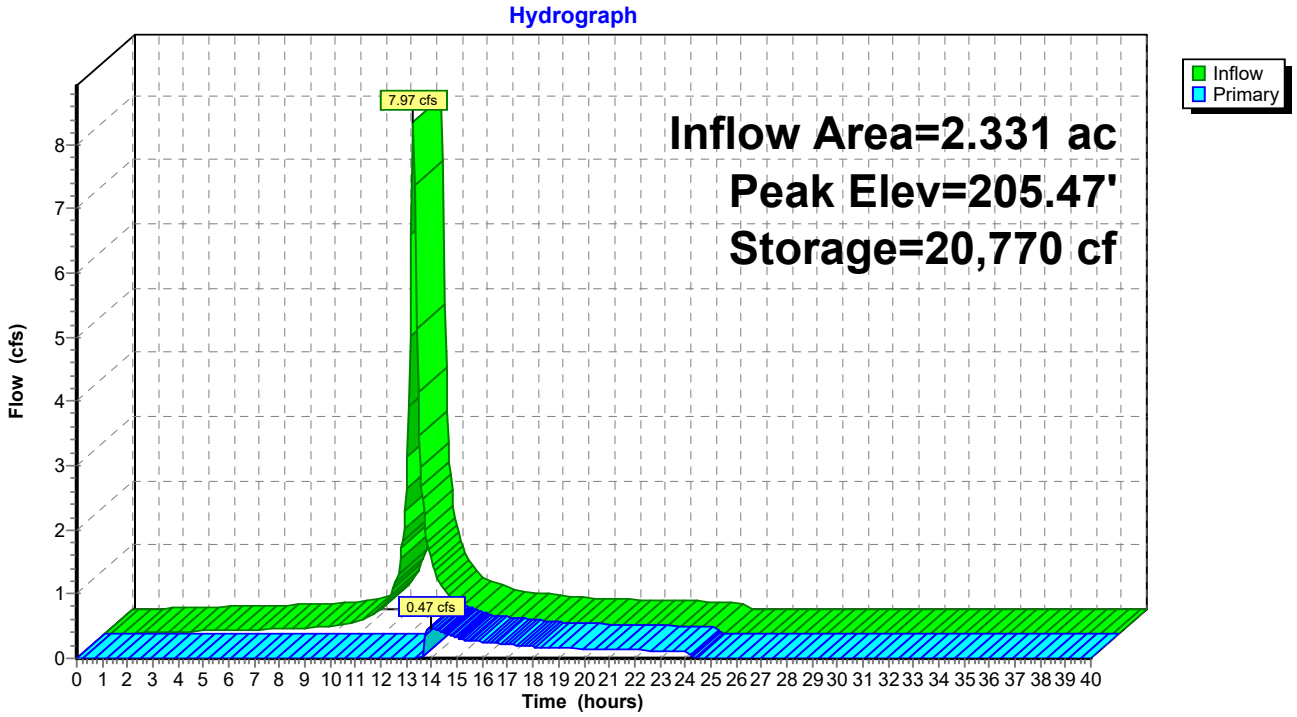
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	20,963 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	1,891	0	0
201.00	2,495	2,193	2,193
202.00	3,169	2,832	5,025
203.00	3,912	3,541	8,566
204.00	4,724	4,318	12,884
205.00	5,604	5,164	18,048
205.50	6,057	2,915	20,963

Device	Routing	Invert	Outlet Devices
#1	Primary	205.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.28 cfs @ 13.93 hrs HW=205.47' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 0.28 cfs @ 0.31 fps)

Pond B-4A: Basin #4A



Stage-Discharge for Pond B-4A: Basin #4A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	0.00	205.20	0.00
200.05	0.00	202.65	0.00	205.25	0.00
200.10	0.00	202.70	0.00	205.30	0.00
200.15	0.00	202.75	0.00	205.35	0.00
200.20	0.00	202.80	0.00	205.40	0.00
200.25	0.00	202.85	0.00	205.45	0.00
200.30	0.00	202.90	0.00	205.50	**1.31**
200.35	0.00	202.95	0.00		
200.40	0.00	203.00	0.00		
200.45	0.00	203.05	0.00		
200.50	0.00	203.10	0.00		
200.55	0.00	203.15	0.00		
200.60	0.00	203.20	0.00		
200.65	0.00	203.25	0.00		
200.70	0.00	203.30	0.00		
200.75	0.00	203.35	0.00		
200.80	0.00	203.40	0.00		
200.85	0.00	203.45	0.00		
200.90	0.00	203.50	0.00		
200.95	0.00	203.55	0.00		
201.00	0.00	203.60	0.00		
201.05	0.00	203.65	0.00		
201.10	0.00	203.70	0.00		
201.15	0.00	203.75	0.00		
201.20	0.00	203.80	0.00		
201.25	0.00	203.85	0.00		
201.30	0.00	203.90	0.00		
201.35	0.00	203.95	0.00		
201.40	0.00	204.00	0.00		
201.45	0.00	204.05	0.00		
201.50	0.00	204.10	0.00		
201.55	0.00	204.15	0.00		
201.60	0.00	204.20	0.00		
201.65	0.00	204.25	0.00		
201.70	0.00	204.30	0.00		
201.75	0.00	204.35	0.00		
201.80	0.00	204.40	0.00		
201.85	0.00	204.45	0.00		
201.90	0.00	204.50	0.00		
201.95	0.00	204.55	0.00		
202.00	0.00	204.60	0.00		
202.05	0.00	204.65	0.00		
202.10	0.00	204.70	0.00		
202.15	0.00	204.75	0.00		
202.20	0.00	204.80	0.00		
202.25	0.00	204.85	0.00		
202.30	0.00	204.90	0.00		
202.35	0.00	204.95	0.00		
202.40	0.00	205.00	0.00		
202.45	0.00	205.05	0.00		
202.50	0.00	205.10	0.00		
202.55	0.00	205.15	0.00		

Summary for Pond B-4B: Basin #4B

Inflow Area = 2.331 ac, 36.89% Impervious, Inflow Depth = 3.34" for Current 10 yr event
Inflow = 7.97 cfs @ 12.17 hrs, Volume= 0.648 af
Outflow = 0.28 cfs @ 15.32 hrs, Volume= 0.128 af, Atten= 96%, Lag= 188.6 min
Primary = 0.28 cfs @ 15.32 hrs, Volume= 0.128 af
Routed to Pond B-5 : Basin #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 205.46' @ 15.32 hrs Surf.Area= 6,892 sf Storage= 22,724 cf

Plug-Flow detention time= 561.3 min calculated for 0.128 af (20% of inflow)
Center-of-Mass det. time= 340.2 min (1,134.7 - 794.4)

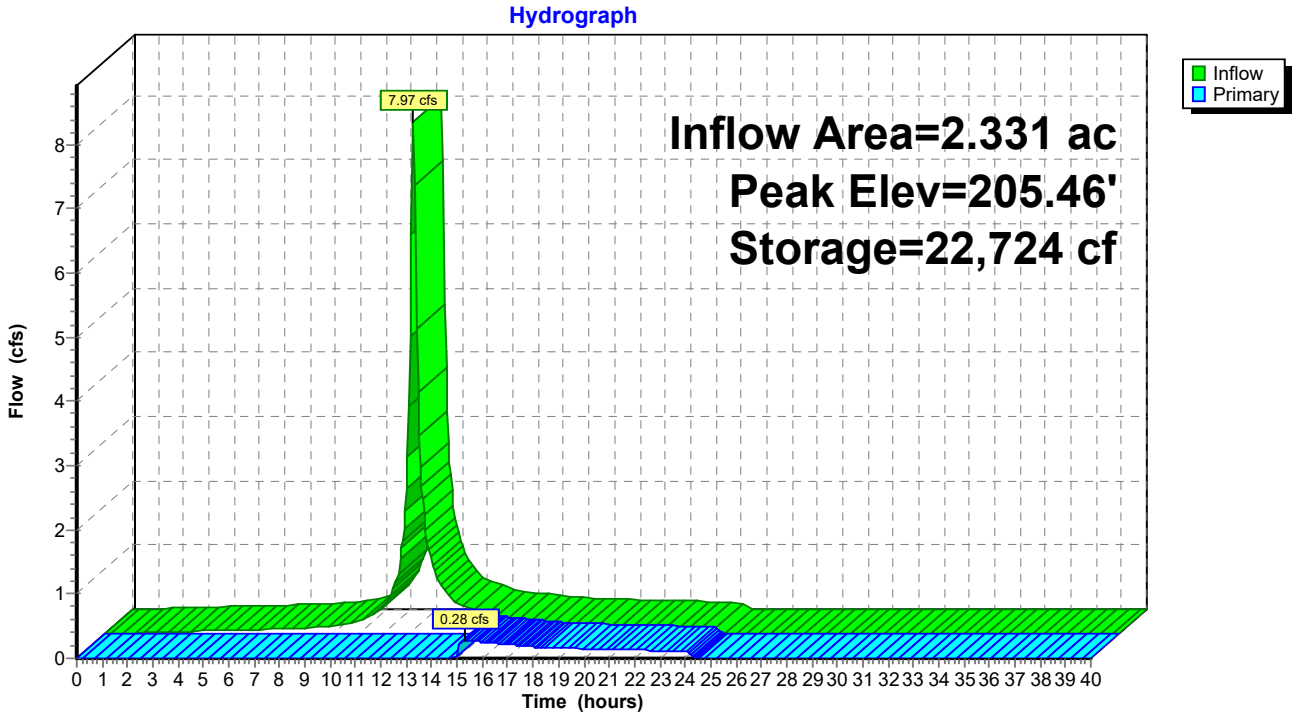
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	22,995 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	1,852	0	0
201.00	2,571	2,212	2,212
202.00	3,384	2,978	5,189
203.00	4,292	3,838	9,027
204.00	5,294	4,793	13,820
205.00	6,393	5,844	19,664
205.50	6,934	3,332	22,995

Device	Routing	Invert	Outlet Devices
#1	Primary	205.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.13 cfs @ 15.32 hrs HW=205.46' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.13 cfs @ 0.24 fps)

Pond B-4B: Basin #4B



Stage-Discharge for Pond B-4B: Basin #4B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	0.00	205.20	0.00
200.05	0.00	202.65	0.00	205.25	0.00
200.10	0.00	202.70	0.00	205.30	0.00
200.15	0.00	202.75	0.00	205.35	0.00
200.20	0.00	202.80	0.00	205.40	0.00
200.25	0.00	202.85	0.00	205.45	0.00
200.30	0.00	202.90	0.00	205.50	**1.31**
200.35	0.00	202.95	0.00		
200.40	0.00	203.00	0.00		
200.45	0.00	203.05	0.00		
200.50	0.00	203.10	0.00		
200.55	0.00	203.15	0.00		
200.60	0.00	203.20	0.00		
200.65	0.00	203.25	0.00		
200.70	0.00	203.30	0.00		
200.75	0.00	203.35	0.00		
200.80	0.00	203.40	0.00		
200.85	0.00	203.45	0.00		
200.90	0.00	203.50	0.00		
200.95	0.00	203.55	0.00		
201.00	0.00	203.60	0.00		
201.05	0.00	203.65	0.00		
201.10	0.00	203.70	0.00		
201.15	0.00	203.75	0.00		
201.20	0.00	203.80	0.00		
201.25	0.00	203.85	0.00		
201.30	0.00	203.90	0.00		
201.35	0.00	203.95	0.00		
201.40	0.00	204.00	0.00		
201.45	0.00	204.05	0.00		
201.50	0.00	204.10	0.00		
201.55	0.00	204.15	0.00		
201.60	0.00	204.20	0.00		
201.65	0.00	204.25	0.00		
201.70	0.00	204.30	0.00		
201.75	0.00	204.35	0.00		
201.80	0.00	204.40	0.00		
201.85	0.00	204.45	0.00		
201.90	0.00	204.50	0.00		
201.95	0.00	204.55	0.00		
202.00	0.00	204.60	0.00		
202.05	0.00	204.65	0.00		
202.10	0.00	204.70	0.00		
202.15	0.00	204.75	0.00		
202.20	0.00	204.80	0.00		
202.25	0.00	204.85	0.00		
202.30	0.00	204.90	0.00		
202.35	0.00	204.95	0.00		
202.40	0.00	205.00	0.00		
202.45	0.00	205.05	0.00		
202.50	0.00	205.10	0.00		
202.55	0.00	205.15	0.00		

Summary for Pond B-5: Basin #5

Inflow Area = 5.341 ac, 32.20% Impervious, Inflow Depth = 0.99" for Current 10 yr event
Inflow = 1.83 cfs @ 12.18 hrs, Volume= 0.440 af
Outflow = 0.16 cfs @ 24.18 hrs, Volume= 0.300 af, Atten= 91%, Lag= 720.2 min
Primary = 0.16 cfs @ 24.18 hrs, Volume= 0.300 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 201.11' @ 24.18 hrs Surf.Area= 12,933 sf Storage= 13,650 cf

Plug-Flow detention time= 683.8 min calculated for 0.300 af (68% of inflow)
Center-of-Mass det. time= 562.3 min (1,577.1 - 1,014.7)

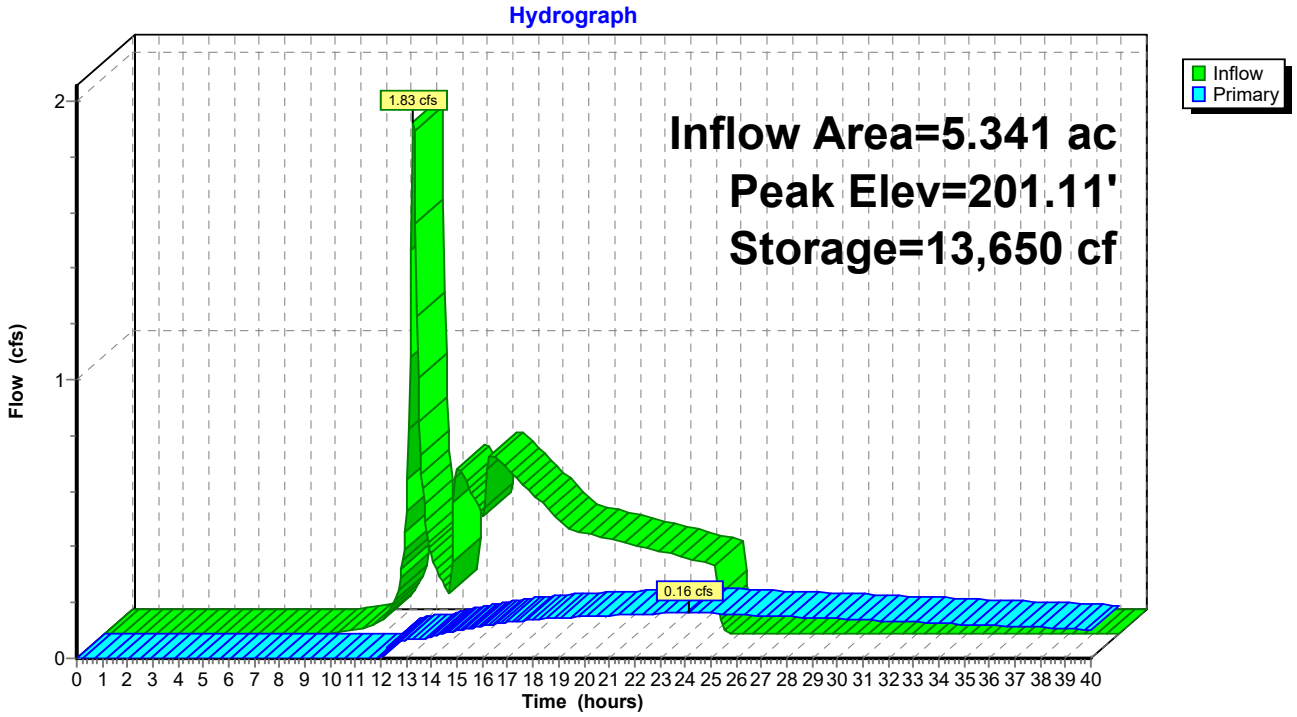
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	91,976 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	11,631	0	0
201.00	12,798	12,215	12,215
202.00	14,009	13,404	25,618
203.00	15,262	14,636	40,254
204.00	16,558	15,910	56,164
205.00	17,896	17,227	73,391
206.00	19,275	18,586	91,976

Device	Routing	Invert	Outlet Devices
#1	Primary	198.65'	**18.0" Round Culvert** L= 70.0' Ke= 0.500 Inlet / Outlet Invert= 198.65' / 196.00' S= 0.0379 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	200.02'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	205.00'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.16 cfs @ 24.18 hrs HW=201.11' (Free Discharge)
- **1=Culvert** (Passes 0.16 cfs of 11.13 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.16 cfs @ 4.78 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-5: Basin #5



Stage-Discharge for Pond B-5: Basin #5

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	15.22	205.20	31.06
200.05	0.00	202.65	15.34	205.25	35.63
200.10	0.01	202.70	15.46	205.30	40.84
200.15	0.03	202.75	15.57	205.35	46.65
200.20	0.05	202.80	15.69	205.40	53.07
200.25	0.06	202.85	15.80	205.45	60.25
200.30	0.07	202.90	15.92	205.50	68.08
200.35	0.08	202.95	16.03	205.55	76.57
200.40	0.09	203.00	16.14	205.60	85.74
200.45	0.09	203.05	16.26	205.65	94.09
200.50	0.10	203.10	16.37	205.70	102.78
200.55	0.11	203.15	16.48	205.75	111.78
200.60	0.11	203.20	16.59	205.80	121.09
200.65	0.12	203.25	16.70	205.85	130.90
200.70	0.12	203.30	16.80	205.90	141.05
200.75	0.13	203.35	16.91	205.95	151.51
200.80	0.13	203.40	17.02	206.00	**162.29**
200.85	0.14	203.45	17.12		
200.90	0.14	203.50	17.23		
200.95	0.15	203.55	17.33		
201.00	0.15	203.60	17.44		
201.05	0.16	203.65	17.54		
201.10	0.16	203.70	17.64		
201.15	0.17	203.75	17.75		
201.20	0.17	203.80	17.85		
201.25	0.17	203.85	17.95		
201.30	0.32	203.90	18.05		
201.35	0.59	203.95	18.15		
201.40	0.94	204.00	18.25		
201.45	1.35	204.05	18.35		
201.50	1.81	204.10	18.45		
201.55	2.31	204.15	18.54		
201.60	2.86	204.20	18.64		
201.65	3.45	204.25	18.74		
201.70	4.07	204.30	18.83		
201.75	4.72	204.35	18.93		
201.80	5.40	204.40	19.03		
201.85	6.11	204.45	19.12		
201.90	6.85	204.50	19.22		
201.95	7.61	204.55	19.31		
202.00	8.40	204.60	19.40		
202.05	9.21	204.65	19.50		
202.10	10.05	204.70	19.59		
202.15	10.90	204.75	19.68		
202.20	11.77	204.80	19.77		
202.25	12.67	204.85	19.86		
202.30	13.58	204.90	19.95		
202.35	14.51	204.95	20.05		
202.40	14.74	205.00	20.14		
202.45	14.86	205.05	21.54		
202.50	14.98	205.10	24.03		
202.55	15.10	205.15	27.25		

Summary for Pond B-6: Basin #6

Inflow Area = 1.191 ac, 58.27% Impervious, Inflow Depth = 3.85" for Current 10 yr event
Inflow = 4.56 cfs @ 12.17 hrs, Volume= 0.382 af
Outflow = 2.10 cfs @ 12.36 hrs, Volume= 0.310 af, Atten= 54%, Lag= 11.3 min
Primary = 2.10 cfs @ 12.36 hrs, Volume= 0.310 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.38' @ 12.36 hrs Surf.Area= 6,329 sf Storage= 8,102 cf

Plug-Flow detention time= 362.2 min calculated for 0.310 af (81% of inflow)
Center-of-Mass det. time= 284.2 min (1,060.6 - 776.4)

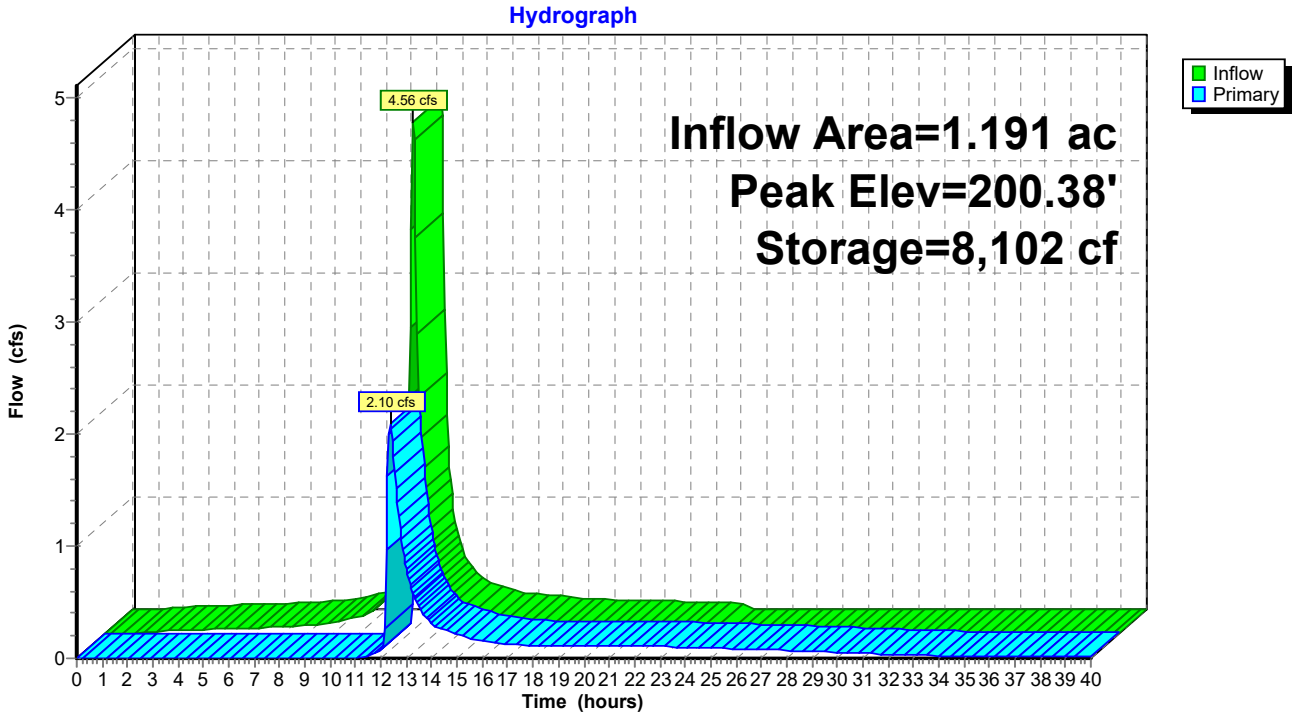
Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	35,769 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.00	5,389	0	0
200.00	6,060	5,725	5,725
201.00	6,761	6,411	12,135
202.00	7,490	7,126	19,261
203.00	8,247	7,869	27,129
204.00	9,032	8,640	35,769

Device	Routing	Invert	Outlet Devices
#1	Primary	197.65'	**18.0" Round Culvert** L= 627.0' Ke= 0.500 Inlet / Outlet Invert= 197.65' / 194.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.50'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.10'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	200.89'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.08 cfs @ 12.36 hrs HW=200.38' (Free Discharge)
- **1=Culvert** (Passes 2.08 cfs of 8.70 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.14 cfs @ 4.25 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.94 cfs @ 1.74 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-6: Basin #6



Stage-Discharge for Pond B-6: Basin #6

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.00	0.00	201.60	92.90
199.05	0.00	201.65	101.92
199.10	0.00	201.70	111.29
199.15	0.00	201.75	121.13
199.20	0.00	201.80	131.29
199.25	0.00	201.85	141.77
199.30	0.00	201.90	152.52
199.35	0.00	201.95	163.34
199.40	0.00	202.00	174.42
199.45	0.00	202.05	185.76
199.50	0.00	202.10	197.39
199.55	0.00	202.15	209.42
199.60	0.02	202.20	221.71
199.65	0.03	202.25	234.27
199.70	0.05	202.30	247.13
199.75	0.06	202.35	260.43
199.80	0.07	202.40	274.02
199.85	0.08	202.45	287.88
199.90	0.09	202.50	302.02
199.95	0.10	202.55	316.42
200.00	0.10	202.60	331.10
200.05	0.11	202.65	346.04
200.10	0.12	202.70	361.25
200.15	0.27	202.75	376.73
200.20	0.54	202.80	392.46
200.25	0.89	202.85	408.46
200.30	1.30	202.90	424.79
200.35	1.76	202.95	441.63
200.40	2.26	203.00	458.76
200.45	2.81	203.05	476.18
200.50	3.40	203.10	493.88
200.55	4.02	203.15	511.86
200.60	4.67	203.20	530.12
200.65	5.36	203.25	548.67
200.70	6.07	203.30	567.49
200.75	6.81	203.35	586.60
200.80	7.57	203.40	605.86
200.85	8.36	203.45	624.84
200.90	9.27	203.50	644.05
200.95	10.92	203.55	663.51
201.00	13.53	203.60	683.20
201.05	16.82	203.65	703.12
201.10	20.73	203.70	723.28
201.15	25.39	203.75	743.67
201.20	30.67	203.80	764.30
201.25	36.56	203.85	785.16
201.30	43.08	203.90	806.43
201.35	50.34	203.95	828.68
201.40	58.26	204.00	**851.20**
201.45	66.84		
201.50	75.82		
201.55	84.20		

Summary for Pond B-7: Basin #7

Inflow Area = 1.564 ac, 62.85% Impervious, Inflow Depth = 3.96" for Current 10 yr event
Inflow = 6.13 cfs @ 12.17 hrs, Volume= 0.517 af
Outflow = 1.05 cfs @ 12.70 hrs, Volume= 0.383 af, Atten= 83%, Lag= 31.9 min
Primary = 1.05 cfs @ 12.70 hrs, Volume= 0.383 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 208.16' @ 12.70 hrs Surf.Area= 10,360 sf Storage= 13,582 cf

Plug-Flow detention time= 563.0 min calculated for 0.383 af (74% of inflow)
Center-of-Mass det. time= 469.8 min (1,242.9 - 773.1)

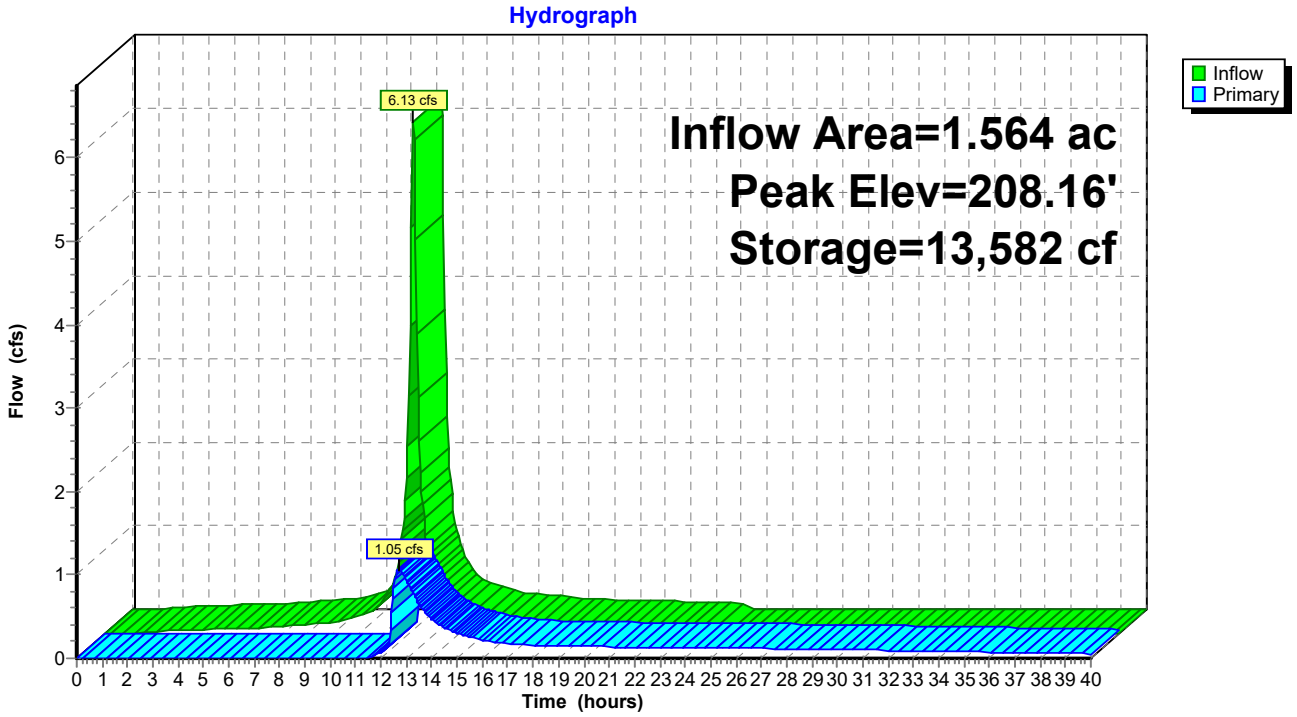
Volume	Invert	Avail.Storage	Storage Description
#1	206.47'	48,130 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.47	0	0	0
207.00	8,989	2,382	2,382
208.00	10,166	9,578	11,960
209.00	11,395	10,781	22,740
210.00	12,681	12,038	34,778
211.00	14,023	13,352	48,130

Device	Routing	Invert	Outlet Devices
#1	Primary	206.47'	**18.0" Round Culvert** L= 94.0' Ke= 0.500 Inlet / Outlet Invert= 206.47' / 206.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	207.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	207.99'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	208.86'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.05 cfs @ 12.70 hrs HW=208.16' (Free Discharge)
- **1=Culvert** (Passes 1.05 cfs of 7.17 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.15 cfs @ 4.53 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.89 cfs @ 1.34 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-7: Basin #7



Stage-Discharge for Pond B-7: Basin #7

Elevation (feet)	Primary (cfs)
206.47	0.00
206.52	0.00
206.57	0.00
206.62	0.00
206.67	0.00
206.72	0.00
206.77	0.00
206.82	0.00
206.87	0.00
206.92	0.00
206.97	0.00
207.02	0.00
207.07	0.00
207.12	0.00
207.17	0.00
207.22	0.00
207.27	0.02
207.32	0.03
207.37	0.05
207.42	0.06
207.47	0.07
207.52	0.08
207.57	0.09
207.62	0.10
207.67	0.10
207.72	0.11
207.77	0.12
207.82	0.12
207.87	0.13
207.92	0.13
207.97	0.14
208.02	0.21
208.07	0.44
208.12	0.76
208.17	1.15
208.22	1.59
208.27	2.07
208.32	2.61
208.37	3.18
208.42	3.78
208.47	4.42
208.52	5.10
208.57	5.80
208.62	6.52
208.67	7.28
208.72	8.06
208.77	8.86
208.82	9.08
208.87	9.37
208.92	11.14
208.97	13.87
209.02	17.29
209.07	21.32
209.12	26.09
209.17	31.48
209.22	37.48
209.27	44.11
209.32	51.48
209.37	59.50
209.42	68.19
209.47	77.27
209.52	85.75
209.57	94.55
209.62	103.67
209.67	113.13
209.72	123.06
209.77	133.31
209.82	143.89
209.87	154.72
209.92	165.63
209.97	176.80
210.02	188.23
210.07	199.94
210.12	212.05
210.17	224.43
210.22	237.07
210.27	250.01
210.32	263.40
210.37	277.07
210.42	291.01
210.47	305.22
210.52	319.70
210.57	334.45
210.62	349.47
210.67	364.76
210.72	380.30
210.77	396.12
210.82	412.19
210.87	428.58
210.92	445.50
210.97	**462.70**

Summary for Pond B-8: Basin #8

Inflow Area = 2.090 ac, 23.06% Impervious, Inflow Depth = 3.00" for Current 10 yr event
Inflow = 6.58 cfs @ 12.17 hrs, Volume= 0.523 af
Outflow = 0.90 cfs @ 12.95 hrs, Volume= 0.394 af, Atten= 86%, Lag= 46.5 min
Primary = 0.90 cfs @ 12.95 hrs, Volume= 0.394 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.94' @ 12.95 hrs Surf.Area= 14,215 sf Storage= 12,935 cf

Plug-Flow detention time= 519.3 min calculated for 0.393 af (75% of inflow)
Center-of-Mass det. time= 427.3 min (1,236.7 - 809.4)

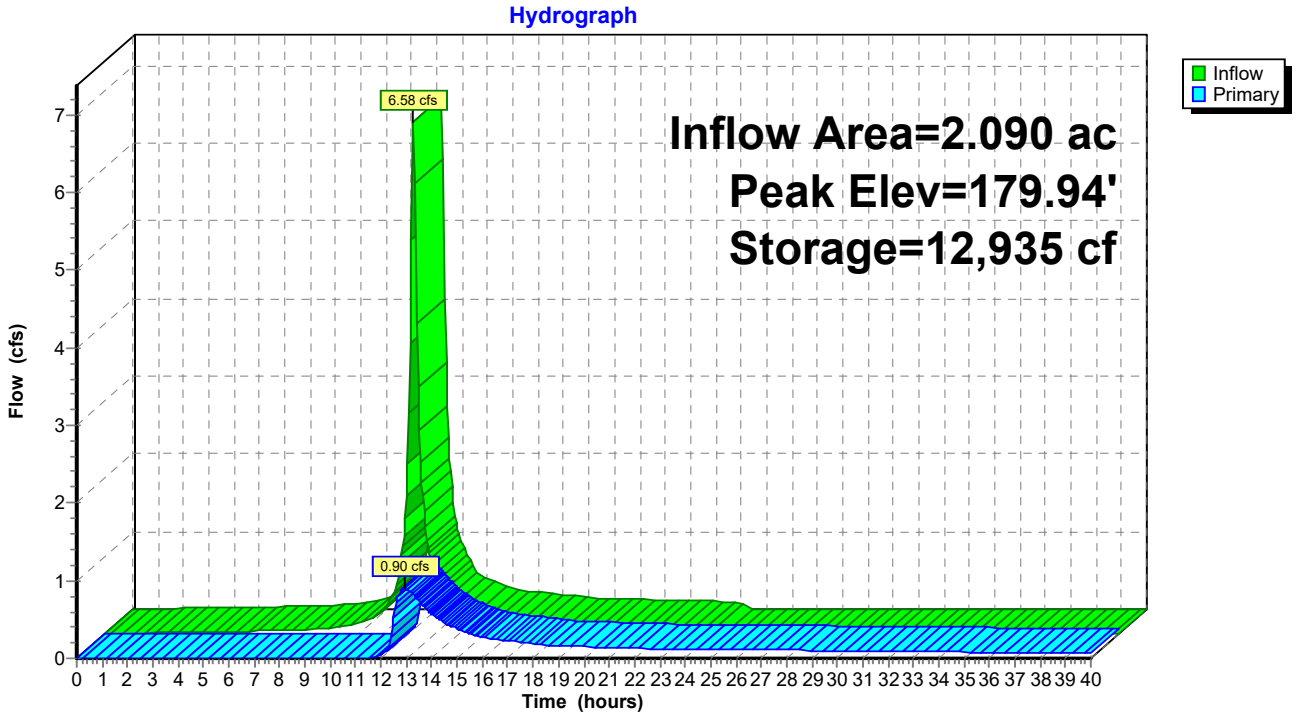
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	44,379 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	13,283	0	0
180.00	14,274	13,779	13,779
181.00	15,293	14,784	28,562
182.00	16,341	15,817	44,379

Device	Routing	Invert	Outlet Devices
#1	Primary	178.23'	**18.0" Round Culvert** L= 46.0' Ke= 0.500 Inlet / Outlet Invert= 178.23' / 178.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.83'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.89 cfs @ 12.95 hrs HW=179.94' (Free Discharge)
- **1=Culvert** (Passes 0.89 cfs of 7.14 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.93 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.76 cfs @ 1.27 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-8: Basin #8



Stage-Discharge for Pond B-8: Basin #8

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	1.76	181.08	26.70
179.02	0.00	180.06	1.96	181.10	28.75
179.04	0.00	180.08	2.16	181.12	30.89
179.06	0.00	180.10	2.37	181.14	33.13
179.08	0.00	180.12	2.59	181.16	35.47
179.10	0.00	180.14	2.81	181.18	37.91
179.12	0.00	180.16	3.04	181.20	40.44
179.14	0.00	180.18	3.28	181.22	43.07
179.16	0.00	180.20	3.52	181.24	45.82
179.18	0.00	180.22	3.77	181.26	48.70
179.20	0.00	180.24	4.02	181.28	51.68
179.22	0.00	180.26	4.28	181.30	54.77
179.24	0.01	180.28	4.54	181.32	57.97
179.26	0.01	180.30	4.81	181.34	61.27
179.28	0.02	180.32	5.08	181.36	64.67
179.30	0.03	180.34	5.36	181.38	68.18
179.32	0.03	180.36	5.64	181.40	71.80
179.34	0.04	180.38	5.93	181.42	75.52
179.36	0.05	180.40	6.22	181.44	79.09
179.38	0.05	180.42	6.51	181.46	82.45
179.40	0.06	180.44	6.81	181.48	85.86
179.42	0.06	180.46	7.11	181.50	89.33
179.44	0.07	180.48	7.42	181.52	92.84
179.46	0.07	180.50	7.73	181.54	96.41
179.48	0.07	180.52	8.04	181.56	100.03
179.50	0.08	180.54	8.36	181.58	103.70
179.52	0.08	180.56	8.68	181.60	107.42
179.54	0.08	180.58	9.01	181.62	111.19
179.56	0.09	180.60	9.34	181.64	115.04
179.58	0.09	180.62	9.67	181.66	118.98
179.60	0.09	180.64	9.90	181.68	122.98
179.62	0.10	180.66	9.98	181.70	127.03
179.64	0.10	180.68	10.07	181.72	131.13
179.66	0.10	180.70	10.15	181.74	135.28
179.68	0.10	180.72	10.24	181.76	139.48
179.70	0.11	180.74	10.32	181.78	143.73
179.72	0.11	180.76	10.40	181.80	148.03
179.74	0.11	180.78	10.49	181.82	152.38
179.76	0.11	180.80	10.57	181.84	156.73
179.78	0.12	180.82	10.65	181.86	161.07
179.80	0.13	180.84	10.85	181.88	165.46
179.82	0.19	180.86	11.42	181.90	169.88
179.84	0.27	180.88	12.20	181.92	174.35
179.86	0.37	180.90	13.14	181.94	178.86
179.88	0.48	180.92	14.22	181.96	183.41
179.90	0.60	180.94	15.41	181.98	188.00
179.92	0.74	180.96	16.72	182.00	**192.63**
179.94	0.89	180.98	18.12		
179.96	1.04	181.00	19.62		
179.98	1.21	181.02	21.20		
180.00	1.39	181.04	22.91		
180.02	1.57	181.06	24.76		

Summary for Pond B-9: Basin #9

Inflow Area = 1.503 ac, 52.63% Impervious, Inflow Depth = 3.72" for Current 10 yr event
Inflow = 5.59 cfs @ 12.17 hrs, Volume= 0.466 af
Outflow = 0.88 cfs @ 12.76 hrs, Volume= 0.344 af, Atten= 84%, Lag= 35.5 min
Primary = 0.88 cfs @ 12.76 hrs, Volume= 0.344 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.08' @ 12.76 hrs Surf.Area= 11,779 sf Storage= 12,128 cf

Plug-Flow detention time= 548.2 min calculated for 0.343 af (74% of inflow)
Center-of-Mass det. time= 455.1 min (1,235.8 - 780.7)

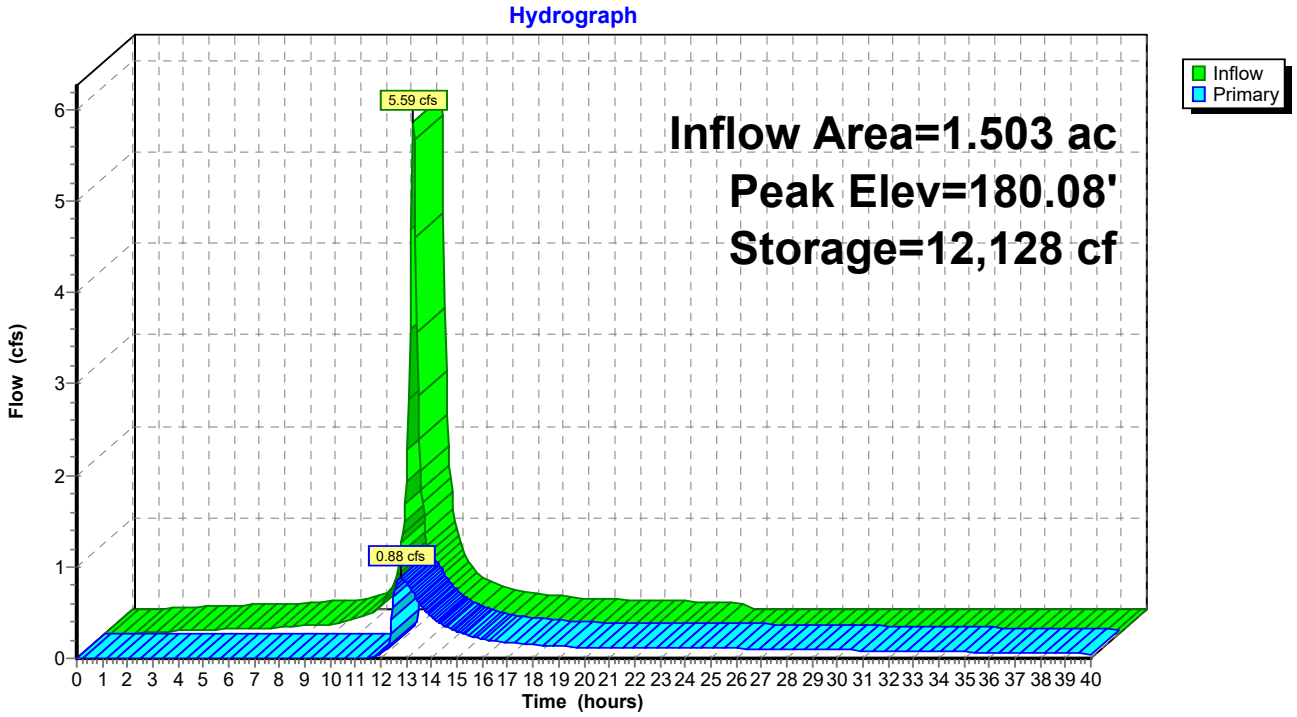
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	36,641 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	10,720	0	0
180.00	11,700	11,210	11,210
181.00	12,708	12,204	23,414
182.00	13,745	13,227	36,641

Device	Routing	Invert	Outlet Devices
#1	Primary	178.23'	**18.0" Round Culvert** L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 178.23' / 178.00' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.30'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.93'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.87 cfs @ 12.76 hrs HW=180.08' (Free Discharge)
- **1=Culvert** (Passes 0.87 cfs of 7.74 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.95 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.74 cfs @ 1.26 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-9: Basin #9



Stage-Discharge for Pond B-9: Basin #9

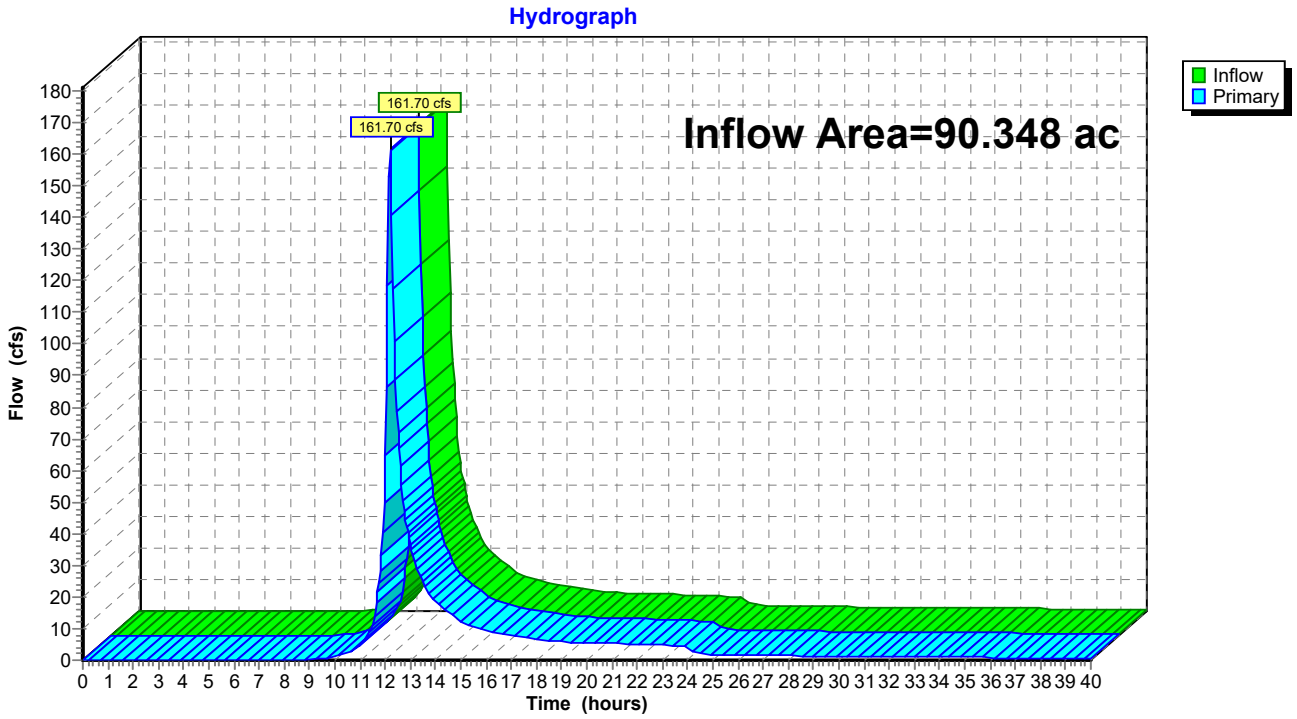
Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.61	181.08	11.70
179.02	0.00	180.06	0.74	181.10	11.77
179.04	0.00	180.08	0.89	181.12	11.84
179.06	0.00	180.10	1.05	181.14	11.92
179.08	0.00	180.12	1.21	181.16	11.99
179.10	0.00	180.14	1.39	181.18	12.06
179.12	0.00	180.16	1.57	181.20	12.13
179.14	0.00	180.18	1.76	181.22	12.20
179.16	0.00	180.20	1.96	181.24	12.27
179.18	0.00	180.22	2.16	181.26	12.34
179.20	0.00	180.24	2.37	181.28	12.41
179.22	0.00	180.26	2.59	181.30	12.48
179.24	0.00	180.28	2.81	181.32	12.55
179.26	0.00	180.30	3.04	181.34	12.62
179.28	0.00	180.32	3.28	181.36	12.69
179.30	0.00	180.34	3.52	181.38	12.76
179.32	0.00	180.36	3.77	181.40	12.83
179.34	0.00	180.38	4.02	181.42	12.89
179.36	0.01	180.40	4.28	181.44	12.96
179.38	0.01	180.42	4.54	181.46	13.03
179.40	0.02	180.44	4.81	181.48	13.09
179.42	0.02	180.46	5.08	181.50	13.16
179.44	0.03	180.48	5.36	181.52	13.22
179.46	0.04	180.50	5.64	181.54	13.29
179.48	0.05	180.52	5.93	181.56	13.35
179.50	0.05	180.54	6.22	181.58	13.42
179.52	0.06	180.56	6.51	181.60	13.48
179.54	0.06	180.58	6.81	181.62	13.55
179.56	0.06	180.60	7.11	181.64	13.61
179.58	0.07	180.62	7.42	181.66	13.67
179.60	0.07	180.64	7.73	181.68	13.74
179.62	0.08	180.66	8.04	181.70	13.80
179.64	0.08	180.68	8.36	181.72	13.86
179.66	0.08	180.70	8.68	181.74	13.93
179.68	0.09	180.72	9.01	181.76	13.99
179.70	0.09	180.74	9.34	181.78	14.05
179.72	0.09	180.76	9.67	181.80	14.11
179.74	0.10	180.78	10.01	181.82	14.17
179.76	0.10	180.80	10.35	181.84	14.23
179.78	0.10	180.82	10.69	181.86	14.29
179.80	0.10	180.84	10.77	181.88	14.35
179.82	0.11	180.86	10.85	181.90	14.41
179.84	0.11	180.88	10.93	181.92	14.47
179.86	0.11	180.90	11.01	181.94	14.53
179.88	0.11	180.92	11.09	181.96	14.71
179.90	0.12	180.94	11.17	181.98	15.26
179.92	0.12	180.96	11.24	182.00	**16.02**
179.94	0.13	180.98	11.32		
179.96	0.19	181.00	11.40		
179.98	0.27	181.02	11.47		
180.00	0.37	181.04	11.55		
180.02	0.48	181.06	11.62		

Summary for Link PDA-1: Proposed Drainage Area #1

Inflow Area = 90.348 ac, 16.68% Impervious, Inflow Depth > 2.41" for Current 10 yr event
Inflow = 161.70 cfs @ 12.19 hrs, Volume= 18.139 af
Primary = 161.70 cfs @ 12.19 hrs, Volume= 18.139 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-1: Proposed Drainage Area #1



Summary for Subcatchment 1I: PDA-1 (impervious)

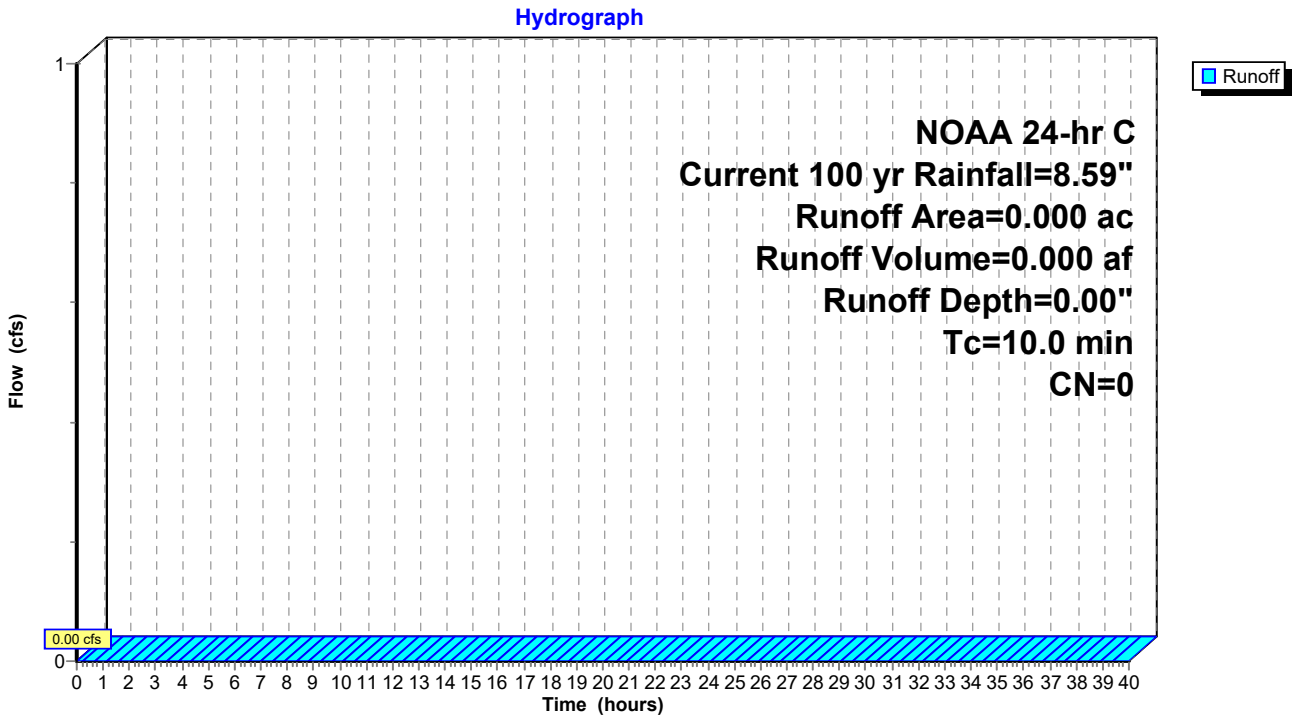
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-1 : Basin #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.000	98	Concrete, HSG C
	0.000	0	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 1I: PDA-1 (impervious)



Summary for Subcatchment 1P: PDA-1 (pervious)

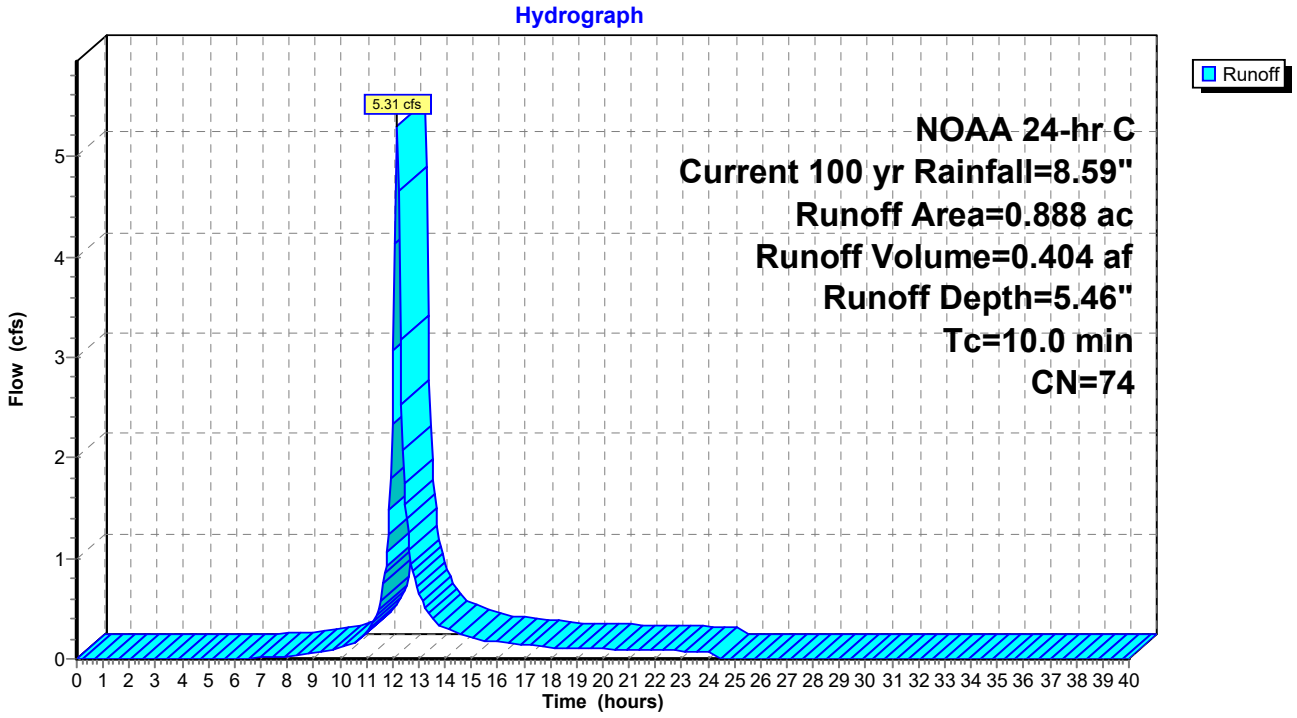
Runoff = 5.31 cfs @ 12.17 hrs, Volume= 0.404 af, Depth= 5.46"
Routed to Pond B-1 : Basin #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.888	74	>75% Grass cover, Good, HSG C
0.888		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 1P: PDA-1 (pervious)



Summary for Subcatchment 2l: PDA-2 (impervious)

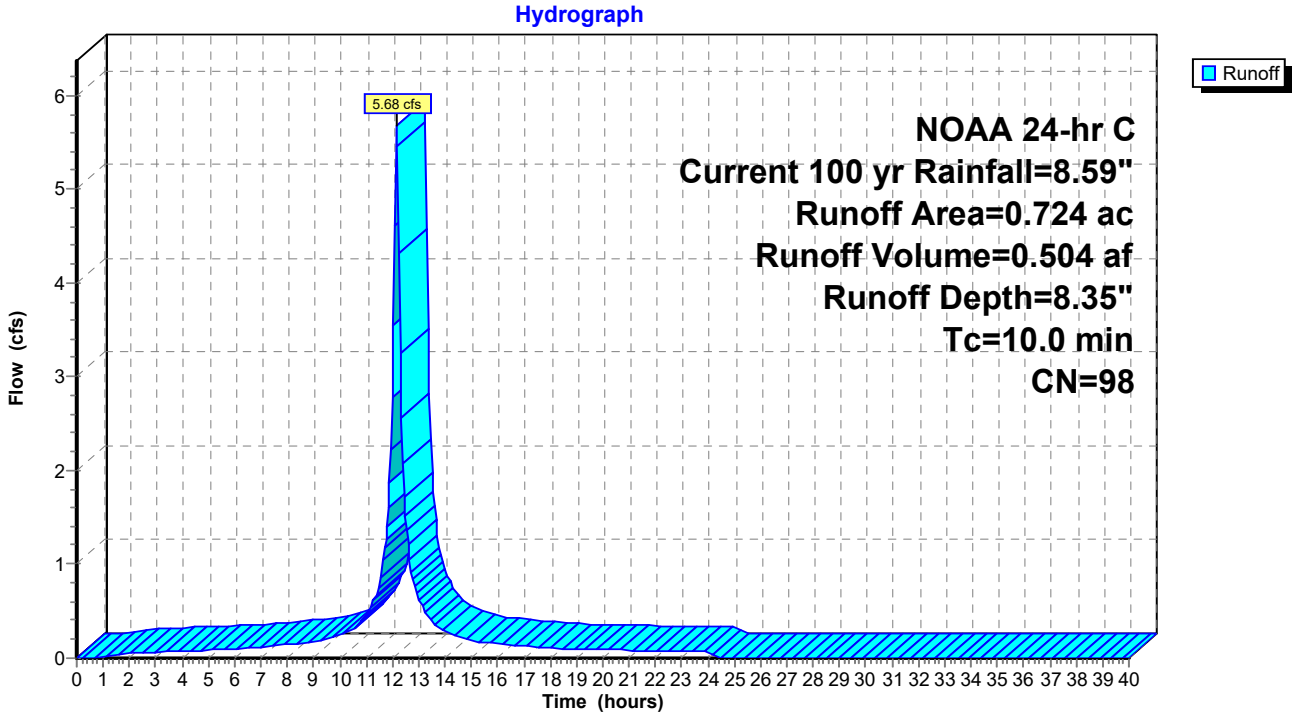
Runoff = 5.68 cfs @ 12.17 hrs, Volume= 0.504 af, Depth= 8.35"
Routed to Pond B-2 : Basin #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.490	98	Roof, HSG C
*	0.196	98	Pavement, HSG C
*	0.038	98	Concrete, HSG C
	0.724	98	Weighted Average
	0.724		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 2l: PDA-2 (impervious)



Summary for Subcatchment 2P: PDA-2 (pervious)

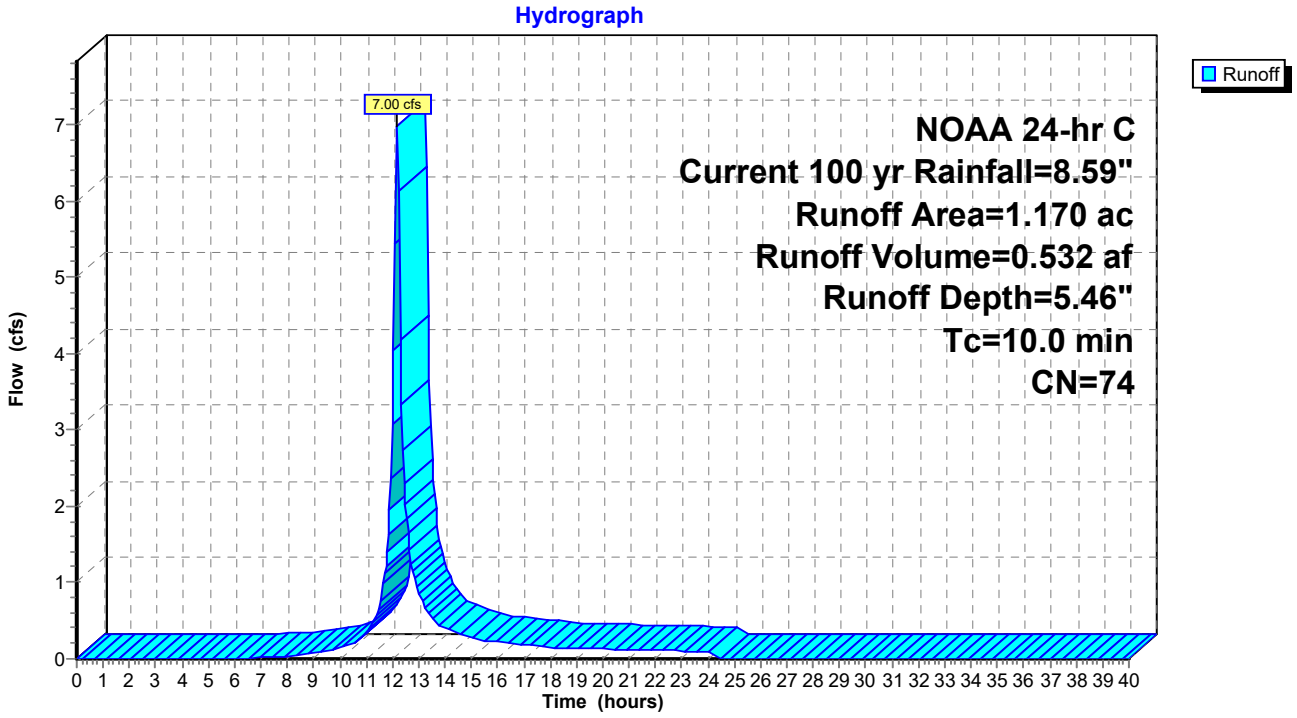
Runoff = 7.00 cfs @ 12.17 hrs, Volume= 0.532 af, Depth= 5.46"
Routed to Pond B-2 : Basin #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.170	74	>75% Grass cover, Good, HSG C
1.170		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 2P: PDA-2 (pervious)



Summary for Subcatchment 3I: PDA-3 (impervious)

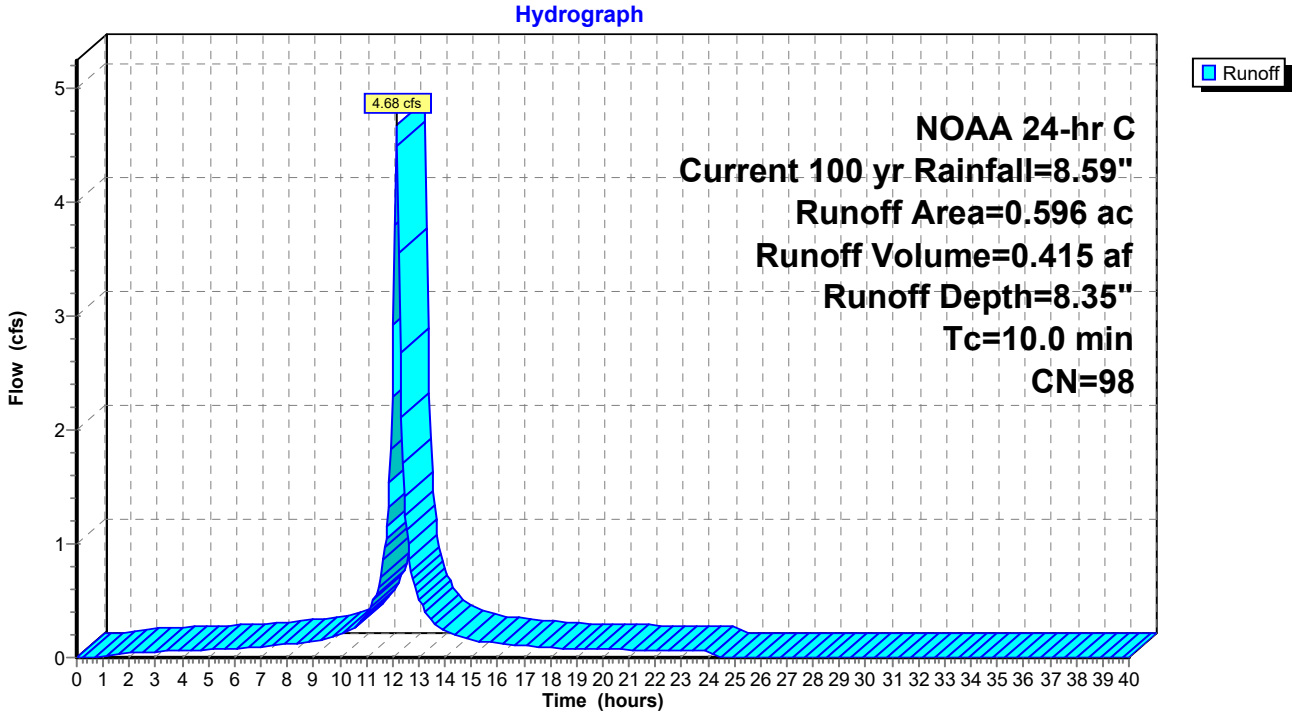
Runoff = 4.68 cfs @ 12.17 hrs, Volume= 0.415 af, Depth= 8.35"
Routed to Pond B-3 : Basin #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.304	98	Pavement, HSG C
*	0.035	98	Concrete, HSG C
	0.257	98	Unconnected roofs, HSG C
	0.596	98	Weighted Average
	0.596		100.00% Impervious Area
	0.257		43.12% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 3I: PDA-3 (impervious)



Summary for Subcatchment 3P: PDA-3 (pervious)

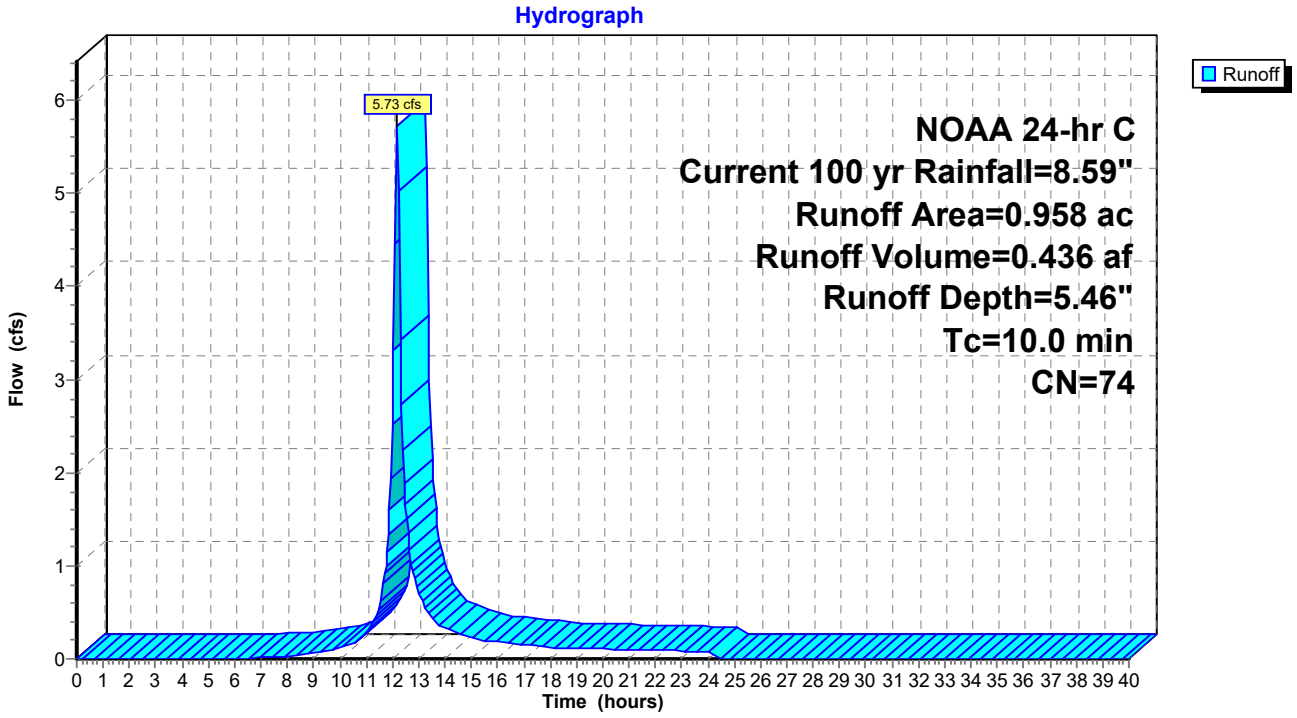
Runoff = 5.73 cfs @ 12.17 hrs, Volume= 0.436 af, Depth= 5.46"
Routed to Pond B-3 : Basin #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.958	74	>75% Grass cover, Good, HSG C
0.958		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 3P: PDA-3 (pervious)



Summary for Subcatchment 4AI: PDA-4A (impervious)

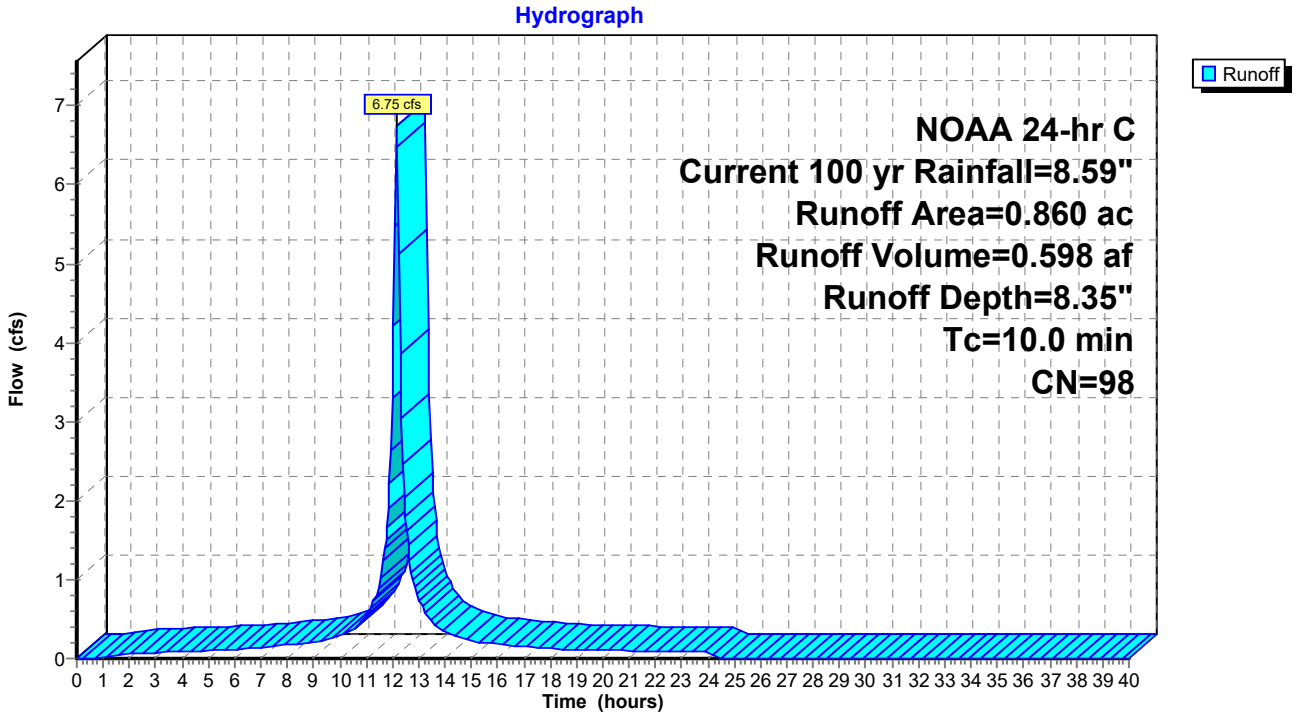
Runoff = 6.75 cfs @ 12.17 hrs, Volume= 0.598 af, Depth= 8.35"
Routed to Pond B-4A : Basin #4A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.742	98	Pavement, HSG C
*	0.118	98	Concrete, HSG C
	0.860	98	Weighted Average
	0.860		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4AI: PDA-4A (impervious)



Summary for Subcatchment 4AP: PDA-4A (pervious)

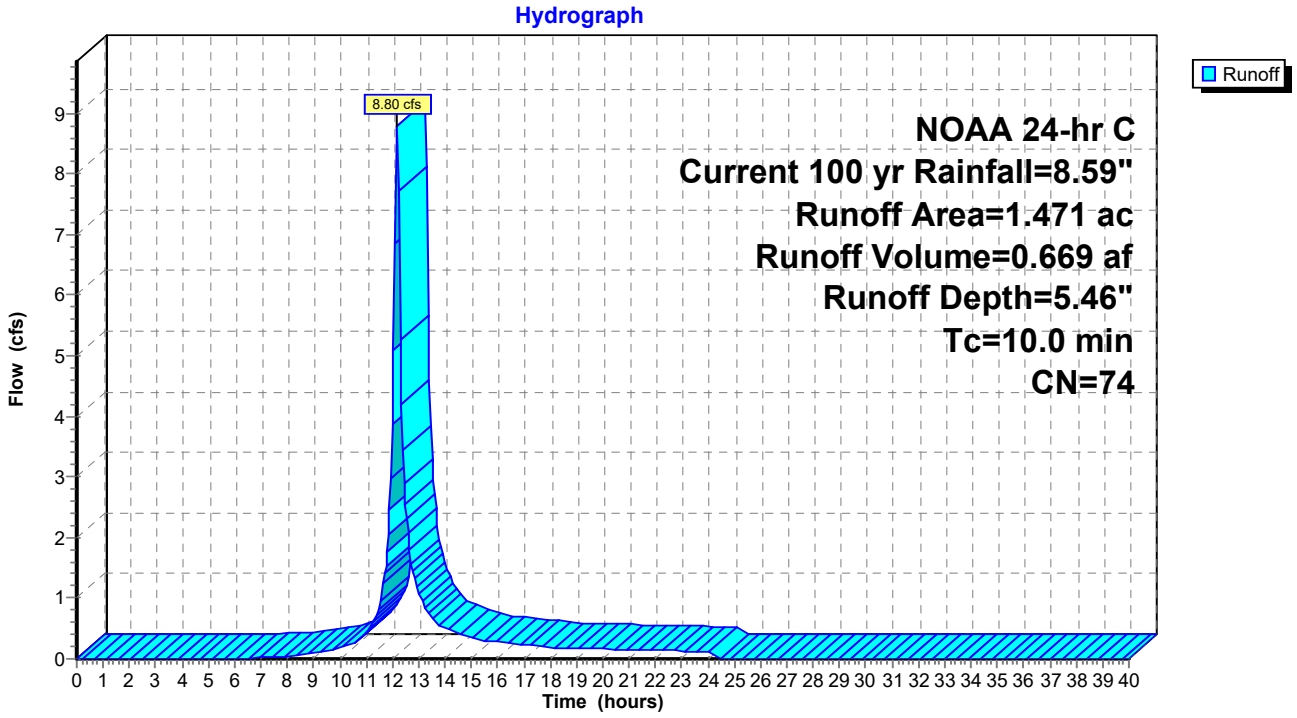
Runoff = 8.80 cfs @ 12.17 hrs, Volume= 0.669 af, Depth= 5.46"
Routed to Pond B-4A : Basin #4A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.471	74	>75% Grass cover, Good, HSG C
1.471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4AP: PDA-4A (pervious)



Summary for Subcatchment 4BI: PDA-4B (impervious)

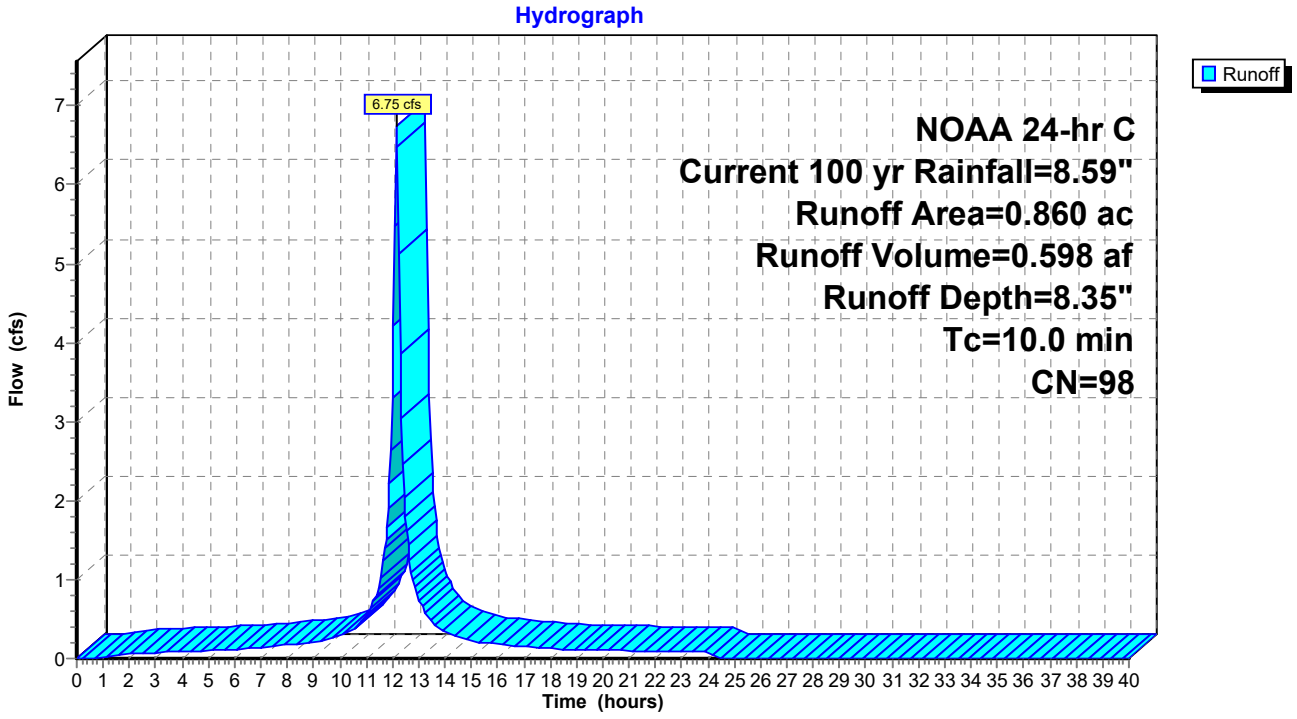
Runoff = 6.75 cfs @ 12.17 hrs, Volume= 0.598 af, Depth= 8.35"
Routed to Pond B-4B : Basin #4B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.742	98	Pavement, HSG C
*	0.118	98	Concrete, HSG C
	0.860	98	Weighted Average
	0.860		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4BI: PDA-4B (impervious)



Summary for Subcatchment 4BP: PDA-4B (pervious)

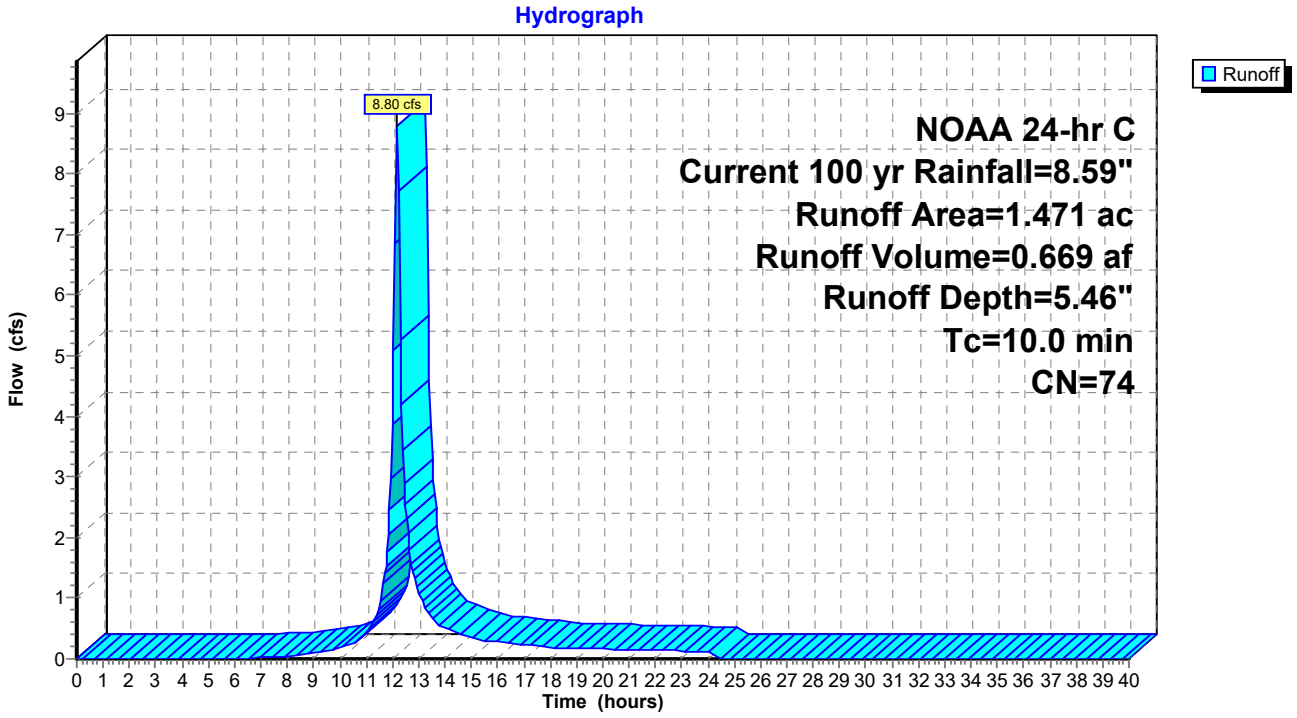
Runoff = 8.80 cfs @ 12.17 hrs, Volume= 0.669 af, Depth= 5.46"
Routed to Pond B-4B : Basin #4B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.471	74	>75% Grass cover, Good, HSG C
1.471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4BP: PDA-4B (pervious)



Summary for Subcatchment 5l: PDA-5 (impervious)

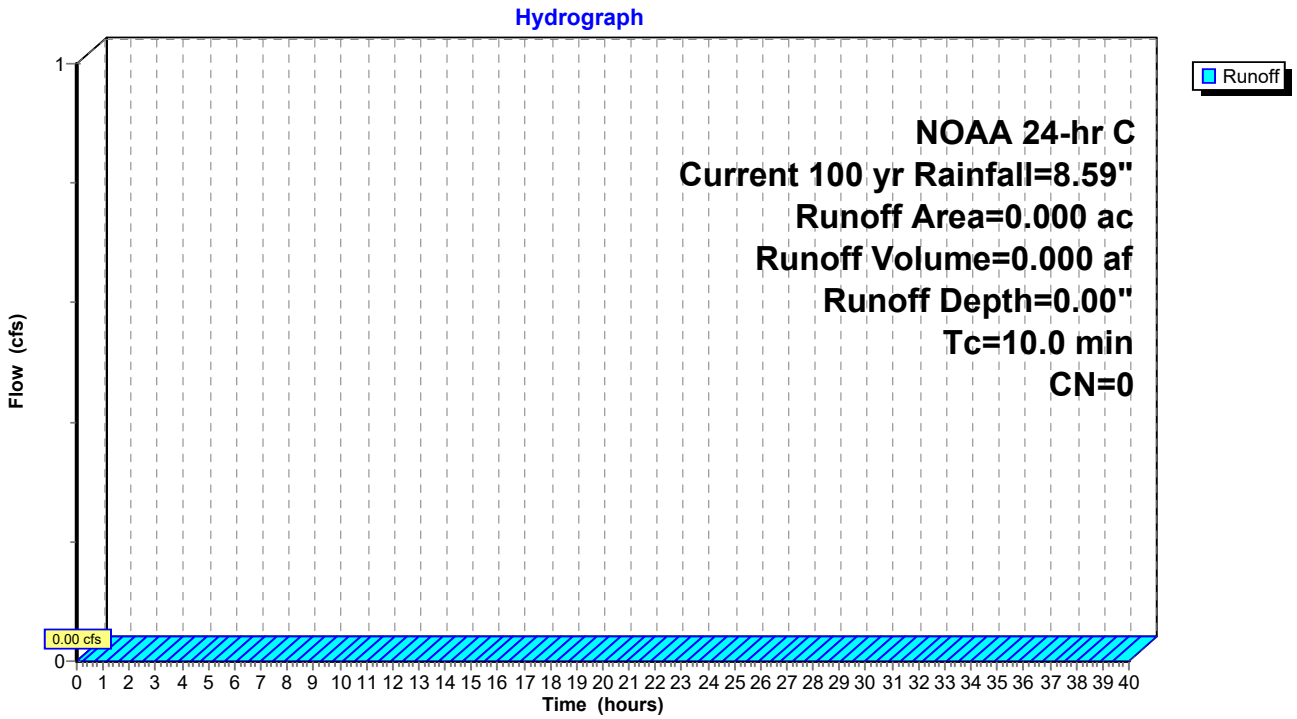
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-5 : Basin #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.000	98	Concrete, HSG C
	0.000	0	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 5l: PDA-5 (impervious)



Summary for Subcatchment 5P: PDA-5 (pervious)

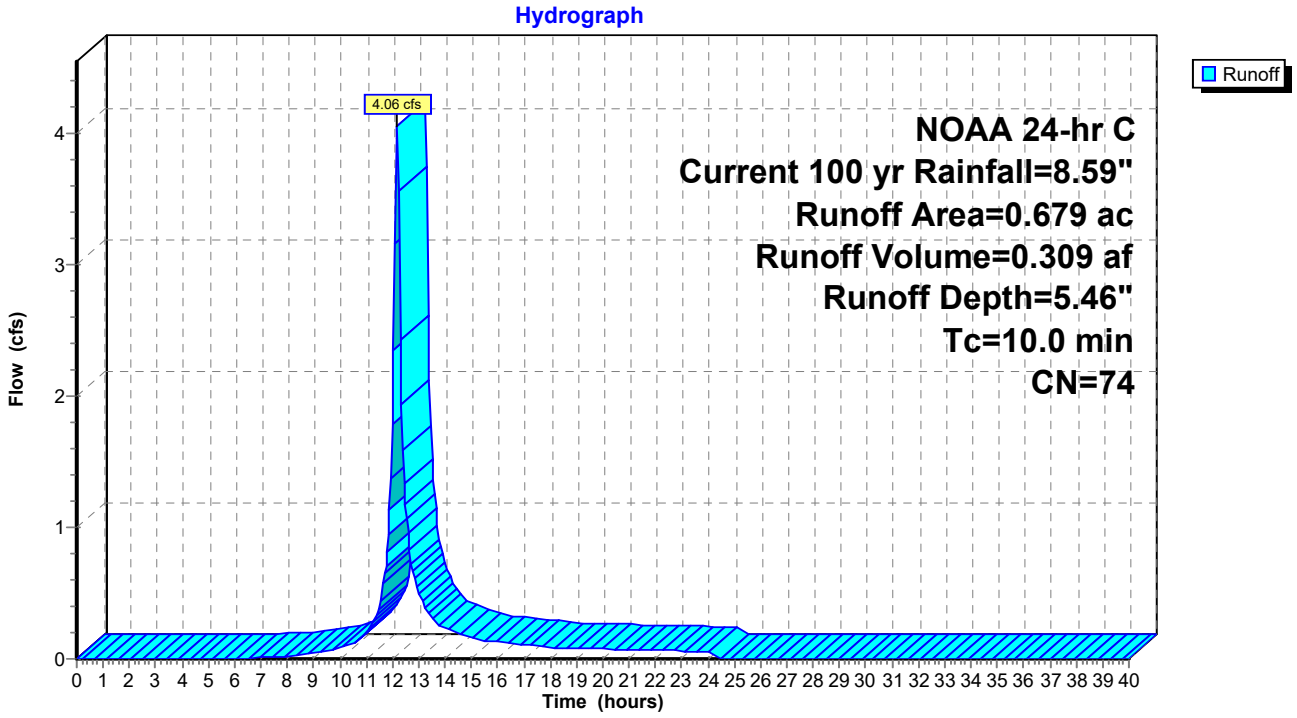
Runoff = 4.06 cfs @ 12.17 hrs, Volume= 0.309 af, Depth= 5.46"
Routed to Pond B-5 : Basin #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.679	74	>75% Grass cover, Good, HSG C
0.679		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 5P: PDA-5 (pervious)



Summary for Subcatchment 6I: PDA-6 (impervious)

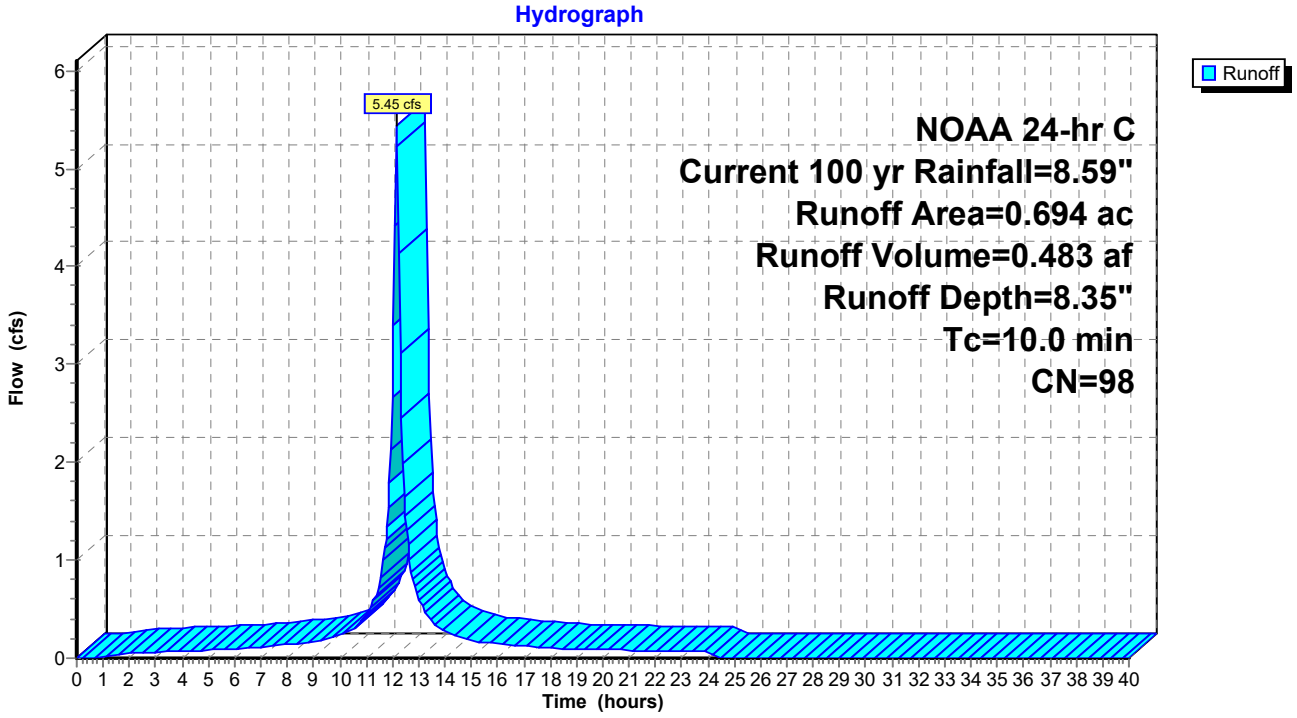
Runoff = 5.45 cfs @ 12.17 hrs, Volume= 0.483 af, Depth= 8.35"
Routed to Pond B-6 : Basin #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.459	98	Pavement, HSG C
*	0.129	98	Roof, HSG C
*	0.106	98	Concrete, HSG C
	0.694	98	Weighted Average
	0.694		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 6I: PDA-6 (impervious)



Summary for Subcatchment 6P: PDA-6 (pervious)

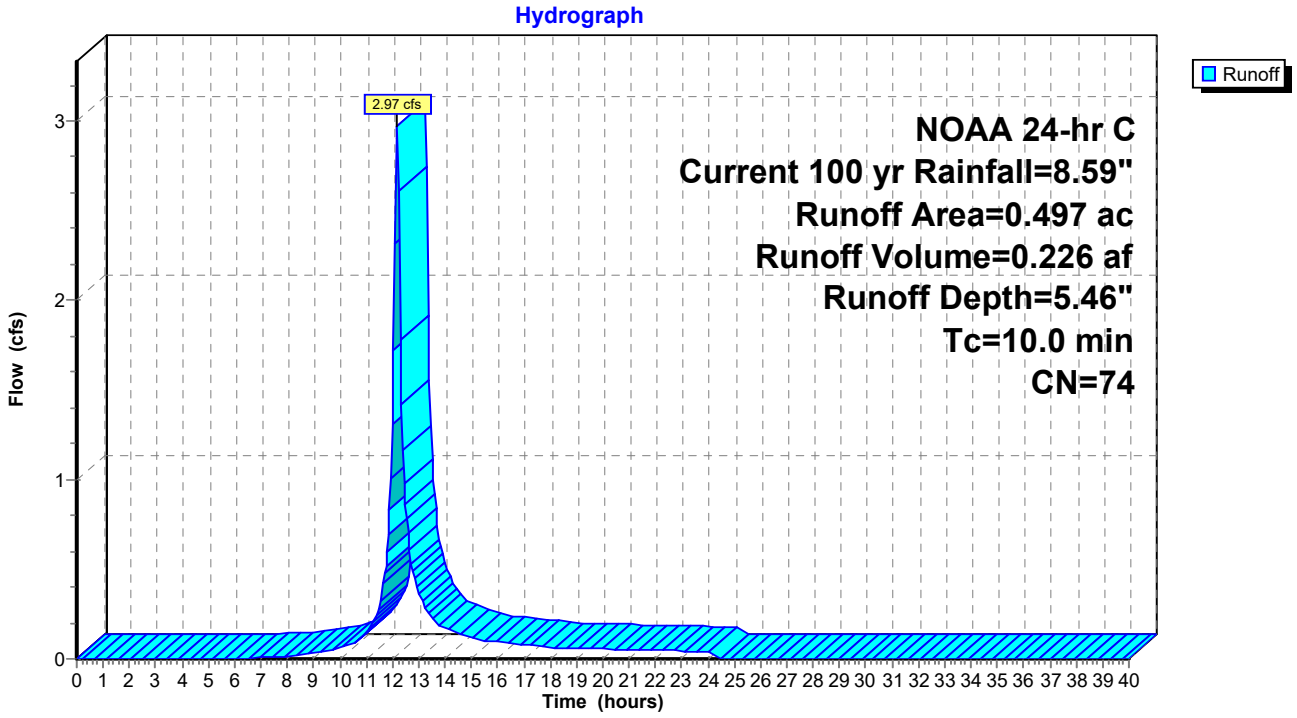
Runoff = 2.97 cfs @ 12.17 hrs, Volume= 0.226 af, Depth= 5.46"
Routed to Pond B-6 : Basin #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.497	74	>75% Grass cover, Good, HSG C
0.497		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 6P: PDA-6 (pervious)



Summary for Subcatchment 7I: PDA-7 (impervious)

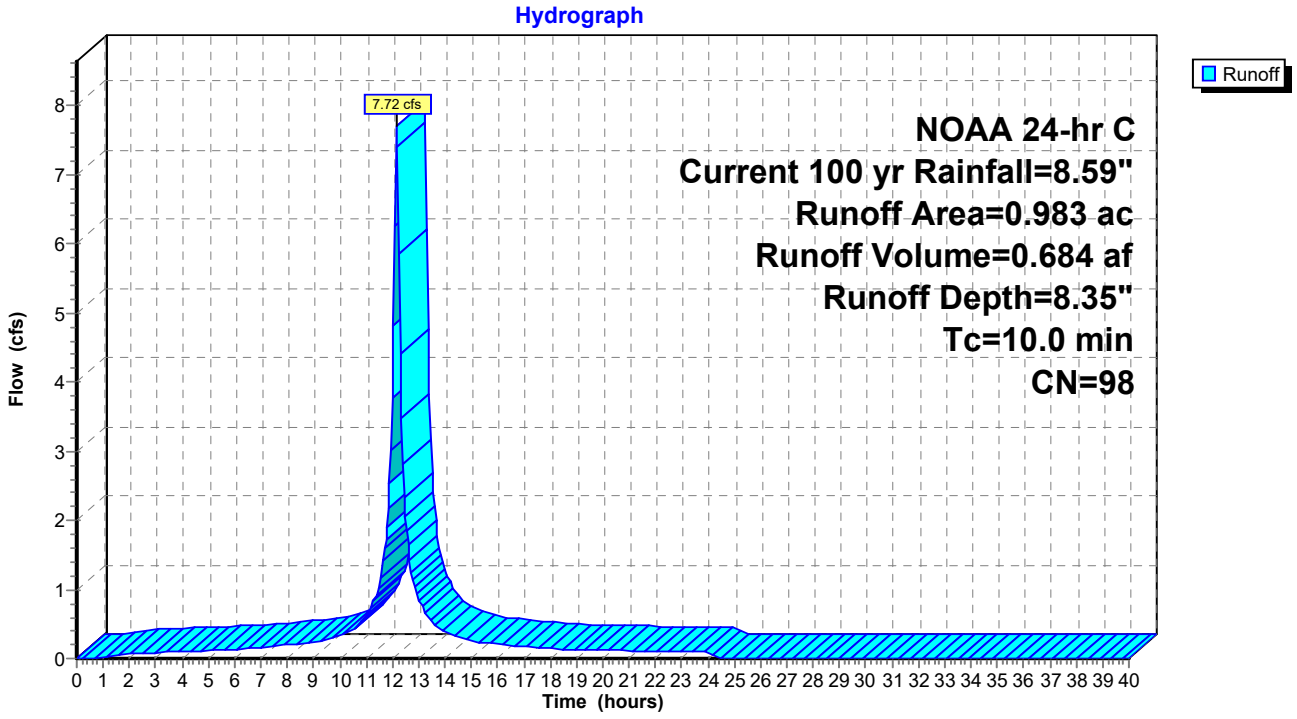
Runoff = 7.72 cfs @ 12.17 hrs, Volume= 0.684 af, Depth= 8.35"
Routed to Pond B-7 : Basin #7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.886	98	Pavement, HSG C
*	0.097	98	Concrete, HSG C
	0.983	98	Weighted Average
	0.983		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 7I: PDA-7 (impervious)



Summary for Subcatchment 7P: PDA-7 (pervious)

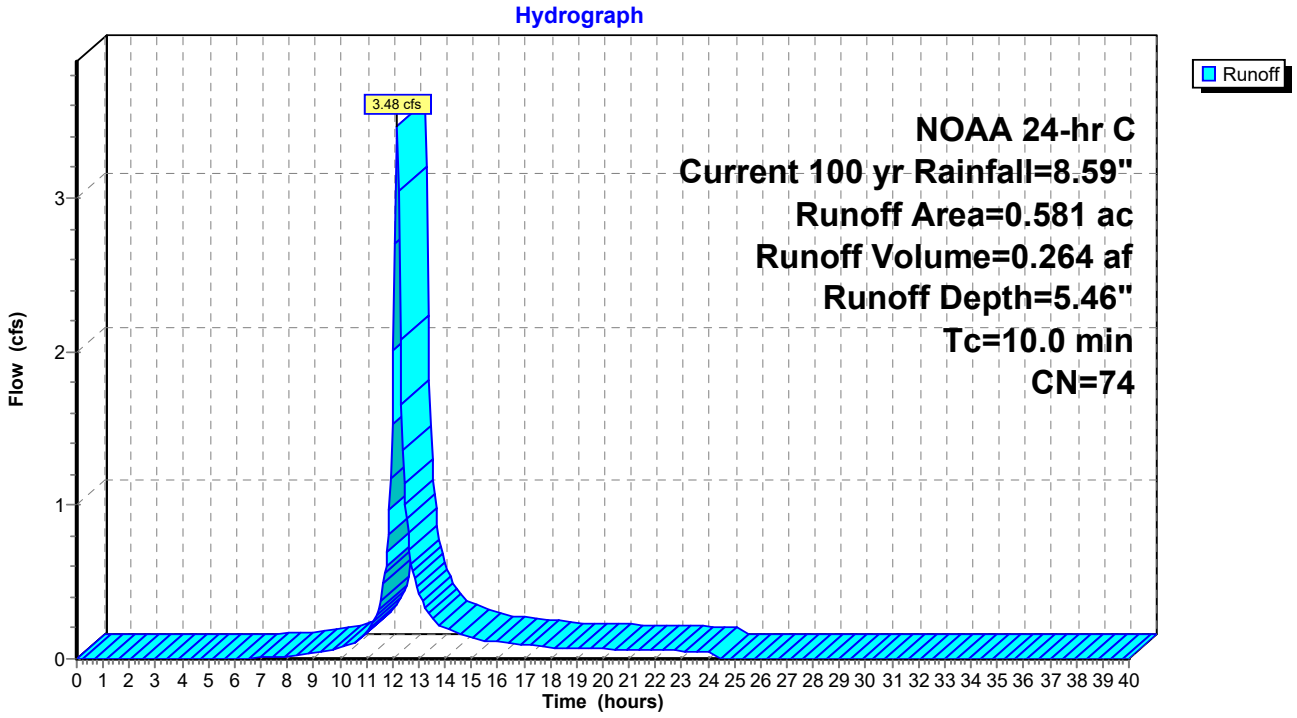
Runoff = 3.48 cfs @ 12.17 hrs, Volume= 0.264 af, Depth= 5.46"
Routed to Pond B-7 : Basin #7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.581	74	>75% Grass cover, Good, HSG C
0.581		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 7P: PDA-7 (pervious)



Summary for Subcatchment 8I: PDA-8 (impervious)

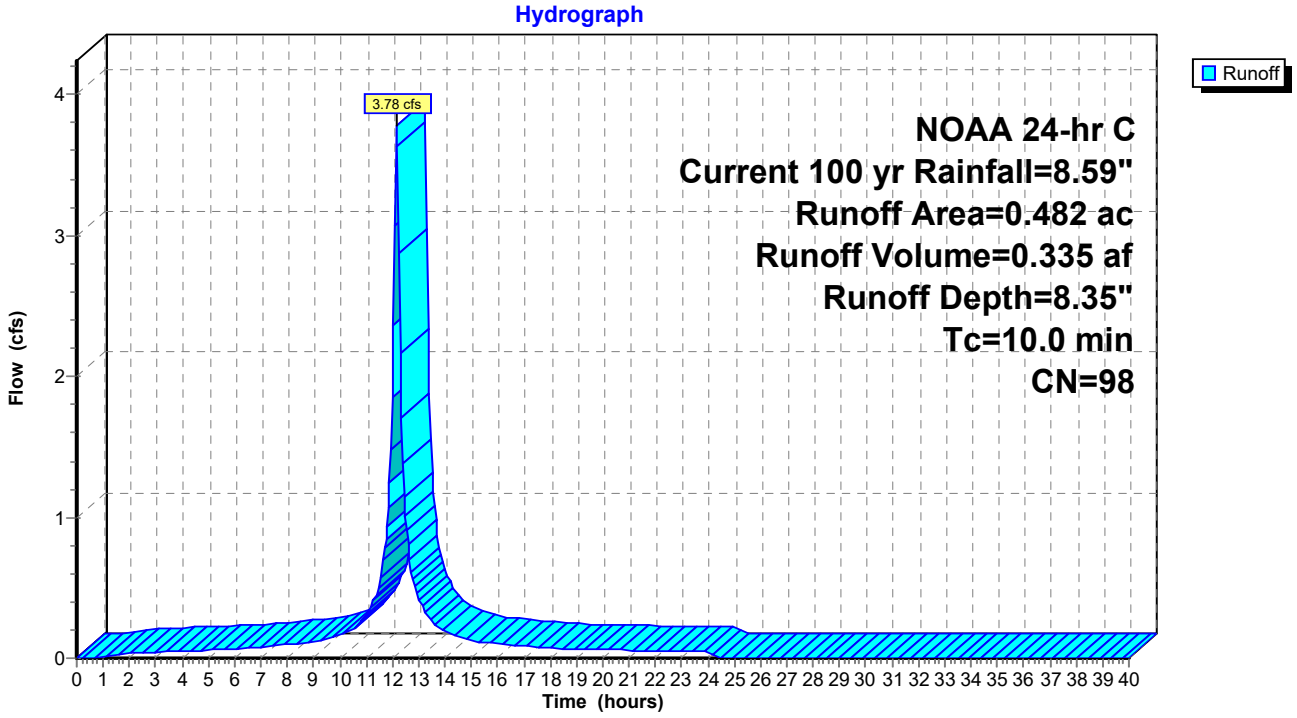
Runoff = 3.78 cfs @ 12.17 hrs, Volume= 0.335 af, Depth= 8.35"
Routed to Pond B-8 : Basin #8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.482	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.482	98	Weighted Average
	0.482		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8I: PDA-8 (impervious)



Summary for Subcatchment 8P: PDA-8 (pervious)

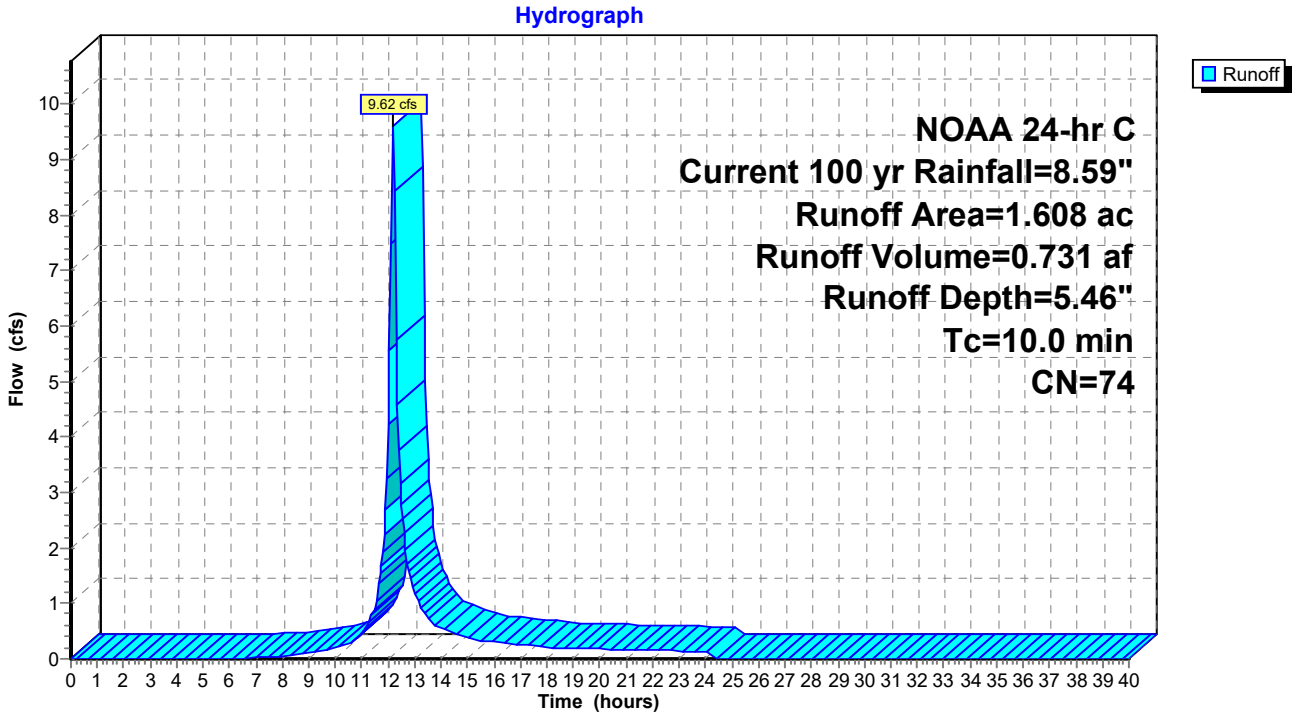
Runoff = 9.62 cfs @ 12.17 hrs, Volume= 0.731 af, Depth= 5.46"
Routed to Pond B-8 : Basin #8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.608	74	>75% Grass cover, Good, HSG C
1.608		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8P: PDA-8 (pervious)



Summary for Subcatchment 9I: PDA-9 (impervious)

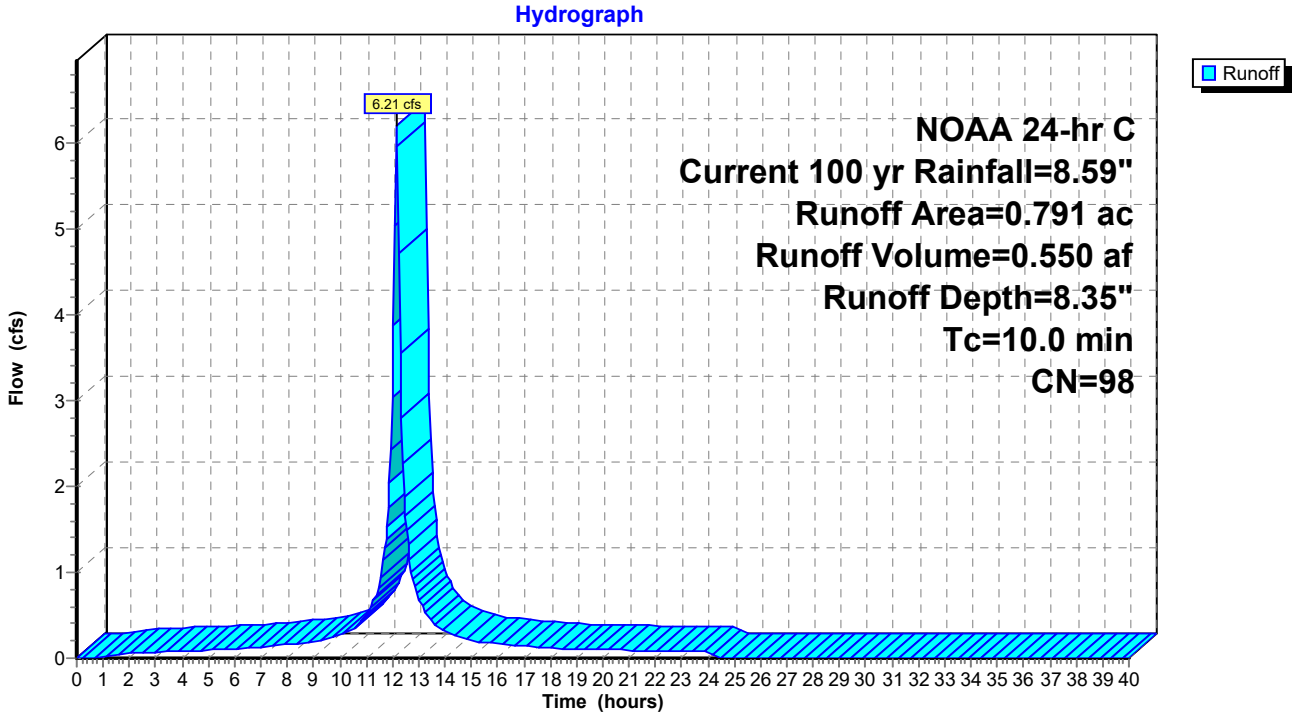
Runoff = 6.21 cfs @ 12.17 hrs, Volume= 0.550 af, Depth= 8.35"
Routed to Pond B-9 : Basin #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.286	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.055	98	Concrete, HSG C
	0.791	98	Weighted Average
	0.791		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 9I: PDA-9 (impervious)



Summary for Subcatchment 9P: PDA-9 (pervious)

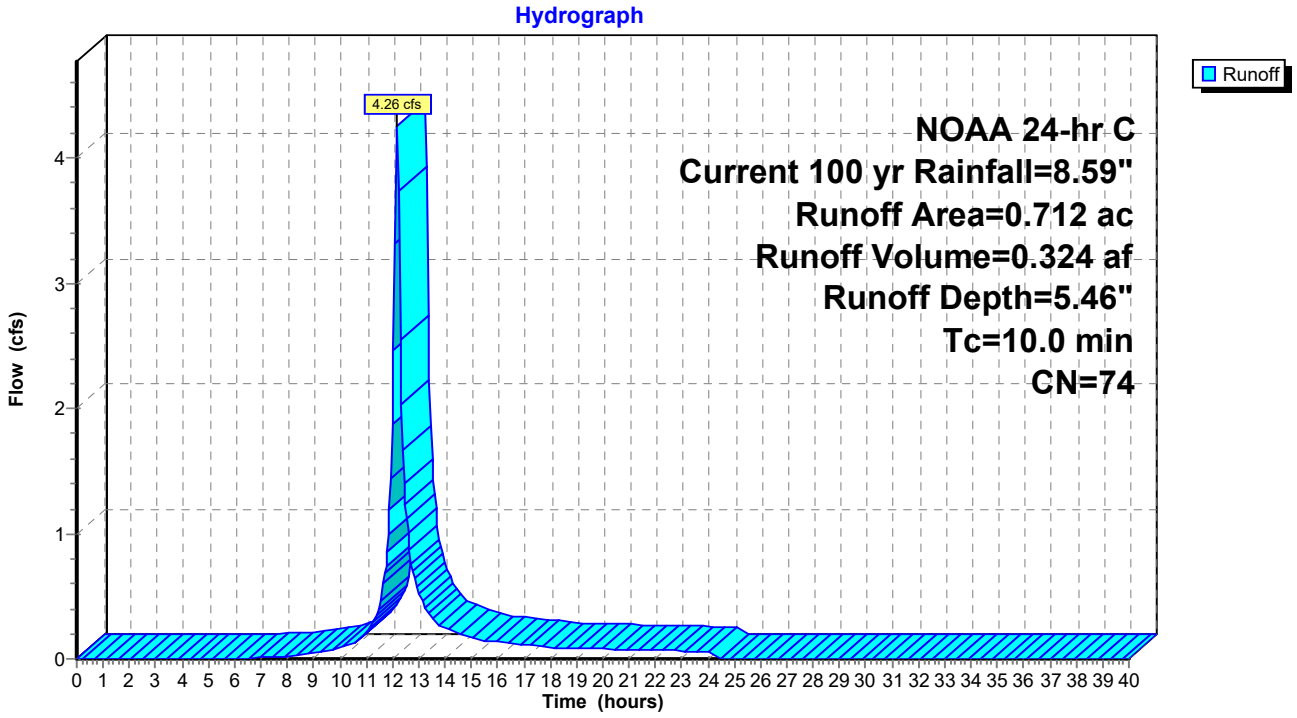
Runoff = 4.26 cfs @ 12.17 hrs, Volume= 0.324 af, Depth= 5.46"
Routed to Pond B-9 : Basin #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.712	74	>75% Grass cover, Good, HSG C
0.712		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 9P: PDA-9 (pervious)



Summary for Subcatchment 10I: PDA-10 (impervious)

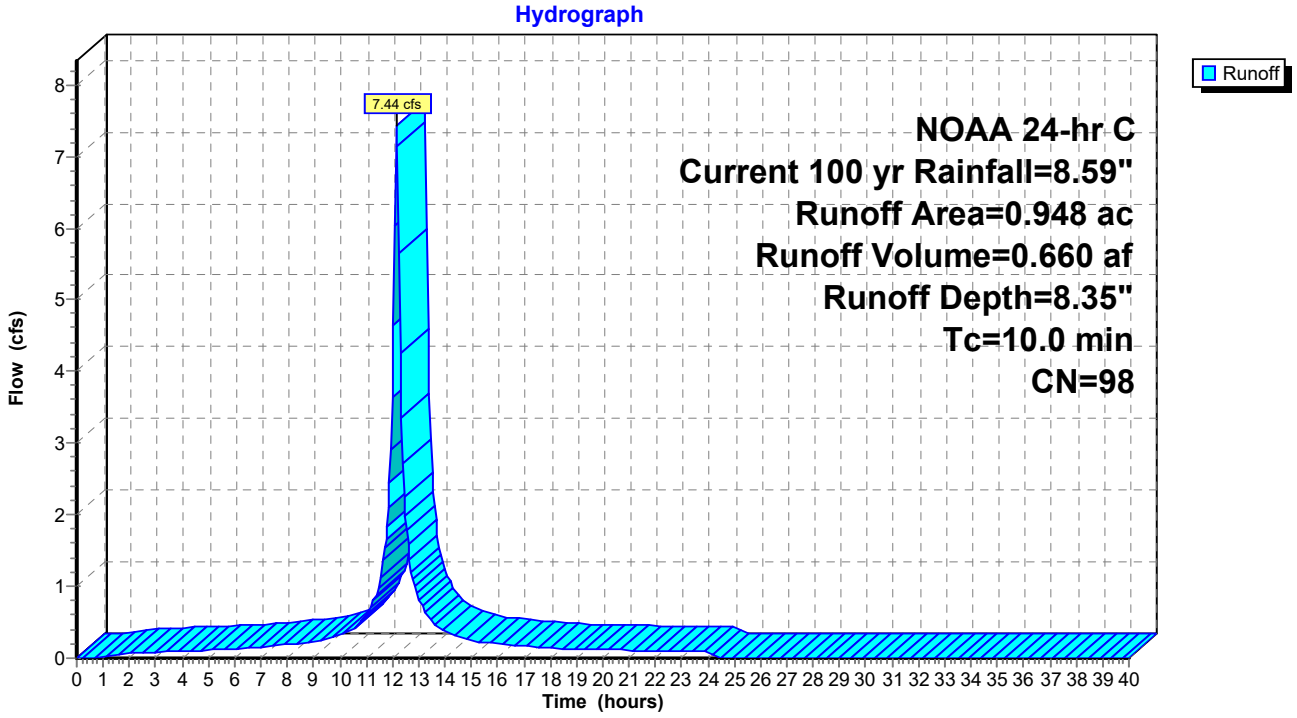
Runoff = 7.44 cfs @ 12.17 hrs, Volume= 0.660 af, Depth= 8.35"
Routed to Pond B-10 : Basin #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.570	98	Pavement, HSG C
*	0.321	98	Roof, HSG C
*	0.057	98	Concrete, HSG C
	0.948	98	Weighted Average
	0.948		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10I: PDA-10 (impervious)



Summary for Subcatchment 10P: PDA-10 (pervious)

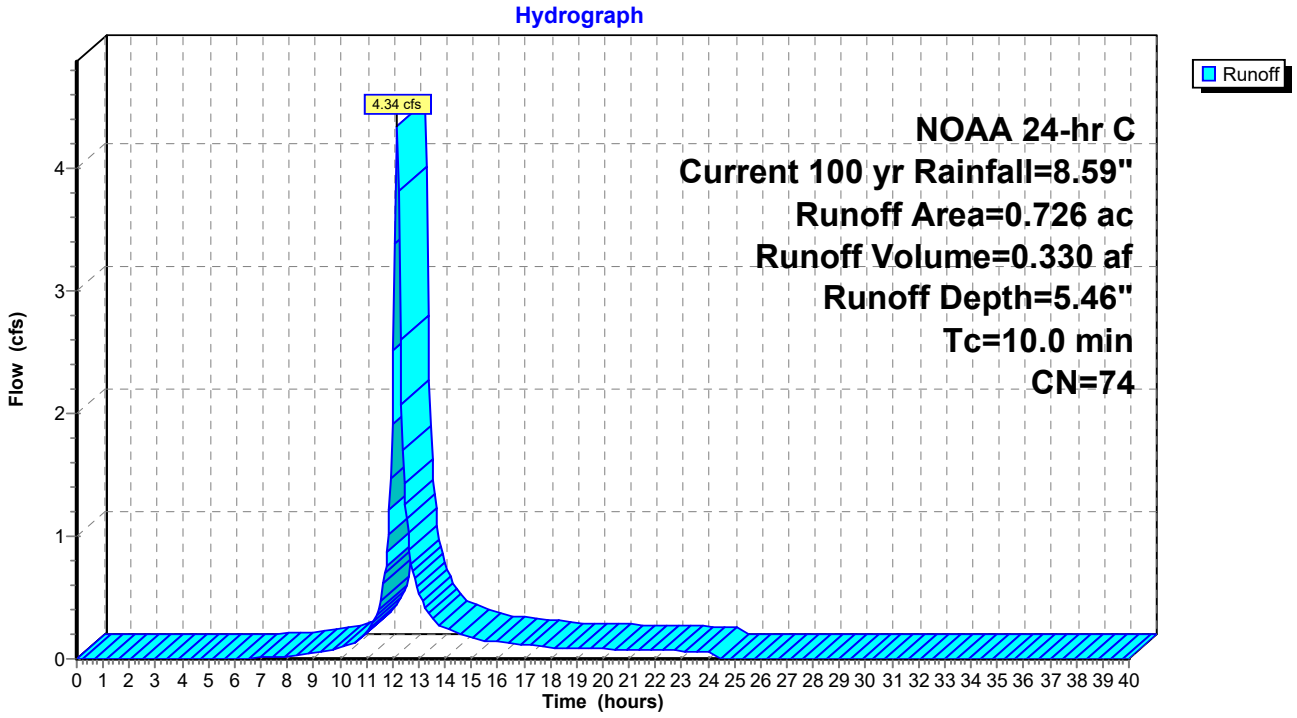
Runoff = 4.34 cfs @ 12.17 hrs, Volume= 0.330 af, Depth= 5.46"
Routed to Pond B-10 : Basin #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.726	74	>75% Grass cover, Good, HSG C
0.726		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10P: PDA-10 (pervious)



Summary for Subcatchment 11I: PDA-11 (impervious)

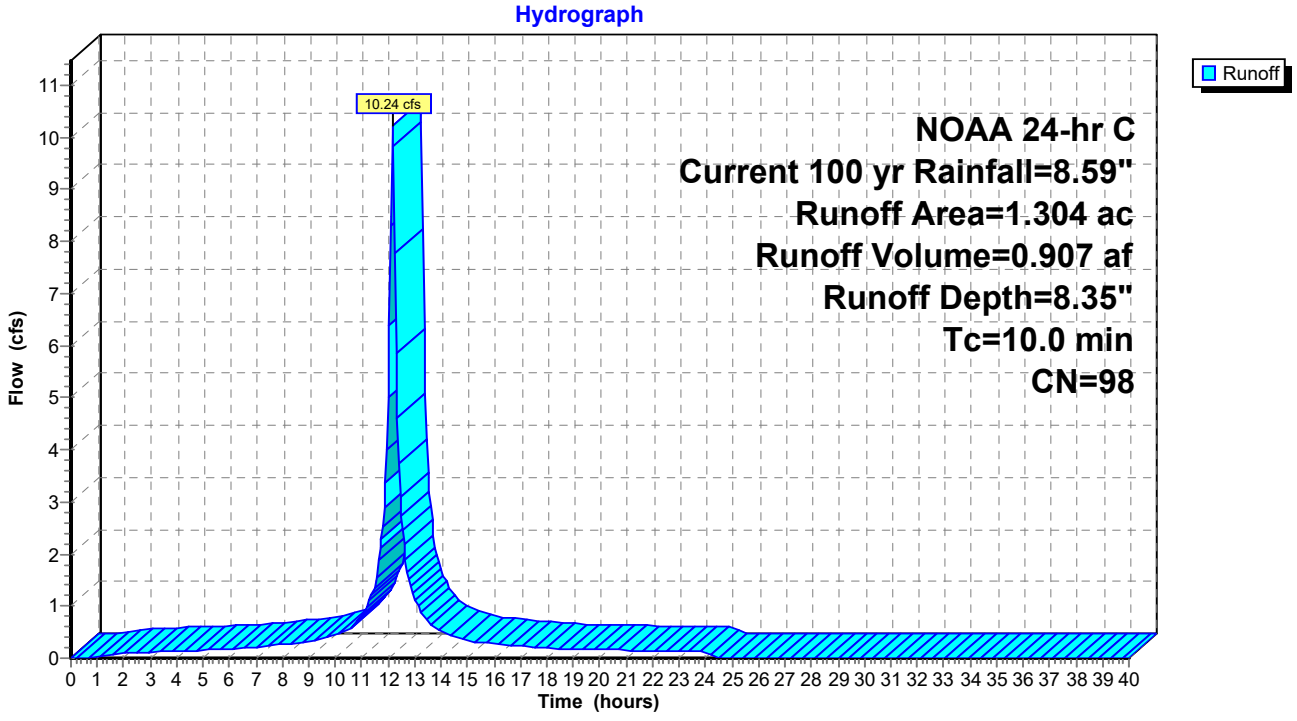
Runoff = 10.24 cfs @ 12.17 hrs, Volume= 0.907 af, Depth= 8.35"
Routed to Pond B-11 : Basin #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.166	98	Concrete, HSG C
	0.231	98	Roofs, HSG C
	0.907	98	Paved roads w/curbs & sewers, HSG C
	1.304	98	Weighted Average
	1.304		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 11I: PDA-11 (impervious)



Summary for Subcatchment 11P: PDA-11 (pervious)

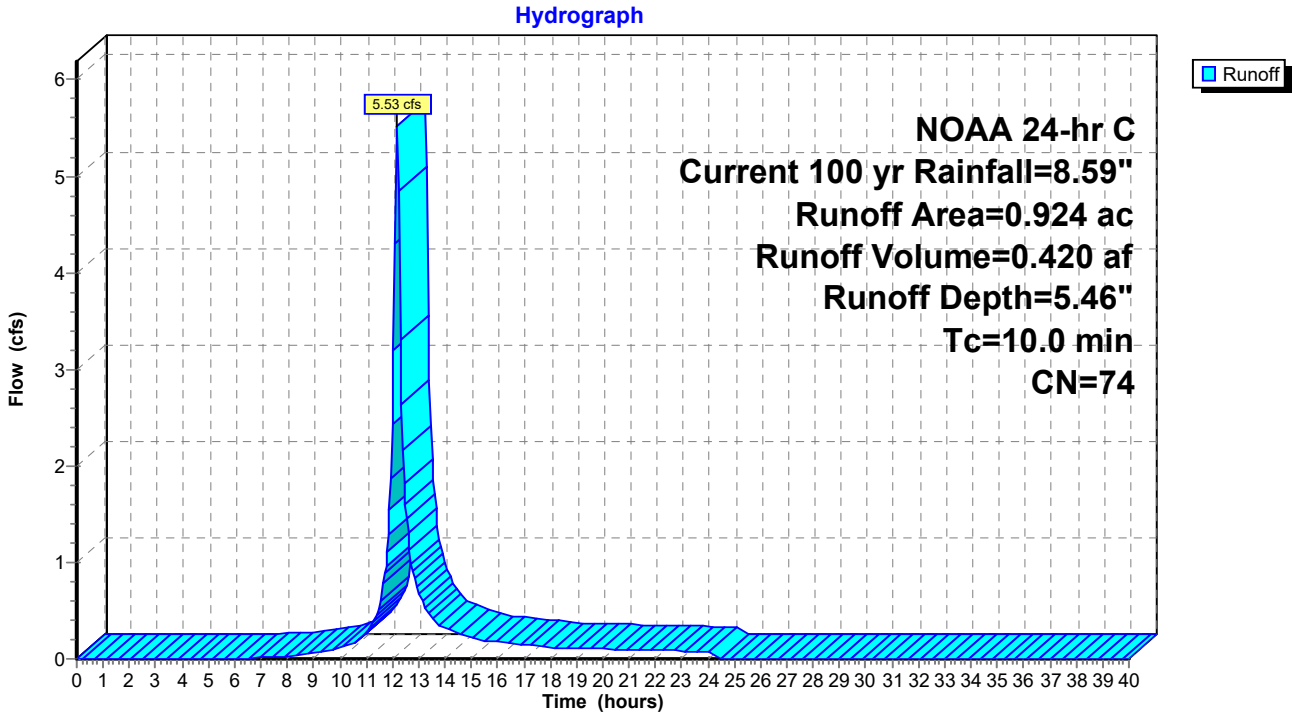
Runoff = 5.53 cfs @ 12.17 hrs, Volume= 0.420 af, Depth= 5.46"
Routed to Pond B-11 : Basin #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.924	74	>75% Grass cover, Good, HSG C
0.924		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 11P: PDA-11 (pervious)



Summary for Subcatchment 12l: PDA-12 (impervious)

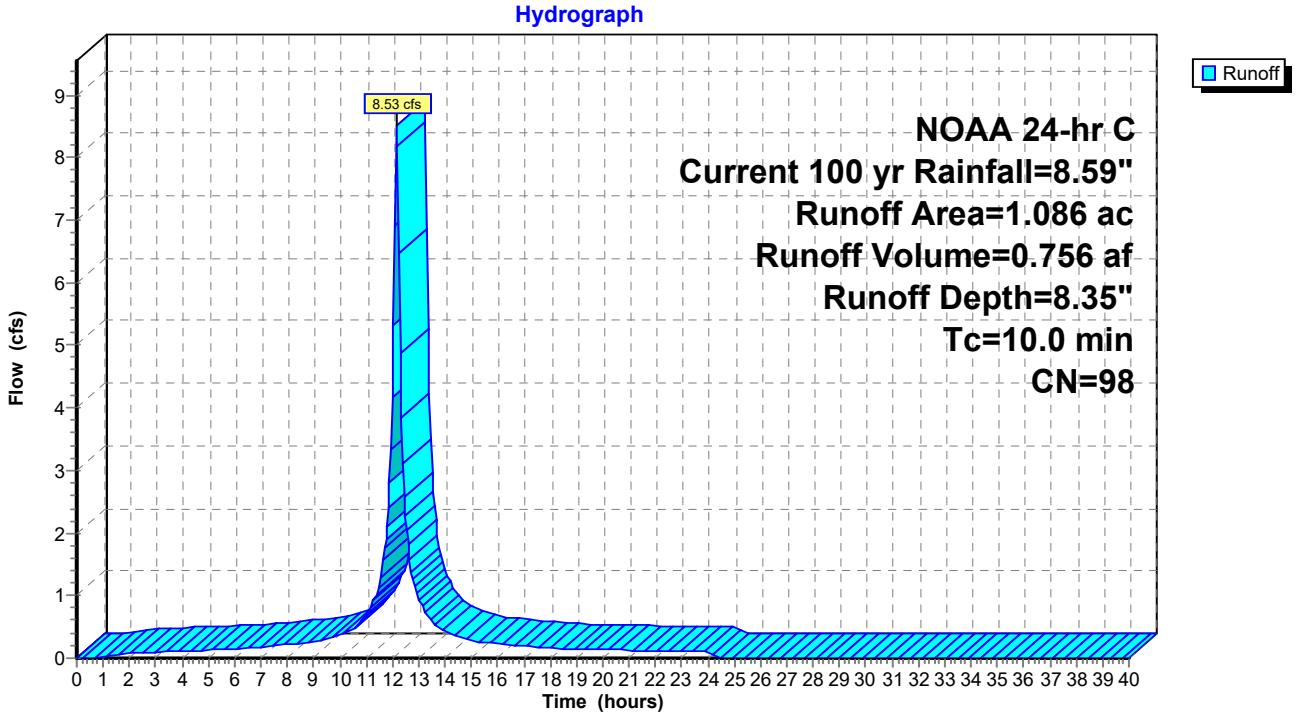
Runoff = 8.53 cfs @ 12.17 hrs, Volume= 0.756 af, Depth= 8.35"
Routed to Pond B-12 : Basin #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.404	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.039	98	Concrete, HSG C
	1.086	98	Weighted Average
	1.086		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 12l: PDA-12 (impervious)



Summary for Subcatchment 12P: PDA-12 (pervious)

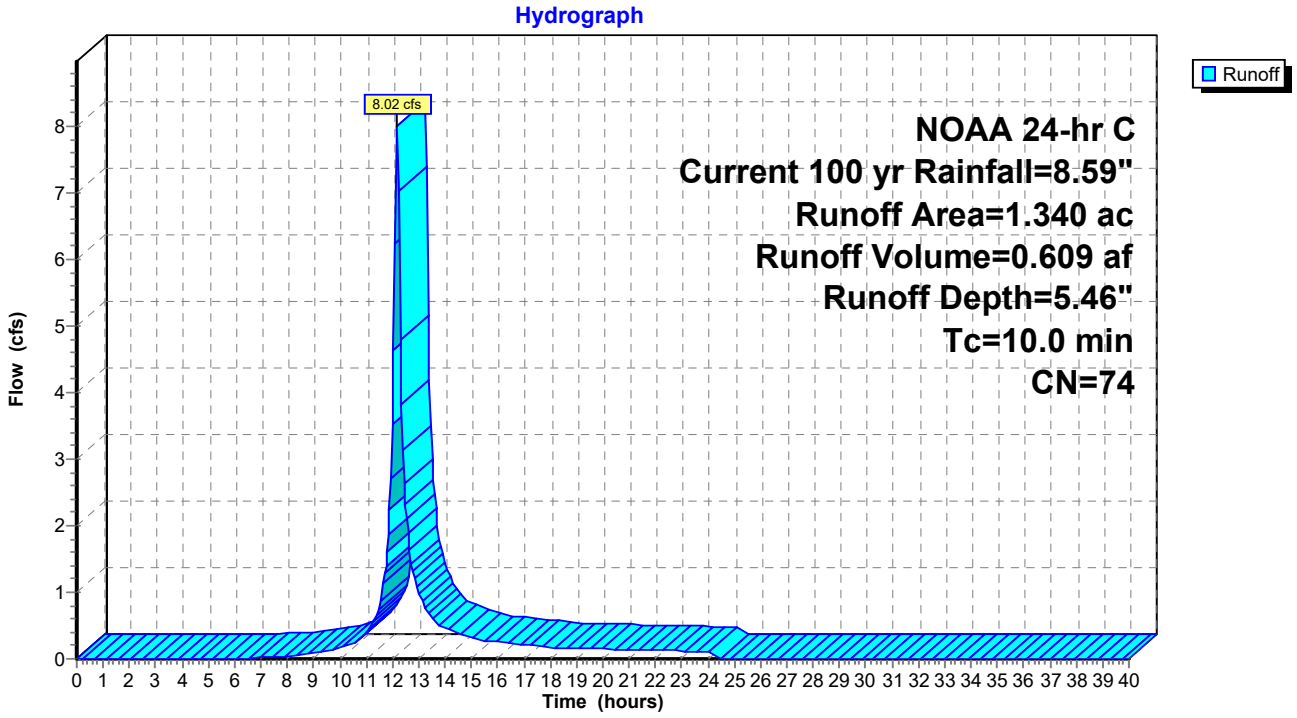
Runoff = 8.02 cfs @ 12.17 hrs, Volume= 0.609 af, Depth= 5.46"
Routed to Pond B-12 : Basin #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.340	74	>75% Grass cover, Good, HSG C
1.340		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 12P: PDA-12 (pervious)



Summary for Subcatchment 13I: PDA-13 (impervious)

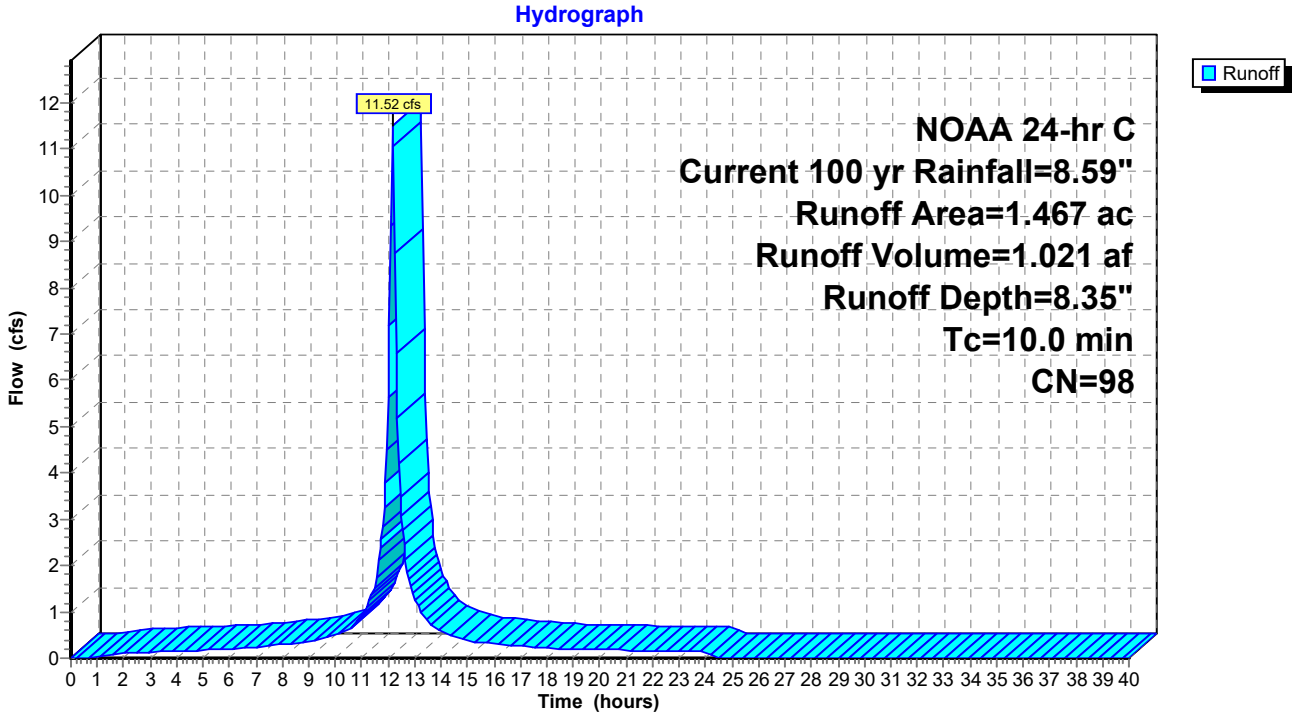
Runoff = 11.52 cfs @ 12.17 hrs, Volume= 1.021 af, Depth= 8.35"
Routed to Pond B-13 : Basin #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.678	98	Pavement, HSG C
*	0.707	98	Roof, HSG C
*	0.082	98	Concrete, HSG C
	1.467	98	Weighted Average
	1.467		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 13I: PDA-13 (impervious)



Summary for Subcatchment 13P: PDA-13 (pervious)

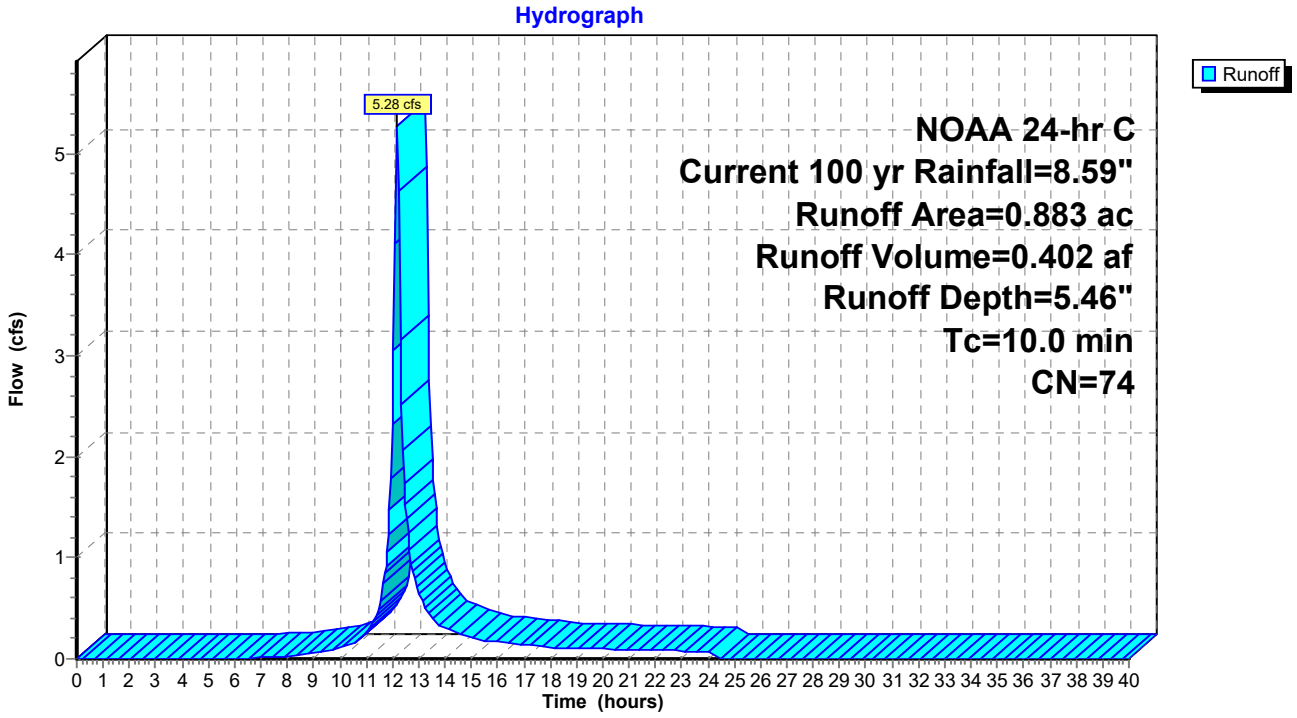
Runoff = 5.28 cfs @ 12.17 hrs, Volume= 0.402 af, Depth= 5.46"
Routed to Pond B-13 : Basin #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.883	74	>75% Grass cover, Good, HSG C
0.883		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 13P: PDA-13 (pervious)



Summary for Subcatchment 14l: PDA-14 (impervious)

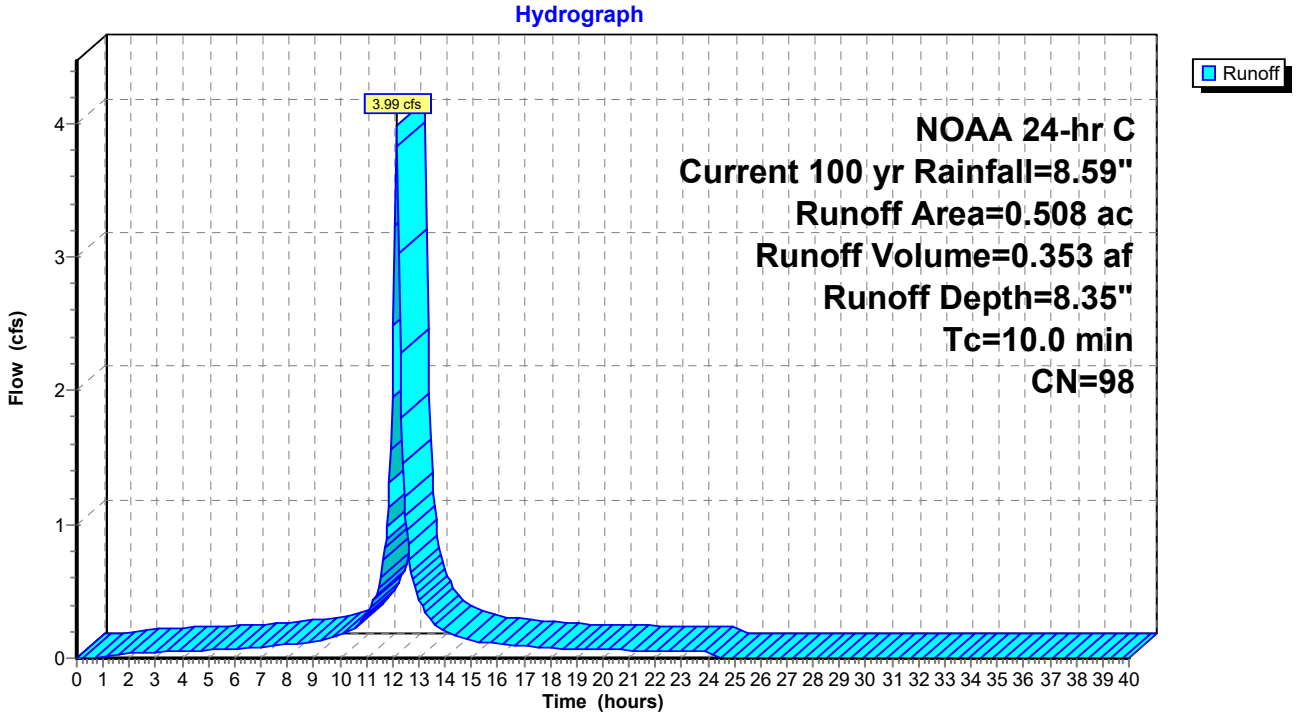
Runoff = 3.99 cfs @ 12.17 hrs, Volume= 0.353 af, Depth= 8.35"
Routed to Pond B-14 : Basin #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.308	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	0.508	98	Weighted Average
	0.508		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 14l: PDA-14 (impervious)



Summary for Subcatchment 14P: PDA-14 (pervious)

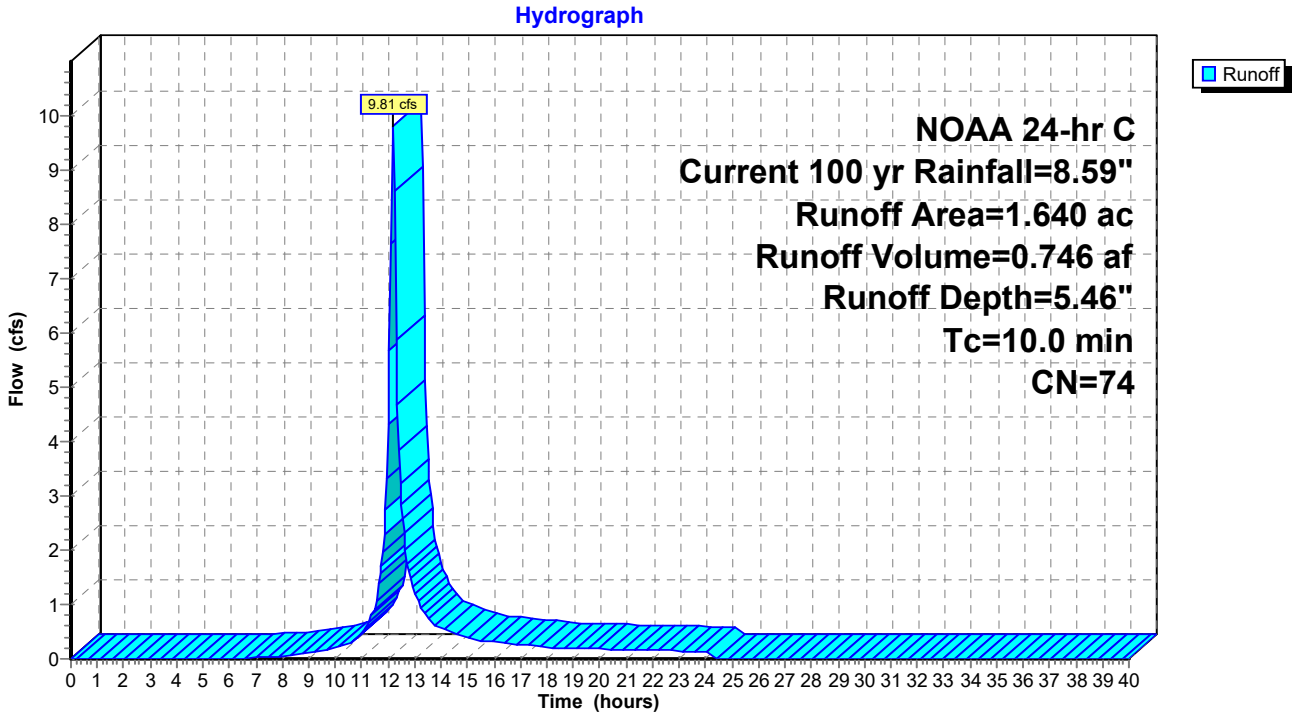
Runoff = 9.81 cfs @ 12.17 hrs, Volume= 0.746 af, Depth= 5.46"
Routed to Pond B-14 : Basin #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.640	74	>75% Grass cover, Good, HSG C
1.640		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 14P: PDA-14 (pervious)



Summary for Subcatchment 15l: PDA-15 (impervious)

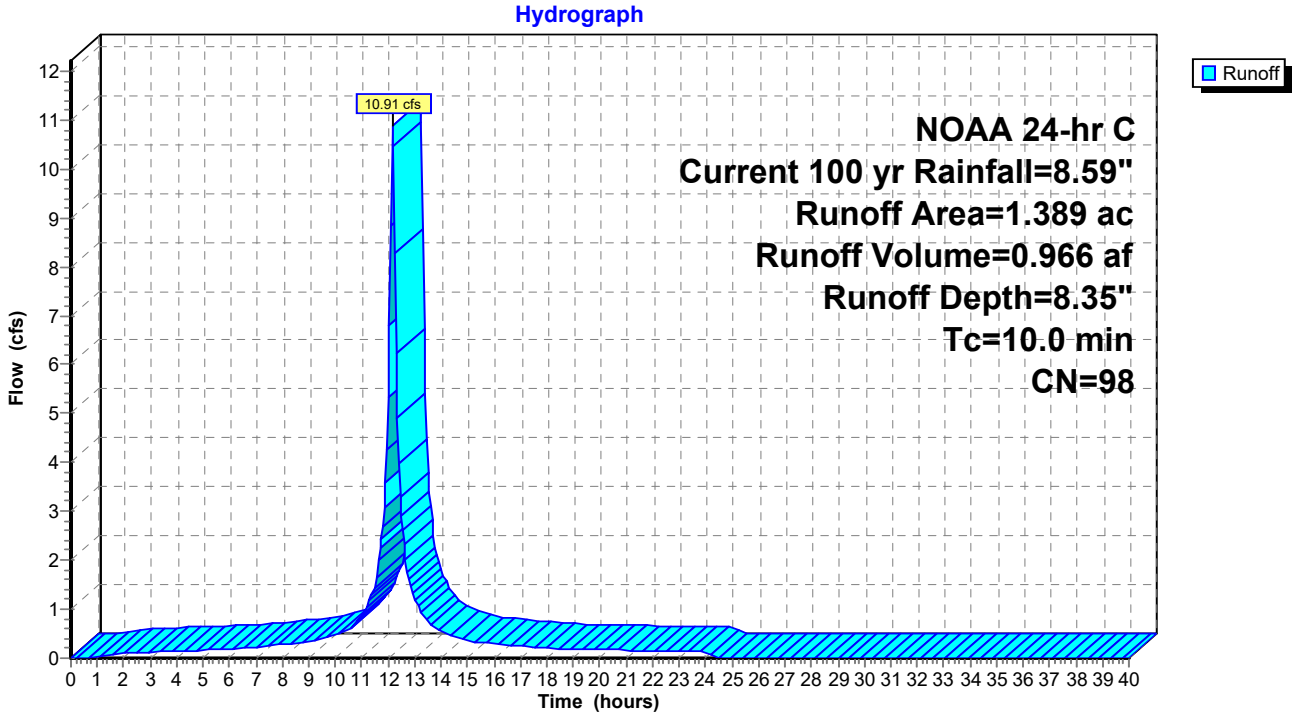
Runoff = 10.91 cfs @ 12.17 hrs, Volume= 0.966 af, Depth= 8.35"
Routed to Pond B-15 : Basin #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.501	98	Pavement, HSG C
*	0.836	98	Roof, HSG C
*	0.052	98	Concrete, HSG C
	1.389	98	Weighted Average
	1.389		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 15l: PDA-15 (impervious)



Summary for Subcatchment 15P: PDA-15 (pervious)

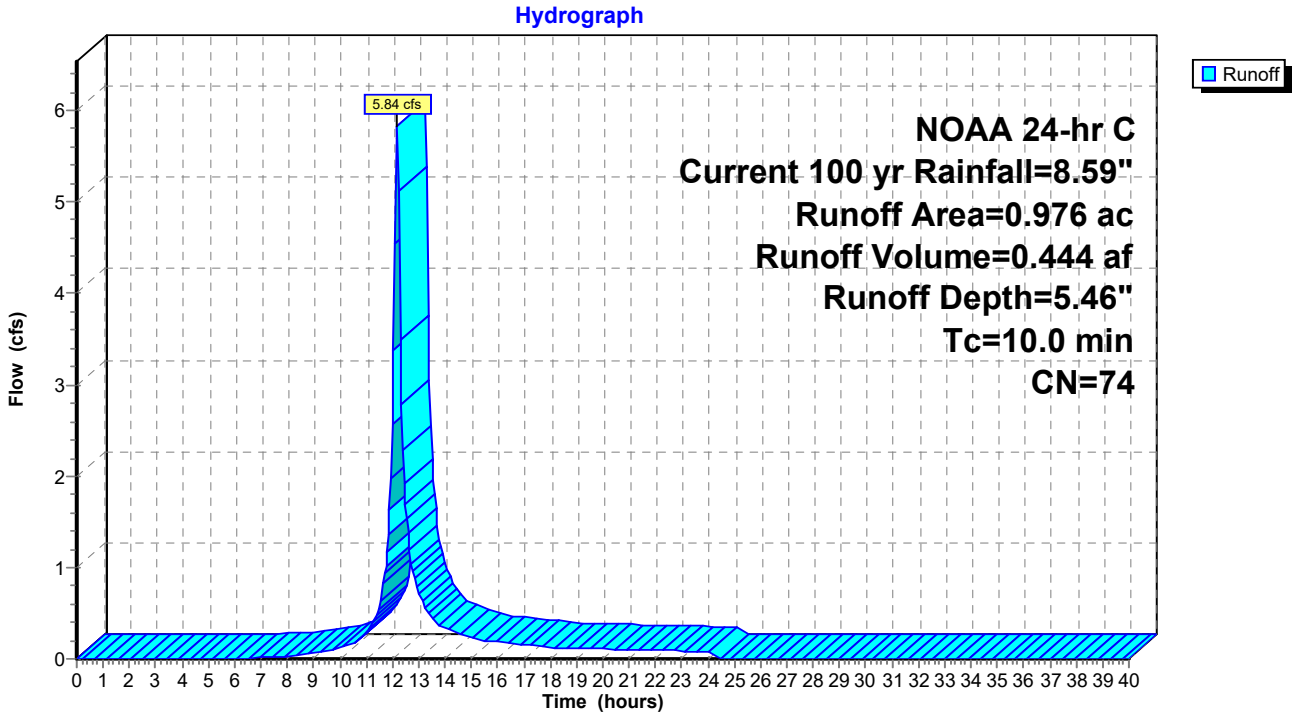
Runoff = 5.84 cfs @ 12.17 hrs, Volume= 0.444 af, Depth= 5.46"
Routed to Pond B-15 : Basin #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.976	74	>75% Grass cover, Good, HSG C
0.976		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 15P: PDA-15 (pervious)



Summary for Subcatchment 16AI: PDA-16A (impervious)

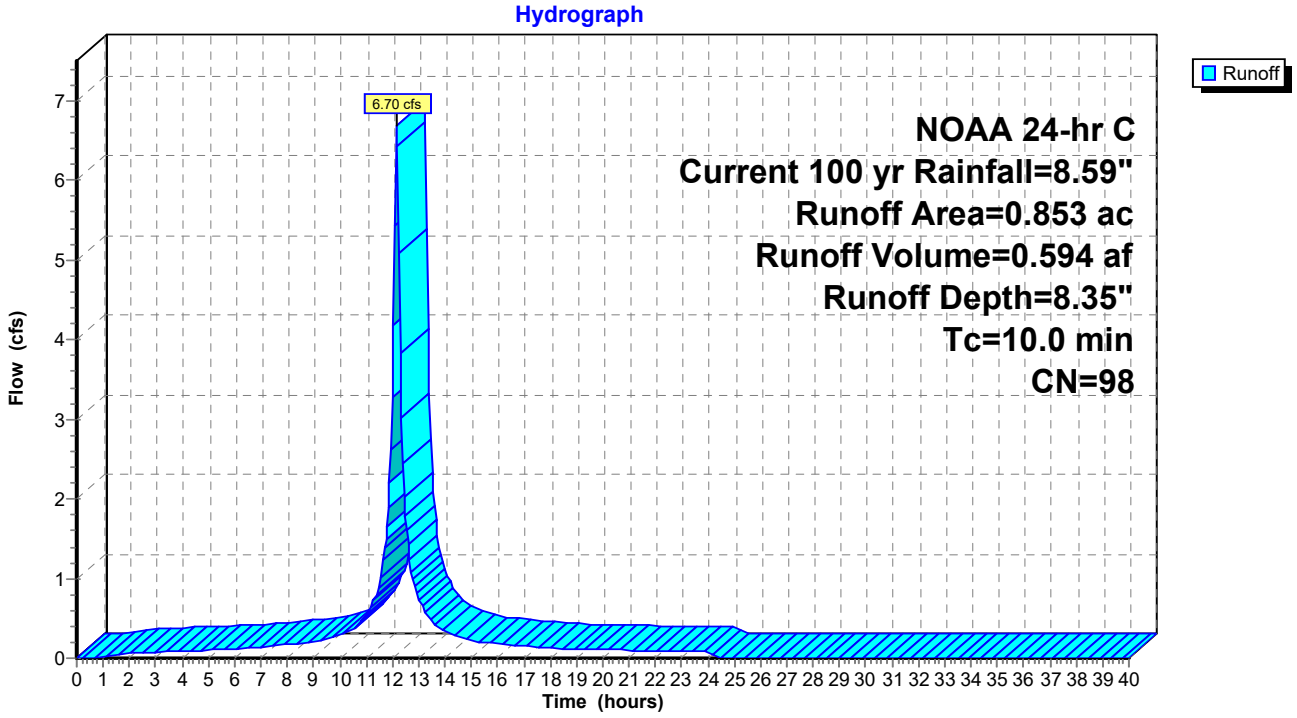
Runoff = 6.70 cfs @ 12.17 hrs, Volume= 0.594 af, Depth= 8.35"
Routed to Pond B-16A : Basin #16A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.072	98	Pavement, HSG C
*	0.771	98	Roof, HSG C
*	0.010	98	Concrete, HSG C
	0.853	98	Weighted Average
	0.853		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16AI: PDA-16A (impervious)



Summary for Subcatchment 16AP: PDA-16A (pervious)

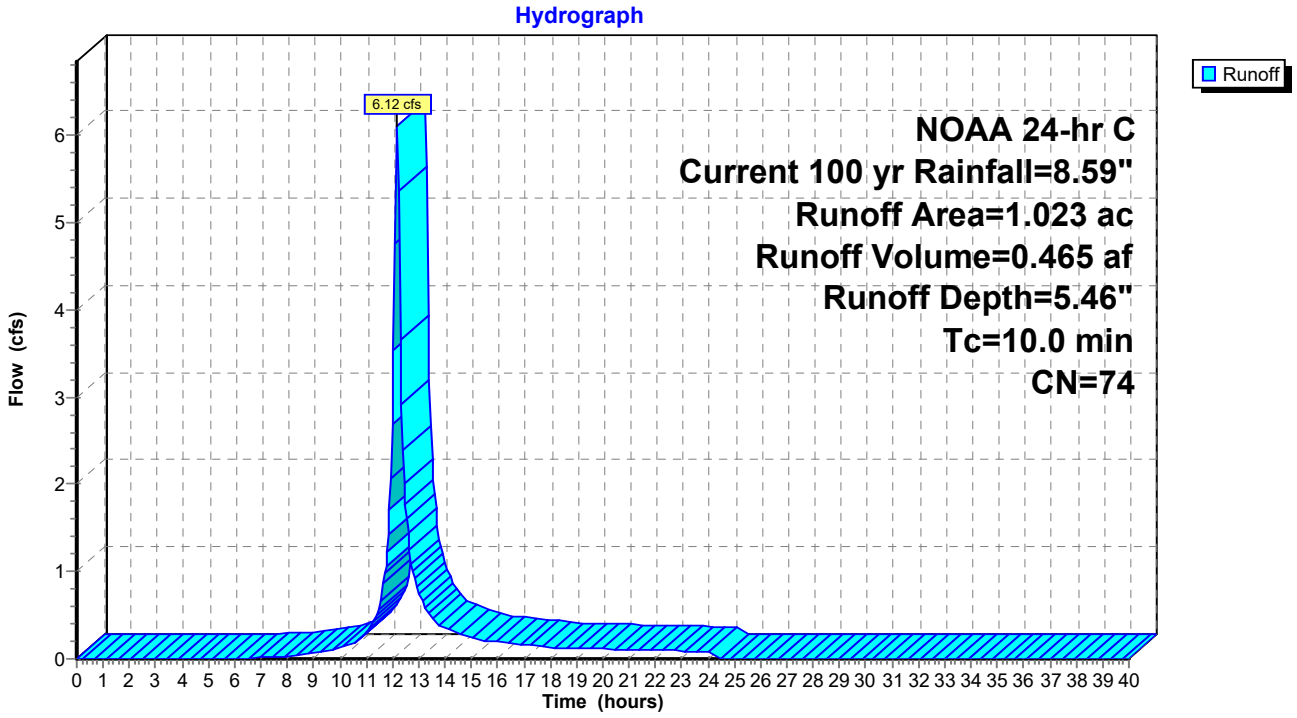
Runoff = 6.12 cfs @ 12.17 hrs, Volume= 0.465 af, Depth= 5.46"
Routed to Pond B-16A : Basin #16A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.023	74	>75% Grass cover, Good, HSG C
1.023		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16AP: PDA-16A (pervious)



Summary for Subcatchment 16BI: PDA-16B (impervious)

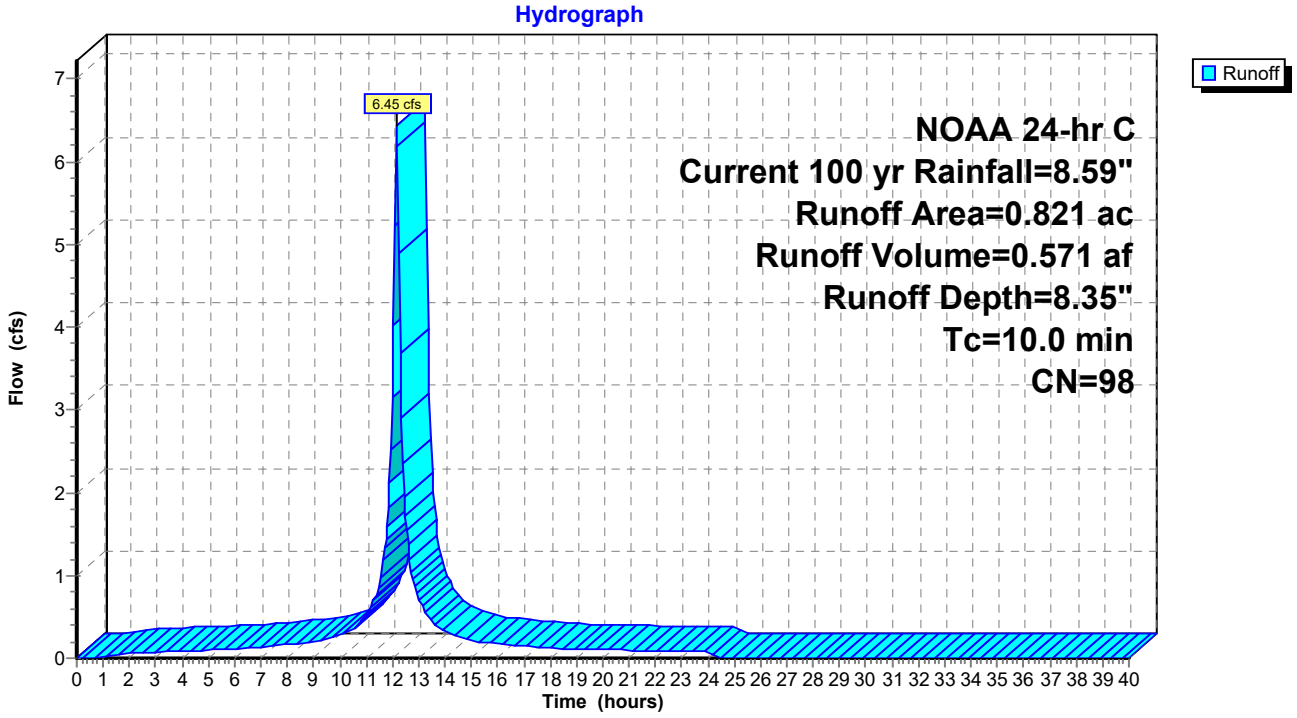
Runoff = 6.45 cfs @ 12.17 hrs, Volume= 0.571 af, Depth= 8.35"
Routed to Pond B-16B : Basin #16B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.621	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	0.821	98	Weighted Average
	0.821		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16BI: PDA-16B (impervious)



Summary for Subcatchment 16BP: PDA-16B (pervious)

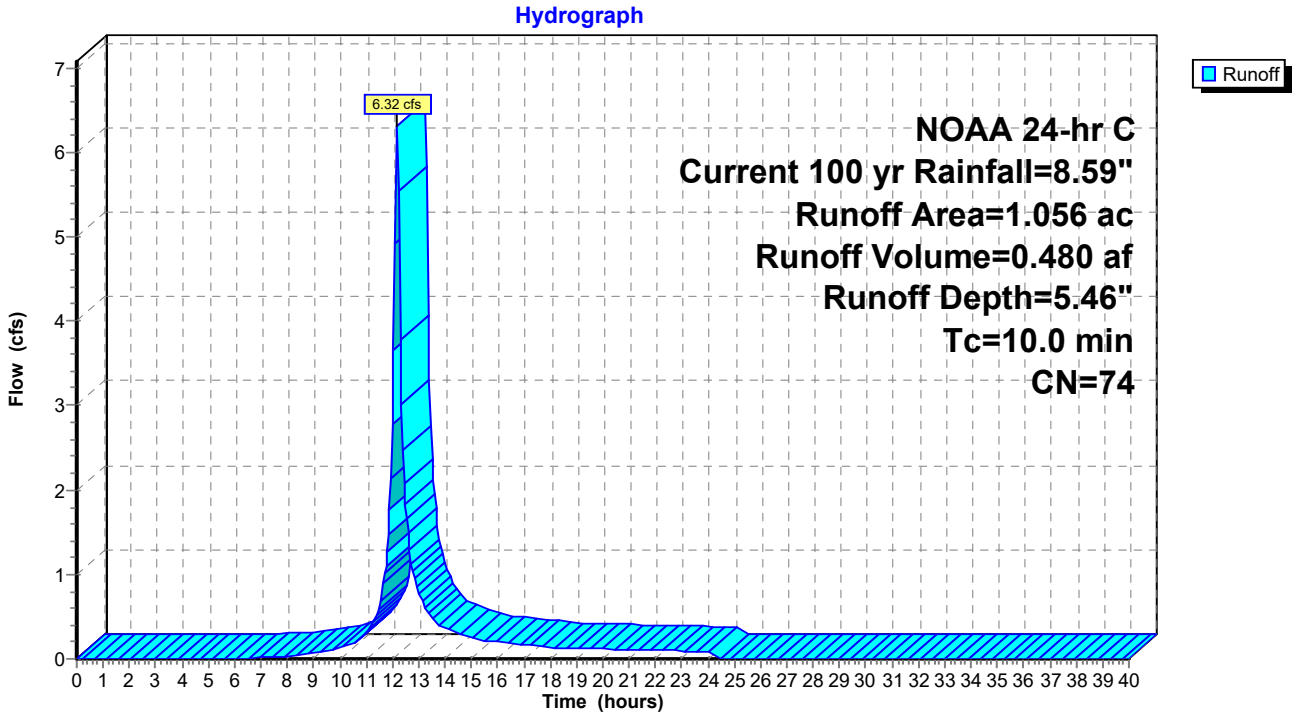
Runoff = 6.32 cfs @ 12.17 hrs, Volume= 0.480 af, Depth= 5.46"
Routed to Pond B-16B : Basin #16B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.056	74	>75% Grass cover, Good, HSG C
1.056		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16BP: PDA-16B (pervious)



Summary for Subcatchment 17AI: PDA-17A (impervious)

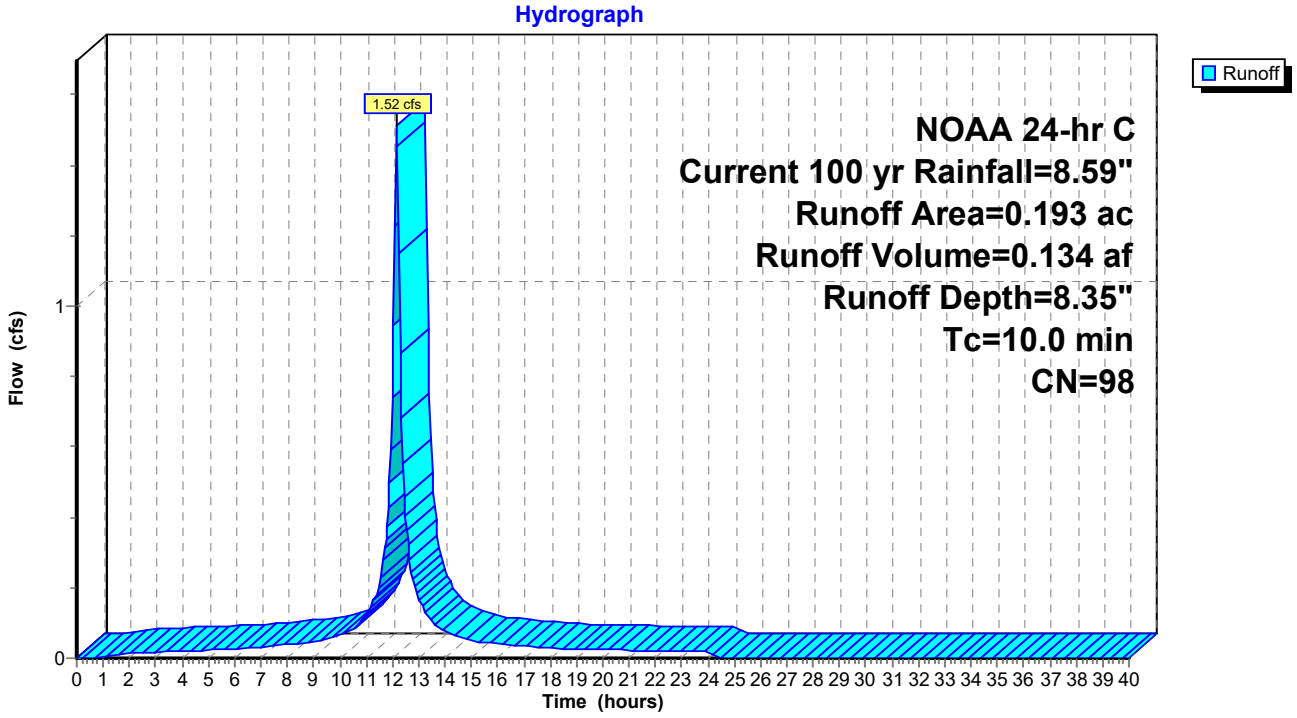
Runoff = 1.52 cfs @ 12.17 hrs, Volume= 0.134 af, Depth= 8.35"
Routed to Pond B-17A : Basin #17A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.193	98	Roof, HSG C
	0.000	98	Paved roads w/curbs & sewers, HSG C
*	0.000	98	Concrete, HSG C
	0.193	98	Weighted Average
	0.193		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17AI: PDA-17A (impervious)



Summary for Subcatchment 17AP: PDA-17A (pervious)

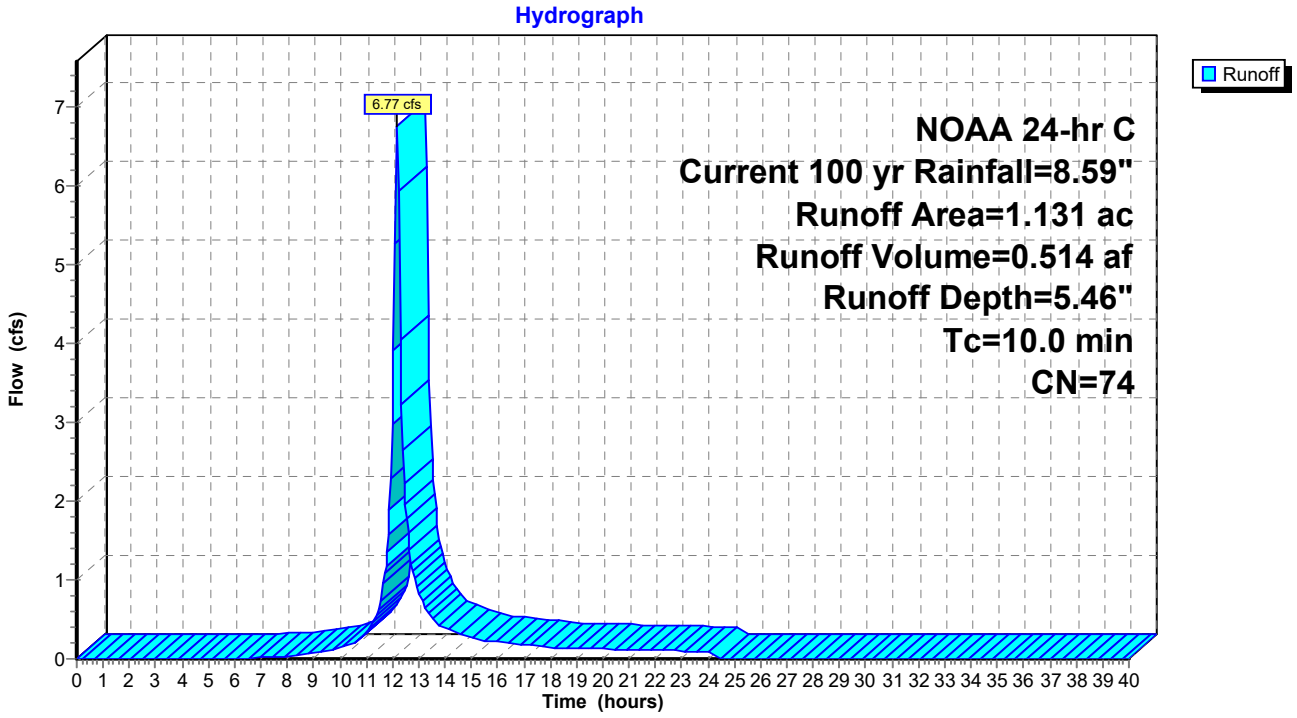
Runoff = 6.77 cfs @ 12.17 hrs, Volume= 0.514 af, Depth= 5.46"
Routed to Pond B-17A : Basin #17A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.131	74	>75% Grass cover, Good, HSG C
1.131		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17AP: PDA-17A (pervious)



Summary for Subcatchment 17BI: PDA-17B (impervious)

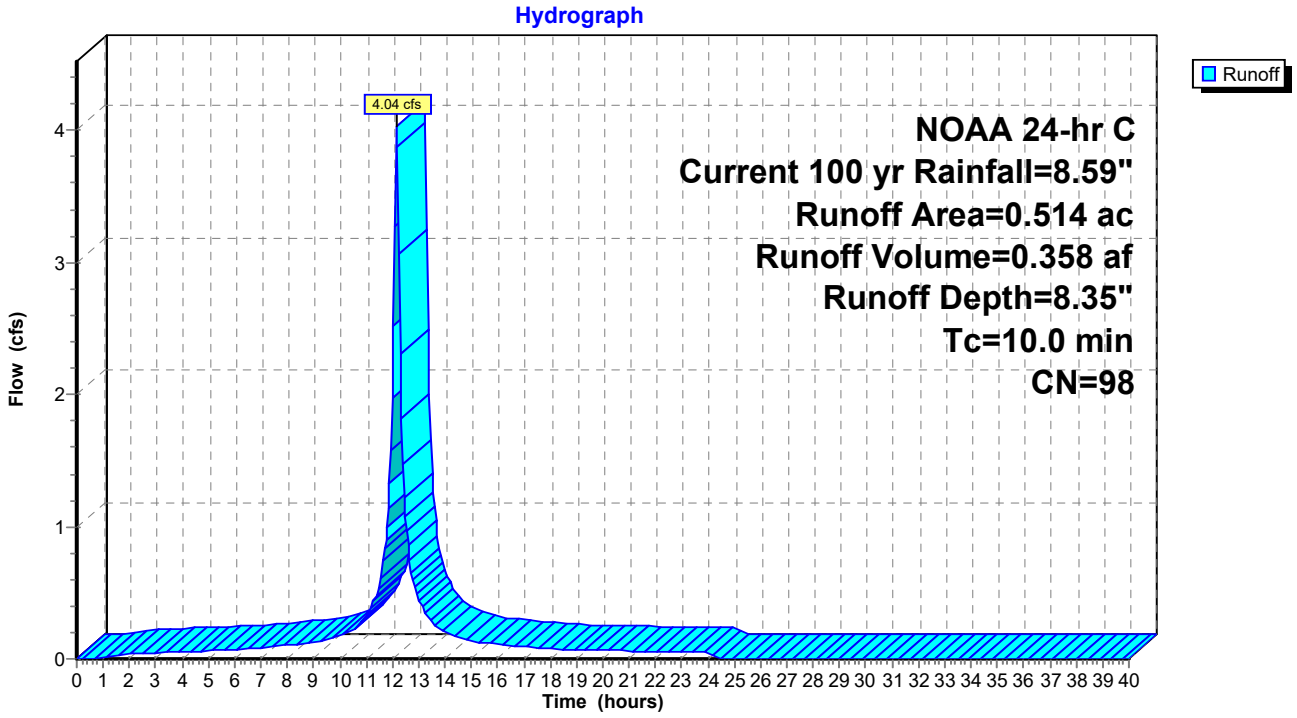
Runoff = 4.04 cfs @ 12.17 hrs, Volume= 0.358 af, Depth= 8.35"
Routed to Pond B-17B : Basin #17B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.514	98	Roof, HSG C
	0.514		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17BI: PDA-17B (impervious)



Summary for Subcatchment 17BP: PDA-17B (pervious)

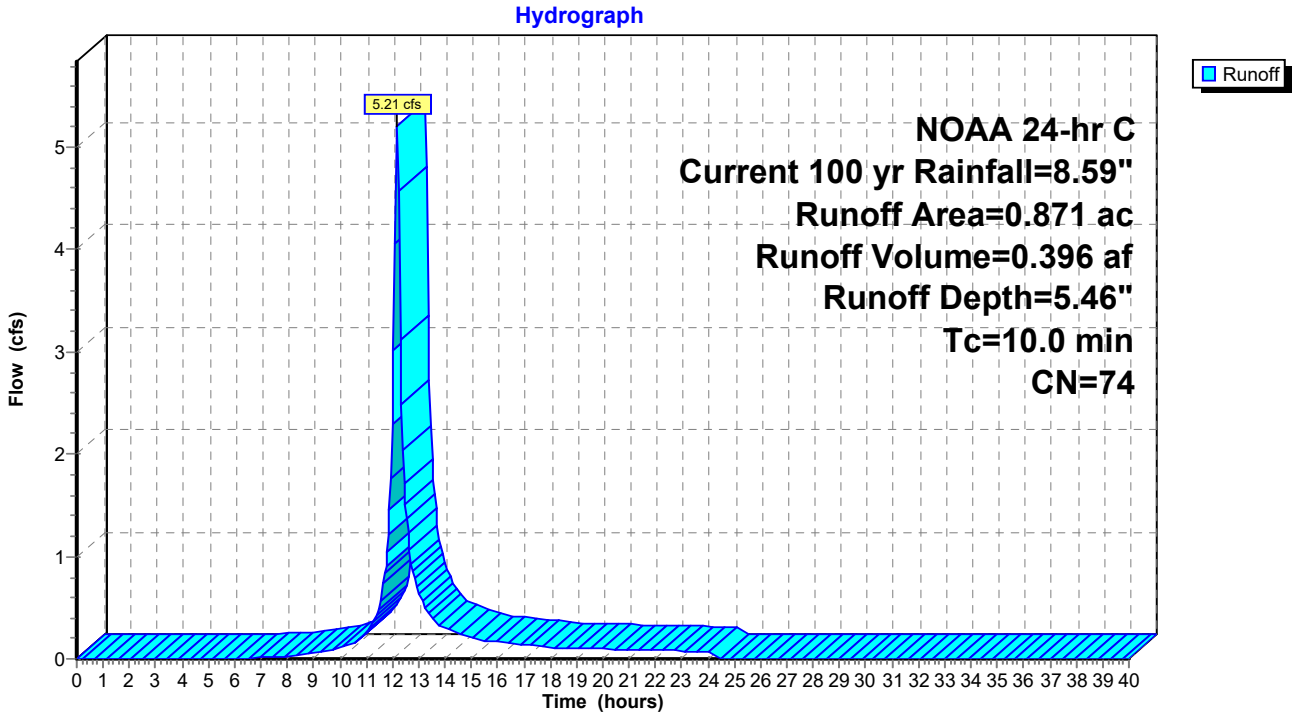
Runoff = 5.21 cfs @ 12.17 hrs, Volume= 0.396 af, Depth= 5.46"
Routed to Pond B-17B : Basin #17B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.871	74	>75% Grass cover, Good, HSG C
0.871		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17BP: PDA-17B (pervious)



Summary for Subcatchment UPDA-1: PDA-1 (undetained)

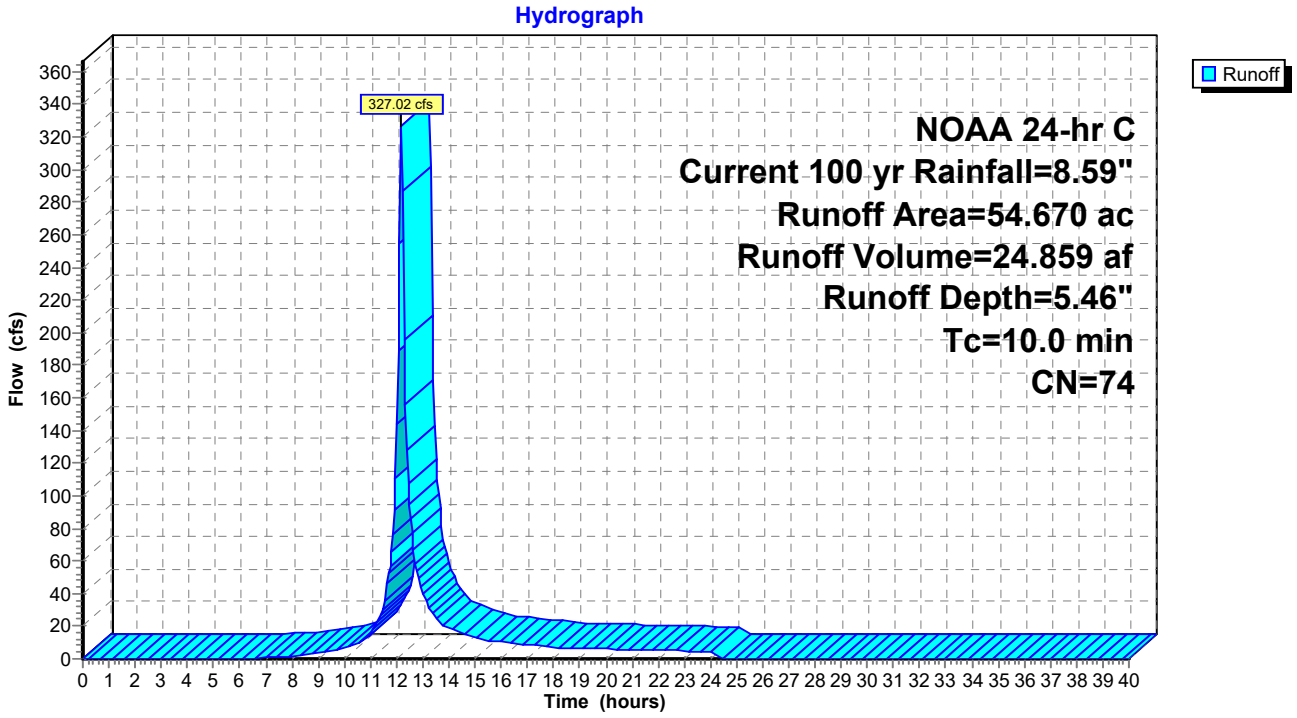
Runoff = 327.02 cfs @ 12.17 hrs, Volume= 24.859 af, Depth= 5.46"
Routed to Link PDA-1 : Proposed Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
54.670	74	>75% Grass cover, Good, HSG C
54.670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-1: PDA-1 (undetained)



Summary for Pond B-1: Basin #1

Inflow Area = 2.782 ac, 26.02% Impervious, Inflow Depth = 3.80" for Current 100 yr event
Inflow = 5.84 cfs @ 12.45 hrs, Volume= 0.881 af
Outflow = 3.40 cfs @ 12.72 hrs, Volume= 0.805 af, Atten= 42%, Lag= 16.0 min
Primary = 3.40 cfs @ 12.72 hrs, Volume= 0.805 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 210.07' @ 12.72 hrs Surf.Area= 11,202 sf Storage= 11,448 cf

Plug-Flow detention time= 213.5 min calculated for 0.805 af (91% of inflow)
Center-of-Mass det. time= 169.3 min (1,050.0 - 880.7)

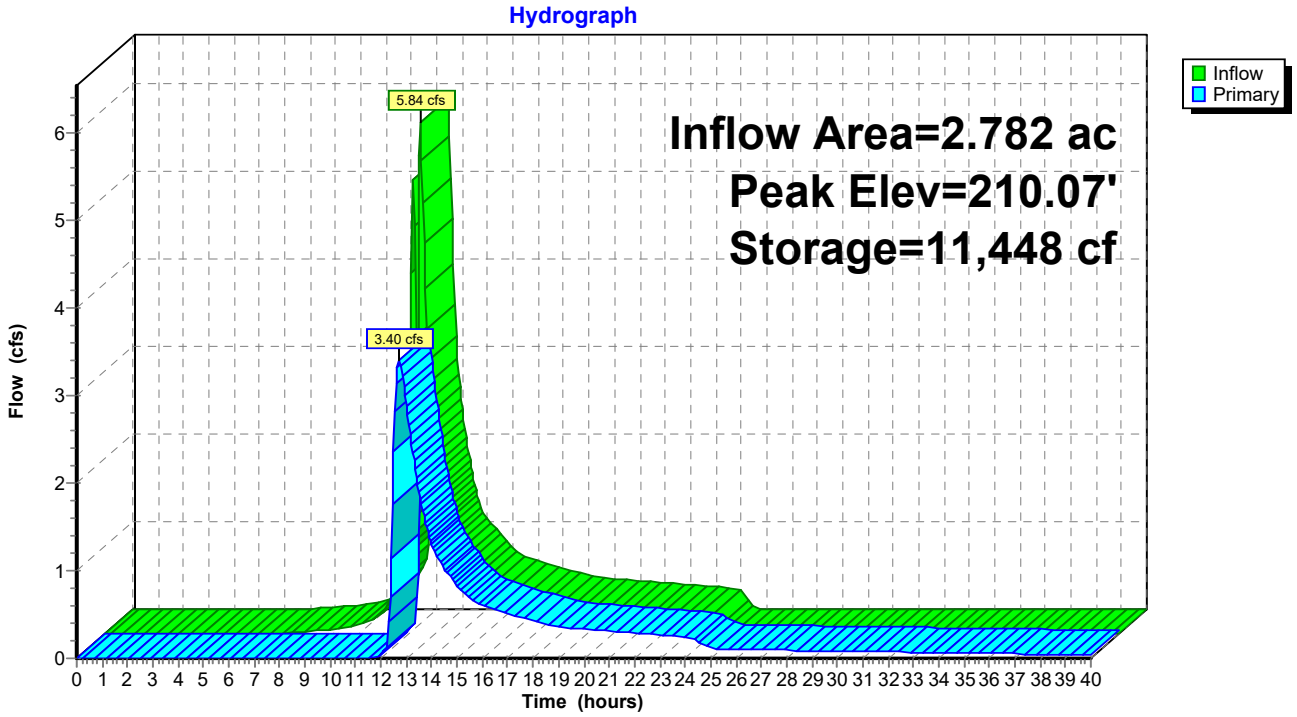
Volume	Invert	Avail.Storage	Storage Description
#1	209.00'	34,903 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
209.00	10,187	0	0
210.00	11,133	10,660	10,660
211.00	12,113	11,623	22,283
212.00	13,126	12,620	34,903

Device	Routing	Invert	Outlet Devices
#1	Primary	207.65'	**18.0" Round Culvert** L= 276.0' Ke= 0.500 Inlet / Outlet Invert= 207.65' / 204.00' S= 0.0132 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	209.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	209.67'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	210.80'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.39 cfs @ 12.72 hrs HW=210.07' (Free Discharge)
- **1=Culvert** (Passes 3.39 cfs of 11.00 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.15 cfs @ 4.29 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.24 cfs @ 2.07 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-1: Basin #1



Stage-Discharge for Pond B-1: Basin #1

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
209.00	0.00	210.04	3.03	211.08	31.14
209.02	0.00	210.06	3.27	211.10	33.28
209.04	0.00	210.08	3.51	211.12	35.53
209.06	0.00	210.10	3.76	211.14	37.86
209.08	0.00	210.12	4.01	211.16	40.30
209.10	0.00	210.14	4.27	211.18	42.83
209.12	0.00	210.16	4.53	211.20	45.46
209.14	0.00	210.18	4.80	211.22	48.24
209.16	0.00	210.20	5.07	211.24	51.13
209.18	0.00	210.22	5.35	211.26	54.12
209.20	0.00	210.24	5.63	211.28	57.21
209.22	0.00	210.26	5.92	211.30	60.41
209.24	0.01	210.28	6.21	211.32	63.72
209.26	0.01	210.30	6.50	211.34	67.13
209.28	0.02	210.32	6.80	211.36	70.65
209.30	0.03	210.34	7.10	211.38	74.28
209.32	0.03	210.36	7.41	211.40	78.01
209.34	0.04	210.38	7.72	211.42	81.30
209.36	0.05	210.40	8.03	211.44	84.65
209.38	0.05	210.42	8.35	211.46	88.04
209.40	0.06	210.44	8.67	211.48	91.49
209.42	0.06	210.46	9.00	211.50	94.99
209.44	0.07	210.48	9.33	211.52	98.55
209.46	0.07	210.50	9.66	211.54	102.15
209.48	0.07	210.52	10.00	211.56	105.80
209.50	0.08	210.54	10.34	211.58	109.50
209.52	0.08	210.56	10.68	211.60	113.25
209.54	0.08	210.58	11.03	211.62	117.13
209.56	0.09	210.60	11.37	211.64	121.06
209.58	0.09	210.62	11.73	211.66	125.04
209.60	0.09	210.64	12.08	211.68	129.07
209.62	0.10	210.66	12.44	211.70	133.15
209.64	0.10	210.68	12.61	211.72	137.29
209.66	0.10	210.70	12.64	211.74	141.48
209.68	0.12	210.72	12.66	211.76	145.72
209.70	0.17	210.74	12.69	211.78	150.00
209.72	0.26	210.76	12.71	211.80	154.34
209.74	0.35	210.78	12.73	211.82	158.62
209.76	0.47	210.80	12.76	211.84	162.95
209.78	0.59	210.82	13.11	211.86	167.31
209.80	0.73	210.84	13.74	211.88	171.72
209.82	0.88	210.86	14.56	211.90	176.17
209.84	1.03	210.88	15.51	211.92	180.66
209.86	1.20	210.90	16.60	211.94	185.19
209.88	1.37	210.92	17.79	211.96	189.77
209.90	1.56	210.94	19.10	211.98	194.38
209.92	1.75	210.96	20.50	212.00	**199.03**
209.94	1.94	210.98	21.99		
209.96	2.15	211.00	23.56		
209.98	2.36	211.02	25.31		
210.00	2.58	211.04	27.15		
210.02	2.80	211.06	29.10		

Summary for Pond B-10: Basin #10

Inflow Area = 1.674 ac, 56.63% Impervious, Inflow Depth = 7.10" for Current 100 yr event
Inflow = 11.78 cfs @ 12.17 hrs, Volume= 0.990 af
Outflow = 3.49 cfs @ 12.47 hrs, Volume= 0.898 af, Atten= 70%, Lag= 18.2 min
Primary = 3.49 cfs @ 12.47 hrs, Volume= 0.898 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 182.19' @ 12.47 hrs Surf.Area= 6,888 sf Storage= 17,610 cf

Plug-Flow detention time= 147.9 min calculated for 0.896 af (91% of inflow)
Center-of-Mass det. time= 99.0 min (868.8 - 769.8)

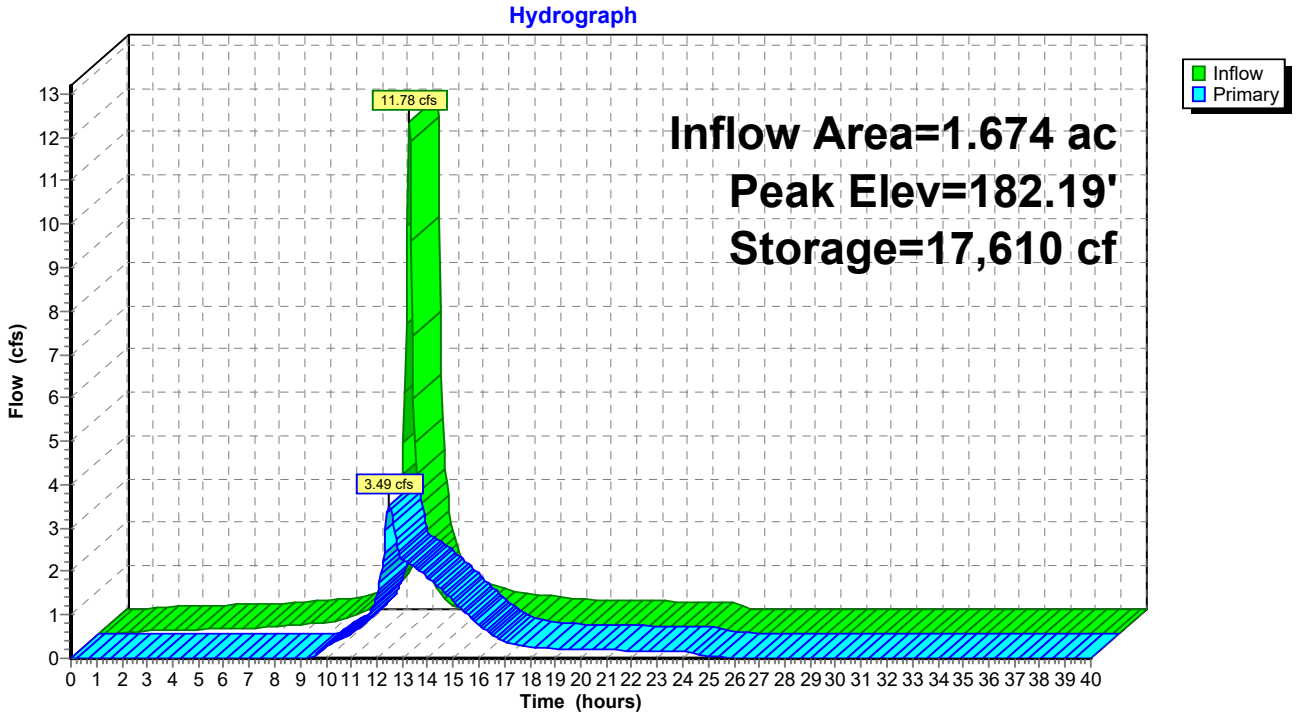
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	23,473 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	4,220	0	0
180.00	5,003	4,612	4,612
181.00	5,833	5,418	10,030
182.00	6,710	6,272	16,301
183.00	7,633	7,172	23,473

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 52.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 176.00' S= 0.0317 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.88'	**24.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	182.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.47 cfs @ 12.47 hrs HW=182.19' (Free Discharge)
- **1=Culvert** (Passes 3.47 cfs of 16.57 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.40 cfs @ 7.19 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.08 cfs @ 1.43 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-10: Basin #10



Stage-Discharge for Pond B-10: Basin #10

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.41	181.08	1.70	182.12	2.90
179.02	0.00	180.06	0.48	181.10	1.71	182.14	3.05
179.04	0.00	180.08	0.54	181.12	1.73	182.16	3.21
179.06	0.00	180.10	0.58	181.14	1.74	182.18	3.38
179.08	0.00	180.12	0.63	181.16	1.76	182.20	3.56
179.10	0.00	180.14	0.67	181.18	1.77	182.22	3.75
179.12	0.00	180.16	0.71	181.20	1.78	182.24	3.94
179.14	0.00	180.18	0.74	181.22	1.80	182.26	4.14
179.16	0.00	180.20	0.78	181.24	1.81	182.28	4.35
179.18	0.00	180.22	0.81	181.26	1.83	182.30	4.57
179.20	0.00	180.24	0.84	181.28	1.84	182.32	4.79
179.22	0.00	180.26	0.87	181.30	1.86	182.34	5.02
179.24	0.00	180.28	0.90	181.32	1.87	182.36	5.26
179.26	0.00	180.30	0.93	181.34	1.88	182.38	5.50
179.28	0.00	180.32	0.96	181.36	1.90	182.40	5.75
179.30	0.00	180.34	0.98	181.38	1.91	182.42	6.00
179.32	0.00	180.36	1.01	181.40	1.92	182.44	6.26
179.34	0.00	180.38	1.03	181.42	1.94	182.46	6.52
179.36	0.00	180.40	1.06	181.44	1.95	182.48	6.79
179.38	0.00	180.42	1.08	181.46	1.96	182.50	7.07
179.40	0.00	180.44	1.11	181.48	1.98	182.52	7.34
179.42	0.00	180.46	1.13	181.50	1.99	182.54	7.63
179.44	0.00	180.48	1.15	181.52	2.00	182.56	7.91
179.46	0.00	180.50	1.17	181.54	2.02	182.58	8.21
179.48	0.00	180.52	1.20	181.56	2.03	182.60	8.50
179.50	0.00	180.54	1.22	181.58	2.04	182.62	8.80
179.52	0.00	180.56	1.24	181.60	2.05	182.64	9.11
179.54	0.00	180.58	1.26	181.62	2.07	182.66	9.42
179.56	0.00	180.60	1.28	181.64	2.08	182.68	9.73
179.58	0.00	180.62	1.30	181.66	2.09	182.70	10.05
179.60	0.00	180.64	1.32	181.68	2.10	182.72	10.37
179.62	0.00	180.66	1.34	181.70	2.11	182.74	10.69
179.64	0.00	180.68	1.36	181.72	2.13	182.76	11.02
179.66	0.00	180.70	1.38	181.74	2.14	182.78	11.35
179.68	0.00	180.72	1.40	181.76	2.15	182.80	11.69
179.70	0.00	180.74	1.41	181.78	2.16	182.82	12.03
179.72	0.00	180.76	1.43	181.80	2.17	182.84	12.37
179.74	0.00	180.78	1.45	181.82	2.19	182.86	12.71
179.76	0.00	180.80	1.47	181.84	2.20	182.88	13.06
179.78	0.00	180.82	1.48	181.86	2.21	182.90	13.42
179.80	0.00	180.84	1.50	181.88	2.22	182.92	13.77
179.82	0.00	180.86	1.52	181.90	2.23	182.94	14.13
179.84	0.00	180.88	1.54	181.92	2.24	182.96	14.61
179.86	0.00	180.90	1.55	181.94	2.26	182.98	15.46
179.88	0.00	180.92	1.57	181.96	2.27	183.00	**16.53**
179.90	0.02	180.94	1.59	181.98	2.28		
179.92	0.05	180.96	1.60	182.00	2.29		
179.94	0.09	180.98	1.62	182.02	2.34		
179.96	0.15	181.00	1.63	182.04	2.42		
179.98	0.20	181.02	1.65	182.06	2.52		
180.00	0.27	181.04	1.66	182.08	2.63		
180.02	0.34	181.06	1.68	182.10	2.76		

Summary for Pond B-11: Basin #11

Inflow Area = 2.228 ac, 58.53% Impervious, Inflow Depth = 7.15" for Current 100 yr event
Inflow = 15.76 cfs @ 12.17 hrs, Volume= 1.328 af
Outflow = 11.46 cfs @ 12.27 hrs, Volume= 1.158 af, Atten= 27%, Lag= 5.7 min
Primary = 11.46 cfs @ 12.27 hrs, Volume= 1.158 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 183.68' @ 12.27 hrs Surf.Area= 7,728 sf Storage= 22,843 cf

Plug-Flow detention time= 321.2 min calculated for 1.156 af (87% of inflow)
Center-of-Mass det. time= 260.6 min (1,029.1 - 768.5)

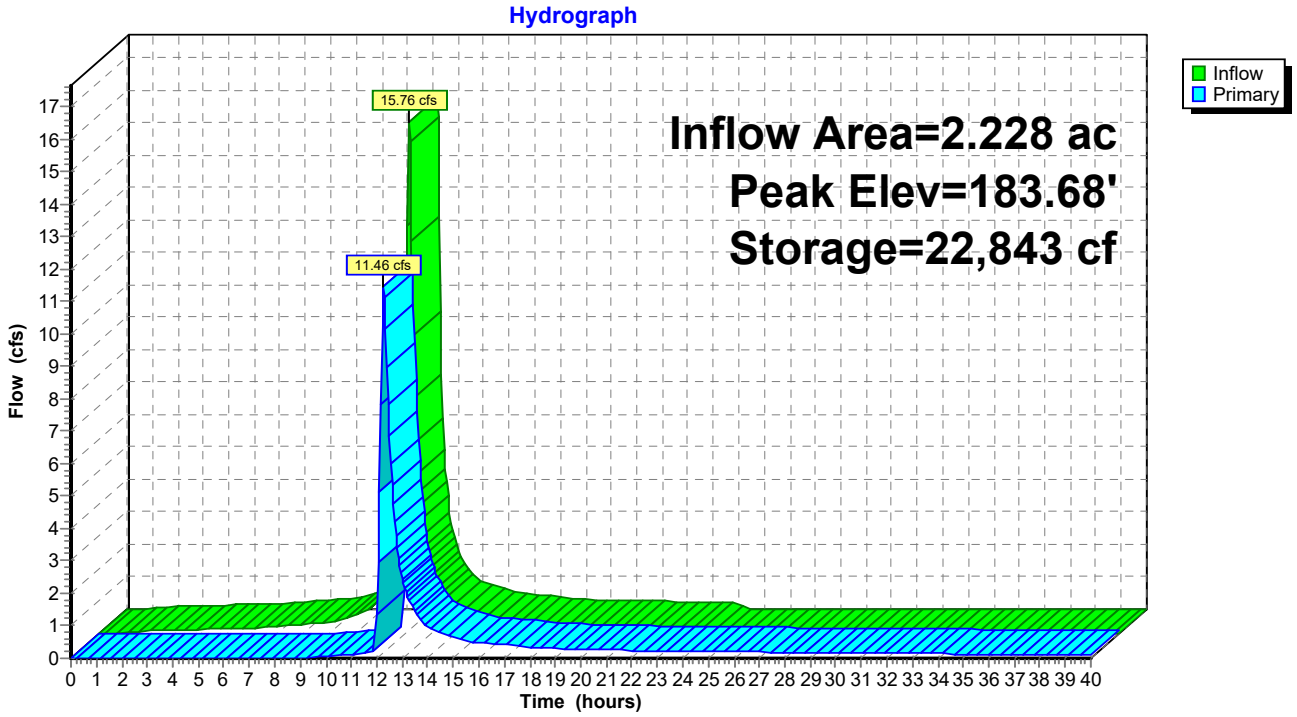
Volume	Invert	Avail.Storage	Storage Description
#1	180.00'	43,224 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.00	4,780	0	0
181.00	5,522	5,151	5,151
182.00	6,306	5,914	11,065
183.00	7,135	6,721	17,786
184.00	8,007	7,571	25,357
185.00	8,923	8,465	33,822
186.00	9,882	9,403	43,224

Device	Routing	Invert	Outlet Devices
#1	Primary	178.65'	**18.0" Round Culvert** L= 131.0' Ke= 0.500 Inlet / Outlet Invert= 178.65' / 178.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	181.00'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	183.91'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.31 cfs @ 12.27 hrs HW=183.67' (Free Discharge)
- **1=Culvert** (Passes 11.31 cfs of 14.68 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.26 cfs @ 7.72 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 11.04 cfs @ 3.14 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-11: Basin #11



Stage-Discharge for Pond B-11: Basin #11

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
180.00	0.00	182.60	0.20	185.20	223.74
180.05	0.00	182.65	0.20	185.25	236.23
180.10	0.00	182.70	0.21	185.30	248.97
180.15	0.00	182.75	0.21	185.35	262.16
180.20	0.00	182.80	0.36	185.40	275.68
180.25	0.00	182.85	0.63	185.45	289.46
180.30	0.00	182.90	0.97	185.50	303.52
180.35	0.00	182.95	1.38	185.55	317.86
180.40	0.00	183.00	1.84	185.60	332.46
180.45	0.00	183.05	2.35	185.65	347.33
180.50	0.00	183.10	2.89	185.70	362.47
180.55	0.00	183.15	3.48	185.75	377.88
180.60	0.00	183.20	4.10	185.80	393.54
180.65	0.00	183.25	4.75	185.85	409.47
180.70	0.00	183.30	5.43	185.90	425.67
180.75	0.00	183.35	6.14	185.95	442.37
180.80	0.00	183.40	6.88	186.00	**459.42**
180.85	0.00	183.45	7.64		
180.90	0.00	183.50	8.43		
180.95	0.00	183.55	9.24		
181.00	0.00	183.60	10.07		
181.05	0.00	183.65	10.93		
181.10	0.02	183.70	11.80		
181.15	0.03	183.75	12.69		
181.20	0.05	183.80	13.60		
181.25	0.06	183.85	14.53		
181.30	0.07	183.90	15.07		
181.35	0.08	183.95	16.09		
181.40	0.09	184.00	18.41		
181.45	0.10	184.05	21.50		
181.50	0.10	184.10	25.19		
181.55	0.11	184.15	29.60		
181.60	0.12	184.20	34.67		
181.65	0.12	184.25	40.36		
181.70	0.13	184.30	46.66		
181.75	0.13	184.35	53.67		
181.80	0.14	184.40	61.37		
181.85	0.14	184.45	69.72		
181.90	0.15	184.50	78.75		
181.95	0.15	184.55	87.28		
182.00	0.16	184.60	95.90		
182.05	0.16	184.65	104.83		
182.10	0.16	184.70	114.08		
182.15	0.17	184.75	123.79		
182.20	0.17	184.80	133.86		
182.25	0.18	184.85	144.25		
182.30	0.18	184.90	154.96		
182.35	0.18	184.95	165.77		
182.40	0.19	185.00	176.78		
182.45	0.19	185.05	188.06		
182.50	0.19	185.10	199.59		
182.55	0.20	185.15	211.51		

Summary for Pond B-12: Basin #12

Inflow Area = 2.426 ac, 44.77% Impervious, Inflow Depth = 6.75" for Current 100 yr event
Inflow = 16.54 cfs @ 12.17 hrs, Volume= 1.365 af
Outflow = 12.94 cfs @ 12.25 hrs, Volume= 1.260 af, Atten= 22%, Lag= 5.0 min
Primary = 12.94 cfs @ 12.25 hrs, Volume= 1.260 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.94' @ 12.25 hrs Surf.Area= 6,836 sf Storage= 16,791 cf

Plug-Flow detention time= 130.0 min calculated for 1.260 af (92% of inflow)
Center-of-Mass det. time= 87.8 min (866.1 - 778.3)

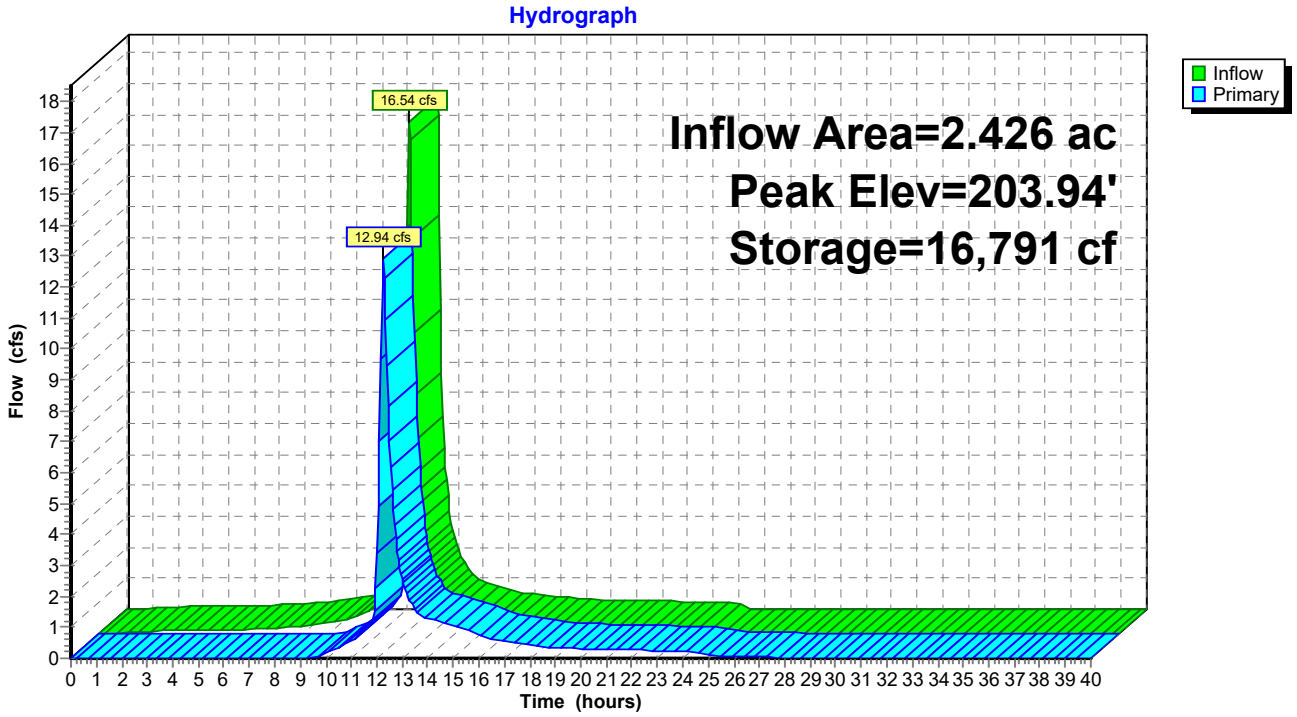
Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	24,487 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,623	0	0
202.00	5,350	4,987	4,987
203.00	6,105	5,728	10,714
204.00	6,883	6,494	17,208
205.00	7,674	7,279	24,487

Device	Routing	Invert	Outlet Devices
#1	Primary	199.65'	**18.0" Round Culvert** L= 238.0' Ke= 0.500 Inlet / Outlet Invert= 199.65' / 195.50' S= 0.0174 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.90'	**7.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.02'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.89 cfs @ 12.25 hrs HW=203.94' (Free Discharge)
- **1=Culvert** (Passes 12.89 cfs of 15.44 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.94 cfs @ 6.32 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 10.95 cfs @ 3.13 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-12: Basin #12



Stage-Discharge for Pond B-12: Basin #12

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	202.04	0.07	203.08	1.57	204.12	15.64
201.02	0.00	202.06	0.08	203.10	1.69	204.14	15.66
201.04	0.00	202.08	0.11	203.12	1.82	204.16	15.69
201.06	0.00	202.10	0.13	203.14	1.96	204.18	15.71
201.08	0.00	202.12	0.15	203.16	2.12	204.20	15.73
201.10	0.00	202.14	0.18	203.18	2.28	204.22	15.75
201.12	0.00	202.16	0.21	203.20	2.46	204.24	15.77
201.14	0.00	202.18	0.24	203.22	2.64	204.26	15.79
201.16	0.00	202.20	0.27	203.24	2.83	204.28	15.82
201.18	0.00	202.22	0.30	203.26	3.03	204.30	15.84
201.20	0.00	202.24	0.34	203.28	3.24	204.32	15.86
201.22	0.00	202.26	0.37	203.30	3.45	204.34	15.88
201.24	0.00	202.28	0.41	203.32	3.67	204.36	15.90
201.26	0.00	202.30	0.45	203.34	3.90	204.38	15.92
201.28	0.00	202.32	0.48	203.36	4.13	204.40	15.95
201.30	0.00	202.34	0.52	203.38	4.37	204.42	15.97
201.32	0.00	202.36	0.56	203.40	4.62	204.44	15.99
201.34	0.00	202.38	0.60	203.42	4.87	204.46	16.01
201.36	0.00	202.40	0.63	203.44	5.12	204.48	16.03
201.38	0.00	202.42	0.67	203.46	5.38	204.50	16.05
201.40	0.00	202.44	0.70	203.48	5.65	204.52	16.41
201.42	0.00	202.46	0.74	203.50	5.92	204.54	17.03
201.44	0.00	202.48	0.77	203.52	6.20	204.56	17.84
201.46	0.00	202.50	0.80	203.54	6.48	204.58	18.80
201.48	0.00	202.52	0.82	203.56	6.77	204.60	19.88
201.50	0.00	202.54	0.85	203.58	7.06	204.62	21.07
201.52	0.00	202.56	0.87	203.60	7.35	204.64	22.37
201.54	0.00	202.58	0.90	203.62	7.65	204.66	23.77
201.56	0.00	202.60	0.92	203.64	7.95	204.68	25.26
201.58	0.00	202.62	0.94	203.66	8.26	204.70	26.83
201.60	0.00	202.64	0.97	203.68	8.57	204.72	28.57
201.62	0.00	202.66	0.99	203.70	8.89	204.74	30.41
201.64	0.00	202.68	1.01	203.72	9.21	204.76	32.36
201.66	0.00	202.70	1.03	203.74	9.53	204.78	34.40
201.68	0.00	202.72	1.05	203.76	9.86	204.80	36.54
201.70	0.00	202.74	1.07	203.78	10.19	204.82	38.78
201.72	0.00	202.76	1.09	203.80	10.52	204.84	41.12
201.74	0.00	202.78	1.11	203.82	10.86	204.86	43.55
201.76	0.00	202.80	1.13	203.84	11.20	204.88	46.08
201.78	0.00	202.82	1.15	203.86	11.54	204.90	48.71
201.80	0.00	202.84	1.17	203.88	11.89	204.92	51.48
201.82	0.00	202.86	1.19	203.90	12.24	204.94	54.37
201.84	0.00	202.88	1.21	203.92	12.60	204.96	57.35
201.86	0.00	202.90	1.22	203.94	12.95	204.98	60.45
201.88	0.00	202.92	1.24	203.96	13.31	205.00	**63.65**
201.90	0.00	202.94	1.26	203.98	13.68		
201.92	0.00	202.96	1.28	204.00	14.04		
201.94	0.01	202.98	1.29	204.02	14.41		
201.96	0.01	203.00	1.31	204.04	14.78		
201.98	0.02	203.02	1.33	204.06	15.16		
202.00	0.03	203.04	1.38	204.08	15.54		
202.02	0.05	203.06	1.46	204.10	15.62		

Summary for Pond B-13: Basin #13

Inflow Area = 2.350 ac, 62.43% Impervious, Inflow Depth = 7.26" for Current 100 yr event
Inflow = 16.80 cfs @ 12.17 hrs, Volume= 1.422 af
Outflow = 10.77 cfs @ 12.29 hrs, Volume= 1.203 af, Atten= 36%, Lag= 7.1 min
Primary = 10.77 cfs @ 12.29 hrs, Volume= 1.203 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.84' @ 12.29 hrs Surf.Area= 10,385 sf Storage= 26,057 cf

Plug-Flow detention time= 314.8 min calculated for 1.203 af (85% of inflow)
Center-of-Mass det. time= 244.9 min (1,010.8 - 765.9)

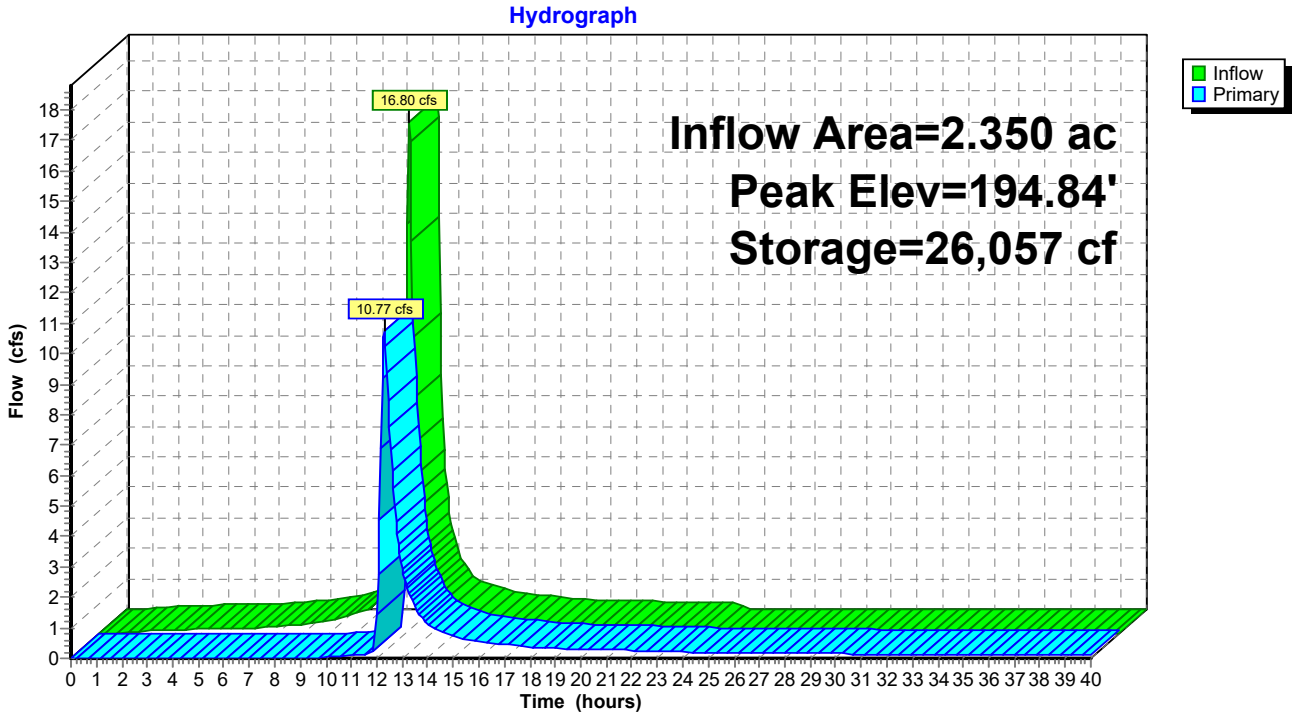
Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	38,667 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	7,975	0	0
193.00	8,804	8,390	8,390
194.00	9,654	9,229	17,619
195.00	10,522	10,088	27,707
196.00	11,399	10,961	38,667

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 57.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0465 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.70'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.95'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.96'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.70 cfs @ 12.29 hrs HW=194.84' (Free Discharge)
- **1=Culvert** (Passes 10.70 cfs of 15.78 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.87 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 10.47 cfs @ 3.08 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-13: Basin #13



Stage-Discharge for Pond B-13: Basin #13

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.00	0.00	193.04	0.08	194.08	0.79	195.12	23.38
192.02	0.00	193.06	0.08	194.10	0.94	195.14	25.23
192.04	0.00	193.08	0.09	194.12	1.10	195.16	27.06
192.06	0.00	193.10	0.09	194.14	1.26	195.18	28.83
192.08	0.00	193.12	0.09	194.16	1.44	195.20	30.69
192.10	0.00	193.14	0.10	194.18	1.62	195.22	32.66
192.12	0.00	193.16	0.10	194.20	1.81	195.24	34.72
192.14	0.00	193.18	0.10	194.22	2.01	195.26	36.89
192.16	0.00	193.20	0.10	194.24	2.21	195.28	39.15
192.18	0.00	193.22	0.11	194.26	2.42	195.30	41.51
192.20	0.00	193.24	0.11	194.28	2.64	195.32	43.96
192.22	0.00	193.26	0.11	194.30	2.86	195.34	46.51
192.24	0.00	193.28	0.11	194.32	3.09	195.36	49.16
192.26	0.00	193.30	0.12	194.34	3.33	195.38	51.96
192.28	0.00	193.32	0.12	194.36	3.57	195.40	54.87
192.30	0.00	193.34	0.12	194.38	3.81	195.42	57.88
192.32	0.00	193.36	0.12	194.40	4.07	195.44	60.99
192.34	0.00	193.38	0.12	194.42	4.32	195.46	64.21
192.36	0.00	193.40	0.13	194.44	4.59	195.48	67.53
192.38	0.00	193.42	0.13	194.46	4.85	195.50	70.97
192.40	0.00	193.44	0.13	194.48	5.13	195.52	74.50
192.42	0.00	193.46	0.13	194.50	5.40	195.54	78.15
192.44	0.00	193.48	0.13	194.52	5.68	195.56	81.90
192.46	0.00	193.50	0.14	194.54	5.97	195.58	85.21
192.48	0.00	193.52	0.14	194.56	6.26	195.60	88.58
192.50	0.00	193.54	0.14	194.58	6.55	195.62	91.99
192.52	0.00	193.56	0.14	194.60	6.85	195.64	95.46
192.54	0.00	193.58	0.14	194.62	7.15	195.66	98.98
192.56	0.00	193.60	0.15	194.64	7.46	195.68	102.55
192.58	0.00	193.62	0.15	194.66	7.77	195.70	106.17
192.60	0.00	193.64	0.15	194.68	8.09	195.72	109.84
192.62	0.00	193.66	0.15	194.70	8.40	195.74	113.56
192.64	0.00	193.68	0.15	194.72	8.72	195.76	117.33
192.66	0.00	193.70	0.16	194.74	9.05	195.78	121.22
192.68	0.00	193.72	0.16	194.76	9.38	195.80	125.17
192.70	0.00	193.74	0.16	194.78	9.71	195.82	129.17
192.72	0.00	193.76	0.16	194.80	10.05	195.84	133.22
192.74	0.00	193.78	0.16	194.82	10.39	195.86	137.32
192.76	0.01	193.80	0.16	194.84	10.73	195.88	141.48
192.78	0.01	193.82	0.17	194.86	11.07	195.90	145.68
192.80	0.02	193.84	0.17	194.88	11.42	195.92	149.94
192.82	0.02	193.86	0.17	194.90	11.77	195.94	154.25
192.84	0.03	193.88	0.17	194.92	12.13	195.96	158.60
192.86	0.04	193.90	0.17	194.94	12.49	195.98	162.90
192.88	0.05	193.92	0.17	194.96	12.85	196.00	**167.24**
192.90	0.05	193.94	0.17	194.98	13.54		
192.92	0.06	193.96	0.19	195.00	14.52		
192.94	0.06	193.98	0.25	195.02	15.67		
192.96	0.06	194.00	0.33	195.04	16.98		
192.98	0.07	194.02	0.42	195.06	18.41		
193.00	0.07	194.04	0.53	195.08	19.96		
193.02	0.08	194.06	0.66	195.10	21.62		

Summary for Pond B-14: Basin #14

Inflow Area = 2.148 ac, 23.65% Impervious, Inflow Depth = 6.14" for Current 100 yr event
Inflow = 13.79 cfs @ 12.17 hrs, Volume= 1.099 af
Outflow = 10.27 cfs @ 12.26 hrs, Volume= 1.014 af, Atten= 26%, Lag= 5.5 min
Primary = 10.27 cfs @ 12.26 hrs, Volume= 1.014 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.31' @ 12.26 hrs Surf.Area= 7,321 sf Storage= 15,656 cf

Plug-Flow detention time= 234.0 min calculated for 1.013 af (92% of inflow)
Center-of-Mass det. time= 193.5 min (989.4 - 795.9)

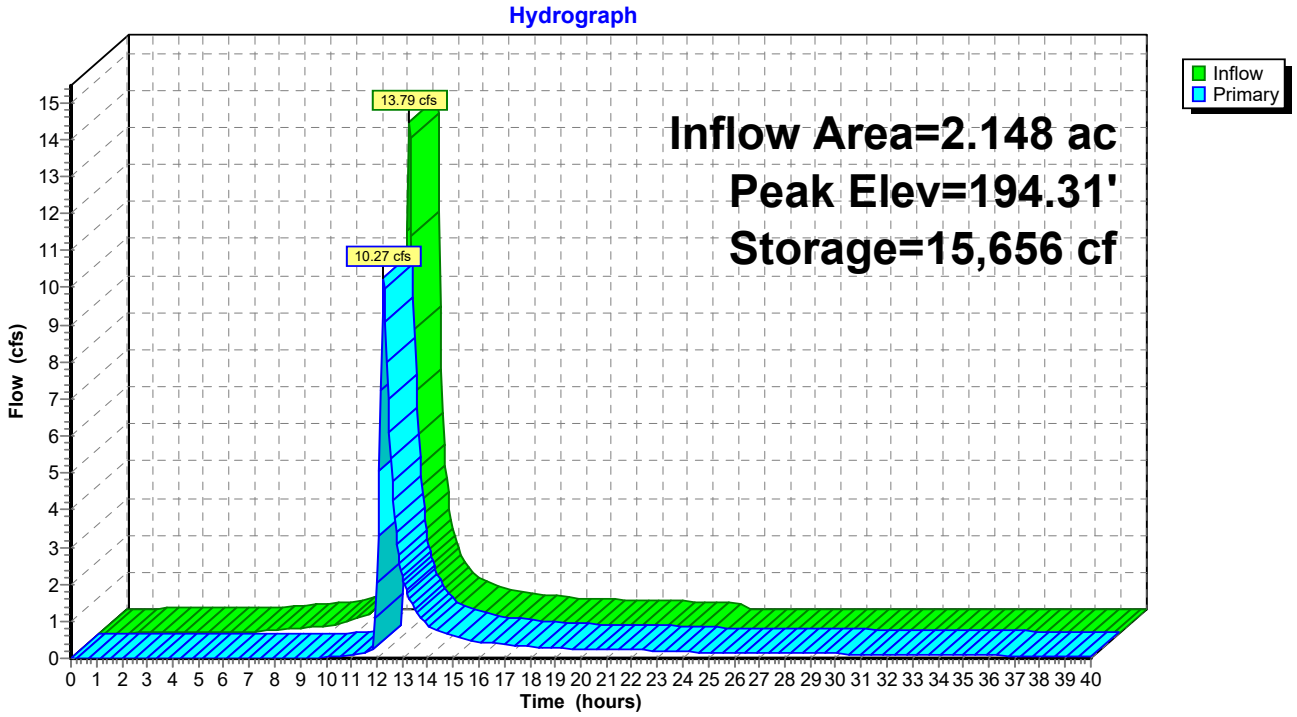
Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	28,705 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	6,224	0	0
193.00	6,689	6,457	6,457
194.00	7,167	6,928	13,385
195.00	7,657	7,412	20,797
196.00	8,160	7,909	28,705

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 194.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0137 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.40'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.45'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.44'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.14 cfs @ 12.26 hrs HW=194.31' (Free Discharge)
- **1=Culvert** (Passes 10.14 cfs of 13.84 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.22 cfs @ 6.46 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 9.92 cfs @ 3.03 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-14: Basin #14



Stage-Discharge for Pond B-14: Basin #14

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.00	0.00	193.04	0.12	194.08	6.54	195.12	92.90
192.02	0.00	193.06	0.12	194.10	6.84	195.14	96.41
192.04	0.00	193.08	0.12	194.12	7.14	195.16	99.96
192.06	0.00	193.10	0.13	194.14	7.45	195.18	103.57
192.08	0.00	193.12	0.13	194.16	7.76	195.20	107.23
192.10	0.00	193.14	0.13	194.18	8.07	195.22	110.93
192.12	0.00	193.16	0.13	194.20	8.39	195.24	114.69
192.14	0.00	193.18	0.13	194.22	8.71	195.26	118.57
192.16	0.00	193.20	0.14	194.24	9.04	195.28	122.50
192.18	0.00	193.22	0.14	194.26	9.37	195.30	126.48
192.20	0.00	193.24	0.14	194.28	9.70	195.32	130.52
192.22	0.00	193.26	0.14	194.30	10.03	195.34	134.61
192.24	0.00	193.28	0.14	194.32	10.37	195.36	138.75
192.26	0.00	193.30	0.15	194.34	10.72	195.38	142.94
192.28	0.00	193.32	0.15	194.36	11.06	195.40	147.18
192.30	0.00	193.34	0.15	194.38	11.41	195.42	151.47
192.32	0.00	193.36	0.15	194.40	11.76	195.44	155.82
192.34	0.00	193.38	0.15	194.42	12.12	195.46	160.10
192.36	0.00	193.40	0.16	194.44	12.47	195.48	164.43
192.38	0.00	193.42	0.16	194.46	13.17	195.50	168.80
192.40	0.00	193.44	0.16	194.48	14.14	195.52	173.21
192.42	0.00	193.46	0.17	194.50	15.29	195.54	177.66
192.44	0.00	193.48	0.23	194.52	16.59	195.56	182.16
192.46	0.01	193.50	0.31	194.54	17.89	195.58	186.69
192.48	0.01	193.52	0.41	194.56	19.09	195.60	191.27
192.50	0.02	193.54	0.52	194.58	20.40	195.62	195.89
192.52	0.02	193.56	0.64	194.60	21.80	195.64	200.54
192.54	0.03	193.58	0.78	194.62	23.29	195.66	205.31
192.56	0.04	193.60	0.93	194.64	24.88	195.68	210.12
192.58	0.05	193.62	1.08	194.66	26.62	195.70	214.98
192.60	0.05	193.64	1.25	194.68	28.47	195.72	219.87
192.62	0.06	193.66	1.42	194.70	30.42	195.74	224.81
192.64	0.06	193.68	1.60	194.72	32.47	195.76	229.79
192.66	0.06	193.70	1.79	194.74	34.62	195.78	234.81
192.68	0.07	193.72	1.99	194.76	36.86	195.80	239.88
192.70	0.07	193.74	2.20	194.78	39.21	195.82	244.98
192.72	0.08	193.76	2.41	194.80	41.65	195.84	250.13
192.74	0.08	193.78	2.62	194.82	44.18	195.86	255.41
192.76	0.08	193.80	2.85	194.84	46.82	195.88	260.73
192.78	0.09	193.82	3.08	194.86	49.60	195.90	266.10
192.80	0.09	193.84	3.31	194.88	52.49	195.92	271.51
192.82	0.09	193.86	3.55	194.90	55.48	195.94	276.96
192.84	0.10	193.88	3.80	194.92	58.58	195.96	282.46
192.86	0.10	193.90	4.05	194.94	61.79	195.98	288.00
192.88	0.10	193.92	4.31	194.96	65.10	196.00	**293.59**
192.90	0.10	193.94	4.57	194.98	68.51		
192.92	0.11	193.96	4.84	195.00	72.04		
192.94	0.11	193.98	5.11	195.02	75.67		
192.96	0.11	194.00	5.39	195.04	79.41		
192.98	0.11	194.02	5.67	195.06	82.70		
193.00	0.12	194.04	5.96	195.08	86.05		
193.02	0.12	194.06	6.25	195.10	89.45		

Summary for Pond B-15: Basin #15

Inflow Area = 2.365 ac, 58.73% Impervious, Inflow Depth = 7.16" for Current 100 yr event
Inflow = 16.74 cfs @ 12.17 hrs, Volume= 1.410 af
Outflow = 13.92 cfs @ 12.24 hrs, Volume= 1.283 af, Atten= 17%, Lag= 4.2 min
Primary = 13.92 cfs @ 12.24 hrs, Volume= 1.283 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 199.58' @ 12.24 hrs Surf.Area= 5,740 sf Storage= 16,784 cf

Plug-Flow detention time= 139.2 min calculated for 1.281 af (91% of inflow)
Center-of-Mass det. time= 92.0 min (860.4 - 768.4)

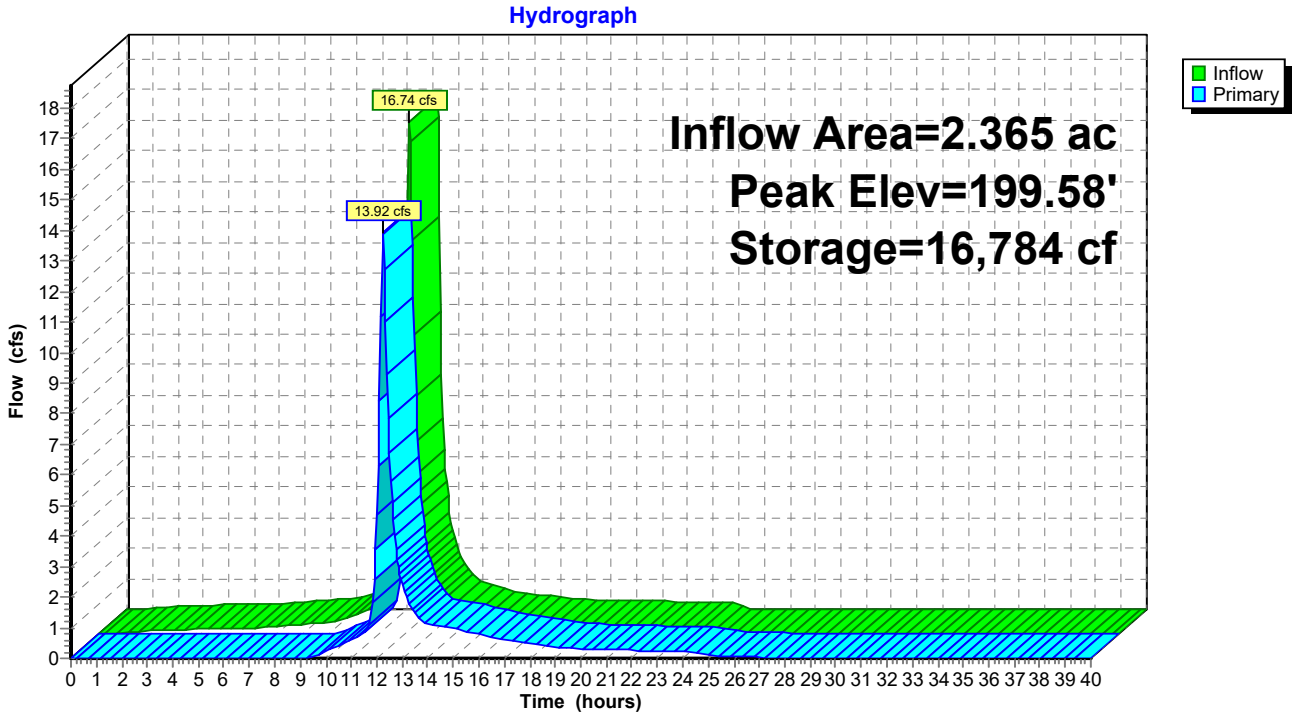
Volume	Invert	Avail.Storage	Storage Description
#1	196.00'	19,269 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.00	3,706	0	0
197.00	4,236	3,971	3,971
198.00	4,795	4,516	8,487
199.00	5,384	5,090	13,576
200.00	6,002	5,693	19,269

Device	Routing	Invert	Outlet Devices
#1	Primary	194.65'	**18.0" Round Culvert** L= 203.0' Ke= 0.500 Inlet / Outlet Invert= 194.65' / 192.00' S= 0.0131 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	197.35'	**6.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	198.58'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	199.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.79 cfs @ 12.24 hrs HW=199.57' (Free Discharge)
- **1=Culvert** (Passes 13.79 cfs of 15.30 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.55 cfs @ 6.72 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 12.24 cfs @ 3.25 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-15: Basin #15



Stage-Discharge for Pond B-15: Basin #15

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.00	0.00	197.04	0.00	198.08	0.75	199.12	6.41
196.02	0.00	197.06	0.00	198.10	0.77	199.14	6.70
196.04	0.00	197.08	0.00	198.12	0.78	199.16	6.99
196.06	0.00	197.10	0.00	198.14	0.80	199.18	7.28
196.08	0.00	197.12	0.00	198.16	0.81	199.20	7.58
196.10	0.00	197.14	0.00	198.18	0.83	199.22	7.89
196.12	0.00	197.16	0.00	198.20	0.84	199.24	8.19
196.14	0.00	197.18	0.00	198.22	0.86	199.26	8.51
196.16	0.00	197.20	0.00	198.24	0.87	199.28	8.82
196.18	0.00	197.22	0.00	198.26	0.89	199.30	9.14
196.20	0.00	197.24	0.00	198.28	0.90	199.32	9.46
196.22	0.00	197.26	0.00	198.30	0.91	199.34	9.79
196.24	0.00	197.28	0.00	198.32	0.93	199.36	10.12
196.26	0.00	197.30	0.00	198.34	0.94	199.38	10.46
196.28	0.00	197.32	0.00	198.36	0.95	199.40	10.79
196.30	0.00	197.34	0.00	198.38	0.97	199.42	11.14
196.32	0.00	197.36	0.00	198.40	0.98	199.44	11.48
196.34	0.00	197.38	0.00	198.42	0.99	199.46	11.83
196.36	0.00	197.40	0.01	198.44	1.00	199.48	12.18
196.38	0.00	197.42	0.02	198.46	1.02	199.50	12.53
196.40	0.00	197.44	0.03	198.48	1.03	199.52	12.89
196.42	0.00	197.46	0.04	198.50	1.04	199.54	13.25
196.44	0.00	197.48	0.05	198.52	1.05	199.56	13.61
196.46	0.00	197.50	0.07	198.54	1.06	199.58	13.98
196.48	0.00	197.52	0.09	198.56	1.08	199.60	14.35
196.50	0.00	197.54	0.11	198.58	1.09	199.62	14.72
196.52	0.00	197.56	0.13	198.60	1.13	199.64	15.09
196.54	0.00	197.58	0.15	198.62	1.21	199.66	15.42
196.56	0.00	197.60	0.18	198.64	1.31	199.68	15.44
196.58	0.00	197.62	0.20	198.66	1.43	199.70	15.47
196.60	0.00	197.64	0.23	198.68	1.55	199.72	15.49
196.62	0.00	197.66	0.26	198.70	1.69	199.74	15.52
196.64	0.00	197.68	0.29	198.72	1.84	199.76	15.54
196.66	0.00	197.70	0.32	198.74	2.00	199.78	15.57
196.68	0.00	197.72	0.35	198.76	2.17	199.80	15.59
196.70	0.00	197.74	0.38	198.78	2.35	199.82	15.62
196.72	0.00	197.76	0.41	198.80	2.54	199.84	15.64
196.74	0.00	197.78	0.44	198.82	2.73	199.86	15.66
196.76	0.00	197.80	0.47	198.84	2.94	199.88	15.69
196.78	0.00	197.82	0.50	198.86	3.15	199.90	15.71
196.80	0.00	197.84	0.52	198.88	3.36	199.92	15.74
196.82	0.00	197.86	0.55	198.90	3.58	199.94	15.76
196.84	0.00	197.88	0.57	198.92	3.81	199.96	15.79
196.86	0.00	197.90	0.59	198.94	4.05	199.98	15.81
196.88	0.00	197.92	0.61	198.96	4.29	200.00	**15.95**
196.90	0.00	197.94	0.63	198.98	4.54		
196.92	0.00	197.96	0.65	199.00	4.79		
196.94	0.00	197.98	0.66	199.02	5.05		
196.96	0.00	198.00	0.68	199.04	5.31		
196.98	0.00	198.02	0.70	199.06	5.58		
197.00	0.00	198.04	0.72	199.08	5.85		
197.02	0.00	198.06	0.74	199.10	6.13		

Summary for Pond B-16A: Basin #16A

Inflow Area = 1.876 ac, 45.47% Impervious, Inflow Depth = 6.77" for Current 100 yr event
Inflow = 12.81 cfs @ 12.17 hrs, Volume= 1.059 af
Outflow = 10.85 cfs @ 12.24 hrs, Volume= 0.979 af, Atten= 15%, Lag= 3.9 min
Primary = 10.85 cfs @ 12.24 hrs, Volume= 0.979 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.60' @ 12.24 hrs Surf.Area= 4,538 sf Storage= 9,166 cf

Plug-Flow detention time= 91.2 min calculated for 0.978 af (92% of inflow)
Center-of-Mass det. time= 50.3 min (828.1 - 777.8)

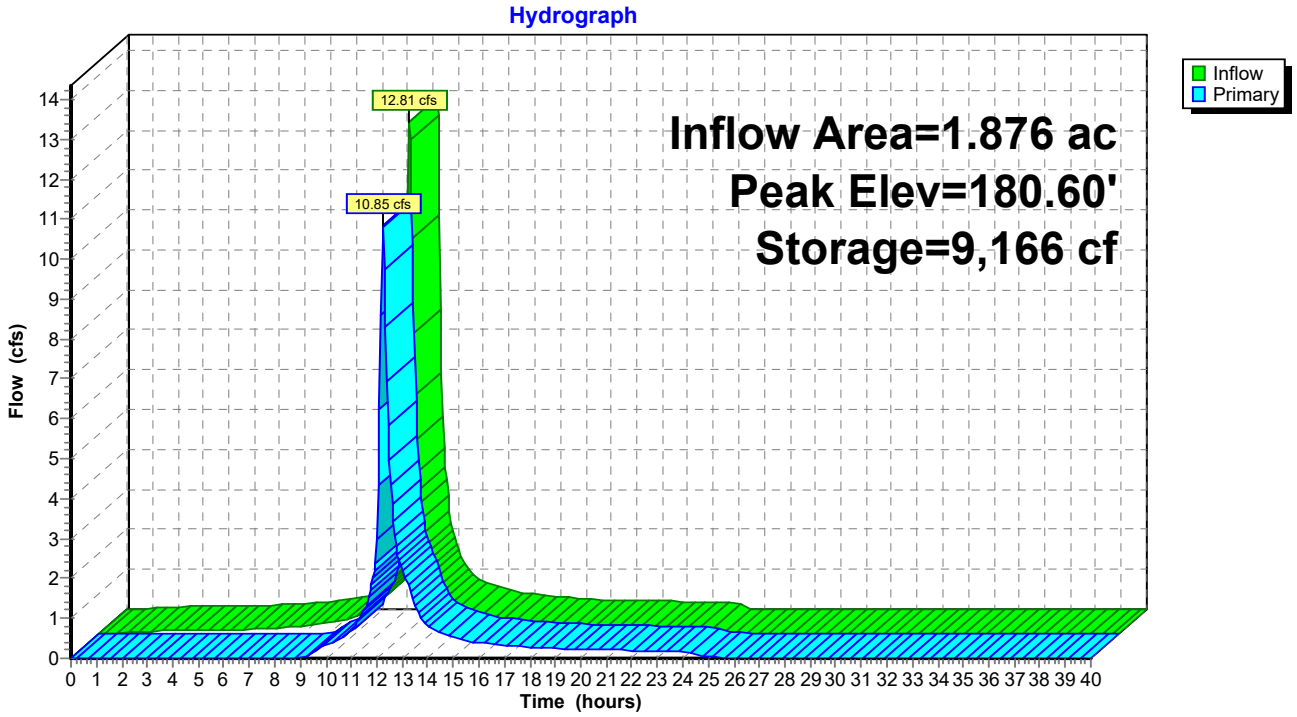
Volume	Invert	Avail.Storage	Storage Description
#1	178.00'	16,318 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
178.00	2,543	0	0
179.00	3,287	2,915	2,915
180.00	4,059	3,673	6,588
181.00	4,858	4,459	11,047
182.00	5,685	5,272	16,318

Device	Routing	Invert	Outlet Devices
#1	Primary	176.65'	**18.0" Round Culvert** L= 53.0' Ke= 0.500 Inlet / Outlet Invert= 176.65' / 172.00' S= 0.0877 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.16'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.72 cfs @ 12.24 hrs HW=180.59' (Free Discharge)
- **1=Culvert** (Passes 10.72 cfs of 15.20 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.61 cfs @ 5.41 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 7.11 cfs @ 2.70 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-16A: Basin #16A



Stage-Discharge for Pond B-16A: Basin #16A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.00	0.00	179.04	0.00	180.08	3.69	181.12	16.41
178.02	0.00	179.06	0.00	180.10	3.89	181.14	16.46
178.04	0.00	179.08	0.00	180.12	4.10	181.16	16.50
178.06	0.00	179.10	0.00	180.14	4.32	181.18	16.54
178.08	0.00	179.12	0.00	180.16	4.54	181.20	16.59
178.10	0.00	179.14	0.00	180.18	4.77	181.22	16.63
178.12	0.00	179.16	0.00	180.20	5.01	181.24	16.67
178.14	0.00	179.18	0.02	180.22	5.25	181.26	16.72
178.16	0.00	179.20	0.05	180.24	5.50	181.28	16.76
178.18	0.00	179.22	0.09	180.26	5.76	181.30	16.80
178.20	0.00	179.24	0.15	180.28	6.02	181.32	16.85
178.22	0.00	179.26	0.20	180.30	6.29	181.34	16.89
178.24	0.00	179.28	0.27	180.32	6.56	181.36	16.93
178.26	0.00	179.30	0.34	180.34	6.84	181.38	16.97
178.28	0.00	179.32	0.41	180.36	7.12	181.40	17.02
178.30	0.00	179.34	0.49	180.38	7.41	181.42	17.06
178.32	0.00	179.36	0.57	180.40	7.70	181.44	17.10
178.34	0.00	179.38	0.66	180.42	8.00	181.46	17.14
178.36	0.00	179.40	0.75	180.44	8.30	181.48	17.19
178.38	0.00	179.42	0.85	180.46	8.60	181.50	17.23
178.40	0.00	179.44	0.95	180.48	8.91	181.52	17.27
178.42	0.00	179.46	1.05	180.50	9.23	181.54	17.31
178.44	0.00	179.48	1.16	180.52	9.55	181.56	17.35
178.46	0.00	179.50	1.27	180.54	9.87	181.58	17.40
178.48	0.00	179.52	1.36	180.56	10.19	181.60	17.44
178.50	0.00	179.54	1.44	180.58	10.52	181.62	17.48
178.52	0.00	179.56	1.51	180.60	10.86	181.64	17.52
178.54	0.00	179.58	1.58	180.62	11.20	181.66	17.56
178.56	0.00	179.60	1.65	180.64	11.54	181.68	17.60
178.58	0.00	179.62	1.71	180.66	11.88	181.70	17.64
178.60	0.00	179.64	1.77	180.68	12.23	181.72	17.69
178.62	0.00	179.66	1.83	180.70	12.58	181.74	17.73
178.64	0.00	179.68	1.89	180.72	12.94	181.76	17.77
178.66	0.00	179.70	1.94	180.74	13.29	181.78	17.81
178.68	0.00	179.72	2.00	180.76	13.66	181.80	17.85
178.70	0.00	179.74	2.05	180.78	14.02	181.82	17.89
178.72	0.00	179.76	2.10	180.80	14.39	181.84	17.93
178.74	0.00	179.78	2.15	180.82	14.76	181.86	17.97
178.76	0.00	179.80	2.20	180.84	15.13	181.88	18.01
178.78	0.00	179.82	2.24	180.86	15.51	181.90	18.05
178.80	0.00	179.84	2.29	180.88	15.87	181.92	18.09
178.82	0.00	179.86	2.33	180.90	15.92	181.94	18.13
178.84	0.00	179.88	2.38	180.92	15.96	181.96	18.29
178.86	0.00	179.90	2.42	180.94	16.01	181.98	18.82
178.88	0.00	179.92	2.48	180.96	16.05	182.00	**19.56**
178.90	0.00	179.94	2.57	180.98	16.10		
178.92	0.00	179.96	2.69	181.00	16.14		
178.94	0.00	179.98	2.83	181.02	16.19		
178.96	0.00	180.00	2.98	181.04	16.23		
178.98	0.00	180.02	3.14	181.06	16.28		
179.00	0.00	180.04	3.31	181.08	16.32		
179.02	0.00	180.06	3.50	181.10	16.37		

Summary for Pond B-16B: Basin #16B

Inflow Area = 1.877 ac, 43.74% Impervious, Inflow Depth = 6.72" for Current 100 yr event
Inflow = 12.76 cfs @ 12.17 hrs, Volume= 1.051 af
Outflow = 11.24 cfs @ 12.23 hrs, Volume= 0.972 af, Atten= 12%, Lag= 3.5 min
Primary = 11.24 cfs @ 12.23 hrs, Volume= 0.972 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.72' @ 12.23 hrs Surf.Area= 4,957 sf Storage= 10,986 cf

Plug-Flow detention time= 100.7 min calculated for 0.971 af (92% of inflow)
Center-of-Mass det. time= 59.5 min (838.6 - 779.1)

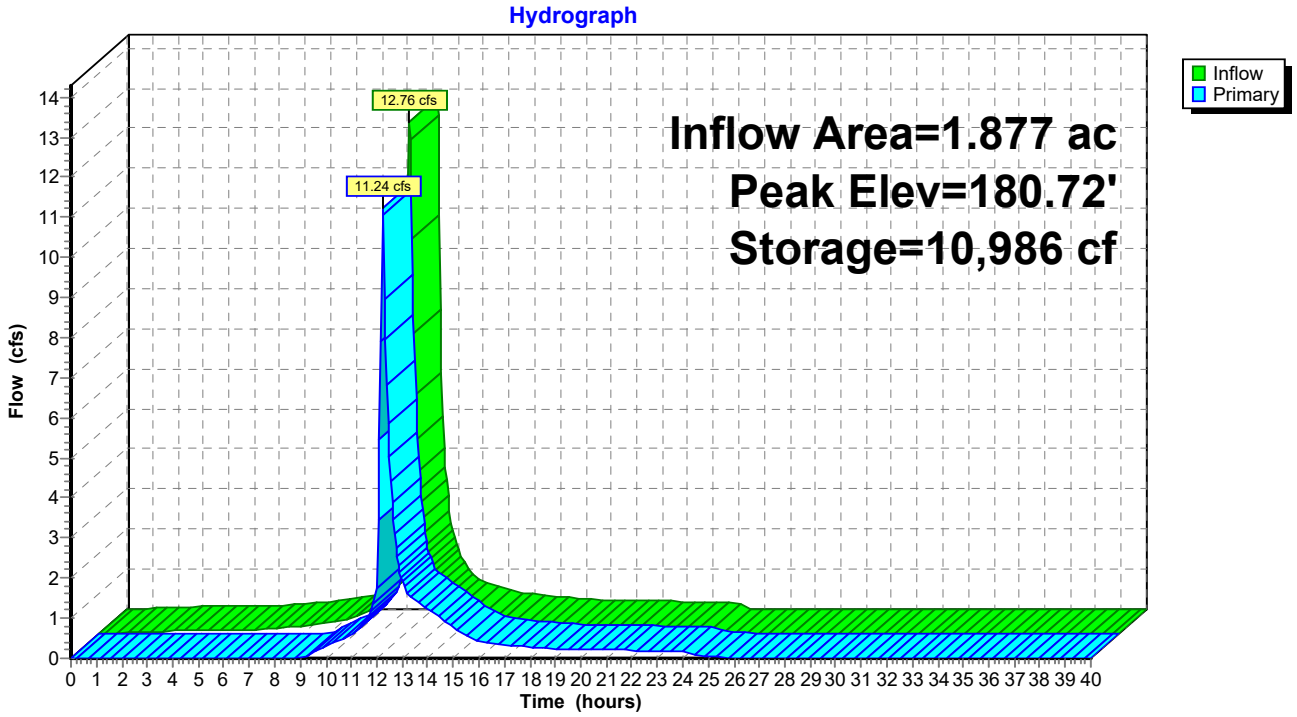
Volume	Invert	Avail.Storage	Storage Description
#1	178.00'	17,892 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
178.00	3,145	0	0
179.00	3,781	3,463	3,463
180.00	4,451	4,116	7,579
181.00	5,149	4,800	12,379
182.00	5,877	5,513	17,892

Device	Routing	Invert	Outlet Devices
#1	Primary	176.65'	**18.0" Round Culvert** L= 53.0' Ke= 0.500 Inlet / Outlet Invert= 176.65' / 172.00' S= 0.0877 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.00'	**24.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	180.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.67'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.94 cfs @ 12.23 hrs HW=180.72' (Free Discharge)
- **1=Culvert** (Passes 9.72 cfs of 15.50 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.05 cfs @ 6.15 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 7.67 cfs @ 2.77 fps)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 1.22 cfs @ 0.51 fps)

Pond B-16B: Basin #16B



Stage-Discharge for Pond B-16B: Basin #16B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.00	0.00	179.04	0.05	180.08	1.90	181.12	55.73
178.02	0.00	179.06	0.09	180.10	2.03	181.14	58.79
178.04	0.00	179.08	0.15	180.12	2.17	181.16	61.96
178.06	0.00	179.10	0.20	180.14	2.33	181.18	65.24
178.08	0.00	179.12	0.27	180.16	2.50	181.20	68.62
178.10	0.00	179.14	0.34	180.18	2.67	181.22	72.10
178.12	0.00	179.16	0.41	180.20	2.85	181.24	75.70
178.14	0.00	179.18	0.48	180.22	3.05	181.26	79.40
178.16	0.00	179.20	0.54	180.24	3.25	181.28	82.94
178.18	0.00	179.22	0.58	180.26	3.45	181.30	86.27
178.20	0.00	179.24	0.63	180.28	3.67	181.32	89.66
178.22	0.00	179.26	0.67	180.30	3.89	181.34	93.11
178.24	0.00	179.28	0.71	180.32	4.11	181.36	96.60
178.26	0.00	179.30	0.74	180.34	4.35	181.38	100.15
178.28	0.00	179.32	0.78	180.36	4.59	181.40	103.75
178.30	0.00	179.34	0.81	180.38	4.83	181.42	107.40
178.32	0.00	179.36	0.84	180.40	5.08	181.44	111.09
178.34	0.00	179.38	0.87	180.42	5.34	181.46	114.84
178.36	0.00	179.40	0.90	180.44	5.60	181.48	118.67
178.38	0.00	179.42	0.93	180.46	5.87	181.50	122.59
178.40	0.00	179.44	0.96	180.48	6.14	181.52	126.57
178.42	0.00	179.46	0.98	180.50	6.42	181.54	130.59
178.44	0.00	179.48	1.01	180.52	6.70	181.56	134.67
178.46	0.00	179.50	1.03	180.54	6.99	181.58	138.80
178.48	0.00	179.52	1.06	180.56	7.28	181.60	142.98
178.50	0.00	179.54	1.08	180.58	7.57	181.62	147.21
178.52	0.00	179.56	1.11	180.60	7.87	181.64	151.50
178.54	0.00	179.58	1.13	180.62	8.18	181.66	155.83
178.56	0.00	179.60	1.15	180.64	8.48	181.68	160.16
178.58	0.00	179.62	1.17	180.66	8.80	181.70	164.48
178.60	0.00	179.64	1.20	180.68	9.23	181.72	168.84
178.62	0.00	179.66	1.22	180.70	10.04	181.74	173.25
178.64	0.00	179.68	1.24	180.72	11.07	181.76	177.70
178.66	0.00	179.70	1.26	180.74	12.26	181.78	182.19
178.68	0.00	179.72	1.28	180.76	13.59	181.80	186.72
178.70	0.00	179.74	1.30	180.78	15.04	181.82	191.29
178.72	0.00	179.76	1.32	180.80	16.61	181.84	195.90
178.74	0.00	179.78	1.34	180.82	18.28	181.86	200.55
178.76	0.00	179.80	1.36	180.84	20.04	181.88	205.28
178.78	0.00	179.82	1.38	180.86	21.90	181.90	210.08
178.80	0.00	179.84	1.40	180.88	23.89	181.92	214.93
178.82	0.00	179.86	1.41	180.90	26.01	181.94	219.82
178.84	0.00	179.88	1.43	180.92	28.24	181.96	224.75
178.86	0.00	179.90	1.45	180.94	30.57	181.98	229.73
178.88	0.00	179.92	1.47	180.96	33.01	182.00	**234.74**
178.90	0.00	179.94	1.48	180.98	35.54		
178.92	0.00	179.96	1.50	181.00	38.18		
178.94	0.00	179.98	1.52	181.02	40.92		
178.96	0.00	180.00	1.54	181.04	43.75		
178.98	0.00	180.02	1.59	181.06	46.69		
179.00	0.00	180.04	1.67	181.08	49.75		
179.02	0.02	180.06	1.78	181.10	52.77		

Summary for Pond B-17A: Basin #17A

Inflow Area = 1.324 ac, 14.58% Impervious, Inflow Depth = 5.88" for Current 100 yr event
Inflow = 8.28 cfs @ 12.17 hrs, Volume= 0.649 af
Outflow = 0.26 cfs @ 15.89 hrs, Volume= 0.515 af, Atten= 97%, Lag= 223.3 min
Primary = 0.26 cfs @ 15.89 hrs, Volume= 0.515 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 181.81' @ 15.89 hrs Surf.Area= 8,452 sf Storage= 19,541 cf

Plug-Flow detention time= 741.6 min calculated for 0.515 af (79% of inflow)
Center-of-Mass det. time= 659.6 min (1,464.1 - 804.5)

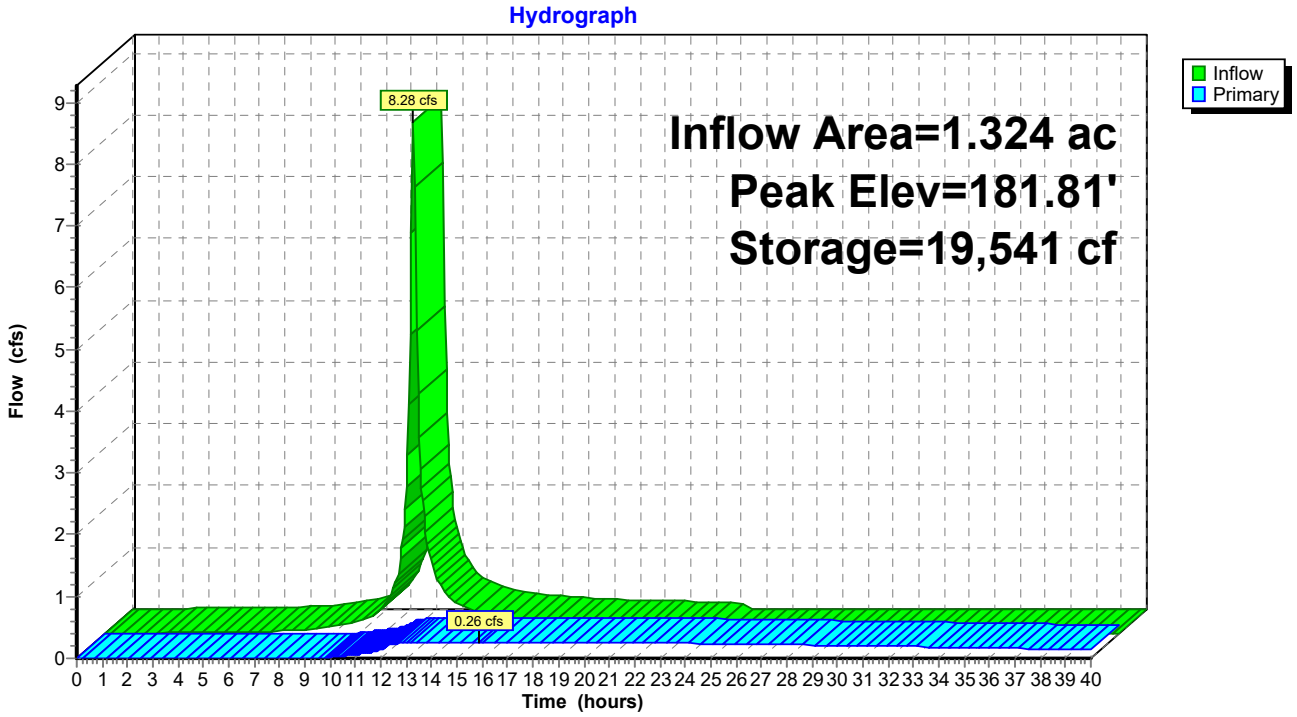
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	30,377 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	5,508	0	0
180.00	6,502	6,005	6,005
181.00	7,552	7,027	13,032
182.00	8,658	8,105	21,137
183.00	9,821	9,240	30,377

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 177.00' S= 0.0163 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.18'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.26 cfs @ 15.89 hrs HW=181.81' (Free Discharge)
- **1=Culvert** (Passes 0.26 cfs of 15.72 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.26 cfs @ 7.66 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-17A: Basin #17A



Stage-Discharge for Pond B-17A: Basin #17A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.14	181.08	0.22	182.12	9.08
179.02	0.00	180.06	0.14	181.10	0.22	182.14	10.74
179.04	0.00	180.08	0.15	181.12	0.22	182.16	12.52
179.06	0.00	180.10	0.15	181.14	0.22	182.18	14.45
179.08	0.00	180.12	0.15	181.16	0.22	182.20	16.49
179.10	0.00	180.14	0.15	181.18	0.23	182.22	18.64
179.12	0.00	180.16	0.15	181.20	0.23	182.24	20.90
179.14	0.00	180.18	0.16	181.22	0.23	182.26	23.26
179.16	0.00	180.20	0.16	181.24	0.23	182.28	25.73
179.18	0.00	180.22	0.16	181.26	0.23	182.30	28.30
179.20	0.00	180.24	0.16	181.28	0.23	182.32	30.97
179.22	0.00	180.26	0.16	181.30	0.23	182.34	33.75
179.24	0.01	180.28	0.16	181.32	0.23	182.36	36.66
179.26	0.01	180.30	0.17	181.34	0.24	182.38	39.70
179.28	0.02	180.32	0.17	181.36	0.24	182.40	42.85
179.30	0.02	180.34	0.17	181.38	0.24	182.42	46.11
179.32	0.03	180.36	0.17	181.40	0.24	182.44	49.49
179.34	0.04	180.38	0.17	181.42	0.24	182.46	52.97
179.36	0.05	180.40	0.17	181.44	0.24	182.48	56.57
179.38	0.05	180.42	0.17	181.46	0.24	182.50	60.28
179.40	0.06	180.44	0.18	181.48	0.24	182.52	64.09
179.42	0.06	180.46	0.18	181.50	0.24	182.54	68.03
179.44	0.06	180.48	0.18	181.52	0.25	182.56	71.80
179.46	0.07	180.50	0.18	181.54	0.25	182.58	75.38
179.48	0.07	180.52	0.18	181.56	0.25	182.60	79.01
179.50	0.08	180.54	0.18	181.58	0.25	182.62	82.71
179.52	0.08	180.56	0.19	181.60	0.25	182.64	86.46
179.54	0.08	180.58	0.19	181.62	0.25	182.66	90.26
179.56	0.09	180.60	0.19	181.64	0.25	182.68	94.12
179.58	0.09	180.62	0.19	181.66	0.25	182.70	98.03
179.60	0.09	180.64	0.19	181.68	0.25	182.72	102.00
179.62	0.10	180.66	0.19	181.70	0.26	182.74	106.02
179.64	0.10	180.68	0.19	181.72	0.26	182.76	110.13
179.66	0.10	180.70	0.20	181.74	0.26	182.78	114.33
179.68	0.10	180.72	0.20	181.76	0.26	182.80	118.59
179.70	0.11	180.74	0.20	181.78	0.26	182.82	122.90
179.72	0.11	180.76	0.20	181.80	0.26	182.84	127.27
179.74	0.11	180.78	0.20	181.82	0.26	182.86	131.70
179.76	0.11	180.80	0.20	181.84	0.26	182.88	136.18
179.78	0.12	180.82	0.20	181.86	0.26	182.90	140.71
179.80	0.12	180.84	0.20	181.88	0.26	182.92	145.30
179.82	0.12	180.86	0.21	181.90	0.27	182.94	149.94
179.84	0.12	180.88	0.21	181.92	0.27	182.96	154.58
179.86	0.12	180.90	0.21	181.94	0.27	182.98	159.22
179.88	0.13	180.92	0.21	181.96	0.39	183.00	**163.90**
179.90	0.13	180.94	0.21	181.98	0.88		
179.92	0.13	180.96	0.21	182.00	1.58		
179.94	0.13	180.98	0.21	182.02	2.48		
179.96	0.13	181.00	0.22	182.04	3.55		
179.98	0.14	181.02	0.22	182.06	4.76		
180.00	0.14	181.04	0.22	182.08	6.09		
180.02	0.14	181.06	0.22	182.10	7.53		

Summary for Pond B-17B: Basin #17B

Inflow Area = 1.385 ac, 37.11% Impervious, Inflow Depth = 6.53" for Current 100 yr event
Inflow = 9.24 cfs @ 12.17 hrs, Volume= 0.754 af
Outflow = 6.28 cfs @ 12.28 hrs, Volume= 0.681 af, Atten= 32%, Lag= 6.3 min
Primary = 6.28 cfs @ 12.28 hrs, Volume= 0.681 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.47' @ 12.28 hrs Surf.Area= 8,620 sf Storage= 11,398 cf

Plug-Flow detention time= 222.7 min calculated for 0.680 af (90% of inflow)
Center-of-Mass det. time= 173.7 min (958.0 - 784.3)

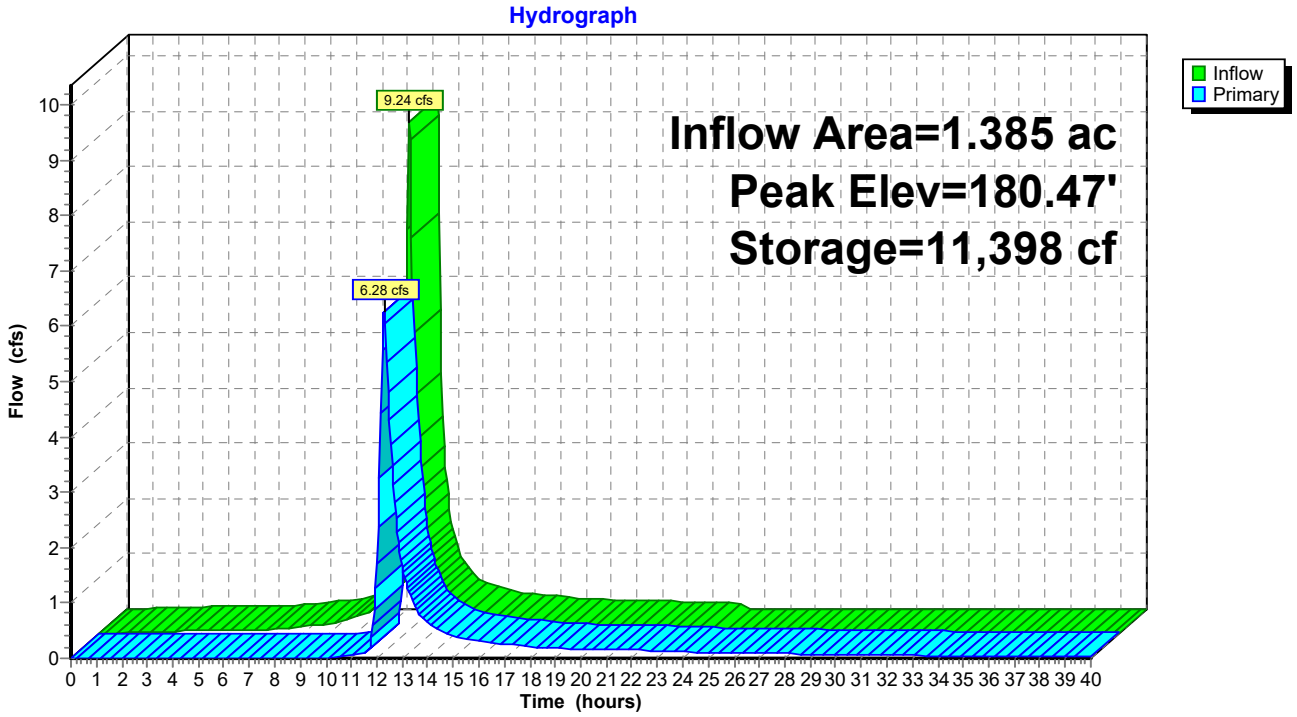
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	37,242 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	6,855	0	0
180.00	8,033	7,444	7,444
181.00	9,268	8,651	16,095
182.00	10,560	9,914	26,009
183.00	11,907	11,234	37,242

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 177.00' S= 0.0163 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.35'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.86'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.23 cfs @ 12.28 hrs HW=180.47' (Free Discharge)
- **1=Culvert** (Passes 6.23 cfs of 12.25 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 4.86 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 6.07 cfs @ 2.56 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-17B: Basin #17B



Stage-Discharge for Pond B-17B: Basin #17B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	1.12	181.08	13.93	182.12	24.68
179.02	0.00	180.06	1.29	181.10	13.98	182.14	26.23
179.04	0.00	180.08	1.46	181.12	14.03	182.16	27.91
179.06	0.00	180.10	1.65	181.14	14.08	182.18	29.72
179.08	0.00	180.12	1.85	181.16	14.14	182.20	31.64
179.10	0.00	180.14	2.05	181.18	14.19	182.22	33.66
179.12	0.00	180.16	2.25	181.20	14.24	182.24	35.77
179.14	0.00	180.18	2.47	181.22	14.29	182.26	37.98
179.16	0.00	180.20	2.69	181.24	14.34	182.28	40.29
179.18	0.00	180.22	2.92	181.26	14.39	182.30	42.70
179.20	0.00	180.24	3.15	181.28	14.44	182.32	45.20
179.22	0.00	180.26	3.39	181.30	14.49	182.34	47.80
179.24	0.00	180.28	3.63	181.32	14.54	182.36	50.53
179.26	0.00	180.30	3.88	181.34	14.59	182.38	53.38
179.28	0.00	180.32	4.14	181.36	14.64	182.40	56.34
179.30	0.00	180.34	4.40	181.38	14.69	182.42	59.40
179.32	0.00	180.36	4.67	181.40	14.74	182.44	62.57
179.34	0.00	180.38	4.94	181.42	14.79	182.46	65.84
179.36	0.00	180.40	5.21	181.44	14.84	182.48	69.22
179.38	0.00	180.42	5.49	181.46	14.88	182.50	72.70
179.40	0.00	180.44	5.77	181.48	14.93	182.52	76.29
179.42	0.01	180.46	6.06	181.50	14.98	182.54	79.99
179.44	0.01	180.48	6.35	181.52	15.03	182.56	83.53
179.46	0.02	180.50	6.65	181.54	15.08	182.58	86.87
179.48	0.03	180.52	6.95	181.56	15.13	182.60	90.26
179.50	0.03	180.54	7.26	181.58	15.17	182.62	93.70
179.52	0.04	180.56	7.56	181.60	15.22	182.64	97.19
179.54	0.05	180.58	7.88	181.62	15.27	182.66	100.74
179.56	0.05	180.60	8.19	181.64	15.32	182.68	104.34
179.58	0.06	180.62	8.51	181.66	15.36	182.70	107.98
179.60	0.06	180.64	8.84	181.68	15.41	182.72	111.68
179.62	0.07	180.66	9.17	181.70	15.46	182.74	115.42
179.64	0.07	180.68	9.50	181.72	15.50	182.76	119.25
179.66	0.07	180.70	9.83	181.74	15.55	182.78	123.17
179.68	0.08	180.72	10.17	181.76	15.60	182.80	127.14
179.70	0.08	180.74	10.51	181.78	15.64	182.82	131.17
179.72	0.08	180.76	10.85	181.80	15.69	182.84	135.25
179.74	0.09	180.78	11.20	181.82	15.74	182.86	139.37
179.76	0.09	180.80	11.55	181.84	15.78	182.88	143.55
179.78	0.09	180.82	11.90	181.86	15.83	182.90	147.78
179.80	0.10	180.84	12.26	181.88	15.87	182.92	152.07
179.82	0.10	180.86	12.62	181.90	15.92	182.94	156.40
179.84	0.10	180.88	12.98	181.92	15.96	182.96	160.73
179.86	0.10	180.90	13.35	181.94	16.01	182.98	165.05
179.88	0.14	180.92	13.51	181.96	16.17	183.00	**169.41**
179.90	0.21	180.94	13.56	181.98	16.71		
179.92	0.30	180.96	13.61	182.00	17.46		
179.94	0.41	180.98	13.67	182.02	18.36		
179.96	0.53	181.00	13.72	182.04	19.41		
179.98	0.66	181.02	13.77	182.06	20.57		
180.00	0.80	181.04	13.83	182.08	21.84		
180.02	0.95	181.06	13.88	182.10	23.21		

Summary for Pond B-2: Basin #2

Inflow Area = 1.894 ac, 38.23% Impervious, Inflow Depth = 6.56" for Current 100 yr event
Inflow = 12.68 cfs @ 12.17 hrs, Volume= 1.036 af
Outflow = 4.13 cfs @ 12.46 hrs, Volume= 0.477 af, Atten= 67%, Lag= 17.5 min
Primary = 4.13 cfs @ 12.46 hrs, Volume= 0.477 af
Routed to Pond B-1 : Basin #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 211.61' @ 12.46 hrs Surf.Area= 9,988 sf Storage= 25,378 cf

Plug-Flow detention time= 281.4 min calculated for 0.477 af (46% of inflow)
Center-of-Mass det. time= 148.5 min (931.9 - 783.4)

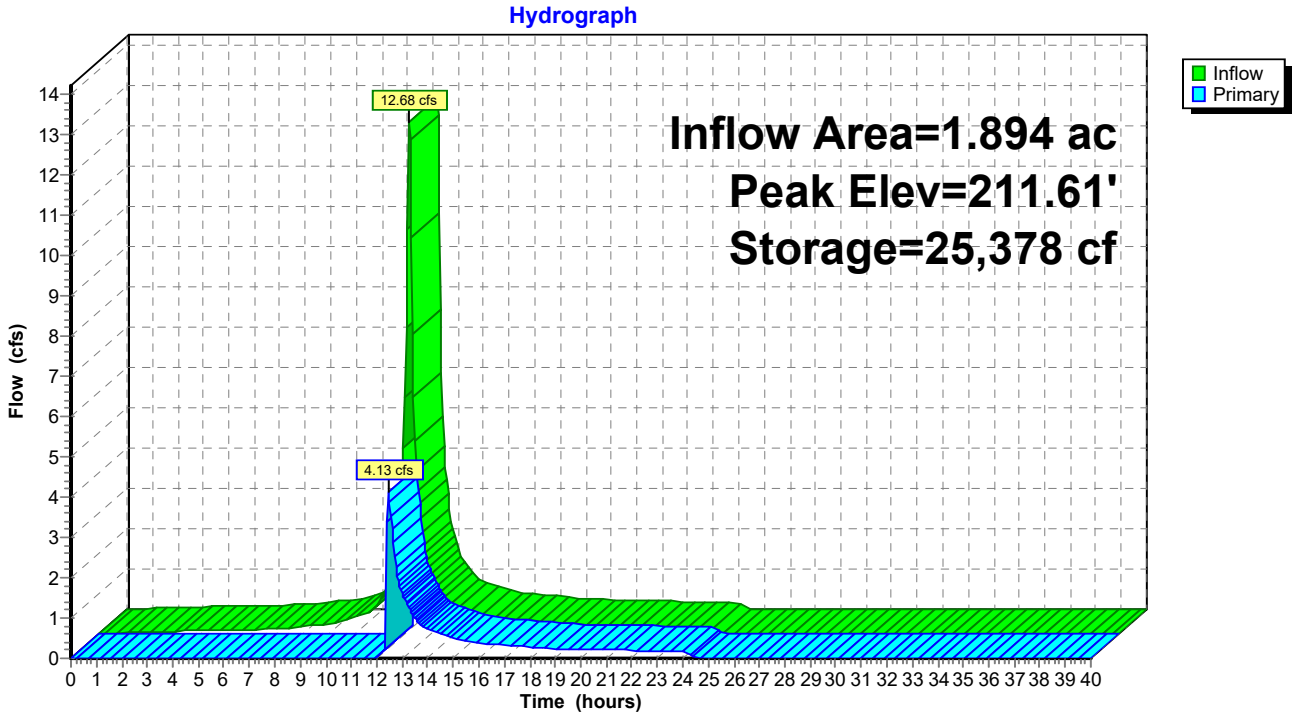
Volume	Invert	Avail.Storage	Storage Description
#1	208.30'	29,385 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
208.30	0	0	0
209.00	7,501	2,625	2,625
210.00	8,431	7,966	10,591
211.00	9,390	8,911	19,502
212.00	10,376	9,883	29,385

Device	Routing	Invert	Outlet Devices
#1	Primary	211.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.00 cfs @ 12.46 hrs HW=211.60' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 4.00 cfs @ 0.76 fps)

Pond B-2: Basin #2



Stage-Discharge for Pond B-2: Basin #2

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
208.30	0.00	209.34	0.00	210.38	0.00	211.42	0.00
208.32	0.00	209.36	0.00	210.40	0.00	211.44	0.00
208.34	0.00	209.38	0.00	210.42	0.00	211.46	0.00
208.36	0.00	209.40	0.00	210.44	0.00	211.48	0.00
208.38	0.00	209.42	0.00	210.46	0.00	211.50	0.00
208.40	0.00	209.44	0.00	210.48	0.00	211.52	0.33
208.42	0.00	209.46	0.00	210.50	0.00	211.54	0.94
208.44	0.00	209.48	0.00	210.52	0.00	211.56	1.72
208.46	0.00	209.50	0.00	210.54	0.00	211.58	2.66
208.48	0.00	209.52	0.00	210.56	0.00	211.60	3.72
208.50	0.00	209.54	0.00	210.58	0.00	211.62	4.89
208.52	0.00	209.56	0.00	210.60	0.00	211.64	6.17
208.54	0.00	209.58	0.00	210.62	0.00	211.66	7.55
208.56	0.00	209.60	0.00	210.64	0.00	211.68	9.01
208.58	0.00	209.62	0.00	210.66	0.00	211.70	10.57
208.60	0.00	209.64	0.00	210.68	0.00	211.72	12.28
208.62	0.00	209.66	0.00	210.70	0.00	211.74	14.11
208.64	0.00	209.68	0.00	210.72	0.00	211.76	16.03
208.66	0.00	209.70	0.00	210.74	0.00	211.78	18.05
208.68	0.00	209.72	0.00	210.76	0.00	211.80	20.17
208.70	0.00	209.74	0.00	210.78	0.00	211.82	22.39
208.72	0.00	209.76	0.00	210.80	0.00	211.84	24.70
208.74	0.00	209.78	0.00	210.82	0.00	211.86	27.11
208.76	0.00	209.80	0.00	210.84	0.00	211.88	29.62
208.78	0.00	209.82	0.00	210.86	0.00	211.90	32.23
208.80	0.00	209.84	0.00	210.88	0.00	211.92	34.99
208.82	0.00	209.86	0.00	210.90	0.00	211.94	37.85
208.84	0.00	209.88	0.00	210.92	0.00	211.96	40.82
208.86	0.00	209.90	0.00	210.94	0.00	211.98	43.89
208.88	0.00	209.92	0.00	210.96	0.00	212.00	**47.07**
208.90	0.00	209.94	0.00	210.98	0.00		
208.92	0.00	209.96	0.00	211.00	0.00		
208.94	0.00	209.98	0.00	211.02	0.00		
208.96	0.00	210.00	0.00	211.04	0.00		
208.98	0.00	210.02	0.00	211.06	0.00		
209.00	0.00	210.04	0.00	211.08	0.00		
209.02	0.00	210.06	0.00	211.10	0.00		
209.04	0.00	210.08	0.00	211.12	0.00		
209.06	0.00	210.10	0.00	211.14	0.00		
209.08	0.00	210.12	0.00	211.16	0.00		
209.10	0.00	210.14	0.00	211.18	0.00		
209.12	0.00	210.16	0.00	211.20	0.00		
209.14	0.00	210.18	0.00	211.22	0.00		
209.16	0.00	210.20	0.00	211.24	0.00		
209.18	0.00	210.22	0.00	211.26	0.00		
209.20	0.00	210.24	0.00	211.28	0.00		
209.22	0.00	210.26	0.00	211.30	0.00		
209.24	0.00	210.28	0.00	211.32	0.00		
209.26	0.00	210.30	0.00	211.34	0.00		
209.28	0.00	210.32	0.00	211.36	0.00		
209.30	0.00	210.34	0.00	211.38	0.00		
209.32	0.00	210.36	0.00	211.40	0.00		

Summary for Pond B-3: Basin #3

Inflow Area = 1.554 ac, 38.35% Impervious, Inflow Depth = 6.57" for Current 100 yr event
Inflow = 10.41 cfs @ 12.17 hrs, Volume= 0.850 af
Outflow = 0.24 cfs @ 17.52 hrs, Volume= 0.543 af, Atten= 98%, Lag= 321.0 min
Primary = 0.24 cfs @ 17.52 hrs, Volume= 0.543 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 215.07' @ 17.52 hrs Surf.Area= 15,643 sf Storage= 26,551 cf

Plug-Flow detention time= 769.7 min calculated for 0.543 af (64% of inflow)
Center-of-Mass det. time= 662.3 min (1,445.6 - 783.3)

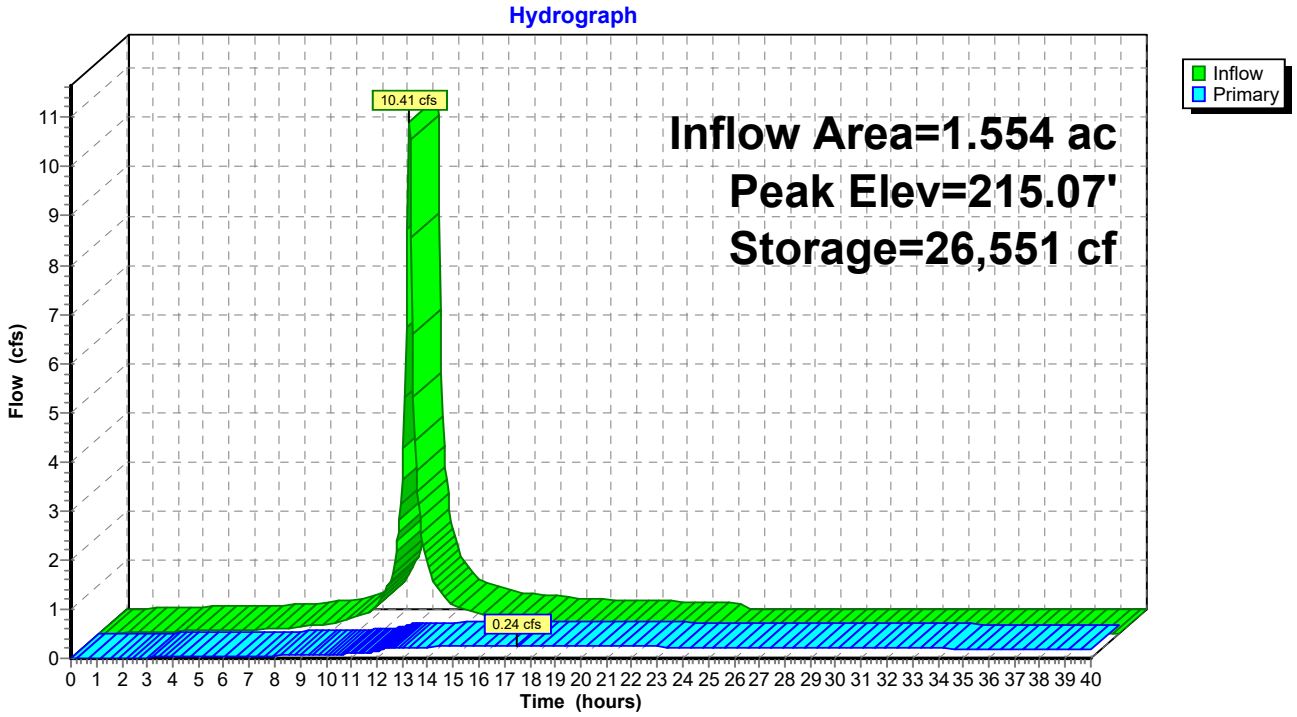
Volume	Invert	Avail.Storage	Storage Description
#1	213.00'	56,991 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
213.00	9,992	0	0
214.00	12,685	11,339	11,339
215.00	15,435	14,060	25,399
216.00	18,241	16,838	42,237
216.75	21,104	14,754	56,991

Device	Routing	Invert	Outlet Devices
#1	Primary	212.30'	**18.0" Round Culvert** L= 151.0' Ke= 0.500 Inlet / Outlet Invert= 212.30' / 202.00' S= 0.0682 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.77 sf
#2	Device 1	212.90'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	215.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	216.70'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.24 cfs @ 17.52 hrs HW=215.07' (Free Discharge)
- **1=Culvert** (Passes 0.24 cfs of 12.11 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.24 cfs @ 6.93 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-3: Basin #3



Stage-Discharge for Pond B-3: Basin #3

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
213.00	0.00	214.04	0.17	215.08	0.24	216.12	6.48
213.02	0.02	214.06	0.17	215.10	0.24	216.14	6.77
213.04	0.03	214.08	0.17	215.12	0.24	216.16	7.07
213.06	0.04	214.10	0.17	215.14	0.24	216.18	7.38
213.08	0.05	214.12	0.17	215.16	0.24	216.20	7.69
213.10	0.05	214.14	0.17	215.18	0.24	216.22	8.00
213.12	0.06	214.16	0.18	215.20	0.24	216.24	8.31
213.14	0.06	214.18	0.18	215.22	0.24	216.26	8.63
213.16	0.06	214.20	0.18	215.24	0.25	216.28	8.96
213.18	0.07	214.22	0.18	215.26	0.25	216.30	9.28
213.20	0.07	214.24	0.18	215.28	0.25	216.32	9.61
213.22	0.08	214.26	0.18	215.30	0.25	216.34	9.95
213.24	0.08	214.28	0.19	215.32	0.25	216.36	10.28
213.26	0.08	214.30	0.19	215.34	0.25	216.38	10.62
213.28	0.09	214.32	0.19	215.36	0.25	216.40	10.97
213.30	0.09	214.34	0.19	215.38	0.25	216.42	11.31
213.32	0.09	214.36	0.19	215.40	0.25	216.44	11.66
213.34	0.10	214.38	0.19	215.42	0.26	216.46	12.02
213.36	0.10	214.40	0.19	215.44	0.26	216.48	12.37
213.38	0.10	214.42	0.20	215.46	0.26	216.50	12.73
213.40	0.10	214.44	0.20	215.48	0.26	216.52	13.09
213.42	0.11	214.46	0.20	215.50	0.26	216.54	13.46
213.44	0.11	214.48	0.20	215.52	0.30	216.56	13.83
213.46	0.11	214.50	0.20	215.54	0.37	216.58	14.20
213.48	0.11	214.52	0.20	215.56	0.45	216.60	14.57
213.50	0.12	214.54	0.20	215.58	0.56	216.62	14.95
213.52	0.12	214.56	0.20	215.60	0.68	216.64	15.33
213.54	0.12	214.58	0.21	215.62	0.81	216.66	15.71
213.56	0.12	214.60	0.21	215.64	0.95	216.68	16.09
213.58	0.12	214.62	0.21	215.66	1.10	216.70	16.26
213.60	0.13	214.64	0.21	215.68	1.26	216.72	16.63
213.62	0.13	214.66	0.21	215.70	1.43	216.74	**17.28**
213.64	0.13	214.68	0.21	215.72	1.61		
213.66	0.13	214.70	0.21	215.74	1.79		
213.68	0.13	214.72	0.22	215.76	1.98		
213.70	0.14	214.74	0.22	215.78	2.18		
213.72	0.14	214.76	0.22	215.80	2.39		
213.74	0.14	214.78	0.22	215.82	2.61		
213.76	0.14	214.80	0.22	215.84	2.83		
213.78	0.14	214.82	0.22	215.86	3.05		
213.80	0.15	214.84	0.22	215.88	3.28		
213.82	0.15	214.86	0.22	215.90	3.52		
213.84	0.15	214.88	0.22	215.92	3.77		
213.86	0.15	214.90	0.23	215.94	4.01		
213.88	0.15	214.92	0.23	215.96	4.27		
213.90	0.16	214.94	0.23	215.98	4.53		
213.92	0.16	214.96	0.23	216.00	4.79		
213.94	0.16	214.98	0.23	216.02	5.06		
213.96	0.16	215.00	0.23	216.04	5.34		
213.98	0.16	215.02	0.23	216.06	5.61		
214.00	0.16	215.04	0.23	216.08	5.90		
214.02	0.17	215.06	0.24	216.10	6.19		

Summary for Pond B-4A: Basin #4A

Inflow Area = 2.331 ac, 36.89% Impervious, Inflow Depth = 6.52" for Current 100 yr event
Inflow = 15.55 cfs @ 12.17 hrs, Volume= 1.267 af
Outflow = 22.52 cfs @ 12.20 hrs, Volume= 0.793 af, Atten= 0%, Lag= 1.6 min
Primary = 22.52 cfs @ 12.20 hrs, Volume= 0.793 af
Routed to Pond B-5 : Basin #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 205.77' @ 12.20 hrs Surf.Area= 6,057 sf Storage= 20,963 cf

Plug-Flow detention time= 201.1 min calculated for 0.793 af (63% of inflow)
Center-of-Mass det. time= 92.5 min (877.0 - 784.5)

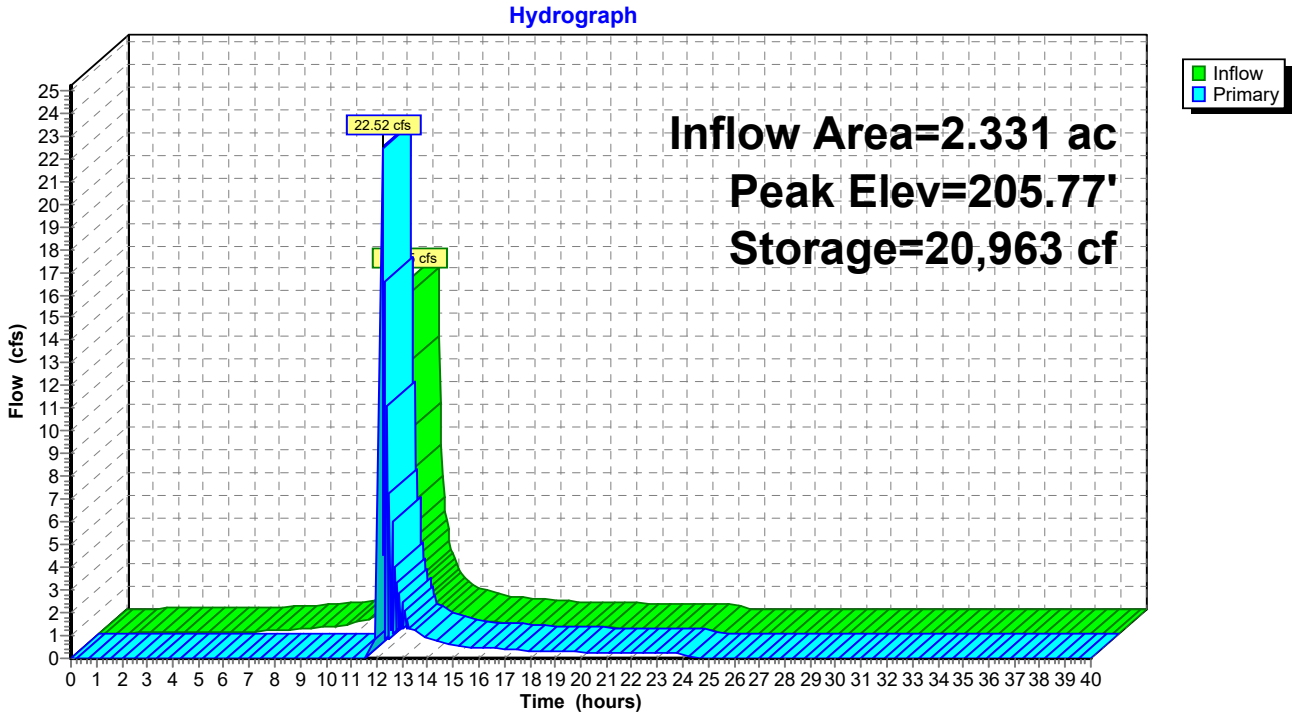
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	20,963 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	1,891	0	0
201.00	2,495	2,193	2,193
202.00	3,169	2,832	5,025
203.00	3,912	3,541	8,566
204.00	4,724	4,318	12,884
205.00	5,604	5,164	18,048
205.50	6,057	2,915	20,963

Device	Routing	Invert	Outlet Devices
#1	Primary	205.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=21.57 cfs @ 12.20 hrs HW=205.76' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 21.57 cfs @ 1.35 fps)

Pond B-4A: Basin #4A



Stage-Discharge for Pond B-4A: Basin #4A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	0.00	205.20	0.00
200.05	0.00	202.65	0.00	205.25	0.00
200.10	0.00	202.70	0.00	205.30	0.00
200.15	0.00	202.75	0.00	205.35	0.00
200.20	0.00	202.80	0.00	205.40	0.00
200.25	0.00	202.85	0.00	205.45	0.00
200.30	0.00	202.90	0.00	205.50	1.31
200.35	0.00	202.95	0.00	205.55	3.72
200.40	0.00	203.00	0.00	205.60	6.85
200.45	0.00	203.05	0.00	205.65	10.57
200.50	0.00	203.10	0.00	205.70	15.05
200.55	0.00	203.15	0.00	205.75	**20.17**
200.60	0.00	203.20	0.00		
200.65	0.00	203.25	0.00		
200.70	0.00	203.30	0.00		
200.75	0.00	203.35	0.00		
200.80	0.00	203.40	0.00		
200.85	0.00	203.45	0.00		
200.90	0.00	203.50	0.00		
200.95	0.00	203.55	0.00		
201.00	0.00	203.60	0.00		
201.05	0.00	203.65	0.00		
201.10	0.00	203.70	0.00		
201.15	0.00	203.75	0.00		
201.20	0.00	203.80	0.00		
201.25	0.00	203.85	0.00		
201.30	0.00	203.90	0.00		
201.35	0.00	203.95	0.00		
201.40	0.00	204.00	0.00		
201.45	0.00	204.05	0.00		
201.50	0.00	204.10	0.00		
201.55	0.00	204.15	0.00		
201.60	0.00	204.20	0.00		
201.65	0.00	204.25	0.00		
201.70	0.00	204.30	0.00		
201.75	0.00	204.35	0.00		
201.80	0.00	204.40	0.00		
201.85	0.00	204.45	0.00		
201.90	0.00	204.50	0.00		
201.95	0.00	204.55	0.00		
202.00	0.00	204.60	0.00		
202.05	0.00	204.65	0.00		
202.10	0.00	204.70	0.00		
202.15	0.00	204.75	0.00		
202.20	0.00	204.80	0.00		
202.25	0.00	204.85	0.00		
202.30	0.00	204.90	0.00		
202.35	0.00	204.95	0.00		
202.40	0.00	205.00	0.00		
202.45	0.00	205.05	0.00		
202.50	0.00	205.10	0.00		
202.55	0.00	205.15	0.00		

Summary for Pond B-4B: Basin #4B

Inflow Area = 2.331 ac, 36.89% Impervious, Inflow Depth = 6.52" for Current 100 yr event
Inflow = 15.55 cfs @ 12.17 hrs, Volume= 1.267 af
Outflow = 16.36 cfs @ 12.21 hrs, Volume= 0.747 af, Atten= 0%, Lag= 2.6 min
Primary = 16.36 cfs @ 12.21 hrs, Volume= 0.747 af
Routed to Pond B-5 : Basin #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 205.74' @ 12.22 hrs Surf.Area= 6,934 sf Storage= 22,995 cf

Plug-Flow detention time= 214.4 min calculated for 0.746 af (59% of inflow)
Center-of-Mass det. time= 101.9 min (886.4 - 784.5)

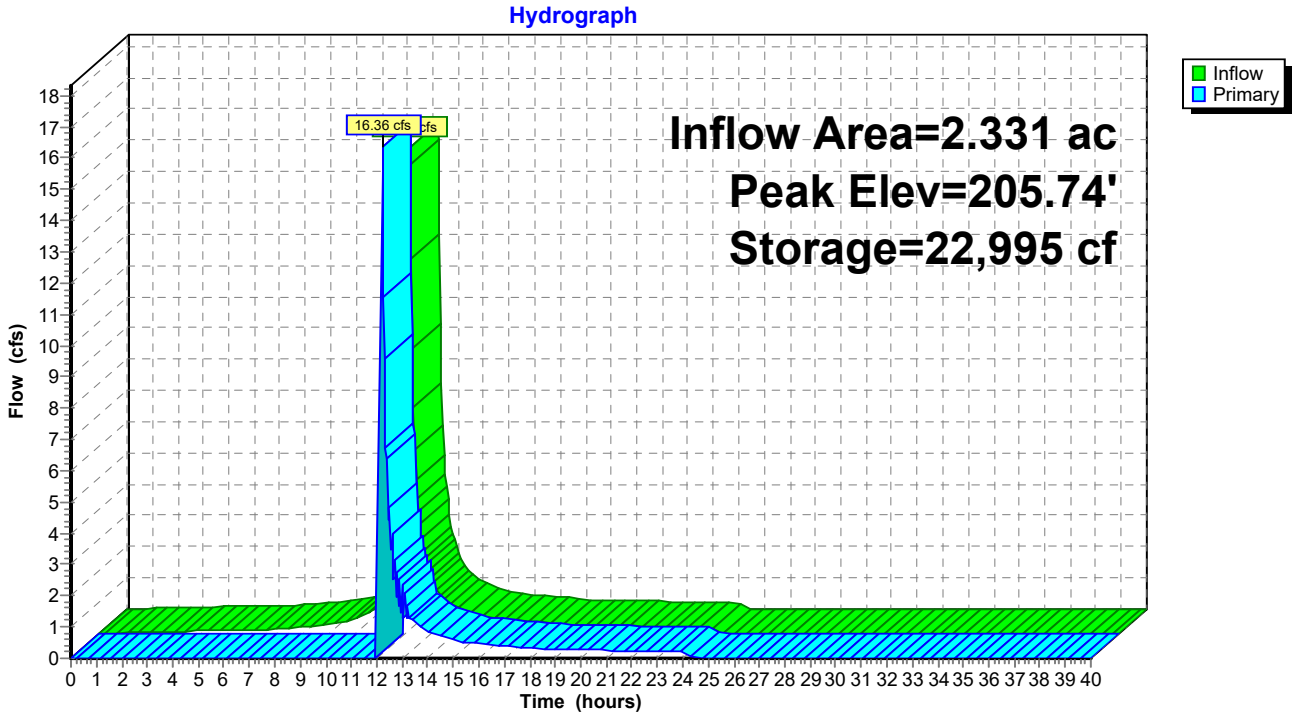
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	22,995 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	1,852	0	0
201.00	2,571	2,212	2,212
202.00	3,384	2,978	5,189
203.00	4,292	3,838	9,027
204.00	5,294	4,793	13,820
205.00	6,393	5,844	19,664
205.50	6,934	3,332	22,995

Device	Routing	Invert	Outlet Devices
#1	Primary	205.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.21 cfs @ 12.21 hrs HW=205.69' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 14.21 cfs @ 1.16 fps)

Pond B-4B: Basin #4B



Stage-Discharge for Pond B-4B: Basin #4B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	0.00	205.20	0.00
200.05	0.00	202.65	0.00	205.25	0.00
200.10	0.00	202.70	0.00	205.30	0.00
200.15	0.00	202.75	0.00	205.35	0.00
200.20	0.00	202.80	0.00	205.40	0.00
200.25	0.00	202.85	0.00	205.45	0.00
200.30	0.00	202.90	0.00	205.50	1.31
200.35	0.00	202.95	0.00	205.55	3.72
200.40	0.00	203.00	0.00	205.60	6.85
200.45	0.00	203.05	0.00	205.65	10.57
200.50	0.00	203.10	0.00	205.70	**15.05**
200.55	0.00	203.15	0.00		
200.60	0.00	203.20	0.00		
200.65	0.00	203.25	0.00		
200.70	0.00	203.30	0.00		
200.75	0.00	203.35	0.00		
200.80	0.00	203.40	0.00		
200.85	0.00	203.45	0.00		
200.90	0.00	203.50	0.00		
200.95	0.00	203.55	0.00		
201.00	0.00	203.60	0.00		
201.05	0.00	203.65	0.00		
201.10	0.00	203.70	0.00		
201.15	0.00	203.75	0.00		
201.20	0.00	203.80	0.00		
201.25	0.00	203.85	0.00		
201.30	0.00	203.90	0.00		
201.35	0.00	203.95	0.00		
201.40	0.00	204.00	0.00		
201.45	0.00	204.05	0.00		
201.50	0.00	204.10	0.00		
201.55	0.00	204.15	0.00		
201.60	0.00	204.20	0.00		
201.65	0.00	204.25	0.00		
201.70	0.00	204.30	0.00		
201.75	0.00	204.35	0.00		
201.80	0.00	204.40	0.00		
201.85	0.00	204.45	0.00		
201.90	0.00	204.50	0.00		
201.95	0.00	204.55	0.00		
202.00	0.00	204.60	0.00		
202.05	0.00	204.65	0.00		
202.10	0.00	204.70	0.00		
202.15	0.00	204.75	0.00		
202.20	0.00	204.80	0.00		
202.25	0.00	204.85	0.00		
202.30	0.00	204.90	0.00		
202.35	0.00	204.95	0.00		
202.40	0.00	205.00	0.00		
202.45	0.00	205.05	0.00		
202.50	0.00	205.10	0.00		
202.55	0.00	205.15	0.00		

Summary for Pond B-5: Basin #5

Inflow Area = 5.341 ac, 32.20% Impervious, Inflow Depth = 4.15" for Current 100 yr event
Inflow = 42.06 cfs @ 12.20 hrs, Volume= 1.849 af
Outflow = 8.23 cfs @ 12.59 hrs, Volume= 1.673 af, Atten= 80%, Lag= 23.0 min
Primary = 8.23 cfs @ 12.59 hrs, Volume= 1.673 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 201.99' @ 12.59 hrs Surf.Area= 13,996 sf Storage= 25,465 cf

Plug-Flow detention time= 218.2 min calculated for 1.673 af (90% of inflow)
Center-of-Mass det. time= 170.4 min (1,041.7 - 871.3)

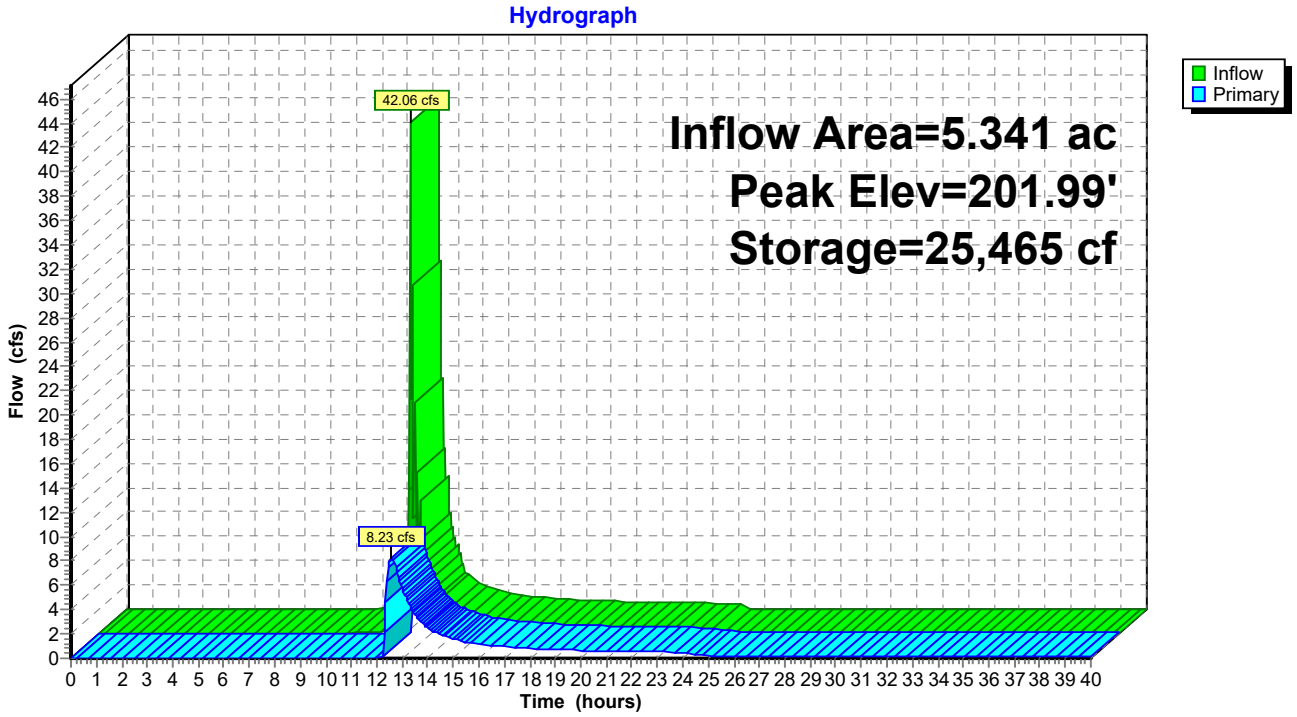
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	91,976 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	11,631	0	0
201.00	12,798	12,215	12,215
202.00	14,009	13,404	25,618
203.00	15,262	14,636	40,254
204.00	16,558	15,910	56,164
205.00	17,896	17,227	73,391
206.00	19,275	18,586	91,976

Device	Routing	Invert	Outlet Devices
#1	Primary	198.65'	**18.0" Round Culvert** L= 70.0' Ke= 0.500 Inlet / Outlet Invert= 198.65' / 196.00' S= 0.0379 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	200.02'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	205.00'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.22 cfs @ 12.59 hrs HW=201.99' (Free Discharge)
- **1=Culvert** (Passes 8.22 cfs of 13.69 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.22 cfs @ 6.57 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 7.99 cfs @ 2.81 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-5: Basin #5



Stage-Discharge for Pond B-5: Basin #5

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	15.22	205.20	31.06
200.05	0.00	202.65	15.34	205.25	35.63
200.10	0.01	202.70	15.46	205.30	40.84
200.15	0.03	202.75	15.57	205.35	46.65
200.20	0.05	202.80	15.69	205.40	53.07
200.25	0.06	202.85	15.80	205.45	60.25
200.30	0.07	202.90	15.92	205.50	68.08
200.35	0.08	202.95	16.03	205.55	76.57
200.40	0.09	203.00	16.14	205.60	85.74
200.45	0.09	203.05	16.26	205.65	94.09
200.50	0.10	203.10	16.37	205.70	102.78
200.55	0.11	203.15	16.48	205.75	111.78
200.60	0.11	203.20	16.59	205.80	121.09
200.65	0.12	203.25	16.70	205.85	130.90
200.70	0.12	203.30	16.80	205.90	141.05
200.75	0.13	203.35	16.91	205.95	151.51
200.80	0.13	203.40	17.02	206.00	**162.29**
200.85	0.14	203.45	17.12		
200.90	0.14	203.50	17.23		
200.95	0.15	203.55	17.33		
201.00	0.15	203.60	17.44		
201.05	0.16	203.65	17.54		
201.10	0.16	203.70	17.64		
201.15	0.17	203.75	17.75		
201.20	0.17	203.80	17.85		
201.25	0.17	203.85	17.95		
201.30	0.32	203.90	18.05		
201.35	0.59	203.95	18.15		
201.40	0.94	204.00	18.25		
201.45	1.35	204.05	18.35		
201.50	1.81	204.10	18.45		
201.55	2.31	204.15	18.54		
201.60	2.86	204.20	18.64		
201.65	3.45	204.25	18.74		
201.70	4.07	204.30	18.83		
201.75	4.72	204.35	18.93		
201.80	5.40	204.40	19.03		
201.85	6.11	204.45	19.12		
201.90	6.85	204.50	19.22		
201.95	7.61	204.55	19.31		
202.00	8.40	204.60	19.40		
202.05	9.21	204.65	19.50		
202.10	10.05	204.70	19.59		
202.15	10.90	204.75	19.68		
202.20	11.77	204.80	19.77		
202.25	12.67	204.85	19.86		
202.30	13.58	204.90	19.95		
202.35	14.51	204.95	20.05		
202.40	14.74	205.00	20.14		
202.45	14.86	205.05	21.54		
202.50	14.98	205.10	24.03		
202.55	15.10	205.15	27.25		

Summary for Pond B-6: Basin #6

Inflow Area = 1.191 ac, 58.27% Impervious, Inflow Depth = 7.14" for Current 100 yr event
Inflow = 8.42 cfs @ 12.17 hrs, Volume= 0.709 af
Outflow = 6.40 cfs @ 12.26 hrs, Volume= 0.635 af, Atten= 24%, Lag= 5.2 min
Primary = 6.40 cfs @ 12.26 hrs, Volume= 0.635 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.72' @ 12.26 hrs Surf.Area= 6,566 sf Storage= 10,286 cf

Plug-Flow detention time= 231.7 min calculated for 0.634 af (89% of inflow)
Center-of-Mass det. time= 179.5 min (948.2 - 768.7)

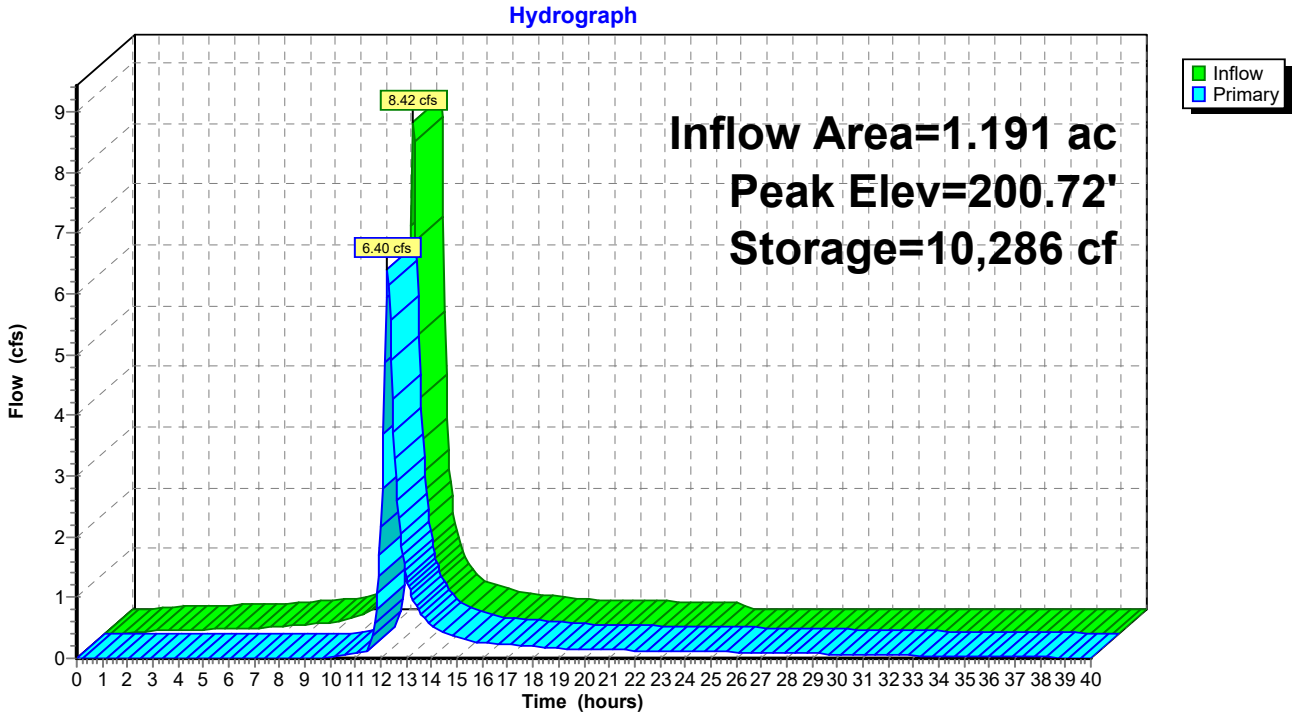
Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	35,769 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.00	5,389	0	0
200.00	6,060	5,725	5,725
201.00	6,761	6,411	12,135
202.00	7,490	7,126	19,261
203.00	8,247	7,869	27,129
204.00	9,032	8,640	35,769

Device	Routing	Invert	Outlet Devices
#1	Primary	197.65'	**18.0" Round Culvert** L= 627.0' Ke= 0.500 Inlet / Outlet Invert= 197.65' / 194.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.50'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.10'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	200.89'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.35 cfs @ 12.26 hrs HW=200.72' (Free Discharge)
- **1=Culvert** (Passes 6.35 cfs of 9.00 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 5.09 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 6.18 cfs @ 2.57 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-6: Basin #6



Stage-Discharge for Pond B-6: Basin #6

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.00	0.00	201.60	92.90
199.05	0.00	201.65	101.92
199.10	0.00	201.70	111.29
199.15	0.00	201.75	121.13
199.20	0.00	201.80	131.29
199.25	0.00	201.85	141.77
199.30	0.00	201.90	152.52
199.35	0.00	201.95	163.34
199.40	0.00	202.00	174.42
199.45	0.00	202.05	185.76
199.50	0.00	202.10	197.39
199.55	0.00	202.15	209.42
199.60	0.02	202.20	221.71
199.65	0.03	202.25	234.27
199.70	0.05	202.30	247.13
199.75	0.06	202.35	260.43
199.80	0.07	202.40	274.02
199.85	0.08	202.45	287.88
199.90	0.09	202.50	302.02
199.95	0.10	202.55	316.42
200.00	0.10	202.60	331.10
200.05	0.11	202.65	346.04
200.10	0.12	202.70	361.25
200.15	0.27	202.75	376.73
200.20	0.54	202.80	392.46
200.25	0.89	202.85	408.46
200.30	1.30	202.90	424.79
200.35	1.76	202.95	441.63
200.40	2.26	203.00	458.76
200.45	2.81	203.05	476.18
200.50	3.40	203.10	493.88
200.55	4.02	203.15	511.86
200.60	4.67	203.20	530.12
200.65	5.36	203.25	548.67
200.70	6.07	203.30	567.49
200.75	6.81	203.35	586.60
200.80	7.57	203.40	605.86
200.85	8.36	203.45	624.84
200.90	9.27	203.50	644.05
200.95	10.92	203.55	663.51
201.00	13.53	203.60	683.20
201.05	16.82	203.65	703.12
201.10	20.73	203.70	723.28
201.15	25.39	203.75	743.67
201.20	30.67	203.80	764.30
201.25	36.56	203.85	785.16
201.30	43.08	203.90	806.43
201.35	50.34	203.95	828.68
201.40	58.26	204.00	**851.20**
201.45	66.84		
201.50	75.82		
201.55	84.20		

Summary for Pond B-7: Basin #7

Inflow Area = 1.564 ac, 62.85% Impervious, Inflow Depth = 7.28" for Current 100 yr event
Inflow = 11.19 cfs @ 12.17 hrs, Volume= 0.948 af
Outflow = 6.35 cfs @ 12.31 hrs, Volume= 0.806 af, Atten= 43%, Lag= 8.5 min
Primary = 6.35 cfs @ 12.31 hrs, Volume= 0.806 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 208.61' @ 12.31 hrs Surf.Area= 10,913 sf Storage= 18,370 cf

Plug-Flow detention time= 332.1 min calculated for 0.806 af (85% of inflow)
Center-of-Mass det. time= 263.3 min (1,029.0 - 765.7)

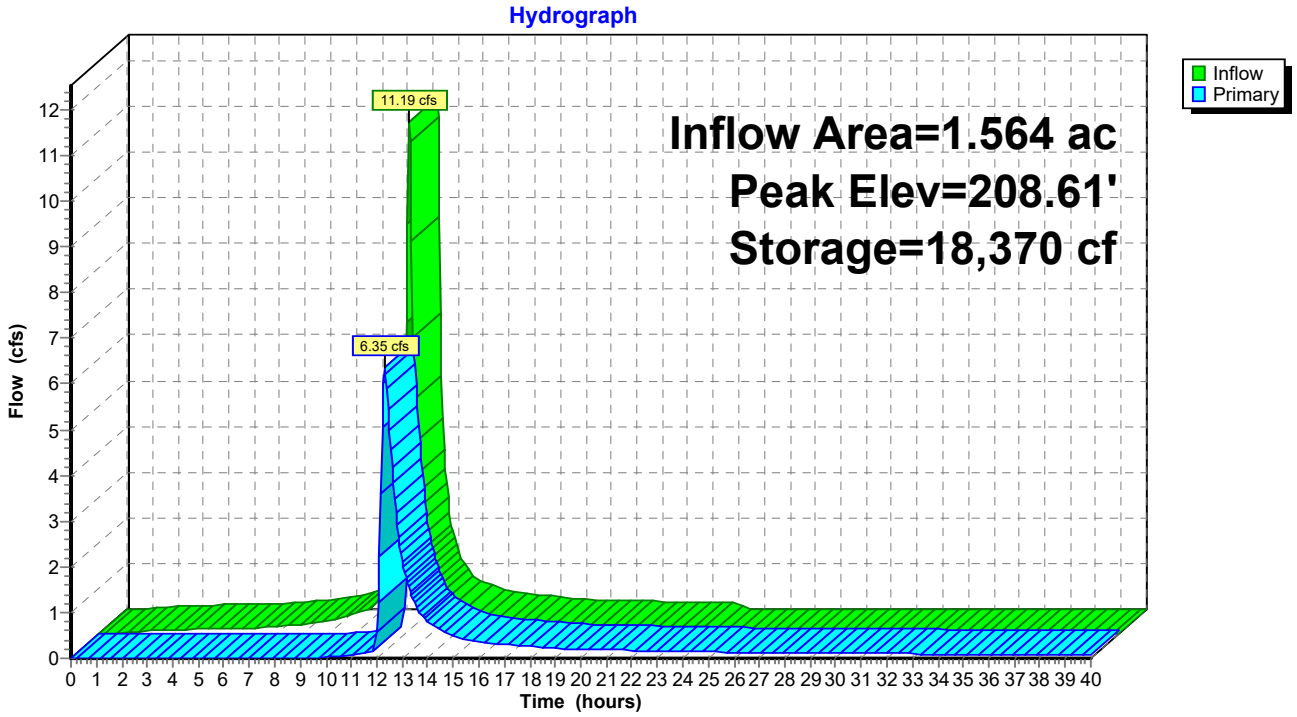
Volume	Invert	Avail.Storage	Storage Description
#1	206.47'	48,130 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.47	0	0	0
207.00	8,989	2,382	2,382
208.00	10,166	9,578	11,960
209.00	11,395	10,781	22,740
210.00	12,681	12,038	34,778
211.00	14,023	13,352	48,130

Device	Routing	Invert	Outlet Devices
#1	Primary	206.47'	**18.0" Round Culvert** L= 94.0' Ke= 0.500 Inlet / Outlet Invert= 206.47' / 206.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	207.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	207.99'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	208.86'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.31 cfs @ 12.31 hrs HW=208.61' (Free Discharge)
- **1=Culvert** (Passes 6.31 cfs of 8.31 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.56 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 6.12 cfs @ 2.57 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-7: Basin #7



Stage-Discharge for Pond B-7: Basin #7

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
206.47	0.00	209.07	21.32
206.52	0.00	209.12	26.09
206.57	0.00	209.17	31.48
206.62	0.00	209.22	37.48
206.67	0.00	209.27	44.11
206.72	0.00	209.32	51.48
206.77	0.00	209.37	59.50
206.82	0.00	209.42	68.19
206.87	0.00	209.47	77.27
206.92	0.00	209.52	85.75
206.97	0.00	209.57	94.55
207.02	0.00	209.62	103.67
207.07	0.00	209.67	113.13
207.12	0.00	209.72	123.06
207.17	0.00	209.77	133.31
207.22	0.00	209.82	143.89
207.27	0.02	209.87	154.72
207.32	0.03	209.92	165.63
207.37	0.05	209.97	176.80
207.42	0.06	210.02	188.23
207.47	0.07	210.07	199.94
207.52	0.08	210.12	212.05
207.57	0.09	210.17	224.43
207.62	0.10	210.22	237.07
207.67	0.10	210.27	250.01
207.72	0.11	210.32	263.40
207.77	0.12	210.37	277.07
207.82	0.12	210.42	291.01
207.87	0.13	210.47	305.22
207.92	0.13	210.52	319.70
207.97	0.14	210.57	334.45
208.02	0.21	210.62	349.47
208.07	0.44	210.67	364.76
208.12	0.76	210.72	380.30
208.17	1.15	210.77	396.12
208.22	1.59	210.82	412.19
208.27	2.07	210.87	428.58
208.32	2.61	210.92	445.50
208.37	3.18	210.97	**462.70**
208.42	3.78		
208.47	4.42		
208.52	5.10		
208.57	5.80		
208.62	6.52		
208.67	7.28		
208.72	8.06		
208.77	8.86		
208.82	9.08		
208.87	9.37		
208.92	11.14		
208.97	13.87		
209.02	17.29		

Summary for Pond B-8: Basin #8

Inflow Area = 2.090 ac, 23.06% Impervious, Inflow Depth = 6.12" for Current 100 yr event
Inflow = 13.40 cfs @ 12.17 hrs, Volume= 1.067 af
Outflow = 6.27 cfs @ 12.36 hrs, Volume= 0.933 af, Atten= 53%, Lag= 11.1 min
Primary = 6.27 cfs @ 12.36 hrs, Volume= 0.933 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.40' @ 12.36 hrs Surf.Area= 14,686 sf Storage= 19,627 cf

Plug-Flow detention time= 272.6 min calculated for 0.932 af (87% of inflow)
Center-of-Mass det. time= 213.5 min (1,009.9 - 796.4)

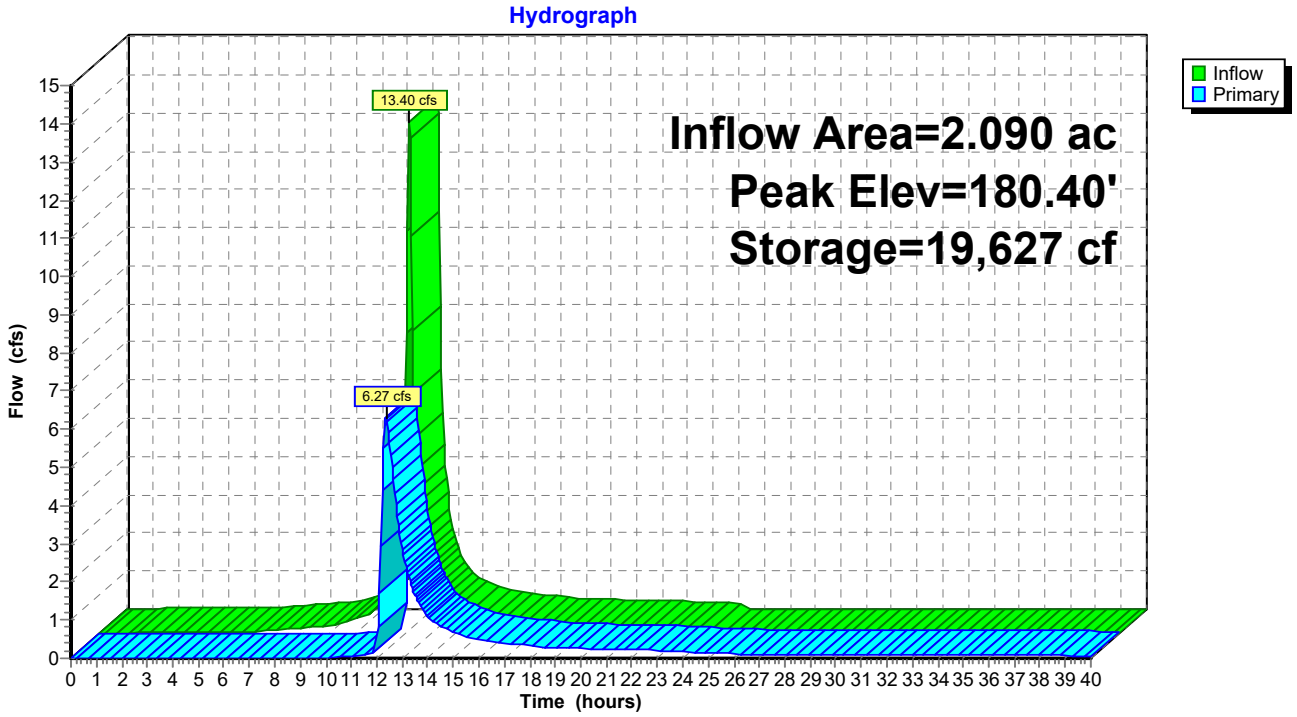
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	44,379 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	13,283	0	0
180.00	14,274	13,779	13,779
181.00	15,293	14,784	28,562
182.00	16,341	15,817	44,379

Device	Routing	Invert	Outlet Devices
#1	Primary	178.23'	**18.0" Round Culvert** L= 46.0' Ke= 0.500 Inlet / Outlet Invert= 178.23' / 178.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.83'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.26 cfs @ 12.36 hrs HW=180.40' (Free Discharge)
- **1=Culvert** (Passes 6.26 cfs of 8.81 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 5.12 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 6.08 cfs @ 2.56 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-8: Basin #8



Stage-Discharge for Pond B-8: Basin #8

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	1.76	181.08	26.70
179.02	0.00	180.06	1.96	181.10	28.75
179.04	0.00	180.08	2.16	181.12	30.89
179.06	0.00	180.10	2.37	181.14	33.13
179.08	0.00	180.12	2.59	181.16	35.47
179.10	0.00	180.14	2.81	181.18	37.91
179.12	0.00	180.16	3.04	181.20	40.44
179.14	0.00	180.18	3.28	181.22	43.07
179.16	0.00	180.20	3.52	181.24	45.82
179.18	0.00	180.22	3.77	181.26	48.70
179.20	0.00	180.24	4.02	181.28	51.68
179.22	0.00	180.26	4.28	181.30	54.77
179.24	0.01	180.28	4.54	181.32	57.97
179.26	0.01	180.30	4.81	181.34	61.27
179.28	0.02	180.32	5.08	181.36	64.67
179.30	0.03	180.34	5.36	181.38	68.18
179.32	0.03	180.36	5.64	181.40	71.80
179.34	0.04	180.38	5.93	181.42	75.52
179.36	0.05	180.40	6.22	181.44	79.09
179.38	0.05	180.42	6.51	181.46	82.45
179.40	0.06	180.44	6.81	181.48	85.86
179.42	0.06	180.46	7.11	181.50	89.33
179.44	0.07	180.48	7.42	181.52	92.84
179.46	0.07	180.50	7.73	181.54	96.41
179.48	0.07	180.52	8.04	181.56	100.03
179.50	0.08	180.54	8.36	181.58	103.70
179.52	0.08	180.56	8.68	181.60	107.42
179.54	0.08	180.58	9.01	181.62	111.19
179.56	0.09	180.60	9.34	181.64	115.04
179.58	0.09	180.62	9.67	181.66	118.98
179.60	0.09	180.64	9.90	181.68	122.98
179.62	0.10	180.66	9.98	181.70	127.03
179.64	0.10	180.68	10.07	181.72	131.13
179.66	0.10	180.70	10.15	181.74	135.28
179.68	0.10	180.72	10.24	181.76	139.48
179.70	0.11	180.74	10.32	181.78	143.73
179.72	0.11	180.76	10.40	181.80	148.03
179.74	0.11	180.78	10.49	181.82	152.38
179.76	0.11	180.80	10.57	181.84	156.73
179.78	0.12	180.82	10.65	181.86	161.07
179.80	0.13	180.84	10.85	181.88	165.46
179.82	0.19	180.86	11.42	181.90	169.88
179.84	0.27	180.88	12.20	181.92	174.35
179.86	0.37	180.90	13.14	181.94	178.86
179.88	0.48	180.92	14.22	181.96	183.41
179.90	0.60	180.94	15.41	181.98	188.00
179.92	0.74	180.96	16.72	182.00	**192.63**
179.94	0.89	180.98	18.12		
179.96	1.04	181.00	19.62		
179.98	1.21	181.02	21.20		
180.00	1.39	181.04	22.91		
180.02	1.57	181.06	24.76		

Summary for Pond B-9: Basin #9

Inflow Area = 1.503 ac, 52.63% Impervious, Inflow Depth = 6.98" for Current 100 yr event
Inflow = 10.47 cfs @ 12.17 hrs, Volume= 0.874 af
Outflow = 5.41 cfs @ 12.33 hrs, Volume= 0.746 af, Atten= 48%, Lag= 9.5 min
Primary = 5.41 cfs @ 12.33 hrs, Volume= 0.746 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.48' @ 12.33 hrs Surf.Area= 12,188 sf Storage= 16,989 cf

Plug-Flow detention time= 315.6 min calculated for 0.746 af (85% of inflow)
Center-of-Mass det. time= 249.4 min (1,022.0 - 772.6)

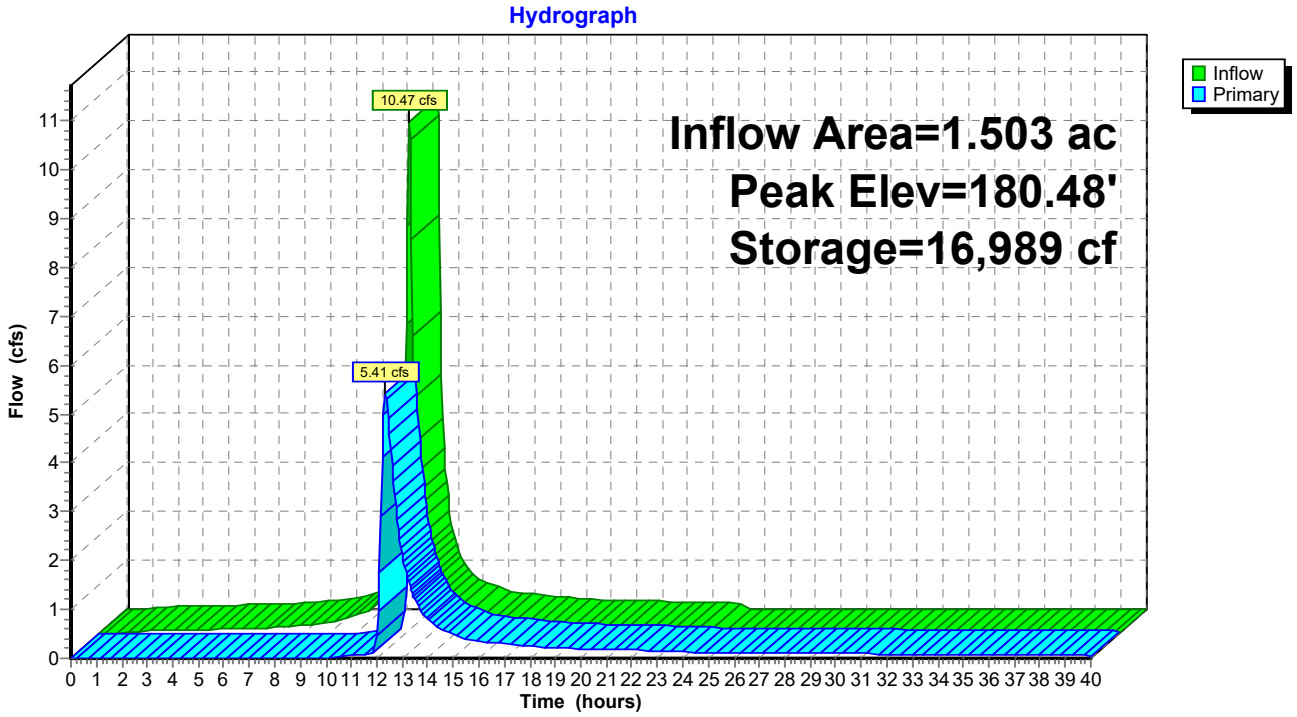
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	36,641 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	10,720	0	0
180.00	11,700	11,210	11,210
181.00	12,708	12,204	23,414
182.00	13,745	13,227	36,641

Device	Routing	Invert	Outlet Devices
#1	Primary	178.23'	**18.0" Round Culvert** L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 178.23' / 178.00' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.30'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.93'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.39 cfs @ 12.33 hrs HW=180.48' (Free Discharge)
- **1=Culvert** (Passes 5.39 cfs of 9.22 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 5.00 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 5.22 cfs @ 2.43 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-9: Basin #9



Stage-Discharge for Pond B-9: Basin #9

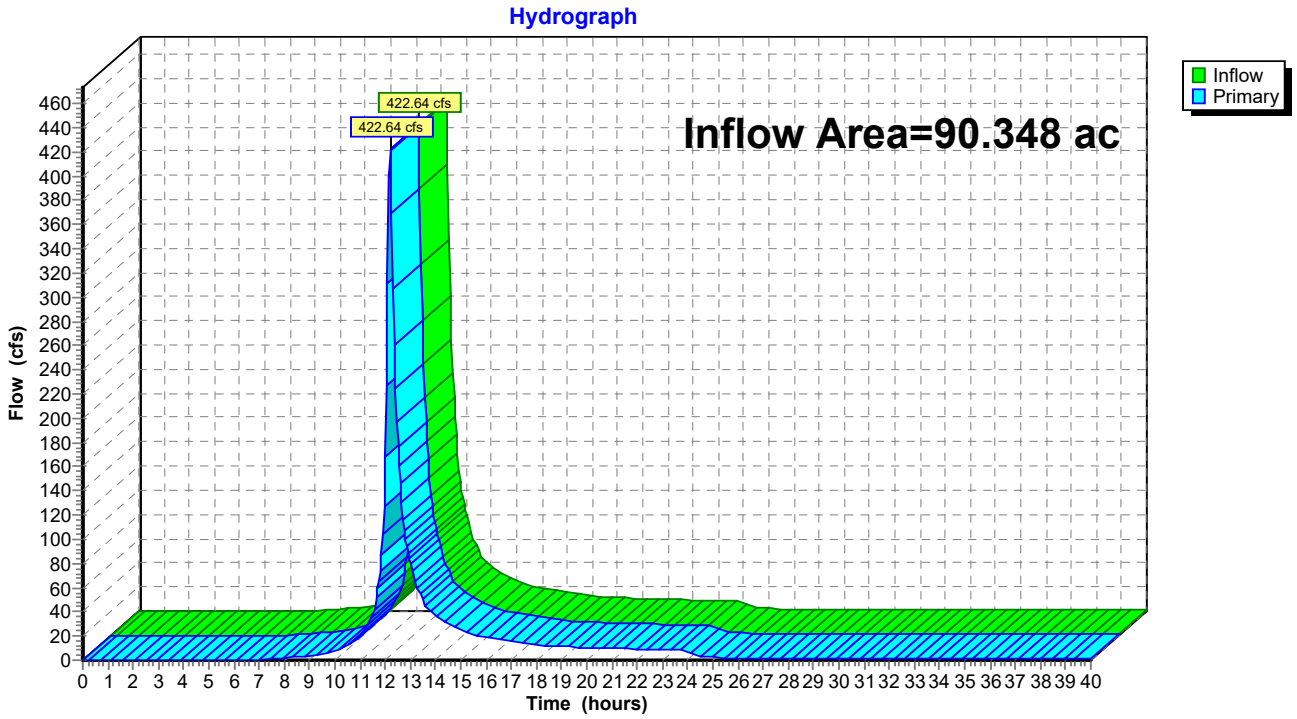
Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.61	181.08	11.70
179.02	0.00	180.06	0.74	181.10	11.77
179.04	0.00	180.08	0.89	181.12	11.84
179.06	0.00	180.10	1.05	181.14	11.92
179.08	0.00	180.12	1.21	181.16	11.99
179.10	0.00	180.14	1.39	181.18	12.06
179.12	0.00	180.16	1.57	181.20	12.13
179.14	0.00	180.18	1.76	181.22	12.20
179.16	0.00	180.20	1.96	181.24	12.27
179.18	0.00	180.22	2.16	181.26	12.34
179.20	0.00	180.24	2.37	181.28	12.41
179.22	0.00	180.26	2.59	181.30	12.48
179.24	0.00	180.28	2.81	181.32	12.55
179.26	0.00	180.30	3.04	181.34	12.62
179.28	0.00	180.32	3.28	181.36	12.69
179.30	0.00	180.34	3.52	181.38	12.76
179.32	0.00	180.36	3.77	181.40	12.83
179.34	0.00	180.38	4.02	181.42	12.89
179.36	0.01	180.40	4.28	181.44	12.96
179.38	0.01	180.42	4.54	181.46	13.03
179.40	0.02	180.44	4.81	181.48	13.09
179.42	0.02	180.46	5.08	181.50	13.16
179.44	0.03	180.48	5.36	181.52	13.22
179.46	0.04	180.50	5.64	181.54	13.29
179.48	0.05	180.52	5.93	181.56	13.35
179.50	0.05	180.54	6.22	181.58	13.42
179.52	0.06	180.56	6.51	181.60	13.48
179.54	0.06	180.58	6.81	181.62	13.55
179.56	0.06	180.60	7.11	181.64	13.61
179.58	0.07	180.62	7.42	181.66	13.67
179.60	0.07	180.64	7.73	181.68	13.74
179.62	0.08	180.66	8.04	181.70	13.80
179.64	0.08	180.68	8.36	181.72	13.86
179.66	0.08	180.70	8.68	181.74	13.93
179.68	0.09	180.72	9.01	181.76	13.99
179.70	0.09	180.74	9.34	181.78	14.05
179.72	0.09	180.76	9.67	181.80	14.11
179.74	0.10	180.78	10.01	181.82	14.17
179.76	0.10	180.80	10.35	181.84	14.23
179.78	0.10	180.82	10.69	181.86	14.29
179.80	0.10	180.84	10.77	181.88	14.35
179.82	0.11	180.86	10.85	181.90	14.41
179.84	0.11	180.88	10.93	181.92	14.47
179.86	0.11	180.90	11.01	181.94	14.53
179.88	0.11	180.92	11.09	181.96	14.71
179.90	0.12	180.94	11.17	181.98	15.26
179.92	0.12	180.96	11.24	182.00	**16.02**
179.94	0.13	180.98	11.32		
179.96	0.19	181.00	11.40		
179.98	0.27	181.02	11.47		
180.00	0.37	181.04	11.55		
180.02	0.48	181.06	11.62		

Summary for Link PDA-1: Proposed Drainage Area #1

Inflow Area = 90.348 ac, 16.68% Impervious, Inflow Depth > 5.44" for Current 100 yr event
Inflow = 422.64 cfs @ 12.19 hrs, Volume= 40.964 af
Primary = 422.64 cfs @ 12.19 hrs, Volume= 40.964 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-1: Proposed Drainage Area #1



Summary for Subcatchment 1I: PDA-1 (impervious)

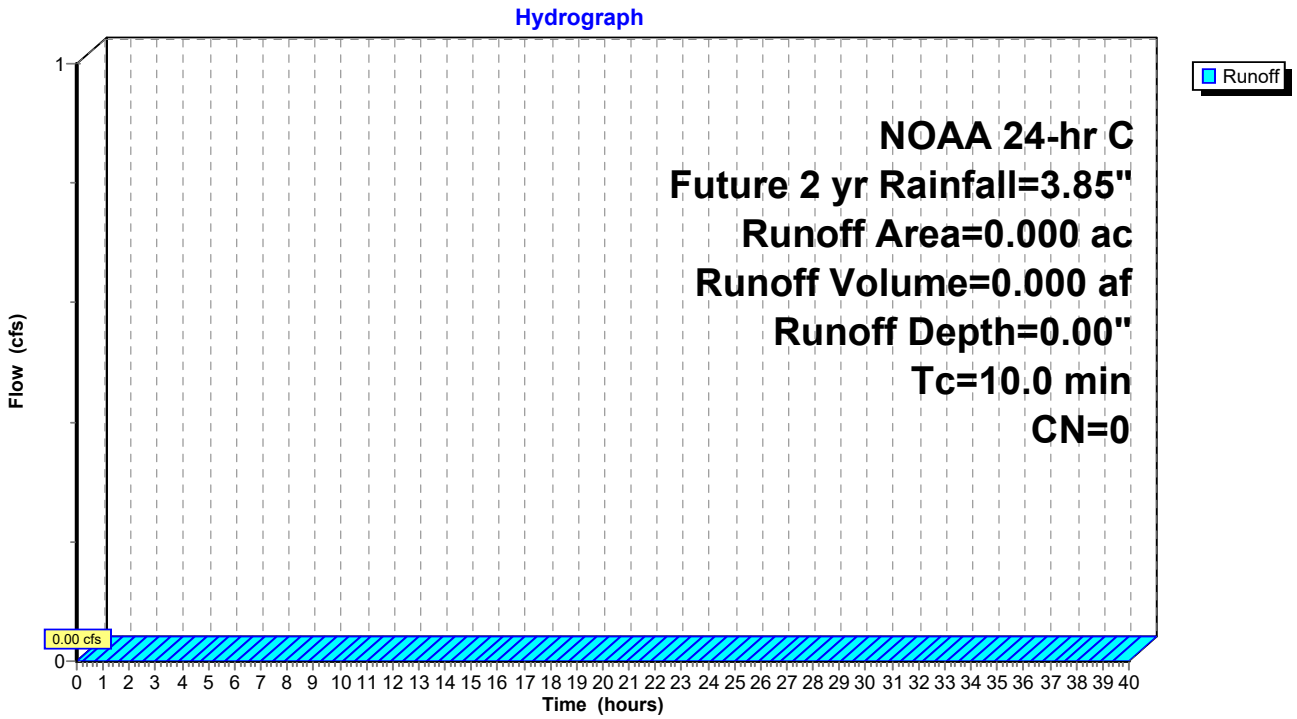
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-1 : Basin #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.000	98	Concrete, HSG C
	0.000	0	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 1I: PDA-1 (impervious)



Summary for Subcatchment 1P: PDA-1 (pervious)

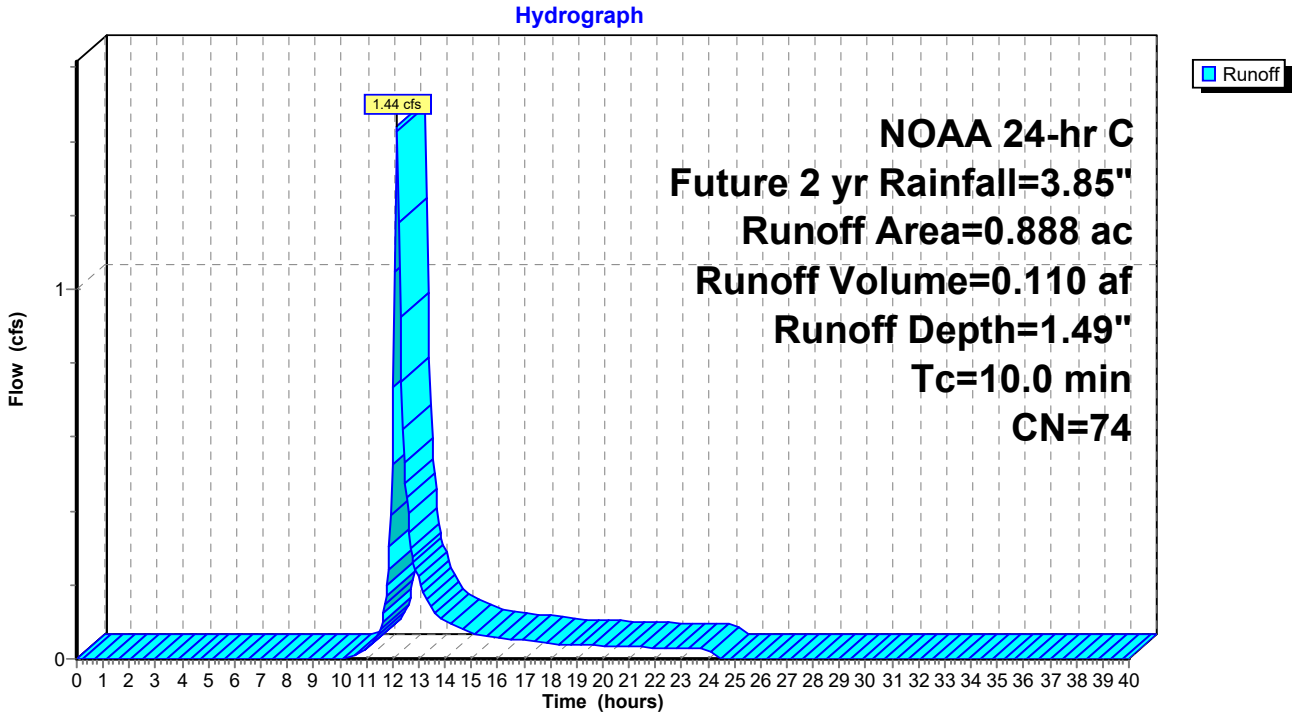
Runoff = 1.44 cfs @ 12.18 hrs, Volume= 0.110 af, Depth= 1.49"
Routed to Pond B-1 : Basin #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.888	74	>75% Grass cover, Good, HSG C
0.888		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 1P: PDA-1 (pervious)



Summary for Subcatchment 2l: PDA-2 (impervious)

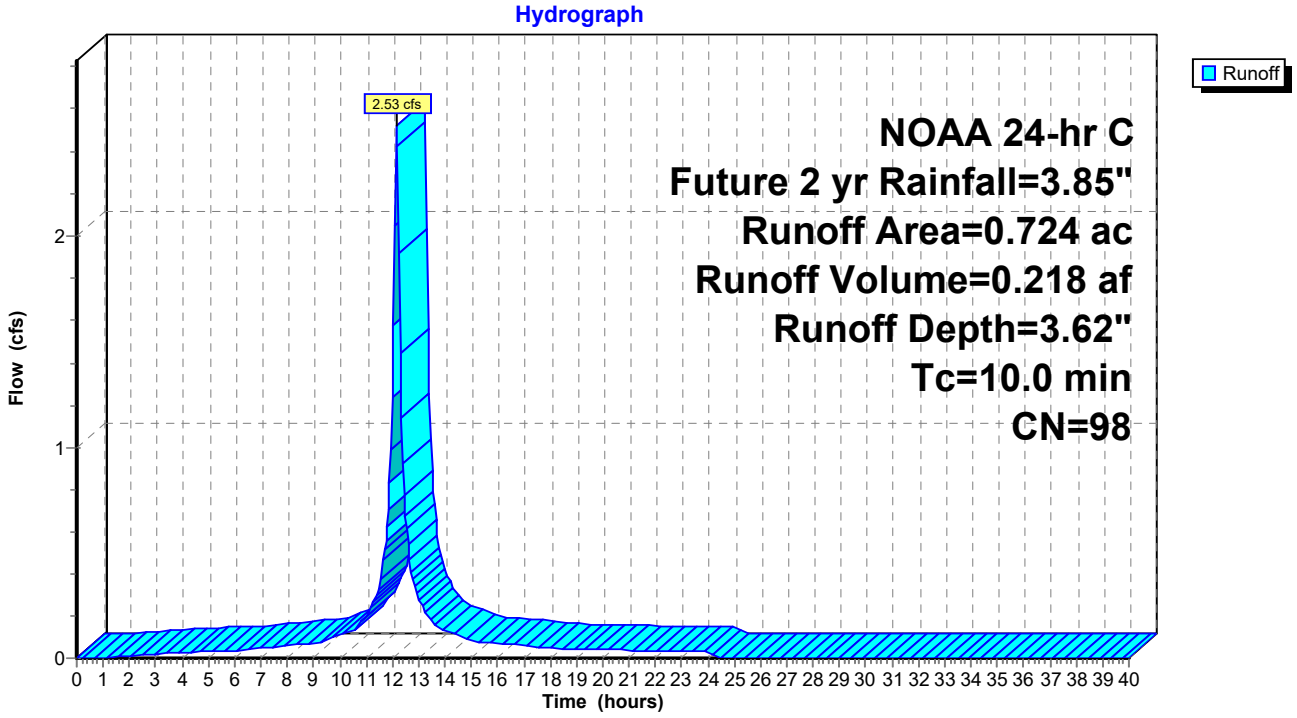
Runoff = 2.53 cfs @ 12.17 hrs, Volume= 0.218 af, Depth= 3.62"
Routed to Pond B-2 : Basin #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.490	98	Roof, HSG C
*	0.196	98	Pavement, HSG C
*	0.038	98	Concrete, HSG C
	0.724	98	Weighted Average
	0.724		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 2l: PDA-2 (impervious)



Summary for Subcatchment 2P: PDA-2 (pervious)

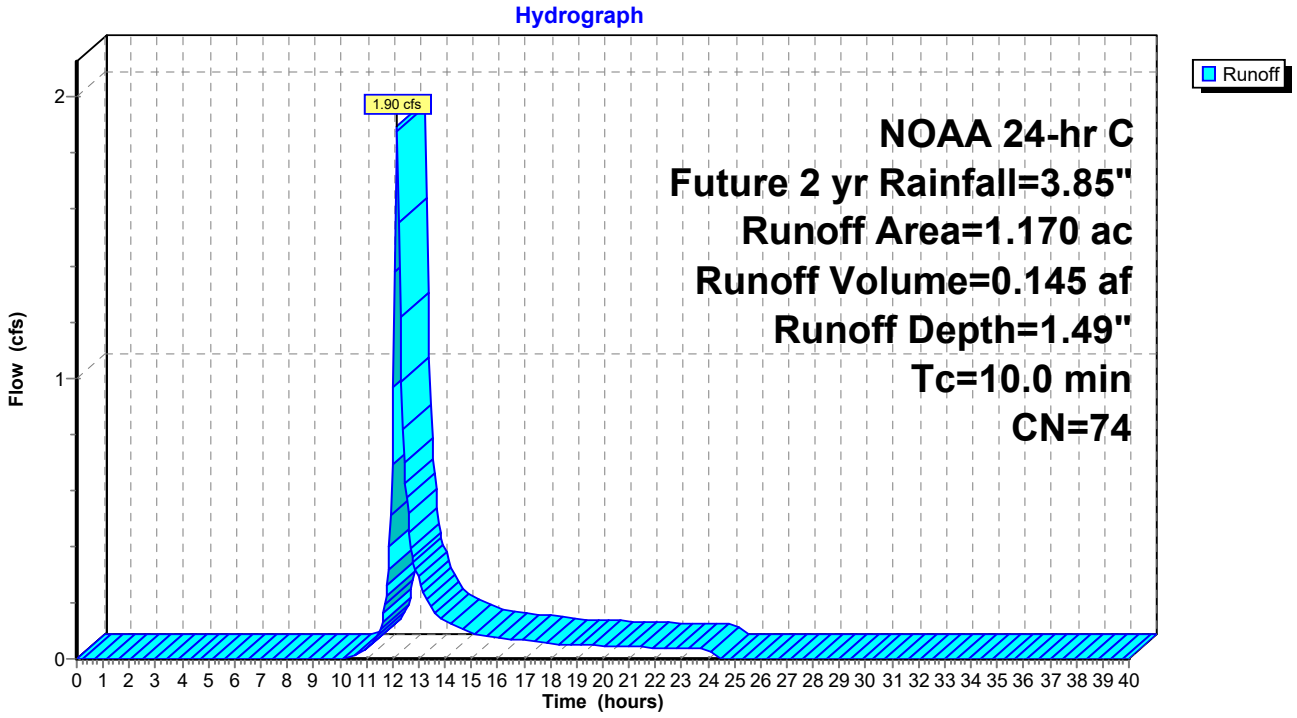
Runoff = 1.90 cfs @ 12.18 hrs, Volume= 0.145 af, Depth= 1.49"
Routed to Pond B-2 : Basin #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.170	74	>75% Grass cover, Good, HSG C
1.170		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 2P: PDA-2 (pervious)



Summary for Subcatchment 3l: PDA-3 (impervious)

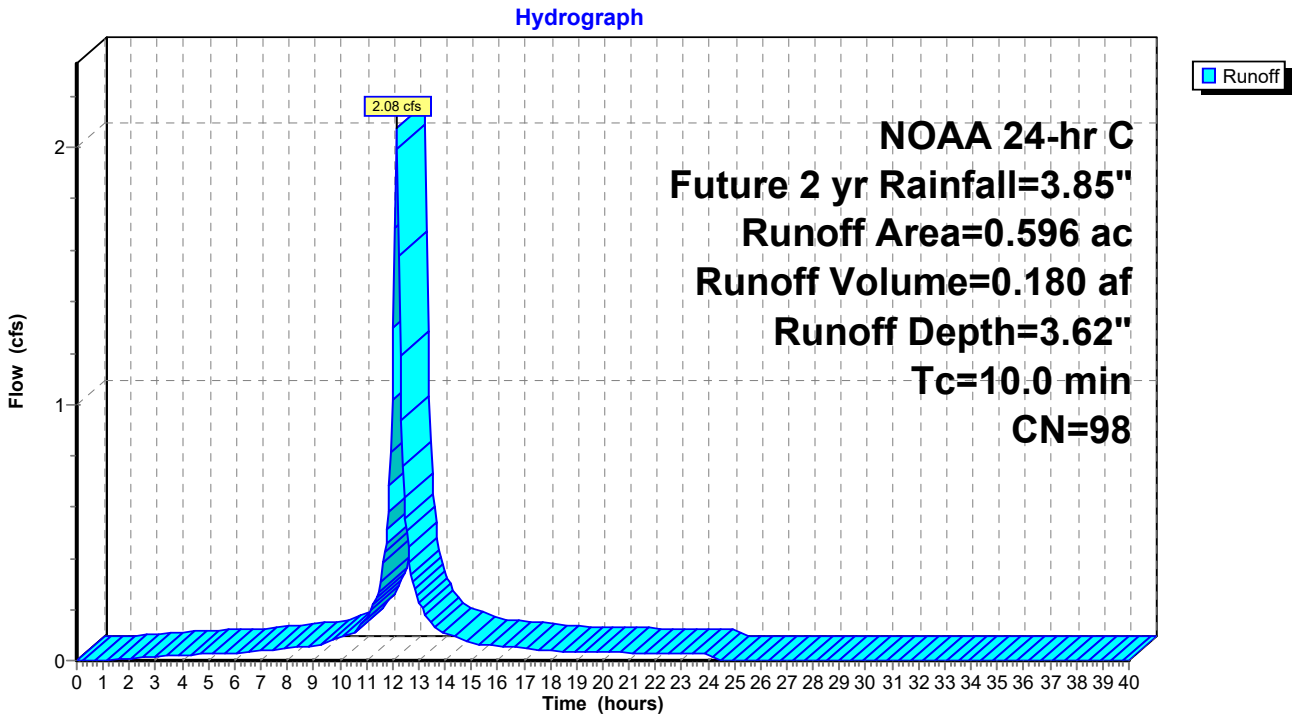
Runoff = 2.08 cfs @ 12.17 hrs, Volume= 0.180 af, Depth= 3.62"
Routed to Pond B-3 : Basin #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.304	98	Pavement, HSG C
*	0.035	98	Concrete, HSG C
	0.257	98	Unconnected roofs, HSG C
	0.596	98	Weighted Average
	0.596		100.00% Impervious Area
	0.257		43.12% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 3l: PDA-3 (impervious)



Summary for Subcatchment 3P: PDA-3 (pervious)

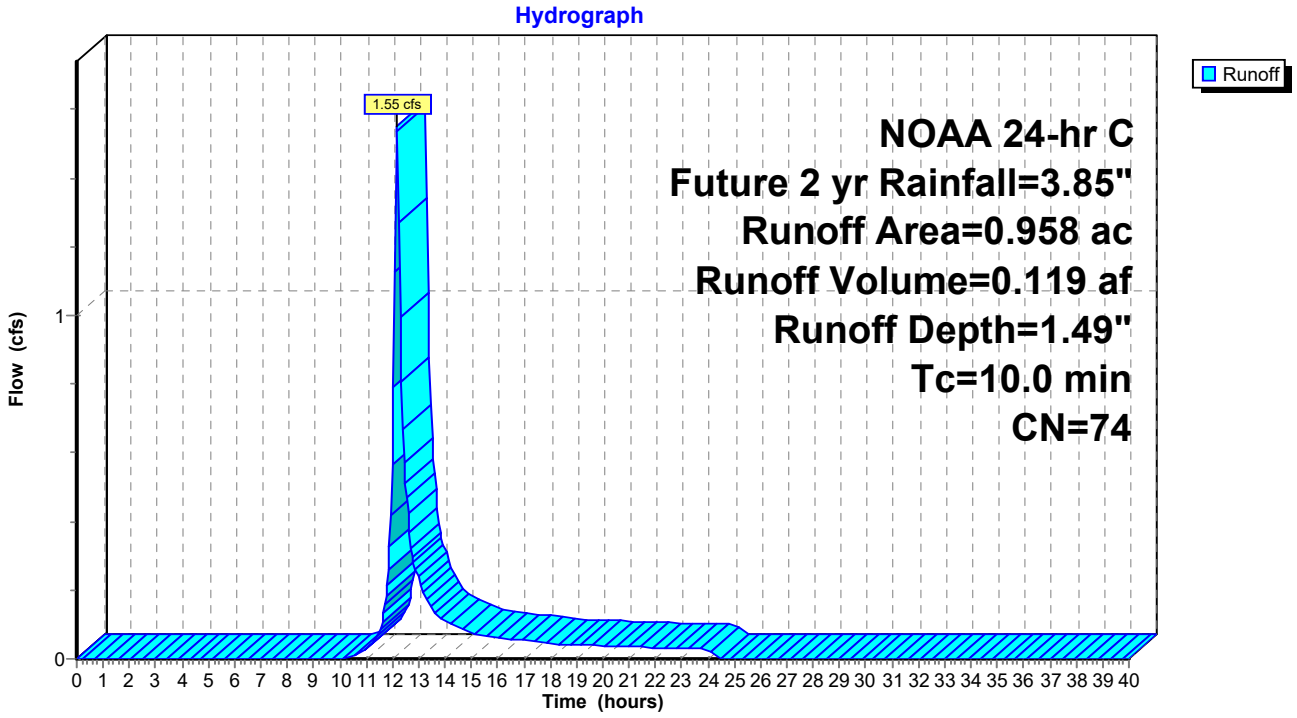
Runoff = 1.55 cfs @ 12.18 hrs, Volume= 0.119 af, Depth= 1.49"
Routed to Pond B-3 : Basin #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.958	74	>75% Grass cover, Good, HSG C
0.958		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 3P: PDA-3 (pervious)



Summary for Subcatchment 4AI: PDA-4A (impervious)

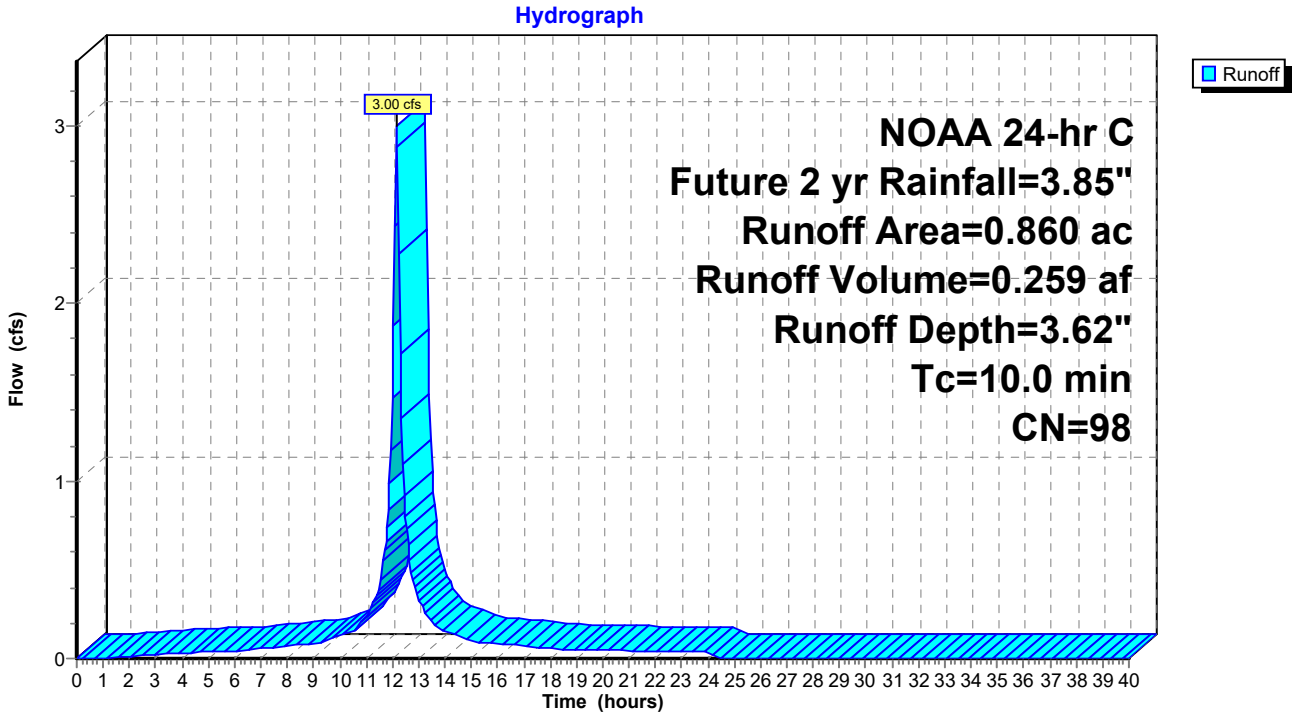
Runoff = 3.00 cfs @ 12.17 hrs, Volume= 0.259 af, Depth= 3.62"
Routed to Pond B-4A : Basin #4A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.742	98	Pavement, HSG C
*	0.118	98	Concrete, HSG C
	0.860	98	Weighted Average
	0.860		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4AI: PDA-4A (impervious)



Summary for Subcatchment 4AP: PDA-4A (pervious)

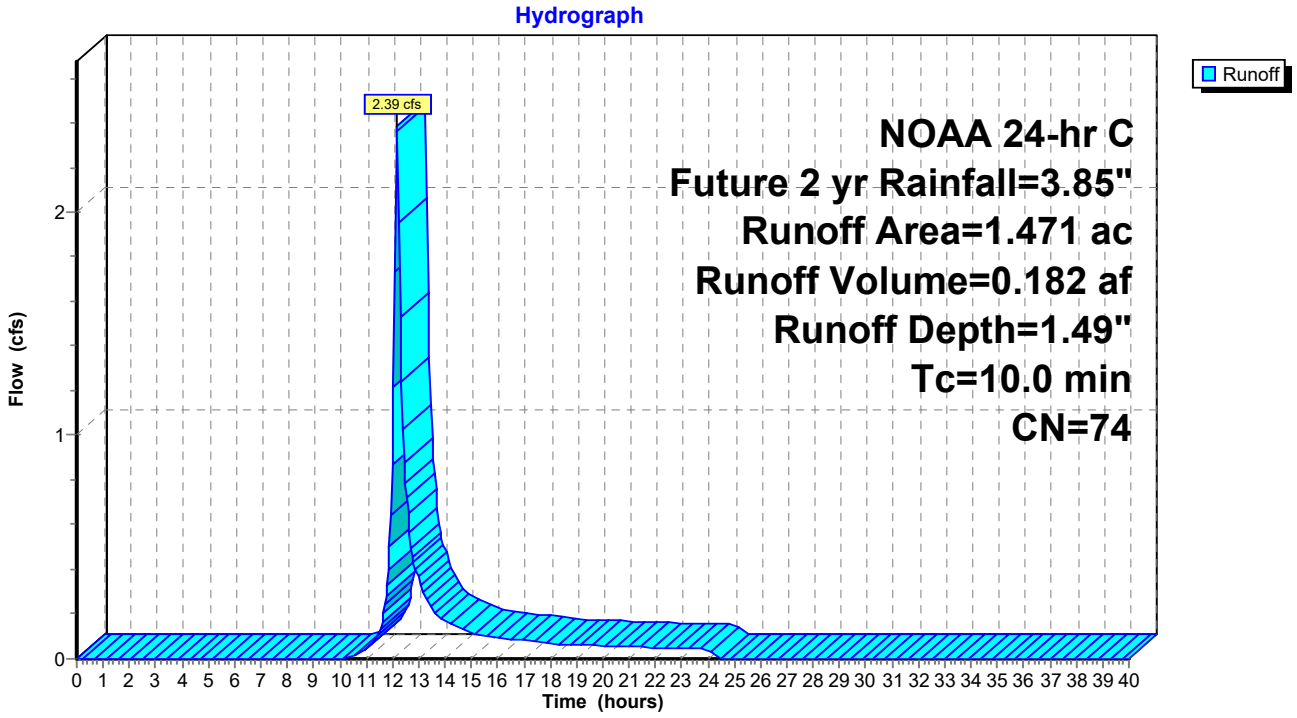
Runoff = 2.39 cfs @ 12.18 hrs, Volume= 0.182 af, Depth= 1.49"
Routed to Pond B-4A : Basin #4A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.471	74	>75% Grass cover, Good, HSG C
1.471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4AP: PDA-4A (pervious)



Summary for Subcatchment 4BI: PDA-4B (impervious)

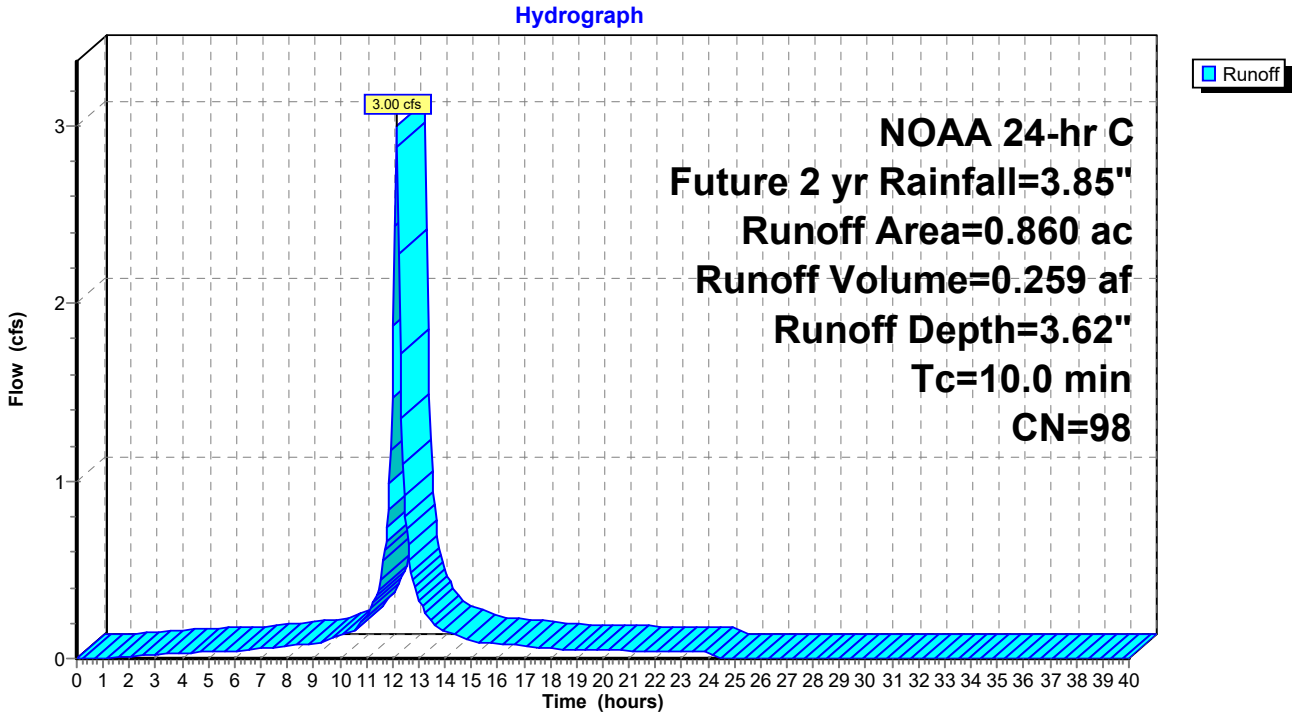
Runoff = 3.00 cfs @ 12.17 hrs, Volume= 0.259 af, Depth= 3.62"
Routed to Pond B-4B : Basin #4B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.742	98	Pavement, HSG C
*	0.118	98	Concrete, HSG C
	0.860	98	Weighted Average
	0.860		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4BI: PDA-4B (impervious)



Summary for Subcatchment 4BP: PDA-4B (pervious)

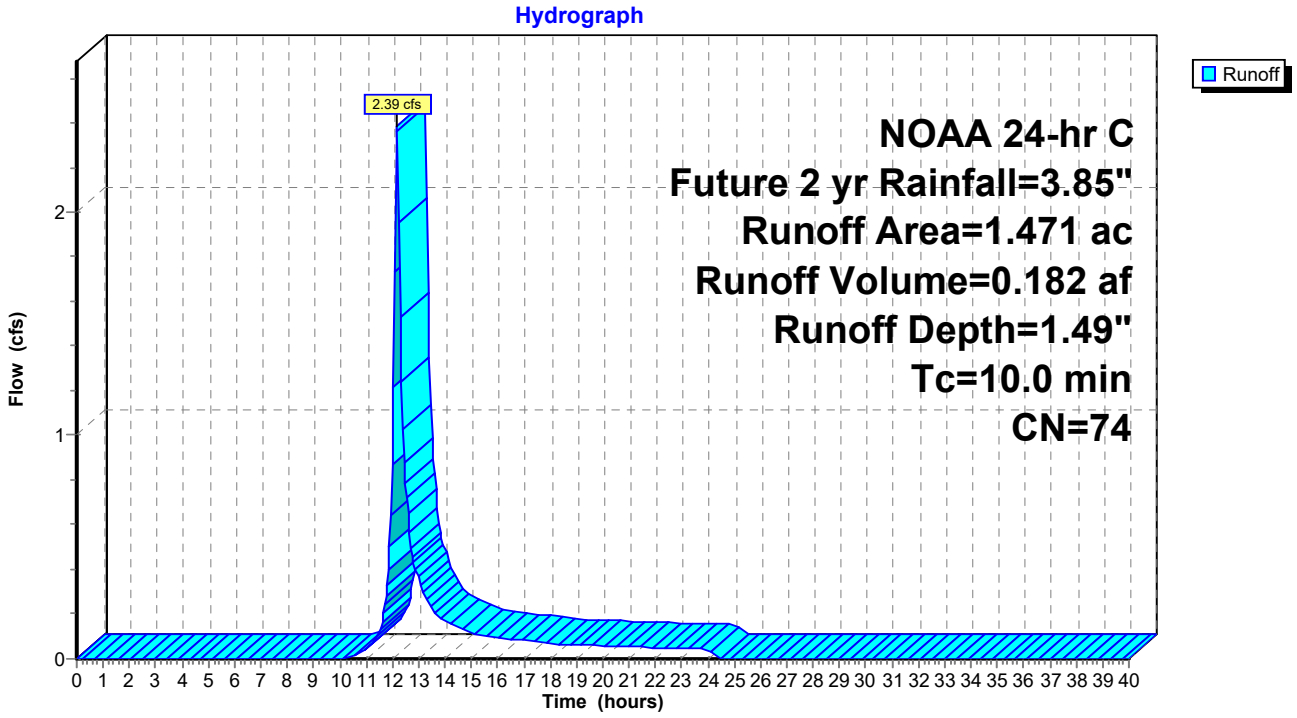
Runoff = 2.39 cfs @ 12.18 hrs, Volume= 0.182 af, Depth= 1.49"
Routed to Pond B-4B : Basin #4B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.471	74	>75% Grass cover, Good, HSG C
1.471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4BP: PDA-4B (pervious)



Summary for Subcatchment 5l: PDA-5 (impervious)

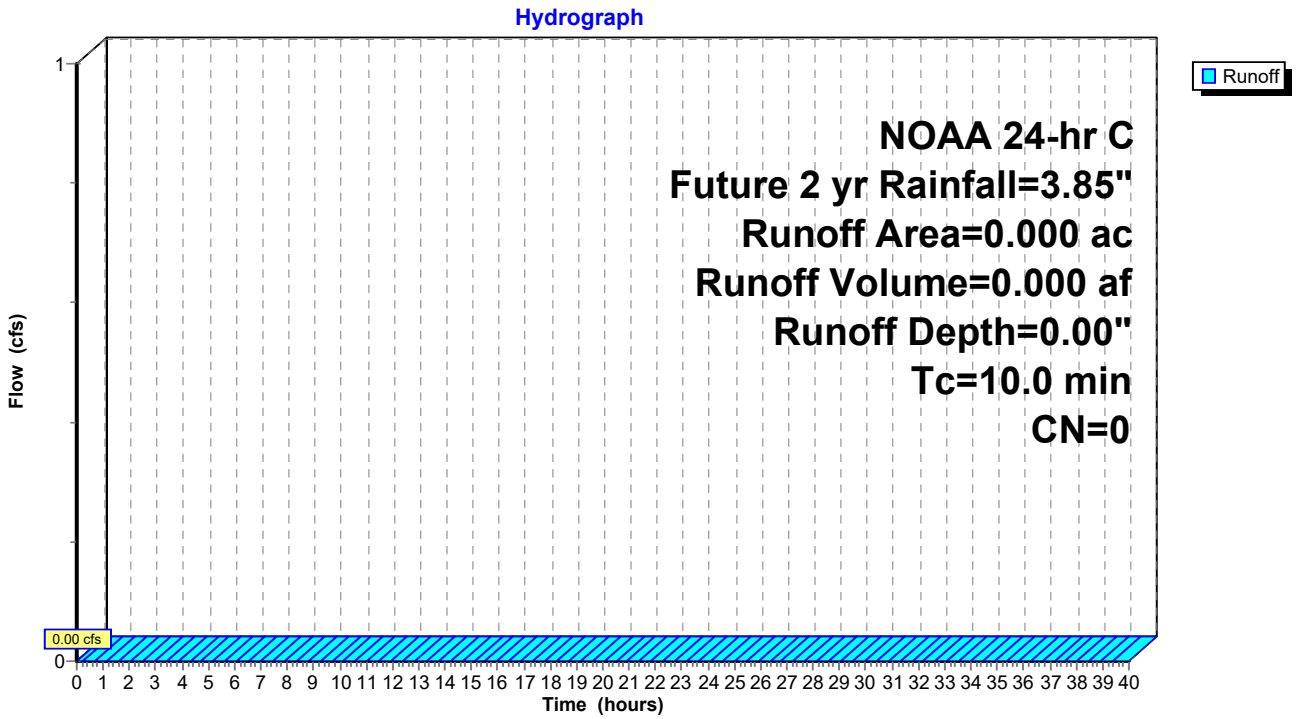
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-5 : Basin #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.000	98	Concrete, HSG C
	0.000	0	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 5l: PDA-5 (impervious)



Summary for Subcatchment 5P: PDA-5 (pervious)

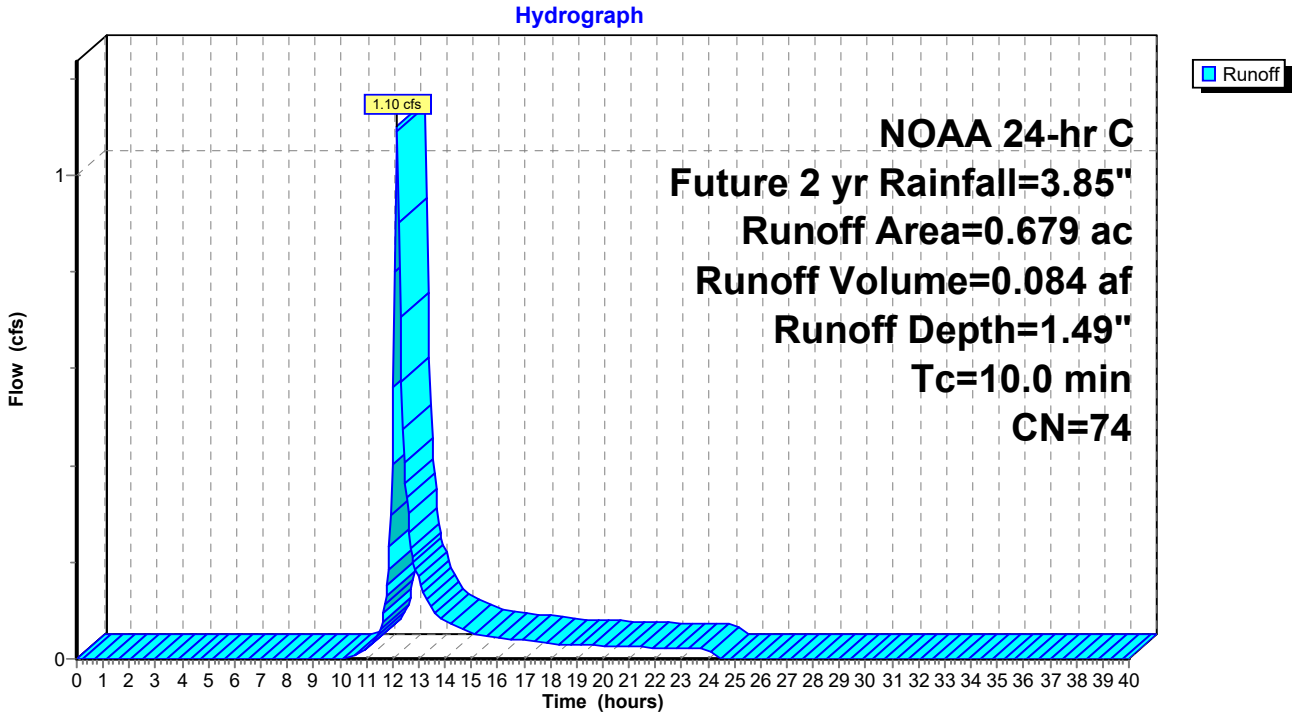
Runoff = 1.10 cfs @ 12.18 hrs, Volume= 0.084 af, Depth= 1.49"
Routed to Pond B-5 : Basin #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.679	74	>75% Grass cover, Good, HSG C
0.679		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 5P: PDA-5 (pervious)



Summary for Subcatchment 6l: PDA-6 (impervious)

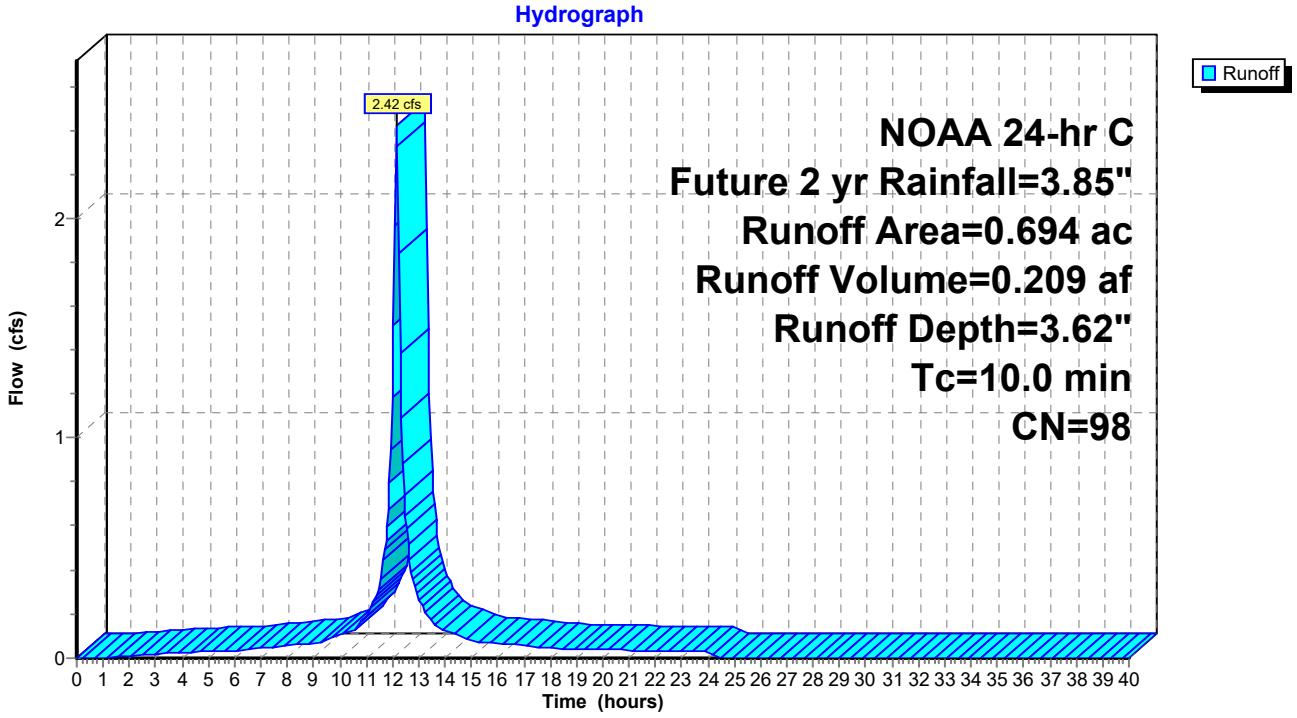
Runoff = 2.42 cfs @ 12.17 hrs, Volume= 0.209 af, Depth= 3.62"
Routed to Pond B-6 : Basin #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.459	98	Pavement, HSG C
*	0.129	98	Roof, HSG C
*	0.106	98	Concrete, HSG C
	0.694	98	Weighted Average
	0.694		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 6l: PDA-6 (impervious)



Summary for Subcatchment 6P: PDA-6 (pervious)

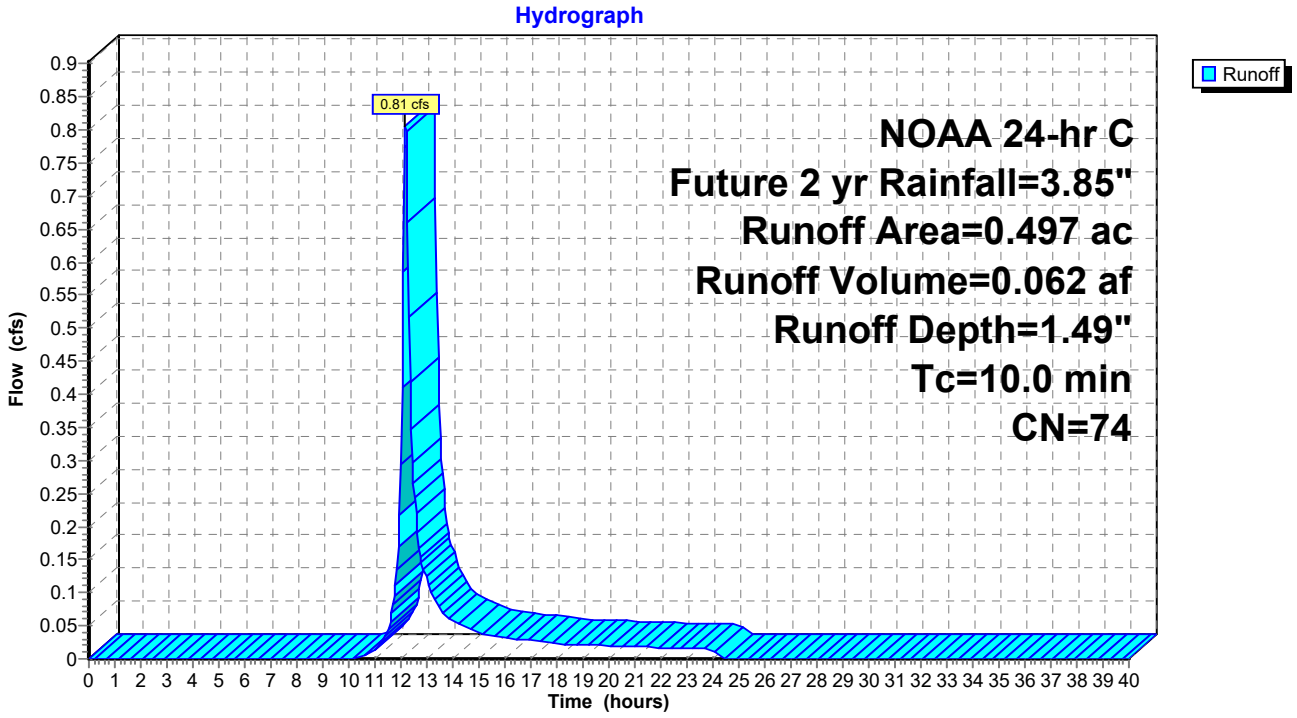
Runoff = 0.81 cfs @ 12.18 hrs, Volume= 0.062 af, Depth= 1.49"
Routed to Pond B-6 : Basin #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.497	74	>75% Grass cover, Good, HSG C
0.497		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 6P: PDA-6 (pervious)



Summary for Subcatchment 7I: PDA-7 (impervious)

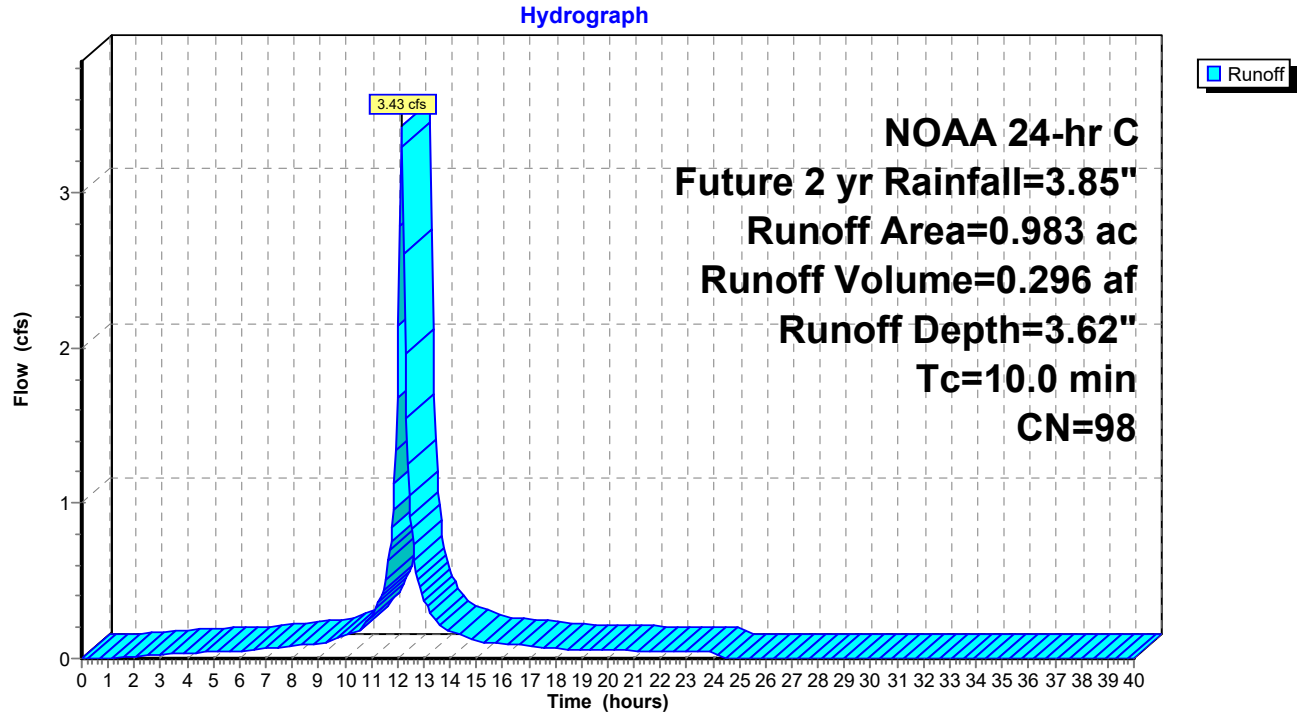
Runoff = 3.43 cfs @ 12.17 hrs, Volume= 0.296 af, Depth= 3.62"
Routed to Pond B-7 : Basin #7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.886	98	Pavement, HSG C
*	0.097	98	Concrete, HSG C
	0.983	98	Weighted Average
	0.983		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 7I: PDA-7 (impervious)



Summary for Subcatchment 7P: PDA-7 (pervious)

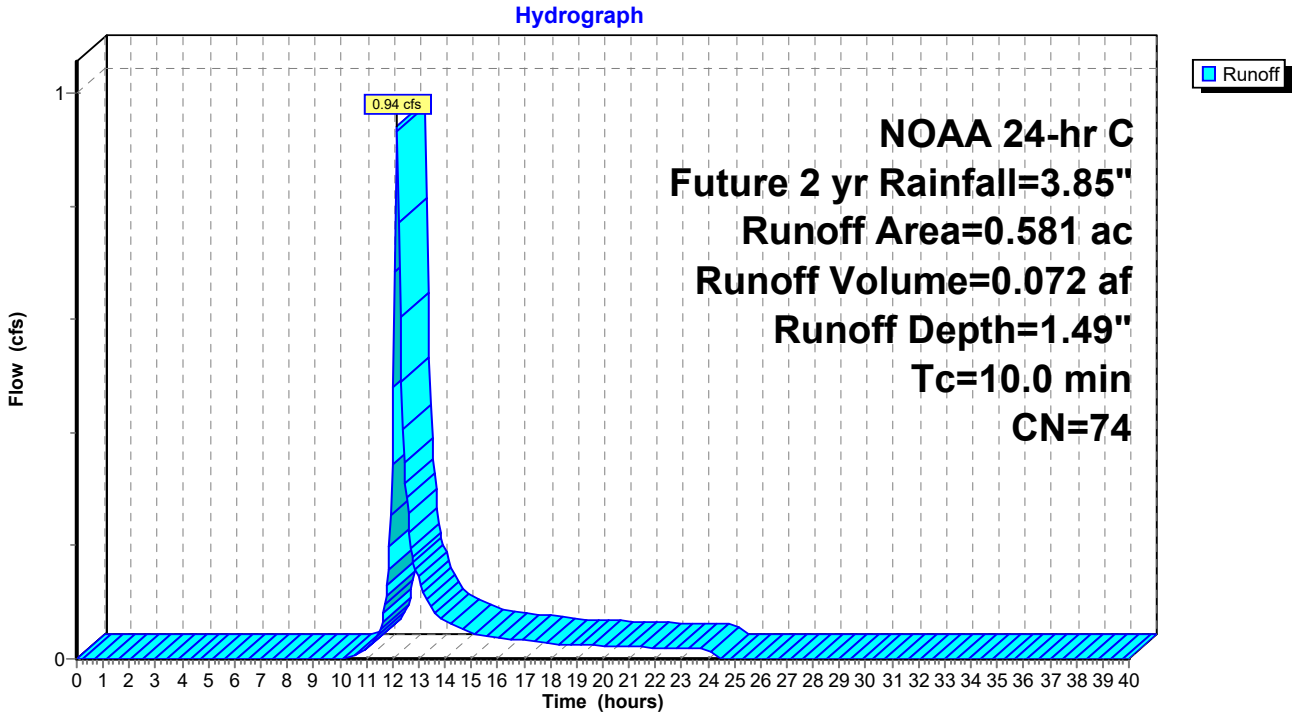
Runoff = 0.94 cfs @ 12.18 hrs, Volume= 0.072 af, Depth= 1.49"
Routed to Pond B-7 : Basin #7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.581	74	>75% Grass cover, Good, HSG C
0.581		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 7P: PDA-7 (pervious)



Summary for Subcatchment 8I: PDA-8 (impervious)

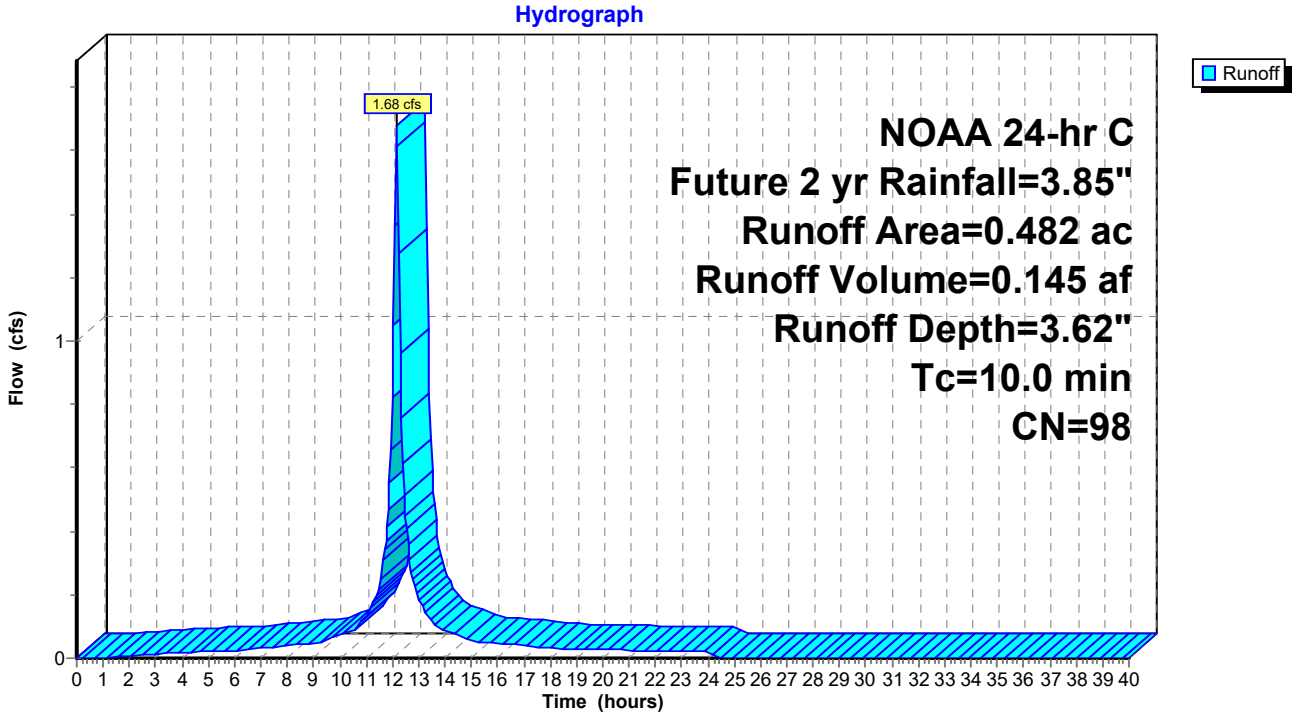
Runoff = 1.68 cfs @ 12.17 hrs, Volume= 0.145 af, Depth= 3.62"
Routed to Pond B-8 : Basin #8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.482	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.482	98	Weighted Average
	0.482		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8I: PDA-8 (impervious)



Summary for Subcatchment 8P: PDA-8 (pervious)

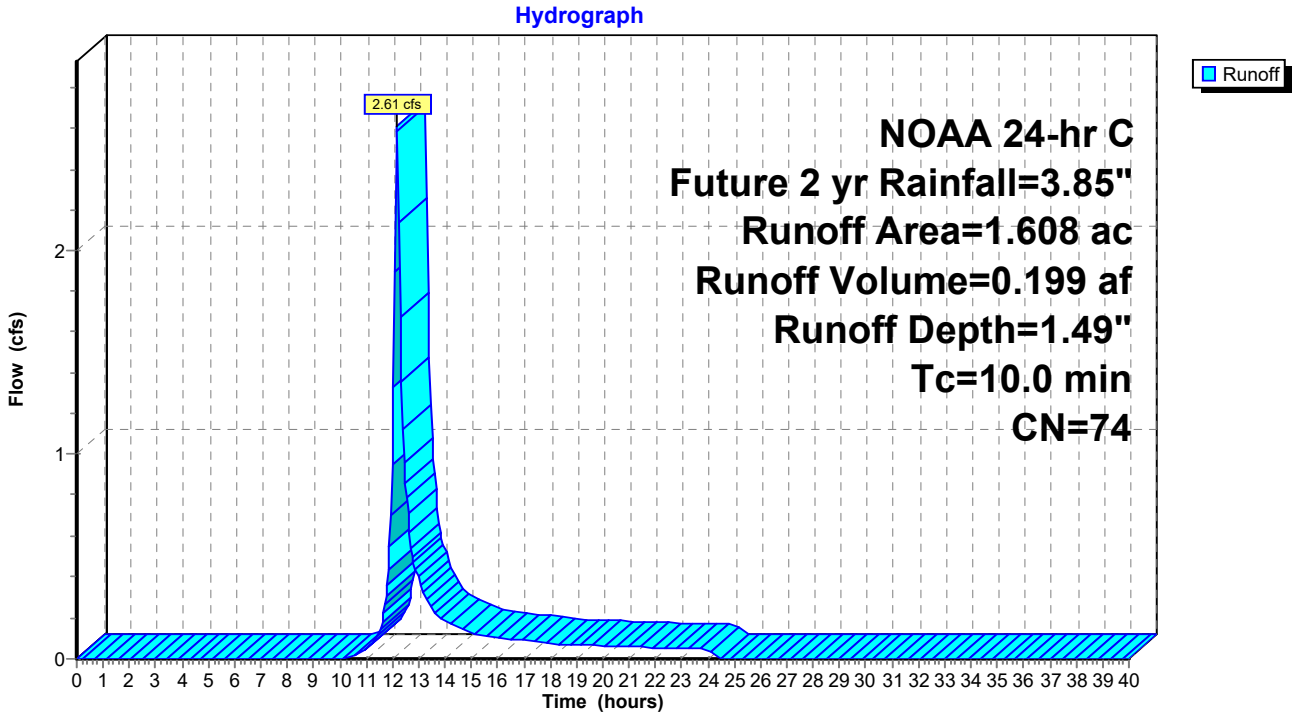
Runoff = 2.61 cfs @ 12.18 hrs, Volume= 0.199 af, Depth= 1.49"
Routed to Pond B-8 : Basin #8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.608	74	>75% Grass cover, Good, HSG C
1.608		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8P: PDA-8 (pervious)



Summary for Subcatchment 9I: PDA-9 (impervious)

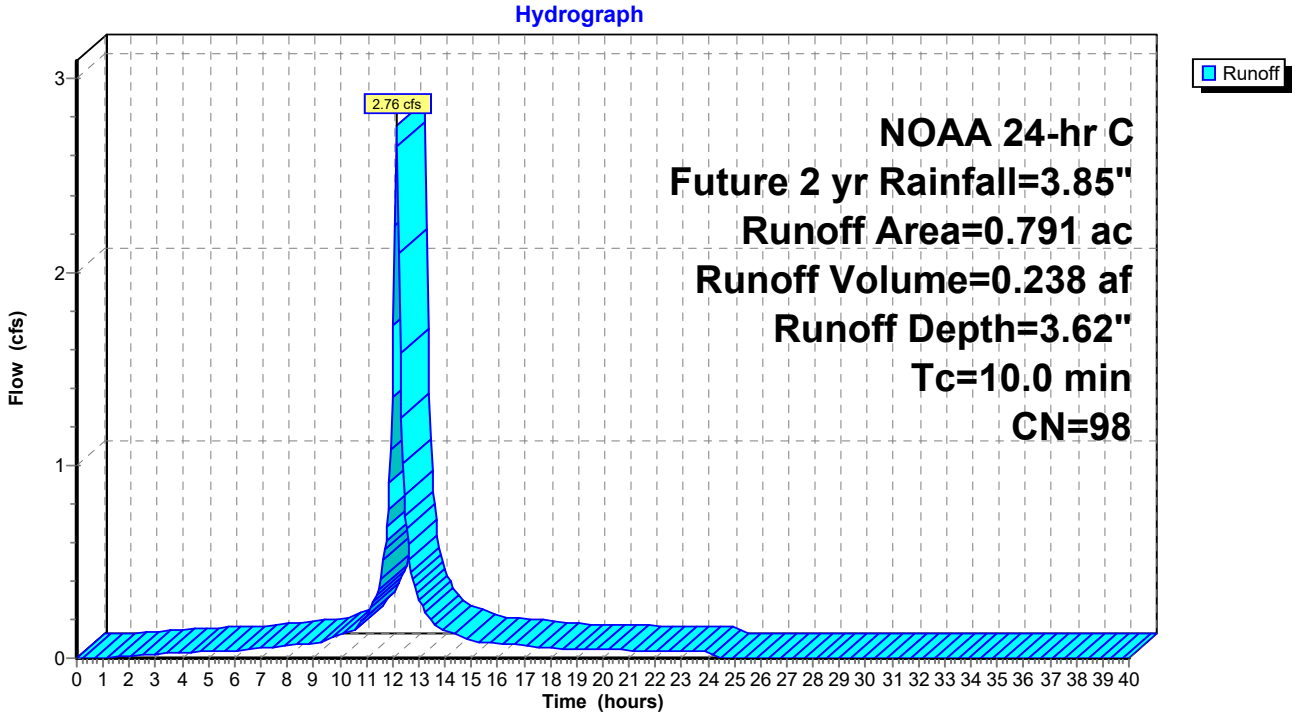
Runoff = 2.76 cfs @ 12.17 hrs, Volume= 0.238 af, Depth= 3.62"
Routed to Pond B-9 : Basin #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.286	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.055	98	Concrete, HSG C
	0.791	98	Weighted Average
	0.791		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 9I: PDA-9 (impervious)



Summary for Subcatchment 9P: PDA-9 (pervious)

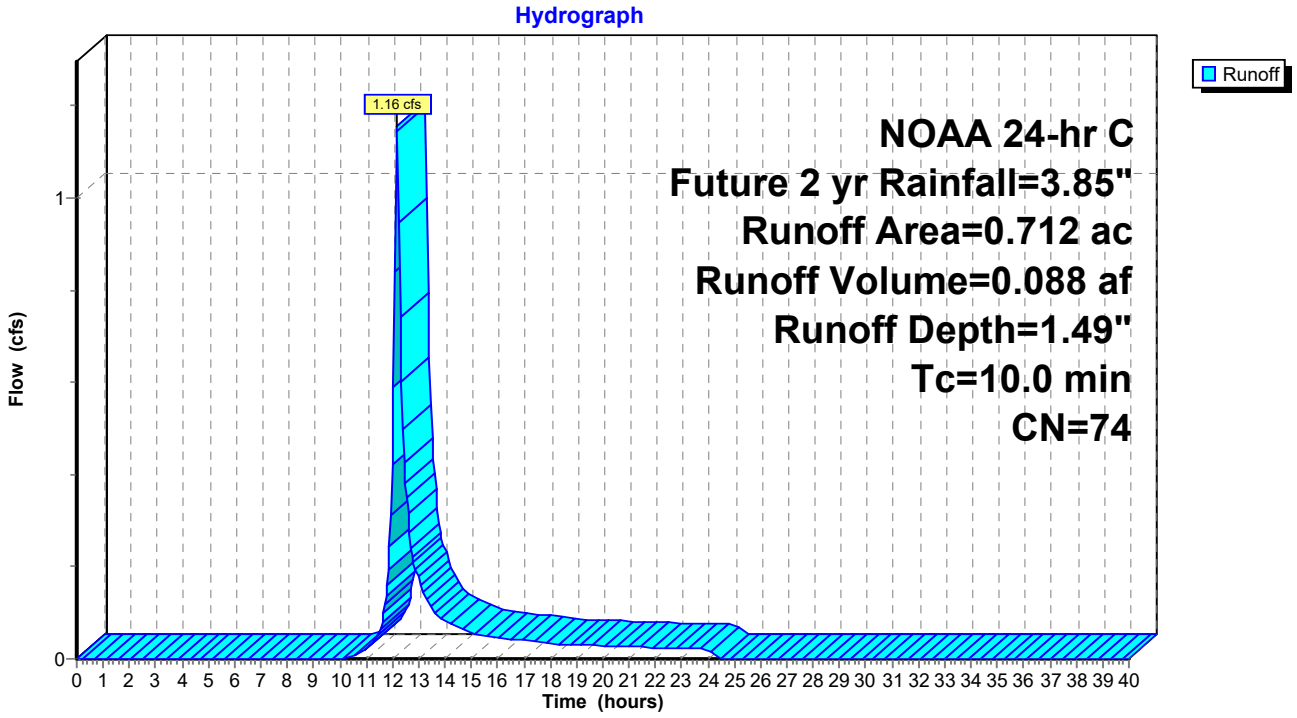
Runoff = 1.16 cfs @ 12.18 hrs, Volume= 0.088 af, Depth= 1.49"
Routed to Pond B-9 : Basin #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.712	74	>75% Grass cover, Good, HSG C
0.712		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 9P: PDA-9 (pervious)



Summary for Subcatchment 10l: PDA-10 (impervious)

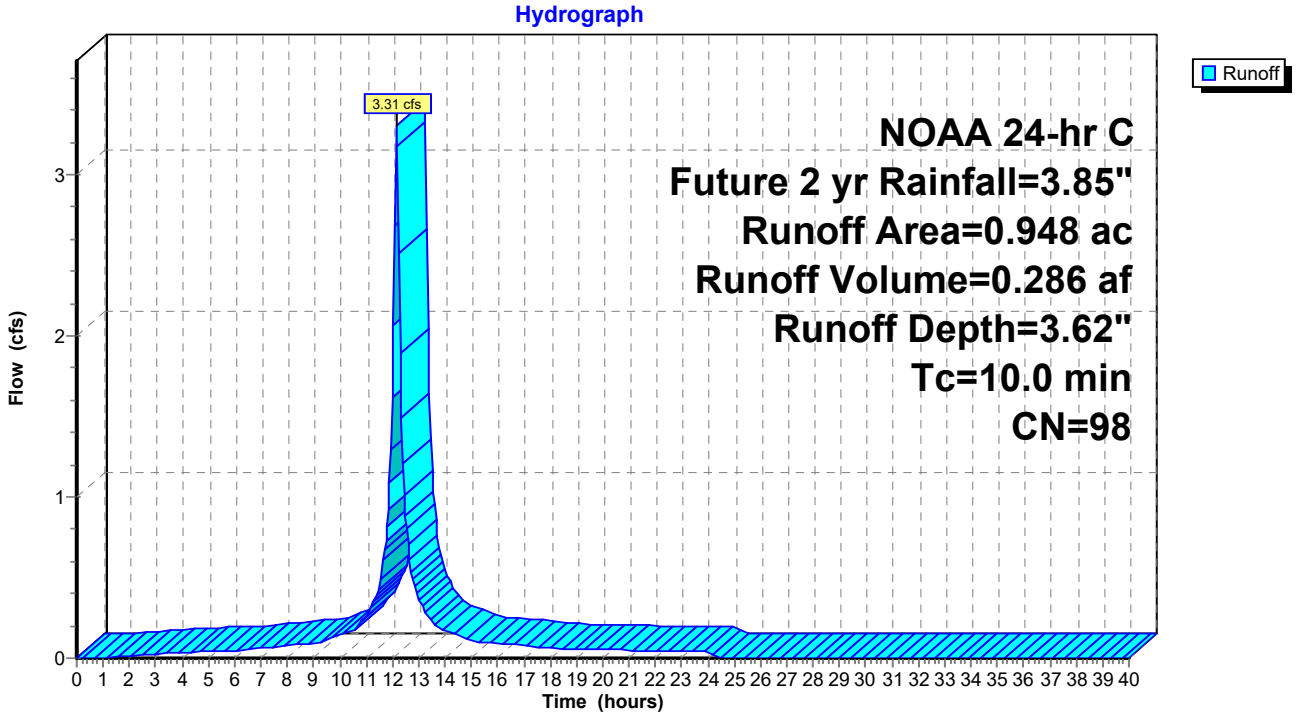
Runoff = 3.31 cfs @ 12.17 hrs, Volume= 0.286 af, Depth= 3.62"
Routed to Pond B-10 : Basin #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.570	98	Pavement, HSG C
*	0.321	98	Roof, HSG C
*	0.057	98	Concrete, HSG C
	0.948	98	Weighted Average
	0.948		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10l: PDA-10 (impervious)



Summary for Subcatchment 10P: PDA-10 (pervious)

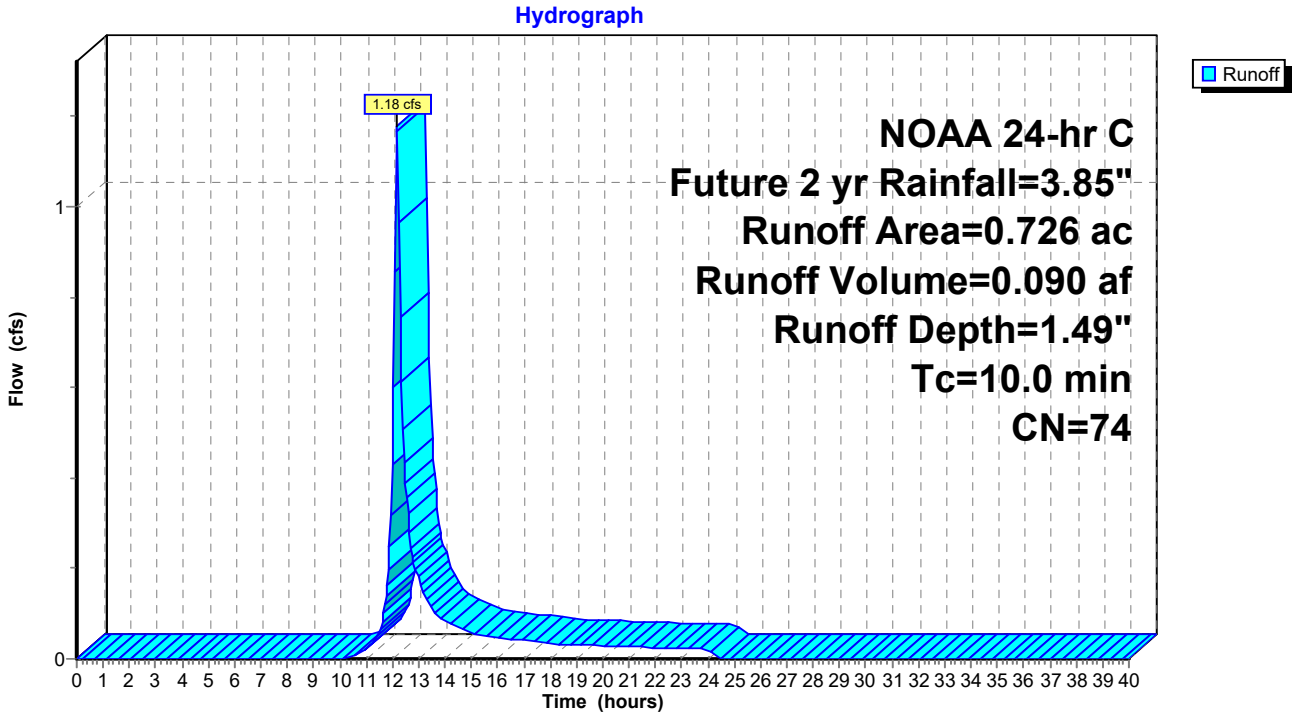
Runoff = 1.18 cfs @ 12.18 hrs, Volume= 0.090 af, Depth= 1.49"
Routed to Pond B-10 : Basin #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.726	74	>75% Grass cover, Good, HSG C
0.726		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10P: PDA-10 (pervious)



Summary for Subcatchment 11I: PDA-11 (impervious)

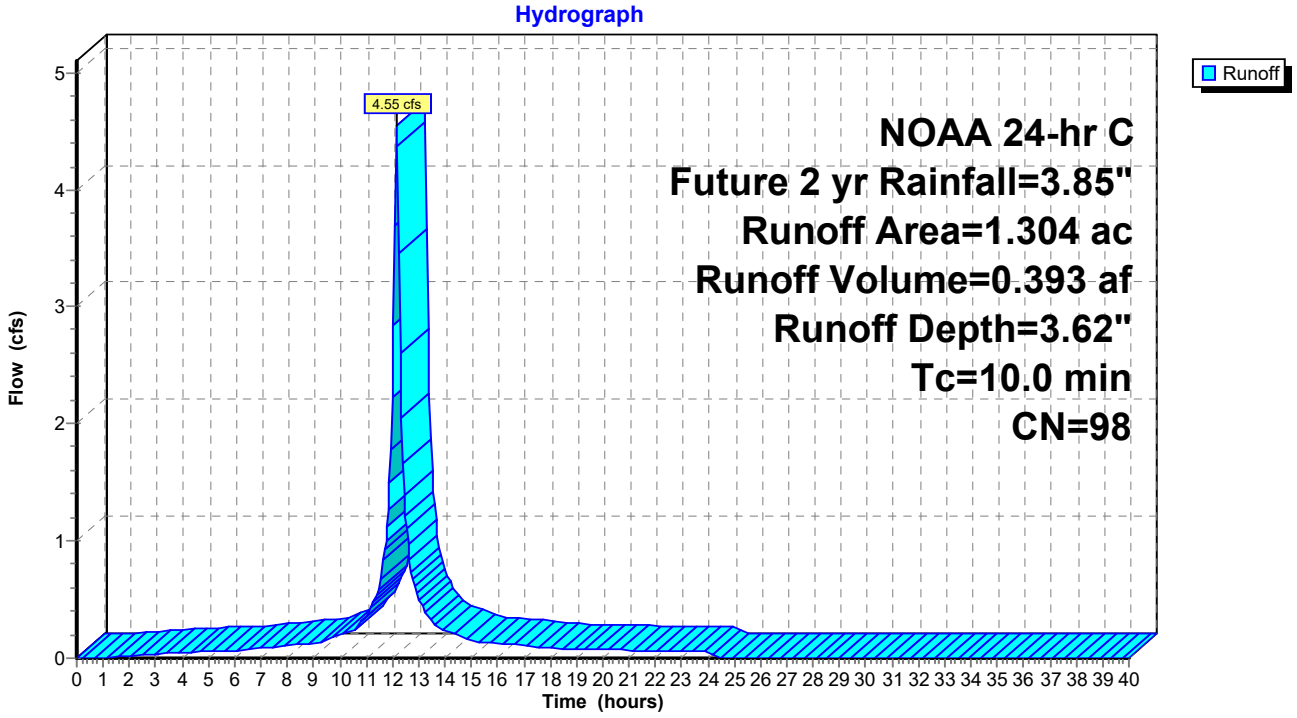
Runoff = 4.55 cfs @ 12.17 hrs, Volume= 0.393 af, Depth= 3.62"
Routed to Pond B-11 : Basin #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.166	98	Concrete, HSG C
	0.231	98	Roofs, HSG C
	0.907	98	Paved roads w/curbs & sewers, HSG C
	1.304	98	Weighted Average
	1.304		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 11I: PDA-11 (impervious)



Summary for Subcatchment 11P: PDA-11 (pervious)

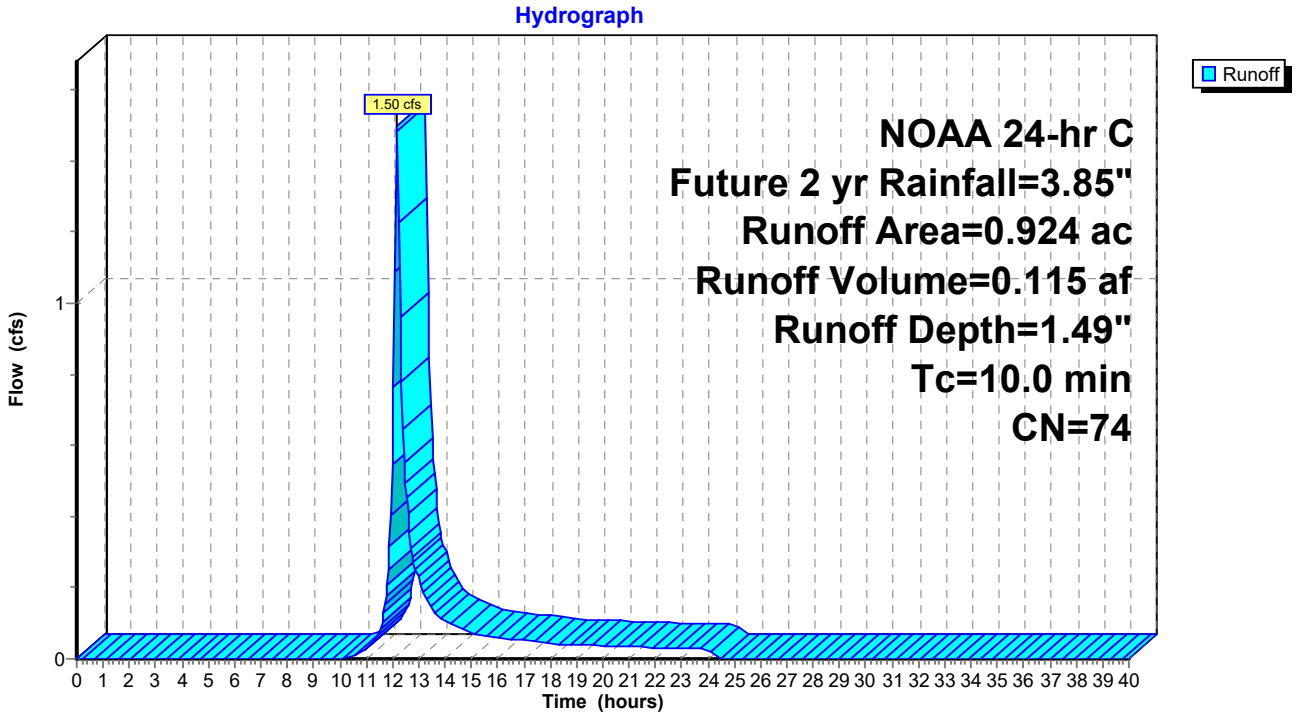
Runoff = 1.50 cfs @ 12.18 hrs, Volume= 0.115 af, Depth= 1.49"
Routed to Pond B-11 : Basin #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.924	74	>75% Grass cover, Good, HSG C
0.924		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 11P: PDA-11 (pervious)



Summary for Subcatchment 12l: PDA-12 (impervious)

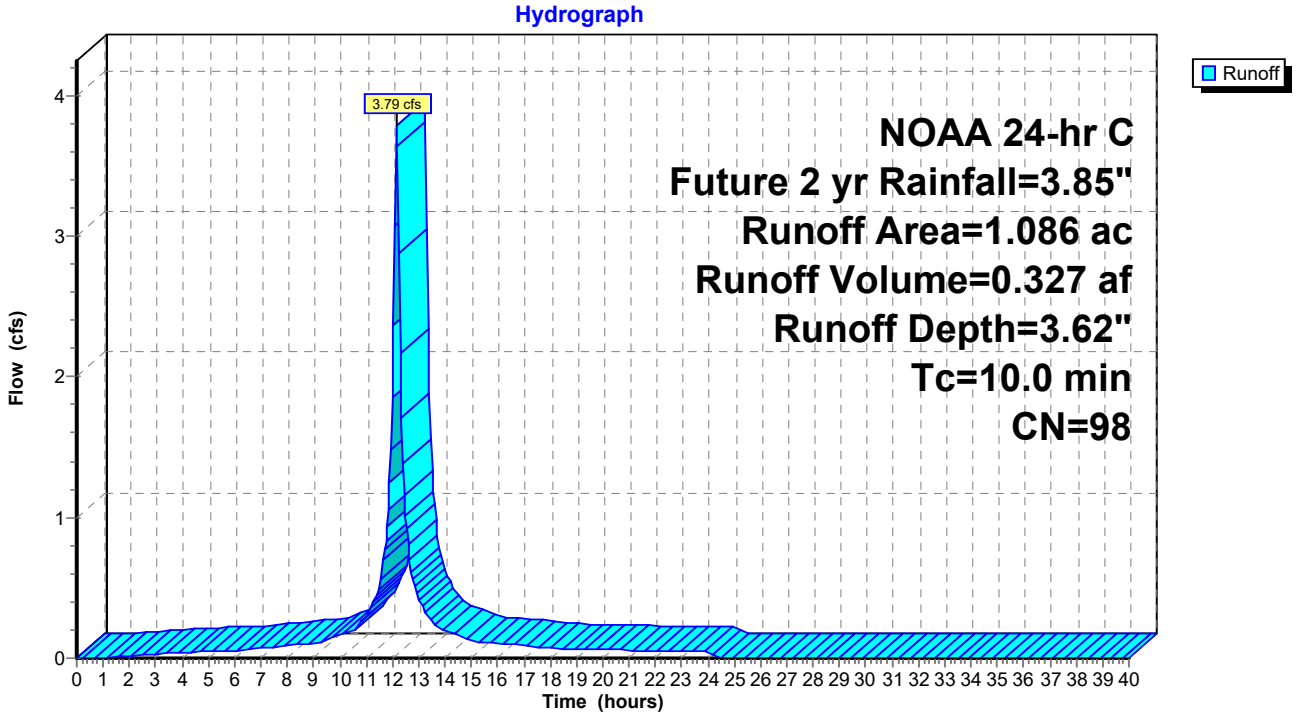
Runoff = 3.79 cfs @ 12.17 hrs, Volume= 0.327 af, Depth= 3.62"
Routed to Pond B-12 : Basin #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.404	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.039	98	Concrete, HSG C
	1.086	98	Weighted Average
	1.086		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 12l: PDA-12 (impervious)



Summary for Subcatchment 12P: PDA-12 (pervious)

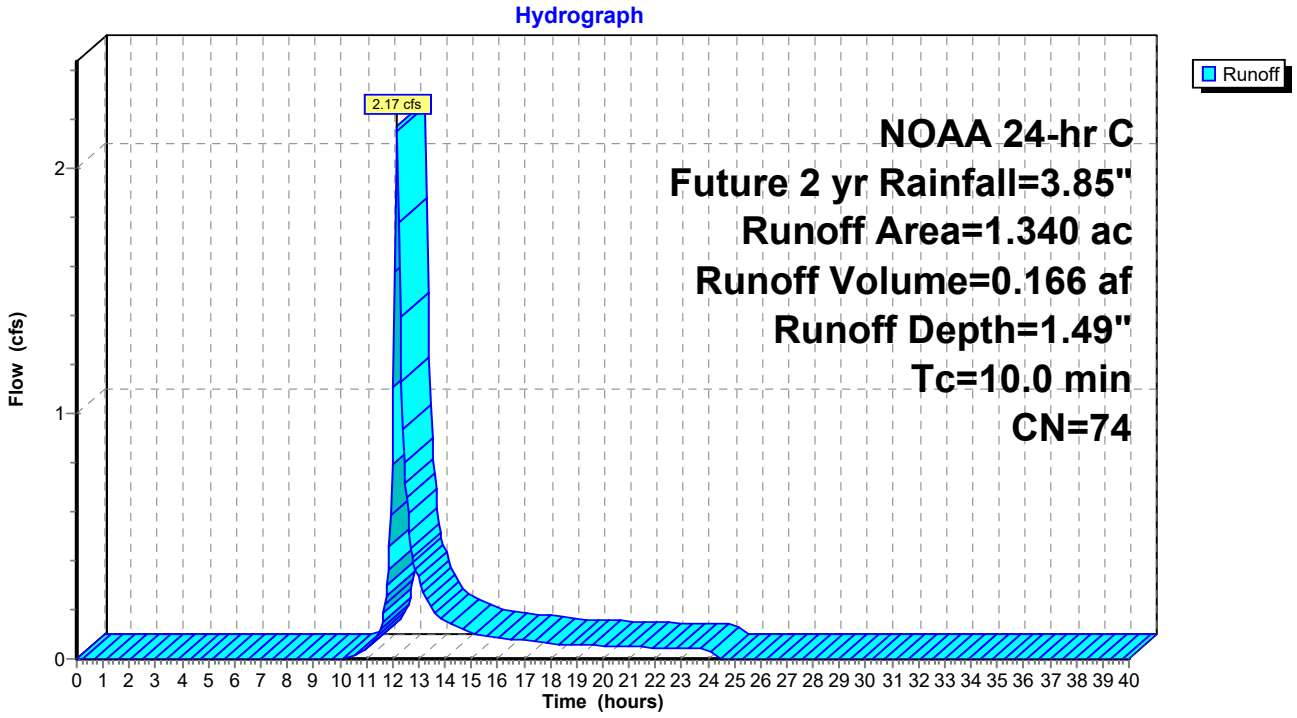
Runoff = 2.17 cfs @ 12.18 hrs, Volume= 0.166 af, Depth= 1.49"
Routed to Pond B-12 : Basin #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.340	74	>75% Grass cover, Good, HSG C
1.340		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 12P: PDA-12 (pervious)



Summary for Subcatchment 13I: PDA-13 (impervious)

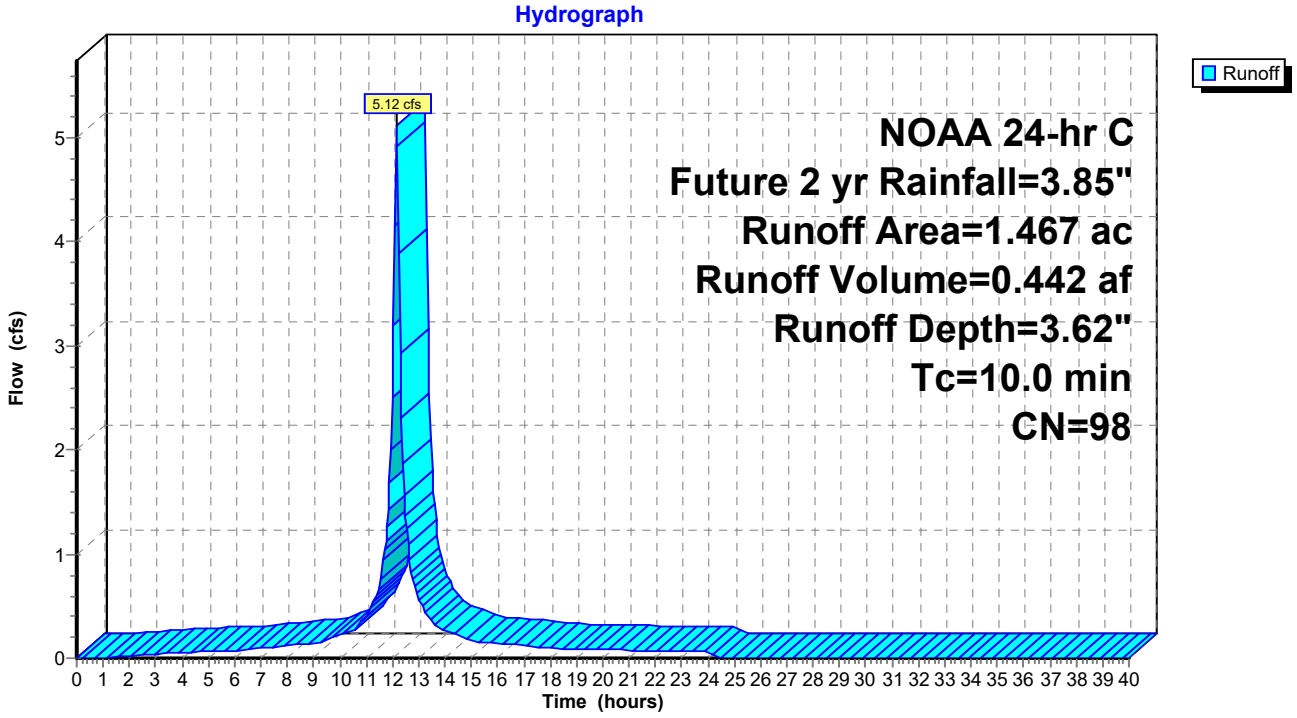
Runoff = 5.12 cfs @ 12.17 hrs, Volume= 0.442 af, Depth= 3.62"
Routed to Pond B-13 : Basin #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.678	98	Pavement, HSG C
*	0.707	98	Roof, HSG C
*	0.082	98	Concrete, HSG C
	1.467	98	Weighted Average
	1.467		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 13I: PDA-13 (impervious)



Summary for Subcatchment 13P: PDA-13 (pervious)

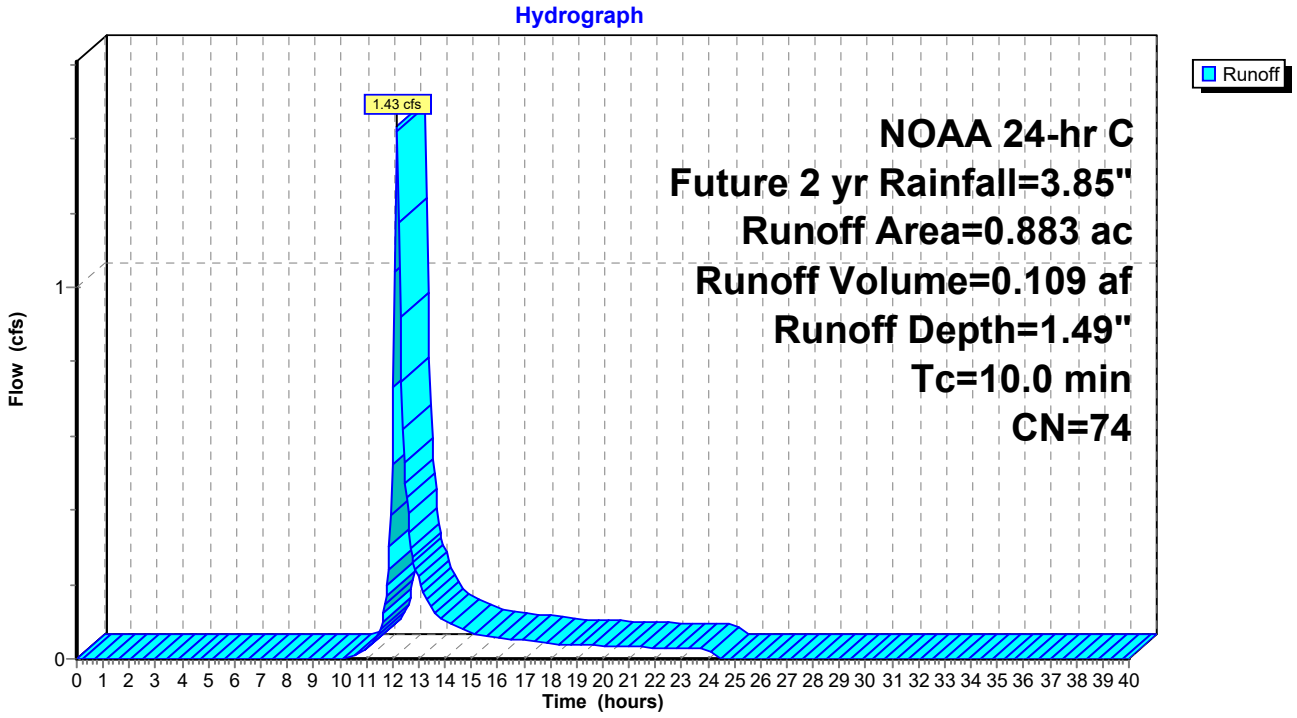
Runoff = 1.43 cfs @ 12.18 hrs, Volume= 0.109 af, Depth= 1.49"
Routed to Pond B-13 : Basin #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.883	74	>75% Grass cover, Good, HSG C
0.883		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 13P: PDA-13 (pervious)



Summary for Subcatchment 14l: PDA-14 (impervious)

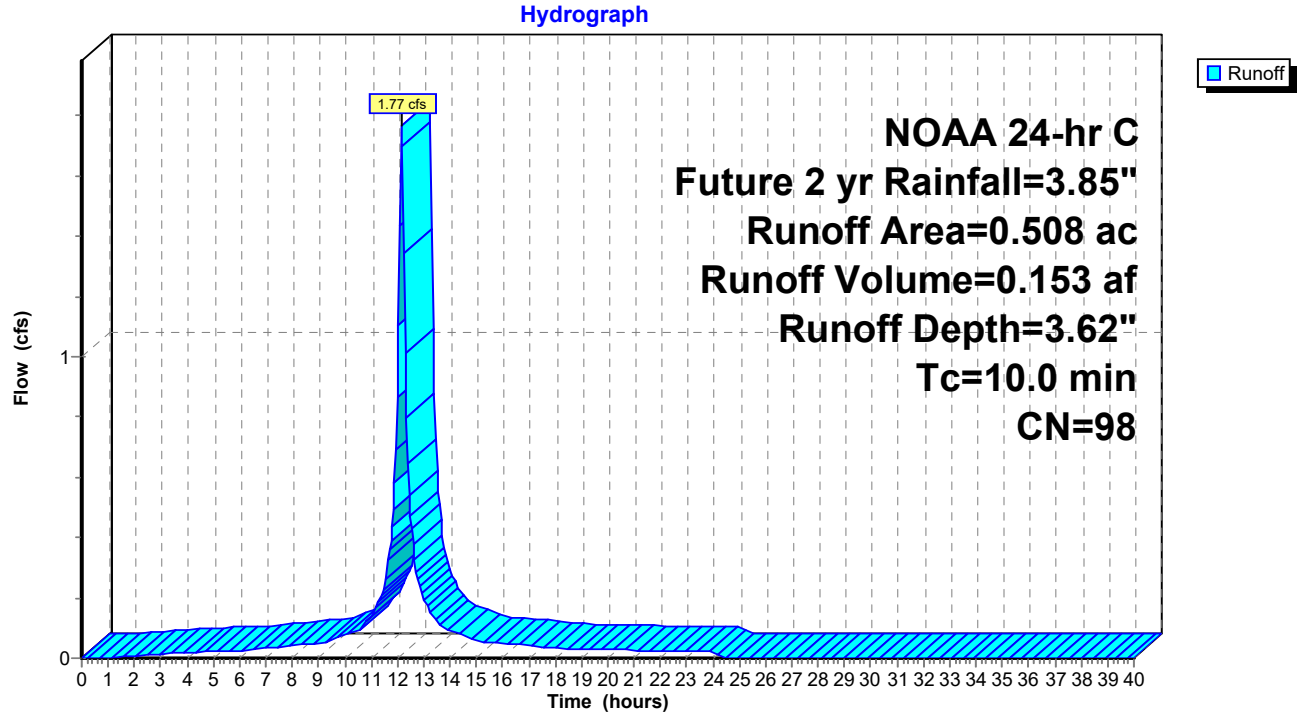
Runoff = 1.77 cfs @ 12.17 hrs, Volume= 0.153 af, Depth= 3.62"
Routed to Pond B-14 : Basin #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.308	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	0.508	98	Weighted Average
	0.508		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 14l: PDA-14 (impervious)



Summary for Subcatchment 14P: PDA-14 (pervious)

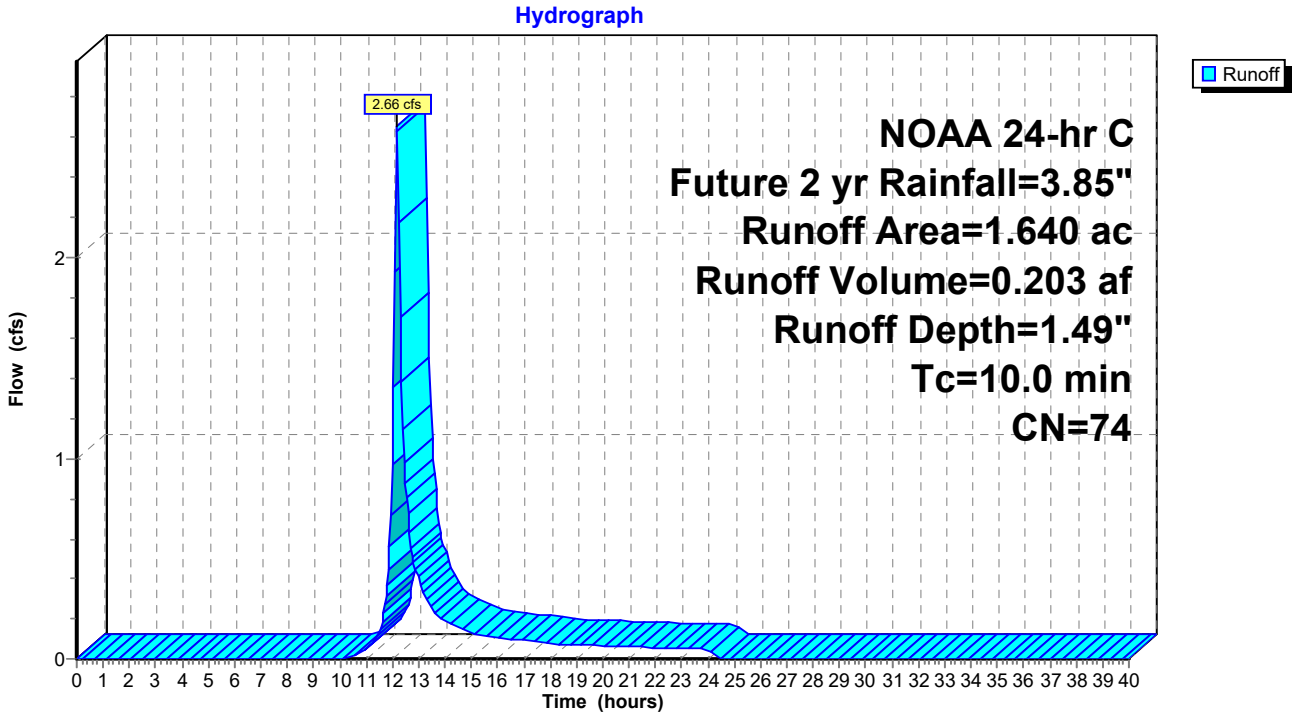
Runoff = 2.66 cfs @ 12.18 hrs, Volume= 0.203 af, Depth= 1.49"
Routed to Pond B-14 : Basin #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.640	74	>75% Grass cover, Good, HSG C
1.640		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 14P: PDA-14 (pervious)



Summary for Subcatchment 15l: PDA-15 (impervious)

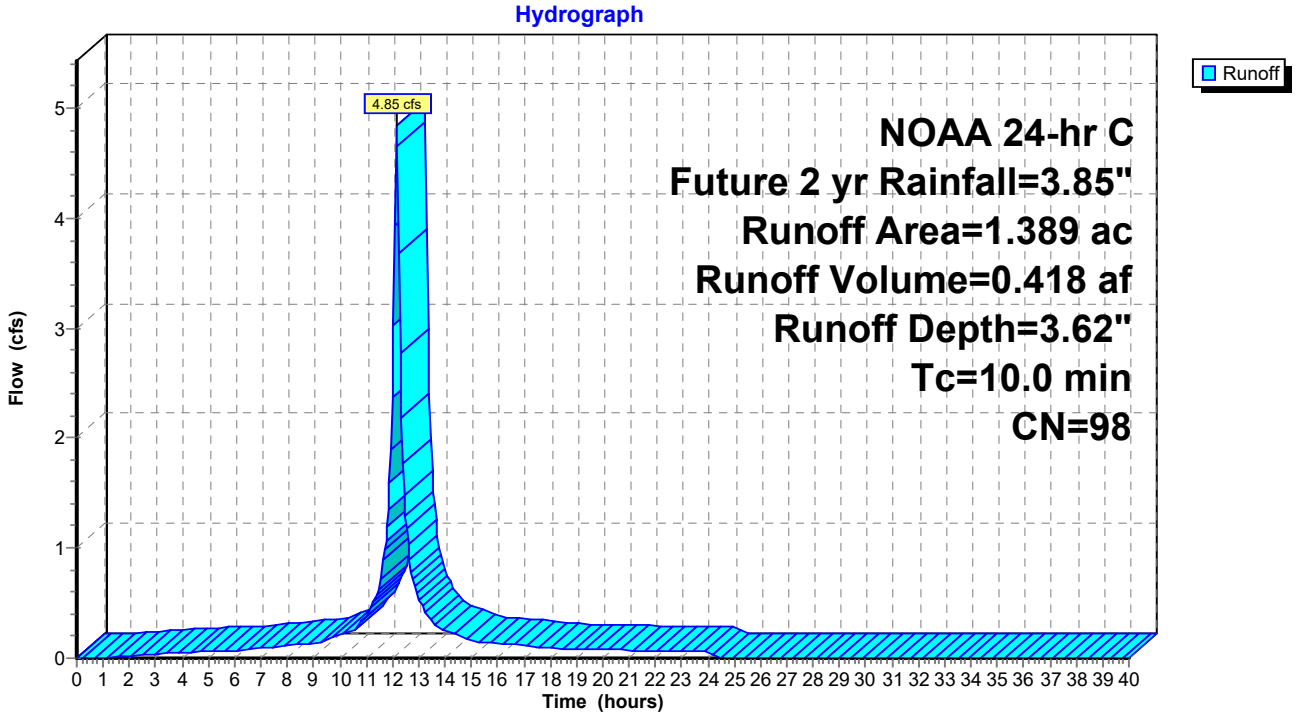
Runoff = 4.85 cfs @ 12.17 hrs, Volume= 0.418 af, Depth= 3.62"
Routed to Pond B-15 : Basin #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.501	98	Pavement, HSG C
*	0.836	98	Roof, HSG C
*	0.052	98	Concrete, HSG C
	1.389	98	Weighted Average
	1.389		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 15l: PDA-15 (impervious)



Summary for Subcatchment 15P: PDA-15 (pervious)

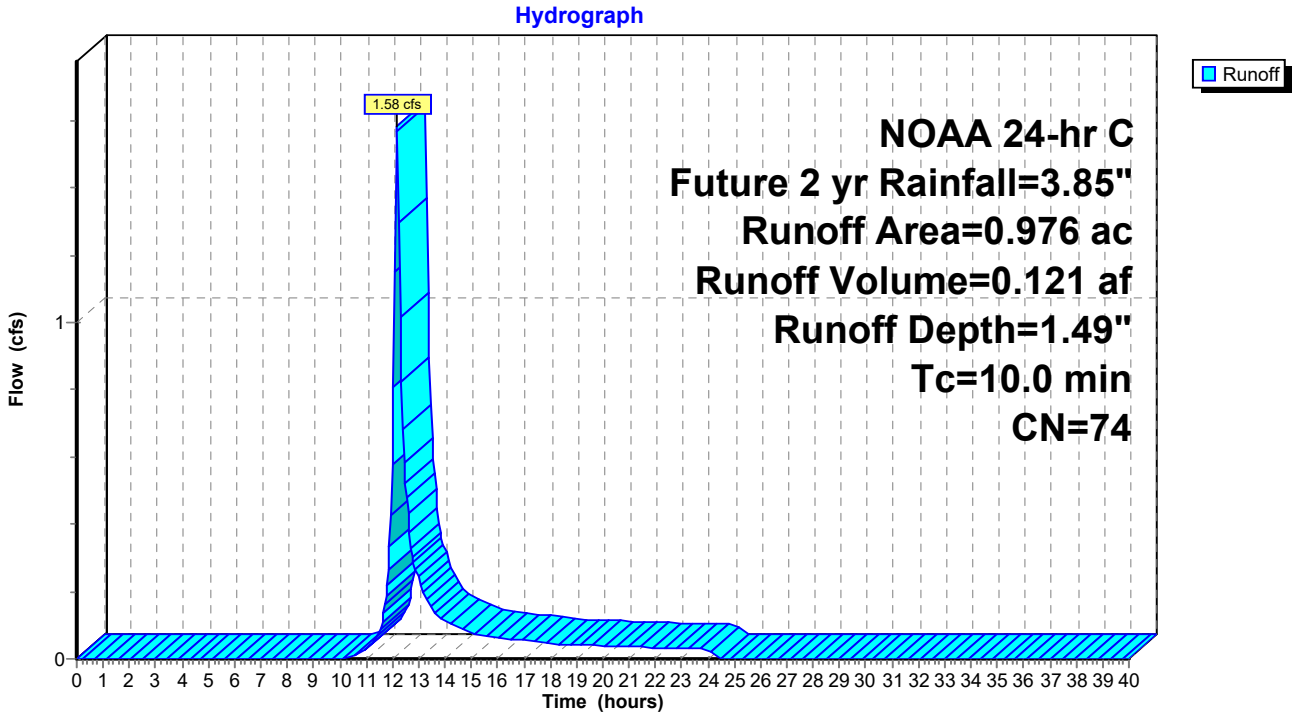
Runoff = 1.58 cfs @ 12.18 hrs, Volume= 0.121 af, Depth= 1.49"
Routed to Pond B-15 : Basin #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.976	74	>75% Grass cover, Good, HSG C
0.976		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 15P: PDA-15 (pervious)



Summary for Subcatchment 16AI: PDA-16A (impervious)

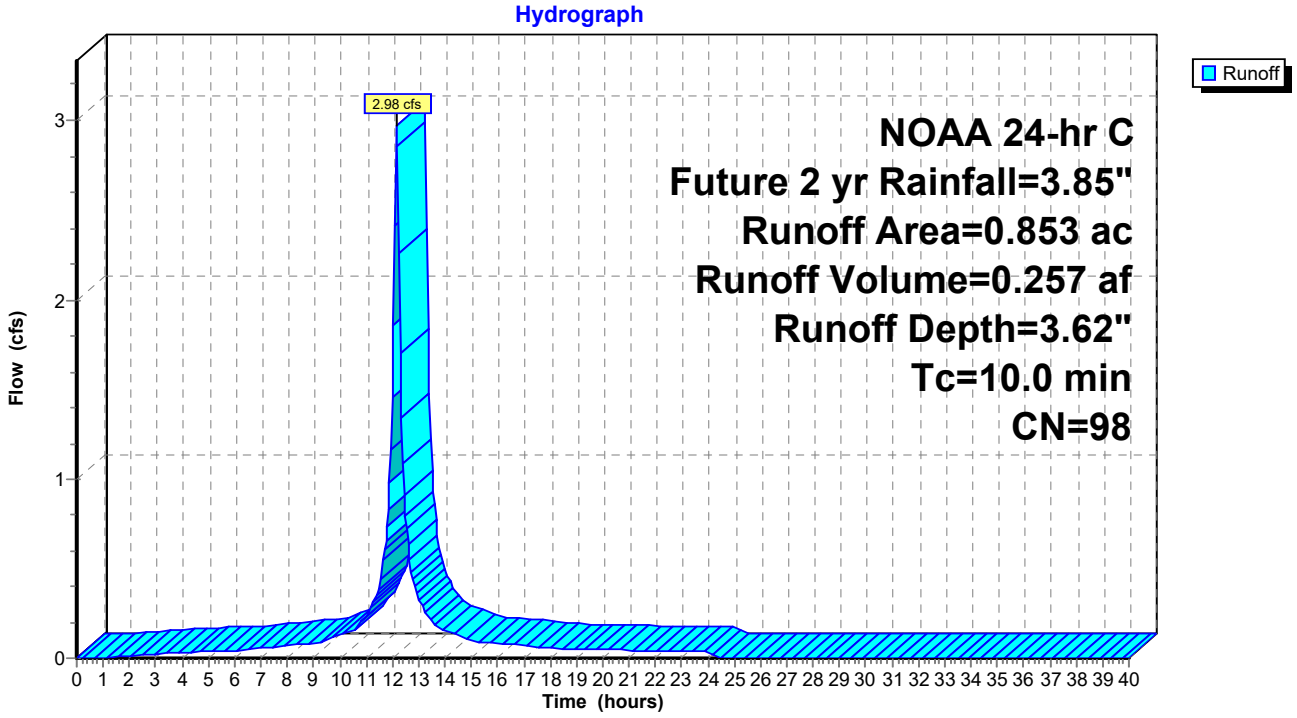
Runoff = 2.98 cfs @ 12.17 hrs, Volume= 0.257 af, Depth= 3.62"
Routed to Pond B-16A : Basin #16A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.072	98	Pavement, HSG C
*	0.771	98	Roof, HSG C
*	0.010	98	Concrete, HSG C
	0.853	98	Weighted Average
	0.853		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16AI: PDA-16A (impervious)



Summary for Subcatchment 16AP: PDA-16A (pervious)

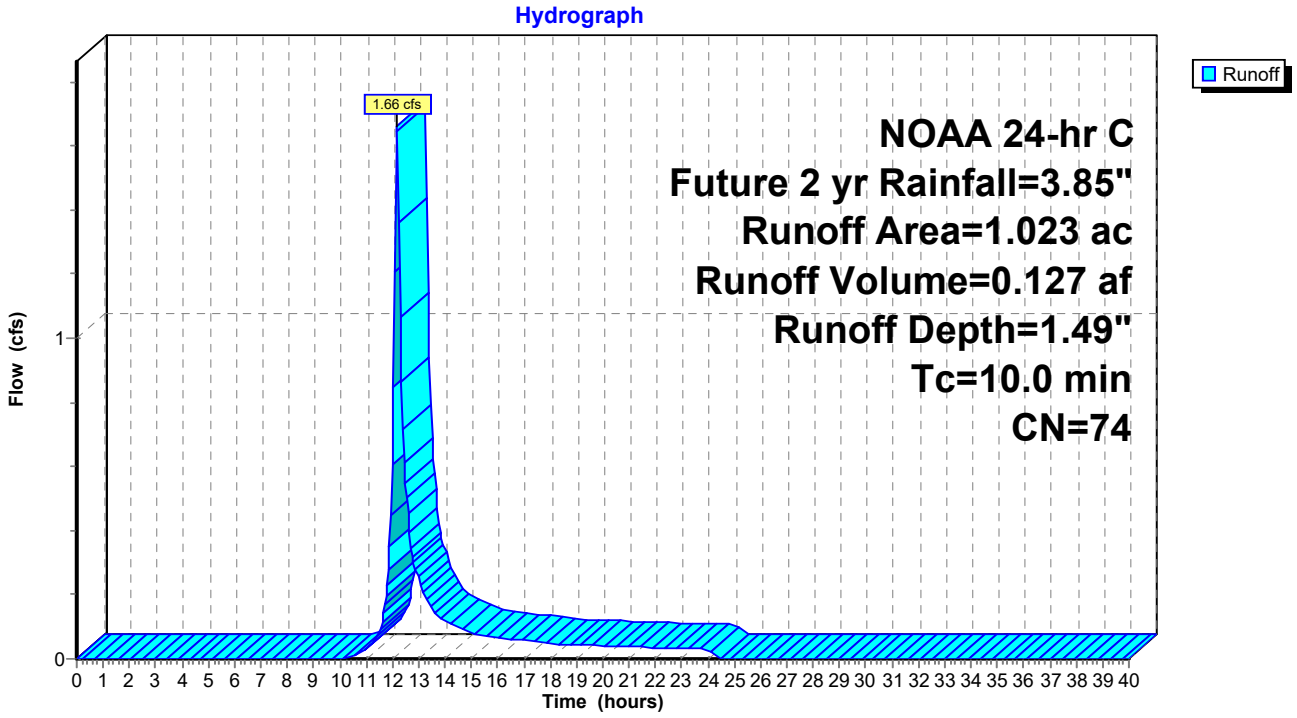
Runoff = 1.66 cfs @ 12.18 hrs, Volume= 0.127 af, Depth= 1.49"
Routed to Pond B-16A : Basin #16A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.023	74	>75% Grass cover, Good, HSG C
1.023		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16AP: PDA-16A (pervious)



Summary for Subcatchment 16BI: PDA-16B (impervious)

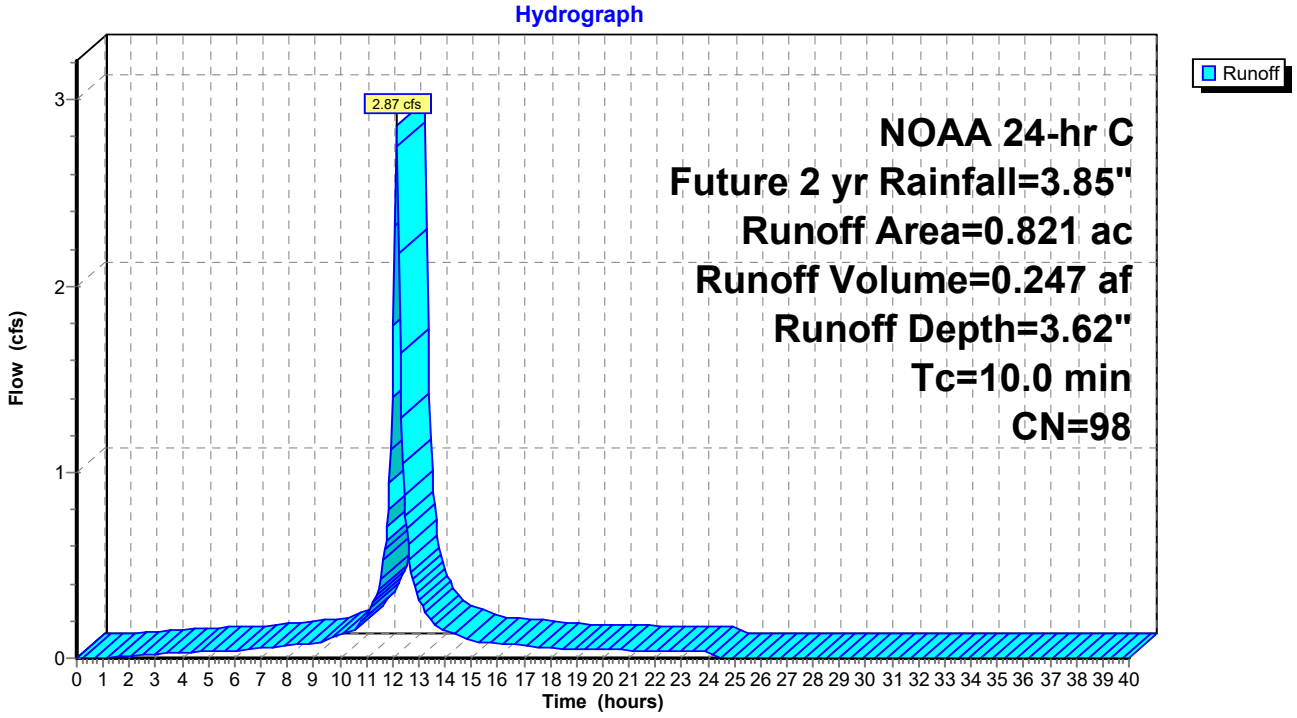
Runoff = 2.87 cfs @ 12.17 hrs, Volume= 0.247 af, Depth= 3.62"
Routed to Pond B-16B : Basin #16B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.621	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	0.821	98	Weighted Average
	0.821		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16BI: PDA-16B (impervious)



Summary for Subcatchment 16BP: PDA-16B (pervious)

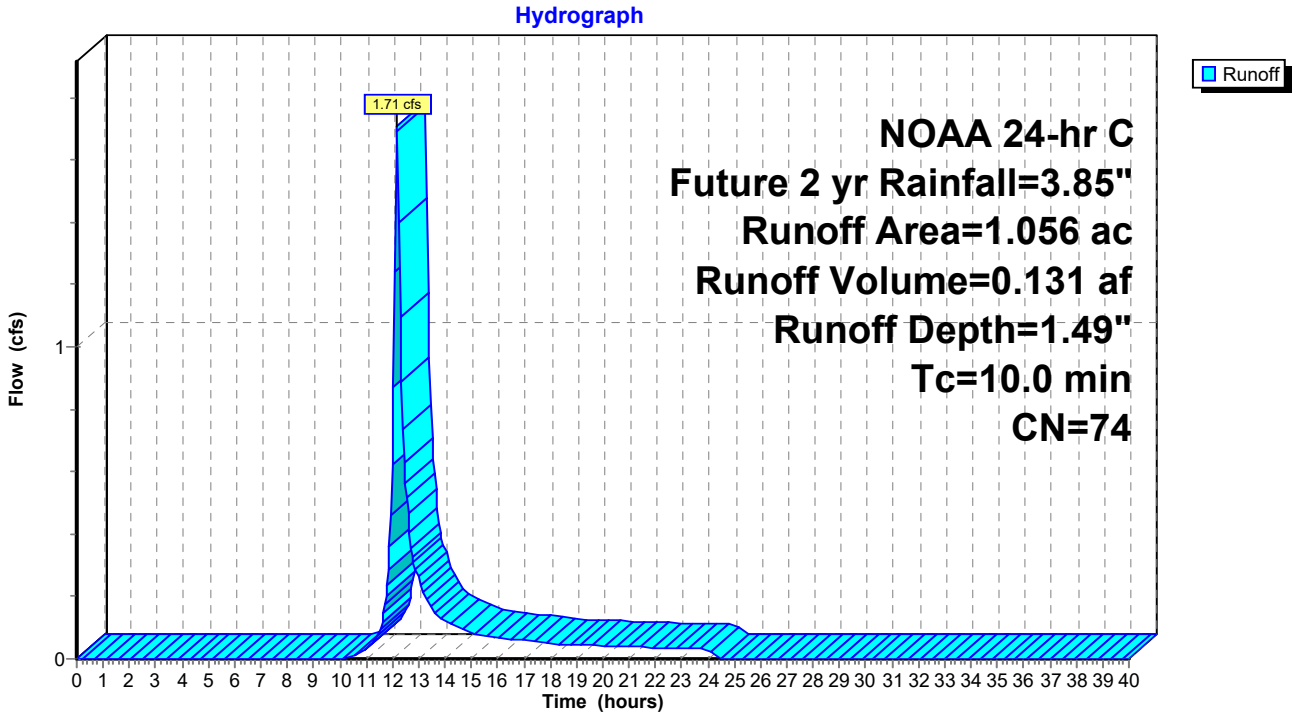
Runoff = 1.71 cfs @ 12.18 hrs, Volume= 0.131 af, Depth= 1.49"
Routed to Pond B-16B : Basin #16B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.056	74	>75% Grass cover, Good, HSG C
1.056		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16BP: PDA-16B (pervious)



Summary for Subcatchment 17AI: PDA-17A (impervious)

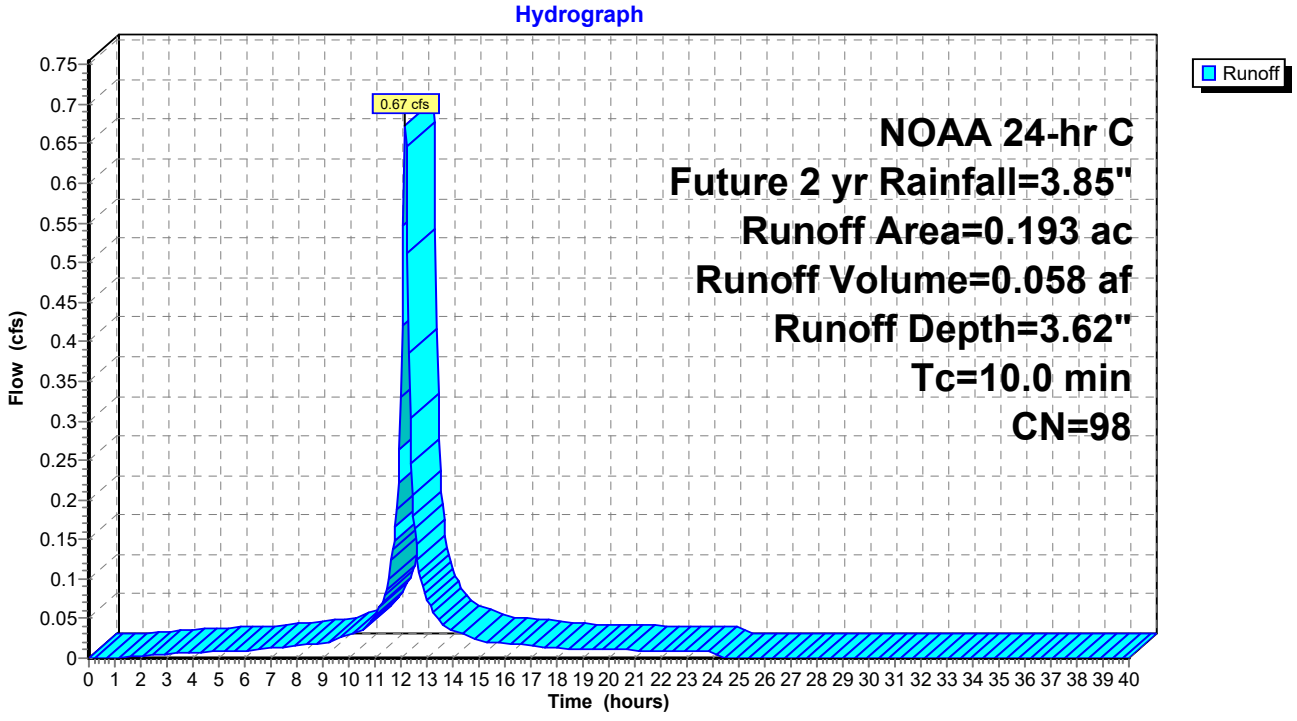
Runoff = 0.67 cfs @ 12.17 hrs, Volume= 0.058 af, Depth= 3.62"
Routed to Pond B-17A : Basin #17A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.193	98	Roof, HSG C
	0.000	98	Paved roads w/curbs & sewers, HSG C
*	0.000	98	Concrete, HSG C
	0.193	98	Weighted Average
	0.193		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17AI: PDA-17A (impervious)



Summary for Subcatchment 17AP: PDA-17A (pervious)

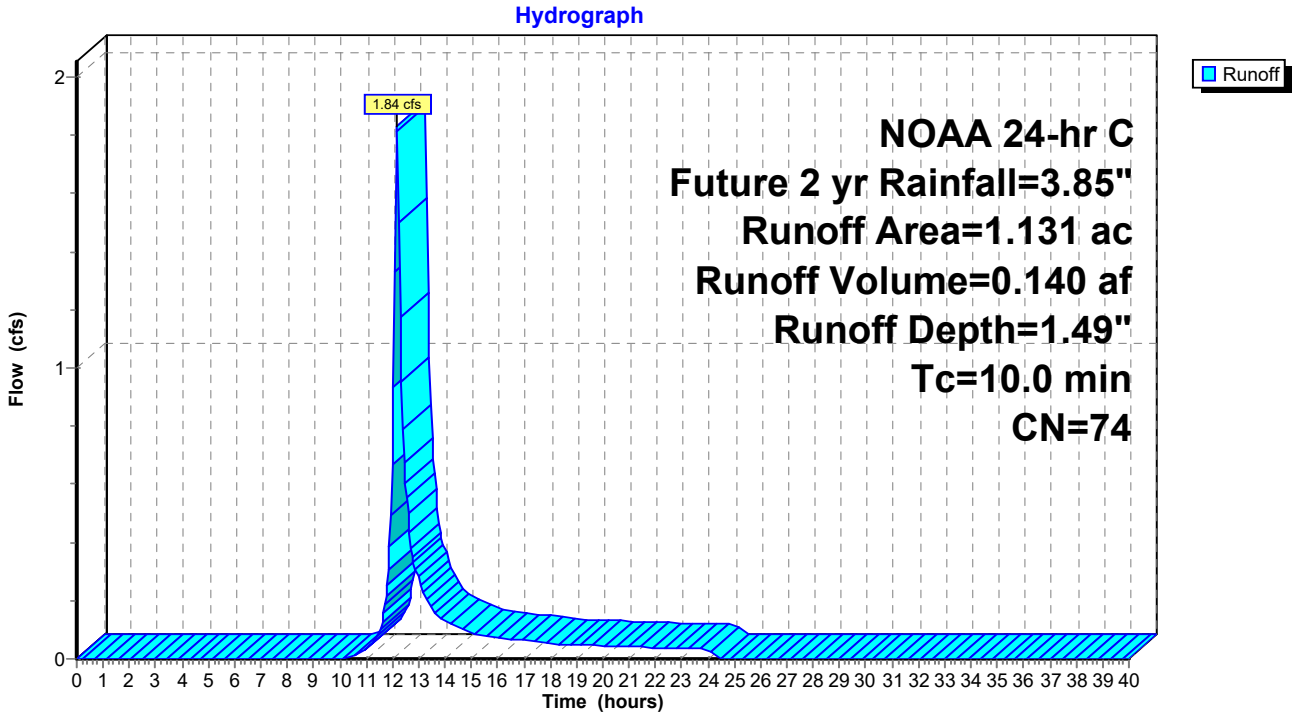
Runoff = 1.84 cfs @ 12.18 hrs, Volume= 0.140 af, Depth= 1.49"
Routed to Pond B-17A : Basin #17A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.131	74	>75% Grass cover, Good, HSG C
1.131		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17AP: PDA-17A (pervious)



Summary for Subcatchment 17BI: PDA-17B (impervious)

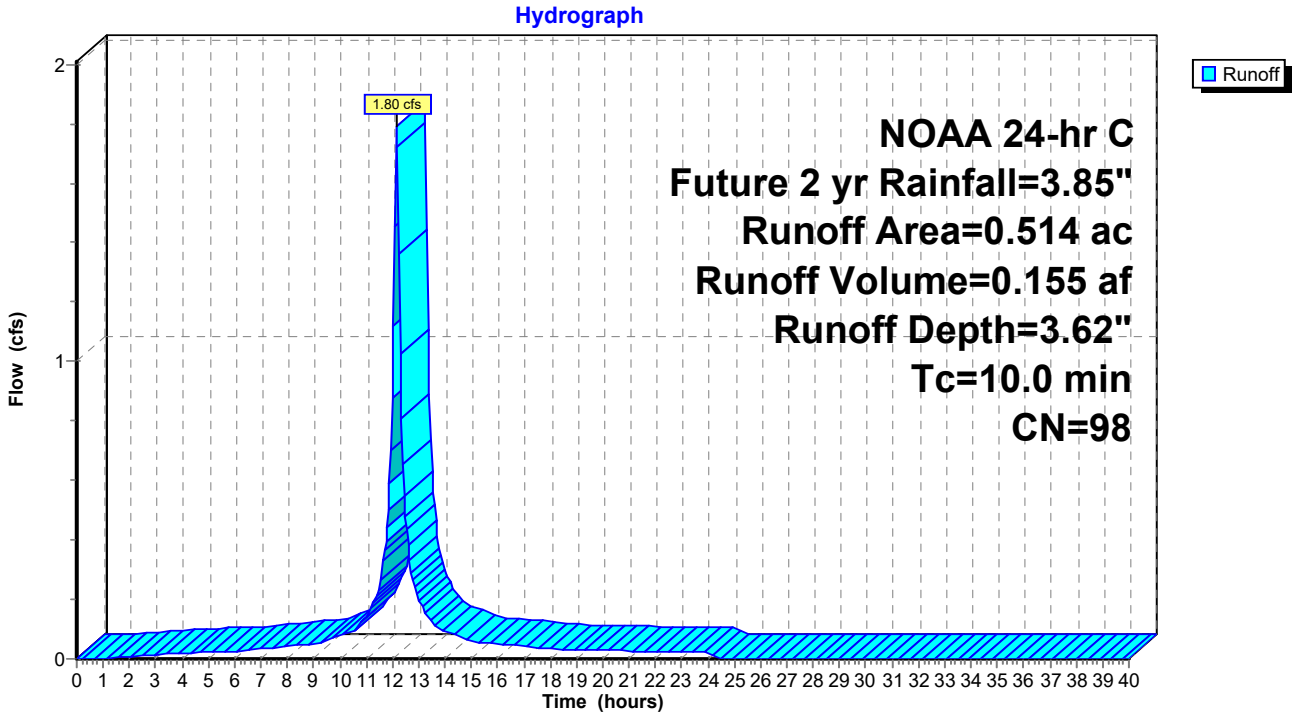
Runoff = 1.80 cfs @ 12.17 hrs, Volume= 0.155 af, Depth= 3.62"
Routed to Pond B-17B : Basin #17B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.514	98	Roof, HSG C
	0.514		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17BI: PDA-17B (impervious)



Summary for Subcatchment 17BP: PDA-17B (pervious)

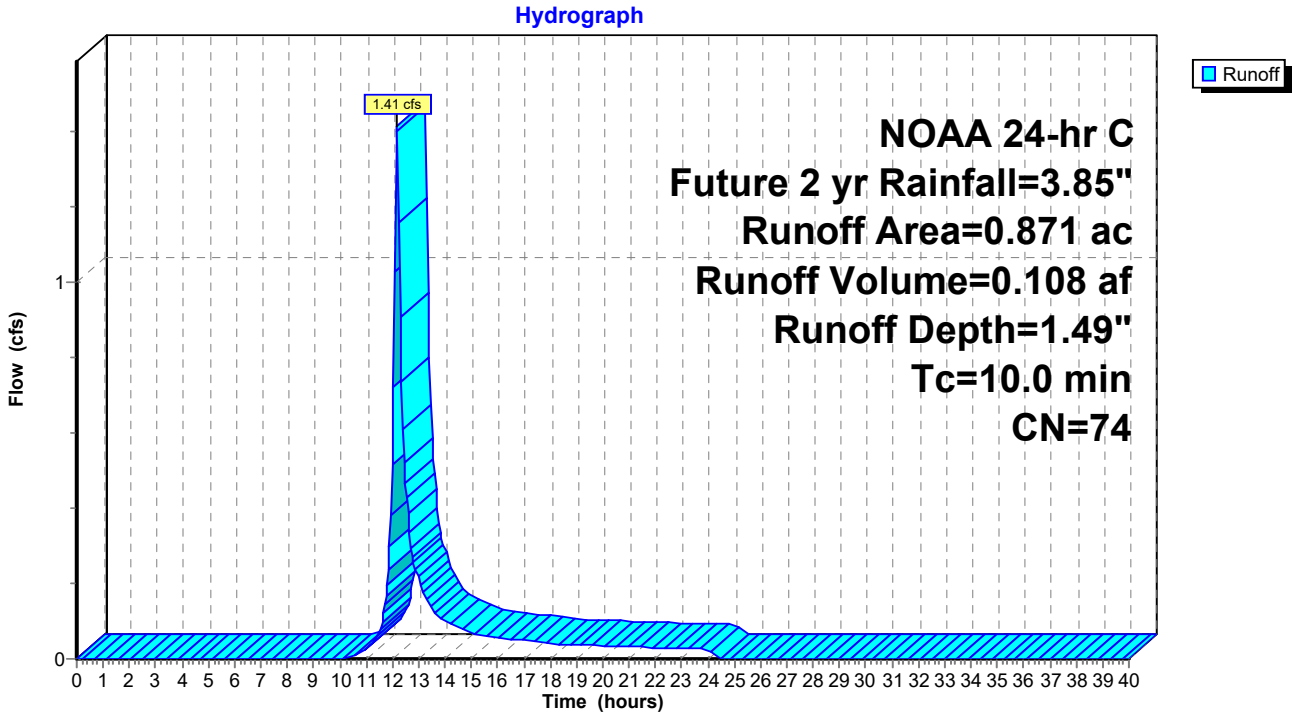
Runoff = 1.41 cfs @ 12.18 hrs, Volume= 0.108 af, Depth= 1.49"
Routed to Pond B-17B : Basin #17B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.871	74	>75% Grass cover, Good, HSG C
0.871		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17BP: PDA-17B (pervious)



Summary for Subcatchment UPDA-1: PDA-1 (undetained)

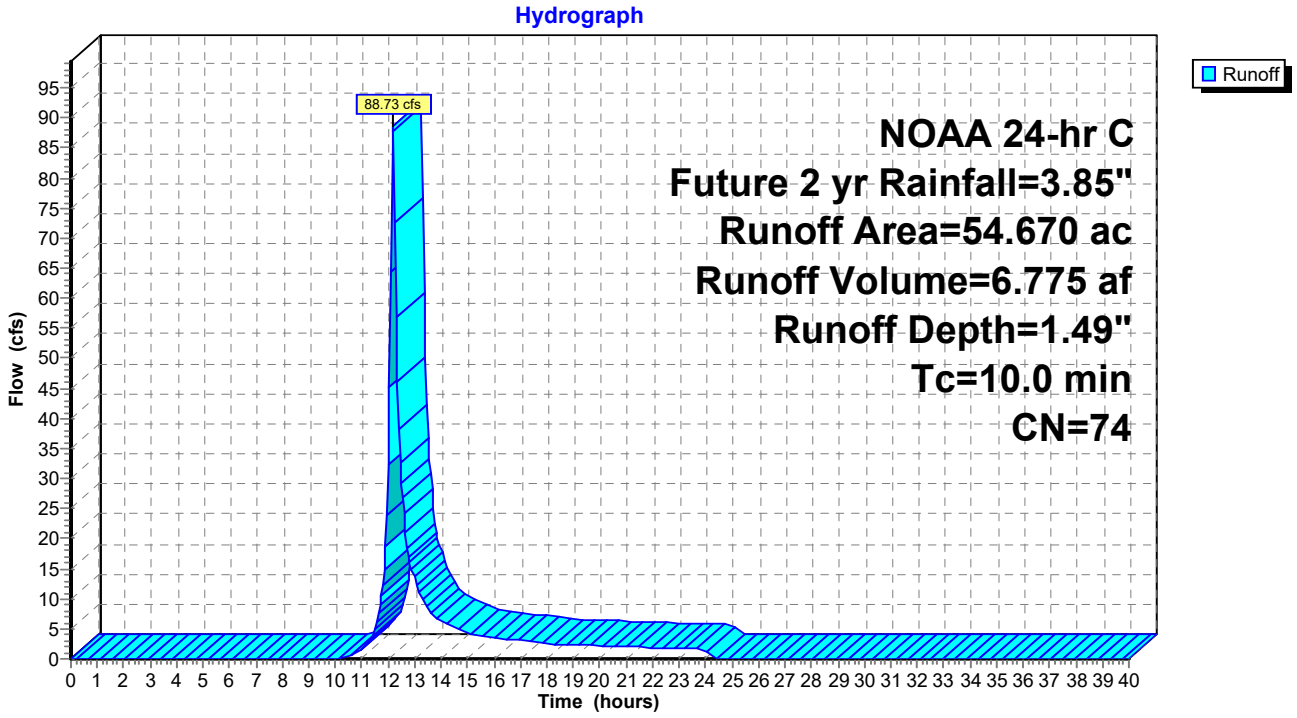
Runoff = 88.73 cfs @ 12.18 hrs, Volume= 6.775 af, Depth= 1.49"
Routed to Link PDA-1 : Proposed Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
54.670	74	>75% Grass cover, Good, HSG C
54.670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-1: PDA-1 (undetained)



Summary for Pond B-1: Basin #1

Inflow Area = 2.782 ac, 26.02% Impervious, Inflow Depth = 0.47" for Future 2 yr event
Inflow = 1.44 cfs @ 12.18 hrs, Volume= 0.110 af
Outflow = 0.04 cfs @ 18.07 hrs, Volume= 0.055 af, Atten= 97%, Lag= 353.2 min
Primary = 0.04 cfs @ 18.07 hrs, Volume= 0.055 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 209.33' @ 18.07 hrs Surf.Area= 10,504 sf Storage= 3,461 cf

Plug-Flow detention time= 661.7 min calculated for 0.055 af (50% of inflow)
Center-of-Mass det. time= 534.5 min (1,392.8 - 858.3)

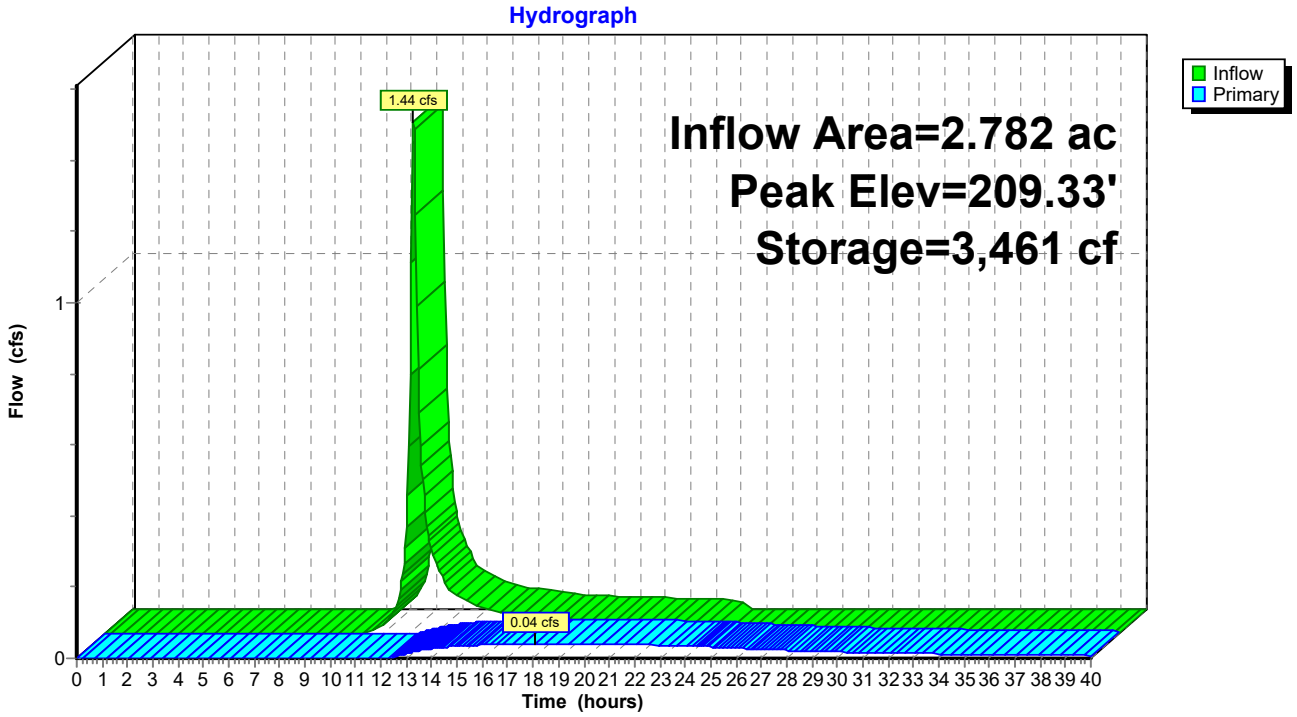
Volume	Invert	Avail.Storage	Storage Description
#1	209.00'	34,903 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
209.00	10,187	0	0
210.00	11,133	10,660	10,660
211.00	12,113	11,623	22,283
212.00	13,126	12,620	34,903

Device	Routing	Invert	Outlet Devices
#1	Primary	207.65'	**18.0" Round Culvert** L= 276.0' Ke= 0.500 Inlet / Outlet Invert= 207.65' / 204.00' S= 0.0132 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	209.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	209.67'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	210.80'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.04 cfs @ 18.07 hrs HW=209.33' (Free Discharge)
- **1=Culvert** (Passes 0.04 cfs of 8.23 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.04 cfs @ 1.38 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-1: Basin #1



Stage-Discharge for Pond B-1: Basin #1

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
209.00	0.00	210.04	3.03	211.08	31.14
209.02	0.00	210.06	3.27	211.10	33.28
209.04	0.00	210.08	3.51	211.12	35.53
209.06	0.00	210.10	3.76	211.14	37.86
209.08	0.00	210.12	4.01	211.16	40.30
209.10	0.00	210.14	4.27	211.18	42.83
209.12	0.00	210.16	4.53	211.20	45.46
209.14	0.00	210.18	4.80	211.22	48.24
209.16	0.00	210.20	5.07	211.24	51.13
209.18	0.00	210.22	5.35	211.26	54.12
209.20	0.00	210.24	5.63	211.28	57.21
209.22	0.00	210.26	5.92	211.30	60.41
209.24	0.01	210.28	6.21	211.32	63.72
209.26	0.01	210.30	6.50	211.34	67.13
209.28	0.02	210.32	6.80	211.36	70.65
209.30	0.03	210.34	7.10	211.38	74.28
209.32	0.03	210.36	7.41	211.40	78.01
209.34	0.04	210.38	7.72	211.42	81.30
209.36	0.05	210.40	8.03	211.44	84.65
209.38	0.05	210.42	8.35	211.46	88.04
209.40	0.06	210.44	8.67	211.48	91.49
209.42	0.06	210.46	9.00	211.50	94.99
209.44	0.07	210.48	9.33	211.52	98.55
209.46	0.07	210.50	9.66	211.54	102.15
209.48	0.07	210.52	10.00	211.56	105.80
209.50	0.08	210.54	10.34	211.58	109.50
209.52	0.08	210.56	10.68	211.60	113.25
209.54	0.08	210.58	11.03	211.62	117.13
209.56	0.09	210.60	11.37	211.64	121.06
209.58	0.09	210.62	11.73	211.66	125.04
209.60	0.09	210.64	12.08	211.68	129.07
209.62	0.10	210.66	12.44	211.70	133.15
209.64	0.10	210.68	12.61	211.72	137.29
209.66	0.10	210.70	12.64	211.74	141.48
209.68	0.12	210.72	12.66	211.76	145.72
209.70	0.17	210.74	12.69	211.78	150.00
209.72	0.26	210.76	12.71	211.80	154.34
209.74	0.35	210.78	12.73	211.82	158.62
209.76	0.47	210.80	12.76	211.84	162.95
209.78	0.59	210.82	13.11	211.86	167.31
209.80	0.73	210.84	13.74	211.88	171.72
209.82	0.88	210.86	14.56	211.90	176.17
209.84	1.03	210.88	15.51	211.92	180.66
209.86	1.20	210.90	16.60	211.94	185.19
209.88	1.37	210.92	17.79	211.96	189.77
209.90	1.56	210.94	19.10	211.98	194.38
209.92	1.75	210.96	20.50	212.00	**199.03**
209.94	1.94	210.98	21.99		
209.96	2.15	211.00	23.56		
209.98	2.36	211.02	25.31		
210.00	2.58	211.04	27.15		
210.02	2.80	211.06	29.10		

Summary for Pond B-10: Basin #10

Inflow Area = 1.674 ac, 56.63% Impervious, Inflow Depth = 2.69" for Future 2 yr event
Inflow = 4.48 cfs @ 12.17 hrs, Volume= 0.376 af
Outflow = 1.30 cfs @ 12.49 hrs, Volume= 0.283 af, Atten= 71%, Lag= 19.3 min
Primary = 1.30 cfs @ 12.49 hrs, Volume= 0.283 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.62' @ 12.49 hrs Surf.Area= 5,520 sf Storage= 7,892 cf

Plug-Flow detention time= 203.9 min calculated for 0.283 af (75% of inflow)
Center-of-Mass det. time= 111.7 min (893.3 - 781.6)

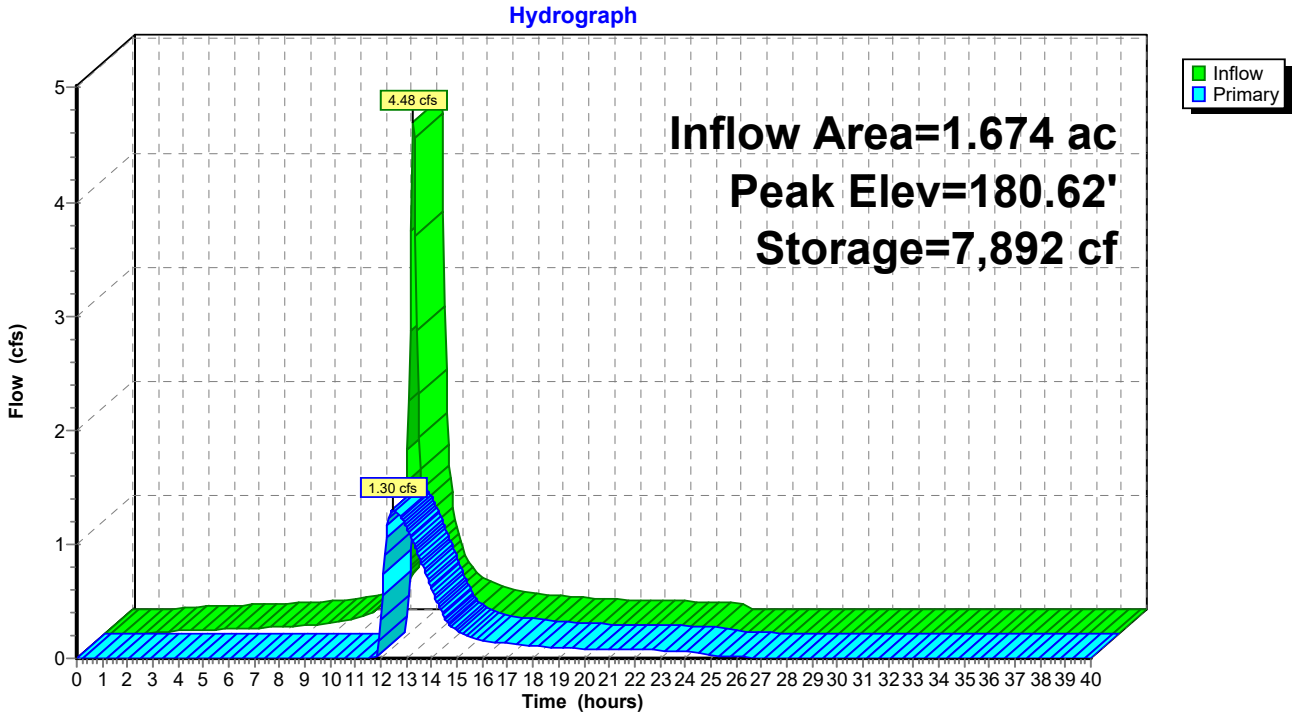
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	23,473 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	4,220	0	0
180.00	5,003	4,612	4,612
181.00	5,833	5,418	10,030
182.00	6,710	6,272	16,301
183.00	7,633	7,172	23,473

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 52.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 176.00' S= 0.0317 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.88'	**24.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	182.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.30 cfs @ 12.49 hrs HW=180.62' (Free Discharge)
- **1=Culvert** (Passes 1.30 cfs of 12.69 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.30 cfs @ 3.91 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-10: Basin #10



Stage-Discharge for Pond B-10: Basin #10

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.41	181.08	1.70	182.12	2.90
179.02	0.00	180.06	0.48	181.10	1.71	182.14	3.05
179.04	0.00	180.08	0.54	181.12	1.73	182.16	3.21
179.06	0.00	180.10	0.58	181.14	1.74	182.18	3.38
179.08	0.00	180.12	0.63	181.16	1.76	182.20	3.56
179.10	0.00	180.14	0.67	181.18	1.77	182.22	3.75
179.12	0.00	180.16	0.71	181.20	1.78	182.24	3.94
179.14	0.00	180.18	0.74	181.22	1.80	182.26	4.14
179.16	0.00	180.20	0.78	181.24	1.81	182.28	4.35
179.18	0.00	180.22	0.81	181.26	1.83	182.30	4.57
179.20	0.00	180.24	0.84	181.28	1.84	182.32	4.79
179.22	0.00	180.26	0.87	181.30	1.86	182.34	5.02
179.24	0.00	180.28	0.90	181.32	1.87	182.36	5.26
179.26	0.00	180.30	0.93	181.34	1.88	182.38	5.50
179.28	0.00	180.32	0.96	181.36	1.90	182.40	5.75
179.30	0.00	180.34	0.98	181.38	1.91	182.42	6.00
179.32	0.00	180.36	1.01	181.40	1.92	182.44	6.26
179.34	0.00	180.38	1.03	181.42	1.94	182.46	6.52
179.36	0.00	180.40	1.06	181.44	1.95	182.48	6.79
179.38	0.00	180.42	1.08	181.46	1.96	182.50	7.07
179.40	0.00	180.44	1.11	181.48	1.98	182.52	7.34
179.42	0.00	180.46	1.13	181.50	1.99	182.54	7.63
179.44	0.00	180.48	1.15	181.52	2.00	182.56	7.91
179.46	0.00	180.50	1.17	181.54	2.02	182.58	8.21
179.48	0.00	180.52	1.20	181.56	2.03	182.60	8.50
179.50	0.00	180.54	1.22	181.58	2.04	182.62	8.80
179.52	0.00	180.56	1.24	181.60	2.05	182.64	9.11
179.54	0.00	180.58	1.26	181.62	2.07	182.66	9.42
179.56	0.00	180.60	1.28	181.64	2.08	182.68	9.73
179.58	0.00	180.62	1.30	181.66	2.09	182.70	10.05
179.60	0.00	180.64	1.32	181.68	2.10	182.72	10.37
179.62	0.00	180.66	1.34	181.70	2.11	182.74	10.69
179.64	0.00	180.68	1.36	181.72	2.13	182.76	11.02
179.66	0.00	180.70	1.38	181.74	2.14	182.78	11.35
179.68	0.00	180.72	1.40	181.76	2.15	182.80	11.69
179.70	0.00	180.74	1.41	181.78	2.16	182.82	12.03
179.72	0.00	180.76	1.43	181.80	2.17	182.84	12.37
179.74	0.00	180.78	1.45	181.82	2.19	182.86	12.71
179.76	0.00	180.80	1.47	181.84	2.20	182.88	13.06
179.78	0.00	180.82	1.48	181.86	2.21	182.90	13.42
179.80	0.00	180.84	1.50	181.88	2.22	182.92	13.77
179.82	0.00	180.86	1.52	181.90	2.23	182.94	14.13
179.84	0.00	180.88	1.54	181.92	2.24	182.96	14.61
179.86	0.00	180.90	1.55	181.94	2.26	182.98	15.46
179.88	0.00	180.92	1.57	181.96	2.27	183.00	**16.53**
179.90	0.02	180.94	1.59	181.98	2.28		
179.92	0.05	180.96	1.60	182.00	2.29		
179.94	0.09	180.98	1.62	182.02	2.34		
179.96	0.15	181.00	1.63	182.04	2.42		
179.98	0.20	181.02	1.65	182.06	2.52		
180.00	0.27	181.04	1.66	182.08	2.63		
180.02	0.34	181.06	1.68	182.10	2.76		

Summary for Pond B-11: Basin #11

Inflow Area = 2.228 ac, 58.53% Impervious, Inflow Depth = 2.73" for Future 2 yr event
Inflow = 6.05 cfs @ 12.17 hrs, Volume= 0.507 af
Outflow = 0.21 cfs @ 15.23 hrs, Volume= 0.360 af, Atten= 97%, Lag= 183.4 min
Primary = 0.21 cfs @ 15.23 hrs, Volume= 0.360 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 182.74' @ 15.23 hrs Surf.Area= 6,916 sf Storage= 15,926 cf

Plug-Flow detention time= 740.2 min calculated for 0.359 af (71% of inflow)
Center-of-Mass det. time= 642.1 min (1,422.3 - 780.2)

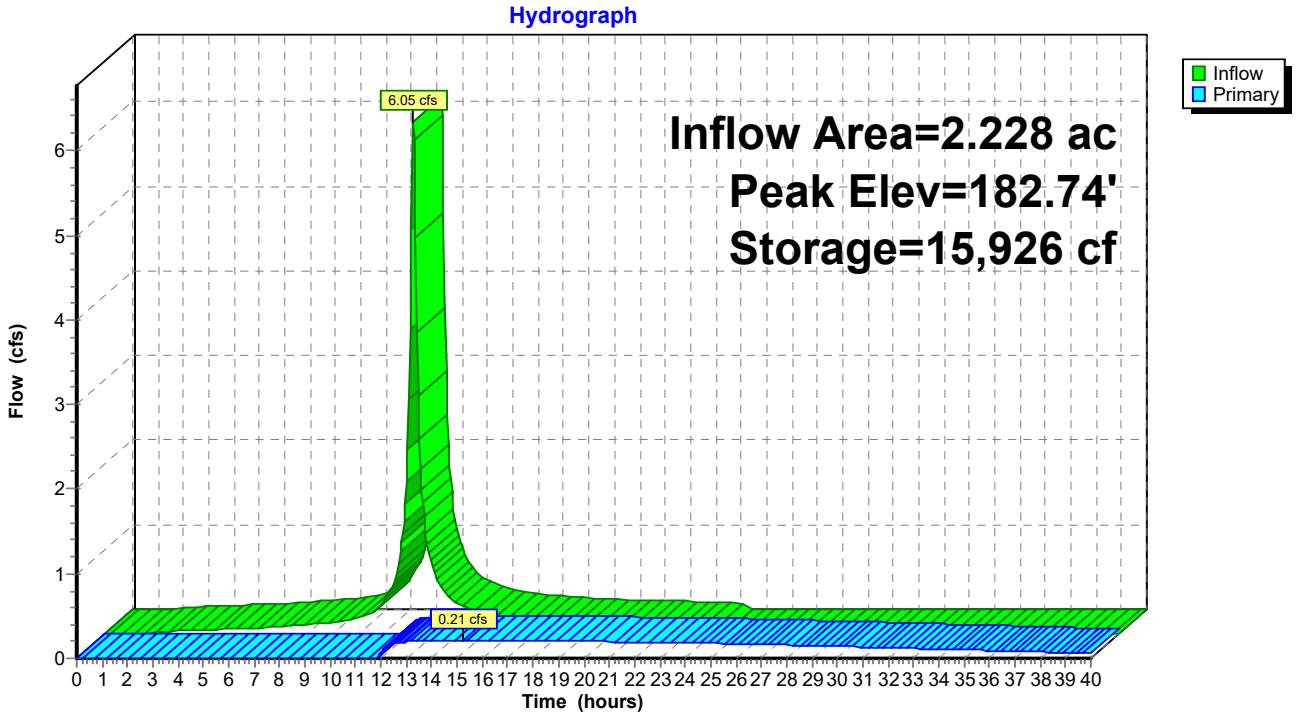
Volume	Invert	Avail.Storage	Storage Description
#1	180.00'	43,224 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.00	4,780	0	0
181.00	5,522	5,151	5,151
182.00	6,306	5,914	11,065
183.00	7,135	6,721	17,786
184.00	8,007	7,571	25,357
185.00	8,923	8,465	33,822
186.00	9,882	9,403	43,224

Device	Routing	Invert	Outlet Devices
#1	Primary	178.65'	**18.0" Round Culvert** L= 131.0' Ke= 0.500 Inlet / Outlet Invert= 178.65' / 178.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	181.00'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	183.91'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.21 cfs @ 15.23 hrs HW=182.74' (Free Discharge)
- **1=Culvert** (Passes 0.21 cfs of 12.92 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.21 cfs @ 6.15 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-11: Basin #11



Stage-Discharge for Pond B-11: Basin #11

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
180.00	0.00	182.60	0.20	185.20	223.74
180.05	0.00	182.65	0.20	185.25	236.23
180.10	0.00	182.70	0.21	185.30	248.97
180.15	0.00	182.75	0.21	185.35	262.16
180.20	0.00	182.80	0.36	185.40	275.68
180.25	0.00	182.85	0.63	185.45	289.46
180.30	0.00	182.90	0.97	185.50	303.52
180.35	0.00	182.95	1.38	185.55	317.86
180.40	0.00	183.00	1.84	185.60	332.46
180.45	0.00	183.05	2.35	185.65	347.33
180.50	0.00	183.10	2.89	185.70	362.47
180.55	0.00	183.15	3.48	185.75	377.88
180.60	0.00	183.20	4.10	185.80	393.54
180.65	0.00	183.25	4.75	185.85	409.47
180.70	0.00	183.30	5.43	185.90	425.67
180.75	0.00	183.35	6.14	185.95	442.37
180.80	0.00	183.40	6.88	186.00	**459.42**
180.85	0.00	183.45	7.64		
180.90	0.00	183.50	8.43		
180.95	0.00	183.55	9.24		
181.00	0.00	183.60	10.07		
181.05	0.00	183.65	10.93		
181.10	0.02	183.70	11.80		
181.15	0.03	183.75	12.69		
181.20	0.05	183.80	13.60		
181.25	0.06	183.85	14.53		
181.30	0.07	183.90	15.07		
181.35	0.08	183.95	16.09		
181.40	0.09	184.00	18.41		
181.45	0.10	184.05	21.50		
181.50	0.10	184.10	25.19		
181.55	0.11	184.15	29.60		
181.60	0.12	184.20	34.67		
181.65	0.12	184.25	40.36		
181.70	0.13	184.30	46.66		
181.75	0.13	184.35	53.67		
181.80	0.14	184.40	61.37		
181.85	0.14	184.45	69.72		
181.90	0.15	184.50	78.75		
181.95	0.15	184.55	87.28		
182.00	0.16	184.60	95.90		
182.05	0.16	184.65	104.83		
182.10	0.16	184.70	114.08		
182.15	0.17	184.75	123.79		
182.20	0.17	184.80	133.86		
182.25	0.18	184.85	144.25		
182.30	0.18	184.90	154.96		
182.35	0.18	184.95	165.77		
182.40	0.19	185.00	176.78		
182.45	0.19	185.05	188.06		
182.50	0.19	185.10	199.59		
182.55	0.20	185.15	211.51		

Summary for Pond B-12: Basin #12

Inflow Area = 2.426 ac, 44.77% Impervious, Inflow Depth = 2.44" for Future 2 yr event
Inflow = 5.96 cfs @ 12.17 hrs, Volume= 0.493 af
Outflow = 1.32 cfs @ 12.62 hrs, Volume= 0.389 af, Atten= 78%, Lag= 26.8 min
Primary = 1.32 cfs @ 12.62 hrs, Volume= 0.389 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.02' @ 12.62 hrs Surf.Area= 6,117 sf Storage= 10,811 cf

Plug-Flow detention time= 235.2 min calculated for 0.388 af (79% of inflow)
Center-of-Mass det. time= 150.4 min (941.7 - 791.4)

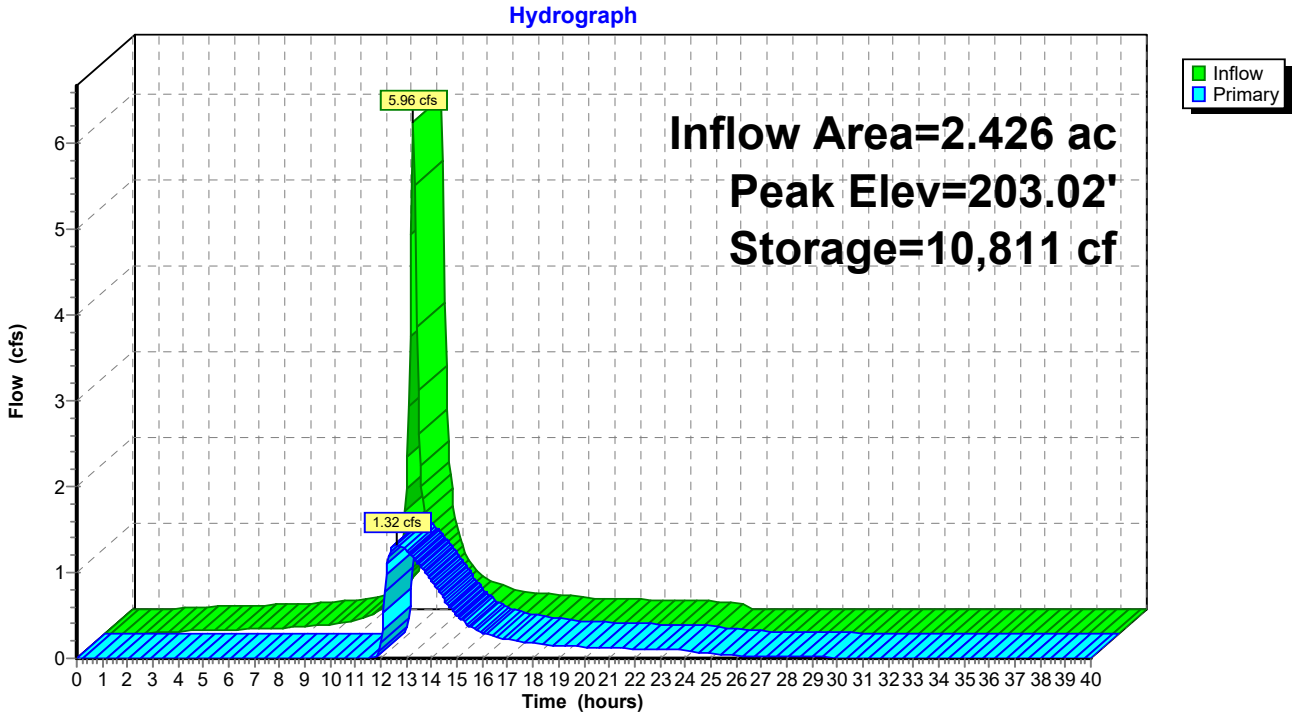
Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	24,487 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,623	0	0
202.00	5,350	4,987	4,987
203.00	6,105	5,728	10,714
204.00	6,883	6,494	17,208
205.00	7,674	7,279	24,487

Device	Routing	Invert	Outlet Devices
#1	Primary	199.65'	**18.0" Round Culvert** L= 238.0' Ke= 0.500 Inlet / Outlet Invert= 199.65' / 195.50' S= 0.0174 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.90'	**7.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.02'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.32 cfs @ 12.62 hrs HW=203.02' (Free Discharge)
- **1=Culvert** (Passes 1.32 cfs of 13.76 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.32 cfs @ 4.31 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-12: Basin #12



Stage-Discharge for Pond B-12: Basin #12

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	202.04	0.07	203.08	1.57	204.12	15.64
201.02	0.00	202.06	0.08	203.10	1.69	204.14	15.66
201.04	0.00	202.08	0.11	203.12	1.82	204.16	15.69
201.06	0.00	202.10	0.13	203.14	1.96	204.18	15.71
201.08	0.00	202.12	0.15	203.16	2.12	204.20	15.73
201.10	0.00	202.14	0.18	203.18	2.28	204.22	15.75
201.12	0.00	202.16	0.21	203.20	2.46	204.24	15.77
201.14	0.00	202.18	0.24	203.22	2.64	204.26	15.79
201.16	0.00	202.20	0.27	203.24	2.83	204.28	15.82
201.18	0.00	202.22	0.30	203.26	3.03	204.30	15.84
201.20	0.00	202.24	0.34	203.28	3.24	204.32	15.86
201.22	0.00	202.26	0.37	203.30	3.45	204.34	15.88
201.24	0.00	202.28	0.41	203.32	3.67	204.36	15.90
201.26	0.00	202.30	0.45	203.34	3.90	204.38	15.92
201.28	0.00	202.32	0.48	203.36	4.13	204.40	15.95
201.30	0.00	202.34	0.52	203.38	4.37	204.42	15.97
201.32	0.00	202.36	0.56	203.40	4.62	204.44	15.99
201.34	0.00	202.38	0.60	203.42	4.87	204.46	16.01
201.36	0.00	202.40	0.63	203.44	5.12	204.48	16.03
201.38	0.00	202.42	0.67	203.46	5.38	204.50	16.05
201.40	0.00	202.44	0.70	203.48	5.65	204.52	16.41
201.42	0.00	202.46	0.74	203.50	5.92	204.54	17.03
201.44	0.00	202.48	0.77	203.52	6.20	204.56	17.84
201.46	0.00	202.50	0.80	203.54	6.48	204.58	18.80
201.48	0.00	202.52	0.82	203.56	6.77	204.60	19.88
201.50	0.00	202.54	0.85	203.58	7.06	204.62	21.07
201.52	0.00	202.56	0.87	203.60	7.35	204.64	22.37
201.54	0.00	202.58	0.90	203.62	7.65	204.66	23.77
201.56	0.00	202.60	0.92	203.64	7.95	204.68	25.26
201.58	0.00	202.62	0.94	203.66	8.26	204.70	26.83
201.60	0.00	202.64	0.97	203.68	8.57	204.72	28.57
201.62	0.00	202.66	0.99	203.70	8.89	204.74	30.41
201.64	0.00	202.68	1.01	203.72	9.21	204.76	32.36
201.66	0.00	202.70	1.03	203.74	9.53	204.78	34.40
201.68	0.00	202.72	1.05	203.76	9.86	204.80	36.54
201.70	0.00	202.74	1.07	203.78	10.19	204.82	38.78
201.72	0.00	202.76	1.09	203.80	10.52	204.84	41.12
201.74	0.00	202.78	1.11	203.82	10.86	204.86	43.55
201.76	0.00	202.80	1.13	203.84	11.20	204.88	46.08
201.78	0.00	202.82	1.15	203.86	11.54	204.90	48.71
201.80	0.00	202.84	1.17	203.88	11.89	204.92	51.48
201.82	0.00	202.86	1.19	203.90	12.24	204.94	54.37
201.84	0.00	202.88	1.21	203.92	12.60	204.96	57.35
201.86	0.00	202.90	1.22	203.94	12.95	204.98	60.45
201.88	0.00	202.92	1.24	203.96	13.31	205.00	**63.65**
201.90	0.00	202.94	1.26	203.98	13.68		
201.92	0.00	202.96	1.28	204.00	14.04		
201.94	0.01	202.98	1.29	204.02	14.41		
201.96	0.01	203.00	1.31	204.04	14.78		
201.98	0.02	203.02	1.33	204.06	15.16		
202.00	0.03	203.04	1.38	204.08	15.54		
202.02	0.05	203.06	1.46	204.10	15.62		

Summary for Pond B-13: Basin #13

Inflow Area = 2.350 ac, 62.43% Impervious, Inflow Depth = 2.82" for Future 2 yr event
Inflow = 6.55 cfs @ 12.17 hrs, Volume= 0.551 af
Outflow = 0.29 cfs @ 14.68 hrs, Volume= 0.351 af, Atten= 96%, Lag= 150.3 min
Primary = 0.29 cfs @ 14.68 hrs, Volume= 0.351 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.99' @ 14.68 hrs Surf.Area= 9,644 sf Storage= 17,505 cf

Plug-Flow detention time= 768.2 min calculated for 0.351 af (64% of inflow)
Center-of-Mass det. time= 658.9 min (1,436.3 - 777.4)

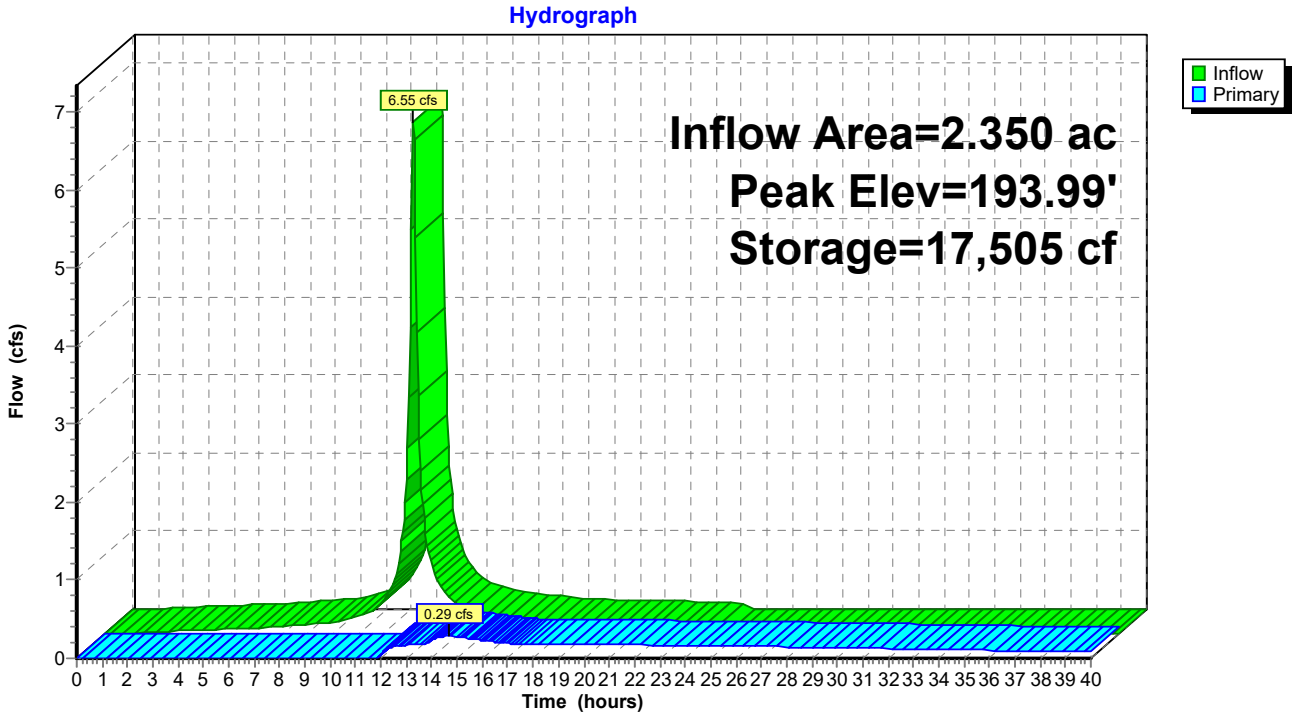
Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	38,667 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	7,975	0	0
193.00	8,804	8,390	8,390
194.00	9,654	9,229	17,619
195.00	10,522	10,088	27,707
196.00	11,399	10,961	38,667

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 57.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0465 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.70'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.95'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.96'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.28 cfs @ 14.68 hrs HW=193.99' (Free Discharge)
- **1=Culvert** (Passes 0.28 cfs of 13.69 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.24 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.10 cfs @ 0.64 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-13: Basin #13



Stage-Discharge for Pond B-13: Basin #13

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.00	0.00	193.04	0.08	194.08	0.79	195.12	23.38
192.02	0.00	193.06	0.08	194.10	0.94	195.14	25.23
192.04	0.00	193.08	0.09	194.12	1.10	195.16	27.06
192.06	0.00	193.10	0.09	194.14	1.26	195.18	28.83
192.08	0.00	193.12	0.09	194.16	1.44	195.20	30.69
192.10	0.00	193.14	0.10	194.18	1.62	195.22	32.66
192.12	0.00	193.16	0.10	194.20	1.81	195.24	34.72
192.14	0.00	193.18	0.10	194.22	2.01	195.26	36.89
192.16	0.00	193.20	0.10	194.24	2.21	195.28	39.15
192.18	0.00	193.22	0.11	194.26	2.42	195.30	41.51
192.20	0.00	193.24	0.11	194.28	2.64	195.32	43.96
192.22	0.00	193.26	0.11	194.30	2.86	195.34	46.51
192.24	0.00	193.28	0.11	194.32	3.09	195.36	49.16
192.26	0.00	193.30	0.12	194.34	3.33	195.38	51.96
192.28	0.00	193.32	0.12	194.36	3.57	195.40	54.87
192.30	0.00	193.34	0.12	194.38	3.81	195.42	57.88
192.32	0.00	193.36	0.12	194.40	4.07	195.44	60.99
192.34	0.00	193.38	0.12	194.42	4.32	195.46	64.21
192.36	0.00	193.40	0.13	194.44	4.59	195.48	67.53
192.38	0.00	193.42	0.13	194.46	4.85	195.50	70.97
192.40	0.00	193.44	0.13	194.48	5.13	195.52	74.50
192.42	0.00	193.46	0.13	194.50	5.40	195.54	78.15
192.44	0.00	193.48	0.13	194.52	5.68	195.56	81.90
192.46	0.00	193.50	0.14	194.54	5.97	195.58	85.21
192.48	0.00	193.52	0.14	194.56	6.26	195.60	88.58
192.50	0.00	193.54	0.14	194.58	6.55	195.62	91.99
192.52	0.00	193.56	0.14	194.60	6.85	195.64	95.46
192.54	0.00	193.58	0.14	194.62	7.15	195.66	98.98
192.56	0.00	193.60	0.15	194.64	7.46	195.68	102.55
192.58	0.00	193.62	0.15	194.66	7.77	195.70	106.17
192.60	0.00	193.64	0.15	194.68	8.09	195.72	109.84
192.62	0.00	193.66	0.15	194.70	8.40	195.74	113.56
192.64	0.00	193.68	0.15	194.72	8.72	195.76	117.33
192.66	0.00	193.70	0.16	194.74	9.05	195.78	121.22
192.68	0.00	193.72	0.16	194.76	9.38	195.80	125.17
192.70	0.00	193.74	0.16	194.78	9.71	195.82	129.17
192.72	0.00	193.76	0.16	194.80	10.05	195.84	133.22
192.74	0.00	193.78	0.16	194.82	10.39	195.86	137.32
192.76	0.01	193.80	0.16	194.84	10.73	195.88	141.48
192.78	0.01	193.82	0.17	194.86	11.07	195.90	145.68
192.80	0.02	193.84	0.17	194.88	11.42	195.92	149.94
192.82	0.02	193.86	0.17	194.90	11.77	195.94	154.25
192.84	0.03	193.88	0.17	194.92	12.13	195.96	158.60
192.86	0.04	193.90	0.17	194.94	12.49	195.98	162.90
192.88	0.05	193.92	0.17	194.96	12.85	196.00	**167.24**
192.90	0.05	193.94	0.17	194.98	13.54		
192.92	0.06	193.96	0.19	195.00	14.52		
192.94	0.06	193.98	0.25	195.02	15.67		
192.96	0.06	194.00	0.33	195.04	16.98		
192.98	0.07	194.02	0.42	195.06	18.41		
193.00	0.07	194.04	0.53	195.08	19.96		
193.02	0.08	194.06	0.66	195.10	21.62		

Summary for Pond B-14: Basin #14

Inflow Area = 2.148 ac, 23.65% Impervious, Inflow Depth = 1.99" for Future 2 yr event
Inflow = 4.42 cfs @ 12.18 hrs, Volume= 0.356 af
Outflow = 0.30 cfs @ 13.77 hrs, Volume= 0.280 af, Atten= 93%, Lag= 95.3 min
Primary = 0.30 cfs @ 13.77 hrs, Volume= 0.280 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.50' @ 13.77 hrs Surf.Area= 6,926 sf Storage= 9,838 cf

Plug-Flow detention time= 616.9 min calculated for 0.280 af (79% of inflow)
Center-of-Mass det. time= 528.8 min (1,343.7 - 814.9)

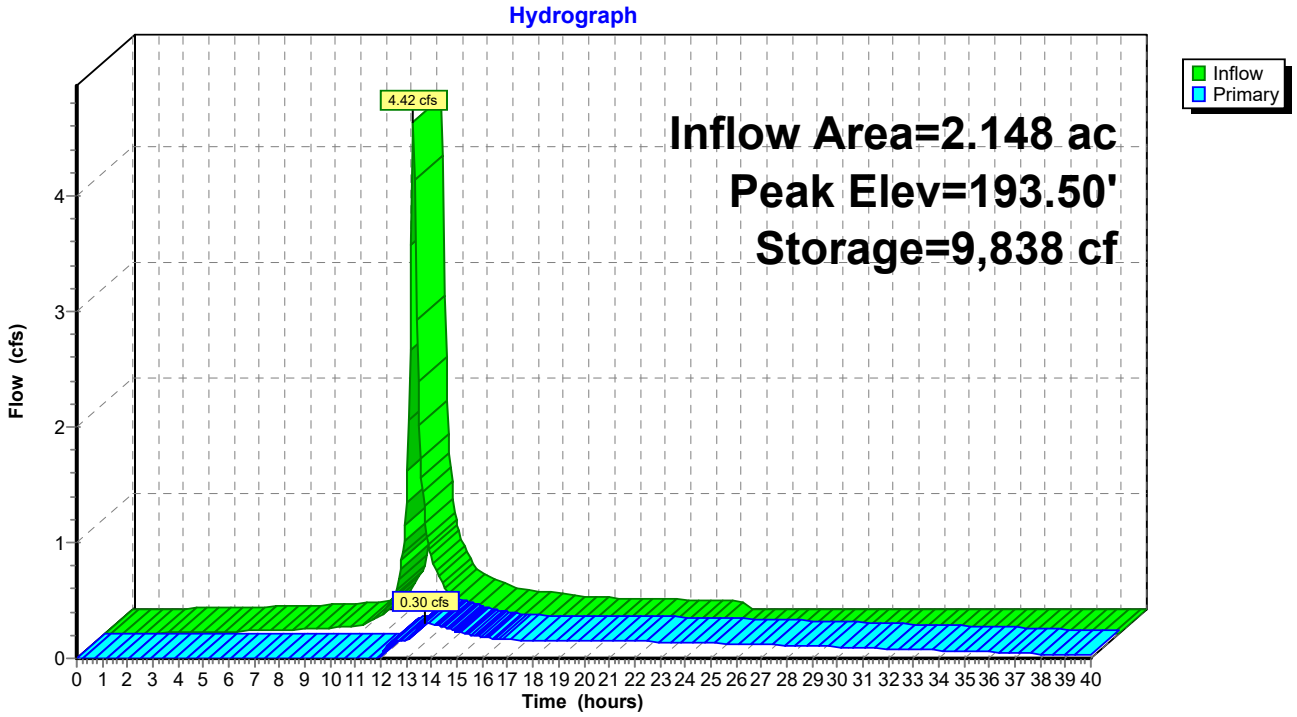
Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	28,705 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	6,224	0	0
193.00	6,689	6,457	6,457
194.00	7,167	6,928	13,385
195.00	7,657	7,412	20,797
196.00	8,160	7,909	28,705

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 194.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0137 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.40'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.45'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.44'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.30 cfs @ 13.77 hrs HW=193.50' (Free Discharge)
- **1=Culvert** (Passes 0.30 cfs of 12.32 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.16 cfs @ 4.80 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.13 cfs @ 0.71 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-14: Basin #14



Stage-Discharge for Pond B-14: Basin #14

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.00	0.00	193.04	0.12	194.08	6.54	195.12	92.90
192.02	0.00	193.06	0.12	194.10	6.84	195.14	96.41
192.04	0.00	193.08	0.12	194.12	7.14	195.16	99.96
192.06	0.00	193.10	0.13	194.14	7.45	195.18	103.57
192.08	0.00	193.12	0.13	194.16	7.76	195.20	107.23
192.10	0.00	193.14	0.13	194.18	8.07	195.22	110.93
192.12	0.00	193.16	0.13	194.20	8.39	195.24	114.69
192.14	0.00	193.18	0.13	194.22	8.71	195.26	118.57
192.16	0.00	193.20	0.14	194.24	9.04	195.28	122.50
192.18	0.00	193.22	0.14	194.26	9.37	195.30	126.48
192.20	0.00	193.24	0.14	194.28	9.70	195.32	130.52
192.22	0.00	193.26	0.14	194.30	10.03	195.34	134.61
192.24	0.00	193.28	0.14	194.32	10.37	195.36	138.75
192.26	0.00	193.30	0.15	194.34	10.72	195.38	142.94
192.28	0.00	193.32	0.15	194.36	11.06	195.40	147.18
192.30	0.00	193.34	0.15	194.38	11.41	195.42	151.47
192.32	0.00	193.36	0.15	194.40	11.76	195.44	155.82
192.34	0.00	193.38	0.15	194.42	12.12	195.46	160.10
192.36	0.00	193.40	0.16	194.44	12.47	195.48	164.43
192.38	0.00	193.42	0.16	194.46	13.17	195.50	168.80
192.40	0.00	193.44	0.16	194.48	14.14	195.52	173.21
192.42	0.00	193.46	0.17	194.50	15.29	195.54	177.66
192.44	0.00	193.48	0.23	194.52	16.59	195.56	182.16
192.46	0.01	193.50	0.31	194.54	17.89	195.58	186.69
192.48	0.01	193.52	0.41	194.56	19.09	195.60	191.27
192.50	0.02	193.54	0.52	194.58	20.40	195.62	195.89
192.52	0.02	193.56	0.64	194.60	21.80	195.64	200.54
192.54	0.03	193.58	0.78	194.62	23.29	195.66	205.31
192.56	0.04	193.60	0.93	194.64	24.88	195.68	210.12
192.58	0.05	193.62	1.08	194.66	26.62	195.70	214.98
192.60	0.05	193.64	1.25	194.68	28.47	195.72	219.87
192.62	0.06	193.66	1.42	194.70	30.42	195.74	224.81
192.64	0.06	193.68	1.60	194.72	32.47	195.76	229.79
192.66	0.06	193.70	1.79	194.74	34.62	195.78	234.81
192.68	0.07	193.72	1.99	194.76	36.86	195.80	239.88
192.70	0.07	193.74	2.20	194.78	39.21	195.82	244.98
192.72	0.08	193.76	2.41	194.80	41.65	195.84	250.13
192.74	0.08	193.78	2.62	194.82	44.18	195.86	255.41
192.76	0.08	193.80	2.85	194.84	46.82	195.88	260.73
192.78	0.09	193.82	3.08	194.86	49.60	195.90	266.10
192.80	0.09	193.84	3.31	194.88	52.49	195.92	271.51
192.82	0.09	193.86	3.55	194.90	55.48	195.94	276.96
192.84	0.10	193.88	3.80	194.92	58.58	195.96	282.46
192.86	0.10	193.90	4.05	194.94	61.79	195.98	288.00
192.88	0.10	193.92	4.31	194.96	65.10	196.00	**293.59**
192.90	0.10	193.94	4.57	194.98	68.51		
192.92	0.11	193.96	4.84	195.00	72.04		
192.94	0.11	193.98	5.11	195.02	75.67		
192.96	0.11	194.00	5.39	195.04	79.41		
192.98	0.11	194.02	5.67	195.06	82.70		
193.00	0.12	194.04	5.96	195.08	86.05		
193.02	0.12	194.06	6.25	195.10	89.45		

Summary for Pond B-15: Basin #15

Inflow Area = 2.365 ac, 58.73% Impervious, Inflow Depth = 2.74" for Future 2 yr event
Inflow = 6.43 cfs @ 12.17 hrs, Volume= 0.539 af
Outflow = 1.89 cfs @ 12.49 hrs, Volume= 0.412 af, Atten= 71%, Lag= 19.0 min
Primary = 1.89 cfs @ 12.49 hrs, Volume= 0.412 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 198.73' @ 12.49 hrs Surf.Area= 5,222 sf Storage= 12,120 cf

Plug-Flow detention time= 242.2 min calculated for 0.411 af (76% of inflow)
Center-of-Mass det. time= 153.7 min (933.8 - 780.0)

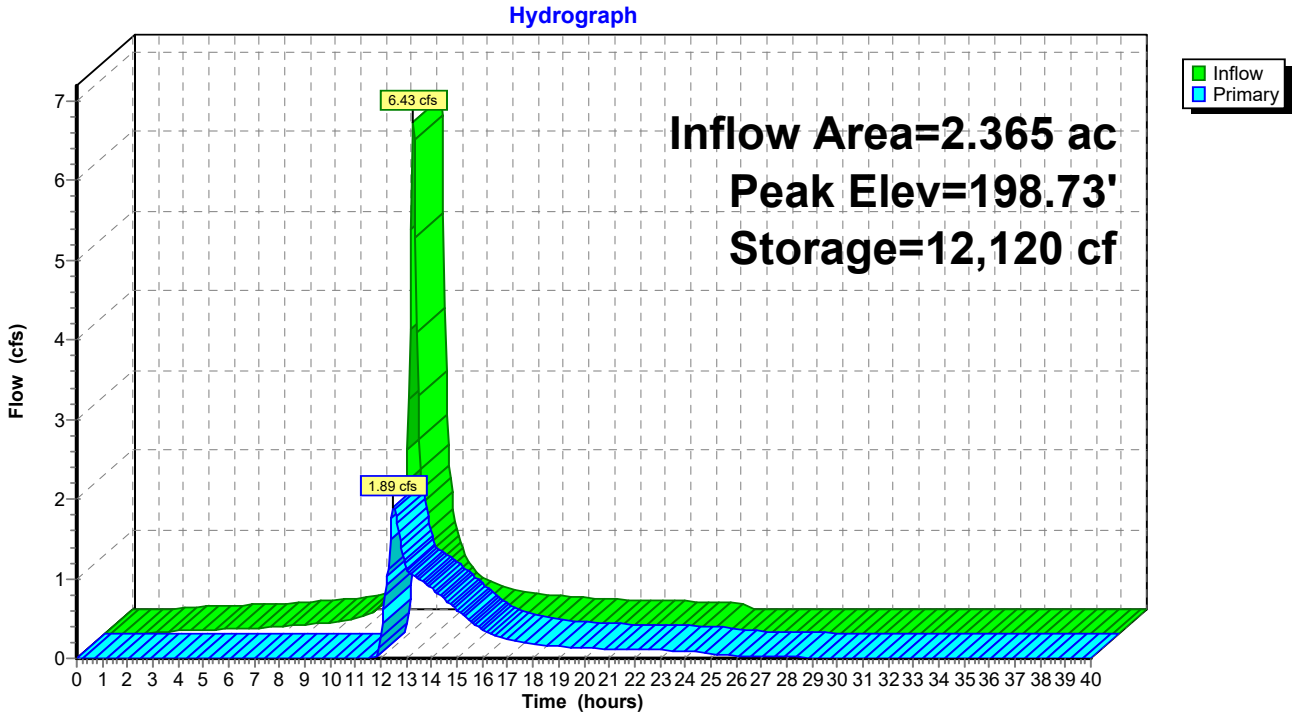
Volume	Invert	Avail.Storage	Storage Description
#1	196.00'	19,269 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.00	3,706	0	0
197.00	4,236	3,971	3,971
198.00	4,795	4,516	8,487
199.00	5,384	5,090	13,576
200.00	6,002	5,693	19,269

Device	Routing	Invert	Outlet Devices
#1	Primary	194.65'	**18.0" Round Culvert** L= 203.0' Ke= 0.500 Inlet / Outlet Invert= 194.65' / 192.00' S= 0.0131 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	197.35'	**6.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	198.58'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	199.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.88 cfs @ 12.49 hrs HW=198.72' (Free Discharge)
- **1=Culvert** (Passes 1.88 cfs of 14.20 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.17 cfs @ 5.06 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.72 cfs @ 1.24 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-15: Basin #15



Stage-Discharge for Pond B-15: Basin #15

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.00	0.00	197.04	0.00	198.08	0.75	199.12	6.41
196.02	0.00	197.06	0.00	198.10	0.77	199.14	6.70
196.04	0.00	197.08	0.00	198.12	0.78	199.16	6.99
196.06	0.00	197.10	0.00	198.14	0.80	199.18	7.28
196.08	0.00	197.12	0.00	198.16	0.81	199.20	7.58
196.10	0.00	197.14	0.00	198.18	0.83	199.22	7.89
196.12	0.00	197.16	0.00	198.20	0.84	199.24	8.19
196.14	0.00	197.18	0.00	198.22	0.86	199.26	8.51
196.16	0.00	197.20	0.00	198.24	0.87	199.28	8.82
196.18	0.00	197.22	0.00	198.26	0.89	199.30	9.14
196.20	0.00	197.24	0.00	198.28	0.90	199.32	9.46
196.22	0.00	197.26	0.00	198.30	0.91	199.34	9.79
196.24	0.00	197.28	0.00	198.32	0.93	199.36	10.12
196.26	0.00	197.30	0.00	198.34	0.94	199.38	10.46
196.28	0.00	197.32	0.00	198.36	0.95	199.40	10.79
196.30	0.00	197.34	0.00	198.38	0.97	199.42	11.14
196.32	0.00	197.36	0.00	198.40	0.98	199.44	11.48
196.34	0.00	197.38	0.00	198.42	0.99	199.46	11.83
196.36	0.00	197.40	0.01	198.44	1.00	199.48	12.18
196.38	0.00	197.42	0.02	198.46	1.02	199.50	12.53
196.40	0.00	197.44	0.03	198.48	1.03	199.52	12.89
196.42	0.00	197.46	0.04	198.50	1.04	199.54	13.25
196.44	0.00	197.48	0.05	198.52	1.05	199.56	13.61
196.46	0.00	197.50	0.07	198.54	1.06	199.58	13.98
196.48	0.00	197.52	0.09	198.56	1.08	199.60	14.35
196.50	0.00	197.54	0.11	198.58	1.09	199.62	14.72
196.52	0.00	197.56	0.13	198.60	1.13	199.64	15.09
196.54	0.00	197.58	0.15	198.62	1.21	199.66	15.42
196.56	0.00	197.60	0.18	198.64	1.31	199.68	15.44
196.58	0.00	197.62	0.20	198.66	1.43	199.70	15.47
196.60	0.00	197.64	0.23	198.68	1.55	199.72	15.49
196.62	0.00	197.66	0.26	198.70	1.69	199.74	15.52
196.64	0.00	197.68	0.29	198.72	1.84	199.76	15.54
196.66	0.00	197.70	0.32	198.74	2.00	199.78	15.57
196.68	0.00	197.72	0.35	198.76	2.17	199.80	15.59
196.70	0.00	197.74	0.38	198.78	2.35	199.82	15.62
196.72	0.00	197.76	0.41	198.80	2.54	199.84	15.64
196.74	0.00	197.78	0.44	198.82	2.73	199.86	15.66
196.76	0.00	197.80	0.47	198.84	2.94	199.88	15.69
196.78	0.00	197.82	0.50	198.86	3.15	199.90	15.71
196.80	0.00	197.84	0.52	198.88	3.36	199.92	15.74
196.82	0.00	197.86	0.55	198.90	3.58	199.94	15.76
196.84	0.00	197.88	0.57	198.92	3.81	199.96	15.79
196.86	0.00	197.90	0.59	198.94	4.05	199.98	15.81
196.88	0.00	197.92	0.61	198.96	4.29	200.00	**15.95**
196.90	0.00	197.94	0.63	198.98	4.54		
196.92	0.00	197.96	0.65	199.00	4.79		
196.94	0.00	197.98	0.66	199.02	5.05		
196.96	0.00	198.00	0.68	199.04	5.31		
196.98	0.00	198.02	0.70	199.06	5.58		
197.00	0.00	198.04	0.72	199.08	5.85		
197.02	0.00	198.06	0.74	199.10	6.13		

Summary for Pond B-16A: Basin #16A

Inflow Area = 1.876 ac, 45.47% Impervious, Inflow Depth = 2.45" for Future 2 yr event
Inflow = 4.63 cfs @ 12.17 hrs, Volume= 0.384 af
Outflow = 2.45 cfs @ 12.33 hrs, Volume= 0.305 af, Atten= 47%, Lag= 9.4 min
Primary = 2.45 cfs @ 12.33 hrs, Volume= 0.305 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.91' @ 12.33 hrs Surf.Area= 3,991 sf Storage= 6,234 cf

Plug-Flow detention time= 167.1 min calculated for 0.305 af (79% of inflow)
Center-of-Mass det. time= 81.7 min (872.4 - 790.7)

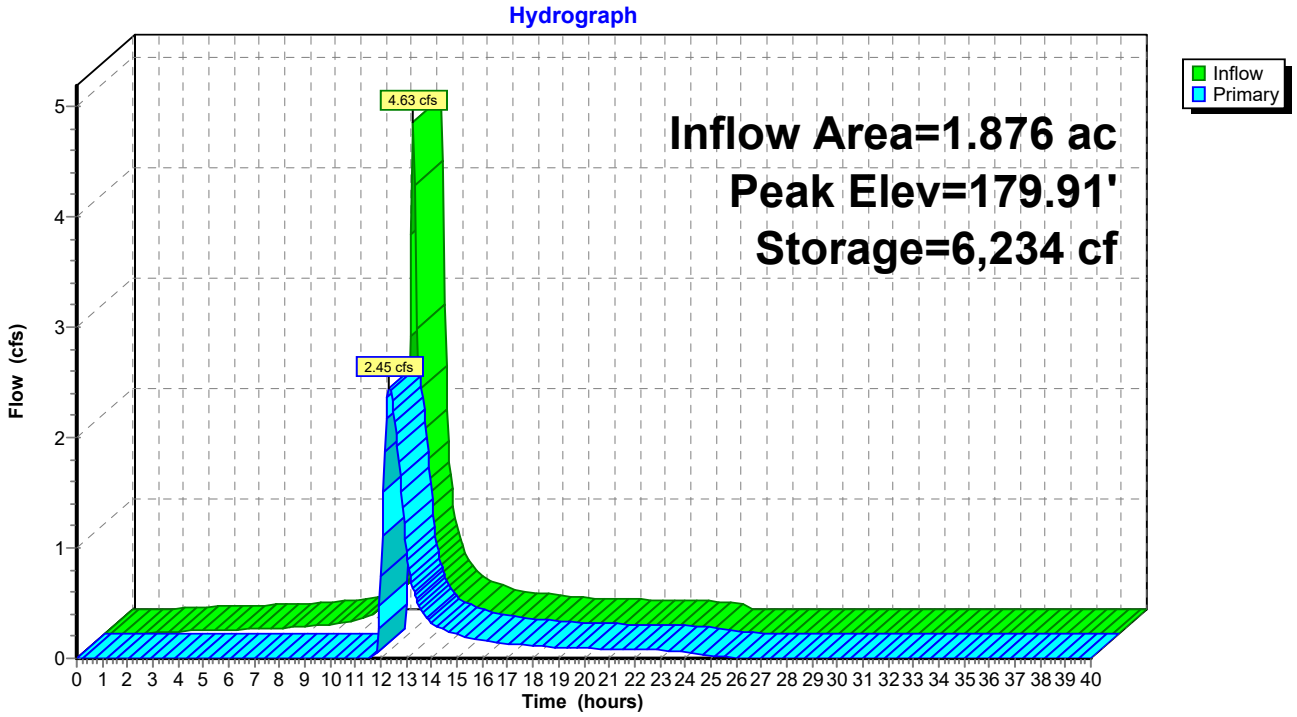
Volume	Invert	Avail.Storage	Storage Description
#1	178.00'	16,318 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
178.00	2,543	0	0
179.00	3,287	2,915	2,915
180.00	4,059	3,673	6,588
181.00	4,858	4,459	11,047
182.00	5,685	5,272	16,318

Device	Routing	Invert	Outlet Devices
#1	Primary	176.65'	**18.0" Round Culvert** L= 53.0' Ke= 0.500 Inlet / Outlet Invert= 176.65' / 172.00' S= 0.0877 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.16'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.44 cfs @ 12.33 hrs HW=179.91' (Free Discharge)
- **1=Culvert** (Passes 2.44 cfs of 13.48 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.44 cfs @ 3.66 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-16A: Basin #16A



Stage-Discharge for Pond B-16A: Basin #16A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.00	0.00	179.04	0.00	180.08	3.69	181.12	16.41
178.02	0.00	179.06	0.00	180.10	3.89	181.14	16.46
178.04	0.00	179.08	0.00	180.12	4.10	181.16	16.50
178.06	0.00	179.10	0.00	180.14	4.32	181.18	16.54
178.08	0.00	179.12	0.00	180.16	4.54	181.20	16.59
178.10	0.00	179.14	0.00	180.18	4.77	181.22	16.63
178.12	0.00	179.16	0.00	180.20	5.01	181.24	16.67
178.14	0.00	179.18	0.02	180.22	5.25	181.26	16.72
178.16	0.00	179.20	0.05	180.24	5.50	181.28	16.76
178.18	0.00	179.22	0.09	180.26	5.76	181.30	16.80
178.20	0.00	179.24	0.15	180.28	6.02	181.32	16.85
178.22	0.00	179.26	0.20	180.30	6.29	181.34	16.89
178.24	0.00	179.28	0.27	180.32	6.56	181.36	16.93
178.26	0.00	179.30	0.34	180.34	6.84	181.38	16.97
178.28	0.00	179.32	0.41	180.36	7.12	181.40	17.02
178.30	0.00	179.34	0.49	180.38	7.41	181.42	17.06
178.32	0.00	179.36	0.57	180.40	7.70	181.44	17.10
178.34	0.00	179.38	0.66	180.42	8.00	181.46	17.14
178.36	0.00	179.40	0.75	180.44	8.30	181.48	17.19
178.38	0.00	179.42	0.85	180.46	8.60	181.50	17.23
178.40	0.00	179.44	0.95	180.48	8.91	181.52	17.27
178.42	0.00	179.46	1.05	180.50	9.23	181.54	17.31
178.44	0.00	179.48	1.16	180.52	9.55	181.56	17.35
178.46	0.00	179.50	1.27	180.54	9.87	181.58	17.40
178.48	0.00	179.52	1.36	180.56	10.19	181.60	17.44
178.50	0.00	179.54	1.44	180.58	10.52	181.62	17.48
178.52	0.00	179.56	1.51	180.60	10.86	181.64	17.52
178.54	0.00	179.58	1.58	180.62	11.20	181.66	17.56
178.56	0.00	179.60	1.65	180.64	11.54	181.68	17.60
178.58	0.00	179.62	1.71	180.66	11.88	181.70	17.64
178.60	0.00	179.64	1.77	180.68	12.23	181.72	17.69
178.62	0.00	179.66	1.83	180.70	12.58	181.74	17.73
178.64	0.00	179.68	1.89	180.72	12.94	181.76	17.77
178.66	0.00	179.70	1.94	180.74	13.29	181.78	17.81
178.68	0.00	179.72	2.00	180.76	13.66	181.80	17.85
178.70	0.00	179.74	2.05	180.78	14.02	181.82	17.89
178.72	0.00	179.76	2.10	180.80	14.39	181.84	17.93
178.74	0.00	179.78	2.15	180.82	14.76	181.86	17.97
178.76	0.00	179.80	2.20	180.84	15.13	181.88	18.01
178.78	0.00	179.82	2.24	180.86	15.51	181.90	18.05
178.80	0.00	179.84	2.29	180.88	15.87	181.92	18.09
178.82	0.00	179.86	2.33	180.90	15.92	181.94	18.13
178.84	0.00	179.88	2.38	180.92	15.96	181.96	18.29
178.86	0.00	179.90	2.42	180.94	16.01	181.98	18.82
178.88	0.00	179.92	2.48	180.96	16.05	182.00	**19.56**
178.90	0.00	179.94	2.57	180.98	16.10		
178.92	0.00	179.96	2.69	181.00	16.14		
178.94	0.00	179.98	2.83	181.02	16.19		
178.96	0.00	180.00	2.98	181.04	16.23		
178.98	0.00	180.02	3.14	181.06	16.28		
179.00	0.00	180.04	3.31	181.08	16.32		
179.02	0.00	180.06	3.50	181.10	16.37		

Summary for Pond B-16B: Basin #16B

Inflow Area = 1.877 ac, 43.74% Impervious, Inflow Depth = 2.42" for Future 2 yr event
Inflow = 4.57 cfs @ 12.17 hrs, Volume= 0.378 af
Outflow = 1.47 cfs @ 12.46 hrs, Volume= 0.299 af, Atten= 68%, Lag= 17.4 min
Primary = 1.47 cfs @ 12.46 hrs, Volume= 0.299 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.92' @ 12.46 hrs Surf.Area= 4,399 sf Storage= 7,237 cf

Plug-Flow detention time= 179.4 min calculated for 0.298 af (79% of inflow)
Center-of-Mass det. time= 94.2 min (886.5 - 792.3)

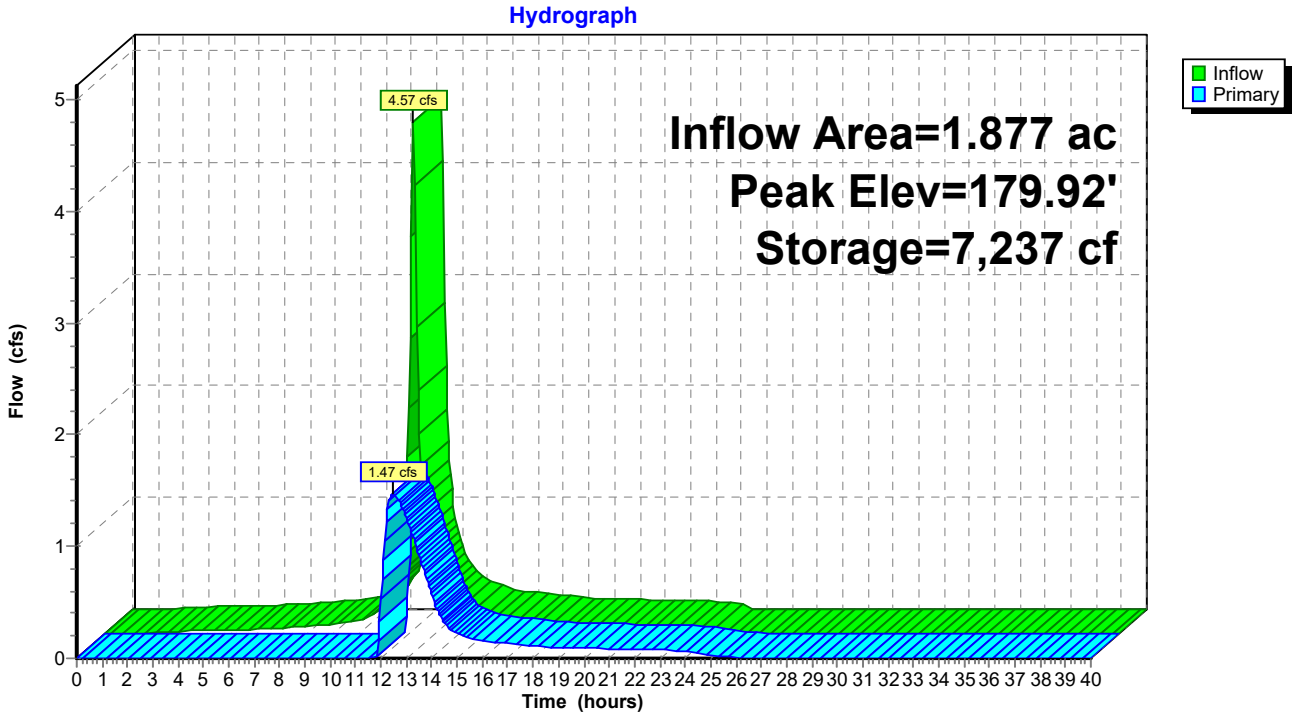
Volume	Invert	Avail.Storage	Storage Description
#1	178.00'	17,892 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
178.00	3,145	0	0
179.00	3,781	3,463	3,463
180.00	4,451	4,116	7,579
181.00	5,149	4,800	12,379
182.00	5,877	5,513	17,892

Device	Routing	Invert	Outlet Devices
#1	Primary	176.65'	**18.0" Round Culvert** L= 53.0' Ke= 0.500 Inlet / Outlet Invert= 176.65' / 172.00' S= 0.0877 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.00'	**24.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	180.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.67'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.47 cfs @ 12.46 hrs HW=179.92' (Free Discharge)
- **1=Culvert** (Passes 1.47 cfs of 13.51 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.47 cfs @ 4.41 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-16B: Basin #16B



Stage-Discharge for Pond B-16B: Basin #16B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.00	0.00	179.04	0.05	180.08	1.90	181.12	55.73
178.02	0.00	179.06	0.09	180.10	2.03	181.14	58.79
178.04	0.00	179.08	0.15	180.12	2.17	181.16	61.96
178.06	0.00	179.10	0.20	180.14	2.33	181.18	65.24
178.08	0.00	179.12	0.27	180.16	2.50	181.20	68.62
178.10	0.00	179.14	0.34	180.18	2.67	181.22	72.10
178.12	0.00	179.16	0.41	180.20	2.85	181.24	75.70
178.14	0.00	179.18	0.48	180.22	3.05	181.26	79.40
178.16	0.00	179.20	0.54	180.24	3.25	181.28	82.94
178.18	0.00	179.22	0.58	180.26	3.45	181.30	86.27
178.20	0.00	179.24	0.63	180.28	3.67	181.32	89.66
178.22	0.00	179.26	0.67	180.30	3.89	181.34	93.11
178.24	0.00	179.28	0.71	180.32	4.11	181.36	96.60
178.26	0.00	179.30	0.74	180.34	4.35	181.38	100.15
178.28	0.00	179.32	0.78	180.36	4.59	181.40	103.75
178.30	0.00	179.34	0.81	180.38	4.83	181.42	107.40
178.32	0.00	179.36	0.84	180.40	5.08	181.44	111.09
178.34	0.00	179.38	0.87	180.42	5.34	181.46	114.84
178.36	0.00	179.40	0.90	180.44	5.60	181.48	118.67
178.38	0.00	179.42	0.93	180.46	5.87	181.50	122.59
178.40	0.00	179.44	0.96	180.48	6.14	181.52	126.57
178.42	0.00	179.46	0.98	180.50	6.42	181.54	130.59
178.44	0.00	179.48	1.01	180.52	6.70	181.56	134.67
178.46	0.00	179.50	1.03	180.54	6.99	181.58	138.80
178.48	0.00	179.52	1.06	180.56	7.28	181.60	142.98
178.50	0.00	179.54	1.08	180.58	7.57	181.62	147.21
178.52	0.00	179.56	1.11	180.60	7.87	181.64	151.50
178.54	0.00	179.58	1.13	180.62	8.18	181.66	155.83
178.56	0.00	179.60	1.15	180.64	8.48	181.68	160.16
178.58	0.00	179.62	1.17	180.66	8.80	181.70	164.48
178.60	0.00	179.64	1.20	180.68	9.23	181.72	168.84
178.62	0.00	179.66	1.22	180.70	10.04	181.74	173.25
178.64	0.00	179.68	1.24	180.72	11.07	181.76	177.70
178.66	0.00	179.70	1.26	180.74	12.26	181.78	182.19
178.68	0.00	179.72	1.28	180.76	13.59	181.80	186.72
178.70	0.00	179.74	1.30	180.78	15.04	181.82	191.29
178.72	0.00	179.76	1.32	180.80	16.61	181.84	195.90
178.74	0.00	179.78	1.34	180.82	18.28	181.86	200.55
178.76	0.00	179.80	1.36	180.84	20.04	181.88	205.28
178.78	0.00	179.82	1.38	180.86	21.90	181.90	210.08
178.80	0.00	179.84	1.40	180.88	23.89	181.92	214.93
178.82	0.00	179.86	1.41	180.90	26.01	181.94	219.82
178.84	0.00	179.88	1.43	180.92	28.24	181.96	224.75
178.86	0.00	179.90	1.45	180.94	30.57	181.98	229.73
178.88	0.00	179.92	1.47	180.96	33.01	182.00	**234.74**
178.90	0.00	179.94	1.48	180.98	35.54		
178.92	0.00	179.96	1.50	181.00	38.18		
178.94	0.00	179.98	1.52	181.02	40.92		
178.96	0.00	180.00	1.54	181.04	43.75		
178.98	0.00	180.02	1.59	181.06	46.69		
179.00	0.00	180.04	1.67	181.08	49.75		
179.02	0.02	180.06	1.78	181.10	52.77		

Summary for Pond B-17A: Basin #17A

Inflow Area = 1.324 ac, 14.58% Impervious, Inflow Depth = 1.80" for Future 2 yr event
Inflow = 2.50 cfs @ 12.18 hrs, Volume= 0.198 af
Outflow = 0.13 cfs @ 14.73 hrs, Volume= 0.167 af, Atten= 95%, Lag= 153.2 min
Primary = 0.13 cfs @ 14.73 hrs, Volume= 0.167 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.89' @ 14.73 hrs Surf.Area= 6,397 sf Storage= 5,326 cf

Plug-Flow detention time= 525.0 min calculated for 0.167 af (84% of inflow)
Center-of-Mass det. time= 452.3 min (1,281.0 - 828.7)

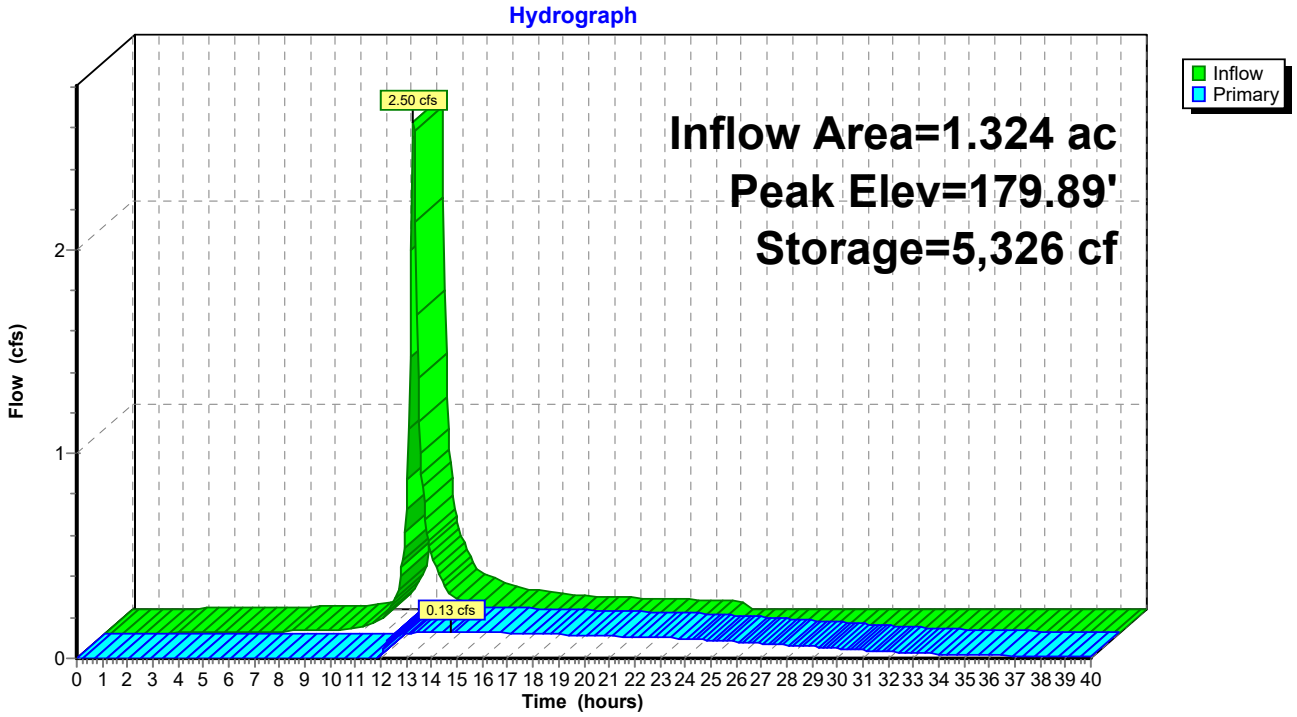
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	30,377 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	5,508	0	0
180.00	6,502	6,005	6,005
181.00	7,552	7,027	13,032
182.00	8,658	8,105	21,137
183.00	9,821	9,240	30,377

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 177.00' S= 0.0163 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.18'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.13 cfs @ 14.73 hrs HW=179.89' (Free Discharge)
- **1=Culvert** (Passes 0.13 cfs of 10.40 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.76 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-17A: Basin #17A



Stage-Discharge for Pond B-17A: Basin #17A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.14	181.08	0.22	182.12	9.08
179.02	0.00	180.06	0.14	181.10	0.22	182.14	10.74
179.04	0.00	180.08	0.15	181.12	0.22	182.16	12.52
179.06	0.00	180.10	0.15	181.14	0.22	182.18	14.45
179.08	0.00	180.12	0.15	181.16	0.22	182.20	16.49
179.10	0.00	180.14	0.15	181.18	0.23	182.22	18.64
179.12	0.00	180.16	0.15	181.20	0.23	182.24	20.90
179.14	0.00	180.18	0.16	181.22	0.23	182.26	23.26
179.16	0.00	180.20	0.16	181.24	0.23	182.28	25.73
179.18	0.00	180.22	0.16	181.26	0.23	182.30	28.30
179.20	0.00	180.24	0.16	181.28	0.23	182.32	30.97
179.22	0.00	180.26	0.16	181.30	0.23	182.34	33.75
179.24	0.01	180.28	0.16	181.32	0.23	182.36	36.66
179.26	0.01	180.30	0.17	181.34	0.24	182.38	39.70
179.28	0.02	180.32	0.17	181.36	0.24	182.40	42.85
179.30	0.02	180.34	0.17	181.38	0.24	182.42	46.11
179.32	0.03	180.36	0.17	181.40	0.24	182.44	49.49
179.34	0.04	180.38	0.17	181.42	0.24	182.46	52.97
179.36	0.05	180.40	0.17	181.44	0.24	182.48	56.57
179.38	0.05	180.42	0.17	181.46	0.24	182.50	60.28
179.40	0.06	180.44	0.18	181.48	0.24	182.52	64.09
179.42	0.06	180.46	0.18	181.50	0.24	182.54	68.03
179.44	0.06	180.48	0.18	181.52	0.25	182.56	71.80
179.46	0.07	180.50	0.18	181.54	0.25	182.58	75.38
179.48	0.07	180.52	0.18	181.56	0.25	182.60	79.01
179.50	0.08	180.54	0.18	181.58	0.25	182.62	82.71
179.52	0.08	180.56	0.19	181.60	0.25	182.64	86.46
179.54	0.08	180.58	0.19	181.62	0.25	182.66	90.26
179.56	0.09	180.60	0.19	181.64	0.25	182.68	94.12
179.58	0.09	180.62	0.19	181.66	0.25	182.70	98.03
179.60	0.09	180.64	0.19	181.68	0.25	182.72	102.00
179.62	0.10	180.66	0.19	181.70	0.26	182.74	106.02
179.64	0.10	180.68	0.19	181.72	0.26	182.76	110.13
179.66	0.10	180.70	0.20	181.74	0.26	182.78	114.33
179.68	0.10	180.72	0.20	181.76	0.26	182.80	118.59
179.70	0.11	180.74	0.20	181.78	0.26	182.82	122.90
179.72	0.11	180.76	0.20	181.80	0.26	182.84	127.27
179.74	0.11	180.78	0.20	181.82	0.26	182.86	131.70
179.76	0.11	180.80	0.20	181.84	0.26	182.88	136.18
179.78	0.12	180.82	0.20	181.86	0.26	182.90	140.71
179.80	0.12	180.84	0.20	181.88	0.26	182.92	145.30
179.82	0.12	180.86	0.21	181.90	0.27	182.94	149.94
179.84	0.12	180.88	0.21	181.92	0.27	182.96	154.58
179.86	0.12	180.90	0.21	181.94	0.27	182.98	159.22
179.88	0.13	180.92	0.21	181.96	0.39	183.00	**163.90**
179.90	0.13	180.94	0.21	181.98	0.88		
179.92	0.13	180.96	0.21	182.00	1.58		
179.94	0.13	180.98	0.21	182.02	2.48		
179.96	0.13	181.00	0.22	182.04	3.55		
179.98	0.14	181.02	0.22	182.06	4.76		
180.00	0.14	181.04	0.22	182.08	6.09		
180.02	0.14	181.06	0.22	182.10	7.53		

Summary for Pond B-17B: Basin #17B

Inflow Area = 1.385 ac, 37.11% Impervious, Inflow Depth = 2.28" for Future 2 yr event
Inflow = 3.20 cfs @ 12.17 hrs, Volume= 0.263 af
Outflow = 0.38 cfs @ 13.08 hrs, Volume= 0.193 af, Atten= 88%, Lag= 54.3 min
Primary = 0.38 cfs @ 13.08 hrs, Volume= 0.193 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.93' @ 13.08 hrs Surf.Area= 7,955 sf Storage= 6,912 cf

Plug-Flow detention time= 523.0 min calculated for 0.193 af (73% of inflow)
Center-of-Mass det. time= 426.8 min (1,225.6 - 798.8)

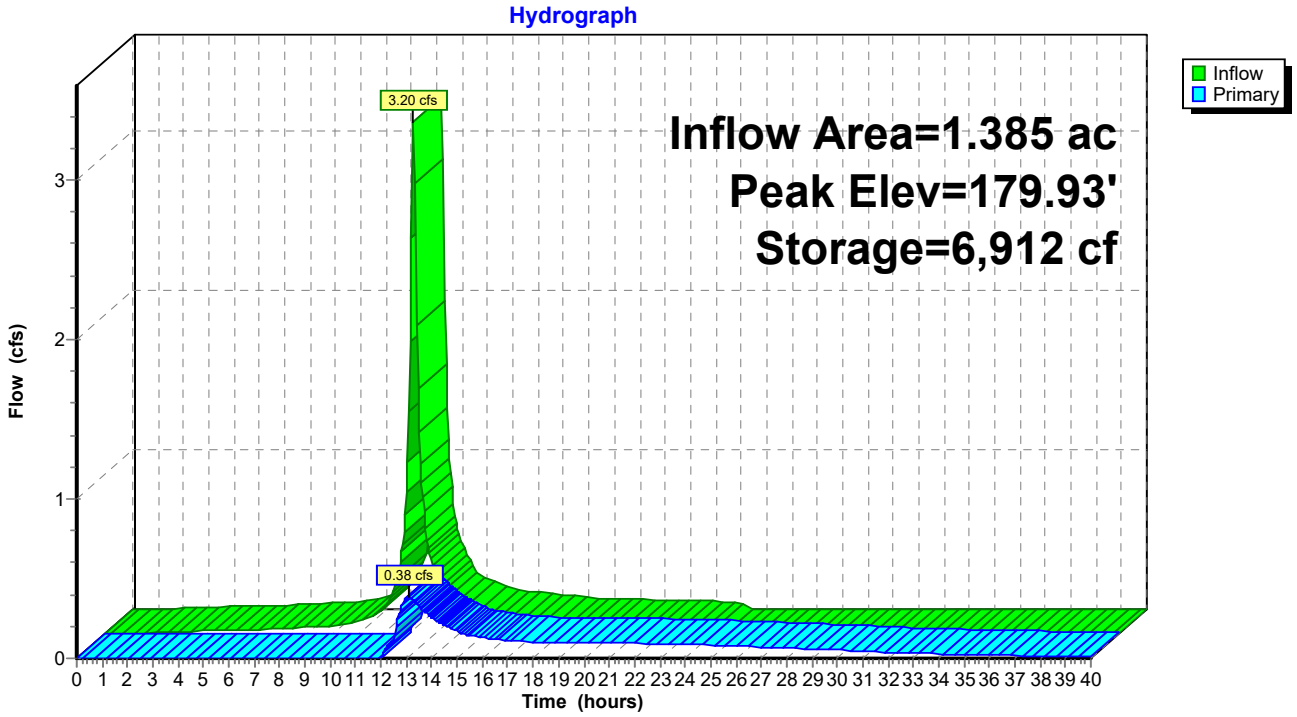
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	37,242 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	6,855	0	0
180.00	8,033	7,444	7,444
181.00	9,268	8,651	16,095
182.00	10,560	9,914	26,009
183.00	11,907	11,234	37,242

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 177.00' S= 0.0163 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.35'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.86'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.37 cfs @ 13.08 hrs HW=179.93' (Free Discharge)
- **1=Culvert** (Passes 0.37 cfs of 10.54 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.11 cfs @ 3.33 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.26 cfs @ 0.89 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-17B: Basin #17B



Stage-Discharge for Pond B-17B: Basin #17B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	1.12	181.08	13.93	182.12	24.68
179.02	0.00	180.06	1.29	181.10	13.98	182.14	26.23
179.04	0.00	180.08	1.46	181.12	14.03	182.16	27.91
179.06	0.00	180.10	1.65	181.14	14.08	182.18	29.72
179.08	0.00	180.12	1.85	181.16	14.14	182.20	31.64
179.10	0.00	180.14	2.05	181.18	14.19	182.22	33.66
179.12	0.00	180.16	2.25	181.20	14.24	182.24	35.77
179.14	0.00	180.18	2.47	181.22	14.29	182.26	37.98
179.16	0.00	180.20	2.69	181.24	14.34	182.28	40.29
179.18	0.00	180.22	2.92	181.26	14.39	182.30	42.70
179.20	0.00	180.24	3.15	181.28	14.44	182.32	45.20
179.22	0.00	180.26	3.39	181.30	14.49	182.34	47.80
179.24	0.00	180.28	3.63	181.32	14.54	182.36	50.53
179.26	0.00	180.30	3.88	181.34	14.59	182.38	53.38
179.28	0.00	180.32	4.14	181.36	14.64	182.40	56.34
179.30	0.00	180.34	4.40	181.38	14.69	182.42	59.40
179.32	0.00	180.36	4.67	181.40	14.74	182.44	62.57
179.34	0.00	180.38	4.94	181.42	14.79	182.46	65.84
179.36	0.00	180.40	5.21	181.44	14.84	182.48	69.22
179.38	0.00	180.42	5.49	181.46	14.88	182.50	72.70
179.40	0.00	180.44	5.77	181.48	14.93	182.52	76.29
179.42	0.01	180.46	6.06	181.50	14.98	182.54	79.99
179.44	0.01	180.48	6.35	181.52	15.03	182.56	83.53
179.46	0.02	180.50	6.65	181.54	15.08	182.58	86.87
179.48	0.03	180.52	6.95	181.56	15.13	182.60	90.26
179.50	0.03	180.54	7.26	181.58	15.17	182.62	93.70
179.52	0.04	180.56	7.56	181.60	15.22	182.64	97.19
179.54	0.05	180.58	7.88	181.62	15.27	182.66	100.74
179.56	0.05	180.60	8.19	181.64	15.32	182.68	104.34
179.58	0.06	180.62	8.51	181.66	15.36	182.70	107.98
179.60	0.06	180.64	8.84	181.68	15.41	182.72	111.68
179.62	0.07	180.66	9.17	181.70	15.46	182.74	115.42
179.64	0.07	180.68	9.50	181.72	15.50	182.76	119.25
179.66	0.07	180.70	9.83	181.74	15.55	182.78	123.17
179.68	0.08	180.72	10.17	181.76	15.60	182.80	127.14
179.70	0.08	180.74	10.51	181.78	15.64	182.82	131.17
179.72	0.08	180.76	10.85	181.80	15.69	182.84	135.25
179.74	0.09	180.78	11.20	181.82	15.74	182.86	139.37
179.76	0.09	180.80	11.55	181.84	15.78	182.88	143.55
179.78	0.09	180.82	11.90	181.86	15.83	182.90	147.78
179.80	0.10	180.84	12.26	181.88	15.87	182.92	152.07
179.82	0.10	180.86	12.62	181.90	15.92	182.94	156.40
179.84	0.10	180.88	12.98	181.92	15.96	182.96	160.73
179.86	0.10	180.90	13.35	181.94	16.01	182.98	165.05
179.88	0.14	180.92	13.51	181.96	16.17	183.00	**169.41**
179.90	0.21	180.94	13.56	181.98	16.71		
179.92	0.30	180.96	13.61	182.00	17.46		
179.94	0.41	180.98	13.67	182.02	18.36		
179.96	0.53	181.00	13.72	182.04	19.41		
179.98	0.66	181.02	13.77	182.06	20.57		
180.00	0.80	181.04	13.83	182.08	21.84		
180.02	0.95	181.06	13.88	182.10	23.21		

Summary for Pond B-2: Basin #2

Inflow Area = 1.894 ac, 38.23% Impervious, Inflow Depth = 2.30" for Future 2 yr event
Inflow = 4.42 cfs @ 12.17 hrs, Volume= 0.363 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond B-1 : Basin #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 210.60' @ 24.60 hrs Surf.Area= 9,006 sf Storage= 15,818 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

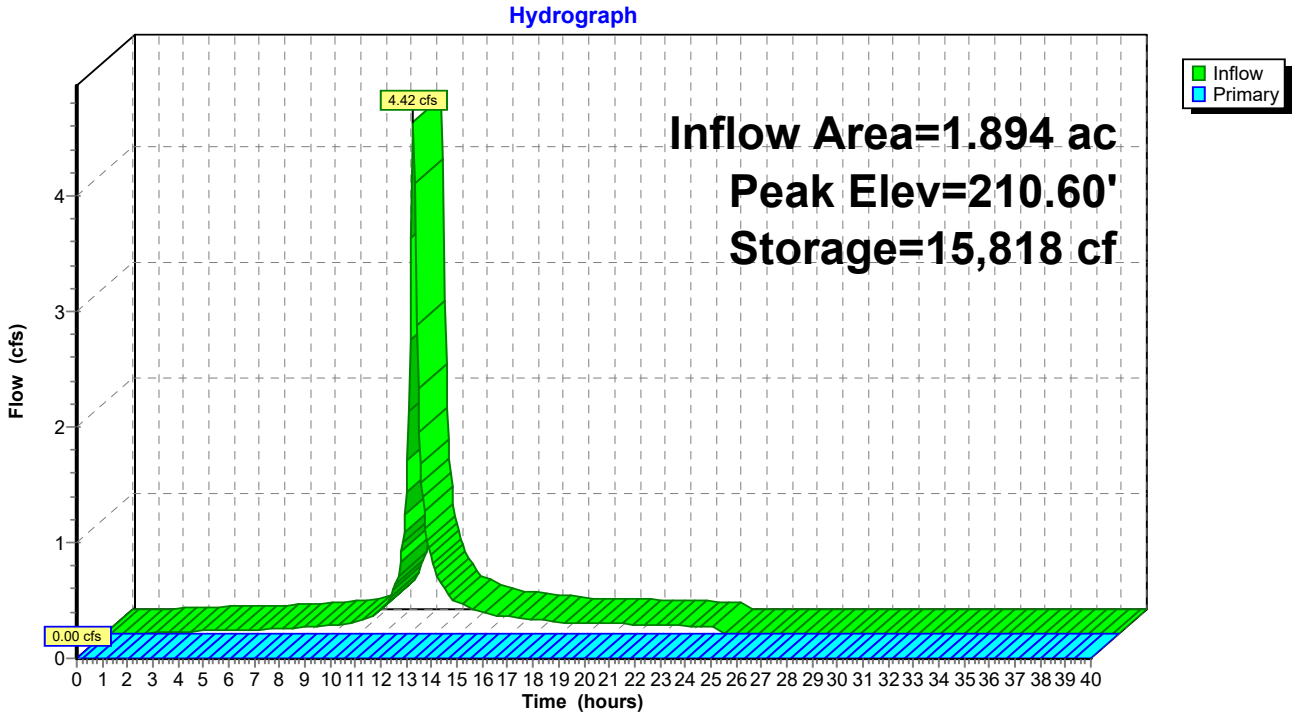
Volume	Invert	Avail.Storage	Storage Description
#1	208.30'	29,385 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
208.30	0	0	0
209.00	7,501	2,625	2,625
210.00	8,431	7,966	10,591
211.00	9,390	8,911	19,502
212.00	10,376	9,883	29,385

Device	Routing	Invert	Outlet Devices
#1	Primary	211.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=208.30' (Free Discharge)
1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-2: Basin #2



Stage-Discharge for Pond B-2: Basin #2

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
208.30	0.00	209.34	0.00	210.38	0.00	211.42	0.00
208.32	0.00	209.36	0.00	210.40	0.00	211.44	0.00
208.34	0.00	209.38	0.00	210.42	0.00	211.46	0.00
208.36	0.00	209.40	0.00	210.44	0.00	211.48	0.00
208.38	0.00	209.42	0.00	210.46	0.00	211.50	0.00
208.40	0.00	209.44	0.00	210.48	0.00	211.52	0.33
208.42	0.00	209.46	0.00	210.50	0.00	211.54	0.94
208.44	0.00	209.48	0.00	210.52	0.00	211.56	1.72
208.46	0.00	209.50	0.00	210.54	0.00	211.58	2.66
208.48	0.00	209.52	0.00	210.56	0.00	211.60	3.72
208.50	0.00	209.54	0.00	210.58	0.00	211.62	4.89
208.52	0.00	209.56	0.00	210.60	0.00	211.64	6.17
208.54	0.00	209.58	0.00	210.62	0.00	211.66	7.55
208.56	0.00	209.60	0.00	210.64	0.00	211.68	9.01
208.58	0.00	209.62	0.00	210.66	0.00	211.70	10.57
208.60	0.00	209.64	0.00	210.68	0.00	211.72	12.28
208.62	0.00	209.66	0.00	210.70	0.00	211.74	14.11
208.64	0.00	209.68	0.00	210.72	0.00	211.76	16.03
208.66	0.00	209.70	0.00	210.74	0.00	211.78	18.05
208.68	0.00	209.72	0.00	210.76	0.00	211.80	20.17
208.70	0.00	209.74	0.00	210.78	0.00	211.82	22.39
208.72	0.00	209.76	0.00	210.80	0.00	211.84	24.70
208.74	0.00	209.78	0.00	210.82	0.00	211.86	27.11
208.76	0.00	209.80	0.00	210.84	0.00	211.88	29.62
208.78	0.00	209.82	0.00	210.86	0.00	211.90	32.23
208.80	0.00	209.84	0.00	210.88	0.00	211.92	34.99
208.82	0.00	209.86	0.00	210.90	0.00	211.94	37.85
208.84	0.00	209.88	0.00	210.92	0.00	211.96	40.82
208.86	0.00	209.90	0.00	210.94	0.00	211.98	43.89
208.88	0.00	209.92	0.00	210.96	0.00	212.00	**47.07**
208.90	0.00	209.94	0.00	210.98	0.00		
208.92	0.00	209.96	0.00	211.00	0.00		
208.94	0.00	209.98	0.00	211.02	0.00		
208.96	0.00	210.00	0.00	211.04	0.00		
208.98	0.00	210.02	0.00	211.06	0.00		
209.00	0.00	210.04	0.00	211.08	0.00		
209.02	0.00	210.06	0.00	211.10	0.00		
209.04	0.00	210.08	0.00	211.12	0.00		
209.06	0.00	210.10	0.00	211.14	0.00		
209.08	0.00	210.12	0.00	211.16	0.00		
209.10	0.00	210.14	0.00	211.18	0.00		
209.12	0.00	210.16	0.00	211.20	0.00		
209.14	0.00	210.18	0.00	211.22	0.00		
209.16	0.00	210.20	0.00	211.24	0.00		
209.18	0.00	210.22	0.00	211.26	0.00		
209.20	0.00	210.24	0.00	211.28	0.00		
209.22	0.00	210.26	0.00	211.30	0.00		
209.24	0.00	210.28	0.00	211.32	0.00		
209.26	0.00	210.30	0.00	211.34	0.00		
209.28	0.00	210.32	0.00	211.36	0.00		
209.30	0.00	210.34	0.00	211.38	0.00		
209.32	0.00	210.36	0.00	211.40	0.00		

Summary for Pond B-3: Basin #3

Inflow Area = 1.554 ac, 38.35% Impervious, Inflow Depth = 2.30" for Future 2 yr event
Inflow = 3.63 cfs @ 12.17 hrs, Volume= 0.298 af
Outflow = 0.14 cfs @ 15.12 hrs, Volume= 0.272 af, Atten= 96%, Lag= 176.8 min
Primary = 0.14 cfs @ 15.12 hrs, Volume= 0.272 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 213.74' @ 15.12 hrs Surf.Area= 11,972 sf Storage= 8,075 cf

Plug-Flow detention time= 632.8 min calculated for 0.272 af (91% of inflow)
Center-of-Mass det. time= 586.0 min (1,383.6 - 797.6)

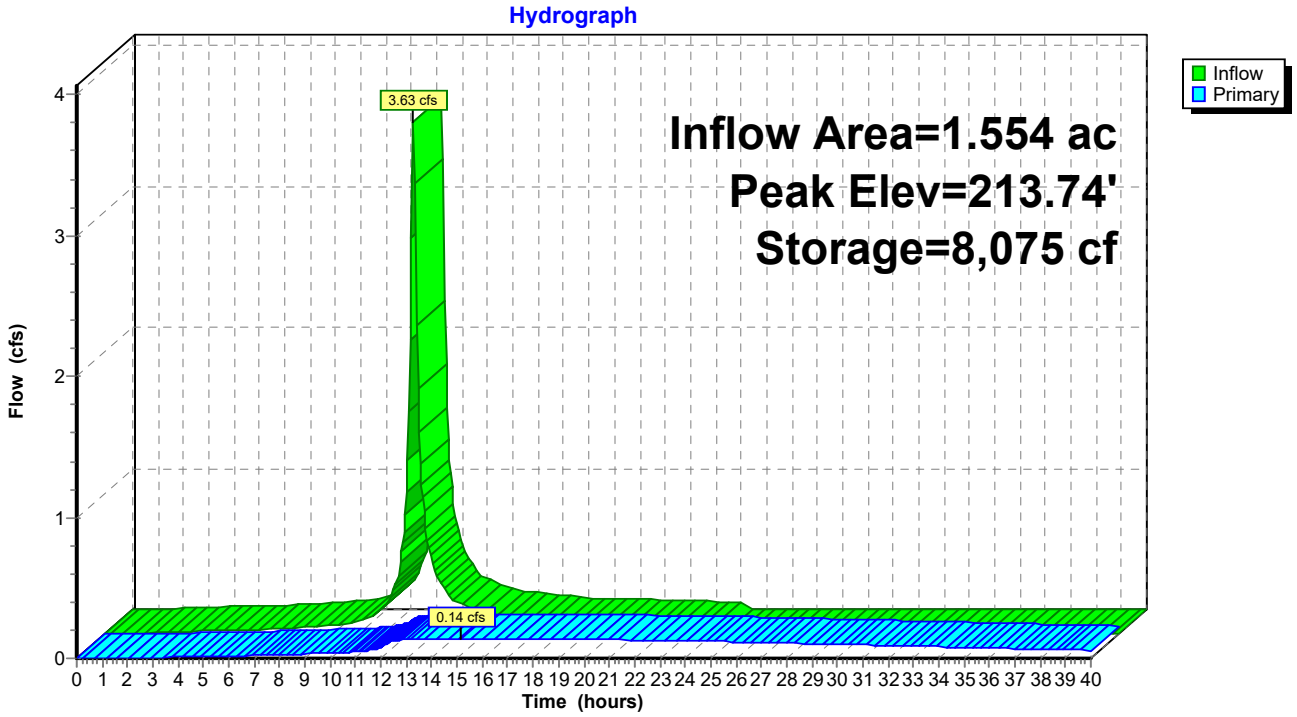
Volume	Invert	Avail.Storage	Storage Description
#1	213.00'	56,991 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
213.00	9,992	0	0
214.00	12,685	11,339	11,339
215.00	15,435	14,060	25,399
216.00	18,241	16,838	42,237
216.75	21,104	14,754	56,991

Device	Routing	Invert	Outlet Devices
#1	Primary	212.30'	**18.0" Round Culvert** L= 151.0' Ke= 0.500 Inlet / Outlet Invert= 212.30' / 202.00' S= 0.0682 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.77 sf
#2	Device 1	212.90'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	215.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	216.70'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.14 cfs @ 15.12 hrs HW=213.74' (Free Discharge)
- **1=Culvert** (Passes 0.14 cfs of 7.10 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.14 cfs @ 4.12 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-3: Basin #3



Stage-Discharge for Pond B-3: Basin #3

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
213.00	0.00	214.04	0.17	215.08	0.24	216.12	6.48
213.02	0.02	214.06	0.17	215.10	0.24	216.14	6.77
213.04	0.03	214.08	0.17	215.12	0.24	216.16	7.07
213.06	0.04	214.10	0.17	215.14	0.24	216.18	7.38
213.08	0.05	214.12	0.17	215.16	0.24	216.20	7.69
213.10	0.05	214.14	0.17	215.18	0.24	216.22	8.00
213.12	0.06	214.16	0.18	215.20	0.24	216.24	8.31
213.14	0.06	214.18	0.18	215.22	0.24	216.26	8.63
213.16	0.06	214.20	0.18	215.24	0.25	216.28	8.96
213.18	0.07	214.22	0.18	215.26	0.25	216.30	9.28
213.20	0.07	214.24	0.18	215.28	0.25	216.32	9.61
213.22	0.08	214.26	0.18	215.30	0.25	216.34	9.95
213.24	0.08	214.28	0.19	215.32	0.25	216.36	10.28
213.26	0.08	214.30	0.19	215.34	0.25	216.38	10.62
213.28	0.09	214.32	0.19	215.36	0.25	216.40	10.97
213.30	0.09	214.34	0.19	215.38	0.25	216.42	11.31
213.32	0.09	214.36	0.19	215.40	0.25	216.44	11.66
213.34	0.10	214.38	0.19	215.42	0.26	216.46	12.02
213.36	0.10	214.40	0.19	215.44	0.26	216.48	12.37
213.38	0.10	214.42	0.20	215.46	0.26	216.50	12.73
213.40	0.10	214.44	0.20	215.48	0.26	216.52	13.09
213.42	0.11	214.46	0.20	215.50	0.26	216.54	13.46
213.44	0.11	214.48	0.20	215.52	0.30	216.56	13.83
213.46	0.11	214.50	0.20	215.54	0.37	216.58	14.20
213.48	0.11	214.52	0.20	215.56	0.45	216.60	14.57
213.50	0.12	214.54	0.20	215.58	0.56	216.62	14.95
213.52	0.12	214.56	0.20	215.60	0.68	216.64	15.33
213.54	0.12	214.58	0.21	215.62	0.81	216.66	15.71
213.56	0.12	214.60	0.21	215.64	0.95	216.68	16.09
213.58	0.12	214.62	0.21	215.66	1.10	216.70	16.26
213.60	0.13	214.64	0.21	215.68	1.26	216.72	16.63
213.62	0.13	214.66	0.21	215.70	1.43	216.74	**17.28**
213.64	0.13	214.68	0.21	215.72	1.61		
213.66	0.13	214.70	0.21	215.74	1.79		
213.68	0.13	214.72	0.22	215.76	1.98		
213.70	0.14	214.74	0.22	215.78	2.18		
213.72	0.14	214.76	0.22	215.80	2.39		
213.74	0.14	214.78	0.22	215.82	2.61		
213.76	0.14	214.80	0.22	215.84	2.83		
213.78	0.14	214.82	0.22	215.86	3.05		
213.80	0.15	214.84	0.22	215.88	3.28		
213.82	0.15	214.86	0.22	215.90	3.52		
213.84	0.15	214.88	0.22	215.92	3.77		
213.86	0.15	214.90	0.23	215.94	4.01		
213.88	0.15	214.92	0.23	215.96	4.27		
213.90	0.16	214.94	0.23	215.98	4.53		
213.92	0.16	214.96	0.23	216.00	4.79		
213.94	0.16	214.98	0.23	216.02	5.06		
213.96	0.16	215.00	0.23	216.04	5.34		
213.98	0.16	215.02	0.23	216.06	5.61		
214.00	0.16	215.04	0.23	216.08	5.90		
214.02	0.17	215.06	0.24	216.10	6.19		

Summary for Pond B-4A: Basin #4A

Inflow Area = 2.331 ac, 36.89% Impervious, Inflow Depth = 2.27" for Future 2 yr event
Inflow = 5.38 cfs @ 12.17 hrs, Volume= 0.441 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond B-5 : Basin #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 205.21' @ 24.60 hrs Surf.Area= 5,792 sf Storage= 19,227 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

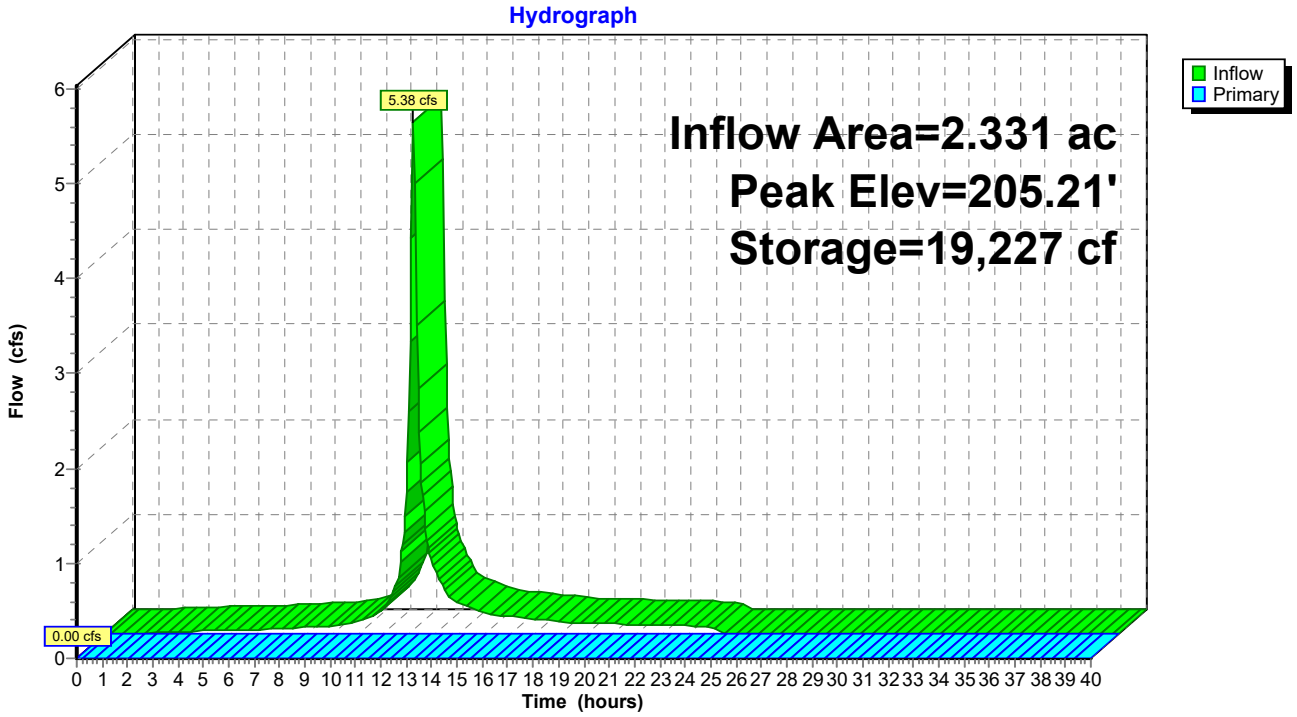
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	20,963 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	1,891	0	0
201.00	2,495	2,193	2,193
202.00	3,169	2,832	5,025
203.00	3,912	3,541	8,566
204.00	4,724	4,318	12,884
205.00	5,604	5,164	18,048
205.50	6,057	2,915	20,963

Device	Routing	Invert	Outlet Devices
#1	Primary	205.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-4A: Basin #4A



Stage-Discharge for Pond B-4A: Basin #4A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	0.00	205.20	0.00
200.05	0.00	202.65	0.00	205.25	0.00
200.10	0.00	202.70	0.00	205.30	0.00
200.15	0.00	202.75	0.00	205.35	0.00
200.20	0.00	202.80	0.00	205.40	0.00
200.25	0.00	202.85	0.00	205.45	0.00
200.30	0.00	202.90	0.00	205.50	**1.31**
200.35	0.00	202.95	0.00		
200.40	0.00	203.00	0.00		
200.45	0.00	203.05	0.00		
200.50	0.00	203.10	0.00		
200.55	0.00	203.15	0.00		
200.60	0.00	203.20	0.00		
200.65	0.00	203.25	0.00		
200.70	0.00	203.30	0.00		
200.75	0.00	203.35	0.00		
200.80	0.00	203.40	0.00		
200.85	0.00	203.45	0.00		
200.90	0.00	203.50	0.00		
200.95	0.00	203.55	0.00		
201.00	0.00	203.60	0.00		
201.05	0.00	203.65	0.00		
201.10	0.00	203.70	0.00		
201.15	0.00	203.75	0.00		
201.20	0.00	203.80	0.00		
201.25	0.00	203.85	0.00		
201.30	0.00	203.90	0.00		
201.35	0.00	203.95	0.00		
201.40	0.00	204.00	0.00		
201.45	0.00	204.05	0.00		
201.50	0.00	204.10	0.00		
201.55	0.00	204.15	0.00		
201.60	0.00	204.20	0.00		
201.65	0.00	204.25	0.00		
201.70	0.00	204.30	0.00		
201.75	0.00	204.35	0.00		
201.80	0.00	204.40	0.00		
201.85	0.00	204.45	0.00		
201.90	0.00	204.50	0.00		
201.95	0.00	204.55	0.00		
202.00	0.00	204.60	0.00		
202.05	0.00	204.65	0.00		
202.10	0.00	204.70	0.00		
202.15	0.00	204.75	0.00		
202.20	0.00	204.80	0.00		
202.25	0.00	204.85	0.00		
202.30	0.00	204.90	0.00		
202.35	0.00	204.95	0.00		
202.40	0.00	205.00	0.00		
202.45	0.00	205.05	0.00		
202.50	0.00	205.10	0.00		
202.55	0.00	205.15	0.00		

Summary for Pond B-4B: Basin #4B

Inflow Area = 2.331 ac, 36.89% Impervious, Inflow Depth = 2.27" for Future 2 yr event
Inflow = 5.38 cfs @ 12.17 hrs, Volume= 0.441 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond B-5 : Basin #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 204.93' @ 24.60 hrs Surf.Area= 6,318 sf Storage= 19,227 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

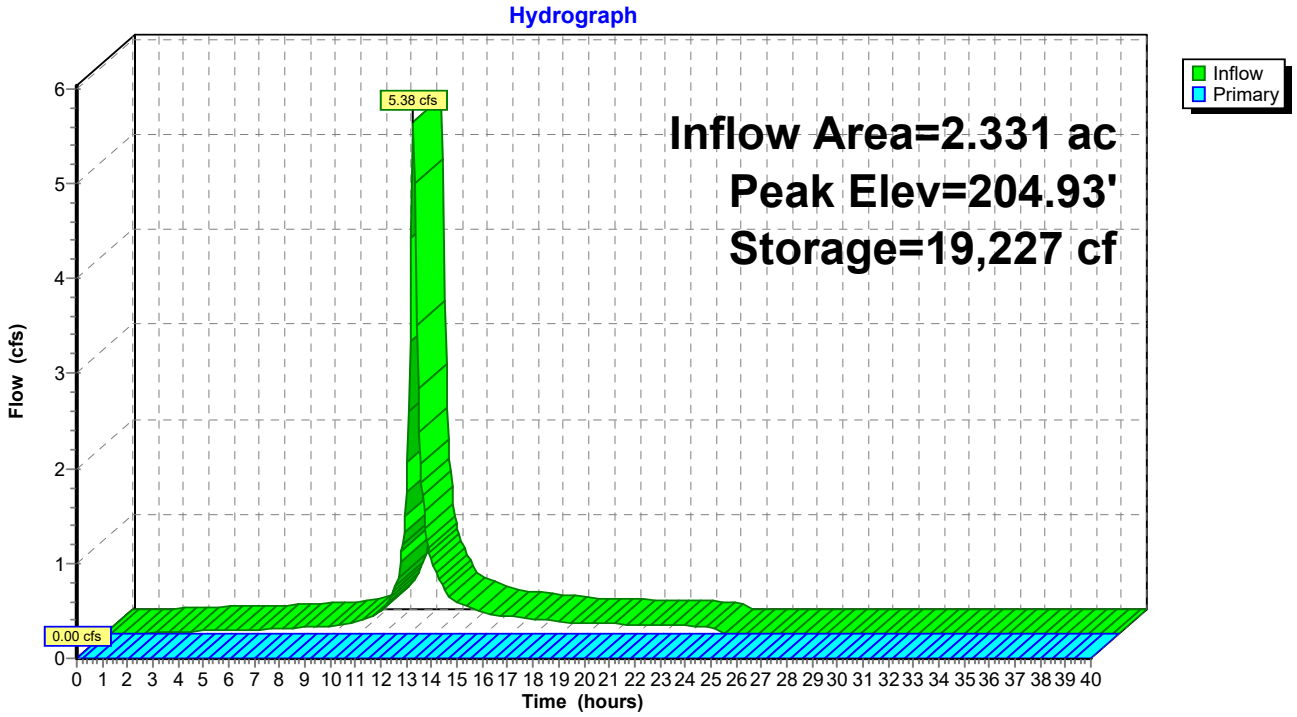
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	22,995 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	1,852	0	0
201.00	2,571	2,212	2,212
202.00	3,384	2,978	5,189
203.00	4,292	3,838	9,027
204.00	5,294	4,793	13,820
205.00	6,393	5,844	19,664
205.50	6,934	3,332	22,995

Device	Routing	Invert	Outlet Devices
#1	Primary	205.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-4B: Basin #4B



Stage-Discharge for Pond B-4B: Basin #4B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	0.00	205.20	0.00
200.05	0.00	202.65	0.00	205.25	0.00
200.10	0.00	202.70	0.00	205.30	0.00
200.15	0.00	202.75	0.00	205.35	0.00
200.20	0.00	202.80	0.00	205.40	0.00
200.25	0.00	202.85	0.00	205.45	0.00
200.30	0.00	202.90	0.00	205.50	**1.31**
200.35	0.00	202.95	0.00		
200.40	0.00	203.00	0.00		
200.45	0.00	203.05	0.00		
200.50	0.00	203.10	0.00		
200.55	0.00	203.15	0.00		
200.60	0.00	203.20	0.00		
200.65	0.00	203.25	0.00		
200.70	0.00	203.30	0.00		
200.75	0.00	203.35	0.00		
200.80	0.00	203.40	0.00		
200.85	0.00	203.45	0.00		
200.90	0.00	203.50	0.00		
200.95	0.00	203.55	0.00		
201.00	0.00	203.60	0.00		
201.05	0.00	203.65	0.00		
201.10	0.00	203.70	0.00		
201.15	0.00	203.75	0.00		
201.20	0.00	203.80	0.00		
201.25	0.00	203.85	0.00		
201.30	0.00	203.90	0.00		
201.35	0.00	203.95	0.00		
201.40	0.00	204.00	0.00		
201.45	0.00	204.05	0.00		
201.50	0.00	204.10	0.00		
201.55	0.00	204.15	0.00		
201.60	0.00	204.20	0.00		
201.65	0.00	204.25	0.00		
201.70	0.00	204.30	0.00		
201.75	0.00	204.35	0.00		
201.80	0.00	204.40	0.00		
201.85	0.00	204.45	0.00		
201.90	0.00	204.50	0.00		
201.95	0.00	204.55	0.00		
202.00	0.00	204.60	0.00		
202.05	0.00	204.65	0.00		
202.10	0.00	204.70	0.00		
202.15	0.00	204.75	0.00		
202.20	0.00	204.80	0.00		
202.25	0.00	204.85	0.00		
202.30	0.00	204.90	0.00		
202.35	0.00	204.95	0.00		
202.40	0.00	205.00	0.00		
202.45	0.00	205.05	0.00		
202.50	0.00	205.10	0.00		
202.55	0.00	205.15	0.00		

Summary for Pond B-5: Basin #5

Inflow Area = 5.341 ac, 32.20% Impervious, Inflow Depth = 0.19" for Future 2 yr event
Inflow = 1.10 cfs @ 12.18 hrs, Volume= 0.084 af
Outflow = 0.04 cfs @ 16.14 hrs, Volume= 0.062 af, Atten= 96%, Lag= 237.3 min
Primary = 0.04 cfs @ 16.14 hrs, Volume= 0.062 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.20' @ 16.14 hrs Surf.Area= 11,862 sf Storage= 2,325 cf

Plug-Flow detention time= 603.3 min calculated for 0.062 af (73% of inflow)
Center-of-Mass det. time= 503.8 min (1,362.0 - 858.3)

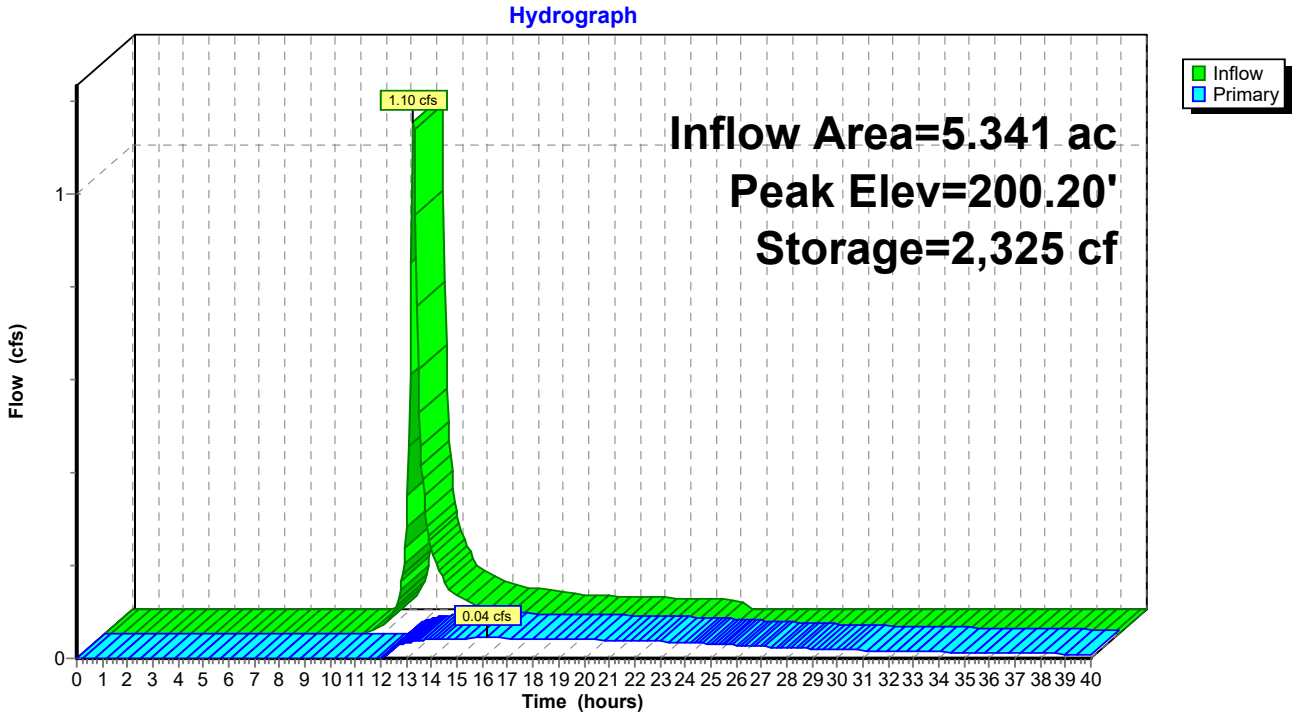
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	91,976 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	11,631	0	0
201.00	12,798	12,215	12,215
202.00	14,009	13,404	25,618
203.00	15,262	14,636	40,254
204.00	16,558	15,910	56,164
205.00	17,896	17,227	73,391
206.00	19,275	18,586	91,976

Device	Routing	Invert	Outlet Devices
#1	Primary	198.65'	**18.0" Round Culvert** L= 70.0' Ke= 0.500 Inlet / Outlet Invert= 198.65' / 196.00' S= 0.0379 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	200.02'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	205.00'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.04 cfs @ 16.14 hrs HW=200.20' (Free Discharge)
- **1=Culvert** (Passes 0.04 cfs of 7.60 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.04 cfs @ 1.44 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-5: Basin #5



Stage-Discharge for Pond B-5: Basin #5

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	15.22	205.20	31.06
200.05	0.00	202.65	15.34	205.25	35.63
200.10	0.01	202.70	15.46	205.30	40.84
200.15	0.03	202.75	15.57	205.35	46.65
200.20	0.05	202.80	15.69	205.40	53.07
200.25	0.06	202.85	15.80	205.45	60.25
200.30	0.07	202.90	15.92	205.50	68.08
200.35	0.08	202.95	16.03	205.55	76.57
200.40	0.09	203.00	16.14	205.60	85.74
200.45	0.09	203.05	16.26	205.65	94.09
200.50	0.10	203.10	16.37	205.70	102.78
200.55	0.11	203.15	16.48	205.75	111.78
200.60	0.11	203.20	16.59	205.80	121.09
200.65	0.12	203.25	16.70	205.85	130.90
200.70	0.12	203.30	16.80	205.90	141.05
200.75	0.13	203.35	16.91	205.95	151.51
200.80	0.13	203.40	17.02	206.00	**162.29**
200.85	0.14	203.45	17.12		
200.90	0.14	203.50	17.23		
200.95	0.15	203.55	17.33		
201.00	0.15	203.60	17.44		
201.05	0.16	203.65	17.54		
201.10	0.16	203.70	17.64		
201.15	0.17	203.75	17.75		
201.20	0.17	203.80	17.85		
201.25	0.17	203.85	17.95		
201.30	0.32	203.90	18.05		
201.35	0.59	203.95	18.15		
201.40	0.94	204.00	18.25		
201.45	1.35	204.05	18.35		
201.50	1.81	204.10	18.45		
201.55	2.31	204.15	18.54		
201.60	2.86	204.20	18.64		
201.65	3.45	204.25	18.74		
201.70	4.07	204.30	18.83		
201.75	4.72	204.35	18.93		
201.80	5.40	204.40	19.03		
201.85	6.11	204.45	19.12		
201.90	6.85	204.50	19.22		
201.95	7.61	204.55	19.31		
202.00	8.40	204.60	19.40		
202.05	9.21	204.65	19.50		
202.10	10.05	204.70	19.59		
202.15	10.90	204.75	19.68		
202.20	11.77	204.80	19.77		
202.25	12.67	204.85	19.86		
202.30	13.58	204.90	19.95		
202.35	14.51	204.95	20.05		
202.40	14.74	205.00	20.14		
202.45	14.86	205.05	21.54		
202.50	14.98	205.10	24.03		
202.55	15.10	205.15	27.25		

Summary for Pond B-6: Basin #6

Inflow Area = 1.191 ac, 58.27% Impervious, Inflow Depth = 2.73" for Future 2 yr event
Inflow = 3.23 cfs @ 12.17 hrs, Volume= 0.271 af
Outflow = 0.58 cfs @ 12.69 hrs, Volume= 0.199 af, Atten= 82%, Lag= 31.3 min
Primary = 0.58 cfs @ 12.69 hrs, Volume= 0.199 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.21' @ 12.69 hrs Surf.Area= 6,204 sf Storage= 6,986 cf

Plug-Flow detention time= 471.3 min calculated for 0.199 af (74% of inflow)
Center-of-Mass det. time= 377.9 min (1,158.3 - 780.4)

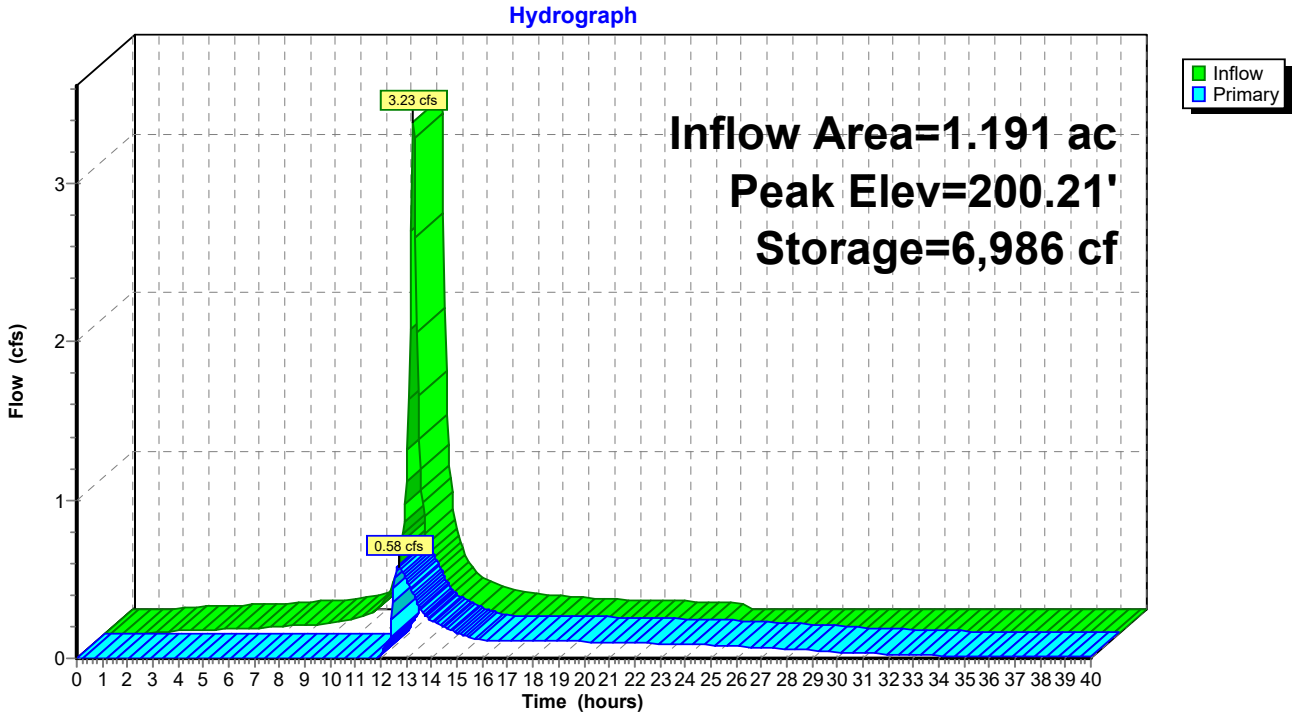
Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	35,769 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.00	5,389	0	0
200.00	6,060	5,725	5,725
201.00	6,761	6,411	12,135
202.00	7,490	7,126	19,261
203.00	8,247	7,869	27,129
204.00	9,032	8,640	35,769

Device	Routing	Invert	Outlet Devices
#1	Primary	197.65'	**18.0" Round Culvert** L= 627.0' Ke= 0.500 Inlet / Outlet Invert= 197.65' / 194.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.50'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.10'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	200.89'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.57 cfs @ 12.69 hrs HW=200.21' (Free Discharge)
- **1=Culvert** (Passes 0.57 cfs of 8.54 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.73 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.45 cfs @ 1.06 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-6: Basin #6



Stage-Discharge for Pond B-6: Basin #6

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.00	0.00	201.60	92.90
199.05	0.00	201.65	101.92
199.10	0.00	201.70	111.29
199.15	0.00	201.75	121.13
199.20	0.00	201.80	131.29
199.25	0.00	201.85	141.77
199.30	0.00	201.90	152.52
199.35	0.00	201.95	163.34
199.40	0.00	202.00	174.42
199.45	0.00	202.05	185.76
199.50	0.00	202.10	197.39
199.55	0.00	202.15	209.42
199.60	0.02	202.20	221.71
199.65	0.03	202.25	234.27
199.70	0.05	202.30	247.13
199.75	0.06	202.35	260.43
199.80	0.07	202.40	274.02
199.85	0.08	202.45	287.88
199.90	0.09	202.50	302.02
199.95	0.10	202.55	316.42
200.00	0.10	202.60	331.10
200.05	0.11	202.65	346.04
200.10	0.12	202.70	361.25
200.15	0.27	202.75	376.73
200.20	0.54	202.80	392.46
200.25	0.89	202.85	408.46
200.30	1.30	202.90	424.79
200.35	1.76	202.95	441.63
200.40	2.26	203.00	458.76
200.45	2.81	203.05	476.18
200.50	3.40	203.10	493.88
200.55	4.02	203.15	511.86
200.60	4.67	203.20	530.12
200.65	5.36	203.25	548.67
200.70	6.07	203.30	567.49
200.75	6.81	203.35	586.60
200.80	7.57	203.40	605.86
200.85	8.36	203.45	624.84
200.90	9.27	203.50	644.05
200.95	10.92	203.55	663.51
201.00	13.53	203.60	683.20
201.05	16.82	203.65	703.12
201.10	20.73	203.70	723.28
201.15	25.39	203.75	743.67
201.20	30.67	203.80	764.30
201.25	36.56	203.85	785.16
201.30	43.08	203.90	806.43
201.35	50.34	203.95	828.68
201.40	58.26	204.00	**851.20**
201.45	66.84		
201.50	75.82		
201.55	84.20		

Summary for Pond B-7: Basin #7

Inflow Area = 1.564 ac, 62.85% Impervious, Inflow Depth = 2.82" for Future 2 yr event
Inflow = 4.37 cfs @ 12.17 hrs, Volume= 0.368 af
Outflow = 0.14 cfs @ 15.72 hrs, Volume= 0.241 af, Atten= 97%, Lag= 213.0 min
Primary = 0.14 cfs @ 15.72 hrs, Volume= 0.241 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 207.98' @ 15.72 hrs Surf.Area= 10,148 sf Storage= 11,801 cf

Plug-Flow detention time= 762.8 min calculated for 0.241 af (65% of inflow)
Center-of-Mass det. time= 656.1 min (1,433.2 - 777.1)

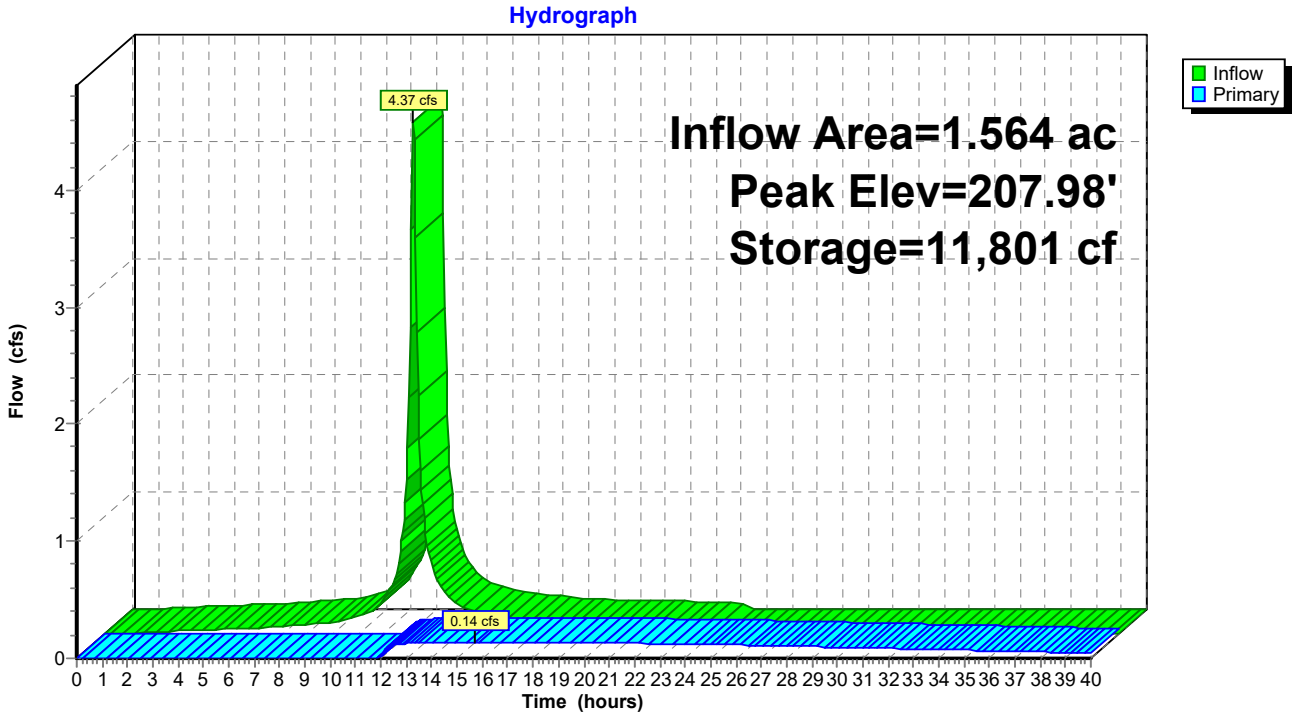
Volume	Invert	Avail.Storage	Storage Description
#1	206.47'	48,130 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.47	0	0	0
207.00	8,989	2,382	2,382
208.00	10,166	9,578	11,960
209.00	11,395	10,781	22,740
210.00	12,681	12,038	34,778
211.00	14,023	13,352	48,130

Device	Routing	Invert	Outlet Devices
#1	Primary	206.47'	**18.0" Round Culvert** L= 94.0' Ke= 0.500 Inlet / Outlet Invert= 206.47' / 206.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	207.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	207.99'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	208.86'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.14 cfs @ 15.72 hrs HW=207.98' (Free Discharge)
- **1=Culvert** (Passes 0.14 cfs of 6.30 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.14 cfs @ 4.06 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-7: Basin #7



Stage-Discharge for Pond B-7: Basin #7

Elevation (feet)	Primary (cfs)
206.47	0.00
206.52	0.00
206.57	0.00
206.62	0.00
206.67	0.00
206.72	0.00
206.77	0.00
206.82	0.00
206.87	0.00
206.92	0.00
206.97	0.00
207.02	0.00
207.07	0.00
207.12	0.00
207.17	0.00
207.22	0.00
207.27	0.02
207.32	0.03
207.37	0.05
207.42	0.06
207.47	0.07
207.52	0.08
207.57	0.09
207.62	0.10
207.67	0.10
207.72	0.11
207.77	0.12
207.82	0.12
207.87	0.13
207.92	0.13
207.97	0.14
208.02	0.21
208.07	0.44
208.12	0.76
208.17	1.15
208.22	1.59
208.27	2.07
208.32	2.61
208.37	3.18
208.42	3.78
208.47	4.42
208.52	5.10
208.57	5.80
208.62	6.52
208.67	7.28
208.72	8.06
208.77	8.86
208.82	9.08
208.87	9.37
208.92	11.14
208.97	13.87
209.02	17.29
209.07	21.32
209.12	26.09
209.17	31.48
209.22	37.48
209.27	44.11
209.32	51.48
209.37	59.50
209.42	68.19
209.47	77.27
209.52	85.75
209.57	94.55
209.62	103.67
209.67	113.13
209.72	123.06
209.77	133.31
209.82	143.89
209.87	154.72
209.92	165.63
209.97	176.80
210.02	188.23
210.07	199.94
210.12	212.05
210.17	224.43
210.22	237.07
210.27	250.01
210.32	263.40
210.37	277.07
210.42	291.01
210.47	305.22
210.52	319.70
210.57	334.45
210.62	349.47
210.67	364.76
210.72	380.30
210.77	396.12
210.82	412.19
210.87	428.58
210.92	445.50
210.97	**462.70**

Summary for Pond B-8: Basin #8

Inflow Area = 2.090 ac, 23.06% Impervious, Inflow Depth = 1.98" for Future 2 yr event
Inflow = 4.28 cfs @ 12.18 hrs, Volume= 0.344 af
Outflow = 0.12 cfs @ 17.39 hrs, Volume= 0.223 af, Atten= 97%, Lag= 312.8 min
Primary = 0.12 cfs @ 17.39 hrs, Volume= 0.223 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.79' @ 17.39 hrs Surf.Area= 14,066 sf Storage= 10,811 cf

Plug-Flow detention time= 775.3 min calculated for 0.223 af (65% of inflow)
Center-of-Mass det. time= 663.7 min (1,479.5 - 815.8)

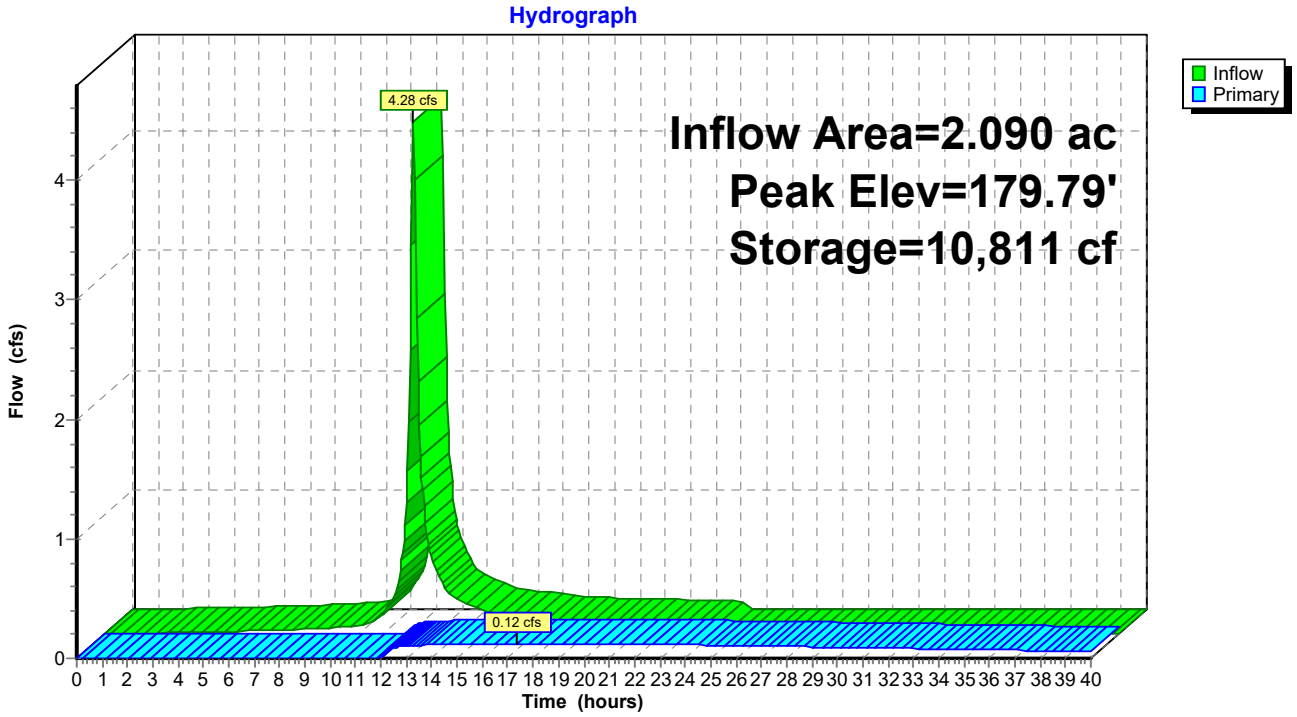
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	44,379 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	13,283	0	0
180.00	14,274	13,779	13,779
181.00	15,293	14,784	28,562
182.00	16,341	15,817	44,379

Device	Routing	Invert	Outlet Devices
#1	Primary	178.23'	**18.0" Round Culvert** L= 46.0' Ke= 0.500 Inlet / Outlet Invert= 178.23' / 178.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.83'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.12 cfs @ 17.39 hrs HW=179.79' (Free Discharge)
- **1=Culvert** (Passes 0.12 cfs of 6.38 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.12 cfs @ 3.46 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.08 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-8: Basin #8



Stage-Discharge for Pond B-8: Basin #8

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	1.76	181.08	26.70
179.02	0.00	180.06	1.96	181.10	28.75
179.04	0.00	180.08	2.16	181.12	30.89
179.06	0.00	180.10	2.37	181.14	33.13
179.08	0.00	180.12	2.59	181.16	35.47
179.10	0.00	180.14	2.81	181.18	37.91
179.12	0.00	180.16	3.04	181.20	40.44
179.14	0.00	180.18	3.28	181.22	43.07
179.16	0.00	180.20	3.52	181.24	45.82
179.18	0.00	180.22	3.77	181.26	48.70
179.20	0.00	180.24	4.02	181.28	51.68
179.22	0.00	180.26	4.28	181.30	54.77
179.24	0.01	180.28	4.54	181.32	57.97
179.26	0.01	180.30	4.81	181.34	61.27
179.28	0.02	180.32	5.08	181.36	64.67
179.30	0.03	180.34	5.36	181.38	68.18
179.32	0.03	180.36	5.64	181.40	71.80
179.34	0.04	180.38	5.93	181.42	75.52
179.36	0.05	180.40	6.22	181.44	79.09
179.38	0.05	180.42	6.51	181.46	82.45
179.40	0.06	180.44	6.81	181.48	85.86
179.42	0.06	180.46	7.11	181.50	89.33
179.44	0.07	180.48	7.42	181.52	92.84
179.46	0.07	180.50	7.73	181.54	96.41
179.48	0.07	180.52	8.04	181.56	100.03
179.50	0.08	180.54	8.36	181.58	103.70
179.52	0.08	180.56	8.68	181.60	107.42
179.54	0.08	180.58	9.01	181.62	111.19
179.56	0.09	180.60	9.34	181.64	115.04
179.58	0.09	180.62	9.67	181.66	118.98
179.60	0.09	180.64	9.90	181.68	122.98
179.62	0.10	180.66	9.98	181.70	127.03
179.64	0.10	180.68	10.07	181.72	131.13
179.66	0.10	180.70	10.15	181.74	135.28
179.68	0.10	180.72	10.24	181.76	139.48
179.70	0.11	180.74	10.32	181.78	143.73
179.72	0.11	180.76	10.40	181.80	148.03
179.74	0.11	180.78	10.49	181.82	152.38
179.76	0.11	180.80	10.57	181.84	156.73
179.78	0.12	180.82	10.65	181.86	161.07
179.80	0.13	180.84	10.85	181.88	165.46
179.82	0.19	180.86	11.42	181.90	169.88
179.84	0.27	180.88	12.20	181.92	174.35
179.86	0.37	180.90	13.14	181.94	178.86
179.88	0.48	180.92	14.22	181.96	183.41
179.90	0.60	180.94	15.41	181.98	188.00
179.92	0.74	180.96	16.72	182.00	**192.63**
179.94	0.89	180.98	18.12		
179.96	1.04	181.00	19.62		
179.98	1.21	181.02	21.20		
180.00	1.39	181.04	22.91		
180.02	1.57	181.06	24.76		

Summary for Pond B-9: Basin #9

Inflow Area = 1.503 ac, 52.63% Impervious, Inflow Depth = 2.61" for Future 2 yr event
Inflow = 3.91 cfs @ 12.17 hrs, Volume= 0.327 af
Outflow = 0.12 cfs @ 15.90 hrs, Volume= 0.210 af, Atten= 97%, Lag= 223.6 min
Primary = 0.12 cfs @ 15.90 hrs, Volume= 0.210 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.93' @ 15.90 hrs Surf.Area= 11,634 sf Storage= 10,420 cf

Plug-Flow detention time= 763.3 min calculated for 0.210 af (64% of inflow)
Center-of-Mass det. time= 654.0 min (1,438.6 - 784.7)

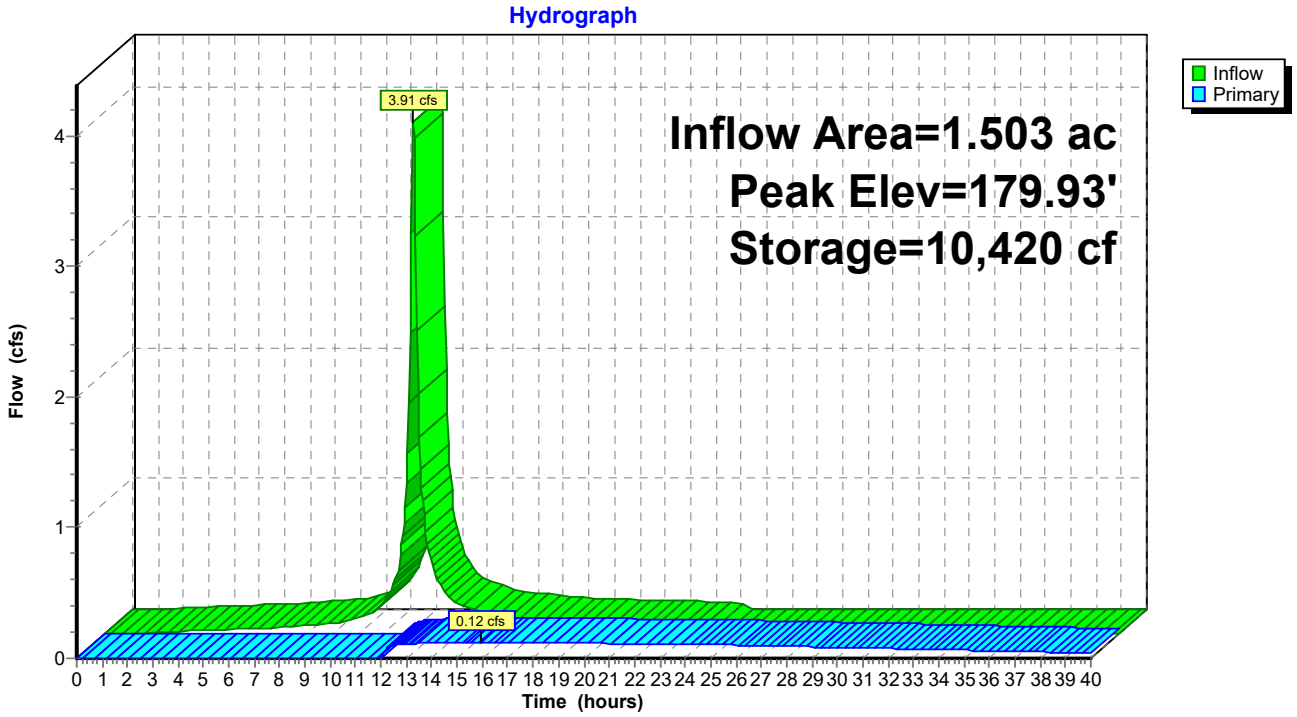
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	36,641 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	10,720	0	0
180.00	11,700	11,210	11,210
181.00	12,708	12,204	23,414
182.00	13,745	13,227	36,641

Device	Routing	Invert	Outlet Devices
#1	Primary	178.23'	**18.0" Round Culvert** L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 178.23' / 178.00' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.30'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.93'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.12 cfs @ 15.90 hrs HW=179.93' (Free Discharge)
- **1=Culvert** (Passes 0.12 cfs of 7.13 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.12 cfs @ 3.50 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.16 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-9: Basin #9



Stage-Discharge for Pond B-9: Basin #9

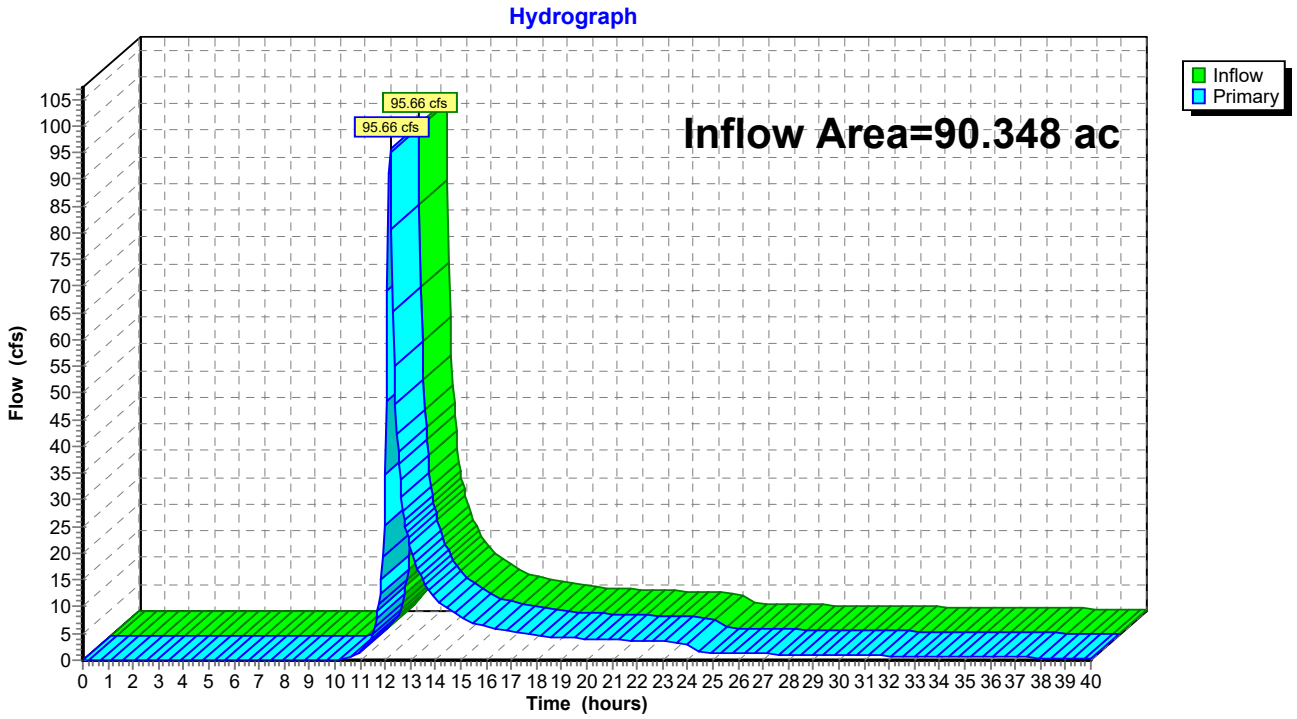
Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.61	181.08	11.70
179.02	0.00	180.06	0.74	181.10	11.77
179.04	0.00	180.08	0.89	181.12	11.84
179.06	0.00	180.10	1.05	181.14	11.92
179.08	0.00	180.12	1.21	181.16	11.99
179.10	0.00	180.14	1.39	181.18	12.06
179.12	0.00	180.16	1.57	181.20	12.13
179.14	0.00	180.18	1.76	181.22	12.20
179.16	0.00	180.20	1.96	181.24	12.27
179.18	0.00	180.22	2.16	181.26	12.34
179.20	0.00	180.24	2.37	181.28	12.41
179.22	0.00	180.26	2.59	181.30	12.48
179.24	0.00	180.28	2.81	181.32	12.55
179.26	0.00	180.30	3.04	181.34	12.62
179.28	0.00	180.32	3.28	181.36	12.69
179.30	0.00	180.34	3.52	181.38	12.76
179.32	0.00	180.36	3.77	181.40	12.83
179.34	0.00	180.38	4.02	181.42	12.89
179.36	0.01	180.40	4.28	181.44	12.96
179.38	0.01	180.42	4.54	181.46	13.03
179.40	0.02	180.44	4.81	181.48	13.09
179.42	0.02	180.46	5.08	181.50	13.16
179.44	0.03	180.48	5.36	181.52	13.22
179.46	0.04	180.50	5.64	181.54	13.29
179.48	0.05	180.52	5.93	181.56	13.35
179.50	0.05	180.54	6.22	181.58	13.42
179.52	0.06	180.56	6.51	181.60	13.48
179.54	0.06	180.58	6.81	181.62	13.55
179.56	0.06	180.60	7.11	181.64	13.61
179.58	0.07	180.62	7.42	181.66	13.67
179.60	0.07	180.64	7.73	181.68	13.74
179.62	0.08	180.66	8.04	181.70	13.80
179.64	0.08	180.68	8.36	181.72	13.86
179.66	0.08	180.70	8.68	181.74	13.93
179.68	0.09	180.72	9.01	181.76	13.99
179.70	0.09	180.74	9.34	181.78	14.05
179.72	0.09	180.76	9.67	181.80	14.11
179.74	0.10	180.78	10.01	181.82	14.17
179.76	0.10	180.80	10.35	181.84	14.23
179.78	0.10	180.82	10.69	181.86	14.29
179.80	0.10	180.84	10.77	181.88	14.35
179.82	0.11	180.86	10.85	181.90	14.41
179.84	0.11	180.88	10.93	181.92	14.47
179.86	0.11	180.90	11.01	181.94	14.53
179.88	0.11	180.92	11.09	181.96	14.71
179.90	0.12	180.94	11.17	181.98	15.26
179.92	0.12	180.96	11.24	182.00	**16.02**
179.94	0.13	180.98	11.32		
179.96	0.19	181.00	11.40		
179.98	0.27	181.02	11.47		
180.00	0.37	181.04	11.55		
180.02	0.48	181.06	11.62		

Summary for Link PDA-1: Proposed Drainage Area #1

Inflow Area = 90.348 ac, 16.68% Impervious, Inflow Depth > 1.47" for Future 2 yr event
Inflow = 95.66 cfs @ 12.19 hrs, Volume= 11.076 af
Primary = 95.66 cfs @ 12.19 hrs, Volume= 11.076 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-1: Proposed Drainage Area #1



Summary for Subcatchment 1I: PDA-1 (impervious)

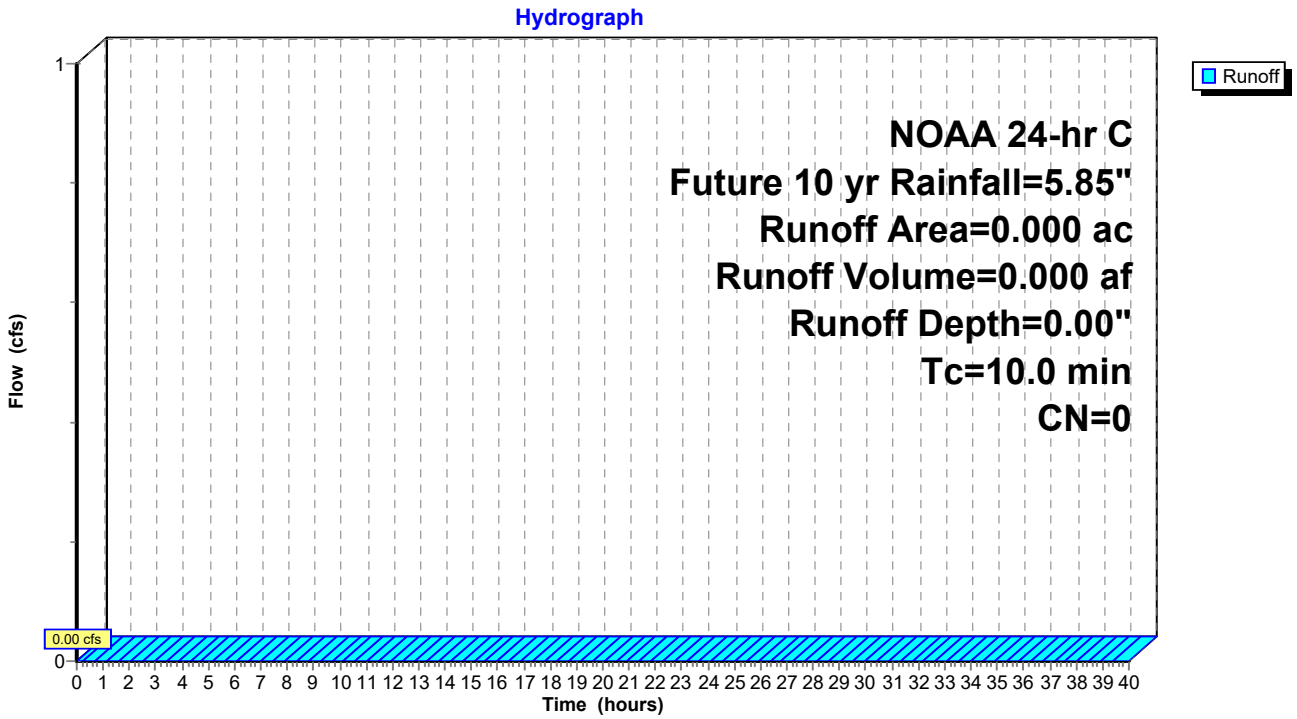
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-1 : Basin #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.000	98	Concrete, HSG C
	0.000	0	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 1I: PDA-1 (impervious)



Summary for Subcatchment 1P: PDA-1 (pervious)

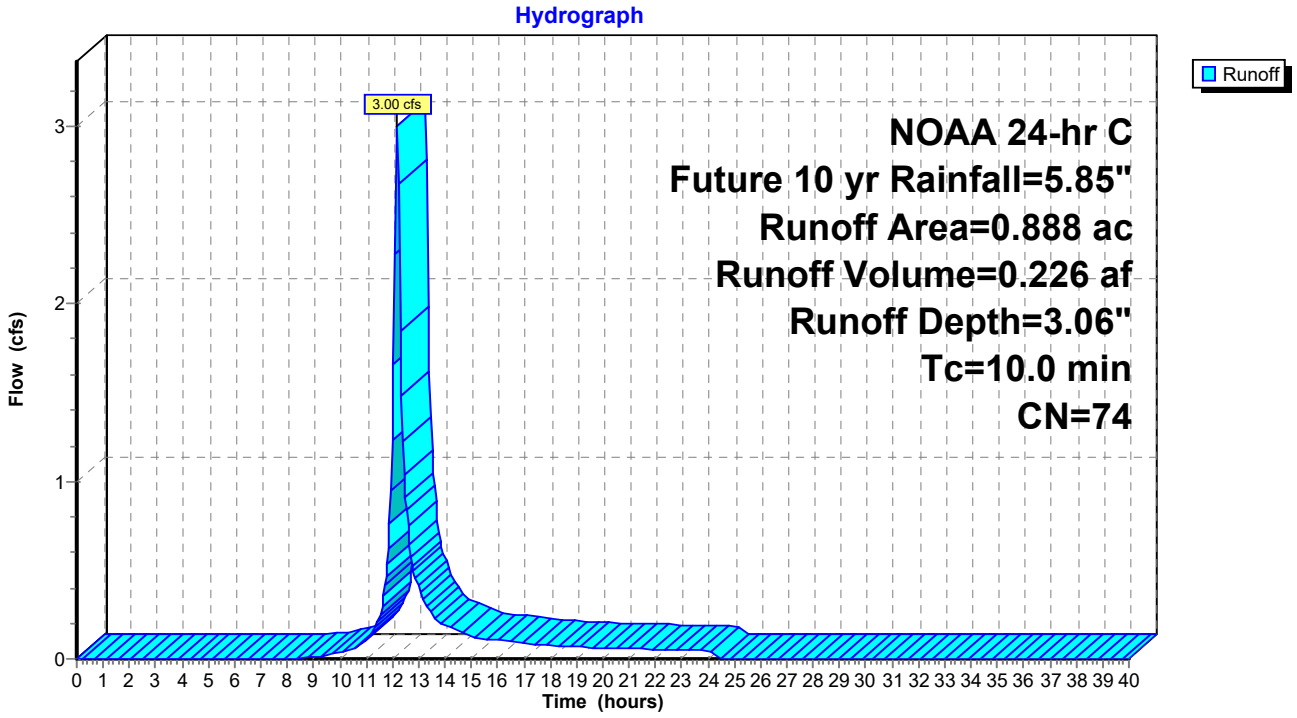
Runoff = 3.00 cfs @ 12.18 hrs, Volume= 0.226 af, Depth= 3.06"
Routed to Pond B-1 : Basin #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.888	74	>75% Grass cover, Good, HSG C
0.888		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 1P: PDA-1 (pervious)



Summary for Subcatchment 2l: PDA-2 (impervious)

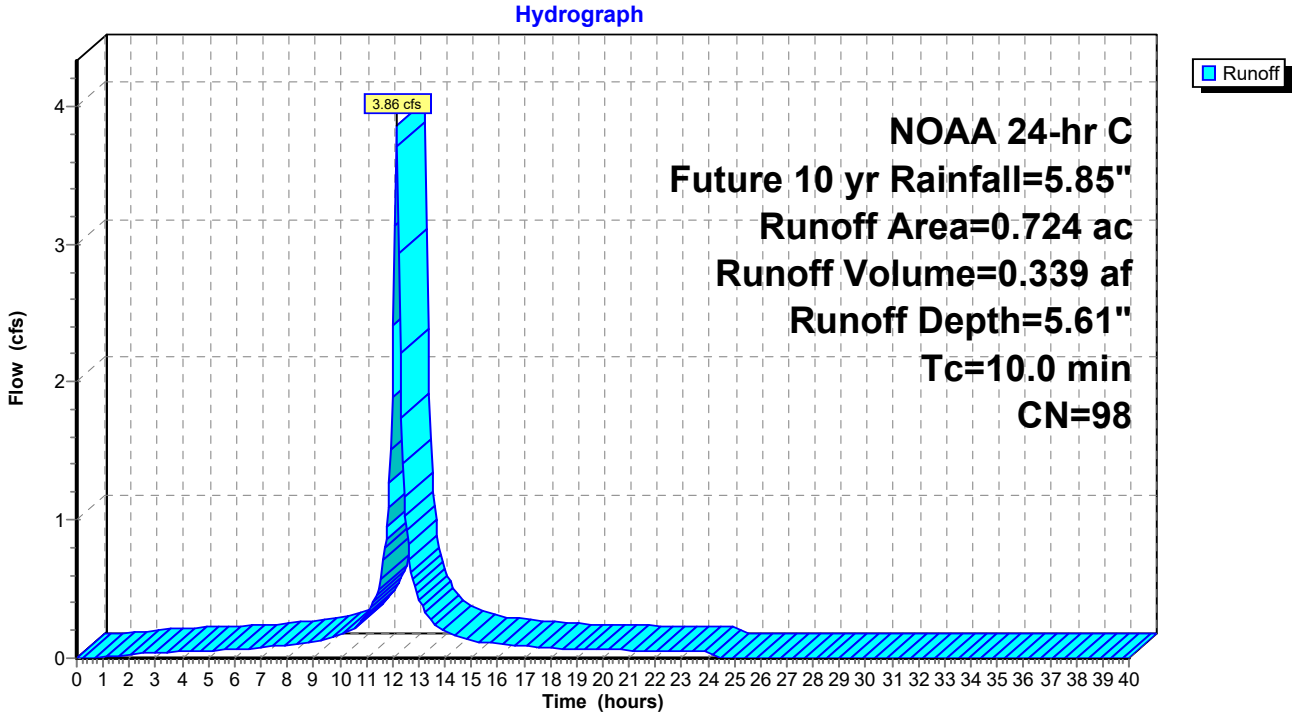
Runoff = 3.86 cfs @ 12.17 hrs, Volume= 0.339 af, Depth= 5.61"
Routed to Pond B-2 : Basin #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.490	98	Roof, HSG C
*	0.196	98	Pavement, HSG C
*	0.038	98	Concrete, HSG C
	0.724	98	Weighted Average
	0.724		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 2l: PDA-2 (impervious)



Summary for Subcatchment 2P: PDA-2 (pervious)

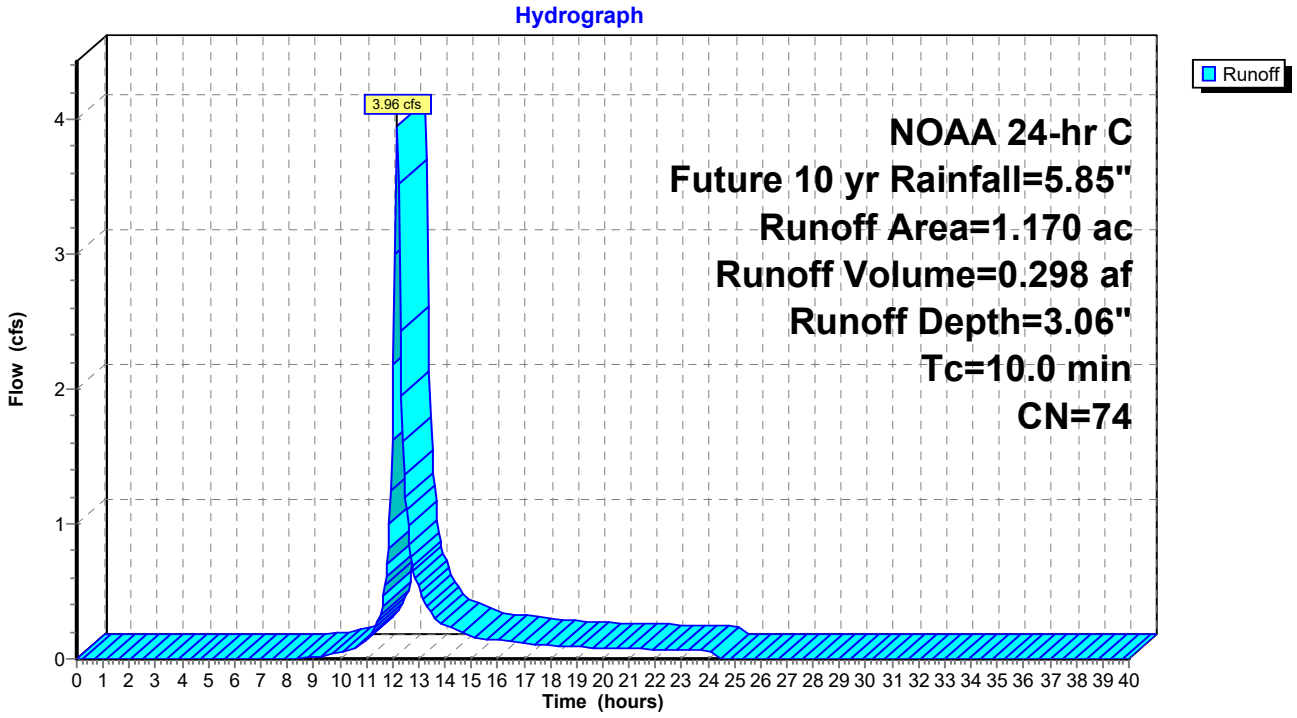
Runoff = 3.96 cfs @ 12.18 hrs, Volume= 0.298 af, Depth= 3.06"
Routed to Pond B-2 : Basin #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.170	74	>75% Grass cover, Good, HSG C
1.170		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 2P: PDA-2 (pervious)



Summary for Subcatchment 3I: PDA-3 (impervious)

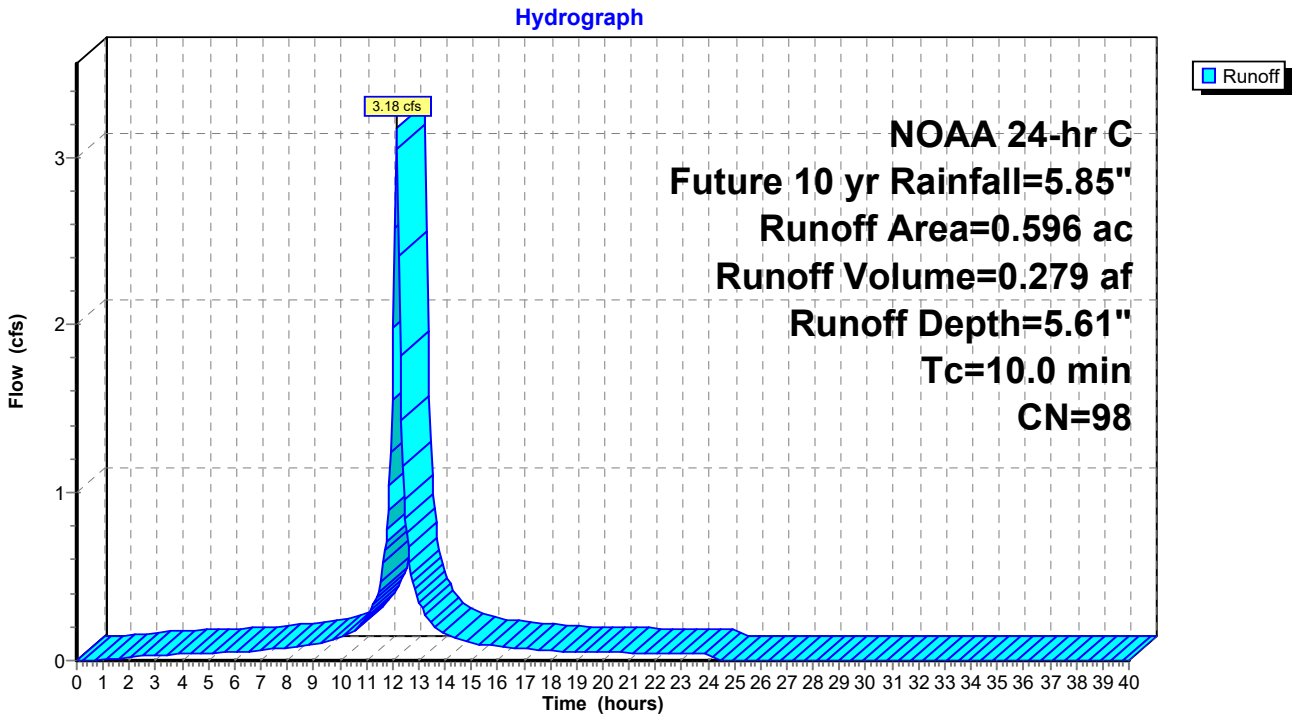
Runoff = 3.18 cfs @ 12.17 hrs, Volume= 0.279 af, Depth= 5.61"
Routed to Pond B-3 : Basin #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.304	98	Pavement, HSG C
*	0.035	98	Concrete, HSG C
	0.257	98	Unconnected roofs, HSG C
	0.596	98	Weighted Average
	0.596		100.00% Impervious Area
	0.257		43.12% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 3I: PDA-3 (impervious)



Summary for Subcatchment 3P: PDA-3 (pervious)

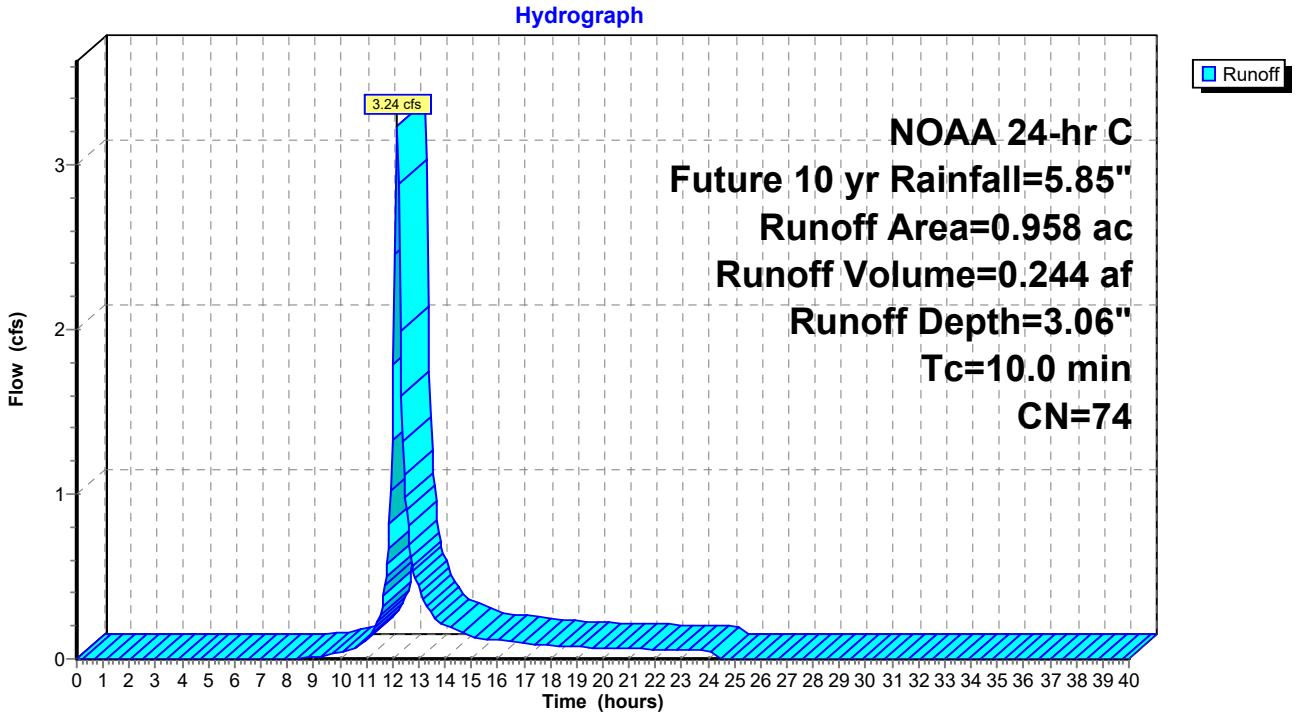
Runoff = 3.24 cfs @ 12.18 hrs, Volume= 0.244 af, Depth= 3.06"
Routed to Pond B-3 : Basin #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.958	74	>75% Grass cover, Good, HSG C
0.958		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 3P: PDA-3 (pervious)



Summary for Subcatchment 4AI: PDA-4A (impervious)

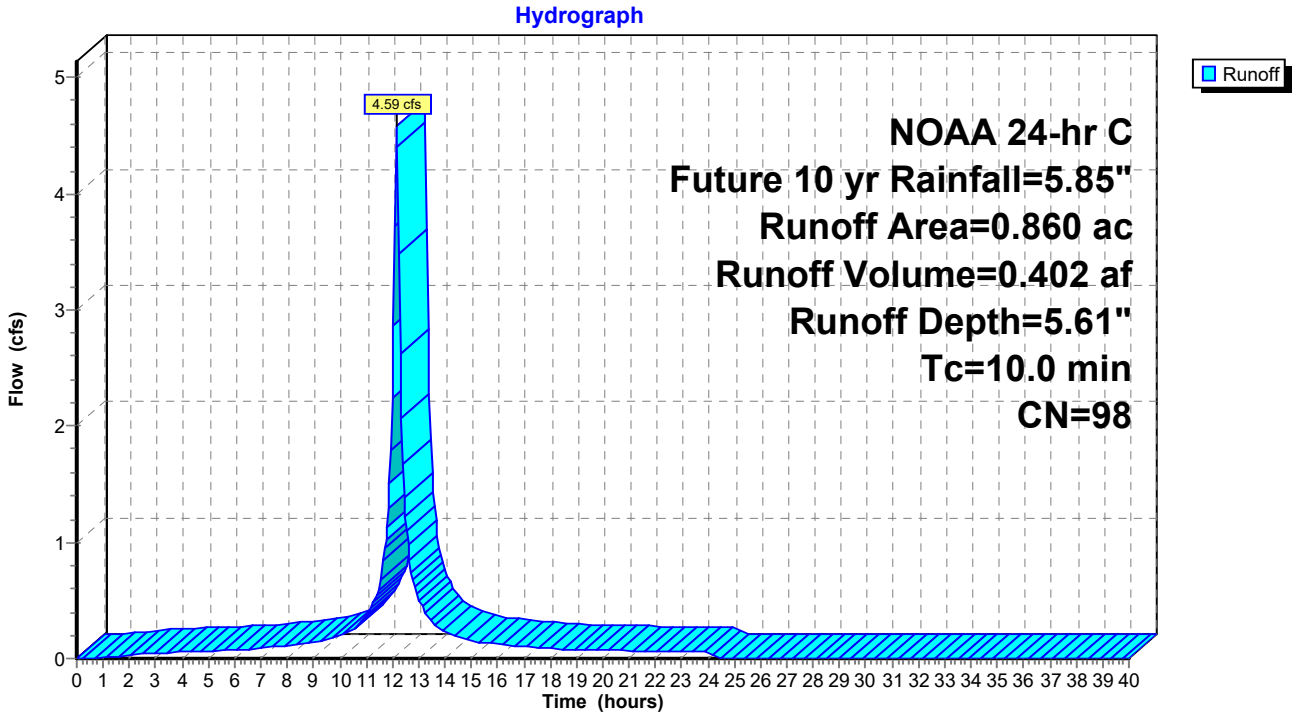
Runoff = 4.59 cfs @ 12.17 hrs, Volume= 0.402 af, Depth= 5.61"
Routed to Pond B-4A : Basin #4A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.742	98	Pavement, HSG C
*	0.118	98	Concrete, HSG C
	0.860	98	Weighted Average
	0.860		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4AI: PDA-4A (impervious)



Summary for Subcatchment 4AP: PDA-4A (pervious)

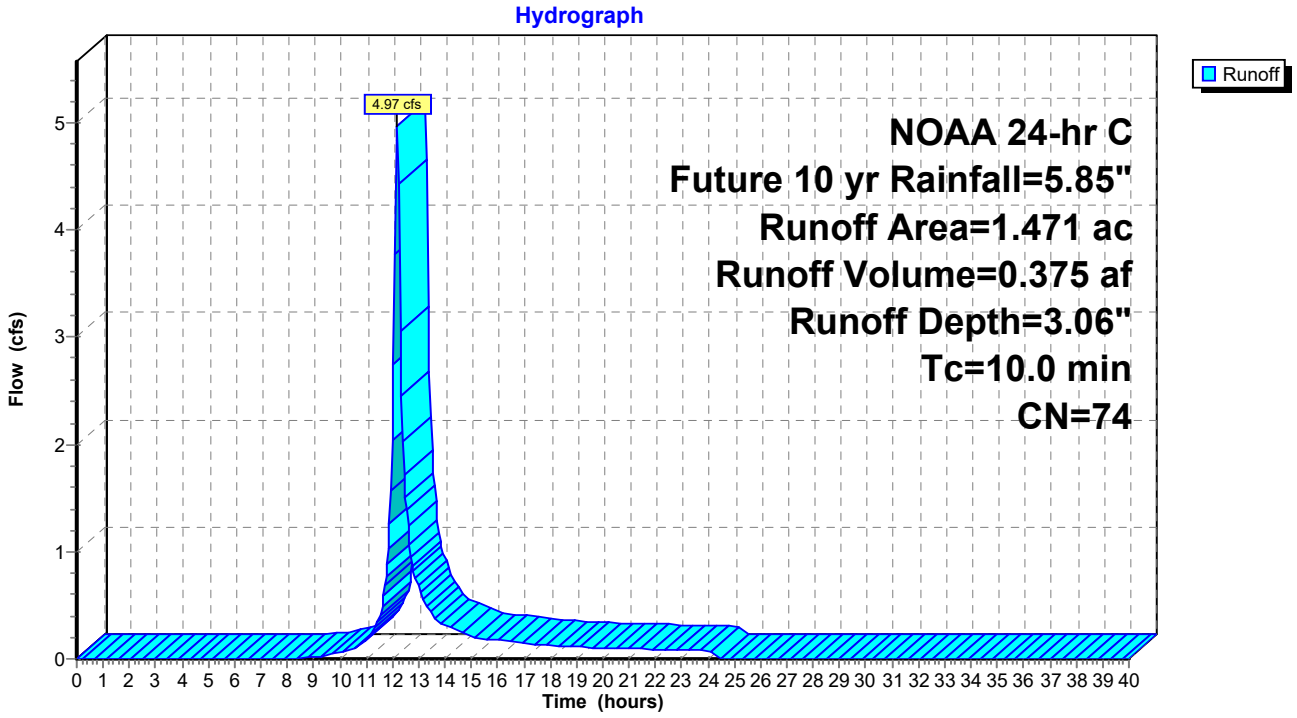
Runoff = 4.97 cfs @ 12.18 hrs, Volume= 0.375 af, Depth= 3.06"
Routed to Pond B-4A : Basin #4A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.471	74	>75% Grass cover, Good, HSG C
1.471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4AP: PDA-4A (pervious)



Summary for Subcatchment 4BI: PDA-4B (impervious)

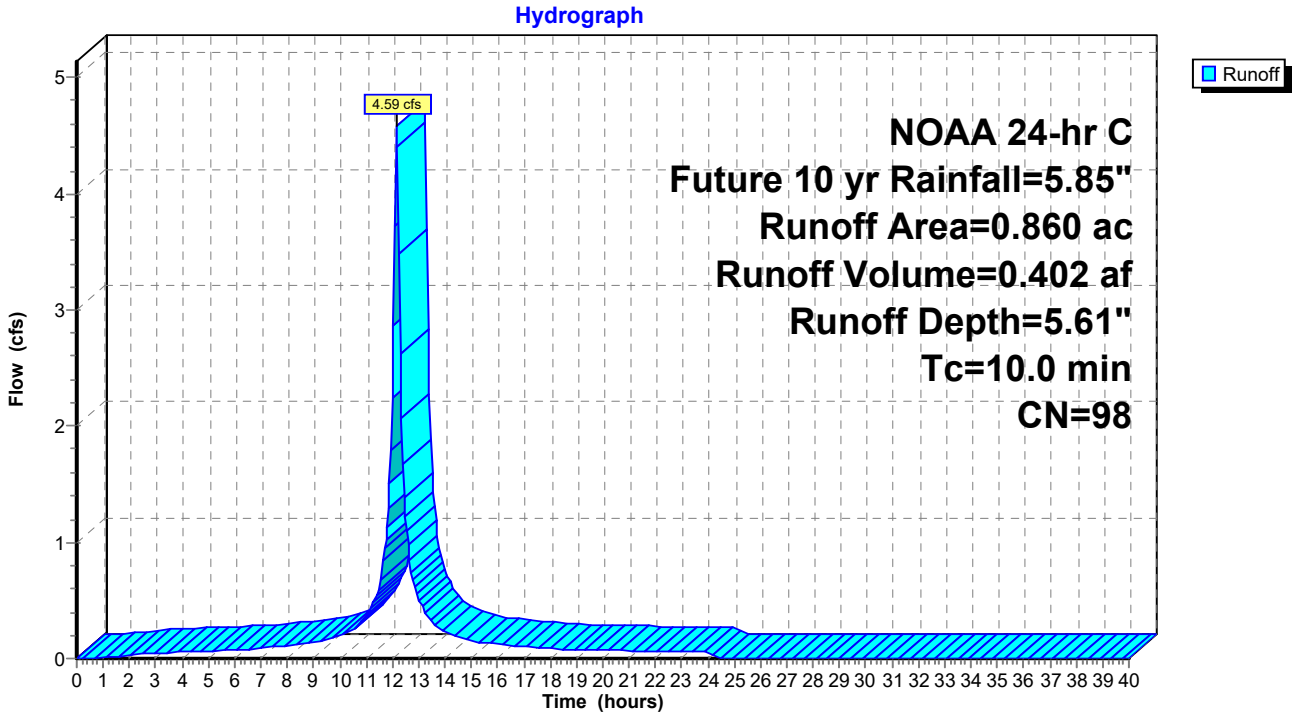
Runoff = 4.59 cfs @ 12.17 hrs, Volume= 0.402 af, Depth= 5.61"
Routed to Pond B-4B : Basin #4B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.742	98	Pavement, HSG C
*	0.118	98	Concrete, HSG C
	0.860	98	Weighted Average
	0.860		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4BI: PDA-4B (impervious)



Summary for Subcatchment 4BP: PDA-4B (pervious)

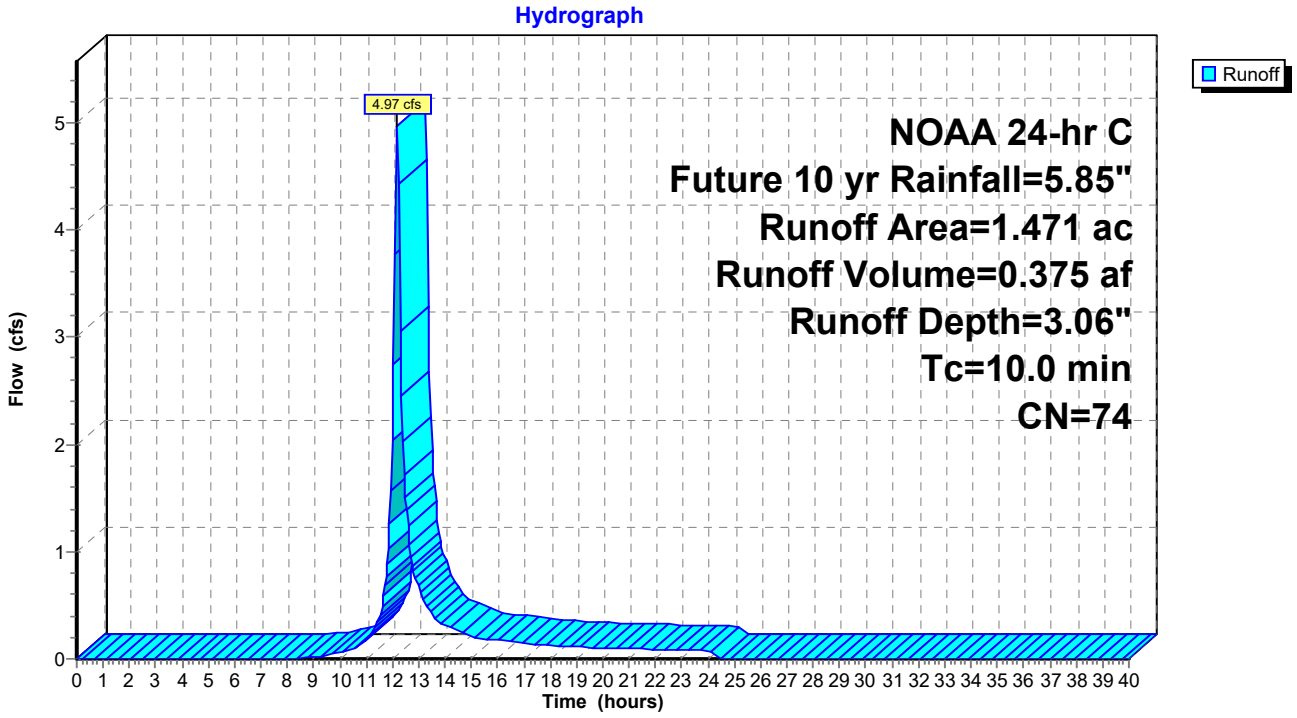
Runoff = 4.97 cfs @ 12.18 hrs, Volume= 0.375 af, Depth= 3.06"
Routed to Pond B-4B : Basin #4B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.471	74	>75% Grass cover, Good, HSG C
1.471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4BP: PDA-4B (pervious)



Summary for Subcatchment 5l: PDA-5 (impervious)

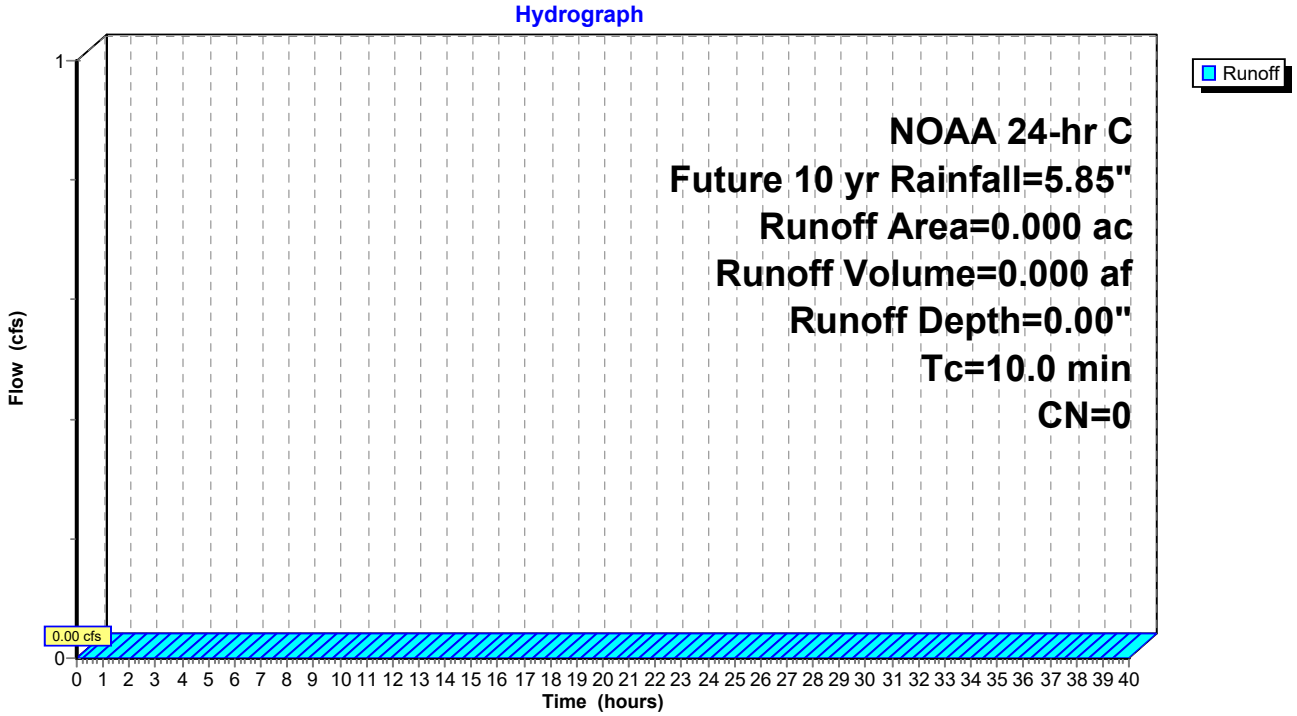
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-5 : Basin #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.000	98	Concrete, HSG C
	0.000	0	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 5l: PDA-5 (impervious)



Summary for Subcatchment 5P: PDA-5 (pervious)

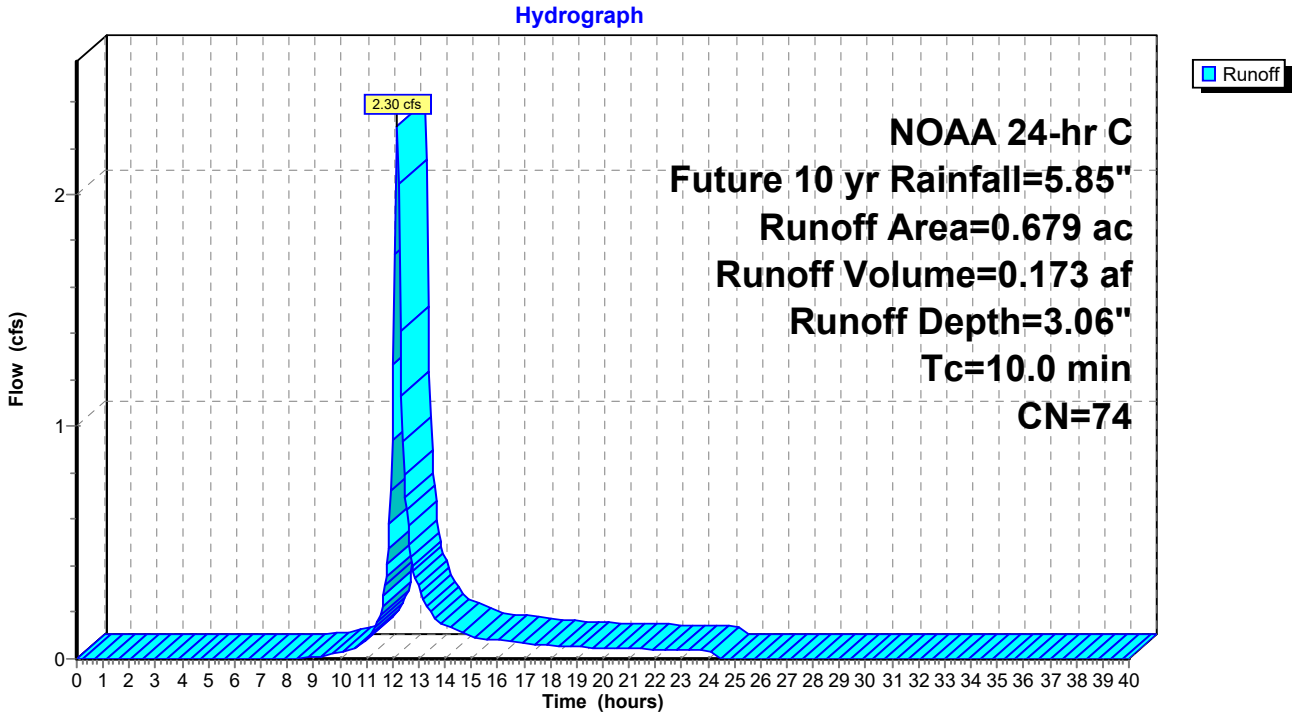
Runoff = 2.30 cfs @ 12.18 hrs, Volume= 0.173 af, Depth= 3.06"
Routed to Pond B-5 : Basin #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.679	74	>75% Grass cover, Good, HSG C
0.679		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 5P: PDA-5 (pervious)



Summary for Subcatchment 6I: PDA-6 (impervious)

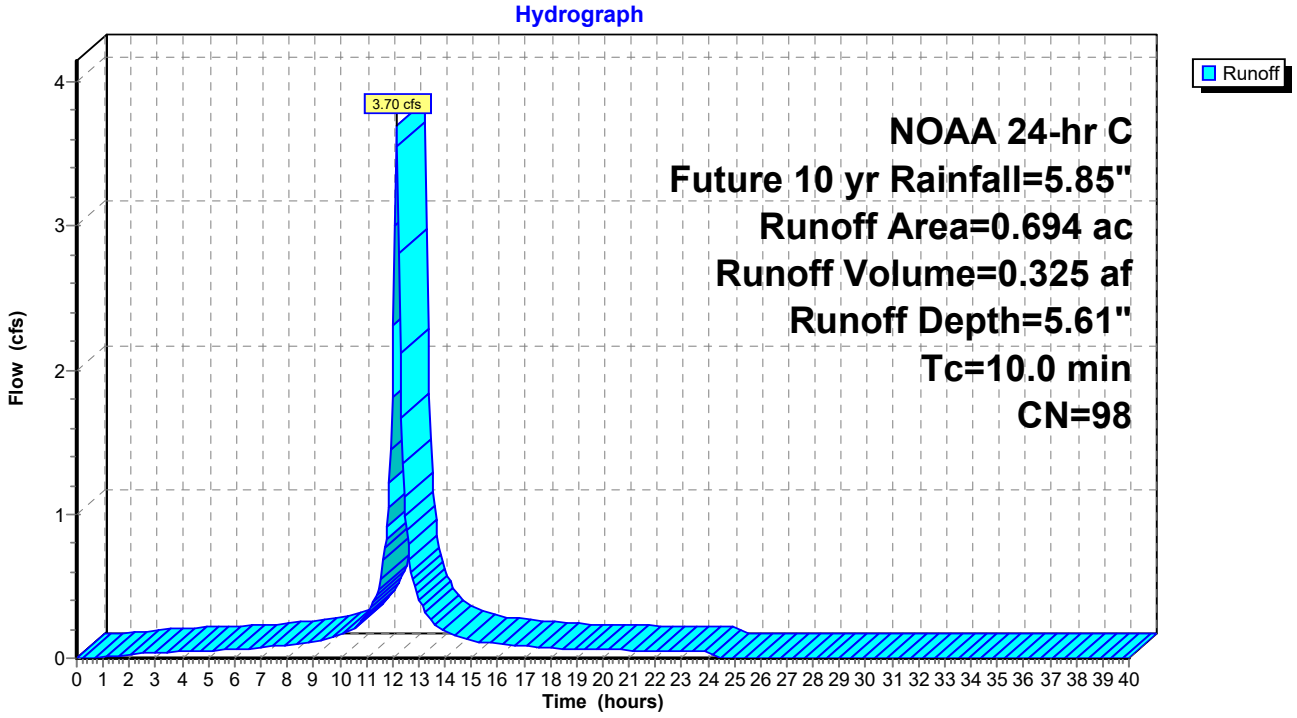
Runoff = 3.70 cfs @ 12.17 hrs, Volume= 0.325 af, Depth= 5.61"
Routed to Pond B-6 : Basin #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.459	98	Pavement, HSG C
*	0.129	98	Roof, HSG C
*	0.106	98	Concrete, HSG C
	0.694	98	Weighted Average
	0.694		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 6I: PDA-6 (impervious)



Summary for Subcatchment 6P: PDA-6 (pervious)

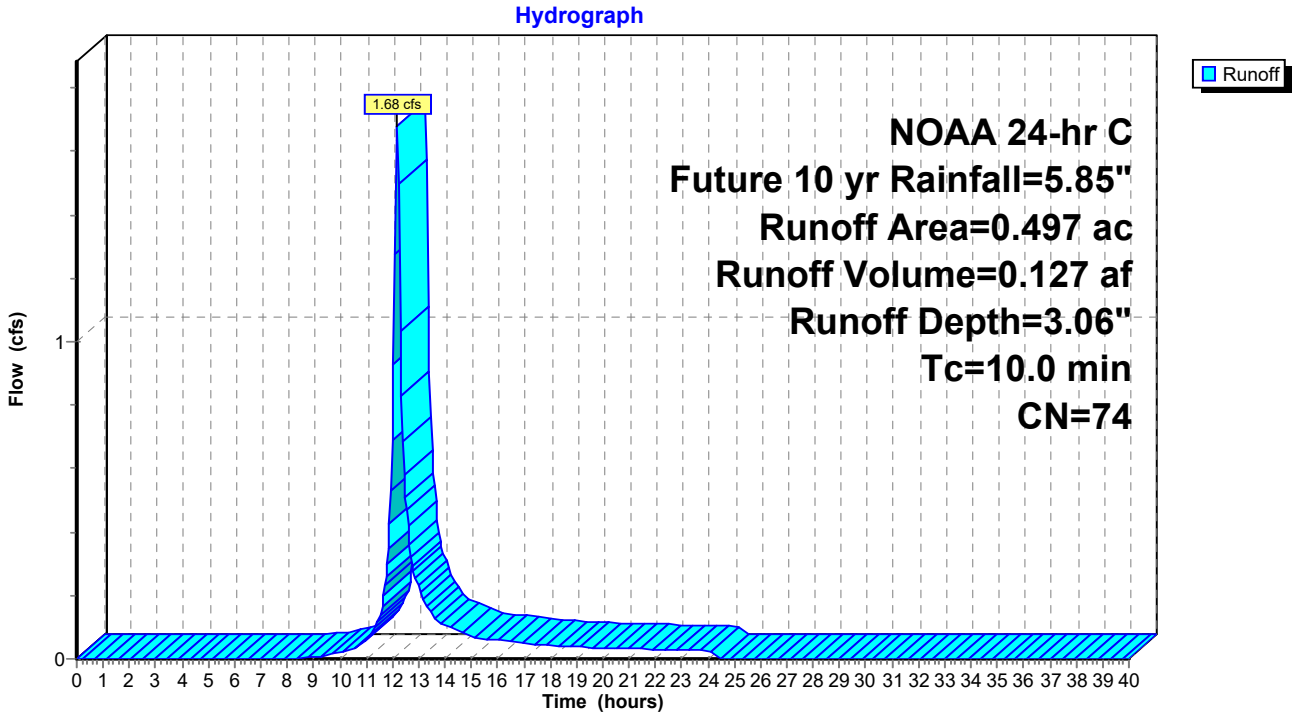
Runoff = 1.68 cfs @ 12.18 hrs, Volume= 0.127 af, Depth= 3.06"
Routed to Pond B-6 : Basin #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.497	74	>75% Grass cover, Good, HSG C
0.497		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 6P: PDA-6 (pervious)



Summary for Subcatchment 7I: PDA-7 (impervious)

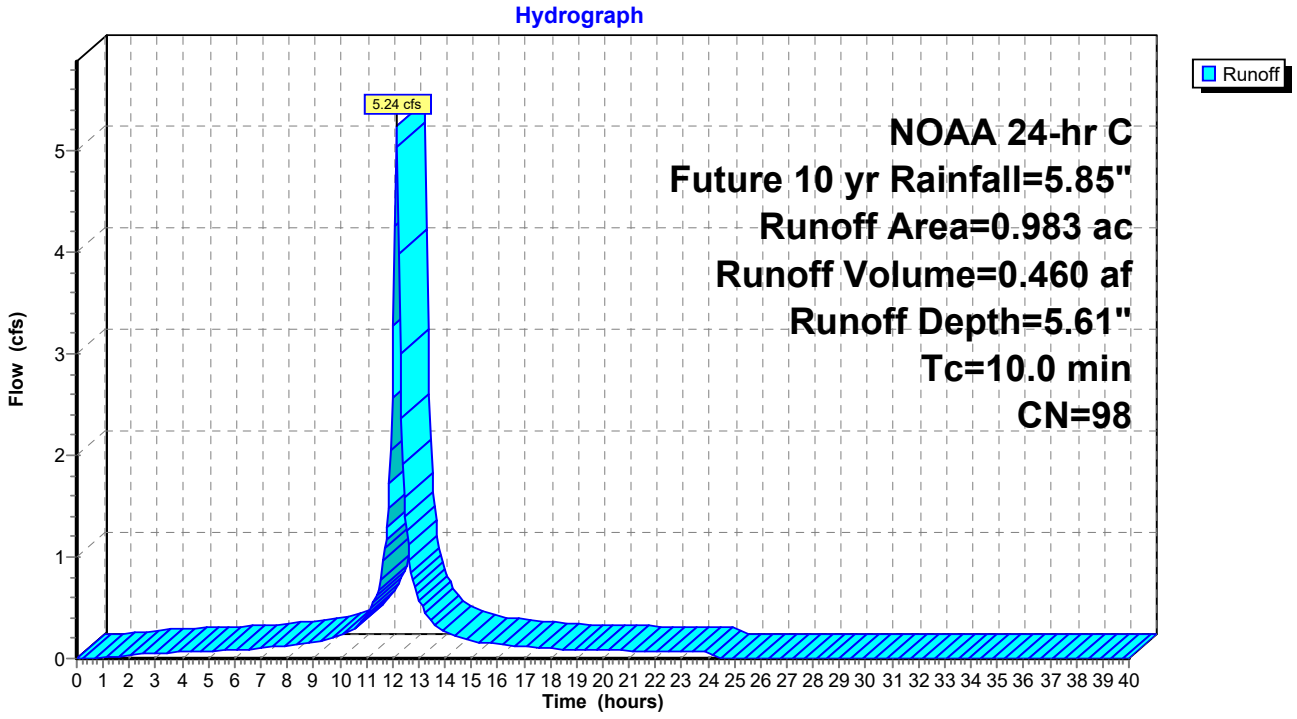
Runoff = 5.24 cfs @ 12.17 hrs, Volume= 0.460 af, Depth= 5.61"
Routed to Pond B-7 : Basin #7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.886	98	Pavement, HSG C
*	0.097	98	Concrete, HSG C
	0.983	98	Weighted Average
	0.983		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 7I: PDA-7 (impervious)



Summary for Subcatchment 7P: PDA-7 (pervious)

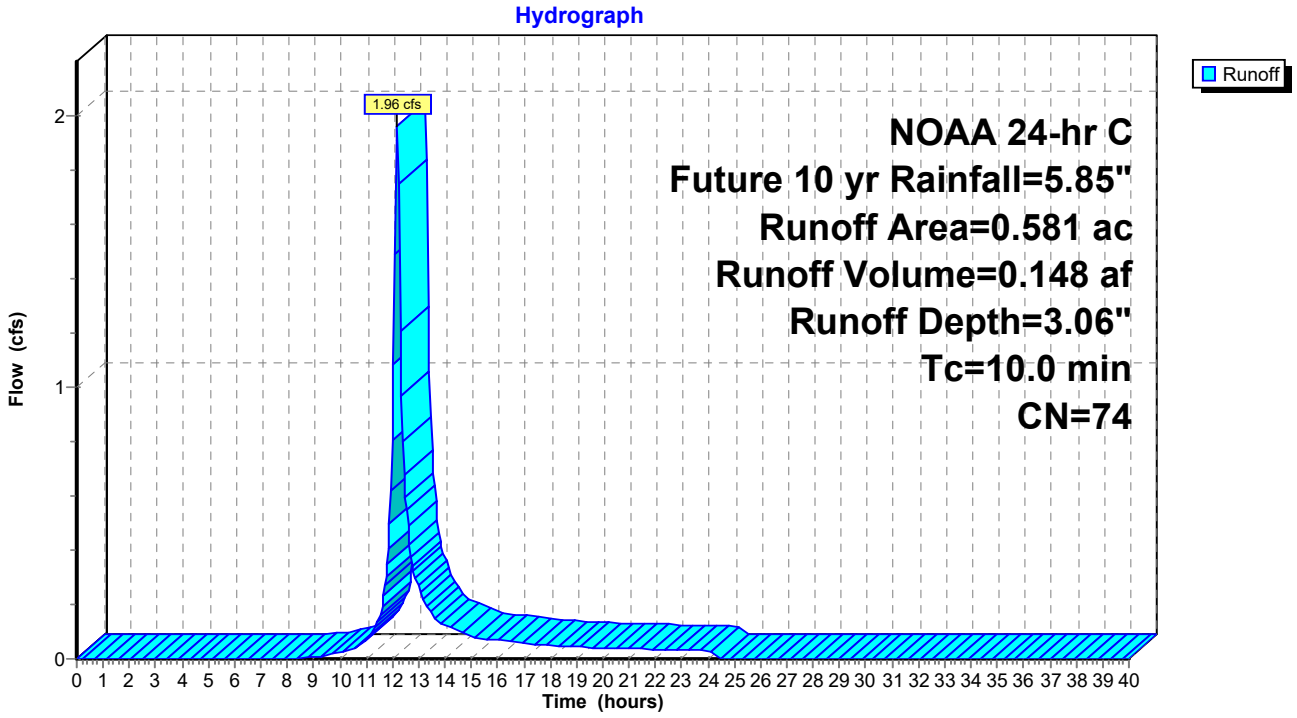
Runoff = 1.96 cfs @ 12.18 hrs, Volume= 0.148 af, Depth= 3.06"
Routed to Pond B-7 : Basin #7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.581	74	>75% Grass cover, Good, HSG C
0.581		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 7P: PDA-7 (pervious)



Summary for Subcatchment 8I: PDA-8 (impervious)

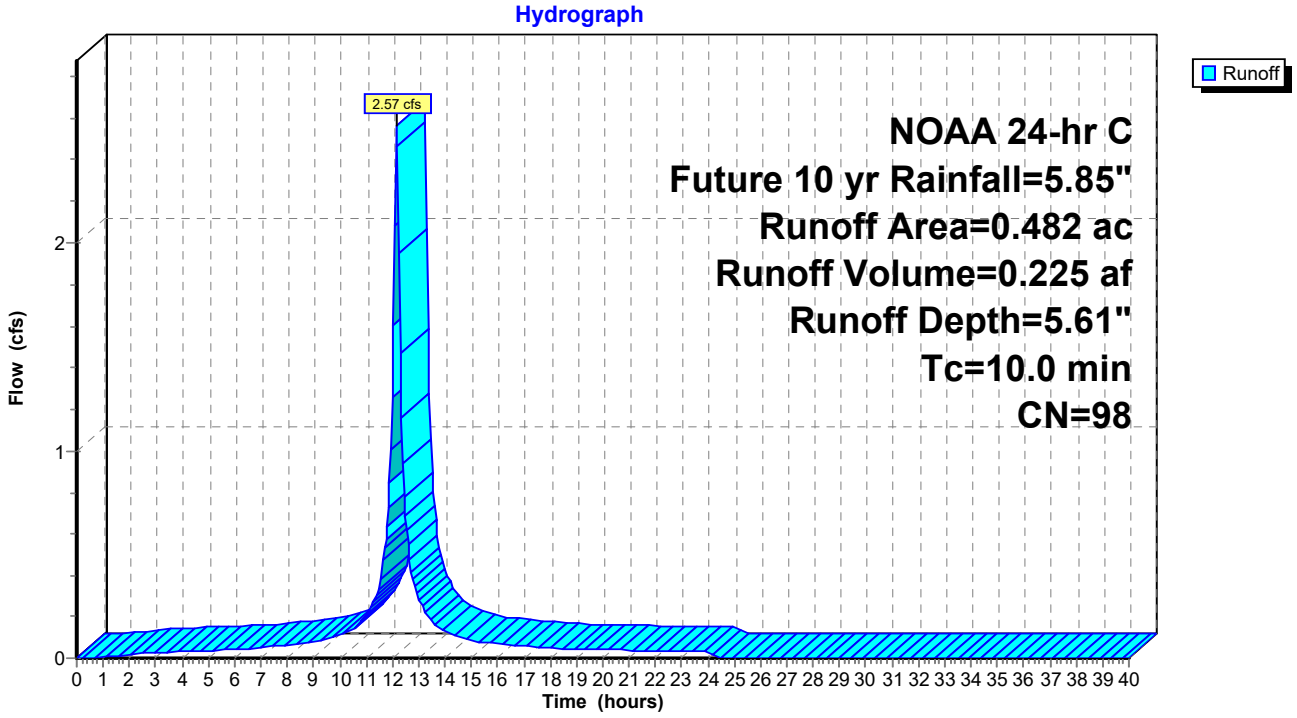
Runoff = 2.57 cfs @ 12.17 hrs, Volume= 0.225 af, Depth= 5.61"
Routed to Pond B-8 : Basin #8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.482	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.482	98	Weighted Average
	0.482		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8I: PDA-8 (impervious)



Summary for Subcatchment 8P: PDA-8 (pervious)

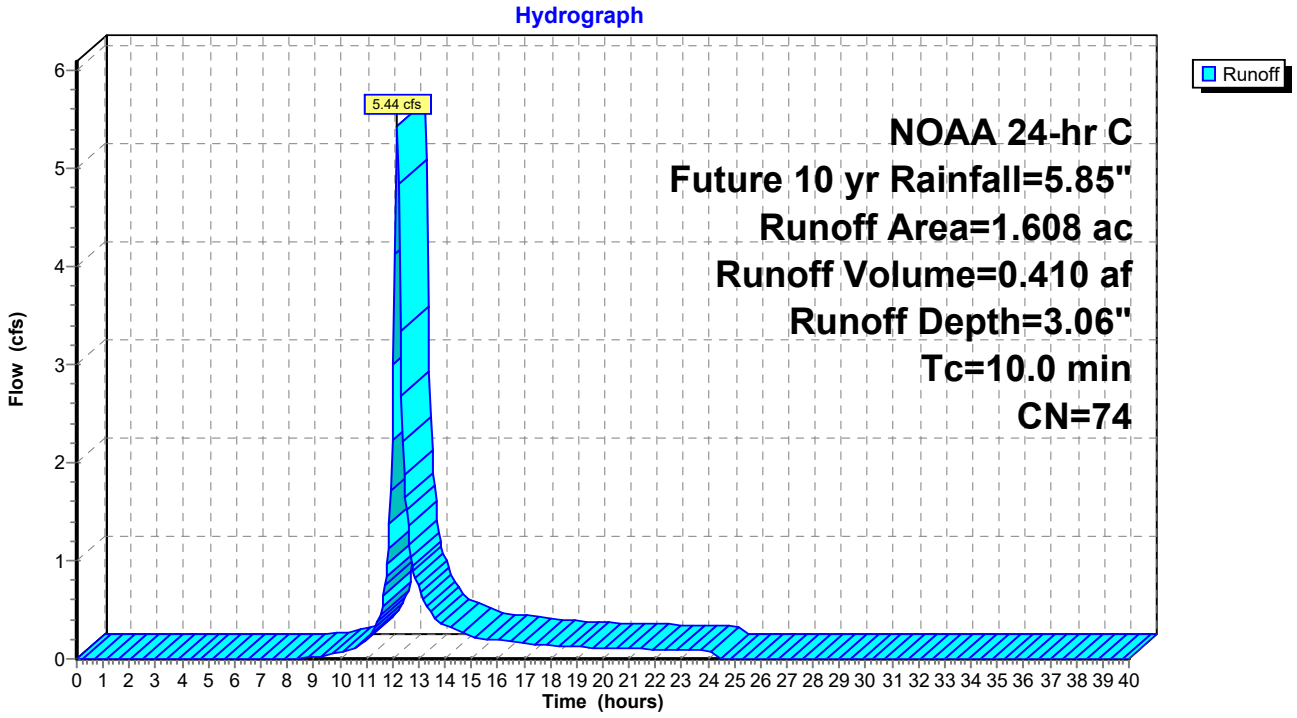
Runoff = 5.44 cfs @ 12.18 hrs, Volume= 0.410 af, Depth= 3.06"
Routed to Pond B-8 : Basin #8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.608	74	>75% Grass cover, Good, HSG C
1.608		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8P: PDA-8 (pervious)



Summary for Subcatchment 9I: PDA-9 (impervious)

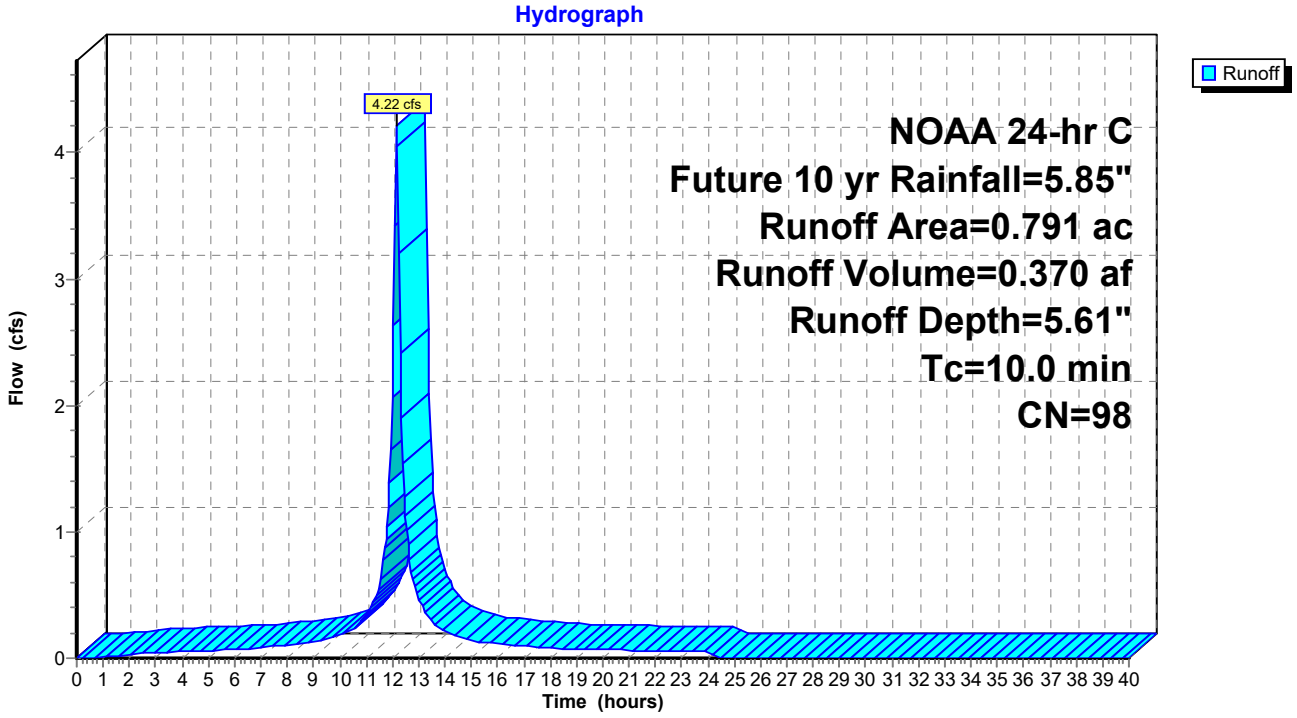
Runoff = 4.22 cfs @ 12.17 hrs, Volume= 0.370 af, Depth= 5.61"
Routed to Pond B-9 : Basin #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.286	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.055	98	Concrete, HSG C
	0.791	98	Weighted Average
	0.791		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 9I: PDA-9 (impervious)



Summary for Subcatchment 9P: PDA-9 (pervious)

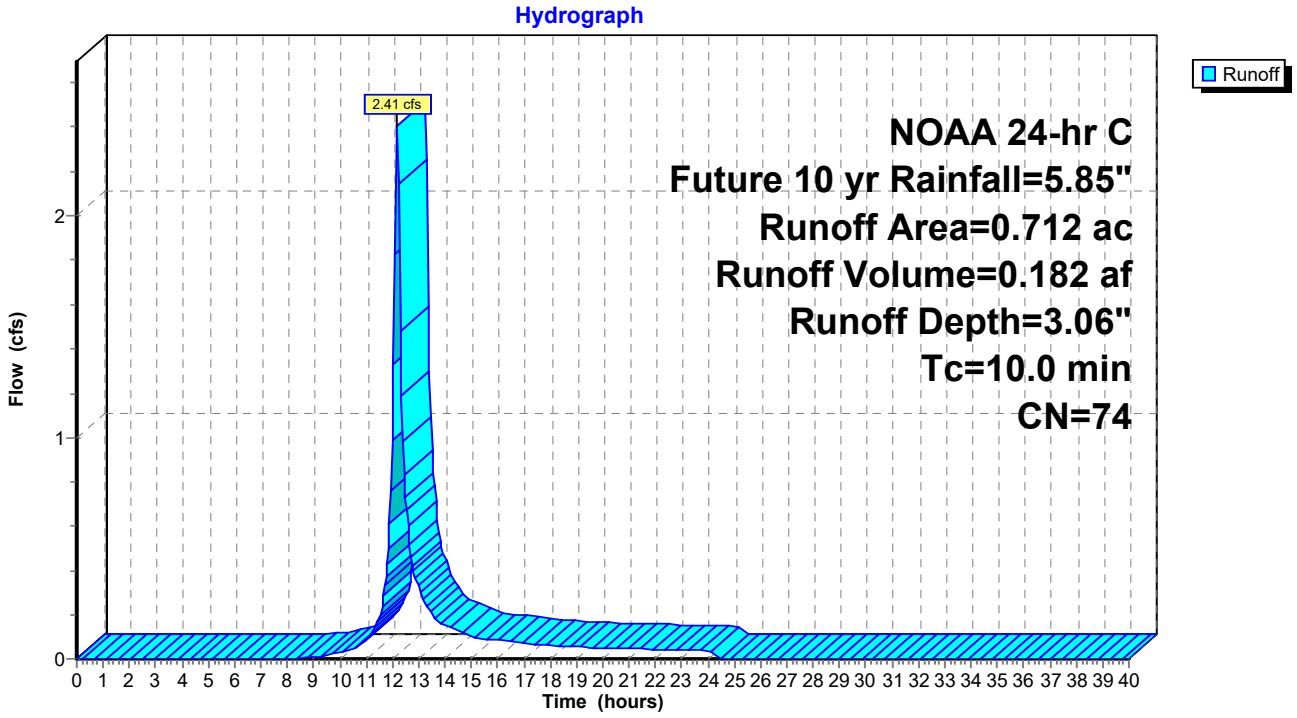
Runoff = 2.41 cfs @ 12.18 hrs, Volume= 0.182 af, Depth= 3.06"
Routed to Pond B-9 : Basin #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.712	74	>75% Grass cover, Good, HSG C
0.712		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 9P: PDA-9 (pervious)



Summary for Subcatchment 10l: PDA-10 (impervious)

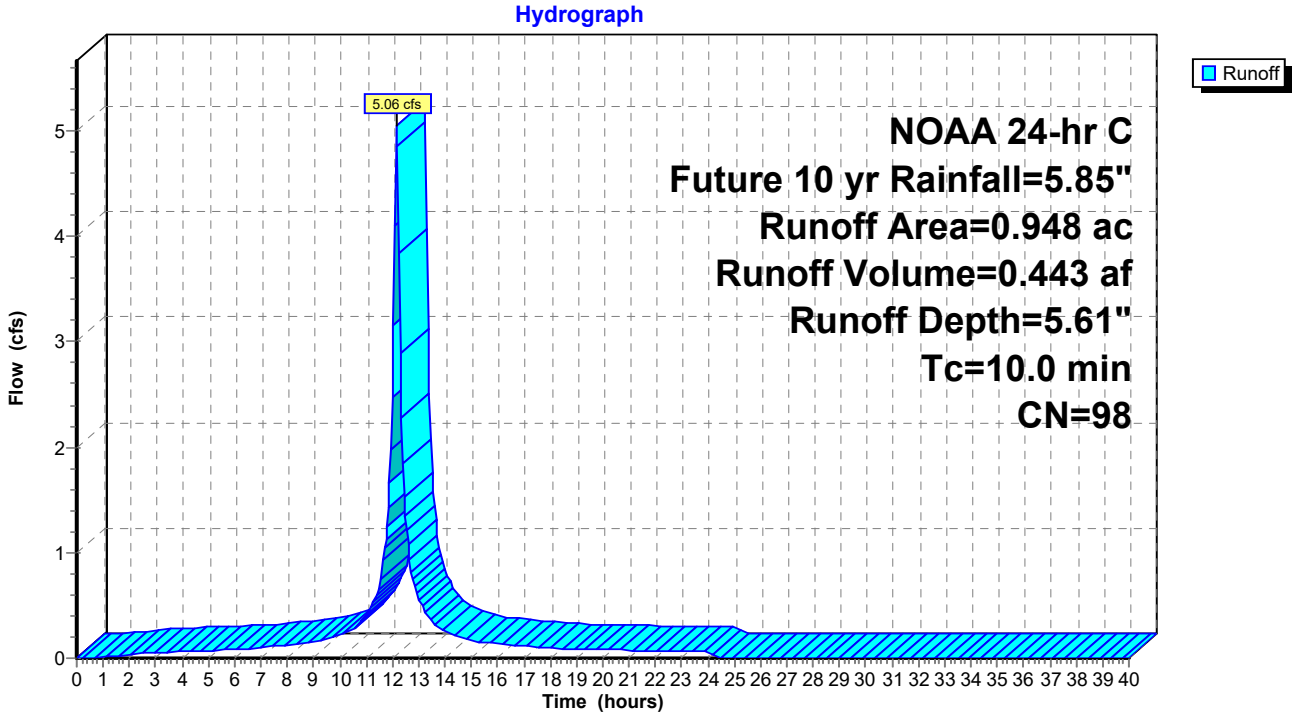
Runoff = 5.06 cfs @ 12.17 hrs, Volume= 0.443 af, Depth= 5.61"
Routed to Pond B-10 : Basin #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.570	98	Pavement, HSG C
*	0.321	98	Roof, HSG C
*	0.057	98	Concrete, HSG C
	0.948	98	Weighted Average
	0.948		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10l: PDA-10 (impervious)



Summary for Subcatchment 10P: PDA-10 (pervious)

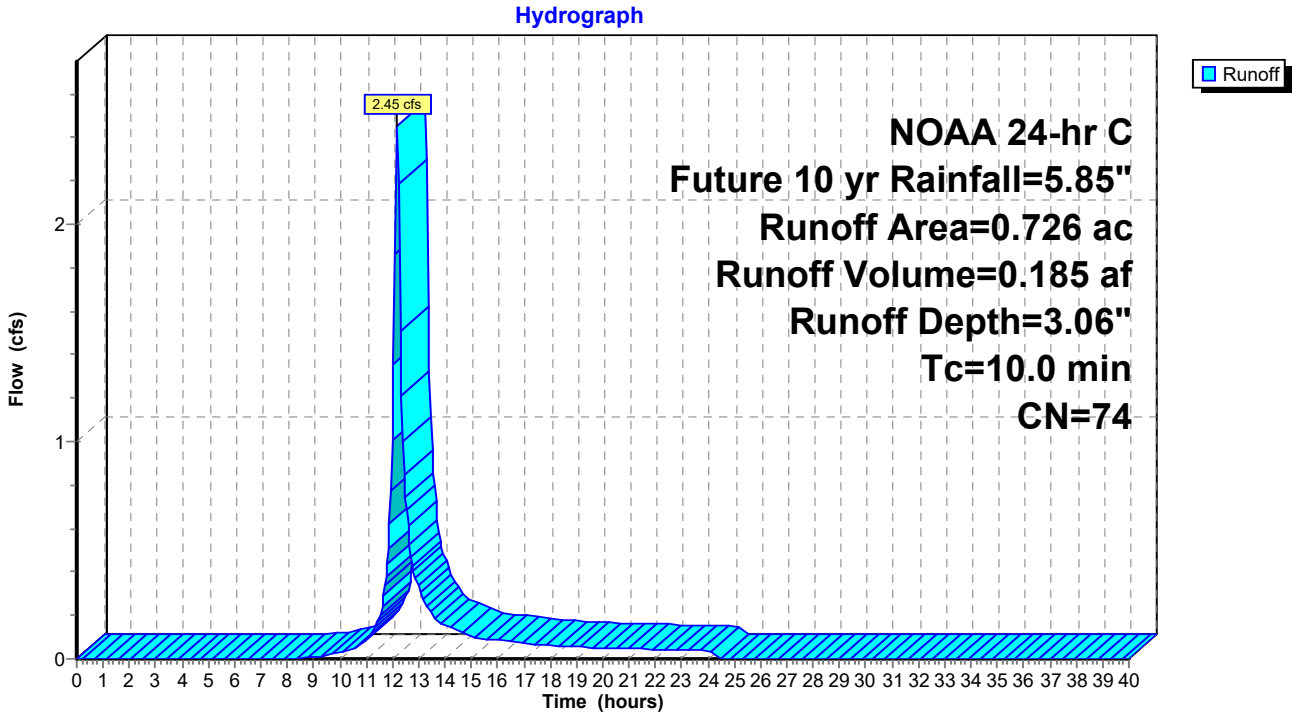
Runoff = 2.45 cfs @ 12.18 hrs, Volume= 0.185 af, Depth= 3.06"
Routed to Pond B-10 : Basin #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.726	74	>75% Grass cover, Good, HSG C
0.726		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10P: PDA-10 (pervious)



Summary for Subcatchment 11I: PDA-11 (impervious)

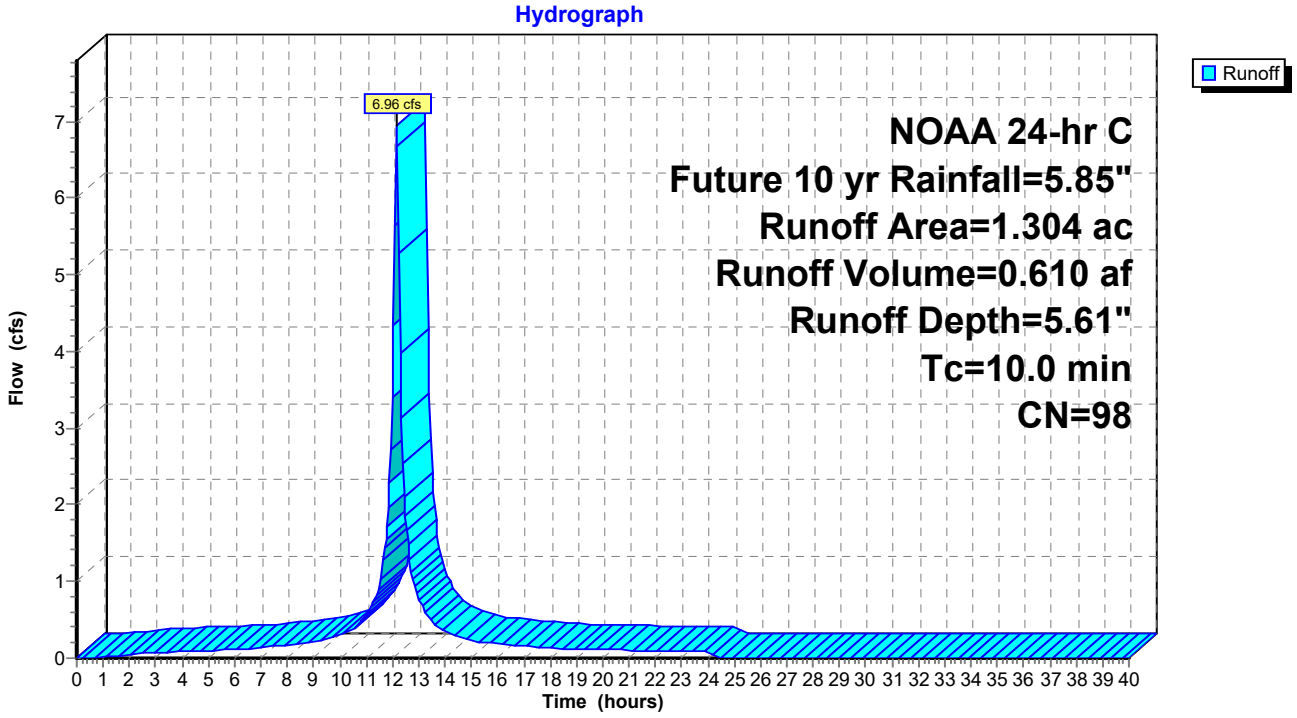
Runoff = 6.96 cfs @ 12.17 hrs, Volume= 0.610 af, Depth= 5.61"
Routed to Pond B-11 : Basin #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.166	98	Concrete, HSG C
	0.231	98	Roofs, HSG C
	0.907	98	Paved roads w/curbs & sewers, HSG C
	1.304	98	Weighted Average
	1.304		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 11I: PDA-11 (impervious)



Summary for Subcatchment 11P: PDA-11 (pervious)

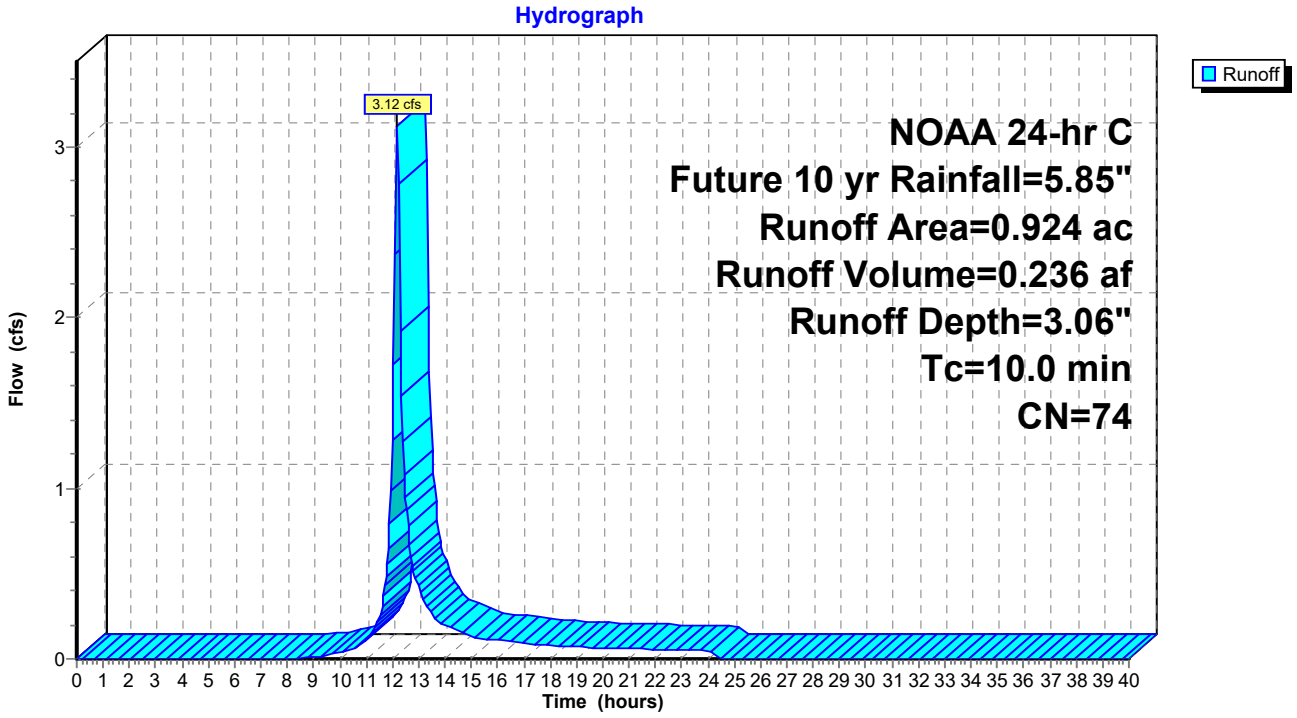
Runoff = 3.12 cfs @ 12.18 hrs, Volume= 0.236 af, Depth= 3.06"
Routed to Pond B-11 : Basin #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.924	74	>75% Grass cover, Good, HSG C
0.924		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 11P: PDA-11 (pervious)



Summary for Subcatchment 12l: PDA-12 (impervious)

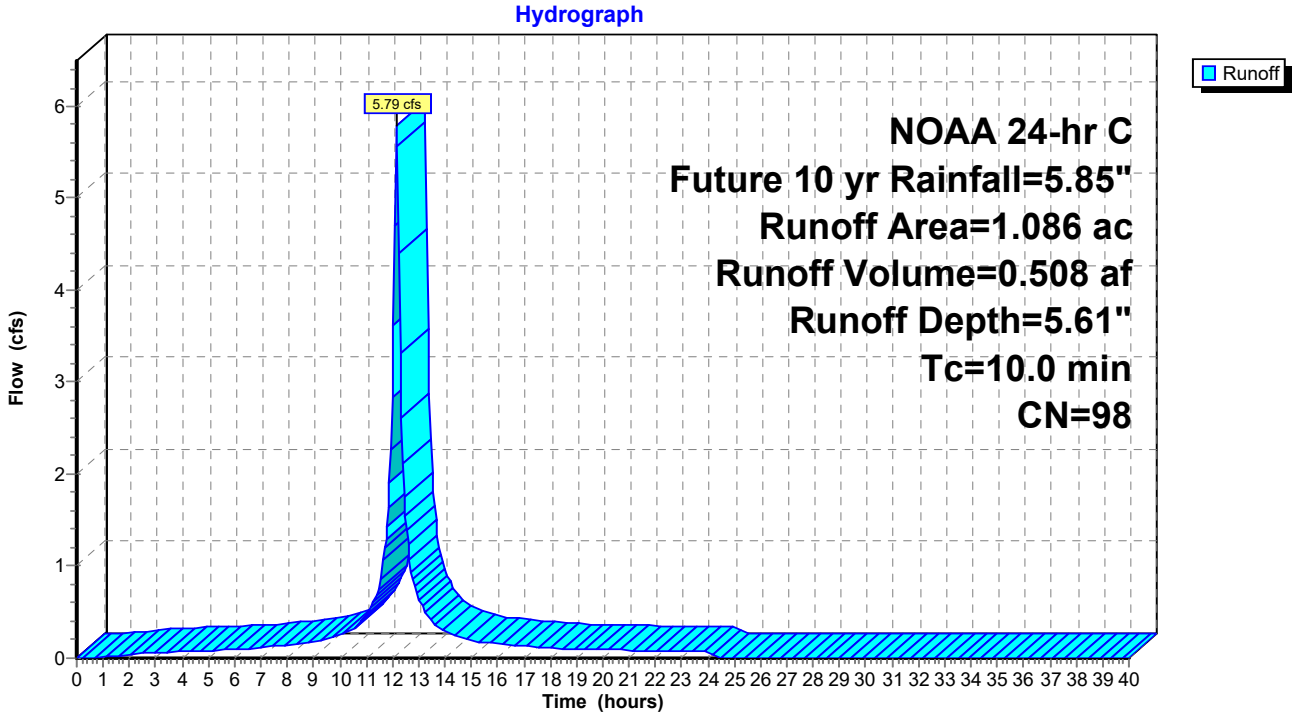
Runoff = 5.79 cfs @ 12.17 hrs, Volume= 0.508 af, Depth= 5.61"
Routed to Pond B-12 : Basin #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.404	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.039	98	Concrete, HSG C
	1.086	98	Weighted Average
	1.086		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 12l: PDA-12 (impervious)



Summary for Subcatchment 12P: PDA-12 (pervious)

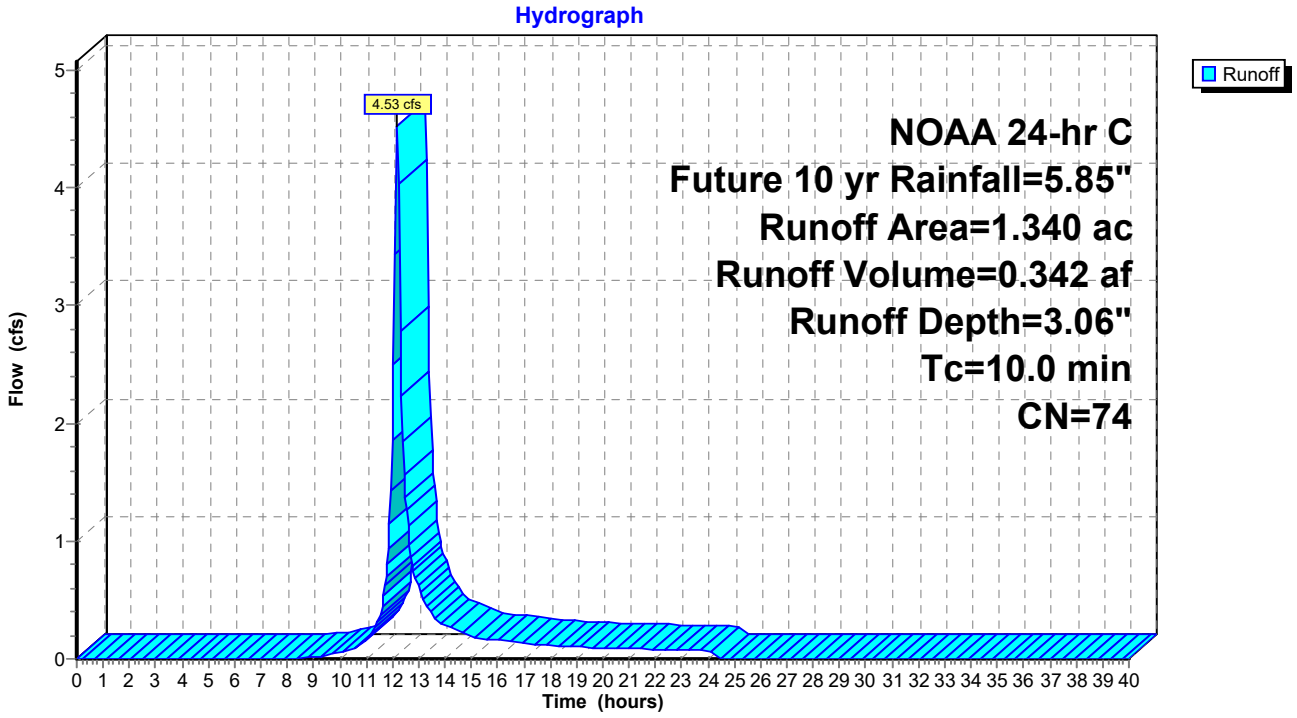
Runoff = 4.53 cfs @ 12.18 hrs, Volume= 0.342 af, Depth= 3.06"
Routed to Pond B-12 : Basin #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.340	74	>75% Grass cover, Good, HSG C
1.340		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 12P: PDA-12 (pervious)



Summary for Subcatchment 13I: PDA-13 (impervious)

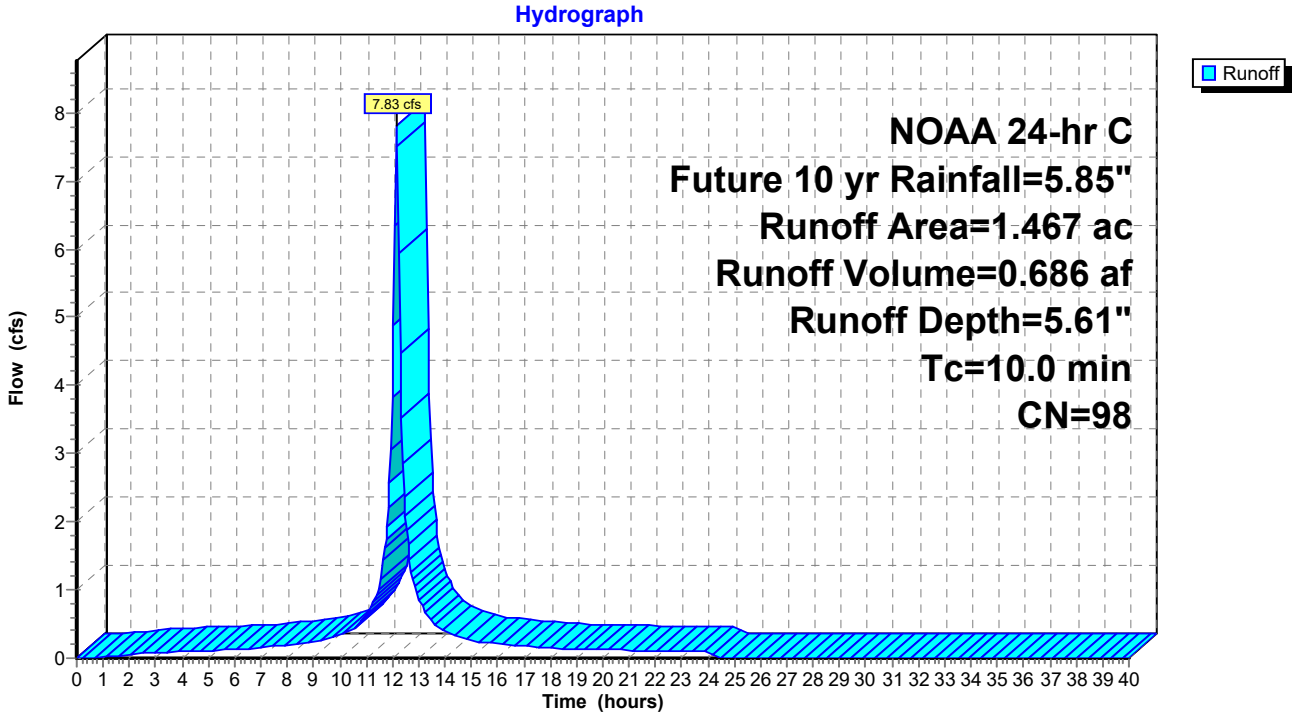
Runoff = 7.83 cfs @ 12.17 hrs, Volume= 0.686 af, Depth= 5.61"
Routed to Pond B-13 : Basin #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.678	98	Pavement, HSG C
*	0.707	98	Roof, HSG C
*	0.082	98	Concrete, HSG C
	1.467	98	Weighted Average
	1.467		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 13I: PDA-13 (impervious)



Summary for Subcatchment 13P: PDA-13 (pervious)

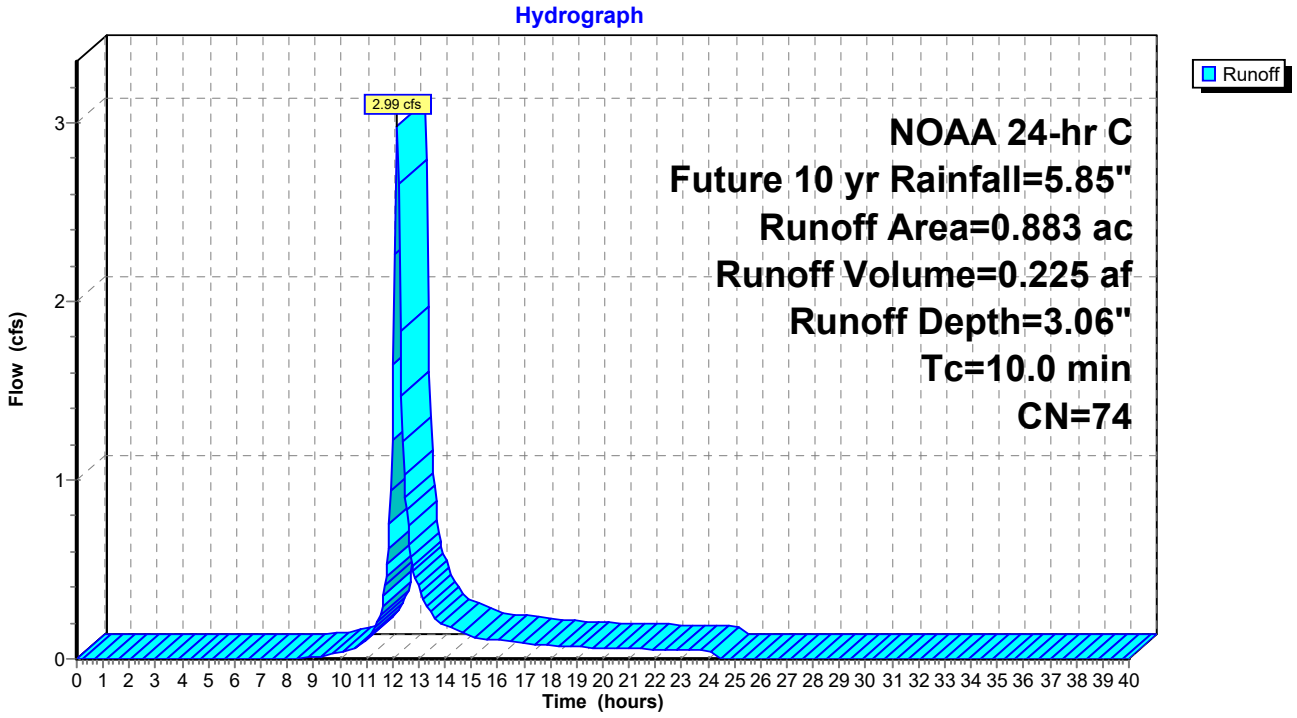
Runoff = 2.99 cfs @ 12.18 hrs, Volume= 0.225 af, Depth= 3.06"
Routed to Pond B-13 : Basin #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.883	74	>75% Grass cover, Good, HSG C
0.883		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 13P: PDA-13 (pervious)



Summary for Subcatchment 14l: PDA-14 (impervious)

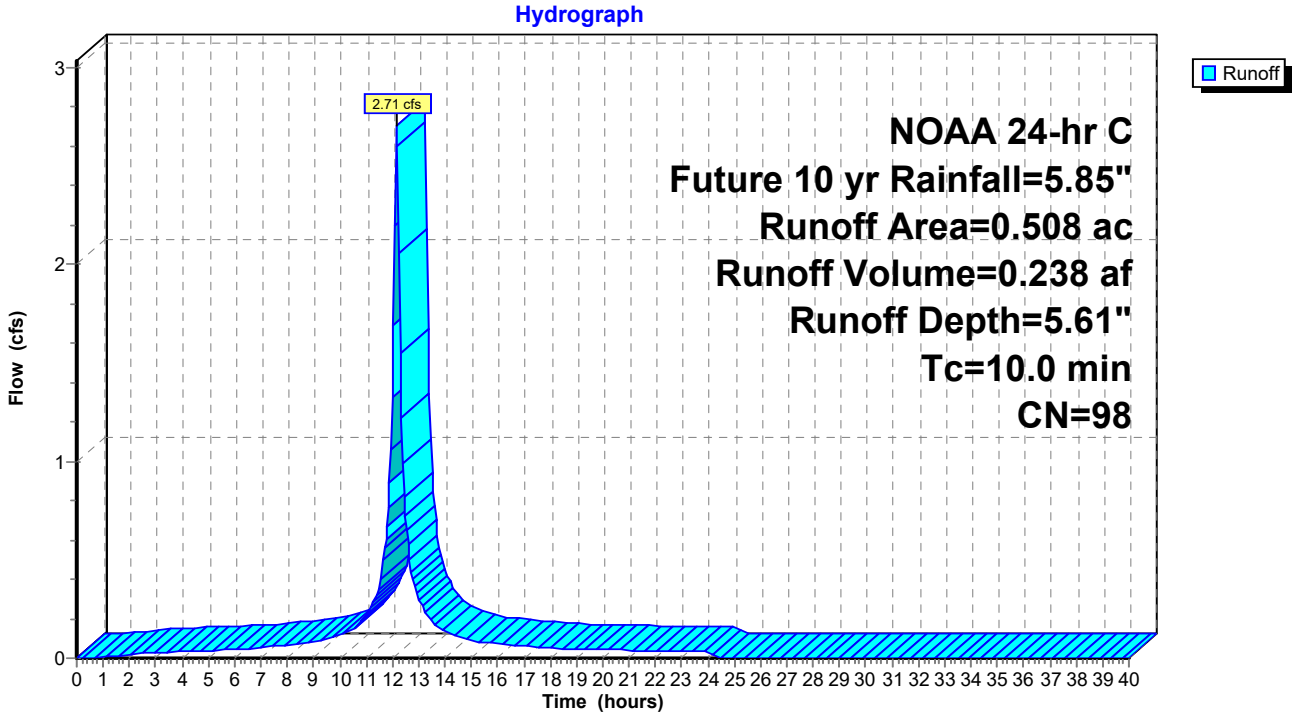
Runoff = 2.71 cfs @ 12.17 hrs, Volume= 0.238 af, Depth= 5.61"
Routed to Pond B-14 : Basin #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.308	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	0.508	98	Weighted Average
	0.508		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 14l: PDA-14 (impervious)



Summary for Subcatchment 14P: PDA-14 (pervious)

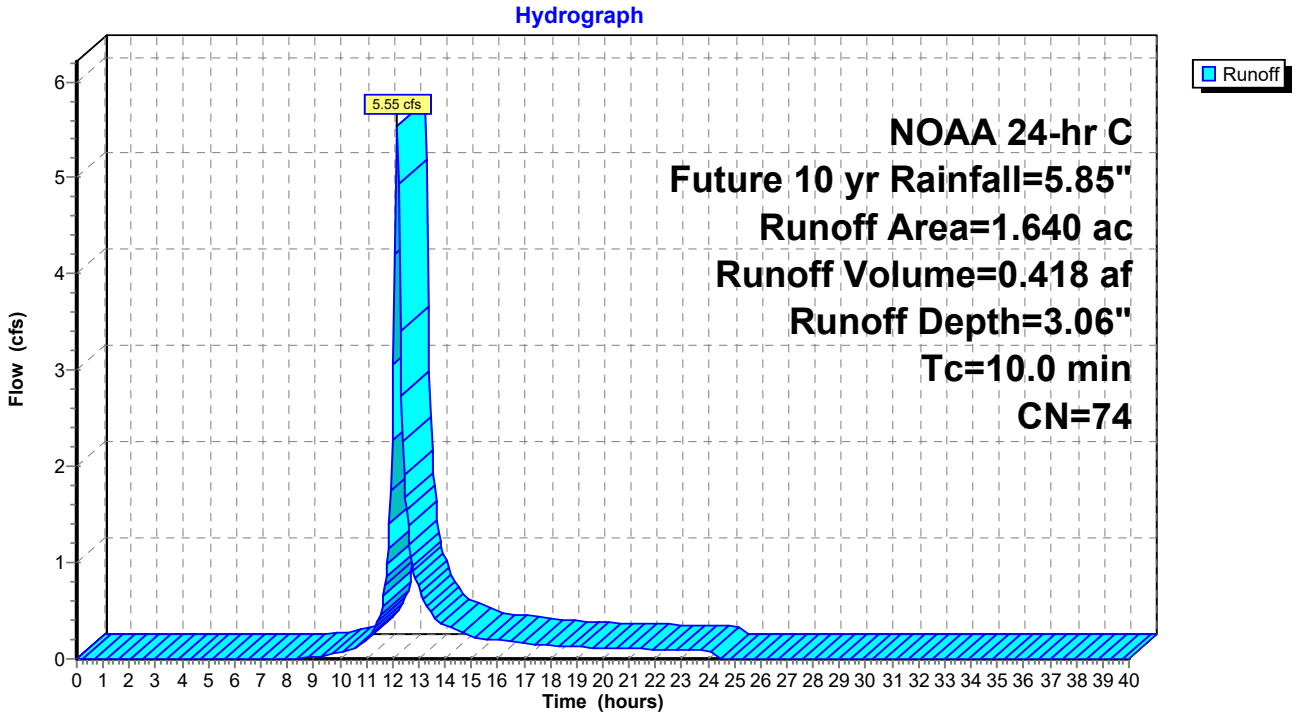
Runoff = 5.55 cfs @ 12.18 hrs, Volume= 0.418 af, Depth= 3.06"
Routed to Pond B-14 : Basin #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.640	74	>75% Grass cover, Good, HSG C
1.640		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 14P: PDA-14 (pervious)



Summary for Subcatchment 15l: PDA-15 (impervious)

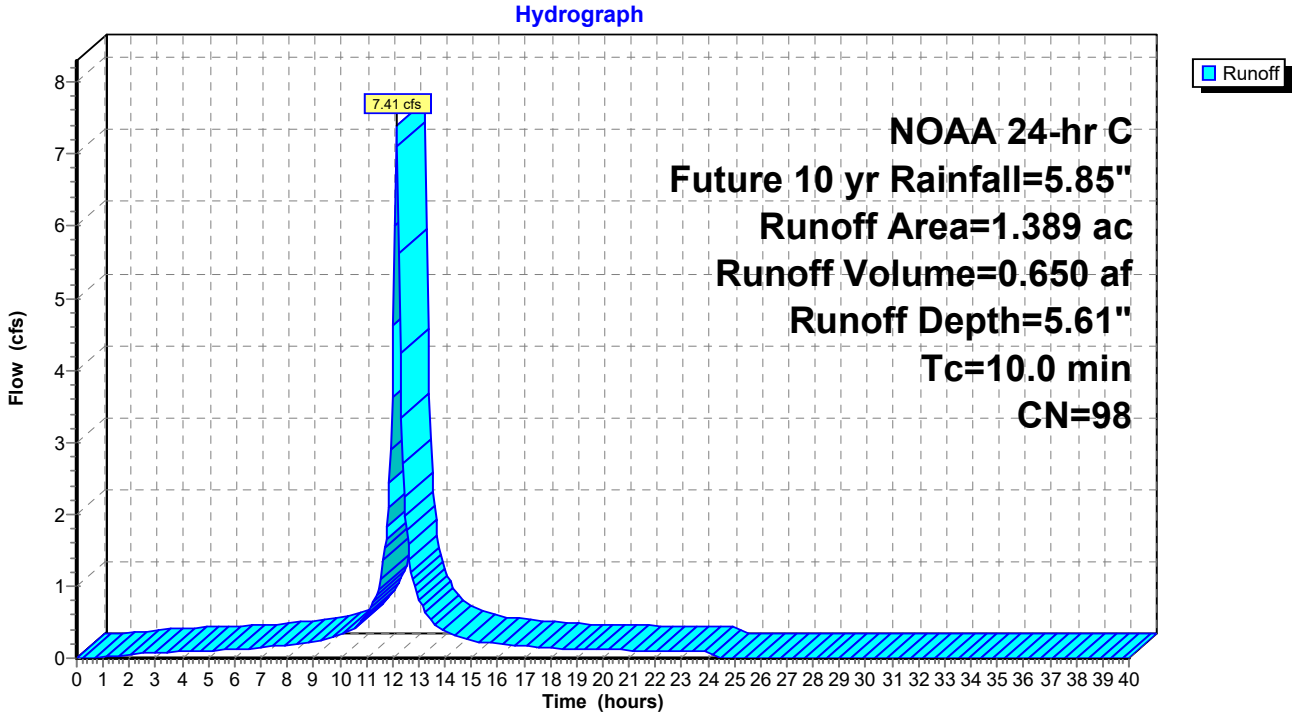
Runoff = 7.41 cfs @ 12.17 hrs, Volume= 0.650 af, Depth= 5.61"
Routed to Pond B-15 : Basin #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.501	98	Pavement, HSG C
*	0.836	98	Roof, HSG C
*	0.052	98	Concrete, HSG C
	1.389	98	Weighted Average
	1.389		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 15l: PDA-15 (impervious)



Summary for Subcatchment 15P: PDA-15 (pervious)

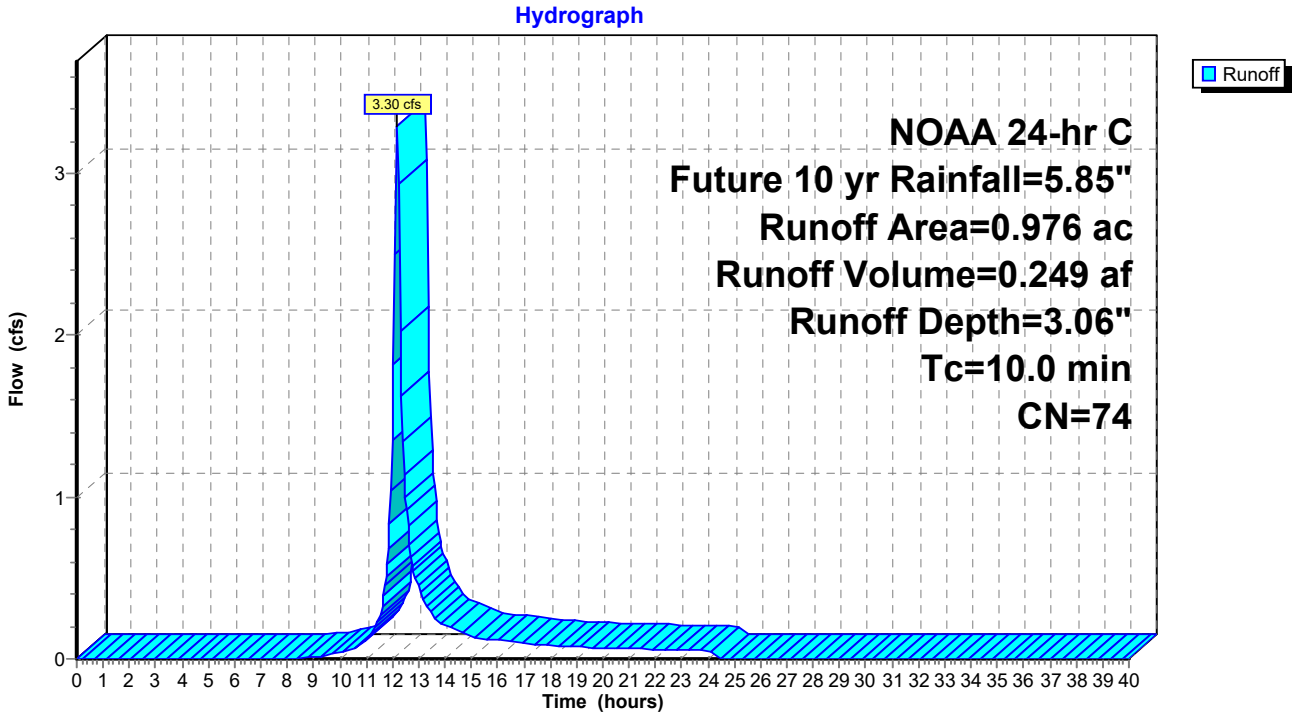
Runoff = 3.30 cfs @ 12.18 hrs, Volume= 0.249 af, Depth= 3.06"
Routed to Pond B-15 : Basin #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.976	74	>75% Grass cover, Good, HSG C
0.976		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 15P: PDA-15 (pervious)



Summary for Subcatchment 16AI: PDA-16A (impervious)

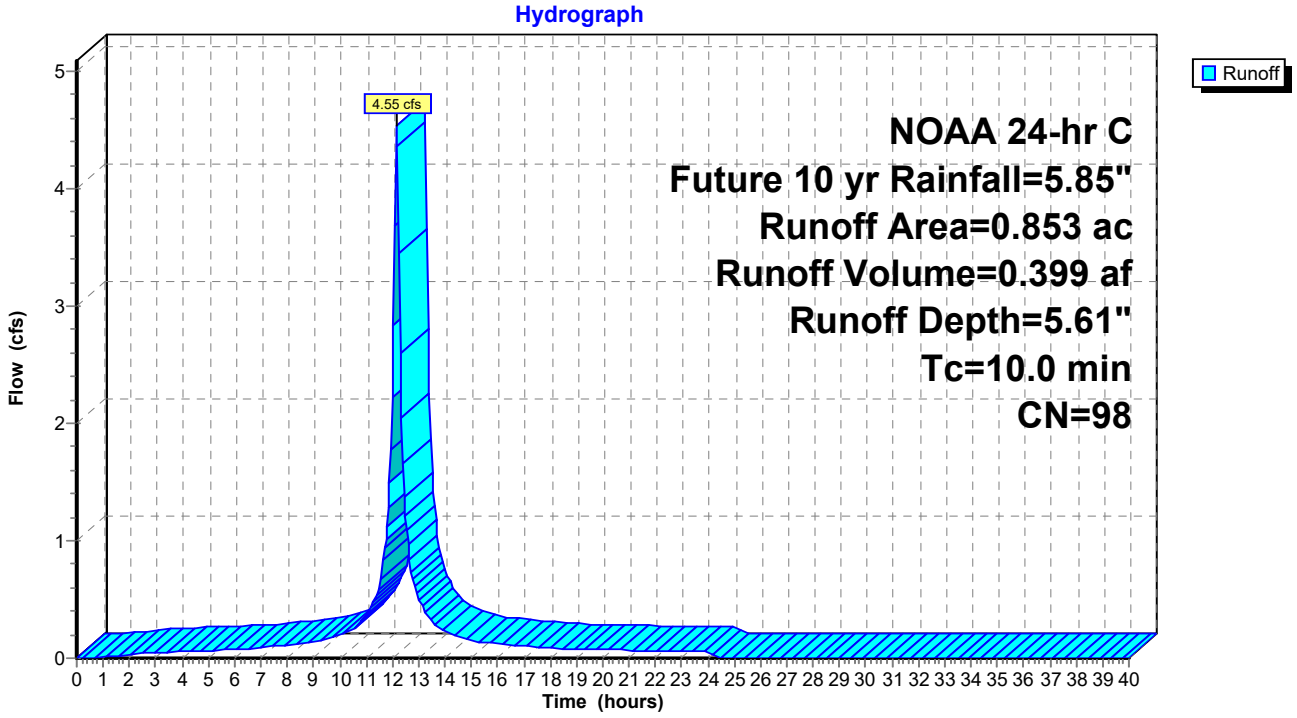
Runoff = 4.55 cfs @ 12.17 hrs, Volume= 0.399 af, Depth= 5.61"
Routed to Pond B-16A : Basin #16A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.072	98	Pavement, HSG C
*	0.771	98	Roof, HSG C
*	0.010	98	Concrete, HSG C
	0.853	98	Weighted Average
	0.853		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16AI: PDA-16A (impervious)



Summary for Subcatchment 16AP: PDA-16A (pervious)

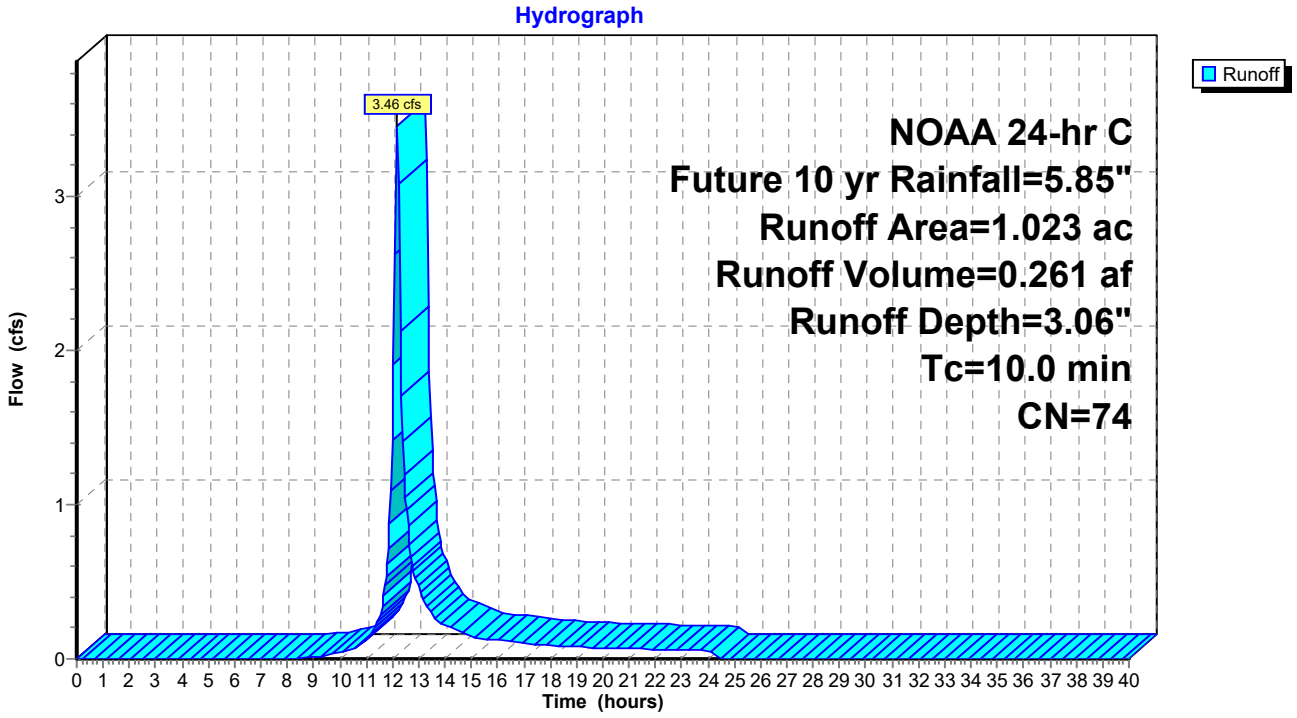
Runoff = 3.46 cfs @ 12.18 hrs, Volume= 0.261 af, Depth= 3.06"
Routed to Pond B-16A : Basin #16A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.023	74	>75% Grass cover, Good, HSG C
1.023		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16AP: PDA-16A (pervious)



Summary for Subcatchment 16BI: PDA-16B (impervious)

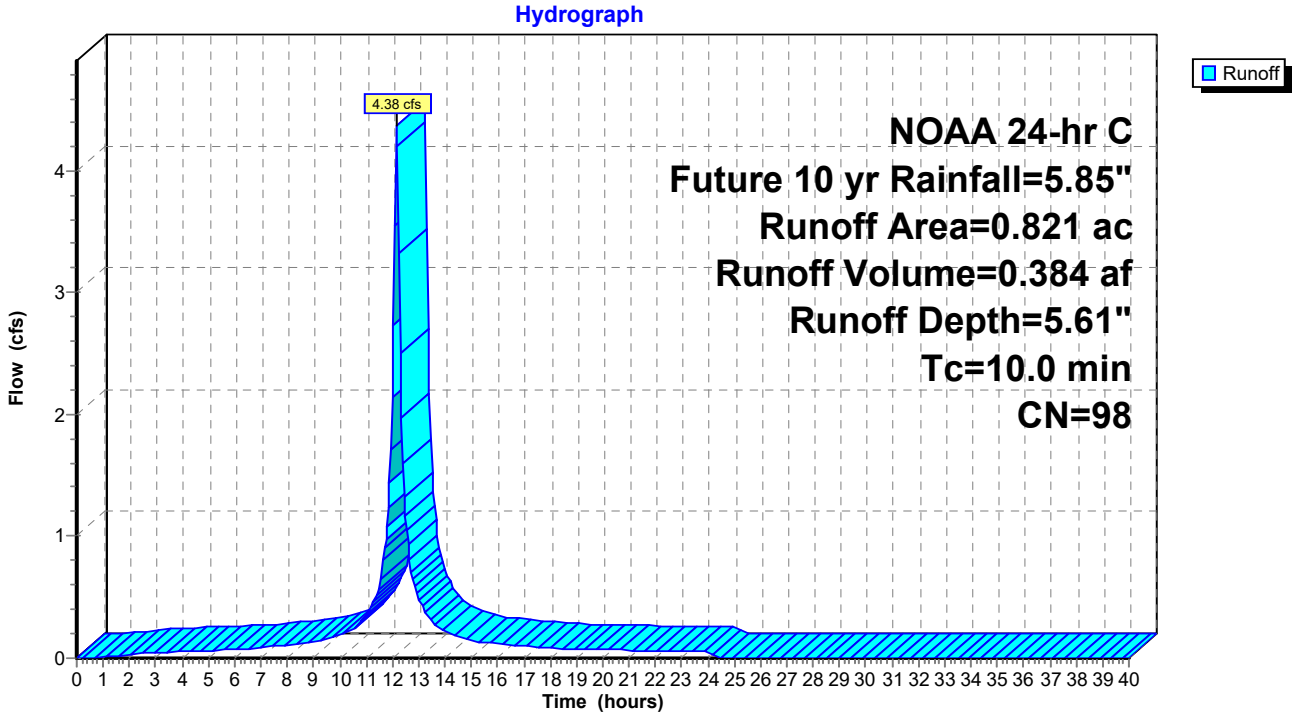
Runoff = 4.38 cfs @ 12.17 hrs, Volume= 0.384 af, Depth= 5.61"
Routed to Pond B-16B : Basin #16B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.621	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	0.821	98	Weighted Average
	0.821		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16BI: PDA-16B (impervious)



Summary for Subcatchment 16BP: PDA-16B (pervious)

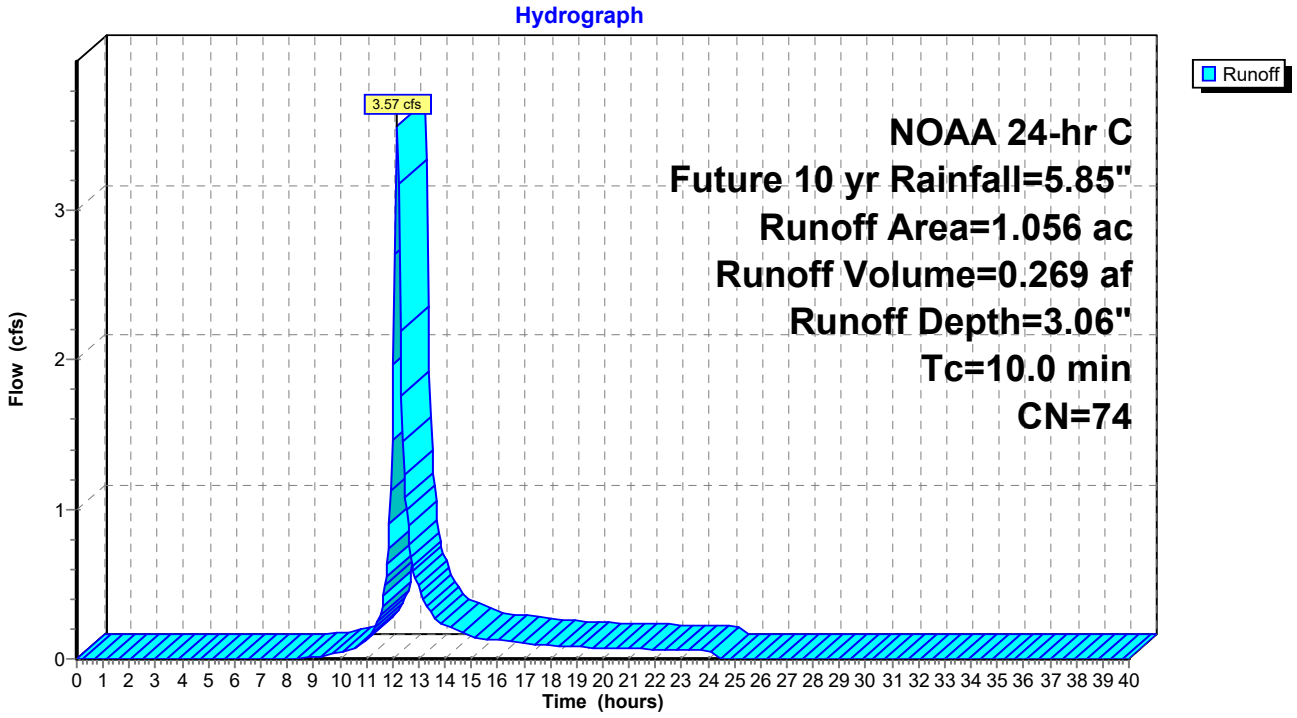
Runoff = 3.57 cfs @ 12.18 hrs, Volume= 0.269 af, Depth= 3.06"
Routed to Pond B-16B : Basin #16B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.056	74	>75% Grass cover, Good, HSG C
1.056		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16BP: PDA-16B (pervious)



Summary for Subcatchment 17AI: PDA-17A (impervious)

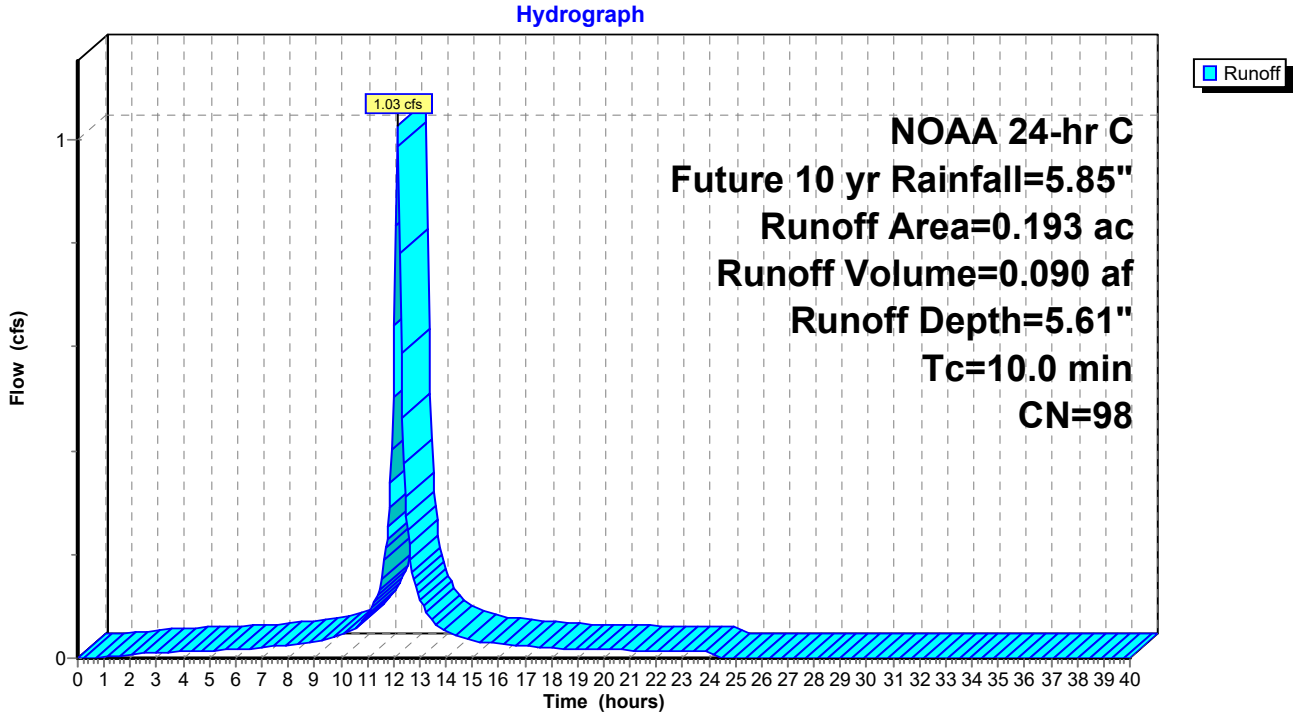
Runoff = 1.03 cfs @ 12.17 hrs, Volume= 0.090 af, Depth= 5.61"
Routed to Pond B-17A : Basin #17A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.193	98	Roof, HSG C
	0.000	98	Paved roads w/curbs & sewers, HSG C
*	0.000	98	Concrete, HSG C
	0.193	98	Weighted Average
	0.193		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17AI: PDA-17A (impervious)



Summary for Subcatchment 17AP: PDA-17A (pervious)

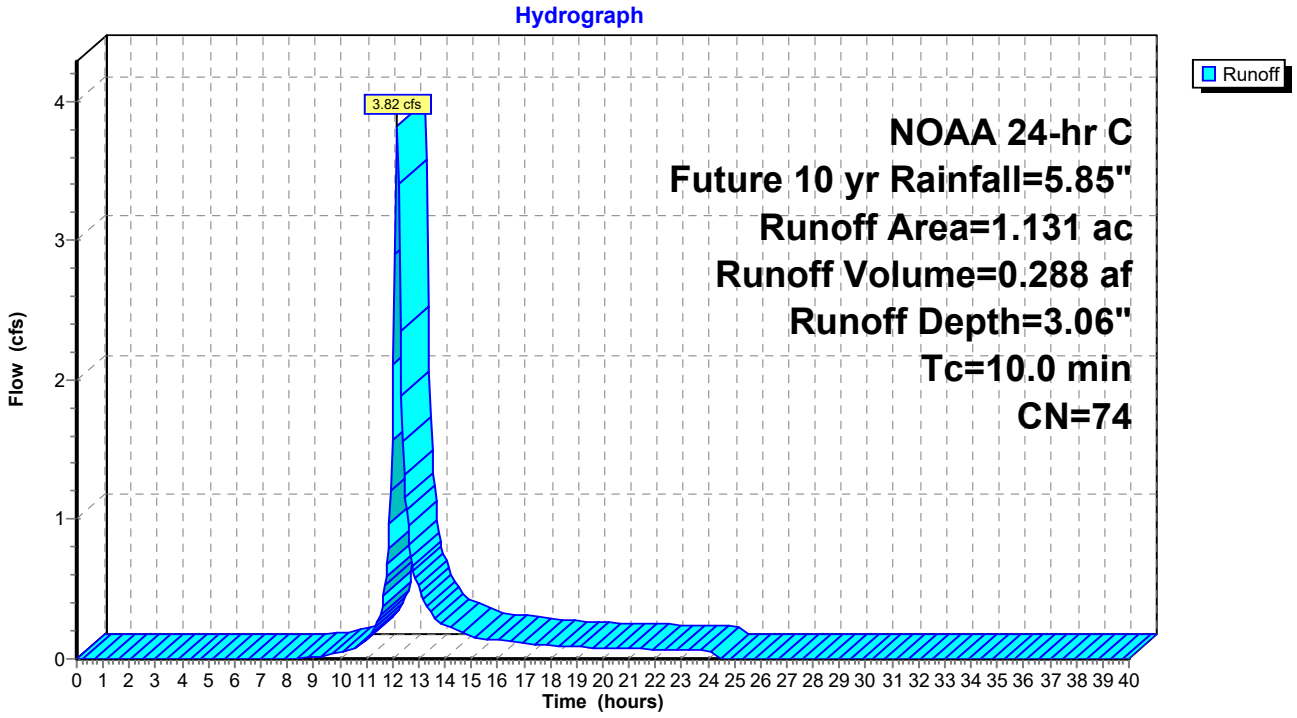
Runoff = 3.82 cfs @ 12.18 hrs, Volume= 0.288 af, Depth= 3.06"
Routed to Pond B-17A : Basin #17A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.131	74	>75% Grass cover, Good, HSG C
1.131		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17AP: PDA-17A (pervious)



Summary for Subcatchment 17BI: PDA-17B (impervious)

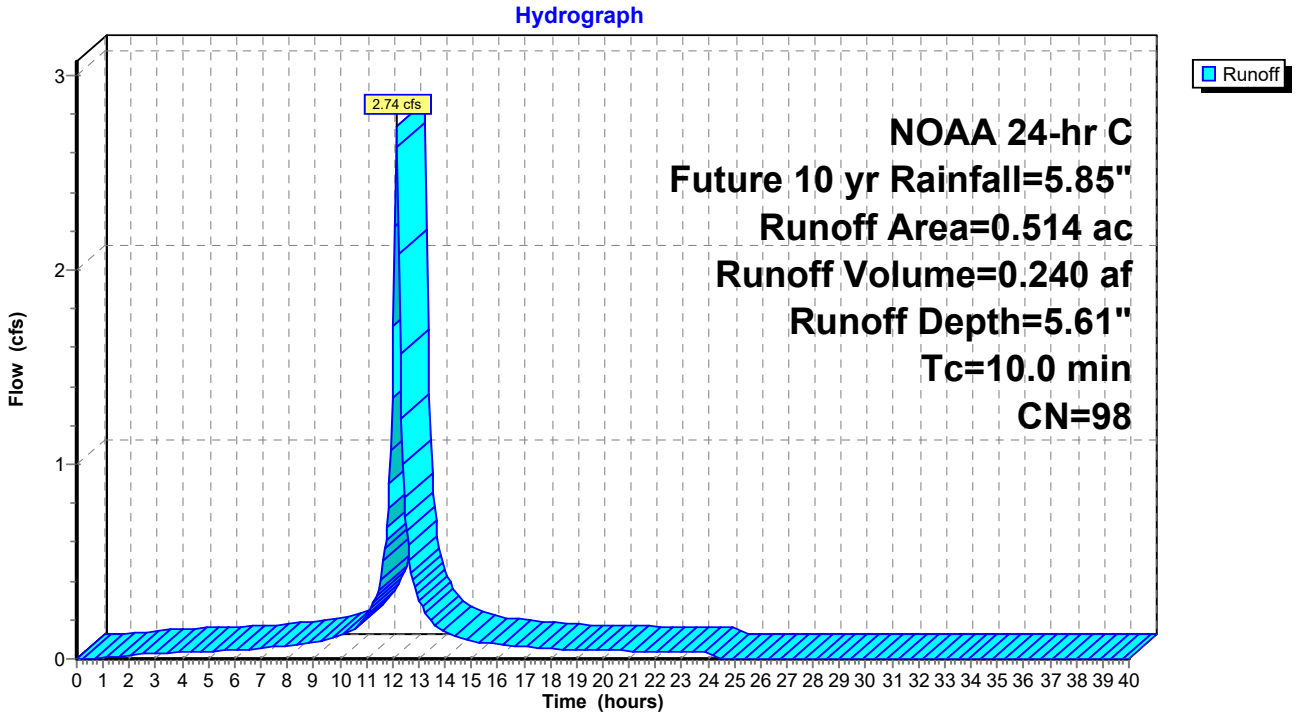
Runoff = 2.74 cfs @ 12.17 hrs, Volume= 0.240 af, Depth= 5.61"
Routed to Pond B-17B : Basin #17B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.514	98	Roof, HSG C
	0.514		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17BI: PDA-17B (impervious)



Summary for Subcatchment 17BP: PDA-17B (pervious)

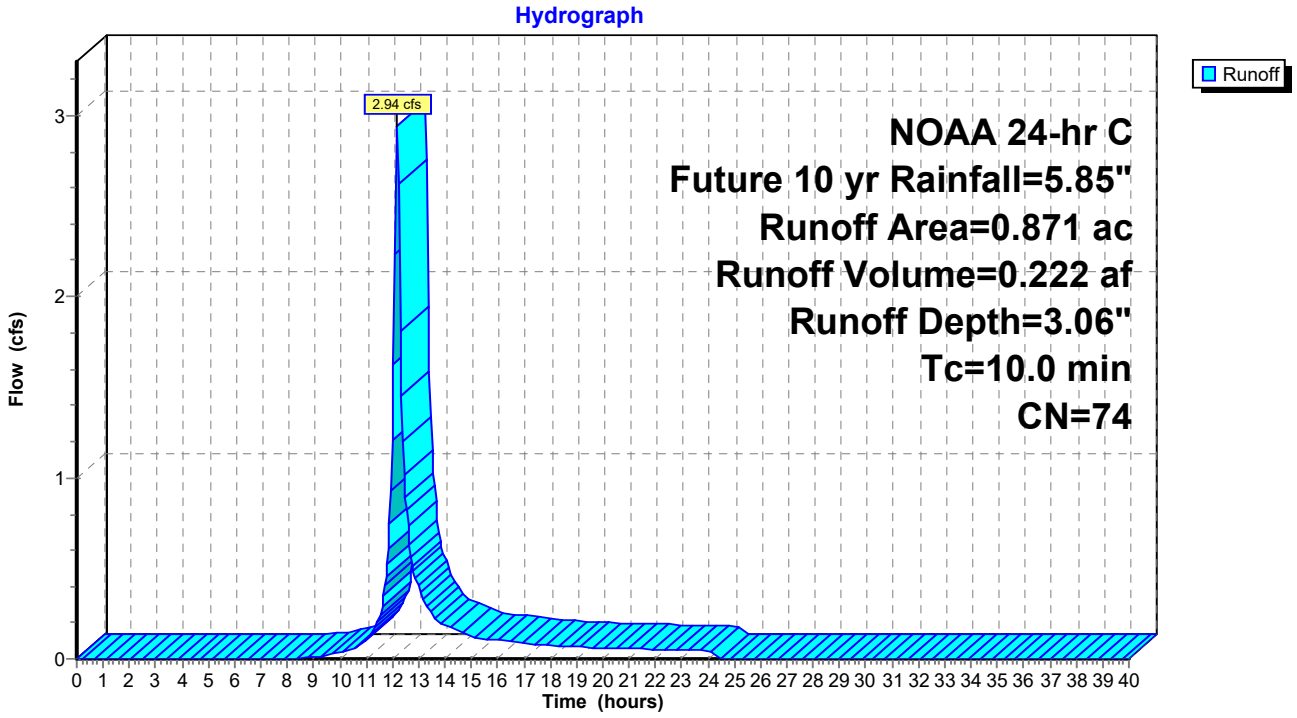
Runoff = 2.94 cfs @ 12.18 hrs, Volume= 0.222 af, Depth= 3.06"
Routed to Pond B-17B : Basin #17B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.871	74	>75% Grass cover, Good, HSG C
0.871		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17BP: PDA-17B (pervious)



Summary for Subcatchment UPDA-1: PDA-1 (undetained)

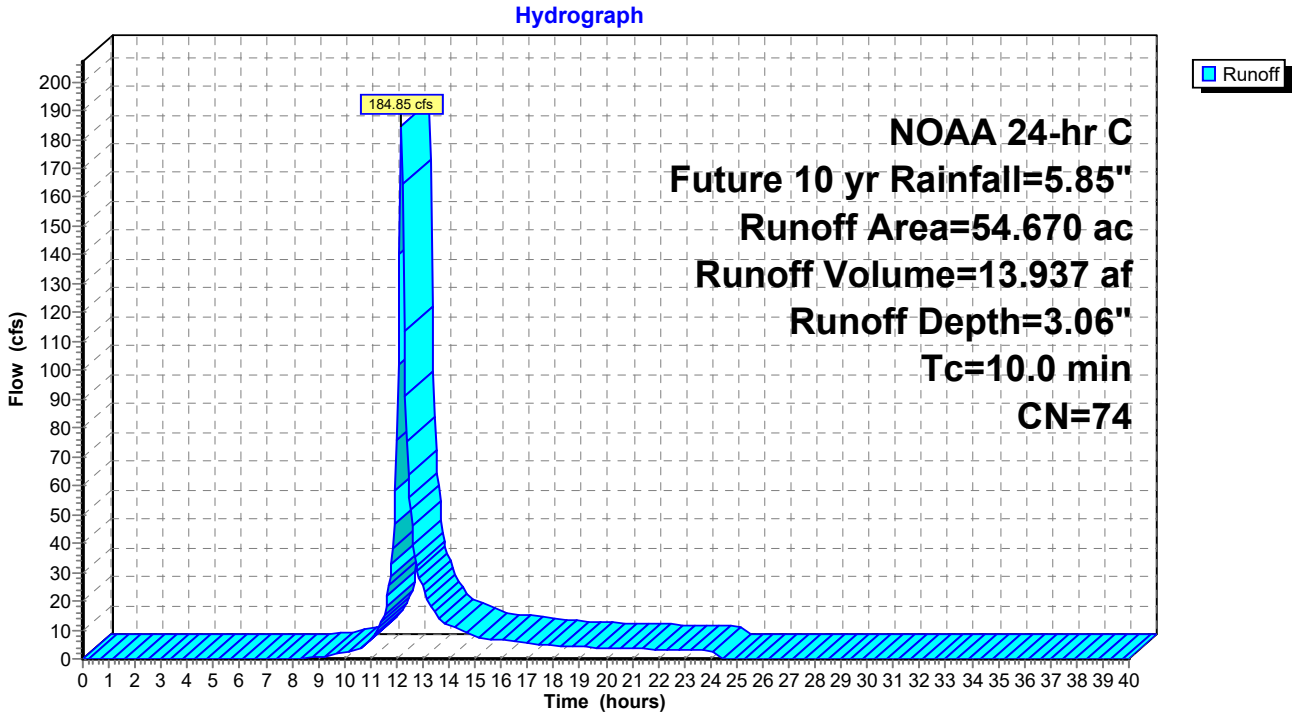
Runoff = 184.85 cfs @ 12.18 hrs, Volume= 13.937 af, Depth= 3.06"
Routed to Link PDA-1 : Proposed Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
54.670	74	>75% Grass cover, Good, HSG C
54.670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-1: PDA-1 (undetained)



Summary for Pond B-1: Basin #1

Inflow Area = 2.782 ac, 26.02% Impervious, Inflow Depth = 1.32" for Future 10 yr event
Inflow = 3.00 cfs @ 12.18 hrs, Volume= 0.305 af
Outflow = 0.20 cfs @ 20.35 hrs, Volume= 0.229 af, Atten= 93%, Lag= 490.6 min
Primary = 0.20 cfs @ 20.35 hrs, Volume= 0.229 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 209.71' @ 20.35 hrs Surf.Area= 10,854 sf Storage= 7,422 cf

Plug-Flow detention time= 609.8 min calculated for 0.229 af (75% of inflow)
Center-of-Mass det. time= 492.2 min (1,431.4 - 939.2)

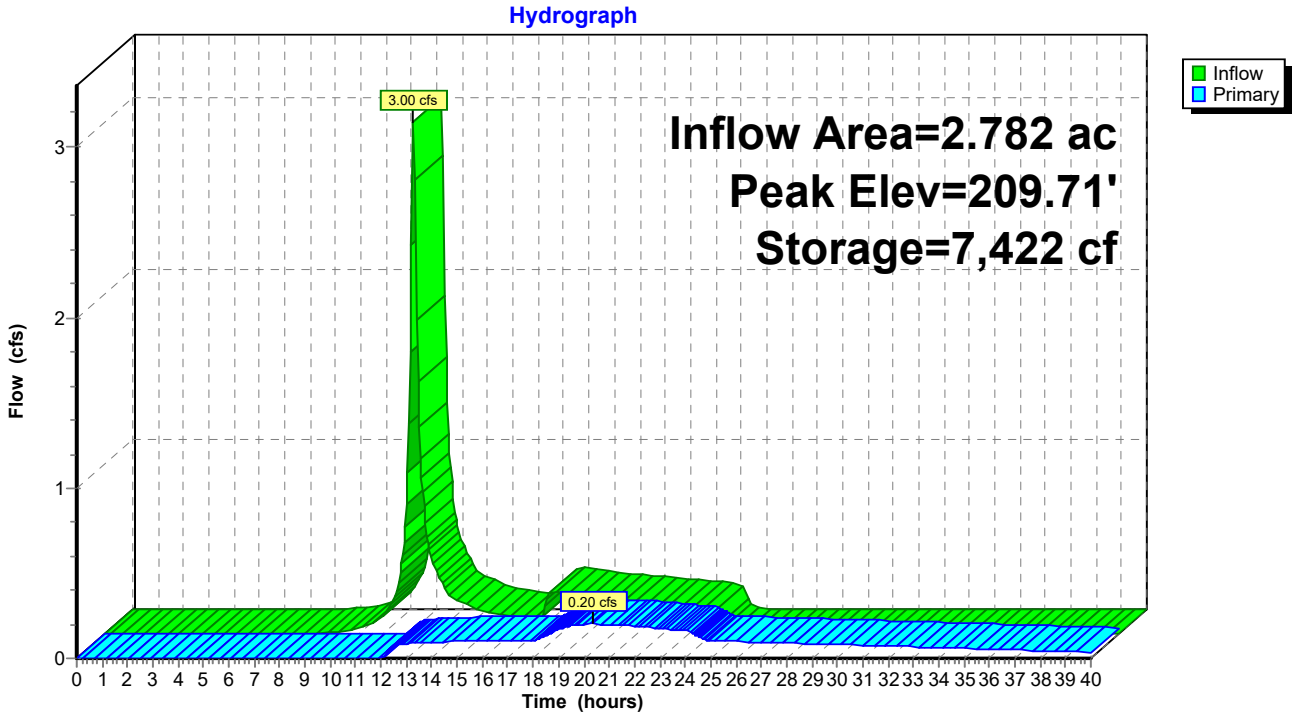
Volume	Invert	Avail.Storage	Storage Description
#1	209.00'	34,903 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
209.00	10,187	0	0
210.00	11,133	10,660	10,660
211.00	12,113	11,623	22,283
212.00	13,126	12,620	34,903

Device	Routing	Invert	Outlet Devices
#1	Primary	207.65'	**18.0" Round Culvert** L= 276.0' Ke= 0.500 Inlet / Outlet Invert= 207.65' / 204.00' S= 0.0132 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	209.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	209.67'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	210.80'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.19 cfs @ 20.35 hrs HW=209.71' (Free Discharge)
- **1=Culvert** (Passes 0.19 cfs of 9.72 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.11 cfs @ 3.16 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.09 cfs @ 0.62 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-1: Basin #1



Stage-Discharge for Pond B-1: Basin #1

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
209.00	0.00	210.04	3.03	211.08	31.14
209.02	0.00	210.06	3.27	211.10	33.28
209.04	0.00	210.08	3.51	211.12	35.53
209.06	0.00	210.10	3.76	211.14	37.86
209.08	0.00	210.12	4.01	211.16	40.30
209.10	0.00	210.14	4.27	211.18	42.83
209.12	0.00	210.16	4.53	211.20	45.46
209.14	0.00	210.18	4.80	211.22	48.24
209.16	0.00	210.20	5.07	211.24	51.13
209.18	0.00	210.22	5.35	211.26	54.12
209.20	0.00	210.24	5.63	211.28	57.21
209.22	0.00	210.26	5.92	211.30	60.41
209.24	0.01	210.28	6.21	211.32	63.72
209.26	0.01	210.30	6.50	211.34	67.13
209.28	0.02	210.32	6.80	211.36	70.65
209.30	0.03	210.34	7.10	211.38	74.28
209.32	0.03	210.36	7.41	211.40	78.01
209.34	0.04	210.38	7.72	211.42	81.30
209.36	0.05	210.40	8.03	211.44	84.65
209.38	0.05	210.42	8.35	211.46	88.04
209.40	0.06	210.44	8.67	211.48	91.49
209.42	0.06	210.46	9.00	211.50	94.99
209.44	0.07	210.48	9.33	211.52	98.55
209.46	0.07	210.50	9.66	211.54	102.15
209.48	0.07	210.52	10.00	211.56	105.80
209.50	0.08	210.54	10.34	211.58	109.50
209.52	0.08	210.56	10.68	211.60	113.25
209.54	0.08	210.58	11.03	211.62	117.13
209.56	0.09	210.60	11.37	211.64	121.06
209.58	0.09	210.62	11.73	211.66	125.04
209.60	0.09	210.64	12.08	211.68	129.07
209.62	0.10	210.66	12.44	211.70	133.15
209.64	0.10	210.68	12.61	211.72	137.29
209.66	0.10	210.70	12.64	211.74	141.48
209.68	0.12	210.72	12.66	211.76	145.72
209.70	0.17	210.74	12.69	211.78	150.00
209.72	0.26	210.76	12.71	211.80	154.34
209.74	0.35	210.78	12.73	211.82	158.62
209.76	0.47	210.80	12.76	211.84	162.95
209.78	0.59	210.82	13.11	211.86	167.31
209.80	0.73	210.84	13.74	211.88	171.72
209.82	0.88	210.86	14.56	211.90	176.17
209.84	1.03	210.88	15.51	211.92	180.66
209.86	1.20	210.90	16.60	211.94	185.19
209.88	1.37	210.92	17.79	211.96	189.77
209.90	1.56	210.94	19.10	211.98	194.38
209.92	1.75	210.96	20.50	212.00	**199.03**
209.94	1.94	210.98	21.99		
209.96	2.15	211.00	23.56		
209.98	2.36	211.02	25.31		
210.00	2.58	211.04	27.15		
210.02	2.80	211.06	29.10		

Summary for Pond B-10: Basin #10

Inflow Area = 1.674 ac, 56.63% Impervious, Inflow Depth = 4.50" for Future 10 yr event
Inflow = 7.51 cfs @ 12.17 hrs, Volume= 0.628 af
Outflow = 1.90 cfs @ 12.55 hrs, Volume= 0.536 af, Atten= 75%, Lag= 22.7 min
Primary = 1.90 cfs @ 12.55 hrs, Volume= 0.536 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 181.36' @ 12.55 hrs Surf.Area= 6,148 sf Storage= 12,178 cf

Plug-Flow detention time= 170.6 min calculated for 0.536 af (85% of inflow)
Center-of-Mass det. time= 103.2 min (878.8 - 775.6)

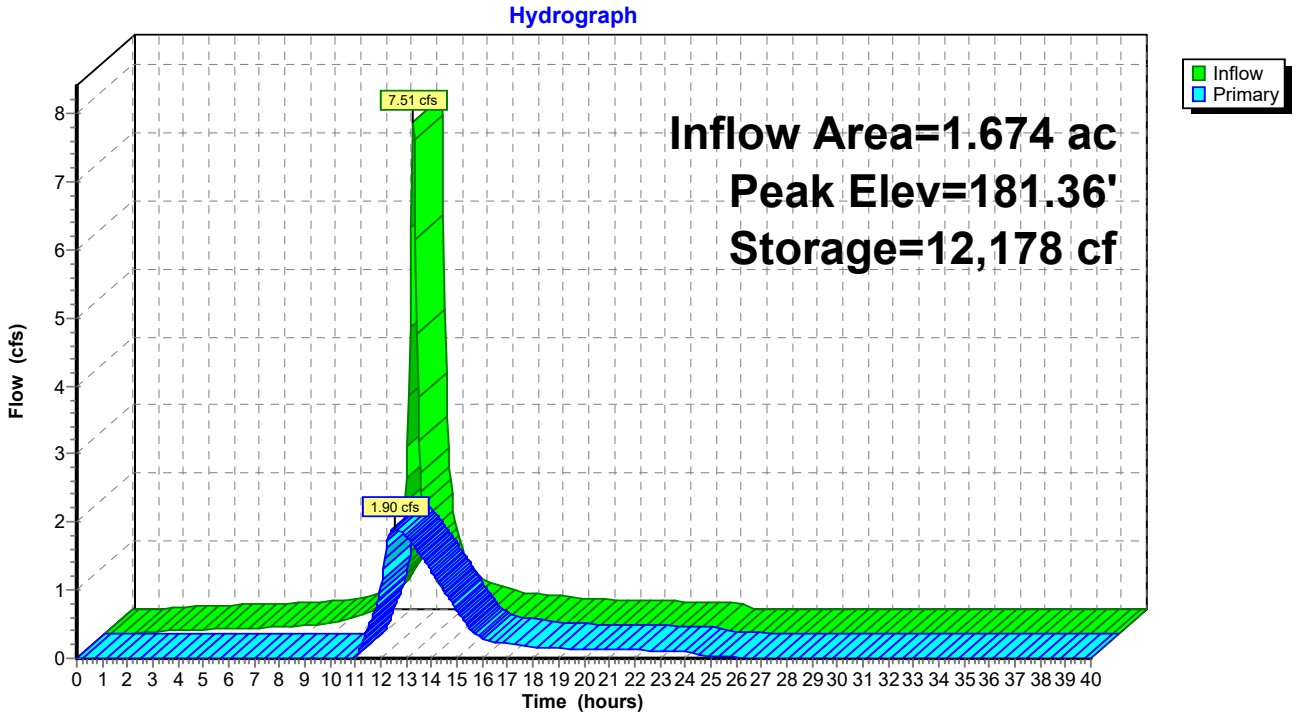
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	23,473 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	4,220	0	0
180.00	5,003	4,612	4,612
181.00	5,833	5,418	10,030
182.00	6,710	6,272	16,301
183.00	7,633	7,172	23,473

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 52.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 176.00' S= 0.0317 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.88'	**24.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	182.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.90 cfs @ 12.55 hrs HW=181.36' (Free Discharge)
- **1=Culvert** (Passes 1.90 cfs of 14.64 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.90 cfs @ 5.69 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-10: Basin #10



Stage-Discharge for Pond B-10: Basin #10

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.41	181.08	1.70	182.12	2.90
179.02	0.00	180.06	0.48	181.10	1.71	182.14	3.05
179.04	0.00	180.08	0.54	181.12	1.73	182.16	3.21
179.06	0.00	180.10	0.58	181.14	1.74	182.18	3.38
179.08	0.00	180.12	0.63	181.16	1.76	182.20	3.56
179.10	0.00	180.14	0.67	181.18	1.77	182.22	3.75
179.12	0.00	180.16	0.71	181.20	1.78	182.24	3.94
179.14	0.00	180.18	0.74	181.22	1.80	182.26	4.14
179.16	0.00	180.20	0.78	181.24	1.81	182.28	4.35
179.18	0.00	180.22	0.81	181.26	1.83	182.30	4.57
179.20	0.00	180.24	0.84	181.28	1.84	182.32	4.79
179.22	0.00	180.26	0.87	181.30	1.86	182.34	5.02
179.24	0.00	180.28	0.90	181.32	1.87	182.36	5.26
179.26	0.00	180.30	0.93	181.34	1.88	182.38	5.50
179.28	0.00	180.32	0.96	181.36	1.90	182.40	5.75
179.30	0.00	180.34	0.98	181.38	1.91	182.42	6.00
179.32	0.00	180.36	1.01	181.40	1.92	182.44	6.26
179.34	0.00	180.38	1.03	181.42	1.94	182.46	6.52
179.36	0.00	180.40	1.06	181.44	1.95	182.48	6.79
179.38	0.00	180.42	1.08	181.46	1.96	182.50	7.07
179.40	0.00	180.44	1.11	181.48	1.98	182.52	7.34
179.42	0.00	180.46	1.13	181.50	1.99	182.54	7.63
179.44	0.00	180.48	1.15	181.52	2.00	182.56	7.91
179.46	0.00	180.50	1.17	181.54	2.02	182.58	8.21
179.48	0.00	180.52	1.20	181.56	2.03	182.60	8.50
179.50	0.00	180.54	1.22	181.58	2.04	182.62	8.80
179.52	0.00	180.56	1.24	181.60	2.05	182.64	9.11
179.54	0.00	180.58	1.26	181.62	2.07	182.66	9.42
179.56	0.00	180.60	1.28	181.64	2.08	182.68	9.73
179.58	0.00	180.62	1.30	181.66	2.09	182.70	10.05
179.60	0.00	180.64	1.32	181.68	2.10	182.72	10.37
179.62	0.00	180.66	1.34	181.70	2.11	182.74	10.69
179.64	0.00	180.68	1.36	181.72	2.13	182.76	11.02
179.66	0.00	180.70	1.38	181.74	2.14	182.78	11.35
179.68	0.00	180.72	1.40	181.76	2.15	182.80	11.69
179.70	0.00	180.74	1.41	181.78	2.16	182.82	12.03
179.72	0.00	180.76	1.43	181.80	2.17	182.84	12.37
179.74	0.00	180.78	1.45	181.82	2.19	182.86	12.71
179.76	0.00	180.80	1.47	181.84	2.20	182.88	13.06
179.78	0.00	180.82	1.48	181.86	2.21	182.90	13.42
179.80	0.00	180.84	1.50	181.88	2.22	182.92	13.77
179.82	0.00	180.86	1.52	181.90	2.23	182.94	14.13
179.84	0.00	180.88	1.54	181.92	2.24	182.96	14.61
179.86	0.00	180.90	1.55	181.94	2.26	182.98	15.46
179.88	0.00	180.92	1.57	181.96	2.27	183.00	**16.53**
179.90	0.02	180.94	1.59	181.98	2.28		
179.92	0.05	180.96	1.60	182.00	2.29		
179.94	0.09	180.98	1.62	182.02	2.34		
179.96	0.15	181.00	1.63	182.04	2.42		
179.98	0.20	181.02	1.65	182.06	2.52		
180.00	0.27	181.04	1.66	182.08	2.63		
180.02	0.34	181.06	1.68	182.10	2.76		

Summary for Pond B-11: Basin #11

Inflow Area = 2.228 ac, 58.53% Impervious, Inflow Depth = 4.55" for Future 10 yr event
Inflow = 10.08 cfs @ 12.17 hrs, Volume= 0.845 af
Outflow = 3.81 cfs @ 12.41 hrs, Volume= 0.685 af, Atten= 62%, Lag= 14.2 min
Primary = 3.81 cfs @ 12.41 hrs, Volume= 0.685 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 183.18' @ 12.41 hrs Surf.Area= 7,290 sf Storage= 19,064 cf

Plug-Flow detention time= 473.7 min calculated for 0.684 af (81% of inflow)
Center-of-Mass det. time= 395.4 min (1,169.6 - 774.2)

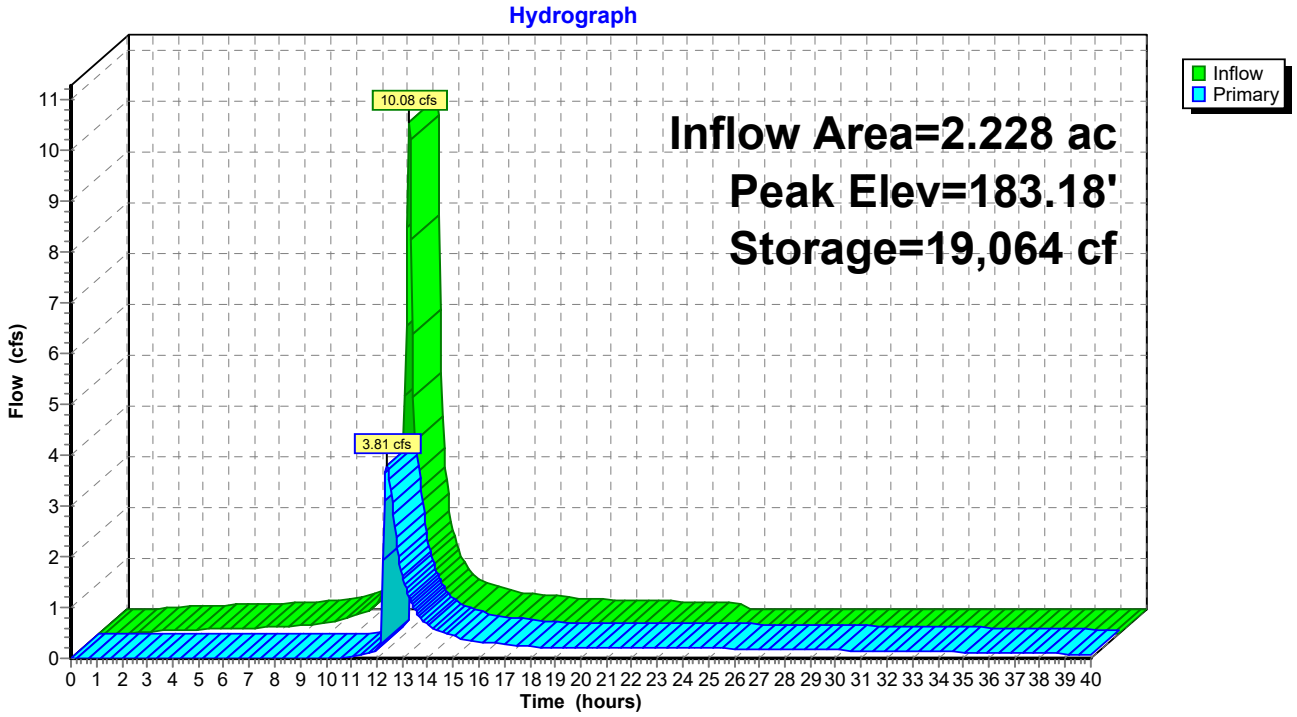
Volume	Invert	Avail.Storage	Storage Description
#1	180.00'	43,224 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.00	4,780	0	0
181.00	5,522	5,151	5,151
182.00	6,306	5,914	11,065
183.00	7,135	6,721	17,786
184.00	8,007	7,571	25,357
185.00	8,923	8,465	33,822
186.00	9,882	9,403	43,224

Device	Routing	Invert	Outlet Devices
#1	Primary	178.65'	**18.0" Round Culvert** L= 131.0' Ke= 0.500 Inlet / Outlet Invert= 178.65' / 178.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	181.00'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	183.91'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.80 cfs @ 12.41 hrs HW=183.18' (Free Discharge)
- **1=Culvert** (Passes 3.80 cfs of 13.78 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.24 cfs @ 6.93 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.56 cfs @ 2.13 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-11: Basin #11



Stage-Discharge for Pond B-11: Basin #11

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
180.00	0.00	182.60	0.20	185.20	223.74
180.05	0.00	182.65	0.20	185.25	236.23
180.10	0.00	182.70	0.21	185.30	248.97
180.15	0.00	182.75	0.21	185.35	262.16
180.20	0.00	182.80	0.36	185.40	275.68
180.25	0.00	182.85	0.63	185.45	289.46
180.30	0.00	182.90	0.97	185.50	303.52
180.35	0.00	182.95	1.38	185.55	317.86
180.40	0.00	183.00	1.84	185.60	332.46
180.45	0.00	183.05	2.35	185.65	347.33
180.50	0.00	183.10	2.89	185.70	362.47
180.55	0.00	183.15	3.48	185.75	377.88
180.60	0.00	183.20	4.10	185.80	393.54
180.65	0.00	183.25	4.75	185.85	409.47
180.70	0.00	183.30	5.43	185.90	425.67
180.75	0.00	183.35	6.14	185.95	442.37
180.80	0.00	183.40	6.88	186.00	**459.42**
180.85	0.00	183.45	7.64		
180.90	0.00	183.50	8.43		
180.95	0.00	183.55	9.24		
181.00	0.00	183.60	10.07		
181.05	0.00	183.65	10.93		
181.10	0.02	183.70	11.80		
181.15	0.03	183.75	12.69		
181.20	0.05	183.80	13.60		
181.25	0.06	183.85	14.53		
181.30	0.07	183.90	15.07		
181.35	0.08	183.95	16.09		
181.40	0.09	184.00	18.41		
181.45	0.10	184.05	21.50		
181.50	0.10	184.10	25.19		
181.55	0.11	184.15	29.60		
181.60	0.12	184.20	34.67		
181.65	0.12	184.25	40.36		
181.70	0.13	184.30	46.66		
181.75	0.13	184.35	53.67		
181.80	0.14	184.40	61.37		
181.85	0.14	184.45	69.72		
181.90	0.15	184.50	78.75		
181.95	0.15	184.55	87.28		
182.00	0.16	184.60	95.90		
182.05	0.16	184.65	104.83		
182.10	0.16	184.70	114.08		
182.15	0.17	184.75	123.79		
182.20	0.17	184.80	133.86		
182.25	0.18	184.85	144.25		
182.30	0.18	184.90	154.96		
182.35	0.18	184.95	165.77		
182.40	0.19	185.00	176.78		
182.45	0.19	185.05	188.06		
182.50	0.19	185.10	199.59		
182.55	0.20	185.15	211.51		

Summary for Pond B-12: Basin #12

Inflow Area = 2.426 ac, 44.77% Impervious, Inflow Depth = 4.20" for Future 10 yr event
Inflow = 10.33 cfs @ 12.17 hrs, Volume= 0.849 af
Outflow = 6.40 cfs @ 12.30 hrs, Volume= 0.745 af, Atten= 38%, Lag= 7.7 min
Primary = 6.40 cfs @ 12.30 hrs, Volume= 0.745 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.53' @ 12.30 hrs Surf.Area= 6,521 sf Storage= 14,086 cf

Plug-Flow detention time= 172.0 min calculated for 0.745 af (88% of inflow)
Center-of-Mass det. time= 111.3 min (896.3 - 785.0)

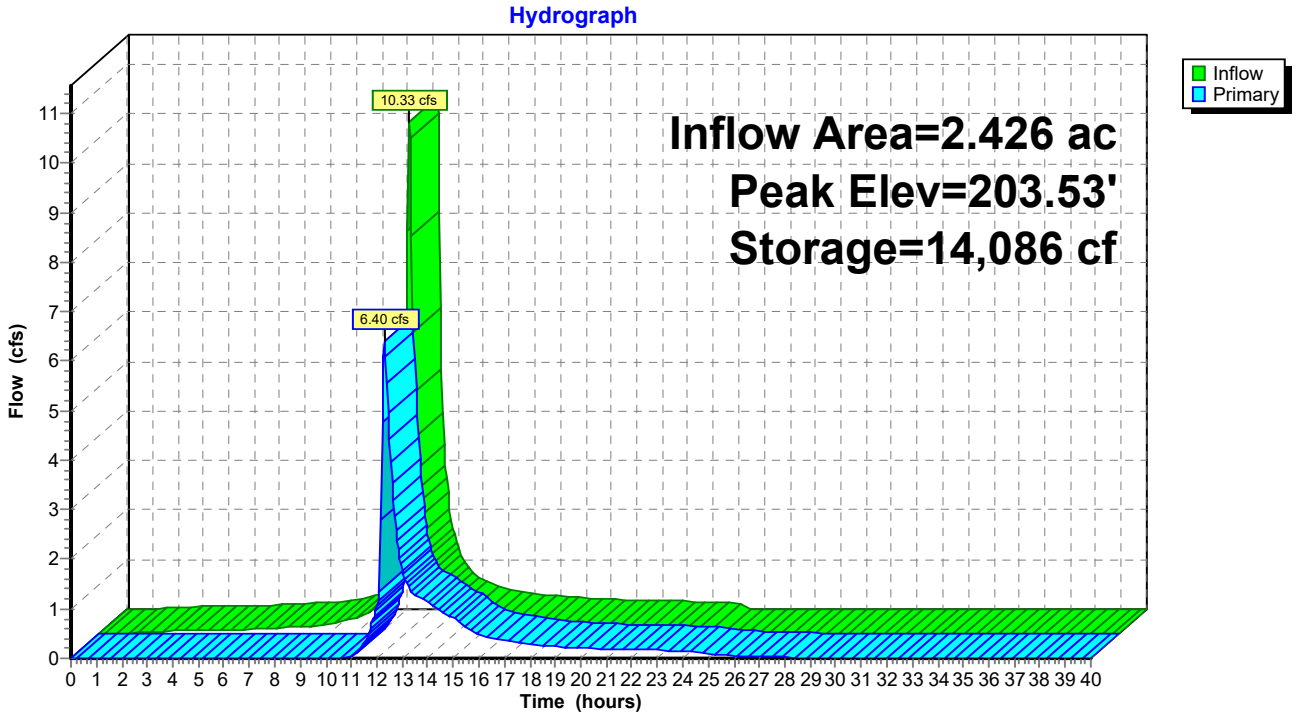
Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	24,487 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,623	0	0
202.00	5,350	4,987	4,987
203.00	6,105	5,728	10,714
204.00	6,883	6,494	17,208
205.00	7,674	7,279	24,487

Device	Routing	Invert	Outlet Devices
#1	Primary	199.65'	**18.0" Round Culvert** L= 238.0' Ke= 0.500 Inlet / Outlet Invert= 199.65' / 195.50' S= 0.0174 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.90'	**7.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.02'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.39 cfs @ 12.30 hrs HW=203.53' (Free Discharge)
- **1=Culvert** (Passes 6.39 cfs of 14.98 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.70 cfs @ 5.54 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.70 cfs @ 2.34 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-12: Basin #12



Stage-Discharge for Pond B-12: Basin #12

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	202.04	0.07	203.08	1.57	204.12	15.64
201.02	0.00	202.06	0.08	203.10	1.69	204.14	15.66
201.04	0.00	202.08	0.11	203.12	1.82	204.16	15.69
201.06	0.00	202.10	0.13	203.14	1.96	204.18	15.71
201.08	0.00	202.12	0.15	203.16	2.12	204.20	15.73
201.10	0.00	202.14	0.18	203.18	2.28	204.22	15.75
201.12	0.00	202.16	0.21	203.20	2.46	204.24	15.77
201.14	0.00	202.18	0.24	203.22	2.64	204.26	15.79
201.16	0.00	202.20	0.27	203.24	2.83	204.28	15.82
201.18	0.00	202.22	0.30	203.26	3.03	204.30	15.84
201.20	0.00	202.24	0.34	203.28	3.24	204.32	15.86
201.22	0.00	202.26	0.37	203.30	3.45	204.34	15.88
201.24	0.00	202.28	0.41	203.32	3.67	204.36	15.90
201.26	0.00	202.30	0.45	203.34	3.90	204.38	15.92
201.28	0.00	202.32	0.48	203.36	4.13	204.40	15.95
201.30	0.00	202.34	0.52	203.38	4.37	204.42	15.97
201.32	0.00	202.36	0.56	203.40	4.62	204.44	15.99
201.34	0.00	202.38	0.60	203.42	4.87	204.46	16.01
201.36	0.00	202.40	0.63	203.44	5.12	204.48	16.03
201.38	0.00	202.42	0.67	203.46	5.38	204.50	16.05
201.40	0.00	202.44	0.70	203.48	5.65	204.52	16.41
201.42	0.00	202.46	0.74	203.50	5.92	204.54	17.03
201.44	0.00	202.48	0.77	203.52	6.20	204.56	17.84
201.46	0.00	202.50	0.80	203.54	6.48	204.58	18.80
201.48	0.00	202.52	0.82	203.56	6.77	204.60	19.88
201.50	0.00	202.54	0.85	203.58	7.06	204.62	21.07
201.52	0.00	202.56	0.87	203.60	7.35	204.64	22.37
201.54	0.00	202.58	0.90	203.62	7.65	204.66	23.77
201.56	0.00	202.60	0.92	203.64	7.95	204.68	25.26
201.58	0.00	202.62	0.94	203.66	8.26	204.70	26.83
201.60	0.00	202.64	0.97	203.68	8.57	204.72	28.57
201.62	0.00	202.66	0.99	203.70	8.89	204.74	30.41
201.64	0.00	202.68	1.01	203.72	9.21	204.76	32.36
201.66	0.00	202.70	1.03	203.74	9.53	204.78	34.40
201.68	0.00	202.72	1.05	203.76	9.86	204.80	36.54
201.70	0.00	202.74	1.07	203.78	10.19	204.82	38.78
201.72	0.00	202.76	1.09	203.80	10.52	204.84	41.12
201.74	0.00	202.78	1.11	203.82	10.86	204.86	43.55
201.76	0.00	202.80	1.13	203.84	11.20	204.88	46.08
201.78	0.00	202.82	1.15	203.86	11.54	204.90	48.71
201.80	0.00	202.84	1.17	203.88	11.89	204.92	51.48
201.82	0.00	202.86	1.19	203.90	12.24	204.94	54.37
201.84	0.00	202.88	1.21	203.92	12.60	204.96	57.35
201.86	0.00	202.90	1.22	203.94	12.95	204.98	60.45
201.88	0.00	202.92	1.24	203.96	13.31	205.00	**63.65**
201.90	0.00	202.94	1.26	203.98	13.68		
201.92	0.00	202.96	1.28	204.00	14.04		
201.94	0.01	202.98	1.29	204.02	14.41		
201.96	0.01	203.00	1.31	204.04	14.78		
201.98	0.02	203.02	1.33	204.06	15.16		
202.00	0.03	203.04	1.38	204.08	15.54		
202.02	0.05	203.06	1.46	204.10	15.62		

Summary for Pond B-13: Basin #13

Inflow Area = 2.350 ac, 62.43% Impervious, Inflow Depth = 4.65" for Future 10 yr event
Inflow = 10.81 cfs @ 12.17 hrs, Volume= 0.911 af
Outflow = 3.60 cfs @ 12.44 hrs, Volume= 0.697 af, Atten= 67%, Lag= 16.1 min
Primary = 3.60 cfs @ 12.44 hrs, Volume= 0.697 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.36' @ 12.44 hrs Surf.Area= 9,969 sf Storage= 21,177 cf

Plug-Flow detention time= 465.5 min calculated for 0.697 af (76% of inflow)
Center-of-Mass det. time= 376.7 min (1,148.1 - 771.5)

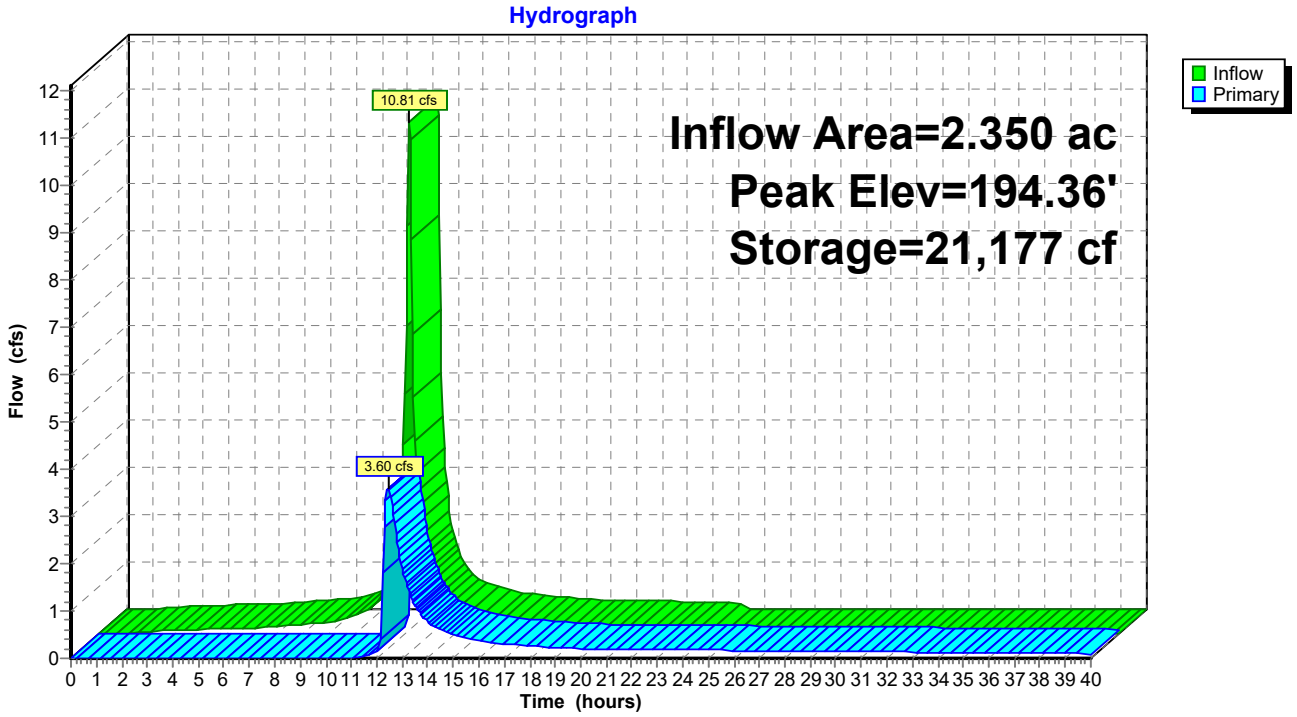
Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	38,667 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	7,975	0	0
193.00	8,804	8,390	8,390
194.00	9,654	9,229	17,619
195.00	10,522	10,088	27,707
196.00	11,399	10,961	38,667

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 57.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0465 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.70'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.95'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.96'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.59 cfs @ 12.44 hrs HW=194.36' (Free Discharge)
- **1=Culvert** (Passes 3.59 cfs of 14.64 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 6.01 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.39 cfs @ 2.10 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-13: Basin #13



Stage-Discharge for Pond B-13: Basin #13

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.00	0.00	193.04	0.08	194.08	0.79	195.12	23.38
192.02	0.00	193.06	0.08	194.10	0.94	195.14	25.23
192.04	0.00	193.08	0.09	194.12	1.10	195.16	27.06
192.06	0.00	193.10	0.09	194.14	1.26	195.18	28.83
192.08	0.00	193.12	0.09	194.16	1.44	195.20	30.69
192.10	0.00	193.14	0.10	194.18	1.62	195.22	32.66
192.12	0.00	193.16	0.10	194.20	1.81	195.24	34.72
192.14	0.00	193.18	0.10	194.22	2.01	195.26	36.89
192.16	0.00	193.20	0.10	194.24	2.21	195.28	39.15
192.18	0.00	193.22	0.11	194.26	2.42	195.30	41.51
192.20	0.00	193.24	0.11	194.28	2.64	195.32	43.96
192.22	0.00	193.26	0.11	194.30	2.86	195.34	46.51
192.24	0.00	193.28	0.11	194.32	3.09	195.36	49.16
192.26	0.00	193.30	0.12	194.34	3.33	195.38	51.96
192.28	0.00	193.32	0.12	194.36	3.57	195.40	54.87
192.30	0.00	193.34	0.12	194.38	3.81	195.42	57.88
192.32	0.00	193.36	0.12	194.40	4.07	195.44	60.99
192.34	0.00	193.38	0.12	194.42	4.32	195.46	64.21
192.36	0.00	193.40	0.13	194.44	4.59	195.48	67.53
192.38	0.00	193.42	0.13	194.46	4.85	195.50	70.97
192.40	0.00	193.44	0.13	194.48	5.13	195.52	74.50
192.42	0.00	193.46	0.13	194.50	5.40	195.54	78.15
192.44	0.00	193.48	0.13	194.52	5.68	195.56	81.90
192.46	0.00	193.50	0.14	194.54	5.97	195.58	85.21
192.48	0.00	193.52	0.14	194.56	6.26	195.60	88.58
192.50	0.00	193.54	0.14	194.58	6.55	195.62	91.99
192.52	0.00	193.56	0.14	194.60	6.85	195.64	95.46
192.54	0.00	193.58	0.14	194.62	7.15	195.66	98.98
192.56	0.00	193.60	0.15	194.64	7.46	195.68	102.55
192.58	0.00	193.62	0.15	194.66	7.77	195.70	106.17
192.60	0.00	193.64	0.15	194.68	8.09	195.72	109.84
192.62	0.00	193.66	0.15	194.70	8.40	195.74	113.56
192.64	0.00	193.68	0.15	194.72	8.72	195.76	117.33
192.66	0.00	193.70	0.16	194.74	9.05	195.78	121.22
192.68	0.00	193.72	0.16	194.76	9.38	195.80	125.17
192.70	0.00	193.74	0.16	194.78	9.71	195.82	129.17
192.72	0.00	193.76	0.16	194.80	10.05	195.84	133.22
192.74	0.00	193.78	0.16	194.82	10.39	195.86	137.32
192.76	0.01	193.80	0.16	194.84	10.73	195.88	141.48
192.78	0.01	193.82	0.17	194.86	11.07	195.90	145.68
192.80	0.02	193.84	0.17	194.88	11.42	195.92	149.94
192.82	0.02	193.86	0.17	194.90	11.77	195.94	154.25
192.84	0.03	193.88	0.17	194.92	12.13	195.96	158.60
192.86	0.04	193.90	0.17	194.94	12.49	195.98	162.90
192.88	0.05	193.92	0.17	194.96	12.85	196.00	**167.24**
192.90	0.05	193.94	0.17	194.98	13.54		
192.92	0.06	193.96	0.19	195.00	14.52		
192.94	0.06	193.98	0.25	195.02	15.67		
192.96	0.06	194.00	0.33	195.04	16.98		
192.98	0.07	194.02	0.42	195.06	18.41		
193.00	0.07	194.04	0.53	195.08	19.96		
193.02	0.08	194.06	0.66	195.10	21.62		

Summary for Pond B-14: Basin #14

Inflow Area = 2.148 ac, 23.65% Impervious, Inflow Depth = 3.66" for Future 10 yr event
Inflow = 8.26 cfs @ 12.17 hrs, Volume= 0.656 af
Outflow = 3.70 cfs @ 12.37 hrs, Volume= 0.573 af, Atten= 55%, Lag= 11.9 min
Primary = 3.70 cfs @ 12.37 hrs, Volume= 0.573 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.87' @ 12.37 hrs Surf.Area= 7,105 sf Storage= 12,466 cf

Plug-Flow detention time= 365.9 min calculated for 0.573 af (87% of inflow)
Center-of-Mass det. time= 306.1 min (1,111.6 - 805.4)

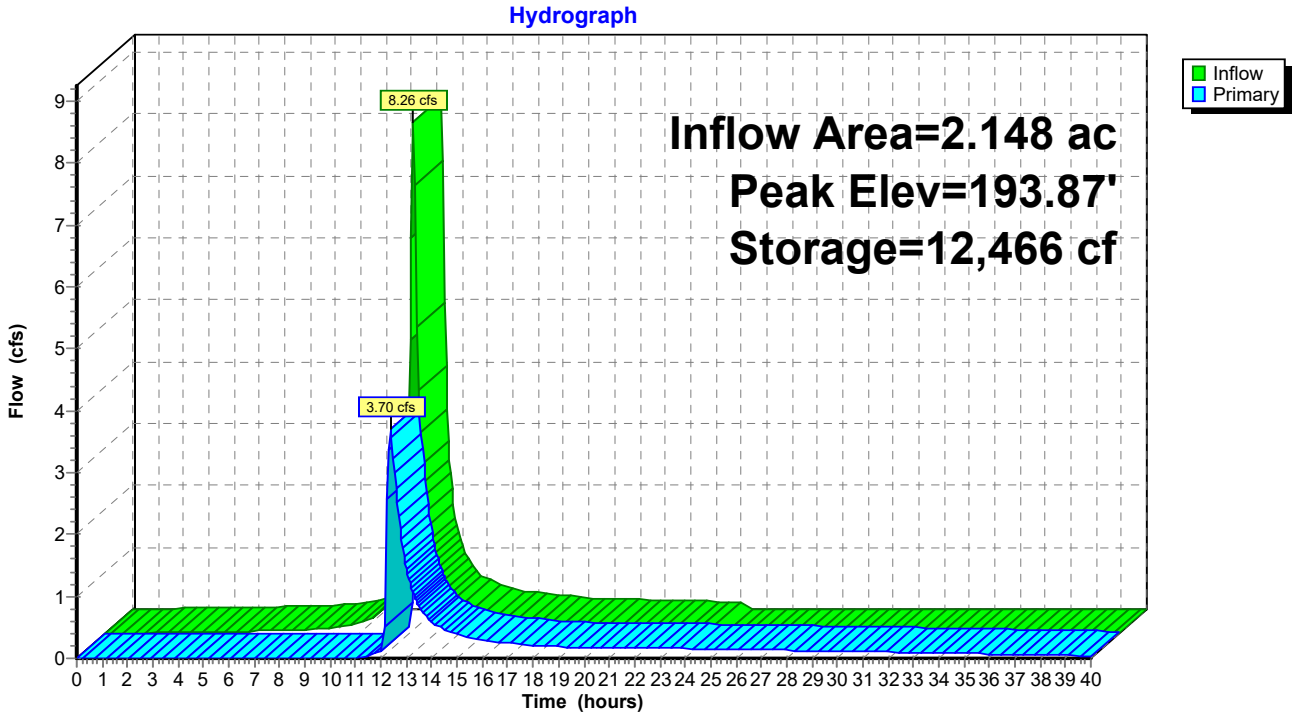
Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	28,705 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	6,224	0	0
193.00	6,689	6,457	6,457
194.00	7,167	6,928	13,385
195.00	7,657	7,412	20,797
196.00	8,160	7,909	28,705

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 194.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0137 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.40'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.45'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.44'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.66 cfs @ 12.37 hrs HW=193.87' (Free Discharge)
- **1=Culvert** (Passes 3.66 cfs of 13.19 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.62 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.46 cfs @ 2.11 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-14: Basin #14



Stage-Discharge for Pond B-14: Basin #14

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.00	0.00	193.04	0.12	194.08	6.54	195.12	92.90
192.02	0.00	193.06	0.12	194.10	6.84	195.14	96.41
192.04	0.00	193.08	0.12	194.12	7.14	195.16	99.96
192.06	0.00	193.10	0.13	194.14	7.45	195.18	103.57
192.08	0.00	193.12	0.13	194.16	7.76	195.20	107.23
192.10	0.00	193.14	0.13	194.18	8.07	195.22	110.93
192.12	0.00	193.16	0.13	194.20	8.39	195.24	114.69
192.14	0.00	193.18	0.13	194.22	8.71	195.26	118.57
192.16	0.00	193.20	0.14	194.24	9.04	195.28	122.50
192.18	0.00	193.22	0.14	194.26	9.37	195.30	126.48
192.20	0.00	193.24	0.14	194.28	9.70	195.32	130.52
192.22	0.00	193.26	0.14	194.30	10.03	195.34	134.61
192.24	0.00	193.28	0.14	194.32	10.37	195.36	138.75
192.26	0.00	193.30	0.15	194.34	10.72	195.38	142.94
192.28	0.00	193.32	0.15	194.36	11.06	195.40	147.18
192.30	0.00	193.34	0.15	194.38	11.41	195.42	151.47
192.32	0.00	193.36	0.15	194.40	11.76	195.44	155.82
192.34	0.00	193.38	0.15	194.42	12.12	195.46	160.10
192.36	0.00	193.40	0.16	194.44	12.47	195.48	164.43
192.38	0.00	193.42	0.16	194.46	13.17	195.50	168.80
192.40	0.00	193.44	0.16	194.48	14.14	195.52	173.21
192.42	0.00	193.46	0.17	194.50	15.29	195.54	177.66
192.44	0.00	193.48	0.23	194.52	16.59	195.56	182.16
192.46	0.01	193.50	0.31	194.54	17.89	195.58	186.69
192.48	0.01	193.52	0.41	194.56	19.09	195.60	191.27
192.50	0.02	193.54	0.52	194.58	20.40	195.62	195.89
192.52	0.02	193.56	0.64	194.60	21.80	195.64	200.54
192.54	0.03	193.58	0.78	194.62	23.29	195.66	205.31
192.56	0.04	193.60	0.93	194.64	24.88	195.68	210.12
192.58	0.05	193.62	1.08	194.66	26.62	195.70	214.98
192.60	0.05	193.64	1.25	194.68	28.47	195.72	219.87
192.62	0.06	193.66	1.42	194.70	30.42	195.74	224.81
192.64	0.06	193.68	1.60	194.72	32.47	195.76	229.79
192.66	0.06	193.70	1.79	194.74	34.62	195.78	234.81
192.68	0.07	193.72	1.99	194.76	36.86	195.80	239.88
192.70	0.07	193.74	2.20	194.78	39.21	195.82	244.98
192.72	0.08	193.76	2.41	194.80	41.65	195.84	250.13
192.74	0.08	193.78	2.62	194.82	44.18	195.86	255.41
192.76	0.08	193.80	2.85	194.84	46.82	195.88	260.73
192.78	0.09	193.82	3.08	194.86	49.60	195.90	266.10
192.80	0.09	193.84	3.31	194.88	52.49	195.92	271.51
192.82	0.09	193.86	3.55	194.90	55.48	195.94	276.96
192.84	0.10	193.88	3.80	194.92	58.58	195.96	282.46
192.86	0.10	193.90	4.05	194.94	61.79	195.98	288.00
192.88	0.10	193.92	4.31	194.96	65.10	196.00	**293.59**
192.90	0.10	193.94	4.57	194.98	68.51		
192.92	0.11	193.96	4.84	195.00	72.04		
192.94	0.11	193.98	5.11	195.02	75.67		
192.96	0.11	194.00	5.39	195.04	79.41		
192.98	0.11	194.02	5.67	195.06	82.70		
193.00	0.12	194.04	5.96	195.08	86.05		
193.02	0.12	194.06	6.25	195.10	89.45		

Summary for Pond B-15: Basin #15

Inflow Area = 2.365 ac, 58.73% Impervious, Inflow Depth = 4.56" for Future 10 yr event
Inflow = 10.71 cfs @ 12.17 hrs, Volume= 0.898 af
Outflow = 7.79 cfs @ 12.27 hrs, Volume= 0.771 af, Atten= 27%, Lag= 5.8 min
Primary = 7.79 cfs @ 12.27 hrs, Volume= 0.771 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 199.21' @ 12.27 hrs Surf.Area= 5,516 sf Storage= 14,742 cf

Plug-Flow detention time= 180.0 min calculated for 0.770 af (86% of inflow)
Center-of-Mass det. time= 114.6 min (888.7 - 774.1)

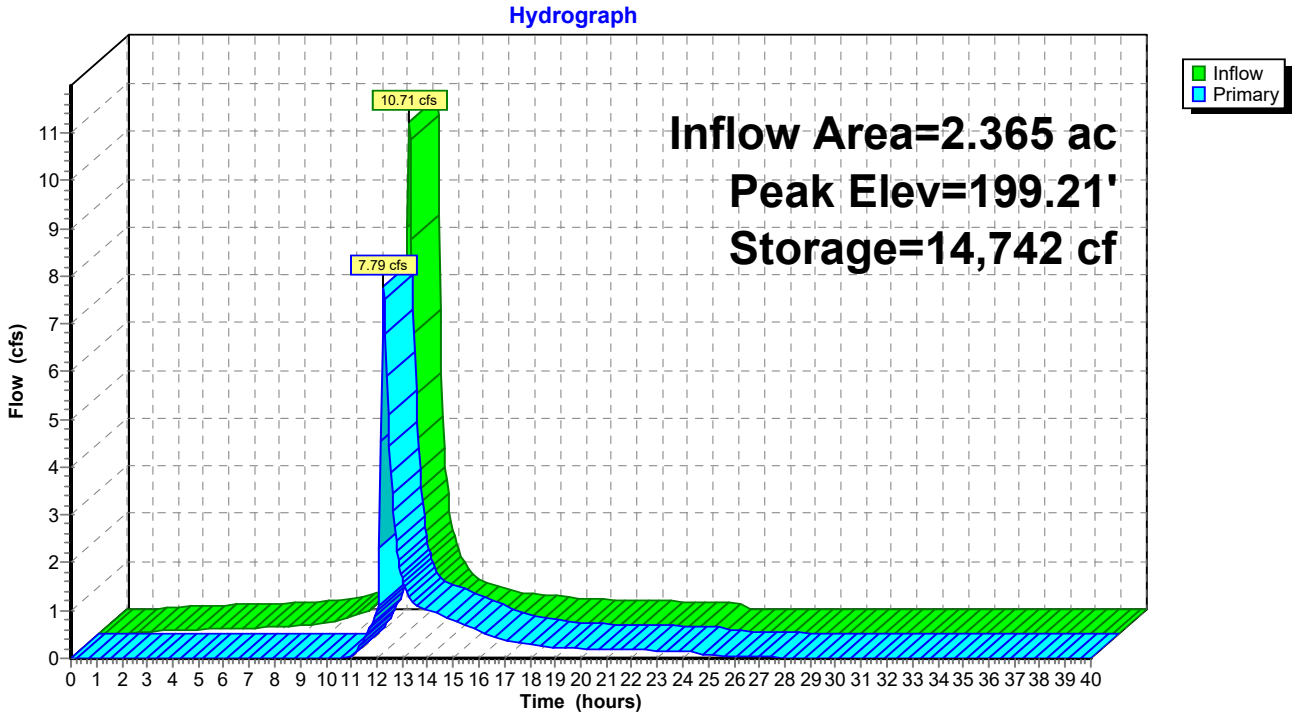
Volume	Invert	Avail.Storage	Storage Description
#1	196.00'	19,269 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.00	3,706	0	0
197.00	4,236	3,971	3,971
198.00	4,795	4,516	8,487
199.00	5,384	5,090	13,576
200.00	6,002	5,693	19,269

Device	Routing	Invert	Outlet Devices
#1	Primary	194.65'	**18.0" Round Culvert** L= 203.0' Ke= 0.500 Inlet / Outlet Invert= 194.65' / 192.00' S= 0.0131 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	197.35'	**6.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	198.58'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	199.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.65 cfs @ 12.27 hrs HW=199.20' (Free Discharge)
- **1=Culvert** (Passes 7.65 cfs of 14.84 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.40 cfs @ 6.06 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 6.26 cfs @ 2.58 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-15: Basin #15



Stage-Discharge for Pond B-15: Basin #15

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.00	0.00	197.04	0.00	198.08	0.75	199.12	6.41
196.02	0.00	197.06	0.00	198.10	0.77	199.14	6.70
196.04	0.00	197.08	0.00	198.12	0.78	199.16	6.99
196.06	0.00	197.10	0.00	198.14	0.80	199.18	7.28
196.08	0.00	197.12	0.00	198.16	0.81	199.20	7.58
196.10	0.00	197.14	0.00	198.18	0.83	199.22	7.89
196.12	0.00	197.16	0.00	198.20	0.84	199.24	8.19
196.14	0.00	197.18	0.00	198.22	0.86	199.26	8.51
196.16	0.00	197.20	0.00	198.24	0.87	199.28	8.82
196.18	0.00	197.22	0.00	198.26	0.89	199.30	9.14
196.20	0.00	197.24	0.00	198.28	0.90	199.32	9.46
196.22	0.00	197.26	0.00	198.30	0.91	199.34	9.79
196.24	0.00	197.28	0.00	198.32	0.93	199.36	10.12
196.26	0.00	197.30	0.00	198.34	0.94	199.38	10.46
196.28	0.00	197.32	0.00	198.36	0.95	199.40	10.79
196.30	0.00	197.34	0.00	198.38	0.97	199.42	11.14
196.32	0.00	197.36	0.00	198.40	0.98	199.44	11.48
196.34	0.00	197.38	0.00	198.42	0.99	199.46	11.83
196.36	0.00	197.40	0.01	198.44	1.00	199.48	12.18
196.38	0.00	197.42	0.02	198.46	1.02	199.50	12.53
196.40	0.00	197.44	0.03	198.48	1.03	199.52	12.89
196.42	0.00	197.46	0.04	198.50	1.04	199.54	13.25
196.44	0.00	197.48	0.05	198.52	1.05	199.56	13.61
196.46	0.00	197.50	0.07	198.54	1.06	199.58	13.98
196.48	0.00	197.52	0.09	198.56	1.08	199.60	14.35
196.50	0.00	197.54	0.11	198.58	1.09	199.62	14.72
196.52	0.00	197.56	0.13	198.60	1.13	199.64	15.09
196.54	0.00	197.58	0.15	198.62	1.21	199.66	15.42
196.56	0.00	197.60	0.18	198.64	1.31	199.68	15.44
196.58	0.00	197.62	0.20	198.66	1.43	199.70	15.47
196.60	0.00	197.64	0.23	198.68	1.55	199.72	15.49
196.62	0.00	197.66	0.26	198.70	1.69	199.74	15.52
196.64	0.00	197.68	0.29	198.72	1.84	199.76	15.54
196.66	0.00	197.70	0.32	198.74	2.00	199.78	15.57
196.68	0.00	197.72	0.35	198.76	2.17	199.80	15.59
196.70	0.00	197.74	0.38	198.78	2.35	199.82	15.62
196.72	0.00	197.76	0.41	198.80	2.54	199.84	15.64
196.74	0.00	197.78	0.44	198.82	2.73	199.86	15.66
196.76	0.00	197.80	0.47	198.84	2.94	199.88	15.69
196.78	0.00	197.82	0.50	198.86	3.15	199.90	15.71
196.80	0.00	197.84	0.52	198.88	3.36	199.92	15.74
196.82	0.00	197.86	0.55	198.90	3.58	199.94	15.76
196.84	0.00	197.88	0.57	198.92	3.81	199.96	15.79
196.86	0.00	197.90	0.59	198.94	4.05	199.98	15.81
196.88	0.00	197.92	0.61	198.96	4.29	200.00	**15.95**
196.90	0.00	197.94	0.63	198.98	4.54		
196.92	0.00	197.96	0.65	199.00	4.79		
196.94	0.00	197.98	0.66	199.02	5.05		
196.96	0.00	198.00	0.68	199.04	5.31		
196.98	0.00	198.02	0.70	199.06	5.58		
197.00	0.00	198.04	0.72	199.08	5.85		
197.02	0.00	198.06	0.74	199.10	6.13		

Summary for Pond B-16A: Basin #16A

Inflow Area = 1.876 ac, 45.47% Impervious, Inflow Depth = 4.22" for Future 10 yr event
Inflow = 8.01 cfs @ 12.17 hrs, Volume= 0.660 af
Outflow = 6.11 cfs @ 12.26 hrs, Volume= 0.580 af, Atten= 24%, Lag= 5.3 min
Primary = 6.11 cfs @ 12.26 hrs, Volume= 0.580 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.29' @ 12.26 hrs Surf.Area= 4,288 sf Storage= 7,785 cf

Plug-Flow detention time= 121.9 min calculated for 0.580 af (88% of inflow)
Center-of-Mass det. time= 63.0 min (847.3 - 784.4)

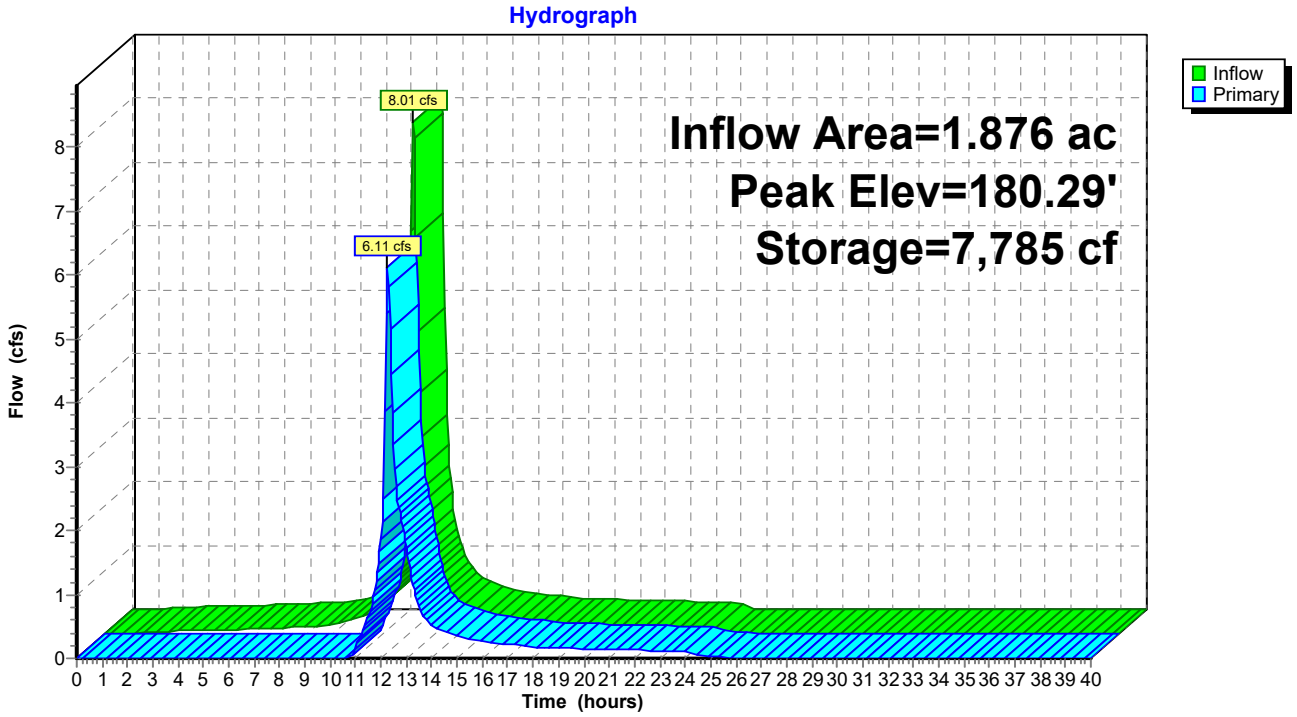
Volume	Invert	Avail.Storage	Storage Description
#1	178.00'	16,318 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
178.00	2,543	0	0
179.00	3,287	2,915	2,915
180.00	4,059	3,673	6,588
181.00	4,858	4,459	11,047
182.00	5,685	5,272	16,318

Device	Routing	Invert	Outlet Devices
#1	Primary	176.65'	**18.0" Round Culvert** L= 53.0' Ke= 0.500 Inlet / Outlet Invert= 176.65' / 172.00' S= 0.0877 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.16'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.03 cfs @ 12.26 hrs HW=180.28' (Free Discharge)
- **1=Culvert** (Passes 6.03 cfs of 14.44 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.13 cfs @ 4.70 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.90 cfs @ 1.99 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-16A: Basin #16A



Stage-Discharge for Pond B-16A: Basin #16A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.00	0.00	179.04	0.00	180.08	3.69	181.12	16.41
178.02	0.00	179.06	0.00	180.10	3.89	181.14	16.46
178.04	0.00	179.08	0.00	180.12	4.10	181.16	16.50
178.06	0.00	179.10	0.00	180.14	4.32	181.18	16.54
178.08	0.00	179.12	0.00	180.16	4.54	181.20	16.59
178.10	0.00	179.14	0.00	180.18	4.77	181.22	16.63
178.12	0.00	179.16	0.00	180.20	5.01	181.24	16.67
178.14	0.00	179.18	0.02	180.22	5.25	181.26	16.72
178.16	0.00	179.20	0.05	180.24	5.50	181.28	16.76
178.18	0.00	179.22	0.09	180.26	5.76	181.30	16.80
178.20	0.00	179.24	0.15	180.28	6.02	181.32	16.85
178.22	0.00	179.26	0.20	180.30	6.29	181.34	16.89
178.24	0.00	179.28	0.27	180.32	6.56	181.36	16.93
178.26	0.00	179.30	0.34	180.34	6.84	181.38	16.97
178.28	0.00	179.32	0.41	180.36	7.12	181.40	17.02
178.30	0.00	179.34	0.49	180.38	7.41	181.42	17.06
178.32	0.00	179.36	0.57	180.40	7.70	181.44	17.10
178.34	0.00	179.38	0.66	180.42	8.00	181.46	17.14
178.36	0.00	179.40	0.75	180.44	8.30	181.48	17.19
178.38	0.00	179.42	0.85	180.46	8.60	181.50	17.23
178.40	0.00	179.44	0.95	180.48	8.91	181.52	17.27
178.42	0.00	179.46	1.05	180.50	9.23	181.54	17.31
178.44	0.00	179.48	1.16	180.52	9.55	181.56	17.35
178.46	0.00	179.50	1.27	180.54	9.87	181.58	17.40
178.48	0.00	179.52	1.36	180.56	10.19	181.60	17.44
178.50	0.00	179.54	1.44	180.58	10.52	181.62	17.48
178.52	0.00	179.56	1.51	180.60	10.86	181.64	17.52
178.54	0.00	179.58	1.58	180.62	11.20	181.66	17.56
178.56	0.00	179.60	1.65	180.64	11.54	181.68	17.60
178.58	0.00	179.62	1.71	180.66	11.88	181.70	17.64
178.60	0.00	179.64	1.77	180.68	12.23	181.72	17.69
178.62	0.00	179.66	1.83	180.70	12.58	181.74	17.73
178.64	0.00	179.68	1.89	180.72	12.94	181.76	17.77
178.66	0.00	179.70	1.94	180.74	13.29	181.78	17.81
178.68	0.00	179.72	2.00	180.76	13.66	181.80	17.85
178.70	0.00	179.74	2.05	180.78	14.02	181.82	17.89
178.72	0.00	179.76	2.10	180.80	14.39	181.84	17.93
178.74	0.00	179.78	2.15	180.82	14.76	181.86	17.97
178.76	0.00	179.80	2.20	180.84	15.13	181.88	18.01
178.78	0.00	179.82	2.24	180.86	15.51	181.90	18.05
178.80	0.00	179.84	2.29	180.88	15.87	181.92	18.09
178.82	0.00	179.86	2.33	180.90	15.92	181.94	18.13
178.84	0.00	179.88	2.38	180.92	15.96	181.96	18.29
178.86	0.00	179.90	2.42	180.94	16.01	181.98	18.82
178.88	0.00	179.92	2.48	180.96	16.05	182.00	**19.56**
178.90	0.00	179.94	2.57	180.98	16.10		
178.92	0.00	179.96	2.69	181.00	16.14		
178.94	0.00	179.98	2.83	181.02	16.19		
178.96	0.00	180.00	2.98	181.04	16.23		
178.98	0.00	180.02	3.14	181.06	16.28		
179.00	0.00	180.04	3.31	181.08	16.32		
179.02	0.00	180.06	3.50	181.10	16.37		

Summary for Pond B-16B: Basin #16B

Inflow Area = 1.877 ac, 43.74% Impervious, Inflow Depth = 4.18" for Future 10 yr event
Inflow = 7.95 cfs @ 12.17 hrs, Volume= 0.653 af
Outflow = 5.22 cfs @ 12.29 hrs, Volume= 0.574 af, Atten= 34%, Lag= 7.0 min
Primary = 5.22 cfs @ 12.29 hrs, Volume= 0.574 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.41' @ 12.29 hrs Surf.Area= 4,737 sf Storage= 9,464 cf

Plug-Flow detention time= 133.6 min calculated for 0.573 af (88% of inflow)
Center-of-Mass det. time= 74.1 min (860.0 - 785.8)

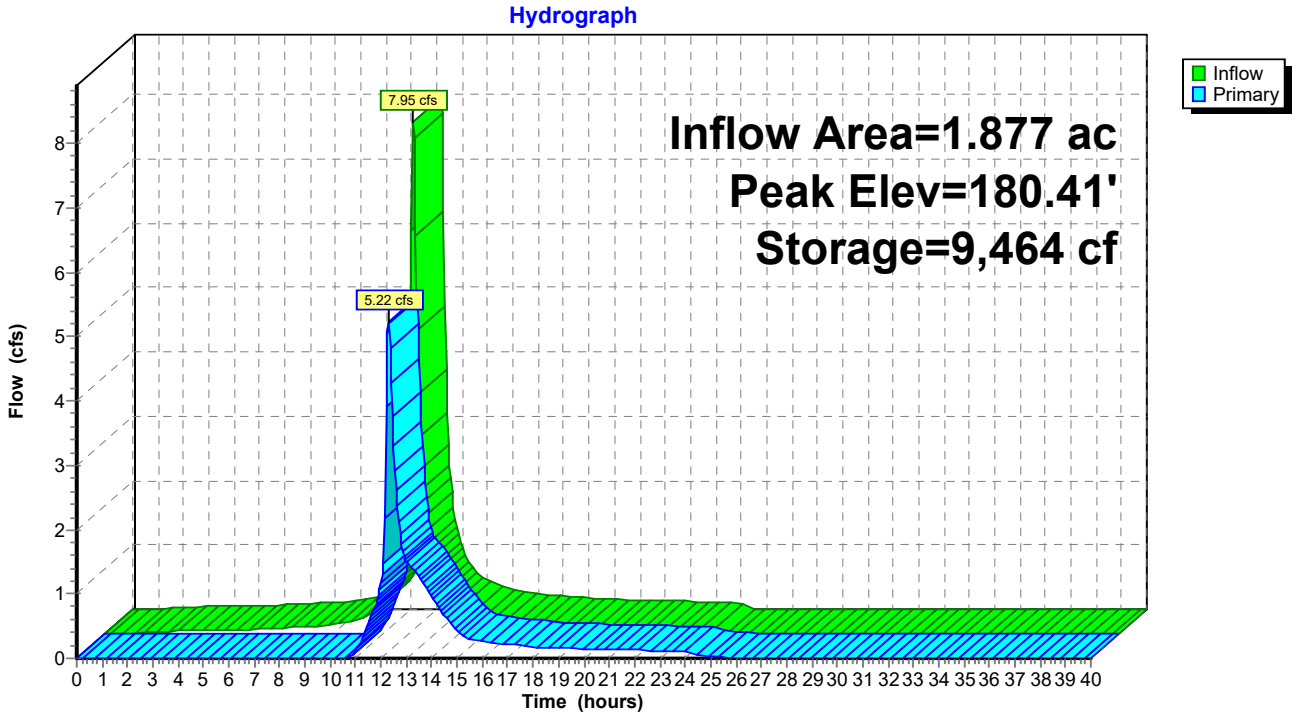
Volume	Invert	Avail.Storage	Storage Description
#1	178.00'	17,892 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
178.00	3,145	0	0
179.00	3,781	3,463	3,463
180.00	4,451	4,116	7,579
181.00	5,149	4,800	12,379
182.00	5,877	5,513	17,892

Device	Routing	Invert	Outlet Devices
#1	Primary	176.65'	**18.0" Round Culvert** L= 53.0' Ke= 0.500 Inlet / Outlet Invert= 176.65' / 172.00' S= 0.0877 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.00'	**24.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	180.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.67'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.17 cfs @ 12.29 hrs HW=180.41' (Free Discharge)
- **1=Culvert** (Passes 5.17 cfs of 14.75 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.85 cfs @ 5.54 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.32 cfs @ 2.09 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-16B: Basin #16B



Stage-Discharge for Pond B-16B: Basin #16B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.00	0.00	179.04	0.05	180.08	1.90	181.12	55.73
178.02	0.00	179.06	0.09	180.10	2.03	181.14	58.79
178.04	0.00	179.08	0.15	180.12	2.17	181.16	61.96
178.06	0.00	179.10	0.20	180.14	2.33	181.18	65.24
178.08	0.00	179.12	0.27	180.16	2.50	181.20	68.62
178.10	0.00	179.14	0.34	180.18	2.67	181.22	72.10
178.12	0.00	179.16	0.41	180.20	2.85	181.24	75.70
178.14	0.00	179.18	0.48	180.22	3.05	181.26	79.40
178.16	0.00	179.20	0.54	180.24	3.25	181.28	82.94
178.18	0.00	179.22	0.58	180.26	3.45	181.30	86.27
178.20	0.00	179.24	0.63	180.28	3.67	181.32	89.66
178.22	0.00	179.26	0.67	180.30	3.89	181.34	93.11
178.24	0.00	179.28	0.71	180.32	4.11	181.36	96.60
178.26	0.00	179.30	0.74	180.34	4.35	181.38	100.15
178.28	0.00	179.32	0.78	180.36	4.59	181.40	103.75
178.30	0.00	179.34	0.81	180.38	4.83	181.42	107.40
178.32	0.00	179.36	0.84	180.40	5.08	181.44	111.09
178.34	0.00	179.38	0.87	180.42	5.34	181.46	114.84
178.36	0.00	179.40	0.90	180.44	5.60	181.48	118.67
178.38	0.00	179.42	0.93	180.46	5.87	181.50	122.59
178.40	0.00	179.44	0.96	180.48	6.14	181.52	126.57
178.42	0.00	179.46	0.98	180.50	6.42	181.54	130.59
178.44	0.00	179.48	1.01	180.52	6.70	181.56	134.67
178.46	0.00	179.50	1.03	180.54	6.99	181.58	138.80
178.48	0.00	179.52	1.06	180.56	7.28	181.60	142.98
178.50	0.00	179.54	1.08	180.58	7.57	181.62	147.21
178.52	0.00	179.56	1.11	180.60	7.87	181.64	151.50
178.54	0.00	179.58	1.13	180.62	8.18	181.66	155.83
178.56	0.00	179.60	1.15	180.64	8.48	181.68	160.16
178.58	0.00	179.62	1.17	180.66	8.80	181.70	164.48
178.60	0.00	179.64	1.20	180.68	9.23	181.72	168.84
178.62	0.00	179.66	1.22	180.70	10.04	181.74	173.25
178.64	0.00	179.68	1.24	180.72	11.07	181.76	177.70
178.66	0.00	179.70	1.26	180.74	12.26	181.78	182.19
178.68	0.00	179.72	1.28	180.76	13.59	181.80	186.72
178.70	0.00	179.74	1.30	180.78	15.04	181.82	191.29
178.72	0.00	179.76	1.32	180.80	16.61	181.84	195.90
178.74	0.00	179.78	1.34	180.82	18.28	181.86	200.55
178.76	0.00	179.80	1.36	180.84	20.04	181.88	205.28
178.78	0.00	179.82	1.38	180.86	21.90	181.90	210.08
178.80	0.00	179.84	1.40	180.88	23.89	181.92	214.93
178.82	0.00	179.86	1.41	180.90	26.01	181.94	219.82
178.84	0.00	179.88	1.43	180.92	28.24	181.96	224.75
178.86	0.00	179.90	1.45	180.94	30.57	181.98	229.73
178.88	0.00	179.92	1.47	180.96	33.01	182.00	**234.74**
178.90	0.00	179.94	1.48	180.98	35.54		
178.92	0.00	179.96	1.50	181.00	38.18		
178.94	0.00	179.98	1.52	181.02	40.92		
178.96	0.00	180.00	1.54	181.04	43.75		
178.98	0.00	180.02	1.59	181.06	46.69		
179.00	0.00	180.04	1.67	181.08	49.75		
179.02	0.02	180.06	1.78	181.10	52.77		

Summary for Pond B-17A: Basin #17A

Inflow Area = 1.324 ac, 14.58% Impervious, Inflow Depth = 3.43" for Future 10 yr event
Inflow = 4.86 cfs @ 12.17 hrs, Volume= 0.379 af
Outflow = 0.20 cfs @ 15.05 hrs, Volume= 0.331 af, Atten= 96%, Lag= 172.6 min
Primary = 0.20 cfs @ 15.05 hrs, Volume= 0.331 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.70' @ 15.05 hrs Surf.Area= 7,240 sf Storage= 10,835 cf

Plug-Flow detention time= 648.8 min calculated for 0.331 af (87% of inflow)
Center-of-Mass det. time= 588.9 min (1,405.1 - 816.2)

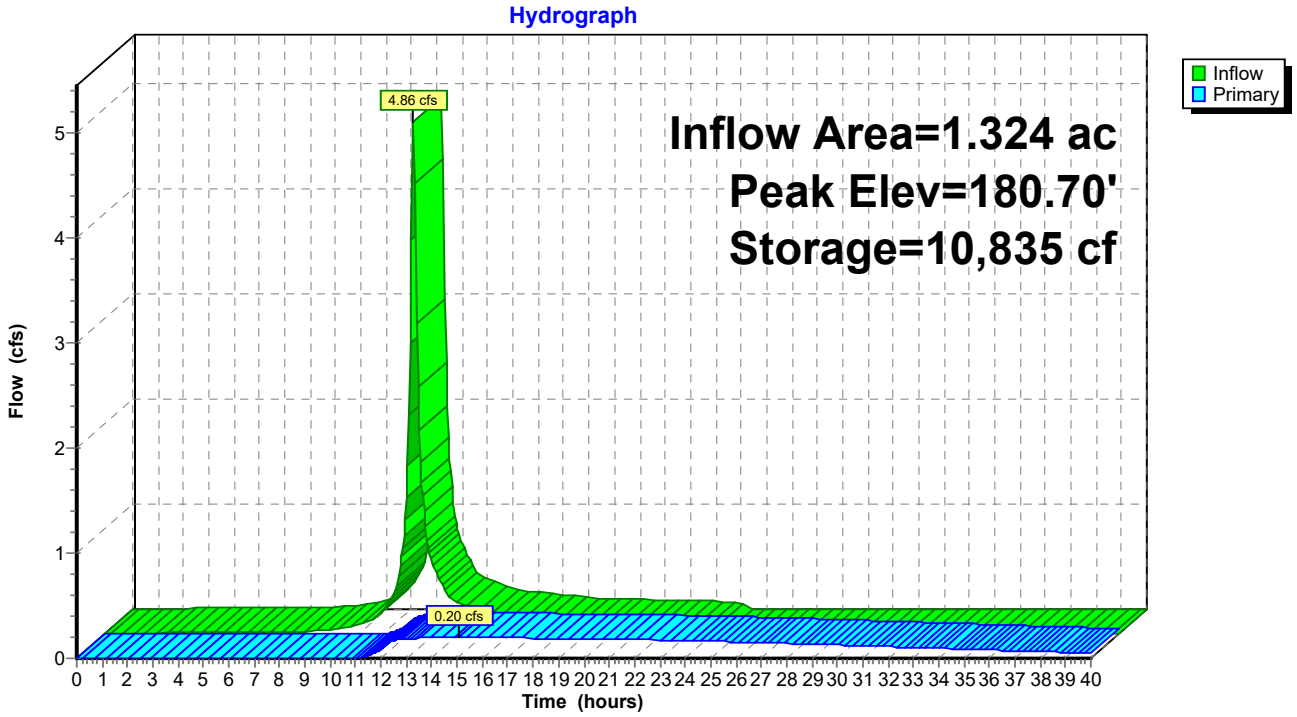
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	30,377 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	5,508	0	0
180.00	6,502	6,005	6,005
181.00	7,552	7,027	13,032
182.00	8,658	8,105	21,137
183.00	9,821	9,240	30,377

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 177.00' S= 0.0163 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.18'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.20 cfs @ 15.05 hrs HW=180.70' (Free Discharge)
- **1=Culvert** (Passes 0.20 cfs of 12.91 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.74 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-17A: Basin #17A



Stage-Discharge for Pond B-17A: Basin #17A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.14	181.08	0.22	182.12	9.08
179.02	0.00	180.06	0.14	181.10	0.22	182.14	10.74
179.04	0.00	180.08	0.15	181.12	0.22	182.16	12.52
179.06	0.00	180.10	0.15	181.14	0.22	182.18	14.45
179.08	0.00	180.12	0.15	181.16	0.22	182.20	16.49
179.10	0.00	180.14	0.15	181.18	0.23	182.22	18.64
179.12	0.00	180.16	0.15	181.20	0.23	182.24	20.90
179.14	0.00	180.18	0.16	181.22	0.23	182.26	23.26
179.16	0.00	180.20	0.16	181.24	0.23	182.28	25.73
179.18	0.00	180.22	0.16	181.26	0.23	182.30	28.30
179.20	0.00	180.24	0.16	181.28	0.23	182.32	30.97
179.22	0.00	180.26	0.16	181.30	0.23	182.34	33.75
179.24	0.01	180.28	0.16	181.32	0.23	182.36	36.66
179.26	0.01	180.30	0.17	181.34	0.24	182.38	39.70
179.28	0.02	180.32	0.17	181.36	0.24	182.40	42.85
179.30	0.02	180.34	0.17	181.38	0.24	182.42	46.11
179.32	0.03	180.36	0.17	181.40	0.24	182.44	49.49
179.34	0.04	180.38	0.17	181.42	0.24	182.46	52.97
179.36	0.05	180.40	0.17	181.44	0.24	182.48	56.57
179.38	0.05	180.42	0.17	181.46	0.24	182.50	60.28
179.40	0.06	180.44	0.18	181.48	0.24	182.52	64.09
179.42	0.06	180.46	0.18	181.50	0.24	182.54	68.03
179.44	0.06	180.48	0.18	181.52	0.25	182.56	71.80
179.46	0.07	180.50	0.18	181.54	0.25	182.58	75.38
179.48	0.07	180.52	0.18	181.56	0.25	182.60	79.01
179.50	0.08	180.54	0.18	181.58	0.25	182.62	82.71
179.52	0.08	180.56	0.19	181.60	0.25	182.64	86.46
179.54	0.08	180.58	0.19	181.62	0.25	182.66	90.26
179.56	0.09	180.60	0.19	181.64	0.25	182.68	94.12
179.58	0.09	180.62	0.19	181.66	0.25	182.70	98.03
179.60	0.09	180.64	0.19	181.68	0.25	182.72	102.00
179.62	0.10	180.66	0.19	181.70	0.26	182.74	106.02
179.64	0.10	180.68	0.19	181.72	0.26	182.76	110.13
179.66	0.10	180.70	0.20	181.74	0.26	182.78	114.33
179.68	0.10	180.72	0.20	181.76	0.26	182.80	118.59
179.70	0.11	180.74	0.20	181.78	0.26	182.82	122.90
179.72	0.11	180.76	0.20	181.80	0.26	182.84	127.27
179.74	0.11	180.78	0.20	181.82	0.26	182.86	131.70
179.76	0.11	180.80	0.20	181.84	0.26	182.88	136.18
179.78	0.12	180.82	0.20	181.86	0.26	182.90	140.71
179.80	0.12	180.84	0.20	181.88	0.26	182.92	145.30
179.82	0.12	180.86	0.21	181.90	0.27	182.94	149.94
179.84	0.12	180.88	0.21	181.92	0.27	182.96	154.58
179.86	0.12	180.90	0.21	181.94	0.27	182.98	159.22
179.88	0.13	180.92	0.21	181.96	0.39	183.00	**163.90**
179.90	0.13	180.94	0.21	181.98	0.88		
179.92	0.13	180.96	0.21	182.00	1.58		
179.94	0.13	180.98	0.21	182.02	2.48		
179.96	0.13	181.00	0.22	182.04	3.55		
179.98	0.14	181.02	0.22	182.06	4.76		
180.00	0.14	181.04	0.22	182.08	6.09		
180.02	0.14	181.06	0.22	182.10	7.53		

Summary for Pond B-17B: Basin #17B

Inflow Area = 1.385 ac, 37.11% Impervious, Inflow Depth = 4.01" for Future 10 yr event
Inflow = 5.69 cfs @ 12.17 hrs, Volume= 0.462 af
Outflow = 2.63 cfs @ 12.36 hrs, Volume= 0.391 af, Atten= 54%, Lag= 11.3 min
Primary = 2.63 cfs @ 12.36 hrs, Volume= 0.391 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.19' @ 12.36 hrs Surf.Area= 8,274 sf Storage= 9,032 cf

Plug-Flow detention time= 328.9 min calculated for 0.390 af (84% of inflow)
Center-of-Mass det. time= 259.5 min (1,051.2 - 791.7)

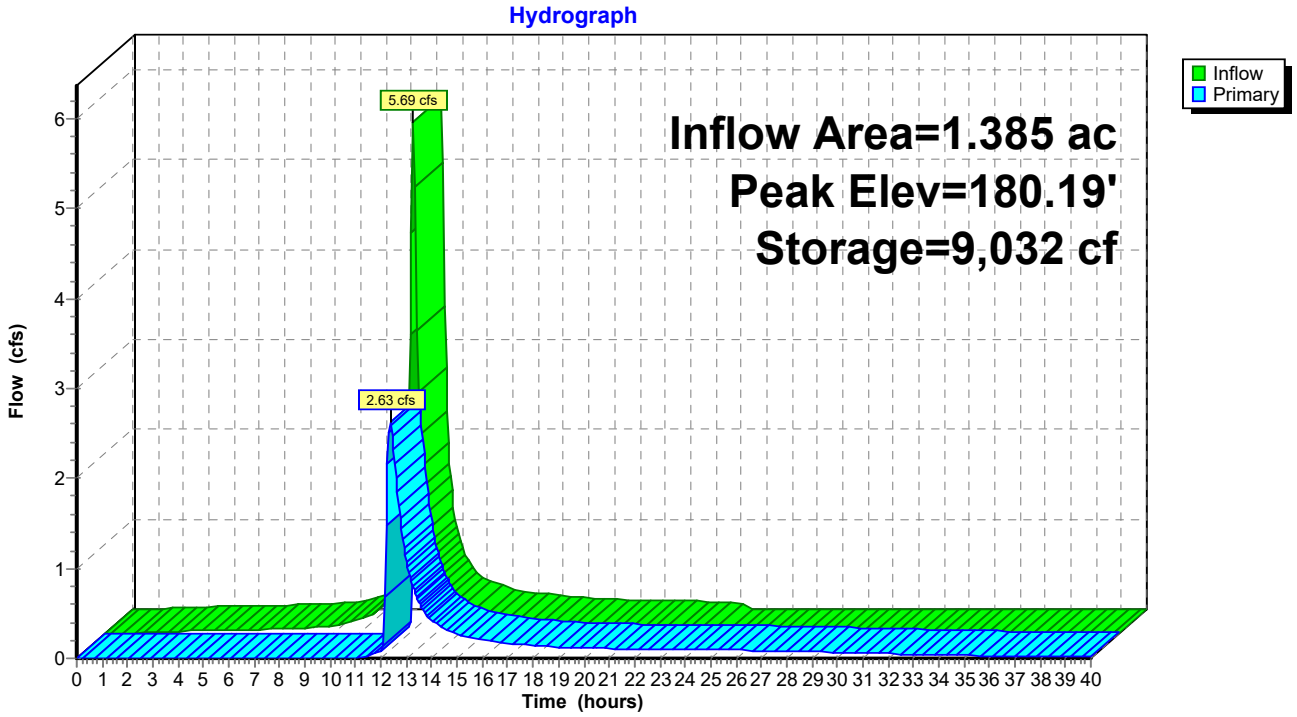
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	37,242 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	6,855	0	0
180.00	8,033	7,444	7,444
181.00	9,268	8,651	16,095
182.00	10,560	9,914	26,009
183.00	11,907	11,234	37,242

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 177.00' S= 0.0163 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.35'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.86'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.62 cfs @ 12.36 hrs HW=180.19' (Free Discharge)
- **1=Culvert** (Passes 2.62 cfs of 11.40 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.14 cfs @ 4.14 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.48 cfs @ 1.89 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-17B: Basin #17B



Stage-Discharge for Pond B-17B: Basin #17B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	1.12	181.08	13.93	182.12	24.68
179.02	0.00	180.06	1.29	181.10	13.98	182.14	26.23
179.04	0.00	180.08	1.46	181.12	14.03	182.16	27.91
179.06	0.00	180.10	1.65	181.14	14.08	182.18	29.72
179.08	0.00	180.12	1.85	181.16	14.14	182.20	31.64
179.10	0.00	180.14	2.05	181.18	14.19	182.22	33.66
179.12	0.00	180.16	2.25	181.20	14.24	182.24	35.77
179.14	0.00	180.18	2.47	181.22	14.29	182.26	37.98
179.16	0.00	180.20	2.69	181.24	14.34	182.28	40.29
179.18	0.00	180.22	2.92	181.26	14.39	182.30	42.70
179.20	0.00	180.24	3.15	181.28	14.44	182.32	45.20
179.22	0.00	180.26	3.39	181.30	14.49	182.34	47.80
179.24	0.00	180.28	3.63	181.32	14.54	182.36	50.53
179.26	0.00	180.30	3.88	181.34	14.59	182.38	53.38
179.28	0.00	180.32	4.14	181.36	14.64	182.40	56.34
179.30	0.00	180.34	4.40	181.38	14.69	182.42	59.40
179.32	0.00	180.36	4.67	181.40	14.74	182.44	62.57
179.34	0.00	180.38	4.94	181.42	14.79	182.46	65.84
179.36	0.00	180.40	5.21	181.44	14.84	182.48	69.22
179.38	0.00	180.42	5.49	181.46	14.88	182.50	72.70
179.40	0.00	180.44	5.77	181.48	14.93	182.52	76.29
179.42	0.01	180.46	6.06	181.50	14.98	182.54	79.99
179.44	0.01	180.48	6.35	181.52	15.03	182.56	83.53
179.46	0.02	180.50	6.65	181.54	15.08	182.58	86.87
179.48	0.03	180.52	6.95	181.56	15.13	182.60	90.26
179.50	0.03	180.54	7.26	181.58	15.17	182.62	93.70
179.52	0.04	180.56	7.56	181.60	15.22	182.64	97.19
179.54	0.05	180.58	7.88	181.62	15.27	182.66	100.74
179.56	0.05	180.60	8.19	181.64	15.32	182.68	104.34
179.58	0.06	180.62	8.51	181.66	15.36	182.70	107.98
179.60	0.06	180.64	8.84	181.68	15.41	182.72	111.68
179.62	0.07	180.66	9.17	181.70	15.46	182.74	115.42
179.64	0.07	180.68	9.50	181.72	15.50	182.76	119.25
179.66	0.07	180.70	9.83	181.74	15.55	182.78	123.17
179.68	0.08	180.72	10.17	181.76	15.60	182.80	127.14
179.70	0.08	180.74	10.51	181.78	15.64	182.82	131.17
179.72	0.08	180.76	10.85	181.80	15.69	182.84	135.25
179.74	0.09	180.78	11.20	181.82	15.74	182.86	139.37
179.76	0.09	180.80	11.55	181.84	15.78	182.88	143.55
179.78	0.09	180.82	11.90	181.86	15.83	182.90	147.78
179.80	0.10	180.84	12.26	181.88	15.87	182.92	152.07
179.82	0.10	180.86	12.62	181.90	15.92	182.94	156.40
179.84	0.10	180.88	12.98	181.92	15.96	182.96	160.73
179.86	0.10	180.90	13.35	181.94	16.01	182.98	165.05
179.88	0.14	180.92	13.51	181.96	16.17	183.00	**169.41**
179.90	0.21	180.94	13.56	181.98	16.71		
179.92	0.30	180.96	13.61	182.00	17.46		
179.94	0.41	180.98	13.67	182.02	18.36		
179.96	0.53	181.00	13.72	182.04	19.41		
179.98	0.66	181.02	13.77	182.06	20.57		
180.00	0.80	181.04	13.83	182.08	21.84		
180.02	0.95	181.06	13.88	182.10	23.21		

Summary for Pond B-2: Basin #2

Inflow Area = 1.894 ac, 38.23% Impervious, Inflow Depth = 4.04" for Future 10 yr event
Inflow = 7.82 cfs @ 12.17 hrs, Volume= 0.637 af
Outflow = 0.17 cfs @ 17.84 hrs, Volume= 0.079 af, Atten= 98%, Lag= 340.1 min
Primary = 0.17 cfs @ 17.84 hrs, Volume= 0.079 af
Routed to Pond B-1 : Basin #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 211.51' @ 17.84 hrs Surf.Area= 9,894 sf Storage= 24,427 cf

Plug-Flow detention time= 740.4 min calculated for 0.079 af (12% of inflow)
Center-of-Mass det. time= 443.3 min (1,234.0 - 790.7)

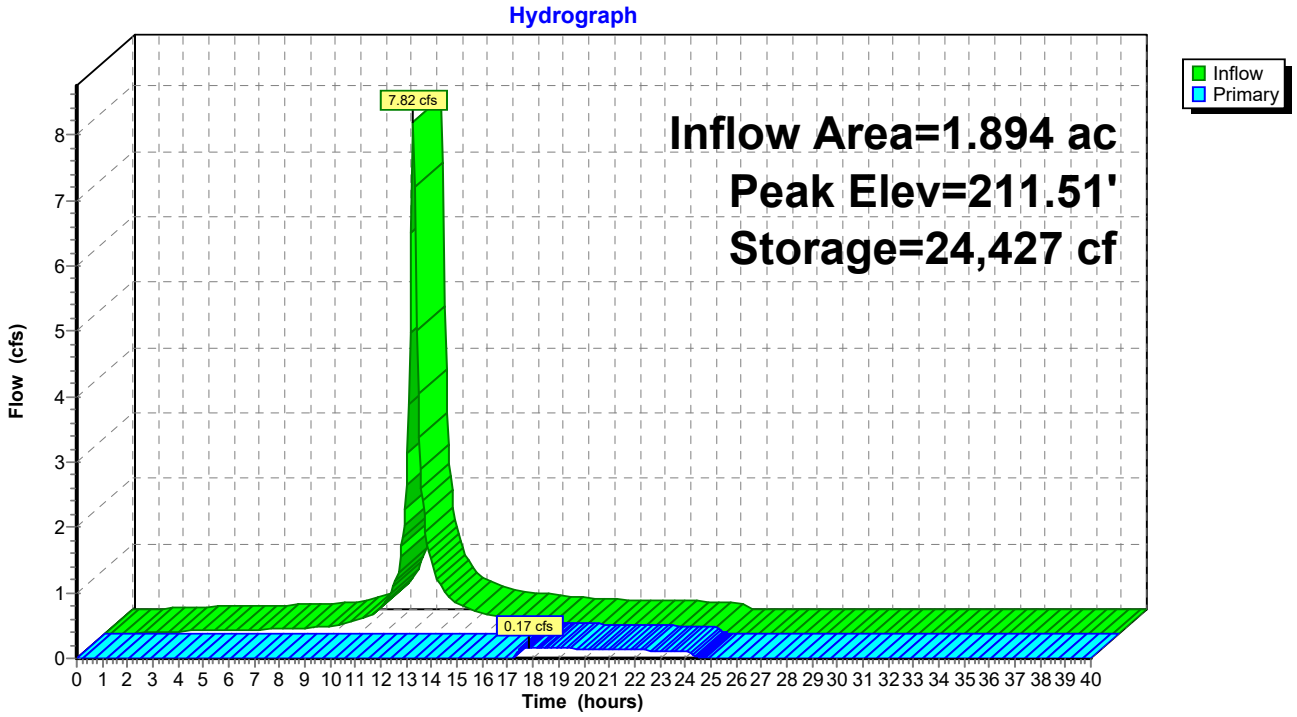
Volume	Invert	Avail.Storage	Storage Description
#1	208.30'	29,385 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
208.30	0	0	0
209.00	7,501	2,625	2,625
210.00	8,431	7,966	10,591
211.00	9,390	8,911	19,502
212.00	10,376	9,883	29,385

Device	Routing	Invert	Outlet Devices
#1	Primary	211.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.13 cfs @ 17.84 hrs HW=211.51' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 0.13 cfs @ 0.24 fps)

Pond B-2: Basin #2



Stage-Discharge for Pond B-2: Basin #2

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
208.30	0.00	209.34	0.00	210.38	0.00	211.42	0.00
208.32	0.00	209.36	0.00	210.40	0.00	211.44	0.00
208.34	0.00	209.38	0.00	210.42	0.00	211.46	0.00
208.36	0.00	209.40	0.00	210.44	0.00	211.48	0.00
208.38	0.00	209.42	0.00	210.46	0.00	211.50	0.00
208.40	0.00	209.44	0.00	210.48	0.00	211.52	0.33
208.42	0.00	209.46	0.00	210.50	0.00	211.54	0.94
208.44	0.00	209.48	0.00	210.52	0.00	211.56	1.72
208.46	0.00	209.50	0.00	210.54	0.00	211.58	2.66
208.48	0.00	209.52	0.00	210.56	0.00	211.60	3.72
208.50	0.00	209.54	0.00	210.58	0.00	211.62	4.89
208.52	0.00	209.56	0.00	210.60	0.00	211.64	6.17
208.54	0.00	209.58	0.00	210.62	0.00	211.66	7.55
208.56	0.00	209.60	0.00	210.64	0.00	211.68	9.01
208.58	0.00	209.62	0.00	210.66	0.00	211.70	10.57
208.60	0.00	209.64	0.00	210.68	0.00	211.72	12.28
208.62	0.00	209.66	0.00	210.70	0.00	211.74	14.11
208.64	0.00	209.68	0.00	210.72	0.00	211.76	16.03
208.66	0.00	209.70	0.00	210.74	0.00	211.78	18.05
208.68	0.00	209.72	0.00	210.76	0.00	211.80	20.17
208.70	0.00	209.74	0.00	210.78	0.00	211.82	22.39
208.72	0.00	209.76	0.00	210.80	0.00	211.84	24.70
208.74	0.00	209.78	0.00	210.82	0.00	211.86	27.11
208.76	0.00	209.80	0.00	210.84	0.00	211.88	29.62
208.78	0.00	209.82	0.00	210.86	0.00	211.90	32.23
208.80	0.00	209.84	0.00	210.88	0.00	211.92	34.99
208.82	0.00	209.86	0.00	210.90	0.00	211.94	37.85
208.84	0.00	209.88	0.00	210.92	0.00	211.96	40.82
208.86	0.00	209.90	0.00	210.94	0.00	211.98	43.89
208.88	0.00	209.92	0.00	210.96	0.00	212.00	**47.07**
208.90	0.00	209.94	0.00	210.98	0.00		
208.92	0.00	209.96	0.00	211.00	0.00		
208.94	0.00	209.98	0.00	211.02	0.00		
208.96	0.00	210.00	0.00	211.04	0.00		
208.98	0.00	210.02	0.00	211.06	0.00		
209.00	0.00	210.04	0.00	211.08	0.00		
209.02	0.00	210.06	0.00	211.10	0.00		
209.04	0.00	210.08	0.00	211.12	0.00		
209.06	0.00	210.10	0.00	211.14	0.00		
209.08	0.00	210.12	0.00	211.16	0.00		
209.10	0.00	210.14	0.00	211.18	0.00		
209.12	0.00	210.16	0.00	211.20	0.00		
209.14	0.00	210.18	0.00	211.22	0.00		
209.16	0.00	210.20	0.00	211.24	0.00		
209.18	0.00	210.22	0.00	211.26	0.00		
209.20	0.00	210.24	0.00	211.28	0.00		
209.22	0.00	210.26	0.00	211.30	0.00		
209.24	0.00	210.28	0.00	211.32	0.00		
209.26	0.00	210.30	0.00	211.34	0.00		
209.28	0.00	210.32	0.00	211.36	0.00		
209.30	0.00	210.34	0.00	211.38	0.00		
209.32	0.00	210.36	0.00	211.40	0.00		

Summary for Pond B-3: Basin #3

Inflow Area = 1.554 ac, 38.35% Impervious, Inflow Depth = 4.04" for Future 10 yr event
Inflow = 6.42 cfs @ 12.17 hrs, Volume= 0.523 af
Outflow = 0.19 cfs @ 16.42 hrs, Volume= 0.404 af, Atten= 97%, Lag= 255.1 min
Primary = 0.19 cfs @ 16.42 hrs, Volume= 0.404 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 214.30' @ 16.42 hrs Surf.Area= 13,517 sf Storage= 15,304 cf

Plug-Flow detention time= 724.1 min calculated for 0.404 af (77% of inflow)
Center-of-Mass det. time= 636.6 min (1,427.2 - 790.6)

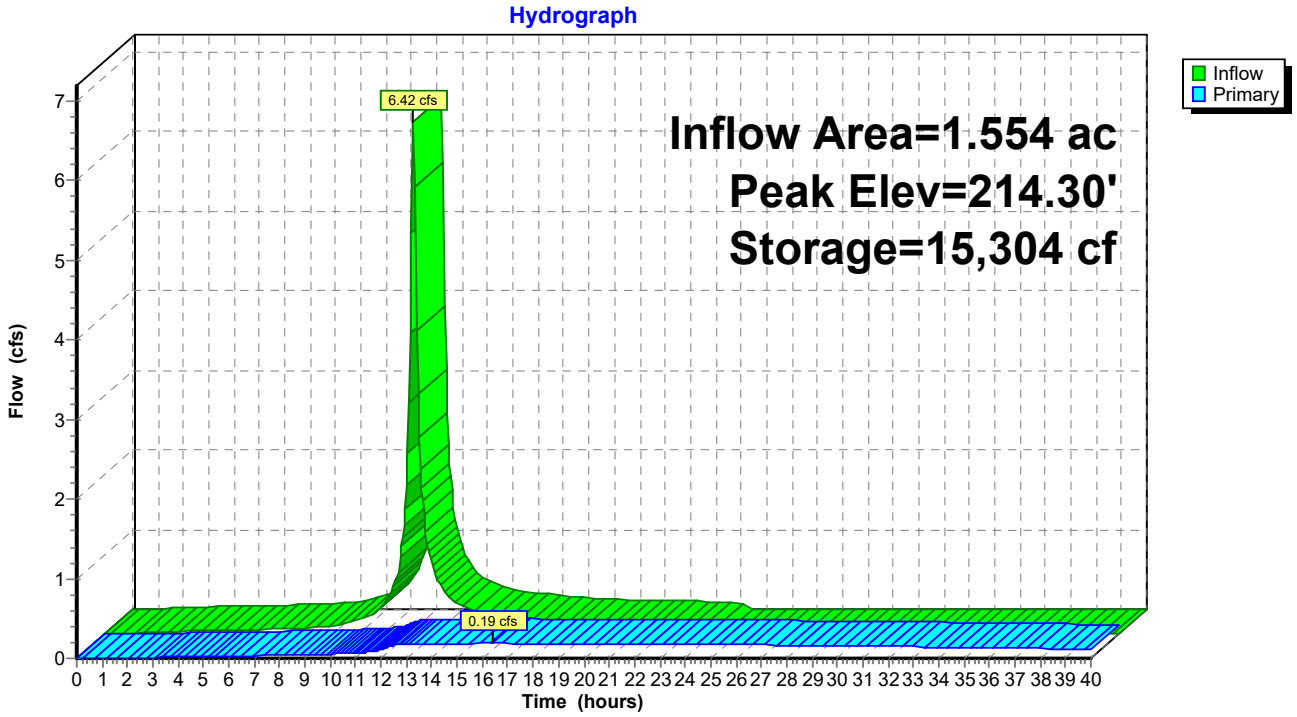
Volume	Invert	Avail.Storage	Storage Description
#1	213.00'	56,991 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
213.00	9,992	0	0
214.00	12,685	11,339	11,339
215.00	15,435	14,060	25,399
216.00	18,241	16,838	42,237
216.75	21,104	14,754	56,991

Device	Routing	Invert	Outlet Devices
#1	Primary	212.30'	**18.0" Round Culvert** L= 151.0' Ke= 0.500 Inlet / Outlet Invert= 212.30' / 202.00' S= 0.0682 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.77 sf
#2	Device 1	212.90'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	215.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	216.70'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.19 cfs @ 16.42 hrs HW=214.30' (Free Discharge)
- **1=Culvert** (Passes 0.19 cfs of 9.52 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.49 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-3: Basin #3



Stage-Discharge for Pond B-3: Basin #3

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
213.00	0.00	214.04	0.17	215.08	0.24	216.12	6.48
213.02	0.02	214.06	0.17	215.10	0.24	216.14	6.77
213.04	0.03	214.08	0.17	215.12	0.24	216.16	7.07
213.06	0.04	214.10	0.17	215.14	0.24	216.18	7.38
213.08	0.05	214.12	0.17	215.16	0.24	216.20	7.69
213.10	0.05	214.14	0.17	215.18	0.24	216.22	8.00
213.12	0.06	214.16	0.18	215.20	0.24	216.24	8.31
213.14	0.06	214.18	0.18	215.22	0.24	216.26	8.63
213.16	0.06	214.20	0.18	215.24	0.25	216.28	8.96
213.18	0.07	214.22	0.18	215.26	0.25	216.30	9.28
213.20	0.07	214.24	0.18	215.28	0.25	216.32	9.61
213.22	0.08	214.26	0.18	215.30	0.25	216.34	9.95
213.24	0.08	214.28	0.19	215.32	0.25	216.36	10.28
213.26	0.08	214.30	0.19	215.34	0.25	216.38	10.62
213.28	0.09	214.32	0.19	215.36	0.25	216.40	10.97
213.30	0.09	214.34	0.19	215.38	0.25	216.42	11.31
213.32	0.09	214.36	0.19	215.40	0.25	216.44	11.66
213.34	0.10	214.38	0.19	215.42	0.26	216.46	12.02
213.36	0.10	214.40	0.19	215.44	0.26	216.48	12.37
213.38	0.10	214.42	0.20	215.46	0.26	216.50	12.73
213.40	0.10	214.44	0.20	215.48	0.26	216.52	13.09
213.42	0.11	214.46	0.20	215.50	0.26	216.54	13.46
213.44	0.11	214.48	0.20	215.52	0.30	216.56	13.83
213.46	0.11	214.50	0.20	215.54	0.37	216.58	14.20
213.48	0.11	214.52	0.20	215.56	0.45	216.60	14.57
213.50	0.12	214.54	0.20	215.58	0.56	216.62	14.95
213.52	0.12	214.56	0.20	215.60	0.68	216.64	15.33
213.54	0.12	214.58	0.21	215.62	0.81	216.66	15.71
213.56	0.12	214.60	0.21	215.64	0.95	216.68	16.09
213.58	0.12	214.62	0.21	215.66	1.10	216.70	16.26
213.60	0.13	214.64	0.21	215.68	1.26	216.72	16.63
213.62	0.13	214.66	0.21	215.70	1.43	216.74	**17.28**
213.64	0.13	214.68	0.21	215.72	1.61		
213.66	0.13	214.70	0.21	215.74	1.79		
213.68	0.13	214.72	0.22	215.76	1.98		
213.70	0.14	214.74	0.22	215.78	2.18		
213.72	0.14	214.76	0.22	215.80	2.39		
213.74	0.14	214.78	0.22	215.82	2.61		
213.76	0.14	214.80	0.22	215.84	2.83		
213.78	0.14	214.82	0.22	215.86	3.05		
213.80	0.15	214.84	0.22	215.88	3.28		
213.82	0.15	214.86	0.22	215.90	3.52		
213.84	0.15	214.88	0.22	215.92	3.77		
213.86	0.15	214.90	0.23	215.94	4.01		
213.88	0.15	214.92	0.23	215.96	4.27		
213.90	0.16	214.94	0.23	215.98	4.53		
213.92	0.16	214.96	0.23	216.00	4.79		
213.94	0.16	214.98	0.23	216.02	5.06		
213.96	0.16	215.00	0.23	216.04	5.34		
213.98	0.16	215.02	0.23	216.06	5.61		
214.00	0.16	215.04	0.23	216.08	5.90		
214.02	0.17	215.06	0.24	216.10	6.19		

Summary for Pond B-4A: Basin #4A

Inflow Area = 2.331 ac, 36.89% Impervious, Inflow Depth = 4.00" for Future 10 yr event
Inflow = 9.56 cfs @ 12.17 hrs, Volume= 0.777 af
Outflow = 1.92 cfs @ 12.70 hrs, Volume= 0.303 af, Atten= 80%, Lag= 31.9 min
Primary = 1.92 cfs @ 12.70 hrs, Volume= 0.303 af
Routed to Pond B-5 : Basin #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 205.51' @ 12.71 hrs Surf.Area= 6,057 sf Storage= 20,963 cf

Plug-Flow detention time= 327.2 min calculated for 0.303 af (39% of inflow)
Center-of-Mass det. time= 180.8 min (972.7 - 792.0)

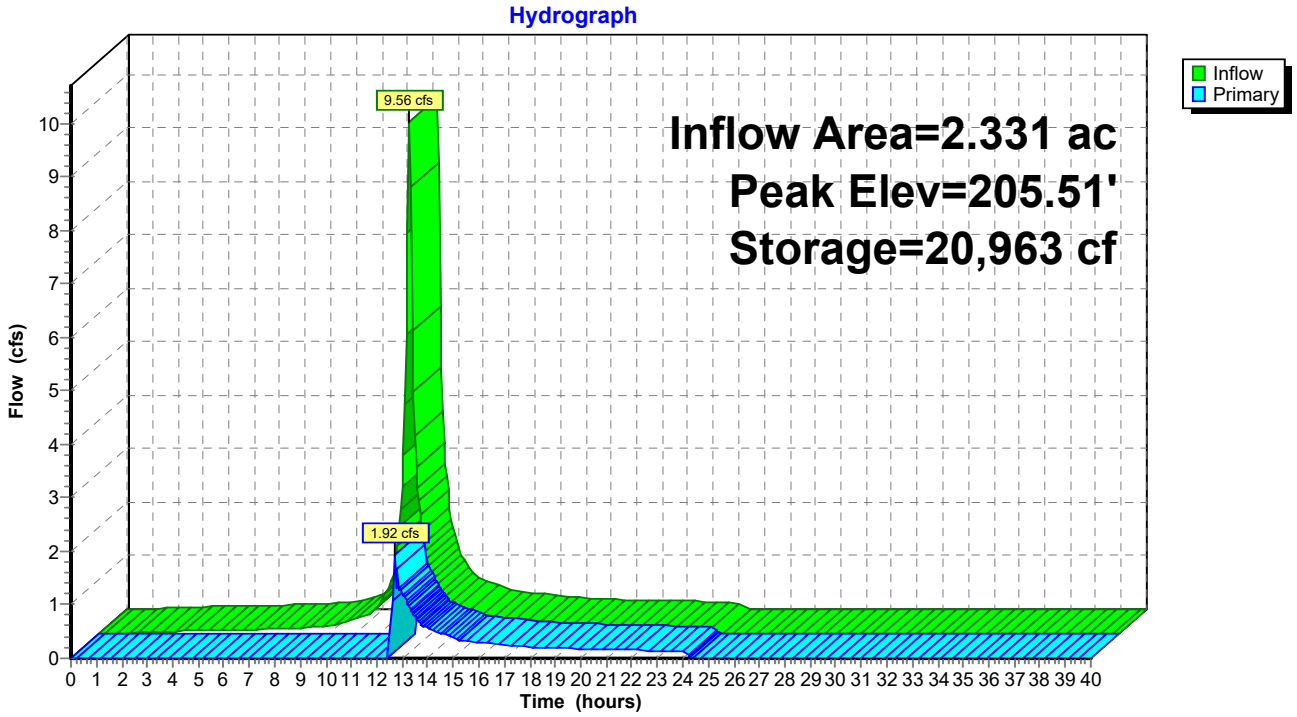
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	20,963 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	1,891	0	0
201.00	2,495	2,193	2,193
202.00	3,169	2,832	5,025
203.00	3,912	3,541	8,566
204.00	4,724	4,318	12,884
205.00	5,604	5,164	18,048
205.50	6,057	2,915	20,963

Device	Routing	Invert	Outlet Devices
#1	Primary	205.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.79 cfs @ 12.70 hrs HW=205.51' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 1.79 cfs @ 0.58 fps)

Pond B-4A: Basin #4A



Stage-Discharge for Pond B-4A: Basin #4A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	0.00	205.20	0.00
200.05	0.00	202.65	0.00	205.25	0.00
200.10	0.00	202.70	0.00	205.30	0.00
200.15	0.00	202.75	0.00	205.35	0.00
200.20	0.00	202.80	0.00	205.40	0.00
200.25	0.00	202.85	0.00	205.45	0.00
200.30	0.00	202.90	0.00	205.50	1.31
200.35	0.00	202.95	0.00	205.55	**3.72**
200.40	0.00	203.00	0.00		
200.45	0.00	203.05	0.00		
200.50	0.00	203.10	0.00		
200.55	0.00	203.15	0.00		
200.60	0.00	203.20	0.00		
200.65	0.00	203.25	0.00		
200.70	0.00	203.30	0.00		
200.75	0.00	203.35	0.00		
200.80	0.00	203.40	0.00		
200.85	0.00	203.45	0.00		
200.90	0.00	203.50	0.00		
200.95	0.00	203.55	0.00		
201.00	0.00	203.60	0.00		
201.05	0.00	203.65	0.00		
201.10	0.00	203.70	0.00		
201.15	0.00	203.75	0.00		
201.20	0.00	203.80	0.00		
201.25	0.00	203.85	0.00		
201.30	0.00	203.90	0.00		
201.35	0.00	203.95	0.00		
201.40	0.00	204.00	0.00		
201.45	0.00	204.05	0.00		
201.50	0.00	204.10	0.00		
201.55	0.00	204.15	0.00		
201.60	0.00	204.20	0.00		
201.65	0.00	204.25	0.00		
201.70	0.00	204.30	0.00		
201.75	0.00	204.35	0.00		
201.80	0.00	204.40	0.00		
201.85	0.00	204.45	0.00		
201.90	0.00	204.50	0.00		
201.95	0.00	204.55	0.00		
202.00	0.00	204.60	0.00		
202.05	0.00	204.65	0.00		
202.10	0.00	204.70	0.00		
202.15	0.00	204.75	0.00		
202.20	0.00	204.80	0.00		
202.25	0.00	204.85	0.00		
202.30	0.00	204.90	0.00		
202.35	0.00	204.95	0.00		
202.40	0.00	205.00	0.00		
202.45	0.00	205.05	0.00		
202.50	0.00	205.10	0.00		
202.55	0.00	205.15	0.00		

Summary for Pond B-4B: Basin #4B

Inflow Area = 2.331 ac, 36.89% Impervious, Inflow Depth = 4.00" for Future 10 yr event
Inflow = 9.56 cfs @ 12.17 hrs, Volume= 0.777 af
Outflow = 1.00 cfs @ 13.16 hrs, Volume= 0.257 af, Atten= 90%, Lag= 59.3 min
Primary = 1.00 cfs @ 13.16 hrs, Volume= 0.257 af
Routed to Pond B-5 : Basin #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 205.49' @ 13.16 hrs Surf.Area= 6,921 sf Storage= 22,913 cf

Plug-Flow detention time= 379.6 min calculated for 0.257 af (33% of inflow)
Center-of-Mass det. time= 217.4 min (1,009.4 - 792.0)

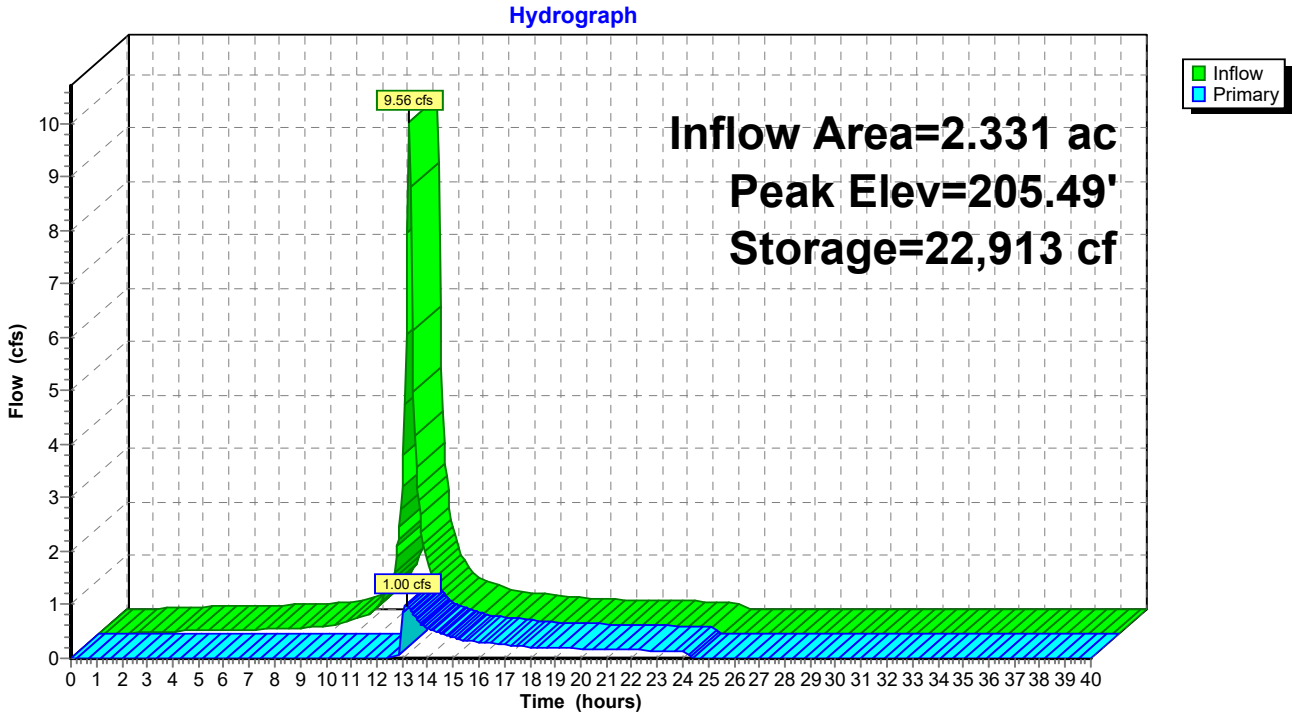
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	22,995 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	1,852	0	0
201.00	2,571	2,212	2,212
202.00	3,384	2,978	5,189
203.00	4,292	3,838	9,027
204.00	5,294	4,793	13,820
205.00	6,393	5,844	19,664
205.50	6,934	3,332	22,995

Device	Routing	Invert	Outlet Devices
#1	Primary	205.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.87 cfs @ 13.16 hrs HW=205.49' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 0.87 cfs @ 0.46 fps)

Pond B-4B: Basin #4B



Stage-Discharge for Pond B-4B: Basin #4B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	0.00	205.20	0.00
200.05	0.00	202.65	0.00	205.25	0.00
200.10	0.00	202.70	0.00	205.30	0.00
200.15	0.00	202.75	0.00	205.35	0.00
200.20	0.00	202.80	0.00	205.40	0.00
200.25	0.00	202.85	0.00	205.45	0.00
200.30	0.00	202.90	0.00	205.50	**1.31**
200.35	0.00	202.95	0.00		
200.40	0.00	203.00	0.00		
200.45	0.00	203.05	0.00		
200.50	0.00	203.10	0.00		
200.55	0.00	203.15	0.00		
200.60	0.00	203.20	0.00		
200.65	0.00	203.25	0.00		
200.70	0.00	203.30	0.00		
200.75	0.00	203.35	0.00		
200.80	0.00	203.40	0.00		
200.85	0.00	203.45	0.00		
200.90	0.00	203.50	0.00		
200.95	0.00	203.55	0.00		
201.00	0.00	203.60	0.00		
201.05	0.00	203.65	0.00		
201.10	0.00	203.70	0.00		
201.15	0.00	203.75	0.00		
201.20	0.00	203.80	0.00		
201.25	0.00	203.85	0.00		
201.30	0.00	203.90	0.00		
201.35	0.00	203.95	0.00		
201.40	0.00	204.00	0.00		
201.45	0.00	204.05	0.00		
201.50	0.00	204.10	0.00		
201.55	0.00	204.15	0.00		
201.60	0.00	204.20	0.00		
201.65	0.00	204.25	0.00		
201.70	0.00	204.30	0.00		
201.75	0.00	204.35	0.00		
201.80	0.00	204.40	0.00		
201.85	0.00	204.45	0.00		
201.90	0.00	204.50	0.00		
201.95	0.00	204.55	0.00		
202.00	0.00	204.60	0.00		
202.05	0.00	204.65	0.00		
202.10	0.00	204.70	0.00		
202.15	0.00	204.75	0.00		
202.20	0.00	204.80	0.00		
202.25	0.00	204.85	0.00		
202.30	0.00	204.90	0.00		
202.35	0.00	204.95	0.00		
202.40	0.00	205.00	0.00		
202.45	0.00	205.05	0.00		
202.50	0.00	205.10	0.00		
202.55	0.00	205.15	0.00		

Summary for Pond B-5: Basin #5

Inflow Area = 5.341 ac, 32.20% Impervious, Inflow Depth = 1.65" for Future 10 yr event
Inflow = 2.38 cfs @ 13.10 hrs, Volume= 0.733 af
Outflow = 0.62 cfs @ 16.59 hrs, Volume= 0.560 af, Atten= 74%, Lag= 209.4 min
Primary = 0.62 cfs @ 16.59 hrs, Volume= 0.560 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 201.35' @ 16.59 hrs Surf.Area= 13,225 sf Storage= 16,802 cf

Plug-Flow detention time= 533.3 min calculated for 0.560 af (76% of inflow)
Center-of-Mass det. time= 437.1 min (1,390.6 - 953.5)

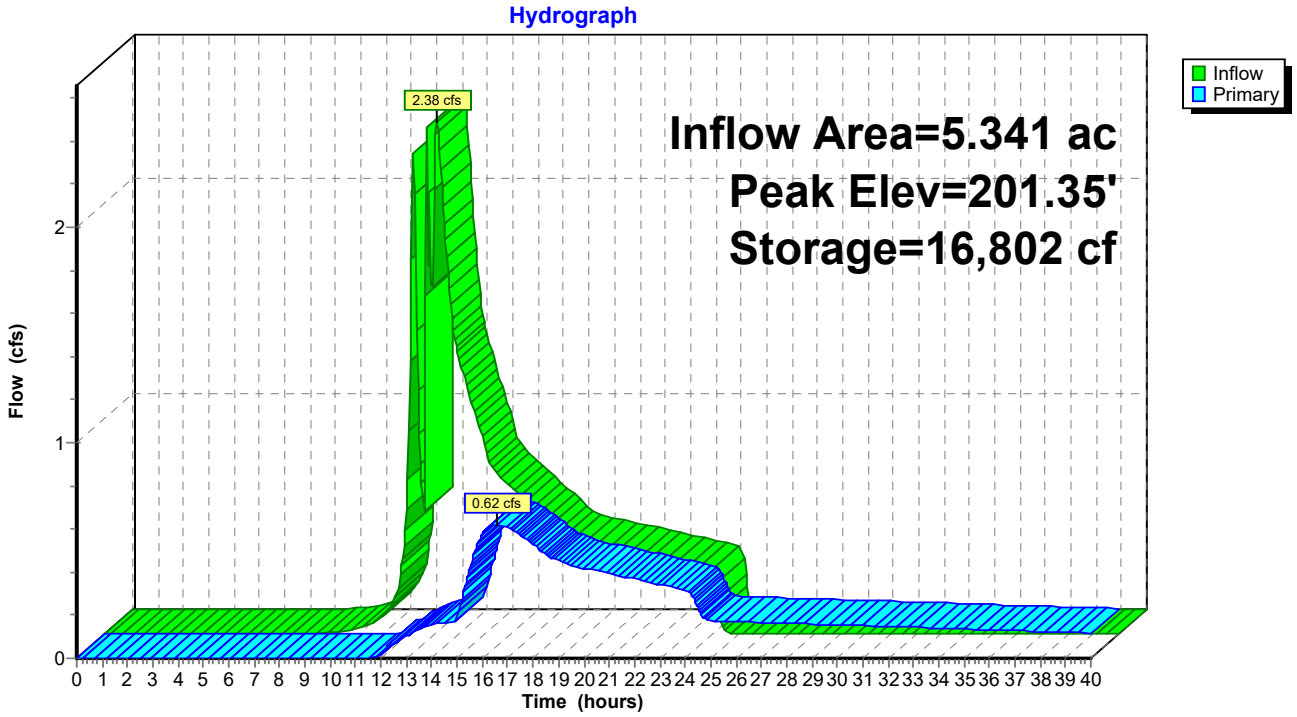
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	91,976 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	11,631	0	0
201.00	12,798	12,215	12,215
202.00	14,009	13,404	25,618
203.00	15,262	14,636	40,254
204.00	16,558	15,910	56,164
205.00	17,896	17,227	73,391
206.00	19,275	18,586	91,976

Device	Routing	Invert	Outlet Devices
#1	Primary	198.65'	**18.0" Round Culvert** L= 70.0' Ke= 0.500 Inlet / Outlet Invert= 198.65' / 196.00' S= 0.0379 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	200.02'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	205.00'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.61 cfs @ 16.59 hrs HW=201.35' (Free Discharge)
- **1=Culvert** (Passes 0.61 cfs of 11.89 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.34 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.43 cfs @ 1.05 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-5: Basin #5



Stage-Discharge for Pond B-5: Basin #5

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	15.22	205.20	31.06
200.05	0.00	202.65	15.34	205.25	35.63
200.10	0.01	202.70	15.46	205.30	40.84
200.15	0.03	202.75	15.57	205.35	46.65
200.20	0.05	202.80	15.69	205.40	53.07
200.25	0.06	202.85	15.80	205.45	60.25
200.30	0.07	202.90	15.92	205.50	68.08
200.35	0.08	202.95	16.03	205.55	76.57
200.40	0.09	203.00	16.14	205.60	85.74
200.45	0.09	203.05	16.26	205.65	94.09
200.50	0.10	203.10	16.37	205.70	102.78
200.55	0.11	203.15	16.48	205.75	111.78
200.60	0.11	203.20	16.59	205.80	121.09
200.65	0.12	203.25	16.70	205.85	130.90
200.70	0.12	203.30	16.80	205.90	141.05
200.75	0.13	203.35	16.91	205.95	151.51
200.80	0.13	203.40	17.02	206.00	**162.29**
200.85	0.14	203.45	17.12		
200.90	0.14	203.50	17.23		
200.95	0.15	203.55	17.33		
201.00	0.15	203.60	17.44		
201.05	0.16	203.65	17.54		
201.10	0.16	203.70	17.64		
201.15	0.17	203.75	17.75		
201.20	0.17	203.80	17.85		
201.25	0.17	203.85	17.95		
201.30	0.32	203.90	18.05		
201.35	0.59	203.95	18.15		
201.40	0.94	204.00	18.25		
201.45	1.35	204.05	18.35		
201.50	1.81	204.10	18.45		
201.55	2.31	204.15	18.54		
201.60	2.86	204.20	18.64		
201.65	3.45	204.25	18.74		
201.70	4.07	204.30	18.83		
201.75	4.72	204.35	18.93		
201.80	5.40	204.40	19.03		
201.85	6.11	204.45	19.12		
201.90	6.85	204.50	19.22		
201.95	7.61	204.55	19.31		
202.00	8.40	204.60	19.40		
202.05	9.21	204.65	19.50		
202.10	10.05	204.70	19.59		
202.15	10.90	204.75	19.68		
202.20	11.77	204.80	19.77		
202.25	12.67	204.85	19.86		
202.30	13.58	204.90	19.95		
202.35	14.51	204.95	20.05		
202.40	14.74	205.00	20.14		
202.45	14.86	205.05	21.54		
202.50	14.98	205.10	24.03		
202.55	15.10	205.15	27.25		

Summary for Pond B-6: Basin #6

Inflow Area = 1.191 ac, 58.27% Impervious, Inflow Depth = 4.55" for Future 10 yr event
Inflow = 5.38 cfs @ 12.17 hrs, Volume= 0.451 af
Outflow = 3.18 cfs @ 12.31 hrs, Volume= 0.379 af, Atten= 41%, Lag= 8.2 min
Primary = 3.18 cfs @ 12.31 hrs, Volume= 0.379 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.48' @ 12.31 hrs Surf.Area= 6,398 sf Storage= 8,725 cf

Plug-Flow detention time= 321.4 min calculated for 0.378 af (84% of inflow)
Center-of-Mass det. time= 250.7 min (1,025.1 - 774.4)

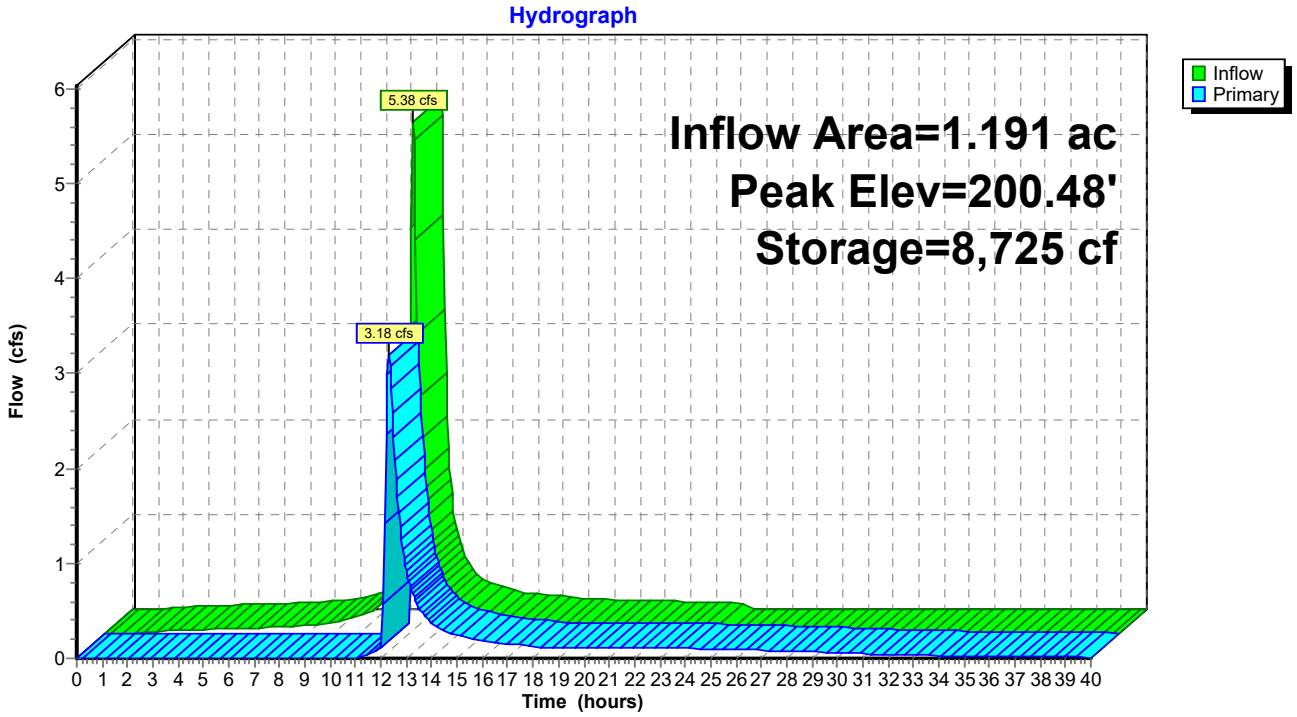
Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	35,769 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.00	5,389	0	0
200.00	6,060	5,725	5,725
201.00	6,761	6,411	12,135
202.00	7,490	7,126	19,261
203.00	8,247	7,869	27,129
204.00	9,032	8,640	35,769

Device	Routing	Invert	Outlet Devices
#1	Primary	197.65'	**18.0" Round Culvert** L= 627.0' Ke= 0.500 Inlet / Outlet Invert= 197.65' / 194.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.50'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.10'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	200.89'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.16 cfs @ 12.31 hrs HW=200.48' (Free Discharge)
- **1=Culvert** (Passes 3.16 cfs of 8.79 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.15 cfs @ 4.51 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.01 cfs @ 2.02 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-6: Basin #6



Stage-Discharge for Pond B-6: Basin #6

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.00	0.00	201.60	92.90
199.05	0.00	201.65	101.92
199.10	0.00	201.70	111.29
199.15	0.00	201.75	121.13
199.20	0.00	201.80	131.29
199.25	0.00	201.85	141.77
199.30	0.00	201.90	152.52
199.35	0.00	201.95	163.34
199.40	0.00	202.00	174.42
199.45	0.00	202.05	185.76
199.50	0.00	202.10	197.39
199.55	0.00	202.15	209.42
199.60	0.02	202.20	221.71
199.65	0.03	202.25	234.27
199.70	0.05	202.30	247.13
199.75	0.06	202.35	260.43
199.80	0.07	202.40	274.02
199.85	0.08	202.45	287.88
199.90	0.09	202.50	302.02
199.95	0.10	202.55	316.42
200.00	0.10	202.60	331.10
200.05	0.11	202.65	346.04
200.10	0.12	202.70	361.25
200.15	0.27	202.75	376.73
200.20	0.54	202.80	392.46
200.25	0.89	202.85	408.46
200.30	1.30	202.90	424.79
200.35	1.76	202.95	441.63
200.40	2.26	203.00	458.76
200.45	2.81	203.05	476.18
200.50	3.40	203.10	493.88
200.55	4.02	203.15	511.86
200.60	4.67	203.20	530.12
200.65	5.36	203.25	548.67
200.70	6.07	203.30	567.49
200.75	6.81	203.35	586.60
200.80	7.57	203.40	605.86
200.85	8.36	203.45	624.84
200.90	9.27	203.50	644.05
200.95	10.92	203.55	663.51
201.00	13.53	203.60	683.20
201.05	16.82	203.65	703.12
201.10	20.73	203.70	723.28
201.15	25.39	203.75	743.67
201.20	30.67	203.80	764.30
201.25	36.56	203.85	785.16
201.30	43.08	203.90	806.43
201.35	50.34	203.95	828.68
201.40	58.26	204.00	**851.20**
201.45	66.84		
201.50	75.82		
201.55	84.20		

Summary for Pond B-7: Basin #7

Inflow Area = 1.564 ac, 62.85% Impervious, Inflow Depth = 4.66" for Future 10 yr event
Inflow = 7.21 cfs @ 12.17 hrs, Volume= 0.608 af
Outflow = 1.98 cfs @ 12.51 hrs, Volume= 0.471 af, Atten= 73%, Lag= 20.4 min
Primary = 1.98 cfs @ 12.51 hrs, Volume= 0.471 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 208.26' @ 12.51 hrs Surf.Area= 10,485 sf Storage= 14,642 cf

Plug-Flow detention time= 484.5 min calculated for 0.470 af (77% of inflow)
Center-of-Mass det. time= 399.0 min (1,170.2 - 771.2)

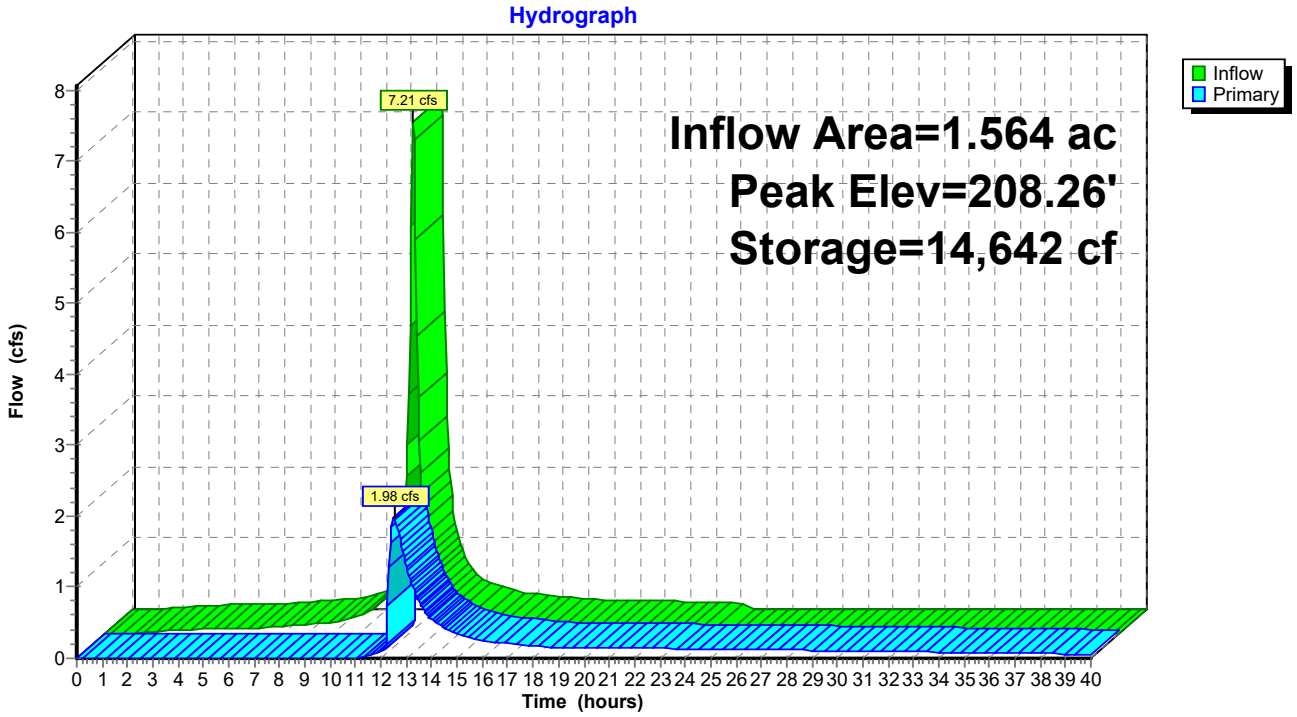
Volume	Invert	Avail.Storage	Storage Description
#1	206.47'	48,130 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.47	0	0	0
207.00	8,989	2,382	2,382
208.00	10,166	9,578	11,960
209.00	11,395	10,781	22,740
210.00	12,681	12,038	34,778
211.00	14,023	13,352	48,130

Device	Routing	Invert	Outlet Devices
#1	Primary	206.47'	**18.0" Round Culvert** L= 94.0' Ke= 0.500 Inlet / Outlet Invert= 206.47' / 206.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	207.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	207.99'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	208.86'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.97 cfs @ 12.51 hrs HW=208.26' (Free Discharge)
- **1=Culvert** (Passes 1.97 cfs of 7.59 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.16 cfs @ 4.78 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.80 cfs @ 1.70 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-7: Basin #7



Stage-Discharge for Pond B-7: Basin #7

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
206.47	0.00	209.07	21.32
206.52	0.00	209.12	26.09
206.57	0.00	209.17	31.48
206.62	0.00	209.22	37.48
206.67	0.00	209.27	44.11
206.72	0.00	209.32	51.48
206.77	0.00	209.37	59.50
206.82	0.00	209.42	68.19
206.87	0.00	209.47	77.27
206.92	0.00	209.52	85.75
206.97	0.00	209.57	94.55
207.02	0.00	209.62	103.67
207.07	0.00	209.67	113.13
207.12	0.00	209.72	123.06
207.17	0.00	209.77	133.31
207.22	0.00	209.82	143.89
207.27	0.02	209.87	154.72
207.32	0.03	209.92	165.63
207.37	0.05	209.97	176.80
207.42	0.06	210.02	188.23
207.47	0.07	210.07	199.94
207.52	0.08	210.12	212.05
207.57	0.09	210.17	224.43
207.62	0.10	210.22	237.07
207.67	0.10	210.27	250.01
207.72	0.11	210.32	263.40
207.77	0.12	210.37	277.07
207.82	0.12	210.42	291.01
207.87	0.13	210.47	305.22
207.92	0.13	210.52	319.70
207.97	0.14	210.57	334.45
208.02	0.21	210.62	349.47
208.07	0.44	210.67	364.76
208.12	0.76	210.72	380.30
208.17	1.15	210.77	396.12
208.22	1.59	210.82	412.19
208.27	2.07	210.87	428.58
208.32	2.61	210.92	445.50
208.37	3.18	210.97	**462.70**
208.42	3.78		
208.47	4.42		
208.52	5.10		
208.57	5.80		
208.62	6.52		
208.67	7.28		
208.72	8.06		
208.77	8.86		
208.82	9.08		
208.87	9.37		
208.92	11.14		
208.97	13.87		
209.02	17.29		

Summary for Pond B-8: Basin #8

Inflow Area = 2.090 ac, 23.06% Impervious, Inflow Depth = 3.65" for Future 10 yr event
Inflow = 8.01 cfs @ 12.17 hrs, Volume= 0.635 af
Outflow = 1.76 cfs @ 12.63 hrs, Volume= 0.505 af, Atten= 78%, Lag= 27.3 min
Primary = 1.76 cfs @ 12.63 hrs, Volume= 0.505 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.04' @ 12.63 hrs Surf.Area= 14,314 sf Storage= 14,345 cf

Plug-Flow detention time= 431.4 min calculated for 0.505 af (79% of inflow)
Center-of-Mass det. time= 347.5 min (1,153.6 - 806.1)

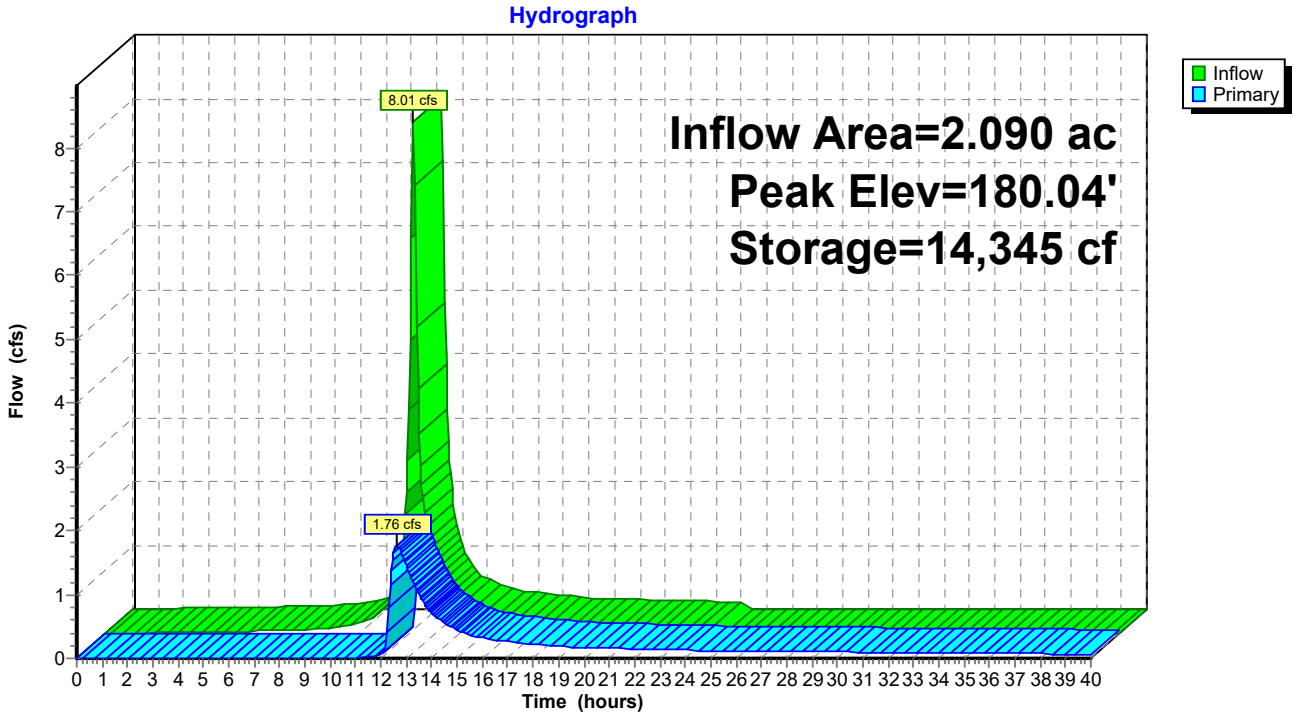
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	44,379 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	13,283	0	0
180.00	14,274	13,779	13,779
181.00	15,293	14,784	28,562
182.00	16,341	15,817	44,379

Device	Routing	Invert	Outlet Devices
#1	Primary	178.23'	**18.0" Round Culvert** L= 46.0' Ke= 0.500 Inlet / Outlet Invert= 178.23' / 178.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.83'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.75 cfs @ 12.63 hrs HW=180.04' (Free Discharge)
- **1=Culvert** (Passes 1.75 cfs of 7.57 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.14 cfs @ 4.21 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.61 cfs @ 1.63 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-8: Basin #8



Stage-Discharge for Pond B-8: Basin #8

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	1.76	181.08	26.70
179.02	0.00	180.06	1.96	181.10	28.75
179.04	0.00	180.08	2.16	181.12	30.89
179.06	0.00	180.10	2.37	181.14	33.13
179.08	0.00	180.12	2.59	181.16	35.47
179.10	0.00	180.14	2.81	181.18	37.91
179.12	0.00	180.16	3.04	181.20	40.44
179.14	0.00	180.18	3.28	181.22	43.07
179.16	0.00	180.20	3.52	181.24	45.82
179.18	0.00	180.22	3.77	181.26	48.70
179.20	0.00	180.24	4.02	181.28	51.68
179.22	0.00	180.26	4.28	181.30	54.77
179.24	0.01	180.28	4.54	181.32	57.97
179.26	0.01	180.30	4.81	181.34	61.27
179.28	0.02	180.32	5.08	181.36	64.67
179.30	0.03	180.34	5.36	181.38	68.18
179.32	0.03	180.36	5.64	181.40	71.80
179.34	0.04	180.38	5.93	181.42	75.52
179.36	0.05	180.40	6.22	181.44	79.09
179.38	0.05	180.42	6.51	181.46	82.45
179.40	0.06	180.44	6.81	181.48	85.86
179.42	0.06	180.46	7.11	181.50	89.33
179.44	0.07	180.48	7.42	181.52	92.84
179.46	0.07	180.50	7.73	181.54	96.41
179.48	0.07	180.52	8.04	181.56	100.03
179.50	0.08	180.54	8.36	181.58	103.70
179.52	0.08	180.56	8.68	181.60	107.42
179.54	0.08	180.58	9.01	181.62	111.19
179.56	0.09	180.60	9.34	181.64	115.04
179.58	0.09	180.62	9.67	181.66	118.98
179.60	0.09	180.64	9.90	181.68	122.98
179.62	0.10	180.66	9.98	181.70	127.03
179.64	0.10	180.68	10.07	181.72	131.13
179.66	0.10	180.70	10.15	181.74	135.28
179.68	0.10	180.72	10.24	181.76	139.48
179.70	0.11	180.74	10.32	181.78	143.73
179.72	0.11	180.76	10.40	181.80	148.03
179.74	0.11	180.78	10.49	181.82	152.38
179.76	0.11	180.80	10.57	181.84	156.73
179.78	0.12	180.82	10.65	181.86	161.07
179.80	0.13	180.84	10.85	181.88	165.46
179.82	0.19	180.86	11.42	181.90	169.88
179.84	0.27	180.88	12.20	181.92	174.35
179.86	0.37	180.90	13.14	181.94	178.86
179.88	0.48	180.92	14.22	181.96	183.41
179.90	0.60	180.94	15.41	181.98	188.00
179.92	0.74	180.96	16.72	182.00	**192.63**
179.94	0.89	180.98	18.12		
179.96	1.04	181.00	19.62		
179.98	1.21	181.02	21.20		
180.00	1.39	181.04	22.91		
180.02	1.57	181.06	24.76		

Summary for Pond B-9: Basin #9

Inflow Area = 1.503 ac, 52.63% Impervious, Inflow Depth = 4.40" for Future 10 yr event
Inflow = 6.63 cfs @ 12.17 hrs, Volume= 0.551 af
Outflow = 1.65 cfs @ 12.56 hrs, Volume= 0.427 af, Atten= 75%, Lag= 23.3 min
Primary = 1.65 cfs @ 12.56 hrs, Volume= 0.427 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.17' @ 12.56 hrs Surf.Area= 11,870 sf Storage= 13,199 cf

Plug-Flow detention time= 470.4 min calculated for 0.427 af (77% of inflow)
Center-of-Mass det. time= 383.1 min (1,161.7 - 778.6)

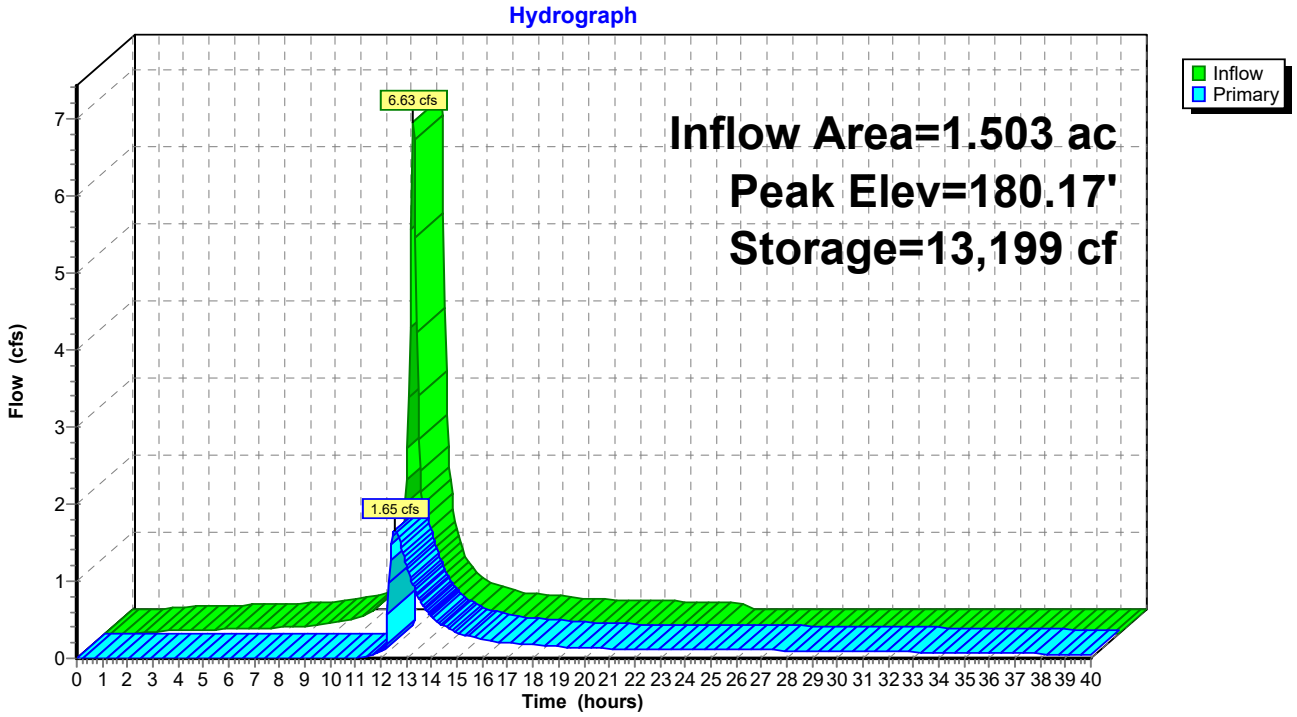
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	36,641 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	10,720	0	0
180.00	11,700	11,210	11,210
181.00	12,708	12,204	23,414
182.00	13,745	13,227	36,641

Device	Routing	Invert	Outlet Devices
#1	Primary	178.23'	**18.0" Round Culvert** L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 178.23' / 178.00' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.30'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.93'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.65 cfs @ 12.56 hrs HW=180.17' (Free Discharge)
- **1=Culvert** (Passes 1.65 cfs of 7.99 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.14 cfs @ 4.21 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.51 cfs @ 1.60 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-9: Basin #9



Stage-Discharge for Pond B-9: Basin #9

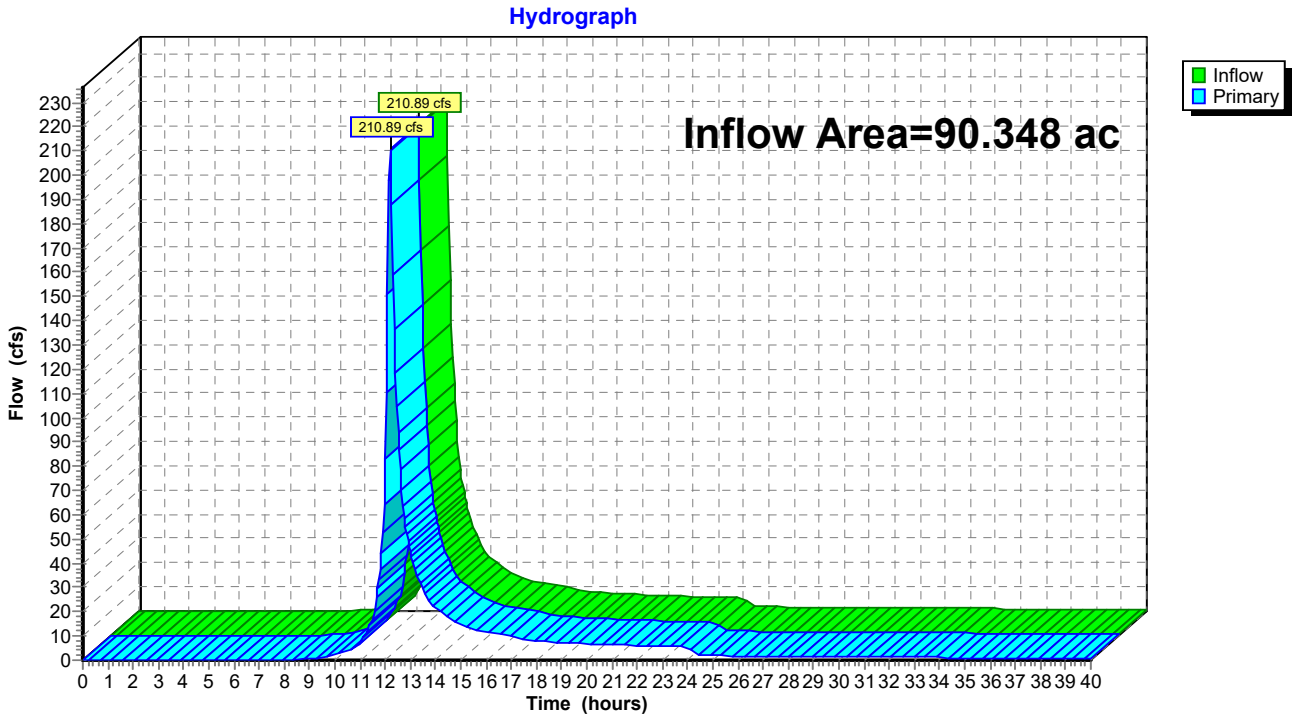
Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.61	181.08	11.70
179.02	0.00	180.06	0.74	181.10	11.77
179.04	0.00	180.08	0.89	181.12	11.84
179.06	0.00	180.10	1.05	181.14	11.92
179.08	0.00	180.12	1.21	181.16	11.99
179.10	0.00	180.14	1.39	181.18	12.06
179.12	0.00	180.16	1.57	181.20	12.13
179.14	0.00	180.18	1.76	181.22	12.20
179.16	0.00	180.20	1.96	181.24	12.27
179.18	0.00	180.22	2.16	181.26	12.34
179.20	0.00	180.24	2.37	181.28	12.41
179.22	0.00	180.26	2.59	181.30	12.48
179.24	0.00	180.28	2.81	181.32	12.55
179.26	0.00	180.30	3.04	181.34	12.62
179.28	0.00	180.32	3.28	181.36	12.69
179.30	0.00	180.34	3.52	181.38	12.76
179.32	0.00	180.36	3.77	181.40	12.83
179.34	0.00	180.38	4.02	181.42	12.89
179.36	0.01	180.40	4.28	181.44	12.96
179.38	0.01	180.42	4.54	181.46	13.03
179.40	0.02	180.44	4.81	181.48	13.09
179.42	0.02	180.46	5.08	181.50	13.16
179.44	0.03	180.48	5.36	181.52	13.22
179.46	0.04	180.50	5.64	181.54	13.29
179.48	0.05	180.52	5.93	181.56	13.35
179.50	0.05	180.54	6.22	181.58	13.42
179.52	0.06	180.56	6.51	181.60	13.48
179.54	0.06	180.58	6.81	181.62	13.55
179.56	0.06	180.60	7.11	181.64	13.61
179.58	0.07	180.62	7.42	181.66	13.67
179.60	0.07	180.64	7.73	181.68	13.74
179.62	0.08	180.66	8.04	181.70	13.80
179.64	0.08	180.68	8.36	181.72	13.86
179.66	0.08	180.70	8.68	181.74	13.93
179.68	0.09	180.72	9.01	181.76	13.99
179.70	0.09	180.74	9.34	181.78	14.05
179.72	0.09	180.76	9.67	181.80	14.11
179.74	0.10	180.78	10.01	181.82	14.17
179.76	0.10	180.80	10.35	181.84	14.23
179.78	0.10	180.82	10.69	181.86	14.29
179.80	0.10	180.84	10.77	181.88	14.35
179.82	0.11	180.86	10.85	181.90	14.41
179.84	0.11	180.88	10.93	181.92	14.47
179.86	0.11	180.90	11.01	181.94	14.53
179.88	0.11	180.92	11.09	181.96	14.71
179.90	0.12	180.94	11.17	181.98	15.26
179.92	0.12	180.96	11.24	182.00	**16.02**
179.94	0.13	180.98	11.32		
179.96	0.19	181.00	11.40		
179.98	0.27	181.02	11.47		
180.00	0.37	181.04	11.55		
180.02	0.48	181.06	11.62		

Summary for Link PDA-1: Proposed Drainage Area #1

Inflow Area = 90.348 ac, 16.68% Impervious, Inflow Depth > 3.03" for Future 10 yr event
Inflow = 210.89 cfs @ 12.19 hrs, Volume= 22.794 af
Primary = 210.89 cfs @ 12.19 hrs, Volume= 22.794 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-1: Proposed Drainage Area #1



Summary for Subcatchment 1I: PDA-1 (impervious)

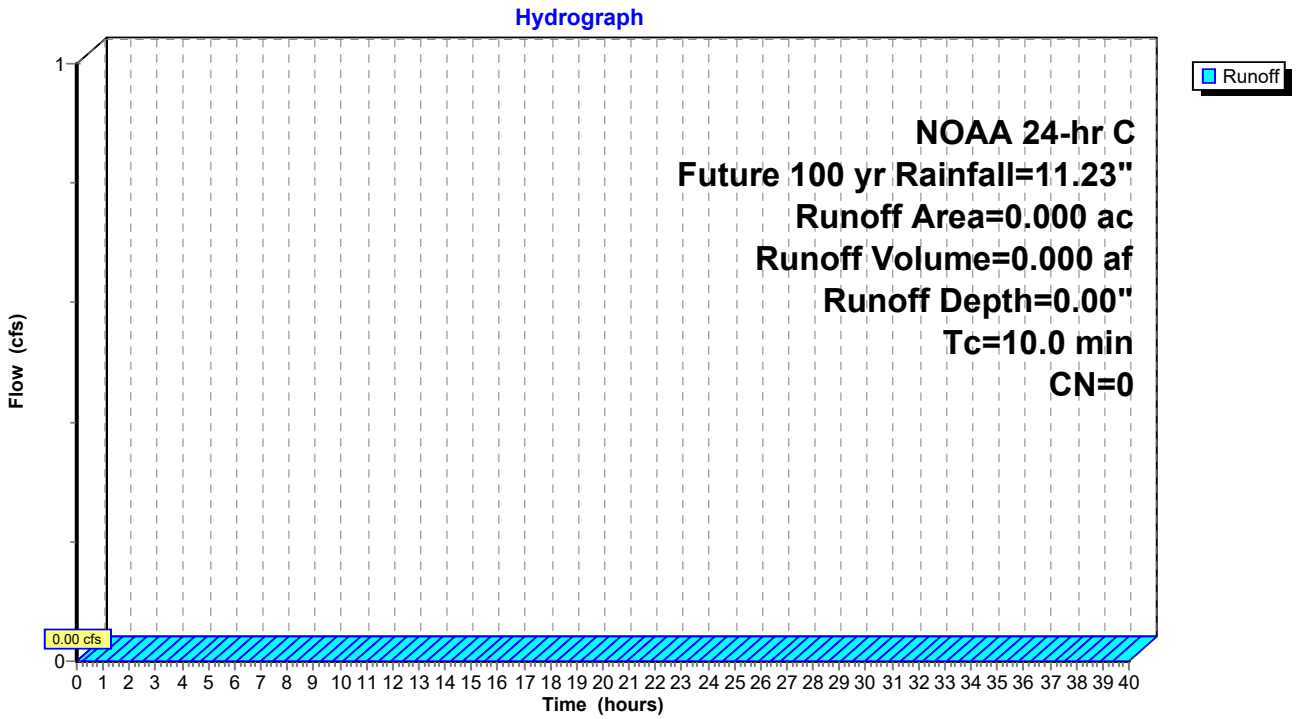
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-1 : Basin #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.000	98	Concrete, HSG C
	0.000	0	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 1I: PDA-1 (impervious)



Summary for Subcatchment 1P: PDA-1 (pervious)

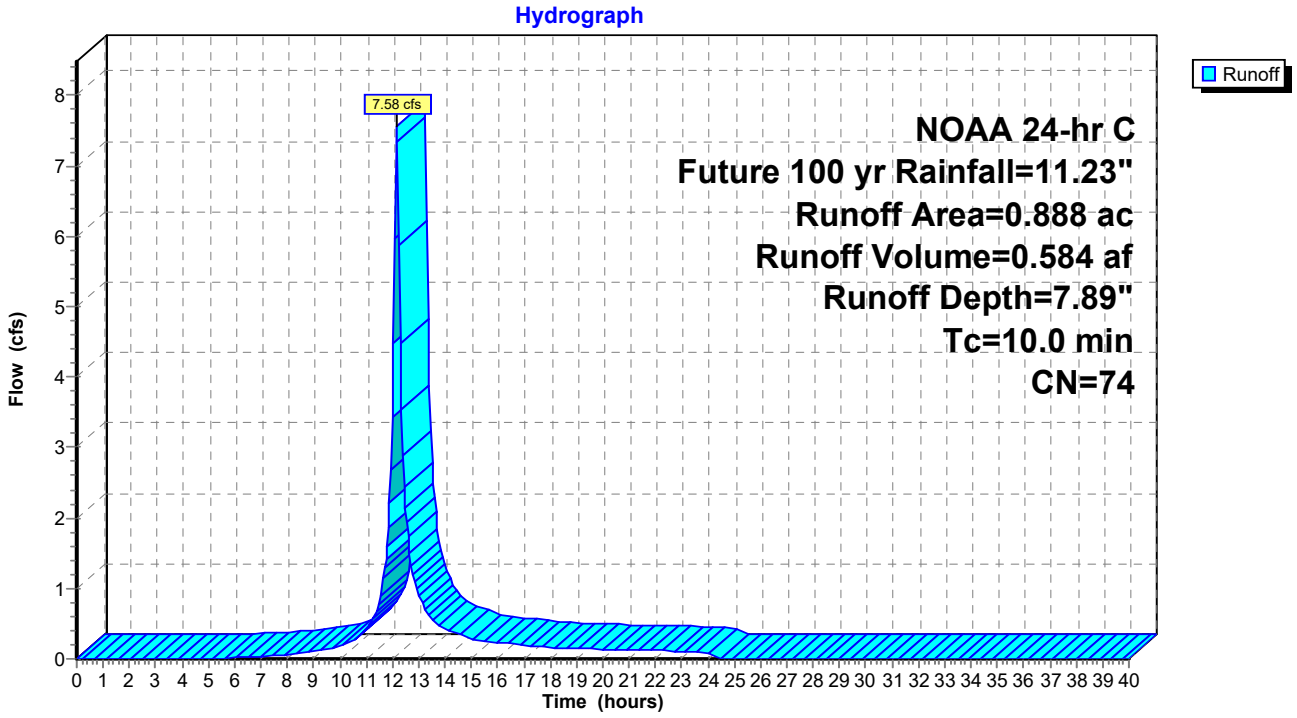
Runoff = 7.58 cfs @ 12.17 hrs, Volume= 0.584 af, Depth= 7.89"
Routed to Pond B-1 : Basin #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.888	74	>75% Grass cover, Good, HSG C
0.888		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 1P: PDA-1 (pervious)



Summary for Subcatchment 2l: PDA-2 (impervious)

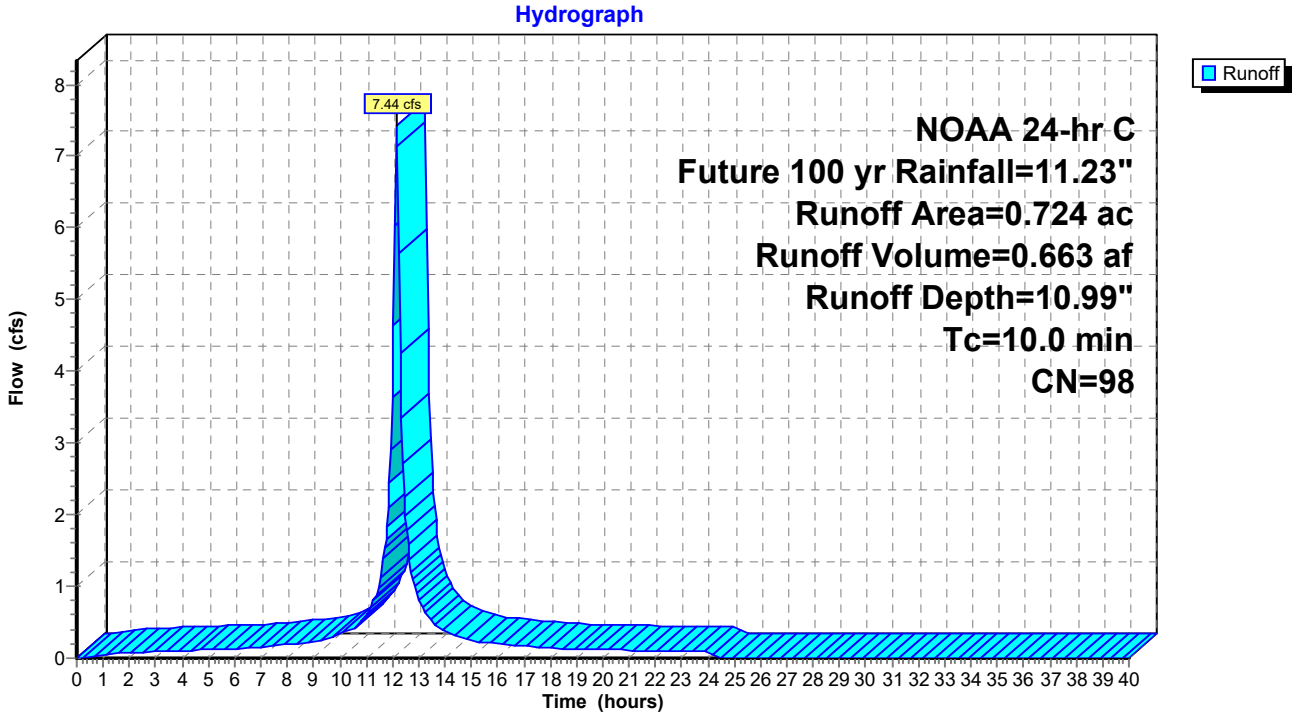
Runoff = 7.44 cfs @ 12.17 hrs, Volume= 0.663 af, Depth=10.99"
Routed to Pond B-2 : Basin #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.490	98	Roof, HSG C
*	0.196	98	Pavement, HSG C
*	0.038	98	Concrete, HSG C
	0.724	98	Weighted Average
	0.724		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 2l: PDA-2 (impervious)



Summary for Subcatchment 2P: PDA-2 (pervious)

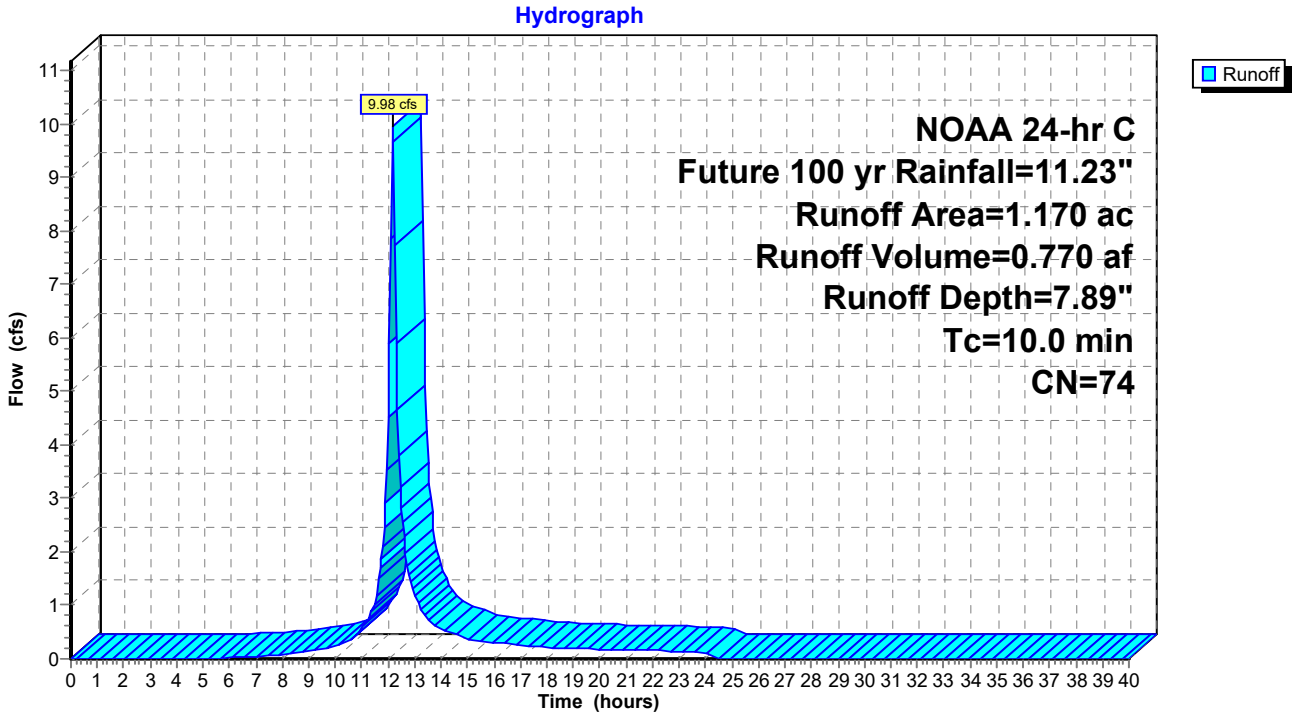
Runoff = 9.98 cfs @ 12.17 hrs, Volume= 0.770 af, Depth= 7.89"
Routed to Pond B-2 : Basin #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.170	74	>75% Grass cover, Good, HSG C
1.170		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 2P: PDA-2 (pervious)



Summary for Subcatchment 3I: PDA-3 (impervious)

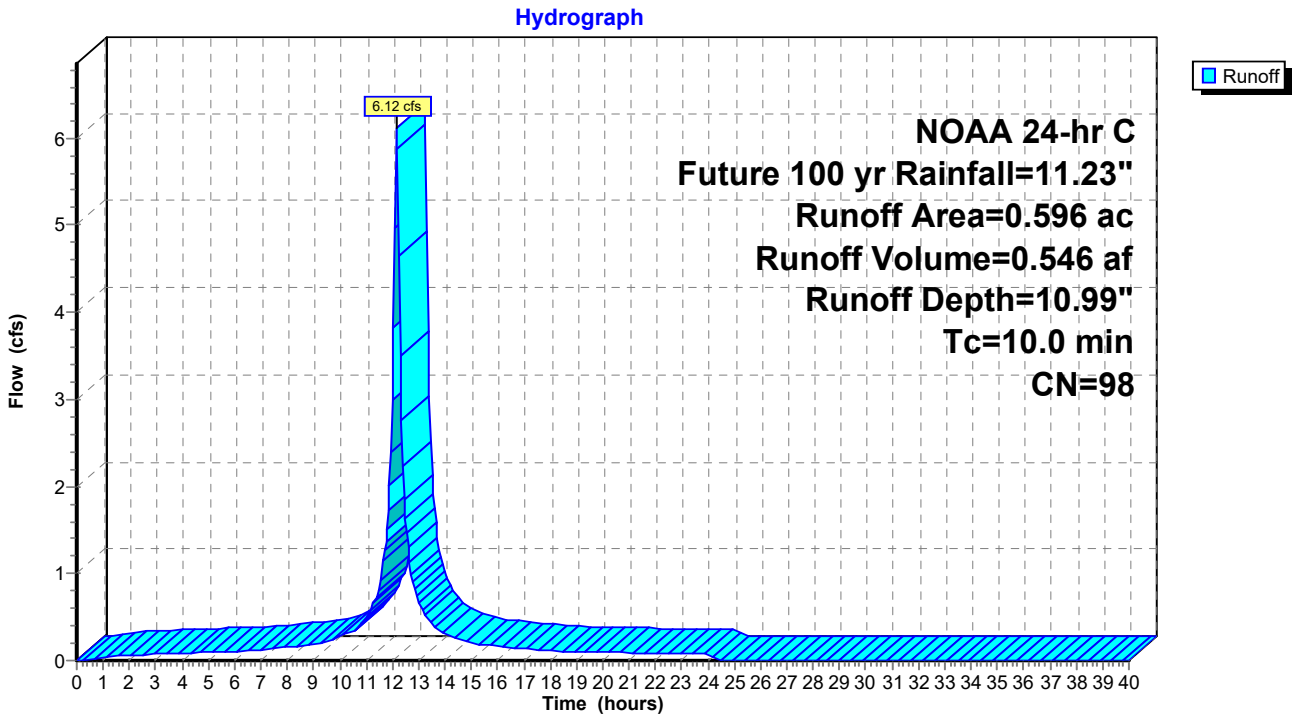
Runoff = 6.12 cfs @ 12.17 hrs, Volume= 0.546 af, Depth=10.99"
Routed to Pond B-3 : Basin #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.304	98	Pavement, HSG C
*	0.035	98	Concrete, HSG C
	0.257	98	Unconnected roofs, HSG C
	0.596	98	Weighted Average
	0.596		100.00% Impervious Area
	0.257		43.12% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 3I: PDA-3 (impervious)



Summary for Subcatchment 3P: PDA-3 (pervious)

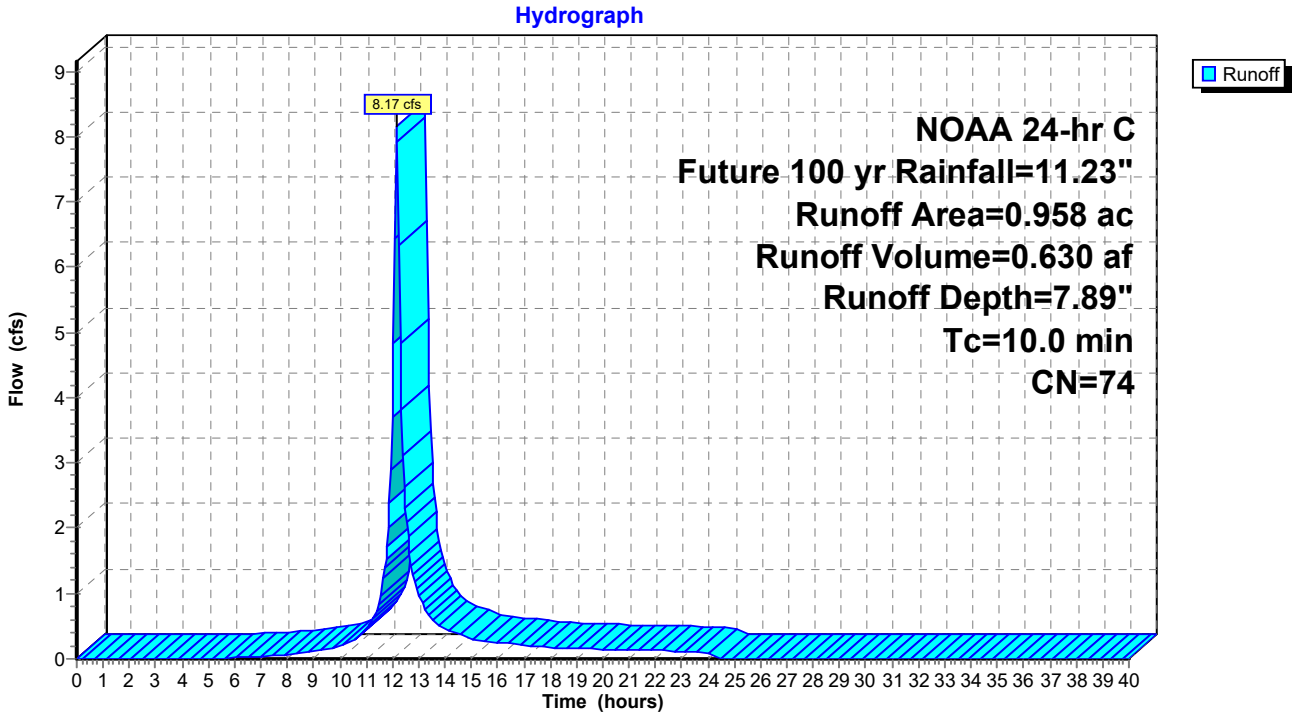
Runoff = 8.17 cfs @ 12.17 hrs, Volume= 0.630 af, Depth= 7.89"
Routed to Pond B-3 : Basin #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.958	74	>75% Grass cover, Good, HSG C
0.958		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 3P: PDA-3 (pervious)



Summary for Subcatchment 4AI: PDA-4A (impervious)

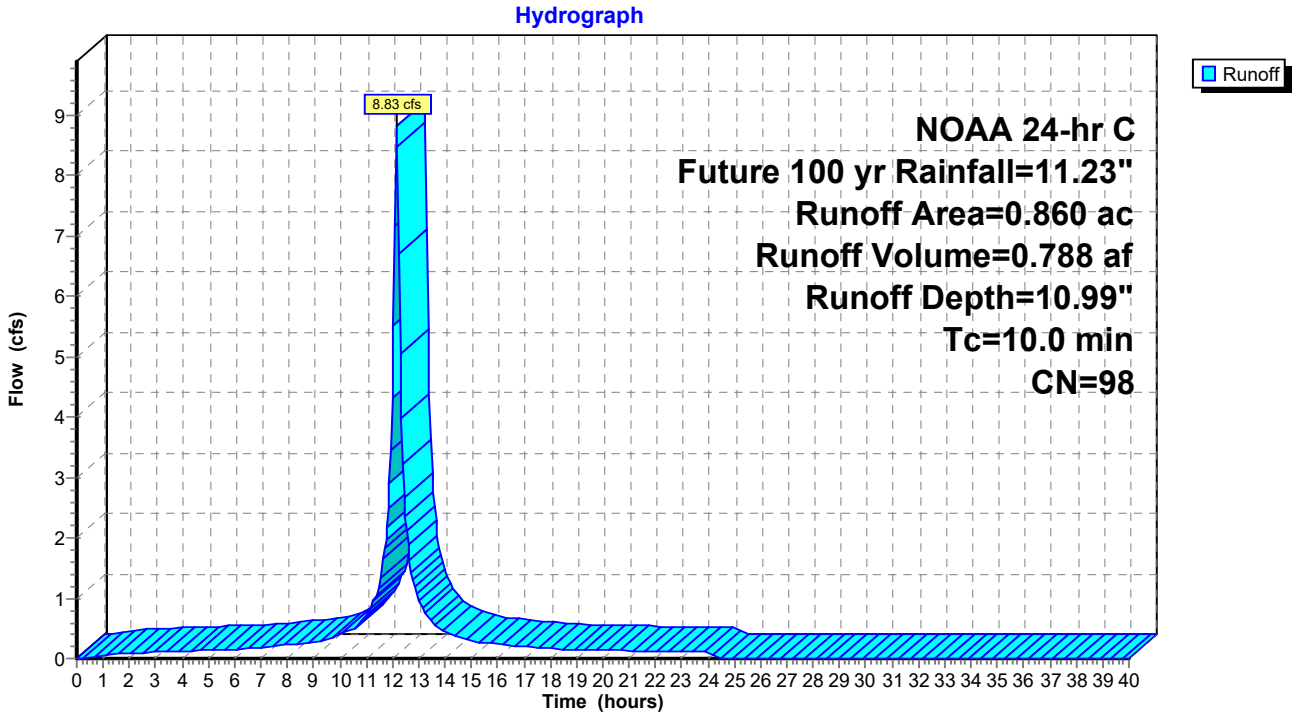
Runoff = 8.83 cfs @ 12.17 hrs, Volume= 0.788 af, Depth=10.99"
Routed to Pond B-4A : Basin #4A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.742	98	Pavement, HSG C
*	0.118	98	Concrete, HSG C
	0.860	98	Weighted Average
	0.860		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4AI: PDA-4A (impervious)



Summary for Subcatchment 4AP: PDA-4A (pervious)

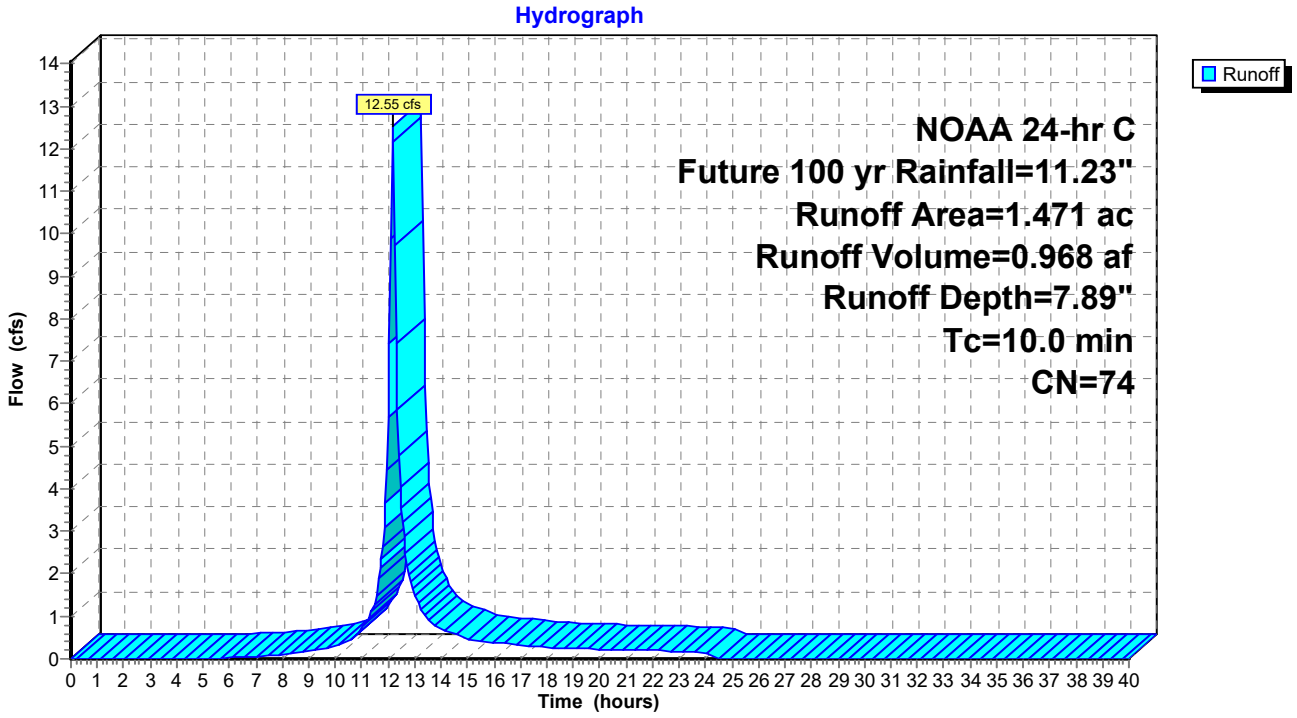
Runoff = 12.55 cfs @ 12.17 hrs, Volume= 0.968 af, Depth= 7.89"
Routed to Pond B-4A : Basin #4A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.471	74	>75% Grass cover, Good, HSG C
1.471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4AP: PDA-4A (pervious)



Summary for Subcatchment 4BI: PDA-4B (impervious)

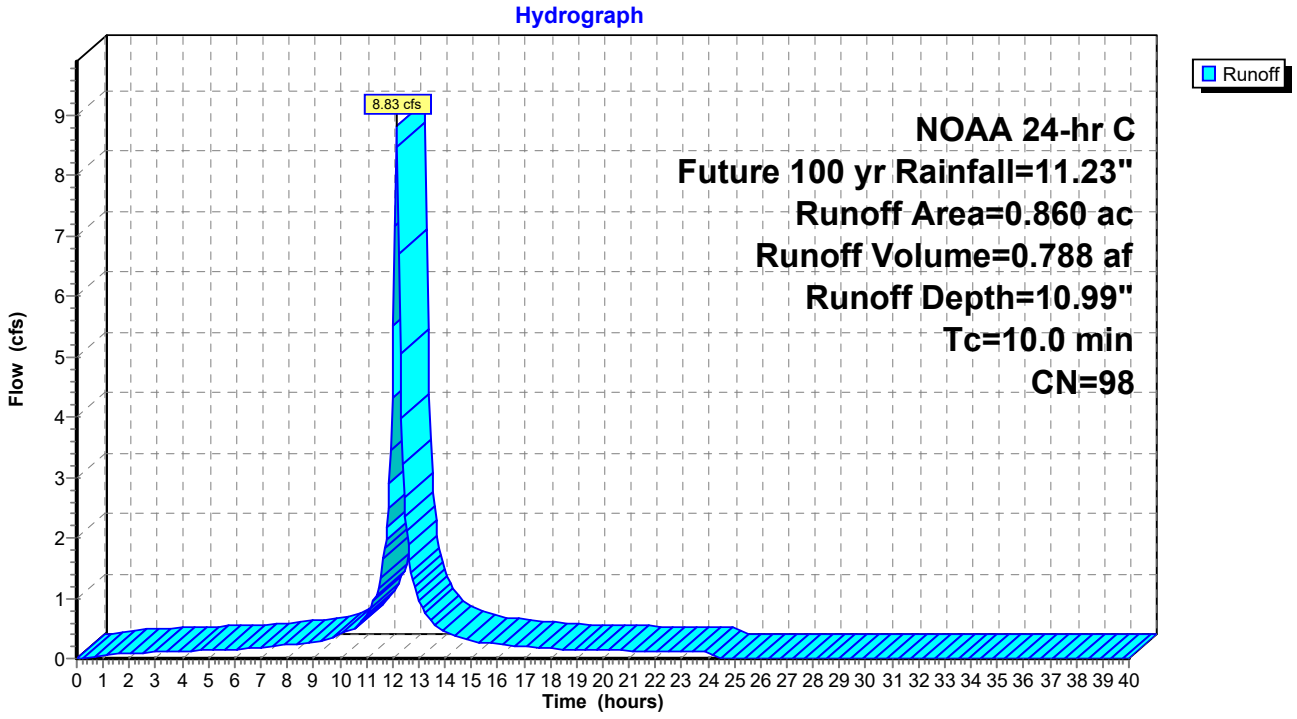
Runoff = 8.83 cfs @ 12.17 hrs, Volume= 0.788 af, Depth=10.99"
Routed to Pond B-4B : Basin #4B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.742	98	Pavement, HSG C
*	0.118	98	Concrete, HSG C
	0.860	98	Weighted Average
	0.860		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4BI: PDA-4B (impervious)



Summary for Subcatchment 4BP: PDA-4B (pervious)

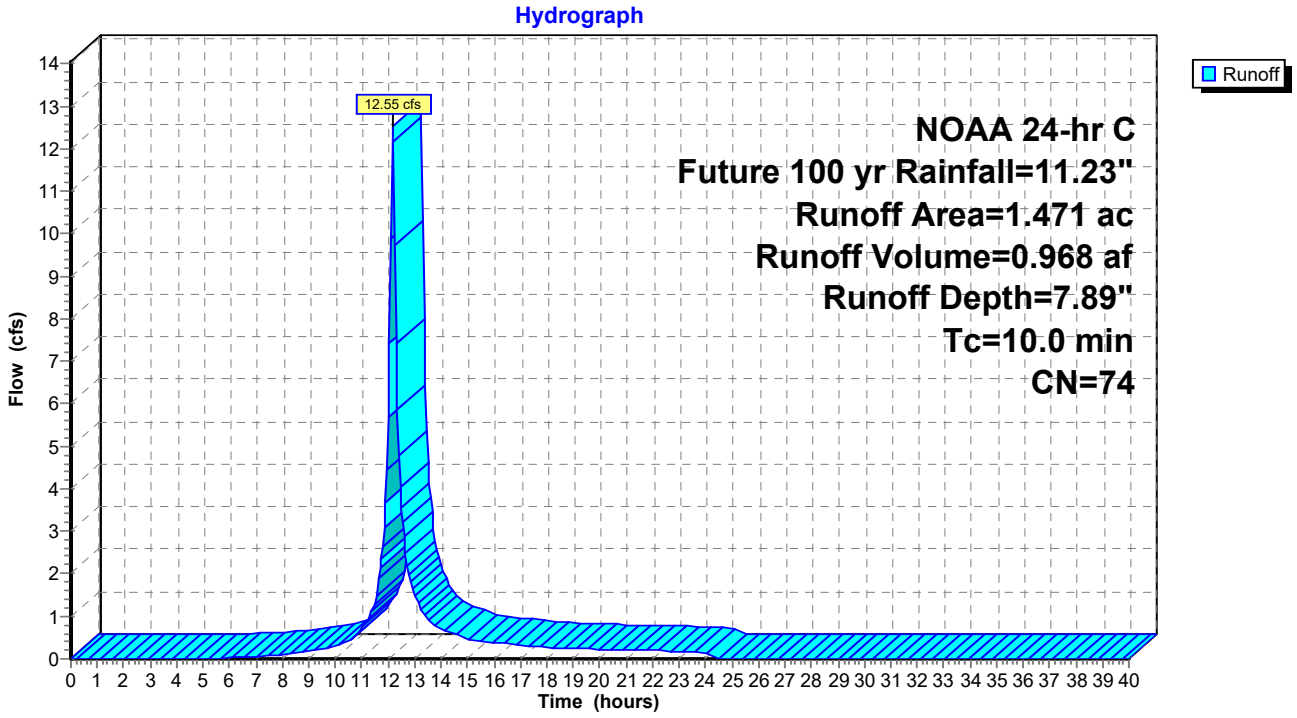
Runoff = 12.55 cfs @ 12.17 hrs, Volume= 0.968 af, Depth= 7.89"
Routed to Pond B-4B : Basin #4B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.471	74	>75% Grass cover, Good, HSG C
1.471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 4BP: PDA-4B (pervious)



Summary for Subcatchment 5l: PDA-5 (impervious)

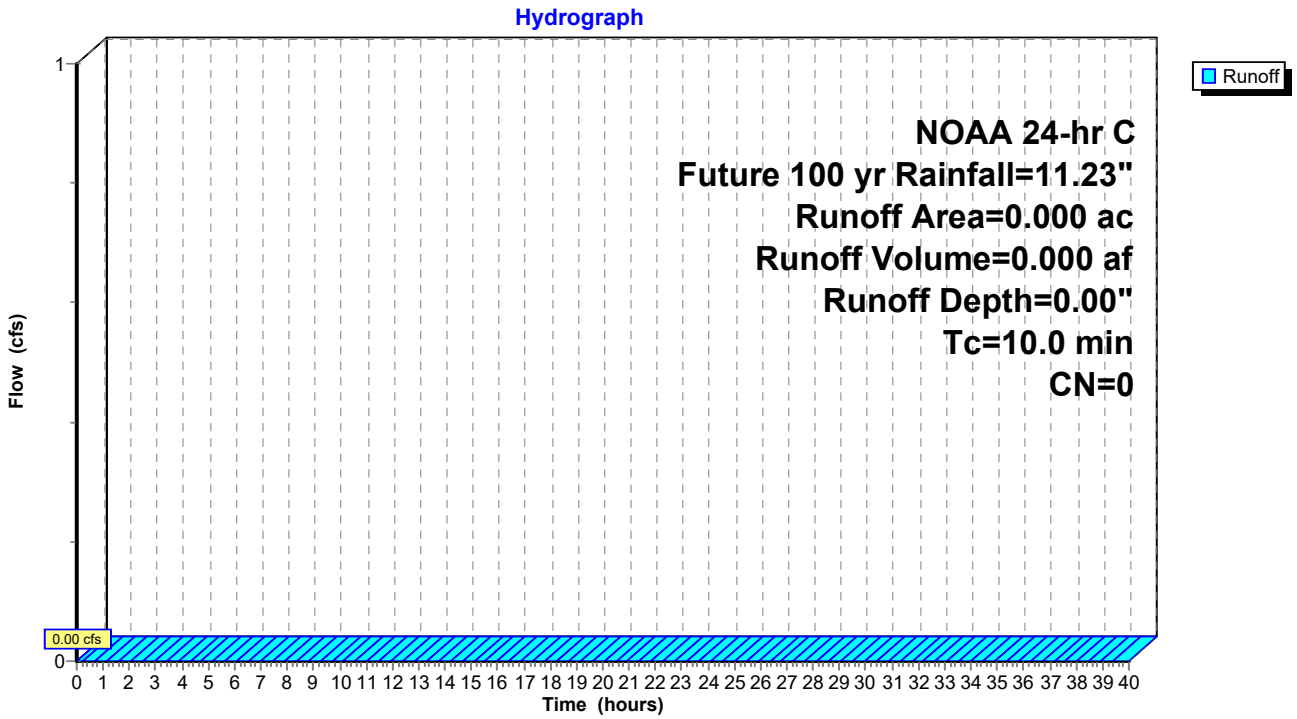
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-5 : Basin #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.000	98	Concrete, HSG C
	0.000	0	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 5l: PDA-5 (impervious)



Summary for Subcatchment 5P: PDA-5 (pervious)

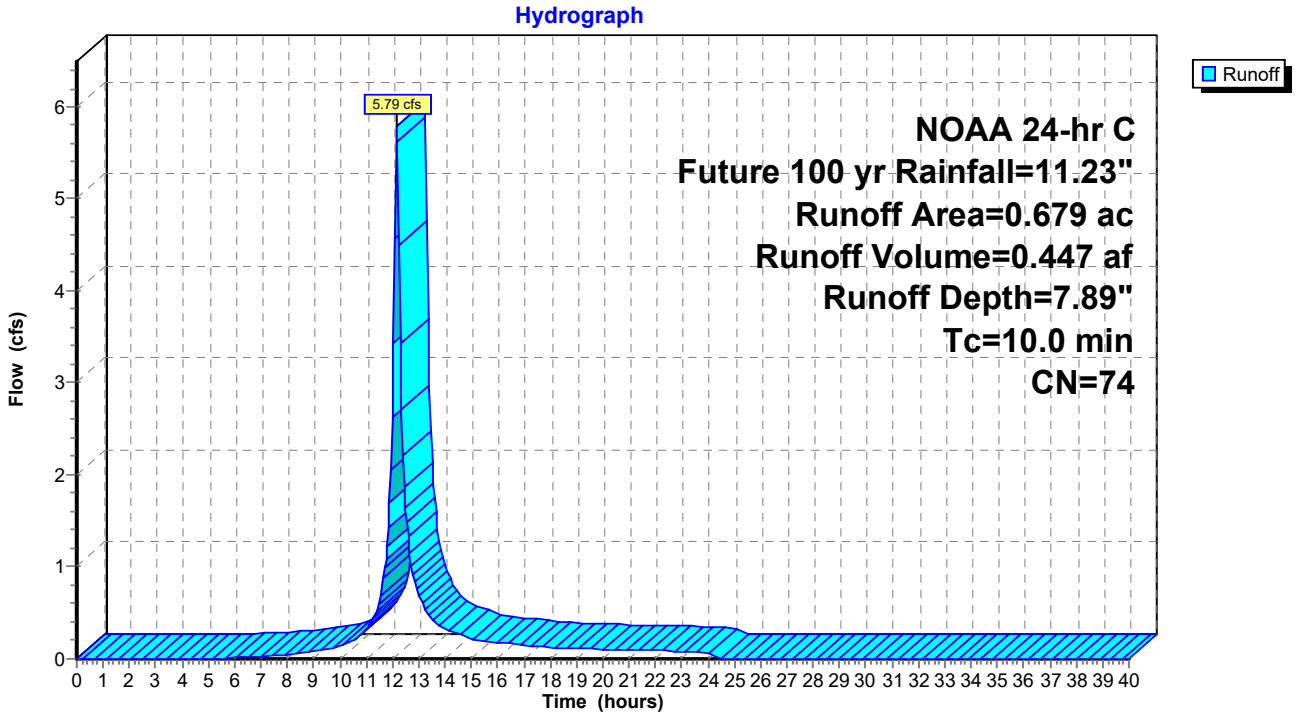
Runoff = 5.79 cfs @ 12.17 hrs, Volume= 0.447 af, Depth= 7.89"
Routed to Pond B-5 : Basin #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.679	74	>75% Grass cover, Good, HSG C
0.679		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 5P: PDA-5 (pervious)



Summary for Subcatchment 6I: PDA-6 (impervious)

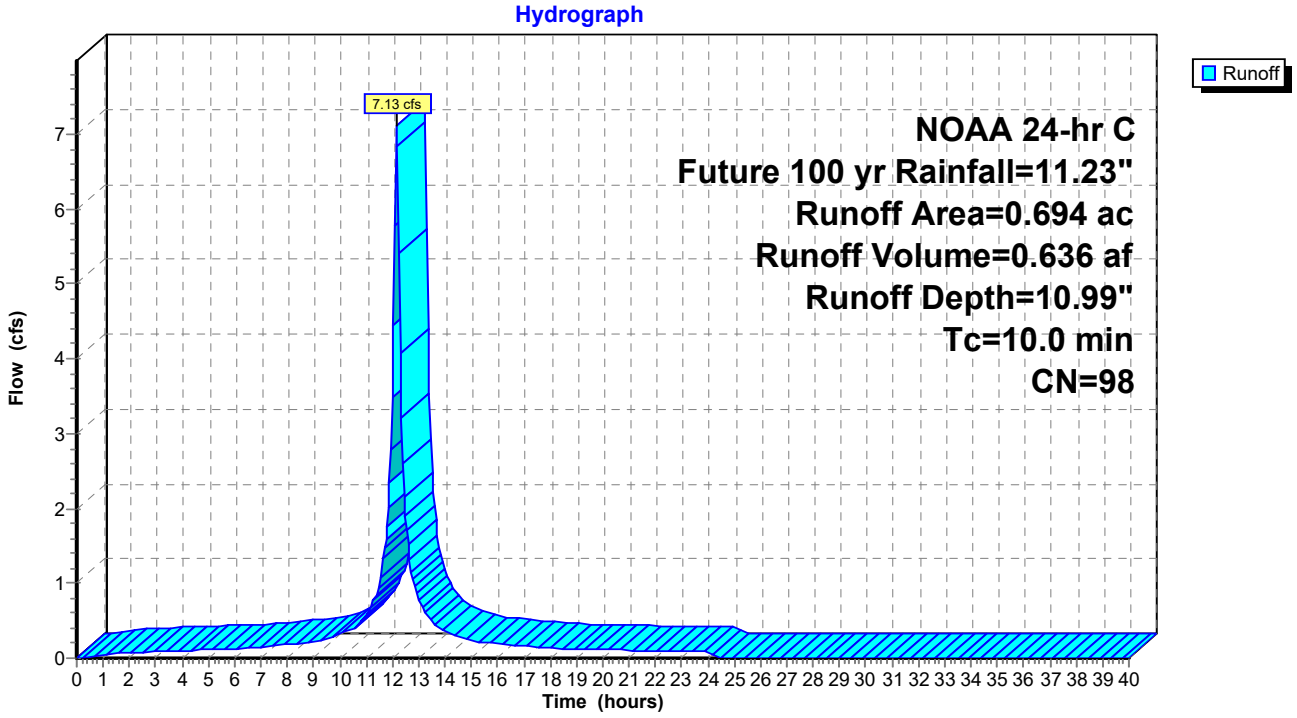
Runoff = 7.13 cfs @ 12.17 hrs, Volume= 0.636 af, Depth=10.99"
Routed to Pond B-6 : Basin #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.459	98	Pavement, HSG C
*	0.129	98	Roof, HSG C
*	0.106	98	Concrete, HSG C
	0.694	98	Weighted Average
	0.694		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 6I: PDA-6 (impervious)



Summary for Subcatchment 6P: PDA-6 (pervious)

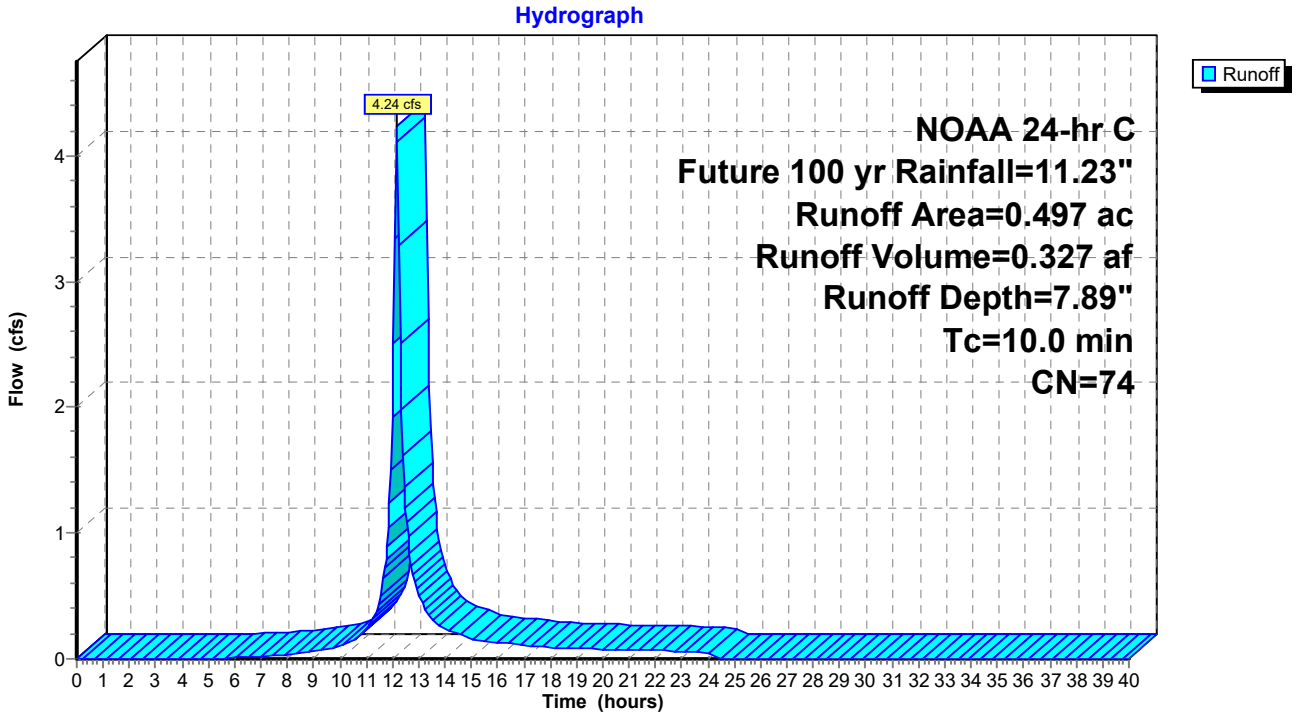
Runoff = 4.24 cfs @ 12.17 hrs, Volume= 0.327 af, Depth= 7.89"
Routed to Pond B-6 : Basin #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.497	74	>75% Grass cover, Good, HSG C
0.497		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 6P: PDA-6 (pervious)



Summary for Subcatchment 7I: PDA-7 (impervious)

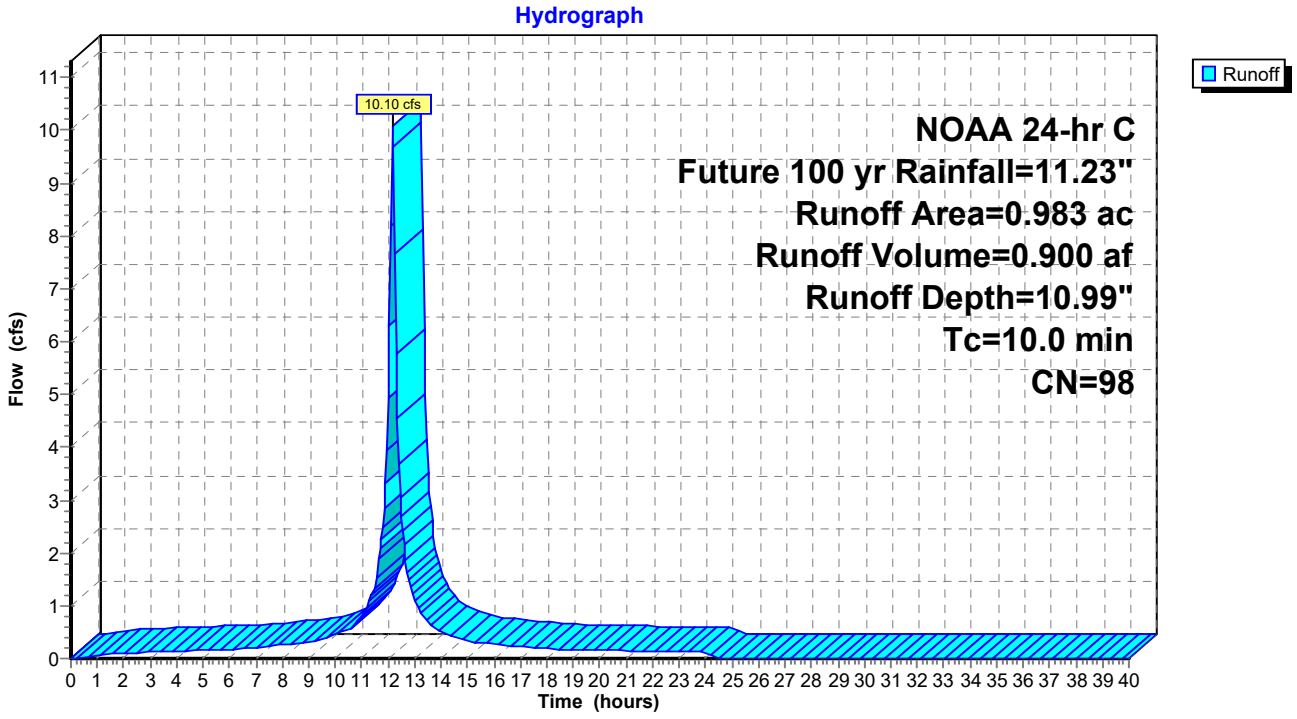
Runoff = 10.10 cfs @ 12.17 hrs, Volume= 0.900 af, Depth=10.99"
Routed to Pond B-7 : Basin #7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.886	98	Pavement, HSG C
*	0.097	98	Concrete, HSG C
	0.983	98	Weighted Average
	0.983		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 7I: PDA-7 (impervious)



Summary for Subcatchment 7P: PDA-7 (pervious)

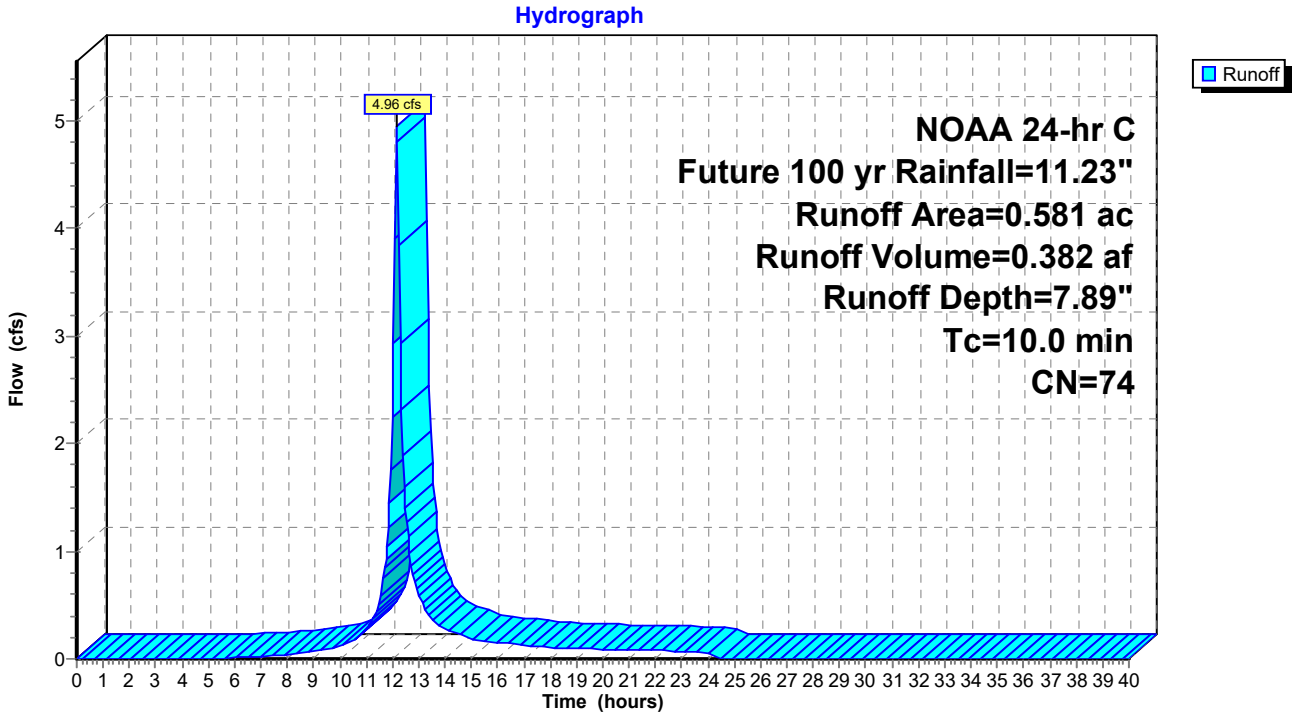
Runoff = 4.96 cfs @ 12.17 hrs, Volume= 0.382 af, Depth= 7.89"
Routed to Pond B-7 : Basin #7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.581	74	>75% Grass cover, Good, HSG C
0.581		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 7P: PDA-7 (pervious)



Summary for Subcatchment 8I: PDA-8 (impervious)

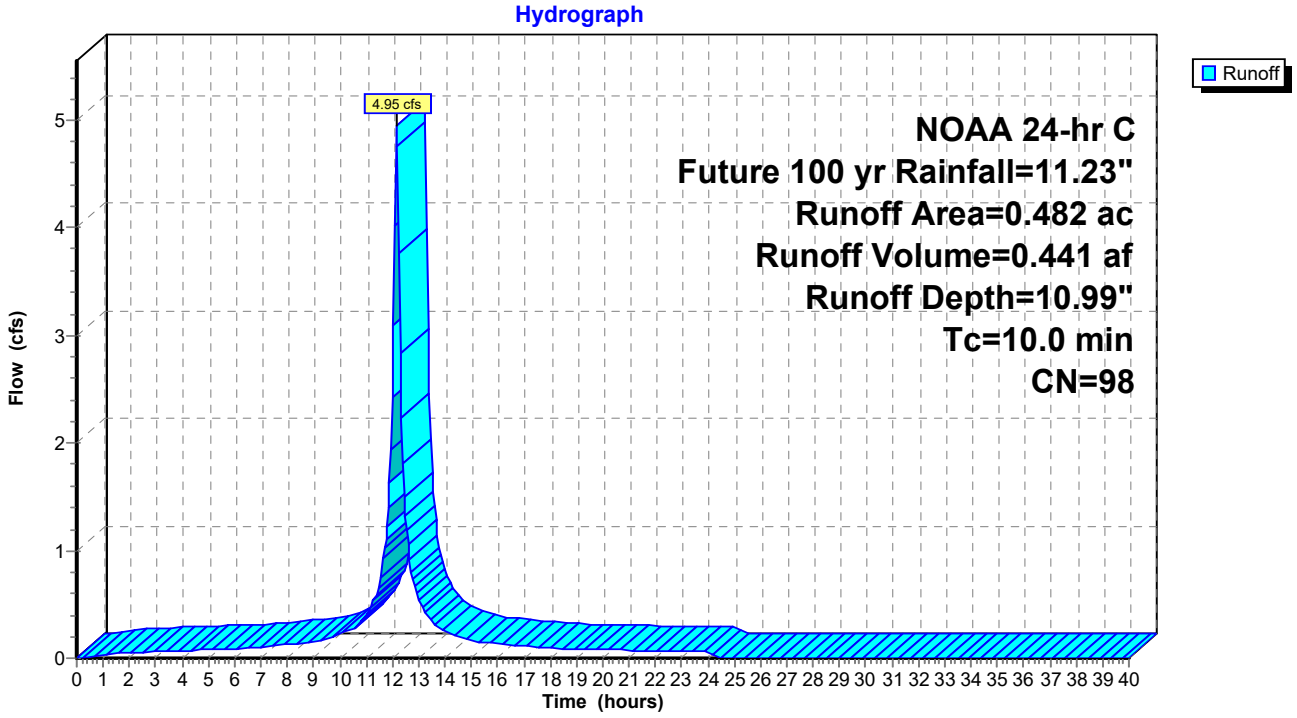
Runoff = 4.95 cfs @ 12.17 hrs, Volume= 0.441 af, Depth=10.99"
Routed to Pond B-8 : Basin #8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.482	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.482	98	Weighted Average
	0.482		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8I: PDA-8 (impervious)



Summary for Subcatchment 8P: PDA-8 (pervious)

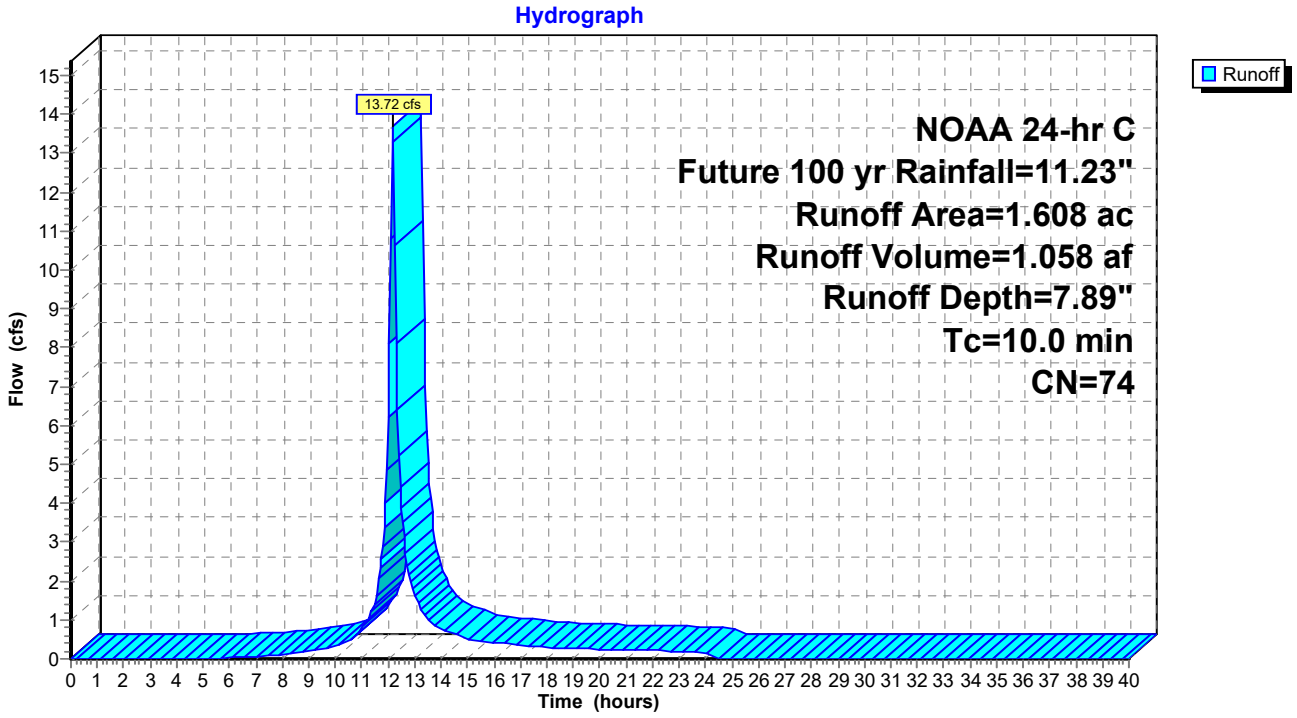
Runoff = 13.72 cfs @ 12.17 hrs, Volume= 1.058 af, Depth= 7.89"
Routed to Pond B-8 : Basin #8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.608	74	>75% Grass cover, Good, HSG C
1.608		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 8P: PDA-8 (pervious)



Summary for Subcatchment 9I: PDA-9 (impervious)

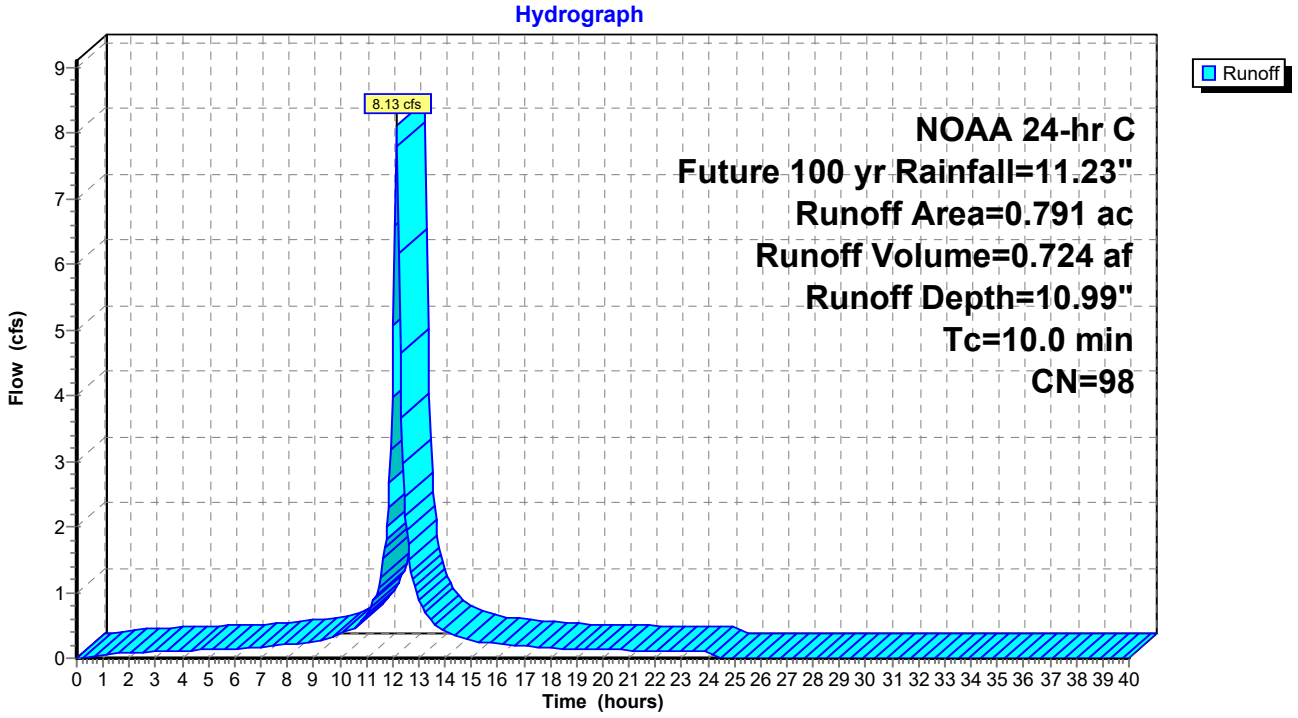
Runoff = 8.13 cfs @ 12.17 hrs, Volume= 0.724 af, Depth=10.99"
Routed to Pond B-9 : Basin #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.286	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.055	98	Concrete, HSG C
	0.791	98	Weighted Average
	0.791		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 9I: PDA-9 (impervious)



Summary for Subcatchment 9P: PDA-9 (pervious)

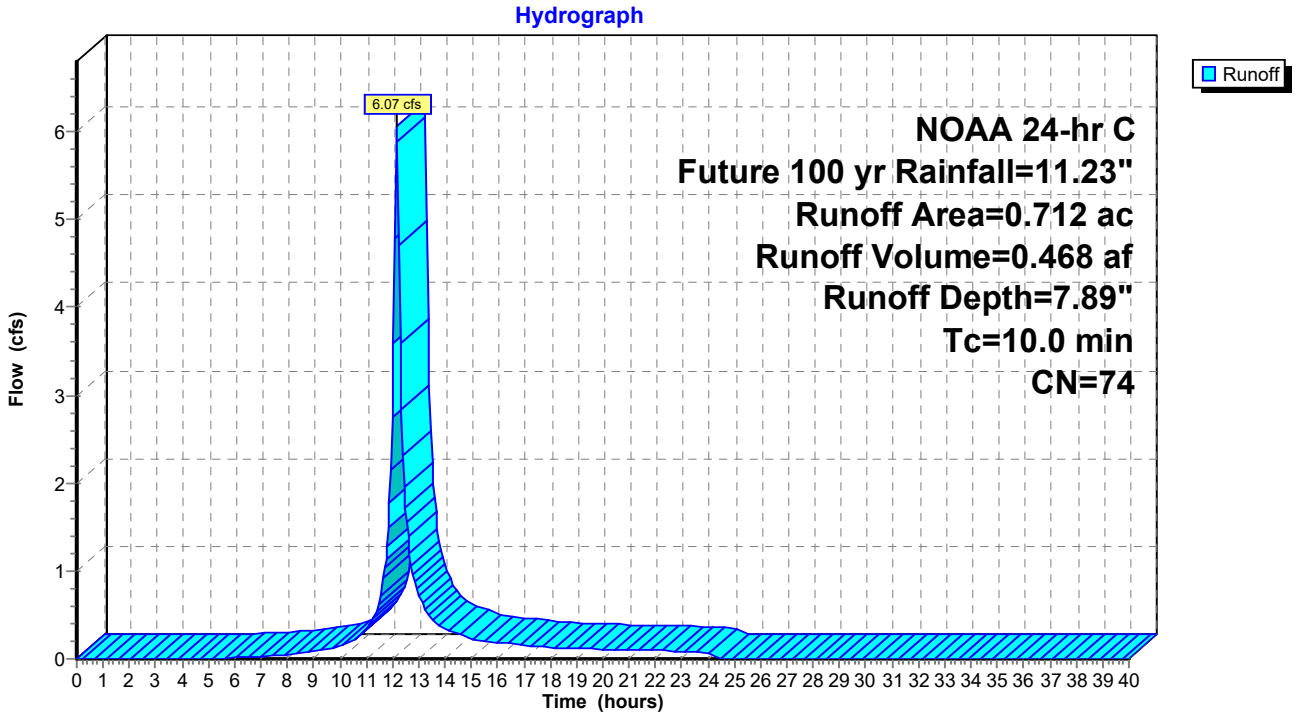
Runoff = 6.07 cfs @ 12.17 hrs, Volume= 0.468 af, Depth= 7.89"
Routed to Pond B-9 : Basin #9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.712	74	>75% Grass cover, Good, HSG C
0.712		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 9P: PDA-9 (pervious)



Summary for Subcatchment 10I: PDA-10 (impervious)

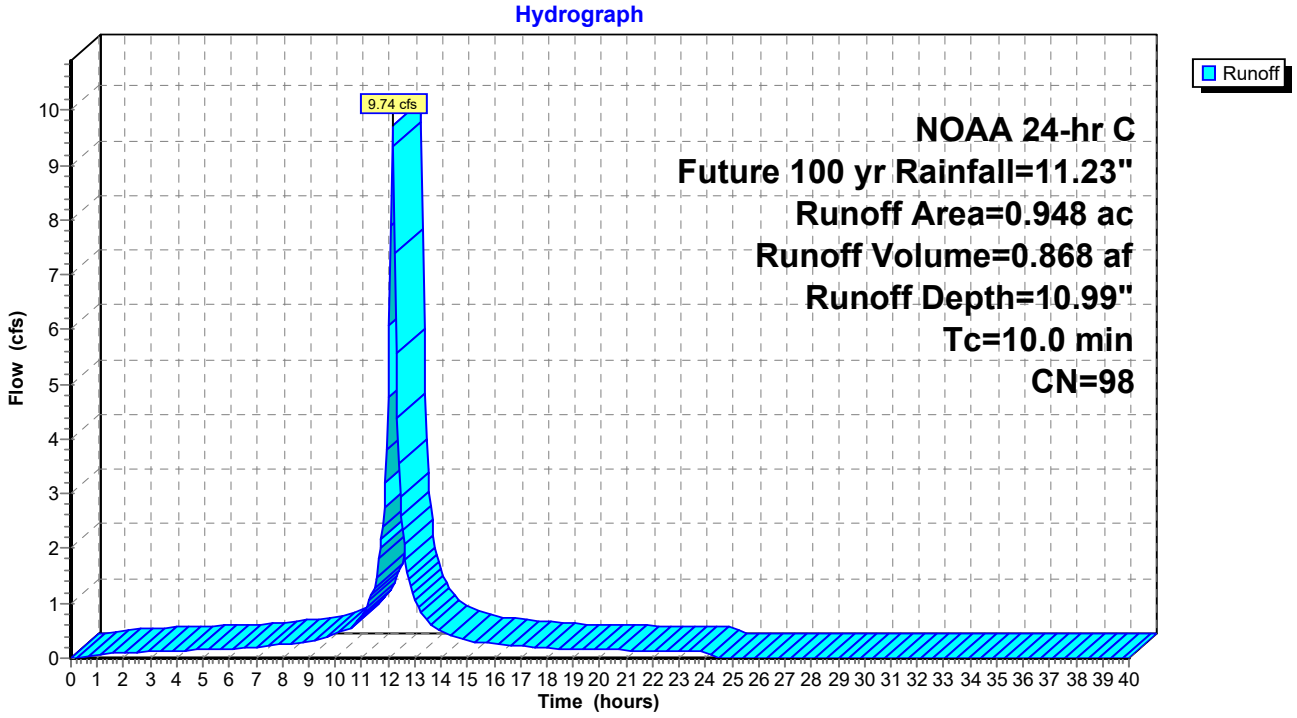
Runoff = 9.74 cfs @ 12.17 hrs, Volume= 0.868 af, Depth=10.99"
Routed to Pond B-10 : Basin #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.570	98	Pavement, HSG C
*	0.321	98	Roof, HSG C
*	0.057	98	Concrete, HSG C
	0.948	98	Weighted Average
	0.948		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10I: PDA-10 (impervious)



Summary for Subcatchment 10P: PDA-10 (pervious)

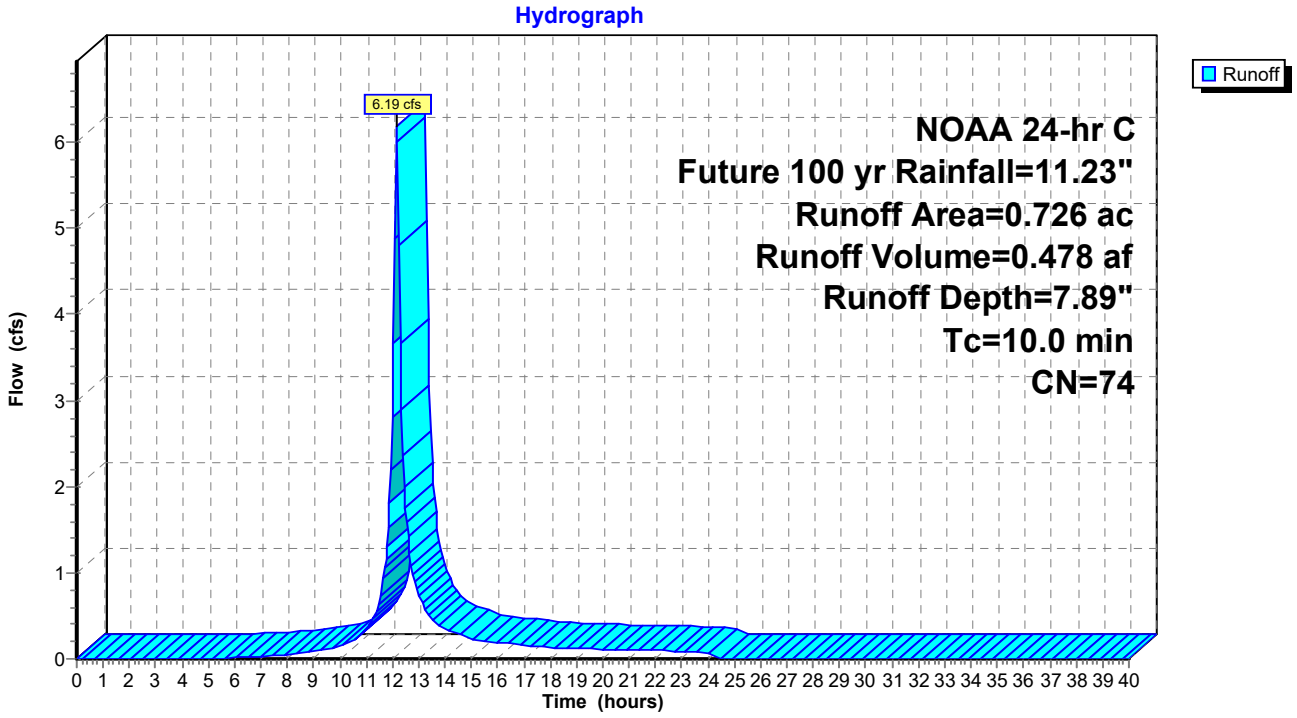
Runoff = 6.19 cfs @ 12.17 hrs, Volume= 0.478 af, Depth= 7.89"
Routed to Pond B-10 : Basin #10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.726	74	>75% Grass cover, Good, HSG C
0.726		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 10P: PDA-10 (pervious)



Summary for Subcatchment 11I: PDA-11 (impervious)

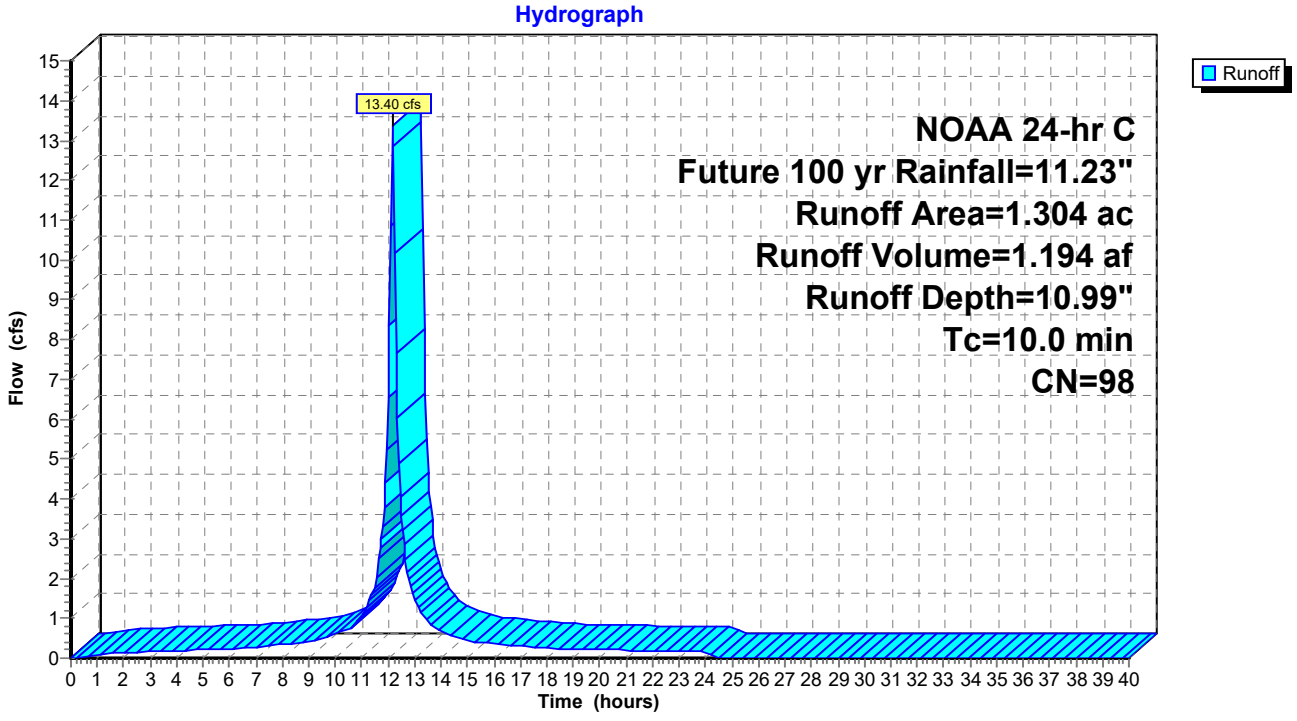
Runoff = 13.40 cfs @ 12.17 hrs, Volume= 1.194 af, Depth=10.99"
Routed to Pond B-11 : Basin #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.166	98	Concrete, HSG C
	0.231	98	Roofs, HSG C
	0.907	98	Paved roads w/curbs & sewers, HSG C
	1.304	98	Weighted Average
	1.304		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 11I: PDA-11 (impervious)



Summary for Subcatchment 11P: PDA-11 (pervious)

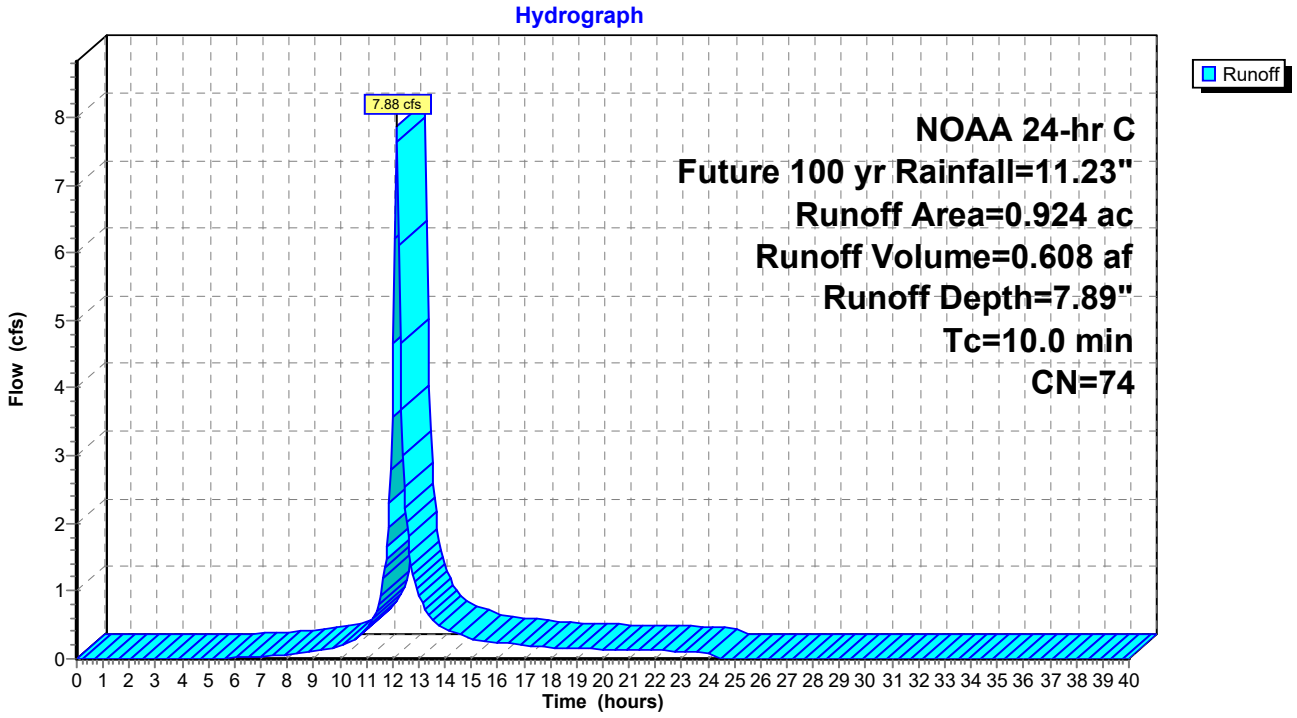
Runoff = 7.88 cfs @ 12.17 hrs, Volume= 0.608 af, Depth= 7.89"
Routed to Pond B-11 : Basin #11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.924	74	>75% Grass cover, Good, HSG C
0.924		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 11P: PDA-11 (pervious)



Summary for Subcatchment 12l: PDA-12 (impervious)

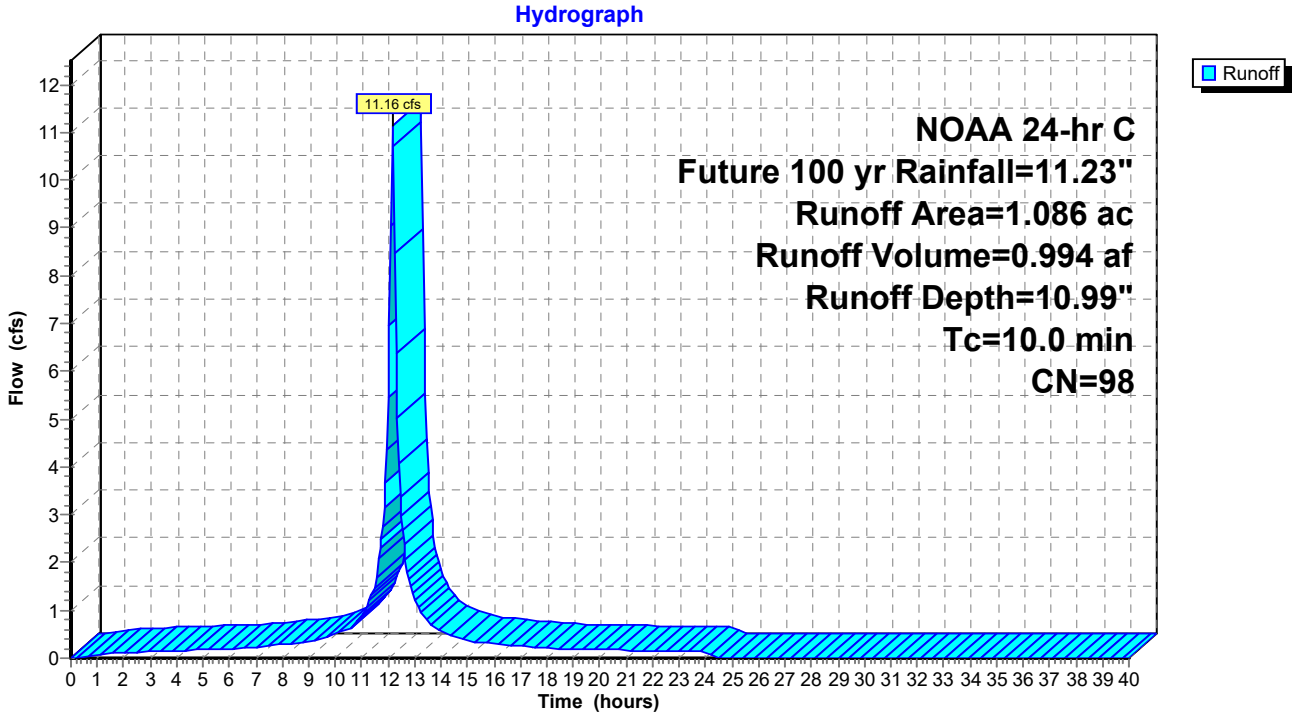
Runoff = 11.16 cfs @ 12.17 hrs, Volume= 0.994 af, Depth=10.99"
Routed to Pond B-12 : Basin #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.404	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.039	98	Concrete, HSG C
	1.086	98	Weighted Average
	1.086		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 12l: PDA-12 (impervious)



Summary for Subcatchment 12P: PDA-12 (pervious)

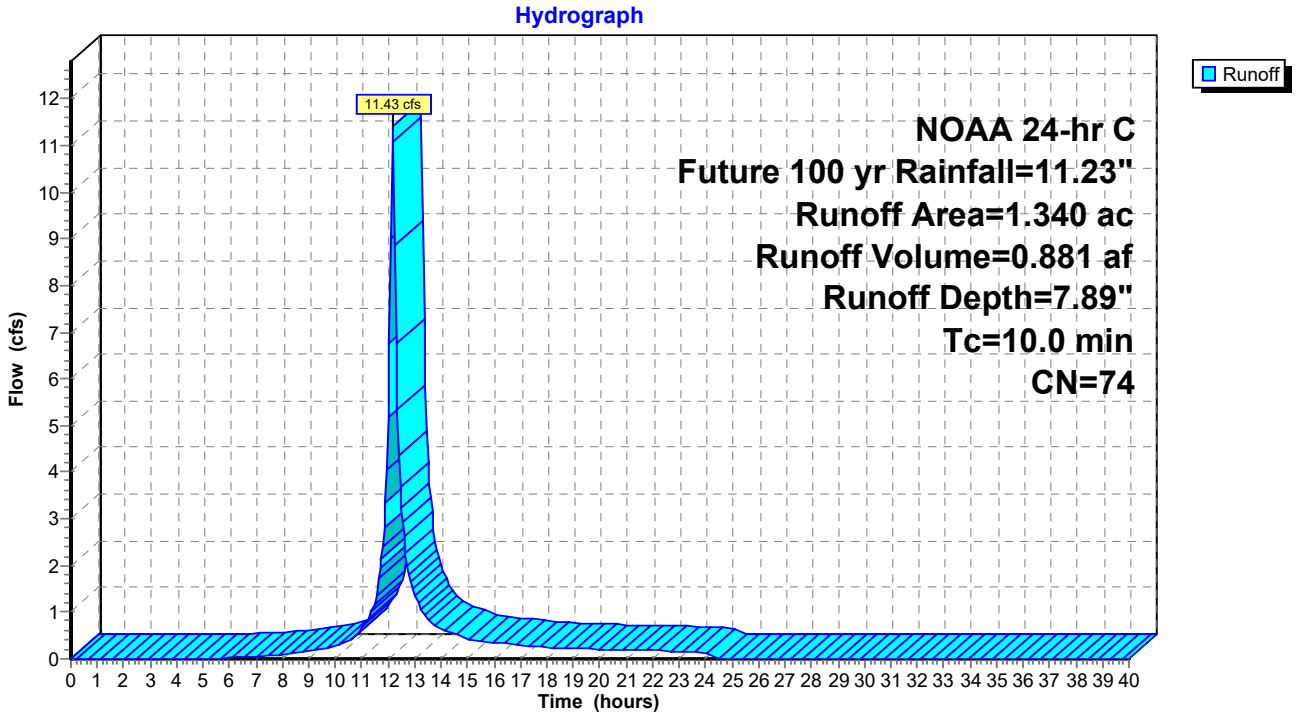
Runoff = 11.43 cfs @ 12.17 hrs, Volume= 0.881 af, Depth= 7.89"
Routed to Pond B-12 : Basin #12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.340	74	>75% Grass cover, Good, HSG C
1.340		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 12P: PDA-12 (pervious)



Summary for Subcatchment 13I: PDA-13 (impervious)

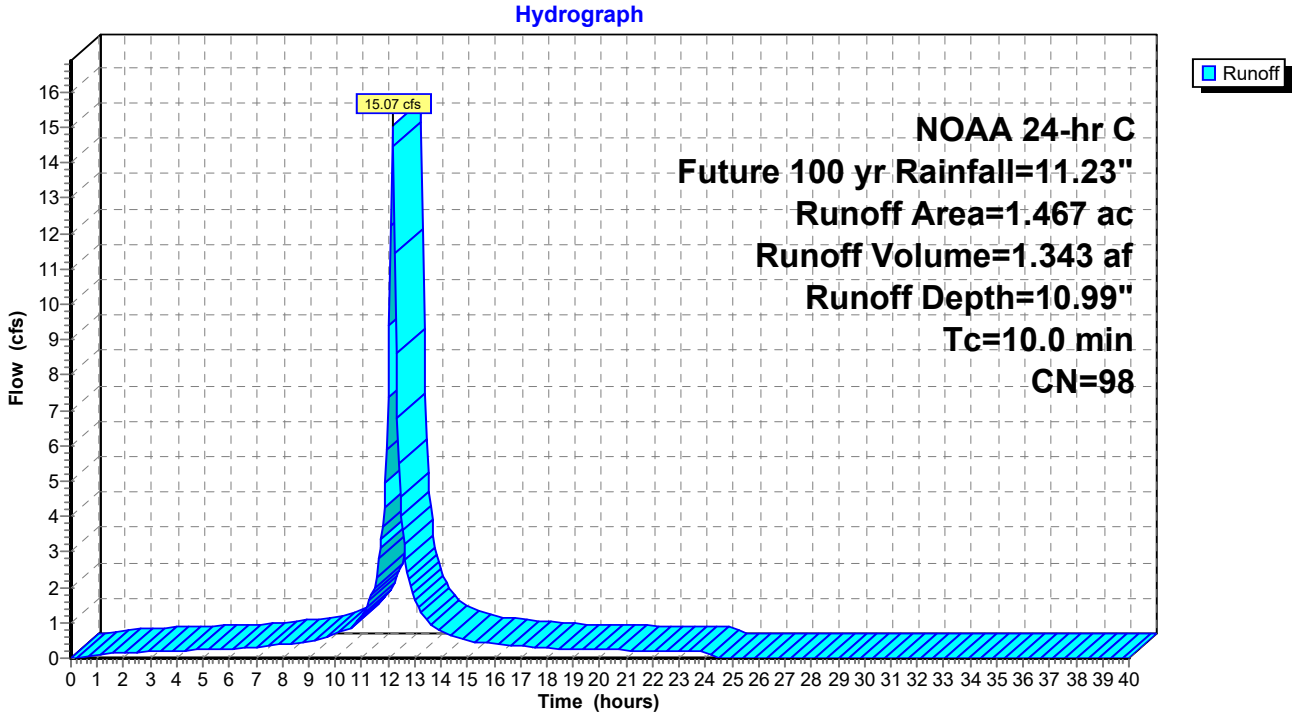
Runoff = 15.07 cfs @ 12.17 hrs, Volume= 1.343 af, Depth=10.99"
Routed to Pond B-13 : Basin #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.678	98	Pavement, HSG C
*	0.707	98	Roof, HSG C
*	0.082	98	Concrete, HSG C
	1.467	98	Weighted Average
	1.467		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 13I: PDA-13 (impervious)



Summary for Subcatchment 13P: PDA-13 (pervious)

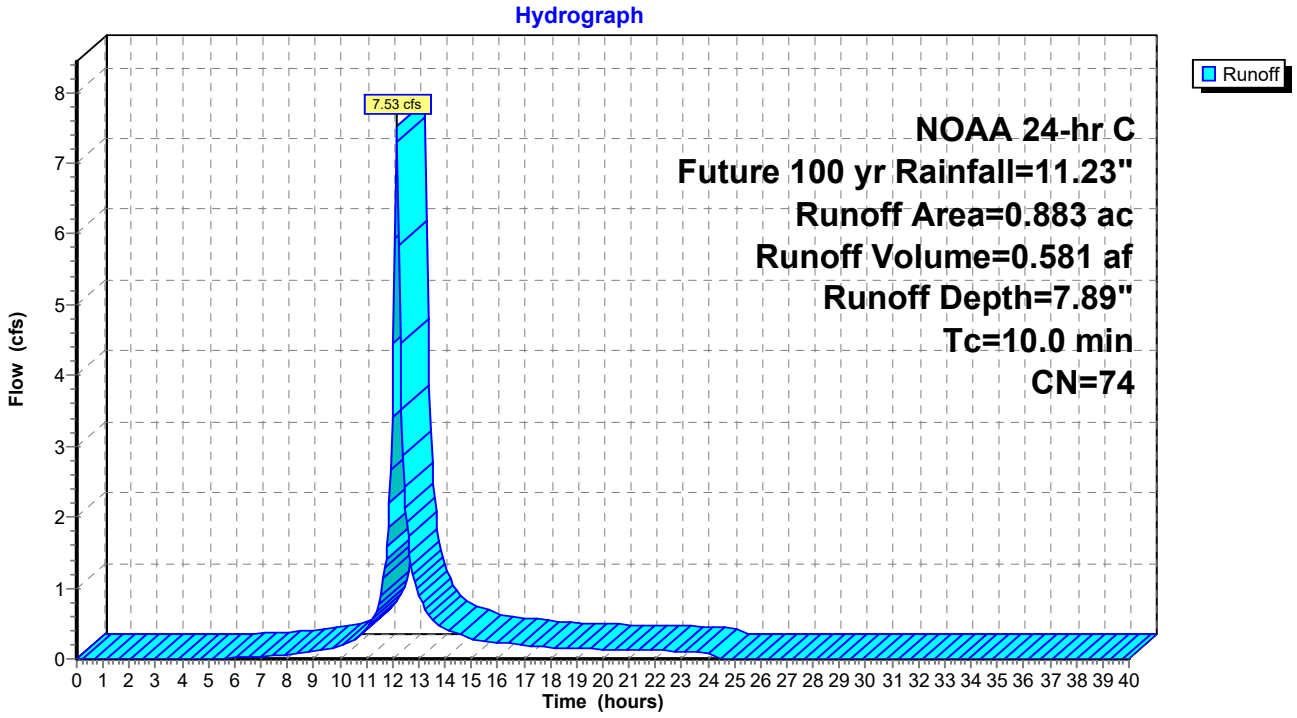
Runoff = 7.53 cfs @ 12.17 hrs, Volume= 0.581 af, Depth= 7.89"
Routed to Pond B-13 : Basin #13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.883	74	>75% Grass cover, Good, HSG C
0.883		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 13P: PDA-13 (pervious)



Summary for Subcatchment 14I: PDA-14 (impervious)

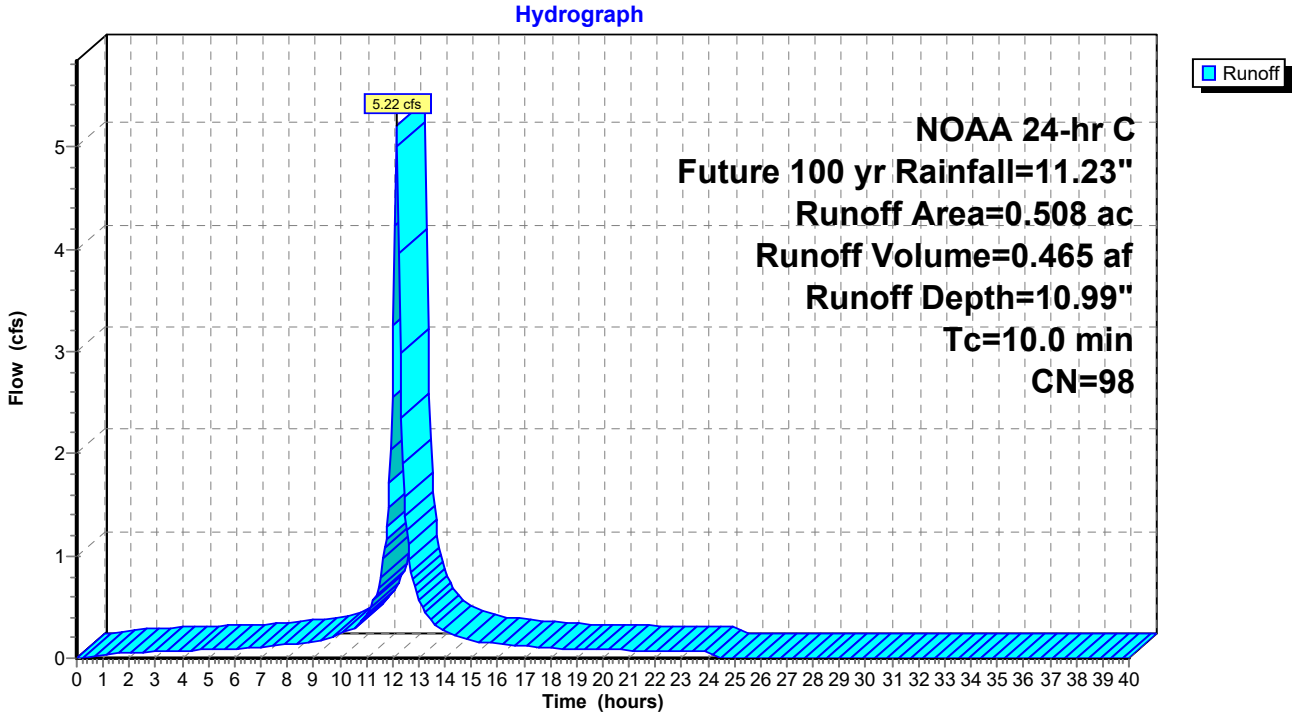
Runoff = 5.22 cfs @ 12.17 hrs, Volume= 0.465 af, Depth=10.99"
Routed to Pond B-14 : Basin #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.308	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	0.508	98	Weighted Average
	0.508		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 14I: PDA-14 (impervious)



Summary for Subcatchment 14P: PDA-14 (pervious)

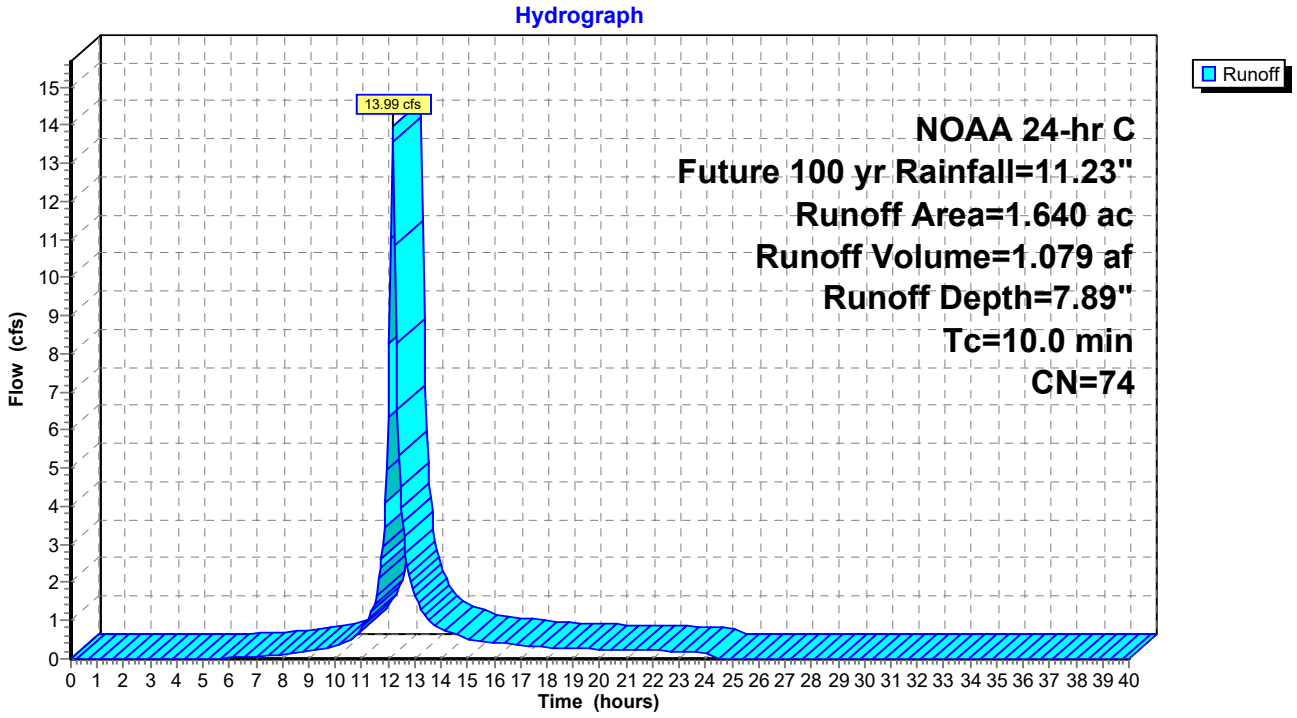
Runoff = 13.99 cfs @ 12.17 hrs, Volume= 1.079 af, Depth= 7.89"
Routed to Pond B-14 : Basin #14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.640	74	>75% Grass cover, Good, HSG C
1.640		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 14P: PDA-14 (pervious)



Summary for Subcatchment 15l: PDA-15 (impervious)

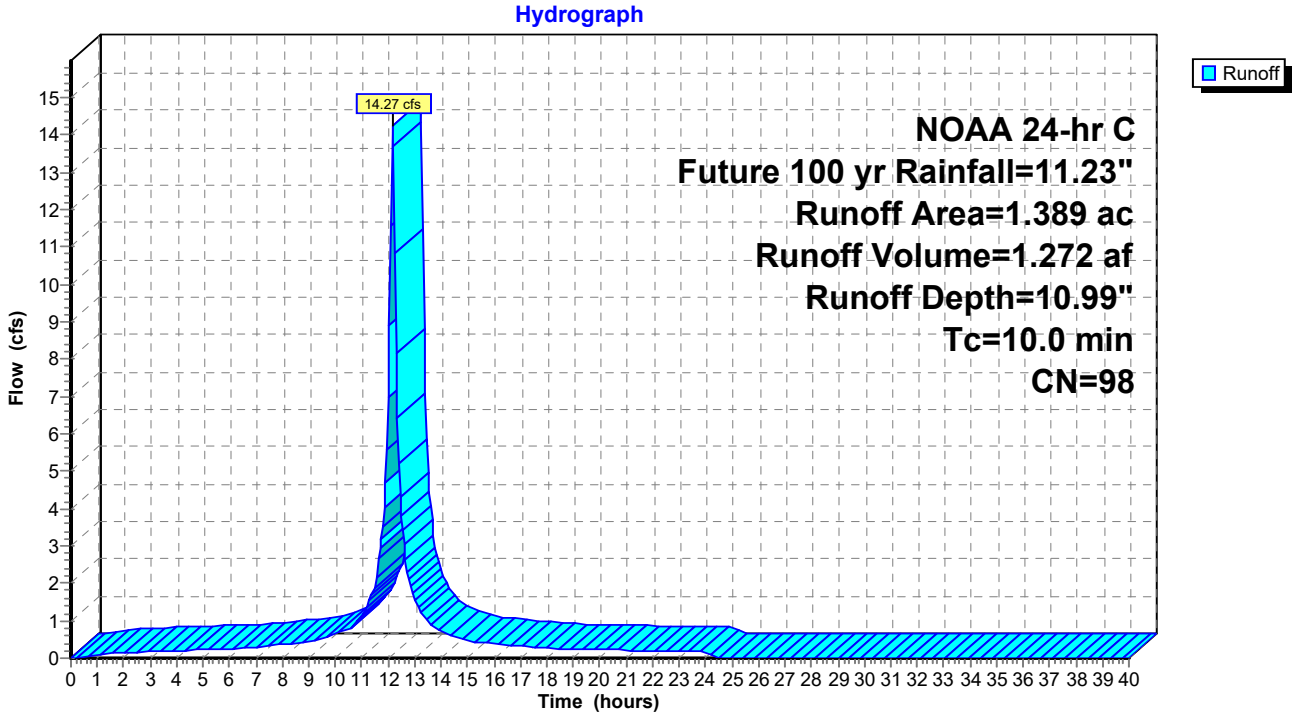
Runoff = 14.27 cfs @ 12.17 hrs, Volume= 1.272 af, Depth=10.99"
Routed to Pond B-15 : Basin #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.501	98	Pavement, HSG C
*	0.836	98	Roof, HSG C
*	0.052	98	Concrete, HSG C
	1.389	98	Weighted Average
	1.389		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 15l: PDA-15 (impervious)



Summary for Subcatchment 15P: PDA-15 (pervious)

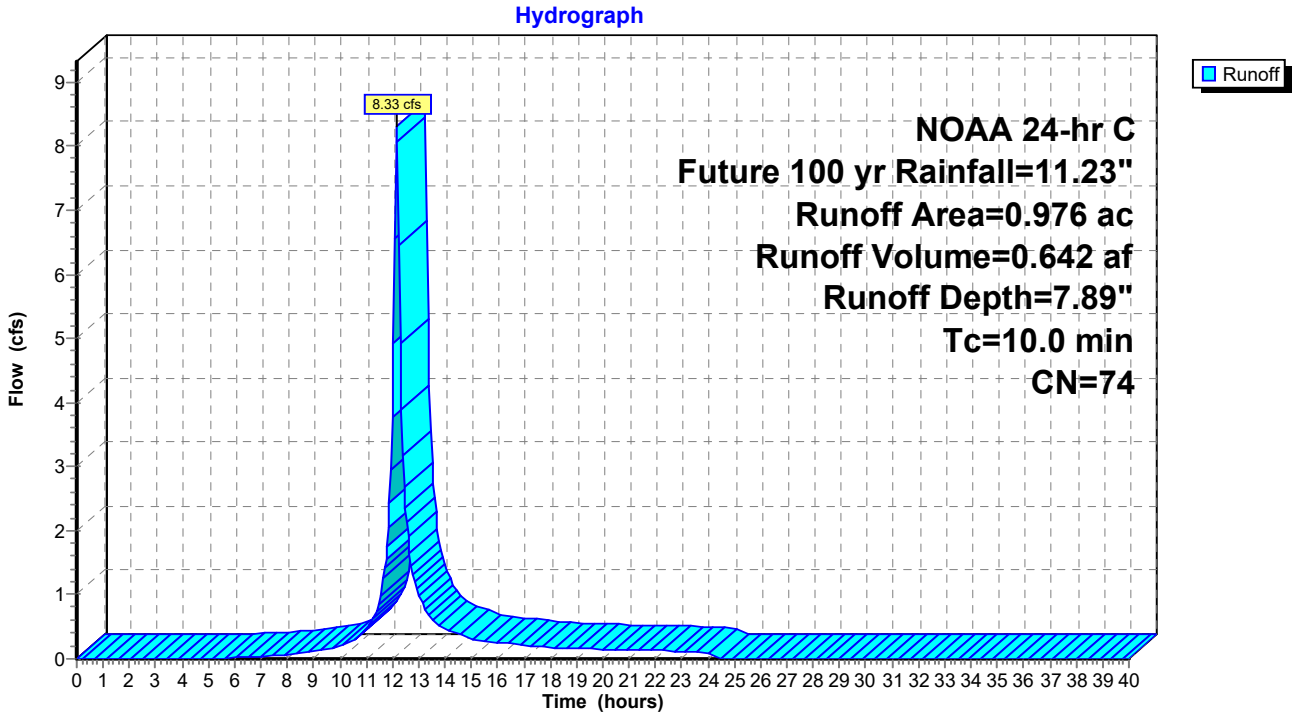
Runoff = 8.33 cfs @ 12.17 hrs, Volume= 0.642 af, Depth= 7.89"
Routed to Pond B-15 : Basin #15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.976	74	>75% Grass cover, Good, HSG C
0.976		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 15P: PDA-15 (pervious)



Summary for Subcatchment 16AI: PDA-16A (impervious)

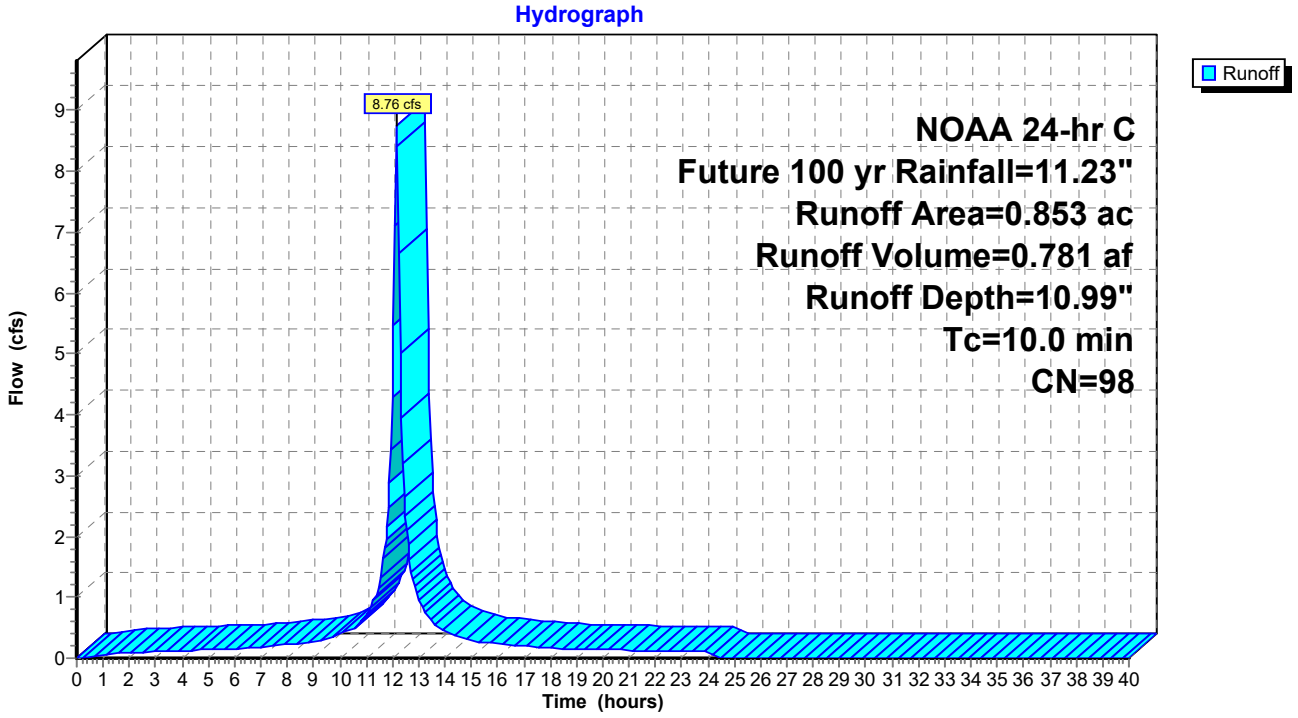
Runoff = 8.76 cfs @ 12.17 hrs, Volume= 0.781 af, Depth=10.99"
Routed to Pond B-16A : Basin #16A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.072	98	Pavement, HSG C
*	0.771	98	Roof, HSG C
*	0.010	98	Concrete, HSG C
	0.853	98	Weighted Average
	0.853		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16AI: PDA-16A (impervious)



Summary for Subcatchment 16AP: PDA-16A (pervious)

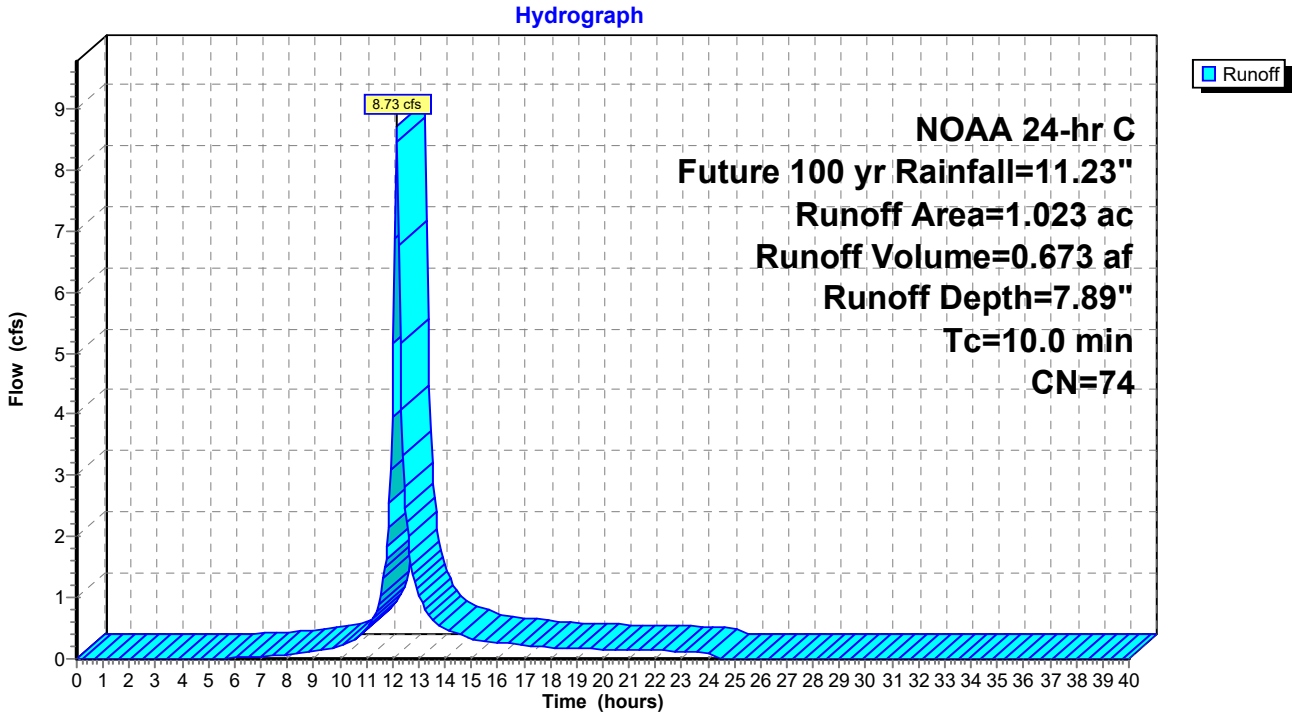
Runoff = 8.73 cfs @ 12.17 hrs, Volume= 0.673 af, Depth= 7.89"
Routed to Pond B-16A : Basin #16A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.023	74	>75% Grass cover, Good, HSG C
1.023		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16AP: PDA-16A (pervious)



Summary for Subcatchment 16BI: PDA-16B (impervious)

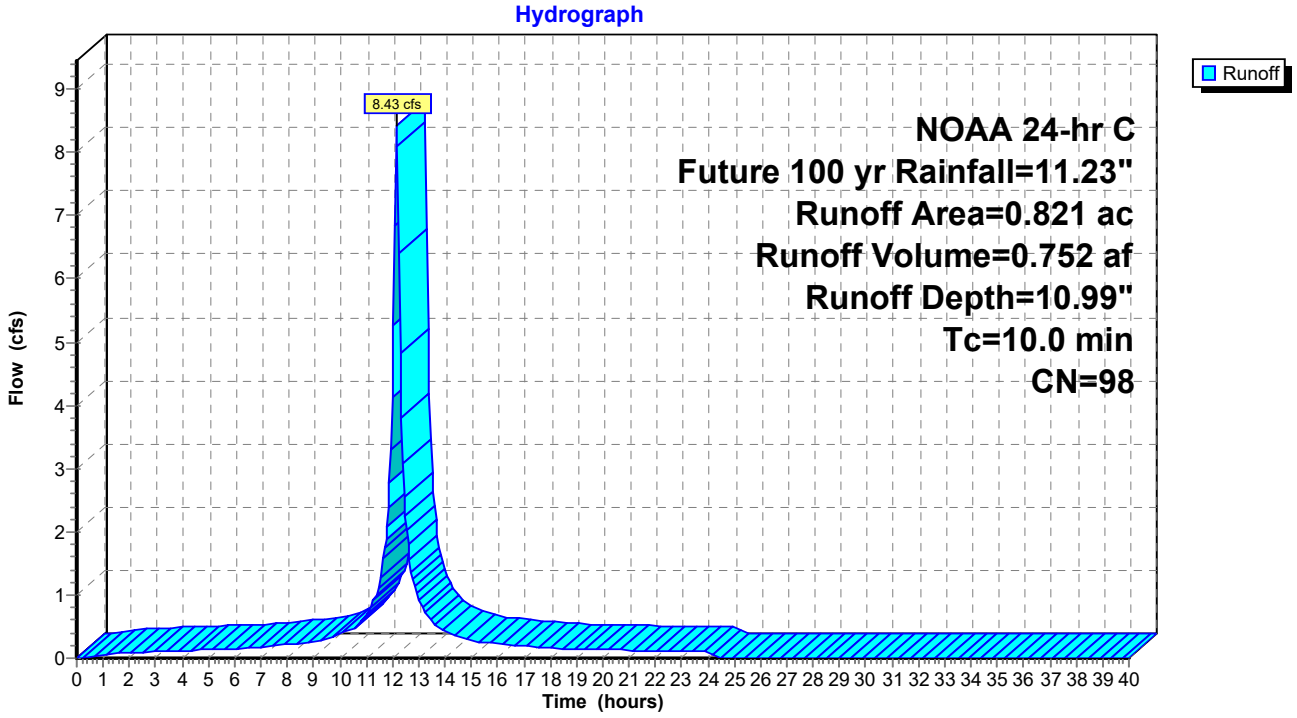
Runoff = 8.43 cfs @ 12.17 hrs, Volume= 0.752 af, Depth=10.99"
Routed to Pond B-16B : Basin #16B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.621	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	0.821	98	Weighted Average
	0.821		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16BI: PDA-16B (impervious)



Summary for Subcatchment 16BP: PDA-16B (pervious)

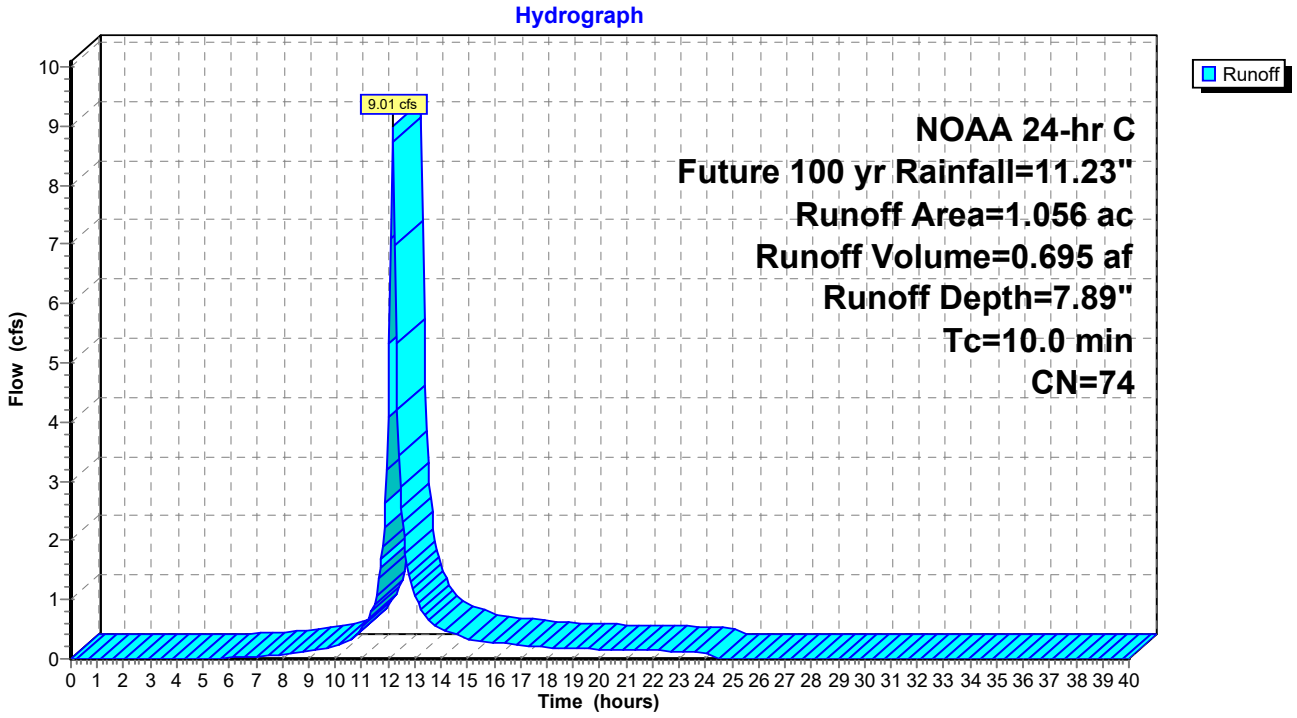
Runoff = 9.01 cfs @ 12.17 hrs, Volume= 0.695 af, Depth= 7.89"
Routed to Pond B-16B : Basin #16B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.056	74	>75% Grass cover, Good, HSG C
1.056		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 16BP: PDA-16B (pervious)



Summary for Subcatchment 17AI: PDA-17A (impervious)

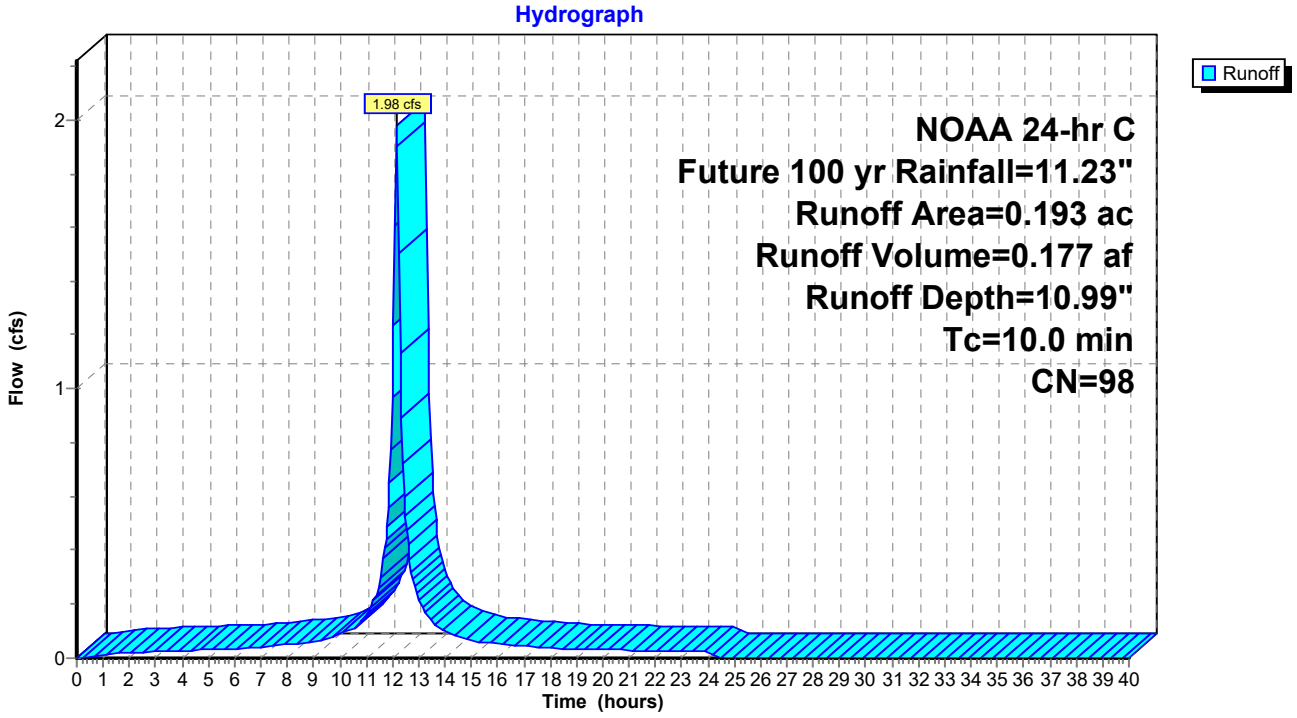
Runoff = 1.98 cfs @ 12.17 hrs, Volume= 0.177 af, Depth=10.99"
Routed to Pond B-17A : Basin #17A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.193	98	Roof, HSG C
	0.000	98	Paved roads w/curbs & sewers, HSG C
*	0.000	98	Concrete, HSG C
	0.193	98	Weighted Average
	0.193		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17AI: PDA-17A (impervious)



Summary for Subcatchment 17AP: PDA-17A (pervious)

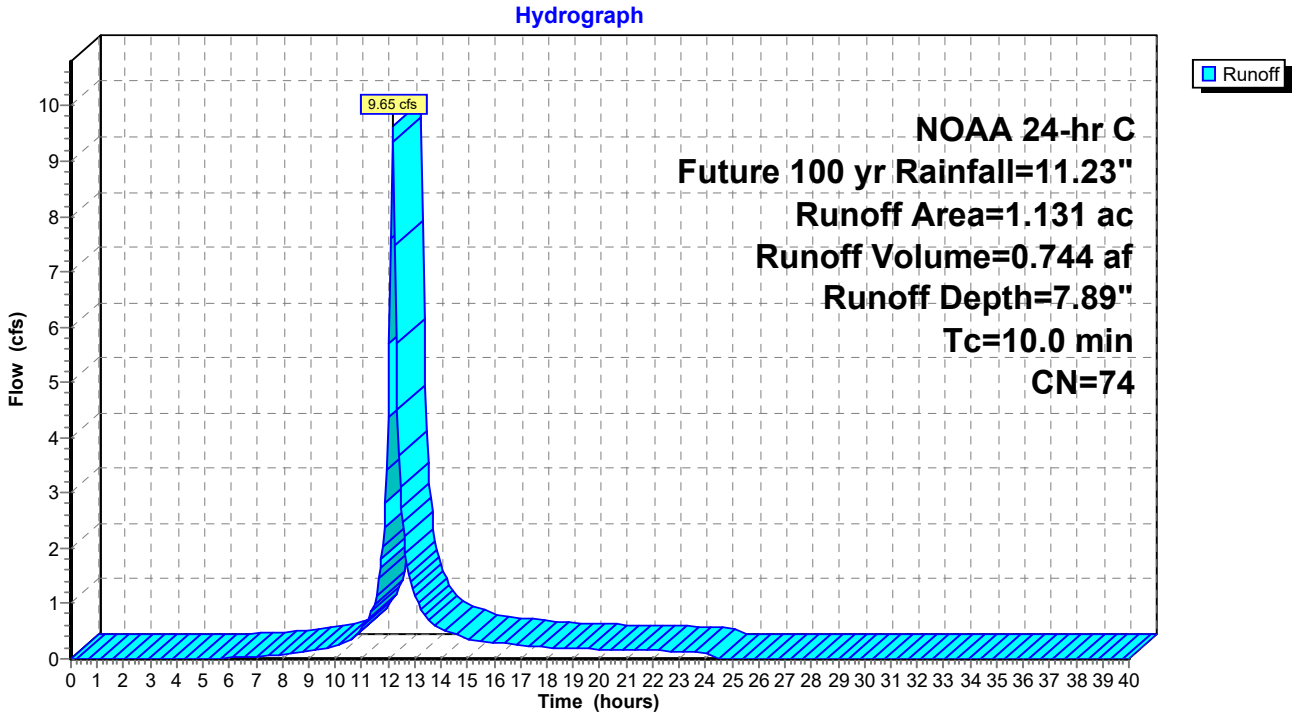
Runoff = 9.65 cfs @ 12.17 hrs, Volume= 0.744 af, Depth= 7.89"
Routed to Pond B-17A : Basin #17A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.131	74	>75% Grass cover, Good, HSG C
1.131		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17AP: PDA-17A (pervious)



Summary for Subcatchment 17BI: PDA-17B (impervious)

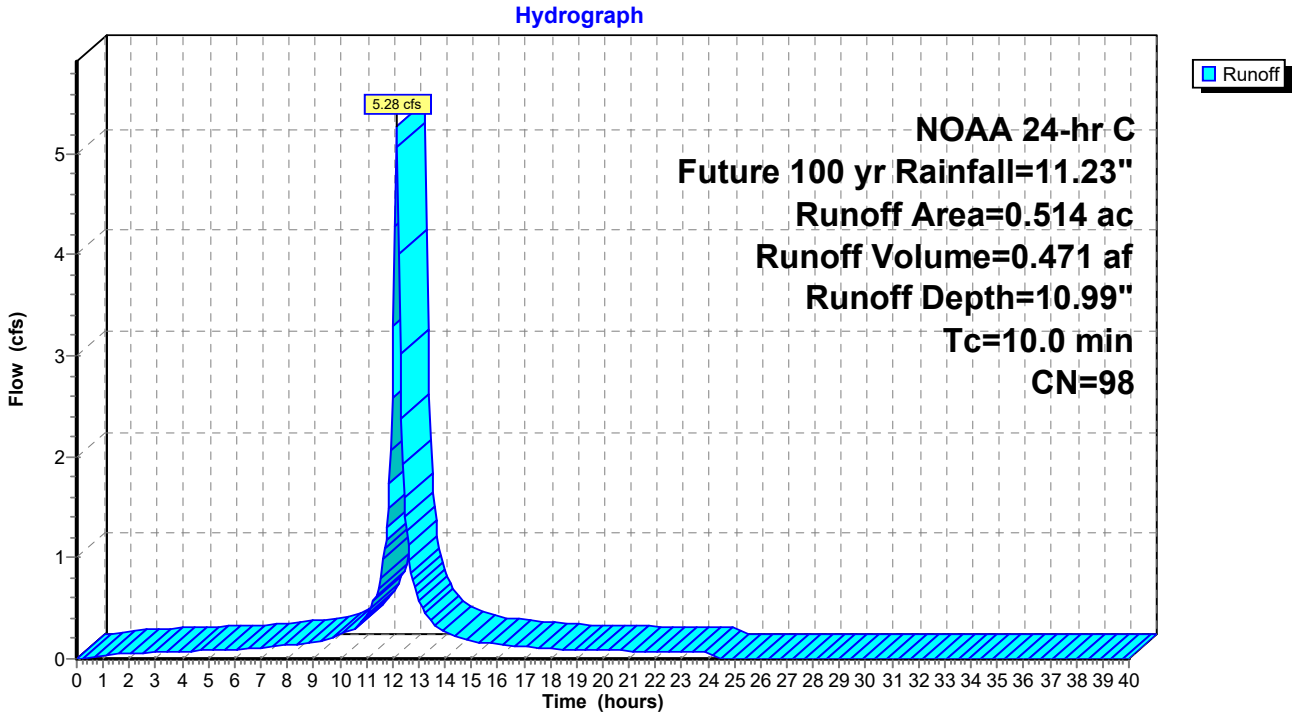
Runoff = 5.28 cfs @ 12.17 hrs, Volume= 0.471 af, Depth=10.99"
Routed to Pond B-17B : Basin #17B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.514	98	Roof, HSG C
	0.514		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17BI: PDA-17B (impervious)



Summary for Subcatchment 17BP: PDA-17B (pervious)

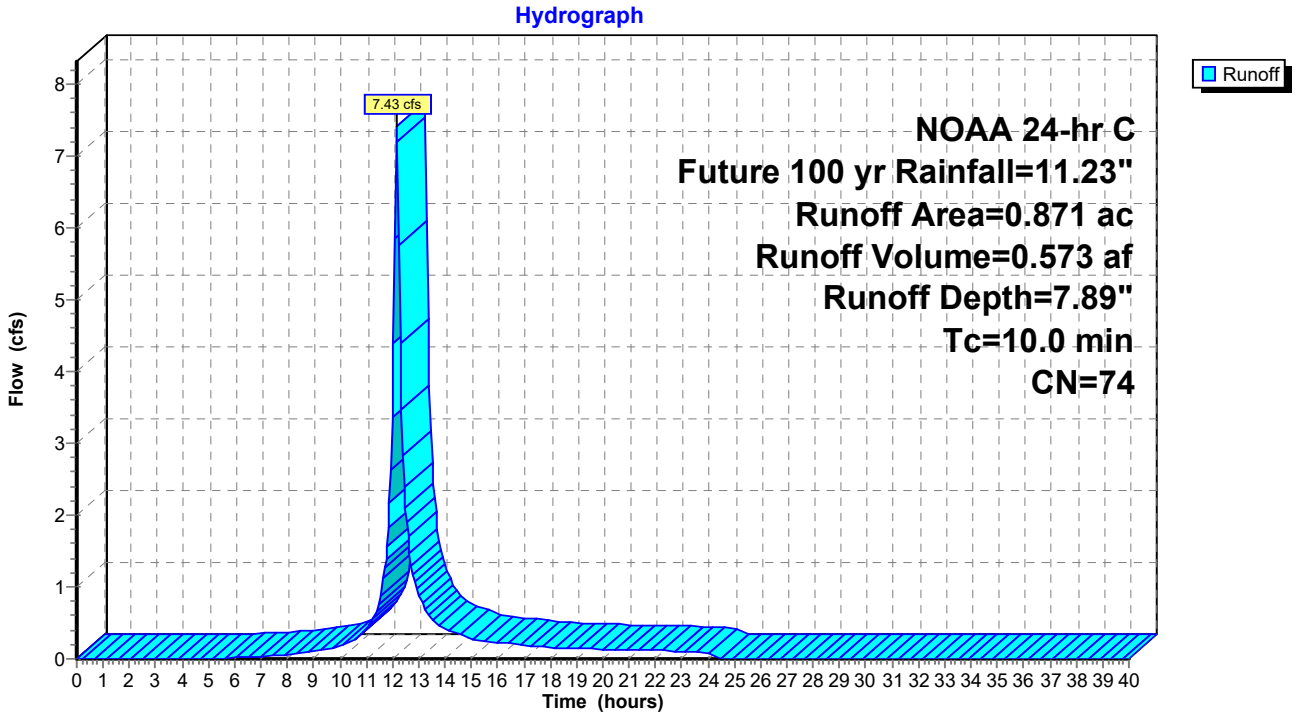
Runoff = 7.43 cfs @ 12.17 hrs, Volume= 0.573 af, Depth= 7.89"
Routed to Pond B-17B : Basin #17B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.871	74	>75% Grass cover, Good, HSG C
0.871		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 17BP: PDA-17B (pervious)



Summary for Subcatchment UPDA-1: PDA-1 (undetained)

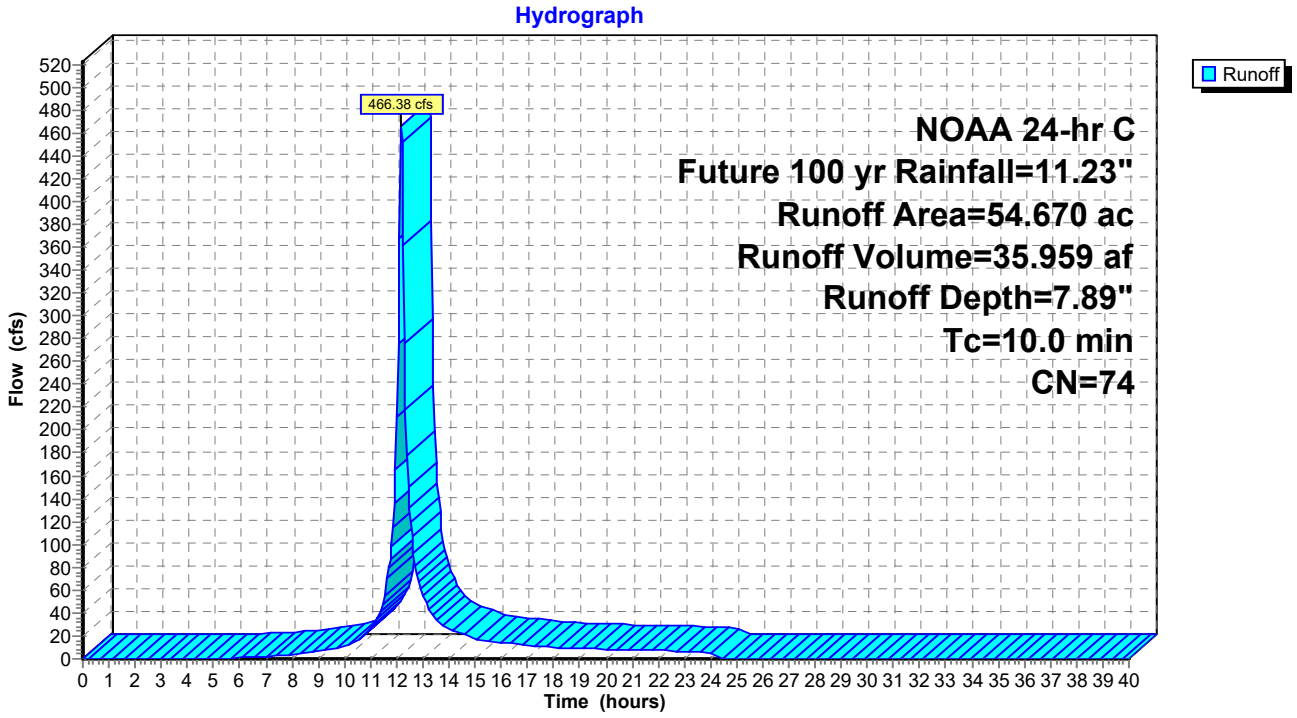
Runoff = 466.38 cfs @ 12.17 hrs, Volume= 35.959 af, Depth= 7.89"
Routed to Link PDA-1 : Proposed Drainage Area #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
54.670	74	>75% Grass cover, Good, HSG C
54.670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-1: PDA-1 (undetained)



Summary for Pond B-1: Basin #1

Inflow Area = 2.782 ac, 26.02% Impervious, Inflow Depth = 6.29" for Future 100 yr event
Inflow = 22.55 cfs @ 12.22 hrs, Volume= 1.458 af
Outflow = 10.95 cfs @ 12.40 hrs, Volume= 1.381 af, Atten= 51%, Lag= 10.6 min
Primary = 10.95 cfs @ 12.40 hrs, Volume= 1.381 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 210.58' @ 12.40 hrs Surf.Area= 11,697 sf Storage= 17,228 cf

Plug-Flow detention time= 137.2 min calculated for 1.381 af (95% of inflow)
Center-of-Mass det. time= 108.3 min (959.4 - 851.1)

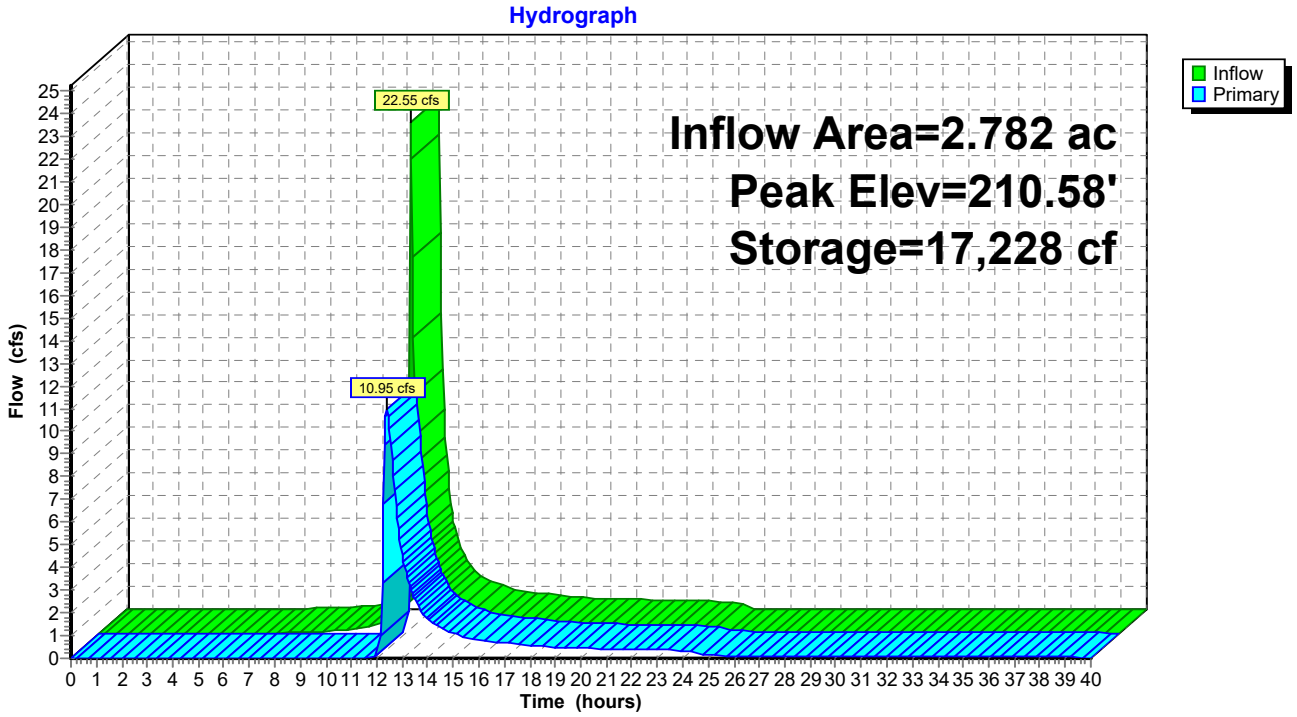
Volume	Invert	Avail.Storage	Storage Description
#1	209.00'	34,903 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
209.00	10,187	0	0
210.00	11,133	10,660	10,660
211.00	12,113	11,623	22,283
212.00	13,126	12,620	34,903

Device	Routing	Invert	Outlet Devices
#1	Primary	207.65'	**18.0" Round Culvert** L= 276.0' Ke= 0.500 Inlet / Outlet Invert= 207.65' / 204.00' S= 0.0132 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	209.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	209.67'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	210.80'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.94 cfs @ 12.40 hrs HW=210.58' (Free Discharge)
- **1=Culvert** (Passes 10.94 cfs of 12.49 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.49 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 10.75 cfs @ 3.11 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-1: Basin #1



Stage-Discharge for Pond B-1: Basin #1

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
209.00	0.00	210.04	3.03	211.08	31.14
209.02	0.00	210.06	3.27	211.10	33.28
209.04	0.00	210.08	3.51	211.12	35.53
209.06	0.00	210.10	3.76	211.14	37.86
209.08	0.00	210.12	4.01	211.16	40.30
209.10	0.00	210.14	4.27	211.18	42.83
209.12	0.00	210.16	4.53	211.20	45.46
209.14	0.00	210.18	4.80	211.22	48.24
209.16	0.00	210.20	5.07	211.24	51.13
209.18	0.00	210.22	5.35	211.26	54.12
209.20	0.00	210.24	5.63	211.28	57.21
209.22	0.00	210.26	5.92	211.30	60.41
209.24	0.01	210.28	6.21	211.32	63.72
209.26	0.01	210.30	6.50	211.34	67.13
209.28	0.02	210.32	6.80	211.36	70.65
209.30	0.03	210.34	7.10	211.38	74.28
209.32	0.03	210.36	7.41	211.40	78.01
209.34	0.04	210.38	7.72	211.42	81.30
209.36	0.05	210.40	8.03	211.44	84.65
209.38	0.05	210.42	8.35	211.46	88.04
209.40	0.06	210.44	8.67	211.48	91.49
209.42	0.06	210.46	9.00	211.50	94.99
209.44	0.07	210.48	9.33	211.52	98.55
209.46	0.07	210.50	9.66	211.54	102.15
209.48	0.07	210.52	10.00	211.56	105.80
209.50	0.08	210.54	10.34	211.58	109.50
209.52	0.08	210.56	10.68	211.60	113.25
209.54	0.08	210.58	11.03	211.62	117.13
209.56	0.09	210.60	11.37	211.64	121.06
209.58	0.09	210.62	11.73	211.66	125.04
209.60	0.09	210.64	12.08	211.68	129.07
209.62	0.10	210.66	12.44	211.70	133.15
209.64	0.10	210.68	12.61	211.72	137.29
209.66	0.10	210.70	12.64	211.74	141.48
209.68	0.12	210.72	12.66	211.76	145.72
209.70	0.17	210.74	12.69	211.78	150.00
209.72	0.26	210.76	12.71	211.80	154.34
209.74	0.35	210.78	12.73	211.82	158.62
209.76	0.47	210.80	12.76	211.84	162.95
209.78	0.59	210.82	13.11	211.86	167.31
209.80	0.73	210.84	13.74	211.88	171.72
209.82	0.88	210.86	14.56	211.90	176.17
209.84	1.03	210.88	15.51	211.92	180.66
209.86	1.20	210.90	16.60	211.94	185.19
209.88	1.37	210.92	17.79	211.96	189.77
209.90	1.56	210.94	19.10	211.98	194.38
209.92	1.75	210.96	20.50	212.00	**199.03**
209.94	1.94	210.98	21.99		
209.96	2.15	211.00	23.56		
209.98	2.36	211.02	25.31		
210.00	2.58	211.04	27.15		
210.02	2.80	211.06	29.10		

Summary for Pond B-10: Basin #10

Inflow Area = 1.674 ac, 56.63% Impervious, Inflow Depth = 9.65" for Future 100 yr event
Inflow = 15.93 cfs @ 12.17 hrs, Volume= 1.346 af
Outflow = 8.16 cfs @ 12.33 hrs, Volume= 1.253 af, Atten= 49%, Lag= 9.6 min
Primary = 8.16 cfs @ 12.33 hrs, Volume= 1.253 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 182.58' @ 12.33 hrs Surf.Area= 7,243 sf Storage= 20,327 cf

Plug-Flow detention time= 125.1 min calculated for 1.253 af (93% of inflow)
Center-of-Mass det. time= 85.9 min (851.6 - 765.7)

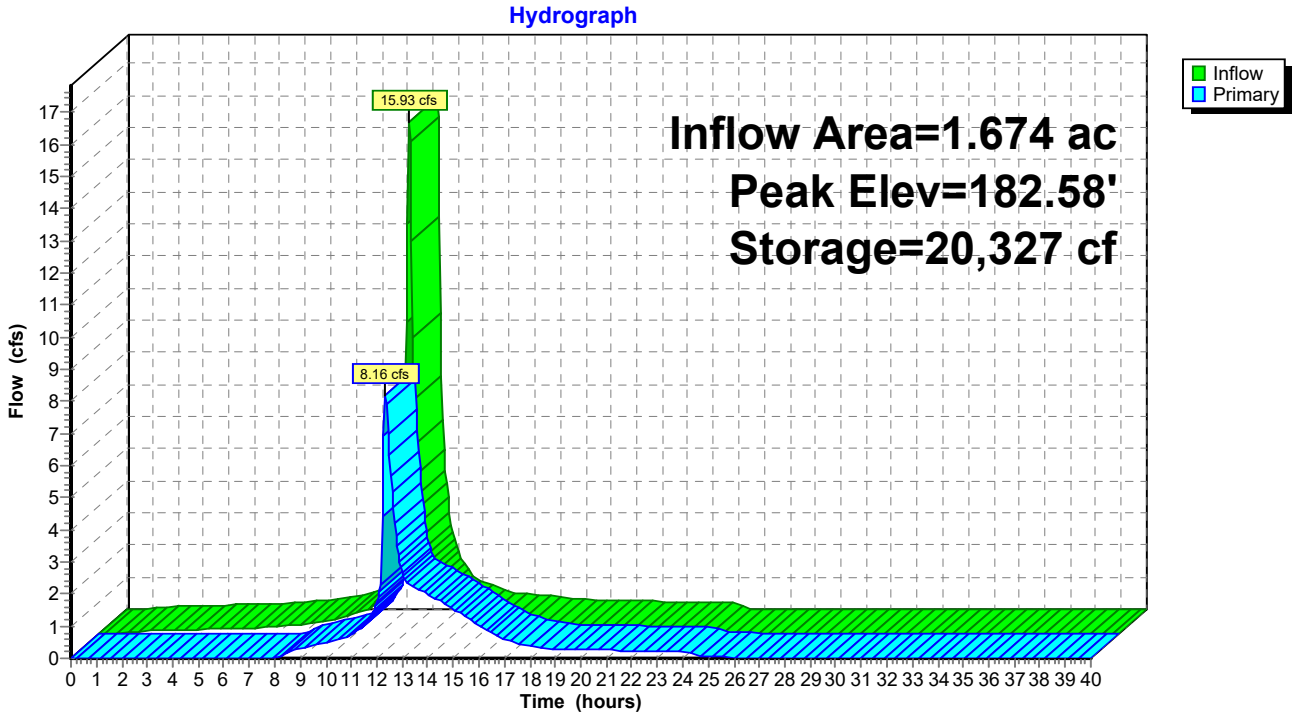
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	23,473 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	4,220	0	0
180.00	5,003	4,612	4,612
181.00	5,833	5,418	10,030
182.00	6,710	6,272	16,301
183.00	7,633	7,172	23,473

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 52.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 176.00' S= 0.0317 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.88'	**24.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	182.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.10 cfs @ 12.33 hrs HW=182.57' (Free Discharge)
- **1=Culvert** (Passes 8.10 cfs of 17.38 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.59 cfs @ 7.78 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 5.51 cfs @ 2.47 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-10: Basin #10



Stage-Discharge for Pond B-10: Basin #10

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.41	181.08	1.70	182.12	2.90
179.02	0.00	180.06	0.48	181.10	1.71	182.14	3.05
179.04	0.00	180.08	0.54	181.12	1.73	182.16	3.21
179.06	0.00	180.10	0.58	181.14	1.74	182.18	3.38
179.08	0.00	180.12	0.63	181.16	1.76	182.20	3.56
179.10	0.00	180.14	0.67	181.18	1.77	182.22	3.75
179.12	0.00	180.16	0.71	181.20	1.78	182.24	3.94
179.14	0.00	180.18	0.74	181.22	1.80	182.26	4.14
179.16	0.00	180.20	0.78	181.24	1.81	182.28	4.35
179.18	0.00	180.22	0.81	181.26	1.83	182.30	4.57
179.20	0.00	180.24	0.84	181.28	1.84	182.32	4.79
179.22	0.00	180.26	0.87	181.30	1.86	182.34	5.02
179.24	0.00	180.28	0.90	181.32	1.87	182.36	5.26
179.26	0.00	180.30	0.93	181.34	1.88	182.38	5.50
179.28	0.00	180.32	0.96	181.36	1.90	182.40	5.75
179.30	0.00	180.34	0.98	181.38	1.91	182.42	6.00
179.32	0.00	180.36	1.01	181.40	1.92	182.44	6.26
179.34	0.00	180.38	1.03	181.42	1.94	182.46	6.52
179.36	0.00	180.40	1.06	181.44	1.95	182.48	6.79
179.38	0.00	180.42	1.08	181.46	1.96	182.50	7.07
179.40	0.00	180.44	1.11	181.48	1.98	182.52	7.34
179.42	0.00	180.46	1.13	181.50	1.99	182.54	7.63
179.44	0.00	180.48	1.15	181.52	2.00	182.56	7.91
179.46	0.00	180.50	1.17	181.54	2.02	182.58	8.21
179.48	0.00	180.52	1.20	181.56	2.03	182.60	8.50
179.50	0.00	180.54	1.22	181.58	2.04	182.62	8.80
179.52	0.00	180.56	1.24	181.60	2.05	182.64	9.11
179.54	0.00	180.58	1.26	181.62	2.07	182.66	9.42
179.56	0.00	180.60	1.28	181.64	2.08	182.68	9.73
179.58	0.00	180.62	1.30	181.66	2.09	182.70	10.05
179.60	0.00	180.64	1.32	181.68	2.10	182.72	10.37
179.62	0.00	180.66	1.34	181.70	2.11	182.74	10.69
179.64	0.00	180.68	1.36	181.72	2.13	182.76	11.02
179.66	0.00	180.70	1.38	181.74	2.14	182.78	11.35
179.68	0.00	180.72	1.40	181.76	2.15	182.80	11.69
179.70	0.00	180.74	1.41	181.78	2.16	182.82	12.03
179.72	0.00	180.76	1.43	181.80	2.17	182.84	12.37
179.74	0.00	180.78	1.45	181.82	2.19	182.86	12.71
179.76	0.00	180.80	1.47	181.84	2.20	182.88	13.06
179.78	0.00	180.82	1.48	181.86	2.21	182.90	13.42
179.80	0.00	180.84	1.50	181.88	2.22	182.92	13.77
179.82	0.00	180.86	1.52	181.90	2.23	182.94	14.13
179.84	0.00	180.88	1.54	181.92	2.24	182.96	14.61
179.86	0.00	180.90	1.55	181.94	2.26	182.98	15.46
179.88	0.00	180.92	1.57	181.96	2.27	183.00	**16.53**
179.90	0.02	180.94	1.59	181.98	2.28		
179.92	0.05	180.96	1.60	182.00	2.29		
179.94	0.09	180.98	1.62	182.02	2.34		
179.96	0.15	181.00	1.63	182.04	2.42		
179.98	0.20	181.02	1.65	182.06	2.52		
180.00	0.27	181.04	1.66	182.08	2.63		
180.02	0.34	181.06	1.68	182.10	2.76		

Summary for Pond B-11: Basin #11

Inflow Area = 2.228 ac, 58.53% Impervious, Inflow Depth = 9.70" for Future 100 yr event
Inflow = 21.28 cfs @ 12.17 hrs, Volume= 1.802 af
Outflow = 17.02 cfs @ 12.25 hrs, Volume= 1.631 af, Atten= 20%, Lag= 4.9 min
Primary = 17.02 cfs @ 12.25 hrs, Volume= 1.631 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 183.97' @ 12.25 hrs Surf.Area= 7,982 sf Storage= 25,126 cf

Plug-Flow detention time= 249.3 min calculated for 1.629 af (90% of inflow)
Center-of-Mass det. time= 200.5 min (965.0 - 764.5)

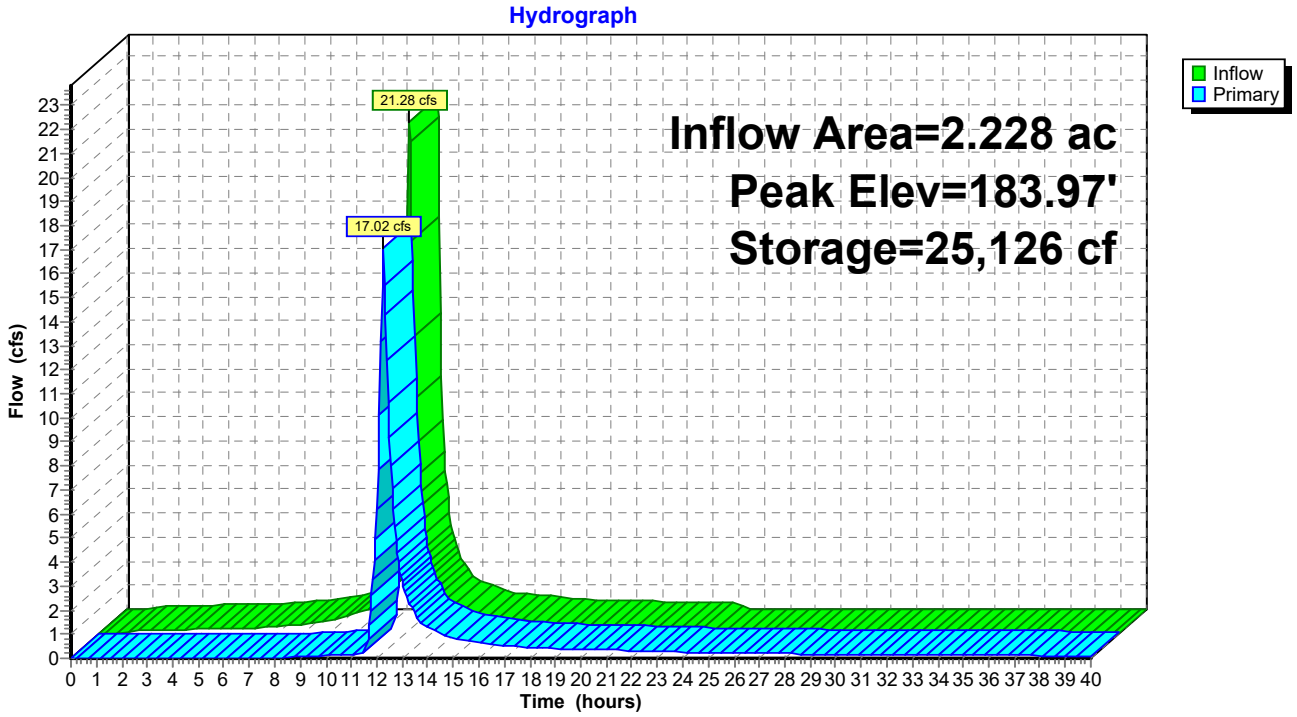
Volume	Invert	Avail.Storage	Storage Description
#1	180.00'	43,224 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.00	4,780	0	0
181.00	5,522	5,151	5,151
182.00	6,306	5,914	11,065
183.00	7,135	6,721	17,786
184.00	8,007	7,571	25,357
185.00	8,923	8,465	33,822
186.00	9,882	9,403	43,224

Device	Routing	Invert	Outlet Devices
#1	Primary	178.65'	**18.0" Round Culvert** L= 131.0' Ke= 0.500 Inlet / Outlet Invert= 178.65' / 178.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	181.00'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	183.91'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=16.93 cfs @ 12.25 hrs HW=183.97' (Free Discharge)
- **1=Culvert** (Barrel Controls 15.19 cfs @ 8.60 fps)
  - **2=Orifice/Grate** (Passes < 0.28 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 16.56 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 1.74 cfs @ 0.57 fps)

Pond B-11: Basin #11



Stage-Discharge for Pond B-11: Basin #11

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
180.00	0.00	182.60	0.20	185.20	223.74
180.05	0.00	182.65	0.20	185.25	236.23
180.10	0.00	182.70	0.21	185.30	248.97
180.15	0.00	182.75	0.21	185.35	262.16
180.20	0.00	182.80	0.36	185.40	275.68
180.25	0.00	182.85	0.63	185.45	289.46
180.30	0.00	182.90	0.97	185.50	303.52
180.35	0.00	182.95	1.38	185.55	317.86
180.40	0.00	183.00	1.84	185.60	332.46
180.45	0.00	183.05	2.35	185.65	347.33
180.50	0.00	183.10	2.89	185.70	362.47
180.55	0.00	183.15	3.48	185.75	377.88
180.60	0.00	183.20	4.10	185.80	393.54
180.65	0.00	183.25	4.75	185.85	409.47
180.70	0.00	183.30	5.43	185.90	425.67
180.75	0.00	183.35	6.14	185.95	442.37
180.80	0.00	183.40	6.88	186.00	**459.42**
180.85	0.00	183.45	7.64		
180.90	0.00	183.50	8.43		
180.95	0.00	183.55	9.24		
181.00	0.00	183.60	10.07		
181.05	0.00	183.65	10.93		
181.10	0.02	183.70	11.80		
181.15	0.03	183.75	12.69		
181.20	0.05	183.80	13.60		
181.25	0.06	183.85	14.53		
181.30	0.07	183.90	15.07		
181.35	0.08	183.95	16.09		
181.40	0.09	184.00	18.41		
181.45	0.10	184.05	21.50		
181.50	0.10	184.10	25.19		
181.55	0.11	184.15	29.60		
181.60	0.12	184.20	34.67		
181.65	0.12	184.25	40.36		
181.70	0.13	184.30	46.66		
181.75	0.13	184.35	53.67		
181.80	0.14	184.40	61.37		
181.85	0.14	184.45	69.72		
181.90	0.15	184.50	78.75		
181.95	0.15	184.55	87.28		
182.00	0.16	184.60	95.90		
182.05	0.16	184.65	104.83		
182.10	0.16	184.70	114.08		
182.15	0.17	184.75	123.79		
182.20	0.17	184.80	133.86		
182.25	0.18	184.85	144.25		
182.30	0.18	184.90	154.96		
182.35	0.18	184.95	165.77		
182.40	0.19	185.00	176.78		
182.45	0.19	185.05	188.06		
182.50	0.19	185.10	199.59		
182.55	0.20	185.15	211.51		

Summary for Pond B-12: Basin #12

Inflow Area = 2.426 ac, 44.77% Impervious, Inflow Depth = 9.28" for Future 100 yr event
Inflow = 22.58 cfs @ 12.17 hrs, Volume= 1.876 af
Outflow = 15.85 cfs @ 12.27 hrs, Volume= 1.771 af, Atten= 30%, Lag= 5.9 min
Primary = 15.85 cfs @ 12.27 hrs, Volume= 1.771 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 204.31' @ 12.27 hrs Surf.Area= 7,128 sf Storage= 19,380 cf

Plug-Flow detention time= 108.0 min calculated for 1.771 af (94% of inflow)
Center-of-Mass det. time= 75.5 min (849.0 - 773.5)

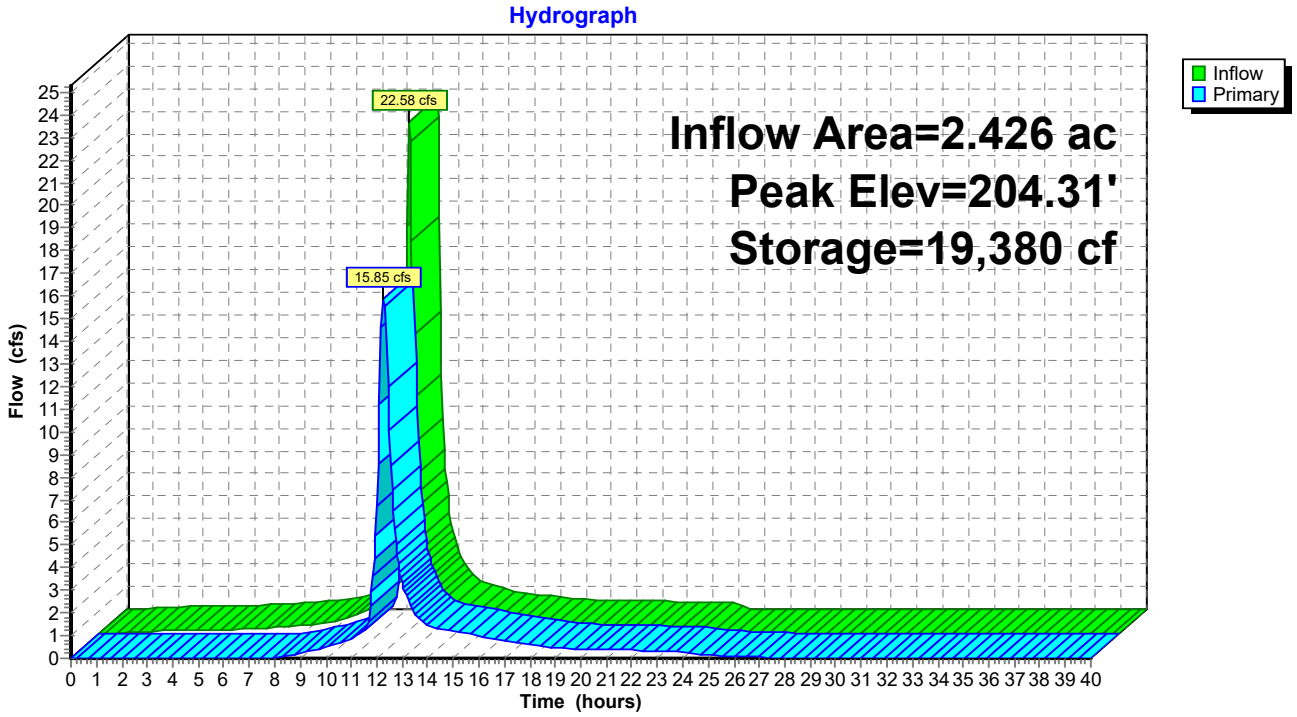
Volume	Invert	Avail.Storage	Storage Description
#1	201.00'	24,487 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.00	4,623	0	0
202.00	5,350	4,987	4,987
203.00	6,105	5,728	10,714
204.00	6,883	6,494	17,208
205.00	7,674	7,279	24,487

Device	Routing	Invert	Outlet Devices
#1	Primary	199.65'	**18.0" Round Culvert** L= 238.0' Ke= 0.500 Inlet / Outlet Invert= 199.65' / 195.50' S= 0.0174 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.90'	**7.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.02'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=15.84 cfs @ 12.27 hrs HW=204.30' (Free Discharge)
- **1=Culvert** (Barrel Controls 15.84 cfs @ 8.96 fps)
  - **2=Orifice/Grate** (Passes < 2.13 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 17.67 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-12: Basin #12



Stage-Discharge for Pond B-12: Basin #12

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.00	0.00	202.04	0.07	203.08	1.57	204.12	15.64
201.02	0.00	202.06	0.08	203.10	1.69	204.14	15.66
201.04	0.00	202.08	0.11	203.12	1.82	204.16	15.69
201.06	0.00	202.10	0.13	203.14	1.96	204.18	15.71
201.08	0.00	202.12	0.15	203.16	2.12	204.20	15.73
201.10	0.00	202.14	0.18	203.18	2.28	204.22	15.75
201.12	0.00	202.16	0.21	203.20	2.46	204.24	15.77
201.14	0.00	202.18	0.24	203.22	2.64	204.26	15.79
201.16	0.00	202.20	0.27	203.24	2.83	204.28	15.82
201.18	0.00	202.22	0.30	203.26	3.03	204.30	15.84
201.20	0.00	202.24	0.34	203.28	3.24	204.32	15.86
201.22	0.00	202.26	0.37	203.30	3.45	204.34	15.88
201.24	0.00	202.28	0.41	203.32	3.67	204.36	15.90
201.26	0.00	202.30	0.45	203.34	3.90	204.38	15.92
201.28	0.00	202.32	0.48	203.36	4.13	204.40	15.95
201.30	0.00	202.34	0.52	203.38	4.37	204.42	15.97
201.32	0.00	202.36	0.56	203.40	4.62	204.44	15.99
201.34	0.00	202.38	0.60	203.42	4.87	204.46	16.01
201.36	0.00	202.40	0.63	203.44	5.12	204.48	16.03
201.38	0.00	202.42	0.67	203.46	5.38	204.50	16.05
201.40	0.00	202.44	0.70	203.48	5.65	204.52	16.41
201.42	0.00	202.46	0.74	203.50	5.92	204.54	17.03
201.44	0.00	202.48	0.77	203.52	6.20	204.56	17.84
201.46	0.00	202.50	0.80	203.54	6.48	204.58	18.80
201.48	0.00	202.52	0.82	203.56	6.77	204.60	19.88
201.50	0.00	202.54	0.85	203.58	7.06	204.62	21.07
201.52	0.00	202.56	0.87	203.60	7.35	204.64	22.37
201.54	0.00	202.58	0.90	203.62	7.65	204.66	23.77
201.56	0.00	202.60	0.92	203.64	7.95	204.68	25.26
201.58	0.00	202.62	0.94	203.66	8.26	204.70	26.83
201.60	0.00	202.64	0.97	203.68	8.57	204.72	28.57
201.62	0.00	202.66	0.99	203.70	8.89	204.74	30.41
201.64	0.00	202.68	1.01	203.72	9.21	204.76	32.36
201.66	0.00	202.70	1.03	203.74	9.53	204.78	34.40
201.68	0.00	202.72	1.05	203.76	9.86	204.80	36.54
201.70	0.00	202.74	1.07	203.78	10.19	204.82	38.78
201.72	0.00	202.76	1.09	203.80	10.52	204.84	41.12
201.74	0.00	202.78	1.11	203.82	10.86	204.86	43.55
201.76	0.00	202.80	1.13	203.84	11.20	204.88	46.08
201.78	0.00	202.82	1.15	203.86	11.54	204.90	48.71
201.80	0.00	202.84	1.17	203.88	11.89	204.92	51.48
201.82	0.00	202.86	1.19	203.90	12.24	204.94	54.37
201.84	0.00	202.88	1.21	203.92	12.60	204.96	57.35
201.86	0.00	202.90	1.22	203.94	12.95	204.98	60.45
201.88	0.00	202.92	1.24	203.96	13.31	205.00	**63.65**
201.90	0.00	202.94	1.26	203.98	13.68		
201.92	0.00	202.96	1.28	204.00	14.04		
201.94	0.01	202.98	1.29	204.02	14.41		
201.96	0.01	203.00	1.31	204.04	14.78		
201.98	0.02	203.02	1.33	204.06	15.16		
202.00	0.03	203.04	1.38	204.08	15.54		
202.02	0.05	203.06	1.46	204.10	15.62		

Summary for Pond B-13: Basin #13

Inflow Area = 2.350 ac, 62.43% Impervious, Inflow Depth = 9.83" for Future 100 yr event
Inflow = 22.60 cfs @ 12.17 hrs, Volume= 1.924 af
Outflow = 19.12 cfs @ 12.24 hrs, Volume= 1.703 af, Atten= 15%, Lag= 4.4 min
Primary = 19.12 cfs @ 12.24 hrs, Volume= 1.703 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.07' @ 12.24 hrs Surf.Area= 10,582 sf Storage= 28,433 cf

Plug-Flow detention time= 246.0 min calculated for 1.701 af (88% of inflow)
Center-of-Mass det. time= 189.8 min (951.9 - 762.1)

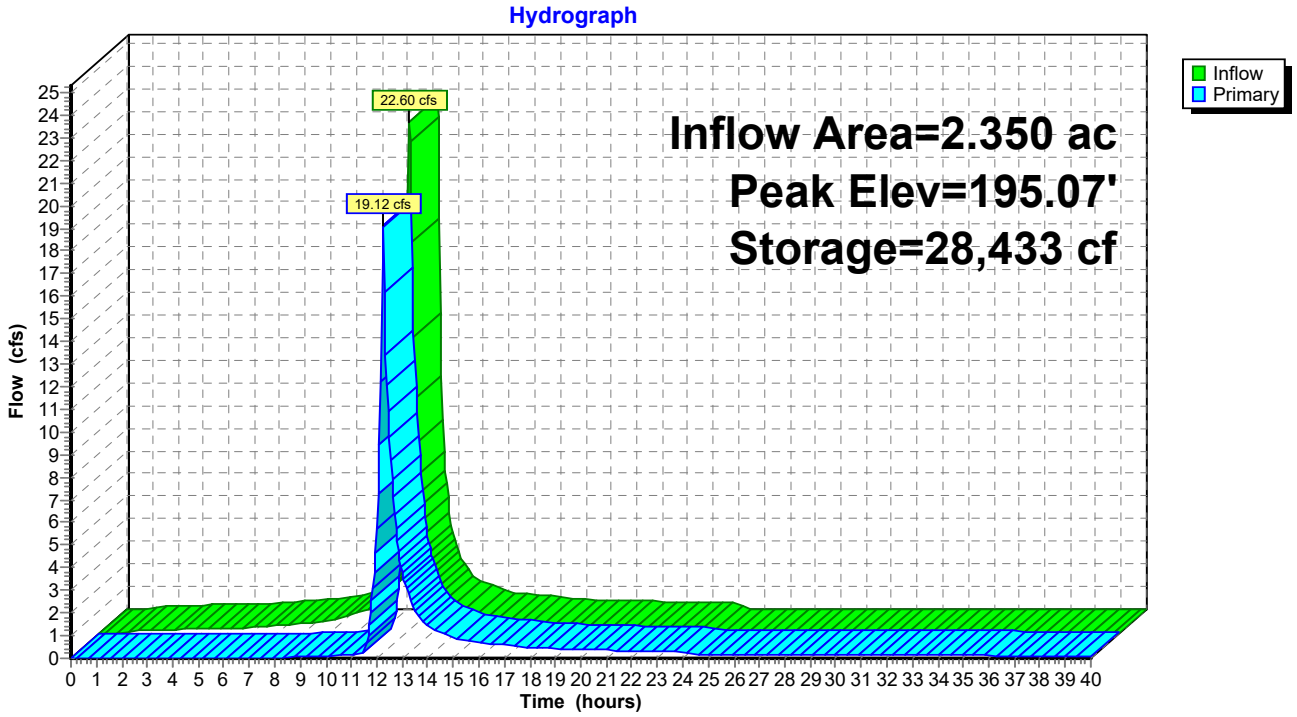
Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	38,667 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	7,975	0	0
193.00	8,804	8,390	8,390
194.00	9,654	9,229	17,619
195.00	10,522	10,088	27,707
196.00	11,399	10,961	38,667

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 57.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0465 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.70'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.95'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.96'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=18.78 cfs @ 12.24 hrs HW=195.06' (Free Discharge)
- **1=Culvert** (Passes 14.79 cfs of 16.29 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.25 cfs @ 7.24 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 14.54 cfs @ 3.45 fps)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 3.99 cfs @ 0.76 fps)

Pond B-13: Basin #13



Stage-Discharge for Pond B-13: Basin #13

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.00	0.00	193.04	0.08	194.08	0.79	195.12	23.38
192.02	0.00	193.06	0.08	194.10	0.94	195.14	25.23
192.04	0.00	193.08	0.09	194.12	1.10	195.16	27.06
192.06	0.00	193.10	0.09	194.14	1.26	195.18	28.83
192.08	0.00	193.12	0.09	194.16	1.44	195.20	30.69
192.10	0.00	193.14	0.10	194.18	1.62	195.22	32.66
192.12	0.00	193.16	0.10	194.20	1.81	195.24	34.72
192.14	0.00	193.18	0.10	194.22	2.01	195.26	36.89
192.16	0.00	193.20	0.10	194.24	2.21	195.28	39.15
192.18	0.00	193.22	0.11	194.26	2.42	195.30	41.51
192.20	0.00	193.24	0.11	194.28	2.64	195.32	43.96
192.22	0.00	193.26	0.11	194.30	2.86	195.34	46.51
192.24	0.00	193.28	0.11	194.32	3.09	195.36	49.16
192.26	0.00	193.30	0.12	194.34	3.33	195.38	51.96
192.28	0.00	193.32	0.12	194.36	3.57	195.40	54.87
192.30	0.00	193.34	0.12	194.38	3.81	195.42	57.88
192.32	0.00	193.36	0.12	194.40	4.07	195.44	60.99
192.34	0.00	193.38	0.12	194.42	4.32	195.46	64.21
192.36	0.00	193.40	0.13	194.44	4.59	195.48	67.53
192.38	0.00	193.42	0.13	194.46	4.85	195.50	70.97
192.40	0.00	193.44	0.13	194.48	5.13	195.52	74.50
192.42	0.00	193.46	0.13	194.50	5.40	195.54	78.15
192.44	0.00	193.48	0.13	194.52	5.68	195.56	81.90
192.46	0.00	193.50	0.14	194.54	5.97	195.58	85.21
192.48	0.00	193.52	0.14	194.56	6.26	195.60	88.58
192.50	0.00	193.54	0.14	194.58	6.55	195.62	91.99
192.52	0.00	193.56	0.14	194.60	6.85	195.64	95.46
192.54	0.00	193.58	0.14	194.62	7.15	195.66	98.98
192.56	0.00	193.60	0.15	194.64	7.46	195.68	102.55
192.58	0.00	193.62	0.15	194.66	7.77	195.70	106.17
192.60	0.00	193.64	0.15	194.68	8.09	195.72	109.84
192.62	0.00	193.66	0.15	194.70	8.40	195.74	113.56
192.64	0.00	193.68	0.15	194.72	8.72	195.76	117.33
192.66	0.00	193.70	0.16	194.74	9.05	195.78	121.22
192.68	0.00	193.72	0.16	194.76	9.38	195.80	125.17
192.70	0.00	193.74	0.16	194.78	9.71	195.82	129.17
192.72	0.00	193.76	0.16	194.80	10.05	195.84	133.22
192.74	0.00	193.78	0.16	194.82	10.39	195.86	137.32
192.76	0.01	193.80	0.16	194.84	10.73	195.88	141.48
192.78	0.01	193.82	0.17	194.86	11.07	195.90	145.68
192.80	0.02	193.84	0.17	194.88	11.42	195.92	149.94
192.82	0.02	193.86	0.17	194.90	11.77	195.94	154.25
192.84	0.03	193.88	0.17	194.92	12.13	195.96	158.60
192.86	0.04	193.90	0.17	194.94	12.49	195.98	162.90
192.88	0.05	193.92	0.17	194.96	12.85	196.00	**167.24**
192.90	0.05	193.94	0.17	194.98	13.54		
192.92	0.06	193.96	0.19	195.00	14.52		
192.94	0.06	193.98	0.25	195.02	15.67		
192.96	0.06	194.00	0.33	195.04	16.98		
192.98	0.07	194.02	0.42	195.06	18.41		
193.00	0.07	194.04	0.53	195.08	19.96		
193.02	0.08	194.06	0.66	195.10	21.62		

Summary for Pond B-14: Basin #14

Inflow Area = 2.148 ac, 23.65% Impervious, Inflow Depth = 8.63" for Future 100 yr event
Inflow = 19.21 cfs @ 12.17 hrs, Volume= 1.544 af
Outflow = 16.90 cfs @ 12.23 hrs, Volume= 1.458 af, Atten= 12%, Lag= 3.5 min
Primary = 16.90 cfs @ 12.23 hrs, Volume= 1.458 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.53' @ 12.23 hrs Surf.Area= 7,424 sf Storage= 17,218 cf

Plug-Flow detention time= 178.1 min calculated for 1.458 af (94% of inflow)
Center-of-Mass det. time= 146.5 min (935.6 - 789.0)

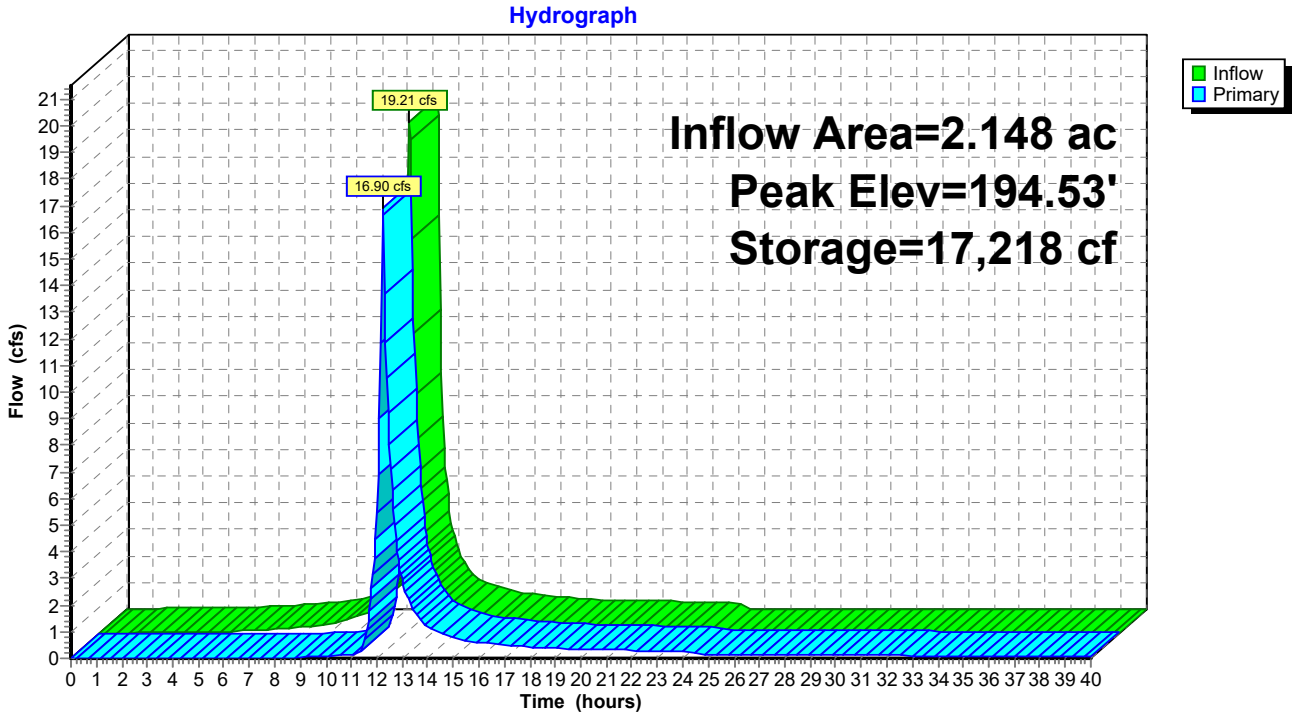
Volume	Invert	Avail.Storage	Storage Description
#1	192.00'	28,705 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.00	6,224	0	0
193.00	6,689	6,457	6,457
194.00	7,167	6,928	13,385
195.00	7,657	7,412	20,797
196.00	8,160	7,909	28,705

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 194.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0137 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.40'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.45'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.44'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=16.50 cfs @ 12.23 hrs HW=194.52' (Free Discharge)
- **1=Culvert** (Passes 13.91 cfs of 14.14 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.83 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 13.68 cfs @ 3.38 fps)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 2.59 cfs @ 0.66 fps)

Pond B-14: Basin #14



Stage-Discharge for Pond B-14: Basin #14

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.00	0.00	193.04	0.12	194.08	6.54	195.12	92.90
192.02	0.00	193.06	0.12	194.10	6.84	195.14	96.41
192.04	0.00	193.08	0.12	194.12	7.14	195.16	99.96
192.06	0.00	193.10	0.13	194.14	7.45	195.18	103.57
192.08	0.00	193.12	0.13	194.16	7.76	195.20	107.23
192.10	0.00	193.14	0.13	194.18	8.07	195.22	110.93
192.12	0.00	193.16	0.13	194.20	8.39	195.24	114.69
192.14	0.00	193.18	0.13	194.22	8.71	195.26	118.57
192.16	0.00	193.20	0.14	194.24	9.04	195.28	122.50
192.18	0.00	193.22	0.14	194.26	9.37	195.30	126.48
192.20	0.00	193.24	0.14	194.28	9.70	195.32	130.52
192.22	0.00	193.26	0.14	194.30	10.03	195.34	134.61
192.24	0.00	193.28	0.14	194.32	10.37	195.36	138.75
192.26	0.00	193.30	0.15	194.34	10.72	195.38	142.94
192.28	0.00	193.32	0.15	194.36	11.06	195.40	147.18
192.30	0.00	193.34	0.15	194.38	11.41	195.42	151.47
192.32	0.00	193.36	0.15	194.40	11.76	195.44	155.82
192.34	0.00	193.38	0.15	194.42	12.12	195.46	160.10
192.36	0.00	193.40	0.16	194.44	12.47	195.48	164.43
192.38	0.00	193.42	0.16	194.46	13.17	195.50	168.80
192.40	0.00	193.44	0.16	194.48	14.14	195.52	173.21
192.42	0.00	193.46	0.17	194.50	15.29	195.54	177.66
192.44	0.00	193.48	0.23	194.52	16.59	195.56	182.16
192.46	0.01	193.50	0.31	194.54	17.89	195.58	186.69
192.48	0.01	193.52	0.41	194.56	19.09	195.60	191.27
192.50	0.02	193.54	0.52	194.58	20.40	195.62	195.89
192.52	0.02	193.56	0.64	194.60	21.80	195.64	200.54
192.54	0.03	193.58	0.78	194.62	23.29	195.66	205.31
192.56	0.04	193.60	0.93	194.64	24.88	195.68	210.12
192.58	0.05	193.62	1.08	194.66	26.62	195.70	214.98
192.60	0.05	193.64	1.25	194.68	28.47	195.72	219.87
192.62	0.06	193.66	1.42	194.70	30.42	195.74	224.81
192.64	0.06	193.68	1.60	194.72	32.47	195.76	229.79
192.66	0.06	193.70	1.79	194.74	34.62	195.78	234.81
192.68	0.07	193.72	1.99	194.76	36.86	195.80	239.88
192.70	0.07	193.74	2.20	194.78	39.21	195.82	244.98
192.72	0.08	193.76	2.41	194.80	41.65	195.84	250.13
192.74	0.08	193.78	2.62	194.82	44.18	195.86	255.41
192.76	0.08	193.80	2.85	194.84	46.82	195.88	260.73
192.78	0.09	193.82	3.08	194.86	49.60	195.90	266.10
192.80	0.09	193.84	3.31	194.88	52.49	195.92	271.51
192.82	0.09	193.86	3.55	194.90	55.48	195.94	276.96
192.84	0.10	193.88	3.80	194.92	58.58	195.96	282.46
192.86	0.10	193.90	4.05	194.94	61.79	195.98	288.00
192.88	0.10	193.92	4.31	194.96	65.10	196.00	**293.59**
192.90	0.10	193.94	4.57	194.98	68.51		
192.92	0.11	193.96	4.84	195.00	72.04		
192.94	0.11	193.98	5.11	195.02	75.67		
192.96	0.11	194.00	5.39	195.04	79.41		
192.98	0.11	194.02	5.67	195.06	82.70		
193.00	0.12	194.04	5.96	195.08	86.05		
193.02	0.12	194.06	6.25	195.10	89.45		

Summary for Pond B-15: Basin #15

Inflow Area = 2.365 ac, 58.73% Impervious, Inflow Depth = 9.71" for Future 100 yr event
Inflow = 22.59 cfs @ 12.17 hrs, Volume= 1.914 af
Outflow = 15.86 cfs @ 12.26 hrs, Volume= 1.786 af, Atten= 30%, Lag= 5.6 min
Primary = 15.86 cfs @ 12.26 hrs, Volume= 1.786 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.00' @ 12.27 hrs Surf.Area= 6,002 sf Storage= 19,269 cf

Plug-Flow detention time= 118.0 min calculated for 1.786 af (93% of inflow)
Center-of-Mass det. time= 79.8 min (844.2 - 764.4)

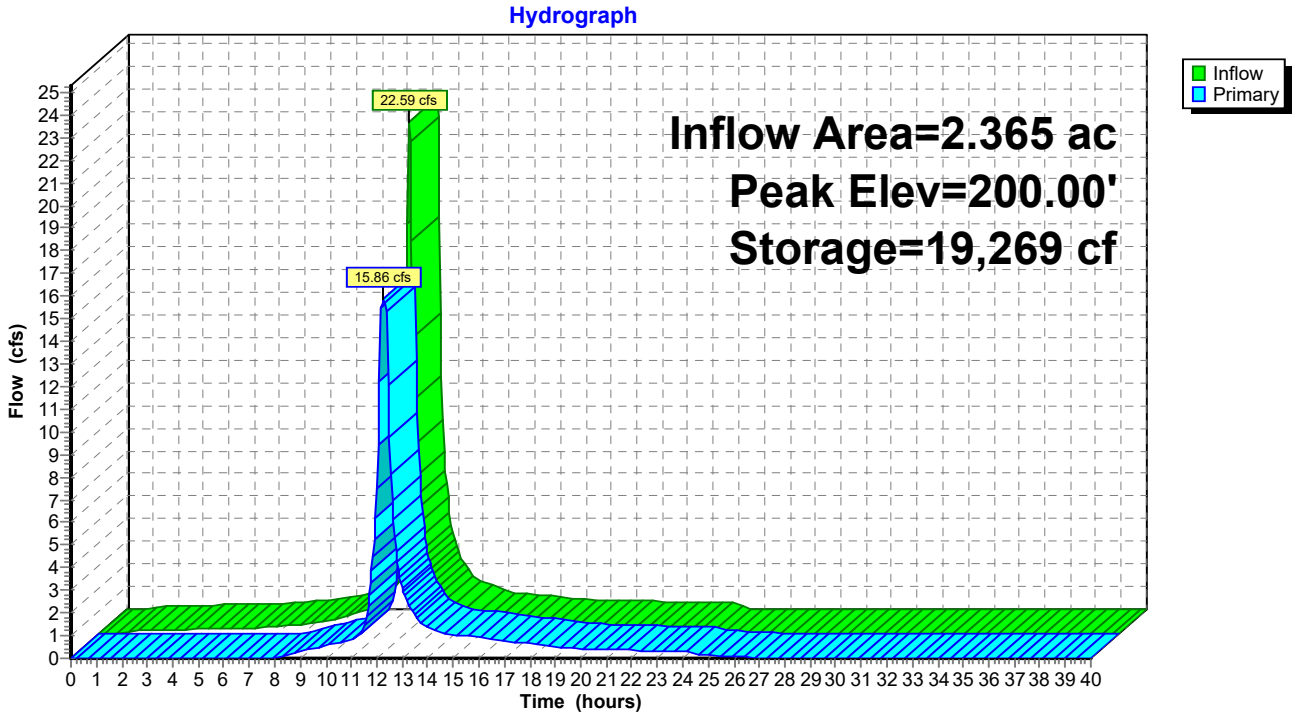
Volume	Invert	Avail.Storage	Storage Description
#1	196.00'	19,269 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.00	3,706	0	0
197.00	4,236	3,971	3,971
198.00	4,795	4,516	8,487
199.00	5,384	5,090	13,576
200.00	6,002	5,693	19,269

Device	Routing	Invert	Outlet Devices
#1	Primary	194.65'	**18.0" Round Culvert** L= 203.0' Ke= 0.500 Inlet / Outlet Invert= 194.65' / 192.00' S= 0.0131 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	197.35'	**6.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	198.58'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	199.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=15.82 cfs @ 12.26 hrs HW=199.99' (Free Discharge)
- **1=Culvert** (Barrel Controls 15.82 cfs @ 8.95 fps)
  - **2=Orifice/Grate** (Passes < 1.71 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 20.30 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-15: Basin #15



Stage-Discharge for Pond B-15: Basin #15

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.00	0.00	197.04	0.00	198.08	0.75	199.12	6.41
196.02	0.00	197.06	0.00	198.10	0.77	199.14	6.70
196.04	0.00	197.08	0.00	198.12	0.78	199.16	6.99
196.06	0.00	197.10	0.00	198.14	0.80	199.18	7.28
196.08	0.00	197.12	0.00	198.16	0.81	199.20	7.58
196.10	0.00	197.14	0.00	198.18	0.83	199.22	7.89
196.12	0.00	197.16	0.00	198.20	0.84	199.24	8.19
196.14	0.00	197.18	0.00	198.22	0.86	199.26	8.51
196.16	0.00	197.20	0.00	198.24	0.87	199.28	8.82
196.18	0.00	197.22	0.00	198.26	0.89	199.30	9.14
196.20	0.00	197.24	0.00	198.28	0.90	199.32	9.46
196.22	0.00	197.26	0.00	198.30	0.91	199.34	9.79
196.24	0.00	197.28	0.00	198.32	0.93	199.36	10.12
196.26	0.00	197.30	0.00	198.34	0.94	199.38	10.46
196.28	0.00	197.32	0.00	198.36	0.95	199.40	10.79
196.30	0.00	197.34	0.00	198.38	0.97	199.42	11.14
196.32	0.00	197.36	0.00	198.40	0.98	199.44	11.48
196.34	0.00	197.38	0.00	198.42	0.99	199.46	11.83
196.36	0.00	197.40	0.01	198.44	1.00	199.48	12.18
196.38	0.00	197.42	0.02	198.46	1.02	199.50	12.53
196.40	0.00	197.44	0.03	198.48	1.03	199.52	12.89
196.42	0.00	197.46	0.04	198.50	1.04	199.54	13.25
196.44	0.00	197.48	0.05	198.52	1.05	199.56	13.61
196.46	0.00	197.50	0.07	198.54	1.06	199.58	13.98
196.48	0.00	197.52	0.09	198.56	1.08	199.60	14.35
196.50	0.00	197.54	0.11	198.58	1.09	199.62	14.72
196.52	0.00	197.56	0.13	198.60	1.13	199.64	15.09
196.54	0.00	197.58	0.15	198.62	1.21	199.66	15.42
196.56	0.00	197.60	0.18	198.64	1.31	199.68	15.44
196.58	0.00	197.62	0.20	198.66	1.43	199.70	15.47
196.60	0.00	197.64	0.23	198.68	1.55	199.72	15.49
196.62	0.00	197.66	0.26	198.70	1.69	199.74	15.52
196.64	0.00	197.68	0.29	198.72	1.84	199.76	15.54
196.66	0.00	197.70	0.32	198.74	2.00	199.78	15.57
196.68	0.00	197.72	0.35	198.76	2.17	199.80	15.59
196.70	0.00	197.74	0.38	198.78	2.35	199.82	15.62
196.72	0.00	197.76	0.41	198.80	2.54	199.84	15.64
196.74	0.00	197.78	0.44	198.82	2.73	199.86	15.66
196.76	0.00	197.80	0.47	198.84	2.94	199.88	15.69
196.78	0.00	197.82	0.50	198.86	3.15	199.90	15.71
196.80	0.00	197.84	0.52	198.88	3.36	199.92	15.74
196.82	0.00	197.86	0.55	198.90	3.58	199.94	15.76
196.84	0.00	197.88	0.57	198.92	3.81	199.96	15.79
196.86	0.00	197.90	0.59	198.94	4.05	199.98	15.81
196.88	0.00	197.92	0.61	198.96	4.29	200.00	**15.95**
196.90	0.00	197.94	0.63	198.98	4.54		
196.92	0.00	197.96	0.65	199.00	4.79		
196.94	0.00	197.98	0.66	199.02	5.05		
196.96	0.00	198.00	0.68	199.04	5.31		
196.98	0.00	198.02	0.70	199.06	5.58		
197.00	0.00	198.04	0.72	199.08	5.85		
197.02	0.00	198.06	0.74	199.10	6.13		

Summary for Pond B-16A: Basin #16A

Inflow Area = 1.876 ac, 45.47% Impervious, Inflow Depth = 9.30" for Future 100 yr event
Inflow = 17.49 cfs @ 12.17 hrs, Volume= 1.454 af
Outflow = 15.20 cfs @ 12.23 hrs, Volume= 1.375 af, Atten= 13%, Lag= 3.5 min
Primary = 15.20 cfs @ 12.23 hrs, Volume= 1.375 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.84' @ 12.23 hrs Surf.Area= 4,733 sf Storage= 10,297 cf

Plug-Flow detention time= 74.2 min calculated for 1.373 af (94% of inflow)
Center-of-Mass det. time= 42.8 min (815.8 - 773.0)

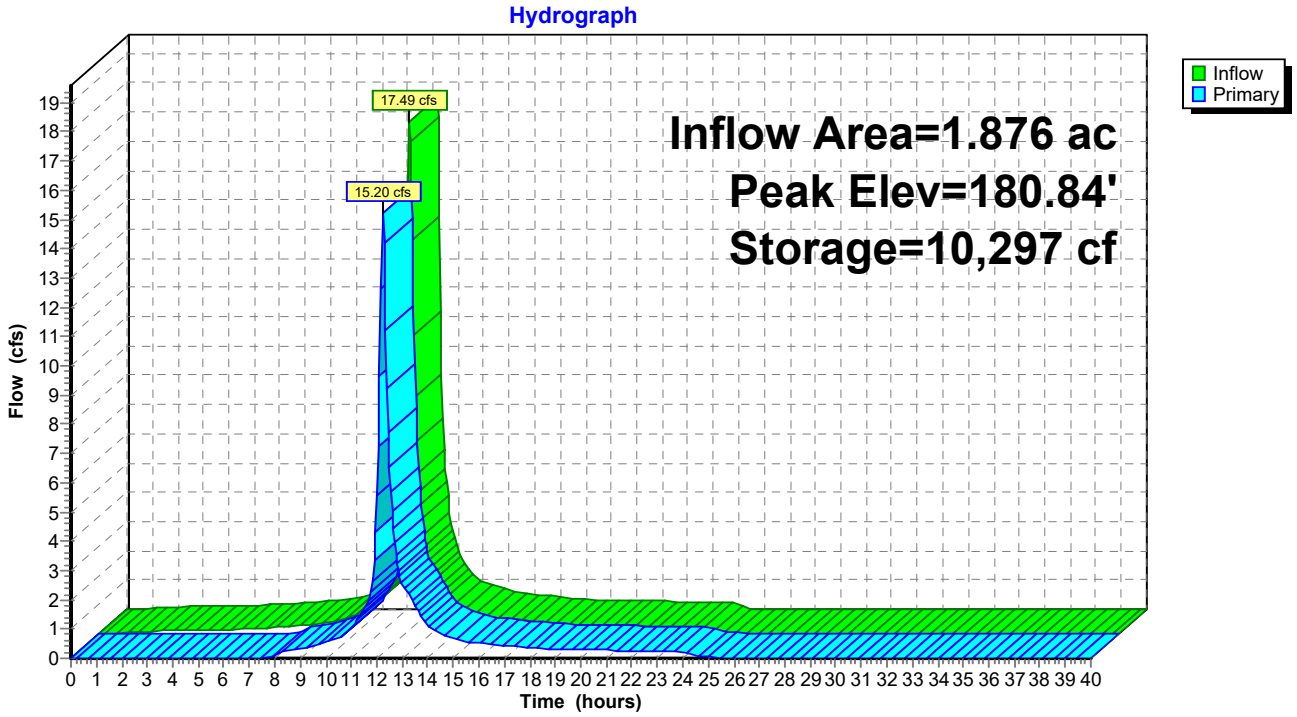
Volume	Invert	Avail.Storage	Storage Description
#1	178.00'	16,318 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
178.00	2,543	0	0
179.00	3,287	2,915	2,915
180.00	4,059	3,673	6,588
181.00	4,858	4,459	11,047
182.00	5,685	5,272	16,318

Device	Routing	Invert	Outlet Devices
#1	Primary	176.65'	**18.0" Round Culvert** L= 53.0' Ke= 0.500 Inlet / Outlet Invert= 176.65' / 172.00' S= 0.0877 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.16'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.98 cfs @ 12.23 hrs HW=180.83' (Free Discharge)
- **1=Culvert** (Passes 14.98 cfs of 15.76 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.94 cfs @ 5.90 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 11.04 cfs @ 3.14 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-16A: Basin #16A



Stage-Discharge for Pond B-16A: Basin #16A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.00	0.00	179.04	0.00	180.08	3.69	181.12	16.41
178.02	0.00	179.06	0.00	180.10	3.89	181.14	16.46
178.04	0.00	179.08	0.00	180.12	4.10	181.16	16.50
178.06	0.00	179.10	0.00	180.14	4.32	181.18	16.54
178.08	0.00	179.12	0.00	180.16	4.54	181.20	16.59
178.10	0.00	179.14	0.00	180.18	4.77	181.22	16.63
178.12	0.00	179.16	0.00	180.20	5.01	181.24	16.67
178.14	0.00	179.18	0.02	180.22	5.25	181.26	16.72
178.16	0.00	179.20	0.05	180.24	5.50	181.28	16.76
178.18	0.00	179.22	0.09	180.26	5.76	181.30	16.80
178.20	0.00	179.24	0.15	180.28	6.02	181.32	16.85
178.22	0.00	179.26	0.20	180.30	6.29	181.34	16.89
178.24	0.00	179.28	0.27	180.32	6.56	181.36	16.93
178.26	0.00	179.30	0.34	180.34	6.84	181.38	16.97
178.28	0.00	179.32	0.41	180.36	7.12	181.40	17.02
178.30	0.00	179.34	0.49	180.38	7.41	181.42	17.06
178.32	0.00	179.36	0.57	180.40	7.70	181.44	17.10
178.34	0.00	179.38	0.66	180.42	8.00	181.46	17.14
178.36	0.00	179.40	0.75	180.44	8.30	181.48	17.19
178.38	0.00	179.42	0.85	180.46	8.60	181.50	17.23
178.40	0.00	179.44	0.95	180.48	8.91	181.52	17.27
178.42	0.00	179.46	1.05	180.50	9.23	181.54	17.31
178.44	0.00	179.48	1.16	180.52	9.55	181.56	17.35
178.46	0.00	179.50	1.27	180.54	9.87	181.58	17.40
178.48	0.00	179.52	1.36	180.56	10.19	181.60	17.44
178.50	0.00	179.54	1.44	180.58	10.52	181.62	17.48
178.52	0.00	179.56	1.51	180.60	10.86	181.64	17.52
178.54	0.00	179.58	1.58	180.62	11.20	181.66	17.56
178.56	0.00	179.60	1.65	180.64	11.54	181.68	17.60
178.58	0.00	179.62	1.71	180.66	11.88	181.70	17.64
178.60	0.00	179.64	1.77	180.68	12.23	181.72	17.69
178.62	0.00	179.66	1.83	180.70	12.58	181.74	17.73
178.64	0.00	179.68	1.89	180.72	12.94	181.76	17.77
178.66	0.00	179.70	1.94	180.74	13.29	181.78	17.81
178.68	0.00	179.72	2.00	180.76	13.66	181.80	17.85
178.70	0.00	179.74	2.05	180.78	14.02	181.82	17.89
178.72	0.00	179.76	2.10	180.80	14.39	181.84	17.93
178.74	0.00	179.78	2.15	180.82	14.76	181.86	17.97
178.76	0.00	179.80	2.20	180.84	15.13	181.88	18.01
178.78	0.00	179.82	2.24	180.86	15.51	181.90	18.05
178.80	0.00	179.84	2.29	180.88	15.87	181.92	18.09
178.82	0.00	179.86	2.33	180.90	15.92	181.94	18.13
178.84	0.00	179.88	2.38	180.92	15.96	181.96	18.29
178.86	0.00	179.90	2.42	180.94	16.01	181.98	18.82
178.88	0.00	179.92	2.48	180.96	16.05	182.00	**19.56**
178.90	0.00	179.94	2.57	180.98	16.10		
178.92	0.00	179.96	2.69	181.00	16.14		
178.94	0.00	179.98	2.83	181.02	16.19		
178.96	0.00	180.00	2.98	181.04	16.23		
178.98	0.00	180.02	3.14	181.06	16.28		
179.00	0.00	180.04	3.31	181.08	16.32		
179.02	0.00	180.06	3.50	181.10	16.37		

Summary for Pond B-16B: Basin #16B

Inflow Area = 1.877 ac, 43.74% Impervious, Inflow Depth = 9.25" for Future 100 yr event
Inflow = 17.44 cfs @ 12.17 hrs, Volume= 1.446 af
Outflow = 17.22 cfs @ 12.19 hrs, Volume= 1.367 af, Atten= 1%, Lag= 1.4 min
Primary = 17.22 cfs @ 12.19 hrs, Volume= 1.367 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.81' @ 12.19 hrs Surf.Area= 5,014 sf Storage= 11,399 cf

Plug-Flow detention time= 83.4 min calculated for 1.367 af (95% of inflow)
Center-of-Mass det. time= 51.0 min (825.2 - 774.2)

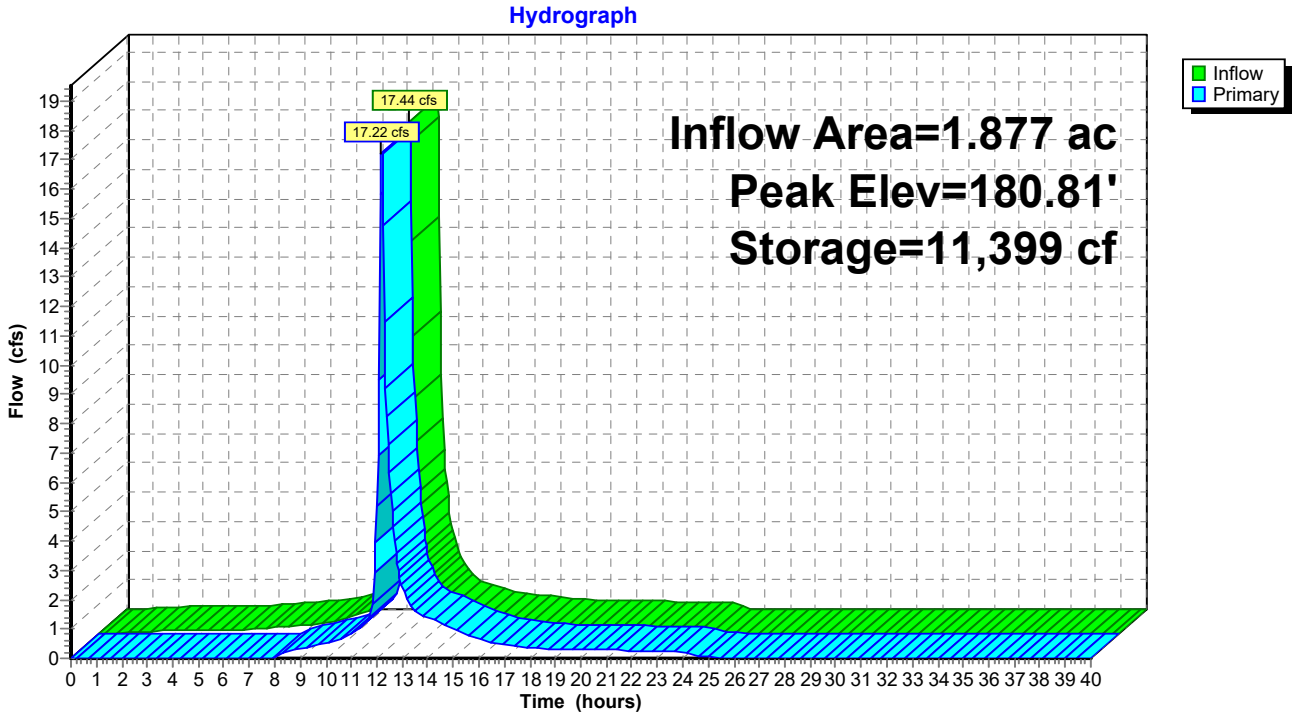
Volume	Invert	Avail.Storage	Storage Description
#1	178.00'	17,892 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
178.00	3,145	0	0
179.00	3,781	3,463	3,463
180.00	4,451	4,116	7,579
181.00	5,149	4,800	12,379
182.00	5,877	5,513	17,892

Device	Routing	Invert	Outlet Devices
#1	Primary	176.65'	**18.0" Round Culvert** L= 53.0' Ke= 0.500 Inlet / Outlet Invert= 176.65' / 172.00' S= 0.0877 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.00'	**24.0" W x 2.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	180.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.67'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=16.95 cfs @ 12.19 hrs HW=180.80' (Free Discharge)
- **1=Culvert** (Passes 11.16 cfs of 15.70 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.11 cfs @ 6.32 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 9.05 cfs @ 2.93 fps)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 5.79 cfs @ 0.86 fps)

Pond B-16B: Basin #16B



Stage-Discharge for Pond B-16B: Basin #16B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.00	0.00	179.04	0.05	180.08	1.90	181.12	55.73
178.02	0.00	179.06	0.09	180.10	2.03	181.14	58.79
178.04	0.00	179.08	0.15	180.12	2.17	181.16	61.96
178.06	0.00	179.10	0.20	180.14	2.33	181.18	65.24
178.08	0.00	179.12	0.27	180.16	2.50	181.20	68.62
178.10	0.00	179.14	0.34	180.18	2.67	181.22	72.10
178.12	0.00	179.16	0.41	180.20	2.85	181.24	75.70
178.14	0.00	179.18	0.48	180.22	3.05	181.26	79.40
178.16	0.00	179.20	0.54	180.24	3.25	181.28	82.94
178.18	0.00	179.22	0.58	180.26	3.45	181.30	86.27
178.20	0.00	179.24	0.63	180.28	3.67	181.32	89.66
178.22	0.00	179.26	0.67	180.30	3.89	181.34	93.11
178.24	0.00	179.28	0.71	180.32	4.11	181.36	96.60
178.26	0.00	179.30	0.74	180.34	4.35	181.38	100.15
178.28	0.00	179.32	0.78	180.36	4.59	181.40	103.75
178.30	0.00	179.34	0.81	180.38	4.83	181.42	107.40
178.32	0.00	179.36	0.84	180.40	5.08	181.44	111.09
178.34	0.00	179.38	0.87	180.42	5.34	181.46	114.84
178.36	0.00	179.40	0.90	180.44	5.60	181.48	118.67
178.38	0.00	179.42	0.93	180.46	5.87	181.50	122.59
178.40	0.00	179.44	0.96	180.48	6.14	181.52	126.57
178.42	0.00	179.46	0.98	180.50	6.42	181.54	130.59
178.44	0.00	179.48	1.01	180.52	6.70	181.56	134.67
178.46	0.00	179.50	1.03	180.54	6.99	181.58	138.80
178.48	0.00	179.52	1.06	180.56	7.28	181.60	142.98
178.50	0.00	179.54	1.08	180.58	7.57	181.62	147.21
178.52	0.00	179.56	1.11	180.60	7.87	181.64	151.50
178.54	0.00	179.58	1.13	180.62	8.18	181.66	155.83
178.56	0.00	179.60	1.15	180.64	8.48	181.68	160.16
178.58	0.00	179.62	1.17	180.66	8.80	181.70	164.48
178.60	0.00	179.64	1.20	180.68	9.23	181.72	168.84
178.62	0.00	179.66	1.22	180.70	10.04	181.74	173.25
178.64	0.00	179.68	1.24	180.72	11.07	181.76	177.70
178.66	0.00	179.70	1.26	180.74	12.26	181.78	182.19
178.68	0.00	179.72	1.28	180.76	13.59	181.80	186.72
178.70	0.00	179.74	1.30	180.78	15.04	181.82	191.29
178.72	0.00	179.76	1.32	180.80	16.61	181.84	195.90
178.74	0.00	179.78	1.34	180.82	18.28	181.86	200.55
178.76	0.00	179.80	1.36	180.84	20.04	181.88	205.28
178.78	0.00	179.82	1.38	180.86	21.90	181.90	210.08
178.80	0.00	179.84	1.40	180.88	23.89	181.92	214.93
178.82	0.00	179.86	1.41	180.90	26.01	181.94	219.82
178.84	0.00	179.88	1.43	180.92	28.24	181.96	224.75
178.86	0.00	179.90	1.45	180.94	30.57	181.98	229.73
178.88	0.00	179.92	1.47	180.96	33.01	182.00	**234.74**
178.90	0.00	179.94	1.48	180.98	35.54		
178.92	0.00	179.96	1.50	181.00	38.18		
178.94	0.00	179.98	1.52	181.02	40.92		
178.96	0.00	180.00	1.54	181.04	43.75		
178.98	0.00	180.02	1.59	181.06	46.69		
179.00	0.00	180.04	1.67	181.08	49.75		
179.02	0.02	180.06	1.78	181.10	52.77		

Summary for Pond B-17A: Basin #17A

Inflow Area = 1.324 ac, 14.58% Impervious, Inflow Depth = 8.34" for Future 100 yr event
Inflow = 11.63 cfs @ 12.17 hrs, Volume= 0.921 af
Outflow = 3.26 cfs @ 12.52 hrs, Volume= 0.757 af, Atten= 72%, Lag= 20.8 min
Primary = 3.26 cfs @ 12.52 hrs, Volume= 0.757 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 182.03' @ 12.52 hrs Surf.Area= 8,698 sf Storage= 21,434 cf

Plug-Flow detention time= 564.4 min calculated for 0.756 af (82% of inflow)
Center-of-Mass det. time= 490.6 min (1,287.1 - 796.4)

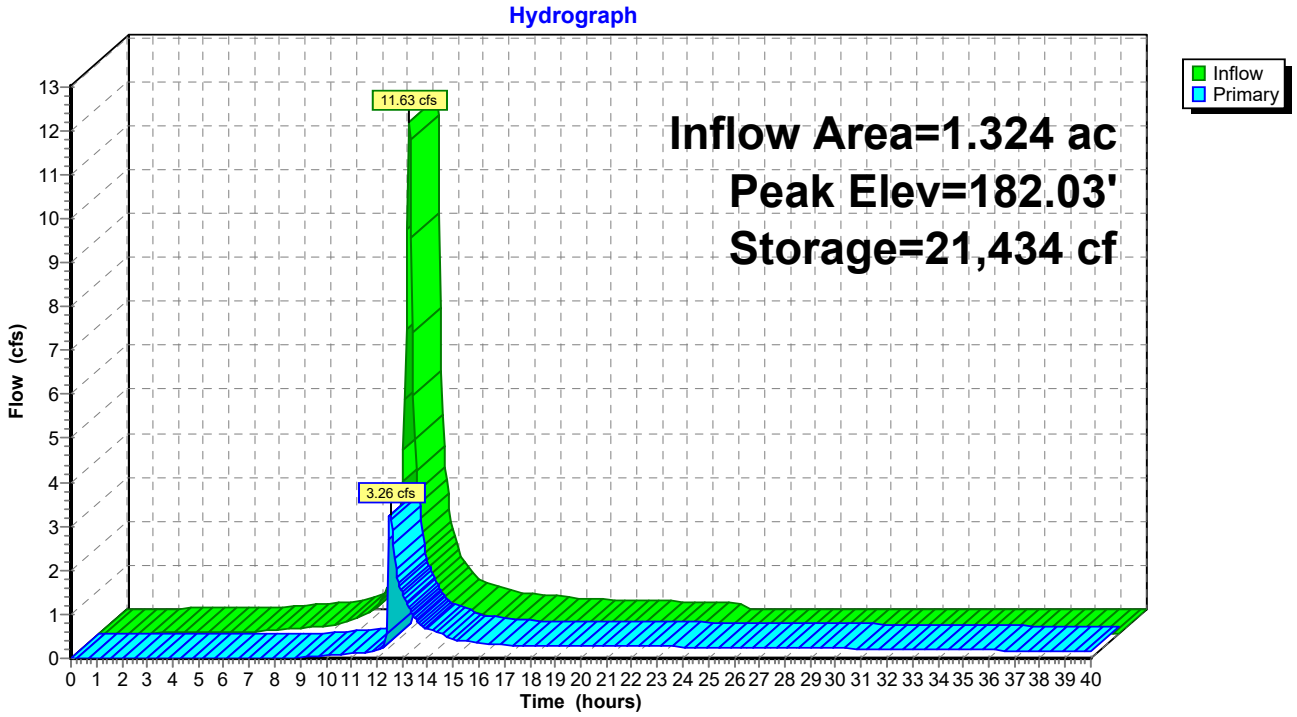
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	30,377 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	5,508	0	0
180.00	6,502	6,005	6,005
181.00	7,552	7,027	13,032
182.00	8,658	8,105	21,137
183.00	9,821	9,240	30,377

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 177.00' S= 0.0163 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.18'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	182.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.15 cfs @ 12.52 hrs HW=182.03' (Free Discharge)
- **1=Culvert** (Passes 0.35 cfs of 16.22 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.27 cfs @ 7.98 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.08 cfs @ 0.59 fps)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 2.80 cfs @ 0.67 fps)

Pond B-17A: Basin #17A



Stage-Discharge for Pond B-17A: Basin #17A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.14	181.08	0.22	182.12	9.08
179.02	0.00	180.06	0.14	181.10	0.22	182.14	10.74
179.04	0.00	180.08	0.15	181.12	0.22	182.16	12.52
179.06	0.00	180.10	0.15	181.14	0.22	182.18	14.45
179.08	0.00	180.12	0.15	181.16	0.22	182.20	16.49
179.10	0.00	180.14	0.15	181.18	0.23	182.22	18.64
179.12	0.00	180.16	0.15	181.20	0.23	182.24	20.90
179.14	0.00	180.18	0.16	181.22	0.23	182.26	23.26
179.16	0.00	180.20	0.16	181.24	0.23	182.28	25.73
179.18	0.00	180.22	0.16	181.26	0.23	182.30	28.30
179.20	0.00	180.24	0.16	181.28	0.23	182.32	30.97
179.22	0.00	180.26	0.16	181.30	0.23	182.34	33.75
179.24	0.01	180.28	0.16	181.32	0.23	182.36	36.66
179.26	0.01	180.30	0.17	181.34	0.24	182.38	39.70
179.28	0.02	180.32	0.17	181.36	0.24	182.40	42.85
179.30	0.02	180.34	0.17	181.38	0.24	182.42	46.11
179.32	0.03	180.36	0.17	181.40	0.24	182.44	49.49
179.34	0.04	180.38	0.17	181.42	0.24	182.46	52.97
179.36	0.05	180.40	0.17	181.44	0.24	182.48	56.57
179.38	0.05	180.42	0.17	181.46	0.24	182.50	60.28
179.40	0.06	180.44	0.18	181.48	0.24	182.52	64.09
179.42	0.06	180.46	0.18	181.50	0.24	182.54	68.03
179.44	0.06	180.48	0.18	181.52	0.25	182.56	71.80
179.46	0.07	180.50	0.18	181.54	0.25	182.58	75.38
179.48	0.07	180.52	0.18	181.56	0.25	182.60	79.01
179.50	0.08	180.54	0.18	181.58	0.25	182.62	82.71
179.52	0.08	180.56	0.19	181.60	0.25	182.64	86.46
179.54	0.08	180.58	0.19	181.62	0.25	182.66	90.26
179.56	0.09	180.60	0.19	181.64	0.25	182.68	94.12
179.58	0.09	180.62	0.19	181.66	0.25	182.70	98.03
179.60	0.09	180.64	0.19	181.68	0.25	182.72	102.00
179.62	0.10	180.66	0.19	181.70	0.26	182.74	106.02
179.64	0.10	180.68	0.19	181.72	0.26	182.76	110.13
179.66	0.10	180.70	0.20	181.74	0.26	182.78	114.33
179.68	0.10	180.72	0.20	181.76	0.26	182.80	118.59
179.70	0.11	180.74	0.20	181.78	0.26	182.82	122.90
179.72	0.11	180.76	0.20	181.80	0.26	182.84	127.27
179.74	0.11	180.78	0.20	181.82	0.26	182.86	131.70
179.76	0.11	180.80	0.20	181.84	0.26	182.88	136.18
179.78	0.12	180.82	0.20	181.86	0.26	182.90	140.71
179.80	0.12	180.84	0.20	181.88	0.26	182.92	145.30
179.82	0.12	180.86	0.21	181.90	0.27	182.94	149.94
179.84	0.12	180.88	0.21	181.92	0.27	182.96	154.58
179.86	0.12	180.90	0.21	181.94	0.27	182.98	159.22
179.88	0.13	180.92	0.21	181.96	0.39	183.00	**163.90**
179.90	0.13	180.94	0.21	181.98	0.88		
179.92	0.13	180.96	0.21	182.00	1.58		
179.94	0.13	180.98	0.21	182.02	2.48		
179.96	0.13	181.00	0.22	182.04	3.55		
179.98	0.14	181.02	0.22	182.06	4.76		
180.00	0.14	181.04	0.22	182.08	6.09		
180.02	0.14	181.06	0.22	182.10	7.53		

Summary for Pond B-17B: Basin #17B

Inflow Area = 1.385 ac, 37.11% Impervious, Inflow Depth = 9.04" for Future 100 yr event
Inflow = 12.71 cfs @ 12.17 hrs, Volume= 1.044 af
Outflow = 9.22 cfs @ 12.27 hrs, Volume= 0.971 af, Atten= 27%, Lag= 5.7 min
Primary = 9.22 cfs @ 12.27 hrs, Volume= 0.971 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.66' @ 12.27 hrs Surf.Area= 8,852 sf Storage= 13,042 cf

Plug-Flow detention time= 175.1 min calculated for 0.971 af (93% of inflow)
Center-of-Mass det. time= 136.1 min (914.9 - 778.9)

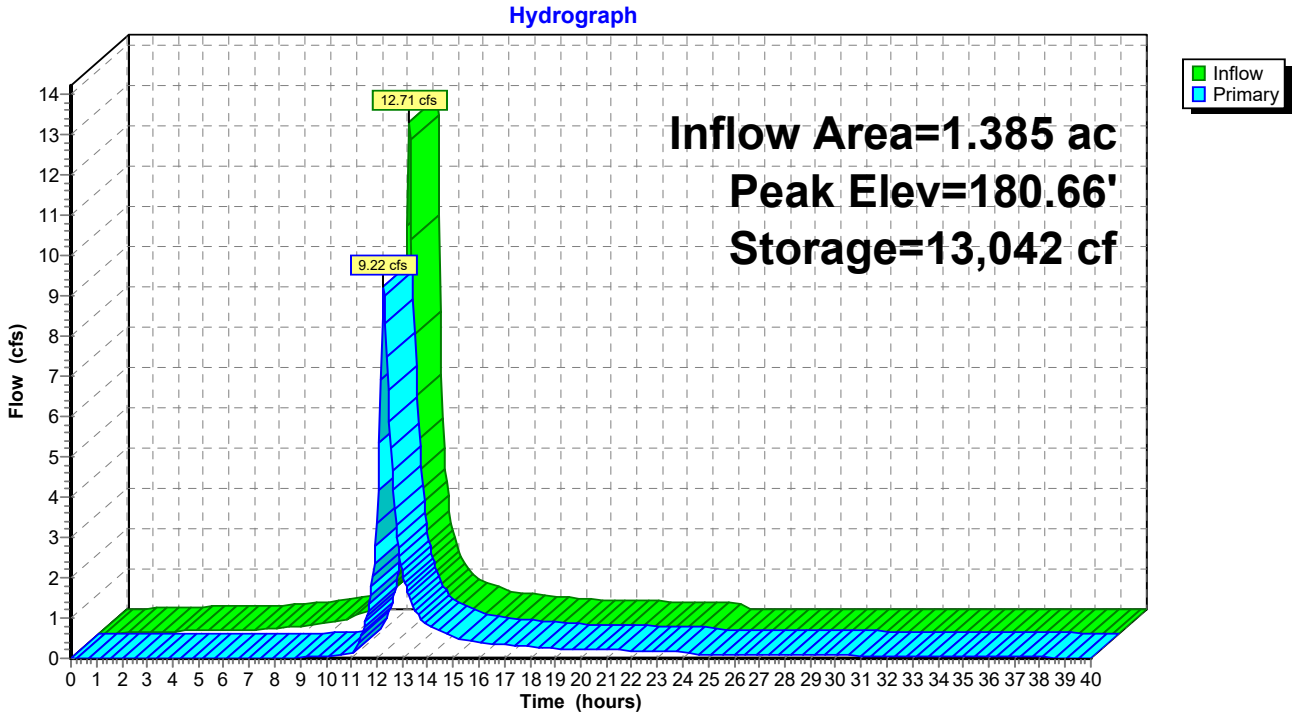
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	37,242 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	6,855	0	0
180.00	8,033	7,444	7,444
181.00	9,268	8,651	16,095
182.00	10,560	9,914	26,009
183.00	11,907	11,234	37,242

Device	Routing	Invert	Outlet Devices
#1	Primary	177.65'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 177.65' / 177.00' S= 0.0163 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.35'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.86'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=9.12 cfs @ 12.27 hrs HW=180.66' (Free Discharge)
- **1=Culvert** (Passes 9.12 cfs of 12.78 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.28 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 8.94 cfs @ 2.92 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-17B: Basin #17B



Stage-Discharge for Pond B-17B: Basin #17B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	1.12	181.08	13.93	182.12	24.68
179.02	0.00	180.06	1.29	181.10	13.98	182.14	26.23
179.04	0.00	180.08	1.46	181.12	14.03	182.16	27.91
179.06	0.00	180.10	1.65	181.14	14.08	182.18	29.72
179.08	0.00	180.12	1.85	181.16	14.14	182.20	31.64
179.10	0.00	180.14	2.05	181.18	14.19	182.22	33.66
179.12	0.00	180.16	2.25	181.20	14.24	182.24	35.77
179.14	0.00	180.18	2.47	181.22	14.29	182.26	37.98
179.16	0.00	180.20	2.69	181.24	14.34	182.28	40.29
179.18	0.00	180.22	2.92	181.26	14.39	182.30	42.70
179.20	0.00	180.24	3.15	181.28	14.44	182.32	45.20
179.22	0.00	180.26	3.39	181.30	14.49	182.34	47.80
179.24	0.00	180.28	3.63	181.32	14.54	182.36	50.53
179.26	0.00	180.30	3.88	181.34	14.59	182.38	53.38
179.28	0.00	180.32	4.14	181.36	14.64	182.40	56.34
179.30	0.00	180.34	4.40	181.38	14.69	182.42	59.40
179.32	0.00	180.36	4.67	181.40	14.74	182.44	62.57
179.34	0.00	180.38	4.94	181.42	14.79	182.46	65.84
179.36	0.00	180.40	5.21	181.44	14.84	182.48	69.22
179.38	0.00	180.42	5.49	181.46	14.88	182.50	72.70
179.40	0.00	180.44	5.77	181.48	14.93	182.52	76.29
179.42	0.01	180.46	6.06	181.50	14.98	182.54	79.99
179.44	0.01	180.48	6.35	181.52	15.03	182.56	83.53
179.46	0.02	180.50	6.65	181.54	15.08	182.58	86.87
179.48	0.03	180.52	6.95	181.56	15.13	182.60	90.26
179.50	0.03	180.54	7.26	181.58	15.17	182.62	93.70
179.52	0.04	180.56	7.56	181.60	15.22	182.64	97.19
179.54	0.05	180.58	7.88	181.62	15.27	182.66	100.74
179.56	0.05	180.60	8.19	181.64	15.32	182.68	104.34
179.58	0.06	180.62	8.51	181.66	15.36	182.70	107.98
179.60	0.06	180.64	8.84	181.68	15.41	182.72	111.68
179.62	0.07	180.66	9.17	181.70	15.46	182.74	115.42
179.64	0.07	180.68	9.50	181.72	15.50	182.76	119.25
179.66	0.07	180.70	9.83	181.74	15.55	182.78	123.17
179.68	0.08	180.72	10.17	181.76	15.60	182.80	127.14
179.70	0.08	180.74	10.51	181.78	15.64	182.82	131.17
179.72	0.08	180.76	10.85	181.80	15.69	182.84	135.25
179.74	0.09	180.78	11.20	181.82	15.74	182.86	139.37
179.76	0.09	180.80	11.55	181.84	15.78	182.88	143.55
179.78	0.09	180.82	11.90	181.86	15.83	182.90	147.78
179.80	0.10	180.84	12.26	181.88	15.87	182.92	152.07
179.82	0.10	180.86	12.62	181.90	15.92	182.94	156.40
179.84	0.10	180.88	12.98	181.92	15.96	182.96	160.73
179.86	0.10	180.90	13.35	181.94	16.01	182.98	165.05
179.88	0.14	180.92	13.51	181.96	16.17	183.00	**169.41**
179.90	0.21	180.94	13.56	181.98	16.71		
179.92	0.30	180.96	13.61	182.00	17.46		
179.94	0.41	180.98	13.67	182.02	18.36		
179.96	0.53	181.00	13.72	182.04	19.41		
179.98	0.66	181.02	13.77	182.06	20.57		
180.00	0.80	181.04	13.83	182.08	21.84		
180.02	0.95	181.06	13.88	182.10	23.21		

Summary for Pond B-2: Basin #2

Inflow Area = 1.894 ac, 38.23% Impervious, Inflow Depth = 9.08" for Future 100 yr event
Inflow = 17.42 cfs @ 12.17 hrs, Volume= 1.433 af
Outflow = 15.13 cfs @ 12.24 hrs, Volume= 0.874 af, Atten= 13%, Lag= 4.0 min
Primary = 15.13 cfs @ 12.24 hrs, Volume= 0.874 af
Routed to Pond B-1 : Basin #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 211.75' @ 12.24 hrs Surf.Area= 10,130 sf Storage= 26,828 cf

Plug-Flow detention time= 210.0 min calculated for 0.873 af (61% of inflow)
Center-of-Mass det. time= 100.9 min (879.0 - 778.1)

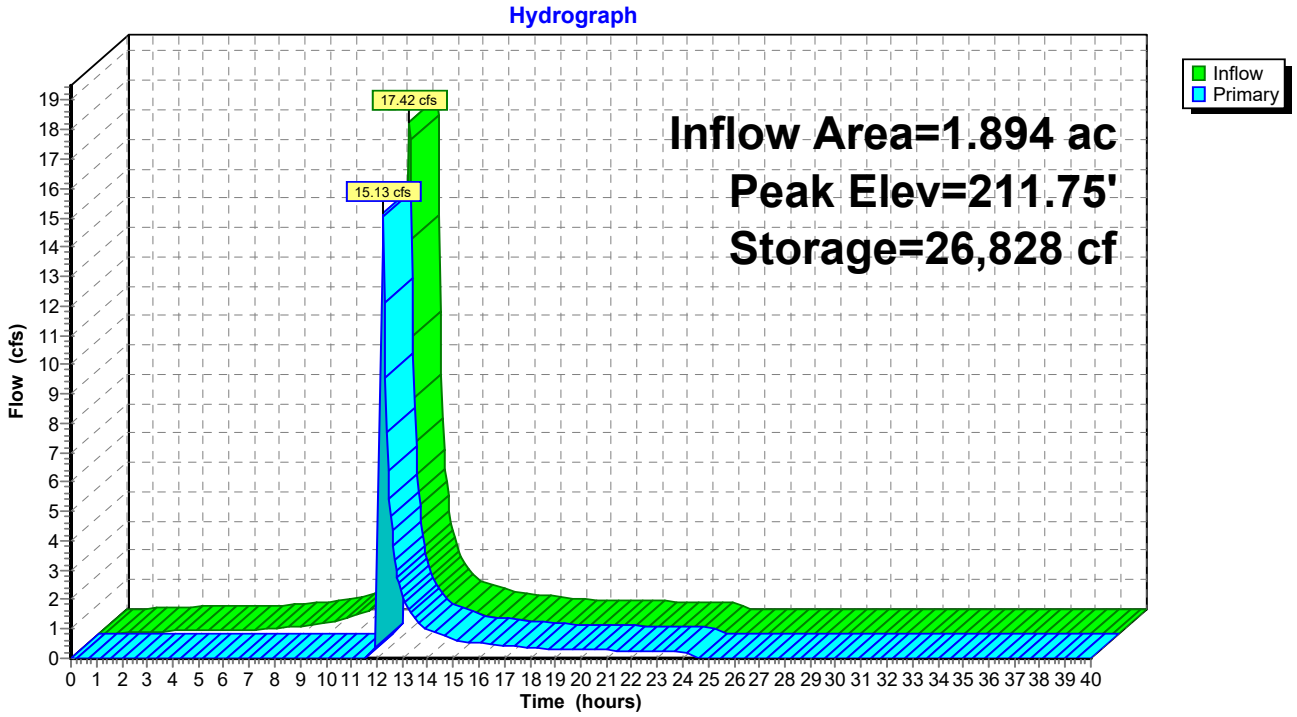
Volume	Invert	Avail.Storage	Storage Description
#1	208.30'	29,385 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
208.30	0	0	0
209.00	7,501	2,625	2,625
210.00	8,431	7,966	10,591
211.00	9,390	8,911	19,502
212.00	10,376	9,883	29,385

Device	Routing	Invert	Outlet Devices
#1	Primary	211.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.74 cfs @ 12.24 hrs HW=211.75' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 14.74 cfs @ 1.18 fps)

Pond B-2: Basin #2



Stage-Discharge for Pond B-2: Basin #2

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
208.30	0.00	209.34	0.00	210.38	0.00	211.42	0.00
208.32	0.00	209.36	0.00	210.40	0.00	211.44	0.00
208.34	0.00	209.38	0.00	210.42	0.00	211.46	0.00
208.36	0.00	209.40	0.00	210.44	0.00	211.48	0.00
208.38	0.00	209.42	0.00	210.46	0.00	211.50	0.00
208.40	0.00	209.44	0.00	210.48	0.00	211.52	0.33
208.42	0.00	209.46	0.00	210.50	0.00	211.54	0.94
208.44	0.00	209.48	0.00	210.52	0.00	211.56	1.72
208.46	0.00	209.50	0.00	210.54	0.00	211.58	2.66
208.48	0.00	209.52	0.00	210.56	0.00	211.60	3.72
208.50	0.00	209.54	0.00	210.58	0.00	211.62	4.89
208.52	0.00	209.56	0.00	210.60	0.00	211.64	6.17
208.54	0.00	209.58	0.00	210.62	0.00	211.66	7.55
208.56	0.00	209.60	0.00	210.64	0.00	211.68	9.01
208.58	0.00	209.62	0.00	210.66	0.00	211.70	10.57
208.60	0.00	209.64	0.00	210.68	0.00	211.72	12.28
208.62	0.00	209.66	0.00	210.70	0.00	211.74	14.11
208.64	0.00	209.68	0.00	210.72	0.00	211.76	16.03
208.66	0.00	209.70	0.00	210.74	0.00	211.78	18.05
208.68	0.00	209.72	0.00	210.76	0.00	211.80	20.17
208.70	0.00	209.74	0.00	210.78	0.00	211.82	22.39
208.72	0.00	209.76	0.00	210.80	0.00	211.84	24.70
208.74	0.00	209.78	0.00	210.82	0.00	211.86	27.11
208.76	0.00	209.80	0.00	210.84	0.00	211.88	29.62
208.78	0.00	209.82	0.00	210.86	0.00	211.90	32.23
208.80	0.00	209.84	0.00	210.88	0.00	211.92	34.99
208.82	0.00	209.86	0.00	210.90	0.00	211.94	37.85
208.84	0.00	209.88	0.00	210.92	0.00	211.96	40.82
208.86	0.00	209.90	0.00	210.94	0.00	211.98	43.89
208.88	0.00	209.92	0.00	210.96	0.00	212.00	**47.07**
208.90	0.00	209.94	0.00	210.98	0.00		
208.92	0.00	209.96	0.00	211.00	0.00		
208.94	0.00	209.98	0.00	211.02	0.00		
208.96	0.00	210.00	0.00	211.04	0.00		
208.98	0.00	210.02	0.00	211.06	0.00		
209.00	0.00	210.04	0.00	211.08	0.00		
209.02	0.00	210.06	0.00	211.10	0.00		
209.04	0.00	210.08	0.00	211.12	0.00		
209.06	0.00	210.10	0.00	211.14	0.00		
209.08	0.00	210.12	0.00	211.16	0.00		
209.10	0.00	210.14	0.00	211.18	0.00		
209.12	0.00	210.16	0.00	211.20	0.00		
209.14	0.00	210.18	0.00	211.22	0.00		
209.16	0.00	210.20	0.00	211.24	0.00		
209.18	0.00	210.22	0.00	211.26	0.00		
209.20	0.00	210.24	0.00	211.28	0.00		
209.22	0.00	210.26	0.00	211.30	0.00		
209.24	0.00	210.28	0.00	211.32	0.00		
209.26	0.00	210.30	0.00	211.34	0.00		
209.28	0.00	210.32	0.00	211.36	0.00		
209.30	0.00	210.34	0.00	211.38	0.00		
209.32	0.00	210.36	0.00	211.40	0.00		

Summary for Pond B-3: Basin #3

Inflow Area = 1.554 ac, 38.35% Impervious, Inflow Depth = 9.08" for Future 100 yr event
Inflow = 14.29 cfs @ 12.17 hrs, Volume= 1.176 af
Outflow = 0.66 cfs @ 14.44 hrs, Volume= 0.727 af, Atten= 95%, Lag= 136.1 min
Primary = 0.66 cfs @ 14.44 hrs, Volume= 0.727 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 215.60' @ 14.44 hrs Surf.Area= 17,109 sf Storage= 35,107 cf

Plug-Flow detention time= 697.8 min calculated for 0.727 af (62% of inflow)
Center-of-Mass det. time= 588.8 min (1,366.7 - 778.0)

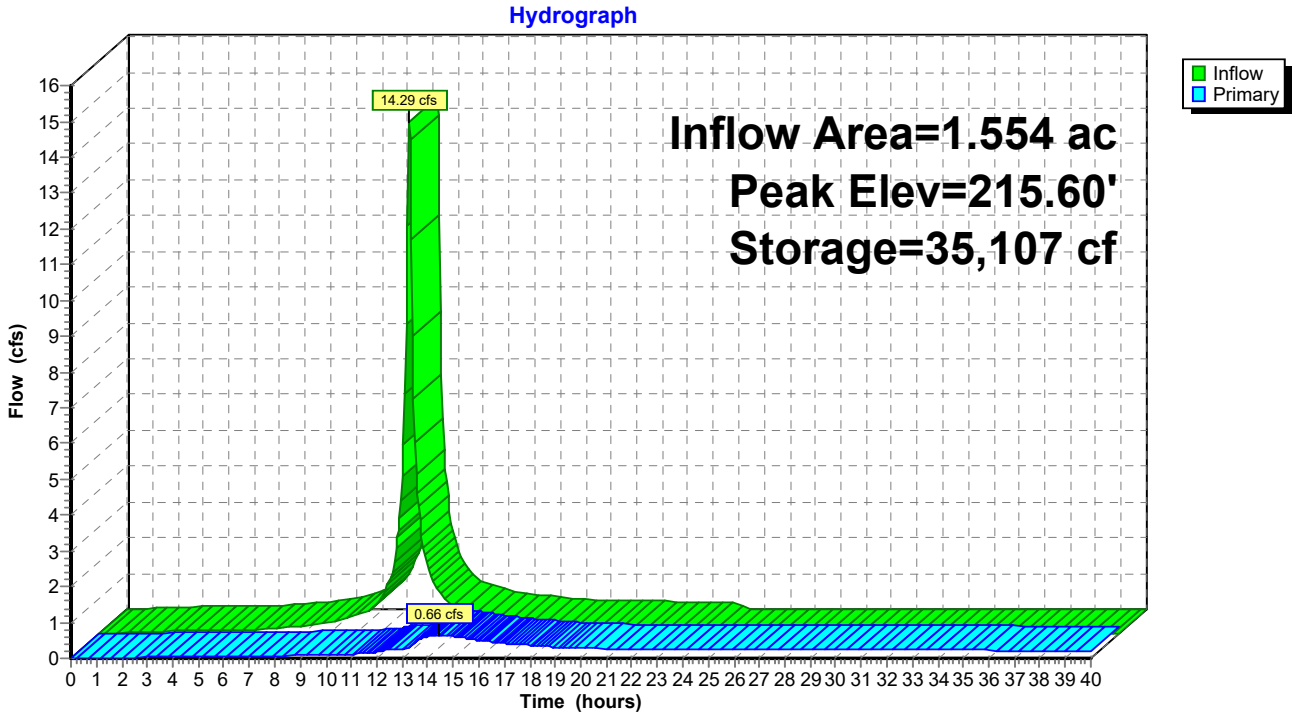
Volume	Invert	Avail.Storage	Storage Description
#1	213.00'	56,991 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
213.00	9,992	0	0
214.00	12,685	11,339	11,339
215.00	15,435	14,060	25,399
216.00	18,241	16,838	42,237
216.75	21,104	14,754	56,991

Device	Routing	Invert	Outlet Devices
#1	Primary	212.30'	**18.0" Round Culvert** L= 151.0' Ke= 0.500 Inlet / Outlet Invert= 212.30' / 202.00' S= 0.0682 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.77 sf
#2	Device 1	212.90'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	215.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	216.70'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.66 cfs @ 14.44 hrs HW=215.60' (Free Discharge)
- **1=Culvert** (Passes 0.66 cfs of 13.58 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.26 cfs @ 7.75 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.39 cfs @ 1.02 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-3: Basin #3



Stage-Discharge for Pond B-3: Basin #3

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
213.00	0.00	214.04	0.17	215.08	0.24	216.12	6.48
213.02	0.02	214.06	0.17	215.10	0.24	216.14	6.77
213.04	0.03	214.08	0.17	215.12	0.24	216.16	7.07
213.06	0.04	214.10	0.17	215.14	0.24	216.18	7.38
213.08	0.05	214.12	0.17	215.16	0.24	216.20	7.69
213.10	0.05	214.14	0.17	215.18	0.24	216.22	8.00
213.12	0.06	214.16	0.18	215.20	0.24	216.24	8.31
213.14	0.06	214.18	0.18	215.22	0.24	216.26	8.63
213.16	0.06	214.20	0.18	215.24	0.25	216.28	8.96
213.18	0.07	214.22	0.18	215.26	0.25	216.30	9.28
213.20	0.07	214.24	0.18	215.28	0.25	216.32	9.61
213.22	0.08	214.26	0.18	215.30	0.25	216.34	9.95
213.24	0.08	214.28	0.19	215.32	0.25	216.36	10.28
213.26	0.08	214.30	0.19	215.34	0.25	216.38	10.62
213.28	0.09	214.32	0.19	215.36	0.25	216.40	10.97
213.30	0.09	214.34	0.19	215.38	0.25	216.42	11.31
213.32	0.09	214.36	0.19	215.40	0.25	216.44	11.66
213.34	0.10	214.38	0.19	215.42	0.26	216.46	12.02
213.36	0.10	214.40	0.19	215.44	0.26	216.48	12.37
213.38	0.10	214.42	0.20	215.46	0.26	216.50	12.73
213.40	0.10	214.44	0.20	215.48	0.26	216.52	13.09
213.42	0.11	214.46	0.20	215.50	0.26	216.54	13.46
213.44	0.11	214.48	0.20	215.52	0.30	216.56	13.83
213.46	0.11	214.50	0.20	215.54	0.37	216.58	14.20
213.48	0.11	214.52	0.20	215.56	0.45	216.60	14.57
213.50	0.12	214.54	0.20	215.58	0.56	216.62	14.95
213.52	0.12	214.56	0.20	215.60	0.68	216.64	15.33
213.54	0.12	214.58	0.21	215.62	0.81	216.66	15.71
213.56	0.12	214.60	0.21	215.64	0.95	216.68	16.09
213.58	0.12	214.62	0.21	215.66	1.10	216.70	16.26
213.60	0.13	214.64	0.21	215.68	1.26	216.72	16.63
213.62	0.13	214.66	0.21	215.70	1.43	216.74	**17.28**
213.64	0.13	214.68	0.21	215.72	1.61		
213.66	0.13	214.70	0.21	215.74	1.79		
213.68	0.13	214.72	0.22	215.76	1.98		
213.70	0.14	214.74	0.22	215.78	2.18		
213.72	0.14	214.76	0.22	215.80	2.39		
213.74	0.14	214.78	0.22	215.82	2.61		
213.76	0.14	214.80	0.22	215.84	2.83		
213.78	0.14	214.82	0.22	215.86	3.05		
213.80	0.15	214.84	0.22	215.88	3.28		
213.82	0.15	214.86	0.22	215.90	3.52		
213.84	0.15	214.88	0.22	215.92	3.77		
213.86	0.15	214.90	0.23	215.94	4.01		
213.88	0.15	214.92	0.23	215.96	4.27		
213.90	0.16	214.94	0.23	215.98	4.53		
213.92	0.16	214.96	0.23	216.00	4.79		
213.94	0.16	214.98	0.23	216.02	5.06		
213.96	0.16	215.00	0.23	216.04	5.34		
213.98	0.16	215.02	0.23	216.06	5.61		
214.00	0.16	215.04	0.23	216.08	5.90		
214.02	0.17	215.06	0.24	216.10	6.19		

Summary for Pond B-4A: Basin #4A

Inflow Area = 2.331 ac, 36.89% Impervious, Inflow Depth = 9.04" for Future 100 yr event
Inflow = 21.38 cfs @ 12.17 hrs, Volume= 1.755 af
Outflow = 24.99 cfs @ 12.19 hrs, Volume= 1.281 af, Atten= 0%, Lag= 1.4 min
Primary = 24.99 cfs @ 12.19 hrs, Volume= 1.281 af
Routed to Pond B-5 : Basin #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 205.79' @ 12.19 hrs Surf.Area= 6,057 sf Storage= 20,963 cf

Plug-Flow detention time= 165.0 min calculated for 1.281 af (73% of inflow)
Center-of-Mass det. time= 71.7 min (850.8 - 779.0)

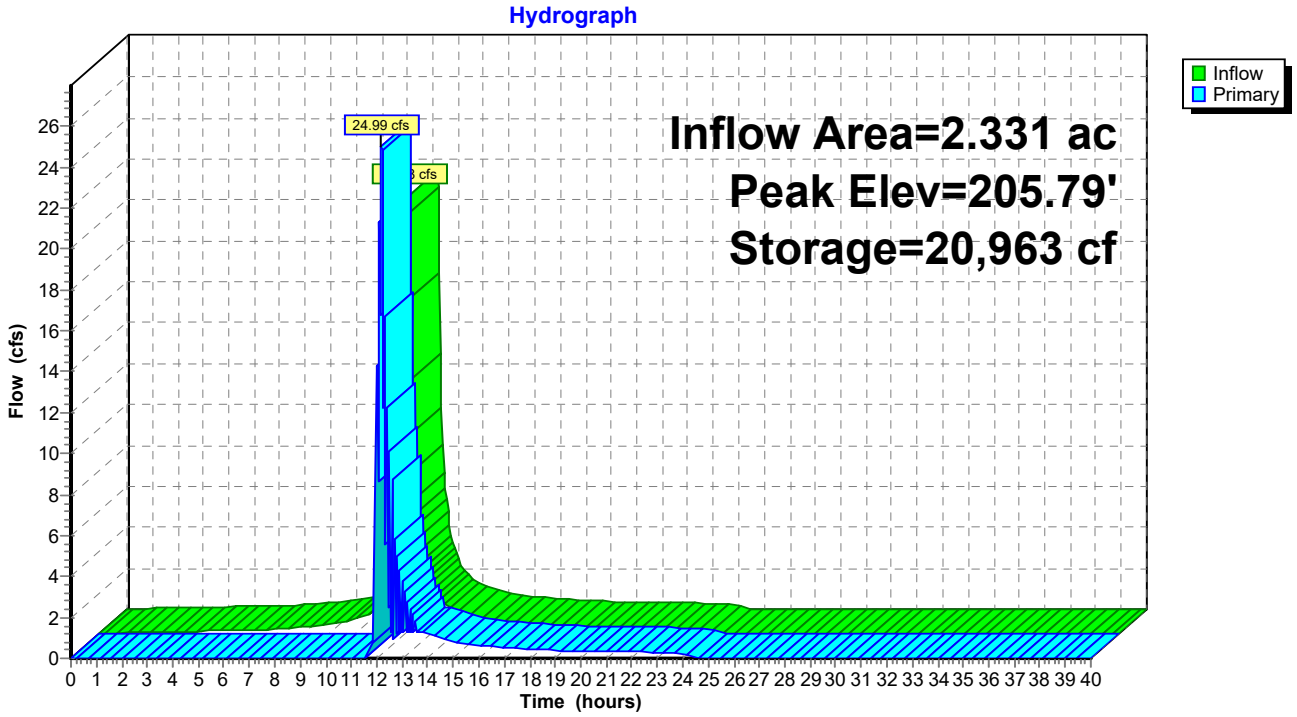
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	20,963 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	1,891	0	0
201.00	2,495	2,193	2,193
202.00	3,169	2,832	5,025
203.00	3,912	3,541	8,566
204.00	4,724	4,318	12,884
205.00	5,604	5,164	18,048
205.50	6,057	2,915	20,963

Device	Routing	Invert	Outlet Devices
#1	Primary	205.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=23.84 cfs @ 12.19 hrs HW=205.78' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 23.84 cfs @ 1.41 fps)

Pond B-4A: Basin #4A



Stage-Discharge for Pond B-4A: Basin #4A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	0.00	205.20	0.00
200.05	0.00	202.65	0.00	205.25	0.00
200.10	0.00	202.70	0.00	205.30	0.00
200.15	0.00	202.75	0.00	205.35	0.00
200.20	0.00	202.80	0.00	205.40	0.00
200.25	0.00	202.85	0.00	205.45	0.00
200.30	0.00	202.90	0.00	205.50	1.31
200.35	0.00	202.95	0.00	205.55	3.72
200.40	0.00	203.00	0.00	205.60	6.85
200.45	0.00	203.05	0.00	205.65	10.57
200.50	0.00	203.10	0.00	205.70	15.05
200.55	0.00	203.15	0.00	205.75	20.17
200.60	0.00	203.20	0.00	205.80	**25.90**
200.65	0.00	203.25	0.00		
200.70	0.00	203.30	0.00		
200.75	0.00	203.35	0.00		
200.80	0.00	203.40	0.00		
200.85	0.00	203.45	0.00		
200.90	0.00	203.50	0.00		
200.95	0.00	203.55	0.00		
201.00	0.00	203.60	0.00		
201.05	0.00	203.65	0.00		
201.10	0.00	203.70	0.00		
201.15	0.00	203.75	0.00		
201.20	0.00	203.80	0.00		
201.25	0.00	203.85	0.00		
201.30	0.00	203.90	0.00		
201.35	0.00	203.95	0.00		
201.40	0.00	204.00	0.00		
201.45	0.00	204.05	0.00		
201.50	0.00	204.10	0.00		
201.55	0.00	204.15	0.00		
201.60	0.00	204.20	0.00		
201.65	0.00	204.25	0.00		
201.70	0.00	204.30	0.00		
201.75	0.00	204.35	0.00		
201.80	0.00	204.40	0.00		
201.85	0.00	204.45	0.00		
201.90	0.00	204.50	0.00		
201.95	0.00	204.55	0.00		
202.00	0.00	204.60	0.00		
202.05	0.00	204.65	0.00		
202.10	0.00	204.70	0.00		
202.15	0.00	204.75	0.00		
202.20	0.00	204.80	0.00		
202.25	0.00	204.85	0.00		
202.30	0.00	204.90	0.00		
202.35	0.00	204.95	0.00		
202.40	0.00	205.00	0.00		
202.45	0.00	205.05	0.00		
202.50	0.00	205.10	0.00		
202.55	0.00	205.15	0.00		

Summary for Pond B-4B: Basin #4B

Inflow Area = 2.331 ac, 36.89% Impervious, Inflow Depth = 9.04" for Future 100 yr event
Inflow = 21.38 cfs @ 12.17 hrs, Volume= 1.755 af
Outflow = 28.62 cfs @ 12.15 hrs, Volume= 1.235 af, Atten= 0%, Lag= 0.0 min
Primary = 28.62 cfs @ 12.15 hrs, Volume= 1.235 af
Routed to Pond B-5 : Basin #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 205.82' @ 12.15 hrs Surf.Area= 6,934 sf Storage= 22,995 cf

Plug-Flow detention time= 174.0 min calculated for 1.235 af (70% of inflow)
Center-of-Mass det. time= 76.9 min (855.9 - 779.0)

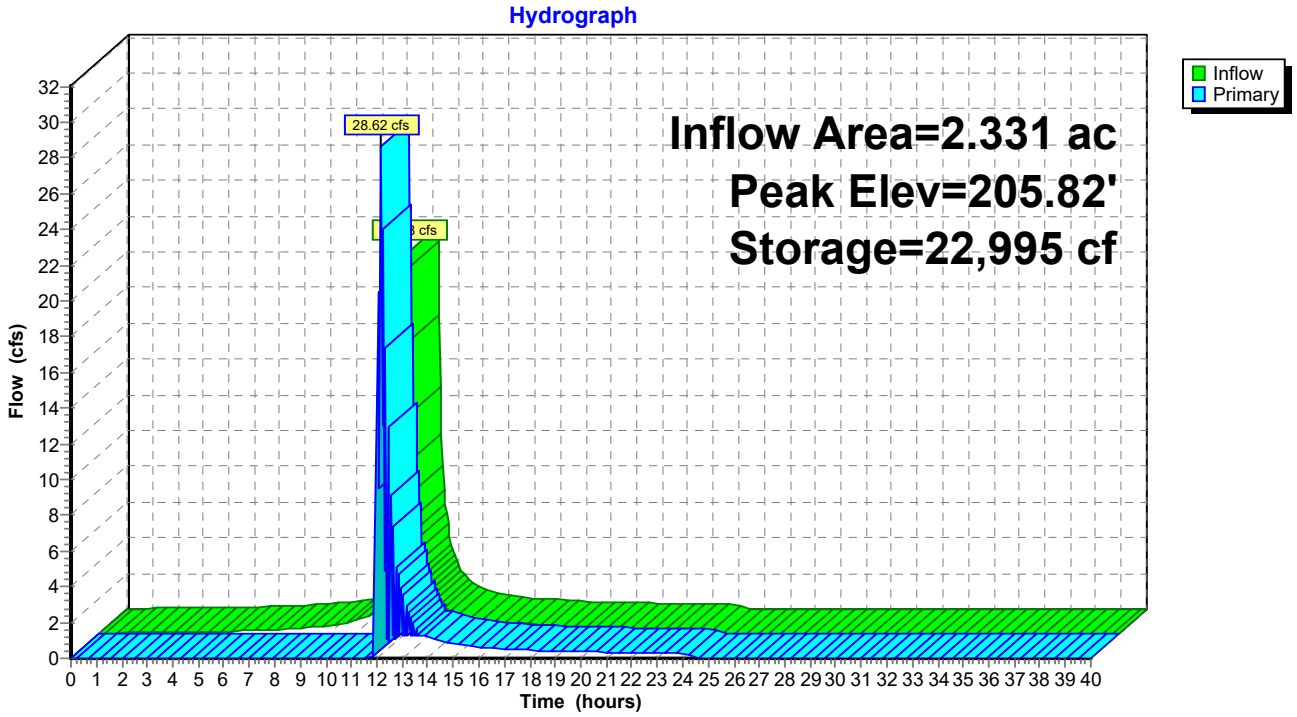
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	22,995 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	1,852	0	0
201.00	2,571	2,212	2,212
202.00	3,384	2,978	5,189
203.00	4,292	3,838	9,027
204.00	5,294	4,793	13,820
205.00	6,393	5,844	19,664
205.50	6,934	3,332	22,995

Device	Routing	Invert	Outlet Devices
#1	Primary	205.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=27.59 cfs @ 12.15 hrs HW=205.81' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 27.59 cfs @ 1.48 fps)

Pond B-4B: Basin #4B



Stage-Discharge for Pond B-4B: Basin #4B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	0.00	205.20	0.00
200.05	0.00	202.65	0.00	205.25	0.00
200.10	0.00	202.70	0.00	205.30	0.00
200.15	0.00	202.75	0.00	205.35	0.00
200.20	0.00	202.80	0.00	205.40	0.00
200.25	0.00	202.85	0.00	205.45	0.00
200.30	0.00	202.90	0.00	205.50	1.31
200.35	0.00	202.95	0.00	205.55	3.72
200.40	0.00	203.00	0.00	205.60	6.85
200.45	0.00	203.05	0.00	205.65	10.57
200.50	0.00	203.10	0.00	205.70	15.05
200.55	0.00	203.15	0.00	205.75	20.17
200.60	0.00	203.20	0.00	205.80	**25.90**
200.65	0.00	203.25	0.00		
200.70	0.00	203.30	0.00		
200.75	0.00	203.35	0.00		
200.80	0.00	203.40	0.00		
200.85	0.00	203.45	0.00		
200.90	0.00	203.50	0.00		
200.95	0.00	203.55	0.00		
201.00	0.00	203.60	0.00		
201.05	0.00	203.65	0.00		
201.10	0.00	203.70	0.00		
201.15	0.00	203.75	0.00		
201.20	0.00	203.80	0.00		
201.25	0.00	203.85	0.00		
201.30	0.00	203.90	0.00		
201.35	0.00	203.95	0.00		
201.40	0.00	204.00	0.00		
201.45	0.00	204.05	0.00		
201.50	0.00	204.10	0.00		
201.55	0.00	204.15	0.00		
201.60	0.00	204.20	0.00		
201.65	0.00	204.25	0.00		
201.70	0.00	204.30	0.00		
201.75	0.00	204.35	0.00		
201.80	0.00	204.40	0.00		
201.85	0.00	204.45	0.00		
201.90	0.00	204.50	0.00		
201.95	0.00	204.55	0.00		
202.00	0.00	204.60	0.00		
202.05	0.00	204.65	0.00		
202.10	0.00	204.70	0.00		
202.15	0.00	204.75	0.00		
202.20	0.00	204.80	0.00		
202.25	0.00	204.85	0.00		
202.30	0.00	204.90	0.00		
202.35	0.00	204.95	0.00		
202.40	0.00	205.00	0.00		
202.45	0.00	205.05	0.00		
202.50	0.00	205.10	0.00		
202.55	0.00	205.15	0.00		

Summary for Pond B-5: Basin #5

Inflow Area = 5.341 ac, 32.20% Impervious, Inflow Depth = 6.66" for Future 100 yr event
Inflow = 51.38 cfs @ 12.16 hrs, Volume= 2.962 af
Outflow = 16.28 cfs @ 12.43 hrs, Volume= 2.784 af, Atten= 68%, Lag= 16.3 min
Primary = 16.28 cfs @ 12.43 hrs, Volume= 2.784 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.06' @ 12.43 hrs Surf.Area= 15,340 sf Storage= 41,169 cf

Plug-Flow detention time= 144.4 min calculated for 2.784 af (94% of inflow)
Center-of-Mass det. time= 112.1 min (958.8 - 846.7)

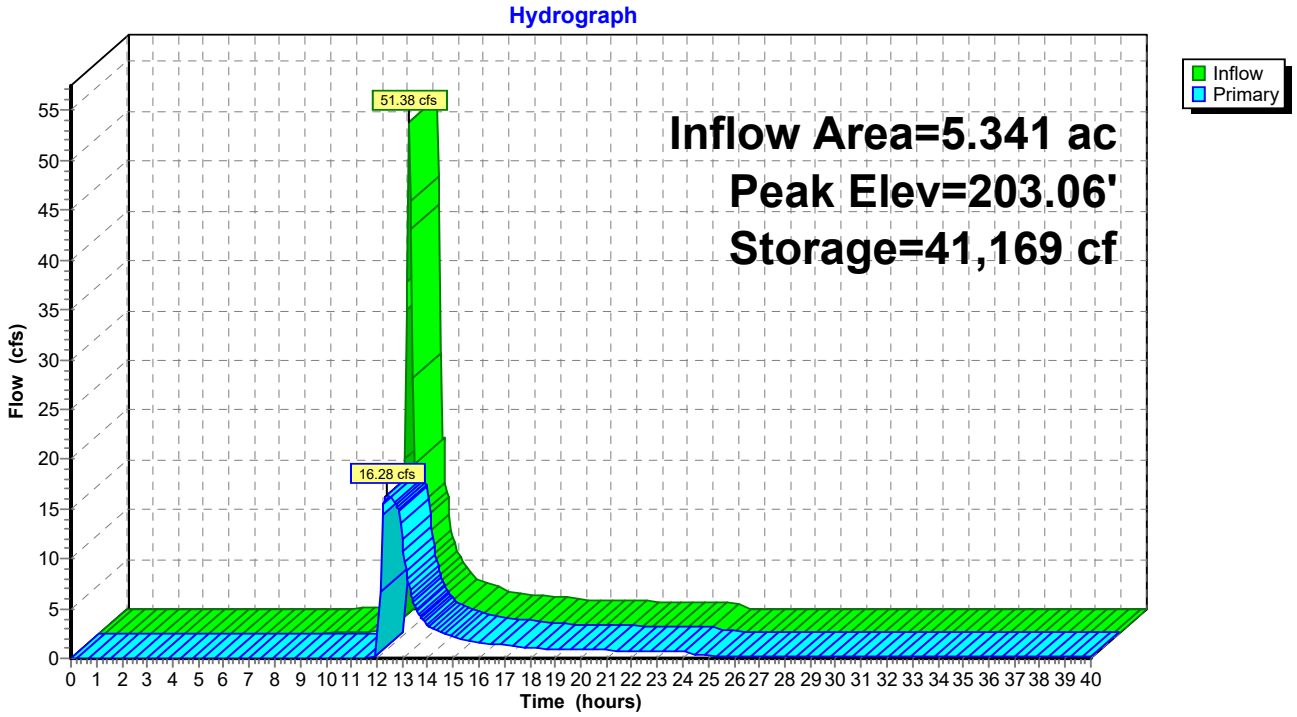
Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	91,976 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.00	11,631	0	0
201.00	12,798	12,215	12,215
202.00	14,009	13,404	25,618
203.00	15,262	14,636	40,254
204.00	16,558	15,910	56,164
205.00	17,896	17,227	73,391
206.00	19,275	18,586	91,976

Device	Routing	Invert	Outlet Devices
#1	Primary	198.65'	**18.0" Round Culvert** L= 70.0' Ke= 0.500 Inlet / Outlet Invert= 198.65' / 196.00' S= 0.0379 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	200.02'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	205.00'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=16.27 cfs @ 12.43 hrs HW=203.06' (Free Discharge)
- **1=Culvert** (Inlet Controls 16.27 cfs @ 9.21 fps)
  - **2=Orifice/Grate** (Passes < 0.28 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 28.92 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-5: Basin #5



Stage-Discharge for Pond B-5: Basin #5

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.00	0.00	202.60	15.22	205.20	31.06
200.05	0.00	202.65	15.34	205.25	35.63
200.10	0.01	202.70	15.46	205.30	40.84
200.15	0.03	202.75	15.57	205.35	46.65
200.20	0.05	202.80	15.69	205.40	53.07
200.25	0.06	202.85	15.80	205.45	60.25
200.30	0.07	202.90	15.92	205.50	68.08
200.35	0.08	202.95	16.03	205.55	76.57
200.40	0.09	203.00	16.14	205.60	85.74
200.45	0.09	203.05	16.26	205.65	94.09
200.50	0.10	203.10	16.37	205.70	102.78
200.55	0.11	203.15	16.48	205.75	111.78
200.60	0.11	203.20	16.59	205.80	121.09
200.65	0.12	203.25	16.70	205.85	130.90
200.70	0.12	203.30	16.80	205.90	141.05
200.75	0.13	203.35	16.91	205.95	151.51
200.80	0.13	203.40	17.02	206.00	**162.29**
200.85	0.14	203.45	17.12		
200.90	0.14	203.50	17.23		
200.95	0.15	203.55	17.33		
201.00	0.15	203.60	17.44		
201.05	0.16	203.65	17.54		
201.10	0.16	203.70	17.64		
201.15	0.17	203.75	17.75		
201.20	0.17	203.80	17.85		
201.25	0.17	203.85	17.95		
201.30	0.32	203.90	18.05		
201.35	0.59	203.95	18.15		
201.40	0.94	204.00	18.25		
201.45	1.35	204.05	18.35		
201.50	1.81	204.10	18.45		
201.55	2.31	204.15	18.54		
201.60	2.86	204.20	18.64		
201.65	3.45	204.25	18.74		
201.70	4.07	204.30	18.83		
201.75	4.72	204.35	18.93		
201.80	5.40	204.40	19.03		
201.85	6.11	204.45	19.12		
201.90	6.85	204.50	19.22		
201.95	7.61	204.55	19.31		
202.00	8.40	204.60	19.40		
202.05	9.21	204.65	19.50		
202.10	10.05	204.70	19.59		
202.15	10.90	204.75	19.68		
202.20	11.77	204.80	19.77		
202.25	12.67	204.85	19.86		
202.30	13.58	204.90	19.95		
202.35	14.51	204.95	20.05		
202.40	14.74	205.00	20.14		
202.45	14.86	205.05	21.54		
202.50	14.98	205.10	24.03		
202.55	15.10	205.15	27.25		

Summary for Pond B-6: Basin #6

Inflow Area = 1.191 ac, 58.27% Impervious, Inflow Depth = 9.70" for Future 100 yr event
Inflow = 11.37 cfs @ 12.17 hrs, Volume= 0.962 af
Outflow = 8.93 cfs @ 12.25 hrs, Volume= 0.888 af, Atten= 21%, Lag= 4.9 min
Primary = 8.93 cfs @ 12.25 hrs, Volume= 0.888 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.89' @ 12.25 hrs Surf.Area= 6,681 sf Storage= 11,364 cf

Plug-Flow detention time= 184.1 min calculated for 0.887 af (92% of inflow)
Center-of-Mass det. time= 142.8 min (907.5 - 764.7)

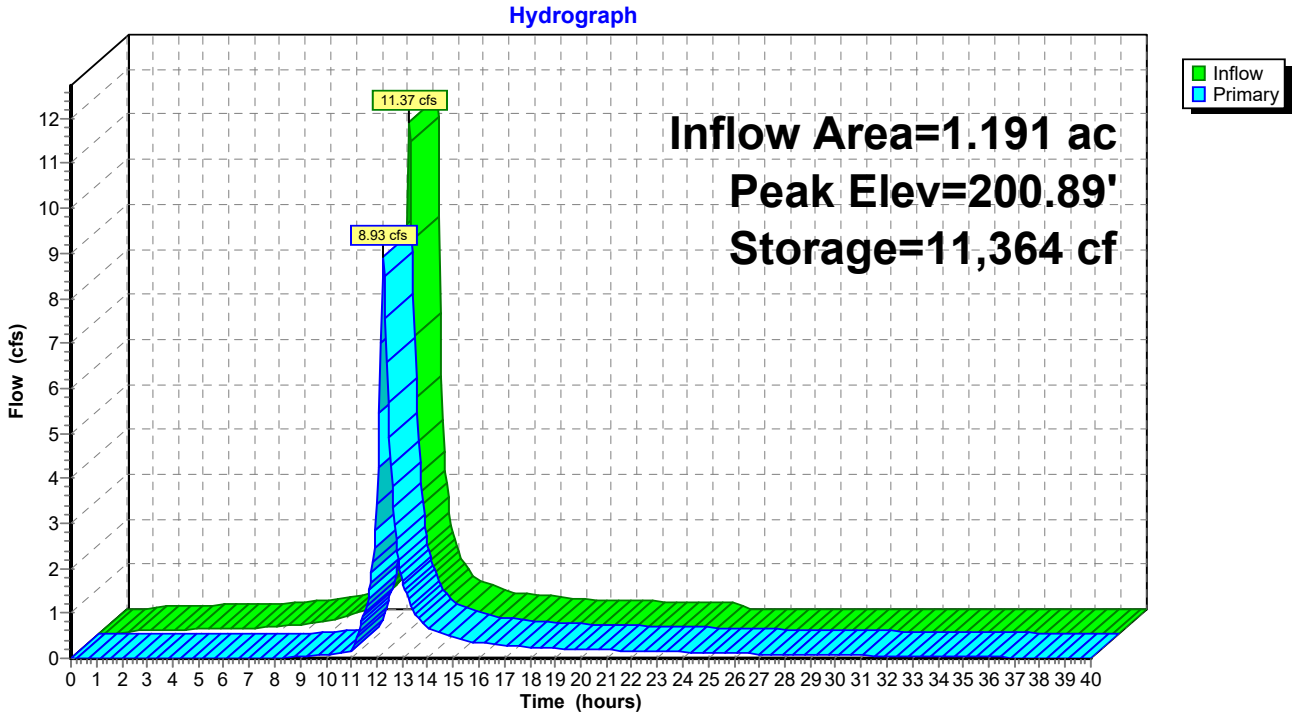
Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	35,769 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.00	5,389	0	0
200.00	6,060	5,725	5,725
201.00	6,761	6,411	12,135
202.00	7,490	7,126	19,261
203.00	8,247	7,869	27,129
204.00	9,032	8,640	35,769

Device	Routing	Invert	Outlet Devices
#1	Primary	197.65'	**18.0" Round Culvert** L= 627.0' Ke= 0.500 Inlet / Outlet Invert= 197.65' / 194.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	199.50'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	200.10'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	200.89'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.92 cfs @ 12.25 hrs HW=200.88' (Free Discharge)
- **1=Culvert** (Passes 8.92 cfs of 9.14 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.45 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 8.74 cfs @ 2.90 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-6: Basin #6



Stage-Discharge for Pond B-6: Basin #6

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.00	0.00	201.60	92.90
199.05	0.00	201.65	101.92
199.10	0.00	201.70	111.29
199.15	0.00	201.75	121.13
199.20	0.00	201.80	131.29
199.25	0.00	201.85	141.77
199.30	0.00	201.90	152.52
199.35	0.00	201.95	163.34
199.40	0.00	202.00	174.42
199.45	0.00	202.05	185.76
199.50	0.00	202.10	197.39
199.55	0.00	202.15	209.42
199.60	0.02	202.20	221.71
199.65	0.03	202.25	234.27
199.70	0.05	202.30	247.13
199.75	0.06	202.35	260.43
199.80	0.07	202.40	274.02
199.85	0.08	202.45	287.88
199.90	0.09	202.50	302.02
199.95	0.10	202.55	316.42
200.00	0.10	202.60	331.10
200.05	0.11	202.65	346.04
200.10	0.12	202.70	361.25
200.15	0.27	202.75	376.73
200.20	0.54	202.80	392.46
200.25	0.89	202.85	408.46
200.30	1.30	202.90	424.79
200.35	1.76	202.95	441.63
200.40	2.26	203.00	458.76
200.45	2.81	203.05	476.18
200.50	3.40	203.10	493.88
200.55	4.02	203.15	511.86
200.60	4.67	203.20	530.12
200.65	5.36	203.25	548.67
200.70	6.07	203.30	567.49
200.75	6.81	203.35	586.60
200.80	7.57	203.40	605.86
200.85	8.36	203.45	624.84
200.90	9.27	203.50	644.05
200.95	10.92	203.55	663.51
201.00	13.53	203.60	683.20
201.05	16.82	203.65	703.12
201.10	20.73	203.70	723.28
201.15	25.39	203.75	743.67
201.20	30.67	203.80	764.30
201.25	36.56	203.85	785.16
201.30	43.08	203.90	806.43
201.35	50.34	203.95	828.68
201.40	58.26	204.00	**851.20**
201.45	66.84		
201.50	75.82		
201.55	84.20		

Summary for Pond B-7: Basin #7

Inflow Area = 1.564 ac, 62.85% Impervious, Inflow Depth = 9.84" for Future 100 yr event
Inflow = 15.05 cfs @ 12.17 hrs, Volume= 1.282 af
Outflow = 9.20 cfs @ 12.30 hrs, Volume= 1.139 af, Atten= 39%, Lag= 7.5 min
Primary = 9.20 cfs @ 12.30 hrs, Volume= 1.139 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 208.85' @ 12.30 hrs Surf.Area= 11,215 sf Storage= 21,084 cf

Plug-Flow detention time= 261.4 min calculated for 1.139 af (89% of inflow)
Center-of-Mass det. time= 204.9 min (966.7 - 761.8)

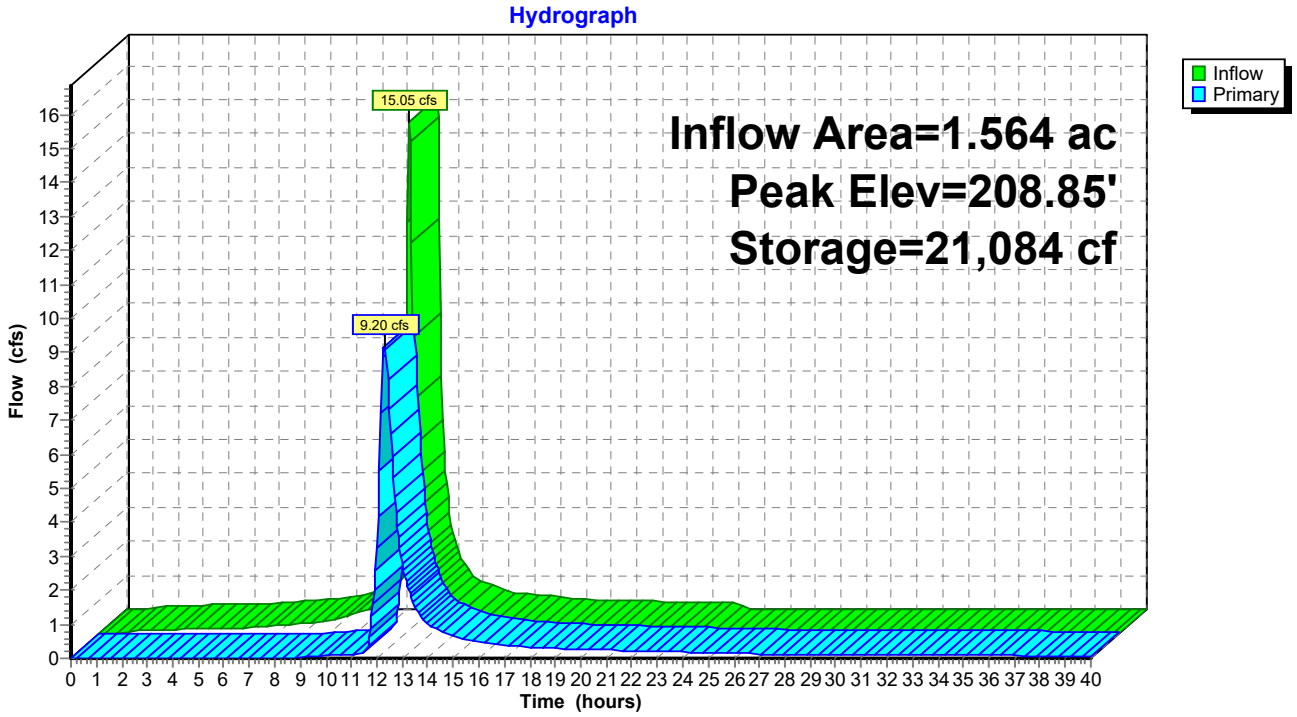
Volume	Invert	Avail.Storage	Storage Description
#1	206.47'	48,130 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.47	0	0	0
207.00	8,989	2,382	2,382
208.00	10,166	9,578	11,960
209.00	11,395	10,781	22,740
210.00	12,681	12,038	34,778
211.00	14,023	13,352	48,130

Device	Routing	Invert	Outlet Devices
#1	Primary	206.47'	**18.0" Round Culvert** L= 94.0' Ke= 0.500 Inlet / Outlet Invert= 206.47' / 206.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	207.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	207.99'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	208.86'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=9.19 cfs @ 12.30 hrs HW=208.85' (Free Discharge)
- **1=Culvert** (Barrel Controls 9.19 cfs @ 5.20 fps)
  - **2=Orifice/Grate** (Passes < 0.21 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 10.02 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-7: Basin #7



Stage-Discharge for Pond B-7: Basin #7

Elevation (feet)	Primary (cfs)
206.47	0.00
206.52	0.00
206.57	0.00
206.62	0.00
206.67	0.00
206.72	0.00
206.77	0.00
206.82	0.00
206.87	0.00
206.92	0.00
206.97	0.00
207.02	0.00
207.07	0.00
207.12	0.00
207.17	0.00
207.22	0.00
207.27	0.02
207.32	0.03
207.37	0.05
207.42	0.06
207.47	0.07
207.52	0.08
207.57	0.09
207.62	0.10
207.67	0.10
207.72	0.11
207.77	0.12
207.82	0.12
207.87	0.13
207.92	0.13
207.97	0.14
208.02	0.21
208.07	0.44
208.12	0.76
208.17	1.15
208.22	1.59
208.27	2.07
208.32	2.61
208.37	3.18
208.42	3.78
208.47	4.42
208.52	5.10
208.57	5.80
208.62	6.52
208.67	7.28
208.72	8.06
208.77	8.86
208.82	9.08
208.87	9.37
208.92	11.14
208.97	13.87
209.02	17.29
209.07	21.32
209.12	26.09
209.17	31.48
209.22	37.48
209.27	44.11
209.32	51.48
209.37	59.50
209.42	68.19
209.47	77.27
209.52	85.75
209.57	94.55
209.62	103.67
209.67	113.13
209.72	123.06
209.77	133.31
209.82	143.89
209.87	154.72
209.92	165.63
209.97	176.80
210.02	188.23
210.07	199.94
210.12	212.05
210.17	224.43
210.22	237.07
210.27	250.01
210.32	263.40
210.37	277.07
210.42	291.01
210.47	305.22
210.52	319.70
210.57	334.45
210.62	349.47
210.67	364.76
210.72	380.30
210.77	396.12
210.82	412.19
210.87	428.58
210.92	445.50
210.97	**462.70**

Summary for Pond B-8: Basin #8

Inflow Area = 2.090 ac, 23.06% Impervious, Inflow Depth = 8.61" for Future 100 yr event
Inflow = 18.67 cfs @ 12.17 hrs, Volume= 1.499 af
Outflow = 10.15 cfs @ 12.32 hrs, Volume= 1.364 af, Atten= 46%, Lag= 8.9 min
Primary = 10.15 cfs @ 12.32 hrs, Volume= 1.364 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.70' @ 12.32 hrs Surf.Area= 14,987 sf Storage= 24,010 cf

Plug-Flow detention time= 208.6 min calculated for 1.362 af (91% of inflow)
Center-of-Mass det. time= 162.6 min (952.1 - 789.5)

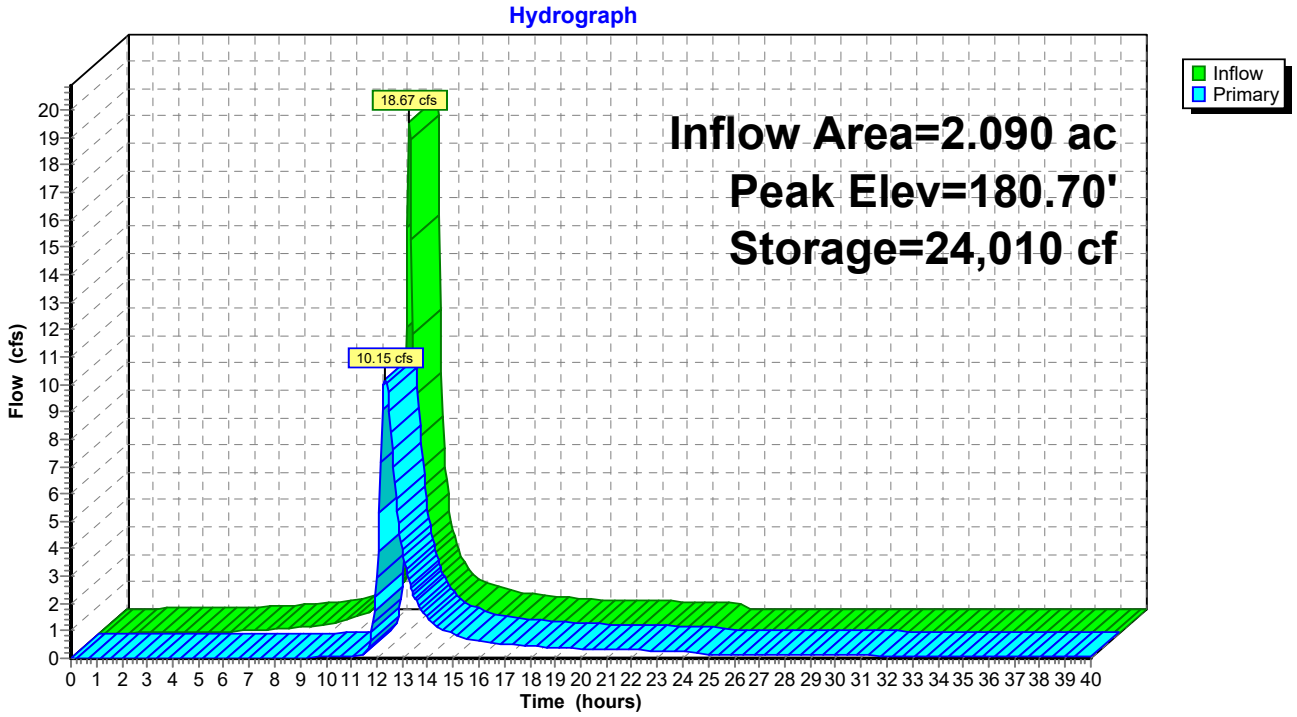
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	44,379 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	13,283	0	0
180.00	14,274	13,779	13,779
181.00	15,293	14,784	28,562
182.00	16,341	15,817	44,379

Device	Routing	Invert	Outlet Devices
#1	Primary	178.23'	**18.0" Round Culvert** L= 46.0' Ke= 0.500 Inlet / Outlet Invert= 178.23' / 178.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.17'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.83'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.13 cfs @ 12.32 hrs HW=180.70' (Free Discharge)
- **1=Culvert** (Barrel Controls 10.13 cfs @ 5.73 fps)
  - **2=Orifice/Grate** (Passes < 0.20 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 10.75 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-8: Basin #8



Stage-Discharge for Pond B-8: Basin #8

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	1.76	181.08	26.70
179.02	0.00	180.06	1.96	181.10	28.75
179.04	0.00	180.08	2.16	181.12	30.89
179.06	0.00	180.10	2.37	181.14	33.13
179.08	0.00	180.12	2.59	181.16	35.47
179.10	0.00	180.14	2.81	181.18	37.91
179.12	0.00	180.16	3.04	181.20	40.44
179.14	0.00	180.18	3.28	181.22	43.07
179.16	0.00	180.20	3.52	181.24	45.82
179.18	0.00	180.22	3.77	181.26	48.70
179.20	0.00	180.24	4.02	181.28	51.68
179.22	0.00	180.26	4.28	181.30	54.77
179.24	0.01	180.28	4.54	181.32	57.97
179.26	0.01	180.30	4.81	181.34	61.27
179.28	0.02	180.32	5.08	181.36	64.67
179.30	0.03	180.34	5.36	181.38	68.18
179.32	0.03	180.36	5.64	181.40	71.80
179.34	0.04	180.38	5.93	181.42	75.52
179.36	0.05	180.40	6.22	181.44	79.09
179.38	0.05	180.42	6.51	181.46	82.45
179.40	0.06	180.44	6.81	181.48	85.86
179.42	0.06	180.46	7.11	181.50	89.33
179.44	0.07	180.48	7.42	181.52	92.84
179.46	0.07	180.50	7.73	181.54	96.41
179.48	0.07	180.52	8.04	181.56	100.03
179.50	0.08	180.54	8.36	181.58	103.70
179.52	0.08	180.56	8.68	181.60	107.42
179.54	0.08	180.58	9.01	181.62	111.19
179.56	0.09	180.60	9.34	181.64	115.04
179.58	0.09	180.62	9.67	181.66	118.98
179.60	0.09	180.64	9.90	181.68	122.98
179.62	0.10	180.66	9.98	181.70	127.03
179.64	0.10	180.68	10.07	181.72	131.13
179.66	0.10	180.70	10.15	181.74	135.28
179.68	0.10	180.72	10.24	181.76	139.48
179.70	0.11	180.74	10.32	181.78	143.73
179.72	0.11	180.76	10.40	181.80	148.03
179.74	0.11	180.78	10.49	181.82	152.38
179.76	0.11	180.80	10.57	181.84	156.73
179.78	0.12	180.82	10.65	181.86	161.07
179.80	0.13	180.84	10.85	181.88	165.46
179.82	0.19	180.86	11.42	181.90	169.88
179.84	0.27	180.88	12.20	181.92	174.35
179.86	0.37	180.90	13.14	181.94	178.86
179.88	0.48	180.92	14.22	181.96	183.41
179.90	0.60	180.94	15.41	181.98	188.00
179.92	0.74	180.96	16.72	182.00	**192.63**
179.94	0.89	180.98	18.12		
179.96	1.04	181.00	19.62		
179.98	1.21	181.02	21.20		
180.00	1.39	181.04	22.91		
180.02	1.57	181.06	24.76		

Summary for Pond B-9: Basin #9

Inflow Area = 1.503 ac, 52.63% Impervious, Inflow Depth = 9.52" for Future 100 yr event
Inflow = 14.20 cfs @ 12.17 hrs, Volume= 1.193 af
Outflow = 8.82 cfs @ 12.29 hrs, Volume= 1.063 af, Atten= 38%, Lag= 7.5 min
Primary = 8.82 cfs @ 12.29 hrs, Volume= 1.063 af
Routed to Link PDA-1 : Proposed Drainage Area #1

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.71' @ 12.29 hrs Surf.Area= 12,414 sf Storage= 19,753 cf

Plug-Flow detention time= 247.4 min calculated for 1.062 af (89% of inflow)
Center-of-Mass det. time= 193.6 min (961.9 - 768.3)

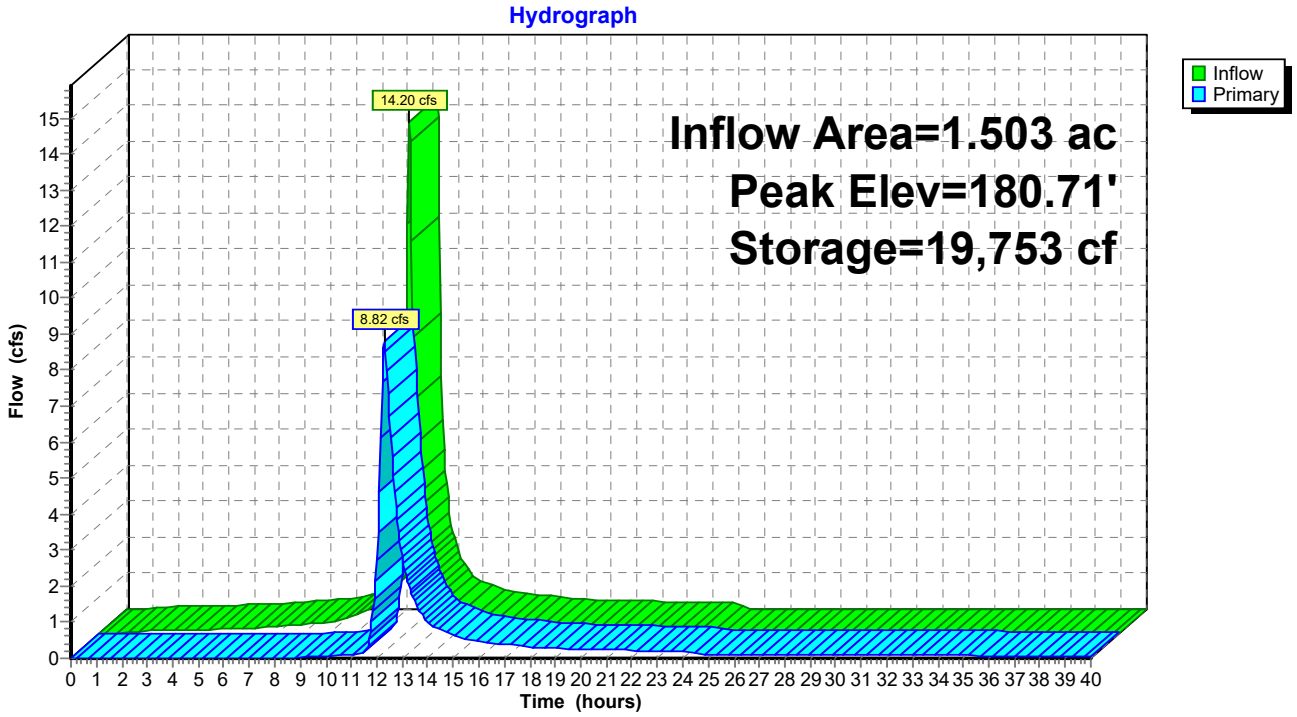
Volume	Invert	Avail.Storage	Storage Description
#1	179.00'	36,641 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
179.00	10,720	0	0
180.00	11,700	11,210	11,210
181.00	12,708	12,204	23,414
182.00	13,745	13,227	36,641

Device	Routing	Invert	Outlet Devices
#1	Primary	178.23'	**18.0" Round Culvert** L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 178.23' / 178.00' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	179.30'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.93'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	181.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.80 cfs @ 12.29 hrs HW=180.71' (Free Discharge)
- **1=Culvert** (Passes 8.80 cfs of 10.22 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.50 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 8.61 cfs @ 2.88 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-9: Basin #9



Stage-Discharge for Pond B-9: Basin #9

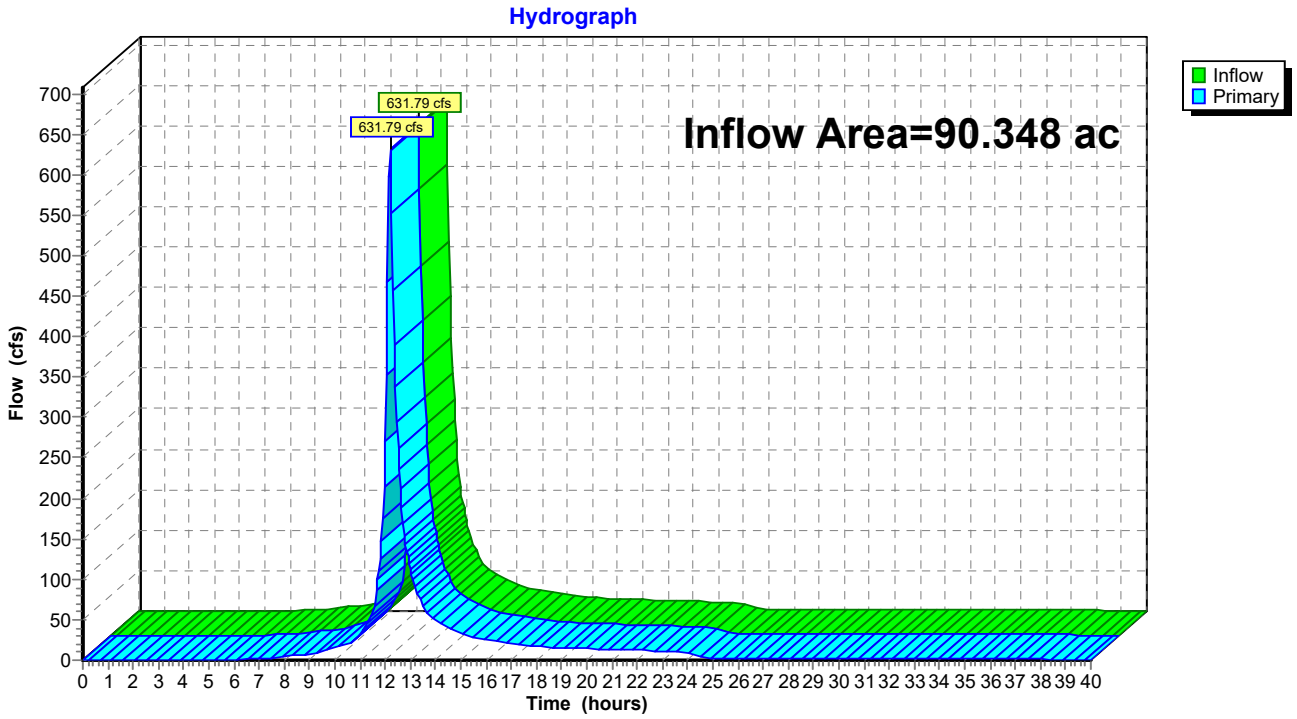
Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
179.00	0.00	180.04	0.61	181.08	11.70
179.02	0.00	180.06	0.74	181.10	11.77
179.04	0.00	180.08	0.89	181.12	11.84
179.06	0.00	180.10	1.05	181.14	11.92
179.08	0.00	180.12	1.21	181.16	11.99
179.10	0.00	180.14	1.39	181.18	12.06
179.12	0.00	180.16	1.57	181.20	12.13
179.14	0.00	180.18	1.76	181.22	12.20
179.16	0.00	180.20	1.96	181.24	12.27
179.18	0.00	180.22	2.16	181.26	12.34
179.20	0.00	180.24	2.37	181.28	12.41
179.22	0.00	180.26	2.59	181.30	12.48
179.24	0.00	180.28	2.81	181.32	12.55
179.26	0.00	180.30	3.04	181.34	12.62
179.28	0.00	180.32	3.28	181.36	12.69
179.30	0.00	180.34	3.52	181.38	12.76
179.32	0.00	180.36	3.77	181.40	12.83
179.34	0.00	180.38	4.02	181.42	12.89
179.36	0.01	180.40	4.28	181.44	12.96
179.38	0.01	180.42	4.54	181.46	13.03
179.40	0.02	180.44	4.81	181.48	13.09
179.42	0.02	180.46	5.08	181.50	13.16
179.44	0.03	180.48	5.36	181.52	13.22
179.46	0.04	180.50	5.64	181.54	13.29
179.48	0.05	180.52	5.93	181.56	13.35
179.50	0.05	180.54	6.22	181.58	13.42
179.52	0.06	180.56	6.51	181.60	13.48
179.54	0.06	180.58	6.81	181.62	13.55
179.56	0.06	180.60	7.11	181.64	13.61
179.58	0.07	180.62	7.42	181.66	13.67
179.60	0.07	180.64	7.73	181.68	13.74
179.62	0.08	180.66	8.04	181.70	13.80
179.64	0.08	180.68	8.36	181.72	13.86
179.66	0.08	180.70	8.68	181.74	13.93
179.68	0.09	180.72	9.01	181.76	13.99
179.70	0.09	180.74	9.34	181.78	14.05
179.72	0.09	180.76	9.67	181.80	14.11
179.74	0.10	180.78	10.01	181.82	14.17
179.76	0.10	180.80	10.35	181.84	14.23
179.78	0.10	180.82	10.69	181.86	14.29
179.80	0.10	180.84	10.77	181.88	14.35
179.82	0.11	180.86	10.85	181.90	14.41
179.84	0.11	180.88	10.93	181.92	14.47
179.86	0.11	180.90	11.01	181.94	14.53
179.88	0.11	180.92	11.09	181.96	14.71
179.90	0.12	180.94	11.17	181.98	15.26
179.92	0.12	180.96	11.24	182.00	**16.02**
179.94	0.13	180.98	11.32		
179.96	0.19	181.00	11.40		
179.98	0.27	181.02	11.47		
180.00	0.37	181.04	11.55		
180.02	0.48	181.06	11.62		

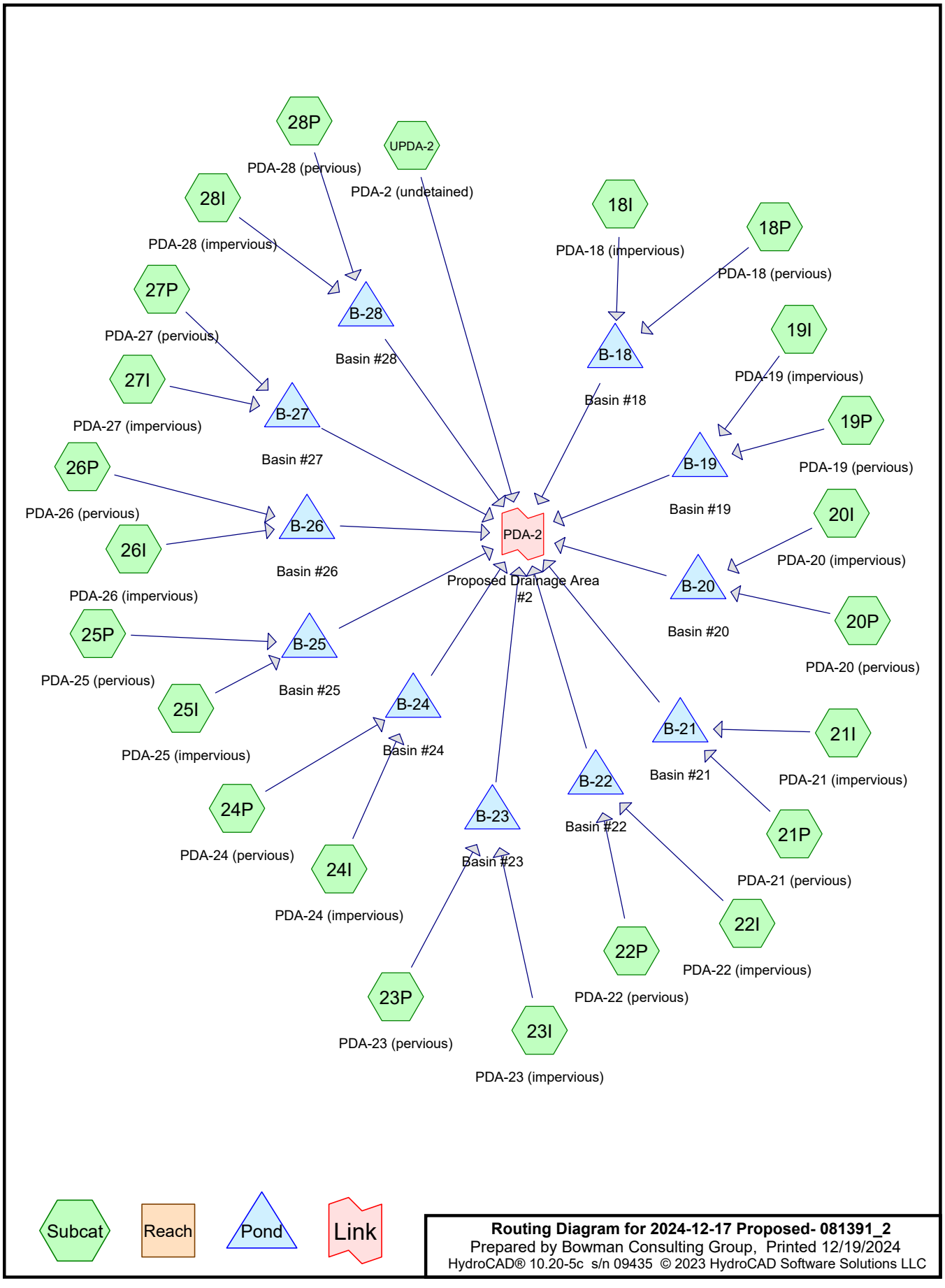
Summary for Link PDA-1: Proposed Drainage Area #1

Inflow Area = 90.348 ac, 16.68% Impervious, Inflow Depth > 7.89" for Future 100 yr event
Inflow = 631.79 cfs @ 12.19 hrs, Volume= 59.379 af
Primary = 631.79 cfs @ 12.19 hrs, Volume= 59.379 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-1: Proposed Drainage Area #1





Routing Diagram for 2024-12-17 Proposed- 081391_2
Prepared by Bowman Consulting Group, Printed 12/19/2024
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Summary for Subcatchment 18l: PDA-18 (impervious)

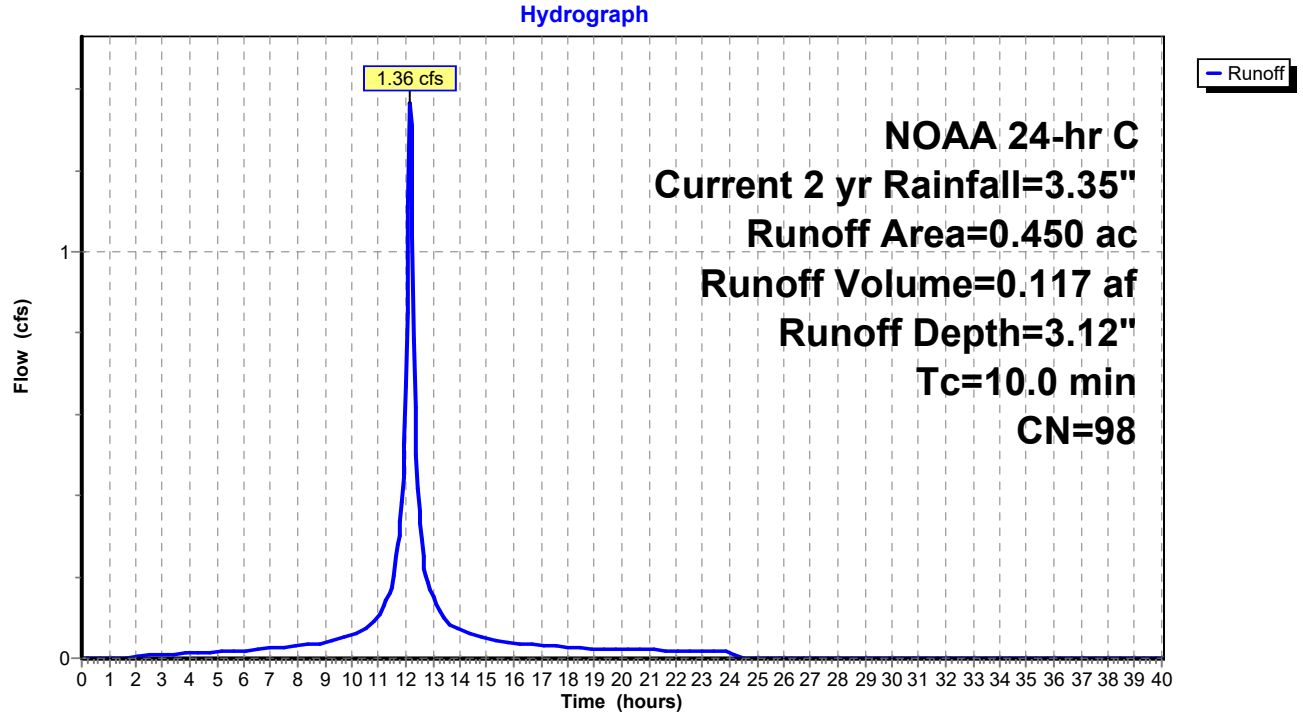
Runoff = 1.36 cfs @ 12.17 hrs, Volume= 0.117 af, Depth= 3.12"
Routed to Pond B-18 : Basin #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.450	98	Weighted Average
	0.450		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 18l: PDA-18 (impervious)



Summary for Subcatchment 18P: PDA-18 (pervious)

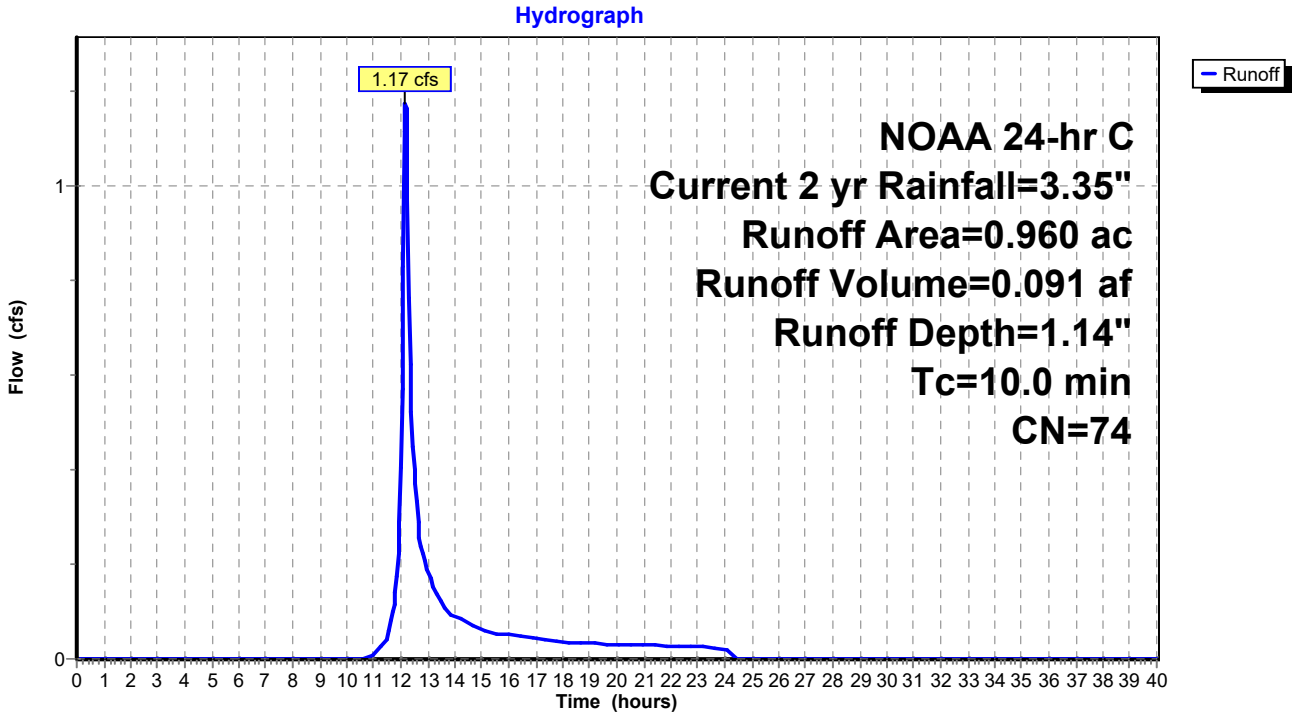
Runoff = 1.17 cfs @ 12.18 hrs, Volume= 0.091 af, Depth= 1.14"
Routed to Pond B-18 : Basin #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.960	74	>75% Grass cover, Good, HSG C
0.960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 18P: PDA-18 (pervious)



Summary for Subcatchment 19l: PDA-19 (impervious)

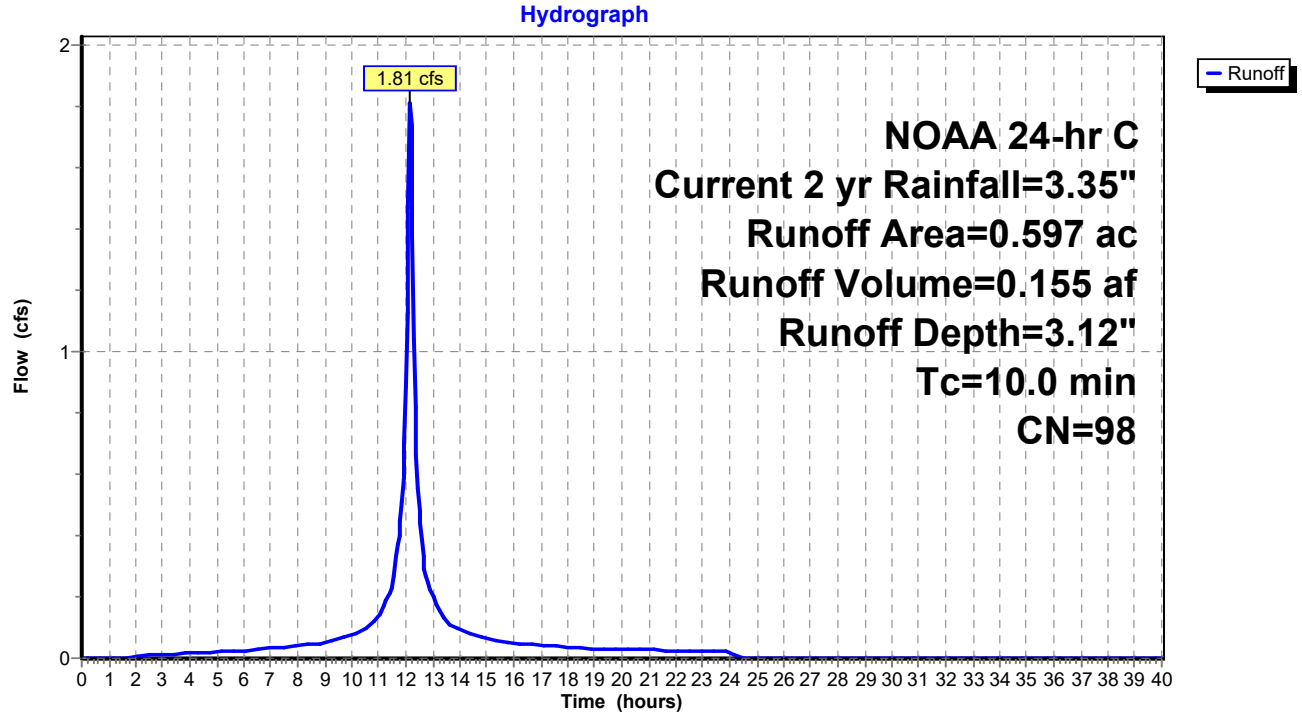
Runoff = 1.81 cfs @ 12.17 hrs, Volume= 0.155 af, Depth= 3.12"
Routed to Pond B-19 : Basin #19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.132	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.015	98	Concrete, HSG C
	0.597	98	Weighted Average
	0.597		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19l: PDA-19 (impervious)



Summary for Subcatchment 19P: PDA-19 (pervious)

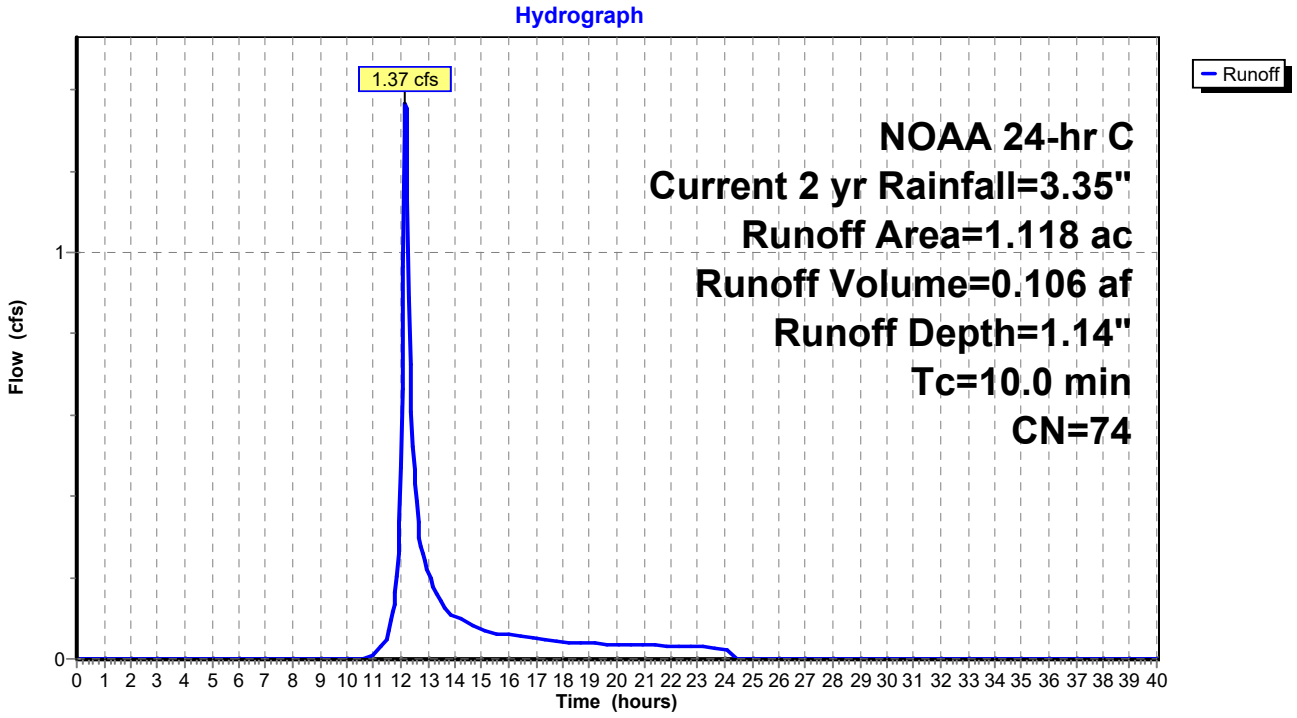
Runoff = 1.37 cfs @ 12.18 hrs, Volume= 0.106 af, Depth= 1.14"
Routed to Pond B-19 : Basin #19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.118	74	>75% Grass cover, Good, HSG C
1.118		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19P: PDA-19 (pervious)



Summary for Subcatchment 20I: PDA-20 (impervious)

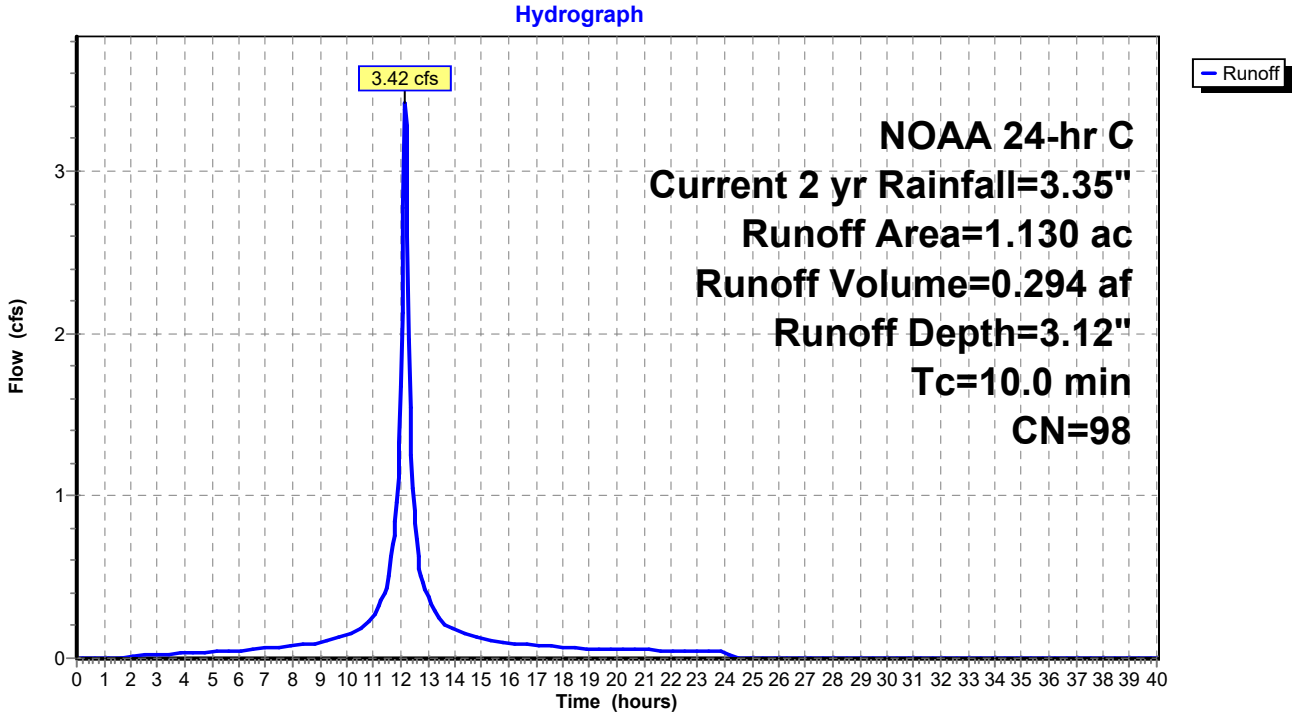
Runoff = 3.42 cfs @ 12.17 hrs, Volume= 0.294 af, Depth= 3.12"
Routed to Pond B-20 : Basin #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.572	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.108	98	Concrete, HSC C
	1.130	98	Weighted Average
	1.130		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 20I: PDA-20 (impervious)



Summary for Subcatchment 20P: PDA-20 (pervious)

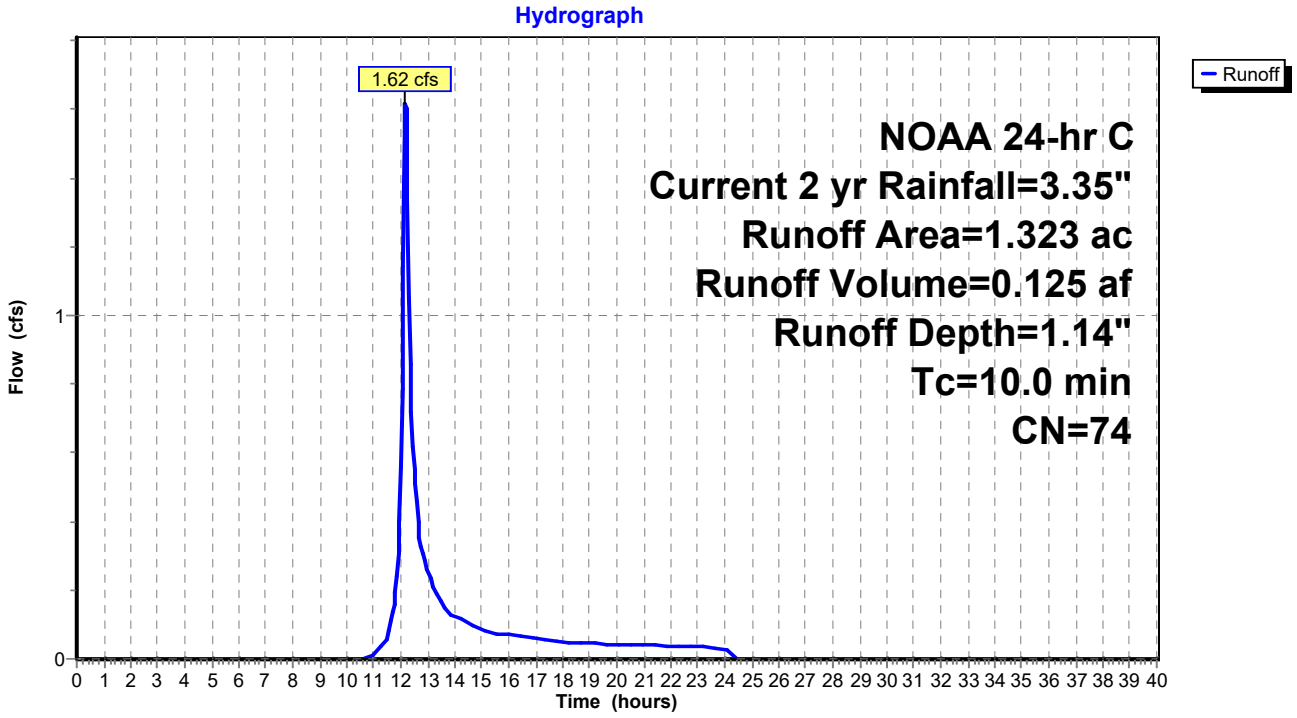
Runoff = 1.62 cfs @ 12.18 hrs, Volume= 0.125 af, Depth= 1.14"
Routed to Pond B-20 : Basin #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.323	74	>75% Grass cover, Good, HSG C
1.323		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 20P: PDA-20 (pervious)



Summary for Subcatchment 21I: PDA-21 (impervious)

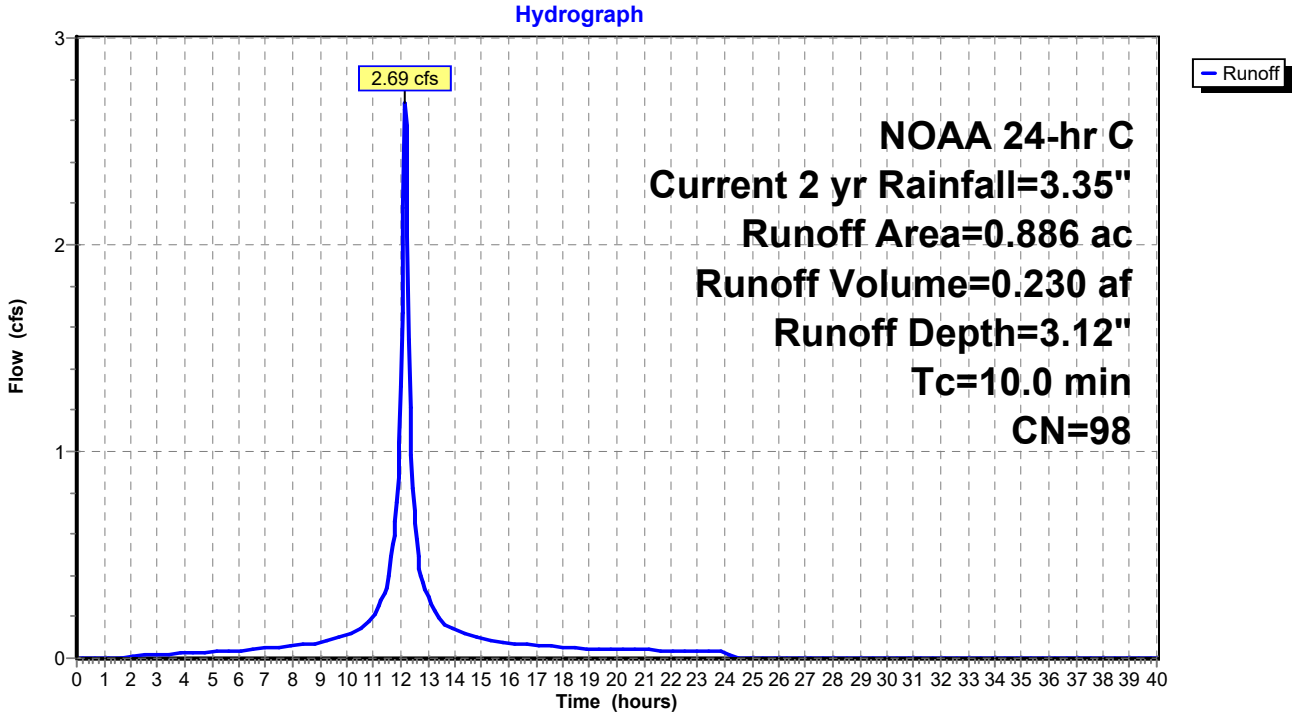
Runoff = 2.69 cfs @ 12.17 hrs, Volume= 0.230 af, Depth= 3.12"
Routed to Pond B-21 : Basin #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.511	98	Pavement, HSG C
*	0.321	98	Roof, HSG C
*	0.054	98	Concrete, HSC C
	0.886	98	Weighted Average
	0.886		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21I: PDA-21 (impervious)



Summary for Subcatchment 21P: PDA-21 (pervious)

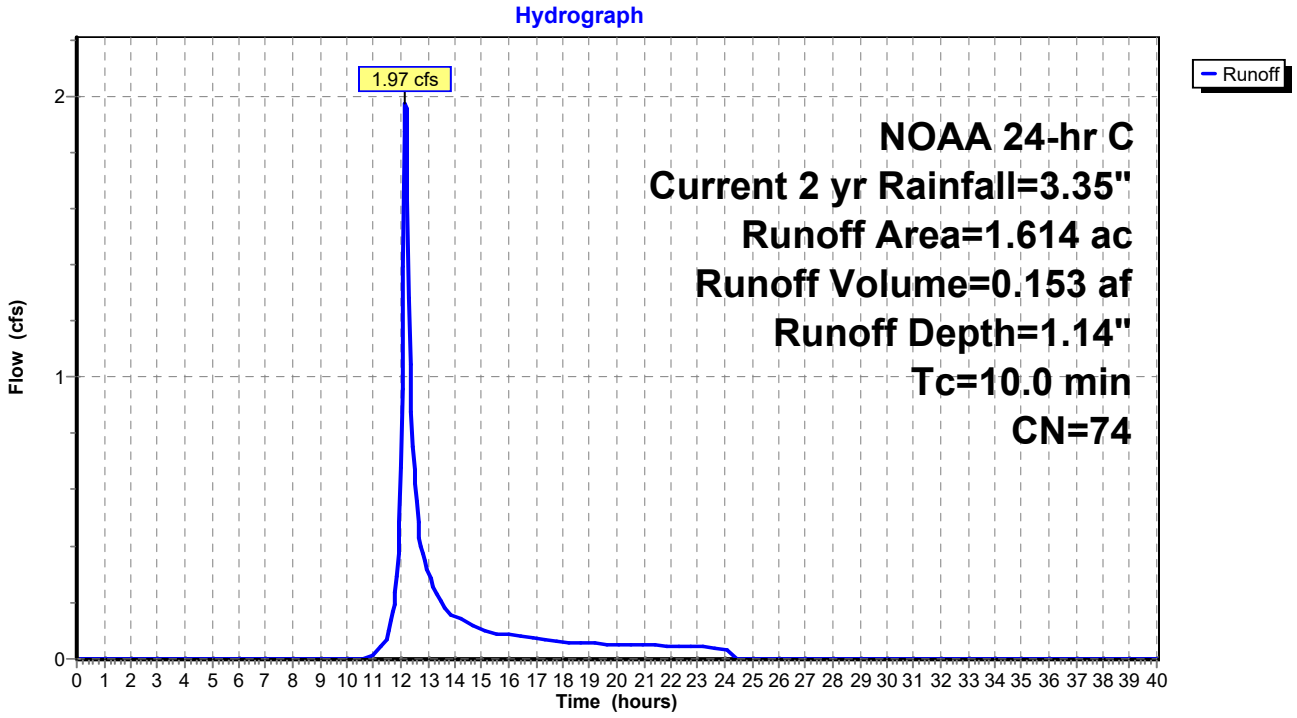
Runoff = 1.97 cfs @ 12.18 hrs, Volume= 0.153 af, Depth= 1.14"
Routed to Pond B-21 : Basin #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.614	74	>75% Grass cover, Good, HSG C
1.614		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21P: PDA-21 (pervious)



Summary for Subcatchment 22I: PDA-22 (impervious)

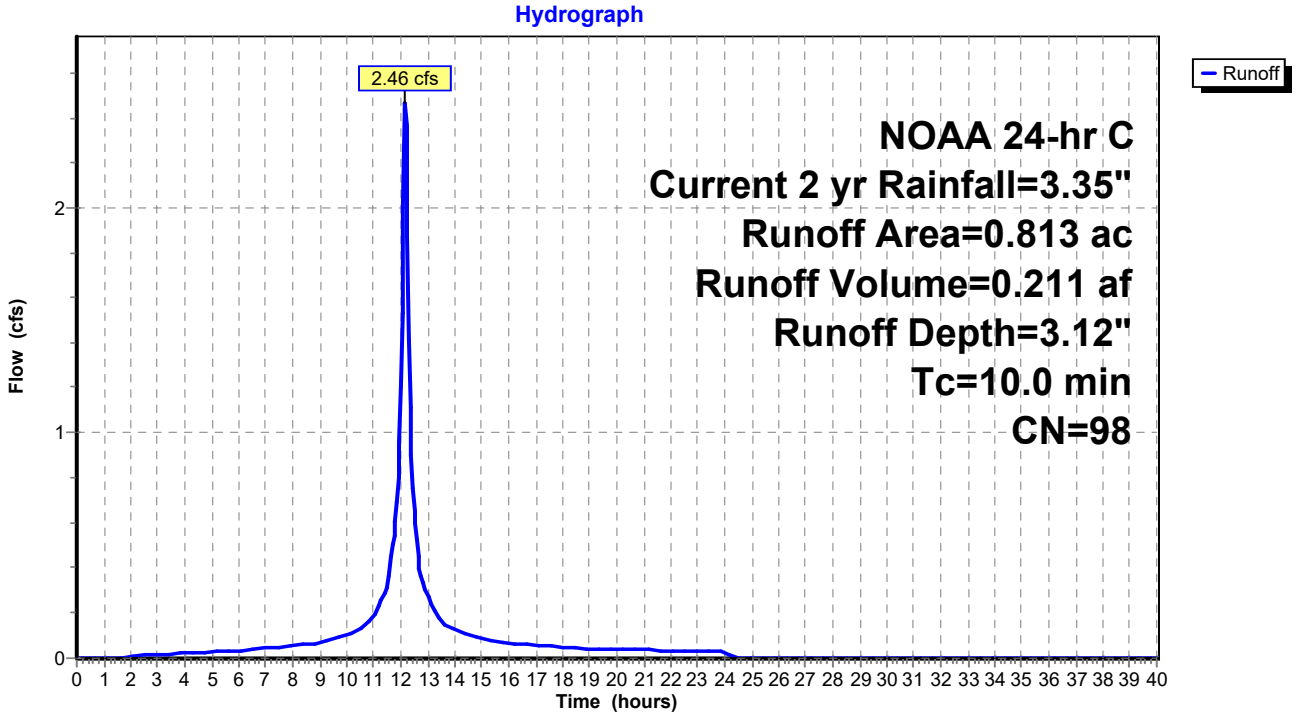
Runoff = 2.46 cfs @ 12.17 hrs, Volume= 0.211 af, Depth= 3.12"
Routed to Pond B-22 : Basin #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.083	98	Pavement, HSG C
*	0.707	98	Roof, HSG C
*	0.023	98	Concrete, HSC C
	0.813	98	Weighted Average
	0.813		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 22I: PDA-22 (impervious)



Summary for Subcatchment 22P: PDA-22 (pervious)

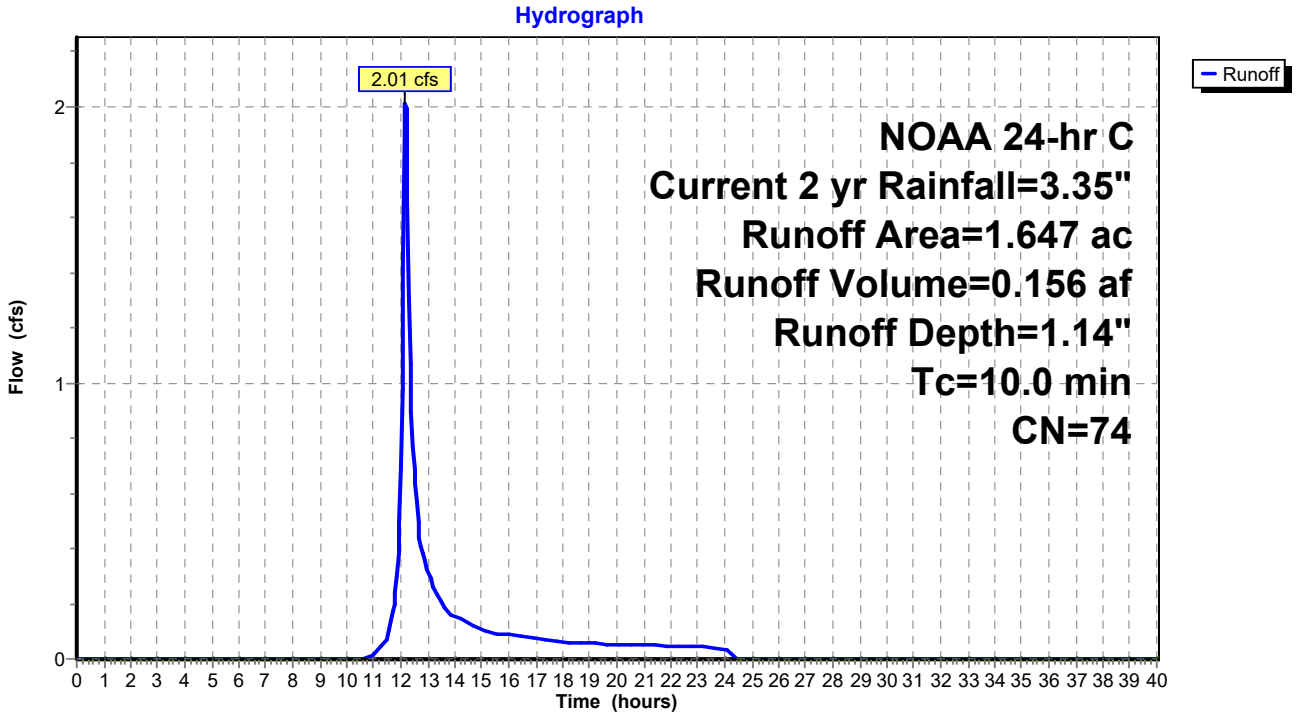
Runoff = 2.01 cfs @ 12.18 hrs, Volume= 0.156 af, Depth= 1.14"
Routed to Pond B-22 : Basin #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.647	74	>75% Grass cover, Good, HSG C
1.647		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 22P: PDA-22 (pervious)



Summary for Subcatchment 23I: PDA-23 (impervious)

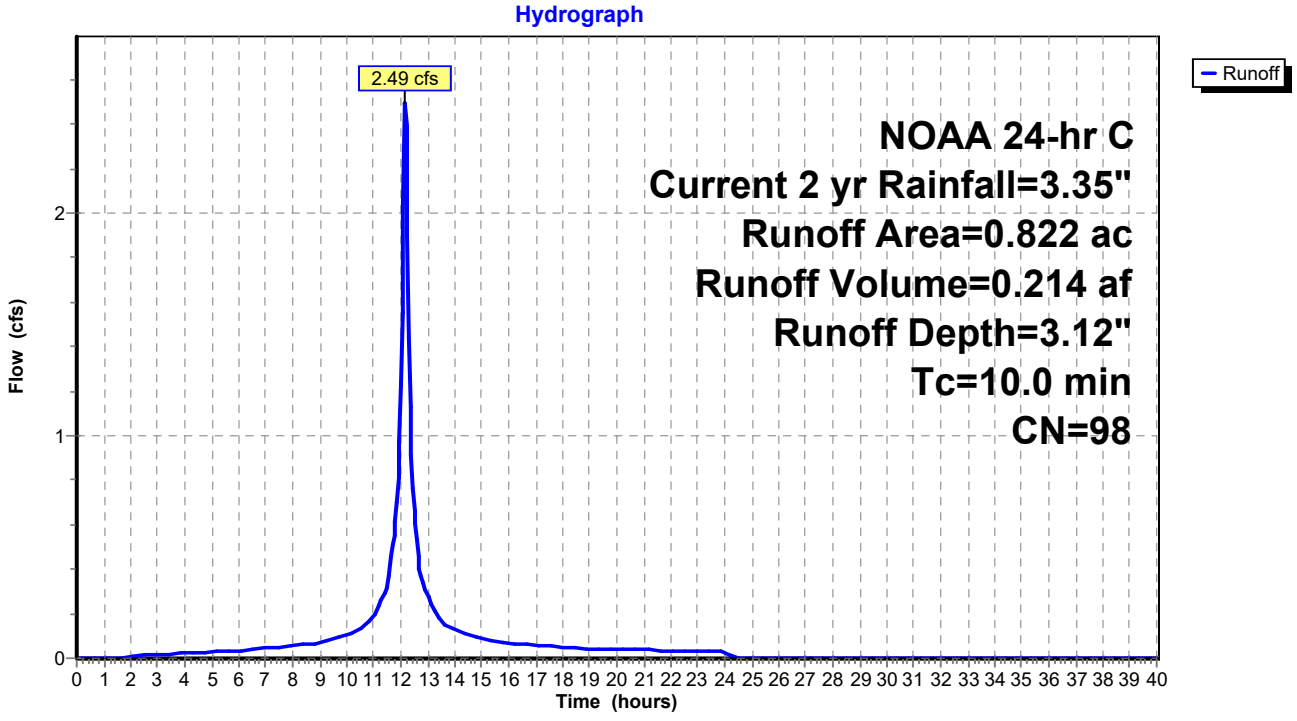
Runoff = 2.49 cfs @ 12.17 hrs, Volume= 0.214 af, Depth= 3.12"
Routed to Pond B-23 : Basin #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.719	98	Pavement, HSG C
*	0.103	98	Concrete, HSG C
	0.000	98	Roofs, HSG C
	0.822	98	Weighted Average
	0.822		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 23I: PDA-23 (impervious)



Summary for Subcatchment 23P: PDA-23 (pervious)

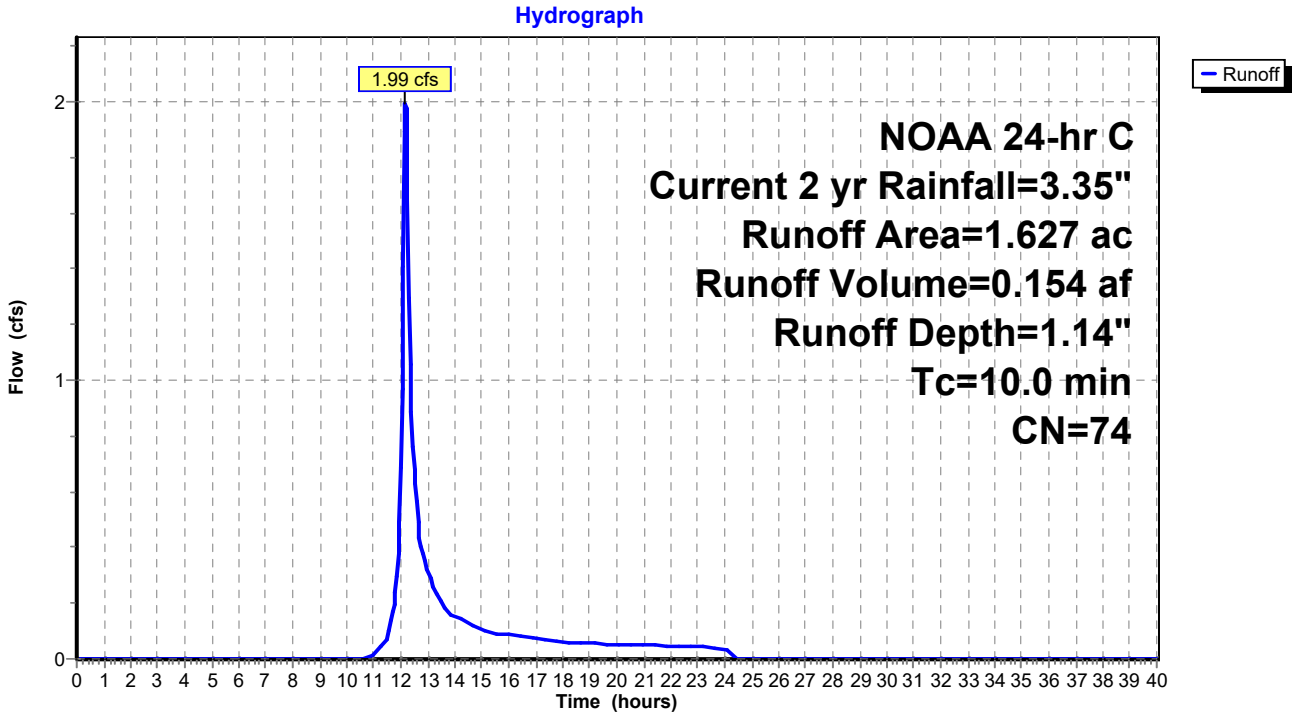
Runoff = 1.99 cfs @ 12.18 hrs, Volume= 0.154 af, Depth= 1.14"
Routed to Pond B-23 : Basin #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.627	74	>75% Grass cover, Good, HSG C
1.627		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 23P: PDA-23 (pervious)



Summary for Subcatchment 24l: PDA-24 (impervious)

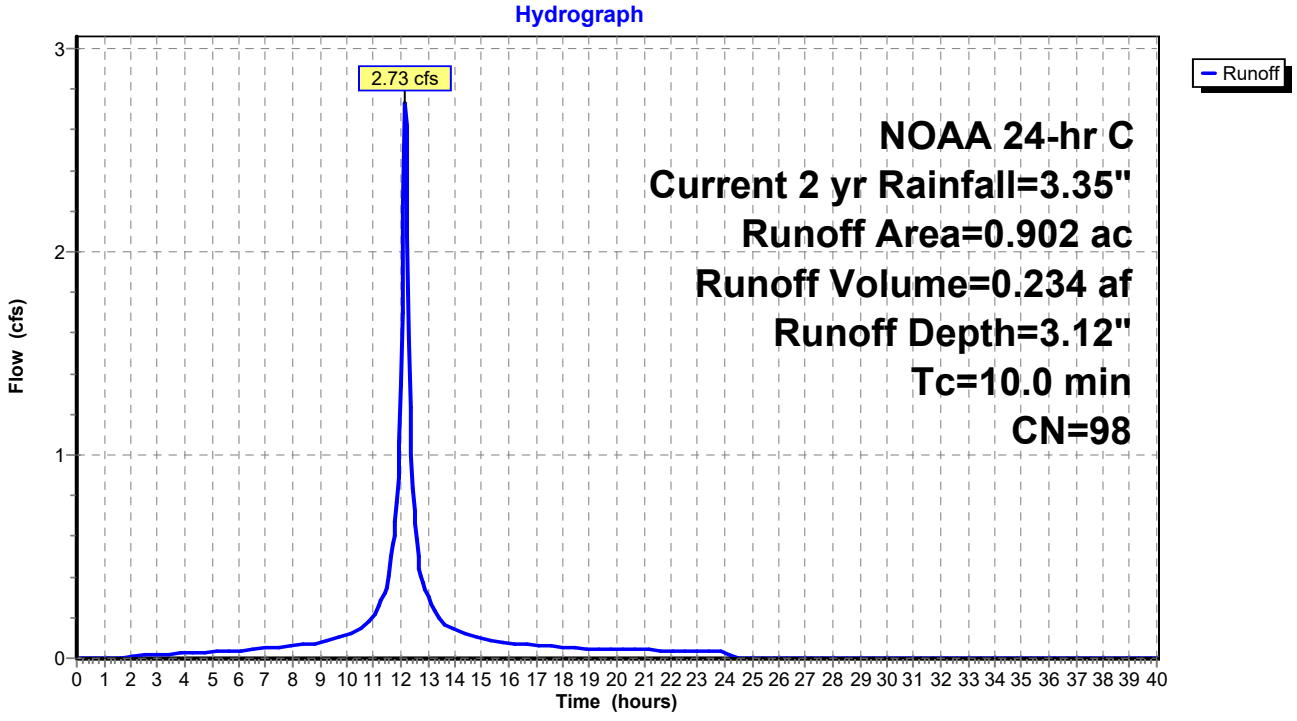
Runoff = 2.73 cfs @ 12.17 hrs, Volume= 0.234 af, Depth= 3.12"
Routed to Pond B-24 : Basin #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.277	98	Pavement, HSG C
*	0.579	98	Roof, HSG C
*	0.046	98	Concrete, HSC C
	0.902	98	Weighted Average
	0.902		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 24l: PDA-24 (impervious)



Summary for Subcatchment 24P: PDA-24 (pervious)

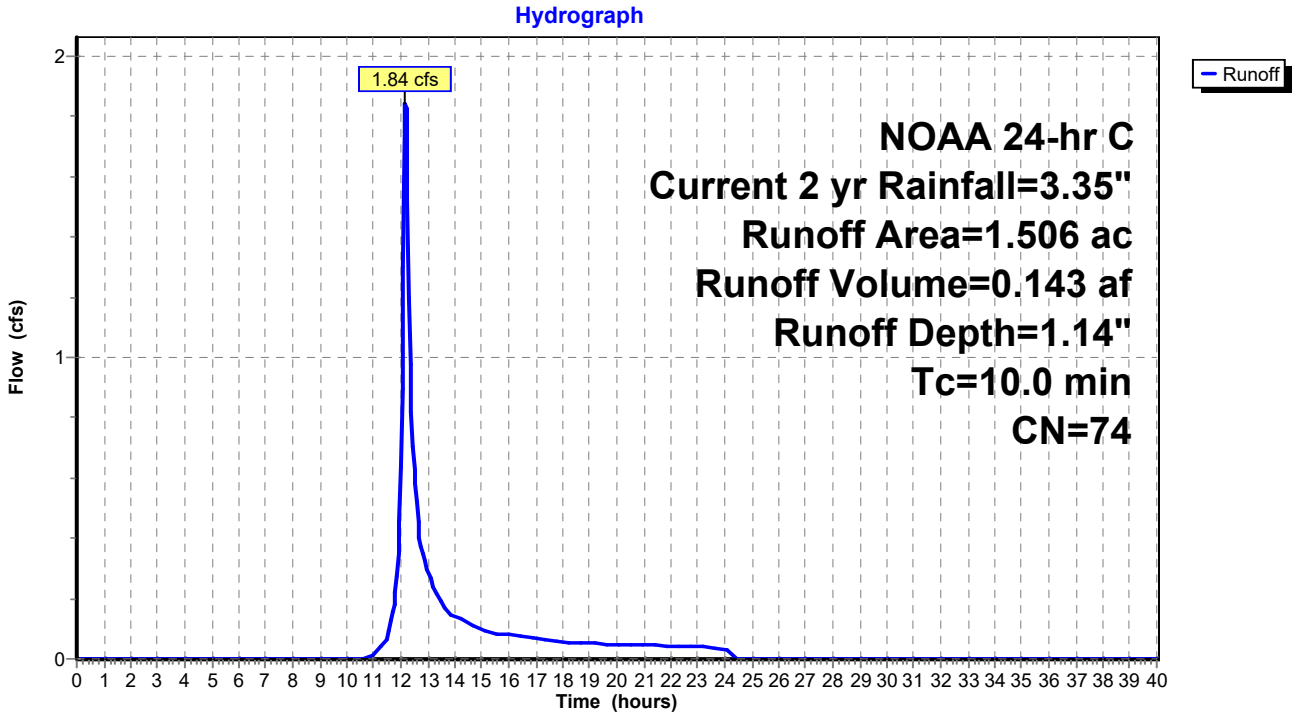
Runoff = 1.84 cfs @ 12.18 hrs, Volume= 0.143 af, Depth= 1.14"
Routed to Pond B-24 : Basin #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.506	74	>75% Grass cover, Good, HSG C
1.506		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 24P: PDA-24 (pervious)



Summary for Subcatchment 25l: PDA-25 (impervious)

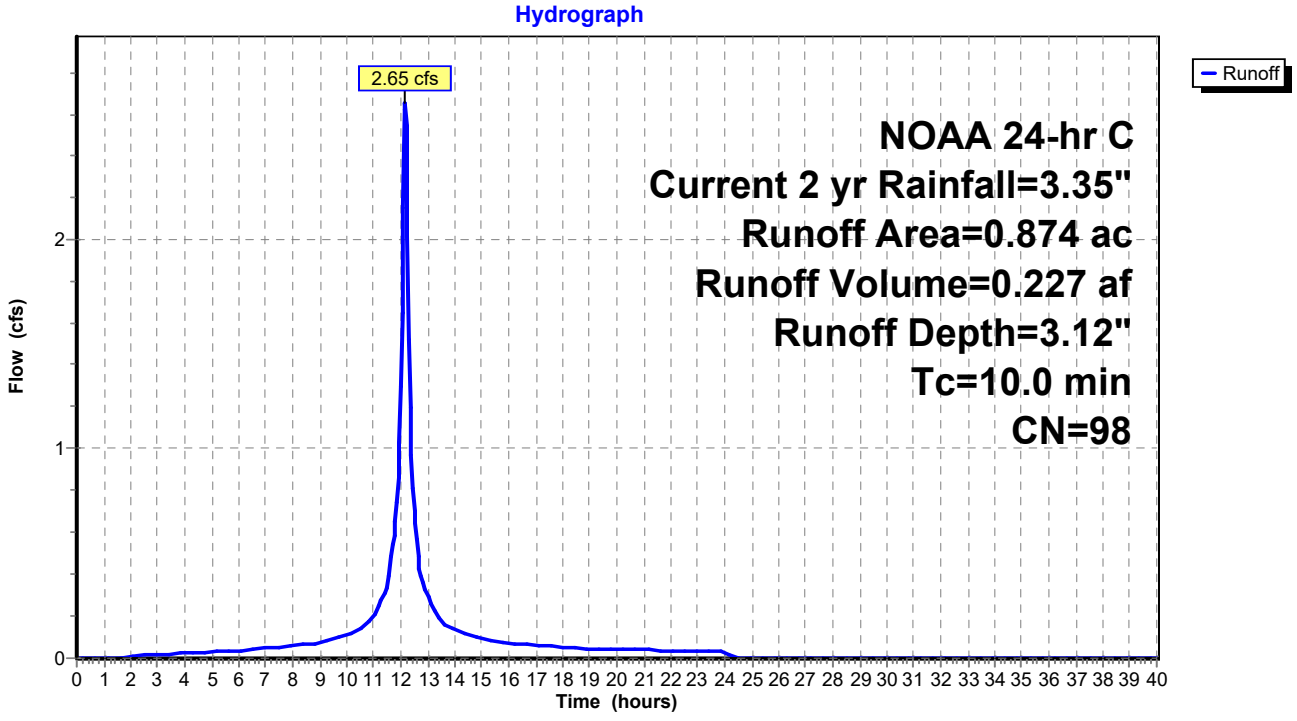
Runoff = 2.65 cfs @ 12.17 hrs, Volume= 0.227 af, Depth= 3.12"
Routed to Pond B-25 : Basin #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.388	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.036	98	Concrete, HSC C
	0.874	98	Weighted Average
	0.874		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 25l: PDA-25 (impervious)



Summary for Subcatchment 25P: PDA-25 (pervious)

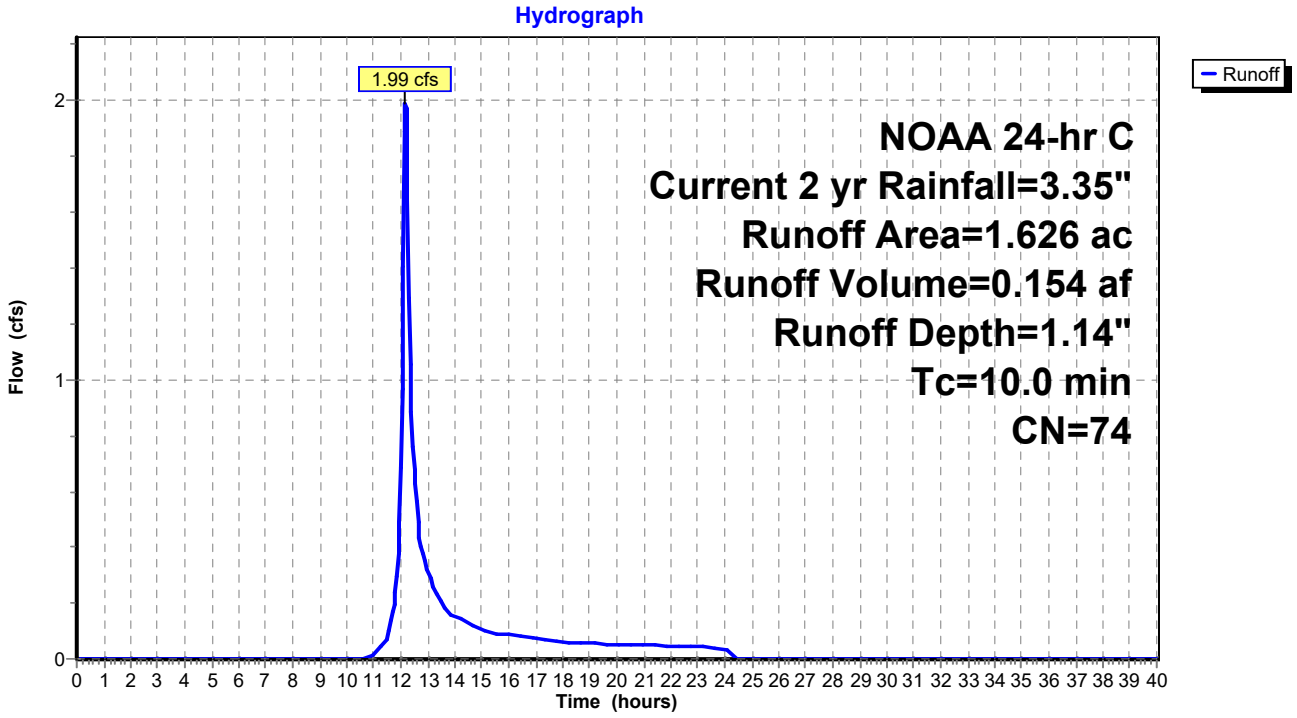
Runoff = 1.99 cfs @ 12.18 hrs, Volume= 0.154 af, Depth= 1.14"
Routed to Pond B-25 : Basin #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.626	74	>75% Grass cover, Good, HSG C
1.626		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 25P: PDA-25 (pervious)



Summary for Subcatchment 26l: PDA-26 (impervious)

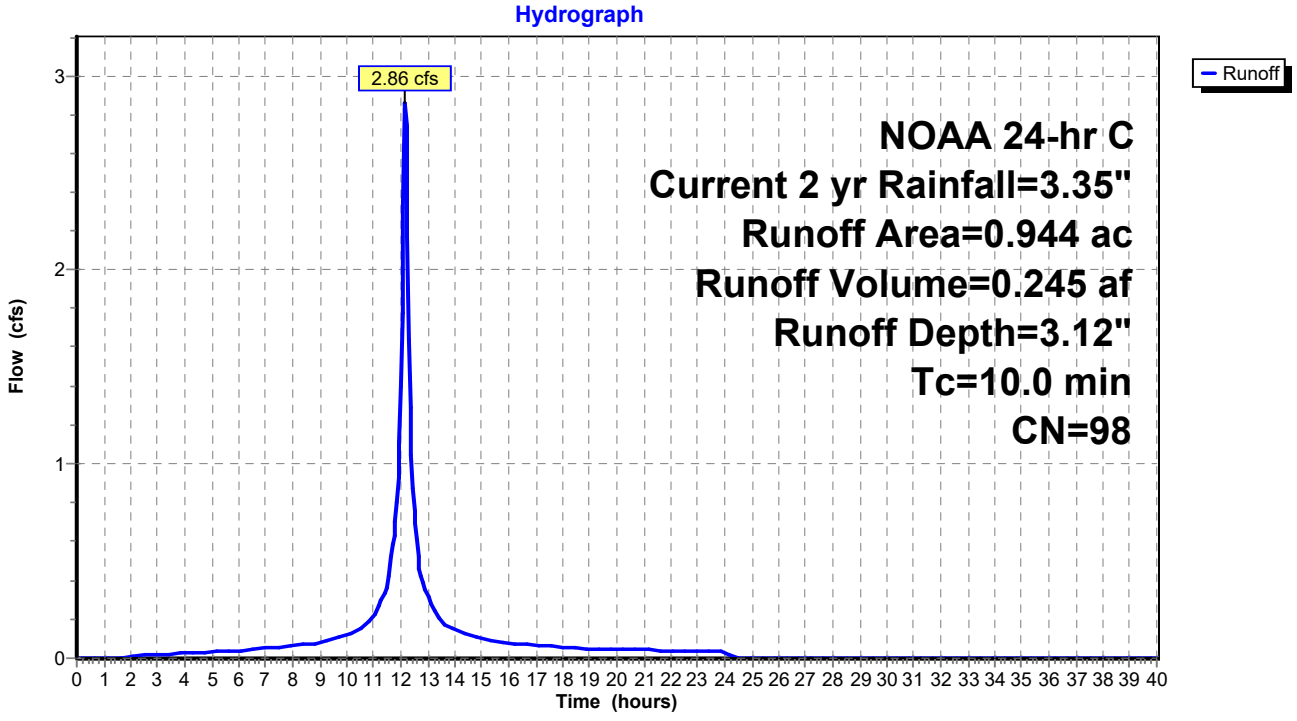
Runoff = 2.86 cfs @ 12.17 hrs, Volume= 0.245 af, Depth= 3.12"
Routed to Pond B-26 : Basin #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.944	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.944	98	Weighted Average
	0.944		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 26l: PDA-26 (impervious)



Summary for Subcatchment 26P: PDA-26 (pervious)

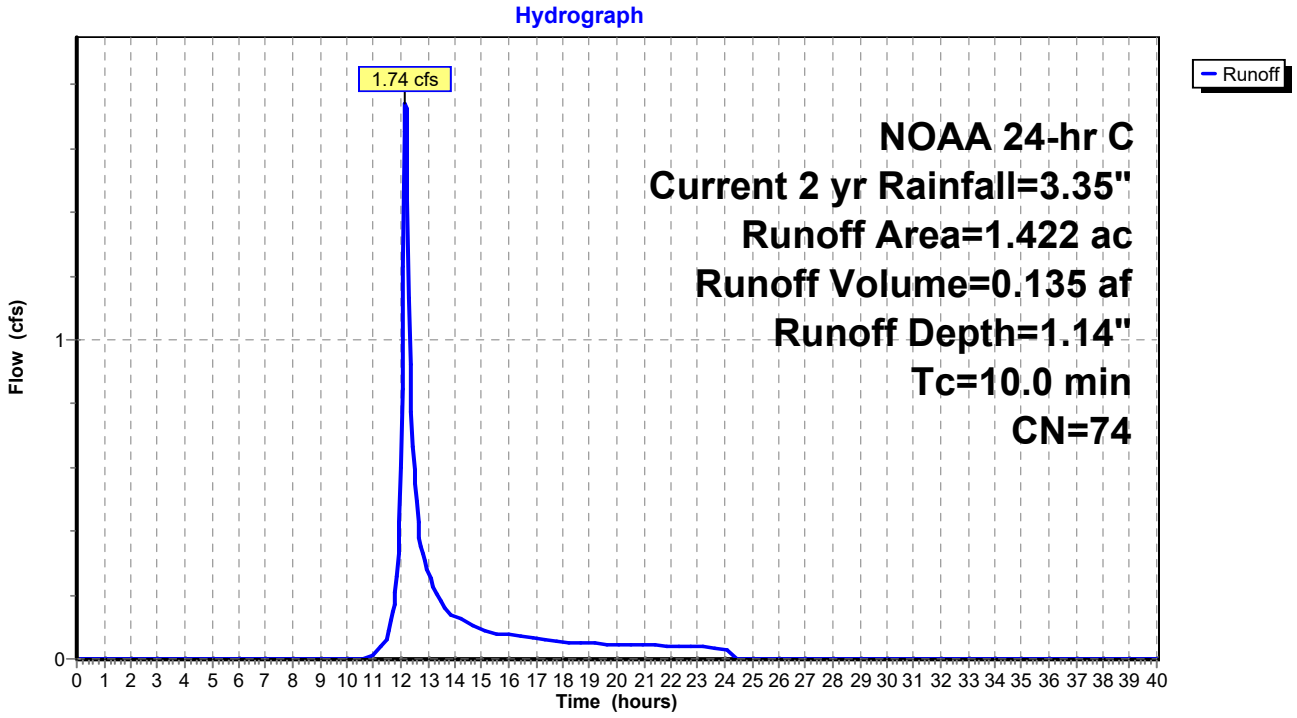
Runoff = 1.74 cfs @ 12.18 hrs, Volume= 0.135 af, Depth= 1.14"
Routed to Pond B-26 : Basin #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.422	74	>75% Grass cover, Good, HSG C
1.422		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 26P: PDA-26 (pervious)



Summary for Subcatchment 27I: PDA-27 (impervious)

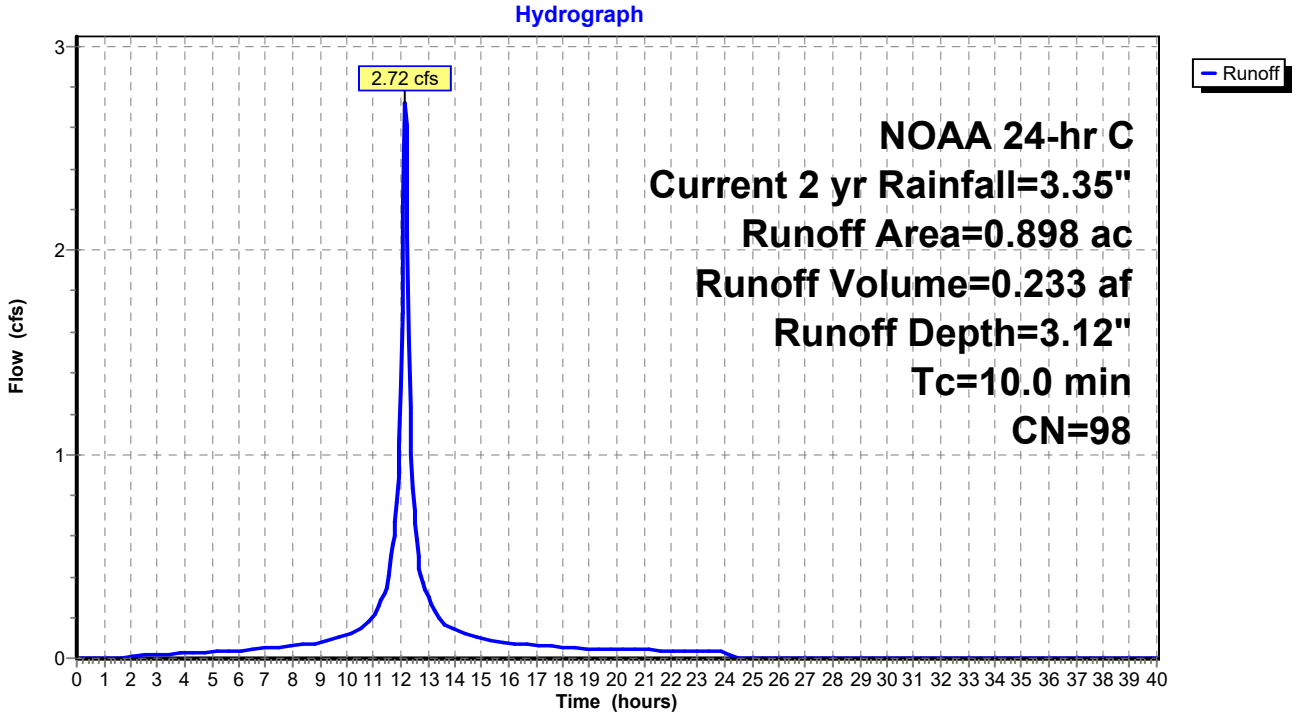
Runoff = 2.72 cfs @ 12.17 hrs, Volume= 0.233 af, Depth= 3.12"
Routed to Pond B-27 : Basin #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.233	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.022	98	Concrete, HSC C
	0.898	98	Weighted Average
	0.898		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 27I: PDA-27 (impervious)



Summary for Subcatchment 27P: PDA-27 (pervious)

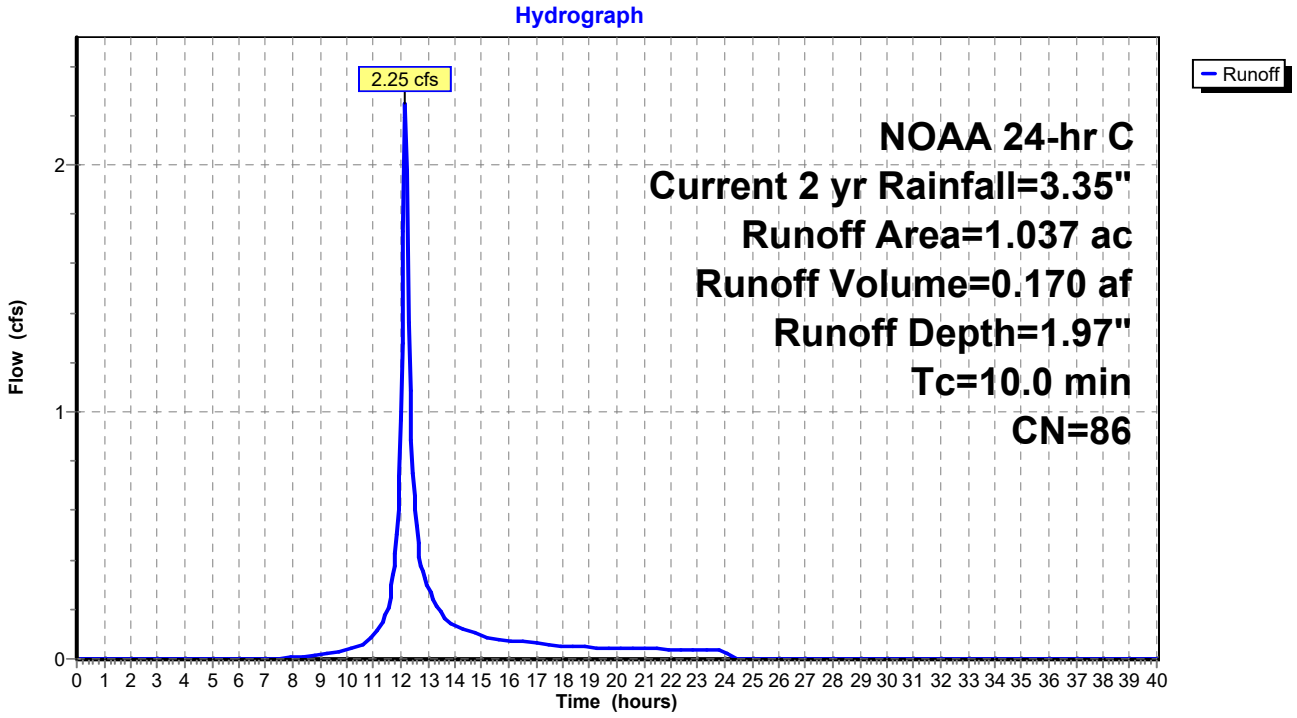
Runoff = 2.25 cfs @ 12.17 hrs, Volume= 0.170 af, Depth= 1.97"
Routed to Pond B-27 : Basin #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.037	86	<50% Grass cover, Poor, HSG C
1.037		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 27P: PDA-27 (pervious)



Summary for Subcatchment 28I: PDA-28 (impervious)

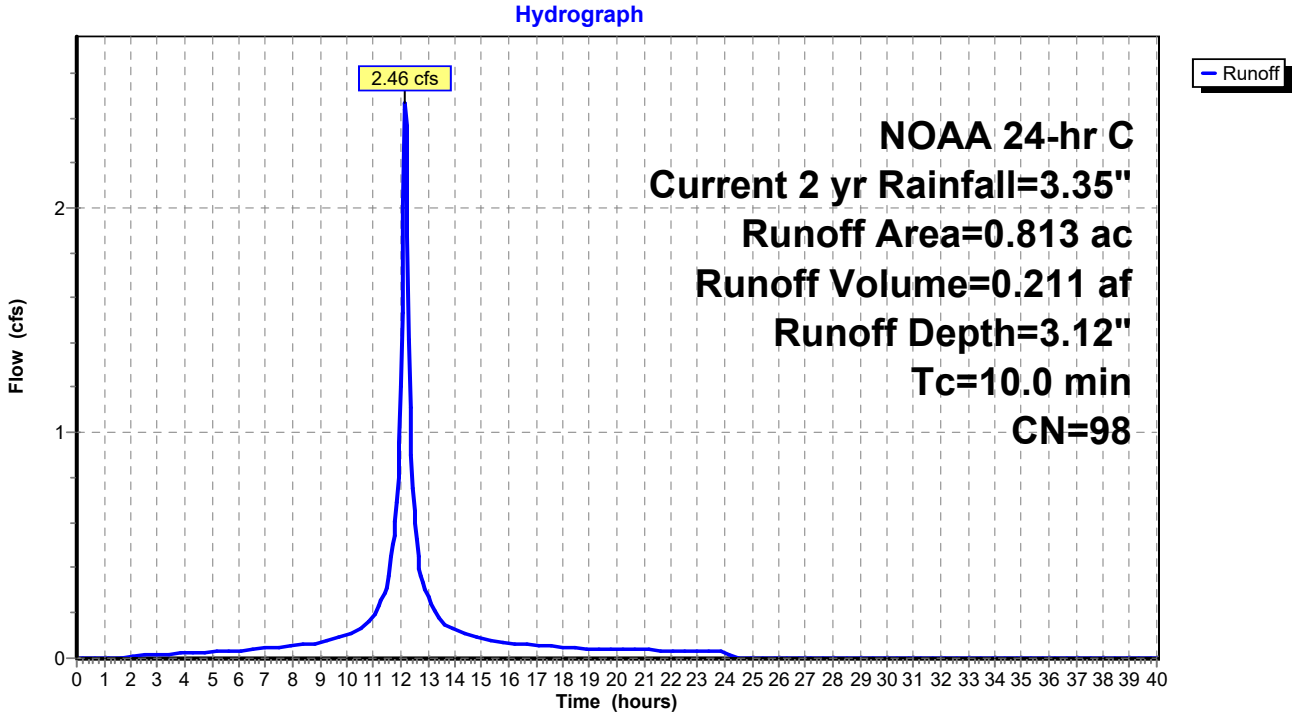
Runoff = 2.46 cfs @ 12.17 hrs, Volume= 0.211 af, Depth= 3.12"
Routed to Pond B-28 : Basin #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.235	98	Pavement, HSG C
*	0.541	98	Roof, HSG C
*	0.037	98	Concrete, HSC C
	0.813	98	Weighted Average
	0.813		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 28I: PDA-28 (impervious)



Summary for Subcatchment 28P: PDA-28 (pervious)

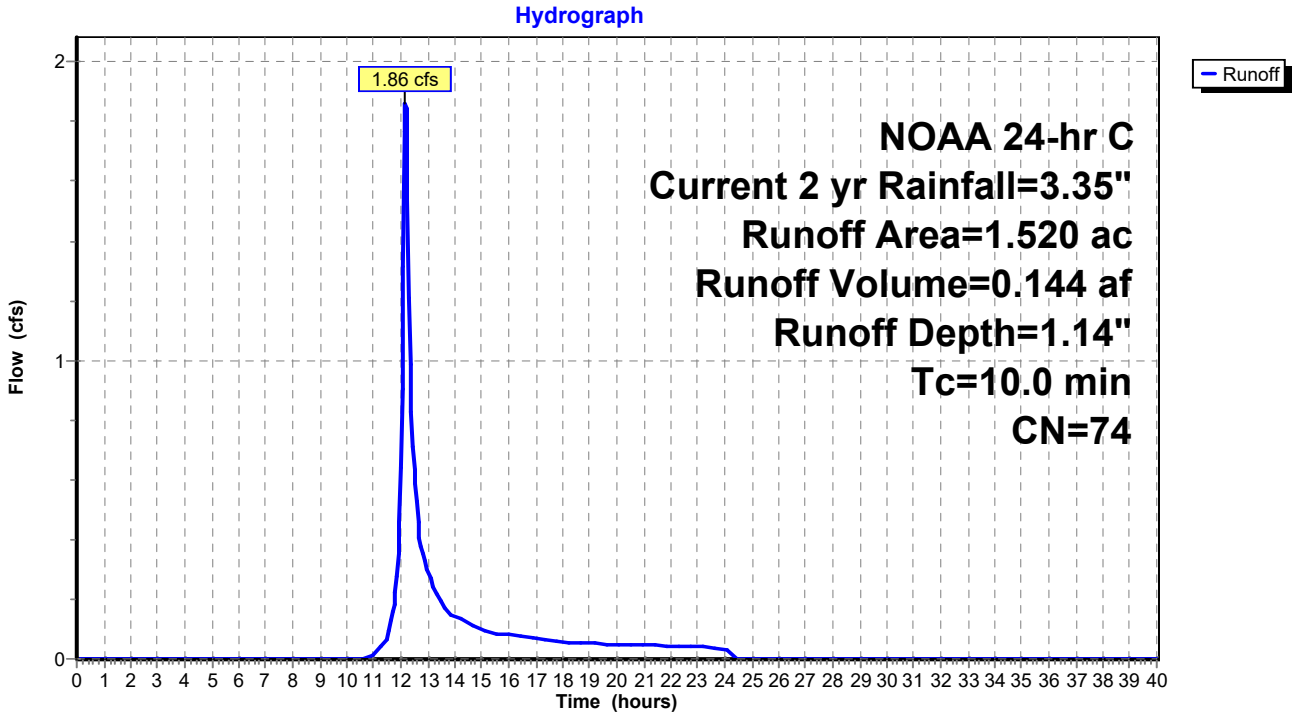
Runoff = 1.86 cfs @ 12.18 hrs, Volume= 0.144 af, Depth= 1.14"
Routed to Pond B-28 : Basin #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.520	74	>75% Grass cover, Good, HSG C
1.520		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 28P: PDA-28 (pervious)



Summary for Subcatchment UPDA-2: PDA-2 (undetained)

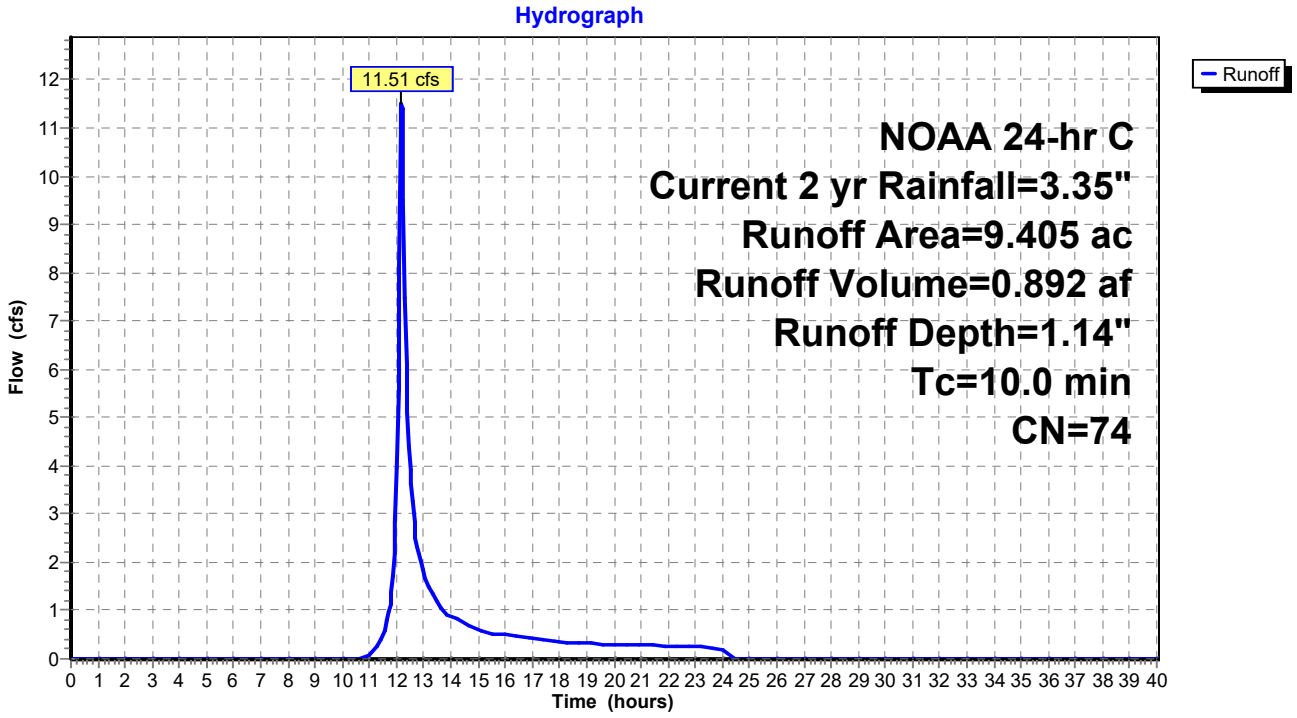
Runoff = 11.51 cfs @ 12.18 hrs, Volume= 0.892 af, Depth= 1.14"
Routed to Link PDA-2 : Proposed Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
9.405	74	>75% Grass cover, Good, HSG C
9.405		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-2: PDA-2 (undetained)



Summary for Pond B-18: Basin #18

Inflow Area = 1.410 ac, 31.91% Impervious, Inflow Depth = 1.77" for Current 2 yr event
Inflow = 2.53 cfs @ 12.18 hrs, Volume= 0.208 af
Outflow = 0.20 cfs @ 13.55 hrs, Volume= 0.163 af, Atten= 92%, Lag= 82.6 min
Primary = 0.20 cfs @ 13.55 hrs, Volume= 0.163 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 188.87' @ 13.55 hrs Surf.Area= 2,548 sf Storage= 5,349 cf

Plug-Flow detention time= 358.3 min calculated for 0.163 af (78% of inflow)
Center-of-Mass det. time= 270.7 min (1,077.5 - 806.8)

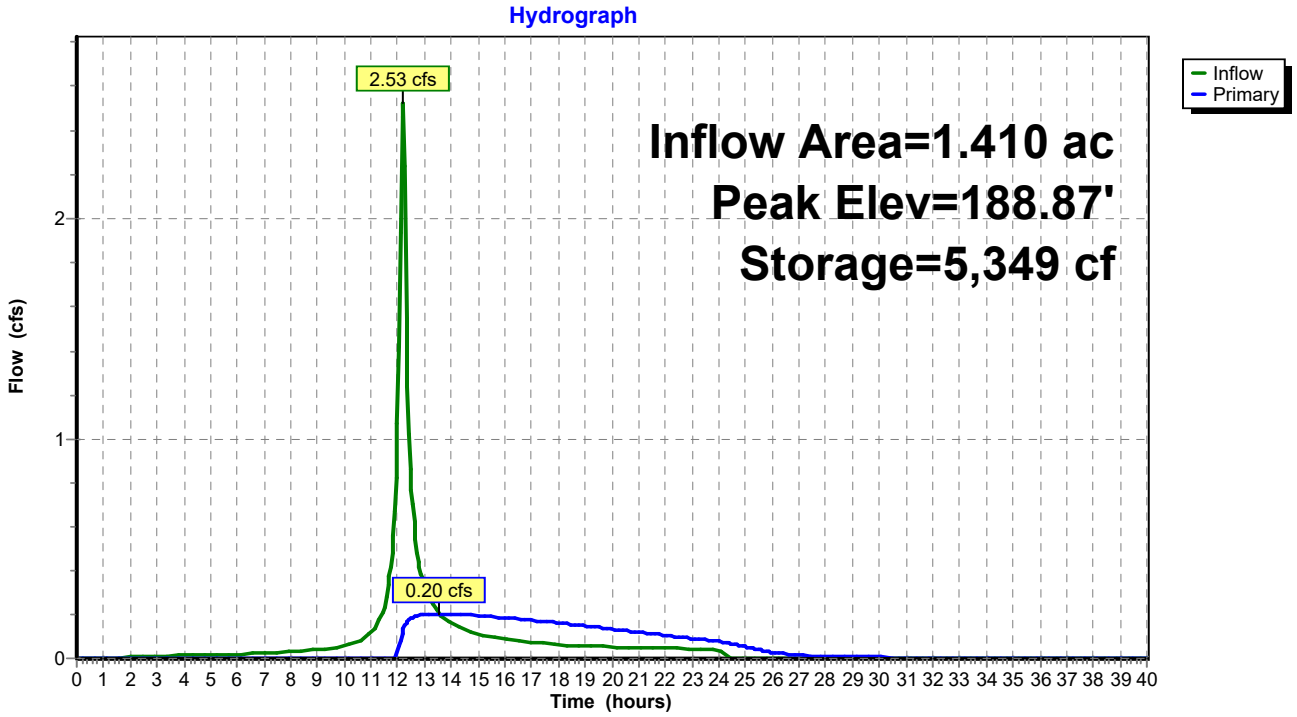
Volume	Invert	Avail.Storage	Storage Description
#1	185.65'	12,198 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
185.65	0	0	0
186.00	1,119	196	196
187.00	1,564	1,342	1,537
188.00	2,065	1,815	3,352
189.00	2,623	2,344	5,696
190.00	3,237	2,930	8,626
191.00	3,908	3,573	12,198

Device	Routing	Invert	Outlet Devices
#1	Primary	186.00'	**15.0" Round Culvert** L= 28.0' Ke= 0.500 Inlet / Outlet Invert= 186.00' / 185.86' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	187.25'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.34'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.20 cfs @ 13.55 hrs HW=188.87' (Free Discharge)
- **1=Culvert** (Passes 0.20 cfs of 8.85 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.92 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-18: Basin #18



Stage-Discharge for Pond B-18: Basin #18

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00
185.68	0.00	186.20	0.00	186.72	0.00	187.24	0.00
185.69	0.00	186.21	0.00	186.73	0.00	187.25	0.00
185.70	0.00	186.22	0.00	186.74	0.00	187.26	0.00
185.71	0.00	186.23	0.00	186.75	0.00	187.27	0.00
185.72	0.00	186.24	0.00	186.76	0.00	187.28	0.00
185.73	0.00	186.25	0.00	186.77	0.00	187.29	0.00
185.74	0.00	186.26	0.00	186.78	0.00	187.30	0.00
185.75	0.00	186.27	0.00	186.79	0.00	187.31	0.01
185.76	0.00	186.28	0.00	186.80	0.00	187.32	0.01
185.77	0.00	186.29	0.00	186.81	0.00	187.33	0.01
185.78	0.00	186.30	0.00	186.82	0.00	187.34	0.01
185.79	0.00	186.31	0.00	186.83	0.00	187.35	0.02
185.80	0.00	186.32	0.00	186.84	0.00	187.36	0.02
185.81	0.00	186.33	0.00	186.85	0.00	187.37	0.02
185.82	0.00	186.34	0.00	186.86	0.00	187.38	0.03
185.83	0.00	186.35	0.00	186.87	0.00	187.39	0.03
185.84	0.00	186.36	0.00	186.88	0.00	187.40	0.03
185.85	0.00	186.37	0.00	186.89	0.00	187.41	0.04
185.86	0.00	186.38	0.00	186.90	0.00	187.42	0.04
185.87	0.00	186.39	0.00	186.91	0.00	187.43	0.05
185.88	0.00	186.40	0.00	186.92	0.00	187.44	0.05
185.89	0.00	186.41	0.00	186.93	0.00	187.45	0.05
185.90	0.00	186.42	0.00	186.94	0.00	187.46	0.05
185.91	0.00	186.43	0.00	186.95	0.00	187.47	0.06
185.92	0.00	186.44	0.00	186.96	0.00	187.48	0.06
185.93	0.00	186.45	0.00	186.97	0.00	187.49	0.06
185.94	0.00	186.46	0.00	186.98	0.00	187.50	0.06
185.95	0.00	186.47	0.00	186.99	0.00	187.51	0.06
185.96	0.00	186.48	0.00	187.00	0.00	187.52	0.07
185.97	0.00	186.49	0.00	187.01	0.00	187.53	0.07
185.98	0.00	186.50	0.00	187.02	0.00	187.54	0.07
185.99	0.00	186.51	0.00	187.03	0.00	187.55	0.07
186.00	0.00	186.52	0.00	187.04	0.00	187.56	0.07
186.01	0.00	186.53	0.00	187.05	0.00	187.57	0.08
186.02	0.00	186.54	0.00	187.06	0.00	187.58	0.08
186.03	0.00	186.55	0.00	187.07	0.00	187.59	0.08
186.04	0.00	186.56	0.00	187.08	0.00	187.60	0.08
186.05	0.00	186.57	0.00	187.09	0.00	187.61	0.08
186.06	0.00	186.58	0.00	187.10	0.00	187.62	0.08
186.07	0.00	186.59	0.00	187.11	0.00	187.63	0.09
186.08	0.00	186.60	0.00	187.12	0.00	187.64	0.09
186.09	0.00	186.61	0.00	187.13	0.00	187.65	0.09
186.10	0.00	186.62	0.00	187.14	0.00	187.66	0.09
186.11	0.00	186.63	0.00	187.15	0.00	187.67	0.09
186.12	0.00	186.64	0.00	187.16	0.00	187.68	0.09
186.13	0.00	186.65	0.00	187.17	0.00	187.69	0.10
186.14	0.00	186.66	0.00	187.18	0.00	187.70	0.10
186.15	0.00	186.67	0.00	187.19	0.00	187.71	0.10
186.16	0.00	186.68	0.00	187.20	0.00	187.72	0.10

Stage-Discharge for Pond B-18: Basin #18 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.73	0.10	188.25	0.16	188.77	0.20	189.29	0.23
187.74	0.10	188.26	0.16	188.78	0.20	189.30	0.23
187.75	0.10	188.27	0.16	188.79	0.20	189.31	0.23
187.76	0.10	188.28	0.16	188.80	0.20	189.32	0.23
187.77	0.11	188.29	0.16	188.81	0.20	189.33	0.23
187.78	0.11	188.30	0.16	188.82	0.20	189.34	0.23
187.79	0.11	188.31	0.16	188.83	0.20	189.35	0.24
187.80	0.11	188.32	0.16	188.84	0.20	189.36	0.27
187.81	0.11	188.33	0.16	188.85	0.20	189.37	0.30
187.82	0.11	188.34	0.16	188.86	0.20	189.38	0.34
187.83	0.11	188.35	0.16	188.87	0.20	189.39	0.38
187.84	0.11	188.36	0.16	188.88	0.20	189.40	0.43
187.85	0.12	188.37	0.17	188.89	0.20	189.41	0.48
187.86	0.12	188.38	0.17	188.90	0.20	189.42	0.53
187.87	0.12	188.39	0.17	188.91	0.20	189.43	0.59
187.88	0.12	188.40	0.17	188.92	0.21	189.44	0.65
187.89	0.12	188.41	0.17	188.93	0.21	189.45	0.71
187.90	0.12	188.42	0.17	188.94	0.21	189.46	0.78
187.91	0.12	188.43	0.17	188.95	0.21	189.47	0.85
187.92	0.12	188.44	0.17	188.96	0.21	189.48	0.92
187.93	0.12	188.45	0.17	188.97	0.21	189.49	0.99
187.94	0.13	188.46	0.17	188.98	0.21	189.50	1.07
187.95	0.13	188.47	0.17	188.99	0.21	189.51	1.15
187.96	0.13	188.48	0.17	189.00	0.21	189.52	1.23
187.97	0.13	188.49	0.17	189.01	0.21	189.53	1.32
187.98	0.13	188.50	0.18	189.02	0.21	189.54	1.40
187.99	0.13	188.51	0.18	189.03	0.21	189.55	1.49
188.00	0.13	188.52	0.18	189.04	0.21	189.56	1.58
188.01	0.13	188.53	0.18	189.05	0.21	189.57	1.67
188.02	0.13	188.54	0.18	189.06	0.21	189.58	1.76
188.03	0.13	188.55	0.18	189.07	0.22	189.59	1.86
188.04	0.14	188.56	0.18	189.08	0.22	189.60	1.96
188.05	0.14	188.57	0.18	189.09	0.22	189.61	2.06
188.06	0.14	188.58	0.18	189.10	0.22	189.62	2.16
188.07	0.14	188.59	0.18	189.11	0.22	189.63	2.26
188.08	0.14	188.60	0.18	189.12	0.22	189.64	2.37
188.09	0.14	188.61	0.18	189.13	0.22	189.65	2.47
188.10	0.14	188.62	0.18	189.14	0.22	189.66	2.58
188.11	0.14	188.63	0.19	189.15	0.22	189.67	2.69
188.12	0.14	188.64	0.19	189.16	0.22	189.68	2.80
188.13	0.14	188.65	0.19	189.17	0.22	189.69	2.91
188.14	0.15	188.66	0.19	189.18	0.22	189.70	3.03
188.15	0.15	188.67	0.19	189.19	0.22	189.71	3.14
188.16	0.15	188.68	0.19	189.20	0.22	189.72	3.26
188.17	0.15	188.69	0.19	189.21	0.22	189.73	3.38
188.18	0.15	188.70	0.19	189.22	0.22	189.74	3.50
188.19	0.15	188.71	0.19	189.23	0.22	189.75	3.62
188.20	0.15	188.72	0.19	189.24	0.23	189.76	3.74
188.21	0.15	188.73	0.19	189.25	0.23	189.77	3.86
188.22	0.15	188.74	0.19	189.26	0.23	189.78	3.99
188.23	0.15	188.75	0.19	189.27	0.23	189.79	4.12
188.24	0.15	188.76	0.19	189.28	0.23	189.80	4.24

Stage-Discharge for Pond B-18: Basin #18 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
189.81	4.37	190.33	11.37	190.85	12.15
189.82	4.50	190.34	11.39	190.86	12.16
189.83	4.63	190.35	11.40	190.87	12.17
189.84	4.77	190.36	11.42	190.88	12.19
189.85	4.90	190.37	11.43	190.89	12.20
189.86	5.04	190.38	11.45	190.90	12.22
189.87	5.17	190.39	11.47	190.91	12.23
189.88	5.31	190.40	11.48	190.92	12.25
189.89	5.45	190.41	11.50	190.93	12.26
189.90	5.59	190.42	11.51	190.94	12.27
189.91	5.73	190.43	11.53	190.95	12.29
189.92	5.87	190.44	11.54	190.96	12.42
189.93	6.02	190.45	11.56	190.97	12.65
189.94	6.16	190.46	11.57	190.98	12.94
189.95	6.31	190.47	11.59	190.99	13.28
189.96	6.45	190.48	11.60	191.00	**13.67**
189.97	6.60	190.49	11.62		
189.98	6.75	190.50	11.63		
189.99	6.90	190.51	11.65		
190.00	7.05	190.52	11.66		
190.01	7.20	190.53	11.68		
190.02	7.35	190.54	11.69		
190.03	7.51	190.55	11.71		
190.04	7.66	190.56	11.72		
190.05	7.82	190.57	11.74		
190.06	7.97	190.58	11.75		
190.07	8.13	190.59	11.77		
190.08	8.29	190.60	11.78		
190.09	8.45	190.61	11.80		
190.10	8.61	190.62	11.81		
190.11	8.77	190.63	11.83		
190.12	8.93	190.64	11.84		
190.13	9.10	190.65	11.85		
190.14	9.26	190.66	11.87		
190.15	9.42	190.67	11.88		
190.16	9.59	190.68	11.90		
190.17	9.76	190.69	11.91		
190.18	9.92	190.70	11.93		
190.19	10.09	190.71	11.94		
190.20	10.26	190.72	11.96		
190.21	10.43	190.73	11.97		
190.22	10.60	190.74	11.99		
190.23	10.77	190.75	12.00		
190.24	10.94	190.76	12.02		
190.25	11.12	190.77	12.03		
190.26	11.27	190.78	12.04		
190.27	11.28	190.79	12.06		
190.28	11.30	190.80	12.07		
190.29	11.31	190.81	12.09		
190.30	11.33	190.82	12.10		
190.31	11.34	190.83	12.12		
190.32	11.36	190.84	12.13		

Stage-Area-Storage for Pond B-18: Basin #18

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.65	0	0	186.17	1,195	392
185.66	32	0	186.18	1,199	404
185.67	64	1	186.19	1,204	416
185.68	96	1	186.20	1,208	429
185.69	128	3	186.21	1,212	441
185.70	160	4	186.22	1,217	453
185.71	192	6	186.23	1,221	465
185.72	224	8	186.24	1,226	477
185.73	256	10	186.25	1,230	489
185.74	288	13	186.26	1,235	502
185.75	320	16	186.27	1,239	514
185.76	352	19	186.28	1,244	527
185.77	384	23	186.29	1,248	539
185.78	416	27	186.30	1,253	552
185.79	448	31	186.31	1,257	564
185.80	480	36	186.32	1,261	577
185.81	512	41	186.33	1,266	589
185.82	544	46	186.34	1,270	602
185.83	575	52	186.35	1,275	615
185.84	607	58	186.36	1,279	628
185.85	639	64	186.37	1,284	640
185.86	671	70	186.38	1,288	653
185.87	703	77	186.39	1,293	666
185.88	735	85	186.40	1,297	679
185.89	767	92	186.41	1,301	692
185.90	799	100	186.42	1,306	705
185.91	831	108	186.43	1,310	718
185.92	863	117	186.44	1,315	731
185.93	895	125	186.45	1,319	744
185.94	927	134	186.46	1,324	758
185.95	959	144	186.47	1,328	771
185.96	991	154	186.48	1,333	784
185.97	1,023	164	186.49	1,337	798
185.98	1,055	174	186.50	1,342	811
185.99	1,087	185	186.51	1,346	824
186.00	1,119	196	186.52	1,350	838
186.01	1,123	207	186.53	1,355	851
186.02	1,128	218	186.54	1,359	865
186.03	1,132	230	186.55	1,364	879
186.04	1,137	241	186.56	1,368	892
186.05	1,141	252	186.57	1,373	906
186.06	1,146	264	186.58	1,377	920
186.07	1,150	275	186.59	1,382	933
186.08	1,155	287	186.60	1,386	947
186.09	1,159	298	186.61	1,390	961
186.10	1,163	310	186.62	1,395	975
186.11	1,168	322	186.63	1,399	989
186.12	1,172	333	186.64	1,404	1,003
186.13	1,177	345	186.65	1,408	1,017
186.14	1,181	357	186.66	1,413	1,031
186.15	1,186	369	186.67	1,417	1,045
186.16	1,190	381	186.68	1,422	1,060

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.69	1,426	1,074	187.21	1,669	1,877
186.70	1,431	1,088	187.22	1,674	1,894
186.71	1,435	1,102	187.23	1,679	1,910
186.72	1,439	1,117	187.24	1,684	1,927
186.73	1,444	1,131	187.25	1,689	1,944
186.74	1,448	1,146	187.26	1,694	1,961
186.75	1,453	1,160	187.27	1,699	1,978
186.76	1,457	1,175	187.28	1,704	1,995
186.77	1,462	1,189	187.29	1,709	2,012
186.78	1,466	1,204	187.30	1,714	2,029
186.79	1,471	1,219	187.31	1,719	2,046
186.80	1,475	1,233	187.32	1,724	2,063
186.81	1,479	1,248	187.33	1,729	2,081
186.82	1,484	1,263	187.34	1,734	2,098
186.83	1,488	1,278	187.35	1,739	2,115
186.84	1,493	1,293	187.36	1,744	2,133
186.85	1,497	1,308	187.37	1,749	2,150
186.86	1,502	1,323	187.38	1,754	2,168
186.87	1,506	1,338	187.39	1,759	2,185
186.88	1,511	1,353	187.40	1,764	2,203
186.89	1,515	1,368	187.41	1,769	2,221
186.90	1,520	1,383	187.42	1,774	2,238
186.91	1,524	1,398	187.43	1,779	2,256
186.92	1,528	1,414	187.44	1,784	2,274
186.93	1,533	1,429	187.45	1,789	2,292
186.94	1,537	1,444	187.46	1,794	2,310
186.95	1,542	1,460	187.47	1,799	2,328
186.96	1,546	1,475	187.48	1,804	2,346
186.97	1,551	1,491	187.49	1,809	2,364
186.98	1,555	1,506	187.50	1,815	2,382
186.99	1,560	1,522	187.51	1,820	2,400
187.00	1,564	1,537	187.52	1,825	2,418
187.01	1,569	1,553	187.53	1,830	2,437
187.02	1,574	1,569	187.54	1,835	2,455
187.03	1,579	1,584	187.55	1,840	2,473
187.04	1,584	1,600	187.56	1,845	2,492
187.05	1,589	1,616	187.57	1,850	2,510
187.06	1,594	1,632	187.58	1,855	2,529
187.07	1,599	1,648	187.59	1,860	2,547
187.08	1,604	1,664	187.60	1,865	2,566
187.09	1,609	1,680	187.61	1,870	2,585
187.10	1,614	1,696	187.62	1,875	2,603
187.11	1,619	1,712	187.63	1,880	2,622
187.12	1,624	1,729	187.64	1,885	2,641
187.13	1,629	1,745	187.65	1,890	2,660
187.14	1,634	1,761	187.66	1,895	2,679
187.15	1,639	1,778	187.67	1,900	2,698
187.16	1,644	1,794	187.68	1,905	2,717
187.17	1,649	1,810	187.69	1,910	2,736
187.18	1,654	1,827	187.70	1,915	2,755
187.19	1,659	1,844	187.71	1,920	2,774
187.20	1,664	1,860	187.72	1,925	2,793

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.73	1,930	2,813	188.25	2,205	3,886
187.74	1,935	2,832	188.26	2,210	3,908
187.75	1,940	2,851	188.27	2,216	3,930
187.76	1,945	2,871	188.28	2,221	3,952
187.77	1,950	2,890	188.29	2,227	3,974
187.78	1,955	2,910	188.30	2,232	3,996
187.79	1,960	2,929	188.31	2,238	4,019
187.80	1,965	2,949	188.32	2,244	4,041
187.81	1,970	2,969	188.33	2,249	4,064
187.82	1,975	2,988	188.34	2,255	4,086
187.83	1,980	3,008	188.35	2,260	4,109
187.84	1,985	3,028	188.36	2,266	4,131
187.85	1,990	3,048	188.37	2,271	4,154
187.86	1,995	3,068	188.38	2,277	4,177
187.87	2,000	3,088	188.39	2,283	4,200
187.88	2,005	3,108	188.40	2,288	4,222
187.89	2,010	3,128	188.41	2,294	4,245
187.90	2,015	3,148	188.42	2,299	4,268
187.91	2,020	3,168	188.43	2,305	4,291
187.92	2,025	3,188	188.44	2,311	4,314
187.93	2,030	3,209	188.45	2,316	4,338
187.94	2,035	3,229	188.46	2,322	4,361
187.95	2,040	3,249	188.47	2,327	4,384
187.96	2,045	3,270	188.48	2,333	4,407
187.97	2,050	3,290	188.49	2,338	4,431
187.98	2,055	3,311	188.50	2,344	4,454
187.99	2,060	3,331	188.51	2,350	4,478
188.00	2,065	3,352	188.52	2,355	4,501
188.01	2,071	3,373	188.53	2,361	4,525
188.02	2,076	3,393	188.54	2,366	4,548
188.03	2,082	3,414	188.55	2,372	4,572
188.04	2,087	3,435	188.56	2,377	4,596
188.05	2,093	3,456	188.57	2,383	4,620
188.06	2,098	3,477	188.58	2,389	4,643
188.07	2,104	3,498	188.59	2,394	4,667
188.08	2,110	3,519	188.60	2,400	4,691
188.09	2,115	3,540	188.61	2,405	4,715
188.10	2,121	3,561	188.62	2,411	4,739
188.11	2,126	3,582	188.63	2,417	4,764
188.12	2,132	3,604	188.64	2,422	4,788
188.13	2,138	3,625	188.65	2,428	4,812
188.14	2,143	3,646	188.66	2,433	4,836
188.15	2,149	3,668	188.67	2,439	4,861
188.16	2,154	3,689	188.68	2,444	4,885
188.17	2,160	3,711	188.69	2,450	4,910
188.18	2,165	3,733	188.70	2,456	4,934
188.19	2,171	3,754	188.71	2,461	4,959
188.20	2,177	3,776	188.72	2,467	4,983
188.21	2,182	3,798	188.73	2,472	5,008
188.22	2,188	3,820	188.74	2,478	5,033
188.23	2,193	3,842	188.75	2,484	5,058
188.24	2,199	3,863	188.76	2,489	5,082

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.77	2,495	5,107	189.29	2,801	6,482
188.78	2,500	5,132	189.30	2,807	6,510
188.79	2,506	5,157	189.31	2,813	6,538
188.80	2,511	5,182	189.32	2,819	6,567
188.81	2,517	5,208	189.33	2,826	6,595
188.82	2,523	5,233	189.34	2,832	6,623
188.83	2,528	5,258	189.35	2,838	6,651
188.84	2,534	5,283	189.36	2,844	6,680
188.85	2,539	5,309	189.37	2,850	6,708
188.86	2,545	5,334	189.38	2,856	6,737
188.87	2,550	5,360	189.39	2,862	6,765
188.88	2,556	5,385	189.40	2,869	6,794
188.89	2,562	5,411	189.41	2,875	6,823
188.90	2,567	5,436	189.42	2,881	6,852
188.91	2,573	5,462	189.43	2,887	6,880
188.92	2,578	5,488	189.44	2,893	6,909
188.93	2,584	5,514	189.45	2,899	6,938
188.94	2,590	5,539	189.46	2,905	6,967
188.95	2,595	5,565	189.47	2,912	6,996
188.96	2,601	5,591	189.48	2,918	7,026
188.97	2,606	5,617	189.49	2,924	7,055
188.98	2,612	5,643	189.50	2,930	7,084
188.99	2,617	5,670	189.51	2,936	7,113
189.00	2,623	5,696	189.52	2,942	7,143
189.01	2,629	5,722	189.53	2,948	7,172
189.02	2,635	5,748	189.54	2,955	7,202
189.03	2,641	5,775	189.55	2,961	7,231
189.04	2,648	5,801	189.56	2,967	7,261
189.05	2,654	5,828	189.57	2,973	7,291
189.06	2,660	5,854	189.58	2,979	7,320
189.07	2,666	5,881	189.59	2,985	7,350
189.08	2,672	5,908	189.60	2,991	7,380
189.09	2,678	5,934	189.61	2,998	7,410
189.10	2,684	5,961	189.62	3,004	7,440
189.11	2,691	5,988	189.63	3,010	7,470
189.12	2,697	6,015	189.64	3,016	7,500
189.13	2,703	6,042	189.65	3,022	7,530
189.14	2,709	6,069	189.66	3,028	7,561
189.15	2,715	6,096	189.67	3,034	7,591
189.16	2,721	6,123	189.68	3,041	7,621
189.17	2,727	6,151	189.69	3,047	7,652
189.18	2,734	6,178	189.70	3,053	7,682
189.19	2,740	6,205	189.71	3,059	7,713
189.20	2,746	6,233	189.72	3,065	7,744
189.21	2,752	6,260	189.73	3,071	7,774
189.22	2,758	6,288	189.74	3,077	7,805
189.23	2,764	6,315	189.75	3,084	7,836
189.24	2,770	6,343	189.76	3,090	7,867
189.25	2,777	6,371	189.77	3,096	7,898
189.26	2,783	6,399	189.78	3,102	7,929
189.27	2,789	6,426	189.79	3,108	7,960
189.28	2,795	6,454	189.80	3,114	7,991

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.81	3,120	8,022	190.33	3,458	9,731
189.82	3,126	8,053	190.34	3,465	9,765
189.83	3,133	8,084	190.35	3,472	9,800
189.84	3,139	8,116	190.36	3,479	9,835
189.85	3,145	8,147	190.37	3,485	9,869
189.86	3,151	8,179	190.38	3,492	9,904
189.87	3,157	8,210	190.39	3,499	9,939
189.88	3,163	8,242	190.40	3,505	9,974
189.89	3,169	8,273	190.41	3,512	10,009
189.90	3,176	8,305	190.42	3,519	10,045
189.91	3,182	8,337	190.43	3,526	10,080
189.92	3,188	8,369	190.44	3,532	10,115
189.93	3,194	8,401	190.45	3,539	10,150
189.94	3,200	8,433	190.46	3,546	10,186
189.95	3,206	8,465	190.47	3,552	10,221
189.96	3,212	8,497	190.48	3,559	10,257
189.97	3,219	8,529	190.49	3,566	10,293
189.98	3,225	8,561	190.50	3,573	10,328
189.99	3,231	8,593	190.51	3,579	10,364
190.00	3,237	8,626	190.52	3,586	10,400
190.01	3,244	8,658	190.53	3,593	10,436
190.02	3,250	8,691	190.54	3,599	10,472
190.03	3,257	8,723	190.55	3,606	10,508
190.04	3,264	8,756	190.56	3,613	10,544
190.05	3,271	8,789	190.57	3,619	10,580
190.06	3,277	8,821	190.58	3,626	10,616
190.07	3,284	8,854	190.59	3,633	10,652
190.08	3,291	8,887	190.60	3,640	10,689
190.09	3,297	8,920	190.61	3,646	10,725
190.10	3,304	8,953	190.62	3,653	10,762
190.11	3,311	8,986	190.63	3,660	10,798
190.12	3,318	9,019	190.64	3,666	10,835
190.13	3,324	9,052	190.65	3,673	10,872
190.14	3,331	9,086	190.66	3,680	10,908
190.15	3,338	9,119	190.67	3,687	10,945
190.16	3,344	9,152	190.68	3,693	10,982
190.17	3,351	9,186	190.69	3,700	11,019
190.18	3,358	9,219	190.70	3,707	11,056
190.19	3,364	9,253	190.71	3,713	11,093
190.20	3,371	9,287	190.72	3,720	11,130
190.21	3,378	9,320	190.73	3,727	11,168
190.22	3,385	9,354	190.74	3,734	11,205
190.23	3,391	9,388	190.75	3,740	11,242
190.24	3,398	9,422	190.76	3,747	11,280
190.25	3,405	9,456	190.77	3,754	11,317
190.26	3,411	9,490	190.78	3,760	11,355
190.27	3,418	9,524	190.79	3,767	11,392
190.28	3,425	9,558	190.80	3,774	11,430
190.29	3,432	9,593	190.81	3,781	11,468
190.30	3,438	9,627	190.82	3,787	11,506
190.31	3,445	9,662	190.83	3,794	11,544
190.32	3,452	9,696	190.84	3,801	11,582

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.85	3,807	11,620
190.86	3,814	11,658
190.87	3,821	11,696
190.88	3,827	11,734
190.89	3,834	11,773
190.90	3,841	11,811
190.91	3,848	11,849
190.92	3,854	11,888
190.93	3,861	11,926
190.94	3,868	11,965
190.95	3,874	12,004
190.96	3,881	12,043
190.97	3,888	12,081
190.98	3,895	12,120
190.99	3,901	12,159
191.00	**3,908**	**12,198**

Summary for Pond B-19: Basin #19

Inflow Area = 1.715 ac, 34.81% Impervious, Inflow Depth = 1.83" for Current 2 yr event
Inflow = 3.16 cfs @ 12.18 hrs, Volume= 0.261 af
Outflow = 0.20 cfs @ 14.00 hrs, Volume= 0.201 af, Atten= 94%, Lag= 109.5 min
Primary = 0.20 cfs @ 14.00 hrs, Volume= 0.201 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 197.53' @ 14.00 hrs Surf.Area= 3,486 sf Storage= 7,107 cf

Plug-Flow detention time= 449.5 min calculated for 0.201 af (77% of inflow)
Center-of-Mass det. time= 359.4 min (1,162.8 - 803.4)

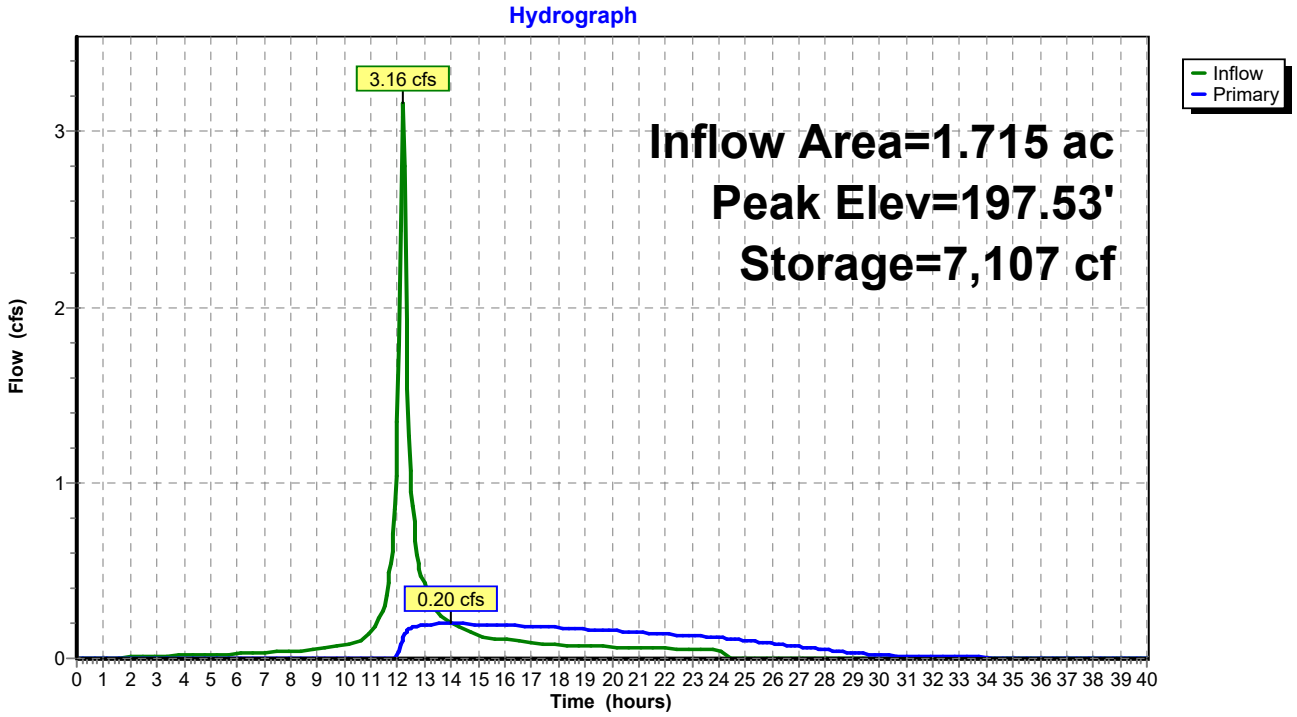
Volume	Invert	Avail.Storage	Storage Description
#1	194.65'	12,982 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
194.65	0	0	0
195.00	1,916	335	335
196.00	2,490	2,203	2,538
197.00	3,119	2,805	5,343
198.00	3,806	3,463	8,805
199.00	4,548	4,177	12,982

Device	Routing	Invert	Outlet Devices
#1	Primary	194.30'	**18.0" Round Culvert** L= 136.0' Ke= 0.500 Inlet / Outlet Invert= 194.30' / 185.86' S= 0.0621 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	196.00'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	197.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	198.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.20 cfs @ 14.00 hrs HW=197.53' (Free Discharge)
- **1=Culvert** (Passes 0.20 cfs of 13.41 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.76 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-19: Basin #19



Stage-Discharge for Pond B-19: Basin #19

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.65	0.00	195.17	0.00	195.69	0.00	196.21	0.05
194.66	0.00	195.18	0.00	195.70	0.00	196.22	0.06
194.67	0.00	195.19	0.00	195.71	0.00	196.23	0.06
194.68	0.00	195.20	0.00	195.72	0.00	196.24	0.06
194.69	0.00	195.21	0.00	195.73	0.00	196.25	0.06
194.70	0.00	195.22	0.00	195.74	0.00	196.26	0.06
194.71	0.00	195.23	0.00	195.75	0.00	196.27	0.07
194.72	0.00	195.24	0.00	195.76	0.00	196.28	0.07
194.73	0.00	195.25	0.00	195.77	0.00	196.29	0.07
194.74	0.00	195.26	0.00	195.78	0.00	196.30	0.07
194.75	0.00	195.27	0.00	195.79	0.00	196.31	0.07
194.76	0.00	195.28	0.00	195.80	0.00	196.32	0.08
194.77	0.00	195.29	0.00	195.81	0.00	196.33	0.08
194.78	0.00	195.30	0.00	195.82	0.00	196.34	0.08
194.79	0.00	195.31	0.00	195.83	0.00	196.35	0.08
194.80	0.00	195.32	0.00	195.84	0.00	196.36	0.08
194.81	0.00	195.33	0.00	195.85	0.00	196.37	0.08
194.82	0.00	195.34	0.00	195.86	0.00	196.38	0.09
194.83	0.00	195.35	0.00	195.87	0.00	196.39	0.09
194.84	0.00	195.36	0.00	195.88	0.00	196.40	0.09
194.85	0.00	195.37	0.00	195.89	0.00	196.41	0.09
194.86	0.00	195.38	0.00	195.90	0.00	196.42	0.09
194.87	0.00	195.39	0.00	195.91	0.00	196.43	0.09
194.88	0.00	195.40	0.00	195.92	0.00	196.44	0.10
194.89	0.00	195.41	0.00	195.93	0.00	196.45	0.10
194.90	0.00	195.42	0.00	195.94	0.00	196.46	0.10
194.91	0.00	195.43	0.00	195.95	0.00	196.47	0.10
194.92	0.00	195.44	0.00	195.96	0.00	196.48	0.10
194.93	0.00	195.45	0.00	195.97	0.00	196.49	0.10
194.94	0.00	195.46	0.00	195.98	0.00	196.50	0.10
194.95	0.00	195.47	0.00	195.99	0.00	196.51	0.10
194.96	0.00	195.48	0.00	196.00	0.00	196.52	0.11
194.97	0.00	195.49	0.00	196.01	0.00	196.53	0.11
194.98	0.00	195.50	0.00	196.02	0.00	196.54	0.11
194.99	0.00	195.51	0.00	196.03	0.00	196.55	0.11
195.00	0.00	195.52	0.00	196.04	0.00	196.56	0.11
195.01	0.00	195.53	0.00	196.05	0.00	196.57	0.11
195.02	0.00	195.54	0.00	196.06	0.01	196.58	0.11
195.03	0.00	195.55	0.00	196.07	0.01	196.59	0.11
195.04	0.00	195.56	0.00	196.08	0.01	196.60	0.12
195.05	0.00	195.57	0.00	196.09	0.01	196.61	0.12
195.06	0.00	195.58	0.00	196.10	0.02	196.62	0.12
195.07	0.00	195.59	0.00	196.11	0.02	196.63	0.12
195.08	0.00	195.60	0.00	196.12	0.02	196.64	0.12
195.09	0.00	195.61	0.00	196.13	0.03	196.65	0.12
195.10	0.00	195.62	0.00	196.14	0.03	196.66	0.12
195.11	0.00	195.63	0.00	196.15	0.03	196.67	0.12
195.12	0.00	195.64	0.00	196.16	0.04	196.68	0.12
195.13	0.00	195.65	0.00	196.17	0.04	196.69	0.13
195.14	0.00	195.66	0.00	196.18	0.05	196.70	0.13
195.15	0.00	195.67	0.00	196.19	0.05	196.71	0.13
195.16	0.00	195.68	0.00	196.20	0.05	196.72	0.13

Stage-Discharge for Pond B-19: Basin #19 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.73	0.13	197.25	0.18	197.77	0.25	198.29	5.29
196.74	0.13	197.26	0.18	197.78	0.28	198.30	5.43
196.75	0.13	197.27	0.18	197.79	0.32	198.31	5.57
196.76	0.13	197.28	0.18	197.80	0.36	198.32	5.71
196.77	0.13	197.29	0.18	197.81	0.41	198.33	5.85
196.78	0.13	197.30	0.18	197.82	0.46	198.34	6.00
196.79	0.14	197.31	0.18	197.83	0.51	198.35	6.14
196.80	0.14	197.32	0.18	197.84	0.57	198.36	6.29
196.81	0.14	197.33	0.18	197.85	0.63	198.37	6.43
196.82	0.14	197.34	0.18	197.86	0.69	198.38	6.58
196.83	0.14	197.35	0.18	197.87	0.76	198.39	6.73
196.84	0.14	197.36	0.18	197.88	0.83	198.40	6.88
196.85	0.14	197.37	0.18	197.89	0.90	198.41	7.03
196.86	0.14	197.38	0.19	197.90	0.97	198.42	7.18
196.87	0.14	197.39	0.19	197.91	1.05	198.43	7.34
196.88	0.14	197.40	0.19	197.92	1.13	198.44	7.49
196.89	0.15	197.41	0.19	197.93	1.21	198.45	7.64
196.90	0.15	197.42	0.19	197.94	1.30	198.46	7.80
196.91	0.15	197.43	0.19	197.95	1.38	198.47	7.96
196.92	0.15	197.44	0.19	197.96	1.47	198.48	8.11
196.93	0.15	197.45	0.19	197.97	1.56	198.49	8.27
196.94	0.15	197.46	0.19	197.98	1.65	198.50	8.43
196.95	0.15	197.47	0.19	197.99	1.74	198.51	8.59
196.96	0.15	197.48	0.19	198.00	1.84	198.52	8.75
196.97	0.15	197.49	0.19	198.01	1.94	198.53	8.91
196.98	0.15	197.50	0.19	198.02	2.04	198.54	9.08
196.99	0.15	197.51	0.19	198.03	2.14	198.55	9.24
197.00	0.16	197.52	0.20	198.04	2.24	198.56	9.41
197.01	0.16	197.53	0.20	198.05	2.35	198.57	9.57
197.02	0.16	197.54	0.20	198.06	2.45	198.58	9.74
197.03	0.16	197.55	0.20	198.07	2.56	198.59	9.91
197.04	0.16	197.56	0.20	198.08	2.67	198.60	10.07
197.05	0.16	197.57	0.20	198.09	2.78	198.61	10.24
197.06	0.16	197.58	0.20	198.10	2.89	198.62	10.41
197.07	0.16	197.59	0.20	198.11	3.01	198.63	10.58
197.08	0.16	197.60	0.20	198.12	3.12	198.64	10.75
197.09	0.16	197.61	0.20	198.13	3.24	198.65	10.93
197.10	0.16	197.62	0.20	198.14	3.36	198.66	11.10
197.11	0.16	197.63	0.20	198.15	3.48	198.67	11.27
197.12	0.17	197.64	0.20	198.16	3.60	198.68	11.45
197.13	0.17	197.65	0.20	198.17	3.72	198.69	11.62
197.14	0.17	197.66	0.20	198.18	3.85	198.70	11.80
197.15	0.17	197.67	0.21	198.19	3.97	198.71	11.98
197.16	0.17	197.68	0.21	198.20	4.10	198.72	12.16
197.17	0.17	197.69	0.21	198.21	4.23	198.73	12.33
197.18	0.17	197.70	0.21	198.22	4.35	198.74	12.51
197.19	0.17	197.71	0.21	198.23	4.48	198.75	12.69
197.20	0.17	197.72	0.21	198.24	4.62	198.76	12.87
197.21	0.17	197.73	0.21	198.25	4.75	198.77	13.06
197.22	0.17	197.74	0.21	198.26	4.88	198.78	13.24
197.23	0.17	197.75	0.21	198.27	5.02	198.79	13.42
197.24	0.17	197.76	0.22	198.28	5.16	198.80	13.60

Stage-Discharge for Pond B-19: Basin #19 (continued)

Elevation (feet)	Primary (cfs)
198.81	13.79
198.82	13.97
198.83	14.16
198.84	14.35
198.85	14.53
198.86	14.72
198.87	14.91
198.88	15.10
198.89	15.29
198.90	15.48
198.91	15.67
198.92	15.86
198.93	16.05
198.94	16.25
198.95	16.44
198.96	16.75
198.97	17.16
198.98	17.48
198.99	17.83
199.00	**18.22**

Stage-Area-Storage for Pond B-19: Basin #19

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.65	0	0
194.66	55	0
194.67	109	1
194.68	164	2
194.69	219	4
194.70	274	7
194.71	328	10
194.72	383	13
194.73	438	18
194.74	493	22
194.75	547	27
194.76	602	33
194.77	657	39
194.78	712	46
194.79	766	54
194.80	821	62
194.81	876	70
194.82	931	79
194.83	985	89
194.84	1,040	99
194.85	1,095	109
194.86	1,150	121
194.87	1,204	132
194.88	1,259	145
194.89	1,314	158
194.90	1,369	171
194.91	1,423	185
194.92	1,478	200
194.93	1,533	215
194.94	1,588	230
194.95	1,642	246
194.96	1,697	263
194.97	1,752	280
194.98	1,807	298
194.99	1,861	316
195.00	1,916	335
195.01	1,922	354
195.02	1,927	374
195.03	1,933	393
195.04	1,939	412
195.05	1,945	432
195.06	1,950	451
195.07	1,956	471
195.08	1,962	490
195.09	1,968	510
195.10	1,973	530
195.11	1,979	550
195.12	1,985	569
195.13	1,991	589
195.14	1,996	609
195.15	2,002	629
195.16	2,008	649
195.17	2,014	669
195.18	2,019	689
195.19	2,025	710
195.20	2,031	730
195.21	2,037	750
195.22	2,042	771
195.23	2,048	791
195.24	2,054	812
195.25	2,060	832
195.26	2,065	853
195.27	2,071	874
195.28	2,077	894
195.29	2,082	915
195.30	2,088	936
195.31	2,094	957
195.32	2,100	978
195.33	2,105	999
195.34	2,111	1,020
195.35	2,117	1,041
195.36	2,123	1,062
195.37	2,128	1,084
195.38	2,134	1,105
195.39	2,140	1,126
195.40	2,146	1,148
195.41	2,151	1,169
195.42	2,157	1,191
195.43	2,163	1,212
195.44	2,169	1,234
195.45	2,174	1,256
195.46	2,180	1,277
195.47	2,186	1,299
195.48	2,192	1,321
195.49	2,197	1,343
195.50	2,203	1,365
195.51	2,209	1,387
195.52	2,214	1,409
195.53	2,220	1,431
195.54	2,226	1,454
195.55	2,232	1,476
195.56	2,237	1,498
195.57	2,243	1,521
195.58	2,249	1,543
195.59	2,255	1,566
195.60	2,260	1,588
195.61	2,266	1,611
195.62	2,272	1,634
195.63	2,278	1,656
195.64	2,283	1,679
195.65	2,289	1,702
195.66	2,295	1,725
195.67	2,301	1,748
195.68	2,306	1,771

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.69	2,312	1,794	196.21	2,622	3,075
195.70	2,318	1,817	196.22	2,628	3,101
195.71	2,324	1,840	196.23	2,635	3,128
195.72	2,329	1,864	196.24	2,641	3,154
195.73	2,335	1,887	196.25	2,647	3,180
195.74	2,341	1,910	196.26	2,654	3,207
195.75	2,347	1,934	196.27	2,660	3,234
195.76	2,352	1,957	196.28	2,666	3,260
195.77	2,358	1,981	196.29	2,672	3,287
195.78	2,364	2,004	196.30	2,679	3,314
195.79	2,369	2,028	196.31	2,685	3,340
195.80	2,375	2,052	196.32	2,691	3,367
195.81	2,381	2,076	196.33	2,698	3,394
195.82	2,387	2,099	196.34	2,704	3,421
195.83	2,392	2,123	196.35	2,710	3,448
195.84	2,398	2,147	196.36	2,716	3,475
195.85	2,404	2,171	196.37	2,723	3,503
195.86	2,410	2,195	196.38	2,729	3,530
195.87	2,415	2,219	196.39	2,735	3,557
195.88	2,421	2,244	196.40	2,742	3,585
195.89	2,427	2,268	196.41	2,748	3,612
195.90	2,433	2,292	196.42	2,754	3,640
195.91	2,438	2,317	196.43	2,760	3,667
195.92	2,444	2,341	196.44	2,767	3,695
195.93	2,450	2,365	196.45	2,773	3,722
195.94	2,456	2,390	196.46	2,779	3,750
195.95	2,461	2,415	196.47	2,786	3,778
195.96	2,467	2,439	196.48	2,792	3,806
195.97	2,473	2,464	196.49	2,798	3,834
195.98	2,479	2,489	196.50	2,805	3,862
195.99	2,484	2,513	196.51	2,811	3,890
196.00	2,490	2,538	196.52	2,817	3,918
196.01	2,496	2,563	196.53	2,823	3,946
196.02	2,503	2,588	196.54	2,830	3,975
196.03	2,509	2,613	196.55	2,836	4,003
196.04	2,515	2,638	196.56	2,842	4,031
196.05	2,521	2,664	196.57	2,849	4,060
196.06	2,528	2,689	196.58	2,855	4,088
196.07	2,534	2,714	196.59	2,861	4,117
196.08	2,540	2,740	196.60	2,867	4,146
196.09	2,547	2,765	196.61	2,874	4,174
196.10	2,553	2,790	196.62	2,880	4,203
196.11	2,559	2,816	196.63	2,886	4,232
196.12	2,565	2,842	196.64	2,893	4,261
196.13	2,572	2,867	196.65	2,899	4,290
196.14	2,578	2,893	196.66	2,905	4,319
196.15	2,584	2,919	196.67	2,911	4,348
196.16	2,591	2,945	196.68	2,918	4,377
196.17	2,597	2,971	196.69	2,924	4,406
196.18	2,603	2,997	196.70	2,930	4,435
196.19	2,610	3,023	196.71	2,937	4,465
196.20	2,616	3,049	196.72	2,943	4,494

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.73	2,949	4,524	197.25	3,291	6,144
196.74	2,955	4,553	197.26	3,298	6,177
196.75	2,962	4,583	197.27	3,304	6,210
196.76	2,968	4,612	197.28	3,311	6,243
196.77	2,974	4,642	197.29	3,318	6,276
196.78	2,981	4,672	197.30	3,325	6,309
196.79	2,987	4,702	197.31	3,332	6,343
196.80	2,993	4,732	197.32	3,339	6,376
196.81	2,999	4,762	197.33	3,346	6,409
196.82	3,006	4,792	197.34	3,353	6,443
196.83	3,012	4,822	197.35	3,359	6,477
196.84	3,018	4,852	197.36	3,366	6,510
196.85	3,025	4,882	197.37	3,373	6,544
196.86	3,031	4,912	197.38	3,380	6,578
196.87	3,037	4,943	197.39	3,387	6,611
196.88	3,044	4,973	197.40	3,394	6,645
196.89	3,050	5,004	197.41	3,401	6,679
196.90	3,056	5,034	197.42	3,408	6,713
196.91	3,062	5,065	197.43	3,414	6,747
196.92	3,069	5,095	197.44	3,421	6,782
196.93	3,075	5,126	197.45	3,428	6,816
196.94	3,081	5,157	197.46	3,435	6,850
196.95	3,088	5,188	197.47	3,442	6,885
196.96	3,094	5,219	197.48	3,449	6,919
196.97	3,100	5,250	197.49	3,456	6,954
196.98	3,106	5,281	197.50	3,463	6,988
196.99	3,113	5,312	197.51	3,469	7,023
197.00	3,119	5,343	197.52	3,476	7,058
197.01	3,126	5,374	197.53	3,483	7,092
197.02	3,133	5,405	197.54	3,490	7,127
197.03	3,140	5,437	197.55	3,497	7,162
197.04	3,146	5,468	197.56	3,504	7,197
197.05	3,153	5,500	197.57	3,511	7,232
197.06	3,160	5,531	197.58	3,517	7,267
197.07	3,167	5,563	197.59	3,524	7,303
197.08	3,174	5,595	197.60	3,531	7,338
197.09	3,181	5,626	197.61	3,538	7,373
197.10	3,188	5,658	197.62	3,545	7,409
197.11	3,195	5,690	197.63	3,552	7,444
197.12	3,201	5,722	197.64	3,559	7,480
197.13	3,208	5,754	197.65	3,566	7,515
197.14	3,215	5,786	197.66	3,572	7,551
197.15	3,222	5,818	197.67	3,579	7,587
197.16	3,229	5,851	197.68	3,586	7,623
197.17	3,236	5,883	197.69	3,593	7,658
197.18	3,243	5,915	197.70	3,600	7,694
197.19	3,250	5,948	197.71	3,607	7,730
197.20	3,256	5,980	197.72	3,614	7,767
197.21	3,263	6,013	197.73	3,621	7,803
197.22	3,270	6,046	197.74	3,627	7,839
197.23	3,277	6,078	197.75	3,634	7,875
197.24	3,284	6,111	197.76	3,641	7,912

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.77	3,648	7,948	198.29	4,021	9,940
197.78	3,655	7,985	198.30	4,029	9,980
197.79	3,662	8,021	198.31	4,036	10,021
197.80	3,669	8,058	198.32	4,043	10,061
197.81	3,675	8,095	198.33	4,051	10,102
197.82	3,682	8,131	198.34	4,058	10,142
197.83	3,689	8,168	198.35	4,066	10,183
197.84	3,696	8,205	198.36	4,073	10,224
197.85	3,703	8,242	198.37	4,081	10,264
197.86	3,710	8,279	198.38	4,088	10,305
197.87	3,717	8,316	198.39	4,095	10,346
197.88	3,724	8,354	198.40	4,103	10,387
197.89	3,730	8,391	198.41	4,110	10,428
197.90	3,737	8,428	198.42	4,118	10,469
197.91	3,744	8,466	198.43	4,125	10,510
197.92	3,751	8,503	198.44	4,132	10,552
197.93	3,758	8,541	198.45	4,140	10,593
197.94	3,765	8,578	198.46	4,147	10,635
197.95	3,772	8,616	198.47	4,155	10,676
197.96	3,779	8,654	198.48	4,162	10,718
197.97	3,785	8,691	198.49	4,170	10,759
197.98	3,792	8,729	198.50	4,177	10,801
197.99	3,799	8,767	198.51	4,184	10,843
198.00	3,806	8,805	198.52	4,192	10,885
198.01	3,813	8,843	198.53	4,199	10,927
198.02	3,821	8,882	198.54	4,207	10,969
198.03	3,828	8,920	198.55	4,214	11,011
198.04	3,836	8,958	198.56	4,222	11,053
198.05	3,843	8,997	198.57	4,229	11,095
198.06	3,851	9,035	198.58	4,236	11,138
198.07	3,858	9,074	198.59	4,244	11,180
198.08	3,865	9,112	198.60	4,251	11,222
198.09	3,873	9,151	198.61	4,259	11,265
198.10	3,880	9,190	198.62	4,266	11,308
198.11	3,888	9,228	198.63	4,273	11,350
198.12	3,895	9,267	198.64	4,281	11,393
198.13	3,902	9,306	198.65	4,288	11,436
198.14	3,910	9,345	198.66	4,296	11,479
198.15	3,917	9,385	198.67	4,303	11,522
198.16	3,925	9,424	198.68	4,311	11,565
198.17	3,932	9,463	198.69	4,318	11,608
198.18	3,940	9,502	198.70	4,325	11,651
198.19	3,947	9,542	198.71	4,333	11,695
198.20	3,954	9,581	198.72	4,340	11,738
198.21	3,962	9,621	198.73	4,348	11,781
198.22	3,969	9,661	198.74	4,355	11,825
198.23	3,977	9,700	198.75	4,363	11,868
198.24	3,984	9,740	198.76	4,370	11,912
198.25	3,992	9,780	198.77	4,377	11,956
198.26	3,999	9,820	198.78	4,385	12,000
198.27	4,006	9,860	198.79	4,392	12,044
198.28	4,014	9,900	198.80	4,400	12,088

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.81	4,407	12,132
198.82	4,414	12,176
198.83	4,422	12,220
198.84	4,429	12,264
198.85	4,437	12,308
198.86	4,444	12,353
198.87	4,452	12,397
198.88	4,459	12,442
198.89	4,466	12,487
198.90	4,474	12,531
198.91	4,481	12,576
198.92	4,489	12,621
198.93	4,496	12,666
198.94	4,503	12,711
198.95	4,511	12,756
198.96	4,518	12,801
198.97	4,526	12,846
198.98	4,533	12,891
198.99	4,541	12,937
199.00	**4,548**	**12,982**

Summary for Pond B-20: Basin #20

Inflow Area = 2.453 ac, 46.07% Impervious, Inflow Depth = 2.05" for Current 2 yr event
Inflow = 5.03 cfs @ 12.17 hrs, Volume= 0.419 af
Outflow = 0.32 cfs @ 13.79 hrs, Volume= 0.293 af, Atten= 94%, Lag= 96.8 min
Primary = 0.32 cfs @ 13.79 hrs, Volume= 0.293 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 152.80' @ 13.79 hrs Surf.Area= 7,352 sf Storage= 12,320 cf

Plug-Flow detention time= 664.5 min calculated for 0.293 af (70% of inflow)
Center-of-Mass det. time= 561.6 min (1,353.7 - 792.1)

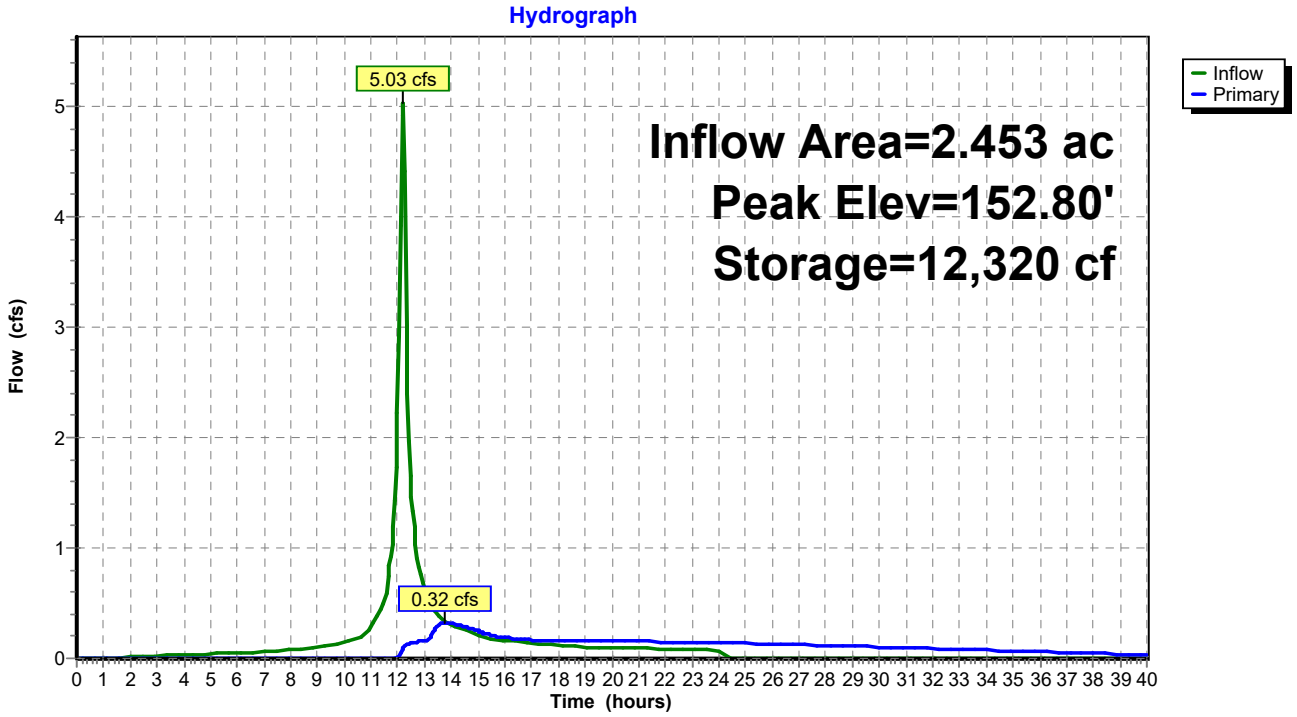
Volume	Invert	Avail.Storage	Storage Description
#1	150.87'	35,230 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
150.87	0	0	0
151.00	5,926	385	385
152.00	6,706	6,316	6,701
153.00	7,514	7,110	13,811
154.00	8,347	7,931	21,742
155.00	9,205	8,776	30,518
155.50	9,643	4,712	35,230

Device	Routing	Invert	Outlet Devices
#1	Primary	151.00'	**18.0" Round Culvert** L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 151.00' / 150.71' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	151.68'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	152.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	154.32'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.31 cfs @ 13.79 hrs HW=152.80' (Free Discharge)
- **1=Culvert** (Passes 0.31 cfs of 8.34 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 4.85 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.14 cfs @ 0.73 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-20: Basin #20



Stage-Discharge for Pond B-20: Basin #20

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
150.87	0.00	151.39	0.00	151.91	0.06	152.43	0.13
150.88	0.00	151.40	0.00	151.92	0.06	152.44	0.13
150.89	0.00	151.41	0.00	151.93	0.06	152.45	0.13
150.90	0.00	151.42	0.00	151.94	0.06	152.46	0.13
150.91	0.00	151.43	0.00	151.95	0.07	152.47	0.14
150.92	0.00	151.44	0.00	151.96	0.07	152.48	0.14
150.93	0.00	151.45	0.00	151.97	0.07	152.49	0.14
150.94	0.00	151.46	0.00	151.98	0.07	152.50	0.14
150.95	0.00	151.47	0.00	151.99	0.07	152.51	0.14
150.96	0.00	151.48	0.00	152.00	0.08	152.52	0.14
150.97	0.00	151.49	0.00	152.01	0.08	152.53	0.14
150.98	0.00	151.50	0.00	152.02	0.08	152.54	0.14
150.99	0.00	151.51	0.00	152.03	0.08	152.55	0.14
151.00	0.00	151.52	0.00	152.04	0.08	152.56	0.14
151.01	0.00	151.53	0.00	152.05	0.08	152.57	0.15
151.02	0.00	151.54	0.00	152.06	0.09	152.58	0.15
151.03	0.00	151.55	0.00	152.07	0.09	152.59	0.15
151.04	0.00	151.56	0.00	152.08	0.09	152.60	0.15
151.05	0.00	151.57	0.00	152.09	0.09	152.61	0.15
151.06	0.00	151.58	0.00	152.10	0.09	152.62	0.15
151.07	0.00	151.59	0.00	152.11	0.09	152.63	0.15
151.08	0.00	151.60	0.00	152.12	0.10	152.64	0.15
151.09	0.00	151.61	0.00	152.13	0.10	152.65	0.15
151.10	0.00	151.62	0.00	152.14	0.10	152.66	0.15
151.11	0.00	151.63	0.00	152.15	0.10	152.67	0.15
151.12	0.00	151.64	0.00	152.16	0.10	152.68	0.16
151.13	0.00	151.65	0.00	152.17	0.10	152.69	0.16
151.14	0.00	151.66	0.00	152.18	0.10	152.70	0.16
151.15	0.00	151.67	0.00	152.19	0.10	152.71	0.16
151.16	0.00	151.68	0.00	152.20	0.11	152.72	0.16
151.17	0.00	151.69	0.00	152.21	0.11	152.73	0.16
151.18	0.00	151.70	0.00	152.22	0.11	152.74	0.16
151.19	0.00	151.71	0.00	152.23	0.11	152.75	0.16
151.20	0.00	151.72	0.00	152.24	0.11	152.76	0.18
151.21	0.00	151.73	0.00	152.25	0.11	152.77	0.20
151.22	0.00	151.74	0.01	152.26	0.11	152.78	0.23
151.23	0.00	151.75	0.01	152.27	0.11	152.79	0.27
151.24	0.00	151.76	0.01	152.28	0.12	152.80	0.31
151.25	0.00	151.77	0.01	152.29	0.12	152.81	0.36
151.26	0.00	151.78	0.02	152.30	0.12	152.82	0.41
151.27	0.00	151.79	0.02	152.31	0.12	152.83	0.46
151.28	0.00	151.80	0.02	152.32	0.12	152.84	0.52
151.29	0.00	151.81	0.03	152.33	0.12	152.85	0.58
151.30	0.00	151.82	0.03	152.34	0.12	152.86	0.64
151.31	0.00	151.83	0.03	152.35	0.12	152.87	0.71
151.32	0.00	151.84	0.04	152.36	0.12	152.88	0.78
151.33	0.00	151.85	0.04	152.37	0.13	152.89	0.85
151.34	0.00	151.86	0.05	152.38	0.13	152.90	0.93
151.35	0.00	151.87	0.05	152.39	0.13	152.91	1.00
151.36	0.00	151.88	0.05	152.40	0.13	152.92	1.08
151.37	0.00	151.89	0.05	152.41	0.13	152.93	1.17
151.38	0.00	151.90	0.06	152.42	0.13	152.94	1.25

Stage-Discharge for Pond B-20: Basin #20 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
152.95	1.34	153.47	7.92	153.99	12.73	154.51	23.91
152.96	1.42	153.48	8.07	154.00	12.76	154.52	24.73
152.97	1.51	153.49	8.23	154.01	12.79	154.53	25.60
152.98	1.61	153.50	8.39	154.02	12.82	154.54	26.50
152.99	1.70	153.51	8.55	154.03	12.85	154.55	27.42
153.00	1.80	153.52	8.71	154.04	12.88	154.56	28.37
153.01	1.89	153.53	8.88	154.05	12.90	154.57	29.34
153.02	1.99	153.54	9.04	154.06	12.93	154.58	30.34
153.03	2.09	153.55	9.20	154.07	12.96	154.59	31.36
153.04	2.20	153.56	9.37	154.08	12.99	154.60	32.41
153.05	2.30	153.57	9.53	154.09	13.02	154.61	33.49
153.06	2.41	153.58	9.70	154.10	13.04	154.62	34.58
153.07	2.52	153.59	9.87	154.11	13.07	154.63	35.71
153.08	2.63	153.60	10.04	154.12	13.10	154.64	36.85
153.09	2.74	153.61	10.20	154.13	13.13	154.65	38.02
153.10	2.85	153.62	10.37	154.14	13.15	154.66	39.22
153.11	2.96	153.63	10.55	154.15	13.18	154.67	40.44
153.12	3.08	153.64	10.72	154.16	13.21	154.68	41.68
153.13	3.20	153.65	10.89	154.17	13.24	154.69	42.95
153.14	3.31	153.66	11.06	154.18	13.26	154.70	44.24
153.15	3.43	153.67	11.24	154.19	13.29	154.71	45.55
153.16	3.56	153.68	11.41	154.20	13.32	154.72	46.89
153.17	3.68	153.69	11.59	154.21	13.35	154.73	48.28
153.18	3.80	153.70	11.76	154.22	13.37	154.74	49.70
153.19	3.93	153.71	11.91	154.23	13.40	154.75	51.14
153.20	4.05	153.72	11.94	154.24	13.43	154.76	52.61
153.21	4.18	153.73	11.97	154.25	13.45	154.77	54.11
153.22	4.31	153.74	12.00	154.26	13.48	154.78	55.63
153.23	4.44	153.75	12.03	154.27	13.51	154.79	57.17
153.24	4.57	153.76	12.06	154.28	13.53	154.80	58.75
153.25	4.71	153.77	12.09	154.29	13.56	154.81	60.35
153.26	4.84	153.78	12.12	154.30	13.59	154.82	61.97
153.27	4.98	153.79	12.15	154.31	13.61	154.83	63.63
153.28	5.11	153.80	12.18	154.32	13.64	154.84	65.31
153.29	5.25	153.81	12.21	154.33	13.78	154.85	67.01
153.30	5.39	153.82	12.24	154.34	14.02	154.86	68.74
153.31	5.53	153.83	12.27	154.35	14.33	154.87	70.50
153.32	5.67	153.84	12.30	154.36	14.68	154.88	72.29
153.33	5.81	153.85	12.33	154.37	15.08	154.89	74.10
153.34	5.96	153.86	12.36	154.38	15.52	154.90	75.94
153.35	6.10	153.87	12.39	154.39	16.00	154.91	77.81
153.36	6.25	153.88	12.42	154.40	16.51	154.92	79.70
153.37	6.39	153.89	12.45	154.41	17.05	154.93	81.35
153.38	6.54	153.90	12.48	154.42	17.62	154.94	83.01
153.39	6.69	153.91	12.51	154.43	18.22	154.95	84.69
153.40	6.84	153.92	12.53	154.44	18.85	154.96	86.38
153.41	6.99	153.93	12.56	154.45	19.50	154.97	88.09
153.42	7.14	153.94	12.59	154.46	20.18	154.98	89.80
153.43	7.30	153.95	12.62	154.47	20.88	154.99	91.54
153.44	7.45	153.96	12.65	154.48	21.60	155.00	93.28
153.45	7.60	153.97	12.68	154.49	22.35	155.01	95.04
153.46	7.76	153.98	12.71	154.50	23.12	155.02	96.80

Stage-Discharge for Pond B-20: Basin #20 (continued)

Elevation (feet)	Primary (cfs)
155.03	98.59
155.04	100.38
155.05	102.19
155.06	104.01
155.07	105.84
155.08	107.69
155.09	109.54
155.10	111.41
155.11	113.29
155.12	115.18
155.13	117.13
155.14	119.08
155.15	121.05
155.16	123.03
155.17	125.03
155.18	127.04
155.19	129.06
155.20	131.10
155.21	133.14
155.22	135.20
155.23	137.28
155.24	139.36
155.25	141.46
155.26	143.57
155.27	145.70
155.28	147.84
155.29	149.99
155.30	152.15
155.31	154.32
155.32	156.51
155.33	158.66
155.34	160.81
155.35	162.98
155.36	165.16
155.37	167.35
155.38	169.55
155.39	171.76
155.40	173.98
155.41	176.21
155.42	178.45
155.43	180.70
155.44	182.96
155.45	185.24
155.46	187.52
155.47	189.81
155.48	192.11
155.49	194.43
155.50	**196.75**

Stage-Area-Storage for Pond B-20: Basin #20

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.87	0	0	151.39	6,230	2,756
150.88	456	2	151.40	6,238	2,818
150.89	912	9	151.41	6,246	2,880
150.90	1,368	21	151.42	6,254	2,943
150.91	1,823	36	151.43	6,261	3,005
150.92	2,279	57	151.44	6,269	3,068
150.93	2,735	82	151.45	6,277	3,131
150.94	3,191	112	151.46	6,285	3,194
150.95	3,647	146	151.47	6,293	3,257
150.96	4,103	185	151.48	6,300	3,320
150.97	4,558	228	151.49	6,308	3,383
150.98	5,014	276	151.50	6,316	3,446
150.99	5,470	328	151.51	6,324	3,509
151.00	5,926	385	151.52	6,332	3,572
151.01	5,934	444	151.53	6,339	3,636
151.02	5,942	504	151.54	6,347	3,699
151.03	5,949	563	151.55	6,355	3,762
151.04	5,957	623	151.56	6,363	3,826
151.05	5,965	682	151.57	6,371	3,890
151.06	5,973	742	151.58	6,378	3,953
151.07	5,981	802	151.59	6,386	4,017
151.08	5,988	862	151.60	6,394	4,081
151.09	5,996	922	151.61	6,402	4,145
151.10	6,004	982	151.62	6,410	4,209
151.11	6,012	1,042	151.63	6,417	4,273
151.12	6,020	1,102	151.64	6,425	4,338
151.13	6,027	1,162	151.65	6,433	4,402
151.14	6,035	1,222	151.66	6,441	4,466
151.15	6,043	1,283	151.67	6,449	4,531
151.16	6,051	1,343	151.68	6,456	4,595
151.17	6,059	1,404	151.69	6,464	4,660
151.18	6,066	1,465	151.70	6,472	4,724
151.19	6,074	1,525	151.71	6,480	4,789
151.20	6,082	1,586	151.72	6,488	4,854
151.21	6,090	1,647	151.73	6,495	4,919
151.22	6,098	1,708	151.74	6,503	4,984
151.23	6,105	1,769	151.75	6,511	5,049
151.24	6,113	1,830	151.76	6,519	5,114
151.25	6,121	1,891	151.77	6,527	5,179
151.26	6,129	1,952	151.78	6,534	5,245
151.27	6,137	2,014	151.79	6,542	5,310
151.28	6,144	2,075	151.80	6,550	5,376
151.29	6,152	2,137	151.81	6,558	5,441
151.30	6,160	2,198	151.82	6,566	5,507
151.31	6,168	2,260	151.83	6,573	5,572
151.32	6,176	2,321	151.84	6,581	5,638
151.33	6,183	2,383	151.85	6,589	5,704
151.34	6,191	2,445	151.86	6,597	5,770
151.35	6,199	2,507	151.87	6,605	5,836
151.36	6,207	2,569	151.88	6,612	5,902
151.37	6,215	2,631	151.89	6,620	5,968
151.38	6,222	2,693	151.90	6,628	6,034

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.91	6,636	6,101	152.43	7,053	9,659
151.92	6,644	6,167	152.44	7,062	9,730
151.93	6,651	6,234	152.45	7,070	9,801
151.94	6,659	6,300	152.46	7,078	9,871
151.95	6,667	6,367	152.47	7,086	9,942
151.96	6,675	6,434	152.48	7,094	10,013
151.97	6,683	6,500	152.49	7,102	10,084
151.98	6,690	6,567	152.50	7,110	10,155
151.99	6,698	6,634	152.51	7,118	10,226
152.00	6,706	6,701	152.52	7,126	10,298
152.01	6,714	6,768	152.53	7,134	10,369
152.02	6,722	6,835	152.54	7,142	10,440
152.03	6,730	6,903	152.55	7,150	10,512
152.04	6,738	6,970	152.56	7,158	10,583
152.05	6,746	7,038	152.57	7,167	10,655
152.06	6,754	7,105	152.58	7,175	10,727
152.07	6,763	7,173	152.59	7,183	10,798
152.08	6,771	7,240	152.60	7,191	10,870
152.09	6,779	7,308	152.61	7,199	10,942
152.10	6,787	7,376	152.62	7,207	11,014
152.11	6,795	7,444	152.63	7,215	11,086
152.12	6,803	7,512	152.64	7,223	11,159
152.13	6,811	7,580	152.65	7,231	11,231
152.14	6,819	7,648	152.66	7,239	11,303
152.15	6,827	7,716	152.67	7,247	11,376
152.16	6,835	7,784	152.68	7,255	11,448
152.17	6,843	7,853	152.69	7,264	11,521
152.18	6,851	7,921	152.70	7,272	11,593
152.19	6,860	7,990	152.71	7,280	11,666
152.20	6,868	8,059	152.72	7,288	11,739
152.21	6,876	8,127	152.73	7,296	11,812
152.22	6,884	8,196	152.74	7,304	11,885
152.23	6,892	8,265	152.75	7,312	11,958
152.24	6,900	8,334	152.76	7,320	12,031
152.25	6,908	8,403	152.77	7,328	12,104
152.26	6,916	8,472	152.78	7,336	12,178
152.27	6,924	8,541	152.79	7,344	12,251
152.28	6,932	8,611	152.80	7,352	12,325
152.29	6,940	8,680	152.81	7,360	12,398
152.30	6,948	8,749	152.82	7,369	12,472
152.31	6,956	8,819	152.83	7,377	12,545
152.32	6,965	8,888	152.84	7,385	12,619
152.33	6,973	8,958	152.85	7,393	12,693
152.34	6,981	9,028	152.86	7,401	12,767
152.35	6,989	9,098	152.87	7,409	12,841
152.36	6,997	9,168	152.88	7,417	12,915
152.37	7,005	9,238	152.89	7,425	12,990
152.38	7,013	9,308	152.90	7,433	13,064
152.39	7,021	9,378	152.91	7,441	13,138
152.40	7,029	9,448	152.92	7,449	13,213
152.41	7,037	9,519	152.93	7,457	13,287
152.42	7,045	9,589	152.94	7,466	13,362

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
152.95	7,474	13,437	153.47	7,906	17,435
152.96	7,482	13,511	153.48	7,914	17,514
152.97	7,490	13,586	153.49	7,922	17,593
152.98	7,498	13,661	153.50	7,931	17,672
152.99	7,506	13,736	153.51	7,939	17,752
153.00	7,514	13,811	153.52	7,947	17,831
153.01	7,522	13,886	153.53	7,955	17,911
153.02	7,531	13,962	153.54	7,964	17,990
153.03	7,539	14,037	153.55	7,972	18,070
153.04	7,547	14,112	153.56	7,980	18,150
153.05	7,556	14,188	153.57	7,989	18,229
153.06	7,564	14,264	153.58	7,997	18,309
153.07	7,572	14,339	153.59	8,005	18,389
153.08	7,581	14,415	153.60	8,014	18,470
153.09	7,589	14,491	153.61	8,022	18,550
153.10	7,597	14,567	153.62	8,030	18,630
153.11	7,606	14,643	153.63	8,039	18,710
153.12	7,614	14,719	153.64	8,047	18,791
153.13	7,622	14,795	153.65	8,055	18,871
153.14	7,631	14,871	153.66	8,064	18,952
153.15	7,639	14,948	153.67	8,072	19,033
153.16	7,647	15,024	153.68	8,080	19,113
153.17	7,656	15,101	153.69	8,089	19,194
153.18	7,664	15,177	153.70	8,097	19,275
153.19	7,672	15,254	153.71	8,105	19,356
153.20	7,681	15,331	153.72	8,114	19,437
153.21	7,689	15,407	153.73	8,122	19,518
153.22	7,697	15,484	153.74	8,130	19,600
153.23	7,706	15,561	153.75	8,139	19,681
153.24	7,714	15,639	153.76	8,147	19,762
153.25	7,722	15,716	153.77	8,155	19,844
153.26	7,731	15,793	153.78	8,164	19,926
153.27	7,739	15,870	153.79	8,172	20,007
153.28	7,747	15,948	153.80	8,180	20,089
153.29	7,756	16,025	153.81	8,189	20,171
153.30	7,764	16,103	153.82	8,197	20,253
153.31	7,772	16,181	153.83	8,205	20,335
153.32	7,781	16,258	153.84	8,214	20,417
153.33	7,789	16,336	153.85	8,222	20,499
153.34	7,797	16,414	153.86	8,230	20,581
153.35	7,806	16,492	153.87	8,239	20,664
153.36	7,814	16,570	153.88	8,247	20,746
153.37	7,822	16,648	153.89	8,255	20,829
153.38	7,831	16,727	153.90	8,264	20,911
153.39	7,839	16,805	153.91	8,272	20,994
153.40	7,847	16,883	153.92	8,280	21,077
153.41	7,856	16,962	153.93	8,289	21,159
153.42	7,864	17,041	153.94	8,297	21,242
153.43	7,872	17,119	153.95	8,305	21,325
153.44	7,881	17,198	153.96	8,314	21,408
153.45	7,889	17,277	153.97	8,322	21,492
153.46	7,897	17,356	153.98	8,330	21,575

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.99	8,339	21,658	154.51	8,785	26,110
154.00	8,347	21,742	154.52	8,793	26,198
154.01	8,356	21,825	154.53	8,802	26,286
154.02	8,364	21,909	154.54	8,810	26,374
154.03	8,373	21,992	154.55	8,819	26,462
154.04	8,381	22,076	154.56	8,827	26,551
154.05	8,390	22,160	154.57	8,836	26,639
154.06	8,398	22,244	154.58	8,845	26,727
154.07	8,407	22,328	154.59	8,853	26,816
154.08	8,416	22,412	154.60	8,862	26,904
154.09	8,424	22,496	154.61	8,870	26,993
154.10	8,433	22,581	154.62	8,879	27,082
154.11	8,441	22,665	154.63	8,888	27,171
154.12	8,450	22,750	154.64	8,896	27,259
154.13	8,459	22,834	154.65	8,905	27,348
154.14	8,467	22,919	154.66	8,913	27,438
154.15	8,476	23,003	154.67	8,922	27,527
154.16	8,484	23,088	154.68	8,930	27,616
154.17	8,493	23,173	154.69	8,939	27,705
154.18	8,501	23,258	154.70	8,948	27,795
154.19	8,510	23,343	154.71	8,956	27,884
154.20	8,519	23,428	154.72	8,965	27,974
154.21	8,527	23,513	154.73	8,973	28,064
154.22	8,536	23,599	154.74	8,982	28,153
154.23	8,544	23,684	154.75	8,991	28,243
154.24	8,553	23,770	154.76	8,999	28,333
154.25	8,562	23,855	154.77	9,008	28,423
154.26	8,570	23,941	154.78	9,016	28,513
154.27	8,579	24,027	154.79	9,025	28,604
154.28	8,587	24,112	154.80	9,033	28,694
154.29	8,596	24,198	154.81	9,042	28,784
154.30	8,604	24,284	154.82	9,051	28,875
154.31	8,613	24,370	154.83	9,059	28,965
154.32	8,622	24,457	154.84	9,068	29,056
154.33	8,630	24,543	154.85	9,076	29,147
154.34	8,639	24,629	154.86	9,085	29,237
154.35	8,647	24,716	154.87	9,093	29,328
154.36	8,656	24,802	154.88	9,102	29,419
154.37	8,664	24,889	154.89	9,111	29,510
154.38	8,673	24,975	154.90	9,119	29,601
154.39	8,682	25,062	154.91	9,128	29,693
154.40	8,690	25,149	154.92	9,136	29,784
154.41	8,699	25,236	154.93	9,145	29,875
154.42	8,707	25,323	154.94	9,154	29,967
154.43	8,716	25,410	154.95	9,162	30,059
154.44	8,725	25,497	154.96	9,171	30,150
154.45	8,733	25,585	154.97	9,179	30,242
154.46	8,742	25,672	154.98	9,188	30,334
154.47	8,750	25,760	154.99	9,196	30,426
154.48	8,759	25,847	155.00	9,205	30,518
154.49	8,767	25,935	155.01	9,214	30,610
154.50	8,776	26,022	155.02	9,223	30,702

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
155.03	9,231	30,794
155.04	9,240	30,887
155.05	9,249	30,979
155.06	9,258	31,072
155.07	9,266	31,164
155.08	9,275	31,257
155.09	9,284	31,350
155.10	9,293	31,443
155.11	9,301	31,536
155.12	9,310	31,629
155.13	9,319	31,722
155.14	9,328	31,815
155.15	9,336	31,908
155.16	9,345	32,002
155.17	9,354	32,095
155.18	9,363	32,189
155.19	9,371	32,282
155.20	9,380	32,376
155.21	9,389	32,470
155.22	9,398	32,564
155.23	9,406	32,658
155.24	9,415	32,752
155.25	9,424	32,846
155.26	9,433	32,941
155.27	9,442	33,035
155.28	9,450	33,129
155.29	9,459	33,224
155.30	9,468	33,319
155.31	9,477	33,413
155.32	9,485	33,508
155.33	9,494	33,603
155.34	9,503	33,698
155.35	9,512	33,793
155.36	9,520	33,888
155.37	9,529	33,984
155.38	9,538	34,079
155.39	9,547	34,174
155.40	9,555	34,270
155.41	9,564	34,365
155.42	9,573	34,461
155.43	9,582	34,557
155.44	9,590	34,653
155.45	9,599	34,749
155.46	9,608	34,845
155.47	9,617	34,941
155.48	9,625	35,037
155.49	9,634	35,133
155.50	**9,643**	**35,230**

Summary for Pond B-21: Basin #21

Inflow Area = 2.500 ac, 35.44% Impervious, Inflow Depth = 1.84" for Current 2 yr event
Inflow = 4.64 cfs @ 12.18 hrs, Volume= 0.383 af
Outflow = 0.18 cfs @ 15.27 hrs, Volume= 0.282 af, Atten= 96%, Lag= 185.8 min
Primary = 0.18 cfs @ 15.27 hrs, Volume= 0.282 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 151.95' @ 15.27 hrs Surf.Area= 6,708 sf Storage= 11,461 cf

Plug-Flow detention time= 676.7 min calculated for 0.281 af (73% of inflow)
Center-of-Mass det. time= 579.2 min (1,381.9 - 802.7)

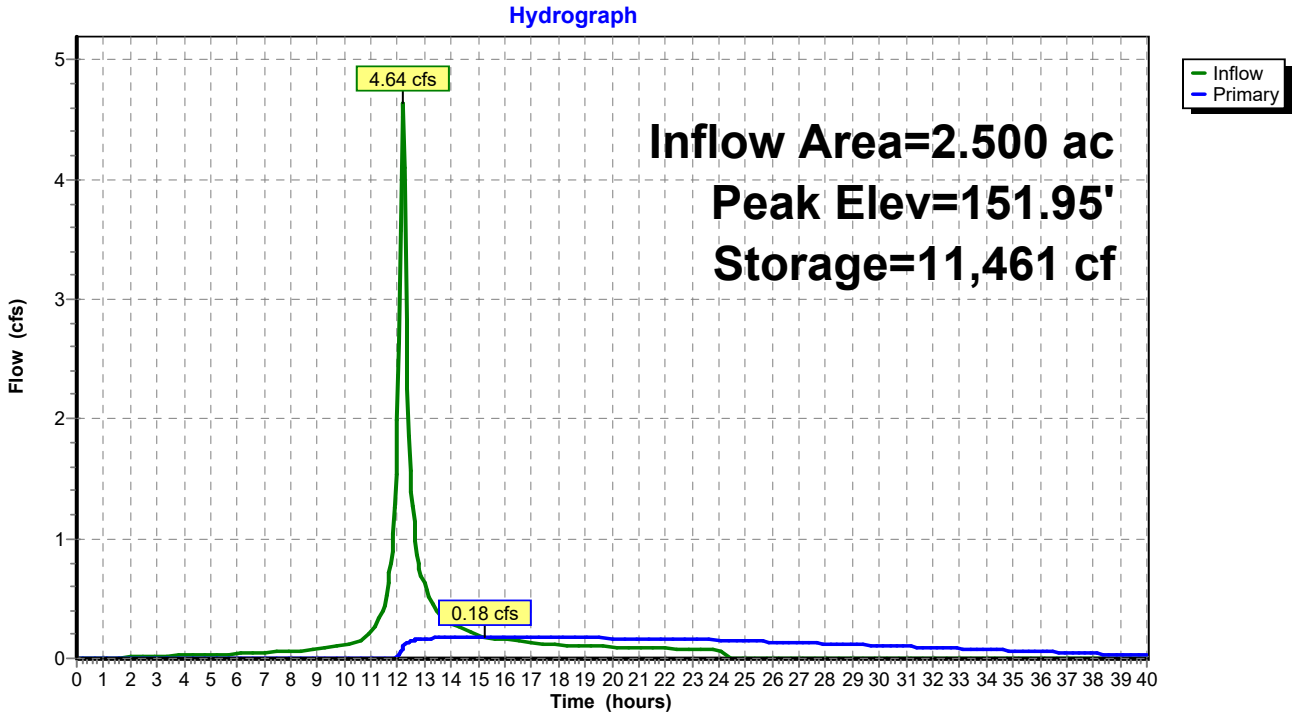
Volume	Invert	Avail.Storage	Storage Description
#1	149.90'	42,109 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
149.90	0	0	0
150.00	4,848	242	242
151.00	5,776	5,312	5,554
152.00	6,761	6,269	11,823
153.00	7,802	7,282	19,104
154.00	8,900	8,351	27,455
155.00	10,054	9,477	36,932
155.50	10,653	5,177	42,109

Device	Routing	Invert	Outlet Devices
#1	Primary	149.30'	**18.0" Round Culvert** L= 24.0' Ke= 0.500 Inlet / Outlet Invert= 149.30' / 148.32' S= 0.0408 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	150.68'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	152.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	154.16'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.18 cfs @ 15.27 hrs HW=151.95' (Free Discharge)
- **1=Culvert** (Passes 0.18 cfs of 11.72 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.19 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-21: Basin #21



Stage-Discharge for Pond B-21: Basin #21

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
149.90	0.00	150.42	0.00	150.94	0.06	151.46	0.13
149.91	0.00	150.43	0.00	150.95	0.07	151.47	0.14
149.92	0.00	150.44	0.00	150.96	0.07	151.48	0.14
149.93	0.00	150.45	0.00	150.97	0.07	151.49	0.14
149.94	0.00	150.46	0.00	150.98	0.07	151.50	0.14
149.95	0.00	150.47	0.00	150.99	0.07	151.51	0.14
149.96	0.00	150.48	0.00	151.00	0.08	151.52	0.14
149.97	0.00	150.49	0.00	151.01	0.08	151.53	0.14
149.98	0.00	150.50	0.00	151.02	0.08	151.54	0.14
149.99	0.00	150.51	0.00	151.03	0.08	151.55	0.14
150.00	0.00	150.52	0.00	151.04	0.08	151.56	0.14
150.01	0.00	150.53	0.00	151.05	0.08	151.57	0.15
150.02	0.00	150.54	0.00	151.06	0.09	151.58	0.15
150.03	0.00	150.55	0.00	151.07	0.09	151.59	0.15
150.04	0.00	150.56	0.00	151.08	0.09	151.60	0.15
150.05	0.00	150.57	0.00	151.09	0.09	151.61	0.15
150.06	0.00	150.58	0.00	151.10	0.09	151.62	0.15
150.07	0.00	150.59	0.00	151.11	0.09	151.63	0.15
150.08	0.00	150.60	0.00	151.12	0.10	151.64	0.15
150.09	0.00	150.61	0.00	151.13	0.10	151.65	0.15
150.10	0.00	150.62	0.00	151.14	0.10	151.66	0.15
150.11	0.00	150.63	0.00	151.15	0.10	151.67	0.15
150.12	0.00	150.64	0.00	151.16	0.10	151.68	0.16
150.13	0.00	150.65	0.00	151.17	0.10	151.69	0.16
150.14	0.00	150.66	0.00	151.18	0.10	151.70	0.16
150.15	0.00	150.67	0.00	151.19	0.10	151.71	0.16
150.16	0.00	150.68	0.00	151.20	0.11	151.72	0.16
150.17	0.00	150.69	0.00	151.21	0.11	151.73	0.16
150.18	0.00	150.70	0.00	151.22	0.11	151.74	0.16
150.19	0.00	150.71	0.00	151.23	0.11	151.75	0.16
150.20	0.00	150.72	0.00	151.24	0.11	151.76	0.16
150.21	0.00	150.73	0.00	151.25	0.11	151.77	0.16
150.22	0.00	150.74	0.01	151.26	0.11	151.78	0.16
150.23	0.00	150.75	0.01	151.27	0.11	151.79	0.16
150.24	0.00	150.76	0.01	151.28	0.12	151.80	0.17
150.25	0.00	150.77	0.01	151.29	0.12	151.81	0.17
150.26	0.00	150.78	0.02	151.30	0.12	151.82	0.17
150.27	0.00	150.79	0.02	151.31	0.12	151.83	0.17
150.28	0.00	150.80	0.02	151.32	0.12	151.84	0.17
150.29	0.00	150.81	0.03	151.33	0.12	151.85	0.17
150.30	0.00	150.82	0.03	151.34	0.12	151.86	0.17
150.31	0.00	150.83	0.03	151.35	0.12	151.87	0.17
150.32	0.00	150.84	0.04	151.36	0.12	151.88	0.17
150.33	0.00	150.85	0.04	151.37	0.13	151.89	0.17
150.34	0.00	150.86	0.05	151.38	0.13	151.90	0.17
150.35	0.00	150.87	0.05	151.39	0.13	151.91	0.17
150.36	0.00	150.88	0.05	151.40	0.13	151.92	0.17
150.37	0.00	150.89	0.05	151.41	0.13	151.93	0.18
150.38	0.00	150.90	0.06	151.42	0.13	151.94	0.18
150.39	0.00	150.91	0.06	151.43	0.13	151.95	0.18
150.40	0.00	150.92	0.06	151.44	0.13	151.96	0.18
150.41	0.00	150.93	0.06	151.45	0.13	151.97	0.18

Stage-Discharge for Pond B-21: Basin #21 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
151.98	0.18	152.50	1.12	153.02	7.48	153.54	15.90
151.99	0.18	152.51	1.21	153.03	7.64	153.55	15.92
152.00	0.18	152.52	1.29	153.04	7.79	153.56	15.94
152.01	0.18	152.53	1.38	153.05	7.95	153.57	15.96
152.02	0.18	152.54	1.46	153.06	8.11	153.58	15.99
152.03	0.18	152.55	1.55	153.07	8.27	153.59	16.01
152.04	0.18	152.56	1.64	153.08	8.43	153.60	16.03
152.05	0.18	152.57	1.74	153.09	8.59	153.61	16.05
152.06	0.19	152.58	1.83	153.10	8.75	153.62	16.08
152.07	0.19	152.59	1.93	153.11	8.91	153.63	16.10
152.08	0.19	152.60	2.03	153.12	9.07	153.64	16.12
152.09	0.19	152.61	2.13	153.13	9.24	153.65	16.14
152.10	0.19	152.62	2.24	153.14	9.40	153.66	16.17
152.11	0.19	152.63	2.34	153.15	9.57	153.67	16.19
152.12	0.19	152.64	2.45	153.16	9.73	153.68	16.21
152.13	0.19	152.65	2.55	153.17	9.90	153.69	16.23
152.14	0.19	152.66	2.66	153.18	10.07	153.70	16.26
152.15	0.19	152.67	2.77	153.19	10.24	153.71	16.28
152.16	0.19	152.68	2.89	153.20	10.41	153.72	16.30
152.17	0.19	152.69	3.00	153.21	10.58	153.73	16.32
152.18	0.19	152.70	3.12	153.22	10.75	153.74	16.34
152.19	0.19	152.71	3.23	153.23	10.92	153.75	16.37
152.20	0.20	152.72	3.35	153.24	11.10	153.76	16.39
152.21	0.20	152.73	3.47	153.25	11.27	153.77	16.41
152.22	0.20	152.74	3.59	153.26	11.44	153.78	16.43
152.23	0.20	152.75	3.72	153.27	11.62	153.79	16.46
152.24	0.20	152.76	3.84	153.28	11.80	153.80	16.48
152.25	0.20	152.77	3.96	153.29	11.97	153.81	16.50
152.26	0.20	152.78	4.09	153.30	12.15	153.82	16.52
152.27	0.20	152.79	4.22	153.31	12.33	153.83	16.54
152.28	0.20	152.80	4.35	153.32	12.51	153.84	16.56
152.29	0.20	152.81	4.48	153.33	12.69	153.85	16.59
152.30	0.20	152.82	4.61	153.34	12.87	153.86	16.61
152.31	0.20	152.83	4.74	153.35	13.05	153.87	16.63
152.32	0.20	152.84	4.88	153.36	13.23	153.88	16.65
152.33	0.20	152.85	5.01	153.37	13.42	153.89	16.67
152.34	0.22	152.86	5.15	153.38	13.60	153.90	16.70
152.35	0.24	152.87	5.29	153.39	13.78	153.91	16.72
152.36	0.27	152.88	5.43	153.40	13.97	153.92	16.74
152.37	0.31	152.89	5.57	153.41	14.15	153.93	16.76
152.38	0.35	152.90	5.71	153.42	14.34	153.94	16.78
152.39	0.40	152.91	5.85	153.43	14.53	153.95	16.80
152.40	0.45	152.92	5.99	153.44	14.72	153.96	16.82
152.41	0.50	152.93	6.14	153.45	14.90	153.97	16.85
152.42	0.56	152.94	6.28	153.46	15.09	153.98	16.87
152.43	0.62	152.95	6.43	153.47	15.28	153.99	16.89
152.44	0.69	152.96	6.58	153.48	15.47	154.00	16.91
152.45	0.75	152.97	6.73	153.49	15.66	154.01	16.93
152.46	0.82	152.98	6.87	153.50	15.80	154.02	16.95
152.47	0.89	152.99	7.03	153.51	15.83	154.03	16.97
152.48	0.97	153.00	7.18	153.52	15.85	154.04	17.00
152.49	1.04	153.01	7.33	153.53	15.87	154.05	17.02

Stage-Discharge for Pond B-21: Basin #21 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
154.06	17.04	154.58	53.10	155.10	146.75
154.07	17.06	154.59	54.54	155.11	148.87
154.08	17.08	154.60	56.00	155.12	151.01
154.09	17.10	154.61	57.49	155.13	153.15
154.10	17.12	154.62	59.01	155.14	155.31
154.11	17.14	154.63	60.55	155.15	157.48
154.12	17.17	154.64	62.12	155.16	159.67
154.13	17.19	154.65	63.71	155.17	161.81
154.14	17.21	154.66	65.33	155.18	163.96
154.15	17.23	154.67	66.98	155.19	166.13
154.16	17.25	154.68	68.66	155.20	168.30
154.17	17.39	154.69	70.36	155.21	170.49
154.18	17.62	154.70	72.09	155.22	172.68
154.19	17.92	154.71	73.84	155.23	174.89
154.20	18.27	154.72	75.62	155.24	177.11
154.21	18.67	154.73	77.43	155.25	179.33
154.22	19.10	154.74	79.26	155.26	181.57
154.23	19.57	154.75	81.13	155.27	183.82
154.24	20.07	154.76	83.02	155.28	186.08
154.25	20.61	154.77	84.66	155.29	188.35
154.26	21.18	154.78	86.32	155.30	190.63
154.27	21.77	154.79	88.00	155.31	192.91
154.28	22.39	154.80	89.68	155.32	195.21
154.29	23.04	154.81	91.38	155.33	197.52
154.30	23.71	154.82	93.10	155.34	199.84
154.31	24.41	154.83	94.82	155.35	202.17
154.32	25.13	154.84	96.56	155.36	204.51
154.33	25.87	154.85	98.31	155.37	206.89
154.34	26.64	154.86	100.08	155.38	209.29
154.35	27.42	154.87	101.86	155.39	211.70
154.36	28.23	154.88	103.65	155.40	214.11
154.37	29.10	154.89	105.45	155.41	216.54
154.38	29.99	154.90	107.27	155.42	218.98
154.39	30.91	154.91	109.09	155.43	221.43
154.40	31.85	154.92	110.94	155.44	223.89
154.41	32.82	154.93	112.79	155.45	226.35
154.42	33.81	154.94	114.65	155.46	228.83
154.43	34.83	154.95	116.53	155.47	231.33
154.44	35.88	154.96	118.42	155.48	233.83
154.45	36.94	154.97	120.36	155.49	236.34
154.46	38.04	154.98	122.31	155.50	**238.86**
154.47	39.15	154.99	124.27		
154.48	40.30	155.00	126.25		
154.49	41.46	155.01	128.24		
154.50	42.65	155.02	130.25		
154.51	43.87	155.03	132.27		
154.52	45.10	155.04	134.30		
154.53	46.37	155.05	136.34		
154.54	47.65	155.06	138.40		
154.55	48.96	155.07	140.47		
154.56	50.30	155.08	142.55		
154.57	51.69	155.09	144.65		

Stage-Area-Storage for Pond B-21: Basin #21

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
149.90	0	0	150.42	5,238	2,360
149.91	485	2	150.43	5,247	2,413
149.92	970	10	150.44	5,256	2,465
149.93	1,454	22	150.45	5,266	2,518
149.94	1,939	39	150.46	5,275	2,571
149.95	2,424	61	150.47	5,284	2,623
149.96	2,909	87	150.48	5,293	2,676
149.97	3,394	119	150.49	5,303	2,729
149.98	3,878	155	150.50	5,312	2,782
149.99	4,363	196	150.51	5,321	2,836
150.00	4,848	242	150.52	5,331	2,889
150.01	4,857	291	150.53	5,340	2,942
150.02	4,867	340	150.54	5,349	2,996
150.03	4,876	388	150.55	5,358	3,049
150.04	4,885	437	150.56	5,368	3,103
150.05	4,894	486	150.57	5,377	3,157
150.06	4,904	535	150.58	5,386	3,210
150.07	4,913	584	150.59	5,396	3,264
150.08	4,922	633	150.60	5,405	3,318
150.09	4,932	682	150.61	5,414	3,372
150.10	4,941	732	150.62	5,423	3,427
150.11	4,950	781	150.63	5,433	3,481
150.12	4,959	831	150.64	5,442	3,535
150.13	4,969	880	150.65	5,451	3,590
150.14	4,978	930	150.66	5,460	3,644
150.15	4,987	980	150.67	5,470	3,699
150.16	4,996	1,030	150.68	5,479	3,754
150.17	5,006	1,080	150.69	5,488	3,808
150.18	5,015	1,130	150.70	5,498	3,863
150.19	5,024	1,180	150.71	5,507	3,918
150.20	5,034	1,231	150.72	5,516	3,973
150.21	5,043	1,281	150.73	5,525	4,029
150.22	5,052	1,331	150.74	5,535	4,084
150.23	5,061	1,382	150.75	5,544	4,139
150.24	5,071	1,433	150.76	5,553	4,195
150.25	5,080	1,483	150.77	5,563	4,250
150.26	5,089	1,534	150.78	5,572	4,306
150.27	5,099	1,585	150.79	5,581	4,362
150.28	5,108	1,636	150.80	5,590	4,418
150.29	5,117	1,687	150.81	5,600	4,474
150.30	5,126	1,739	150.82	5,609	4,530
150.31	5,136	1,790	150.83	5,618	4,586
150.32	5,145	1,841	150.84	5,628	4,642
150.33	5,154	1,893	150.85	5,637	4,698
150.34	5,164	1,944	150.86	5,646	4,755
150.35	5,173	1,996	150.87	5,655	4,811
150.36	5,182	2,048	150.88	5,665	4,868
150.37	5,191	2,100	150.89	5,674	4,925
150.38	5,201	2,152	150.90	5,683	4,981
150.39	5,210	2,204	150.91	5,692	5,038
150.40	5,219	2,256	150.92	5,702	5,095
150.41	5,228	2,308	150.93	5,711	5,152

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.94	5,720	5,210	151.46	6,229	8,316
150.95	5,730	5,267	151.47	6,239	8,378
150.96	5,739	5,324	151.48	6,249	8,440
150.97	5,748	5,382	151.49	6,259	8,503
150.98	5,757	5,439	151.50	6,269	8,566
150.99	5,767	5,497	151.51	6,278	8,628
151.00	5,776	5,554	151.52	6,288	8,691
151.01	5,786	5,612	151.53	6,298	8,754
151.02	5,796	5,670	151.54	6,308	8,817
151.03	5,806	5,728	151.55	6,318	8,880
151.04	5,815	5,786	151.56	6,328	8,943
151.05	5,825	5,844	151.57	6,337	9,007
151.06	5,835	5,903	151.58	6,347	9,070
151.07	5,845	5,961	151.59	6,357	9,134
151.08	5,855	6,020	151.60	6,367	9,197
151.09	5,865	6,078	151.61	6,377	9,261
151.10	5,874	6,137	151.62	6,387	9,325
151.11	5,884	6,196	151.63	6,397	9,389
151.12	5,894	6,255	151.64	6,406	9,453
151.13	5,904	6,314	151.65	6,416	9,517
151.14	5,914	6,373	151.66	6,426	9,581
151.15	5,924	6,432	151.67	6,436	9,645
151.16	5,934	6,491	151.68	6,446	9,710
151.17	5,943	6,551	151.69	6,456	9,774
151.18	5,953	6,610	151.70	6,466	9,839
151.19	5,963	6,670	151.71	6,475	9,904
151.20	5,973	6,729	151.72	6,485	9,968
151.21	5,983	6,789	151.73	6,495	10,033
151.22	5,993	6,849	151.74	6,505	10,098
151.23	6,003	6,909	151.75	6,515	10,163
151.24	6,012	6,969	151.76	6,525	10,229
151.25	6,022	7,029	151.77	6,534	10,294
151.26	6,032	7,089	151.78	6,544	10,359
151.27	6,042	7,150	151.79	6,554	10,425
151.28	6,052	7,210	151.80	6,564	10,490
151.29	6,062	7,271	151.81	6,574	10,556
151.30	6,072	7,332	151.82	6,584	10,622
151.31	6,081	7,392	151.83	6,594	10,688
151.32	6,091	7,453	151.84	6,603	10,754
151.33	6,101	7,514	151.85	6,613	10,820
151.34	6,111	7,575	151.86	6,623	10,886
151.35	6,121	7,636	151.87	6,633	10,952
151.36	6,131	7,698	151.88	6,643	11,019
151.37	6,140	7,759	151.89	6,653	11,085
151.38	6,150	7,820	151.90	6,663	11,152
151.39	6,160	7,882	151.91	6,672	11,218
151.40	6,170	7,944	151.92	6,682	11,285
151.41	6,180	8,005	151.93	6,692	11,352
151.42	6,190	8,067	151.94	6,702	11,419
151.43	6,200	8,129	151.95	6,712	11,486
151.44	6,209	8,191	151.96	6,722	11,553
151.45	6,219	8,253	151.97	6,731	11,621

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.98	6,741	11,688	152.50	7,282	15,334
151.99	6,751	11,755	152.51	7,292	15,406
152.00	6,761	11,823	152.52	7,302	15,479
152.01	6,771	11,891	152.53	7,313	15,552
152.02	6,782	11,958	152.54	7,323	15,626
152.03	6,792	12,026	152.55	7,334	15,699
152.04	6,803	12,094	152.56	7,344	15,772
152.05	6,813	12,162	152.57	7,354	15,846
152.06	6,823	12,230	152.58	7,365	15,919
152.07	6,834	12,299	152.59	7,375	15,993
152.08	6,844	12,367	152.60	7,386	16,067
152.09	6,855	12,436	152.61	7,396	16,141
152.10	6,865	12,504	152.62	7,406	16,215
152.11	6,876	12,573	152.63	7,417	16,289
152.12	6,886	12,642	152.64	7,427	16,363
152.13	6,896	12,711	152.65	7,438	16,437
152.14	6,907	12,780	152.66	7,448	16,512
152.15	6,917	12,849	152.67	7,458	16,586
152.16	6,928	12,918	152.68	7,469	16,661
152.17	6,938	12,987	152.69	7,479	16,736
152.18	6,948	13,057	152.70	7,490	16,811
152.19	6,959	13,126	152.71	7,500	16,886
152.20	6,969	13,196	152.72	7,511	16,961
152.21	6,980	13,266	152.73	7,521	17,036
152.22	6,990	13,336	152.74	7,531	17,111
152.23	7,000	13,405	152.75	7,542	17,186
152.24	7,011	13,476	152.76	7,552	17,262
152.25	7,021	13,546	152.77	7,563	17,337
152.26	7,032	13,616	152.78	7,573	17,413
152.27	7,042	13,686	152.79	7,583	17,489
152.28	7,052	13,757	152.80	7,594	17,565
152.29	7,063	13,827	152.81	7,604	17,641
152.30	7,073	13,898	152.82	7,615	17,717
152.31	7,084	13,969	152.83	7,625	17,793
152.32	7,094	14,040	152.84	7,635	17,869
152.33	7,105	14,111	152.85	7,646	17,946
152.34	7,115	14,182	152.86	7,656	18,022
152.35	7,125	14,253	152.87	7,667	18,099
152.36	7,136	14,324	152.88	7,677	18,176
152.37	7,146	14,396	152.89	7,687	18,252
152.38	7,157	14,467	152.90	7,698	18,329
152.39	7,167	14,539	152.91	7,708	18,406
152.40	7,177	14,611	152.92	7,719	18,484
152.41	7,188	14,682	152.93	7,729	18,561
152.42	7,198	14,754	152.94	7,740	18,638
152.43	7,209	14,826	152.95	7,750	18,716
152.44	7,219	14,899	152.96	7,760	18,793
152.45	7,229	14,971	152.97	7,771	18,871
152.46	7,240	15,043	152.98	7,781	18,949
152.47	7,250	15,116	152.99	7,792	19,026
152.48	7,261	15,188	153.00	7,802	19,104
152.49	7,271	15,261	153.01	7,813	19,182

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.02	7,824	19,261	153.54	8,395	23,478
153.03	7,835	19,339	153.55	8,406	23,562
153.04	7,846	19,417	153.56	8,417	23,646
153.05	7,857	19,496	153.57	8,428	23,730
153.06	7,868	19,574	153.58	8,439	23,814
153.07	7,879	19,653	153.59	8,450	23,899
153.08	7,890	19,732	153.60	8,461	23,983
153.09	7,901	19,811	153.61	8,472	24,068
153.10	7,912	19,890	153.62	8,483	24,153
153.11	7,923	19,969	153.63	8,494	24,238
153.12	7,934	20,049	153.64	8,505	24,323
153.13	7,945	20,128	153.65	8,516	24,408
153.14	7,956	20,207	153.66	8,527	24,493
153.15	7,967	20,287	153.67	8,538	24,578
153.16	7,978	20,367	153.68	8,549	24,664
153.17	7,989	20,447	153.69	8,560	24,749
153.18	8,000	20,527	153.70	8,571	24,835
153.19	8,011	20,607	153.71	8,582	24,921
153.20	8,022	20,687	153.72	8,593	25,006
153.21	8,033	20,767	153.73	8,604	25,092
153.22	8,044	20,847	153.74	8,615	25,179
153.23	8,055	20,928	153.75	8,626	25,265
153.24	8,066	21,009	153.76	8,636	25,351
153.25	8,077	21,089	153.77	8,647	25,437
153.26	8,087	21,170	153.78	8,658	25,524
153.27	8,098	21,251	153.79	8,669	25,611
153.28	8,109	21,332	153.80	8,680	25,697
153.29	8,120	21,413	153.81	8,691	25,784
153.30	8,131	21,494	153.82	8,702	25,871
153.31	8,142	21,576	153.83	8,713	25,958
153.32	8,153	21,657	153.84	8,724	26,045
153.33	8,164	21,739	153.85	8,735	26,133
153.34	8,175	21,821	153.86	8,746	26,220
153.35	8,186	21,902	153.87	8,757	26,308
153.36	8,197	21,984	153.88	8,768	26,395
153.37	8,208	22,066	153.89	8,779	26,483
153.38	8,219	22,148	153.90	8,790	26,571
153.39	8,230	22,231	153.91	8,801	26,659
153.40	8,241	22,313	153.92	8,812	26,747
153.41	8,252	22,396	153.93	8,823	26,835
153.42	8,263	22,478	153.94	8,834	26,923
153.43	8,274	22,561	153.95	8,845	27,012
153.44	8,285	22,644	153.96	8,856	27,100
153.45	8,296	22,726	153.97	8,867	27,189
153.46	8,307	22,809	153.98	8,878	27,278
153.47	8,318	22,893	153.99	8,889	27,366
153.48	8,329	22,976	154.00	8,900	27,455
153.49	8,340	23,059	154.01	8,912	27,544
153.50	8,351	23,143	154.02	8,923	27,634
153.51	8,362	23,226	154.03	8,935	27,723
153.52	8,373	23,310	154.04	8,946	27,812
153.53	8,384	23,394	154.05	8,958	27,902

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
154.06	8,969	27,991	154.58	9,569	32,812
154.07	8,981	28,081	154.59	9,581	32,907
154.08	8,992	28,171	154.60	9,592	33,003
154.09	9,004	28,261	154.61	9,604	33,099
154.10	9,015	28,351	154.62	9,615	33,195
154.11	9,027	28,441	154.63	9,627	33,291
154.12	9,038	28,532	154.64	9,639	33,388
154.13	9,050	28,622	154.65	9,650	33,484
154.14	9,062	28,713	154.66	9,662	33,581
154.15	9,073	28,803	154.67	9,673	33,677
154.16	9,085	28,894	154.68	9,685	33,774
154.17	9,096	28,985	154.69	9,696	33,871
154.18	9,108	29,076	154.70	9,708	33,968
154.19	9,119	29,167	154.71	9,719	34,065
154.20	9,131	29,258	154.72	9,731	34,163
154.21	9,142	29,350	154.73	9,742	34,260
154.22	9,154	29,441	154.74	9,754	34,357
154.23	9,165	29,533	154.75	9,766	34,455
154.24	9,177	29,625	154.76	9,777	34,553
154.25	9,189	29,716	154.77	9,789	34,651
154.26	9,200	29,808	154.78	9,800	34,748
154.27	9,212	29,900	154.79	9,812	34,847
154.28	9,223	29,993	154.80	9,823	34,945
154.29	9,235	30,085	154.81	9,835	35,043
154.30	9,246	30,177	154.82	9,846	35,141
154.31	9,258	30,270	154.83	9,858	35,240
154.32	9,269	30,362	154.84	9,869	35,339
154.33	9,281	30,455	154.85	9,881	35,437
154.34	9,292	30,548	154.86	9,892	35,536
154.35	9,304	30,641	154.87	9,904	35,635
154.36	9,315	30,734	154.88	9,916	35,734
154.37	9,327	30,827	154.89	9,927	35,833
154.38	9,339	30,921	154.90	9,939	35,933
154.39	9,350	31,014	154.91	9,950	36,032
154.40	9,362	31,108	154.92	9,962	36,132
154.41	9,373	31,201	154.93	9,973	36,231
154.42	9,385	31,295	154.94	9,985	36,331
154.43	9,396	31,389	154.95	9,996	36,431
154.44	9,408	31,483	154.96	10,008	36,531
154.45	9,419	31,577	154.97	10,019	36,631
154.46	9,431	31,671	154.98	10,031	36,732
154.47	9,442	31,766	154.99	10,042	36,832
154.48	9,454	31,860	155.00	10,054	36,932
154.49	9,465	31,955	155.01	10,066	37,033
154.50	9,477	32,050	155.02	10,078	37,134
154.51	9,489	32,144	155.03	10,090	37,235
154.52	9,500	32,239	155.04	10,102	37,336
154.53	9,512	32,334	155.05	10,114	37,437
154.54	9,523	32,430	155.06	10,126	37,538
154.55	9,535	32,525	155.07	10,138	37,639
154.56	9,546	32,620	155.08	10,150	37,741
154.57	9,558	32,716	155.09	10,162	37,842

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
155.10	10,174	37,944
155.11	10,186	38,046
155.12	10,198	38,148
155.13	10,210	38,250
155.14	10,222	38,352
155.15	10,234	38,454
155.16	10,246	38,556
155.17	10,258	38,659
155.18	10,270	38,762
155.19	10,282	38,864
155.20	10,294	38,967
155.21	10,306	39,070
155.22	10,318	39,173
155.23	10,330	39,277
155.24	10,342	39,380
155.25	10,354	39,483
155.26	10,365	39,587
155.27	10,377	39,691
155.28	10,389	39,794
155.29	10,401	39,898
155.30	10,413	40,003
155.31	10,425	40,107
155.32	10,437	40,211
155.33	10,449	40,315
155.34	10,461	40,420
155.35	10,473	40,525
155.36	10,485	40,629
155.37	10,497	40,734
155.38	10,509	40,839
155.39	10,521	40,945
155.40	10,533	41,050
155.41	10,545	41,155
155.42	10,557	41,261
155.43	10,569	41,366
155.44	10,581	41,472
155.45	10,593	41,578
155.46	10,605	41,684
155.47	10,617	41,790
155.48	10,629	41,896
155.49	10,641	42,003
155.50	**10,653**	**42,109**

Summary for Pond B-22: Basin #22

Inflow Area = 2.460 ac, 33.05% Impervious, Inflow Depth = 1.79" for Current 2 yr event
Inflow = 4.46 cfs @ 12.18 hrs, Volume= 0.367 af
Outflow = 0.16 cfs @ 15.94 hrs, Volume= 0.262 af, Atten= 97%, Lag= 225.8 min
Primary = 0.16 cfs @ 15.94 hrs, Volume= 0.262 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 149.16' @ 15.94 hrs Surf.Area= 8,105 sf Storage= 11,124 cf

Plug-Flow detention time= 711.4 min calculated for 0.262 af (71% of inflow)
Center-of-Mass det. time= 608.8 min (1,414.3 - 805.4)

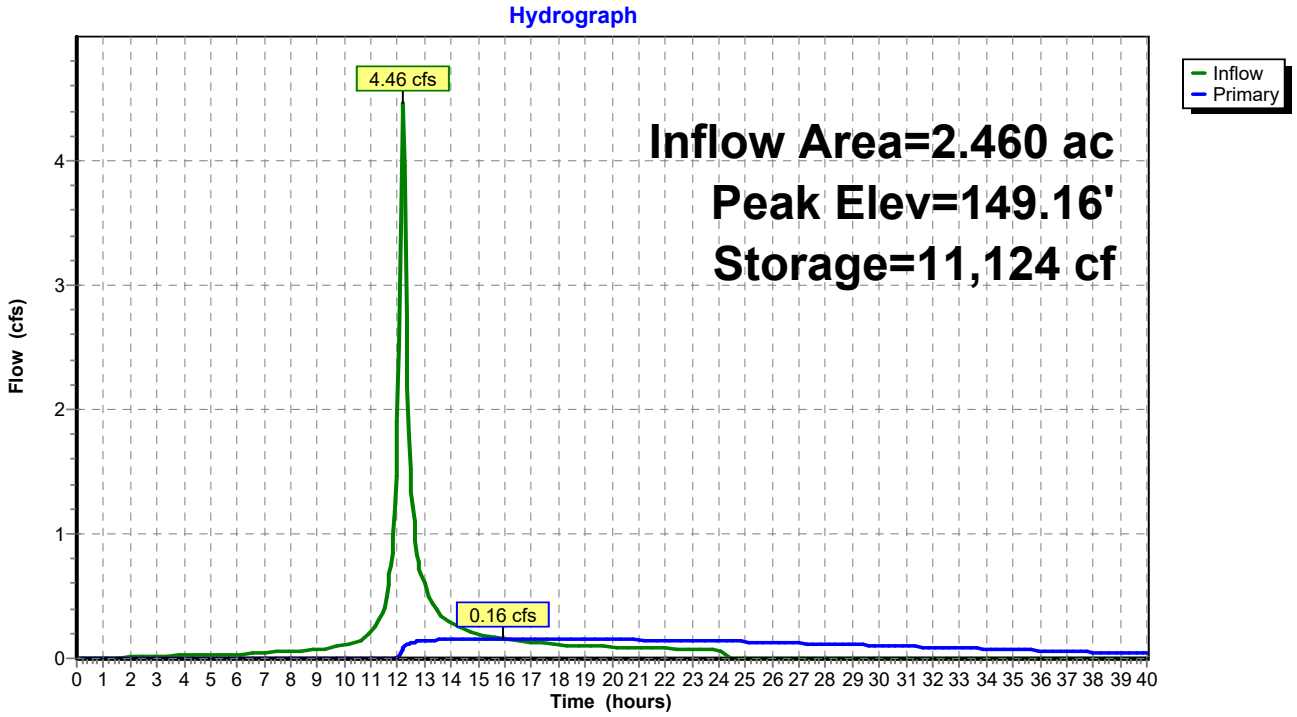
Volume	Invert	Avail.Storage	Storage Description
#1	147.30'	50,528 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
147.30	0	0	0
148.00	6,928	2,425	2,425
149.00	7,937	7,433	9,857
150.00	9,003	8,470	18,327
151.00	10,125	9,564	27,891
152.00	11,304	10,715	38,606
153.00	12,540	11,922	50,528

Device	Routing	Invert	Outlet Devices
#1	Primary	147.30'	**18.0" Round Culvert** L= 24.0' Ke= 0.500 Inlet / Outlet Invert= 147.30' / 146.20' S= 0.0458 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	148.15'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	149.47'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	152.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.16 cfs @ 15.94 hrs HW=149.16' (Free Discharge)
- **1=Culvert** (Passes 0.16 cfs of 8.96 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.16 cfs @ 4.58 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-22: Basin #22



Stage-Discharge for Pond B-22: Basin #22

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.30	0.00	147.82	0.00	148.34	0.05	148.86	0.13
147.31	0.00	147.83	0.00	148.35	0.05	148.87	0.13
147.32	0.00	147.84	0.00	148.36	0.05	148.88	0.13
147.33	0.00	147.85	0.00	148.37	0.06	148.89	0.13
147.34	0.00	147.86	0.00	148.38	0.06	148.90	0.13
147.35	0.00	147.87	0.00	148.39	0.06	148.91	0.13
147.36	0.00	147.88	0.00	148.40	0.06	148.92	0.13
147.37	0.00	147.89	0.00	148.41	0.06	148.93	0.13
147.38	0.00	147.90	0.00	148.42	0.07	148.94	0.14
147.39	0.00	147.91	0.00	148.43	0.07	148.95	0.14
147.40	0.00	147.92	0.00	148.44	0.07	148.96	0.14
147.41	0.00	147.93	0.00	148.45	0.07	148.97	0.14
147.42	0.00	147.94	0.00	148.46	0.07	148.98	0.14
147.43	0.00	147.95	0.00	148.47	0.08	148.99	0.14
147.44	0.00	147.96	0.00	148.48	0.08	149.00	0.14
147.45	0.00	147.97	0.00	148.49	0.08	149.01	0.14
147.46	0.00	147.98	0.00	148.50	0.08	149.02	0.14
147.47	0.00	147.99	0.00	148.51	0.08	149.03	0.14
147.48	0.00	148.00	0.00	148.52	0.08	149.04	0.15
147.49	0.00	148.01	0.00	148.53	0.09	149.05	0.15
147.50	0.00	148.02	0.00	148.54	0.09	149.06	0.15
147.51	0.00	148.03	0.00	148.55	0.09	149.07	0.15
147.52	0.00	148.04	0.00	148.56	0.09	149.08	0.15
147.53	0.00	148.05	0.00	148.57	0.09	149.09	0.15
147.54	0.00	148.06	0.00	148.58	0.09	149.10	0.15
147.55	0.00	148.07	0.00	148.59	0.10	149.11	0.15
147.56	0.00	148.08	0.00	148.60	0.10	149.12	0.15
147.57	0.00	148.09	0.00	148.61	0.10	149.13	0.15
147.58	0.00	148.10	0.00	148.62	0.10	149.14	0.15
147.59	0.00	148.11	0.00	148.63	0.10	149.15	0.16
147.60	0.00	148.12	0.00	148.64	0.10	149.16	0.16
147.61	0.00	148.13	0.00	148.65	0.10	149.17	0.16
147.62	0.00	148.14	0.00	148.66	0.10	149.18	0.16
147.63	0.00	148.15	0.00	148.67	0.11	149.19	0.16
147.64	0.00	148.16	0.00	148.68	0.11	149.20	0.16
147.65	0.00	148.17	0.00	148.69	0.11	149.21	0.16
147.66	0.00	148.18	0.00	148.70	0.11	149.22	0.16
147.67	0.00	148.19	0.00	148.71	0.11	149.23	0.16
147.68	0.00	148.20	0.00	148.72	0.11	149.24	0.16
147.69	0.00	148.21	0.01	148.73	0.11	149.25	0.16
147.70	0.00	148.22	0.01	148.74	0.11	149.26	0.16
147.71	0.00	148.23	0.01	148.75	0.12	149.27	0.17
147.72	0.00	148.24	0.01	148.76	0.12	149.28	0.17
147.73	0.00	148.25	0.02	148.77	0.12	149.29	0.17
147.74	0.00	148.26	0.02	148.78	0.12	149.30	0.17
147.75	0.00	148.27	0.02	148.79	0.12	149.31	0.17
147.76	0.00	148.28	0.03	148.80	0.12	149.32	0.17
147.77	0.00	148.29	0.03	148.81	0.12	149.33	0.17
147.78	0.00	148.30	0.03	148.82	0.12	149.34	0.17
147.79	0.00	148.31	0.04	148.83	0.12	149.35	0.17
147.80	0.00	148.32	0.04	148.84	0.13	149.36	0.17
147.81	0.00	148.33	0.05	148.85	0.13	149.37	0.17

Stage-Discharge for Pond B-22: Basin #22 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
149.38	0.17	149.90	3.82	150.42	11.78	150.94	14.46
149.39	0.17	149.91	3.94	150.43	11.95	150.95	14.49
149.40	0.18	149.92	4.07	150.44	12.13	150.96	14.51
149.41	0.18	149.93	4.20	150.45	12.31	150.97	14.54
149.42	0.18	149.94	4.33	150.46	12.49	150.98	14.56
149.43	0.18	149.95	4.46	150.47	12.67	150.99	14.59
149.44	0.18	149.96	4.59	150.48	12.85	151.00	14.61
149.45	0.18	149.97	4.72	150.49	13.03	151.01	14.64
149.46	0.18	149.98	4.86	150.50	13.21	151.02	14.66
149.47	0.18	149.99	4.99	150.51	13.35	151.03	14.69
149.48	0.19	150.00	5.13	150.52	13.37	151.04	14.71
149.49	0.22	150.01	5.27	150.53	13.40	151.05	14.74
149.50	0.25	150.02	5.41	150.54	13.43	151.06	14.76
149.51	0.29	150.03	5.55	150.55	13.45	151.07	14.79
149.52	0.33	150.04	5.69	150.56	13.48	151.08	14.81
149.53	0.38	150.05	5.83	150.57	13.51	151.09	14.84
149.54	0.43	150.06	5.97	150.58	13.53	151.10	14.86
149.55	0.48	150.07	6.12	150.59	13.56	151.11	14.88
149.56	0.54	150.08	6.26	150.60	13.59	151.12	14.91
149.57	0.60	150.09	6.41	150.61	13.61	151.13	14.93
149.58	0.66	150.10	6.56	150.62	13.64	151.14	14.96
149.59	0.73	150.11	6.71	150.63	13.67	151.15	14.98
149.60	0.80	150.12	6.86	150.64	13.69	151.16	15.01
149.61	0.87	150.13	7.01	150.65	13.72	151.17	15.03
149.62	0.95	150.14	7.16	150.66	13.75	151.18	15.05
149.63	1.02	150.15	7.31	150.67	13.77	151.19	15.08
149.64	1.10	150.16	7.46	150.68	13.80	151.20	15.10
149.65	1.18	150.17	7.62	150.69	13.83	151.21	15.13
149.66	1.27	150.18	7.78	150.70	13.85	151.22	15.15
149.67	1.35	150.19	7.93	150.71	13.88	151.23	15.17
149.68	1.44	150.20	8.09	150.72	13.90	151.24	15.20
149.69	1.53	150.21	8.25	150.73	13.93	151.25	15.22
149.70	1.62	150.22	8.41	150.74	13.96	151.26	15.24
149.71	1.72	150.23	8.57	150.75	13.98	151.27	15.27
149.72	1.81	150.24	8.73	150.76	14.01	151.28	15.29
149.73	1.91	150.25	8.89	150.77	14.03	151.29	15.32
149.74	2.01	150.26	9.05	150.78	14.06	151.30	15.34
149.75	2.11	150.27	9.22	150.79	14.08	151.31	15.36
149.76	2.21	150.28	9.38	150.80	14.11	151.32	15.39
149.77	2.32	150.29	9.55	150.81	14.14	151.33	15.41
149.78	2.43	150.30	9.71	150.82	14.16	151.34	15.43
149.79	2.53	150.31	9.88	150.83	14.19	151.35	15.46
149.80	2.64	150.32	10.05	150.84	14.21	151.36	15.48
149.81	2.75	150.33	10.22	150.85	14.24	151.37	15.50
149.82	2.87	150.34	10.39	150.86	14.26	151.38	15.53
149.83	2.98	150.35	10.56	150.87	14.29	151.39	15.55
149.84	3.10	150.36	10.73	150.88	14.31	151.40	15.57
149.85	3.21	150.37	10.90	150.89	14.34	151.41	15.60
149.86	3.33	150.38	11.08	150.90	14.36	151.42	15.62
149.87	3.45	150.39	11.25	150.91	14.39	151.43	15.64
149.88	3.57	150.40	11.43	150.92	14.41	151.44	15.67
149.89	3.70	150.41	11.60	150.93	14.44	151.45	15.69

Stage-Discharge for Pond B-22: Basin #22 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
151.46	15.71	151.98	16.87	152.50	17.95
151.47	15.74	151.99	16.89	152.51	17.97
151.48	15.76	152.00	16.91	152.52	17.99
151.49	15.78	152.01	16.93	152.53	18.01
151.50	15.80	152.02	16.95	152.54	18.03
151.51	15.83	152.03	16.97	152.55	18.05
151.52	15.85	152.04	17.00	152.56	18.07
151.53	15.87	152.05	17.02	152.57	18.09
151.54	15.90	152.06	17.04	152.58	18.11
151.55	15.92	152.07	17.06	152.59	18.13
151.56	15.94	152.08	17.08	152.60	18.15
151.57	15.96	152.09	17.10	152.61	18.17
151.58	15.99	152.10	17.12	152.62	18.19
151.59	16.01	152.11	17.14	152.63	18.21
151.60	16.03	152.12	17.17	152.64	18.23
151.61	16.05	152.13	17.19	152.65	18.25
151.62	16.08	152.14	17.21	152.66	18.27
151.63	16.10	152.15	17.23	152.67	18.29
151.64	16.12	152.16	17.25	152.68	18.31
151.65	16.14	152.17	17.27	152.69	18.33
151.66	16.17	152.18	17.29	152.70	18.35
151.67	16.19	152.19	17.31	152.71	18.37
151.68	16.21	152.20	17.33	152.72	18.39
151.69	16.23	152.21	17.35	152.73	18.41
151.70	16.26	152.22	17.38	152.74	18.43
151.71	16.28	152.23	17.40	152.75	18.45
151.72	16.30	152.24	17.42	152.76	18.47
151.73	16.32	152.25	17.44	152.77	18.49
151.74	16.34	152.26	17.46	152.78	18.51
151.75	16.37	152.27	17.48	152.79	18.52
151.76	16.39	152.28	17.50	152.80	18.54
151.77	16.41	152.29	17.52	152.81	18.56
151.78	16.43	152.30	17.54	152.82	18.58
151.79	16.46	152.31	17.56	152.83	18.60
151.80	16.48	152.32	17.58	152.84	18.62
151.81	16.50	152.33	17.60	152.85	18.64
151.82	16.52	152.34	17.62	152.86	18.66
151.83	16.54	152.35	17.64	152.87	18.68
151.84	16.56	152.36	17.66	152.88	18.70
151.85	16.59	152.37	17.69	152.89	18.72
151.86	16.61	152.38	17.71	152.90	18.74
151.87	16.63	152.39	17.73	152.91	18.76
151.88	16.65	152.40	17.75	152.92	18.78
151.89	16.67	152.41	17.77	152.93	18.80
151.90	16.70	152.42	17.79	152.94	18.82
151.91	16.72	152.43	17.81	152.95	18.83
151.92	16.74	152.44	17.83	152.96	18.97
151.93	16.76	152.45	17.85	152.97	19.20
151.94	16.78	152.46	17.87	152.98	19.50
151.95	16.80	152.47	17.89	152.99	19.85
151.96	16.82	152.48	17.91	153.00	**20.24**
151.97	16.85	152.49	17.93		

Stage-Area-Storage for Pond B-22: Basin #22

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.30	0	0	147.82	5,147	1,338
147.31	99	0	147.83	5,245	1,390
147.32	198	2	147.84	5,344	1,443
147.33	297	4	147.85	5,443	1,497
147.34	396	8	147.86	5,542	1,552
147.35	495	12	147.87	5,641	1,608
147.36	594	18	147.88	5,740	1,665
147.37	693	24	147.89	5,839	1,723
147.38	792	32	147.90	5,938	1,781
147.39	891	40	147.91	6,037	1,841
147.40	990	49	147.92	6,136	1,902
147.41	1,089	60	147.93	6,235	1,964
147.42	1,188	71	147.94	6,334	2,027
147.43	1,287	84	147.95	6,433	2,091
147.44	1,386	97	147.96	6,532	2,156
147.45	1,485	111	147.97	6,631	2,221
147.46	1,584	127	147.98	6,730	2,288
147.47	1,683	143	147.99	6,829	2,356
147.48	1,781	160	148.00	6,928	2,425
147.49	1,880	179	148.01	6,938	2,494
147.50	1,979	198	148.02	6,948	2,564
147.51	2,078	218	148.03	6,958	2,633
147.52	2,177	240	148.04	6,968	2,703
147.53	2,276	262	148.05	6,978	2,772
147.54	2,375	285	148.06	6,989	2,842
147.55	2,474	309	148.07	6,999	2,912
147.56	2,573	335	148.08	7,009	2,982
147.57	2,672	361	148.09	7,019	3,052
147.58	2,771	388	148.10	7,029	3,123
147.59	2,870	416	148.11	7,039	3,193
147.60	2,969	445	148.12	7,049	3,263
147.61	3,068	476	148.13	7,059	3,334
147.62	3,167	507	148.14	7,069	3,405
147.63	3,266	539	148.15	7,079	3,475
147.64	3,365	572	148.16	7,089	3,546
147.65	3,464	606	148.17	7,100	3,617
147.66	3,563	641	148.18	7,110	3,688
147.67	3,662	677	148.19	7,120	3,759
147.68	3,761	715	148.20	7,130	3,831
147.69	3,860	753	148.21	7,140	3,902
147.70	3,959	792	148.22	7,150	3,973
147.71	4,058	832	148.23	7,160	4,045
147.72	4,157	873	148.24	7,170	4,117
147.73	4,256	915	148.25	7,180	4,188
147.74	4,355	958	148.26	7,190	4,260
147.75	4,454	1,002	148.27	7,200	4,332
147.76	4,553	1,047	148.28	7,211	4,404
147.77	4,652	1,093	148.29	7,221	4,476
147.78	4,751	1,140	148.30	7,231	4,549
147.79	4,850	1,188	148.31	7,241	4,621
147.80	4,949	1,237	148.32	7,251	4,693
147.81	5,048	1,287	148.33	7,261	4,766

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.34	7,271	4,839
148.35	7,281	4,911
148.36	7,291	4,984
148.37	7,301	5,057
148.38	7,311	5,130
148.39	7,322	5,203
148.40	7,332	5,277
148.41	7,342	5,350
148.42	7,352	5,424
148.43	7,362	5,497
148.44	7,372	5,571
148.45	7,382	5,645
148.46	7,392	5,718
148.47	7,402	5,792
148.48	7,412	5,866
148.49	7,422	5,941
148.50	7,433	6,015
148.51	7,443	6,089
148.52	7,453	6,164
148.53	7,463	6,238
148.54	7,473	6,313
148.55	7,483	6,388
148.56	7,493	6,463
148.57	7,503	6,538
148.58	7,513	6,613
148.59	7,523	6,688
148.60	7,533	6,763
148.61	7,543	6,839
148.62	7,554	6,914
148.63	7,564	6,990
148.64	7,574	7,065
148.65	7,584	7,141
148.66	7,594	7,217
148.67	7,604	7,293
148.68	7,614	7,369
148.69	7,624	7,445
148.70	7,634	7,522
148.71	7,644	7,598
148.72	7,654	7,674
148.73	7,665	7,751
148.74	7,675	7,828
148.75	7,685	7,905
148.76	7,695	7,981
148.77	7,705	8,058
148.78	7,715	8,136
148.79	7,725	8,213
148.80	7,735	8,290
148.81	7,745	8,367
148.82	7,755	8,445
148.83	7,765	8,523
148.84	7,776	8,600
148.85	7,786	8,678
148.86	7,796	8,756
148.87	7,806	8,834
148.88	7,816	8,912
148.89	7,826	8,990
148.90	7,836	9,069
148.91	7,846	9,147
148.92	7,856	9,226
148.93	7,866	9,304
148.94	7,876	9,383
148.95	7,887	9,462
148.96	7,897	9,541
148.97	7,907	9,620
148.98	7,917	9,699
148.99	7,927	9,778
149.00	7,937	9,857
149.01	7,948	9,937
149.02	7,958	10,016
149.03	7,969	10,096
149.04	7,980	10,176
149.05	7,990	10,255
149.06	8,001	10,335
149.07	8,012	10,416
149.08	8,022	10,496
149.09	8,033	10,576
149.10	8,044	10,656
149.11	8,054	10,737
149.12	8,065	10,817
149.13	8,076	10,898
149.14	8,086	10,979
149.15	8,097	11,060
149.16	8,108	11,141
149.17	8,118	11,222
149.18	8,129	11,303
149.19	8,140	11,385
149.20	8,150	11,466
149.21	8,161	11,548
149.22	8,172	11,629
149.23	8,182	11,711
149.24	8,193	11,793
149.25	8,204	11,875
149.26	8,214	11,957
149.27	8,225	12,039
149.28	8,235	12,121
149.29	8,246	12,204
149.30	8,257	12,286
149.31	8,267	12,369
149.32	8,278	12,452
149.33	8,289	12,535
149.34	8,299	12,617
149.35	8,310	12,701
149.36	8,321	12,784
149.37	8,331	12,867

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
149.38	8,342	12,950	149.90	8,896	17,432
149.39	8,353	13,034	149.91	8,907	17,521
149.40	8,363	13,117	149.92	8,918	17,610
149.41	8,374	13,201	149.93	8,928	17,700
149.42	8,385	13,285	149.94	8,939	17,789
149.43	8,395	13,369	149.95	8,950	17,878
149.44	8,406	13,453	149.96	8,960	17,968
149.45	8,417	13,537	149.97	8,971	18,058
149.46	8,427	13,621	149.98	8,982	18,147
149.47	8,438	13,705	149.99	8,992	18,237
149.48	8,449	13,790	150.00	9,003	18,327
149.49	8,459	13,874	150.01	9,014	18,417
149.50	8,470	13,959	150.02	9,025	18,508
149.51	8,481	14,044	150.03	9,037	18,598
149.52	8,491	14,129	150.04	9,048	18,688
149.53	8,502	14,214	150.05	9,059	18,779
149.54	8,513	14,299	150.06	9,070	18,869
149.55	8,523	14,384	150.07	9,082	18,960
149.56	8,534	14,469	150.08	9,093	19,051
149.57	8,545	14,555	150.09	9,104	19,142
149.58	8,555	14,640	150.10	9,115	19,233
149.59	8,566	14,726	150.11	9,126	19,324
149.60	8,577	14,811	150.12	9,138	19,416
149.61	8,587	14,897	150.13	9,149	19,507
149.62	8,598	14,983	150.14	9,160	19,599
149.63	8,609	15,069	150.15	9,171	19,690
149.64	8,619	15,155	150.16	9,183	19,782
149.65	8,630	15,242	150.17	9,194	19,874
149.66	8,641	15,328	150.18	9,205	19,966
149.67	8,651	15,414	150.19	9,216	20,058
149.68	8,662	15,501	150.20	9,227	20,150
149.69	8,673	15,588	150.21	9,239	20,243
149.70	8,683	15,674	150.22	9,250	20,335
149.71	8,694	15,761	150.23	9,261	20,428
149.72	8,705	15,848	150.24	9,272	20,520
149.73	8,715	15,935	150.25	9,284	20,613
149.74	8,726	16,023	150.26	9,295	20,706
149.75	8,737	16,110	150.27	9,306	20,799
149.76	8,747	16,197	150.28	9,317	20,892
149.77	8,758	16,285	150.29	9,328	20,985
149.78	8,768	16,372	150.30	9,340	21,079
149.79	8,779	16,460	150.31	9,351	21,172
149.80	8,790	16,548	150.32	9,362	21,266
149.81	8,800	16,636	150.33	9,373	21,359
149.82	8,811	16,724	150.34	9,384	21,453
149.83	8,822	16,812	150.35	9,396	21,547
149.84	8,832	16,900	150.36	9,407	21,641
149.85	8,843	16,989	150.37	9,418	21,735
149.86	8,854	17,077	150.38	9,429	21,829
149.87	8,864	17,166	150.39	9,441	21,924
149.88	8,875	17,255	150.40	9,452	22,018
149.89	8,886	17,343	150.41	9,463	22,113

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.42	9,474	22,208	150.94	10,058	27,286
150.43	9,485	22,302	150.95	10,069	27,386
150.44	9,497	22,397	150.96	10,080	27,487
150.45	9,508	22,492	150.97	10,091	27,588
150.46	9,519	22,587	150.98	10,103	27,689
150.47	9,530	22,683	150.99	10,114	27,790
150.48	9,542	22,778	151.00	10,125	27,891
150.49	9,553	22,873	151.01	10,137	27,993
150.50	9,564	22,969	151.02	10,149	28,094
150.51	9,575	23,065	151.03	10,160	28,196
150.52	9,586	23,161	151.04	10,172	28,297
150.53	9,598	23,256	151.05	10,184	28,399
150.54	9,609	23,353	151.06	10,196	28,501
150.55	9,620	23,449	151.07	10,208	28,603
150.56	9,631	23,545	151.08	10,219	28,705
150.57	9,643	23,641	151.09	10,231	28,807
150.58	9,654	23,738	151.10	10,243	28,910
150.59	9,665	23,834	151.11	10,255	29,012
150.60	9,676	23,931	151.12	10,266	29,115
150.61	9,687	24,028	151.13	10,278	29,218
150.62	9,699	24,125	151.14	10,290	29,320
150.63	9,710	24,222	151.15	10,302	29,423
150.64	9,721	24,319	151.16	10,314	29,526
150.65	9,732	24,416	151.17	10,325	29,630
150.66	9,744	24,514	151.18	10,337	29,733
150.67	9,755	24,611	151.19	10,349	29,836
150.68	9,766	24,709	151.20	10,361	29,940
150.69	9,777	24,806	151.21	10,373	30,044
150.70	9,788	24,904	151.22	10,384	30,147
150.71	9,800	25,002	151.23	10,396	30,251
150.72	9,811	25,100	151.24	10,408	30,355
150.73	9,822	25,198	151.25	10,420	30,459
150.74	9,833	25,297	151.26	10,432	30,564
150.75	9,845	25,395	151.27	10,443	30,668
150.76	9,856	25,494	151.28	10,455	30,773
150.77	9,867	25,592	151.29	10,467	30,877
150.78	9,878	25,691	151.30	10,479	30,982
150.79	9,889	25,790	151.31	10,490	31,087
150.80	9,901	25,889	151.32	10,502	31,192
150.81	9,912	25,988	151.33	10,514	31,297
150.82	9,923	26,087	151.34	10,526	31,402
150.83	9,934	26,186	151.35	10,538	31,507
150.84	9,945	26,286	151.36	10,549	31,613
150.85	9,957	26,385	151.37	10,561	31,718
150.86	9,968	26,485	151.38	10,573	31,824
150.87	9,979	26,585	151.39	10,585	31,930
150.88	9,990	26,684	151.40	10,597	32,036
150.89	10,002	26,784	151.41	10,608	32,142
150.90	10,013	26,884	151.42	10,620	32,248
150.91	10,024	26,985	151.43	10,632	32,354
150.92	10,035	27,085	151.44	10,644	32,460
150.93	10,046	27,185	151.45	10,656	32,567

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.46	10,667	32,674	151.98	11,280	38,380
151.47	10,679	32,780	151.99	11,292	38,493
151.48	10,691	32,887	152.00	11,304	38,606
151.49	10,703	32,994	152.01	11,316	38,719
151.50	10,715	33,101	152.02	11,329	38,832
151.51	10,726	33,208	152.03	11,341	38,945
151.52	10,738	33,316	152.04	11,353	39,059
151.53	10,750	33,423	152.05	11,366	39,173
151.54	10,762	33,531	152.06	11,378	39,286
151.55	10,773	33,638	152.07	11,391	39,400
151.56	10,785	33,746	152.08	11,403	39,514
151.57	10,797	33,854	152.09	11,415	39,628
151.58	10,809	33,962	152.10	11,428	39,742
151.59	10,821	34,070	152.11	11,440	39,857
151.60	10,832	34,179	152.12	11,452	39,971
151.61	10,844	34,287	152.13	11,465	40,086
151.62	10,856	34,395	152.14	11,477	40,200
151.63	10,868	34,504	152.15	11,489	40,315
151.64	10,880	34,613	152.16	11,502	40,430
151.65	10,891	34,722	152.17	11,514	40,545
151.66	10,903	34,831	152.18	11,526	40,661
151.67	10,915	34,940	152.19	11,539	40,776
151.68	10,927	35,049	152.20	11,551	40,891
151.69	10,939	35,158	152.21	11,564	41,007
151.70	10,950	35,268	152.22	11,576	41,123
151.71	10,962	35,377	152.23	11,588	41,238
151.72	10,974	35,487	152.24	11,601	41,354
151.73	10,986	35,597	152.25	11,613	41,470
151.74	10,997	35,707	152.26	11,625	41,587
151.75	11,009	35,817	152.27	11,638	41,703
151.76	11,021	35,927	152.28	11,650	41,819
151.77	11,033	36,037	152.29	11,662	41,936
151.78	11,045	36,147	152.30	11,675	42,053
151.79	11,056	36,258	152.31	11,687	42,169
151.80	11,068	36,369	152.32	11,700	42,286
151.81	11,080	36,479	152.33	11,712	42,403
151.82	11,092	36,590	152.34	11,724	42,521
151.83	11,104	36,701	152.35	11,737	42,638
151.84	11,115	36,812	152.36	11,749	42,755
151.85	11,127	36,923	152.37	11,761	42,873
151.86	11,139	37,035	152.38	11,774	42,991
151.87	11,151	37,146	152.39	11,786	43,108
151.88	11,163	37,258	152.40	11,798	43,226
151.89	11,174	37,369	152.41	11,811	43,344
151.90	11,186	37,481	152.42	11,823	43,462
151.91	11,198	37,593	152.43	11,835	43,581
151.92	11,210	37,705	152.44	11,848	43,699
151.93	11,221	37,817	152.45	11,860	43,818
151.94	11,233	37,930	152.46	11,873	43,936
151.95	11,245	38,042	152.47	11,885	44,055
151.96	11,257	38,155	152.48	11,897	44,174
151.97	11,269	38,267	152.49	11,910	44,293

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
152.50	11,922	44,412
152.51	11,934	44,532
152.52	11,947	44,651
152.53	11,959	44,771
152.54	11,971	44,890
152.55	11,984	45,010
152.56	11,996	45,130
152.57	12,009	45,250
152.58	12,021	45,370
152.59	12,033	45,490
152.60	12,046	45,611
152.61	12,058	45,731
152.62	12,070	45,852
152.63	12,083	45,973
152.64	12,095	46,093
152.65	12,107	46,215
152.66	12,120	46,336
152.67	12,132	46,457
152.68	12,144	46,578
152.69	12,157	46,700
152.70	12,169	46,821
152.71	12,182	46,943
152.72	12,194	47,065
152.73	12,206	47,187
152.74	12,219	47,309
152.75	12,231	47,431
152.76	12,243	47,554
152.77	12,256	47,676
152.78	12,268	47,799
152.79	12,280	47,922
152.80	12,293	48,045
152.81	12,305	48,168
152.82	12,318	48,291
152.83	12,330	48,414
152.84	12,342	48,537
152.85	12,355	48,661
152.86	12,367	48,784
152.87	12,379	48,908
152.88	12,392	49,032
152.89	12,404	49,156
152.90	12,416	49,280
152.91	12,429	49,404
152.92	12,441	49,529
152.93	12,453	49,653
152.94	12,466	49,778
152.95	12,478	49,902
152.96	12,491	50,027
152.97	12,503	50,152
152.98	12,515	50,277
152.99	12,528	50,402
153.00	**12,540**	**50,528**

Summary for Pond B-23: Basin #23

Inflow Area = 2.449 ac, 33.56% Impervious, Inflow Depth = 1.80" for Current 2 yr event
Inflow = 4.46 cfs @ 12.18 hrs, Volume= 0.368 af
Outflow = 0.37 cfs @ 13.50 hrs, Volume= 0.283 af, Atten= 92%, Lag= 79.3 min
Primary = 0.37 cfs @ 13.50 hrs, Volume= 0.283 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.23' @ 13.50 hrs Surf.Area= 6,776 sf Storage= 9,497 cf

Plug-Flow detention time= 372.2 min calculated for 0.283 af (77% of inflow)
Center-of-Mass det. time= 280.0 min (1,084.9 - 804.8)

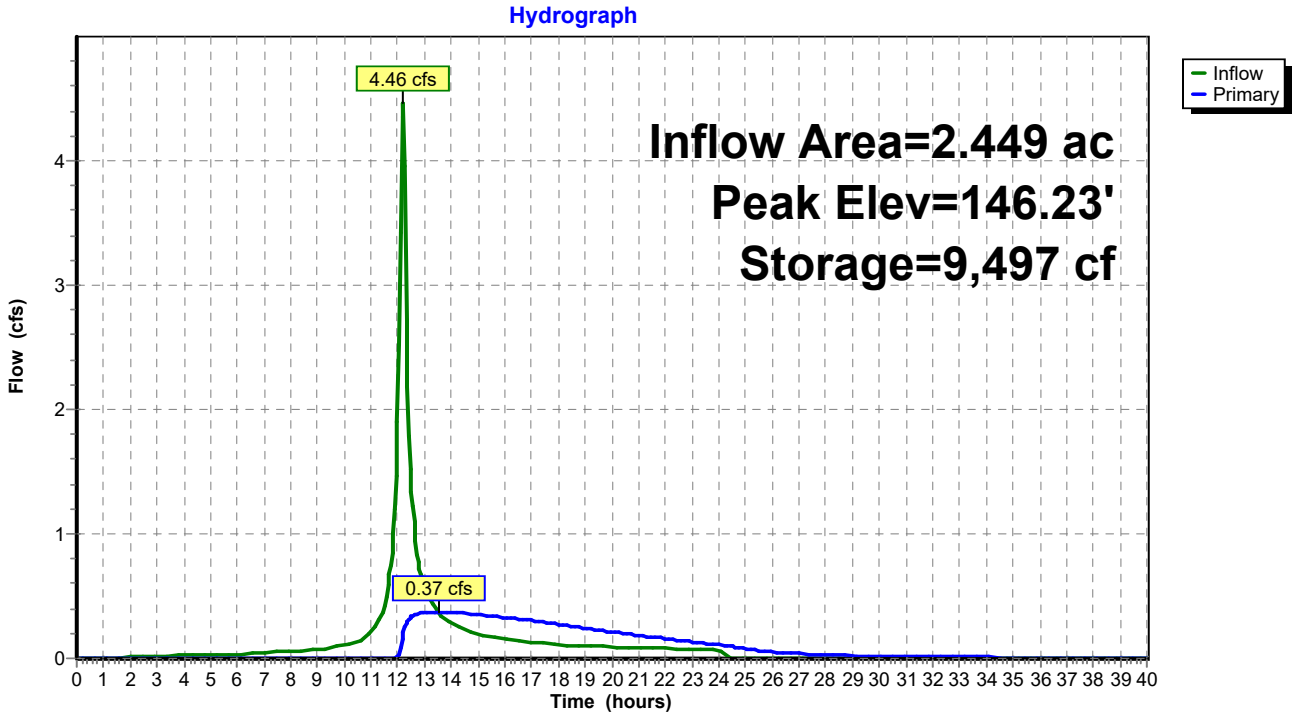
Volume	Invert	Avail.Storage	Storage Description
#1	144.30'	23,175 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
144.30	0	0	0
145.00	5,512	1,929	1,929
146.00	6,527	6,020	7,949
147.00	7,599	7,063	15,012
148.00	8,727	8,163	23,175

Device	Routing	Invert	Outlet Devices
#1	Primary	144.30'	**18.0" Round Culvert** L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 144.30' / 141.44' S= 0.0636 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	145.28'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.37 cfs @ 13.50 hrs HW=146.23' (Free Discharge)
- **1=Culvert** (Passes 0.37 cfs of 9.25 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.37 cfs @ 4.27 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-23: Basin #23



Stage-Discharge for Pond B-23: Basin #23

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
144.30	0.00	144.82	0.00	145.34	0.01	145.86	0.27
144.31	0.00	144.83	0.00	145.35	0.01	145.87	0.27
144.32	0.00	144.84	0.00	145.36	0.02	145.88	0.28
144.33	0.00	144.85	0.00	145.37	0.02	145.89	0.28
144.34	0.00	144.86	0.00	145.38	0.02	145.90	0.28
144.35	0.00	144.87	0.00	145.39	0.03	145.91	0.29
144.36	0.00	144.88	0.00	145.40	0.03	145.92	0.29
144.37	0.00	144.89	0.00	145.41	0.04	145.93	0.29
144.38	0.00	144.90	0.00	145.42	0.04	145.94	0.30
144.39	0.00	144.91	0.00	145.43	0.05	145.95	0.30
144.40	0.00	144.92	0.00	145.44	0.06	145.96	0.30
144.41	0.00	144.93	0.00	145.45	0.06	145.97	0.30
144.42	0.00	144.94	0.00	145.46	0.07	145.98	0.31
144.43	0.00	144.95	0.00	145.47	0.08	145.99	0.31
144.44	0.00	144.96	0.00	145.48	0.08	146.00	0.31
144.45	0.00	144.97	0.00	145.49	0.09	146.01	0.32
144.46	0.00	144.98	0.00	145.50	0.10	146.02	0.32
144.47	0.00	144.99	0.00	145.51	0.10	146.03	0.32
144.48	0.00	145.00	0.00	145.52	0.11	146.04	0.32
144.49	0.00	145.01	0.00	145.53	0.12	146.05	0.33
144.50	0.00	145.02	0.00	145.54	0.13	146.06	0.33
144.51	0.00	145.03	0.00	145.55	0.13	146.07	0.33
144.52	0.00	145.04	0.00	145.56	0.14	146.08	0.33
144.53	0.00	145.05	0.00	145.57	0.15	146.09	0.34
144.54	0.00	145.06	0.00	145.58	0.15	146.10	0.34
144.55	0.00	145.07	0.00	145.59	0.16	146.11	0.34
144.56	0.00	145.08	0.00	145.60	0.17	146.12	0.34
144.57	0.00	145.09	0.00	145.61	0.17	146.13	0.35
144.58	0.00	145.10	0.00	145.62	0.17	146.14	0.35
144.59	0.00	145.11	0.00	145.63	0.18	146.15	0.35
144.60	0.00	145.12	0.00	145.64	0.18	146.16	0.35
144.61	0.00	145.13	0.00	145.65	0.19	146.17	0.36
144.62	0.00	145.14	0.00	145.66	0.19	146.18	0.36
144.63	0.00	145.15	0.00	145.67	0.20	146.19	0.36
144.64	0.00	145.16	0.00	145.68	0.20	146.20	0.36
144.65	0.00	145.17	0.00	145.69	0.21	146.21	0.37
144.66	0.00	145.18	0.00	145.70	0.21	146.22	0.37
144.67	0.00	145.19	0.00	145.71	0.22	146.23	0.37
144.68	0.00	145.20	0.00	145.72	0.22	146.24	0.37
144.69	0.00	145.21	0.00	145.73	0.22	146.25	0.38
144.70	0.00	145.22	0.00	145.74	0.23	146.26	0.38
144.71	0.00	145.23	0.00	145.75	0.23	146.27	0.38
144.72	0.00	145.24	0.00	145.76	0.24	146.28	0.38
144.73	0.00	145.25	0.00	145.77	0.24	146.29	0.39
144.74	0.00	145.26	0.00	145.78	0.24	146.30	0.39
144.75	0.00	145.27	0.00	145.79	0.25	146.31	0.39
144.76	0.00	145.28	0.00	145.80	0.25	146.32	0.39
144.77	0.00	145.29	0.00	145.81	0.25	146.33	0.39
144.78	0.00	145.30	0.00	145.82	0.26	146.34	0.40
144.79	0.00	145.31	0.00	145.83	0.26	146.35	0.40
144.80	0.00	145.32	0.00	145.84	0.26	146.36	0.40
144.81	0.00	145.33	0.01	145.85	0.27	146.37	0.40

Stage-Discharge for Pond B-23: Basin #23 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
146.38	0.41	146.90	3.75	147.42	11.60	147.94	14.46
146.39	0.41	146.91	3.87	147.43	11.78	147.95	14.49
146.40	0.41	146.92	4.00	147.44	11.95	147.96	14.63
146.41	0.41	146.93	4.12	147.45	12.13	147.97	14.87
146.42	0.41	146.94	4.25	147.46	12.31	147.98	15.17
146.43	0.42	146.95	4.37	147.47	12.49	147.99	15.53
146.44	0.42	146.96	4.50	147.48	12.67	148.00	**15.93**
146.45	0.42	146.97	4.63	147.49	12.85		
146.46	0.42	146.98	4.77	147.50	13.03		
146.47	0.43	146.99	4.90	147.51	13.21		
146.48	0.43	147.00	5.03	147.52	13.37		
146.49	0.43	147.01	5.17	147.53	13.40		
146.50	0.43	147.02	5.30	147.54	13.43		
146.51	0.45	147.03	5.44	147.55	13.45		
146.52	0.47	147.04	5.58	147.56	13.48		
146.53	0.51	147.05	5.72	147.57	13.51		
146.54	0.54	147.06	5.86	147.58	13.53		
146.55	0.59	147.07	6.00	147.59	13.56		
146.56	0.64	147.08	6.15	147.60	13.59		
146.57	0.69	147.09	6.29	147.61	13.61		
146.58	0.74	147.10	6.44	147.62	13.64		
146.59	0.80	147.11	6.58	147.63	13.67		
146.60	0.86	147.12	6.73	147.64	13.69		
146.61	0.93	147.13	6.88	147.65	13.72		
146.62	1.00	147.14	7.03	147.66	13.75		
146.63	1.07	147.15	7.18	147.67	13.77		
146.64	1.14	147.16	7.33	147.68	13.80		
146.65	1.22	147.17	7.48	147.69	13.83		
146.66	1.29	147.18	7.64	147.70	13.85		
146.67	1.37	147.19	7.79	147.71	13.88		
146.68	1.46	147.20	7.95	147.72	13.90		
146.69	1.54	147.21	8.11	147.73	13.93		
146.70	1.63	147.22	8.26	147.74	13.96		
146.71	1.72	147.23	8.42	147.75	13.98		
146.72	1.81	147.24	8.58	147.76	14.01		
146.73	1.90	147.25	8.74	147.77	14.03		
146.74	2.00	147.26	8.90	147.78	14.06		
146.75	2.09	147.27	9.06	147.79	14.08		
146.76	2.19	147.28	9.23	147.80	14.11		
146.77	2.29	147.29	9.39	147.81	14.14		
146.78	2.40	147.30	9.56	147.82	14.16		
146.79	2.50	147.31	9.72	147.83	14.19		
146.80	2.61	147.32	9.89	147.84	14.21		
146.81	2.71	147.33	10.06	147.85	14.24		
146.82	2.82	147.34	10.23	147.86	14.26		
146.83	2.93	147.35	10.39	147.87	14.29		
146.84	3.05	147.36	10.56	147.88	14.31		
146.85	3.16	147.37	10.74	147.89	14.34		
146.86	3.27	147.38	10.91	147.90	14.36		
146.87	3.39	147.39	11.08	147.91	14.39		
146.88	3.51	147.40	11.25	147.92	14.41		
146.89	3.63	147.41	11.43	147.93	14.44		

Stage-Area-Storage for Pond B-23: Basin #23

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.30	0	0
144.31	79	0
144.32	157	2
144.33	236	4
144.34	315	6
144.35	394	10
144.36	472	14
144.37	551	19
144.38	630	25
144.39	709	32
144.40	787	39
144.41	866	48
144.42	945	57
144.43	1,024	67
144.44	1,102	77
144.45	1,181	89
144.46	1,260	101
144.47	1,339	114
144.48	1,417	128
144.49	1,496	142
144.50	1,575	157
144.51	1,654	174
144.52	1,732	191
144.53	1,811	208
144.54	1,890	227
144.55	1,969	246
144.56	2,047	266
144.57	2,126	287
144.58	2,205	309
144.59	2,284	331
144.60	2,362	354
144.61	2,441	378
144.62	2,520	403
144.63	2,599	429
144.64	2,677	455
144.65	2,756	482
144.66	2,835	510
144.67	2,913	539
144.68	2,992	569
144.69	3,071	599
144.70	3,150	630
144.71	3,228	662
144.72	3,307	695
144.73	3,386	728
144.74	3,465	762
144.75	3,543	797
144.76	3,622	833
144.77	3,701	870
144.78	3,780	907
144.79	3,858	945
144.80	3,937	984
144.81	4,016	1,024
144.82	4,095	1,065
144.83	4,173	1,106
144.84	4,252	1,148
144.85	4,331	1,191
144.86	4,410	1,235
144.87	4,488	1,279
144.88	4,567	1,324
144.89	4,646	1,371
144.90	4,725	1,417
144.91	4,803	1,465
144.92	4,882	1,513
144.93	4,961	1,563
144.94	5,040	1,613
144.95	5,118	1,663
144.96	5,197	1,715
144.97	5,276	1,767
144.98	5,355	1,821
144.99	5,433	1,874
145.00	5,512	1,929
145.01	5,522	1,984
145.02	5,532	2,040
145.03	5,542	2,095
145.04	5,553	2,150
145.05	5,563	2,206
145.06	5,573	2,262
145.07	5,583	2,318
145.08	5,593	2,373
145.09	5,603	2,429
145.10	5,614	2,485
145.11	5,624	2,542
145.12	5,634	2,598
145.13	5,644	2,654
145.14	5,654	2,711
145.15	5,664	2,767
145.16	5,674	2,824
145.17	5,685	2,881
145.18	5,695	2,938
145.19	5,705	2,995
145.20	5,715	3,052
145.21	5,725	3,109
145.22	5,735	3,166
145.23	5,745	3,224
145.24	5,756	3,281
145.25	5,766	3,339
145.26	5,776	3,397
145.27	5,786	3,454
145.28	5,796	3,512
145.29	5,806	3,570
145.30	5,817	3,628
145.31	5,827	3,687
145.32	5,837	3,745
145.33	5,847	3,803

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.34	5,857	3,862	145.86	6,385	7,045
145.35	5,867	3,921	145.87	6,395	7,109
145.36	5,877	3,979	145.88	6,405	7,173
145.37	5,888	4,038	145.89	6,415	7,237
145.38	5,898	4,097	145.90	6,426	7,301
145.39	5,908	4,156	145.91	6,436	7,365
145.40	5,918	4,215	145.92	6,446	7,430
145.41	5,928	4,274	145.93	6,456	7,494
145.42	5,938	4,334	145.94	6,466	7,559
145.43	5,948	4,393	145.95	6,476	7,624
145.44	5,959	4,453	145.96	6,486	7,688
145.45	5,969	4,512	145.97	6,497	7,753
145.46	5,979	4,572	145.98	6,507	7,818
145.47	5,989	4,632	145.99	6,517	7,883
145.48	5,999	4,692	146.00	6,527	7,949
145.49	6,009	4,752	146.01	6,538	8,014
145.50	6,020	4,812	146.02	6,548	8,079
145.51	6,030	4,872	146.03	6,559	8,145
145.52	6,040	4,933	146.04	6,570	8,211
145.53	6,050	4,993	146.05	6,581	8,276
145.54	6,060	5,054	146.06	6,591	8,342
145.55	6,070	5,114	146.07	6,602	8,408
145.56	6,080	5,175	146.08	6,613	8,474
145.57	6,091	5,236	146.09	6,623	8,540
145.58	6,101	5,297	146.10	6,634	8,607
145.59	6,111	5,358	146.11	6,645	8,673
145.60	6,121	5,419	146.12	6,656	8,740
145.61	6,131	5,480	146.13	6,666	8,806
145.62	6,141	5,542	146.14	6,677	8,873
145.63	6,151	5,603	146.15	6,688	8,940
145.64	6,162	5,665	146.16	6,699	9,007
145.65	6,172	5,726	146.17	6,709	9,074
145.66	6,182	5,788	146.18	6,720	9,141
145.67	6,192	5,850	146.19	6,731	9,208
145.68	6,202	5,912	146.20	6,741	9,276
145.69	6,212	5,974	146.21	6,752	9,343
145.70	6,223	6,036	146.22	6,763	9,411
145.71	6,233	6,099	146.23	6,774	9,478
145.72	6,243	6,161	146.24	6,784	9,546
145.73	6,253	6,223	146.25	6,795	9,614
145.74	6,263	6,286	146.26	6,806	9,682
145.75	6,273	6,349	146.27	6,816	9,750
145.76	6,283	6,411	146.28	6,827	9,818
145.77	6,294	6,474	146.29	6,838	9,887
145.78	6,304	6,537	146.30	6,849	9,955
145.79	6,314	6,600	146.31	6,859	10,024
145.80	6,324	6,664	146.32	6,870	10,092
145.81	6,334	6,727	146.33	6,881	10,161
145.82	6,344	6,790	146.34	6,891	10,230
145.83	6,354	6,854	146.35	6,902	10,299
145.84	6,365	6,917	146.36	6,913	10,368
145.85	6,375	6,981	146.37	6,924	10,437

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.38	6,934	10,506	146.90	7,492	14,257
146.39	6,945	10,576	146.91	7,503	14,332
146.40	6,956	10,645	146.92	7,513	14,407
146.41	6,967	10,715	146.93	7,524	14,482
146.42	6,977	10,785	146.94	7,535	14,558
146.43	6,988	10,854	146.95	7,545	14,633
146.44	6,999	10,924	146.96	7,556	14,709
146.45	7,009	10,994	146.97	7,567	14,784
146.46	7,020	11,065	146.98	7,578	14,860
146.47	7,031	11,135	146.99	7,588	14,936
146.48	7,042	11,205	147.00	7,599	15,012
146.49	7,052	11,276	147.01	7,610	15,088
146.50	7,063	11,346	147.02	7,622	15,164
146.51	7,074	11,417	147.03	7,633	15,240
146.52	7,084	11,488	147.04	7,644	15,317
146.53	7,095	11,559	147.05	7,655	15,393
146.54	7,106	11,630	147.06	7,667	15,470
146.55	7,117	11,701	147.07	7,678	15,546
146.56	7,127	11,772	147.08	7,689	15,623
146.57	7,138	11,843	147.09	7,701	15,700
146.58	7,149	11,915	147.10	7,712	15,777
146.59	7,159	11,986	147.11	7,723	15,854
146.60	7,170	12,058	147.12	7,734	15,932
146.61	7,181	12,130	147.13	7,746	16,009
146.62	7,192	12,201	147.14	7,757	16,087
146.63	7,202	12,273	147.15	7,768	16,164
146.64	7,213	12,346	147.16	7,779	16,242
146.65	7,224	12,418	147.17	7,791	16,320
146.66	7,235	12,490	147.18	7,802	16,398
146.67	7,245	12,562	147.19	7,813	16,476
146.68	7,256	12,635	147.20	7,825	16,554
146.69	7,267	12,708	147.21	7,836	16,632
146.70	7,277	12,780	147.22	7,847	16,711
146.71	7,288	12,853	147.23	7,858	16,789
146.72	7,299	12,926	147.24	7,870	16,868
146.73	7,310	12,999	147.25	7,881	16,947
146.74	7,320	13,072	147.26	7,892	17,026
146.75	7,331	13,145	147.27	7,904	17,105
146.76	7,342	13,219	147.28	7,915	17,184
146.77	7,352	13,292	147.29	7,926	17,263
146.78	7,363	13,366	147.30	7,937	17,342
146.79	7,374	13,440	147.31	7,949	17,422
146.80	7,385	13,513	147.32	7,960	17,501
146.81	7,395	13,587	147.33	7,971	17,581
146.82	7,406	13,661	147.34	7,983	17,661
146.83	7,417	13,735	147.35	7,994	17,740
146.84	7,427	13,810	147.36	8,005	17,820
146.85	7,438	13,884	147.37	8,016	17,901
146.86	7,449	13,958	147.38	8,028	17,981
146.87	7,460	14,033	147.39	8,039	18,061
146.88	7,470	14,108	147.40	8,050	18,142
146.89	7,481	14,182	147.41	8,061	18,222

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.42	8,073	18,303
147.43	8,084	18,384
147.44	8,095	18,464
147.45	8,107	18,545
147.46	8,118	18,627
147.47	8,129	18,708
147.48	8,140	18,789
147.49	8,152	18,871
147.50	8,163	18,952
147.51	8,174	19,034
147.52	8,186	19,116
147.53	8,197	19,198
147.54	8,208	19,280
147.55	8,219	19,362
147.56	8,231	19,444
147.57	8,242	19,526
147.58	8,253	19,609
147.59	8,265	19,691
147.60	8,276	19,774
147.61	8,287	19,857
147.62	8,298	19,940
147.63	8,310	20,023
147.64	8,321	20,106
147.65	8,332	20,189
147.66	8,343	20,273
147.67	8,355	20,356
147.68	8,366	20,440
147.69	8,377	20,524
147.70	8,389	20,607
147.71	8,400	20,691
147.72	8,411	20,775
147.73	8,422	20,860
147.74	8,434	20,944
147.75	8,445	21,028
147.76	8,456	21,113
147.77	8,468	21,197
147.78	8,479	21,282
147.79	8,490	21,367
147.80	8,501	21,452
147.81	8,513	21,537
147.82	8,524	21,622
147.83	8,535	21,707
147.84	8,547	21,793
147.85	8,558	21,878
147.86	8,569	21,964
147.87	8,580	22,050
147.88	8,592	22,136
147.89	8,603	22,222
147.90	8,614	22,308
147.91	8,625	22,394
147.92	8,637	22,480
147.93	8,648	22,567
147.94	8,659	22,653
147.95	8,671	22,740
147.96	8,682	22,827
147.97	8,693	22,913
147.98	8,704	23,000
147.99	8,716	23,087
148.00	**8,727**	**23,175**

Summary for Pond B-24: Basin #24

Inflow Area = 2.408 ac, 37.46% Impervious, Inflow Depth = 1.88" for Current 2 yr event
Inflow = 4.55 cfs @ 12.18 hrs, Volume= 0.377 af
Outflow = 0.47 cfs @ 13.22 hrs, Volume= 0.283 af, Atten= 90%, Lag= 62.9 min
Primary = 0.47 cfs @ 13.22 hrs, Volume= 0.283 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 145.89' @ 13.22 hrs Surf.Area= 8,221 sf Storage= 9,514 cf

Plug-Flow detention time= 346.9 min calculated for 0.283 af (75% of inflow)
Center-of-Mass det. time= 253.2 min (1,053.7 - 800.5)

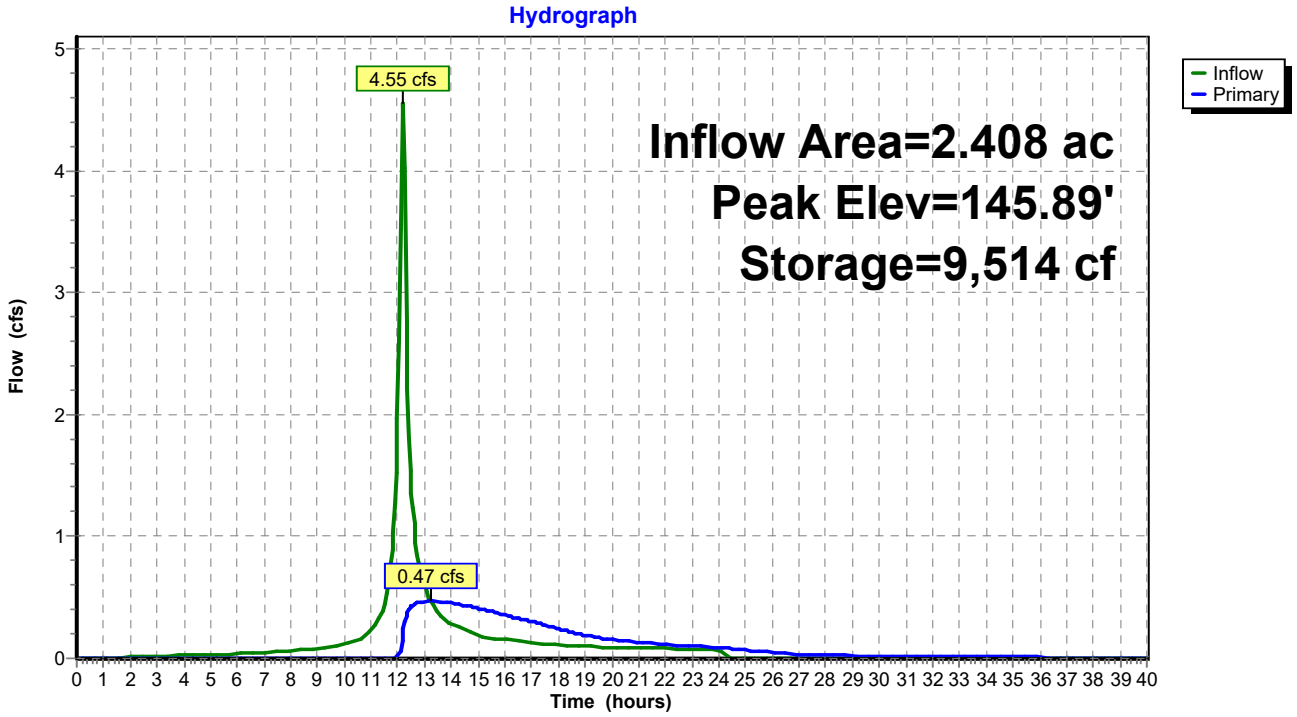
Volume	Invert	Avail.Storage	Storage Description
#1	144.30'	40,061 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
144.30	0	0	0
145.00	7,331	2,566	2,566
146.00	8,327	7,829	10,395
147.00	9,353	8,840	19,235
148.00	10,406	9,880	29,114
149.00	11,488	10,947	40,061

Device	Routing	Invert	Outlet Devices
#1	Primary	144.30'	**18.0" Round Culvert** L= 22.0' Ke= 0.500 Inlet / Outlet Invert= 144.30' / 143.04' S= 0.0573 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	145.17'	**5.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.47 cfs @ 13.22 hrs HW=145.89' (Free Discharge)
- **1=Culvert** (Passes 0.47 cfs of 7.81 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.47 cfs @ 3.46 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-24: Basin #24



Stage-Discharge for Pond B-24: Basin #24

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
144.30	0.00	144.82	0.00	145.34	0.07	145.86	0.46
144.31	0.00	144.83	0.00	145.35	0.08	145.87	0.46
144.32	0.00	144.84	0.00	145.36	0.09	145.88	0.47
144.33	0.00	144.85	0.00	145.37	0.10	145.89	0.47
144.34	0.00	144.86	0.00	145.38	0.11	145.90	0.47
144.35	0.00	144.87	0.00	145.39	0.12	145.91	0.48
144.36	0.00	144.88	0.00	145.40	0.13	145.92	0.48
144.37	0.00	144.89	0.00	145.41	0.14	145.93	0.49
144.38	0.00	144.90	0.00	145.42	0.15	145.94	0.49
144.39	0.00	144.91	0.00	145.43	0.16	145.95	0.50
144.40	0.00	144.92	0.00	145.44	0.17	145.96	0.50
144.41	0.00	144.93	0.00	145.45	0.18	145.97	0.51
144.42	0.00	144.94	0.00	145.46	0.19	145.98	0.51
144.43	0.00	144.95	0.00	145.47	0.20	145.99	0.51
144.44	0.00	144.96	0.00	145.48	0.21	146.00	0.52
144.45	0.00	144.97	0.00	145.49	0.22	146.01	0.52
144.46	0.00	144.98	0.00	145.50	0.23	146.02	0.53
144.47	0.00	144.99	0.00	145.51	0.24	146.03	0.53
144.48	0.00	145.00	0.00	145.52	0.25	146.04	0.53
144.49	0.00	145.01	0.00	145.53	0.26	146.05	0.54
144.50	0.00	145.02	0.00	145.54	0.27	146.06	0.54
144.51	0.00	145.03	0.00	145.55	0.27	146.07	0.55
144.52	0.00	145.04	0.00	145.56	0.28	146.08	0.55
144.53	0.00	145.05	0.00	145.57	0.29	146.09	0.55
144.54	0.00	145.06	0.00	145.58	0.30	146.10	0.56
144.55	0.00	145.07	0.00	145.59	0.30	146.11	0.56
144.56	0.00	145.08	0.00	145.60	0.31	146.12	0.57
144.57	0.00	145.09	0.00	145.61	0.32	146.13	0.57
144.58	0.00	145.10	0.00	145.62	0.32	146.14	0.57
144.59	0.00	145.11	0.00	145.63	0.33	146.15	0.58
144.60	0.00	145.12	0.00	145.64	0.34	146.16	0.58
144.61	0.00	145.13	0.00	145.65	0.34	146.17	0.58
144.62	0.00	145.14	0.00	145.66	0.35	146.18	0.59
144.63	0.00	145.15	0.00	145.67	0.35	146.19	0.59
144.64	0.00	145.16	0.00	145.68	0.36	146.20	0.60
144.65	0.00	145.17	0.00	145.69	0.37	146.21	0.60
144.66	0.00	145.18	0.00	145.70	0.37	146.22	0.60
144.67	0.00	145.19	0.00	145.71	0.38	146.23	0.61
144.68	0.00	145.20	0.00	145.72	0.38	146.24	0.61
144.69	0.00	145.21	0.00	145.73	0.39	146.25	0.61
144.70	0.00	145.22	0.01	145.74	0.39	146.26	0.63
144.71	0.00	145.23	0.01	145.75	0.40	146.27	0.66
144.72	0.00	145.24	0.01	145.76	0.41	146.28	0.69
144.73	0.00	145.25	0.02	145.77	0.41	146.29	0.73
144.74	0.00	145.26	0.02	145.78	0.42	146.30	0.78
144.75	0.00	145.27	0.03	145.79	0.42	146.31	0.83
144.76	0.00	145.28	0.03	145.80	0.43	146.32	0.88
144.77	0.00	145.29	0.04	145.81	0.43	146.33	0.94
144.78	0.00	145.30	0.04	145.82	0.44	146.34	1.00
144.79	0.00	145.31	0.05	145.83	0.44	146.35	1.06
144.80	0.00	145.32	0.06	145.84	0.45	146.36	1.13
144.81	0.00	145.33	0.07	145.85	0.45	146.37	1.19

Stage-Discharge for Pond B-24: Basin #24 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
146.38	1.27	146.90	7.44	147.42	13.10	147.94	14.46
146.39	1.34	146.91	7.59	147.43	13.13	147.95	14.49
146.40	1.42	146.92	7.75	147.44	13.15	147.96	14.51
146.41	1.50	146.93	7.90	147.45	13.18	147.97	14.54
146.42	1.58	146.94	8.06	147.46	13.21	147.98	14.56
146.43	1.66	146.95	8.22	147.47	13.24	147.99	14.59
146.44	1.75	146.96	8.37	147.48	13.26	148.00	14.73
146.45	1.84	146.97	8.53	147.49	13.29	148.01	14.97
146.46	1.93	146.98	8.69	147.50	13.32	148.02	15.27
146.47	2.02	146.99	8.85	147.51	13.35	148.03	15.63
146.48	2.12	147.00	9.01	147.52	13.37	148.04	16.02
146.49	2.21	147.01	9.18	147.53	13.40	148.05	16.46
146.50	2.31	147.02	9.34	147.54	13.43	148.06	16.94
146.51	2.41	147.03	9.50	147.55	13.45	148.07	17.44
146.52	2.51	147.04	9.67	147.56	13.48	148.08	17.98
146.53	2.62	147.05	9.83	147.57	13.51	148.09	18.55
146.54	2.72	147.06	10.00	147.58	13.53	148.10	19.15
146.55	2.83	147.07	10.17	147.59	13.56	148.11	19.78
146.56	2.94	147.08	10.34	147.60	13.59	148.12	20.43
146.57	3.05	147.09	10.51	147.61	13.61	148.13	21.10
146.58	3.16	147.10	10.68	147.62	13.64	148.14	21.80
146.59	3.27	147.11	10.85	147.63	13.67	148.15	22.53
146.60	3.39	147.12	11.02	147.64	13.69	148.16	23.27
146.61	3.50	147.13	11.19	147.65	13.72	148.17	24.04
146.62	3.62	147.14	11.36	147.66	13.75	148.18	24.83
146.63	3.74	147.15	11.54	147.67	13.77	148.19	25.64
146.64	3.86	147.16	11.71	147.68	13.80	148.20	26.51
146.65	3.98	147.17	11.89	147.69	13.83	148.21	27.41
146.66	4.11	147.18	12.07	147.70	13.85	148.22	28.33
146.67	4.23	147.19	12.24	147.71	13.88	148.23	29.28
146.68	4.36	147.20	12.42	147.72	13.90	148.24	30.25
146.69	4.49	147.21	12.51	147.73	13.93	148.25	31.25
146.70	4.61	147.22	12.53	147.74	13.96	148.26	32.27
146.71	4.74	147.23	12.56	147.75	13.98	148.27	33.32
146.72	4.88	147.24	12.59	147.76	14.01	148.28	34.39
146.73	5.01	147.25	12.62	147.77	14.03	148.29	35.48
146.74	5.14	147.26	12.65	147.78	14.06	148.30	36.60
146.75	5.28	147.27	12.68	147.79	14.08	148.31	37.75
146.76	5.41	147.28	12.71	147.80	14.11	148.32	38.92
146.77	5.55	147.29	12.73	147.81	14.14	148.33	40.11
146.78	5.69	147.30	12.76	147.82	14.16	148.34	41.33
146.79	5.83	147.31	12.79	147.83	14.19	148.35	42.57
146.80	5.97	147.32	12.82	147.84	14.21	148.36	43.84
146.81	6.11	147.33	12.85	147.85	14.24	148.37	45.13
146.82	6.26	147.34	12.88	147.86	14.26	148.38	46.44
146.83	6.40	147.35	12.90	147.87	14.29	148.39	47.78
146.84	6.55	147.36	12.93	147.88	14.31	148.40	49.17
146.85	6.69	147.37	12.96	147.89	14.34	148.41	50.58
146.86	6.84	147.38	12.99	147.90	14.36	148.42	52.03
146.87	6.99	147.39	13.02	147.91	14.39	148.43	53.49
146.88	7.14	147.40	13.04	147.92	14.41	148.44	54.99
146.89	7.29	147.41	13.07	147.93	14.44	148.45	56.51

Stage-Discharge for Pond B-24: Basin #24 (continued)

Elevation (feet)	Primary (cfs)
148.46	58.05
148.47	59.62
148.48	61.22
148.49	62.85
148.50	64.50
148.51	66.18
148.52	67.88
148.53	69.61
148.54	71.37
148.55	73.15
148.56	74.96
148.57	76.80
148.58	78.67
148.59	80.56
148.60	82.21
148.61	83.87
148.62	85.55
148.63	87.24
148.64	88.94
148.65	90.66
148.66	92.39
148.67	94.13
148.68	95.88
148.69	97.65
148.70	99.43
148.71	101.23
148.72	103.03
148.73	104.85
148.74	106.68
148.75	108.53
148.76	110.38
148.77	112.25
148.78	114.13
148.79	116.02
148.80	117.96
148.81	119.92
148.82	121.88
148.83	123.87
148.84	125.86
148.85	127.87
148.86	129.89
148.87	131.92
148.88	133.97
148.89	136.03
148.90	138.10
148.91	140.18
148.92	142.28
148.93	144.39
148.94	146.52
148.95	148.65
148.96	150.80
148.97	152.96
148.98	155.14
148.99	157.32
149.00	**159.47**

Stage-Area-Storage for Pond B-24: Basin #24

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.30	0	0
144.31	105	1
144.32	209	2
144.33	314	5
144.34	419	8
144.35	524	13
144.36	628	19
144.37	733	26
144.38	838	34
144.39	943	42
144.40	1,047	52
144.41	1,152	63
144.42	1,257	75
144.43	1,361	88
144.44	1,466	103
144.45	1,571	118
144.46	1,676	134
144.47	1,780	151
144.48	1,885	170
144.49	1,990	189
144.50	2,095	209
144.51	2,199	231
144.52	2,304	253
144.53	2,409	277
144.54	2,513	302
144.55	2,618	327
144.56	2,723	354
144.57	2,828	382
144.58	2,932	411
144.59	3,037	440
144.60	3,142	471
144.61	3,247	503
144.62	3,351	536
144.63	3,456	570
144.64	3,561	605
144.65	3,666	641
144.66	3,770	679
144.67	3,875	717
144.68	3,980	756
144.69	4,084	796
144.70	4,189	838
144.71	4,294	880
144.72	4,399	924
144.73	4,503	968
144.74	4,608	1,014
144.75	4,713	1,060
144.76	4,818	1,108
144.77	4,922	1,157
144.78	5,027	1,206
144.79	5,132	1,257
144.80	5,236	1,309
144.81	5,341	1,362
144.82	5,446	1,416
144.83	5,551	1,471
144.84	5,655	1,527
144.85	5,760	1,584
144.86	5,865	1,642
144.87	5,970	1,701
144.88	6,074	1,762
144.89	6,179	1,823
144.90	6,284	1,885
144.91	6,388	1,948
144.92	6,493	2,013
144.93	6,598	2,078
144.94	6,703	2,145
144.95	6,807	2,212
144.96	6,912	2,281
144.97	7,017	2,351
144.98	7,122	2,421
144.99	7,226	2,493
145.00	7,331	2,566
145.01	7,341	2,639
145.02	7,351	2,713
145.03	7,361	2,786
145.04	7,371	2,860
145.05	7,381	2,934
145.06	7,391	3,008
145.07	7,401	3,081
145.08	7,411	3,156
145.09	7,421	3,230
145.10	7,431	3,304
145.11	7,441	3,378
145.12	7,451	3,453
145.13	7,460	3,527
145.14	7,470	3,602
145.15	7,480	3,677
145.16	7,490	3,752
145.17	7,500	3,827
145.18	7,510	3,902
145.19	7,520	3,977
145.20	7,530	4,052
145.21	7,540	4,127
145.22	7,550	4,203
145.23	7,560	4,278
145.24	7,570	4,354
145.25	7,580	4,430
145.26	7,590	4,506
145.27	7,600	4,582
145.28	7,610	4,658
145.29	7,620	4,734
145.30	7,630	4,810
145.31	7,640	4,886
145.32	7,650	4,963
145.33	7,660	5,039

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.34	7,670	5,116	145.86	8,188	9,239
145.35	7,680	5,193	145.87	8,198	9,321
145.36	7,690	5,270	145.88	8,207	9,403
145.37	7,700	5,346	145.89	8,217	9,485
145.38	7,709	5,424	145.90	8,227	9,567
145.39	7,719	5,501	145.91	8,237	9,649
145.40	7,729	5,578	145.92	8,247	9,732
145.41	7,739	5,655	145.93	8,257	9,814
145.42	7,749	5,733	145.94	8,267	9,897
145.43	7,759	5,810	145.95	8,277	9,980
145.44	7,769	5,888	145.96	8,287	10,063
145.45	7,779	5,966	145.97	8,297	10,145
145.46	7,789	6,043	145.98	8,307	10,229
145.47	7,799	6,121	145.99	8,317	10,312
145.48	7,809	6,199	146.00	8,327	10,395
145.49	7,819	6,278	146.01	8,337	10,478
145.50	7,829	6,356	146.02	8,348	10,562
145.51	7,839	6,434	146.03	8,358	10,645
145.52	7,849	6,513	146.04	8,368	10,729
145.53	7,859	6,591	146.05	8,378	10,812
145.54	7,869	6,670	146.06	8,389	10,896
145.55	7,879	6,749	146.07	8,399	10,980
145.56	7,889	6,827	146.08	8,409	11,064
145.57	7,899	6,906	146.09	8,419	11,148
145.58	7,909	6,985	146.10	8,430	11,233
145.59	7,919	7,064	146.11	8,440	11,317
145.60	7,929	7,144	146.12	8,450	11,401
145.61	7,939	7,223	146.13	8,460	11,486
145.62	7,949	7,303	146.14	8,471	11,571
145.63	7,958	7,382	146.15	8,481	11,655
145.64	7,968	7,462	146.16	8,491	11,740
145.65	7,978	7,541	146.17	8,501	11,825
145.66	7,988	7,621	146.18	8,512	11,910
145.67	7,998	7,701	146.19	8,522	11,995
145.68	8,008	7,781	146.20	8,532	12,081
145.69	8,018	7,861	146.21	8,542	12,166
145.70	8,028	7,942	146.22	8,553	12,252
145.71	8,038	8,022	146.23	8,563	12,337
145.72	8,048	8,102	146.24	8,573	12,423
145.73	8,058	8,183	146.25	8,584	12,509
145.74	8,068	8,263	146.26	8,594	12,595
145.75	8,078	8,344	146.27	8,604	12,681
145.76	8,088	8,425	146.28	8,614	12,767
145.77	8,098	8,506	146.29	8,625	12,853
145.78	8,108	8,587	146.30	8,635	12,939
145.79	8,118	8,668	146.31	8,645	13,026
145.80	8,128	8,749	146.32	8,655	13,112
145.81	8,138	8,831	146.33	8,666	13,199
145.82	8,148	8,912	146.34	8,676	13,285
145.83	8,158	8,994	146.35	8,686	13,372
145.84	8,168	9,075	146.36	8,696	13,459
145.85	8,178	9,157	146.37	8,707	13,546

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.38	8,717	13,633	146.90	9,250	18,305
146.39	8,727	13,720	146.91	9,261	18,397
146.40	8,737	13,808	146.92	9,271	18,490
146.41	8,748	13,895	146.93	9,281	18,583
146.42	8,758	13,983	146.94	9,291	18,676
146.43	8,768	14,070	146.95	9,302	18,768
146.44	8,778	14,158	146.96	9,312	18,862
146.45	8,789	14,246	146.97	9,322	18,955
146.46	8,799	14,334	146.98	9,332	19,048
146.47	8,809	14,422	146.99	9,343	19,141
146.48	8,819	14,510	147.00	9,353	19,235
146.49	8,830	14,598	147.01	9,364	19,328
146.50	8,840	14,687	147.02	9,374	19,422
146.51	8,850	14,775	147.03	9,385	19,516
146.52	8,861	14,864	147.04	9,395	19,610
146.53	8,871	14,952	147.05	9,406	19,704
146.54	8,881	15,041	147.06	9,416	19,798
146.55	8,891	15,130	147.07	9,427	19,892
146.56	8,902	15,219	147.08	9,437	19,986
146.57	8,912	15,308	147.09	9,448	20,081
146.58	8,922	15,397	147.10	9,458	20,175
146.59	8,932	15,486	147.11	9,469	20,270
146.60	8,943	15,576	147.12	9,479	20,365
146.61	8,953	15,665	147.13	9,490	20,460
146.62	8,963	15,755	147.14	9,500	20,555
146.63	8,973	15,844	147.15	9,511	20,650
146.64	8,984	15,934	147.16	9,521	20,745
146.65	8,994	16,024	147.17	9,532	20,840
146.66	9,004	16,114	147.18	9,543	20,935
146.67	9,014	16,204	147.19	9,553	21,031
146.68	9,025	16,294	147.20	9,564	21,127
146.69	9,035	16,385	147.21	9,574	21,222
146.70	9,045	16,475	147.22	9,585	21,318
146.71	9,055	16,566	147.23	9,595	21,414
146.72	9,066	16,656	147.24	9,606	21,510
146.73	9,076	16,747	147.25	9,616	21,606
146.74	9,086	16,838	147.26	9,627	21,702
146.75	9,097	16,929	147.27	9,637	21,799
146.76	9,107	17,020	147.28	9,648	21,895
146.77	9,117	17,111	147.29	9,658	21,991
146.78	9,127	17,202	147.30	9,669	22,088
146.79	9,138	17,293	147.31	9,679	22,185
146.80	9,148	17,385	147.32	9,690	22,282
146.81	9,158	17,476	147.33	9,700	22,379
146.82	9,168	17,568	147.34	9,711	22,476
146.83	9,179	17,660	147.35	9,722	22,573
146.84	9,189	17,752	147.36	9,732	22,670
146.85	9,199	17,843	147.37	9,743	22,768
146.86	9,209	17,935	147.38	9,753	22,865
146.87	9,220	18,028	147.39	9,764	22,963
146.88	9,230	18,120	147.40	9,774	23,060
146.89	9,240	18,212	147.41	9,785	23,158

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.42	9,795	23,256	147.94	10,343	28,492
147.43	9,806	23,354	147.95	10,353	28,595
147.44	9,816	23,452	147.96	10,364	28,699
147.45	9,827	23,550	147.97	10,374	28,803
147.46	9,837	23,649	147.98	10,385	28,906
147.47	9,848	23,747	147.99	10,395	29,010
147.48	9,858	23,846	148.00	10,406	29,114
147.49	9,869	23,944	148.01	10,417	29,218
147.50	9,880	24,043	148.02	10,428	29,323
147.51	9,890	24,142	148.03	10,438	29,427
147.52	9,901	24,241	148.04	10,449	29,531
147.53	9,911	24,340	148.05	10,460	29,636
147.54	9,922	24,439	148.06	10,471	29,741
147.55	9,932	24,538	148.07	10,482	29,845
147.56	9,943	24,638	148.08	10,493	29,950
147.57	9,953	24,737	148.09	10,503	30,055
147.58	9,964	24,837	148.10	10,514	30,160
147.59	9,974	24,936	148.11	10,525	30,266
147.60	9,985	25,036	148.12	10,536	30,371
147.61	9,995	25,136	148.13	10,547	30,476
147.62	10,006	25,236	148.14	10,557	30,582
147.63	10,016	25,336	148.15	10,568	30,687
147.64	10,027	25,436	148.16	10,579	30,793
147.65	10,037	25,537	148.17	10,590	30,899
147.66	10,048	25,637	148.18	10,601	31,005
147.67	10,059	25,738	148.19	10,612	31,111
147.68	10,069	25,838	148.20	10,622	31,217
147.69	10,080	25,939	148.21	10,633	31,323
147.70	10,090	26,040	148.22	10,644	31,430
147.71	10,101	26,141	148.23	10,655	31,536
147.72	10,111	26,242	148.24	10,666	31,643
147.73	10,122	26,343	148.25	10,677	31,750
147.74	10,132	26,444	148.26	10,687	31,856
147.75	10,143	26,546	148.27	10,698	31,963
147.76	10,153	26,647	148.28	10,709	32,070
147.77	10,164	26,749	148.29	10,720	32,178
147.78	10,174	26,851	148.30	10,731	32,285
147.79	10,185	26,952	148.31	10,741	32,392
147.80	10,195	27,054	148.32	10,752	32,500
147.81	10,206	27,156	148.33	10,763	32,607
147.82	10,216	27,258	148.34	10,774	32,715
147.83	10,227	27,361	148.35	10,785	32,823
147.84	10,238	27,463	148.36	10,796	32,931
147.85	10,248	27,565	148.37	10,806	33,039
147.86	10,259	27,668	148.38	10,817	33,147
147.87	10,269	27,770	148.39	10,828	33,255
147.88	10,280	27,873	148.40	10,839	33,363
147.89	10,290	27,976	148.41	10,850	33,472
147.90	10,301	28,079	148.42	10,860	33,580
147.91	10,311	28,182	148.43	10,871	33,689
147.92	10,322	28,285	148.44	10,882	33,798
147.93	10,332	28,389	148.45	10,893	33,907

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.46	10,904	34,016
148.47	10,915	34,125
148.48	10,925	34,234
148.49	10,936	34,343
148.50	10,947	34,453
148.51	10,958	34,562
148.52	10,969	34,672
148.53	10,979	34,781
148.54	10,990	34,891
148.55	11,001	35,001
148.56	11,012	35,111
148.57	11,023	35,222
148.58	11,034	35,332
148.59	11,044	35,442
148.60	11,055	35,553
148.61	11,066	35,663
148.62	11,077	35,774
148.63	11,088	35,885
148.64	11,098	35,996
148.65	11,109	36,107
148.66	11,120	36,218
148.67	11,131	36,329
148.68	11,142	36,441
148.69	11,153	36,552
148.70	11,163	36,664
148.71	11,174	36,775
148.72	11,185	36,887
148.73	11,196	36,999
148.74	11,207	37,111
148.75	11,218	37,223
148.76	11,228	37,335
148.77	11,239	37,448
148.78	11,250	37,560
148.79	11,261	37,673
148.80	11,272	37,785
148.81	11,282	37,898
148.82	11,293	38,011
148.83	11,304	38,124
148.84	11,315	38,237
148.85	11,326	38,350
148.86	11,337	38,464
148.87	11,347	38,577
148.88	11,358	38,691
148.89	11,369	38,804
148.90	11,380	38,918
148.91	11,391	39,032
148.92	11,401	39,146
148.93	11,412	39,260
148.94	11,423	39,374
148.95	11,434	39,488
148.96	11,445	39,603
148.97	11,456	39,717
148.98	11,466	39,832
148.99	11,477	39,947
149.00	**11,488**	**40,061**

Summary for Pond B-25: Basin #25

Inflow Area = 2.500 ac, 34.96% Impervious, Inflow Depth = 1.83" for Current 2 yr event
Inflow = 4.62 cfs @ 12.18 hrs, Volume= 0.381 af
Outflow = 0.49 cfs @ 13.21 hrs, Volume= 0.293 af, Atten= 89%, Lag= 61.8 min
Primary = 0.49 cfs @ 13.21 hrs, Volume= 0.293 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 145.46' @ 13.21 hrs Surf.Area= 5,998 sf Storage= 9,428 cf

Plug-Flow detention time= 317.6 min calculated for 0.293 af (77% of inflow)
Center-of-Mass det. time= 227.4 min (1,030.6 - 803.2)

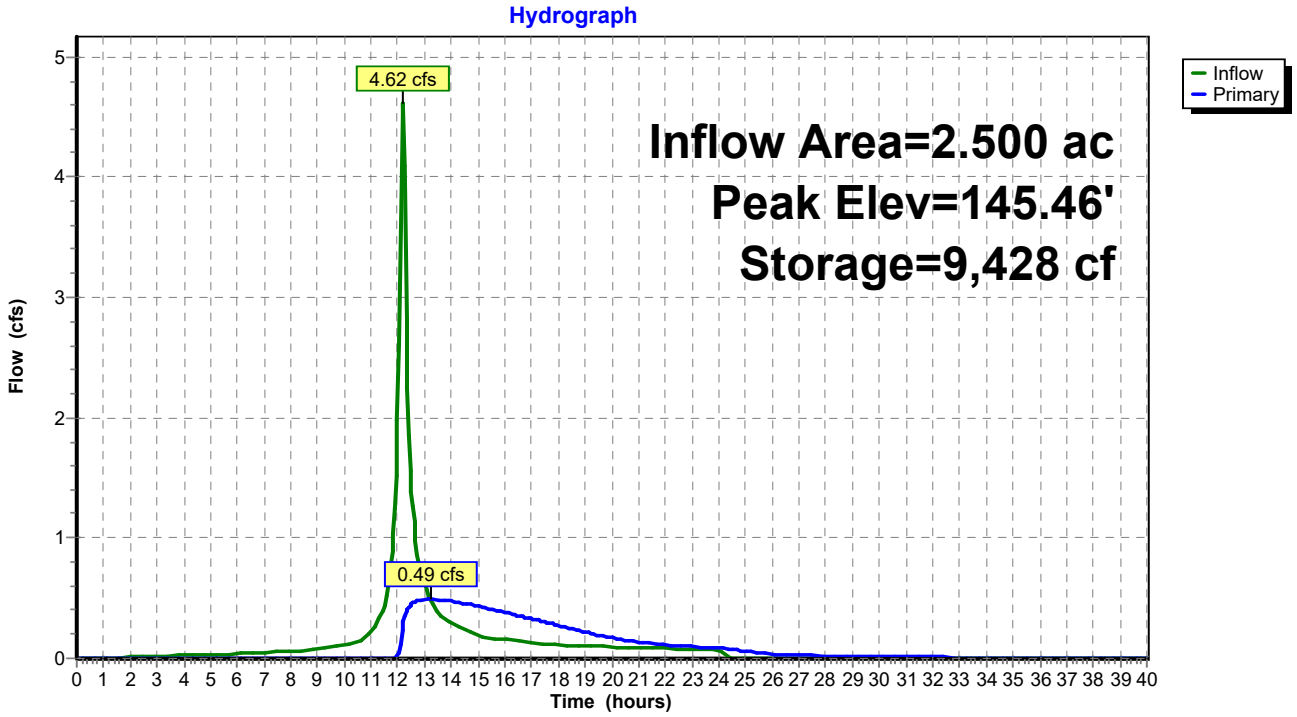
Volume	Invert	Avail.Storage	Storage Description
#1	143.30'	36,587 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
143.30	0	0	0
144.00	4,702	1,646	1,646
145.00	5,584	5,143	6,789
146.00	6,492	6,038	12,827
147.00	7,428	6,960	19,787
148.00	8,393	7,911	27,697
149.00	9,386	8,890	36,587

Device	Routing	Invert	Outlet Devices
#1	Primary	143.30'	**18.0" Round Culvert** L= 186.0' Ke= 0.500 Inlet / Outlet Invert= 143.30' / 142.00' S= 0.0070 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	144.42'	**4.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	145.95'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.96'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.49 cfs @ 13.21 hrs HW=145.46' (Free Discharge)
- **1=Culvert** (Passes 0.49 cfs of 8.96 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.49 cfs @ 4.43 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-25: Basin #25



Stage-Discharge for Pond B-25: Basin #25

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
143.30	0.00	143.82	0.00	144.34	0.00	144.86	0.27
143.31	0.00	143.83	0.00	144.35	0.00	144.87	0.27
143.32	0.00	143.84	0.00	144.36	0.00	144.88	0.28
143.33	0.00	143.85	0.00	144.37	0.00	144.89	0.28
143.34	0.00	143.86	0.00	144.38	0.00	144.90	0.29
143.35	0.00	143.87	0.00	144.39	0.00	144.91	0.29
143.36	0.00	143.88	0.00	144.40	0.00	144.92	0.30
143.37	0.00	143.89	0.00	144.41	0.00	144.93	0.30
143.38	0.00	143.90	0.00	144.42	0.00	144.94	0.31
143.39	0.00	143.91	0.00	144.43	0.00	144.95	0.31
143.40	0.00	143.92	0.00	144.44	0.00	144.96	0.32
143.41	0.00	143.93	0.00	144.45	0.00	144.97	0.32
143.42	0.00	143.94	0.00	144.46	0.00	144.98	0.32
143.43	0.00	143.95	0.00	144.47	0.01	144.99	0.33
143.44	0.00	143.96	0.00	144.48	0.01	145.00	0.33
143.45	0.00	143.97	0.00	144.49	0.01	145.01	0.34
143.46	0.00	143.98	0.00	144.50	0.02	145.02	0.34
143.47	0.00	143.99	0.00	144.51	0.02	145.03	0.35
143.48	0.00	144.00	0.00	144.52	0.03	145.04	0.35
143.49	0.00	144.01	0.00	144.53	0.03	145.05	0.35
143.50	0.00	144.02	0.00	144.54	0.04	145.06	0.36
143.51	0.00	144.03	0.00	144.55	0.04	145.07	0.36
143.52	0.00	144.04	0.00	144.56	0.05	145.08	0.37
143.53	0.00	144.05	0.00	144.57	0.05	145.09	0.37
143.54	0.00	144.06	0.00	144.58	0.06	145.10	0.37
143.55	0.00	144.07	0.00	144.59	0.07	145.11	0.38
143.56	0.00	144.08	0.00	144.60	0.08	145.12	0.38
143.57	0.00	144.09	0.00	144.61	0.08	145.13	0.38
143.58	0.00	144.10	0.00	144.62	0.09	145.14	0.39
143.59	0.00	144.11	0.00	144.63	0.10	145.15	0.39
143.60	0.00	144.12	0.00	144.64	0.11	145.16	0.40
143.61	0.00	144.13	0.00	144.65	0.12	145.17	0.40
143.62	0.00	144.14	0.00	144.66	0.12	145.18	0.40
143.63	0.00	144.15	0.00	144.67	0.13	145.19	0.41
143.64	0.00	144.16	0.00	144.68	0.14	145.20	0.41
143.65	0.00	144.17	0.00	144.69	0.15	145.21	0.41
143.66	0.00	144.18	0.00	144.70	0.16	145.22	0.42
143.67	0.00	144.19	0.00	144.71	0.17	145.23	0.42
143.68	0.00	144.20	0.00	144.72	0.18	145.24	0.42
143.69	0.00	144.21	0.00	144.73	0.19	145.25	0.43
143.70	0.00	144.22	0.00	144.74	0.19	145.26	0.43
143.71	0.00	144.23	0.00	144.75	0.20	145.27	0.43
143.72	0.00	144.24	0.00	144.76	0.21	145.28	0.44
143.73	0.00	144.25	0.00	144.77	0.22	145.29	0.44
143.74	0.00	144.26	0.00	144.78	0.22	145.30	0.44
143.75	0.00	144.27	0.00	144.79	0.23	145.31	0.45
143.76	0.00	144.28	0.00	144.80	0.23	145.32	0.45
143.77	0.00	144.29	0.00	144.81	0.24	145.33	0.45
143.78	0.00	144.30	0.00	144.82	0.25	145.34	0.46
143.79	0.00	144.31	0.00	144.83	0.25	145.35	0.46
143.80	0.00	144.32	0.00	144.84	0.26	145.36	0.46
143.81	0.00	144.33	0.00	144.85	0.26	145.37	0.46

Stage-Discharge for Pond B-25: Basin #25 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
145.38	0.47	145.90	0.60	146.42	4.83	146.94	11.88
145.39	0.47	145.91	0.61	146.43	4.96	146.95	11.90
145.40	0.47	145.92	0.61	146.44	5.10	146.96	11.91
145.41	0.48	145.93	0.61	146.45	5.23	146.97	11.93
145.42	0.48	145.94	0.61	146.46	5.37	146.98	11.95
145.43	0.48	145.95	0.62	146.47	5.50	146.99	11.97
145.44	0.49	145.96	0.63	146.48	5.64	147.00	11.98
145.45	0.49	145.97	0.66	146.49	5.78	147.01	12.00
145.46	0.49	145.98	0.69	146.50	5.92	147.02	12.02
145.47	0.49	145.99	0.73	146.51	6.06	147.03	12.03
145.48	0.50	146.00	0.77	146.52	6.20	147.04	12.05
145.49	0.50	146.01	0.82	146.53	6.35	147.05	12.07
145.50	0.50	146.02	0.87	146.54	6.49	147.06	12.09
145.51	0.51	146.03	0.93	146.55	6.64	147.07	12.10
145.52	0.51	146.04	0.99	146.56	6.78	147.08	12.12
145.53	0.51	146.05	1.05	146.57	6.93	147.09	12.14
145.54	0.51	146.06	1.12	146.58	7.08	147.10	12.15
145.55	0.52	146.07	1.18	146.59	7.23	147.11	12.17
145.56	0.52	146.08	1.25	146.60	7.38	147.12	12.19
145.57	0.52	146.09	1.33	146.61	7.53	147.13	12.20
145.58	0.52	146.10	1.40	146.62	7.69	147.14	12.22
145.59	0.53	146.11	1.48	146.63	7.84	147.15	12.24
145.60	0.53	146.12	1.56	146.64	8.00	147.16	12.25
145.61	0.53	146.13	1.65	146.65	8.15	147.17	12.27
145.62	0.54	146.14	1.73	146.66	8.31	147.18	12.29
145.63	0.54	146.15	1.82	146.67	8.47	147.19	12.30
145.64	0.54	146.16	1.91	146.68	8.63	147.20	12.32
145.65	0.54	146.17	2.00	146.69	8.79	147.21	12.34
145.66	0.55	146.18	2.09	146.70	8.95	147.22	12.35
145.67	0.55	146.19	2.19	146.71	9.11	147.23	12.37
145.68	0.55	146.20	2.29	146.72	9.27	147.24	12.39
145.69	0.55	146.21	2.38	146.73	9.43	147.25	12.40
145.70	0.56	146.22	2.49	146.74	9.60	147.26	12.42
145.71	0.56	146.23	2.59	146.75	9.76	147.27	12.44
145.72	0.56	146.24	2.69	146.76	9.93	147.28	12.45
145.73	0.56	146.25	2.80	146.77	10.10	147.29	12.47
145.74	0.57	146.26	2.91	146.78	10.26	147.30	12.49
145.75	0.57	146.27	3.02	146.79	10.43	147.31	12.50
145.76	0.57	146.28	3.13	146.80	10.60	147.32	12.52
145.77	0.57	146.29	3.24	146.81	10.77	147.33	12.54
145.78	0.58	146.30	3.35	146.82	10.94	147.34	12.55
145.79	0.58	146.31	3.47	146.83	11.12	147.35	12.57
145.80	0.58	146.32	3.59	146.84	11.29	147.36	12.58
145.81	0.58	146.33	3.70	146.85	11.46	147.37	12.60
145.82	0.59	146.34	3.82	146.86	11.64	147.38	12.62
145.83	0.59	146.35	3.94	146.87	11.76	147.39	12.63
145.84	0.59	146.36	4.07	146.88	11.78	147.40	12.65
145.85	0.59	146.37	4.19	146.89	11.79	147.41	12.67
145.86	0.60	146.38	4.32	146.90	11.81	147.42	12.68
145.87	0.60	146.39	4.44	146.91	11.83	147.43	12.70
145.88	0.60	146.40	4.57	146.92	11.85	147.44	12.71
145.89	0.60	146.41	4.70	146.93	11.86	147.45	12.73

Stage-Discharge for Pond B-25: Basin #25 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.46	12.75	147.98	13.89	148.50	68.06
147.47	12.76	147.99	14.18	148.51	69.81
147.48	12.78	148.00	14.53	148.52	71.59
147.49	12.79	148.01	14.91	148.53	73.39
147.50	12.81	148.02	15.34	148.54	75.22
147.51	12.83	148.03	15.81	148.55	77.07
147.52	12.84	148.04	16.31	148.56	78.96
147.53	12.86	148.05	16.84	148.57	80.60
147.54	12.87	148.06	17.40	148.58	82.25
147.55	12.89	148.07	17.98	148.59	83.92
147.56	12.91	148.08	18.60	148.60	85.60
147.57	12.92	148.09	19.24	148.61	87.30
147.58	12.94	148.10	19.91	148.62	89.01
147.59	12.95	148.11	20.60	148.63	90.73
147.60	12.97	148.12	21.31	148.64	92.46
147.61	12.99	148.13	22.05	148.65	94.21
147.62	13.00	148.14	22.81	148.66	95.97
147.63	13.02	148.15	23.59	148.67	97.74
147.64	13.03	148.16	24.39	148.68	99.53
147.65	13.05	148.17	25.25	148.69	101.32
147.66	13.06	148.18	26.14	148.70	103.13
147.67	13.08	148.19	27.05	148.71	104.96
147.68	13.10	148.20	27.99	148.72	106.79
147.69	13.11	148.21	28.95	148.73	108.64
147.70	13.13	148.22	29.94	148.74	110.50
147.71	13.14	148.23	30.96	148.75	112.37
147.72	13.16	148.24	31.99	148.76	114.26
147.73	13.17	148.25	33.06	148.77	116.19
147.74	13.19	148.26	34.14	148.78	118.14
147.75	13.21	148.27	35.26	148.79	120.10
147.76	13.22	148.28	36.39	148.80	122.07
147.77	13.24	148.29	37.55	148.81	124.06
147.78	13.25	148.30	38.74	148.82	126.05
147.79	13.27	148.31	39.94	148.83	128.07
147.80	13.28	148.32	41.18	148.84	130.09
147.81	13.30	148.33	42.43	148.85	132.13
147.82	13.31	148.34	43.72	148.86	134.18
147.83	13.33	148.35	45.02	148.87	136.25
147.84	13.34	148.36	46.35	148.88	138.33
147.85	13.36	148.37	47.73	148.89	140.42
147.86	13.37	148.38	49.14	148.90	142.52
147.87	13.39	148.39	50.57	148.91	144.63
147.88	13.41	148.40	52.03	148.92	146.76
147.89	13.42	148.41	53.51	148.93	148.90
147.90	13.44	148.42	55.02	148.94	151.06
147.91	13.45	148.43	56.56	148.95	153.22
147.92	13.47	148.44	58.12	148.96	155.40
147.93	13.48	148.45	59.71	148.97	157.54
147.94	13.50	148.46	61.33	148.98	159.69
147.95	13.51	148.47	62.97	148.99	161.84
147.96	13.53	148.48	64.64	149.00	**164.01**
147.97	13.66	148.49	66.34		

Stage-Area-Storage for Pond B-25: Basin #25

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
143.30	0	0
143.31	67	0
143.32	134	1
143.33	202	3
143.34	269	5
143.35	336	8
143.36	403	12
143.37	470	16
143.38	537	21
143.39	605	27
143.40	672	34
143.41	739	41
143.42	806	48
143.43	873	57
143.44	940	66
143.45	1,008	76
143.46	1,075	86
143.47	1,142	97
143.48	1,209	109
143.49	1,276	121
143.50	1,343	134
143.51	1,411	148
143.52	1,478	163
143.53	1,545	178
143.54	1,612	193
143.55	1,679	210
143.56	1,746	227
143.57	1,814	245
143.58	1,881	263
143.59	1,948	282
143.60	2,015	302
143.61	2,082	323
143.62	2,149	344
143.63	2,217	366
143.64	2,284	388
143.65	2,351	411
143.66	2,418	435
143.67	2,485	460
143.68	2,553	485
143.69	2,620	511
143.70	2,687	537
143.71	2,754	565
143.72	2,821	592
143.73	2,888	621
143.74	2,956	650
143.75	3,023	680
143.76	3,090	711
143.77	3,157	742
143.78	3,224	774
143.79	3,291	806
143.80	3,359	840
143.81	3,426	874
143.82	3,493	908
143.83	3,560	943
143.84	3,627	979
143.85	3,694	1,016
143.86	3,762	1,053
143.87	3,829	1,091
143.88	3,896	1,130
143.89	3,963	1,169
143.90	4,030	1,209
143.91	4,097	1,250
143.92	4,165	1,291
143.93	4,232	1,333
143.94	4,299	1,376
143.95	4,366	1,419
143.96	4,433	1,463
143.97	4,500	1,508
143.98	4,568	1,553
143.99	4,635	1,599
144.00	4,702	1,646
144.01	4,711	1,693
144.02	4,720	1,740
144.03	4,728	1,787
144.04	4,737	1,834
144.05	4,746	1,882
144.06	4,755	1,929
144.07	4,764	1,977
144.08	4,773	2,025
144.09	4,781	2,072
144.10	4,790	2,120
144.11	4,799	2,168
144.12	4,808	2,216
144.13	4,817	2,264
144.14	4,825	2,313
144.15	4,834	2,361
144.16	4,843	2,409
144.17	4,852	2,458
144.18	4,861	2,506
144.19	4,870	2,555
144.20	4,878	2,604
144.21	4,887	2,653
144.22	4,896	2,701
144.23	4,905	2,750
144.24	4,914	2,800
144.25	4,923	2,849
144.26	4,931	2,898
144.27	4,940	2,947
144.28	4,949	2,997
144.29	4,958	3,046
144.30	4,967	3,096
144.31	4,975	3,146
144.32	4,984	3,195
144.33	4,993	3,245

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.34	5,002	3,295	144.86	5,461	6,016
144.35	5,011	3,345	144.87	5,469	6,070
144.36	5,020	3,396	144.88	5,478	6,125
144.37	5,028	3,446	144.89	5,487	6,180
144.38	5,037	3,496	144.90	5,496	6,235
144.39	5,046	3,547	144.91	5,505	6,290
144.40	5,055	3,597	144.92	5,513	6,345
144.41	5,064	3,648	144.93	5,522	6,400
144.42	5,072	3,698	144.94	5,531	6,455
144.43	5,081	3,749	144.95	5,540	6,511
144.44	5,090	3,800	144.96	5,549	6,566
144.45	5,099	3,851	144.97	5,558	6,622
144.46	5,108	3,902	144.98	5,566	6,677
144.47	5,117	3,953	144.99	5,575	6,733
144.48	5,125	4,004	145.00	5,584	6,789
144.49	5,134	4,056	145.01	5,593	6,845
144.50	5,143	4,107	145.02	5,602	6,901
144.51	5,152	4,158	145.03	5,611	6,957
144.52	5,161	4,210	145.04	5,620	7,013
144.53	5,169	4,262	145.05	5,629	7,069
144.54	5,178	4,313	145.06	5,638	7,125
144.55	5,187	4,365	145.07	5,648	7,182
144.56	5,196	4,417	145.08	5,657	7,238
144.57	5,205	4,469	145.09	5,666	7,295
144.58	5,214	4,521	145.10	5,675	7,352
144.59	5,222	4,573	145.11	5,684	7,408
144.60	5,231	4,626	145.12	5,693	7,465
144.61	5,240	4,678	145.13	5,702	7,522
144.62	5,249	4,730	145.14	5,711	7,579
144.63	5,258	4,783	145.15	5,720	7,637
144.64	5,266	4,836	145.16	5,729	7,694
144.65	5,275	4,888	145.17	5,738	7,751
144.66	5,284	4,941	145.18	5,747	7,809
144.67	5,293	4,994	145.19	5,757	7,866
144.68	5,302	5,047	145.20	5,766	7,924
144.69	5,311	5,100	145.21	5,775	7,981
144.70	5,319	5,153	145.22	5,784	8,039
144.71	5,328	5,206	145.23	5,793	8,097
144.72	5,337	5,260	145.24	5,802	8,155
144.73	5,346	5,313	145.25	5,811	8,213
144.74	5,355	5,367	145.26	5,820	8,271
144.75	5,364	5,420	145.27	5,829	8,329
144.76	5,372	5,474	145.28	5,838	8,388
144.77	5,381	5,528	145.29	5,847	8,446
144.78	5,390	5,582	145.30	5,856	8,505
144.79	5,399	5,636	145.31	5,865	8,563
144.80	5,408	5,690	145.32	5,875	8,622
144.81	5,416	5,744	145.33	5,884	8,681
144.82	5,425	5,798	145.34	5,893	8,740
144.83	5,434	5,852	145.35	5,902	8,799
144.84	5,443	5,907	145.36	5,911	8,858
144.85	5,452	5,961	145.37	5,920	8,917

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.38	5,929	8,976	145.90	6,401	12,182
145.39	5,938	9,036	145.91	6,410	12,246
145.40	5,947	9,095	145.92	6,419	12,310
145.41	5,956	9,154	145.93	6,428	12,374
145.42	5,965	9,214	145.94	6,438	12,439
145.43	5,974	9,274	145.95	6,447	12,503
145.44	5,984	9,334	145.96	6,456	12,568
145.45	5,993	9,393	145.97	6,465	12,632
145.46	6,002	9,453	145.98	6,474	12,697
145.47	6,011	9,513	145.99	6,483	12,762
145.48	6,020	9,574	146.00	6,492	12,827
145.49	6,029	9,634	146.01	6,501	12,892
145.50	6,038	9,694	146.02	6,511	12,957
145.51	6,047	9,755	146.03	6,520	13,022
145.52	6,056	9,815	146.04	6,529	13,087
145.53	6,065	9,876	146.05	6,539	13,152
145.54	6,074	9,936	146.06	6,548	13,218
145.55	6,083	9,997	146.07	6,558	13,283
145.56	6,092	10,058	146.08	6,567	13,349
145.57	6,102	10,119	146.09	6,576	13,415
145.58	6,111	10,180	146.10	6,586	13,481
145.59	6,120	10,241	146.11	6,595	13,546
145.60	6,129	10,303	146.12	6,604	13,612
145.61	6,138	10,364	146.13	6,614	13,679
145.62	6,147	10,425	146.14	6,623	13,745
145.63	6,156	10,487	146.15	6,632	13,811
145.64	6,165	10,548	146.16	6,642	13,877
145.65	6,174	10,610	146.17	6,651	13,944
145.66	6,183	10,672	146.18	6,660	14,010
145.67	6,192	10,734	146.19	6,670	14,077
145.68	6,201	10,796	146.20	6,679	14,144
145.69	6,211	10,858	146.21	6,689	14,211
145.70	6,220	10,920	146.22	6,698	14,278
145.71	6,229	10,982	146.23	6,707	14,345
145.72	6,238	11,045	146.24	6,717	14,412
145.73	6,247	11,107	146.25	6,726	14,479
145.74	6,256	11,169	146.26	6,735	14,546
145.75	6,265	11,232	146.27	6,745	14,614
145.76	6,274	11,295	146.28	6,754	14,681
145.77	6,283	11,358	146.29	6,763	14,749
145.78	6,292	11,420	146.30	6,773	14,816
145.79	6,301	11,483	146.31	6,782	14,884
145.80	6,310	11,546	146.32	6,792	14,952
145.81	6,319	11,610	146.33	6,801	15,020
145.82	6,329	11,673	146.34	6,810	15,088
145.83	6,338	11,736	146.35	6,820	15,156
145.84	6,347	11,800	146.36	6,829	15,224
145.85	6,356	11,863	146.37	6,838	15,293
145.86	6,365	11,927	146.38	6,848	15,361
145.87	6,374	11,990	146.39	6,857	15,430
145.88	6,383	12,054	146.40	6,866	15,498
145.89	6,392	12,118	146.41	6,876	15,567

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.42	6,885	15,636	146.94	7,372	19,343
146.43	6,894	15,705	146.95	7,381	19,416
146.44	6,904	15,774	146.96	7,391	19,490
146.45	6,913	15,843	146.97	7,400	19,564
146.46	6,923	15,912	146.98	7,409	19,638
146.47	6,932	15,981	146.99	7,419	19,712
146.48	6,941	16,051	147.00	7,428	19,787
146.49	6,951	16,120	147.01	7,438	19,861
146.50	6,960	16,190	147.02	7,447	19,935
146.51	6,969	16,259	147.03	7,457	20,010
146.52	6,979	16,329	147.04	7,467	20,085
146.53	6,988	16,399	147.05	7,476	20,159
146.54	6,997	16,469	147.06	7,486	20,234
146.55	7,007	16,539	147.07	7,496	20,309
146.56	7,016	16,609	147.08	7,505	20,384
146.57	7,026	16,679	147.09	7,515	20,459
146.58	7,035	16,749	147.10	7,525	20,534
146.59	7,044	16,820	147.11	7,534	20,610
146.60	7,054	16,890	147.12	7,544	20,685
146.61	7,063	16,961	147.13	7,553	20,760
146.62	7,072	17,032	147.14	7,563	20,836
146.63	7,082	17,102	147.15	7,573	20,912
146.64	7,091	17,173	147.16	7,582	20,988
146.65	7,100	17,244	147.17	7,592	21,063
146.66	7,110	17,315	147.18	7,602	21,139
146.67	7,119	17,386	147.19	7,611	21,215
146.68	7,128	17,458	147.20	7,621	21,292
146.69	7,138	17,529	147.21	7,631	21,368
146.70	7,147	17,600	147.22	7,640	21,444
146.71	7,157	17,672	147.23	7,650	21,521
146.72	7,166	17,744	147.24	7,660	21,597
146.73	7,175	17,815	147.25	7,669	21,674
146.74	7,185	17,887	147.26	7,679	21,751
146.75	7,194	17,959	147.27	7,689	21,827
146.76	7,203	18,031	147.28	7,698	21,904
146.77	7,213	18,103	147.29	7,708	21,981
146.78	7,222	18,175	147.30	7,718	22,059
146.79	7,231	18,247	147.31	7,727	22,136
146.80	7,241	18,320	147.32	7,737	22,213
146.81	7,250	18,392	147.33	7,746	22,290
146.82	7,260	18,465	147.34	7,756	22,368
146.83	7,269	18,537	147.35	7,766	22,446
146.84	7,278	18,610	147.36	7,775	22,523
146.85	7,288	18,683	147.37	7,785	22,601
146.86	7,297	18,756	147.38	7,795	22,679
146.87	7,306	18,829	147.39	7,804	22,757
146.88	7,316	18,902	147.40	7,814	22,835
146.89	7,325	18,975	147.41	7,824	22,913
146.90	7,334	19,049	147.42	7,833	22,992
146.91	7,344	19,122	147.43	7,843	23,070
146.92	7,353	19,195	147.44	7,853	23,148
146.93	7,362	19,269	147.45	7,862	23,227

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.46	7,872	23,306	147.98	8,374	27,530
147.47	7,882	23,384	147.99	8,383	27,613
147.48	7,891	23,463	148.00	8,393	27,697
147.49	7,901	23,542	148.01	8,403	27,781
147.50	7,911	23,621	148.02	8,413	27,865
147.51	7,920	23,700	148.03	8,423	27,949
147.52	7,930	23,780	148.04	8,433	28,034
147.53	7,939	23,859	148.05	8,443	28,118
147.54	7,949	23,939	148.06	8,453	28,203
147.55	7,959	24,018	148.07	8,463	28,287
147.56	7,968	24,098	148.08	8,472	28,372
147.57	7,978	24,177	148.09	8,482	28,457
147.58	7,988	24,257	148.10	8,492	28,541
147.59	7,997	24,337	148.11	8,502	28,626
147.60	8,007	24,417	148.12	8,512	28,712
147.61	8,017	24,497	148.13	8,522	28,797
147.62	8,026	24,578	148.14	8,532	28,882
147.63	8,036	24,658	148.15	8,542	28,967
147.64	8,046	24,738	148.16	8,552	29,053
147.65	8,055	24,819	148.17	8,562	29,138
147.66	8,065	24,899	148.18	8,572	29,224
147.67	8,075	24,980	148.19	8,582	29,310
147.68	8,084	25,061	148.20	8,592	29,396
147.69	8,094	25,142	148.21	8,602	29,482
147.70	8,104	25,223	148.22	8,611	29,568
147.71	8,113	25,304	148.23	8,621	29,654
147.72	8,123	25,385	148.24	8,631	29,740
147.73	8,132	25,466	148.25	8,641	29,826
147.74	8,142	25,548	148.26	8,651	29,913
147.75	8,152	25,629	148.27	8,661	30,000
147.76	8,161	25,711	148.28	8,671	30,086
147.77	8,171	25,792	148.29	8,681	30,173
147.78	8,181	25,874	148.30	8,691	30,260
147.79	8,190	25,956	148.31	8,701	30,347
147.80	8,200	26,038	148.32	8,711	30,434
147.81	8,210	26,120	148.33	8,721	30,521
147.82	8,219	26,202	148.34	8,731	30,608
147.83	8,229	26,284	148.35	8,741	30,696
147.84	8,239	26,367	148.36	8,750	30,783
147.85	8,248	26,449	148.37	8,760	30,871
147.86	8,258	26,532	148.38	8,770	30,958
147.87	8,268	26,614	148.39	8,780	31,046
147.88	8,277	26,697	148.40	8,790	31,134
147.89	8,287	26,780	148.41	8,800	31,222
147.90	8,297	26,863	148.42	8,810	31,310
147.91	8,306	26,946	148.43	8,820	31,398
147.92	8,316	27,029	148.44	8,830	31,486
147.93	8,325	27,112	148.45	8,840	31,575
147.94	8,335	27,195	148.46	8,850	31,663
147.95	8,345	27,279	148.47	8,860	31,752
147.96	8,354	27,362	148.48	8,870	31,840
147.97	8,364	27,446	148.49	8,880	31,929

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.50	8,890	32,018
148.51	8,899	32,107
148.52	8,909	32,196
148.53	8,919	32,285
148.54	8,929	32,374
148.55	8,939	32,464
148.56	8,949	32,553
148.57	8,959	32,643
148.58	8,969	32,732
148.59	8,979	32,822
148.60	8,989	32,912
148.61	8,999	33,002
148.62	9,009	33,092
148.63	9,019	33,182
148.64	9,029	33,272
148.65	9,038	33,362
148.66	9,048	33,453
148.67	9,058	33,543
148.68	9,068	33,634
148.69	9,078	33,725
148.70	9,088	33,816
148.71	9,098	33,907
148.72	9,108	33,998
148.73	9,118	34,089
148.74	9,128	34,180
148.75	9,138	34,271
148.76	9,148	34,363
148.77	9,158	34,454
148.78	9,168	34,546
148.79	9,177	34,638
148.80	9,187	34,729
148.81	9,197	34,821
148.82	9,207	34,913
148.83	9,217	35,005
148.84	9,227	35,098
148.85	9,237	35,190
148.86	9,247	35,282
148.87	9,257	35,375
148.88	9,267	35,468
148.89	9,277	35,560
148.90	9,287	35,653
148.91	9,297	35,746
148.92	9,307	35,839
148.93	9,316	35,932
148.94	9,326	36,025
148.95	9,336	36,119
148.96	9,346	36,212
148.97	9,356	36,306
148.98	9,366	36,399
148.99	9,376	36,493
149.00	**9,386**	**36,587**

Summary for Pond B-26: Basin #26

Inflow Area = 2.366 ac, 39.90% Impervious, Inflow Depth = 1.93" for Current 2 yr event
Inflow = 4.59 cfs @ 12.17 hrs, Volume= 0.380 af
Outflow = 0.18 cfs @ 15.16 hrs, Volume= 0.275 af, Atten= 96%, Lag= 179.3 min
Primary = 0.18 cfs @ 15.16 hrs, Volume= 0.275 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 145.62' @ 15.16 hrs Surf.Area= 6,290 sf Storage= 11,445 cf

Plug-Flow detention time= 674.3 min calculated for 0.275 af (72% of inflow)
Center-of-Mass det. time= 574.5 min (1,372.5 - 798.0)

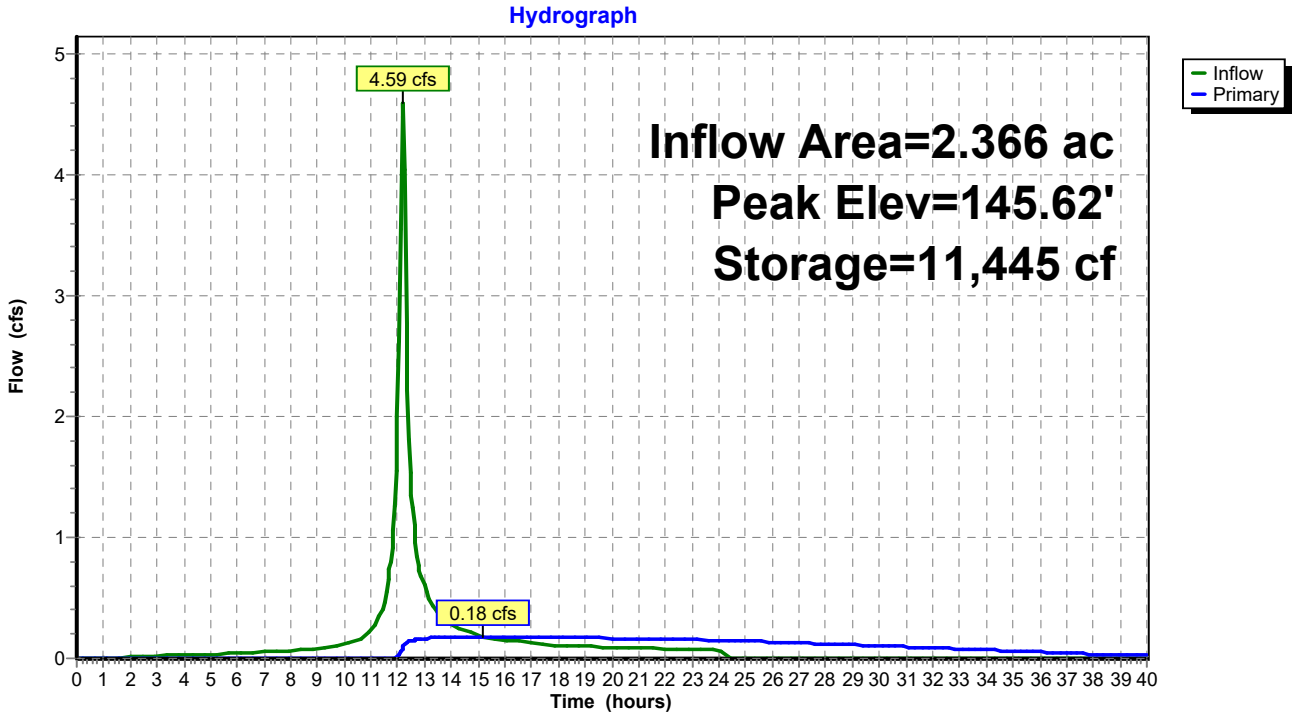
Volume	Invert	Avail.Storage	Storage Description
#1	143.30'	35,348 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
143.30	0	0	0
144.00	5,466	1,913	1,913
145.00	5,967	5,717	7,630
146.00	6,486	6,227	13,856
147.00	7,018	6,752	20,608
148.00	7,563	7,291	27,899
148.95	8,120	7,449	35,348

Device	Routing	Invert	Outlet Devices
#1	Primary	143.30'	**18.0" Round Culvert** L= 234.0' Ke= 0.500 Inlet / Outlet Invert= 143.30' / 142.00' S= 0.0056 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	144.36'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	148.05'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.18 cfs @ 15.16 hrs HW=145.62' (Free Discharge)
- **1=Culvert** (Passes 0.18 cfs of 8.59 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.18 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-26: Basin #26



Stage-Discharge for Pond B-26: Basin #26

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
143.30	0.00	143.82	0.00	144.34	0.00	144.86	0.10
143.31	0.00	143.83	0.00	144.35	0.00	144.87	0.10
143.32	0.00	143.84	0.00	144.36	0.00	144.88	0.11
143.33	0.00	143.85	0.00	144.37	0.00	144.89	0.11
143.34	0.00	143.86	0.00	144.38	0.00	144.90	0.11
143.35	0.00	143.87	0.00	144.39	0.00	144.91	0.11
143.36	0.00	143.88	0.00	144.40	0.00	144.92	0.11
143.37	0.00	143.89	0.00	144.41	0.00	144.93	0.11
143.38	0.00	143.90	0.00	144.42	0.01	144.94	0.11
143.39	0.00	143.91	0.00	144.43	0.01	144.95	0.11
143.40	0.00	143.92	0.00	144.44	0.01	144.96	0.12
143.41	0.00	143.93	0.00	144.45	0.01	144.97	0.12
143.42	0.00	143.94	0.00	144.46	0.02	144.98	0.12
143.43	0.00	143.95	0.00	144.47	0.02	144.99	0.12
143.44	0.00	143.96	0.00	144.48	0.02	145.00	0.12
143.45	0.00	143.97	0.00	144.49	0.03	145.01	0.12
143.46	0.00	143.98	0.00	144.50	0.03	145.02	0.12
143.47	0.00	143.99	0.00	144.51	0.03	145.03	0.12
143.48	0.00	144.00	0.00	144.52	0.04	145.04	0.12
143.49	0.00	144.01	0.00	144.53	0.04	145.05	0.13
143.50	0.00	144.02	0.00	144.54	0.05	145.06	0.13
143.51	0.00	144.03	0.00	144.55	0.05	145.07	0.13
143.52	0.00	144.04	0.00	144.56	0.05	145.08	0.13
143.53	0.00	144.05	0.00	144.57	0.05	145.09	0.13
143.54	0.00	144.06	0.00	144.58	0.06	145.10	0.13
143.55	0.00	144.07	0.00	144.59	0.06	145.11	0.13
143.56	0.00	144.08	0.00	144.60	0.06	145.12	0.13
143.57	0.00	144.09	0.00	144.61	0.06	145.13	0.13
143.58	0.00	144.10	0.00	144.62	0.06	145.14	0.13
143.59	0.00	144.11	0.00	144.63	0.07	145.15	0.14
143.60	0.00	144.12	0.00	144.64	0.07	145.16	0.14
143.61	0.00	144.13	0.00	144.65	0.07	145.17	0.14
143.62	0.00	144.14	0.00	144.66	0.07	145.18	0.14
143.63	0.00	144.15	0.00	144.67	0.07	145.19	0.14
143.64	0.00	144.16	0.00	144.68	0.08	145.20	0.14
143.65	0.00	144.17	0.00	144.69	0.08	145.21	0.14
143.66	0.00	144.18	0.00	144.70	0.08	145.22	0.14
143.67	0.00	144.19	0.00	144.71	0.08	145.23	0.14
143.68	0.00	144.20	0.00	144.72	0.08	145.24	0.14
143.69	0.00	144.21	0.00	144.73	0.08	145.25	0.15
143.70	0.00	144.22	0.00	144.74	0.09	145.26	0.15
143.71	0.00	144.23	0.00	144.75	0.09	145.27	0.15
143.72	0.00	144.24	0.00	144.76	0.09	145.28	0.15
143.73	0.00	144.25	0.00	144.77	0.09	145.29	0.15
143.74	0.00	144.26	0.00	144.78	0.09	145.30	0.15
143.75	0.00	144.27	0.00	144.79	0.09	145.31	0.15
143.76	0.00	144.28	0.00	144.80	0.10	145.32	0.15
143.77	0.00	144.29	0.00	144.81	0.10	145.33	0.15
143.78	0.00	144.30	0.00	144.82	0.10	145.34	0.15
143.79	0.00	144.31	0.00	144.83	0.10	145.35	0.15
143.80	0.00	144.32	0.00	144.84	0.10	145.36	0.16
143.81	0.00	144.33	0.00	144.85	0.10	145.37	0.16

Stage-Discharge for Pond B-26: Basin #26 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
145.38	0.16	145.90	0.20	146.42	3.72	146.94	10.94
145.39	0.16	145.91	0.20	146.43	3.84	146.95	10.96
145.40	0.16	145.92	0.20	146.44	3.96	146.96	10.97
145.41	0.16	145.93	0.20	146.45	4.09	146.97	10.99
145.42	0.16	145.94	0.20	146.46	4.22	146.98	11.00
145.43	0.16	145.95	0.20	146.47	4.35	146.99	11.02
145.44	0.16	145.96	0.20	146.48	4.48	147.00	11.04
145.45	0.16	145.97	0.20	146.49	4.61	147.01	11.05
145.46	0.16	145.98	0.20	146.50	4.74	147.02	11.07
145.47	0.16	145.99	0.20	146.51	4.88	147.03	11.08
145.48	0.17	146.00	0.20	146.52	5.01	147.04	11.10
145.49	0.17	146.01	0.22	146.53	5.15	147.05	11.11
145.50	0.17	146.02	0.24	146.54	5.29	147.06	11.13
145.51	0.17	146.03	0.27	146.55	5.43	147.07	11.15
145.52	0.17	146.04	0.31	146.56	5.57	147.08	11.16
145.53	0.17	146.05	0.35	146.57	5.71	147.09	11.18
145.54	0.17	146.06	0.40	146.58	5.85	147.10	11.19
145.55	0.17	146.07	0.45	146.59	5.99	147.11	11.21
145.56	0.17	146.08	0.50	146.60	6.14	147.12	11.22
145.57	0.17	146.09	0.56	146.61	6.28	147.13	11.24
145.58	0.17	146.10	0.62	146.62	6.43	147.14	11.25
145.59	0.17	146.11	0.69	146.63	6.58	147.15	11.27
145.60	0.17	146.12	0.75	146.64	6.72	147.16	11.29
145.61	0.18	146.13	0.82	146.65	6.87	147.17	11.30
145.62	0.18	146.14	0.89	146.66	7.03	147.18	11.32
145.63	0.18	146.15	0.97	146.67	7.18	147.19	11.33
145.64	0.18	146.16	1.04	146.68	7.33	147.20	11.35
145.65	0.18	146.17	1.12	146.69	7.48	147.21	11.36
145.66	0.18	146.18	1.20	146.70	7.64	147.22	11.38
145.67	0.18	146.19	1.29	146.71	7.79	147.23	11.39
145.68	0.18	146.20	1.37	146.72	7.95	147.24	11.41
145.69	0.18	146.21	1.46	146.73	8.11	147.25	11.42
145.70	0.18	146.22	1.55	146.74	8.27	147.26	11.44
145.71	0.18	146.23	1.64	146.75	8.43	147.27	11.45
145.72	0.18	146.24	1.74	146.76	8.59	147.28	11.47
145.73	0.18	146.25	1.83	146.77	8.75	147.29	11.48
145.74	0.19	146.26	1.93	146.78	8.91	147.30	11.50
145.75	0.19	146.27	2.03	146.79	9.07	147.31	11.51
145.76	0.19	146.28	2.13	146.80	9.24	147.32	11.53
145.77	0.19	146.29	2.23	146.81	9.40	147.33	11.54
145.78	0.19	146.30	2.34	146.82	9.57	147.34	11.56
145.79	0.19	146.31	2.45	146.83	9.73	147.35	11.57
145.80	0.19	146.32	2.55	146.84	9.90	147.36	11.59
145.81	0.19	146.33	2.66	146.85	10.07	147.37	11.60
145.82	0.19	146.34	2.77	146.86	10.24	147.38	11.62
145.83	0.19	146.35	2.89	146.87	10.41	147.39	11.63
145.84	0.19	146.36	3.00	146.88	10.58	147.40	11.65
145.85	0.19	146.37	3.12	146.89	10.75	147.41	11.66
145.86	0.19	146.38	3.23	146.90	10.88	147.42	11.68
145.87	0.19	146.39	3.35	146.91	10.89	147.43	11.69
145.88	0.20	146.40	3.47	146.92	10.91	147.44	11.71
145.89	0.20	146.41	3.59	146.93	10.92	147.45	11.72

Stage-Discharge for Pond B-26: Basin #26 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.46	11.74	147.98	12.49	148.50	52.51
147.47	11.75	147.99	12.50	148.51	54.02
147.48	11.77	148.00	12.51	148.52	55.56
147.49	11.78	148.01	12.53	148.53	57.12
147.50	11.80	148.02	12.54	148.54	58.71
147.51	11.81	148.03	12.56	148.55	60.32
147.52	11.83	148.04	12.57	148.56	61.96
147.53	11.84	148.05	12.58	148.57	63.63
147.54	11.86	148.06	12.71	148.58	65.33
147.55	11.87	148.07	12.94	148.59	67.05
147.56	11.89	148.08	13.23	148.60	68.79
147.57	11.90	148.09	13.58	148.61	70.57
147.58	11.92	148.10	13.96	148.62	72.37
147.59	11.93	148.11	14.39	148.63	74.20
147.60	11.94	148.12	14.85	148.64	76.05
147.61	11.96	148.13	15.35	148.65	77.94
147.62	11.97	148.14	15.88	148.66	79.58
147.63	11.99	148.15	16.44	148.67	81.23
147.64	12.00	148.16	17.03	148.68	82.90
147.65	12.02	148.17	17.64	148.69	84.58
147.66	12.03	148.18	18.28	148.70	86.27
147.67	12.05	148.19	18.95	148.71	87.98
147.68	12.06	148.20	19.63	148.72	89.70
147.69	12.07	148.21	20.35	148.73	91.43
147.70	12.09	148.22	21.08	148.74	93.18
147.71	12.10	148.23	21.84	148.75	94.93
147.72	12.12	148.24	22.62	148.76	96.71
147.73	12.13	148.25	23.42	148.77	98.49
147.74	12.15	148.26	24.28	148.78	100.29
147.75	12.16	148.27	25.17	148.79	102.10
147.76	12.18	148.28	26.08	148.80	103.92
147.77	12.19	148.29	27.02	148.81	105.75
147.78	12.20	148.30	27.98	148.82	107.60
147.79	12.22	148.31	28.96	148.83	109.46
147.80	12.23	148.32	29.98	148.84	111.33
147.81	12.25	148.33	31.01	148.85	113.21
147.82	12.26	148.34	32.07	148.86	115.14
147.83	12.27	148.35	33.16	148.87	117.09
147.84	12.29	148.36	34.27	148.88	119.05
147.85	12.30	148.37	35.40	148.89	121.02
147.86	12.32	148.38	36.56	148.90	123.00
147.87	12.33	148.39	37.75	148.91	125.00
147.88	12.35	148.40	38.95	148.92	127.01
147.89	12.36	148.41	40.19	148.93	129.04
147.90	12.37	148.42	41.44	148.94	131.07
147.91	12.39	148.43	42.72	148.95	**133.12**
147.92	12.40	148.44	44.03		
147.93	12.42	148.45	45.35		
147.94	12.43	148.46	46.73		
147.95	12.44	148.47	48.14		
147.96	12.46	148.48	49.57		
147.97	12.47	148.49	51.03		

Stage-Area-Storage for Pond B-26: Basin #26

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
143.30	0	0
143.31	78	0
143.32	156	2
143.33	234	4
143.34	312	6
143.35	390	10
143.36	469	14
143.37	547	19
143.38	625	25
143.39	703	32
143.40	781	39
143.41	859	47
143.42	937	56
143.43	1,015	66
143.44	1,093	77
143.45	1,171	88
143.46	1,249	100
143.47	1,327	113
143.48	1,406	126
143.49	1,484	141
143.50	1,562	156
143.51	1,640	172
143.52	1,718	189
143.53	1,796	207
143.54	1,874	225
143.55	1,952	244
143.56	2,030	264
143.57	2,108	285
143.58	2,186	306
143.59	2,264	328
143.60	2,343	351
143.61	2,421	375
143.62	2,499	400
143.63	2,577	425
143.64	2,655	451
143.65	2,733	478
143.66	2,811	506
143.67	2,889	534
143.68	2,967	564
143.69	3,045	594
143.70	3,123	625
143.71	3,202	656
143.72	3,280	689
143.73	3,358	722
143.74	3,436	756
143.75	3,514	791
143.76	3,592	826
143.77	3,670	862
143.78	3,748	900
143.79	3,826	937
143.80	3,904	976
143.81	3,982	1,016
143.82	4,060	1,056
143.83	4,139	1,097
143.84	4,217	1,138
143.85	4,295	1,181
143.86	4,373	1,224
143.87	4,451	1,269
143.88	4,529	1,313
143.89	4,607	1,359
143.90	4,685	1,406
143.91	4,763	1,453
143.92	4,841	1,501
143.93	4,919	1,550
143.94	4,997	1,599
143.95	5,076	1,650
143.96	5,154	1,701
143.97	5,232	1,753
143.98	5,310	1,805
143.99	5,388	1,859
144.00	5,466	1,913
144.01	5,471	1,968
144.02	5,476	2,023
144.03	5,481	2,077
144.04	5,486	2,132
144.05	5,491	2,187
144.06	5,496	2,242
144.07	5,501	2,297
144.08	5,506	2,352
144.09	5,511	2,407
144.10	5,516	2,462
144.11	5,521	2,517
144.12	5,526	2,573
144.13	5,531	2,628
144.14	5,536	2,683
144.15	5,541	2,739
144.16	5,546	2,794
144.17	5,551	2,850
144.18	5,556	2,905
144.19	5,561	2,961
144.20	5,566	3,016
144.21	5,571	3,072
144.22	5,576	3,128
144.23	5,581	3,184
144.24	5,586	3,239
144.25	5,591	3,295
144.26	5,596	3,351
144.27	5,601	3,407
144.28	5,606	3,463
144.29	5,611	3,519
144.30	5,616	3,575
144.31	5,621	3,632
144.32	5,626	3,688
144.33	5,631	3,744

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.34	5,636	3,800	144.86	5,897	6,799
144.35	5,641	3,857	144.87	5,902	6,858
144.36	5,646	3,913	144.88	5,907	6,917
144.37	5,651	3,970	144.89	5,912	6,976
144.38	5,656	4,026	144.90	5,917	7,035
144.39	5,661	4,083	144.91	5,922	7,095
144.40	5,666	4,140	144.92	5,927	7,154
144.41	5,671	4,196	144.93	5,932	7,213
144.42	5,676	4,253	144.94	5,937	7,272
144.43	5,681	4,310	144.95	5,942	7,332
144.44	5,686	4,367	144.96	5,947	7,391
144.45	5,691	4,424	144.97	5,952	7,451
144.46	5,696	4,480	144.98	5,957	7,510
144.47	5,701	4,537	144.99	5,962	7,570
144.48	5,706	4,594	145.00	5,967	7,630
144.49	5,711	4,652	145.01	5,972	7,689
144.50	5,717	4,709	145.02	5,977	7,749
144.51	5,722	4,766	145.03	5,983	7,809
144.52	5,727	4,823	145.04	5,988	7,869
144.53	5,732	4,880	145.05	5,993	7,929
144.54	5,737	4,938	145.06	5,998	7,989
144.55	5,742	4,995	145.07	6,003	8,049
144.56	5,747	5,053	145.08	6,009	8,109
144.57	5,752	5,110	145.09	6,014	8,169
144.58	5,757	5,168	145.10	6,019	8,229
144.59	5,762	5,225	145.11	6,024	8,289
144.60	5,767	5,283	145.12	6,029	8,349
144.61	5,772	5,341	145.13	6,034	8,410
144.62	5,777	5,398	145.14	6,040	8,470
144.63	5,782	5,456	145.15	6,045	8,530
144.64	5,787	5,514	145.16	6,050	8,591
144.65	5,792	5,572	145.17	6,055	8,651
144.66	5,797	5,630	145.18	6,060	8,712
144.67	5,802	5,688	145.19	6,066	8,773
144.68	5,807	5,746	145.20	6,071	8,833
144.69	5,812	5,804	145.21	6,076	8,894
144.70	5,817	5,862	145.22	6,081	8,955
144.71	5,822	5,920	145.23	6,086	9,016
144.72	5,827	5,978	145.24	6,092	9,077
144.73	5,832	6,037	145.25	6,097	9,138
144.74	5,837	6,095	145.26	6,102	9,199
144.75	5,842	6,154	145.27	6,107	9,260
144.76	5,847	6,212	145.28	6,112	9,321
144.77	5,852	6,270	145.29	6,118	9,382
144.78	5,857	6,329	145.30	6,123	9,443
144.79	5,862	6,388	145.31	6,128	9,504
144.80	5,867	6,446	145.32	6,133	9,566
144.81	5,872	6,505	145.33	6,138	9,627
144.82	5,877	6,564	145.34	6,143	9,688
144.83	5,882	6,622	145.35	6,149	9,750
144.84	5,887	6,681	145.36	6,154	9,811
144.85	5,892	6,740	145.37	6,159	9,873

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.38	6,164	9,935	145.90	6,434	13,210
145.39	6,169	9,996	145.91	6,439	13,274
145.40	6,175	10,058	145.92	6,444	13,339
145.41	6,180	10,120	145.93	6,450	13,403
145.42	6,185	10,182	145.94	6,455	13,468
145.43	6,190	10,243	145.95	6,460	13,532
145.44	6,195	10,305	145.96	6,465	13,597
145.45	6,201	10,367	145.97	6,470	13,662
145.46	6,206	10,429	145.98	6,476	13,726
145.47	6,211	10,491	145.99	6,481	13,791
145.48	6,216	10,554	146.00	6,486	13,856
145.49	6,221	10,616	146.01	6,491	13,921
145.50	6,227	10,678	146.02	6,497	13,986
145.51	6,232	10,740	146.03	6,502	14,051
145.52	6,237	10,803	146.04	6,507	14,116
145.53	6,242	10,865	146.05	6,513	14,181
145.54	6,247	10,927	146.06	6,518	14,246
145.55	6,252	10,990	146.07	6,523	14,311
145.56	6,258	11,052	146.08	6,529	14,377
145.57	6,263	11,115	146.09	6,534	14,442
145.58	6,268	11,178	146.10	6,539	14,507
145.59	6,273	11,240	146.11	6,545	14,573
145.60	6,278	11,303	146.12	6,550	14,638
145.61	6,284	11,366	146.13	6,555	14,704
145.62	6,289	11,429	146.14	6,560	14,769
145.63	6,294	11,492	146.15	6,566	14,835
145.64	6,299	11,555	146.16	6,571	14,901
145.65	6,304	11,618	146.17	6,576	14,966
145.66	6,310	11,681	146.18	6,582	15,032
145.67	6,315	11,744	146.19	6,587	15,098
145.68	6,320	11,807	146.20	6,592	15,164
145.69	6,325	11,870	146.21	6,598	15,230
145.70	6,330	11,934	146.22	6,603	15,296
145.71	6,335	11,997	146.23	6,608	15,362
145.72	6,341	12,060	146.24	6,614	15,428
145.73	6,346	12,124	146.25	6,619	15,494
145.74	6,351	12,187	146.26	6,624	15,560
145.75	6,356	12,251	146.27	6,630	15,627
145.76	6,361	12,314	146.28	6,635	15,693
145.77	6,367	12,378	146.29	6,640	15,759
145.78	6,372	12,442	146.30	6,646	15,826
145.79	6,377	12,505	146.31	6,651	15,892
145.80	6,382	12,569	146.32	6,656	15,959
145.81	6,387	12,633	146.33	6,662	16,025
145.82	6,393	12,697	146.34	6,667	16,092
145.83	6,398	12,761	146.35	6,672	16,159
145.84	6,403	12,825	146.36	6,678	16,226
145.85	6,408	12,889	146.37	6,683	16,292
145.86	6,413	12,953	146.38	6,688	16,359
145.87	6,419	13,017	146.39	6,693	16,426
145.88	6,424	13,082	146.40	6,699	16,493
145.89	6,429	13,146	146.41	6,704	16,560

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.42	6,709	16,627	146.94	6,986	20,188
146.43	6,715	16,694	146.95	6,991	20,258
146.44	6,720	16,761	146.96	6,997	20,328
146.45	6,725	16,829	146.97	7,002	20,398
146.46	6,731	16,896	146.98	7,007	20,468
146.47	6,736	16,963	146.99	7,013	20,538
146.48	6,741	17,031	147.00	7,018	20,608
146.49	6,747	17,098	147.01	7,023	20,678
146.50	6,752	17,166	147.02	7,029	20,749
146.51	6,757	17,233	147.03	7,034	20,819
146.52	6,763	17,301	147.04	7,040	20,889
146.53	6,768	17,368	147.05	7,045	20,960
146.54	6,773	17,436	147.06	7,051	21,030
146.55	6,779	17,504	147.07	7,056	21,101
146.56	6,784	17,572	147.08	7,062	21,171
146.57	6,789	17,640	147.09	7,067	21,242
146.58	6,795	17,707	147.10	7,073	21,313
146.59	6,800	17,775	147.11	7,078	21,383
146.60	6,805	17,843	147.12	7,083	21,454
146.61	6,811	17,912	147.13	7,089	21,525
146.62	6,816	17,980	147.14	7,094	21,596
146.63	6,821	18,048	147.15	7,100	21,667
146.64	6,826	18,116	147.16	7,105	21,738
146.65	6,832	18,184	147.17	7,111	21,809
146.66	6,837	18,253	147.18	7,116	21,880
146.67	6,842	18,321	147.19	7,122	21,951
146.68	6,848	18,390	147.20	7,127	22,023
146.69	6,853	18,458	147.21	7,132	22,094
146.70	6,858	18,527	147.22	7,138	22,165
146.71	6,864	18,595	147.23	7,143	22,237
146.72	6,869	18,664	147.24	7,149	22,308
146.73	6,874	18,733	147.25	7,154	22,380
146.74	6,880	18,801	147.26	7,160	22,451
146.75	6,885	18,870	147.27	7,165	22,523
146.76	6,890	18,939	147.28	7,171	22,595
146.77	6,896	19,008	147.29	7,176	22,666
146.78	6,901	19,077	147.30	7,182	22,738
146.79	6,906	19,146	147.31	7,187	22,810
146.80	6,912	19,215	147.32	7,192	22,882
146.81	6,917	19,284	147.33	7,198	22,954
146.82	6,922	19,353	147.34	7,203	23,026
146.83	6,928	19,423	147.35	7,209	23,098
146.84	6,933	19,492	147.36	7,214	23,170
146.85	6,938	19,561	147.37	7,220	23,242
146.86	6,944	19,631	147.38	7,225	23,314
146.87	6,949	19,700	147.39	7,231	23,387
146.88	6,954	19,770	147.40	7,236	23,459
146.89	6,959	19,839	147.41	7,241	23,531
146.90	6,965	19,909	147.42	7,247	23,604
146.91	6,970	19,979	147.43	7,252	23,676
146.92	6,975	20,048	147.44	7,258	23,749
146.93	6,981	20,118	147.45	7,263	23,821

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.46	7,269	23,894	147.98	7,552	27,747
147.47	7,274	23,967	147.99	7,558	27,823
147.48	7,280	24,040	148.00	7,563	27,899
147.49	7,285	24,112	148.01	7,569	27,974
147.50	7,291	24,185	148.02	7,575	28,050
147.51	7,296	24,258	148.03	7,581	28,126
147.52	7,301	24,331	148.04	7,586	28,202
147.53	7,307	24,404	148.05	7,592	28,277
147.54	7,312	24,477	148.06	7,598	28,353
147.55	7,318	24,550	148.07	7,604	28,429
147.56	7,323	24,624	148.08	7,610	28,506
147.57	7,329	24,697	148.09	7,616	28,582
147.58	7,334	24,770	148.10	7,622	28,658
147.59	7,340	24,844	148.11	7,627	28,734
147.60	7,345	24,917	148.12	7,633	28,810
147.61	7,350	24,990	148.13	7,639	28,887
147.62	7,356	25,064	148.14	7,645	28,963
147.63	7,361	25,138	148.15	7,651	29,040
147.64	7,367	25,211	148.16	7,657	29,116
147.65	7,372	25,285	148.17	7,663	29,193
147.66	7,378	25,359	148.18	7,669	29,269
147.67	7,383	25,432	148.19	7,674	29,346
147.68	7,389	25,506	148.20	7,680	29,423
147.69	7,394	25,580	148.21	7,686	29,500
147.70	7,400	25,654	148.22	7,692	29,577
147.71	7,405	25,728	148.23	7,698	29,654
147.72	7,410	25,802	148.24	7,704	29,731
147.73	7,416	25,876	148.25	7,710	29,808
147.74	7,421	25,951	148.26	7,715	29,885
147.75	7,427	26,025	148.27	7,721	29,962
147.76	7,432	26,099	148.28	7,727	30,039
147.77	7,438	26,174	148.29	7,733	30,117
147.78	7,443	26,248	148.30	7,739	30,194
147.79	7,449	26,322	148.31	7,745	30,271
147.80	7,454	26,397	148.32	7,751	30,349
147.81	7,459	26,471	148.33	7,756	30,426
147.82	7,465	26,546	148.34	7,762	30,504
147.83	7,470	26,621	148.35	7,768	30,582
147.84	7,476	26,695	148.36	7,774	30,659
147.85	7,481	26,770	148.37	7,780	30,737
147.86	7,487	26,845	148.38	7,786	30,815
147.87	7,492	26,920	148.39	7,792	30,893
147.88	7,498	26,995	148.40	7,798	30,971
147.89	7,503	27,070	148.41	7,803	31,049
147.90	7,509	27,145	148.42	7,809	31,127
147.91	7,514	27,220	148.43	7,815	31,205
147.92	7,519	27,295	148.44	7,821	31,283
147.93	7,525	27,371	148.45	7,827	31,361
147.94	7,530	27,446	148.46	7,833	31,440
147.95	7,536	27,521	148.47	7,839	31,518
147.96	7,541	27,597	148.48	7,844	31,596
147.97	7,547	27,672	148.49	7,850	31,675

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.50	7,856	31,753
148.51	7,862	31,832
148.52	7,868	31,911
148.53	7,874	31,989
148.54	7,880	32,068
148.55	7,885	32,147
148.56	7,891	32,226
148.57	7,897	32,305
148.58	7,903	32,384
148.59	7,909	32,463
148.60	7,915	32,542
148.61	7,921	32,621
148.62	7,927	32,700
148.63	7,932	32,780
148.64	7,938	32,859
148.65	7,944	32,938
148.66	7,950	33,018
148.67	7,956	33,097
148.68	7,962	33,177
148.69	7,968	33,257
148.70	7,973	33,336
148.71	7,979	33,416
148.72	7,985	33,496
148.73	7,991	33,576
148.74	7,997	33,656
148.75	8,003	33,736
148.76	8,009	33,816
148.77	8,014	33,896
148.78	8,020	33,976
148.79	8,026	34,056
148.80	8,032	34,137
148.81	8,038	34,217
148.82	8,044	34,297
148.83	8,050	34,378
148.84	8,056	34,458
148.85	8,061	34,539
148.86	8,067	34,620
148.87	8,073	34,700
148.88	8,079	34,781
148.89	8,085	34,862
148.90	8,091	34,943
148.91	8,097	35,024
148.92	8,102	35,105
148.93	8,108	35,186
148.94	8,114	35,267
148.95	**8,120**	**35,348**

Summary for Pond B-27: Basin #27

Inflow Area = 1.935 ac, 46.41% Impervious, Inflow Depth = 2.50" for Current 2 yr event
Inflow = 4.97 cfs @ 12.17 hrs, Volume= 0.403 af
Outflow = 1.61 cfs @ 12.45 hrs, Volume= 0.296 af, Atten= 68%, Lag= 16.7 min
Primary = 1.61 cfs @ 12.45 hrs, Volume= 0.296 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 171.73' @ 12.45 hrs Surf.Area= 3,461 sf Storage= 8,404 cf

Plug-Flow detention time= 203.7 min calculated for 0.296 af (73% of inflow)
Center-of-Mass det. time= 112.4 min (901.0 - 788.6)

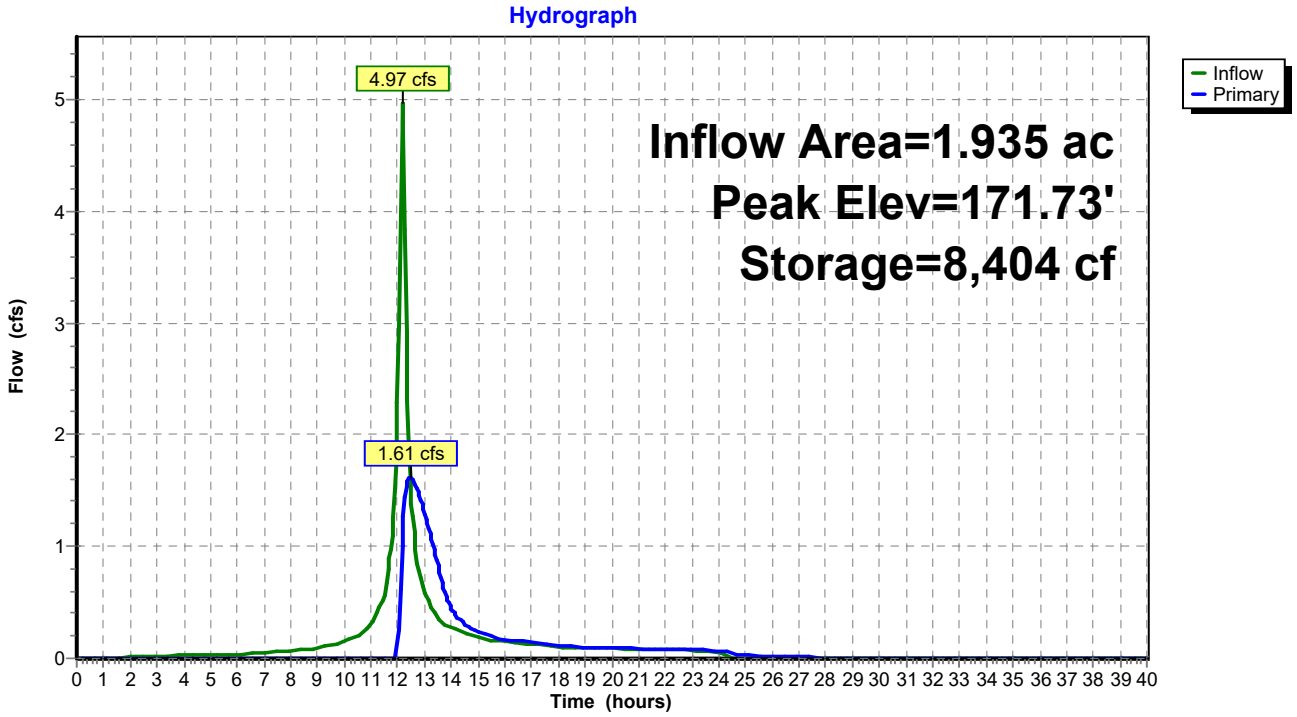
Volume	Invert	Avail.Storage	Storage Description
#1	167.35'	13,052 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
167.35	0	0	0
168.00	1,002	326	326
169.00	1,583	1,293	1,618
170.00	2,221	1,902	3,520
171.00	2,916	2,569	6,089
172.00	3,667	3,292	9,380
172.95	4,064	3,672	13,052

Device	Routing	Invert	Outlet Devices
#1	Primary	167.65'	**24.0" Round Culvert** L= 61.0' Ke= 0.500 Inlet / Outlet Invert= 167.65' / 165.16' S= 0.0408 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	170.47'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	171.75'	**2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	172.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	172.90'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.61 cfs @ 12.45 hrs HW=171.73' (Free Discharge)
- **1=Culvert** (Passes 1.61 cfs of 26.53 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.61 cfs @ 4.62 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
  - **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-27: Basin #27



Stage-Discharge for Pond B-27: Basin #27

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.35	0.00	167.87	0.00	168.39	0.00	168.91	0.00
167.36	0.00	167.88	0.00	168.40	0.00	168.92	0.00
167.37	0.00	167.89	0.00	168.41	0.00	168.93	0.00
167.38	0.00	167.90	0.00	168.42	0.00	168.94	0.00
167.39	0.00	167.91	0.00	168.43	0.00	168.95	0.00
167.40	0.00	167.92	0.00	168.44	0.00	168.96	0.00
167.41	0.00	167.93	0.00	168.45	0.00	168.97	0.00
167.42	0.00	167.94	0.00	168.46	0.00	168.98	0.00
167.43	0.00	167.95	0.00	168.47	0.00	168.99	0.00
167.44	0.00	167.96	0.00	168.48	0.00	169.00	0.00
167.45	0.00	167.97	0.00	168.49	0.00	169.01	0.00
167.46	0.00	167.98	0.00	168.50	0.00	169.02	0.00
167.47	0.00	167.99	0.00	168.51	0.00	169.03	0.00
167.48	0.00	168.00	0.00	168.52	0.00	169.04	0.00
167.49	0.00	168.01	0.00	168.53	0.00	169.05	0.00
167.50	0.00	168.02	0.00	168.54	0.00	169.06	0.00
167.51	0.00	168.03	0.00	168.55	0.00	169.07	0.00
167.52	0.00	168.04	0.00	168.56	0.00	169.08	0.00
167.53	0.00	168.05	0.00	168.57	0.00	169.09	0.00
167.54	0.00	168.06	0.00	168.58	0.00	169.10	0.00
167.55	0.00	168.07	0.00	168.59	0.00	169.11	0.00
167.56	0.00	168.08	0.00	168.60	0.00	169.12	0.00
167.57	0.00	168.09	0.00	168.61	0.00	169.13	0.00
167.58	0.00	168.10	0.00	168.62	0.00	169.14	0.00
167.59	0.00	168.11	0.00	168.63	0.00	169.15	0.00
167.60	0.00	168.12	0.00	168.64	0.00	169.16	0.00
167.61	0.00	168.13	0.00	168.65	0.00	169.17	0.00
167.62	0.00	168.14	0.00	168.66	0.00	169.18	0.00
167.63	0.00	168.15	0.00	168.67	0.00	169.19	0.00
167.64	0.00	168.16	0.00	168.68	0.00	169.20	0.00
167.65	0.00	168.17	0.00	168.69	0.00	169.21	0.00
167.66	0.00	168.18	0.00	168.70	0.00	169.22	0.00
167.67	0.00	168.19	0.00	168.71	0.00	169.23	0.00
167.68	0.00	168.20	0.00	168.72	0.00	169.24	0.00
167.69	0.00	168.21	0.00	168.73	0.00	169.25	0.00
167.70	0.00	168.22	0.00	168.74	0.00	169.26	0.00
167.71	0.00	168.23	0.00	168.75	0.00	169.27	0.00
167.72	0.00	168.24	0.00	168.76	0.00	169.28	0.00
167.73	0.00	168.25	0.00	168.77	0.00	169.29	0.00
167.74	0.00	168.26	0.00	168.78	0.00	169.30	0.00
167.75	0.00	168.27	0.00	168.79	0.00	169.31	0.00
167.76	0.00	168.28	0.00	168.80	0.00	169.32	0.00
167.77	0.00	168.29	0.00	168.81	0.00	169.33	0.00
167.78	0.00	168.30	0.00	168.82	0.00	169.34	0.00
167.79	0.00	168.31	0.00	168.83	0.00	169.35	0.00
167.80	0.00	168.32	0.00	168.84	0.00	169.36	0.00
167.81	0.00	168.33	0.00	168.85	0.00	169.37	0.00
167.82	0.00	168.34	0.00	168.86	0.00	169.38	0.00
167.83	0.00	168.35	0.00	168.87	0.00	169.39	0.00
167.84	0.00	168.36	0.00	168.88	0.00	169.40	0.00
167.85	0.00	168.37	0.00	168.89	0.00	169.41	0.00
167.86	0.00	168.38	0.00	168.90	0.00	169.42	0.00

Stage-Discharge for Pond B-27: Basin #27 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
169.43	0.00	169.95	0.00	170.47	0.00	170.99	0.72
169.44	0.00	169.96	0.00	170.48	0.00	171.00	0.74
169.45	0.00	169.97	0.00	170.49	0.00	171.01	0.76
169.46	0.00	169.98	0.00	170.50	0.00	171.02	0.78
169.47	0.00	169.99	0.00	170.51	0.01	171.03	0.80
169.48	0.00	170.00	0.00	170.52	0.01	171.04	0.82
169.49	0.00	170.01	0.00	170.53	0.01	171.05	0.84
169.50	0.00	170.02	0.00	170.54	0.02	171.06	0.85
169.51	0.00	170.03	0.00	170.55	0.02	171.07	0.87
169.52	0.00	170.04	0.00	170.56	0.03	171.08	0.89
169.53	0.00	170.05	0.00	170.57	0.04	171.09	0.91
169.54	0.00	170.06	0.00	170.58	0.04	171.10	0.92
169.55	0.00	170.07	0.00	170.59	0.05	171.11	0.94
169.56	0.00	170.08	0.00	170.60	0.06	171.12	0.95
169.57	0.00	170.09	0.00	170.61	0.07	171.13	0.96
169.58	0.00	170.10	0.00	170.62	0.08	171.14	0.98
169.59	0.00	170.11	0.00	170.63	0.09	171.15	0.99
169.60	0.00	170.12	0.00	170.64	0.10	171.16	1.00
169.61	0.00	170.13	0.00	170.65	0.11	171.17	1.02
169.62	0.00	170.14	0.00	170.66	0.12	171.18	1.03
169.63	0.00	170.15	0.00	170.67	0.13	171.19	1.05
169.64	0.00	170.16	0.00	170.68	0.15	171.20	1.06
169.65	0.00	170.17	0.00	170.69	0.16	171.21	1.07
169.66	0.00	170.18	0.00	170.70	0.17	171.22	1.08
169.67	0.00	170.19	0.00	170.71	0.19	171.23	1.10
169.68	0.00	170.20	0.00	170.72	0.20	171.24	1.11
169.69	0.00	170.21	0.00	170.73	0.22	171.25	1.12
169.70	0.00	170.22	0.00	170.74	0.23	171.26	1.14
169.71	0.00	170.23	0.00	170.75	0.25	171.27	1.15
169.72	0.00	170.24	0.00	170.76	0.27	171.28	1.16
169.73	0.00	170.25	0.00	170.77	0.28	171.29	1.17
169.74	0.00	170.26	0.00	170.78	0.30	171.30	1.18
169.75	0.00	170.27	0.00	170.79	0.32	171.31	1.20
169.76	0.00	170.28	0.00	170.80	0.34	171.32	1.21
169.77	0.00	170.29	0.00	170.81	0.36	171.33	1.22
169.78	0.00	170.30	0.00	170.82	0.37	171.34	1.23
169.79	0.00	170.31	0.00	170.83	0.39	171.35	1.24
169.80	0.00	170.32	0.00	170.84	0.41	171.36	1.25
169.81	0.00	170.33	0.00	170.85	0.43	171.37	1.27
169.82	0.00	170.34	0.00	170.86	0.45	171.38	1.28
169.83	0.00	170.35	0.00	170.87	0.47	171.39	1.29
169.84	0.00	170.36	0.00	170.88	0.49	171.40	1.30
169.85	0.00	170.37	0.00	170.89	0.51	171.41	1.31
169.86	0.00	170.38	0.00	170.90	0.53	171.42	1.32
169.87	0.00	170.39	0.00	170.91	0.55	171.43	1.33
169.88	0.00	170.40	0.00	170.92	0.57	171.44	1.34
169.89	0.00	170.41	0.00	170.93	0.59	171.45	1.35
169.90	0.00	170.42	0.00	170.94	0.61	171.46	1.36
169.91	0.00	170.43	0.00	170.95	0.63	171.47	1.37
169.92	0.00	170.44	0.00	170.96	0.66	171.48	1.38
169.93	0.00	170.45	0.00	170.97	0.68	171.49	1.39
169.94	0.00	170.46	0.00	170.98	0.70	171.50	1.40

Stage-Discharge for Pond B-27: Basin #27 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
171.51	1.41	172.03	2.80	172.55	8.64
171.52	1.42	172.04	2.86	172.56	8.83
171.53	1.43	172.05	2.92	172.57	9.02
171.54	1.44	172.06	2.98	172.58	9.21
171.55	1.45	172.07	3.04	172.59	9.41
171.56	1.46	172.08	3.10	172.60	9.60
171.57	1.47	172.09	3.16	172.61	9.80
171.58	1.48	172.10	3.22	172.62	10.00
171.59	1.49	172.11	3.28	172.63	10.20
171.60	1.50	172.12	3.35	172.64	10.40
171.61	1.51	172.13	3.41	172.65	10.61
171.62	1.52	172.14	3.47	172.66	10.81
171.63	1.53	172.15	3.54	172.67	11.02
171.64	1.54	172.16	3.60	172.68	11.23
171.65	1.55	172.17	3.67	172.69	11.44
171.66	1.56	172.18	3.74	172.70	11.65
171.67	1.56	172.19	3.80	172.71	11.87
171.68	1.57	172.20	3.87	172.72	12.08
171.69	1.58	172.21	3.94	172.73	12.30
171.70	1.59	172.22	4.01	172.74	12.52
171.71	1.60	172.23	4.08	172.75	12.74
171.72	1.61	172.24	4.15	172.76	12.96
171.73	1.62	172.25	4.22	172.77	13.18
171.74	1.63	172.26	4.30	172.78	13.41
171.75	1.64	172.27	4.40	172.79	13.63
171.76	1.65	172.28	4.50	172.80	13.86
171.77	1.67	172.29	4.61	172.81	14.09
171.78	1.69	172.30	4.72	172.82	14.32
171.79	1.72	172.31	4.84	172.83	14.55
171.80	1.75	172.32	4.97	172.84	14.78
171.81	1.78	172.33	5.09	172.85	15.02
171.82	1.81	172.34	5.22	172.86	15.25
171.83	1.85	172.35	5.36	172.87	15.49
171.84	1.89	172.36	5.50	172.88	15.72
171.85	1.92	172.37	5.64	172.89	15.96
171.86	1.96	172.38	5.78	172.90	16.20
171.87	2.00	172.39	5.93	172.91	16.56
171.88	2.05	172.40	6.08	172.92	17.02
171.89	2.09	172.41	6.24	172.93	17.54
171.90	2.13	172.42	6.39	172.94	18.11
171.91	2.18	172.43	6.55	172.95	**18.73**
171.92	2.23	172.44	6.71		
171.93	2.27	172.45	6.88		
171.94	2.32	172.46	7.04		
171.95	2.37	172.47	7.21		
171.96	2.42	172.48	7.38		
171.97	2.48	172.49	7.56		
171.98	2.53	172.50	7.73		
171.99	2.58	172.51	7.91		
172.00	2.64	172.52	8.09		
172.01	2.69	172.53	8.27		
172.02	2.75	172.54	8.46		

Stage-Area-Storage for Pond B-27: Basin #27

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.35	0	0	167.87	802	208
167.36	15	0	167.88	817	217
167.37	31	0	167.89	832	225
167.38	46	1	167.90	848	233
167.39	62	1	167.91	863	242
167.40	77	2	167.92	879	250
167.41	92	3	167.93	894	259
167.42	108	4	167.94	910	268
167.43	123	5	167.95	925	277
167.44	139	6	167.96	940	287
167.45	154	8	167.97	956	296
167.46	170	9	167.98	971	306
167.47	185	11	167.99	987	316
167.48	200	13	168.00	1,002	326
167.49	216	15	168.01	1,008	336
167.50	231	17	168.02	1,014	346
167.51	247	20	168.03	1,019	356
167.52	262	22	168.04	1,025	366
167.53	277	25	168.05	1,031	376
167.54	293	28	168.06	1,037	387
167.55	308	31	168.07	1,043	397
167.56	324	34	168.08	1,048	408
167.57	339	37	168.09	1,054	418
167.58	355	41	168.10	1,060	429
167.59	370	44	168.11	1,066	439
167.60	385	48	168.12	1,072	450
167.61	401	52	168.13	1,078	461
167.62	416	56	168.14	1,083	472
167.63	432	60	168.15	1,089	482
167.64	447	65	168.16	1,095	493
167.65	462	69	168.17	1,101	504
167.66	478	74	168.18	1,107	515
167.67	493	79	168.19	1,112	527
167.68	509	84	168.20	1,118	538
167.69	524	89	168.21	1,124	549
167.70	540	94	168.22	1,130	560
167.71	555	100	168.23	1,136	571
167.72	570	106	168.24	1,141	583
167.73	586	111	168.25	1,147	594
167.74	601	117	168.26	1,153	606
167.75	617	123	168.27	1,159	617
167.76	632	130	168.28	1,165	629
167.77	647	136	168.29	1,170	641
167.78	663	143	168.30	1,176	652
167.79	678	149	168.31	1,182	664
167.80	694	156	168.32	1,188	676
167.81	709	163	168.33	1,194	688
167.82	725	170	168.34	1,200	700
167.83	740	178	168.35	1,205	712
167.84	755	185	168.36	1,211	724
167.85	771	193	168.37	1,217	736
167.86	786	200	168.38	1,223	748

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.39	1,229	761	168.91	1,531	1,478
168.40	1,234	773	168.92	1,537	1,493
168.41	1,240	785	168.93	1,542	1,509
168.42	1,246	798	168.94	1,548	1,524
168.43	1,252	810	168.95	1,554	1,540
168.44	1,258	823	168.96	1,560	1,555
168.45	1,263	835	168.97	1,566	1,571
168.46	1,269	848	168.98	1,571	1,587
168.47	1,275	861	168.99	1,577	1,602
168.48	1,281	874	169.00	1,583	1,618
168.49	1,287	886	169.01	1,589	1,634
168.50	1,293	899	169.02	1,596	1,650
168.51	1,298	912	169.03	1,602	1,666
168.52	1,304	925	169.04	1,609	1,682
168.53	1,310	938	169.05	1,615	1,698
168.54	1,316	951	169.06	1,621	1,714
168.55	1,322	965	169.07	1,628	1,731
168.56	1,327	978	169.08	1,634	1,747
168.57	1,333	991	169.09	1,640	1,763
168.58	1,339	1,005	169.10	1,647	1,780
168.59	1,345	1,018	169.11	1,653	1,796
168.60	1,351	1,031	169.12	1,660	1,813
168.61	1,356	1,045	169.13	1,666	1,829
168.62	1,362	1,059	169.14	1,672	1,846
168.63	1,368	1,072	169.15	1,679	1,863
168.64	1,374	1,086	169.16	1,685	1,880
168.65	1,380	1,100	169.17	1,691	1,896
168.66	1,385	1,114	169.18	1,698	1,913
168.67	1,391	1,127	169.19	1,704	1,930
168.68	1,397	1,141	169.20	1,711	1,948
168.69	1,403	1,155	169.21	1,717	1,965
168.70	1,409	1,169	169.22	1,723	1,982
168.71	1,415	1,184	169.23	1,730	1,999
168.72	1,420	1,198	169.24	1,736	2,016
168.73	1,426	1,212	169.25	1,743	2,034
168.74	1,432	1,226	169.26	1,749	2,051
168.75	1,438	1,241	169.27	1,755	2,069
168.76	1,444	1,255	169.28	1,762	2,086
168.77	1,449	1,269	169.29	1,768	2,104
168.78	1,455	1,284	169.30	1,774	2,122
168.79	1,461	1,299	169.31	1,781	2,140
168.80	1,467	1,313	169.32	1,787	2,157
168.81	1,473	1,328	169.33	1,794	2,175
168.82	1,478	1,343	169.34	1,800	2,193
168.83	1,484	1,357	169.35	1,806	2,211
168.84	1,490	1,372	169.36	1,813	2,229
168.85	1,496	1,387	169.37	1,819	2,248
168.86	1,502	1,402	169.38	1,825	2,266
168.87	1,507	1,417	169.39	1,832	2,284
168.88	1,513	1,432	169.40	1,838	2,302
168.89	1,519	1,448	169.41	1,845	2,321
168.90	1,525	1,463	169.42	1,851	2,339

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.43	1,857	2,358	169.95	2,189	3,410
169.44	1,864	2,376	169.96	2,195	3,432
169.45	1,870	2,395	169.97	2,202	3,454
169.46	1,876	2,414	169.98	2,208	3,476
169.47	1,883	2,433	169.99	2,215	3,498
169.48	1,889	2,451	170.00	2,221	3,520
169.49	1,896	2,470	170.01	2,228	3,542
169.50	1,902	2,489	170.02	2,235	3,565
169.51	1,908	2,508	170.03	2,242	3,587
169.52	1,915	2,528	170.04	2,249	3,610
169.53	1,921	2,547	170.05	2,256	3,632
169.54	1,928	2,566	170.06	2,263	3,655
169.55	1,934	2,585	170.07	2,270	3,677
169.56	1,940	2,605	170.08	2,277	3,700
169.57	1,947	2,624	170.09	2,284	3,723
169.58	1,953	2,644	170.10	2,290	3,746
169.59	1,959	2,663	170.11	2,297	3,769
169.60	1,966	2,683	170.12	2,304	3,792
169.61	1,972	2,702	170.13	2,311	3,815
169.62	1,979	2,722	170.14	2,318	3,838
169.63	1,985	2,742	170.15	2,325	3,861
169.64	1,991	2,762	170.16	2,332	3,884
169.65	1,998	2,782	170.17	2,339	3,908
169.66	2,004	2,802	170.18	2,346	3,931
169.67	2,010	2,822	170.19	2,353	3,955
169.68	2,017	2,842	170.20	2,360	3,978
169.69	2,023	2,862	170.21	2,367	4,002
169.70	2,030	2,883	170.22	2,374	4,026
169.71	2,036	2,903	170.23	2,381	4,049
169.72	2,042	2,923	170.24	2,388	4,073
169.73	2,049	2,944	170.25	2,395	4,097
169.74	2,055	2,964	170.26	2,402	4,121
169.75	2,062	2,985	170.27	2,409	4,145
169.76	2,068	3,005	170.28	2,416	4,169
169.77	2,074	3,026	170.29	2,423	4,193
169.78	2,081	3,047	170.30	2,429	4,218
169.79	2,087	3,068	170.31	2,436	4,242
169.80	2,093	3,089	170.32	2,443	4,266
169.81	2,100	3,110	170.33	2,450	4,291
169.82	2,106	3,131	170.34	2,457	4,315
169.83	2,113	3,152	170.35	2,464	4,340
169.84	2,119	3,173	170.36	2,471	4,365
169.85	2,125	3,194	170.37	2,478	4,389
169.86	2,132	3,215	170.38	2,485	4,414
169.87	2,138	3,237	170.39	2,492	4,439
169.88	2,144	3,258	170.40	2,499	4,464
169.89	2,151	3,280	170.41	2,506	4,489
169.90	2,157	3,301	170.42	2,513	4,514
169.91	2,164	3,323	170.43	2,520	4,539
169.92	2,170	3,345	170.44	2,527	4,565
169.93	2,176	3,366	170.45	2,534	4,590
169.94	2,183	3,388	170.46	2,541	4,615

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
170.47	2,548	4,641	170.99	2,909	6,060
170.48	2,555	4,666	171.00	2,916	6,089
170.49	2,562	4,692	171.01	2,924	6,118
170.50	2,569	4,718	171.02	2,931	6,147
170.51	2,575	4,743	171.03	2,939	6,176
170.52	2,582	4,769	171.04	2,946	6,206
170.53	2,589	4,795	171.05	2,954	6,235
170.54	2,596	4,821	171.06	2,961	6,265
170.55	2,603	4,847	171.07	2,969	6,295
170.56	2,610	4,873	171.08	2,976	6,324
170.57	2,617	4,899	171.09	2,984	6,354
170.58	2,624	4,925	171.10	2,991	6,384
170.59	2,631	4,952	171.11	2,999	6,414
170.60	2,638	4,978	171.12	3,006	6,444
170.61	2,645	5,004	171.13	3,014	6,474
170.62	2,652	5,031	171.14	3,021	6,504
170.63	2,659	5,057	171.15	3,029	6,534
170.64	2,666	5,084	171.16	3,036	6,565
170.65	2,673	5,111	171.17	3,044	6,595
170.66	2,680	5,137	171.18	3,051	6,626
170.67	2,687	5,164	171.19	3,059	6,656
170.68	2,694	5,191	171.20	3,066	6,687
170.69	2,701	5,218	171.21	3,074	6,718
170.70	2,707	5,245	171.22	3,081	6,748
170.71	2,714	5,272	171.23	3,089	6,779
170.72	2,721	5,299	171.24	3,096	6,810
170.73	2,728	5,327	171.25	3,104	6,841
170.74	2,735	5,354	171.26	3,111	6,872
170.75	2,742	5,381	171.27	3,119	6,903
170.76	2,749	5,409	171.28	3,126	6,935
170.77	2,756	5,436	171.29	3,134	6,966
170.78	2,763	5,464	171.30	3,141	6,997
170.79	2,770	5,492	171.31	3,149	7,029
170.80	2,777	5,519	171.32	3,156	7,060
170.81	2,784	5,547	171.33	3,164	7,092
170.82	2,791	5,575	171.34	3,171	7,123
170.83	2,798	5,603	171.35	3,179	7,155
170.84	2,805	5,631	171.36	3,186	7,187
170.85	2,812	5,659	171.37	3,194	7,219
170.86	2,819	5,687	171.38	3,201	7,251
170.87	2,826	5,715	171.39	3,209	7,283
170.88	2,833	5,744	171.40	3,216	7,315
170.89	2,840	5,772	171.41	3,224	7,347
170.90	2,847	5,801	171.42	3,231	7,380
170.91	2,853	5,829	171.43	3,239	7,412
170.92	2,860	5,858	171.44	3,246	7,444
170.93	2,867	5,886	171.45	3,254	7,477
170.94	2,874	5,915	171.46	3,261	7,509
170.95	2,881	5,944	171.47	3,269	7,542
170.96	2,888	5,973	171.48	3,276	7,575
170.97	2,895	6,001	171.49	3,284	7,608
170.98	2,902	6,030	171.50	3,292	7,641

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
171.51	3,299	7,673	172.03	3,680	9,490
171.52	3,307	7,707	172.04	3,684	9,527
171.53	3,314	7,740	172.05	3,688	9,564
171.54	3,322	7,773	172.06	3,692	9,601
171.55	3,329	7,806	172.07	3,696	9,638
171.56	3,337	7,839	172.08	3,700	9,675
171.57	3,344	7,873	172.09	3,705	9,712
171.58	3,352	7,906	172.10	3,709	9,749
171.59	3,359	7,940	172.11	3,713	9,786
171.60	3,367	7,973	172.12	3,717	9,823
171.61	3,374	8,007	172.13	3,721	9,860
171.62	3,382	8,041	172.14	3,726	9,898
171.63	3,389	8,075	172.15	3,730	9,935
171.64	3,397	8,109	172.16	3,734	9,972
171.65	3,404	8,143	172.17	3,738	10,010
171.66	3,412	8,177	172.18	3,742	10,047
171.67	3,419	8,211	172.19	3,746	10,084
171.68	3,427	8,245	172.20	3,751	10,122
171.69	3,434	8,279	172.21	3,755	10,159
171.70	3,442	8,314	172.22	3,759	10,197
171.71	3,449	8,348	172.23	3,763	10,235
171.72	3,457	8,383	172.24	3,767	10,272
171.73	3,464	8,417	172.25	3,771	10,310
171.74	3,472	8,452	172.26	3,776	10,348
171.75	3,479	8,487	172.27	3,780	10,385
171.76	3,487	8,522	172.28	3,784	10,423
171.77	3,494	8,557	172.29	3,788	10,461
171.78	3,502	8,592	172.30	3,792	10,499
171.79	3,509	8,627	172.31	3,797	10,537
171.80	3,517	8,662	172.32	3,801	10,575
171.81	3,524	8,697	172.33	3,805	10,613
171.82	3,532	8,732	172.34	3,809	10,651
171.83	3,539	8,768	172.35	3,813	10,689
171.84	3,547	8,803	172.36	3,817	10,727
171.85	3,554	8,839	172.37	3,822	10,766
171.86	3,562	8,874	172.38	3,826	10,804
171.87	3,569	8,910	172.39	3,830	10,842
171.88	3,577	8,946	172.40	3,834	10,880
171.89	3,584	8,981	172.41	3,838	10,919
171.90	3,592	9,017	172.42	3,843	10,957
171.91	3,599	9,053	172.43	3,847	10,996
171.92	3,607	9,089	172.44	3,851	11,034
171.93	3,614	9,125	172.45	3,855	11,073
171.94	3,622	9,161	172.46	3,859	11,111
171.95	3,629	9,198	172.47	3,863	11,150
171.96	3,637	9,234	172.48	3,868	11,188
171.97	3,644	9,270	172.49	3,872	11,227
171.98	3,652	9,307	172.50	3,876	11,266
171.99	3,659	9,344	172.51	3,880	11,305
172.00	3,667	9,380	172.52	3,884	11,343
172.01	3,671	9,417	172.53	3,888	11,382
172.02	3,675	9,454	172.54	3,893	11,421

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
172.55	3,897	11,460
172.56	3,901	11,499
172.57	3,905	11,538
172.58	3,909	11,577
172.59	3,914	11,616
172.60	3,918	11,656
172.61	3,922	11,695
172.62	3,926	11,734
172.63	3,930	11,773
172.64	3,934	11,813
172.65	3,939	11,852
172.66	3,943	11,891
172.67	3,947	11,931
172.68	3,951	11,970
172.69	3,955	12,010
172.70	3,960	12,049
172.71	3,964	12,089
172.72	3,968	12,129
172.73	3,972	12,168
172.74	3,976	12,208
172.75	3,980	12,248
172.76	3,985	12,288
172.77	3,989	12,328
172.78	3,993	12,368
172.79	3,997	12,407
172.80	4,001	12,447
172.81	4,005	12,488
172.82	4,010	12,528
172.83	4,014	12,568
172.84	4,018	12,608
172.85	4,022	12,648
172.86	4,026	12,688
172.87	4,031	12,729
172.88	4,035	12,769
172.89	4,039	12,809
172.90	4,043	12,850
172.91	4,047	12,890
172.92	4,051	12,931
172.93	4,056	12,971
172.94	4,060	13,012
172.95	**4,064**	**13,052**

Summary for Pond B-28: Basin #28

Inflow Area = 2.333 ac, 34.85% Impervious, Inflow Depth = 1.83" for Current 2 yr event
Inflow = 4.30 cfs @ 12.18 hrs, Volume= 0.355 af
Outflow = 3.47 cfs @ 12.25 hrs, Volume= 0.276 af, Atten= 19%, Lag= 4.7 min
Primary = 3.47 cfs @ 12.25 hrs, Volume= 0.276 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 168.44' @ 12.25 hrs Surf.Area= 2,794 sf Storage= 4,946 cf

Plug-Flow detention time= 162.0 min calculated for 0.275 af (77% of inflow)
Center-of-Mass det. time= 72.2 min (875.6 - 803.4)

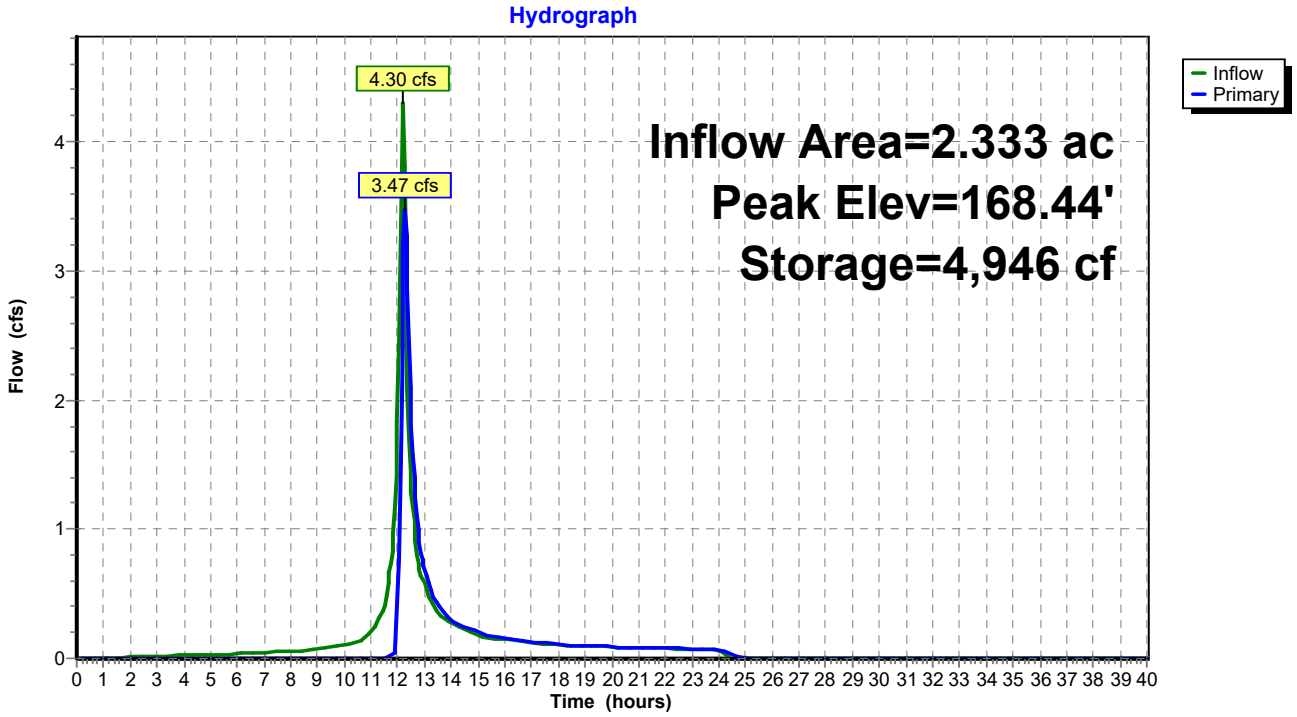
Volume	Invert	Avail.Storage	Storage Description
#1	165.65'	12,318 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.65	0	0	0
166.00	1,145	200	200
167.00	1,778	1,462	1,662
168.00	2,465	2,122	3,783
169.00	3,210	2,838	6,621
170.00	4,012	3,611	10,232
170.50	4,334	2,087	12,318

Device	Routing	Invert	Outlet Devices
#1	Primary	165.65'	**18.0" Round Culvert** L= 186.0' Ke= 0.500 Inlet / Outlet Invert= 165.65' / 163.70' S= 0.0105 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.87'	**30.0" W x 9.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	169.50'	**1.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	170.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	170.49'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.46 cfs @ 12.25 hrs HW=168.44' (Free Discharge)
- **1=Culvert** (Passes 3.46 cfs of 11.53 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.46 cfs @ 2.42 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
  - **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-28: Basin #28



Stage-Discharge for Pond B-28: Basin #28

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.00
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.00
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.00
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.00
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.00
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.00
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.00
165.82	0.00	166.34	0.00	166.86	0.00	167.38	0.00
165.83	0.00	166.35	0.00	166.87	0.00	167.39	0.00
165.84	0.00	166.36	0.00	166.88	0.00	167.40	0.00
165.85	0.00	166.37	0.00	166.89	0.00	167.41	0.00
165.86	0.00	166.38	0.00	166.90	0.00	167.42	0.00
165.87	0.00	166.39	0.00	166.91	0.00	167.43	0.00
165.88	0.00	166.40	0.00	166.92	0.00	167.44	0.00
165.89	0.00	166.41	0.00	166.93	0.00	167.45	0.00
165.90	0.00	166.42	0.00	166.94	0.00	167.46	0.00
165.91	0.00	166.43	0.00	166.95	0.00	167.47	0.00
165.92	0.00	166.44	0.00	166.96	0.00	167.48	0.00
165.93	0.00	166.45	0.00	166.97	0.00	167.49	0.00
165.94	0.00	166.46	0.00	166.98	0.00	167.50	0.00
165.95	0.00	166.47	0.00	166.99	0.00	167.51	0.00
165.96	0.00	166.48	0.00	167.00	0.00	167.52	0.00
165.97	0.00	166.49	0.00	167.01	0.00	167.53	0.00
165.98	0.00	166.50	0.00	167.02	0.00	167.54	0.00
165.99	0.00	166.51	0.00	167.03	0.00	167.55	0.00
166.00	0.00	166.52	0.00	167.04	0.00	167.56	0.00
166.01	0.00	166.53	0.00	167.05	0.00	167.57	0.00
166.02	0.00	166.54	0.00	167.06	0.00	167.58	0.00
166.03	0.00	166.55	0.00	167.07	0.00	167.59	0.00
166.04	0.00	166.56	0.00	167.08	0.00	167.60	0.00
166.05	0.00	166.57	0.00	167.09	0.00	167.61	0.00
166.06	0.00	166.58	0.00	167.10	0.00	167.62	0.00
166.07	0.00	166.59	0.00	167.11	0.00	167.63	0.00
166.08	0.00	166.60	0.00	167.12	0.00	167.64	0.00
166.09	0.00	166.61	0.00	167.13	0.00	167.65	0.00
166.10	0.00	166.62	0.00	167.14	0.00	167.66	0.00
166.11	0.00	166.63	0.00	167.15	0.00	167.67	0.00
166.12	0.00	166.64	0.00	167.16	0.00	167.68	0.00
166.13	0.00	166.65	0.00	167.17	0.00	167.69	0.00
166.14	0.00	166.66	0.00	167.18	0.00	167.70	0.00
166.15	0.00	166.67	0.00	167.19	0.00	167.71	0.00
166.16	0.00	166.68	0.00	167.20	0.00	167.72	0.00

Stage-Discharge for Pond B-28: Basin #28 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.73	0.00	168.25	1.88	168.77	6.39	169.29	9.18
167.74	0.00	168.26	1.95	168.78	6.45	169.30	9.22
167.75	0.00	168.27	2.03	168.79	6.52	169.31	9.27
167.76	0.00	168.28	2.11	168.80	6.58	169.32	9.31
167.77	0.00	168.29	2.18	168.81	6.65	169.33	9.36
167.78	0.00	168.30	2.26	168.82	6.71	169.34	9.40
167.79	0.00	168.31	2.34	168.83	6.78	169.35	9.44
167.80	0.00	168.32	2.42	168.84	6.84	169.36	9.49
167.81	0.00	168.33	2.50	168.85	6.90	169.37	9.53
167.82	0.00	168.34	2.59	168.86	6.96	169.38	9.57
167.83	0.00	168.35	2.67	168.87	7.02	169.39	9.62
167.84	0.00	168.36	2.75	168.88	7.08	169.40	9.66
167.85	0.00	168.37	2.84	168.89	7.14	169.41	9.70
167.86	0.00	168.38	2.92	168.90	7.20	169.42	9.74
167.87	0.00	168.39	3.01	168.91	7.26	169.43	9.79
167.88	0.01	168.40	3.10	168.92	7.32	169.44	9.83
167.89	0.02	168.41	3.18	168.93	7.37	169.45	9.87
167.90	0.04	168.42	3.27	168.94	7.43	169.46	9.91
167.91	0.06	168.43	3.36	168.95	7.49	169.47	9.95
167.92	0.09	168.44	3.45	168.96	7.54	169.48	9.99
167.93	0.12	168.45	3.54	168.97	7.60	169.49	10.03
167.94	0.15	168.46	3.64	168.98	7.65	169.50	10.08
167.95	0.18	168.47	3.73	168.99	7.71	169.51	10.12
167.96	0.22	168.48	3.82	169.00	7.76	169.52	10.17
167.97	0.25	168.49	3.92	169.01	7.81	169.53	10.21
167.98	0.29	168.50	4.01	169.02	7.87	169.54	10.26
167.99	0.33	168.51	4.11	169.03	7.92	169.55	10.31
168.00	0.38	168.52	4.21	169.04	7.97	169.56	10.36
168.01	0.42	168.53	4.30	169.05	8.02	169.57	10.42
168.02	0.47	168.54	4.40	169.06	8.08	169.58	10.47
168.03	0.51	168.55	4.50	169.07	8.13	169.59	10.52
168.04	0.56	168.56	4.60	169.08	8.18	169.60	10.58
168.05	0.61	168.57	4.70	169.09	8.23	169.61	10.63
168.06	0.66	168.58	4.80	169.10	8.28	169.62	10.69
168.07	0.72	168.59	4.90	169.11	8.33	169.63	10.74
168.08	0.77	168.60	5.01	169.12	8.38	169.64	10.80
168.09	0.83	168.61	5.11	169.13	8.43	169.65	10.85
168.10	0.89	168.62	5.21	169.14	8.48	169.66	10.91
168.11	0.94	168.63	5.31	169.15	8.52	169.67	10.97
168.12	1.00	168.64	5.40	169.16	8.57	169.68	11.02
168.13	1.06	168.65	5.49	169.17	8.62	169.69	11.08
168.14	1.13	168.66	5.57	169.18	8.67	169.70	11.14
168.15	1.19	168.67	5.65	169.19	8.72	169.71	11.20
168.16	1.25	168.68	5.73	169.20	8.76	169.72	11.26
168.17	1.32	168.69	5.81	169.21	8.81	169.73	11.32
168.18	1.39	168.70	5.89	169.22	8.86	169.74	11.38
168.19	1.45	168.71	5.96	169.23	8.90	169.75	11.43
168.20	1.52	168.72	6.04	169.24	8.95	169.76	11.49
168.21	1.59	168.73	6.11	169.25	9.00	169.77	11.55
168.22	1.66	168.74	6.18	169.26	9.04	169.78	11.61
168.23	1.73	168.75	6.25	169.27	9.09	169.79	11.67
168.24	1.81	168.76	6.32	169.28	9.13	169.80	11.74

Stage-Discharge for Pond B-28: Basin #28 (continued)

Elevation (feet)	Primary (cfs)
169.81	11.80
169.82	11.86
169.83	11.92
169.84	11.98
169.85	12.04
169.86	12.10
169.87	12.16
169.88	12.23
169.89	12.29
169.90	12.35
169.91	12.41
169.92	12.47
169.93	12.54
169.94	12.60
169.95	12.66
169.96	12.73
169.97	12.79
169.98	12.85
169.99	12.91
170.00	12.98
170.01	13.05
170.02	13.14
170.03	13.24
170.04	13.34
170.05	13.44
170.06	13.55
170.07	13.66
170.08	13.78
170.09	13.90
170.10	14.02
170.11	14.15
170.12	14.21
170.13	14.22
170.14	14.24
170.15	14.25
170.16	14.27
170.17	14.28
170.18	14.29
170.19	14.31
170.20	14.32
170.21	14.34
170.22	14.35
170.23	14.37
170.24	14.38
170.25	14.39
170.26	14.41
170.27	14.42
170.28	14.44
170.29	14.45
170.30	14.47
170.31	14.48
170.32	14.49
170.33	14.51
170.34	14.52
170.35	14.54
170.36	14.55
170.37	14.56
170.38	14.58
170.39	14.59
170.40	14.61
170.41	14.62
170.42	14.63
170.43	14.65
170.44	14.66
170.45	14.68
170.46	14.69
170.47	14.70
170.48	14.72
170.49	14.73
170.50	**14.86**

Stage-Area-Storage for Pond B-28: Basin #28

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.65	0	0	166.17	1,253	404
165.66	33	0	166.18	1,259	417
165.67	65	1	166.19	1,265	429
165.68	98	1	166.20	1,272	442
165.69	131	3	166.21	1,278	455
165.70	164	4	166.22	1,284	468
165.71	196	6	166.23	1,291	480
165.72	229	8	166.24	1,297	493
165.73	262	10	166.25	1,303	506
165.74	294	13	166.26	1,310	519
165.75	327	16	166.27	1,316	533
165.76	360	20	166.28	1,322	546
165.77	393	24	166.29	1,329	559
165.78	425	28	166.30	1,335	572
165.79	458	32	166.31	1,341	586
165.80	491	37	166.32	1,348	599
165.81	523	42	166.33	1,354	613
165.82	556	47	166.34	1,360	626
165.83	589	53	166.35	1,367	640
165.84	622	59	166.36	1,373	654
165.85	654	65	166.37	1,379	667
165.86	687	72	166.38	1,386	681
165.87	720	79	166.39	1,392	695
165.88	752	87	166.40	1,398	709
165.89	785	94	166.41	1,405	723
165.90	818	102	166.42	1,411	737
165.91	851	111	166.43	1,417	751
165.92	883	119	166.44	1,424	765
165.93	916	128	166.45	1,430	780
165.94	949	138	166.46	1,436	794
165.95	981	147	166.47	1,443	808
165.96	1,014	157	166.48	1,449	823
165.97	1,047	167	166.49	1,455	837
165.98	1,080	178	166.50	1,462	852
165.99	1,112	189	166.51	1,468	867
166.00	1,145	200	166.52	1,474	881
166.01	1,151	212	166.53	1,480	896
166.02	1,158	223	166.54	1,487	911
166.03	1,164	235	166.55	1,493	926
166.04	1,170	247	166.56	1,499	941
166.05	1,177	258	166.57	1,506	956
166.06	1,183	270	166.58	1,512	971
166.07	1,189	282	166.59	1,518	986
166.08	1,196	294	166.60	1,525	1,001
166.09	1,202	306	166.61	1,531	1,017
166.10	1,208	318	166.62	1,537	1,032
166.11	1,215	330	166.63	1,544	1,047
166.12	1,221	342	166.64	1,550	1,063
166.13	1,227	355	166.65	1,556	1,078
166.14	1,234	367	166.66	1,563	1,094
166.15	1,240	379	166.67	1,569	1,110
166.16	1,246	392	166.68	1,575	1,125

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.69	1,582	1,141	167.21	1,922	2,050
166.70	1,588	1,157	167.22	1,929	2,070
166.71	1,594	1,173	167.23	1,936	2,089
166.72	1,601	1,189	167.24	1,943	2,108
166.73	1,607	1,205	167.25	1,950	2,128
166.74	1,613	1,221	167.26	1,957	2,147
166.75	1,620	1,237	167.27	1,963	2,167
166.76	1,626	1,253	167.28	1,970	2,187
166.77	1,632	1,270	167.29	1,977	2,206
166.78	1,639	1,286	167.30	1,984	2,226
166.79	1,645	1,302	167.31	1,991	2,246
166.80	1,651	1,319	167.32	1,998	2,266
166.81	1,658	1,335	167.33	2,005	2,286
166.82	1,664	1,352	167.34	2,012	2,306
166.83	1,670	1,369	167.35	2,018	2,326
166.84	1,677	1,385	167.36	2,025	2,346
166.85	1,683	1,402	167.37	2,032	2,367
166.86	1,689	1,419	167.38	2,039	2,387
166.87	1,696	1,436	167.39	2,046	2,408
166.88	1,702	1,453	167.40	2,053	2,428
166.89	1,708	1,470	167.41	2,060	2,449
166.90	1,715	1,487	167.42	2,067	2,469
166.91	1,721	1,504	167.43	2,073	2,490
166.92	1,727	1,522	167.44	2,080	2,511
166.93	1,734	1,539	167.45	2,087	2,532
166.94	1,740	1,556	167.46	2,094	2,552
166.95	1,746	1,574	167.47	2,101	2,573
166.96	1,753	1,591	167.48	2,108	2,594
166.97	1,759	1,609	167.49	2,115	2,616
166.98	1,765	1,626	167.50	2,122	2,637
166.99	1,772	1,644	167.51	2,128	2,658
167.00	1,778	1,662	167.52	2,135	2,679
167.01	1,785	1,680	167.53	2,142	2,701
167.02	1,792	1,698	167.54	2,149	2,722
167.03	1,799	1,716	167.55	2,156	2,744
167.04	1,805	1,734	167.56	2,163	2,765
167.05	1,812	1,752	167.57	2,170	2,787
167.06	1,819	1,770	167.58	2,176	2,809
167.07	1,826	1,788	167.59	2,183	2,830
167.08	1,833	1,806	167.60	2,190	2,852
167.09	1,840	1,825	167.61	2,197	2,874
167.10	1,847	1,843	167.62	2,204	2,896
167.11	1,854	1,862	167.63	2,211	2,918
167.12	1,860	1,880	167.64	2,218	2,940
167.13	1,867	1,899	167.65	2,225	2,963
167.14	1,874	1,918	167.66	2,231	2,985
167.15	1,881	1,936	167.67	2,238	3,007
167.16	1,888	1,955	167.68	2,245	3,030
167.17	1,895	1,974	167.69	2,252	3,052
167.18	1,902	1,993	167.70	2,259	3,075
167.19	1,909	2,012	167.71	2,266	3,097
167.20	1,915	2,031	167.72	2,273	3,120

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.73	2,280	3,143	168.25	2,651	4,423
167.74	2,286	3,166	168.26	2,659	4,449
167.75	2,293	3,189	168.27	2,666	4,476
167.76	2,300	3,212	168.28	2,674	4,503
167.77	2,307	3,235	168.29	2,681	4,530
167.78	2,314	3,258	168.30	2,689	4,556
167.79	2,321	3,281	168.31	2,696	4,583
167.80	2,328	3,304	168.32	2,703	4,610
167.81	2,334	3,327	168.33	2,711	4,637
167.82	2,341	3,351	168.34	2,718	4,665
167.83	2,348	3,374	168.35	2,726	4,692
167.84	2,355	3,398	168.36	2,733	4,719
167.85	2,362	3,421	168.37	2,741	4,746
167.86	2,369	3,445	168.38	2,748	4,774
167.87	2,376	3,469	168.39	2,756	4,801
167.88	2,383	3,493	168.40	2,763	4,829
167.89	2,389	3,516	168.41	2,770	4,857
167.90	2,396	3,540	168.42	2,778	4,884
167.91	2,403	3,564	168.43	2,785	4,912
167.92	2,410	3,588	168.44	2,793	4,940
167.93	2,417	3,613	168.45	2,800	4,968
167.94	2,424	3,637	168.46	2,808	4,996
167.95	2,431	3,661	168.47	2,815	5,024
167.96	2,438	3,685	168.48	2,823	5,052
167.97	2,444	3,710	168.49	2,830	5,081
167.98	2,451	3,734	168.50	2,838	5,109
167.99	2,458	3,759	168.51	2,845	5,137
168.00	2,465	3,783	168.52	2,852	5,166
168.01	2,472	3,808	168.53	2,860	5,194
168.02	2,480	3,833	168.54	2,867	5,223
168.03	2,487	3,858	168.55	2,875	5,252
168.04	2,495	3,883	168.56	2,882	5,281
168.05	2,502	3,908	168.57	2,890	5,309
168.06	2,510	3,933	168.58	2,897	5,338
168.07	2,517	3,958	168.59	2,905	5,367
168.08	2,525	3,983	168.60	2,912	5,396
168.09	2,532	4,008	168.61	2,919	5,426
168.10	2,539	4,034	168.62	2,927	5,455
168.11	2,547	4,059	168.63	2,934	5,484
168.12	2,554	4,085	168.64	2,942	5,514
168.13	2,562	4,110	168.65	2,949	5,543
168.14	2,569	4,136	168.66	2,957	5,573
168.15	2,577	4,162	168.67	2,964	5,602
168.16	2,584	4,187	168.68	2,972	5,632
168.17	2,592	4,213	168.69	2,979	5,662
168.18	2,599	4,239	168.70	2,987	5,691
168.19	2,607	4,265	168.71	2,994	5,721
168.20	2,614	4,291	168.72	3,001	5,751
168.21	2,621	4,317	168.73	3,009	5,781
168.22	2,629	4,344	168.74	3,016	5,811
168.23	2,636	4,370	168.75	3,024	5,842
168.24	2,644	4,396	168.76	3,031	5,872

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.77	3,039	5,902	169.29	3,443	7,585
168.78	3,046	5,933	169.30	3,451	7,620
168.79	3,054	5,963	169.31	3,459	7,655
168.80	3,061	5,994	169.32	3,467	7,689
168.81	3,068	6,024	169.33	3,475	7,724
168.82	3,076	6,055	169.34	3,483	7,759
168.83	3,083	6,086	169.35	3,491	7,793
168.84	3,091	6,117	169.36	3,499	7,828
168.85	3,098	6,148	169.37	3,507	7,863
168.86	3,106	6,179	169.38	3,515	7,899
168.87	3,113	6,210	169.39	3,523	7,934
168.88	3,121	6,241	169.40	3,531	7,969
168.89	3,128	6,272	169.41	3,539	8,004
168.90	3,136	6,304	169.42	3,547	8,040
168.91	3,143	6,335	169.43	3,555	8,075
168.92	3,150	6,366	169.44	3,563	8,111
168.93	3,158	6,398	169.45	3,571	8,147
168.94	3,165	6,430	169.46	3,579	8,182
168.95	3,173	6,461	169.47	3,587	8,218
168.96	3,180	6,493	169.48	3,595	8,254
168.97	3,188	6,525	169.49	3,603	8,290
168.98	3,195	6,557	169.50	3,611	8,326
168.99	3,203	6,589	169.51	3,619	8,362
169.00	3,210	6,621	169.52	3,627	8,399
169.01	3,218	6,653	169.53	3,635	8,435
169.02	3,226	6,685	169.54	3,643	8,471
169.03	3,234	6,718	169.55	3,651	8,508
169.04	3,242	6,750	169.56	3,659	8,544
169.05	3,250	6,782	169.57	3,667	8,581
169.06	3,258	6,815	169.58	3,675	8,618
169.07	3,266	6,848	169.59	3,683	8,654
169.08	3,274	6,880	169.60	3,691	8,691
169.09	3,282	6,913	169.61	3,699	8,728
169.10	3,290	6,946	169.62	3,707	8,765
169.11	3,298	6,979	169.63	3,715	8,802
169.12	3,306	7,012	169.64	3,723	8,840
169.13	3,314	7,045	169.65	3,731	8,877
169.14	3,322	7,078	169.66	3,739	8,914
169.15	3,330	7,111	169.67	3,747	8,952
169.16	3,338	7,145	169.68	3,755	8,989
169.17	3,346	7,178	169.69	3,763	9,027
169.18	3,354	7,212	169.70	3,771	9,064
169.19	3,362	7,245	169.71	3,779	9,102
169.20	3,370	7,279	169.72	3,787	9,140
169.21	3,378	7,313	169.73	3,795	9,178
169.22	3,386	7,346	169.74	3,803	9,216
169.23	3,394	7,380	169.75	3,812	9,254
169.24	3,402	7,414	169.76	3,820	9,292
169.25	3,411	7,448	169.77	3,828	9,330
169.26	3,419	7,483	169.78	3,836	9,369
169.27	3,427	7,517	169.79	3,844	9,407
169.28	3,435	7,551	169.80	3,852	9,446

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

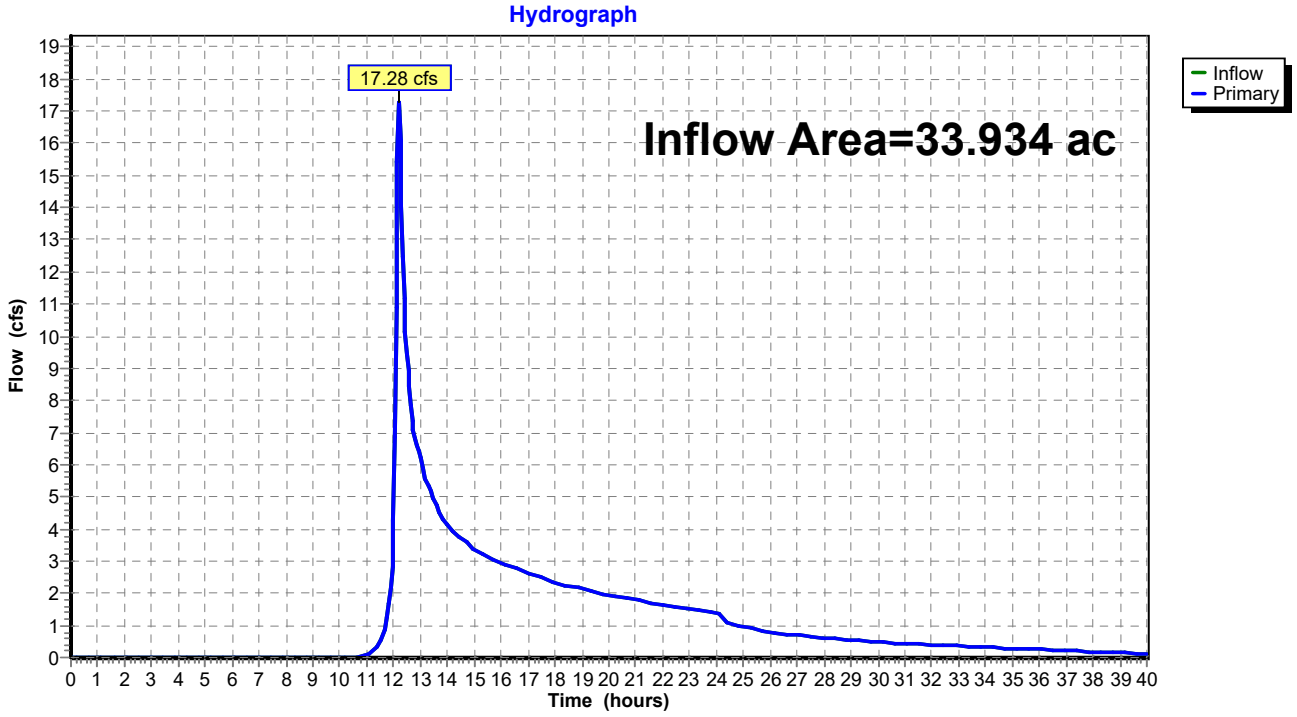
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.81	3,860	9,484
169.82	3,868	9,523
169.83	3,876	9,561
169.84	3,884	9,600
169.85	3,892	9,639
169.86	3,900	9,678
169.87	3,908	9,717
169.88	3,916	9,756
169.89	3,924	9,795
169.90	3,932	9,835
169.91	3,940	9,874
169.92	3,948	9,913
169.93	3,956	9,953
169.94	3,964	9,993
169.95	3,972	10,032
169.96	3,980	10,072
169.97	3,988	10,112
169.98	3,996	10,152
169.99	4,004	10,192
170.00	4,012	10,232
170.01	4,018	10,272
170.02	4,025	10,312
170.03	4,031	10,353
170.04	4,038	10,393
170.05	4,044	10,433
170.06	4,051	10,474
170.07	4,057	10,514
170.08	4,064	10,555
170.09	4,070	10,596
170.10	4,076	10,636
170.11	4,083	10,677
170.12	4,089	10,718
170.13	4,096	10,759
170.14	4,102	10,800
170.15	4,109	10,841
170.16	4,115	10,882
170.17	4,121	10,923
170.18	4,128	10,964
170.19	4,134	11,006
170.20	4,141	11,047
170.21	4,147	11,089
170.22	4,154	11,130
170.23	4,160	11,172
170.24	4,167	11,213
170.25	4,173	11,255
170.26	4,179	11,297
170.27	4,186	11,339
170.28	4,192	11,380
170.29	4,199	11,422
170.30	4,205	11,464
170.31	4,212	11,507
170.32	4,218	11,549
170.33	4,225	11,591
170.34	4,231	11,633
170.35	4,237	11,676
170.36	4,244	11,718
170.37	4,250	11,760
170.38	4,257	11,803
170.39	4,263	11,846
170.40	4,270	11,888
170.41	4,276	11,931
170.42	4,282	11,974
170.43	4,289	12,017
170.44	4,295	12,059
170.45	4,302	12,102
170.46	4,308	12,146
170.47	4,315	12,189
170.48	4,321	12,232
170.49	4,328	12,275
170.50	**4,334**	**12,318**

Summary for Link PDA-2: Proposed Drainage Area #2

Inflow Area = 33.934 ac, 26.90% Impervious, Inflow Depth > 1.34" for Current 2 yr event
Inflow = 17.28 cfs @ 12.21 hrs, Volume= 3.799 af
Primary = 17.28 cfs @ 12.21 hrs, Volume= 3.799 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-2: Proposed Drainage Area #2



Summary for Subcatchment 18l: PDA-18 (impervious)

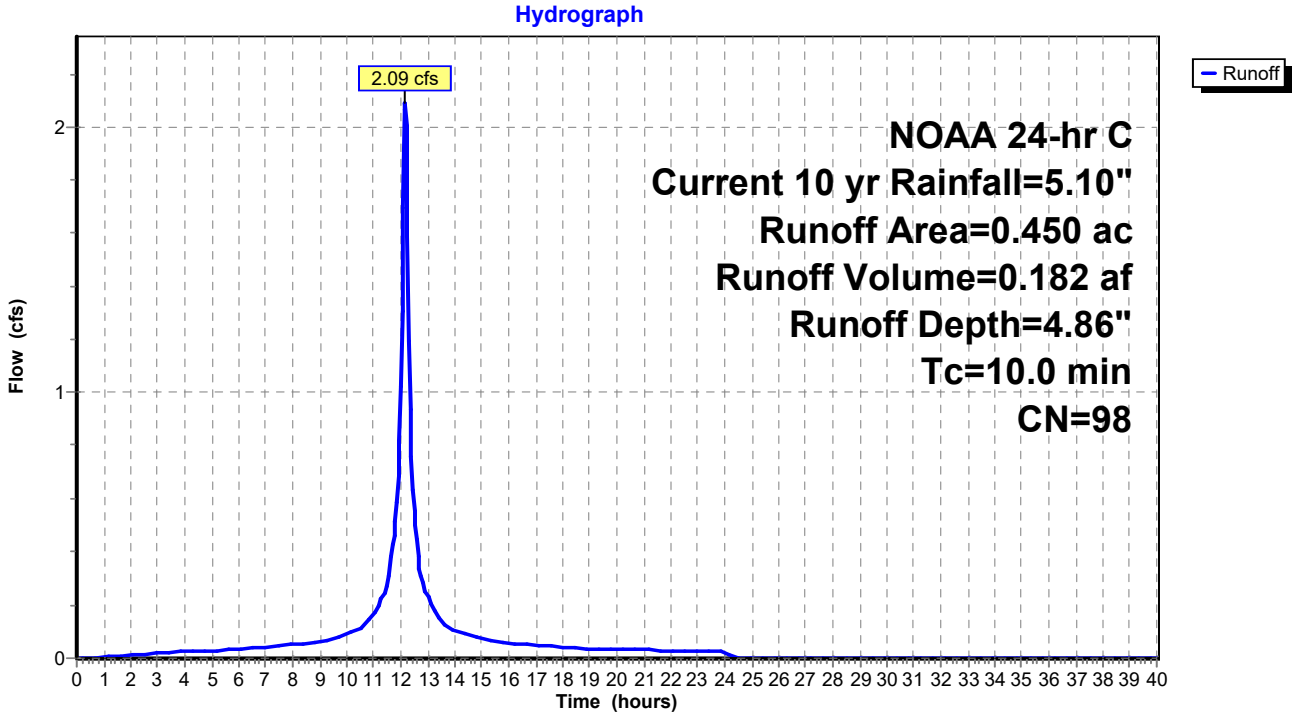
Runoff = 2.09 cfs @ 12.17 hrs, Volume= 0.182 af, Depth= 4.86"
Routed to Pond B-18 : Basin #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.450	98	Weighted Average
	0.450		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 18l: PDA-18 (impervious)



Summary for Subcatchment 18P: PDA-18 (pervious)

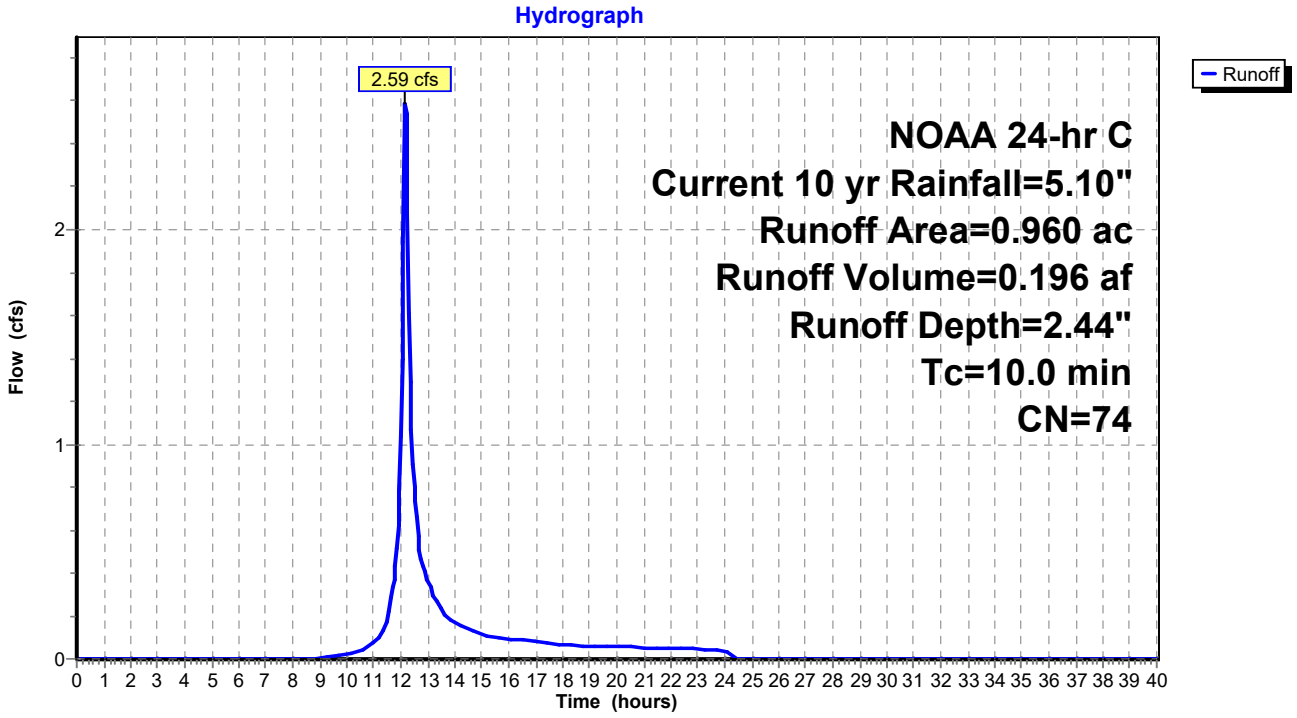
Runoff = 2.59 cfs @ 12.18 hrs, Volume= 0.196 af, Depth= 2.44"
Routed to Pond B-18 : Basin #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.960	74	>75% Grass cover, Good, HSG C
0.960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 18P: PDA-18 (pervious)



Summary for Subcatchment 19l: PDA-19 (impervious)

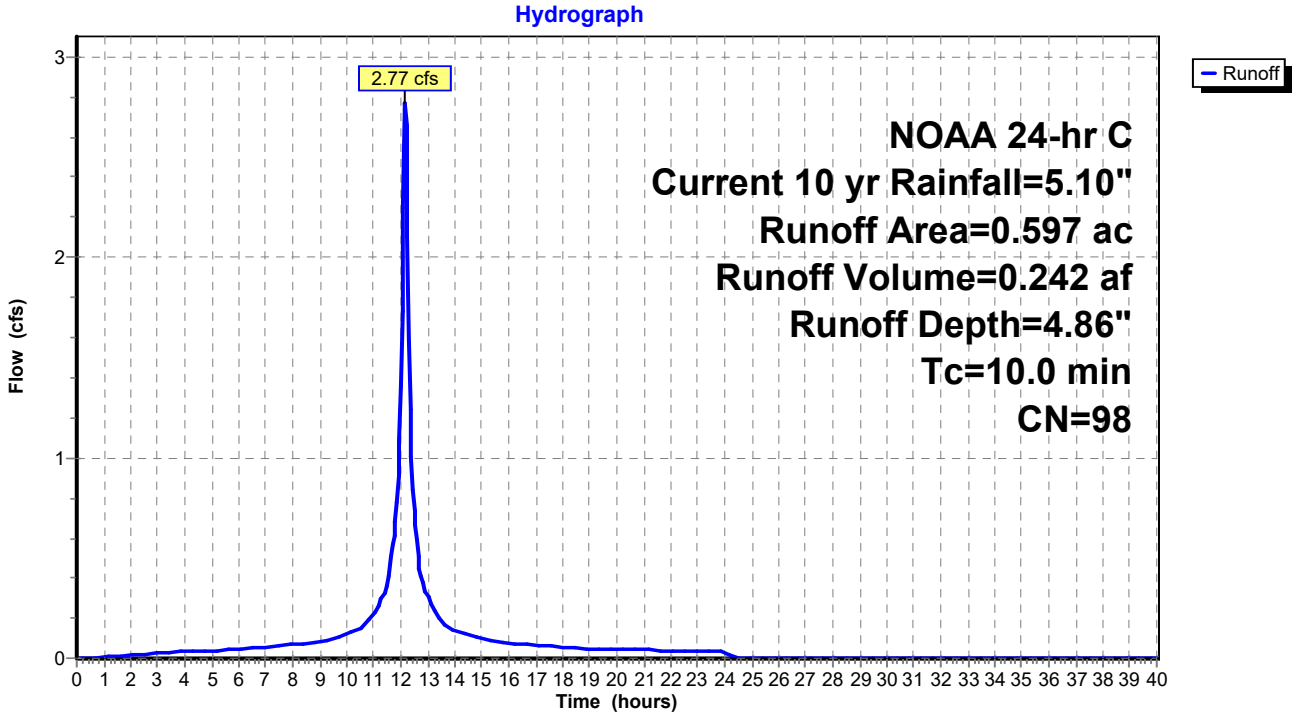
Runoff = 2.77 cfs @ 12.17 hrs, Volume= 0.242 af, Depth= 4.86"
Routed to Pond B-19 : Basin #19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.132	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.015	98	Concrete, HSG C
	0.597	98	Weighted Average
	0.597		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19l: PDA-19 (impervious)



Summary for Subcatchment 19P: PDA-19 (pervious)

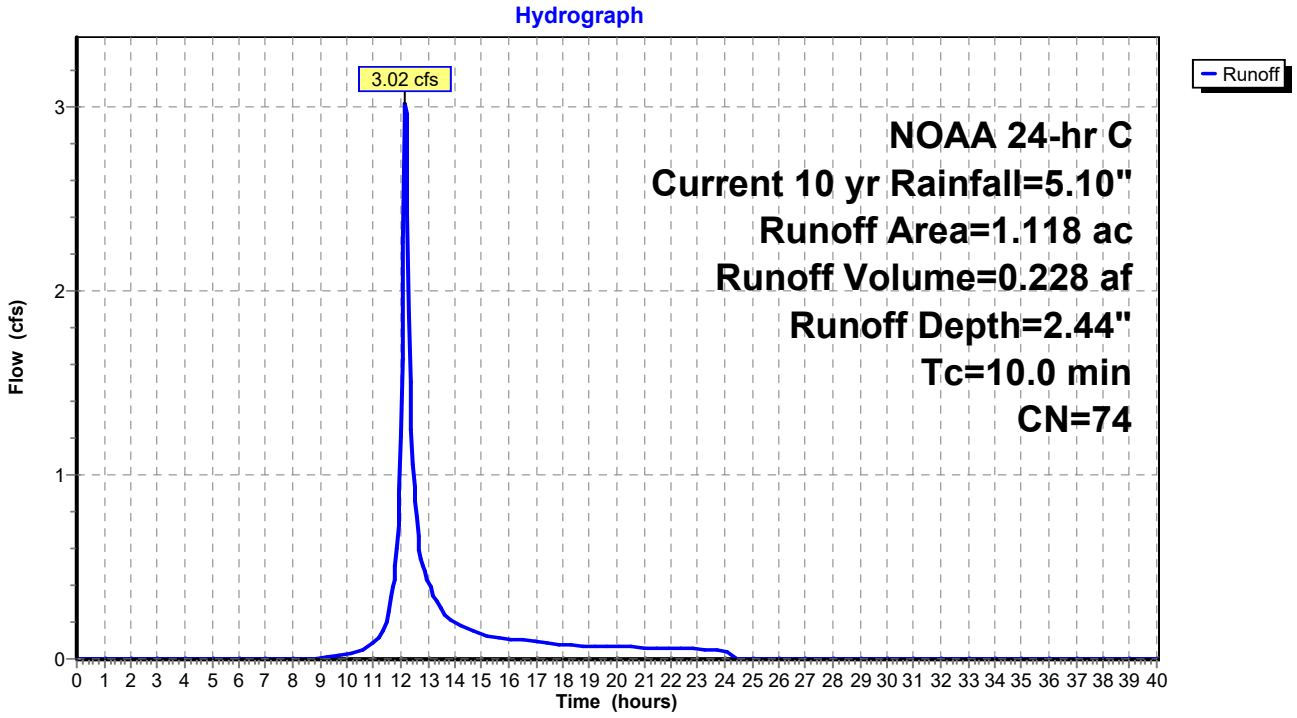
Runoff = 3.02 cfs @ 12.18 hrs, Volume= 0.228 af, Depth= 2.44"
Routed to Pond B-19 : Basin #19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.118	74	>75% Grass cover, Good, HSG C
1.118		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19P: PDA-19 (pervious)



Summary for Subcatchment 20I: PDA-20 (impervious)

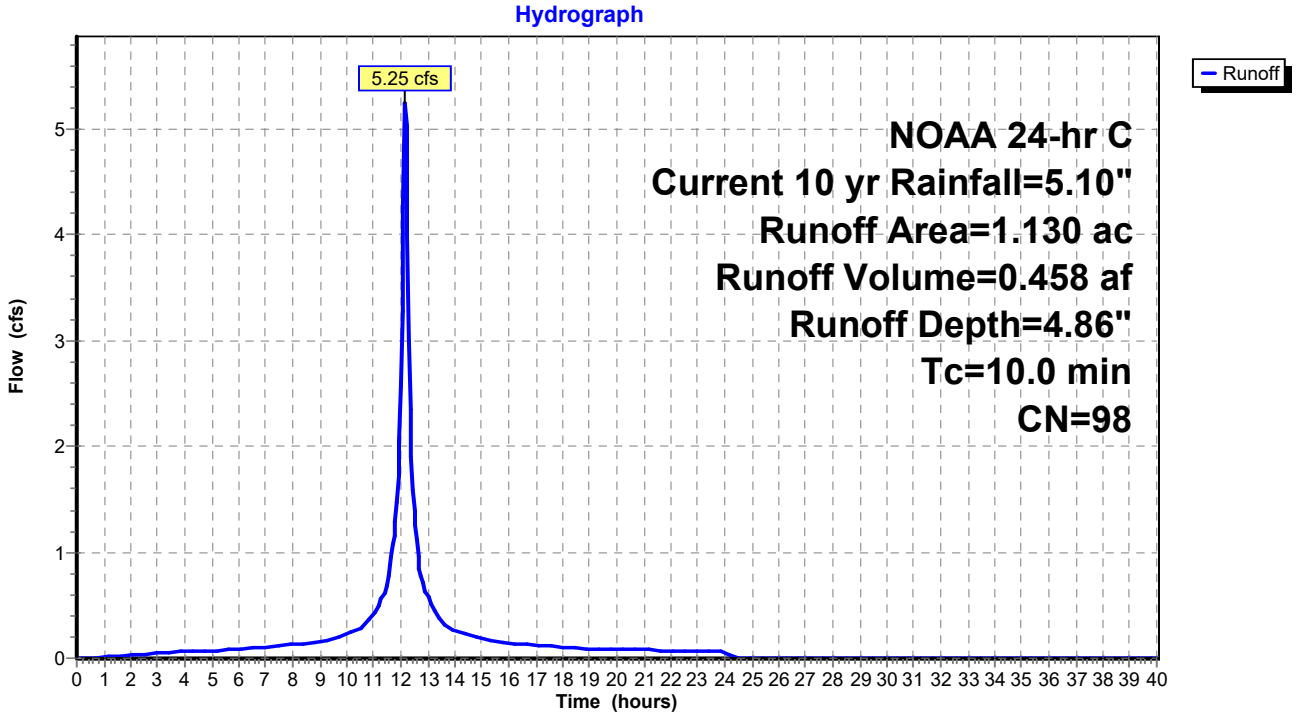
Runoff = 5.25 cfs @ 12.17 hrs, Volume= 0.458 af, Depth= 4.86"
Routed to Pond B-20 : Basin #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.572	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.108	98	Concrete, HSC C
	1.130	98	Weighted Average
	1.130		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 20I: PDA-20 (impervious)



Summary for Subcatchment 20P: PDA-20 (pervious)

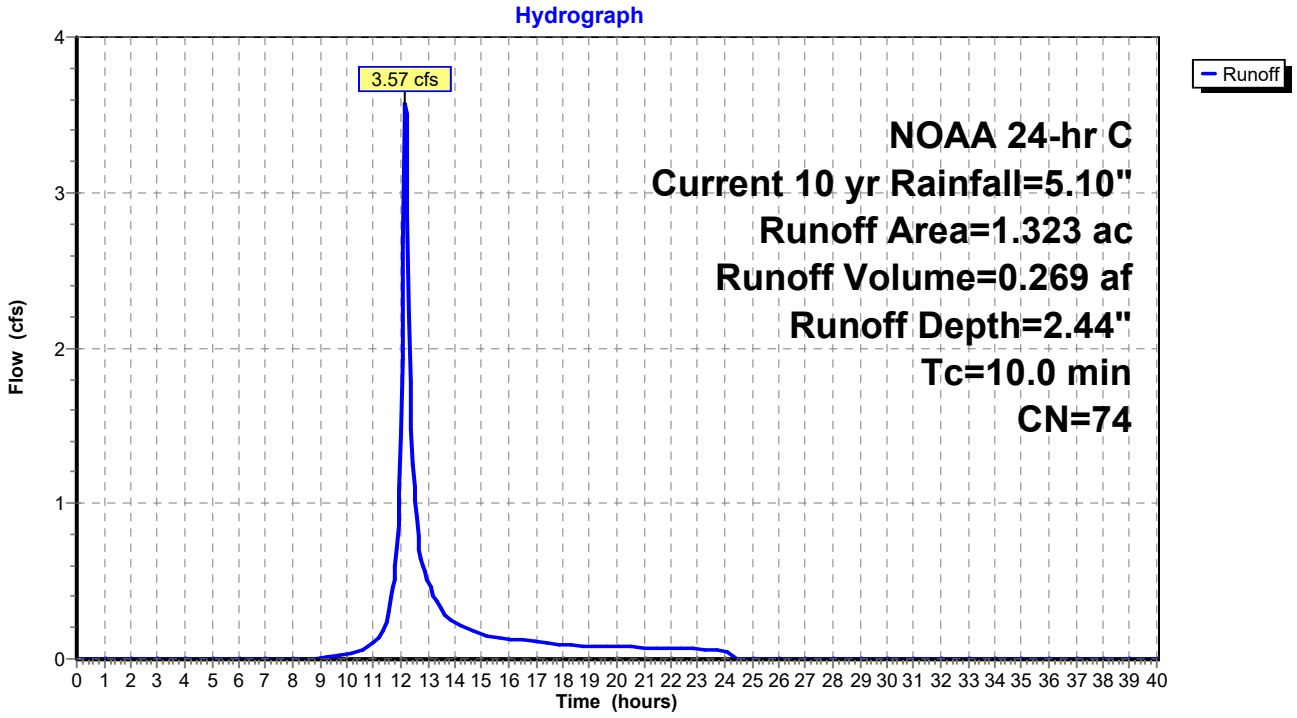
Runoff = 3.57 cfs @ 12.18 hrs, Volume= 0.269 af, Depth= 2.44"
Routed to Pond B-20 : Basin #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.323	74	>75% Grass cover, Good, HSG C
1.323		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 20P: PDA-20 (pervious)



Summary for Subcatchment 21I: PDA-21 (impervious)

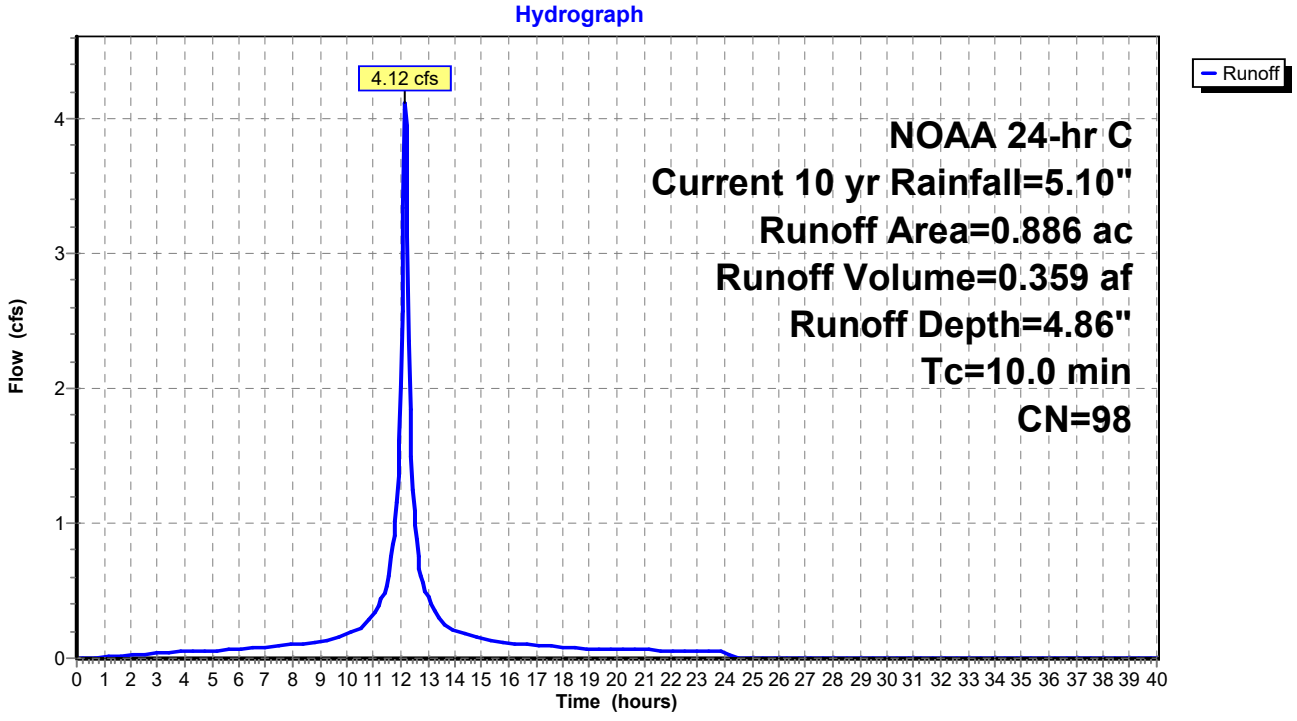
Runoff = 4.12 cfs @ 12.17 hrs, Volume= 0.359 af, Depth= 4.86"
Routed to Pond B-21 : Basin #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.511	98	Pavement, HSG C
*	0.321	98	Roof, HSG C
*	0.054	98	Concrete, HSC C
	0.886	98	Weighted Average
	0.886		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21I: PDA-21 (impervious)



Summary for Subcatchment 21P: PDA-21 (pervious)

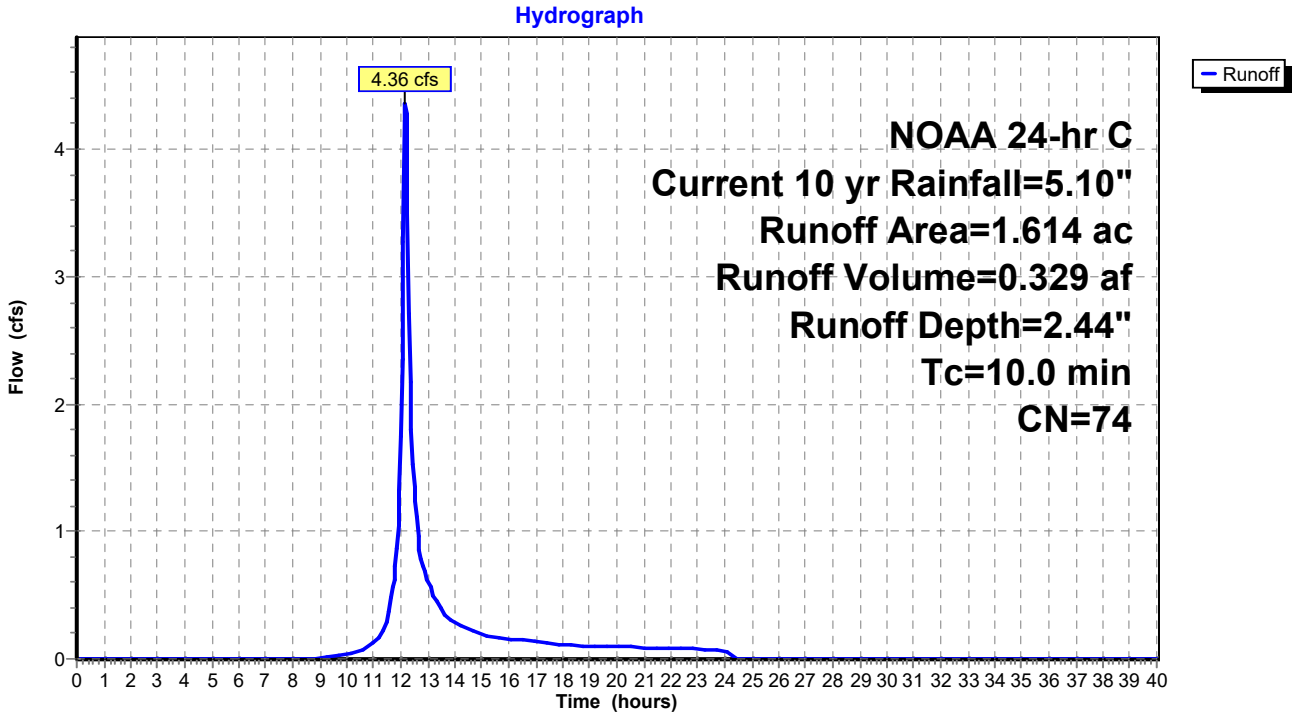
Runoff = 4.36 cfs @ 12.18 hrs, Volume= 0.329 af, Depth= 2.44"
Routed to Pond B-21 : Basin #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.614	74	>75% Grass cover, Good, HSG C
1.614		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21P: PDA-21 (pervious)



Summary for Subcatchment 22l: PDA-22 (impervious)

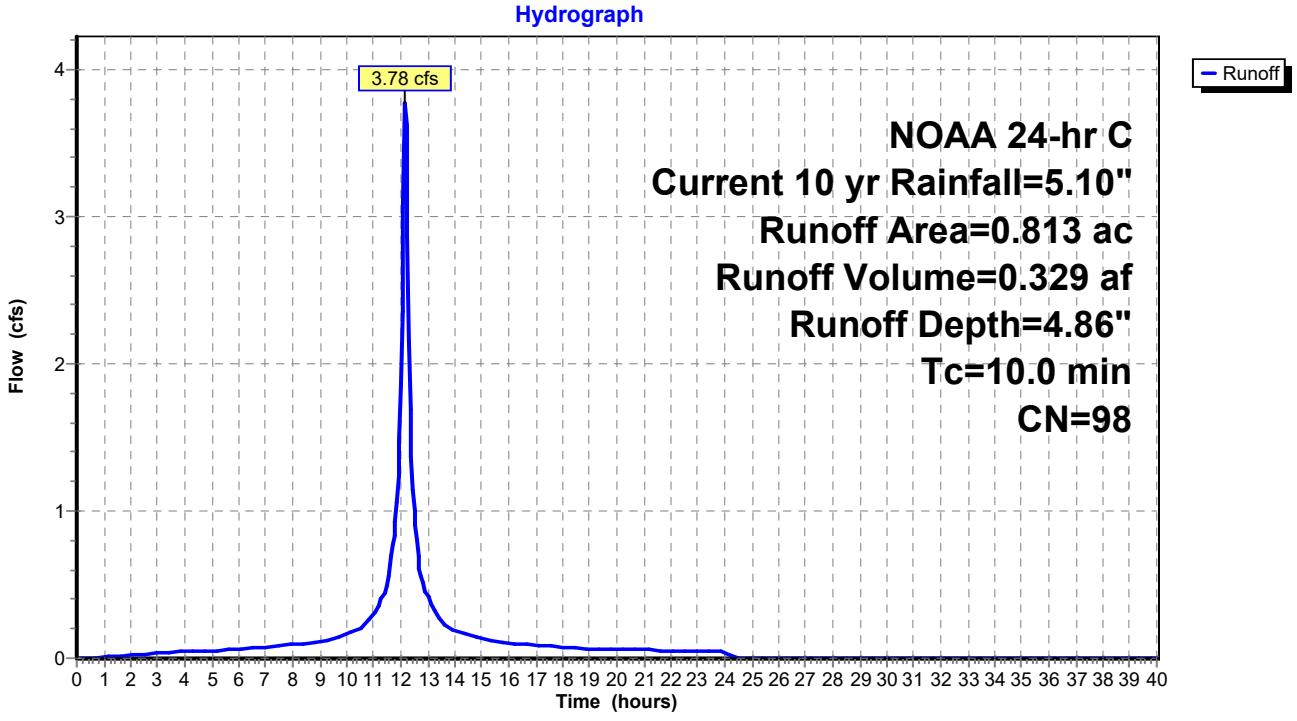
Runoff = 3.78 cfs @ 12.17 hrs, Volume= 0.329 af, Depth= 4.86"
Routed to Pond B-22 : Basin #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.083	98	Pavement, HSG C
*	0.707	98	Roof, HSG C
*	0.023	98	Concrete, HSC C
	0.813	98	Weighted Average
	0.813		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 22l: PDA-22 (impervious)



Summary for Subcatchment 22P: PDA-22 (pervious)

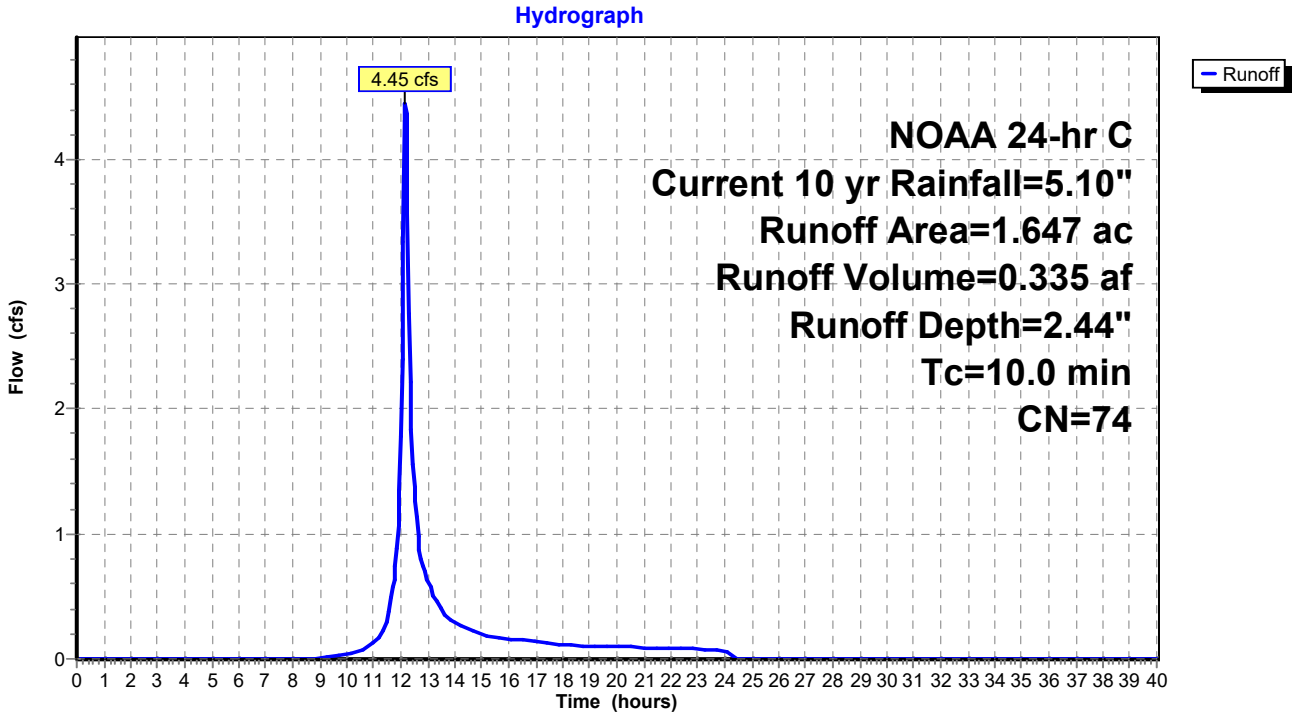
Runoff = 4.45 cfs @ 12.18 hrs, Volume= 0.335 af, Depth= 2.44"
Routed to Pond B-22 : Basin #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.647	74	>75% Grass cover, Good, HSG C
1.647		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 22P: PDA-22 (pervious)



Summary for Subcatchment 23I: PDA-23 (impervious)

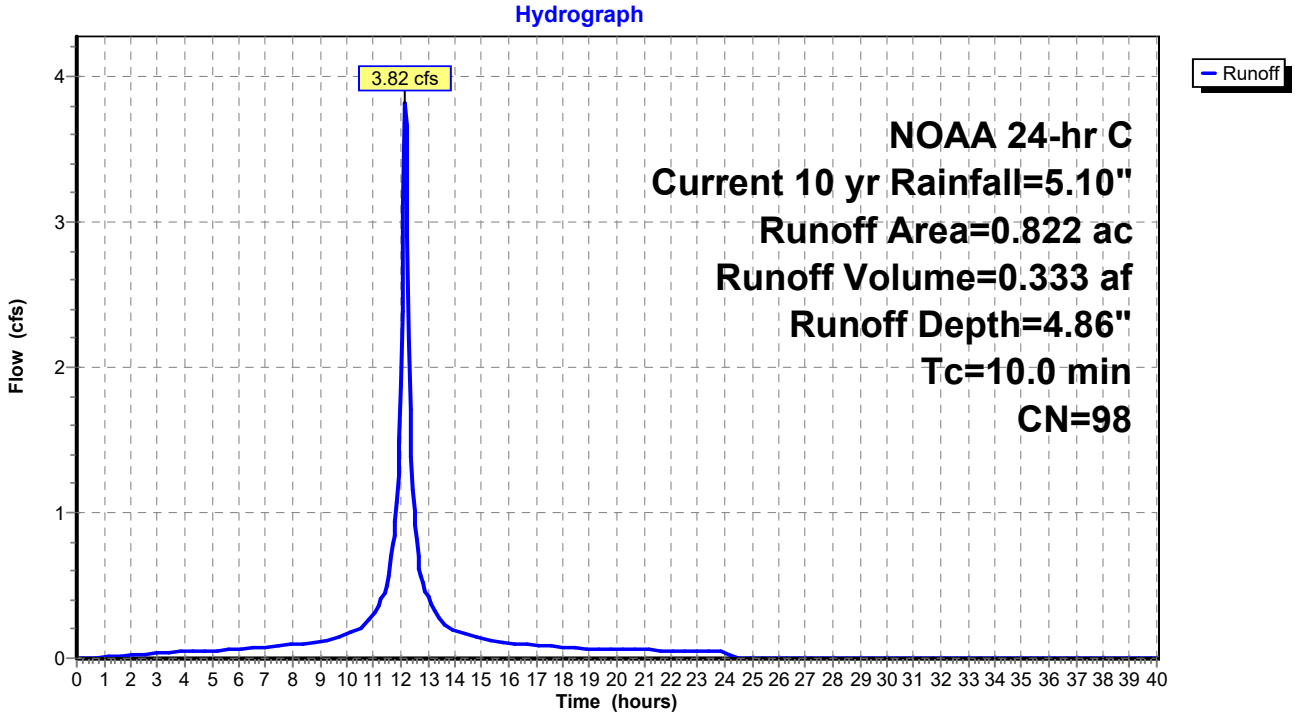
Runoff = 3.82 cfs @ 12.17 hrs, Volume= 0.333 af, Depth= 4.86"
Routed to Pond B-23 : Basin #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.719	98	Pavement, HSG C
*	0.103	98	Concrete, HSG C
	0.000	98	Roofs, HSG C
	0.822	98	Weighted Average
	0.822		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 23I: PDA-23 (impervious)



Summary for Subcatchment 23P: PDA-23 (pervious)

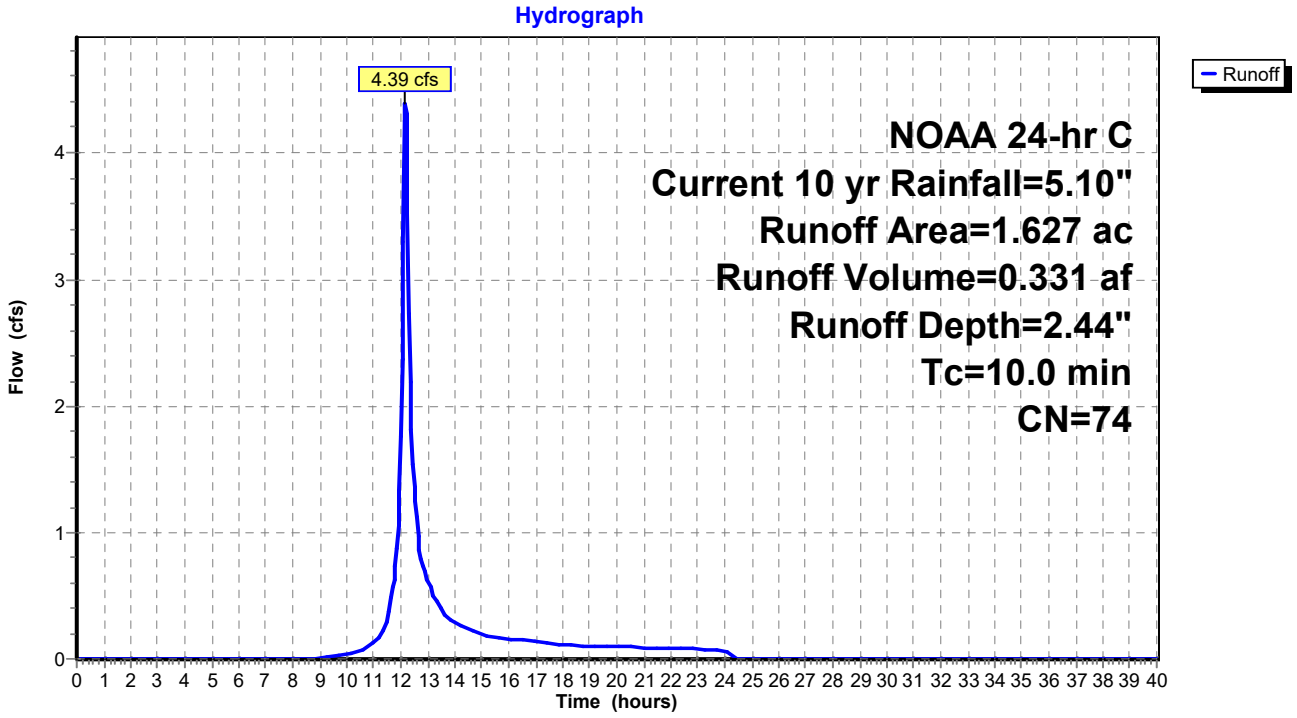
Runoff = 4.39 cfs @ 12.18 hrs, Volume= 0.331 af, Depth= 2.44"
Routed to Pond B-23 : Basin #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.627	74	>75% Grass cover, Good, HSG C
1.627		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 23P: PDA-23 (pervious)



Summary for Subcatchment 24l: PDA-24 (impervious)

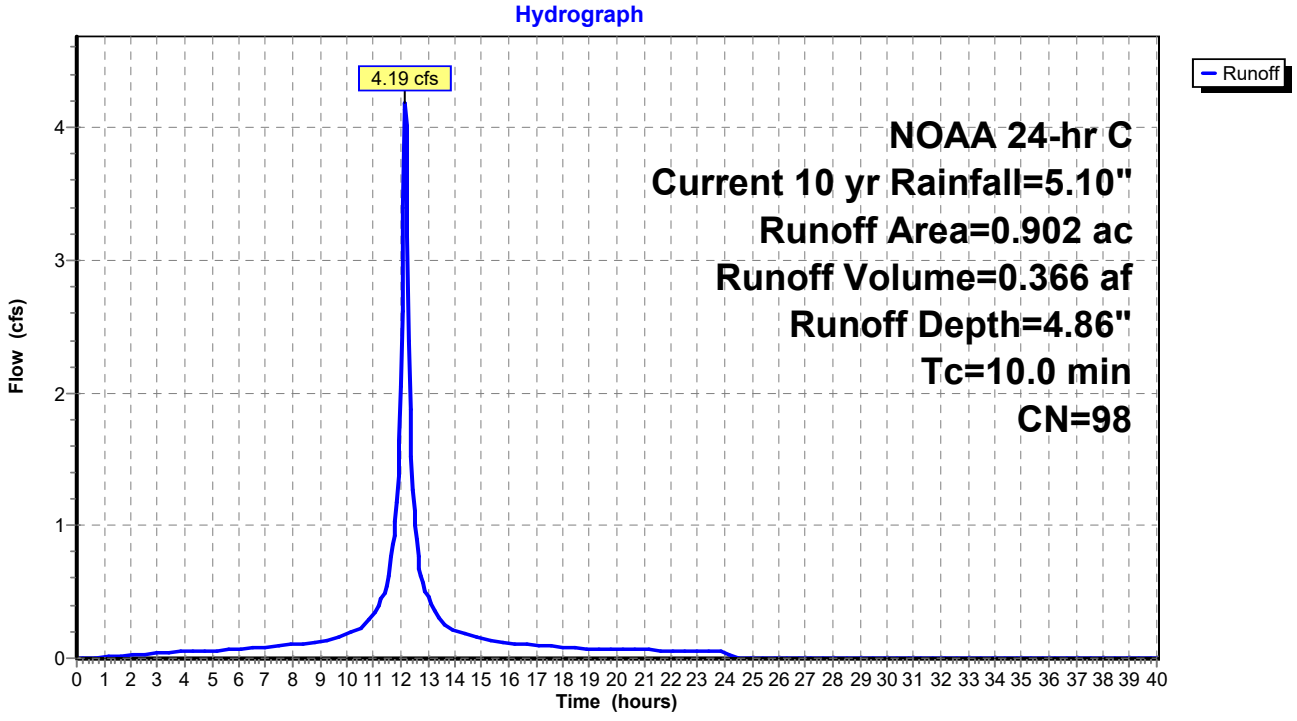
Runoff = 4.19 cfs @ 12.17 hrs, Volume= 0.366 af, Depth= 4.86"
Routed to Pond B-24 : Basin #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.277	98	Pavement, HSG C
*	0.579	98	Roof, HSG C
*	0.046	98	Concrete, HSC C
	0.902	98	Weighted Average
	0.902		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 24l: PDA-24 (impervious)



Summary for Subcatchment 24P: PDA-24 (pervious)

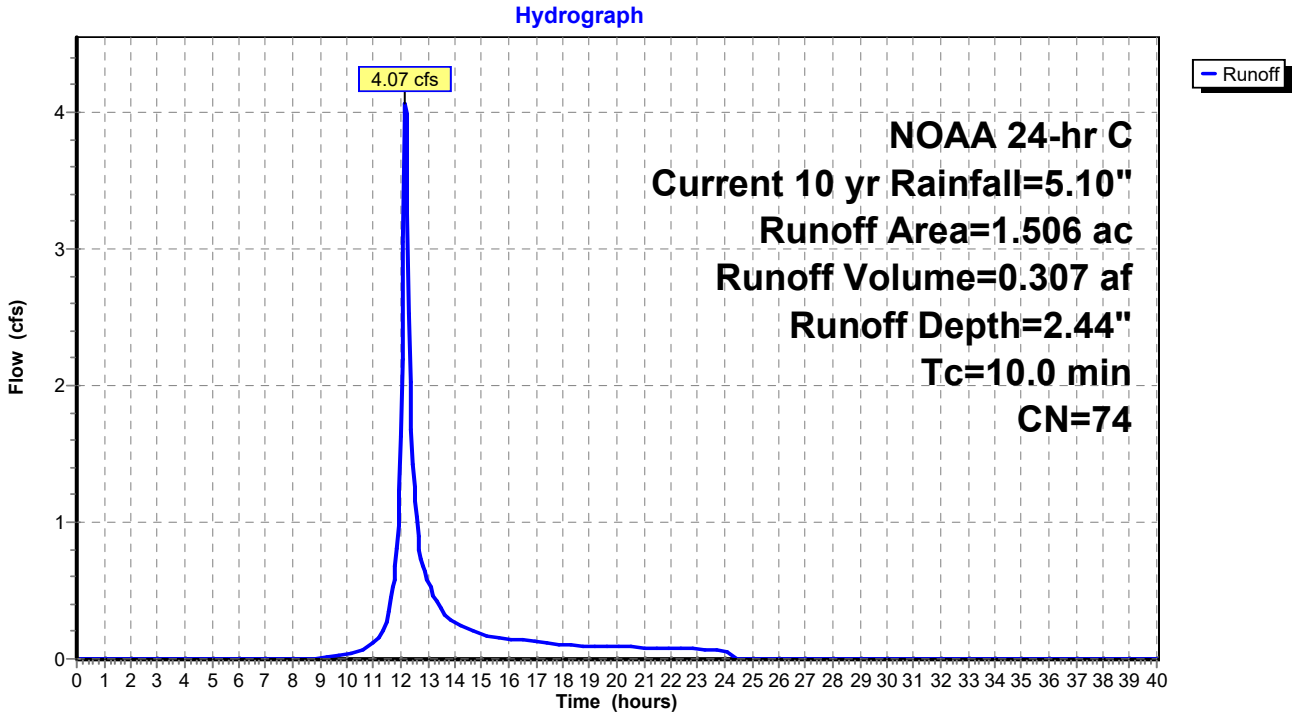
Runoff = 4.07 cfs @ 12.18 hrs, Volume= 0.307 af, Depth= 2.44"
Routed to Pond B-24 : Basin #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.506	74	>75% Grass cover, Good, HSG C
1.506		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 24P: PDA-24 (pervious)



Summary for Subcatchment 25l: PDA-25 (impervious)

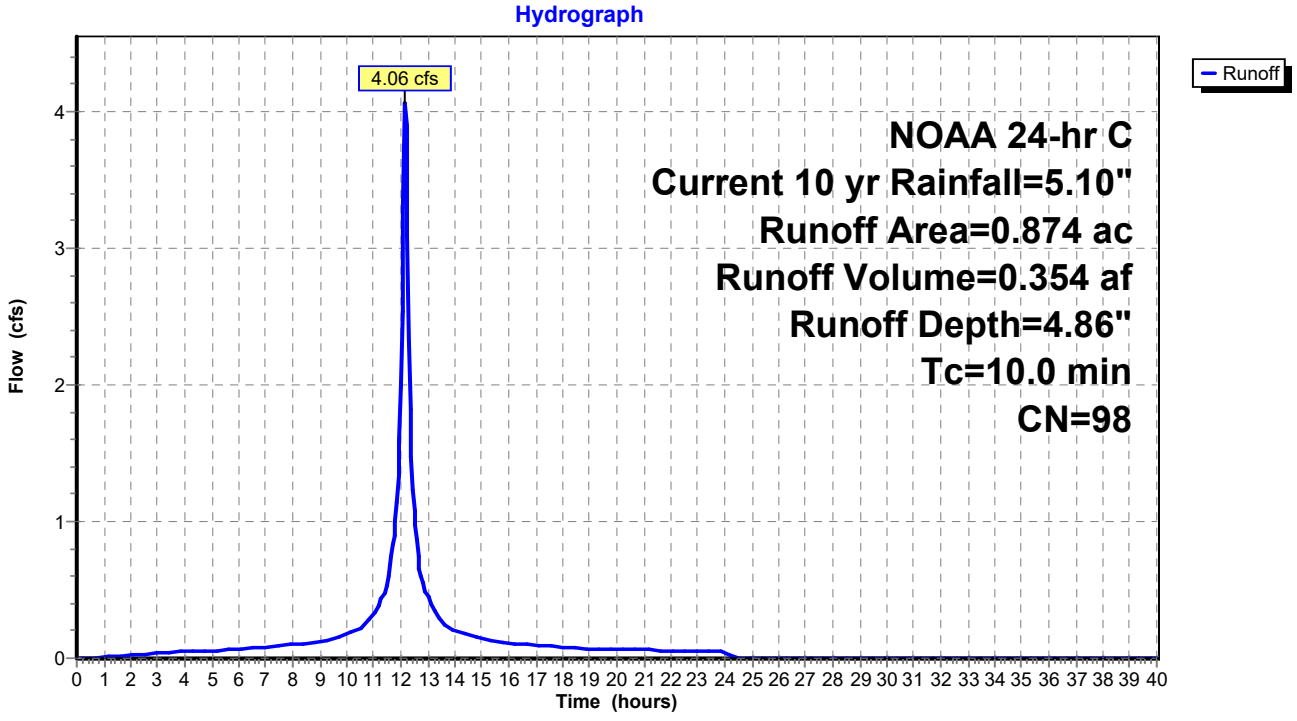
Runoff = 4.06 cfs @ 12.17 hrs, Volume= 0.354 af, Depth= 4.86"
Routed to Pond B-25 : Basin #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.388	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.036	98	Concrete, HSC C
	0.874	98	Weighted Average
	0.874		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 25l: PDA-25 (impervious)



Summary for Subcatchment 25P: PDA-25 (pervious)

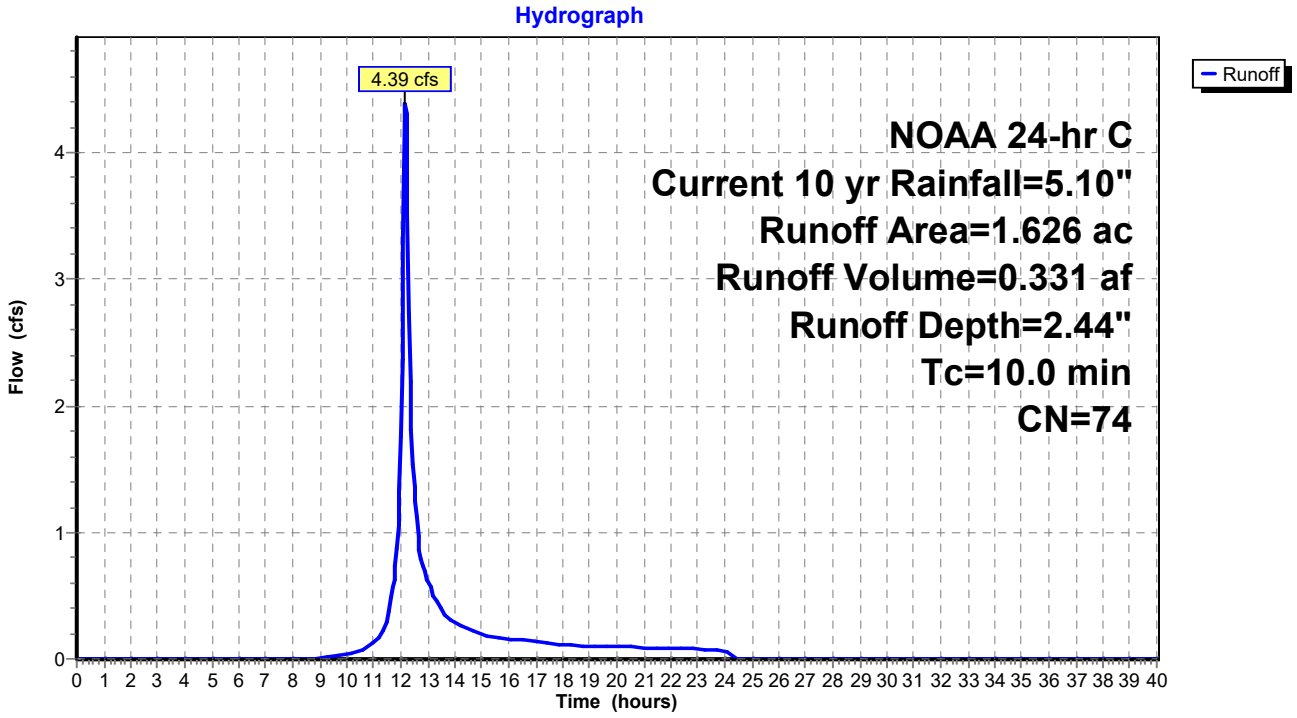
Runoff = 4.39 cfs @ 12.18 hrs, Volume= 0.331 af, Depth= 2.44"
Routed to Pond B-25 : Basin #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.626	74	>75% Grass cover, Good, HSG C
1.626		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 25P: PDA-25 (pervious)



Summary for Subcatchment 26l: PDA-26 (impervious)

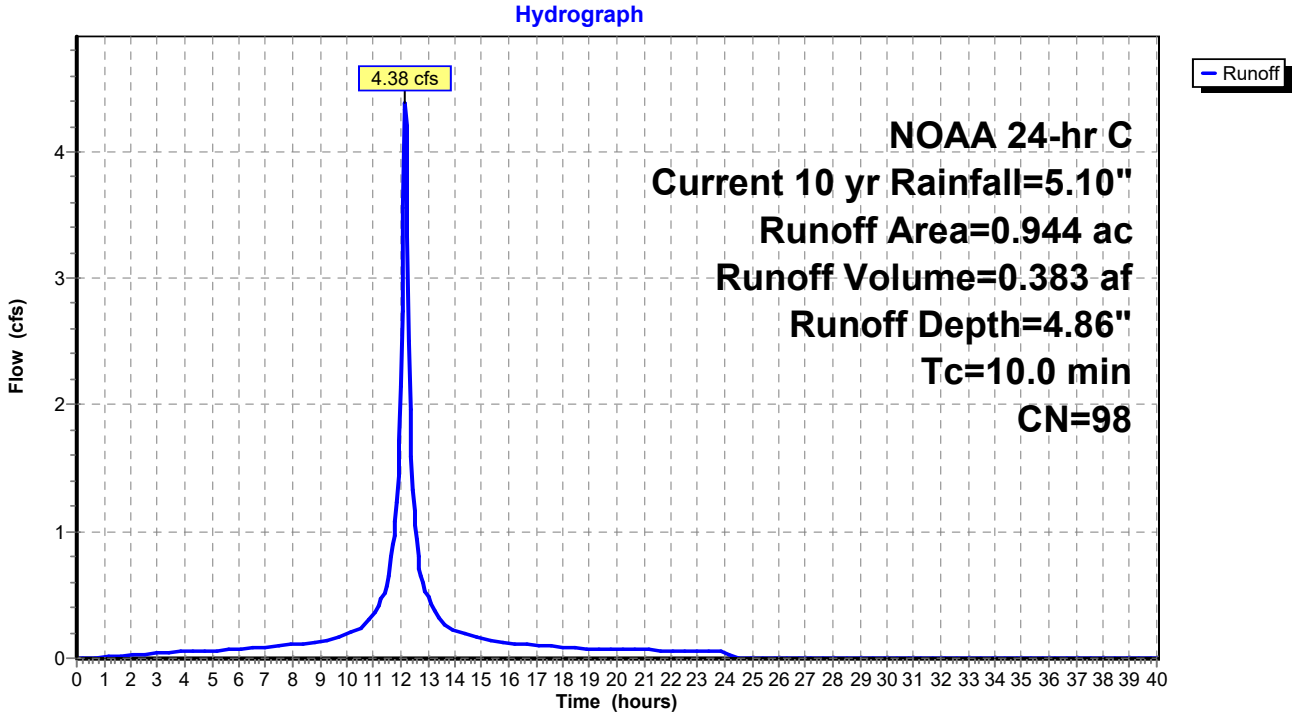
Runoff = 4.38 cfs @ 12.17 hrs, Volume= 0.383 af, Depth= 4.86"
Routed to Pond B-26 : Basin #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.944	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.944	98	Weighted Average
	0.944		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 26l: PDA-26 (impervious)



Summary for Subcatchment 26P: PDA-26 (pervious)

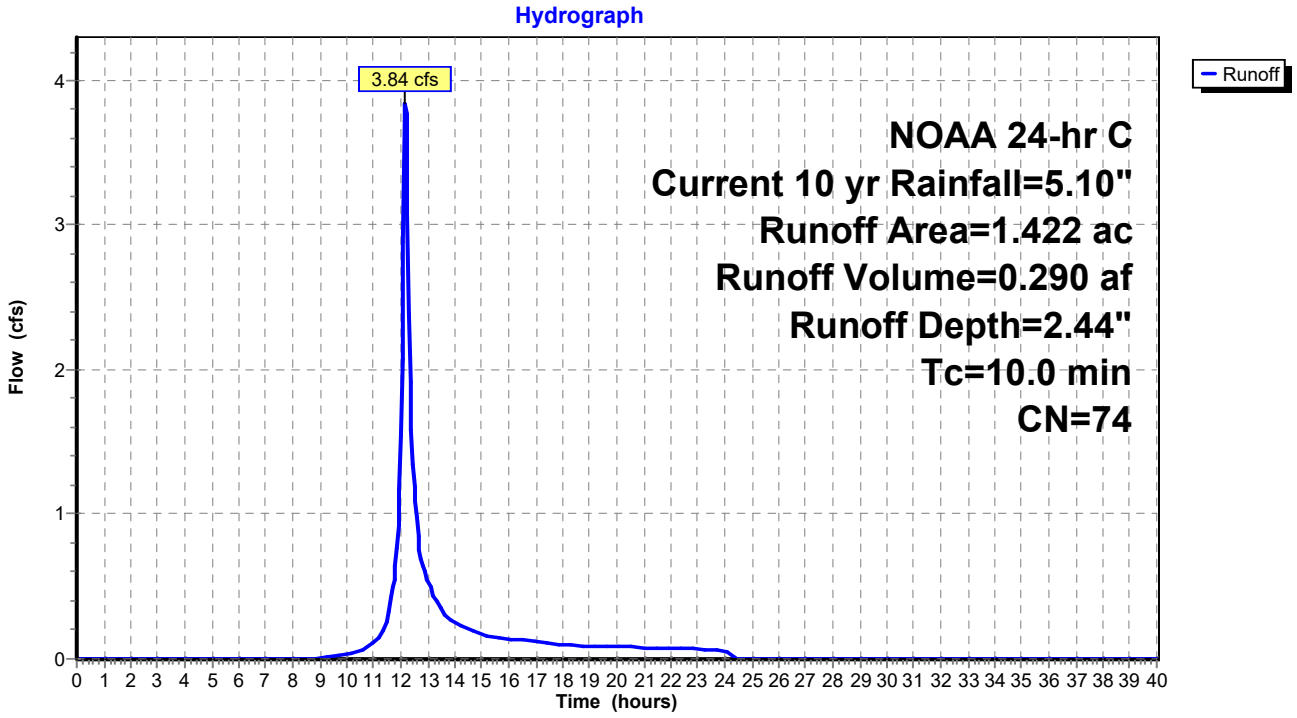
Runoff = 3.84 cfs @ 12.18 hrs, Volume= 0.290 af, Depth= 2.44"
Routed to Pond B-26 : Basin #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.422	74	>75% Grass cover, Good, HSG C
1.422		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 26P: PDA-26 (pervious)



Summary for Subcatchment 27I: PDA-27 (impervious)

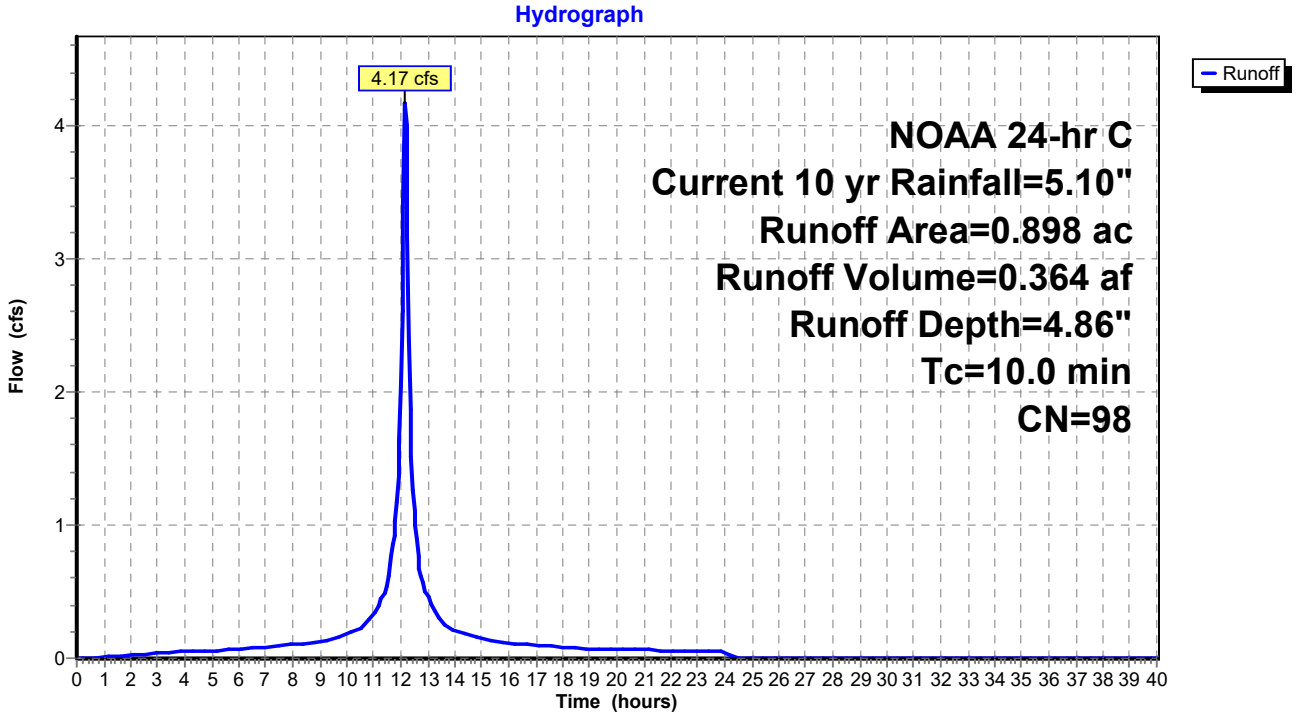
Runoff = 4.17 cfs @ 12.17 hrs, Volume= 0.364 af, Depth= 4.86"
Routed to Pond B-27 : Basin #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.233	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.022	98	Concrete, HSC C
	0.898	98	Weighted Average
	0.898		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 27I: PDA-27 (impervious)



Summary for Subcatchment 27P: PDA-27 (pervious)

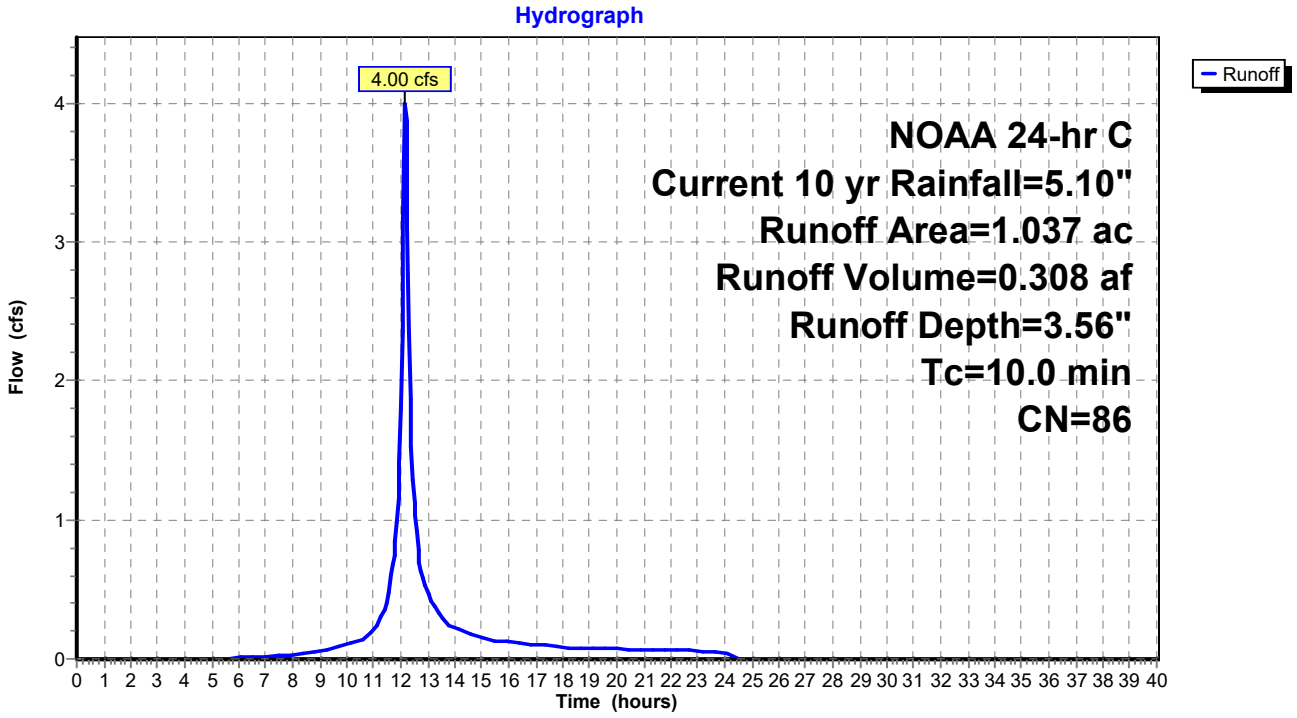
Runoff = 4.00 cfs @ 12.17 hrs, Volume= 0.308 af, Depth= 3.56"
Routed to Pond B-27 : Basin #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.037	86	<50% Grass cover, Poor, HSG C
1.037		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 27P: PDA-27 (pervious)



Summary for Subcatchment 28I: PDA-28 (impervious)

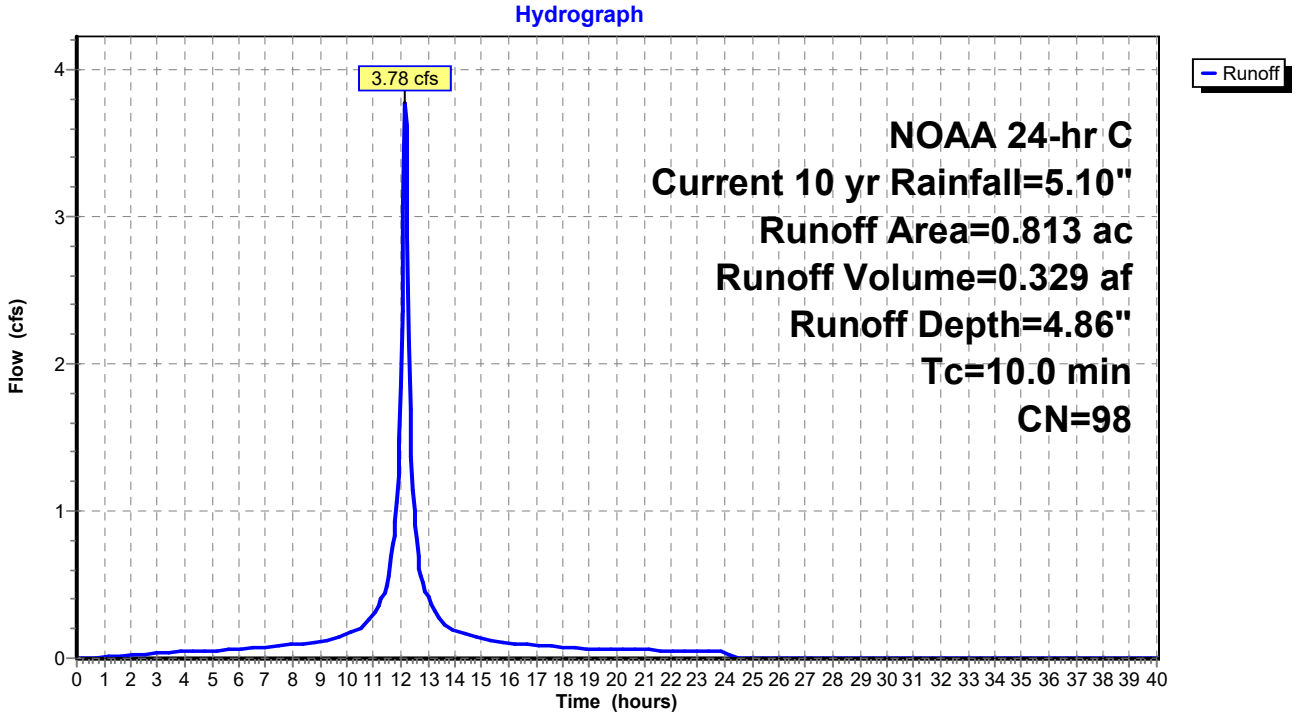
Runoff = 3.78 cfs @ 12.17 hrs, Volume= 0.329 af, Depth= 4.86"
Routed to Pond B-28 : Basin #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.235	98	Pavement, HSG C
*	0.541	98	Roof, HSG C
*	0.037	98	Concrete, HSC C
	0.813	98	Weighted Average
	0.813		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 28I: PDA-28 (impervious)



Summary for Subcatchment 28P: PDA-28 (pervious)

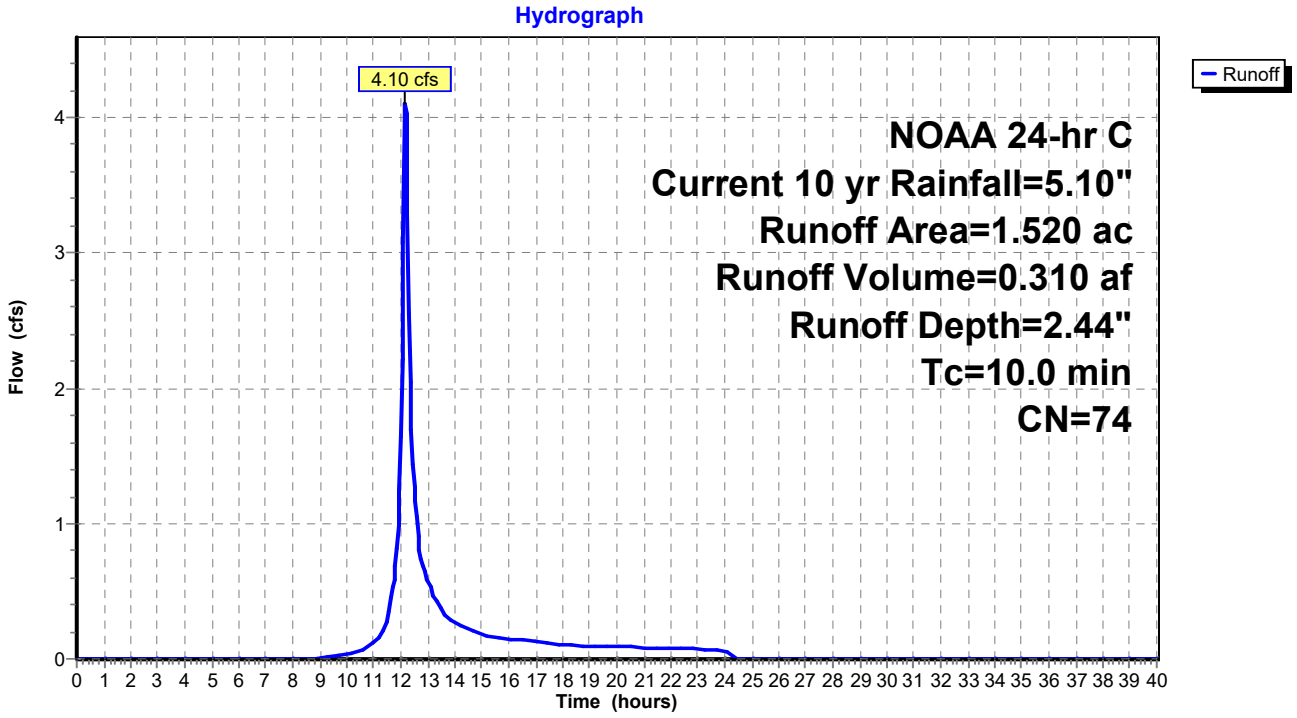
Runoff = 4.10 cfs @ 12.18 hrs, Volume= 0.310 af, Depth= 2.44"
Routed to Pond B-28 : Basin #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.520	74	>75% Grass cover, Good, HSG C
1.520		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 28P: PDA-28 (pervious)



Summary for Subcatchment UPDA-2: PDA-2 (undetained)

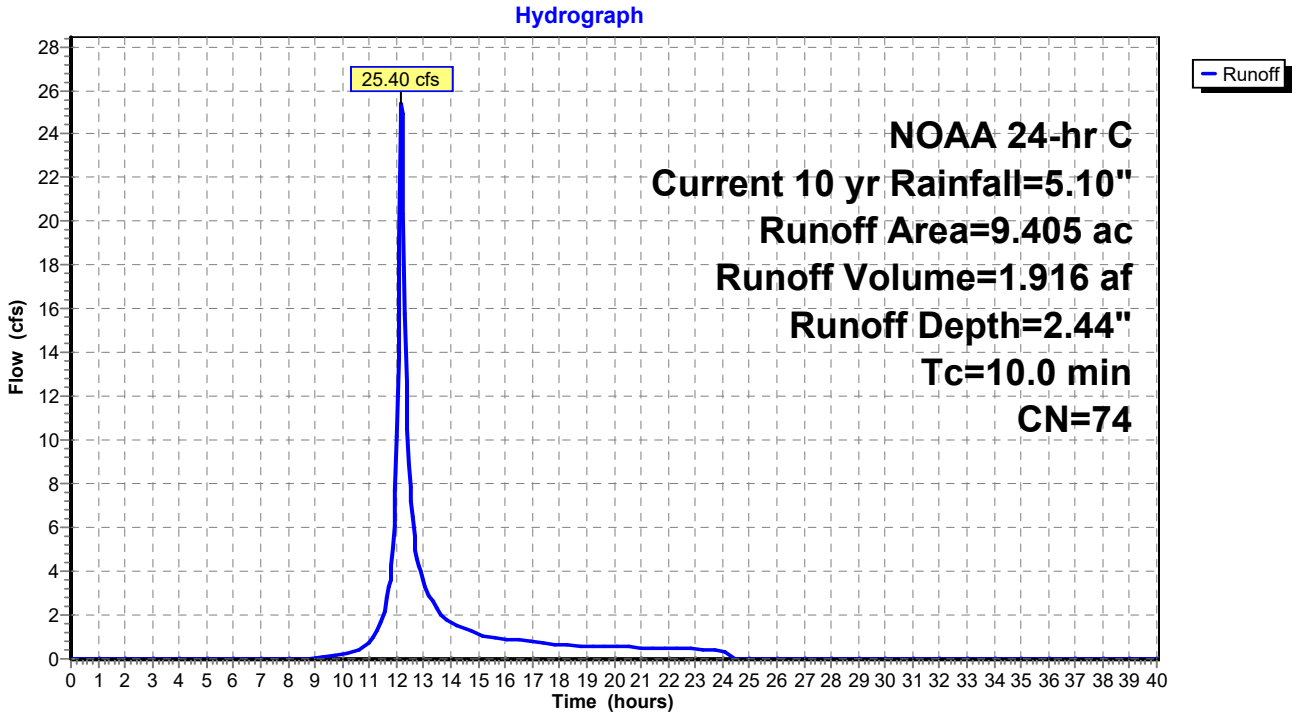
Runoff = 25.40 cfs @ 12.18 hrs, Volume= 1.916 af, Depth= 2.44"
Routed to Link PDA-2 : Proposed Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
9.405	74	>75% Grass cover, Good, HSG C
9.405		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-2: PDA-2 (undetained)



Summary for Pond B-18: Basin #18

Inflow Area = 1.410 ac, 31.91% Impervious, Inflow Depth = 3.22" for Current 10 yr event
Inflow = 4.68 cfs @ 12.17 hrs, Volume= 0.378 af
Outflow = 2.12 cfs @ 12.37 hrs, Volume= 0.333 af, Atten= 55%, Lag= 11.9 min
Primary = 2.12 cfs @ 12.37 hrs, Volume= 0.333 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 189.62' @ 12.37 hrs Surf.Area= 3,001 sf Storage= 7,428 cf

Plug-Flow detention time= 295.4 min calculated for 0.333 af (88% of inflow)
Center-of-Mass det. time= 236.3 min (1,035.7 - 799.5)

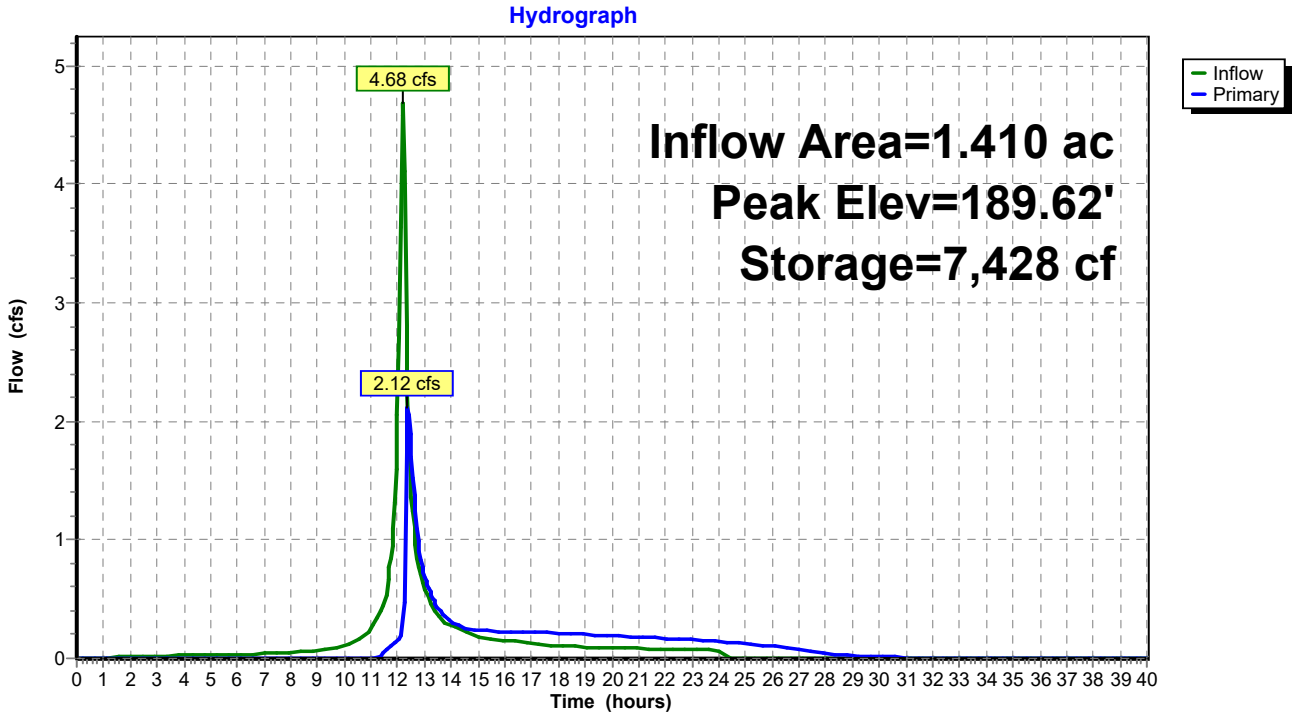
Volume	Invert	Avail.Storage	Storage Description
#1	185.65'	12,198 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
185.65	0	0	0
186.00	1,119	196	196
187.00	1,564	1,342	1,537
188.00	2,065	1,815	3,352
189.00	2,623	2,344	5,696
190.00	3,237	2,930	8,626
191.00	3,908	3,573	12,198

Device	Routing	Invert	Outlet Devices
#1	Primary	186.00'	**15.0" Round Culvert** L= 28.0' Ke= 0.500 Inlet / Outlet Invert= 186.00' / 185.86' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	187.25'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.34'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.07 cfs @ 12.37 hrs HW=189.61' (Free Discharge)
- **1=Culvert** (Passes 2.07 cfs of 10.21 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.25 cfs @ 7.23 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.82 cfs @ 1.70 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-18: Basin #18



Stage-Discharge for Pond B-18: Basin #18

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00
185.68	0.00	186.20	0.00	186.72	0.00	187.24	0.00
185.69	0.00	186.21	0.00	186.73	0.00	187.25	0.00
185.70	0.00	186.22	0.00	186.74	0.00	187.26	0.00
185.71	0.00	186.23	0.00	186.75	0.00	187.27	0.00
185.72	0.00	186.24	0.00	186.76	0.00	187.28	0.00
185.73	0.00	186.25	0.00	186.77	0.00	187.29	0.00
185.74	0.00	186.26	0.00	186.78	0.00	187.30	0.00
185.75	0.00	186.27	0.00	186.79	0.00	187.31	0.01
185.76	0.00	186.28	0.00	186.80	0.00	187.32	0.01
185.77	0.00	186.29	0.00	186.81	0.00	187.33	0.01
185.78	0.00	186.30	0.00	186.82	0.00	187.34	0.01
185.79	0.00	186.31	0.00	186.83	0.00	187.35	0.02
185.80	0.00	186.32	0.00	186.84	0.00	187.36	0.02
185.81	0.00	186.33	0.00	186.85	0.00	187.37	0.02
185.82	0.00	186.34	0.00	186.86	0.00	187.38	0.03
185.83	0.00	186.35	0.00	186.87	0.00	187.39	0.03
185.84	0.00	186.36	0.00	186.88	0.00	187.40	0.03
185.85	0.00	186.37	0.00	186.89	0.00	187.41	0.04
185.86	0.00	186.38	0.00	186.90	0.00	187.42	0.04
185.87	0.00	186.39	0.00	186.91	0.00	187.43	0.05
185.88	0.00	186.40	0.00	186.92	0.00	187.44	0.05
185.89	0.00	186.41	0.00	186.93	0.00	187.45	0.05
185.90	0.00	186.42	0.00	186.94	0.00	187.46	0.05
185.91	0.00	186.43	0.00	186.95	0.00	187.47	0.06
185.92	0.00	186.44	0.00	186.96	0.00	187.48	0.06
185.93	0.00	186.45	0.00	186.97	0.00	187.49	0.06
185.94	0.00	186.46	0.00	186.98	0.00	187.50	0.06
185.95	0.00	186.47	0.00	186.99	0.00	187.51	0.06
185.96	0.00	186.48	0.00	187.00	0.00	187.52	0.07
185.97	0.00	186.49	0.00	187.01	0.00	187.53	0.07
185.98	0.00	186.50	0.00	187.02	0.00	187.54	0.07
185.99	0.00	186.51	0.00	187.03	0.00	187.55	0.07
186.00	0.00	186.52	0.00	187.04	0.00	187.56	0.07
186.01	0.00	186.53	0.00	187.05	0.00	187.57	0.08
186.02	0.00	186.54	0.00	187.06	0.00	187.58	0.08
186.03	0.00	186.55	0.00	187.07	0.00	187.59	0.08
186.04	0.00	186.56	0.00	187.08	0.00	187.60	0.08
186.05	0.00	186.57	0.00	187.09	0.00	187.61	0.08
186.06	0.00	186.58	0.00	187.10	0.00	187.62	0.08
186.07	0.00	186.59	0.00	187.11	0.00	187.63	0.09
186.08	0.00	186.60	0.00	187.12	0.00	187.64	0.09
186.09	0.00	186.61	0.00	187.13	0.00	187.65	0.09
186.10	0.00	186.62	0.00	187.14	0.00	187.66	0.09
186.11	0.00	186.63	0.00	187.15	0.00	187.67	0.09
186.12	0.00	186.64	0.00	187.16	0.00	187.68	0.09
186.13	0.00	186.65	0.00	187.17	0.00	187.69	0.10
186.14	0.00	186.66	0.00	187.18	0.00	187.70	0.10
186.15	0.00	186.67	0.00	187.19	0.00	187.71	0.10
186.16	0.00	186.68	0.00	187.20	0.00	187.72	0.10

Stage-Discharge for Pond B-18: Basin #18 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.73	0.10	188.25	0.16	188.77	0.20	189.29	0.23
187.74	0.10	188.26	0.16	188.78	0.20	189.30	0.23
187.75	0.10	188.27	0.16	188.79	0.20	189.31	0.23
187.76	0.10	188.28	0.16	188.80	0.20	189.32	0.23
187.77	0.11	188.29	0.16	188.81	0.20	189.33	0.23
187.78	0.11	188.30	0.16	188.82	0.20	189.34	0.23
187.79	0.11	188.31	0.16	188.83	0.20	189.35	0.24
187.80	0.11	188.32	0.16	188.84	0.20	189.36	0.27
187.81	0.11	188.33	0.16	188.85	0.20	189.37	0.30
187.82	0.11	188.34	0.16	188.86	0.20	189.38	0.34
187.83	0.11	188.35	0.16	188.87	0.20	189.39	0.38
187.84	0.11	188.36	0.16	188.88	0.20	189.40	0.43
187.85	0.12	188.37	0.17	188.89	0.20	189.41	0.48
187.86	0.12	188.38	0.17	188.90	0.20	189.42	0.53
187.87	0.12	188.39	0.17	188.91	0.20	189.43	0.59
187.88	0.12	188.40	0.17	188.92	0.21	189.44	0.65
187.89	0.12	188.41	0.17	188.93	0.21	189.45	0.71
187.90	0.12	188.42	0.17	188.94	0.21	189.46	0.78
187.91	0.12	188.43	0.17	188.95	0.21	189.47	0.85
187.92	0.12	188.44	0.17	188.96	0.21	189.48	0.92
187.93	0.12	188.45	0.17	188.97	0.21	189.49	0.99
187.94	0.13	188.46	0.17	188.98	0.21	189.50	1.07
187.95	0.13	188.47	0.17	188.99	0.21	189.51	1.15
187.96	0.13	188.48	0.17	189.00	0.21	189.52	1.23
187.97	0.13	188.49	0.17	189.01	0.21	189.53	1.32
187.98	0.13	188.50	0.18	189.02	0.21	189.54	1.40
187.99	0.13	188.51	0.18	189.03	0.21	189.55	1.49
188.00	0.13	188.52	0.18	189.04	0.21	189.56	1.58
188.01	0.13	188.53	0.18	189.05	0.21	189.57	1.67
188.02	0.13	188.54	0.18	189.06	0.21	189.58	1.76
188.03	0.13	188.55	0.18	189.07	0.22	189.59	1.86
188.04	0.14	188.56	0.18	189.08	0.22	189.60	1.96
188.05	0.14	188.57	0.18	189.09	0.22	189.61	2.06
188.06	0.14	188.58	0.18	189.10	0.22	189.62	2.16
188.07	0.14	188.59	0.18	189.11	0.22	189.63	2.26
188.08	0.14	188.60	0.18	189.12	0.22	189.64	2.37
188.09	0.14	188.61	0.18	189.13	0.22	189.65	2.47
188.10	0.14	188.62	0.18	189.14	0.22	189.66	2.58
188.11	0.14	188.63	0.19	189.15	0.22	189.67	2.69
188.12	0.14	188.64	0.19	189.16	0.22	189.68	2.80
188.13	0.14	188.65	0.19	189.17	0.22	189.69	2.91
188.14	0.15	188.66	0.19	189.18	0.22	189.70	3.03
188.15	0.15	188.67	0.19	189.19	0.22	189.71	3.14
188.16	0.15	188.68	0.19	189.20	0.22	189.72	3.26
188.17	0.15	188.69	0.19	189.21	0.22	189.73	3.38
188.18	0.15	188.70	0.19	189.22	0.22	189.74	3.50
188.19	0.15	188.71	0.19	189.23	0.22	189.75	3.62
188.20	0.15	188.72	0.19	189.24	0.23	189.76	3.74
188.21	0.15	188.73	0.19	189.25	0.23	189.77	3.86
188.22	0.15	188.74	0.19	189.26	0.23	189.78	3.99
188.23	0.15	188.75	0.19	189.27	0.23	189.79	4.12
188.24	0.15	188.76	0.19	189.28	0.23	189.80	4.24

Stage-Discharge for Pond B-18: Basin #18 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
189.81	4.37	190.33	11.37	190.85	12.15
189.82	4.50	190.34	11.39	190.86	12.16
189.83	4.63	190.35	11.40	190.87	12.17
189.84	4.77	190.36	11.42	190.88	12.19
189.85	4.90	190.37	11.43	190.89	12.20
189.86	5.04	190.38	11.45	190.90	12.22
189.87	5.17	190.39	11.47	190.91	12.23
189.88	5.31	190.40	11.48	190.92	12.25
189.89	5.45	190.41	11.50	190.93	12.26
189.90	5.59	190.42	11.51	190.94	12.27
189.91	5.73	190.43	11.53	190.95	12.29
189.92	5.87	190.44	11.54	190.96	12.42
189.93	6.02	190.45	11.56	190.97	12.65
189.94	6.16	190.46	11.57	190.98	12.94
189.95	6.31	190.47	11.59	190.99	13.28
189.96	6.45	190.48	11.60	191.00	**13.67**
189.97	6.60	190.49	11.62		
189.98	6.75	190.50	11.63		
189.99	6.90	190.51	11.65		
190.00	7.05	190.52	11.66		
190.01	7.20	190.53	11.68		
190.02	7.35	190.54	11.69		
190.03	7.51	190.55	11.71		
190.04	7.66	190.56	11.72		
190.05	7.82	190.57	11.74		
190.06	7.97	190.58	11.75		
190.07	8.13	190.59	11.77		
190.08	8.29	190.60	11.78		
190.09	8.45	190.61	11.80		
190.10	8.61	190.62	11.81		
190.11	8.77	190.63	11.83		
190.12	8.93	190.64	11.84		
190.13	9.10	190.65	11.85		
190.14	9.26	190.66	11.87		
190.15	9.42	190.67	11.88		
190.16	9.59	190.68	11.90		
190.17	9.76	190.69	11.91		
190.18	9.92	190.70	11.93		
190.19	10.09	190.71	11.94		
190.20	10.26	190.72	11.96		
190.21	10.43	190.73	11.97		
190.22	10.60	190.74	11.99		
190.23	10.77	190.75	12.00		
190.24	10.94	190.76	12.02		
190.25	11.12	190.77	12.03		
190.26	11.27	190.78	12.04		
190.27	11.28	190.79	12.06		
190.28	11.30	190.80	12.07		
190.29	11.31	190.81	12.09		
190.30	11.33	190.82	12.10		
190.31	11.34	190.83	12.12		
190.32	11.36	190.84	12.13		

Stage-Area-Storage for Pond B-18: Basin #18

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.65	0	0
185.66	32	0
185.67	64	1
185.68	96	1
185.69	128	3
185.70	160	4
185.71	192	6
185.72	224	8
185.73	256	10
185.74	288	13
185.75	320	16
185.76	352	19
185.77	384	23
185.78	416	27
185.79	448	31
185.80	480	36
185.81	512	41
185.82	544	46
185.83	575	52
185.84	607	58
185.85	639	64
185.86	671	70
185.87	703	77
185.88	735	85
185.89	767	92
185.90	799	100
185.91	831	108
185.92	863	117
185.93	895	125
185.94	927	134
185.95	959	144
185.96	991	154
185.97	1,023	164
185.98	1,055	174
185.99	1,087	185
186.00	1,119	196
186.01	1,123	207
186.02	1,128	218
186.03	1,132	230
186.04	1,137	241
186.05	1,141	252
186.06	1,146	264
186.07	1,150	275
186.08	1,155	287
186.09	1,159	298
186.10	1,163	310
186.11	1,168	322
186.12	1,172	333
186.13	1,177	345
186.14	1,181	357
186.15	1,186	369
186.16	1,190	381
186.17	1,195	392
186.18	1,199	404
186.19	1,204	416
186.20	1,208	429
186.21	1,212	441
186.22	1,217	453
186.23	1,221	465
186.24	1,226	477
186.25	1,230	489
186.26	1,235	502
186.27	1,239	514
186.28	1,244	527
186.29	1,248	539
186.30	1,253	552
186.31	1,257	564
186.32	1,261	577
186.33	1,266	589
186.34	1,270	602
186.35	1,275	615
186.36	1,279	628
186.37	1,284	640
186.38	1,288	653
186.39	1,293	666
186.40	1,297	679
186.41	1,301	692
186.42	1,306	705
186.43	1,310	718
186.44	1,315	731
186.45	1,319	744
186.46	1,324	758
186.47	1,328	771
186.48	1,333	784
186.49	1,337	798
186.50	1,342	811
186.51	1,346	824
186.52	1,350	838
186.53	1,355	851
186.54	1,359	865
186.55	1,364	879
186.56	1,368	892
186.57	1,373	906
186.58	1,377	920
186.59	1,382	933
186.60	1,386	947
186.61	1,390	961
186.62	1,395	975
186.63	1,399	989
186.64	1,404	1,003
186.65	1,408	1,017
186.66	1,413	1,031
186.67	1,417	1,045
186.68	1,422	1,060

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.69	1,426	1,074	187.21	1,669	1,877
186.70	1,431	1,088	187.22	1,674	1,894
186.71	1,435	1,102	187.23	1,679	1,910
186.72	1,439	1,117	187.24	1,684	1,927
186.73	1,444	1,131	187.25	1,689	1,944
186.74	1,448	1,146	187.26	1,694	1,961
186.75	1,453	1,160	187.27	1,699	1,978
186.76	1,457	1,175	187.28	1,704	1,995
186.77	1,462	1,189	187.29	1,709	2,012
186.78	1,466	1,204	187.30	1,714	2,029
186.79	1,471	1,219	187.31	1,719	2,046
186.80	1,475	1,233	187.32	1,724	2,063
186.81	1,479	1,248	187.33	1,729	2,081
186.82	1,484	1,263	187.34	1,734	2,098
186.83	1,488	1,278	187.35	1,739	2,115
186.84	1,493	1,293	187.36	1,744	2,133
186.85	1,497	1,308	187.37	1,749	2,150
186.86	1,502	1,323	187.38	1,754	2,168
186.87	1,506	1,338	187.39	1,759	2,185
186.88	1,511	1,353	187.40	1,764	2,203
186.89	1,515	1,368	187.41	1,769	2,221
186.90	1,520	1,383	187.42	1,774	2,238
186.91	1,524	1,398	187.43	1,779	2,256
186.92	1,528	1,414	187.44	1,784	2,274
186.93	1,533	1,429	187.45	1,789	2,292
186.94	1,537	1,444	187.46	1,794	2,310
186.95	1,542	1,460	187.47	1,799	2,328
186.96	1,546	1,475	187.48	1,804	2,346
186.97	1,551	1,491	187.49	1,809	2,364
186.98	1,555	1,506	187.50	1,815	2,382
186.99	1,560	1,522	187.51	1,820	2,400
187.00	1,564	1,537	187.52	1,825	2,418
187.01	1,569	1,553	187.53	1,830	2,437
187.02	1,574	1,569	187.54	1,835	2,455
187.03	1,579	1,584	187.55	1,840	2,473
187.04	1,584	1,600	187.56	1,845	2,492
187.05	1,589	1,616	187.57	1,850	2,510
187.06	1,594	1,632	187.58	1,855	2,529
187.07	1,599	1,648	187.59	1,860	2,547
187.08	1,604	1,664	187.60	1,865	2,566
187.09	1,609	1,680	187.61	1,870	2,585
187.10	1,614	1,696	187.62	1,875	2,603
187.11	1,619	1,712	187.63	1,880	2,622
187.12	1,624	1,729	187.64	1,885	2,641
187.13	1,629	1,745	187.65	1,890	2,660
187.14	1,634	1,761	187.66	1,895	2,679
187.15	1,639	1,778	187.67	1,900	2,698
187.16	1,644	1,794	187.68	1,905	2,717
187.17	1,649	1,810	187.69	1,910	2,736
187.18	1,654	1,827	187.70	1,915	2,755
187.19	1,659	1,844	187.71	1,920	2,774
187.20	1,664	1,860	187.72	1,925	2,793

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.73	1,930	2,813	188.25	2,205	3,886
187.74	1,935	2,832	188.26	2,210	3,908
187.75	1,940	2,851	188.27	2,216	3,930
187.76	1,945	2,871	188.28	2,221	3,952
187.77	1,950	2,890	188.29	2,227	3,974
187.78	1,955	2,910	188.30	2,232	3,996
187.79	1,960	2,929	188.31	2,238	4,019
187.80	1,965	2,949	188.32	2,244	4,041
187.81	1,970	2,969	188.33	2,249	4,064
187.82	1,975	2,988	188.34	2,255	4,086
187.83	1,980	3,008	188.35	2,260	4,109
187.84	1,985	3,028	188.36	2,266	4,131
187.85	1,990	3,048	188.37	2,271	4,154
187.86	1,995	3,068	188.38	2,277	4,177
187.87	2,000	3,088	188.39	2,283	4,200
187.88	2,005	3,108	188.40	2,288	4,222
187.89	2,010	3,128	188.41	2,294	4,245
187.90	2,015	3,148	188.42	2,299	4,268
187.91	2,020	3,168	188.43	2,305	4,291
187.92	2,025	3,188	188.44	2,311	4,314
187.93	2,030	3,209	188.45	2,316	4,338
187.94	2,035	3,229	188.46	2,322	4,361
187.95	2,040	3,249	188.47	2,327	4,384
187.96	2,045	3,270	188.48	2,333	4,407
187.97	2,050	3,290	188.49	2,338	4,431
187.98	2,055	3,311	188.50	2,344	4,454
187.99	2,060	3,331	188.51	2,350	4,478
188.00	2,065	3,352	188.52	2,355	4,501
188.01	2,071	3,373	188.53	2,361	4,525
188.02	2,076	3,393	188.54	2,366	4,548
188.03	2,082	3,414	188.55	2,372	4,572
188.04	2,087	3,435	188.56	2,377	4,596
188.05	2,093	3,456	188.57	2,383	4,620
188.06	2,098	3,477	188.58	2,389	4,643
188.07	2,104	3,498	188.59	2,394	4,667
188.08	2,110	3,519	188.60	2,400	4,691
188.09	2,115	3,540	188.61	2,405	4,715
188.10	2,121	3,561	188.62	2,411	4,739
188.11	2,126	3,582	188.63	2,417	4,764
188.12	2,132	3,604	188.64	2,422	4,788
188.13	2,138	3,625	188.65	2,428	4,812
188.14	2,143	3,646	188.66	2,433	4,836
188.15	2,149	3,668	188.67	2,439	4,861
188.16	2,154	3,689	188.68	2,444	4,885
188.17	2,160	3,711	188.69	2,450	4,910
188.18	2,165	3,733	188.70	2,456	4,934
188.19	2,171	3,754	188.71	2,461	4,959
188.20	2,177	3,776	188.72	2,467	4,983
188.21	2,182	3,798	188.73	2,472	5,008
188.22	2,188	3,820	188.74	2,478	5,033
188.23	2,193	3,842	188.75	2,484	5,058
188.24	2,199	3,863	188.76	2,489	5,082

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.77	2,495	5,107	189.29	2,801	6,482
188.78	2,500	5,132	189.30	2,807	6,510
188.79	2,506	5,157	189.31	2,813	6,538
188.80	2,511	5,182	189.32	2,819	6,567
188.81	2,517	5,208	189.33	2,826	6,595
188.82	2,523	5,233	189.34	2,832	6,623
188.83	2,528	5,258	189.35	2,838	6,651
188.84	2,534	5,283	189.36	2,844	6,680
188.85	2,539	5,309	189.37	2,850	6,708
188.86	2,545	5,334	189.38	2,856	6,737
188.87	2,550	5,360	189.39	2,862	6,765
188.88	2,556	5,385	189.40	2,869	6,794
188.89	2,562	5,411	189.41	2,875	6,823
188.90	2,567	5,436	189.42	2,881	6,852
188.91	2,573	5,462	189.43	2,887	6,880
188.92	2,578	5,488	189.44	2,893	6,909
188.93	2,584	5,514	189.45	2,899	6,938
188.94	2,590	5,539	189.46	2,905	6,967
188.95	2,595	5,565	189.47	2,912	6,996
188.96	2,601	5,591	189.48	2,918	7,026
188.97	2,606	5,617	189.49	2,924	7,055
188.98	2,612	5,643	189.50	2,930	7,084
188.99	2,617	5,670	189.51	2,936	7,113
189.00	2,623	5,696	189.52	2,942	7,143
189.01	2,629	5,722	189.53	2,948	7,172
189.02	2,635	5,748	189.54	2,955	7,202
189.03	2,641	5,775	189.55	2,961	7,231
189.04	2,648	5,801	189.56	2,967	7,261
189.05	2,654	5,828	189.57	2,973	7,291
189.06	2,660	5,854	189.58	2,979	7,320
189.07	2,666	5,881	189.59	2,985	7,350
189.08	2,672	5,908	189.60	2,991	7,380
189.09	2,678	5,934	189.61	2,998	7,410
189.10	2,684	5,961	189.62	3,004	7,440
189.11	2,691	5,988	189.63	3,010	7,470
189.12	2,697	6,015	189.64	3,016	7,500
189.13	2,703	6,042	189.65	3,022	7,530
189.14	2,709	6,069	189.66	3,028	7,561
189.15	2,715	6,096	189.67	3,034	7,591
189.16	2,721	6,123	189.68	3,041	7,621
189.17	2,727	6,151	189.69	3,047	7,652
189.18	2,734	6,178	189.70	3,053	7,682
189.19	2,740	6,205	189.71	3,059	7,713
189.20	2,746	6,233	189.72	3,065	7,744
189.21	2,752	6,260	189.73	3,071	7,774
189.22	2,758	6,288	189.74	3,077	7,805
189.23	2,764	6,315	189.75	3,084	7,836
189.24	2,770	6,343	189.76	3,090	7,867
189.25	2,777	6,371	189.77	3,096	7,898
189.26	2,783	6,399	189.78	3,102	7,929
189.27	2,789	6,426	189.79	3,108	7,960
189.28	2,795	6,454	189.80	3,114	7,991

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.81	3,120	8,022	190.33	3,458	9,731
189.82	3,126	8,053	190.34	3,465	9,765
189.83	3,133	8,084	190.35	3,472	9,800
189.84	3,139	8,116	190.36	3,479	9,835
189.85	3,145	8,147	190.37	3,485	9,869
189.86	3,151	8,179	190.38	3,492	9,904
189.87	3,157	8,210	190.39	3,499	9,939
189.88	3,163	8,242	190.40	3,505	9,974
189.89	3,169	8,273	190.41	3,512	10,009
189.90	3,176	8,305	190.42	3,519	10,045
189.91	3,182	8,337	190.43	3,526	10,080
189.92	3,188	8,369	190.44	3,532	10,115
189.93	3,194	8,401	190.45	3,539	10,150
189.94	3,200	8,433	190.46	3,546	10,186
189.95	3,206	8,465	190.47	3,552	10,221
189.96	3,212	8,497	190.48	3,559	10,257
189.97	3,219	8,529	190.49	3,566	10,293
189.98	3,225	8,561	190.50	3,573	10,328
189.99	3,231	8,593	190.51	3,579	10,364
190.00	3,237	8,626	190.52	3,586	10,400
190.01	3,244	8,658	190.53	3,593	10,436
190.02	3,250	8,691	190.54	3,599	10,472
190.03	3,257	8,723	190.55	3,606	10,508
190.04	3,264	8,756	190.56	3,613	10,544
190.05	3,271	8,789	190.57	3,619	10,580
190.06	3,277	8,821	190.58	3,626	10,616
190.07	3,284	8,854	190.59	3,633	10,652
190.08	3,291	8,887	190.60	3,640	10,689
190.09	3,297	8,920	190.61	3,646	10,725
190.10	3,304	8,953	190.62	3,653	10,762
190.11	3,311	8,986	190.63	3,660	10,798
190.12	3,318	9,019	190.64	3,666	10,835
190.13	3,324	9,052	190.65	3,673	10,872
190.14	3,331	9,086	190.66	3,680	10,908
190.15	3,338	9,119	190.67	3,687	10,945
190.16	3,344	9,152	190.68	3,693	10,982
190.17	3,351	9,186	190.69	3,700	11,019
190.18	3,358	9,219	190.70	3,707	11,056
190.19	3,364	9,253	190.71	3,713	11,093
190.20	3,371	9,287	190.72	3,720	11,130
190.21	3,378	9,320	190.73	3,727	11,168
190.22	3,385	9,354	190.74	3,734	11,205
190.23	3,391	9,388	190.75	3,740	11,242
190.24	3,398	9,422	190.76	3,747	11,280
190.25	3,405	9,456	190.77	3,754	11,317
190.26	3,411	9,490	190.78	3,760	11,355
190.27	3,418	9,524	190.79	3,767	11,392
190.28	3,425	9,558	190.80	3,774	11,430
190.29	3,432	9,593	190.81	3,781	11,468
190.30	3,438	9,627	190.82	3,787	11,506
190.31	3,445	9,662	190.83	3,794	11,544
190.32	3,452	9,696	190.84	3,801	11,582

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.85	3,807	11,620
190.86	3,814	11,658
190.87	3,821	11,696
190.88	3,827	11,734
190.89	3,834	11,773
190.90	3,841	11,811
190.91	3,848	11,849
190.92	3,854	11,888
190.93	3,861	11,926
190.94	3,868	11,965
190.95	3,874	12,004
190.96	3,881	12,043
190.97	3,888	12,081
190.98	3,895	12,120
190.99	3,901	12,159
191.00	**3,908**	**12,198**

Summary for Pond B-19: Basin #19

Inflow Area = 1.715 ac, 34.81% Impervious, Inflow Depth = 3.29" for Current 10 yr event
Inflow = 5.79 cfs @ 12.17 hrs, Volume= 0.470 af
Outflow = 2.83 cfs @ 12.35 hrs, Volume= 0.409 af, Atten= 51%, Lag= 10.9 min
Primary = 2.83 cfs @ 12.35 hrs, Volume= 0.409 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 198.09' @ 12.36 hrs Surf.Area= 3,876 sf Storage= 9,166 cf

Plug-Flow detention time= 331.3 min calculated for 0.409 af (87% of inflow)
Center-of-Mass det. time= 270.2 min (1,066.7 - 796.5)

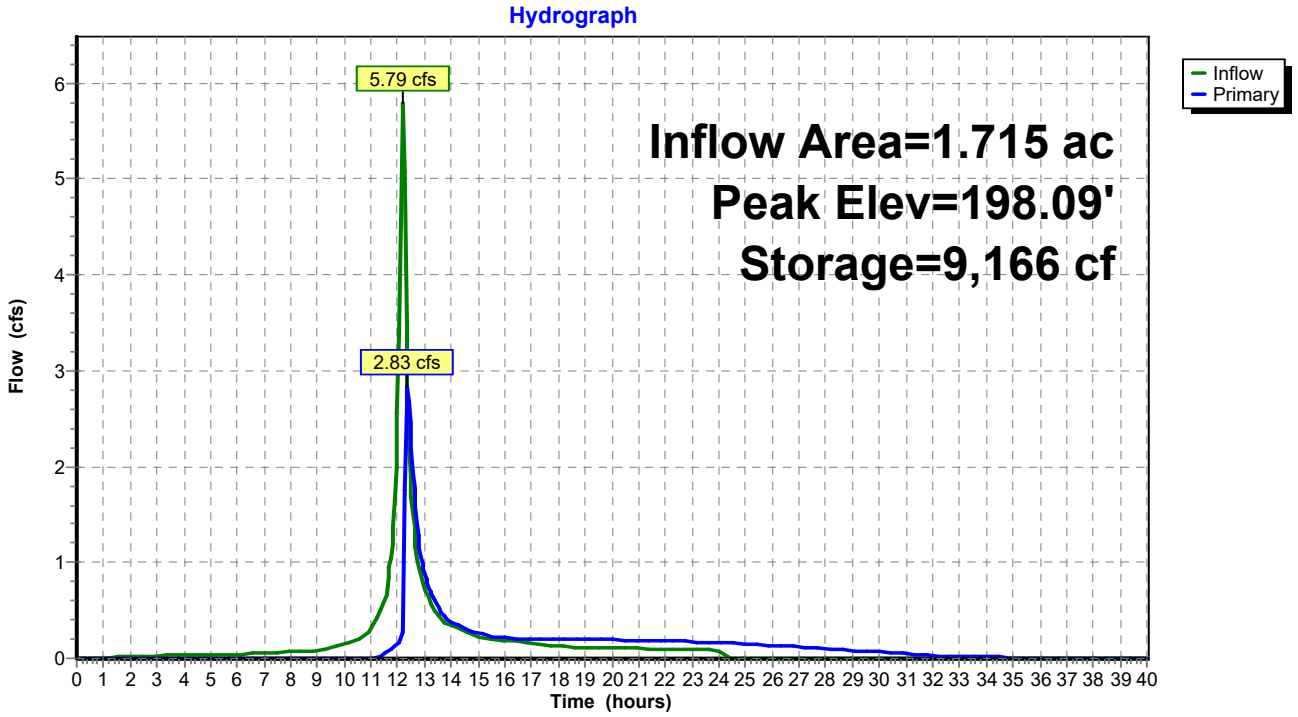
Volume	Invert	Avail.Storage	Storage Description
#1	194.65'	12,982 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
194.65	0	0	0
195.00	1,916	335	335
196.00	2,490	2,203	2,538
197.00	3,119	2,805	5,343
198.00	3,806	3,463	8,805
199.00	4,548	4,177	12,982

Device	Routing	Invert	Outlet Devices
#1	Primary	194.30'	**18.0" Round Culvert** L= 136.0' Ke= 0.500 Inlet / Outlet Invert= 194.30' / 185.86' S= 0.0621 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	196.00'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	197.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	198.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.81 cfs @ 12.35 hrs HW=198.09' (Free Discharge)
- **1=Culvert** (Passes 2.81 cfs of 14.84 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.79 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.58 cfs @ 1.91 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-19: Basin #19



Stage-Discharge for Pond B-19: Basin #19

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.65	0.00	195.17	0.00	195.69	0.00	196.21	0.05
194.66	0.00	195.18	0.00	195.70	0.00	196.22	0.06
194.67	0.00	195.19	0.00	195.71	0.00	196.23	0.06
194.68	0.00	195.20	0.00	195.72	0.00	196.24	0.06
194.69	0.00	195.21	0.00	195.73	0.00	196.25	0.06
194.70	0.00	195.22	0.00	195.74	0.00	196.26	0.06
194.71	0.00	195.23	0.00	195.75	0.00	196.27	0.07
194.72	0.00	195.24	0.00	195.76	0.00	196.28	0.07
194.73	0.00	195.25	0.00	195.77	0.00	196.29	0.07
194.74	0.00	195.26	0.00	195.78	0.00	196.30	0.07
194.75	0.00	195.27	0.00	195.79	0.00	196.31	0.07
194.76	0.00	195.28	0.00	195.80	0.00	196.32	0.08
194.77	0.00	195.29	0.00	195.81	0.00	196.33	0.08
194.78	0.00	195.30	0.00	195.82	0.00	196.34	0.08
194.79	0.00	195.31	0.00	195.83	0.00	196.35	0.08
194.80	0.00	195.32	0.00	195.84	0.00	196.36	0.08
194.81	0.00	195.33	0.00	195.85	0.00	196.37	0.08
194.82	0.00	195.34	0.00	195.86	0.00	196.38	0.09
194.83	0.00	195.35	0.00	195.87	0.00	196.39	0.09
194.84	0.00	195.36	0.00	195.88	0.00	196.40	0.09
194.85	0.00	195.37	0.00	195.89	0.00	196.41	0.09
194.86	0.00	195.38	0.00	195.90	0.00	196.42	0.09
194.87	0.00	195.39	0.00	195.91	0.00	196.43	0.09
194.88	0.00	195.40	0.00	195.92	0.00	196.44	0.10
194.89	0.00	195.41	0.00	195.93	0.00	196.45	0.10
194.90	0.00	195.42	0.00	195.94	0.00	196.46	0.10
194.91	0.00	195.43	0.00	195.95	0.00	196.47	0.10
194.92	0.00	195.44	0.00	195.96	0.00	196.48	0.10
194.93	0.00	195.45	0.00	195.97	0.00	196.49	0.10
194.94	0.00	195.46	0.00	195.98	0.00	196.50	0.10
194.95	0.00	195.47	0.00	195.99	0.00	196.51	0.10
194.96	0.00	195.48	0.00	196.00	0.00	196.52	0.11
194.97	0.00	195.49	0.00	196.01	0.00	196.53	0.11
194.98	0.00	195.50	0.00	196.02	0.00	196.54	0.11
194.99	0.00	195.51	0.00	196.03	0.00	196.55	0.11
195.00	0.00	195.52	0.00	196.04	0.00	196.56	0.11
195.01	0.00	195.53	0.00	196.05	0.00	196.57	0.11
195.02	0.00	195.54	0.00	196.06	0.01	196.58	0.11
195.03	0.00	195.55	0.00	196.07	0.01	196.59	0.11
195.04	0.00	195.56	0.00	196.08	0.01	196.60	0.12
195.05	0.00	195.57	0.00	196.09	0.01	196.61	0.12
195.06	0.00	195.58	0.00	196.10	0.02	196.62	0.12
195.07	0.00	195.59	0.00	196.11	0.02	196.63	0.12
195.08	0.00	195.60	0.00	196.12	0.02	196.64	0.12
195.09	0.00	195.61	0.00	196.13	0.03	196.65	0.12
195.10	0.00	195.62	0.00	196.14	0.03	196.66	0.12
195.11	0.00	195.63	0.00	196.15	0.03	196.67	0.12
195.12	0.00	195.64	0.00	196.16	0.04	196.68	0.12
195.13	0.00	195.65	0.00	196.17	0.04	196.69	0.13
195.14	0.00	195.66	0.00	196.18	0.05	196.70	0.13
195.15	0.00	195.67	0.00	196.19	0.05	196.71	0.13
195.16	0.00	195.68	0.00	196.20	0.05	196.72	0.13

Stage-Discharge for Pond B-19: Basin #19 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.73	0.13	197.25	0.18	197.77	0.25	198.29	5.29
196.74	0.13	197.26	0.18	197.78	0.28	198.30	5.43
196.75	0.13	197.27	0.18	197.79	0.32	198.31	5.57
196.76	0.13	197.28	0.18	197.80	0.36	198.32	5.71
196.77	0.13	197.29	0.18	197.81	0.41	198.33	5.85
196.78	0.13	197.30	0.18	197.82	0.46	198.34	6.00
196.79	0.14	197.31	0.18	197.83	0.51	198.35	6.14
196.80	0.14	197.32	0.18	197.84	0.57	198.36	6.29
196.81	0.14	197.33	0.18	197.85	0.63	198.37	6.43
196.82	0.14	197.34	0.18	197.86	0.69	198.38	6.58
196.83	0.14	197.35	0.18	197.87	0.76	198.39	6.73
196.84	0.14	197.36	0.18	197.88	0.83	198.40	6.88
196.85	0.14	197.37	0.18	197.89	0.90	198.41	7.03
196.86	0.14	197.38	0.19	197.90	0.97	198.42	7.18
196.87	0.14	197.39	0.19	197.91	1.05	198.43	7.34
196.88	0.14	197.40	0.19	197.92	1.13	198.44	7.49
196.89	0.15	197.41	0.19	197.93	1.21	198.45	7.64
196.90	0.15	197.42	0.19	197.94	1.30	198.46	7.80
196.91	0.15	197.43	0.19	197.95	1.38	198.47	7.96
196.92	0.15	197.44	0.19	197.96	1.47	198.48	8.11
196.93	0.15	197.45	0.19	197.97	1.56	198.49	8.27
196.94	0.15	197.46	0.19	197.98	1.65	198.50	8.43
196.95	0.15	197.47	0.19	197.99	1.74	198.51	8.59
196.96	0.15	197.48	0.19	198.00	1.84	198.52	8.75
196.97	0.15	197.49	0.19	198.01	1.94	198.53	8.91
196.98	0.15	197.50	0.19	198.02	2.04	198.54	9.08
196.99	0.15	197.51	0.19	198.03	2.14	198.55	9.24
197.00	0.16	197.52	0.20	198.04	2.24	198.56	9.41
197.01	0.16	197.53	0.20	198.05	2.35	198.57	9.57
197.02	0.16	197.54	0.20	198.06	2.45	198.58	9.74
197.03	0.16	197.55	0.20	198.07	2.56	198.59	9.91
197.04	0.16	197.56	0.20	198.08	2.67	198.60	10.07
197.05	0.16	197.57	0.20	198.09	2.78	198.61	10.24
197.06	0.16	197.58	0.20	198.10	2.89	198.62	10.41
197.07	0.16	197.59	0.20	198.11	3.01	198.63	10.58
197.08	0.16	197.60	0.20	198.12	3.12	198.64	10.75
197.09	0.16	197.61	0.20	198.13	3.24	198.65	10.93
197.10	0.16	197.62	0.20	198.14	3.36	198.66	11.10
197.11	0.16	197.63	0.20	198.15	3.48	198.67	11.27
197.12	0.17	197.64	0.20	198.16	3.60	198.68	11.45
197.13	0.17	197.65	0.20	198.17	3.72	198.69	11.62
197.14	0.17	197.66	0.20	198.18	3.85	198.70	11.80
197.15	0.17	197.67	0.21	198.19	3.97	198.71	11.98
197.16	0.17	197.68	0.21	198.20	4.10	198.72	12.16
197.17	0.17	197.69	0.21	198.21	4.23	198.73	12.33
197.18	0.17	197.70	0.21	198.22	4.35	198.74	12.51
197.19	0.17	197.71	0.21	198.23	4.48	198.75	12.69
197.20	0.17	197.72	0.21	198.24	4.62	198.76	12.87
197.21	0.17	197.73	0.21	198.25	4.75	198.77	13.06
197.22	0.17	197.74	0.21	198.26	4.88	198.78	13.24
197.23	0.17	197.75	0.21	198.27	5.02	198.79	13.42
197.24	0.17	197.76	0.22	198.28	5.16	198.80	13.60

Stage-Discharge for Pond B-19: Basin #19 (continued)

Elevation (feet)	Primary (cfs)
198.81	13.79
198.82	13.97
198.83	14.16
198.84	14.35
198.85	14.53
198.86	14.72
198.87	14.91
198.88	15.10
198.89	15.29
198.90	15.48
198.91	15.67
198.92	15.86
198.93	16.05
198.94	16.25
198.95	16.44
198.96	16.75
198.97	17.16
198.98	17.48
198.99	17.83
199.00	**18.22**

Stage-Area-Storage for Pond B-19: Basin #19

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.65	0	0	195.17	2,014	669
194.66	55	0	195.18	2,019	689
194.67	109	1	195.19	2,025	710
194.68	164	2	195.20	2,031	730
194.69	219	4	195.21	2,037	750
194.70	274	7	195.22	2,042	771
194.71	328	10	195.23	2,048	791
194.72	383	13	195.24	2,054	812
194.73	438	18	195.25	2,060	832
194.74	493	22	195.26	2,065	853
194.75	547	27	195.27	2,071	874
194.76	602	33	195.28	2,077	894
194.77	657	39	195.29	2,082	915
194.78	712	46	195.30	2,088	936
194.79	766	54	195.31	2,094	957
194.80	821	62	195.32	2,100	978
194.81	876	70	195.33	2,105	999
194.82	931	79	195.34	2,111	1,020
194.83	985	89	195.35	2,117	1,041
194.84	1,040	99	195.36	2,123	1,062
194.85	1,095	109	195.37	2,128	1,084
194.86	1,150	121	195.38	2,134	1,105
194.87	1,204	132	195.39	2,140	1,126
194.88	1,259	145	195.40	2,146	1,148
194.89	1,314	158	195.41	2,151	1,169
194.90	1,369	171	195.42	2,157	1,191
194.91	1,423	185	195.43	2,163	1,212
194.92	1,478	200	195.44	2,169	1,234
194.93	1,533	215	195.45	2,174	1,256
194.94	1,588	230	195.46	2,180	1,277
194.95	1,642	246	195.47	2,186	1,299
194.96	1,697	263	195.48	2,192	1,321
194.97	1,752	280	195.49	2,197	1,343
194.98	1,807	298	195.50	2,203	1,365
194.99	1,861	316	195.51	2,209	1,387
195.00	1,916	335	195.52	2,214	1,409
195.01	1,922	354	195.53	2,220	1,431
195.02	1,927	374	195.54	2,226	1,454
195.03	1,933	393	195.55	2,232	1,476
195.04	1,939	412	195.56	2,237	1,498
195.05	1,945	432	195.57	2,243	1,521
195.06	1,950	451	195.58	2,249	1,543
195.07	1,956	471	195.59	2,255	1,566
195.08	1,962	490	195.60	2,260	1,588
195.09	1,968	510	195.61	2,266	1,611
195.10	1,973	530	195.62	2,272	1,634
195.11	1,979	550	195.63	2,278	1,656
195.12	1,985	569	195.64	2,283	1,679
195.13	1,991	589	195.65	2,289	1,702
195.14	1,996	609	195.66	2,295	1,725
195.15	2,002	629	195.67	2,301	1,748
195.16	2,008	649	195.68	2,306	1,771

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.69	2,312	1,794	196.21	2,622	3,075
195.70	2,318	1,817	196.22	2,628	3,101
195.71	2,324	1,840	196.23	2,635	3,128
195.72	2,329	1,864	196.24	2,641	3,154
195.73	2,335	1,887	196.25	2,647	3,180
195.74	2,341	1,910	196.26	2,654	3,207
195.75	2,347	1,934	196.27	2,660	3,234
195.76	2,352	1,957	196.28	2,666	3,260
195.77	2,358	1,981	196.29	2,672	3,287
195.78	2,364	2,004	196.30	2,679	3,314
195.79	2,369	2,028	196.31	2,685	3,340
195.80	2,375	2,052	196.32	2,691	3,367
195.81	2,381	2,076	196.33	2,698	3,394
195.82	2,387	2,099	196.34	2,704	3,421
195.83	2,392	2,123	196.35	2,710	3,448
195.84	2,398	2,147	196.36	2,716	3,475
195.85	2,404	2,171	196.37	2,723	3,503
195.86	2,410	2,195	196.38	2,729	3,530
195.87	2,415	2,219	196.39	2,735	3,557
195.88	2,421	2,244	196.40	2,742	3,585
195.89	2,427	2,268	196.41	2,748	3,612
195.90	2,433	2,292	196.42	2,754	3,640
195.91	2,438	2,317	196.43	2,760	3,667
195.92	2,444	2,341	196.44	2,767	3,695
195.93	2,450	2,365	196.45	2,773	3,722
195.94	2,456	2,390	196.46	2,779	3,750
195.95	2,461	2,415	196.47	2,786	3,778
195.96	2,467	2,439	196.48	2,792	3,806
195.97	2,473	2,464	196.49	2,798	3,834
195.98	2,479	2,489	196.50	2,805	3,862
195.99	2,484	2,513	196.51	2,811	3,890
196.00	2,490	2,538	196.52	2,817	3,918
196.01	2,496	2,563	196.53	2,823	3,946
196.02	2,503	2,588	196.54	2,830	3,975
196.03	2,509	2,613	196.55	2,836	4,003
196.04	2,515	2,638	196.56	2,842	4,031
196.05	2,521	2,664	196.57	2,849	4,060
196.06	2,528	2,689	196.58	2,855	4,088
196.07	2,534	2,714	196.59	2,861	4,117
196.08	2,540	2,740	196.60	2,867	4,146
196.09	2,547	2,765	196.61	2,874	4,174
196.10	2,553	2,790	196.62	2,880	4,203
196.11	2,559	2,816	196.63	2,886	4,232
196.12	2,565	2,842	196.64	2,893	4,261
196.13	2,572	2,867	196.65	2,899	4,290
196.14	2,578	2,893	196.66	2,905	4,319
196.15	2,584	2,919	196.67	2,911	4,348
196.16	2,591	2,945	196.68	2,918	4,377
196.17	2,597	2,971	196.69	2,924	4,406
196.18	2,603	2,997	196.70	2,930	4,435
196.19	2,610	3,023	196.71	2,937	4,465
196.20	2,616	3,049	196.72	2,943	4,494

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.73	2,949	4,524	197.25	3,291	6,144
196.74	2,955	4,553	197.26	3,298	6,177
196.75	2,962	4,583	197.27	3,304	6,210
196.76	2,968	4,612	197.28	3,311	6,243
196.77	2,974	4,642	197.29	3,318	6,276
196.78	2,981	4,672	197.30	3,325	6,309
196.79	2,987	4,702	197.31	3,332	6,343
196.80	2,993	4,732	197.32	3,339	6,376
196.81	2,999	4,762	197.33	3,346	6,409
196.82	3,006	4,792	197.34	3,353	6,443
196.83	3,012	4,822	197.35	3,359	6,477
196.84	3,018	4,852	197.36	3,366	6,510
196.85	3,025	4,882	197.37	3,373	6,544
196.86	3,031	4,912	197.38	3,380	6,578
196.87	3,037	4,943	197.39	3,387	6,611
196.88	3,044	4,973	197.40	3,394	6,645
196.89	3,050	5,004	197.41	3,401	6,679
196.90	3,056	5,034	197.42	3,408	6,713
196.91	3,062	5,065	197.43	3,414	6,747
196.92	3,069	5,095	197.44	3,421	6,782
196.93	3,075	5,126	197.45	3,428	6,816
196.94	3,081	5,157	197.46	3,435	6,850
196.95	3,088	5,188	197.47	3,442	6,885
196.96	3,094	5,219	197.48	3,449	6,919
196.97	3,100	5,250	197.49	3,456	6,954
196.98	3,106	5,281	197.50	3,463	6,988
196.99	3,113	5,312	197.51	3,469	7,023
197.00	3,119	5,343	197.52	3,476	7,058
197.01	3,126	5,374	197.53	3,483	7,092
197.02	3,133	5,405	197.54	3,490	7,127
197.03	3,140	5,437	197.55	3,497	7,162
197.04	3,146	5,468	197.56	3,504	7,197
197.05	3,153	5,500	197.57	3,511	7,232
197.06	3,160	5,531	197.58	3,517	7,267
197.07	3,167	5,563	197.59	3,524	7,303
197.08	3,174	5,595	197.60	3,531	7,338
197.09	3,181	5,626	197.61	3,538	7,373
197.10	3,188	5,658	197.62	3,545	7,409
197.11	3,195	5,690	197.63	3,552	7,444
197.12	3,201	5,722	197.64	3,559	7,480
197.13	3,208	5,754	197.65	3,566	7,515
197.14	3,215	5,786	197.66	3,572	7,551
197.15	3,222	5,818	197.67	3,579	7,587
197.16	3,229	5,851	197.68	3,586	7,623
197.17	3,236	5,883	197.69	3,593	7,658
197.18	3,243	5,915	197.70	3,600	7,694
197.19	3,250	5,948	197.71	3,607	7,730
197.20	3,256	5,980	197.72	3,614	7,767
197.21	3,263	6,013	197.73	3,621	7,803
197.22	3,270	6,046	197.74	3,627	7,839
197.23	3,277	6,078	197.75	3,634	7,875
197.24	3,284	6,111	197.76	3,641	7,912

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.77	3,648	7,948	198.29	4,021	9,940
197.78	3,655	7,985	198.30	4,029	9,980
197.79	3,662	8,021	198.31	4,036	10,021
197.80	3,669	8,058	198.32	4,043	10,061
197.81	3,675	8,095	198.33	4,051	10,102
197.82	3,682	8,131	198.34	4,058	10,142
197.83	3,689	8,168	198.35	4,066	10,183
197.84	3,696	8,205	198.36	4,073	10,224
197.85	3,703	8,242	198.37	4,081	10,264
197.86	3,710	8,279	198.38	4,088	10,305
197.87	3,717	8,316	198.39	4,095	10,346
197.88	3,724	8,354	198.40	4,103	10,387
197.89	3,730	8,391	198.41	4,110	10,428
197.90	3,737	8,428	198.42	4,118	10,469
197.91	3,744	8,466	198.43	4,125	10,510
197.92	3,751	8,503	198.44	4,132	10,552
197.93	3,758	8,541	198.45	4,140	10,593
197.94	3,765	8,578	198.46	4,147	10,635
197.95	3,772	8,616	198.47	4,155	10,676
197.96	3,779	8,654	198.48	4,162	10,718
197.97	3,785	8,691	198.49	4,170	10,759
197.98	3,792	8,729	198.50	4,177	10,801
197.99	3,799	8,767	198.51	4,184	10,843
198.00	3,806	8,805	198.52	4,192	10,885
198.01	3,813	8,843	198.53	4,199	10,927
198.02	3,821	8,882	198.54	4,207	10,969
198.03	3,828	8,920	198.55	4,214	11,011
198.04	3,836	8,958	198.56	4,222	11,053
198.05	3,843	8,997	198.57	4,229	11,095
198.06	3,851	9,035	198.58	4,236	11,138
198.07	3,858	9,074	198.59	4,244	11,180
198.08	3,865	9,112	198.60	4,251	11,222
198.09	3,873	9,151	198.61	4,259	11,265
198.10	3,880	9,190	198.62	4,266	11,308
198.11	3,888	9,228	198.63	4,273	11,350
198.12	3,895	9,267	198.64	4,281	11,393
198.13	3,902	9,306	198.65	4,288	11,436
198.14	3,910	9,345	198.66	4,296	11,479
198.15	3,917	9,385	198.67	4,303	11,522
198.16	3,925	9,424	198.68	4,311	11,565
198.17	3,932	9,463	198.69	4,318	11,608
198.18	3,940	9,502	198.70	4,325	11,651
198.19	3,947	9,542	198.71	4,333	11,695
198.20	3,954	9,581	198.72	4,340	11,738
198.21	3,962	9,621	198.73	4,348	11,781
198.22	3,969	9,661	198.74	4,355	11,825
198.23	3,977	9,700	198.75	4,363	11,868
198.24	3,984	9,740	198.76	4,370	11,912
198.25	3,992	9,780	198.77	4,377	11,956
198.26	3,999	9,820	198.78	4,385	12,000
198.27	4,006	9,860	198.79	4,392	12,044
198.28	4,014	9,900	198.80	4,400	12,088

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.81	4,407	12,132
198.82	4,414	12,176
198.83	4,422	12,220
198.84	4,429	12,264
198.85	4,437	12,308
198.86	4,444	12,353
198.87	4,452	12,397
198.88	4,459	12,442
198.89	4,466	12,487
198.90	4,474	12,531
198.91	4,481	12,576
198.92	4,489	12,621
198.93	4,496	12,666
198.94	4,503	12,711
198.95	4,511	12,756
198.96	4,518	12,801
198.97	4,526	12,846
198.98	4,533	12,891
198.99	4,541	12,937
199.00	**4,548**	**12,982**

Summary for Pond B-20: Basin #20

Inflow Area = 2.453 ac, 46.07% Impervious, Inflow Depth = 3.56" for Current 10 yr event
Inflow = 8.82 cfs @ 12.17 hrs, Volume= 0.727 af
Outflow = 3.80 cfs @ 12.37 hrs, Volume= 0.595 af, Atten= 57%, Lag= 12.2 min
Primary = 3.80 cfs @ 12.37 hrs, Volume= 0.595 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 153.18' @ 12.37 hrs Surf.Area= 7,664 sf Storage= 15,177 cf

Plug-Flow detention time= 404.6 min calculated for 0.594 af (82% of inflow)
Center-of-Mass det. time= 327.5 min (1,113.6 - 786.0)

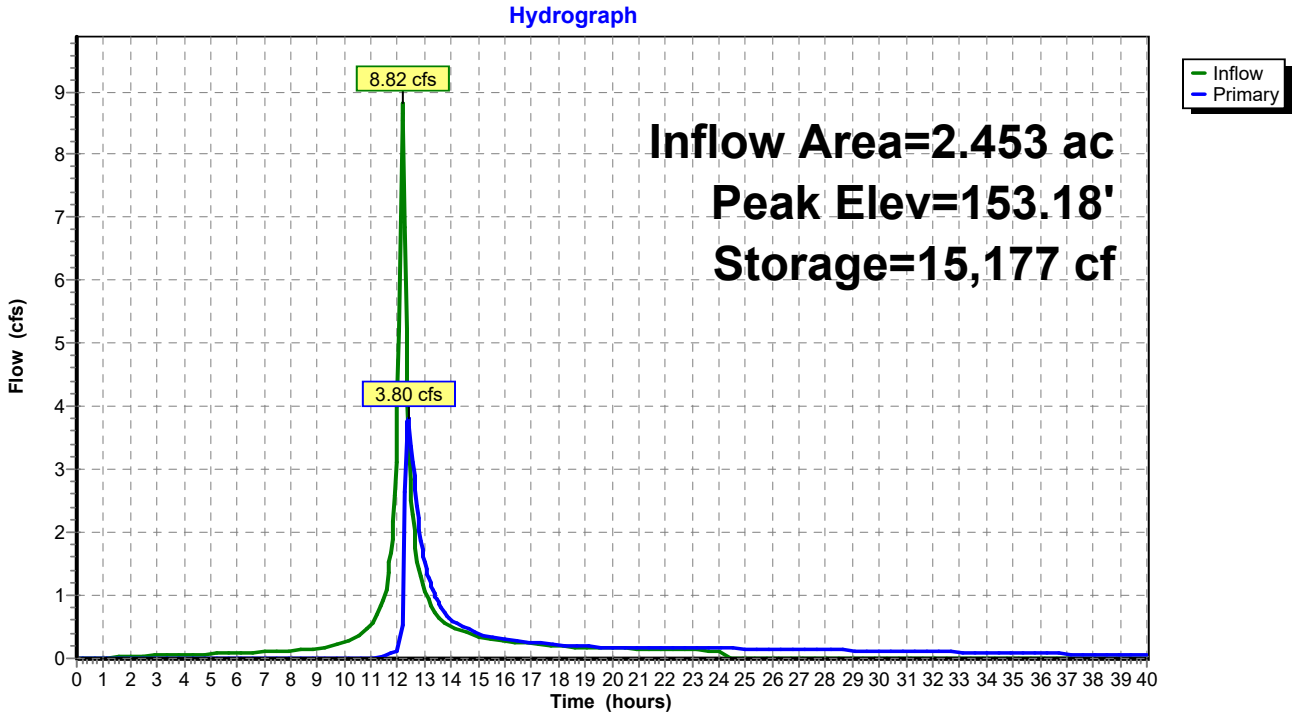
Volume	Invert	Avail.Storage	Storage Description
#1	150.87'	35,230 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
150.87	0	0	0
151.00	5,926	385	385
152.00	6,706	6,316	6,701
153.00	7,514	7,110	13,811
154.00	8,347	7,931	21,742
155.00	9,205	8,776	30,518
155.50	9,643	4,712	35,230

Device	Routing	Invert	Outlet Devices
#1	Primary	151.00'	**18.0" Round Culvert** L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 151.00' / 150.71' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	151.68'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	152.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	154.32'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.76 cfs @ 12.37 hrs HW=153.18' (Free Discharge)
- **1=Culvert** (Passes 3.76 cfs of 9.79 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.68 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.57 cfs @ 2.14 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-20: Basin #20



Stage-Discharge for Pond B-20: Basin #20

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
150.87	0.00	151.39	0.00	151.91	0.06	152.43	0.13
150.88	0.00	151.40	0.00	151.92	0.06	152.44	0.13
150.89	0.00	151.41	0.00	151.93	0.06	152.45	0.13
150.90	0.00	151.42	0.00	151.94	0.06	152.46	0.13
150.91	0.00	151.43	0.00	151.95	0.07	152.47	0.14
150.92	0.00	151.44	0.00	151.96	0.07	152.48	0.14
150.93	0.00	151.45	0.00	151.97	0.07	152.49	0.14
150.94	0.00	151.46	0.00	151.98	0.07	152.50	0.14
150.95	0.00	151.47	0.00	151.99	0.07	152.51	0.14
150.96	0.00	151.48	0.00	152.00	0.08	152.52	0.14
150.97	0.00	151.49	0.00	152.01	0.08	152.53	0.14
150.98	0.00	151.50	0.00	152.02	0.08	152.54	0.14
150.99	0.00	151.51	0.00	152.03	0.08	152.55	0.14
151.00	0.00	151.52	0.00	152.04	0.08	152.56	0.14
151.01	0.00	151.53	0.00	152.05	0.08	152.57	0.15
151.02	0.00	151.54	0.00	152.06	0.09	152.58	0.15
151.03	0.00	151.55	0.00	152.07	0.09	152.59	0.15
151.04	0.00	151.56	0.00	152.08	0.09	152.60	0.15
151.05	0.00	151.57	0.00	152.09	0.09	152.61	0.15
151.06	0.00	151.58	0.00	152.10	0.09	152.62	0.15
151.07	0.00	151.59	0.00	152.11	0.09	152.63	0.15
151.08	0.00	151.60	0.00	152.12	0.10	152.64	0.15
151.09	0.00	151.61	0.00	152.13	0.10	152.65	0.15
151.10	0.00	151.62	0.00	152.14	0.10	152.66	0.15
151.11	0.00	151.63	0.00	152.15	0.10	152.67	0.15
151.12	0.00	151.64	0.00	152.16	0.10	152.68	0.16
151.13	0.00	151.65	0.00	152.17	0.10	152.69	0.16
151.14	0.00	151.66	0.00	152.18	0.10	152.70	0.16
151.15	0.00	151.67	0.00	152.19	0.10	152.71	0.16
151.16	0.00	151.68	0.00	152.20	0.11	152.72	0.16
151.17	0.00	151.69	0.00	152.21	0.11	152.73	0.16
151.18	0.00	151.70	0.00	152.22	0.11	152.74	0.16
151.19	0.00	151.71	0.00	152.23	0.11	152.75	0.16
151.20	0.00	151.72	0.00	152.24	0.11	152.76	0.18
151.21	0.00	151.73	0.00	152.25	0.11	152.77	0.20
151.22	0.00	151.74	0.01	152.26	0.11	152.78	0.23
151.23	0.00	151.75	0.01	152.27	0.11	152.79	0.27
151.24	0.00	151.76	0.01	152.28	0.12	152.80	0.31
151.25	0.00	151.77	0.01	152.29	0.12	152.81	0.36
151.26	0.00	151.78	0.02	152.30	0.12	152.82	0.41
151.27	0.00	151.79	0.02	152.31	0.12	152.83	0.46
151.28	0.00	151.80	0.02	152.32	0.12	152.84	0.52
151.29	0.00	151.81	0.03	152.33	0.12	152.85	0.58
151.30	0.00	151.82	0.03	152.34	0.12	152.86	0.64
151.31	0.00	151.83	0.03	152.35	0.12	152.87	0.71
151.32	0.00	151.84	0.04	152.36	0.12	152.88	0.78
151.33	0.00	151.85	0.04	152.37	0.13	152.89	0.85
151.34	0.00	151.86	0.05	152.38	0.13	152.90	0.93
151.35	0.00	151.87	0.05	152.39	0.13	152.91	1.00
151.36	0.00	151.88	0.05	152.40	0.13	152.92	1.08
151.37	0.00	151.89	0.05	152.41	0.13	152.93	1.17
151.38	0.00	151.90	0.06	152.42	0.13	152.94	1.25

Stage-Discharge for Pond B-20: Basin #20 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
152.95	1.34	153.47	7.92	153.99	12.73	154.51	23.91
152.96	1.42	153.48	8.07	154.00	12.76	154.52	24.73
152.97	1.51	153.49	8.23	154.01	12.79	154.53	25.60
152.98	1.61	153.50	8.39	154.02	12.82	154.54	26.50
152.99	1.70	153.51	8.55	154.03	12.85	154.55	27.42
153.00	1.80	153.52	8.71	154.04	12.88	154.56	28.37
153.01	1.89	153.53	8.88	154.05	12.90	154.57	29.34
153.02	1.99	153.54	9.04	154.06	12.93	154.58	30.34
153.03	2.09	153.55	9.20	154.07	12.96	154.59	31.36
153.04	2.20	153.56	9.37	154.08	12.99	154.60	32.41
153.05	2.30	153.57	9.53	154.09	13.02	154.61	33.49
153.06	2.41	153.58	9.70	154.10	13.04	154.62	34.58
153.07	2.52	153.59	9.87	154.11	13.07	154.63	35.71
153.08	2.63	153.60	10.04	154.12	13.10	154.64	36.85
153.09	2.74	153.61	10.20	154.13	13.13	154.65	38.02
153.10	2.85	153.62	10.37	154.14	13.15	154.66	39.22
153.11	2.96	153.63	10.55	154.15	13.18	154.67	40.44
153.12	3.08	153.64	10.72	154.16	13.21	154.68	41.68
153.13	3.20	153.65	10.89	154.17	13.24	154.69	42.95
153.14	3.31	153.66	11.06	154.18	13.26	154.70	44.24
153.15	3.43	153.67	11.24	154.19	13.29	154.71	45.55
153.16	3.56	153.68	11.41	154.20	13.32	154.72	46.89
153.17	3.68	153.69	11.59	154.21	13.35	154.73	48.28
153.18	3.80	153.70	11.76	154.22	13.37	154.74	49.70
153.19	3.93	153.71	11.91	154.23	13.40	154.75	51.14
153.20	4.05	153.72	11.94	154.24	13.43	154.76	52.61
153.21	4.18	153.73	11.97	154.25	13.45	154.77	54.11
153.22	4.31	153.74	12.00	154.26	13.48	154.78	55.63
153.23	4.44	153.75	12.03	154.27	13.51	154.79	57.17
153.24	4.57	153.76	12.06	154.28	13.53	154.80	58.75
153.25	4.71	153.77	12.09	154.29	13.56	154.81	60.35
153.26	4.84	153.78	12.12	154.30	13.59	154.82	61.97
153.27	4.98	153.79	12.15	154.31	13.61	154.83	63.63
153.28	5.11	153.80	12.18	154.32	13.64	154.84	65.31
153.29	5.25	153.81	12.21	154.33	13.78	154.85	67.01
153.30	5.39	153.82	12.24	154.34	14.02	154.86	68.74
153.31	5.53	153.83	12.27	154.35	14.33	154.87	70.50
153.32	5.67	153.84	12.30	154.36	14.68	154.88	72.29
153.33	5.81	153.85	12.33	154.37	15.08	154.89	74.10
153.34	5.96	153.86	12.36	154.38	15.52	154.90	75.94
153.35	6.10	153.87	12.39	154.39	16.00	154.91	77.81
153.36	6.25	153.88	12.42	154.40	16.51	154.92	79.70
153.37	6.39	153.89	12.45	154.41	17.05	154.93	81.35
153.38	6.54	153.90	12.48	154.42	17.62	154.94	83.01
153.39	6.69	153.91	12.51	154.43	18.22	154.95	84.69
153.40	6.84	153.92	12.53	154.44	18.85	154.96	86.38
153.41	6.99	153.93	12.56	154.45	19.50	154.97	88.09
153.42	7.14	153.94	12.59	154.46	20.18	154.98	89.80
153.43	7.30	153.95	12.62	154.47	20.88	154.99	91.54
153.44	7.45	153.96	12.65	154.48	21.60	155.00	93.28
153.45	7.60	153.97	12.68	154.49	22.35	155.01	95.04
153.46	7.76	153.98	12.71	154.50	23.12	155.02	96.80

Stage-Discharge for Pond B-20: Basin #20 (continued)

Elevation (feet)	Primary (cfs)
155.03	98.59
155.04	100.38
155.05	102.19
155.06	104.01
155.07	105.84
155.08	107.69
155.09	109.54
155.10	111.41
155.11	113.29
155.12	115.18
155.13	117.13
155.14	119.08
155.15	121.05
155.16	123.03
155.17	125.03
155.18	127.04
155.19	129.06
155.20	131.10
155.21	133.14
155.22	135.20
155.23	137.28
155.24	139.36
155.25	141.46
155.26	143.57
155.27	145.70
155.28	147.84
155.29	149.99
155.30	152.15
155.31	154.32
155.32	156.51
155.33	158.66
155.34	160.81
155.35	162.98
155.36	165.16
155.37	167.35
155.38	169.55
155.39	171.76
155.40	173.98
155.41	176.21
155.42	178.45
155.43	180.70
155.44	182.96
155.45	185.24
155.46	187.52
155.47	189.81
155.48	192.11
155.49	194.43
155.50	**196.75**

Stage-Area-Storage for Pond B-20: Basin #20

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.87	0	0	151.39	6,230	2,756
150.88	456	2	151.40	6,238	2,818
150.89	912	9	151.41	6,246	2,880
150.90	1,368	21	151.42	6,254	2,943
150.91	1,823	36	151.43	6,261	3,005
150.92	2,279	57	151.44	6,269	3,068
150.93	2,735	82	151.45	6,277	3,131
150.94	3,191	112	151.46	6,285	3,194
150.95	3,647	146	151.47	6,293	3,257
150.96	4,103	185	151.48	6,300	3,320
150.97	4,558	228	151.49	6,308	3,383
150.98	5,014	276	151.50	6,316	3,446
150.99	5,470	328	151.51	6,324	3,509
151.00	5,926	385	151.52	6,332	3,572
151.01	5,934	444	151.53	6,339	3,636
151.02	5,942	504	151.54	6,347	3,699
151.03	5,949	563	151.55	6,355	3,762
151.04	5,957	623	151.56	6,363	3,826
151.05	5,965	682	151.57	6,371	3,890
151.06	5,973	742	151.58	6,378	3,953
151.07	5,981	802	151.59	6,386	4,017
151.08	5,988	862	151.60	6,394	4,081
151.09	5,996	922	151.61	6,402	4,145
151.10	6,004	982	151.62	6,410	4,209
151.11	6,012	1,042	151.63	6,417	4,273
151.12	6,020	1,102	151.64	6,425	4,338
151.13	6,027	1,162	151.65	6,433	4,402
151.14	6,035	1,222	151.66	6,441	4,466
151.15	6,043	1,283	151.67	6,449	4,531
151.16	6,051	1,343	151.68	6,456	4,595
151.17	6,059	1,404	151.69	6,464	4,660
151.18	6,066	1,465	151.70	6,472	4,724
151.19	6,074	1,525	151.71	6,480	4,789
151.20	6,082	1,586	151.72	6,488	4,854
151.21	6,090	1,647	151.73	6,495	4,919
151.22	6,098	1,708	151.74	6,503	4,984
151.23	6,105	1,769	151.75	6,511	5,049
151.24	6,113	1,830	151.76	6,519	5,114
151.25	6,121	1,891	151.77	6,527	5,179
151.26	6,129	1,952	151.78	6,534	5,245
151.27	6,137	2,014	151.79	6,542	5,310
151.28	6,144	2,075	151.80	6,550	5,376
151.29	6,152	2,137	151.81	6,558	5,441
151.30	6,160	2,198	151.82	6,566	5,507
151.31	6,168	2,260	151.83	6,573	5,572
151.32	6,176	2,321	151.84	6,581	5,638
151.33	6,183	2,383	151.85	6,589	5,704
151.34	6,191	2,445	151.86	6,597	5,770
151.35	6,199	2,507	151.87	6,605	5,836
151.36	6,207	2,569	151.88	6,612	5,902
151.37	6,215	2,631	151.89	6,620	5,968
151.38	6,222	2,693	151.90	6,628	6,034

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.91	6,636	6,101	152.43	7,053	9,659
151.92	6,644	6,167	152.44	7,062	9,730
151.93	6,651	6,234	152.45	7,070	9,801
151.94	6,659	6,300	152.46	7,078	9,871
151.95	6,667	6,367	152.47	7,086	9,942
151.96	6,675	6,434	152.48	7,094	10,013
151.97	6,683	6,500	152.49	7,102	10,084
151.98	6,690	6,567	152.50	7,110	10,155
151.99	6,698	6,634	152.51	7,118	10,226
152.00	6,706	6,701	152.52	7,126	10,298
152.01	6,714	6,768	152.53	7,134	10,369
152.02	6,722	6,835	152.54	7,142	10,440
152.03	6,730	6,903	152.55	7,150	10,512
152.04	6,738	6,970	152.56	7,158	10,583
152.05	6,746	7,038	152.57	7,167	10,655
152.06	6,754	7,105	152.58	7,175	10,727
152.07	6,763	7,173	152.59	7,183	10,798
152.08	6,771	7,240	152.60	7,191	10,870
152.09	6,779	7,308	152.61	7,199	10,942
152.10	6,787	7,376	152.62	7,207	11,014
152.11	6,795	7,444	152.63	7,215	11,086
152.12	6,803	7,512	152.64	7,223	11,159
152.13	6,811	7,580	152.65	7,231	11,231
152.14	6,819	7,648	152.66	7,239	11,303
152.15	6,827	7,716	152.67	7,247	11,376
152.16	6,835	7,784	152.68	7,255	11,448
152.17	6,843	7,853	152.69	7,264	11,521
152.18	6,851	7,921	152.70	7,272	11,593
152.19	6,860	7,990	152.71	7,280	11,666
152.20	6,868	8,059	152.72	7,288	11,739
152.21	6,876	8,127	152.73	7,296	11,812
152.22	6,884	8,196	152.74	7,304	11,885
152.23	6,892	8,265	152.75	7,312	11,958
152.24	6,900	8,334	152.76	7,320	12,031
152.25	6,908	8,403	152.77	7,328	12,104
152.26	6,916	8,472	152.78	7,336	12,178
152.27	6,924	8,541	152.79	7,344	12,251
152.28	6,932	8,611	152.80	7,352	12,325
152.29	6,940	8,680	152.81	7,360	12,398
152.30	6,948	8,749	152.82	7,369	12,472
152.31	6,956	8,819	152.83	7,377	12,545
152.32	6,965	8,888	152.84	7,385	12,619
152.33	6,973	8,958	152.85	7,393	12,693
152.34	6,981	9,028	152.86	7,401	12,767
152.35	6,989	9,098	152.87	7,409	12,841
152.36	6,997	9,168	152.88	7,417	12,915
152.37	7,005	9,238	152.89	7,425	12,990
152.38	7,013	9,308	152.90	7,433	13,064
152.39	7,021	9,378	152.91	7,441	13,138
152.40	7,029	9,448	152.92	7,449	13,213
152.41	7,037	9,519	152.93	7,457	13,287
152.42	7,045	9,589	152.94	7,466	13,362

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
152.95	7,474	13,437	153.47	7,906	17,435
152.96	7,482	13,511	153.48	7,914	17,514
152.97	7,490	13,586	153.49	7,922	17,593
152.98	7,498	13,661	153.50	7,931	17,672
152.99	7,506	13,736	153.51	7,939	17,752
153.00	7,514	13,811	153.52	7,947	17,831
153.01	7,522	13,886	153.53	7,955	17,911
153.02	7,531	13,962	153.54	7,964	17,990
153.03	7,539	14,037	153.55	7,972	18,070
153.04	7,547	14,112	153.56	7,980	18,150
153.05	7,556	14,188	153.57	7,989	18,229
153.06	7,564	14,264	153.58	7,997	18,309
153.07	7,572	14,339	153.59	8,005	18,389
153.08	7,581	14,415	153.60	8,014	18,470
153.09	7,589	14,491	153.61	8,022	18,550
153.10	7,597	14,567	153.62	8,030	18,630
153.11	7,606	14,643	153.63	8,039	18,710
153.12	7,614	14,719	153.64	8,047	18,791
153.13	7,622	14,795	153.65	8,055	18,871
153.14	7,631	14,871	153.66	8,064	18,952
153.15	7,639	14,948	153.67	8,072	19,033
153.16	7,647	15,024	153.68	8,080	19,113
153.17	7,656	15,101	153.69	8,089	19,194
153.18	7,664	15,177	153.70	8,097	19,275
153.19	7,672	15,254	153.71	8,105	19,356
153.20	7,681	15,331	153.72	8,114	19,437
153.21	7,689	15,407	153.73	8,122	19,518
153.22	7,697	15,484	153.74	8,130	19,600
153.23	7,706	15,561	153.75	8,139	19,681
153.24	7,714	15,639	153.76	8,147	19,762
153.25	7,722	15,716	153.77	8,155	19,844
153.26	7,731	15,793	153.78	8,164	19,926
153.27	7,739	15,870	153.79	8,172	20,007
153.28	7,747	15,948	153.80	8,180	20,089
153.29	7,756	16,025	153.81	8,189	20,171
153.30	7,764	16,103	153.82	8,197	20,253
153.31	7,772	16,181	153.83	8,205	20,335
153.32	7,781	16,258	153.84	8,214	20,417
153.33	7,789	16,336	153.85	8,222	20,499
153.34	7,797	16,414	153.86	8,230	20,581
153.35	7,806	16,492	153.87	8,239	20,664
153.36	7,814	16,570	153.88	8,247	20,746
153.37	7,822	16,648	153.89	8,255	20,829
153.38	7,831	16,727	153.90	8,264	20,911
153.39	7,839	16,805	153.91	8,272	20,994
153.40	7,847	16,883	153.92	8,280	21,077
153.41	7,856	16,962	153.93	8,289	21,159
153.42	7,864	17,041	153.94	8,297	21,242
153.43	7,872	17,119	153.95	8,305	21,325
153.44	7,881	17,198	153.96	8,314	21,408
153.45	7,889	17,277	153.97	8,322	21,492
153.46	7,897	17,356	153.98	8,330	21,575

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.99	8,339	21,658	154.51	8,785	26,110
154.00	8,347	21,742	154.52	8,793	26,198
154.01	8,356	21,825	154.53	8,802	26,286
154.02	8,364	21,909	154.54	8,810	26,374
154.03	8,373	21,992	154.55	8,819	26,462
154.04	8,381	22,076	154.56	8,827	26,551
154.05	8,390	22,160	154.57	8,836	26,639
154.06	8,398	22,244	154.58	8,845	26,727
154.07	8,407	22,328	154.59	8,853	26,816
154.08	8,416	22,412	154.60	8,862	26,904
154.09	8,424	22,496	154.61	8,870	26,993
154.10	8,433	22,581	154.62	8,879	27,082
154.11	8,441	22,665	154.63	8,888	27,171
154.12	8,450	22,750	154.64	8,896	27,259
154.13	8,459	22,834	154.65	8,905	27,348
154.14	8,467	22,919	154.66	8,913	27,438
154.15	8,476	23,003	154.67	8,922	27,527
154.16	8,484	23,088	154.68	8,930	27,616
154.17	8,493	23,173	154.69	8,939	27,705
154.18	8,501	23,258	154.70	8,948	27,795
154.19	8,510	23,343	154.71	8,956	27,884
154.20	8,519	23,428	154.72	8,965	27,974
154.21	8,527	23,513	154.73	8,973	28,064
154.22	8,536	23,599	154.74	8,982	28,153
154.23	8,544	23,684	154.75	8,991	28,243
154.24	8,553	23,770	154.76	8,999	28,333
154.25	8,562	23,855	154.77	9,008	28,423
154.26	8,570	23,941	154.78	9,016	28,513
154.27	8,579	24,027	154.79	9,025	28,604
154.28	8,587	24,112	154.80	9,033	28,694
154.29	8,596	24,198	154.81	9,042	28,784
154.30	8,604	24,284	154.82	9,051	28,875
154.31	8,613	24,370	154.83	9,059	28,965
154.32	8,622	24,457	154.84	9,068	29,056
154.33	8,630	24,543	154.85	9,076	29,147
154.34	8,639	24,629	154.86	9,085	29,237
154.35	8,647	24,716	154.87	9,093	29,328
154.36	8,656	24,802	154.88	9,102	29,419
154.37	8,664	24,889	154.89	9,111	29,510
154.38	8,673	24,975	154.90	9,119	29,601
154.39	8,682	25,062	154.91	9,128	29,693
154.40	8,690	25,149	154.92	9,136	29,784
154.41	8,699	25,236	154.93	9,145	29,875
154.42	8,707	25,323	154.94	9,154	29,967
154.43	8,716	25,410	154.95	9,162	30,059
154.44	8,725	25,497	154.96	9,171	30,150
154.45	8,733	25,585	154.97	9,179	30,242
154.46	8,742	25,672	154.98	9,188	30,334
154.47	8,750	25,760	154.99	9,196	30,426
154.48	8,759	25,847	155.00	9,205	30,518
154.49	8,767	25,935	155.01	9,214	30,610
154.50	8,776	26,022	155.02	9,223	30,702

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
155.03	9,231	30,794
155.04	9,240	30,887
155.05	9,249	30,979
155.06	9,258	31,072
155.07	9,266	31,164
155.08	9,275	31,257
155.09	9,284	31,350
155.10	9,293	31,443
155.11	9,301	31,536
155.12	9,310	31,629
155.13	9,319	31,722
155.14	9,328	31,815
155.15	9,336	31,908
155.16	9,345	32,002
155.17	9,354	32,095
155.18	9,363	32,189
155.19	9,371	32,282
155.20	9,380	32,376
155.21	9,389	32,470
155.22	9,398	32,564
155.23	9,406	32,658
155.24	9,415	32,752
155.25	9,424	32,846
155.26	9,433	32,941
155.27	9,442	33,035
155.28	9,450	33,129
155.29	9,459	33,224
155.30	9,468	33,319
155.31	9,477	33,413
155.32	9,485	33,508
155.33	9,494	33,603
155.34	9,503	33,698
155.35	9,512	33,793
155.36	9,520	33,888
155.37	9,529	33,984
155.38	9,538	34,079
155.39	9,547	34,174
155.40	9,555	34,270
155.41	9,564	34,365
155.42	9,573	34,461
155.43	9,582	34,557
155.44	9,590	34,653
155.45	9,599	34,749
155.46	9,608	34,845
155.47	9,617	34,941
155.48	9,625	35,037
155.49	9,634	35,133
155.50	**9,643**	**35,230**

Summary for Pond B-21: Basin #21

Inflow Area = 2.500 ac, 35.44% Impervious, Inflow Depth = 3.30" for Current 10 yr event
Inflow = 8.47 cfs @ 12.17 hrs, Volume= 0.688 af
Outflow = 2.01 cfs @ 12.60 hrs, Volume= 0.565 af, Atten= 76%, Lag= 25.4 min
Primary = 2.01 cfs @ 12.60 hrs, Volume= 0.565 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 152.60' @ 12.60 hrs Surf.Area= 7,383 sf Storage= 16,052 cf

Plug-Flow detention time= 512.4 min calculated for 0.565 af (82% of inflow)
Center-of-Mass det. time= 434.7 min (1,230.5 - 795.9)

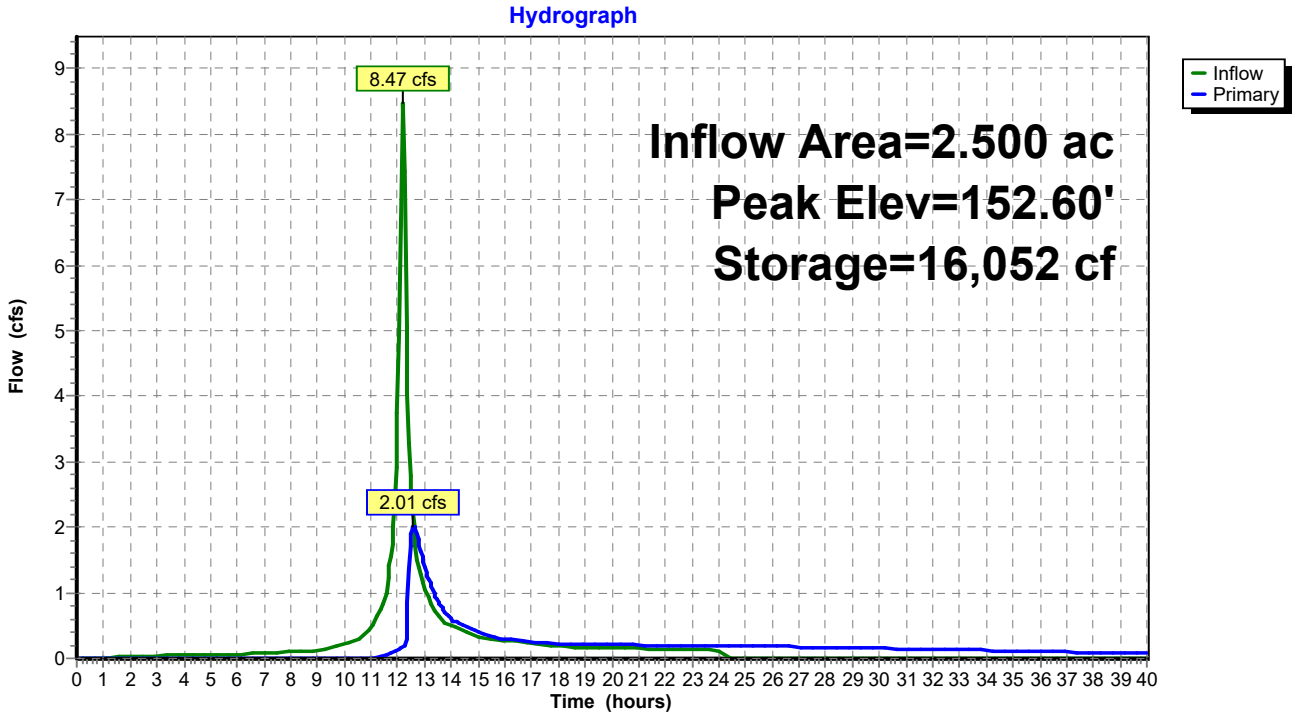
Volume	Invert	Avail.Storage	Storage Description
#1	149.90'	42,109 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
149.90	0	0	0
150.00	4,848	242	242
151.00	5,776	5,312	5,554
152.00	6,761	6,269	11,823
153.00	7,802	7,282	19,104
154.00	8,900	8,351	27,455
155.00	10,054	9,477	36,932
155.50	10,653	5,177	42,109

Device	Routing	Invert	Outlet Devices
#1	Primary	149.30'	**18.0" Round Culvert** L= 24.0' Ke= 0.500 Inlet / Outlet Invert= 149.30' / 148.32' S= 0.0408 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	150.68'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	152.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	154.16'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.01 cfs @ 12.60 hrs HW=152.60' (Free Discharge)
- **1=Culvert** (Passes 2.01 cfs of 13.58 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.22 cfs @ 6.48 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.79 cfs @ 1.69 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-21: Basin #21



Stage-Discharge for Pond B-21: Basin #21

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
149.90	0.00	150.42	0.00	150.94	0.06	151.46	0.13
149.91	0.00	150.43	0.00	150.95	0.07	151.47	0.14
149.92	0.00	150.44	0.00	150.96	0.07	151.48	0.14
149.93	0.00	150.45	0.00	150.97	0.07	151.49	0.14
149.94	0.00	150.46	0.00	150.98	0.07	151.50	0.14
149.95	0.00	150.47	0.00	150.99	0.07	151.51	0.14
149.96	0.00	150.48	0.00	151.00	0.08	151.52	0.14
149.97	0.00	150.49	0.00	151.01	0.08	151.53	0.14
149.98	0.00	150.50	0.00	151.02	0.08	151.54	0.14
149.99	0.00	150.51	0.00	151.03	0.08	151.55	0.14
150.00	0.00	150.52	0.00	151.04	0.08	151.56	0.14
150.01	0.00	150.53	0.00	151.05	0.08	151.57	0.15
150.02	0.00	150.54	0.00	151.06	0.09	151.58	0.15
150.03	0.00	150.55	0.00	151.07	0.09	151.59	0.15
150.04	0.00	150.56	0.00	151.08	0.09	151.60	0.15
150.05	0.00	150.57	0.00	151.09	0.09	151.61	0.15
150.06	0.00	150.58	0.00	151.10	0.09	151.62	0.15
150.07	0.00	150.59	0.00	151.11	0.09	151.63	0.15
150.08	0.00	150.60	0.00	151.12	0.10	151.64	0.15
150.09	0.00	150.61	0.00	151.13	0.10	151.65	0.15
150.10	0.00	150.62	0.00	151.14	0.10	151.66	0.15
150.11	0.00	150.63	0.00	151.15	0.10	151.67	0.15
150.12	0.00	150.64	0.00	151.16	0.10	151.68	0.16
150.13	0.00	150.65	0.00	151.17	0.10	151.69	0.16
150.14	0.00	150.66	0.00	151.18	0.10	151.70	0.16
150.15	0.00	150.67	0.00	151.19	0.10	151.71	0.16
150.16	0.00	150.68	0.00	151.20	0.11	151.72	0.16
150.17	0.00	150.69	0.00	151.21	0.11	151.73	0.16
150.18	0.00	150.70	0.00	151.22	0.11	151.74	0.16
150.19	0.00	150.71	0.00	151.23	0.11	151.75	0.16
150.20	0.00	150.72	0.00	151.24	0.11	151.76	0.16
150.21	0.00	150.73	0.00	151.25	0.11	151.77	0.16
150.22	0.00	150.74	0.01	151.26	0.11	151.78	0.16
150.23	0.00	150.75	0.01	151.27	0.11	151.79	0.16
150.24	0.00	150.76	0.01	151.28	0.12	151.80	0.17
150.25	0.00	150.77	0.01	151.29	0.12	151.81	0.17
150.26	0.00	150.78	0.02	151.30	0.12	151.82	0.17
150.27	0.00	150.79	0.02	151.31	0.12	151.83	0.17
150.28	0.00	150.80	0.02	151.32	0.12	151.84	0.17
150.29	0.00	150.81	0.03	151.33	0.12	151.85	0.17
150.30	0.00	150.82	0.03	151.34	0.12	151.86	0.17
150.31	0.00	150.83	0.03	151.35	0.12	151.87	0.17
150.32	0.00	150.84	0.04	151.36	0.12	151.88	0.17
150.33	0.00	150.85	0.04	151.37	0.13	151.89	0.17
150.34	0.00	150.86	0.05	151.38	0.13	151.90	0.17
150.35	0.00	150.87	0.05	151.39	0.13	151.91	0.17
150.36	0.00	150.88	0.05	151.40	0.13	151.92	0.17
150.37	0.00	150.89	0.05	151.41	0.13	151.93	0.18
150.38	0.00	150.90	0.06	151.42	0.13	151.94	0.18
150.39	0.00	150.91	0.06	151.43	0.13	151.95	0.18
150.40	0.00	150.92	0.06	151.44	0.13	151.96	0.18
150.41	0.00	150.93	0.06	151.45	0.13	151.97	0.18

Stage-Discharge for Pond B-21: Basin #21 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
151.98	0.18	152.50	1.12	153.02	7.48	153.54	15.90
151.99	0.18	152.51	1.21	153.03	7.64	153.55	15.92
152.00	0.18	152.52	1.29	153.04	7.79	153.56	15.94
152.01	0.18	152.53	1.38	153.05	7.95	153.57	15.96
152.02	0.18	152.54	1.46	153.06	8.11	153.58	15.99
152.03	0.18	152.55	1.55	153.07	8.27	153.59	16.01
152.04	0.18	152.56	1.64	153.08	8.43	153.60	16.03
152.05	0.18	152.57	1.74	153.09	8.59	153.61	16.05
152.06	0.19	152.58	1.83	153.10	8.75	153.62	16.08
152.07	0.19	152.59	1.93	153.11	8.91	153.63	16.10
152.08	0.19	152.60	2.03	153.12	9.07	153.64	16.12
152.09	0.19	152.61	2.13	153.13	9.24	153.65	16.14
152.10	0.19	152.62	2.24	153.14	9.40	153.66	16.17
152.11	0.19	152.63	2.34	153.15	9.57	153.67	16.19
152.12	0.19	152.64	2.45	153.16	9.73	153.68	16.21
152.13	0.19	152.65	2.55	153.17	9.90	153.69	16.23
152.14	0.19	152.66	2.66	153.18	10.07	153.70	16.26
152.15	0.19	152.67	2.77	153.19	10.24	153.71	16.28
152.16	0.19	152.68	2.89	153.20	10.41	153.72	16.30
152.17	0.19	152.69	3.00	153.21	10.58	153.73	16.32
152.18	0.19	152.70	3.12	153.22	10.75	153.74	16.34
152.19	0.19	152.71	3.23	153.23	10.92	153.75	16.37
152.20	0.20	152.72	3.35	153.24	11.10	153.76	16.39
152.21	0.20	152.73	3.47	153.25	11.27	153.77	16.41
152.22	0.20	152.74	3.59	153.26	11.44	153.78	16.43
152.23	0.20	152.75	3.72	153.27	11.62	153.79	16.46
152.24	0.20	152.76	3.84	153.28	11.80	153.80	16.48
152.25	0.20	152.77	3.96	153.29	11.97	153.81	16.50
152.26	0.20	152.78	4.09	153.30	12.15	153.82	16.52
152.27	0.20	152.79	4.22	153.31	12.33	153.83	16.54
152.28	0.20	152.80	4.35	153.32	12.51	153.84	16.56
152.29	0.20	152.81	4.48	153.33	12.69	153.85	16.59
152.30	0.20	152.82	4.61	153.34	12.87	153.86	16.61
152.31	0.20	152.83	4.74	153.35	13.05	153.87	16.63
152.32	0.20	152.84	4.88	153.36	13.23	153.88	16.65
152.33	0.20	152.85	5.01	153.37	13.42	153.89	16.67
152.34	0.22	152.86	5.15	153.38	13.60	153.90	16.70
152.35	0.24	152.87	5.29	153.39	13.78	153.91	16.72
152.36	0.27	152.88	5.43	153.40	13.97	153.92	16.74
152.37	0.31	152.89	5.57	153.41	14.15	153.93	16.76
152.38	0.35	152.90	5.71	153.42	14.34	153.94	16.78
152.39	0.40	152.91	5.85	153.43	14.53	153.95	16.80
152.40	0.45	152.92	5.99	153.44	14.72	153.96	16.82
152.41	0.50	152.93	6.14	153.45	14.90	153.97	16.85
152.42	0.56	152.94	6.28	153.46	15.09	153.98	16.87
152.43	0.62	152.95	6.43	153.47	15.28	153.99	16.89
152.44	0.69	152.96	6.58	153.48	15.47	154.00	16.91
152.45	0.75	152.97	6.73	153.49	15.66	154.01	16.93
152.46	0.82	152.98	6.87	153.50	15.80	154.02	16.95
152.47	0.89	152.99	7.03	153.51	15.83	154.03	16.97
152.48	0.97	153.00	7.18	153.52	15.85	154.04	17.00
152.49	1.04	153.01	7.33	153.53	15.87	154.05	17.02

Stage-Discharge for Pond B-21: Basin #21 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
154.06	17.04	154.58	53.10	155.10	146.75
154.07	17.06	154.59	54.54	155.11	148.87
154.08	17.08	154.60	56.00	155.12	151.01
154.09	17.10	154.61	57.49	155.13	153.15
154.10	17.12	154.62	59.01	155.14	155.31
154.11	17.14	154.63	60.55	155.15	157.48
154.12	17.17	154.64	62.12	155.16	159.67
154.13	17.19	154.65	63.71	155.17	161.81
154.14	17.21	154.66	65.33	155.18	163.96
154.15	17.23	154.67	66.98	155.19	166.13
154.16	17.25	154.68	68.66	155.20	168.30
154.17	17.39	154.69	70.36	155.21	170.49
154.18	17.62	154.70	72.09	155.22	172.68
154.19	17.92	154.71	73.84	155.23	174.89
154.20	18.27	154.72	75.62	155.24	177.11
154.21	18.67	154.73	77.43	155.25	179.33
154.22	19.10	154.74	79.26	155.26	181.57
154.23	19.57	154.75	81.13	155.27	183.82
154.24	20.07	154.76	83.02	155.28	186.08
154.25	20.61	154.77	84.66	155.29	188.35
154.26	21.18	154.78	86.32	155.30	190.63
154.27	21.77	154.79	88.00	155.31	192.91
154.28	22.39	154.80	89.68	155.32	195.21
154.29	23.04	154.81	91.38	155.33	197.52
154.30	23.71	154.82	93.10	155.34	199.84
154.31	24.41	154.83	94.82	155.35	202.17
154.32	25.13	154.84	96.56	155.36	204.51
154.33	25.87	154.85	98.31	155.37	206.89
154.34	26.64	154.86	100.08	155.38	209.29
154.35	27.42	154.87	101.86	155.39	211.70
154.36	28.23	154.88	103.65	155.40	214.11
154.37	29.10	154.89	105.45	155.41	216.54
154.38	29.99	154.90	107.27	155.42	218.98
154.39	30.91	154.91	109.09	155.43	221.43
154.40	31.85	154.92	110.94	155.44	223.89
154.41	32.82	154.93	112.79	155.45	226.35
154.42	33.81	154.94	114.65	155.46	228.83
154.43	34.83	154.95	116.53	155.47	231.33
154.44	35.88	154.96	118.42	155.48	233.83
154.45	36.94	154.97	120.36	155.49	236.34
154.46	38.04	154.98	122.31	155.50	**238.86**
154.47	39.15	154.99	124.27		
154.48	40.30	155.00	126.25		
154.49	41.46	155.01	128.24		
154.50	42.65	155.02	130.25		
154.51	43.87	155.03	132.27		
154.52	45.10	155.04	134.30		
154.53	46.37	155.05	136.34		
154.54	47.65	155.06	138.40		
154.55	48.96	155.07	140.47		
154.56	50.30	155.08	142.55		
154.57	51.69	155.09	144.65		

Stage-Area-Storage for Pond B-21: Basin #21

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
149.90	0	0
149.91	485	2
149.92	970	10
149.93	1,454	22
149.94	1,939	39
149.95	2,424	61
149.96	2,909	87
149.97	3,394	119
149.98	3,878	155
149.99	4,363	196
150.00	4,848	242
150.01	4,857	291
150.02	4,867	340
150.03	4,876	388
150.04	4,885	437
150.05	4,894	486
150.06	4,904	535
150.07	4,913	584
150.08	4,922	633
150.09	4,932	682
150.10	4,941	732
150.11	4,950	781
150.12	4,959	831
150.13	4,969	880
150.14	4,978	930
150.15	4,987	980
150.16	4,996	1,030
150.17	5,006	1,080
150.18	5,015	1,130
150.19	5,024	1,180
150.20	5,034	1,231
150.21	5,043	1,281
150.22	5,052	1,331
150.23	5,061	1,382
150.24	5,071	1,433
150.25	5,080	1,483
150.26	5,089	1,534
150.27	5,099	1,585
150.28	5,108	1,636
150.29	5,117	1,687
150.30	5,126	1,739
150.31	5,136	1,790
150.32	5,145	1,841
150.33	5,154	1,893
150.34	5,164	1,944
150.35	5,173	1,996
150.36	5,182	2,048
150.37	5,191	2,100
150.38	5,201	2,152
150.39	5,210	2,204
150.40	5,219	2,256
150.41	5,228	2,308
150.42	5,238	2,360
150.43	5,247	2,413
150.44	5,256	2,465
150.45	5,266	2,518
150.46	5,275	2,571
150.47	5,284	2,623
150.48	5,293	2,676
150.49	5,303	2,729
150.50	5,312	2,782
150.51	5,321	2,836
150.52	5,331	2,889
150.53	5,340	2,942
150.54	5,349	2,996
150.55	5,358	3,049
150.56	5,368	3,103
150.57	5,377	3,157
150.58	5,386	3,210
150.59	5,396	3,264
150.60	5,405	3,318
150.61	5,414	3,372
150.62	5,423	3,427
150.63	5,433	3,481
150.64	5,442	3,535
150.65	5,451	3,590
150.66	5,460	3,644
150.67	5,470	3,699
150.68	5,479	3,754
150.69	5,488	3,808
150.70	5,498	3,863
150.71	5,507	3,918
150.72	5,516	3,973
150.73	5,525	4,029
150.74	5,535	4,084
150.75	5,544	4,139
150.76	5,553	4,195
150.77	5,563	4,250
150.78	5,572	4,306
150.79	5,581	4,362
150.80	5,590	4,418
150.81	5,600	4,474
150.82	5,609	4,530
150.83	5,618	4,586
150.84	5,628	4,642
150.85	5,637	4,698
150.86	5,646	4,755
150.87	5,655	4,811
150.88	5,665	4,868
150.89	5,674	4,925
150.90	5,683	4,981
150.91	5,692	5,038
150.92	5,702	5,095
150.93	5,711	5,152

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.94	5,720	5,210	151.46	6,229	8,316
150.95	5,730	5,267	151.47	6,239	8,378
150.96	5,739	5,324	151.48	6,249	8,440
150.97	5,748	5,382	151.49	6,259	8,503
150.98	5,757	5,439	151.50	6,269	8,566
150.99	5,767	5,497	151.51	6,278	8,628
151.00	5,776	5,554	151.52	6,288	8,691
151.01	5,786	5,612	151.53	6,298	8,754
151.02	5,796	5,670	151.54	6,308	8,817
151.03	5,806	5,728	151.55	6,318	8,880
151.04	5,815	5,786	151.56	6,328	8,943
151.05	5,825	5,844	151.57	6,337	9,007
151.06	5,835	5,903	151.58	6,347	9,070
151.07	5,845	5,961	151.59	6,357	9,134
151.08	5,855	6,020	151.60	6,367	9,197
151.09	5,865	6,078	151.61	6,377	9,261
151.10	5,874	6,137	151.62	6,387	9,325
151.11	5,884	6,196	151.63	6,397	9,389
151.12	5,894	6,255	151.64	6,406	9,453
151.13	5,904	6,314	151.65	6,416	9,517
151.14	5,914	6,373	151.66	6,426	9,581
151.15	5,924	6,432	151.67	6,436	9,645
151.16	5,934	6,491	151.68	6,446	9,710
151.17	5,943	6,551	151.69	6,456	9,774
151.18	5,953	6,610	151.70	6,466	9,839
151.19	5,963	6,670	151.71	6,475	9,904
151.20	5,973	6,729	151.72	6,485	9,968
151.21	5,983	6,789	151.73	6,495	10,033
151.22	5,993	6,849	151.74	6,505	10,098
151.23	6,003	6,909	151.75	6,515	10,163
151.24	6,012	6,969	151.76	6,525	10,229
151.25	6,022	7,029	151.77	6,534	10,294
151.26	6,032	7,089	151.78	6,544	10,359
151.27	6,042	7,150	151.79	6,554	10,425
151.28	6,052	7,210	151.80	6,564	10,490
151.29	6,062	7,271	151.81	6,574	10,556
151.30	6,072	7,332	151.82	6,584	10,622
151.31	6,081	7,392	151.83	6,594	10,688
151.32	6,091	7,453	151.84	6,603	10,754
151.33	6,101	7,514	151.85	6,613	10,820
151.34	6,111	7,575	151.86	6,623	10,886
151.35	6,121	7,636	151.87	6,633	10,952
151.36	6,131	7,698	151.88	6,643	11,019
151.37	6,140	7,759	151.89	6,653	11,085
151.38	6,150	7,820	151.90	6,663	11,152
151.39	6,160	7,882	151.91	6,672	11,218
151.40	6,170	7,944	151.92	6,682	11,285
151.41	6,180	8,005	151.93	6,692	11,352
151.42	6,190	8,067	151.94	6,702	11,419
151.43	6,200	8,129	151.95	6,712	11,486
151.44	6,209	8,191	151.96	6,722	11,553
151.45	6,219	8,253	151.97	6,731	11,621

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.98	6,741	11,688	152.50	7,282	15,334
151.99	6,751	11,755	152.51	7,292	15,406
152.00	6,761	11,823	152.52	7,302	15,479
152.01	6,771	11,891	152.53	7,313	15,552
152.02	6,782	11,958	152.54	7,323	15,626
152.03	6,792	12,026	152.55	7,334	15,699
152.04	6,803	12,094	152.56	7,344	15,772
152.05	6,813	12,162	152.57	7,354	15,846
152.06	6,823	12,230	152.58	7,365	15,919
152.07	6,834	12,299	152.59	7,375	15,993
152.08	6,844	12,367	152.60	7,386	16,067
152.09	6,855	12,436	152.61	7,396	16,141
152.10	6,865	12,504	152.62	7,406	16,215
152.11	6,876	12,573	152.63	7,417	16,289
152.12	6,886	12,642	152.64	7,427	16,363
152.13	6,896	12,711	152.65	7,438	16,437
152.14	6,907	12,780	152.66	7,448	16,512
152.15	6,917	12,849	152.67	7,458	16,586
152.16	6,928	12,918	152.68	7,469	16,661
152.17	6,938	12,987	152.69	7,479	16,736
152.18	6,948	13,057	152.70	7,490	16,811
152.19	6,959	13,126	152.71	7,500	16,886
152.20	6,969	13,196	152.72	7,511	16,961
152.21	6,980	13,266	152.73	7,521	17,036
152.22	6,990	13,336	152.74	7,531	17,111
152.23	7,000	13,405	152.75	7,542	17,186
152.24	7,011	13,476	152.76	7,552	17,262
152.25	7,021	13,546	152.77	7,563	17,337
152.26	7,032	13,616	152.78	7,573	17,413
152.27	7,042	13,686	152.79	7,583	17,489
152.28	7,052	13,757	152.80	7,594	17,565
152.29	7,063	13,827	152.81	7,604	17,641
152.30	7,073	13,898	152.82	7,615	17,717
152.31	7,084	13,969	152.83	7,625	17,793
152.32	7,094	14,040	152.84	7,635	17,869
152.33	7,105	14,111	152.85	7,646	17,946
152.34	7,115	14,182	152.86	7,656	18,022
152.35	7,125	14,253	152.87	7,667	18,099
152.36	7,136	14,324	152.88	7,677	18,176
152.37	7,146	14,396	152.89	7,687	18,252
152.38	7,157	14,467	152.90	7,698	18,329
152.39	7,167	14,539	152.91	7,708	18,406
152.40	7,177	14,611	152.92	7,719	18,484
152.41	7,188	14,682	152.93	7,729	18,561
152.42	7,198	14,754	152.94	7,740	18,638
152.43	7,209	14,826	152.95	7,750	18,716
152.44	7,219	14,899	152.96	7,760	18,793
152.45	7,229	14,971	152.97	7,771	18,871
152.46	7,240	15,043	152.98	7,781	18,949
152.47	7,250	15,116	152.99	7,792	19,026
152.48	7,261	15,188	153.00	7,802	19,104
152.49	7,271	15,261	153.01	7,813	19,182

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.02	7,824	19,261	153.54	8,395	23,478
153.03	7,835	19,339	153.55	8,406	23,562
153.04	7,846	19,417	153.56	8,417	23,646
153.05	7,857	19,496	153.57	8,428	23,730
153.06	7,868	19,574	153.58	8,439	23,814
153.07	7,879	19,653	153.59	8,450	23,899
153.08	7,890	19,732	153.60	8,461	23,983
153.09	7,901	19,811	153.61	8,472	24,068
153.10	7,912	19,890	153.62	8,483	24,153
153.11	7,923	19,969	153.63	8,494	24,238
153.12	7,934	20,049	153.64	8,505	24,323
153.13	7,945	20,128	153.65	8,516	24,408
153.14	7,956	20,207	153.66	8,527	24,493
153.15	7,967	20,287	153.67	8,538	24,578
153.16	7,978	20,367	153.68	8,549	24,664
153.17	7,989	20,447	153.69	8,560	24,749
153.18	8,000	20,527	153.70	8,571	24,835
153.19	8,011	20,607	153.71	8,582	24,921
153.20	8,022	20,687	153.72	8,593	25,006
153.21	8,033	20,767	153.73	8,604	25,092
153.22	8,044	20,847	153.74	8,615	25,179
153.23	8,055	20,928	153.75	8,626	25,265
153.24	8,066	21,009	153.76	8,636	25,351
153.25	8,077	21,089	153.77	8,647	25,437
153.26	8,087	21,170	153.78	8,658	25,524
153.27	8,098	21,251	153.79	8,669	25,611
153.28	8,109	21,332	153.80	8,680	25,697
153.29	8,120	21,413	153.81	8,691	25,784
153.30	8,131	21,494	153.82	8,702	25,871
153.31	8,142	21,576	153.83	8,713	25,958
153.32	8,153	21,657	153.84	8,724	26,045
153.33	8,164	21,739	153.85	8,735	26,133
153.34	8,175	21,821	153.86	8,746	26,220
153.35	8,186	21,902	153.87	8,757	26,308
153.36	8,197	21,984	153.88	8,768	26,395
153.37	8,208	22,066	153.89	8,779	26,483
153.38	8,219	22,148	153.90	8,790	26,571
153.39	8,230	22,231	153.91	8,801	26,659
153.40	8,241	22,313	153.92	8,812	26,747
153.41	8,252	22,396	153.93	8,823	26,835
153.42	8,263	22,478	153.94	8,834	26,923
153.43	8,274	22,561	153.95	8,845	27,012
153.44	8,285	22,644	153.96	8,856	27,100
153.45	8,296	22,726	153.97	8,867	27,189
153.46	8,307	22,809	153.98	8,878	27,278
153.47	8,318	22,893	153.99	8,889	27,366
153.48	8,329	22,976	154.00	8,900	27,455
153.49	8,340	23,059	154.01	8,912	27,544
153.50	8,351	23,143	154.02	8,923	27,634
153.51	8,362	23,226	154.03	8,935	27,723
153.52	8,373	23,310	154.04	8,946	27,812
153.53	8,384	23,394	154.05	8,958	27,902

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
154.06	8,969	27,991	154.58	9,569	32,812
154.07	8,981	28,081	154.59	9,581	32,907
154.08	8,992	28,171	154.60	9,592	33,003
154.09	9,004	28,261	154.61	9,604	33,099
154.10	9,015	28,351	154.62	9,615	33,195
154.11	9,027	28,441	154.63	9,627	33,291
154.12	9,038	28,532	154.64	9,639	33,388
154.13	9,050	28,622	154.65	9,650	33,484
154.14	9,062	28,713	154.66	9,662	33,581
154.15	9,073	28,803	154.67	9,673	33,677
154.16	9,085	28,894	154.68	9,685	33,774
154.17	9,096	28,985	154.69	9,696	33,871
154.18	9,108	29,076	154.70	9,708	33,968
154.19	9,119	29,167	154.71	9,719	34,065
154.20	9,131	29,258	154.72	9,731	34,163
154.21	9,142	29,350	154.73	9,742	34,260
154.22	9,154	29,441	154.74	9,754	34,357
154.23	9,165	29,533	154.75	9,766	34,455
154.24	9,177	29,625	154.76	9,777	34,553
154.25	9,189	29,716	154.77	9,789	34,651
154.26	9,200	29,808	154.78	9,800	34,748
154.27	9,212	29,900	154.79	9,812	34,847
154.28	9,223	29,993	154.80	9,823	34,945
154.29	9,235	30,085	154.81	9,835	35,043
154.30	9,246	30,177	154.82	9,846	35,141
154.31	9,258	30,270	154.83	9,858	35,240
154.32	9,269	30,362	154.84	9,869	35,339
154.33	9,281	30,455	154.85	9,881	35,437
154.34	9,292	30,548	154.86	9,892	35,536
154.35	9,304	30,641	154.87	9,904	35,635
154.36	9,315	30,734	154.88	9,916	35,734
154.37	9,327	30,827	154.89	9,927	35,833
154.38	9,339	30,921	154.90	9,939	35,933
154.39	9,350	31,014	154.91	9,950	36,032
154.40	9,362	31,108	154.92	9,962	36,132
154.41	9,373	31,201	154.93	9,973	36,231
154.42	9,385	31,295	154.94	9,985	36,331
154.43	9,396	31,389	154.95	9,996	36,431
154.44	9,408	31,483	154.96	10,008	36,531
154.45	9,419	31,577	154.97	10,019	36,631
154.46	9,431	31,671	154.98	10,031	36,732
154.47	9,442	31,766	154.99	10,042	36,832
154.48	9,454	31,860	155.00	10,054	36,932
154.49	9,465	31,955	155.01	10,066	37,033
154.50	9,477	32,050	155.02	10,078	37,134
154.51	9,489	32,144	155.03	10,090	37,235
154.52	9,500	32,239	155.04	10,102	37,336
154.53	9,512	32,334	155.05	10,114	37,437
154.54	9,523	32,430	155.06	10,126	37,538
154.55	9,535	32,525	155.07	10,138	37,639
154.56	9,546	32,620	155.08	10,150	37,741
154.57	9,558	32,716	155.09	10,162	37,842

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
155.10	10,174	37,944
155.11	10,186	38,046
155.12	10,198	38,148
155.13	10,210	38,250
155.14	10,222	38,352
155.15	10,234	38,454
155.16	10,246	38,556
155.17	10,258	38,659
155.18	10,270	38,762
155.19	10,282	38,864
155.20	10,294	38,967
155.21	10,306	39,070
155.22	10,318	39,173
155.23	10,330	39,277
155.24	10,342	39,380
155.25	10,354	39,483
155.26	10,365	39,587
155.27	10,377	39,691
155.28	10,389	39,794
155.29	10,401	39,898
155.30	10,413	40,003
155.31	10,425	40,107
155.32	10,437	40,211
155.33	10,449	40,315
155.34	10,461	40,420
155.35	10,473	40,525
155.36	10,485	40,629
155.37	10,497	40,734
155.38	10,509	40,839
155.39	10,521	40,945
155.40	10,533	41,050
155.41	10,545	41,155
155.42	10,557	41,261
155.43	10,569	41,366
155.44	10,581	41,472
155.45	10,593	41,578
155.46	10,605	41,684
155.47	10,617	41,790
155.48	10,629	41,896
155.49	10,641	42,003
155.50	**10,653**	**42,109**

Summary for Pond B-22: Basin #22

Inflow Area = 2.460 ac, 33.05% Impervious, Inflow Depth = 3.24" for Current 10 yr event
Inflow = 8.22 cfs @ 12.17 hrs, Volume= 0.665 af
Outflow = 1.73 cfs @ 12.64 hrs, Volume= 0.532 af, Atten= 79%, Lag= 28.2 min
Primary = 1.73 cfs @ 12.64 hrs, Volume= 0.532 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 149.71' @ 12.64 hrs Surf.Area= 8,695 sf Storage= 15,767 cf

Plug-Flow detention time= 518.5 min calculated for 0.532 af (80% of inflow)
Center-of-Mass det. time= 435.6 min (1,233.9 - 798.3)

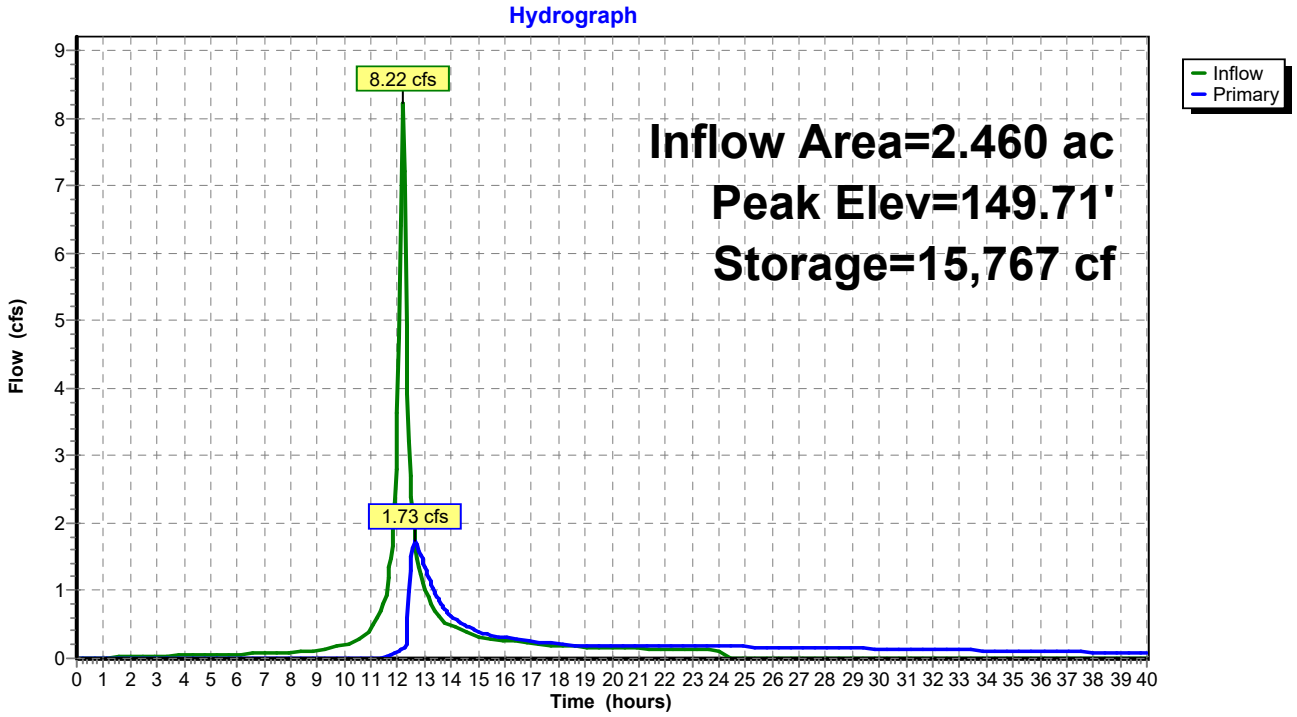
Volume	Invert	Avail.Storage	Storage Description
#1	147.30'	50,528 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
147.30	0	0	0
148.00	6,928	2,425	2,425
149.00	7,937	7,433	9,857
150.00	9,003	8,470	18,327
151.00	10,125	9,564	27,891
152.00	11,304	10,715	38,606
153.00	12,540	11,922	50,528

Device	Routing	Invert	Outlet Devices
#1	Primary	147.30'	**18.0" Round Culvert** L= 24.0' Ke= 0.500 Inlet / Outlet Invert= 147.30' / 146.20' S= 0.0458 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	148.15'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	149.47'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	152.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.72 cfs @ 12.64 hrs HW=149.71' (Free Discharge)
- **1=Culvert** (Passes 1.72 cfs of 10.96 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.81 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.52 cfs @ 1.60 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-22: Basin #22



Stage-Discharge for Pond B-22: Basin #22

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.30	0.00	147.82	0.00	148.34	0.05	148.86	0.13
147.31	0.00	147.83	0.00	148.35	0.05	148.87	0.13
147.32	0.00	147.84	0.00	148.36	0.05	148.88	0.13
147.33	0.00	147.85	0.00	148.37	0.06	148.89	0.13
147.34	0.00	147.86	0.00	148.38	0.06	148.90	0.13
147.35	0.00	147.87	0.00	148.39	0.06	148.91	0.13
147.36	0.00	147.88	0.00	148.40	0.06	148.92	0.13
147.37	0.00	147.89	0.00	148.41	0.06	148.93	0.13
147.38	0.00	147.90	0.00	148.42	0.07	148.94	0.14
147.39	0.00	147.91	0.00	148.43	0.07	148.95	0.14
147.40	0.00	147.92	0.00	148.44	0.07	148.96	0.14
147.41	0.00	147.93	0.00	148.45	0.07	148.97	0.14
147.42	0.00	147.94	0.00	148.46	0.07	148.98	0.14
147.43	0.00	147.95	0.00	148.47	0.08	148.99	0.14
147.44	0.00	147.96	0.00	148.48	0.08	149.00	0.14
147.45	0.00	147.97	0.00	148.49	0.08	149.01	0.14
147.46	0.00	147.98	0.00	148.50	0.08	149.02	0.14
147.47	0.00	147.99	0.00	148.51	0.08	149.03	0.14
147.48	0.00	148.00	0.00	148.52	0.08	149.04	0.15
147.49	0.00	148.01	0.00	148.53	0.09	149.05	0.15
147.50	0.00	148.02	0.00	148.54	0.09	149.06	0.15
147.51	0.00	148.03	0.00	148.55	0.09	149.07	0.15
147.52	0.00	148.04	0.00	148.56	0.09	149.08	0.15
147.53	0.00	148.05	0.00	148.57	0.09	149.09	0.15
147.54	0.00	148.06	0.00	148.58	0.09	149.10	0.15
147.55	0.00	148.07	0.00	148.59	0.10	149.11	0.15
147.56	0.00	148.08	0.00	148.60	0.10	149.12	0.15
147.57	0.00	148.09	0.00	148.61	0.10	149.13	0.15
147.58	0.00	148.10	0.00	148.62	0.10	149.14	0.15
147.59	0.00	148.11	0.00	148.63	0.10	149.15	0.16
147.60	0.00	148.12	0.00	148.64	0.10	149.16	0.16
147.61	0.00	148.13	0.00	148.65	0.10	149.17	0.16
147.62	0.00	148.14	0.00	148.66	0.10	149.18	0.16
147.63	0.00	148.15	0.00	148.67	0.11	149.19	0.16
147.64	0.00	148.16	0.00	148.68	0.11	149.20	0.16
147.65	0.00	148.17	0.00	148.69	0.11	149.21	0.16
147.66	0.00	148.18	0.00	148.70	0.11	149.22	0.16
147.67	0.00	148.19	0.00	148.71	0.11	149.23	0.16
147.68	0.00	148.20	0.00	148.72	0.11	149.24	0.16
147.69	0.00	148.21	0.01	148.73	0.11	149.25	0.16
147.70	0.00	148.22	0.01	148.74	0.11	149.26	0.16
147.71	0.00	148.23	0.01	148.75	0.12	149.27	0.17
147.72	0.00	148.24	0.01	148.76	0.12	149.28	0.17
147.73	0.00	148.25	0.02	148.77	0.12	149.29	0.17
147.74	0.00	148.26	0.02	148.78	0.12	149.30	0.17
147.75	0.00	148.27	0.02	148.79	0.12	149.31	0.17
147.76	0.00	148.28	0.03	148.80	0.12	149.32	0.17
147.77	0.00	148.29	0.03	148.81	0.12	149.33	0.17
147.78	0.00	148.30	0.03	148.82	0.12	149.34	0.17
147.79	0.00	148.31	0.04	148.83	0.12	149.35	0.17
147.80	0.00	148.32	0.04	148.84	0.13	149.36	0.17
147.81	0.00	148.33	0.05	148.85	0.13	149.37	0.17

Stage-Discharge for Pond B-22: Basin #22 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
149.38	0.17	149.90	3.82	150.42	11.78	150.94	14.46
149.39	0.17	149.91	3.94	150.43	11.95	150.95	14.49
149.40	0.18	149.92	4.07	150.44	12.13	150.96	14.51
149.41	0.18	149.93	4.20	150.45	12.31	150.97	14.54
149.42	0.18	149.94	4.33	150.46	12.49	150.98	14.56
149.43	0.18	149.95	4.46	150.47	12.67	150.99	14.59
149.44	0.18	149.96	4.59	150.48	12.85	151.00	14.61
149.45	0.18	149.97	4.72	150.49	13.03	151.01	14.64
149.46	0.18	149.98	4.86	150.50	13.21	151.02	14.66
149.47	0.18	149.99	4.99	150.51	13.35	151.03	14.69
149.48	0.19	150.00	5.13	150.52	13.37	151.04	14.71
149.49	0.22	150.01	5.27	150.53	13.40	151.05	14.74
149.50	0.25	150.02	5.41	150.54	13.43	151.06	14.76
149.51	0.29	150.03	5.55	150.55	13.45	151.07	14.79
149.52	0.33	150.04	5.69	150.56	13.48	151.08	14.81
149.53	0.38	150.05	5.83	150.57	13.51	151.09	14.84
149.54	0.43	150.06	5.97	150.58	13.53	151.10	14.86
149.55	0.48	150.07	6.12	150.59	13.56	151.11	14.88
149.56	0.54	150.08	6.26	150.60	13.59	151.12	14.91
149.57	0.60	150.09	6.41	150.61	13.61	151.13	14.93
149.58	0.66	150.10	6.56	150.62	13.64	151.14	14.96
149.59	0.73	150.11	6.71	150.63	13.67	151.15	14.98
149.60	0.80	150.12	6.86	150.64	13.69	151.16	15.01
149.61	0.87	150.13	7.01	150.65	13.72	151.17	15.03
149.62	0.95	150.14	7.16	150.66	13.75	151.18	15.05
149.63	1.02	150.15	7.31	150.67	13.77	151.19	15.08
149.64	1.10	150.16	7.46	150.68	13.80	151.20	15.10
149.65	1.18	150.17	7.62	150.69	13.83	151.21	15.13
149.66	1.27	150.18	7.78	150.70	13.85	151.22	15.15
149.67	1.35	150.19	7.93	150.71	13.88	151.23	15.17
149.68	1.44	150.20	8.09	150.72	13.90	151.24	15.20
149.69	1.53	150.21	8.25	150.73	13.93	151.25	15.22
149.70	1.62	150.22	8.41	150.74	13.96	151.26	15.24
149.71	1.72	150.23	8.57	150.75	13.98	151.27	15.27
149.72	1.81	150.24	8.73	150.76	14.01	151.28	15.29
149.73	1.91	150.25	8.89	150.77	14.03	151.29	15.32
149.74	2.01	150.26	9.05	150.78	14.06	151.30	15.34
149.75	2.11	150.27	9.22	150.79	14.08	151.31	15.36
149.76	2.21	150.28	9.38	150.80	14.11	151.32	15.39
149.77	2.32	150.29	9.55	150.81	14.14	151.33	15.41
149.78	2.43	150.30	9.71	150.82	14.16	151.34	15.43
149.79	2.53	150.31	9.88	150.83	14.19	151.35	15.46
149.80	2.64	150.32	10.05	150.84	14.21	151.36	15.48
149.81	2.75	150.33	10.22	150.85	14.24	151.37	15.50
149.82	2.87	150.34	10.39	150.86	14.26	151.38	15.53
149.83	2.98	150.35	10.56	150.87	14.29	151.39	15.55
149.84	3.10	150.36	10.73	150.88	14.31	151.40	15.57
149.85	3.21	150.37	10.90	150.89	14.34	151.41	15.60
149.86	3.33	150.38	11.08	150.90	14.36	151.42	15.62
149.87	3.45	150.39	11.25	150.91	14.39	151.43	15.64
149.88	3.57	150.40	11.43	150.92	14.41	151.44	15.67
149.89	3.70	150.41	11.60	150.93	14.44	151.45	15.69

Stage-Discharge for Pond B-22: Basin #22 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
151.46	15.71	151.98	16.87	152.50	17.95
151.47	15.74	151.99	16.89	152.51	17.97
151.48	15.76	152.00	16.91	152.52	17.99
151.49	15.78	152.01	16.93	152.53	18.01
151.50	15.80	152.02	16.95	152.54	18.03
151.51	15.83	152.03	16.97	152.55	18.05
151.52	15.85	152.04	17.00	152.56	18.07
151.53	15.87	152.05	17.02	152.57	18.09
151.54	15.90	152.06	17.04	152.58	18.11
151.55	15.92	152.07	17.06	152.59	18.13
151.56	15.94	152.08	17.08	152.60	18.15
151.57	15.96	152.09	17.10	152.61	18.17
151.58	15.99	152.10	17.12	152.62	18.19
151.59	16.01	152.11	17.14	152.63	18.21
151.60	16.03	152.12	17.17	152.64	18.23
151.61	16.05	152.13	17.19	152.65	18.25
151.62	16.08	152.14	17.21	152.66	18.27
151.63	16.10	152.15	17.23	152.67	18.29
151.64	16.12	152.16	17.25	152.68	18.31
151.65	16.14	152.17	17.27	152.69	18.33
151.66	16.17	152.18	17.29	152.70	18.35
151.67	16.19	152.19	17.31	152.71	18.37
151.68	16.21	152.20	17.33	152.72	18.39
151.69	16.23	152.21	17.35	152.73	18.41
151.70	16.26	152.22	17.38	152.74	18.43
151.71	16.28	152.23	17.40	152.75	18.45
151.72	16.30	152.24	17.42	152.76	18.47
151.73	16.32	152.25	17.44	152.77	18.49
151.74	16.34	152.26	17.46	152.78	18.51
151.75	16.37	152.27	17.48	152.79	18.52
151.76	16.39	152.28	17.50	152.80	18.54
151.77	16.41	152.29	17.52	152.81	18.56
151.78	16.43	152.30	17.54	152.82	18.58
151.79	16.46	152.31	17.56	152.83	18.60
151.80	16.48	152.32	17.58	152.84	18.62
151.81	16.50	152.33	17.60	152.85	18.64
151.82	16.52	152.34	17.62	152.86	18.66
151.83	16.54	152.35	17.64	152.87	18.68
151.84	16.56	152.36	17.66	152.88	18.70
151.85	16.59	152.37	17.69	152.89	18.72
151.86	16.61	152.38	17.71	152.90	18.74
151.87	16.63	152.39	17.73	152.91	18.76
151.88	16.65	152.40	17.75	152.92	18.78
151.89	16.67	152.41	17.77	152.93	18.80
151.90	16.70	152.42	17.79	152.94	18.82
151.91	16.72	152.43	17.81	152.95	18.83
151.92	16.74	152.44	17.83	152.96	18.97
151.93	16.76	152.45	17.85	152.97	19.20
151.94	16.78	152.46	17.87	152.98	19.50
151.95	16.80	152.47	17.89	152.99	19.85
151.96	16.82	152.48	17.91	153.00	**20.24**
151.97	16.85	152.49	17.93		

Stage-Area-Storage for Pond B-22: Basin #22

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.30	0	0
147.31	99	0
147.32	198	2
147.33	297	4
147.34	396	8
147.35	495	12
147.36	594	18
147.37	693	24
147.38	792	32
147.39	891	40
147.40	990	49
147.41	1,089	60
147.42	1,188	71
147.43	1,287	84
147.44	1,386	97
147.45	1,485	111
147.46	1,584	127
147.47	1,683	143
147.48	1,781	160
147.49	1,880	179
147.50	1,979	198
147.51	2,078	218
147.52	2,177	240
147.53	2,276	262
147.54	2,375	285
147.55	2,474	309
147.56	2,573	335
147.57	2,672	361
147.58	2,771	388
147.59	2,870	416
147.60	2,969	445
147.61	3,068	476
147.62	3,167	507
147.63	3,266	539
147.64	3,365	572
147.65	3,464	606
147.66	3,563	641
147.67	3,662	677
147.68	3,761	715
147.69	3,860	753
147.70	3,959	792
147.71	4,058	832
147.72	4,157	873
147.73	4,256	915
147.74	4,355	958
147.75	4,454	1,002
147.76	4,553	1,047
147.77	4,652	1,093
147.78	4,751	1,140
147.79	4,850	1,188
147.80	4,949	1,237
147.81	5,048	1,287
147.82	5,147	1,338
147.83	5,245	1,390
147.84	5,344	1,443
147.85	5,443	1,497
147.86	5,542	1,552
147.87	5,641	1,608
147.88	5,740	1,665
147.89	5,839	1,723
147.90	5,938	1,781
147.91	6,037	1,841
147.92	6,136	1,902
147.93	6,235	1,964
147.94	6,334	2,027
147.95	6,433	2,091
147.96	6,532	2,156
147.97	6,631	2,221
147.98	6,730	2,288
147.99	6,829	2,356
148.00	6,928	2,425
148.01	6,938	2,494
148.02	6,948	2,564
148.03	6,958	2,633
148.04	6,968	2,703
148.05	6,978	2,772
148.06	6,989	2,842
148.07	6,999	2,912
148.08	7,009	2,982
148.09	7,019	3,052
148.10	7,029	3,123
148.11	7,039	3,193
148.12	7,049	3,263
148.13	7,059	3,334
148.14	7,069	3,405
148.15	7,079	3,475
148.16	7,089	3,546
148.17	7,100	3,617
148.18	7,110	3,688
148.19	7,120	3,759
148.20	7,130	3,831
148.21	7,140	3,902
148.22	7,150	3,973
148.23	7,160	4,045
148.24	7,170	4,117
148.25	7,180	4,188
148.26	7,190	4,260
148.27	7,200	4,332
148.28	7,211	4,404
148.29	7,221	4,476
148.30	7,231	4,549
148.31	7,241	4,621
148.32	7,251	4,693
148.33	7,261	4,766

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.34	7,271	4,839
148.35	7,281	4,911
148.36	7,291	4,984
148.37	7,301	5,057
148.38	7,311	5,130
148.39	7,322	5,203
148.40	7,332	5,277
148.41	7,342	5,350
148.42	7,352	5,424
148.43	7,362	5,497
148.44	7,372	5,571
148.45	7,382	5,645
148.46	7,392	5,718
148.47	7,402	5,792
148.48	7,412	5,866
148.49	7,422	5,941
148.50	7,433	6,015
148.51	7,443	6,089
148.52	7,453	6,164
148.53	7,463	6,238
148.54	7,473	6,313
148.55	7,483	6,388
148.56	7,493	6,463
148.57	7,503	6,538
148.58	7,513	6,613
148.59	7,523	6,688
148.60	7,533	6,763
148.61	7,543	6,839
148.62	7,554	6,914
148.63	7,564	6,990
148.64	7,574	7,065
148.65	7,584	7,141
148.66	7,594	7,217
148.67	7,604	7,293
148.68	7,614	7,369
148.69	7,624	7,445
148.70	7,634	7,522
148.71	7,644	7,598
148.72	7,654	7,674
148.73	7,665	7,751
148.74	7,675	7,828
148.75	7,685	7,905
148.76	7,695	7,981
148.77	7,705	8,058
148.78	7,715	8,136
148.79	7,725	8,213
148.80	7,735	8,290
148.81	7,745	8,367
148.82	7,755	8,445
148.83	7,765	8,523
148.84	7,776	8,600
148.85	7,786	8,678
148.86	7,796	8,756
148.87	7,806	8,834
148.88	7,816	8,912
148.89	7,826	8,990
148.90	7,836	9,069
148.91	7,846	9,147
148.92	7,856	9,226
148.93	7,866	9,304
148.94	7,876	9,383
148.95	7,887	9,462
148.96	7,897	9,541
148.97	7,907	9,620
148.98	7,917	9,699
148.99	7,927	9,778
149.00	7,937	9,857
149.01	7,948	9,937
149.02	7,958	10,016
149.03	7,969	10,096
149.04	7,980	10,176
149.05	7,990	10,255
149.06	8,001	10,335
149.07	8,012	10,416
149.08	8,022	10,496
149.09	8,033	10,576
149.10	8,044	10,656
149.11	8,054	10,737
149.12	8,065	10,817
149.13	8,076	10,898
149.14	8,086	10,979
149.15	8,097	11,060
149.16	8,108	11,141
149.17	8,118	11,222
149.18	8,129	11,303
149.19	8,140	11,385
149.20	8,150	11,466
149.21	8,161	11,548
149.22	8,172	11,629
149.23	8,182	11,711
149.24	8,193	11,793
149.25	8,204	11,875
149.26	8,214	11,957
149.27	8,225	12,039
149.28	8,235	12,121
149.29	8,246	12,204
149.30	8,257	12,286
149.31	8,267	12,369
149.32	8,278	12,452
149.33	8,289	12,535
149.34	8,299	12,617
149.35	8,310	12,701
149.36	8,321	12,784
149.37	8,331	12,867

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
149.38	8,342	12,950	149.90	8,896	17,432
149.39	8,353	13,034	149.91	8,907	17,521
149.40	8,363	13,117	149.92	8,918	17,610
149.41	8,374	13,201	149.93	8,928	17,700
149.42	8,385	13,285	149.94	8,939	17,789
149.43	8,395	13,369	149.95	8,950	17,878
149.44	8,406	13,453	149.96	8,960	17,968
149.45	8,417	13,537	149.97	8,971	18,058
149.46	8,427	13,621	149.98	8,982	18,147
149.47	8,438	13,705	149.99	8,992	18,237
149.48	8,449	13,790	150.00	9,003	18,327
149.49	8,459	13,874	150.01	9,014	18,417
149.50	8,470	13,959	150.02	9,025	18,508
149.51	8,481	14,044	150.03	9,037	18,598
149.52	8,491	14,129	150.04	9,048	18,688
149.53	8,502	14,214	150.05	9,059	18,779
149.54	8,513	14,299	150.06	9,070	18,869
149.55	8,523	14,384	150.07	9,082	18,960
149.56	8,534	14,469	150.08	9,093	19,051
149.57	8,545	14,555	150.09	9,104	19,142
149.58	8,555	14,640	150.10	9,115	19,233
149.59	8,566	14,726	150.11	9,126	19,324
149.60	8,577	14,811	150.12	9,138	19,416
149.61	8,587	14,897	150.13	9,149	19,507
149.62	8,598	14,983	150.14	9,160	19,599
149.63	8,609	15,069	150.15	9,171	19,690
149.64	8,619	15,155	150.16	9,183	19,782
149.65	8,630	15,242	150.17	9,194	19,874
149.66	8,641	15,328	150.18	9,205	19,966
149.67	8,651	15,414	150.19	9,216	20,058
149.68	8,662	15,501	150.20	9,227	20,150
149.69	8,673	15,588	150.21	9,239	20,243
149.70	8,683	15,674	150.22	9,250	20,335
149.71	8,694	15,761	150.23	9,261	20,428
149.72	8,705	15,848	150.24	9,272	20,520
149.73	8,715	15,935	150.25	9,284	20,613
149.74	8,726	16,023	150.26	9,295	20,706
149.75	8,737	16,110	150.27	9,306	20,799
149.76	8,747	16,197	150.28	9,317	20,892
149.77	8,758	16,285	150.29	9,328	20,985
149.78	8,768	16,372	150.30	9,340	21,079
149.79	8,779	16,460	150.31	9,351	21,172
149.80	8,790	16,548	150.32	9,362	21,266
149.81	8,800	16,636	150.33	9,373	21,359
149.82	8,811	16,724	150.34	9,384	21,453
149.83	8,822	16,812	150.35	9,396	21,547
149.84	8,832	16,900	150.36	9,407	21,641
149.85	8,843	16,989	150.37	9,418	21,735
149.86	8,854	17,077	150.38	9,429	21,829
149.87	8,864	17,166	150.39	9,441	21,924
149.88	8,875	17,255	150.40	9,452	22,018
149.89	8,886	17,343	150.41	9,463	22,113

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.42	9,474	22,208	150.94	10,058	27,286
150.43	9,485	22,302	150.95	10,069	27,386
150.44	9,497	22,397	150.96	10,080	27,487
150.45	9,508	22,492	150.97	10,091	27,588
150.46	9,519	22,587	150.98	10,103	27,689
150.47	9,530	22,683	150.99	10,114	27,790
150.48	9,542	22,778	151.00	10,125	27,891
150.49	9,553	22,873	151.01	10,137	27,993
150.50	9,564	22,969	151.02	10,149	28,094
150.51	9,575	23,065	151.03	10,160	28,196
150.52	9,586	23,161	151.04	10,172	28,297
150.53	9,598	23,256	151.05	10,184	28,399
150.54	9,609	23,353	151.06	10,196	28,501
150.55	9,620	23,449	151.07	10,208	28,603
150.56	9,631	23,545	151.08	10,219	28,705
150.57	9,643	23,641	151.09	10,231	28,807
150.58	9,654	23,738	151.10	10,243	28,910
150.59	9,665	23,834	151.11	10,255	29,012
150.60	9,676	23,931	151.12	10,266	29,115
150.61	9,687	24,028	151.13	10,278	29,218
150.62	9,699	24,125	151.14	10,290	29,320
150.63	9,710	24,222	151.15	10,302	29,423
150.64	9,721	24,319	151.16	10,314	29,526
150.65	9,732	24,416	151.17	10,325	29,630
150.66	9,744	24,514	151.18	10,337	29,733
150.67	9,755	24,611	151.19	10,349	29,836
150.68	9,766	24,709	151.20	10,361	29,940
150.69	9,777	24,806	151.21	10,373	30,044
150.70	9,788	24,904	151.22	10,384	30,147
150.71	9,800	25,002	151.23	10,396	30,251
150.72	9,811	25,100	151.24	10,408	30,355
150.73	9,822	25,198	151.25	10,420	30,459
150.74	9,833	25,297	151.26	10,432	30,564
150.75	9,845	25,395	151.27	10,443	30,668
150.76	9,856	25,494	151.28	10,455	30,773
150.77	9,867	25,592	151.29	10,467	30,877
150.78	9,878	25,691	151.30	10,479	30,982
150.79	9,889	25,790	151.31	10,490	31,087
150.80	9,901	25,889	151.32	10,502	31,192
150.81	9,912	25,988	151.33	10,514	31,297
150.82	9,923	26,087	151.34	10,526	31,402
150.83	9,934	26,186	151.35	10,538	31,507
150.84	9,945	26,286	151.36	10,549	31,613
150.85	9,957	26,385	151.37	10,561	31,718
150.86	9,968	26,485	151.38	10,573	31,824
150.87	9,979	26,585	151.39	10,585	31,930
150.88	9,990	26,684	151.40	10,597	32,036
150.89	10,002	26,784	151.41	10,608	32,142
150.90	10,013	26,884	151.42	10,620	32,248
150.91	10,024	26,985	151.43	10,632	32,354
150.92	10,035	27,085	151.44	10,644	32,460
150.93	10,046	27,185	151.45	10,656	32,567

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.46	10,667	32,674	151.98	11,280	38,380
151.47	10,679	32,780	151.99	11,292	38,493
151.48	10,691	32,887	152.00	11,304	38,606
151.49	10,703	32,994	152.01	11,316	38,719
151.50	10,715	33,101	152.02	11,329	38,832
151.51	10,726	33,208	152.03	11,341	38,945
151.52	10,738	33,316	152.04	11,353	39,059
151.53	10,750	33,423	152.05	11,366	39,173
151.54	10,762	33,531	152.06	11,378	39,286
151.55	10,773	33,638	152.07	11,391	39,400
151.56	10,785	33,746	152.08	11,403	39,514
151.57	10,797	33,854	152.09	11,415	39,628
151.58	10,809	33,962	152.10	11,428	39,742
151.59	10,821	34,070	152.11	11,440	39,857
151.60	10,832	34,179	152.12	11,452	39,971
151.61	10,844	34,287	152.13	11,465	40,086
151.62	10,856	34,395	152.14	11,477	40,200
151.63	10,868	34,504	152.15	11,489	40,315
151.64	10,880	34,613	152.16	11,502	40,430
151.65	10,891	34,722	152.17	11,514	40,545
151.66	10,903	34,831	152.18	11,526	40,661
151.67	10,915	34,940	152.19	11,539	40,776
151.68	10,927	35,049	152.20	11,551	40,891
151.69	10,939	35,158	152.21	11,564	41,007
151.70	10,950	35,268	152.22	11,576	41,123
151.71	10,962	35,377	152.23	11,588	41,238
151.72	10,974	35,487	152.24	11,601	41,354
151.73	10,986	35,597	152.25	11,613	41,470
151.74	10,997	35,707	152.26	11,625	41,587
151.75	11,009	35,817	152.27	11,638	41,703
151.76	11,021	35,927	152.28	11,650	41,819
151.77	11,033	36,037	152.29	11,662	41,936
151.78	11,045	36,147	152.30	11,675	42,053
151.79	11,056	36,258	152.31	11,687	42,169
151.80	11,068	36,369	152.32	11,700	42,286
151.81	11,080	36,479	152.33	11,712	42,403
151.82	11,092	36,590	152.34	11,724	42,521
151.83	11,104	36,701	152.35	11,737	42,638
151.84	11,115	36,812	152.36	11,749	42,755
151.85	11,127	36,923	152.37	11,761	42,873
151.86	11,139	37,035	152.38	11,774	42,991
151.87	11,151	37,146	152.39	11,786	43,108
151.88	11,163	37,258	152.40	11,798	43,226
151.89	11,174	37,369	152.41	11,811	43,344
151.90	11,186	37,481	152.42	11,823	43,462
151.91	11,198	37,593	152.43	11,835	43,581
151.92	11,210	37,705	152.44	11,848	43,699
151.93	11,221	37,817	152.45	11,860	43,818
151.94	11,233	37,930	152.46	11,873	43,936
151.95	11,245	38,042	152.47	11,885	44,055
151.96	11,257	38,155	152.48	11,897	44,174
151.97	11,269	38,267	152.49	11,910	44,293

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
152.50	11,922	44,412
152.51	11,934	44,532
152.52	11,947	44,651
152.53	11,959	44,771
152.54	11,971	44,890
152.55	11,984	45,010
152.56	11,996	45,130
152.57	12,009	45,250
152.58	12,021	45,370
152.59	12,033	45,490
152.60	12,046	45,611
152.61	12,058	45,731
152.62	12,070	45,852
152.63	12,083	45,973
152.64	12,095	46,093
152.65	12,107	46,215
152.66	12,120	46,336
152.67	12,132	46,457
152.68	12,144	46,578
152.69	12,157	46,700
152.70	12,169	46,821
152.71	12,182	46,943
152.72	12,194	47,065
152.73	12,206	47,187
152.74	12,219	47,309
152.75	12,231	47,431
152.76	12,243	47,554
152.77	12,256	47,676
152.78	12,268	47,799
152.79	12,280	47,922
152.80	12,293	48,045
152.81	12,305	48,168
152.82	12,318	48,291
152.83	12,330	48,414
152.84	12,342	48,537
152.85	12,355	48,661
152.86	12,367	48,784
152.87	12,379	48,908
152.88	12,392	49,032
152.89	12,404	49,156
152.90	12,416	49,280
152.91	12,429	49,404
152.92	12,441	49,529
152.93	12,453	49,653
152.94	12,466	49,778
152.95	12,478	49,902
152.96	12,491	50,027
152.97	12,503	50,152
152.98	12,515	50,277
152.99	12,528	50,402
153.00	**12,540**	**50,528**

Summary for Pond B-23: Basin #23

Inflow Area = 2.449 ac, 33.56% Impervious, Inflow Depth = 3.26" for Current 10 yr event
Inflow = 8.21 cfs @ 12.17 hrs, Volume= 0.665 af
Outflow = 2.85 cfs @ 12.44 hrs, Volume= 0.579 af, Atten= 65%, Lag= 16.0 min
Primary = 2.85 cfs @ 12.44 hrs, Volume= 0.579 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.82' @ 12.44 hrs Surf.Area= 7,409 sf Storage= 13,681 cf

Plug-Flow detention time= 288.9 min calculated for 0.578 af (87% of inflow)
Center-of-Mass det. time= 227.4 min (1,025.2 - 797.8)

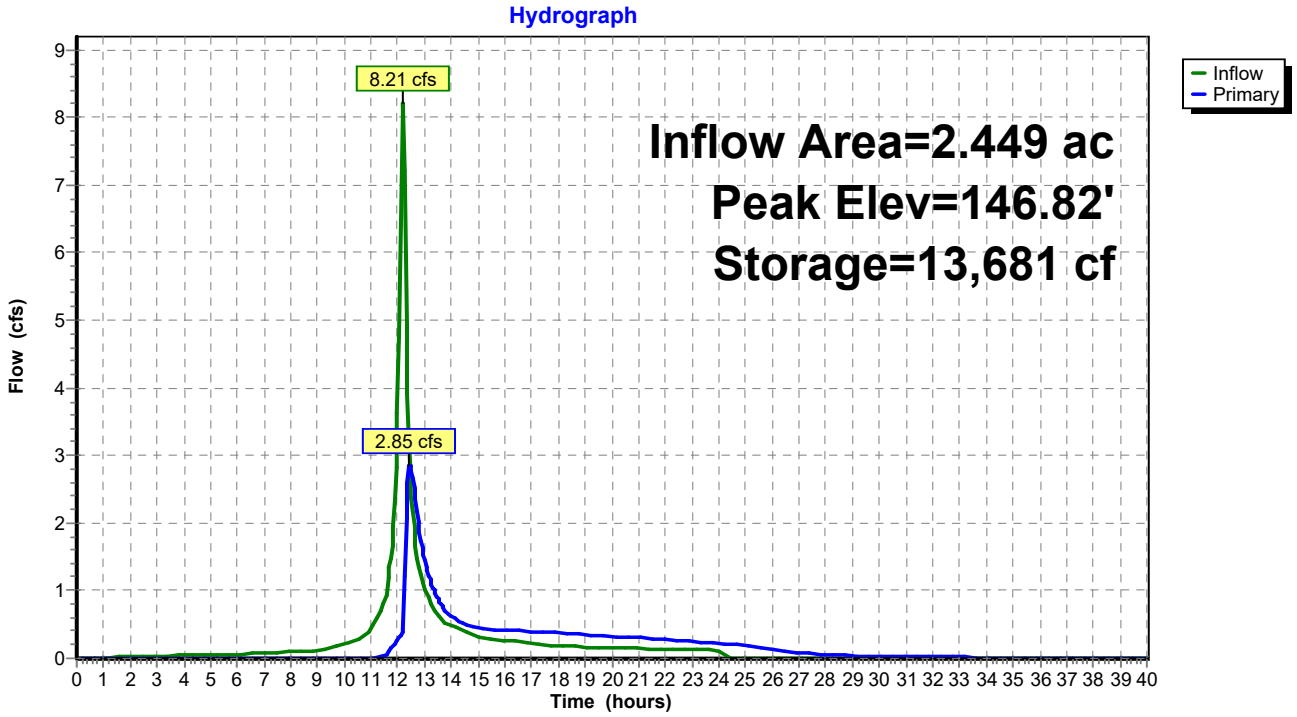
Volume	Invert	Avail.Storage	Storage Description
#1	144.30'	23,175 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
144.30	0	0	0
145.00	5,512	1,929	1,929
146.00	6,527	6,020	7,949
147.00	7,599	7,063	15,012
148.00	8,727	8,163	23,175

Device	Routing	Invert	Outlet Devices
#1	Primary	144.30'	**18.0" Round Culvert** L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 144.30' / 141.44' S= 0.0636 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	145.28'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.84 cfs @ 12.44 hrs HW=146.82' (Free Discharge)
- **1=Culvert** (Passes 2.84 cfs of 11.33 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.49 cfs @ 5.65 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.35 cfs @ 1.86 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-23: Basin #23



Stage-Discharge for Pond B-23: Basin #23

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
144.30	0.00	144.82	0.00	145.34	0.01	145.86	0.27
144.31	0.00	144.83	0.00	145.35	0.01	145.87	0.27
144.32	0.00	144.84	0.00	145.36	0.02	145.88	0.28
144.33	0.00	144.85	0.00	145.37	0.02	145.89	0.28
144.34	0.00	144.86	0.00	145.38	0.02	145.90	0.28
144.35	0.00	144.87	0.00	145.39	0.03	145.91	0.29
144.36	0.00	144.88	0.00	145.40	0.03	145.92	0.29
144.37	0.00	144.89	0.00	145.41	0.04	145.93	0.29
144.38	0.00	144.90	0.00	145.42	0.04	145.94	0.30
144.39	0.00	144.91	0.00	145.43	0.05	145.95	0.30
144.40	0.00	144.92	0.00	145.44	0.06	145.96	0.30
144.41	0.00	144.93	0.00	145.45	0.06	145.97	0.30
144.42	0.00	144.94	0.00	145.46	0.07	145.98	0.31
144.43	0.00	144.95	0.00	145.47	0.08	145.99	0.31
144.44	0.00	144.96	0.00	145.48	0.08	146.00	0.31
144.45	0.00	144.97	0.00	145.49	0.09	146.01	0.32
144.46	0.00	144.98	0.00	145.50	0.10	146.02	0.32
144.47	0.00	144.99	0.00	145.51	0.10	146.03	0.32
144.48	0.00	145.00	0.00	145.52	0.11	146.04	0.32
144.49	0.00	145.01	0.00	145.53	0.12	146.05	0.33
144.50	0.00	145.02	0.00	145.54	0.13	146.06	0.33
144.51	0.00	145.03	0.00	145.55	0.13	146.07	0.33
144.52	0.00	145.04	0.00	145.56	0.14	146.08	0.33
144.53	0.00	145.05	0.00	145.57	0.15	146.09	0.34
144.54	0.00	145.06	0.00	145.58	0.15	146.10	0.34
144.55	0.00	145.07	0.00	145.59	0.16	146.11	0.34
144.56	0.00	145.08	0.00	145.60	0.17	146.12	0.34
144.57	0.00	145.09	0.00	145.61	0.17	146.13	0.35
144.58	0.00	145.10	0.00	145.62	0.17	146.14	0.35
144.59	0.00	145.11	0.00	145.63	0.18	146.15	0.35
144.60	0.00	145.12	0.00	145.64	0.18	146.16	0.35
144.61	0.00	145.13	0.00	145.65	0.19	146.17	0.36
144.62	0.00	145.14	0.00	145.66	0.19	146.18	0.36
144.63	0.00	145.15	0.00	145.67	0.20	146.19	0.36
144.64	0.00	145.16	0.00	145.68	0.20	146.20	0.36
144.65	0.00	145.17	0.00	145.69	0.21	146.21	0.37
144.66	0.00	145.18	0.00	145.70	0.21	146.22	0.37
144.67	0.00	145.19	0.00	145.71	0.22	146.23	0.37
144.68	0.00	145.20	0.00	145.72	0.22	146.24	0.37
144.69	0.00	145.21	0.00	145.73	0.22	146.25	0.38
144.70	0.00	145.22	0.00	145.74	0.23	146.26	0.38
144.71	0.00	145.23	0.00	145.75	0.23	146.27	0.38
144.72	0.00	145.24	0.00	145.76	0.24	146.28	0.38
144.73	0.00	145.25	0.00	145.77	0.24	146.29	0.39
144.74	0.00	145.26	0.00	145.78	0.24	146.30	0.39
144.75	0.00	145.27	0.00	145.79	0.25	146.31	0.39
144.76	0.00	145.28	0.00	145.80	0.25	146.32	0.39
144.77	0.00	145.29	0.00	145.81	0.25	146.33	0.39
144.78	0.00	145.30	0.00	145.82	0.26	146.34	0.40
144.79	0.00	145.31	0.00	145.83	0.26	146.35	0.40
144.80	0.00	145.32	0.00	145.84	0.26	146.36	0.40
144.81	0.00	145.33	0.01	145.85	0.27	146.37	0.40

Stage-Discharge for Pond B-23: Basin #23 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
146.38	0.41	146.90	3.75	147.42	11.60	147.94	14.46
146.39	0.41	146.91	3.87	147.43	11.78	147.95	14.49
146.40	0.41	146.92	4.00	147.44	11.95	147.96	14.63
146.41	0.41	146.93	4.12	147.45	12.13	147.97	14.87
146.42	0.41	146.94	4.25	147.46	12.31	147.98	15.17
146.43	0.42	146.95	4.37	147.47	12.49	147.99	15.53
146.44	0.42	146.96	4.50	147.48	12.67	148.00	**15.93**
146.45	0.42	146.97	4.63	147.49	12.85		
146.46	0.42	146.98	4.77	147.50	13.03		
146.47	0.43	146.99	4.90	147.51	13.21		
146.48	0.43	147.00	5.03	147.52	13.37		
146.49	0.43	147.01	5.17	147.53	13.40		
146.50	0.43	147.02	5.30	147.54	13.43		
146.51	0.45	147.03	5.44	147.55	13.45		
146.52	0.47	147.04	5.58	147.56	13.48		
146.53	0.51	147.05	5.72	147.57	13.51		
146.54	0.54	147.06	5.86	147.58	13.53		
146.55	0.59	147.07	6.00	147.59	13.56		
146.56	0.64	147.08	6.15	147.60	13.59		
146.57	0.69	147.09	6.29	147.61	13.61		
146.58	0.74	147.10	6.44	147.62	13.64		
146.59	0.80	147.11	6.58	147.63	13.67		
146.60	0.86	147.12	6.73	147.64	13.69		
146.61	0.93	147.13	6.88	147.65	13.72		
146.62	1.00	147.14	7.03	147.66	13.75		
146.63	1.07	147.15	7.18	147.67	13.77		
146.64	1.14	147.16	7.33	147.68	13.80		
146.65	1.22	147.17	7.48	147.69	13.83		
146.66	1.29	147.18	7.64	147.70	13.85		
146.67	1.37	147.19	7.79	147.71	13.88		
146.68	1.46	147.20	7.95	147.72	13.90		
146.69	1.54	147.21	8.11	147.73	13.93		
146.70	1.63	147.22	8.26	147.74	13.96		
146.71	1.72	147.23	8.42	147.75	13.98		
146.72	1.81	147.24	8.58	147.76	14.01		
146.73	1.90	147.25	8.74	147.77	14.03		
146.74	2.00	147.26	8.90	147.78	14.06		
146.75	2.09	147.27	9.06	147.79	14.08		
146.76	2.19	147.28	9.23	147.80	14.11		
146.77	2.29	147.29	9.39	147.81	14.14		
146.78	2.40	147.30	9.56	147.82	14.16		
146.79	2.50	147.31	9.72	147.83	14.19		
146.80	2.61	147.32	9.89	147.84	14.21		
146.81	2.71	147.33	10.06	147.85	14.24		
146.82	2.82	147.34	10.23	147.86	14.26		
146.83	2.93	147.35	10.39	147.87	14.29		
146.84	3.05	147.36	10.56	147.88	14.31		
146.85	3.16	147.37	10.74	147.89	14.34		
146.86	3.27	147.38	10.91	147.90	14.36		
146.87	3.39	147.39	11.08	147.91	14.39		
146.88	3.51	147.40	11.25	147.92	14.41		
146.89	3.63	147.41	11.43	147.93	14.44		

Stage-Area-Storage for Pond B-23: Basin #23

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.30	0	0	144.82	4,095	1,065
144.31	79	0	144.83	4,173	1,106
144.32	157	2	144.84	4,252	1,148
144.33	236	4	144.85	4,331	1,191
144.34	315	6	144.86	4,410	1,235
144.35	394	10	144.87	4,488	1,279
144.36	472	14	144.88	4,567	1,324
144.37	551	19	144.89	4,646	1,371
144.38	630	25	144.90	4,725	1,417
144.39	709	32	144.91	4,803	1,465
144.40	787	39	144.92	4,882	1,513
144.41	866	48	144.93	4,961	1,563
144.42	945	57	144.94	5,040	1,613
144.43	1,024	67	144.95	5,118	1,663
144.44	1,102	77	144.96	5,197	1,715
144.45	1,181	89	144.97	5,276	1,767
144.46	1,260	101	144.98	5,355	1,821
144.47	1,339	114	144.99	5,433	1,874
144.48	1,417	128	145.00	5,512	1,929
144.49	1,496	142	145.01	5,522	1,984
144.50	1,575	157	145.02	5,532	2,040
144.51	1,654	174	145.03	5,542	2,095
144.52	1,732	191	145.04	5,553	2,150
144.53	1,811	208	145.05	5,563	2,206
144.54	1,890	227	145.06	5,573	2,262
144.55	1,969	246	145.07	5,583	2,318
144.56	2,047	266	145.08	5,593	2,373
144.57	2,126	287	145.09	5,603	2,429
144.58	2,205	309	145.10	5,614	2,485
144.59	2,284	331	145.11	5,624	2,542
144.60	2,362	354	145.12	5,634	2,598
144.61	2,441	378	145.13	5,644	2,654
144.62	2,520	403	145.14	5,654	2,711
144.63	2,599	429	145.15	5,664	2,767
144.64	2,677	455	145.16	5,674	2,824
144.65	2,756	482	145.17	5,685	2,881
144.66	2,835	510	145.18	5,695	2,938
144.67	2,913	539	145.19	5,705	2,995
144.68	2,992	569	145.20	5,715	3,052
144.69	3,071	599	145.21	5,725	3,109
144.70	3,150	630	145.22	5,735	3,166
144.71	3,228	662	145.23	5,745	3,224
144.72	3,307	695	145.24	5,756	3,281
144.73	3,386	728	145.25	5,766	3,339
144.74	3,465	762	145.26	5,776	3,397
144.75	3,543	797	145.27	5,786	3,454
144.76	3,622	833	145.28	5,796	3,512
144.77	3,701	870	145.29	5,806	3,570
144.78	3,780	907	145.30	5,817	3,628
144.79	3,858	945	145.31	5,827	3,687
144.80	3,937	984	145.32	5,837	3,745
144.81	4,016	1,024	145.33	5,847	3,803

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.34	5,857	3,862	145.86	6,385	7,045
145.35	5,867	3,921	145.87	6,395	7,109
145.36	5,877	3,979	145.88	6,405	7,173
145.37	5,888	4,038	145.89	6,415	7,237
145.38	5,898	4,097	145.90	6,426	7,301
145.39	5,908	4,156	145.91	6,436	7,365
145.40	5,918	4,215	145.92	6,446	7,430
145.41	5,928	4,274	145.93	6,456	7,494
145.42	5,938	4,334	145.94	6,466	7,559
145.43	5,948	4,393	145.95	6,476	7,624
145.44	5,959	4,453	145.96	6,486	7,688
145.45	5,969	4,512	145.97	6,497	7,753
145.46	5,979	4,572	145.98	6,507	7,818
145.47	5,989	4,632	145.99	6,517	7,883
145.48	5,999	4,692	146.00	6,527	7,949
145.49	6,009	4,752	146.01	6,538	8,014
145.50	6,020	4,812	146.02	6,548	8,079
145.51	6,030	4,872	146.03	6,559	8,145
145.52	6,040	4,933	146.04	6,570	8,211
145.53	6,050	4,993	146.05	6,581	8,276
145.54	6,060	5,054	146.06	6,591	8,342
145.55	6,070	5,114	146.07	6,602	8,408
145.56	6,080	5,175	146.08	6,613	8,474
145.57	6,091	5,236	146.09	6,623	8,540
145.58	6,101	5,297	146.10	6,634	8,607
145.59	6,111	5,358	146.11	6,645	8,673
145.60	6,121	5,419	146.12	6,656	8,740
145.61	6,131	5,480	146.13	6,666	8,806
145.62	6,141	5,542	146.14	6,677	8,873
145.63	6,151	5,603	146.15	6,688	8,940
145.64	6,162	5,665	146.16	6,699	9,007
145.65	6,172	5,726	146.17	6,709	9,074
145.66	6,182	5,788	146.18	6,720	9,141
145.67	6,192	5,850	146.19	6,731	9,208
145.68	6,202	5,912	146.20	6,741	9,276
145.69	6,212	5,974	146.21	6,752	9,343
145.70	6,223	6,036	146.22	6,763	9,411
145.71	6,233	6,099	146.23	6,774	9,478
145.72	6,243	6,161	146.24	6,784	9,546
145.73	6,253	6,223	146.25	6,795	9,614
145.74	6,263	6,286	146.26	6,806	9,682
145.75	6,273	6,349	146.27	6,816	9,750
145.76	6,283	6,411	146.28	6,827	9,818
145.77	6,294	6,474	146.29	6,838	9,887
145.78	6,304	6,537	146.30	6,849	9,955
145.79	6,314	6,600	146.31	6,859	10,024
145.80	6,324	6,664	146.32	6,870	10,092
145.81	6,334	6,727	146.33	6,881	10,161
145.82	6,344	6,790	146.34	6,891	10,230
145.83	6,354	6,854	146.35	6,902	10,299
145.84	6,365	6,917	146.36	6,913	10,368
145.85	6,375	6,981	146.37	6,924	10,437

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.38	6,934	10,506	146.90	7,492	14,257
146.39	6,945	10,576	146.91	7,503	14,332
146.40	6,956	10,645	146.92	7,513	14,407
146.41	6,967	10,715	146.93	7,524	14,482
146.42	6,977	10,785	146.94	7,535	14,558
146.43	6,988	10,854	146.95	7,545	14,633
146.44	6,999	10,924	146.96	7,556	14,709
146.45	7,009	10,994	146.97	7,567	14,784
146.46	7,020	11,065	146.98	7,578	14,860
146.47	7,031	11,135	146.99	7,588	14,936
146.48	7,042	11,205	147.00	7,599	15,012
146.49	7,052	11,276	147.01	7,610	15,088
146.50	7,063	11,346	147.02	7,622	15,164
146.51	7,074	11,417	147.03	7,633	15,240
146.52	7,084	11,488	147.04	7,644	15,317
146.53	7,095	11,559	147.05	7,655	15,393
146.54	7,106	11,630	147.06	7,667	15,470
146.55	7,117	11,701	147.07	7,678	15,546
146.56	7,127	11,772	147.08	7,689	15,623
146.57	7,138	11,843	147.09	7,701	15,700
146.58	7,149	11,915	147.10	7,712	15,777
146.59	7,159	11,986	147.11	7,723	15,854
146.60	7,170	12,058	147.12	7,734	15,932
146.61	7,181	12,130	147.13	7,746	16,009
146.62	7,192	12,201	147.14	7,757	16,087
146.63	7,202	12,273	147.15	7,768	16,164
146.64	7,213	12,346	147.16	7,779	16,242
146.65	7,224	12,418	147.17	7,791	16,320
146.66	7,235	12,490	147.18	7,802	16,398
146.67	7,245	12,562	147.19	7,813	16,476
146.68	7,256	12,635	147.20	7,825	16,554
146.69	7,267	12,708	147.21	7,836	16,632
146.70	7,277	12,780	147.22	7,847	16,711
146.71	7,288	12,853	147.23	7,858	16,789
146.72	7,299	12,926	147.24	7,870	16,868
146.73	7,310	12,999	147.25	7,881	16,947
146.74	7,320	13,072	147.26	7,892	17,026
146.75	7,331	13,145	147.27	7,904	17,105
146.76	7,342	13,219	147.28	7,915	17,184
146.77	7,352	13,292	147.29	7,926	17,263
146.78	7,363	13,366	147.30	7,937	17,342
146.79	7,374	13,440	147.31	7,949	17,422
146.80	7,385	13,513	147.32	7,960	17,501
146.81	7,395	13,587	147.33	7,971	17,581
146.82	7,406	13,661	147.34	7,983	17,661
146.83	7,417	13,735	147.35	7,994	17,740
146.84	7,427	13,810	147.36	8,005	17,820
146.85	7,438	13,884	147.37	8,016	17,901
146.86	7,449	13,958	147.38	8,028	17,981
146.87	7,460	14,033	147.39	8,039	18,061
146.88	7,470	14,108	147.40	8,050	18,142
146.89	7,481	14,182	147.41	8,061	18,222

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.42	8,073	18,303
147.43	8,084	18,384
147.44	8,095	18,464
147.45	8,107	18,545
147.46	8,118	18,627
147.47	8,129	18,708
147.48	8,140	18,789
147.49	8,152	18,871
147.50	8,163	18,952
147.51	8,174	19,034
147.52	8,186	19,116
147.53	8,197	19,198
147.54	8,208	19,280
147.55	8,219	19,362
147.56	8,231	19,444
147.57	8,242	19,526
147.58	8,253	19,609
147.59	8,265	19,691
147.60	8,276	19,774
147.61	8,287	19,857
147.62	8,298	19,940
147.63	8,310	20,023
147.64	8,321	20,106
147.65	8,332	20,189
147.66	8,343	20,273
147.67	8,355	20,356
147.68	8,366	20,440
147.69	8,377	20,524
147.70	8,389	20,607
147.71	8,400	20,691
147.72	8,411	20,775
147.73	8,422	20,860
147.74	8,434	20,944
147.75	8,445	21,028
147.76	8,456	21,113
147.77	8,468	21,197
147.78	8,479	21,282
147.79	8,490	21,367
147.80	8,501	21,452
147.81	8,513	21,537
147.82	8,524	21,622
147.83	8,535	21,707
147.84	8,547	21,793
147.85	8,558	21,878
147.86	8,569	21,964
147.87	8,580	22,050
147.88	8,592	22,136
147.89	8,603	22,222
147.90	8,614	22,308
147.91	8,625	22,394
147.92	8,637	22,480
147.93	8,648	22,567
147.94	8,659	22,653
147.95	8,671	22,740
147.96	8,682	22,827
147.97	8,693	22,913
147.98	8,704	23,000
147.99	8,716	23,087
148.00	**8,727**	**23,175**

Summary for Pond B-24: Basin #24

Inflow Area = 2.408 ac, 37.46% Impervious, Inflow Depth = 3.35" for Current 10 yr event
Inflow = 8.25 cfs @ 12.17 hrs, Volume= 0.672 af
Outflow = 2.27 cfs @ 12.53 hrs, Volume= 0.578 af, Atten= 72%, Lag= 21.1 min
Primary = 2.27 cfs @ 12.53 hrs, Volume= 0.578 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.50' @ 12.53 hrs Surf.Area= 8,836 sf Storage= 14,651 cf

Plug-Flow detention time= 278.3 min calculated for 0.577 af (86% of inflow)
Center-of-Mass det. time= 213.1 min (1,007.0 - 793.9)

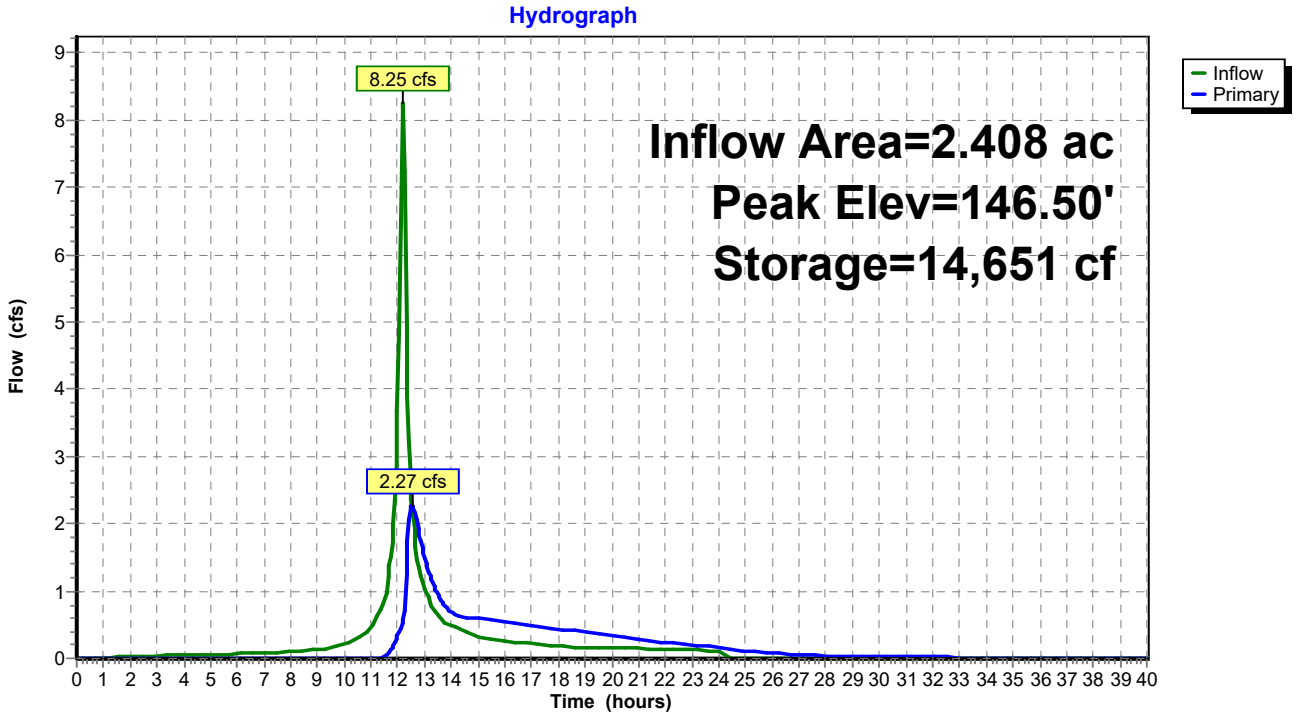
Volume	Invert	Avail.Storage	Storage Description
#1	144.30'	40,061 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
144.30	0	0	0
145.00	7,331	2,566	2,566
146.00	8,327	7,829	10,395
147.00	9,353	8,840	19,235
148.00	10,406	9,880	29,114
149.00	11,488	10,947	40,061

Device	Routing	Invert	Outlet Devices
#1	Primary	144.30'	**18.0" Round Culvert** L= 22.0' Ke= 0.500 Inlet / Outlet Invert= 144.30' / 143.04' S= 0.0573 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	145.17'	**5.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.27 cfs @ 12.53 hrs HW=146.50' (Free Discharge)
- **1=Culvert** (Passes 2.27 cfs of 10.23 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.69 cfs @ 5.09 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.57 cfs @ 1.62 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-24: Basin #24



Stage-Discharge for Pond B-24: Basin #24

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
144.30	0.00	144.82	0.00	145.34	0.07	145.86	0.46
144.31	0.00	144.83	0.00	145.35	0.08	145.87	0.46
144.32	0.00	144.84	0.00	145.36	0.09	145.88	0.47
144.33	0.00	144.85	0.00	145.37	0.10	145.89	0.47
144.34	0.00	144.86	0.00	145.38	0.11	145.90	0.47
144.35	0.00	144.87	0.00	145.39	0.12	145.91	0.48
144.36	0.00	144.88	0.00	145.40	0.13	145.92	0.48
144.37	0.00	144.89	0.00	145.41	0.14	145.93	0.49
144.38	0.00	144.90	0.00	145.42	0.15	145.94	0.49
144.39	0.00	144.91	0.00	145.43	0.16	145.95	0.50
144.40	0.00	144.92	0.00	145.44	0.17	145.96	0.50
144.41	0.00	144.93	0.00	145.45	0.18	145.97	0.51
144.42	0.00	144.94	0.00	145.46	0.19	145.98	0.51
144.43	0.00	144.95	0.00	145.47	0.20	145.99	0.51
144.44	0.00	144.96	0.00	145.48	0.21	146.00	0.52
144.45	0.00	144.97	0.00	145.49	0.22	146.01	0.52
144.46	0.00	144.98	0.00	145.50	0.23	146.02	0.53
144.47	0.00	144.99	0.00	145.51	0.24	146.03	0.53
144.48	0.00	145.00	0.00	145.52	0.25	146.04	0.53
144.49	0.00	145.01	0.00	145.53	0.26	146.05	0.54
144.50	0.00	145.02	0.00	145.54	0.27	146.06	0.54
144.51	0.00	145.03	0.00	145.55	0.27	146.07	0.55
144.52	0.00	145.04	0.00	145.56	0.28	146.08	0.55
144.53	0.00	145.05	0.00	145.57	0.29	146.09	0.55
144.54	0.00	145.06	0.00	145.58	0.30	146.10	0.56
144.55	0.00	145.07	0.00	145.59	0.30	146.11	0.56
144.56	0.00	145.08	0.00	145.60	0.31	146.12	0.57
144.57	0.00	145.09	0.00	145.61	0.32	146.13	0.57
144.58	0.00	145.10	0.00	145.62	0.32	146.14	0.57
144.59	0.00	145.11	0.00	145.63	0.33	146.15	0.58
144.60	0.00	145.12	0.00	145.64	0.34	146.16	0.58
144.61	0.00	145.13	0.00	145.65	0.34	146.17	0.58
144.62	0.00	145.14	0.00	145.66	0.35	146.18	0.59
144.63	0.00	145.15	0.00	145.67	0.35	146.19	0.59
144.64	0.00	145.16	0.00	145.68	0.36	146.20	0.60
144.65	0.00	145.17	0.00	145.69	0.37	146.21	0.60
144.66	0.00	145.18	0.00	145.70	0.37	146.22	0.60
144.67	0.00	145.19	0.00	145.71	0.38	146.23	0.61
144.68	0.00	145.20	0.00	145.72	0.38	146.24	0.61
144.69	0.00	145.21	0.00	145.73	0.39	146.25	0.61
144.70	0.00	145.22	0.01	145.74	0.39	146.26	0.63
144.71	0.00	145.23	0.01	145.75	0.40	146.27	0.66
144.72	0.00	145.24	0.01	145.76	0.41	146.28	0.69
144.73	0.00	145.25	0.02	145.77	0.41	146.29	0.73
144.74	0.00	145.26	0.02	145.78	0.42	146.30	0.78
144.75	0.00	145.27	0.03	145.79	0.42	146.31	0.83
144.76	0.00	145.28	0.03	145.80	0.43	146.32	0.88
144.77	0.00	145.29	0.04	145.81	0.43	146.33	0.94
144.78	0.00	145.30	0.04	145.82	0.44	146.34	1.00
144.79	0.00	145.31	0.05	145.83	0.44	146.35	1.06
144.80	0.00	145.32	0.06	145.84	0.45	146.36	1.13
144.81	0.00	145.33	0.07	145.85	0.45	146.37	1.19

Stage-Discharge for Pond B-24: Basin #24 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
146.38	1.27	146.90	7.44	147.42	13.10	147.94	14.46
146.39	1.34	146.91	7.59	147.43	13.13	147.95	14.49
146.40	1.42	146.92	7.75	147.44	13.15	147.96	14.51
146.41	1.50	146.93	7.90	147.45	13.18	147.97	14.54
146.42	1.58	146.94	8.06	147.46	13.21	147.98	14.56
146.43	1.66	146.95	8.22	147.47	13.24	147.99	14.59
146.44	1.75	146.96	8.37	147.48	13.26	148.00	14.73
146.45	1.84	146.97	8.53	147.49	13.29	148.01	14.97
146.46	1.93	146.98	8.69	147.50	13.32	148.02	15.27
146.47	2.02	146.99	8.85	147.51	13.35	148.03	15.63
146.48	2.12	147.00	9.01	147.52	13.37	148.04	16.02
146.49	2.21	147.01	9.18	147.53	13.40	148.05	16.46
146.50	2.31	147.02	9.34	147.54	13.43	148.06	16.94
146.51	2.41	147.03	9.50	147.55	13.45	148.07	17.44
146.52	2.51	147.04	9.67	147.56	13.48	148.08	17.98
146.53	2.62	147.05	9.83	147.57	13.51	148.09	18.55
146.54	2.72	147.06	10.00	147.58	13.53	148.10	19.15
146.55	2.83	147.07	10.17	147.59	13.56	148.11	19.78
146.56	2.94	147.08	10.34	147.60	13.59	148.12	20.43
146.57	3.05	147.09	10.51	147.61	13.61	148.13	21.10
146.58	3.16	147.10	10.68	147.62	13.64	148.14	21.80
146.59	3.27	147.11	10.85	147.63	13.67	148.15	22.53
146.60	3.39	147.12	11.02	147.64	13.69	148.16	23.27
146.61	3.50	147.13	11.19	147.65	13.72	148.17	24.04
146.62	3.62	147.14	11.36	147.66	13.75	148.18	24.83
146.63	3.74	147.15	11.54	147.67	13.77	148.19	25.64
146.64	3.86	147.16	11.71	147.68	13.80	148.20	26.51
146.65	3.98	147.17	11.89	147.69	13.83	148.21	27.41
146.66	4.11	147.18	12.07	147.70	13.85	148.22	28.33
146.67	4.23	147.19	12.24	147.71	13.88	148.23	29.28
146.68	4.36	147.20	12.42	147.72	13.90	148.24	30.25
146.69	4.49	147.21	12.51	147.73	13.93	148.25	31.25
146.70	4.61	147.22	12.53	147.74	13.96	148.26	32.27
146.71	4.74	147.23	12.56	147.75	13.98	148.27	33.32
146.72	4.88	147.24	12.59	147.76	14.01	148.28	34.39
146.73	5.01	147.25	12.62	147.77	14.03	148.29	35.48
146.74	5.14	147.26	12.65	147.78	14.06	148.30	36.60
146.75	5.28	147.27	12.68	147.79	14.08	148.31	37.75
146.76	5.41	147.28	12.71	147.80	14.11	148.32	38.92
146.77	5.55	147.29	12.73	147.81	14.14	148.33	40.11
146.78	5.69	147.30	12.76	147.82	14.16	148.34	41.33
146.79	5.83	147.31	12.79	147.83	14.19	148.35	42.57
146.80	5.97	147.32	12.82	147.84	14.21	148.36	43.84
146.81	6.11	147.33	12.85	147.85	14.24	148.37	45.13
146.82	6.26	147.34	12.88	147.86	14.26	148.38	46.44
146.83	6.40	147.35	12.90	147.87	14.29	148.39	47.78
146.84	6.55	147.36	12.93	147.88	14.31	148.40	49.17
146.85	6.69	147.37	12.96	147.89	14.34	148.41	50.58
146.86	6.84	147.38	12.99	147.90	14.36	148.42	52.03
146.87	6.99	147.39	13.02	147.91	14.39	148.43	53.49
146.88	7.14	147.40	13.04	147.92	14.41	148.44	54.99
146.89	7.29	147.41	13.07	147.93	14.44	148.45	56.51

Stage-Discharge for Pond B-24: Basin #24 (continued)

Elevation (feet)	Primary (cfs)
148.46	58.05
148.47	59.62
148.48	61.22
148.49	62.85
148.50	64.50
148.51	66.18
148.52	67.88
148.53	69.61
148.54	71.37
148.55	73.15
148.56	74.96
148.57	76.80
148.58	78.67
148.59	80.56
148.60	82.21
148.61	83.87
148.62	85.55
148.63	87.24
148.64	88.94
148.65	90.66
148.66	92.39
148.67	94.13
148.68	95.88
148.69	97.65
148.70	99.43
148.71	101.23
148.72	103.03
148.73	104.85
148.74	106.68
148.75	108.53
148.76	110.38
148.77	112.25
148.78	114.13
148.79	116.02
148.80	117.96
148.81	119.92
148.82	121.88
148.83	123.87
148.84	125.86
148.85	127.87
148.86	129.89
148.87	131.92
148.88	133.97
148.89	136.03
148.90	138.10
148.91	140.18
148.92	142.28
148.93	144.39
148.94	146.52
148.95	148.65
148.96	150.80
148.97	152.96
148.98	155.14
148.99	157.32
149.00	**159.47**

Stage-Area-Storage for Pond B-24: Basin #24

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.30	0	0
144.31	105	1
144.32	209	2
144.33	314	5
144.34	419	8
144.35	524	13
144.36	628	19
144.37	733	26
144.38	838	34
144.39	943	42
144.40	1,047	52
144.41	1,152	63
144.42	1,257	75
144.43	1,361	88
144.44	1,466	103
144.45	1,571	118
144.46	1,676	134
144.47	1,780	151
144.48	1,885	170
144.49	1,990	189
144.50	2,095	209
144.51	2,199	231
144.52	2,304	253
144.53	2,409	277
144.54	2,513	302
144.55	2,618	327
144.56	2,723	354
144.57	2,828	382
144.58	2,932	411
144.59	3,037	440
144.60	3,142	471
144.61	3,247	503
144.62	3,351	536
144.63	3,456	570
144.64	3,561	605
144.65	3,666	641
144.66	3,770	679
144.67	3,875	717
144.68	3,980	756
144.69	4,084	796
144.70	4,189	838
144.71	4,294	880
144.72	4,399	924
144.73	4,503	968
144.74	4,608	1,014
144.75	4,713	1,060
144.76	4,818	1,108
144.77	4,922	1,157
144.78	5,027	1,206
144.79	5,132	1,257
144.80	5,236	1,309
144.81	5,341	1,362
144.82	5,446	1,416
144.83	5,551	1,471
144.84	5,655	1,527
144.85	5,760	1,584
144.86	5,865	1,642
144.87	5,970	1,701
144.88	6,074	1,762
144.89	6,179	1,823
144.90	6,284	1,885
144.91	6,388	1,948
144.92	6,493	2,013
144.93	6,598	2,078
144.94	6,703	2,145
144.95	6,807	2,212
144.96	6,912	2,281
144.97	7,017	2,351
144.98	7,122	2,421
144.99	7,226	2,493
145.00	7,331	2,566
145.01	7,341	2,639
145.02	7,351	2,713
145.03	7,361	2,786
145.04	7,371	2,860
145.05	7,381	2,934
145.06	7,391	3,008
145.07	7,401	3,081
145.08	7,411	3,156
145.09	7,421	3,230
145.10	7,431	3,304
145.11	7,441	3,378
145.12	7,451	3,453
145.13	7,460	3,527
145.14	7,470	3,602
145.15	7,480	3,677
145.16	7,490	3,752
145.17	7,500	3,827
145.18	7,510	3,902
145.19	7,520	3,977
145.20	7,530	4,052
145.21	7,540	4,127
145.22	7,550	4,203
145.23	7,560	4,278
145.24	7,570	4,354
145.25	7,580	4,430
145.26	7,590	4,506
145.27	7,600	4,582
145.28	7,610	4,658
145.29	7,620	4,734
145.30	7,630	4,810
145.31	7,640	4,886
145.32	7,650	4,963
145.33	7,660	5,039

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.34	7,670	5,116	145.86	8,188	9,239
145.35	7,680	5,193	145.87	8,198	9,321
145.36	7,690	5,270	145.88	8,207	9,403
145.37	7,700	5,346	145.89	8,217	9,485
145.38	7,709	5,424	145.90	8,227	9,567
145.39	7,719	5,501	145.91	8,237	9,649
145.40	7,729	5,578	145.92	8,247	9,732
145.41	7,739	5,655	145.93	8,257	9,814
145.42	7,749	5,733	145.94	8,267	9,897
145.43	7,759	5,810	145.95	8,277	9,980
145.44	7,769	5,888	145.96	8,287	10,063
145.45	7,779	5,966	145.97	8,297	10,145
145.46	7,789	6,043	145.98	8,307	10,229
145.47	7,799	6,121	145.99	8,317	10,312
145.48	7,809	6,199	146.00	8,327	10,395
145.49	7,819	6,278	146.01	8,337	10,478
145.50	7,829	6,356	146.02	8,348	10,562
145.51	7,839	6,434	146.03	8,358	10,645
145.52	7,849	6,513	146.04	8,368	10,729
145.53	7,859	6,591	146.05	8,378	10,812
145.54	7,869	6,670	146.06	8,389	10,896
145.55	7,879	6,749	146.07	8,399	10,980
145.56	7,889	6,827	146.08	8,409	11,064
145.57	7,899	6,906	146.09	8,419	11,148
145.58	7,909	6,985	146.10	8,430	11,233
145.59	7,919	7,064	146.11	8,440	11,317
145.60	7,929	7,144	146.12	8,450	11,401
145.61	7,939	7,223	146.13	8,460	11,486
145.62	7,949	7,303	146.14	8,471	11,571
145.63	7,958	7,382	146.15	8,481	11,655
145.64	7,968	7,462	146.16	8,491	11,740
145.65	7,978	7,541	146.17	8,501	11,825
145.66	7,988	7,621	146.18	8,512	11,910
145.67	7,998	7,701	146.19	8,522	11,995
145.68	8,008	7,781	146.20	8,532	12,081
145.69	8,018	7,861	146.21	8,542	12,166
145.70	8,028	7,942	146.22	8,553	12,252
145.71	8,038	8,022	146.23	8,563	12,337
145.72	8,048	8,102	146.24	8,573	12,423
145.73	8,058	8,183	146.25	8,584	12,509
145.74	8,068	8,263	146.26	8,594	12,595
145.75	8,078	8,344	146.27	8,604	12,681
145.76	8,088	8,425	146.28	8,614	12,767
145.77	8,098	8,506	146.29	8,625	12,853
145.78	8,108	8,587	146.30	8,635	12,939
145.79	8,118	8,668	146.31	8,645	13,026
145.80	8,128	8,749	146.32	8,655	13,112
145.81	8,138	8,831	146.33	8,666	13,199
145.82	8,148	8,912	146.34	8,676	13,285
145.83	8,158	8,994	146.35	8,686	13,372
145.84	8,168	9,075	146.36	8,696	13,459
145.85	8,178	9,157	146.37	8,707	13,546

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.38	8,717	13,633	146.90	9,250	18,305
146.39	8,727	13,720	146.91	9,261	18,397
146.40	8,737	13,808	146.92	9,271	18,490
146.41	8,748	13,895	146.93	9,281	18,583
146.42	8,758	13,983	146.94	9,291	18,676
146.43	8,768	14,070	146.95	9,302	18,768
146.44	8,778	14,158	146.96	9,312	18,862
146.45	8,789	14,246	146.97	9,322	18,955
146.46	8,799	14,334	146.98	9,332	19,048
146.47	8,809	14,422	146.99	9,343	19,141
146.48	8,819	14,510	147.00	9,353	19,235
146.49	8,830	14,598	147.01	9,364	19,328
146.50	8,840	14,687	147.02	9,374	19,422
146.51	8,850	14,775	147.03	9,385	19,516
146.52	8,861	14,864	147.04	9,395	19,610
146.53	8,871	14,952	147.05	9,406	19,704
146.54	8,881	15,041	147.06	9,416	19,798
146.55	8,891	15,130	147.07	9,427	19,892
146.56	8,902	15,219	147.08	9,437	19,986
146.57	8,912	15,308	147.09	9,448	20,081
146.58	8,922	15,397	147.10	9,458	20,175
146.59	8,932	15,486	147.11	9,469	20,270
146.60	8,943	15,576	147.12	9,479	20,365
146.61	8,953	15,665	147.13	9,490	20,460
146.62	8,963	15,755	147.14	9,500	20,555
146.63	8,973	15,844	147.15	9,511	20,650
146.64	8,984	15,934	147.16	9,521	20,745
146.65	8,994	16,024	147.17	9,532	20,840
146.66	9,004	16,114	147.18	9,543	20,935
146.67	9,014	16,204	147.19	9,553	21,031
146.68	9,025	16,294	147.20	9,564	21,127
146.69	9,035	16,385	147.21	9,574	21,222
146.70	9,045	16,475	147.22	9,585	21,318
146.71	9,055	16,566	147.23	9,595	21,414
146.72	9,066	16,656	147.24	9,606	21,510
146.73	9,076	16,747	147.25	9,616	21,606
146.74	9,086	16,838	147.26	9,627	21,702
146.75	9,097	16,929	147.27	9,637	21,799
146.76	9,107	17,020	147.28	9,648	21,895
146.77	9,117	17,111	147.29	9,658	21,991
146.78	9,127	17,202	147.30	9,669	22,088
146.79	9,138	17,293	147.31	9,679	22,185
146.80	9,148	17,385	147.32	9,690	22,282
146.81	9,158	17,476	147.33	9,700	22,379
146.82	9,168	17,568	147.34	9,711	22,476
146.83	9,179	17,660	147.35	9,722	22,573
146.84	9,189	17,752	147.36	9,732	22,670
146.85	9,199	17,843	147.37	9,743	22,768
146.86	9,209	17,935	147.38	9,753	22,865
146.87	9,220	18,028	147.39	9,764	22,963
146.88	9,230	18,120	147.40	9,774	23,060
146.89	9,240	18,212	147.41	9,785	23,158

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.42	9,795	23,256	147.94	10,343	28,492
147.43	9,806	23,354	147.95	10,353	28,595
147.44	9,816	23,452	147.96	10,364	28,699
147.45	9,827	23,550	147.97	10,374	28,803
147.46	9,837	23,649	147.98	10,385	28,906
147.47	9,848	23,747	147.99	10,395	29,010
147.48	9,858	23,846	148.00	10,406	29,114
147.49	9,869	23,944	148.01	10,417	29,218
147.50	9,880	24,043	148.02	10,428	29,323
147.51	9,890	24,142	148.03	10,438	29,427
147.52	9,901	24,241	148.04	10,449	29,531
147.53	9,911	24,340	148.05	10,460	29,636
147.54	9,922	24,439	148.06	10,471	29,741
147.55	9,932	24,538	148.07	10,482	29,845
147.56	9,943	24,638	148.08	10,493	29,950
147.57	9,953	24,737	148.09	10,503	30,055
147.58	9,964	24,837	148.10	10,514	30,160
147.59	9,974	24,936	148.11	10,525	30,266
147.60	9,985	25,036	148.12	10,536	30,371
147.61	9,995	25,136	148.13	10,547	30,476
147.62	10,006	25,236	148.14	10,557	30,582
147.63	10,016	25,336	148.15	10,568	30,687
147.64	10,027	25,436	148.16	10,579	30,793
147.65	10,037	25,537	148.17	10,590	30,899
147.66	10,048	25,637	148.18	10,601	31,005
147.67	10,059	25,738	148.19	10,612	31,111
147.68	10,069	25,838	148.20	10,622	31,217
147.69	10,080	25,939	148.21	10,633	31,323
147.70	10,090	26,040	148.22	10,644	31,430
147.71	10,101	26,141	148.23	10,655	31,536
147.72	10,111	26,242	148.24	10,666	31,643
147.73	10,122	26,343	148.25	10,677	31,750
147.74	10,132	26,444	148.26	10,687	31,856
147.75	10,143	26,546	148.27	10,698	31,963
147.76	10,153	26,647	148.28	10,709	32,070
147.77	10,164	26,749	148.29	10,720	32,178
147.78	10,174	26,851	148.30	10,731	32,285
147.79	10,185	26,952	148.31	10,741	32,392
147.80	10,195	27,054	148.32	10,752	32,500
147.81	10,206	27,156	148.33	10,763	32,607
147.82	10,216	27,258	148.34	10,774	32,715
147.83	10,227	27,361	148.35	10,785	32,823
147.84	10,238	27,463	148.36	10,796	32,931
147.85	10,248	27,565	148.37	10,806	33,039
147.86	10,259	27,668	148.38	10,817	33,147
147.87	10,269	27,770	148.39	10,828	33,255
147.88	10,280	27,873	148.40	10,839	33,363
147.89	10,290	27,976	148.41	10,850	33,472
147.90	10,301	28,079	148.42	10,860	33,580
147.91	10,311	28,182	148.43	10,871	33,689
147.92	10,322	28,285	148.44	10,882	33,798
147.93	10,332	28,389	148.45	10,893	33,907

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.46	10,904	34,016
148.47	10,915	34,125
148.48	10,925	34,234
148.49	10,936	34,343
148.50	10,947	34,453
148.51	10,958	34,562
148.52	10,969	34,672
148.53	10,979	34,781
148.54	10,990	34,891
148.55	11,001	35,001
148.56	11,012	35,111
148.57	11,023	35,222
148.58	11,034	35,332
148.59	11,044	35,442
148.60	11,055	35,553
148.61	11,066	35,663
148.62	11,077	35,774
148.63	11,088	35,885
148.64	11,098	35,996
148.65	11,109	36,107
148.66	11,120	36,218
148.67	11,131	36,329
148.68	11,142	36,441
148.69	11,153	36,552
148.70	11,163	36,664
148.71	11,174	36,775
148.72	11,185	36,887
148.73	11,196	36,999
148.74	11,207	37,111
148.75	11,218	37,223
148.76	11,228	37,335
148.77	11,239	37,448
148.78	11,250	37,560
148.79	11,261	37,673
148.80	11,272	37,785
148.81	11,282	37,898
148.82	11,293	38,011
148.83	11,304	38,124
148.84	11,315	38,237
148.85	11,326	38,350
148.86	11,337	38,464
148.87	11,347	38,577
148.88	11,358	38,691
148.89	11,369	38,804
148.90	11,380	38,918
148.91	11,391	39,032
148.92	11,401	39,146
148.93	11,412	39,260
148.94	11,423	39,374
148.95	11,434	39,488
148.96	11,445	39,603
148.97	11,456	39,717
148.98	11,466	39,832
148.99	11,477	39,947
149.00	**11,488**	**40,061**

Summary for Pond B-25: Basin #25

Inflow Area = 2.500 ac, 34.96% Impervious, Inflow Depth = 3.29" for Current 10 yr event
Inflow = 8.45 cfs @ 12.17 hrs, Volume= 0.685 af
Outflow = 2.67 cfs @ 12.47 hrs, Volume= 0.597 af, Atten= 68%, Lag= 17.8 min
Primary = 2.67 cfs @ 12.47 hrs, Volume= 0.597 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.24' @ 12.47 hrs Surf.Area= 6,714 sf Storage= 14,390 cf

Plug-Flow detention time= 263.4 min calculated for 0.597 af (87% of inflow)
Center-of-Mass det. time= 201.0 min (997.4 - 796.3)

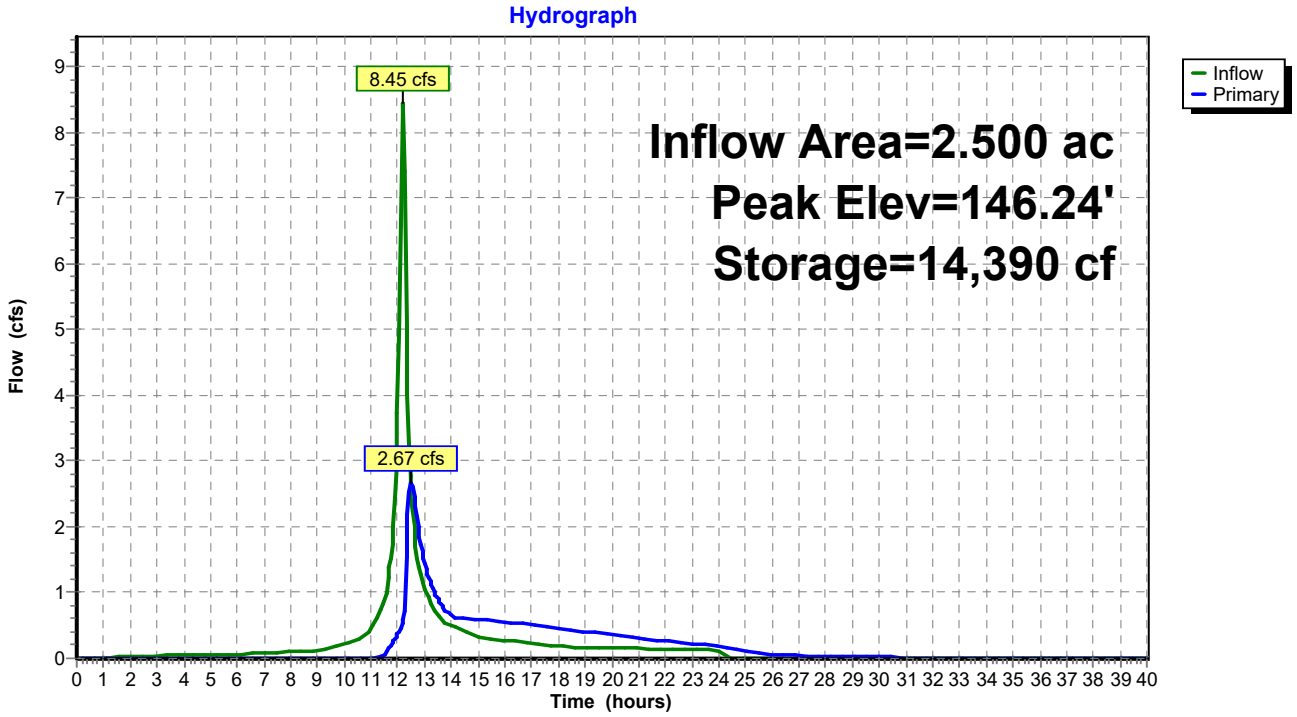
Volume	Invert	Avail.Storage	Storage Description
#1	143.30'	36,587 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
143.30	0	0	0
144.00	4,702	1,646	1,646
145.00	5,584	5,143	6,789
146.00	6,492	6,038	12,827
147.00	7,428	6,960	19,787
148.00	8,393	7,911	27,697
149.00	9,386	8,890	36,587

Device	Routing	Invert	Outlet Devices
#1	Primary	143.30'	**18.0" Round Culvert** L= 186.0' Ke= 0.500 Inlet / Outlet Invert= 143.30' / 142.00' S= 0.0070 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	144.42'	**4.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	145.95'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.96'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.64 cfs @ 12.47 hrs HW=146.24' (Free Discharge)
- **1=Culvert** (Passes 2.64 cfs of 10.59 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.68 cfs @ 6.14 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.96 cfs @ 1.75 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-25: Basin #25



Stage-Discharge for Pond B-25: Basin #25

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
143.30	0.00	143.82	0.00	144.34	0.00	144.86	0.27
143.31	0.00	143.83	0.00	144.35	0.00	144.87	0.27
143.32	0.00	143.84	0.00	144.36	0.00	144.88	0.28
143.33	0.00	143.85	0.00	144.37	0.00	144.89	0.28
143.34	0.00	143.86	0.00	144.38	0.00	144.90	0.29
143.35	0.00	143.87	0.00	144.39	0.00	144.91	0.29
143.36	0.00	143.88	0.00	144.40	0.00	144.92	0.30
143.37	0.00	143.89	0.00	144.41	0.00	144.93	0.30
143.38	0.00	143.90	0.00	144.42	0.00	144.94	0.31
143.39	0.00	143.91	0.00	144.43	0.00	144.95	0.31
143.40	0.00	143.92	0.00	144.44	0.00	144.96	0.32
143.41	0.00	143.93	0.00	144.45	0.00	144.97	0.32
143.42	0.00	143.94	0.00	144.46	0.00	144.98	0.32
143.43	0.00	143.95	0.00	144.47	0.01	144.99	0.33
143.44	0.00	143.96	0.00	144.48	0.01	145.00	0.33
143.45	0.00	143.97	0.00	144.49	0.01	145.01	0.34
143.46	0.00	143.98	0.00	144.50	0.02	145.02	0.34
143.47	0.00	143.99	0.00	144.51	0.02	145.03	0.35
143.48	0.00	144.00	0.00	144.52	0.03	145.04	0.35
143.49	0.00	144.01	0.00	144.53	0.03	145.05	0.35
143.50	0.00	144.02	0.00	144.54	0.04	145.06	0.36
143.51	0.00	144.03	0.00	144.55	0.04	145.07	0.36
143.52	0.00	144.04	0.00	144.56	0.05	145.08	0.37
143.53	0.00	144.05	0.00	144.57	0.05	145.09	0.37
143.54	0.00	144.06	0.00	144.58	0.06	145.10	0.37
143.55	0.00	144.07	0.00	144.59	0.07	145.11	0.38
143.56	0.00	144.08	0.00	144.60	0.08	145.12	0.38
143.57	0.00	144.09	0.00	144.61	0.08	145.13	0.38
143.58	0.00	144.10	0.00	144.62	0.09	145.14	0.39
143.59	0.00	144.11	0.00	144.63	0.10	145.15	0.39
143.60	0.00	144.12	0.00	144.64	0.11	145.16	0.40
143.61	0.00	144.13	0.00	144.65	0.12	145.17	0.40
143.62	0.00	144.14	0.00	144.66	0.12	145.18	0.40
143.63	0.00	144.15	0.00	144.67	0.13	145.19	0.41
143.64	0.00	144.16	0.00	144.68	0.14	145.20	0.41
143.65	0.00	144.17	0.00	144.69	0.15	145.21	0.41
143.66	0.00	144.18	0.00	144.70	0.16	145.22	0.42
143.67	0.00	144.19	0.00	144.71	0.17	145.23	0.42
143.68	0.00	144.20	0.00	144.72	0.18	145.24	0.42
143.69	0.00	144.21	0.00	144.73	0.19	145.25	0.43
143.70	0.00	144.22	0.00	144.74	0.19	145.26	0.43
143.71	0.00	144.23	0.00	144.75	0.20	145.27	0.43
143.72	0.00	144.24	0.00	144.76	0.21	145.28	0.44
143.73	0.00	144.25	0.00	144.77	0.22	145.29	0.44
143.74	0.00	144.26	0.00	144.78	0.22	145.30	0.44
143.75	0.00	144.27	0.00	144.79	0.23	145.31	0.45
143.76	0.00	144.28	0.00	144.80	0.23	145.32	0.45
143.77	0.00	144.29	0.00	144.81	0.24	145.33	0.45
143.78	0.00	144.30	0.00	144.82	0.25	145.34	0.46
143.79	0.00	144.31	0.00	144.83	0.25	145.35	0.46
143.80	0.00	144.32	0.00	144.84	0.26	145.36	0.46
143.81	0.00	144.33	0.00	144.85	0.26	145.37	0.46

Stage-Discharge for Pond B-25: Basin #25 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
145.38	0.47	145.90	0.60	146.42	4.83	146.94	11.88
145.39	0.47	145.91	0.61	146.43	4.96	146.95	11.90
145.40	0.47	145.92	0.61	146.44	5.10	146.96	11.91
145.41	0.48	145.93	0.61	146.45	5.23	146.97	11.93
145.42	0.48	145.94	0.61	146.46	5.37	146.98	11.95
145.43	0.48	145.95	0.62	146.47	5.50	146.99	11.97
145.44	0.49	145.96	0.63	146.48	5.64	147.00	11.98
145.45	0.49	145.97	0.66	146.49	5.78	147.01	12.00
145.46	0.49	145.98	0.69	146.50	5.92	147.02	12.02
145.47	0.49	145.99	0.73	146.51	6.06	147.03	12.03
145.48	0.50	146.00	0.77	146.52	6.20	147.04	12.05
145.49	0.50	146.01	0.82	146.53	6.35	147.05	12.07
145.50	0.50	146.02	0.87	146.54	6.49	147.06	12.09
145.51	0.51	146.03	0.93	146.55	6.64	147.07	12.10
145.52	0.51	146.04	0.99	146.56	6.78	147.08	12.12
145.53	0.51	146.05	1.05	146.57	6.93	147.09	12.14
145.54	0.51	146.06	1.12	146.58	7.08	147.10	12.15
145.55	0.52	146.07	1.18	146.59	7.23	147.11	12.17
145.56	0.52	146.08	1.25	146.60	7.38	147.12	12.19
145.57	0.52	146.09	1.33	146.61	7.53	147.13	12.20
145.58	0.52	146.10	1.40	146.62	7.69	147.14	12.22
145.59	0.53	146.11	1.48	146.63	7.84	147.15	12.24
145.60	0.53	146.12	1.56	146.64	8.00	147.16	12.25
145.61	0.53	146.13	1.65	146.65	8.15	147.17	12.27
145.62	0.54	146.14	1.73	146.66	8.31	147.18	12.29
145.63	0.54	146.15	1.82	146.67	8.47	147.19	12.30
145.64	0.54	146.16	1.91	146.68	8.63	147.20	12.32
145.65	0.54	146.17	2.00	146.69	8.79	147.21	12.34
145.66	0.55	146.18	2.09	146.70	8.95	147.22	12.35
145.67	0.55	146.19	2.19	146.71	9.11	147.23	12.37
145.68	0.55	146.20	2.29	146.72	9.27	147.24	12.39
145.69	0.55	146.21	2.38	146.73	9.43	147.25	12.40
145.70	0.56	146.22	2.49	146.74	9.60	147.26	12.42
145.71	0.56	146.23	2.59	146.75	9.76	147.27	12.44
145.72	0.56	146.24	2.69	146.76	9.93	147.28	12.45
145.73	0.56	146.25	2.80	146.77	10.10	147.29	12.47
145.74	0.57	146.26	2.91	146.78	10.26	147.30	12.49
145.75	0.57	146.27	3.02	146.79	10.43	147.31	12.50
145.76	0.57	146.28	3.13	146.80	10.60	147.32	12.52
145.77	0.57	146.29	3.24	146.81	10.77	147.33	12.54
145.78	0.58	146.30	3.35	146.82	10.94	147.34	12.55
145.79	0.58	146.31	3.47	146.83	11.12	147.35	12.57
145.80	0.58	146.32	3.59	146.84	11.29	147.36	12.58
145.81	0.58	146.33	3.70	146.85	11.46	147.37	12.60
145.82	0.59	146.34	3.82	146.86	11.64	147.38	12.62
145.83	0.59	146.35	3.94	146.87	11.76	147.39	12.63
145.84	0.59	146.36	4.07	146.88	11.78	147.40	12.65
145.85	0.59	146.37	4.19	146.89	11.79	147.41	12.67
145.86	0.60	146.38	4.32	146.90	11.81	147.42	12.68
145.87	0.60	146.39	4.44	146.91	11.83	147.43	12.70
145.88	0.60	146.40	4.57	146.92	11.85	147.44	12.71
145.89	0.60	146.41	4.70	146.93	11.86	147.45	12.73

Stage-Discharge for Pond B-25: Basin #25 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.46	12.75	147.98	13.89	148.50	68.06
147.47	12.76	147.99	14.18	148.51	69.81
147.48	12.78	148.00	14.53	148.52	71.59
147.49	12.79	148.01	14.91	148.53	73.39
147.50	12.81	148.02	15.34	148.54	75.22
147.51	12.83	148.03	15.81	148.55	77.07
147.52	12.84	148.04	16.31	148.56	78.96
147.53	12.86	148.05	16.84	148.57	80.60
147.54	12.87	148.06	17.40	148.58	82.25
147.55	12.89	148.07	17.98	148.59	83.92
147.56	12.91	148.08	18.60	148.60	85.60
147.57	12.92	148.09	19.24	148.61	87.30
147.58	12.94	148.10	19.91	148.62	89.01
147.59	12.95	148.11	20.60	148.63	90.73
147.60	12.97	148.12	21.31	148.64	92.46
147.61	12.99	148.13	22.05	148.65	94.21
147.62	13.00	148.14	22.81	148.66	95.97
147.63	13.02	148.15	23.59	148.67	97.74
147.64	13.03	148.16	24.39	148.68	99.53
147.65	13.05	148.17	25.25	148.69	101.32
147.66	13.06	148.18	26.14	148.70	103.13
147.67	13.08	148.19	27.05	148.71	104.96
147.68	13.10	148.20	27.99	148.72	106.79
147.69	13.11	148.21	28.95	148.73	108.64
147.70	13.13	148.22	29.94	148.74	110.50
147.71	13.14	148.23	30.96	148.75	112.37
147.72	13.16	148.24	31.99	148.76	114.26
147.73	13.17	148.25	33.06	148.77	116.19
147.74	13.19	148.26	34.14	148.78	118.14
147.75	13.21	148.27	35.26	148.79	120.10
147.76	13.22	148.28	36.39	148.80	122.07
147.77	13.24	148.29	37.55	148.81	124.06
147.78	13.25	148.30	38.74	148.82	126.05
147.79	13.27	148.31	39.94	148.83	128.07
147.80	13.28	148.32	41.18	148.84	130.09
147.81	13.30	148.33	42.43	148.85	132.13
147.82	13.31	148.34	43.72	148.86	134.18
147.83	13.33	148.35	45.02	148.87	136.25
147.84	13.34	148.36	46.35	148.88	138.33
147.85	13.36	148.37	47.73	148.89	140.42
147.86	13.37	148.38	49.14	148.90	142.52
147.87	13.39	148.39	50.57	148.91	144.63
147.88	13.41	148.40	52.03	148.92	146.76
147.89	13.42	148.41	53.51	148.93	148.90
147.90	13.44	148.42	55.02	148.94	151.06
147.91	13.45	148.43	56.56	148.95	153.22
147.92	13.47	148.44	58.12	148.96	155.40
147.93	13.48	148.45	59.71	148.97	157.54
147.94	13.50	148.46	61.33	148.98	159.69
147.95	13.51	148.47	62.97	148.99	161.84
147.96	13.53	148.48	64.64	149.00	**164.01**
147.97	13.66	148.49	66.34		

Stage-Area-Storage for Pond B-25: Basin #25

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
143.30	0	0
143.31	67	0
143.32	134	1
143.33	202	3
143.34	269	5
143.35	336	8
143.36	403	12
143.37	470	16
143.38	537	21
143.39	605	27
143.40	672	34
143.41	739	41
143.42	806	48
143.43	873	57
143.44	940	66
143.45	1,008	76
143.46	1,075	86
143.47	1,142	97
143.48	1,209	109
143.49	1,276	121
143.50	1,343	134
143.51	1,411	148
143.52	1,478	163
143.53	1,545	178
143.54	1,612	193
143.55	1,679	210
143.56	1,746	227
143.57	1,814	245
143.58	1,881	263
143.59	1,948	282
143.60	2,015	302
143.61	2,082	323
143.62	2,149	344
143.63	2,217	366
143.64	2,284	388
143.65	2,351	411
143.66	2,418	435
143.67	2,485	460
143.68	2,553	485
143.69	2,620	511
143.70	2,687	537
143.71	2,754	565
143.72	2,821	592
143.73	2,888	621
143.74	2,956	650
143.75	3,023	680
143.76	3,090	711
143.77	3,157	742
143.78	3,224	774
143.79	3,291	806
143.80	3,359	840
143.81	3,426	874
143.82	3,493	908
143.83	3,560	943
143.84	3,627	979
143.85	3,694	1,016
143.86	3,762	1,053
143.87	3,829	1,091
143.88	3,896	1,130
143.89	3,963	1,169
143.90	4,030	1,209
143.91	4,097	1,250
143.92	4,165	1,291
143.93	4,232	1,333
143.94	4,299	1,376
143.95	4,366	1,419
143.96	4,433	1,463
143.97	4,500	1,508
143.98	4,568	1,553
143.99	4,635	1,599
144.00	4,702	1,646
144.01	4,711	1,693
144.02	4,720	1,740
144.03	4,728	1,787
144.04	4,737	1,834
144.05	4,746	1,882
144.06	4,755	1,929
144.07	4,764	1,977
144.08	4,773	2,025
144.09	4,781	2,072
144.10	4,790	2,120
144.11	4,799	2,168
144.12	4,808	2,216
144.13	4,817	2,264
144.14	4,825	2,313
144.15	4,834	2,361
144.16	4,843	2,409
144.17	4,852	2,458
144.18	4,861	2,506
144.19	4,870	2,555
144.20	4,878	2,604
144.21	4,887	2,653
144.22	4,896	2,701
144.23	4,905	2,750
144.24	4,914	2,800
144.25	4,923	2,849
144.26	4,931	2,898
144.27	4,940	2,947
144.28	4,949	2,997
144.29	4,958	3,046
144.30	4,967	3,096
144.31	4,975	3,146
144.32	4,984	3,195
144.33	4,993	3,245

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.34	5,002	3,295	144.86	5,461	6,016
144.35	5,011	3,345	144.87	5,469	6,070
144.36	5,020	3,396	144.88	5,478	6,125
144.37	5,028	3,446	144.89	5,487	6,180
144.38	5,037	3,496	144.90	5,496	6,235
144.39	5,046	3,547	144.91	5,505	6,290
144.40	5,055	3,597	144.92	5,513	6,345
144.41	5,064	3,648	144.93	5,522	6,400
144.42	5,072	3,698	144.94	5,531	6,455
144.43	5,081	3,749	144.95	5,540	6,511
144.44	5,090	3,800	144.96	5,549	6,566
144.45	5,099	3,851	144.97	5,558	6,622
144.46	5,108	3,902	144.98	5,566	6,677
144.47	5,117	3,953	144.99	5,575	6,733
144.48	5,125	4,004	145.00	5,584	6,789
144.49	5,134	4,056	145.01	5,593	6,845
144.50	5,143	4,107	145.02	5,602	6,901
144.51	5,152	4,158	145.03	5,611	6,957
144.52	5,161	4,210	145.04	5,620	7,013
144.53	5,169	4,262	145.05	5,629	7,069
144.54	5,178	4,313	145.06	5,638	7,125
144.55	5,187	4,365	145.07	5,648	7,182
144.56	5,196	4,417	145.08	5,657	7,238
144.57	5,205	4,469	145.09	5,666	7,295
144.58	5,214	4,521	145.10	5,675	7,352
144.59	5,222	4,573	145.11	5,684	7,408
144.60	5,231	4,626	145.12	5,693	7,465
144.61	5,240	4,678	145.13	5,702	7,522
144.62	5,249	4,730	145.14	5,711	7,579
144.63	5,258	4,783	145.15	5,720	7,637
144.64	5,266	4,836	145.16	5,729	7,694
144.65	5,275	4,888	145.17	5,738	7,751
144.66	5,284	4,941	145.18	5,747	7,809
144.67	5,293	4,994	145.19	5,757	7,866
144.68	5,302	5,047	145.20	5,766	7,924
144.69	5,311	5,100	145.21	5,775	7,981
144.70	5,319	5,153	145.22	5,784	8,039
144.71	5,328	5,206	145.23	5,793	8,097
144.72	5,337	5,260	145.24	5,802	8,155
144.73	5,346	5,313	145.25	5,811	8,213
144.74	5,355	5,367	145.26	5,820	8,271
144.75	5,364	5,420	145.27	5,829	8,329
144.76	5,372	5,474	145.28	5,838	8,388
144.77	5,381	5,528	145.29	5,847	8,446
144.78	5,390	5,582	145.30	5,856	8,505
144.79	5,399	5,636	145.31	5,865	8,563
144.80	5,408	5,690	145.32	5,875	8,622
144.81	5,416	5,744	145.33	5,884	8,681
144.82	5,425	5,798	145.34	5,893	8,740
144.83	5,434	5,852	145.35	5,902	8,799
144.84	5,443	5,907	145.36	5,911	8,858
144.85	5,452	5,961	145.37	5,920	8,917

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.38	5,929	8,976	145.90	6,401	12,182
145.39	5,938	9,036	145.91	6,410	12,246
145.40	5,947	9,095	145.92	6,419	12,310
145.41	5,956	9,154	145.93	6,428	12,374
145.42	5,965	9,214	145.94	6,438	12,439
145.43	5,974	9,274	145.95	6,447	12,503
145.44	5,984	9,334	145.96	6,456	12,568
145.45	5,993	9,393	145.97	6,465	12,632
145.46	6,002	9,453	145.98	6,474	12,697
145.47	6,011	9,513	145.99	6,483	12,762
145.48	6,020	9,574	146.00	6,492	12,827
145.49	6,029	9,634	146.01	6,501	12,892
145.50	6,038	9,694	146.02	6,511	12,957
145.51	6,047	9,755	146.03	6,520	13,022
145.52	6,056	9,815	146.04	6,529	13,087
145.53	6,065	9,876	146.05	6,539	13,152
145.54	6,074	9,936	146.06	6,548	13,218
145.55	6,083	9,997	146.07	6,558	13,283
145.56	6,092	10,058	146.08	6,567	13,349
145.57	6,102	10,119	146.09	6,576	13,415
145.58	6,111	10,180	146.10	6,586	13,481
145.59	6,120	10,241	146.11	6,595	13,546
145.60	6,129	10,303	146.12	6,604	13,612
145.61	6,138	10,364	146.13	6,614	13,679
145.62	6,147	10,425	146.14	6,623	13,745
145.63	6,156	10,487	146.15	6,632	13,811
145.64	6,165	10,548	146.16	6,642	13,877
145.65	6,174	10,610	146.17	6,651	13,944
145.66	6,183	10,672	146.18	6,660	14,010
145.67	6,192	10,734	146.19	6,670	14,077
145.68	6,201	10,796	146.20	6,679	14,144
145.69	6,211	10,858	146.21	6,689	14,211
145.70	6,220	10,920	146.22	6,698	14,278
145.71	6,229	10,982	146.23	6,707	14,345
145.72	6,238	11,045	146.24	6,717	14,412
145.73	6,247	11,107	146.25	6,726	14,479
145.74	6,256	11,169	146.26	6,735	14,546
145.75	6,265	11,232	146.27	6,745	14,614
145.76	6,274	11,295	146.28	6,754	14,681
145.77	6,283	11,358	146.29	6,763	14,749
145.78	6,292	11,420	146.30	6,773	14,816
145.79	6,301	11,483	146.31	6,782	14,884
145.80	6,310	11,546	146.32	6,792	14,952
145.81	6,319	11,610	146.33	6,801	15,020
145.82	6,329	11,673	146.34	6,810	15,088
145.83	6,338	11,736	146.35	6,820	15,156
145.84	6,347	11,800	146.36	6,829	15,224
145.85	6,356	11,863	146.37	6,838	15,293
145.86	6,365	11,927	146.38	6,848	15,361
145.87	6,374	11,990	146.39	6,857	15,430
145.88	6,383	12,054	146.40	6,866	15,498
145.89	6,392	12,118	146.41	6,876	15,567

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.42	6,885	15,636	146.94	7,372	19,343
146.43	6,894	15,705	146.95	7,381	19,416
146.44	6,904	15,774	146.96	7,391	19,490
146.45	6,913	15,843	146.97	7,400	19,564
146.46	6,923	15,912	146.98	7,409	19,638
146.47	6,932	15,981	146.99	7,419	19,712
146.48	6,941	16,051	147.00	7,428	19,787
146.49	6,951	16,120	147.01	7,438	19,861
146.50	6,960	16,190	147.02	7,447	19,935
146.51	6,969	16,259	147.03	7,457	20,010
146.52	6,979	16,329	147.04	7,467	20,085
146.53	6,988	16,399	147.05	7,476	20,159
146.54	6,997	16,469	147.06	7,486	20,234
146.55	7,007	16,539	147.07	7,496	20,309
146.56	7,016	16,609	147.08	7,505	20,384
146.57	7,026	16,679	147.09	7,515	20,459
146.58	7,035	16,749	147.10	7,525	20,534
146.59	7,044	16,820	147.11	7,534	20,610
146.60	7,054	16,890	147.12	7,544	20,685
146.61	7,063	16,961	147.13	7,553	20,760
146.62	7,072	17,032	147.14	7,563	20,836
146.63	7,082	17,102	147.15	7,573	20,912
146.64	7,091	17,173	147.16	7,582	20,988
146.65	7,100	17,244	147.17	7,592	21,063
146.66	7,110	17,315	147.18	7,602	21,139
146.67	7,119	17,386	147.19	7,611	21,215
146.68	7,128	17,458	147.20	7,621	21,292
146.69	7,138	17,529	147.21	7,631	21,368
146.70	7,147	17,600	147.22	7,640	21,444
146.71	7,157	17,672	147.23	7,650	21,521
146.72	7,166	17,744	147.24	7,660	21,597
146.73	7,175	17,815	147.25	7,669	21,674
146.74	7,185	17,887	147.26	7,679	21,751
146.75	7,194	17,959	147.27	7,689	21,827
146.76	7,203	18,031	147.28	7,698	21,904
146.77	7,213	18,103	147.29	7,708	21,981
146.78	7,222	18,175	147.30	7,718	22,059
146.79	7,231	18,247	147.31	7,727	22,136
146.80	7,241	18,320	147.32	7,737	22,213
146.81	7,250	18,392	147.33	7,746	22,290
146.82	7,260	18,465	147.34	7,756	22,368
146.83	7,269	18,537	147.35	7,766	22,446
146.84	7,278	18,610	147.36	7,775	22,523
146.85	7,288	18,683	147.37	7,785	22,601
146.86	7,297	18,756	147.38	7,795	22,679
146.87	7,306	18,829	147.39	7,804	22,757
146.88	7,316	18,902	147.40	7,814	22,835
146.89	7,325	18,975	147.41	7,824	22,913
146.90	7,334	19,049	147.42	7,833	22,992
146.91	7,344	19,122	147.43	7,843	23,070
146.92	7,353	19,195	147.44	7,853	23,148
146.93	7,362	19,269	147.45	7,862	23,227

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.46	7,872	23,306	147.98	8,374	27,530
147.47	7,882	23,384	147.99	8,383	27,613
147.48	7,891	23,463	148.00	8,393	27,697
147.49	7,901	23,542	148.01	8,403	27,781
147.50	7,911	23,621	148.02	8,413	27,865
147.51	7,920	23,700	148.03	8,423	27,949
147.52	7,930	23,780	148.04	8,433	28,034
147.53	7,939	23,859	148.05	8,443	28,118
147.54	7,949	23,939	148.06	8,453	28,203
147.55	7,959	24,018	148.07	8,463	28,287
147.56	7,968	24,098	148.08	8,472	28,372
147.57	7,978	24,177	148.09	8,482	28,457
147.58	7,988	24,257	148.10	8,492	28,541
147.59	7,997	24,337	148.11	8,502	28,626
147.60	8,007	24,417	148.12	8,512	28,712
147.61	8,017	24,497	148.13	8,522	28,797
147.62	8,026	24,578	148.14	8,532	28,882
147.63	8,036	24,658	148.15	8,542	28,967
147.64	8,046	24,738	148.16	8,552	29,053
147.65	8,055	24,819	148.17	8,562	29,138
147.66	8,065	24,899	148.18	8,572	29,224
147.67	8,075	24,980	148.19	8,582	29,310
147.68	8,084	25,061	148.20	8,592	29,396
147.69	8,094	25,142	148.21	8,602	29,482
147.70	8,104	25,223	148.22	8,611	29,568
147.71	8,113	25,304	148.23	8,621	29,654
147.72	8,123	25,385	148.24	8,631	29,740
147.73	8,132	25,466	148.25	8,641	29,826
147.74	8,142	25,548	148.26	8,651	29,913
147.75	8,152	25,629	148.27	8,661	30,000
147.76	8,161	25,711	148.28	8,671	30,086
147.77	8,171	25,792	148.29	8,681	30,173
147.78	8,181	25,874	148.30	8,691	30,260
147.79	8,190	25,956	148.31	8,701	30,347
147.80	8,200	26,038	148.32	8,711	30,434
147.81	8,210	26,120	148.33	8,721	30,521
147.82	8,219	26,202	148.34	8,731	30,608
147.83	8,229	26,284	148.35	8,741	30,696
147.84	8,239	26,367	148.36	8,750	30,783
147.85	8,248	26,449	148.37	8,760	30,871
147.86	8,258	26,532	148.38	8,770	30,958
147.87	8,268	26,614	148.39	8,780	31,046
147.88	8,277	26,697	148.40	8,790	31,134
147.89	8,287	26,780	148.41	8,800	31,222
147.90	8,297	26,863	148.42	8,810	31,310
147.91	8,306	26,946	148.43	8,820	31,398
147.92	8,316	27,029	148.44	8,830	31,486
147.93	8,325	27,112	148.45	8,840	31,575
147.94	8,335	27,195	148.46	8,850	31,663
147.95	8,345	27,279	148.47	8,860	31,752
147.96	8,354	27,362	148.48	8,870	31,840
147.97	8,364	27,446	148.49	8,880	31,929

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.50	8,890	32,018
148.51	8,899	32,107
148.52	8,909	32,196
148.53	8,919	32,285
148.54	8,929	32,374
148.55	8,939	32,464
148.56	8,949	32,553
148.57	8,959	32,643
148.58	8,969	32,732
148.59	8,979	32,822
148.60	8,989	32,912
148.61	8,999	33,002
148.62	9,009	33,092
148.63	9,019	33,182
148.64	9,029	33,272
148.65	9,038	33,362
148.66	9,048	33,453
148.67	9,058	33,543
148.68	9,068	33,634
148.69	9,078	33,725
148.70	9,088	33,816
148.71	9,098	33,907
148.72	9,108	33,998
148.73	9,118	34,089
148.74	9,128	34,180
148.75	9,138	34,271
148.76	9,148	34,363
148.77	9,158	34,454
148.78	9,168	34,546
148.79	9,177	34,638
148.80	9,187	34,729
148.81	9,197	34,821
148.82	9,207	34,913
148.83	9,217	35,005
148.84	9,227	35,098
148.85	9,237	35,190
148.86	9,247	35,282
148.87	9,257	35,375
148.88	9,267	35,468
148.89	9,277	35,560
148.90	9,287	35,653
148.91	9,297	35,746
148.92	9,307	35,839
148.93	9,316	35,932
148.94	9,326	36,025
148.95	9,336	36,119
148.96	9,346	36,212
148.97	9,356	36,306
148.98	9,366	36,399
148.99	9,376	36,493
149.00	**9,386**	**36,587**

Summary for Pond B-26: Basin #26

Inflow Area = 2.366 ac, 39.90% Impervious, Inflow Depth = 3.41" for Current 10 yr event
Inflow = 8.22 cfs @ 12.17 hrs, Volume= 0.672 af
Outflow = 2.11 cfs @ 12.56 hrs, Volume= 0.550 af, Atten= 74%, Lag= 23.3 min
Primary = 2.11 cfs @ 12.56 hrs, Volume= 0.550 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.28' @ 12.56 hrs Surf.Area= 6,633 sf Storage= 15,672 cf

Plug-Flow detention time= 508.0 min calculated for 0.549 af (82% of inflow)
Center-of-Mass det. time= 430.6 min (1,222.2 - 791.6)

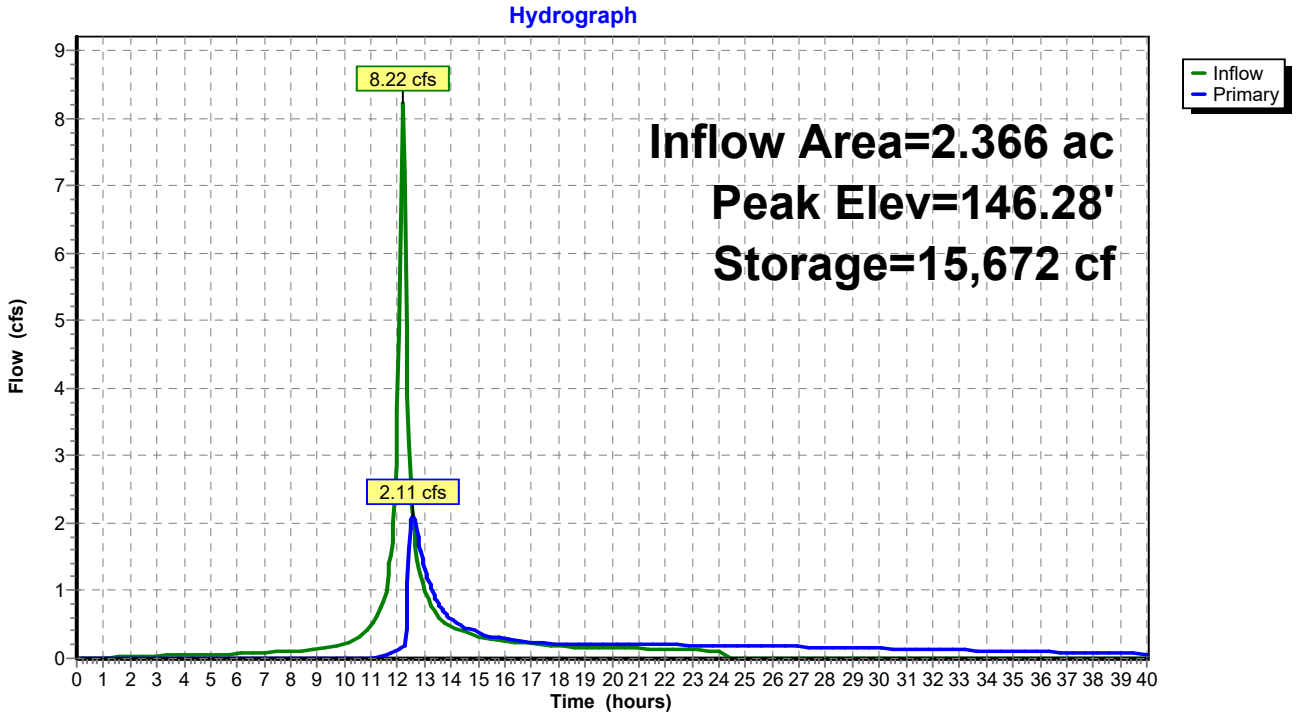
Volume	Invert	Avail.Storage	Storage Description
#1	143.30'	35,348 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
143.30	0	0	0
144.00	5,466	1,913	1,913
145.00	5,967	5,717	7,630
146.00	6,486	6,227	13,856
147.00	7,018	6,752	20,608
148.00	7,563	7,291	27,899
148.95	8,120	7,449	35,348

Device	Routing	Invert	Outlet Devices
#1	Primary	143.30'	**18.0" Round Culvert** L= 234.0' Ke= 0.500 Inlet / Outlet Invert= 143.30' / 142.00' S= 0.0056 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	144.36'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	148.05'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.09 cfs @ 12.56 hrs HW=146.28' (Free Discharge)
- **1=Culvert** (Passes 2.09 cfs of 9.83 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.22 cfs @ 6.48 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.87 cfs @ 1.72 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-26: Basin #26



Stage-Discharge for Pond B-26: Basin #26

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
143.30	0.00	143.82	0.00	144.34	0.00	144.86	0.10
143.31	0.00	143.83	0.00	144.35	0.00	144.87	0.10
143.32	0.00	143.84	0.00	144.36	0.00	144.88	0.11
143.33	0.00	143.85	0.00	144.37	0.00	144.89	0.11
143.34	0.00	143.86	0.00	144.38	0.00	144.90	0.11
143.35	0.00	143.87	0.00	144.39	0.00	144.91	0.11
143.36	0.00	143.88	0.00	144.40	0.00	144.92	0.11
143.37	0.00	143.89	0.00	144.41	0.00	144.93	0.11
143.38	0.00	143.90	0.00	144.42	0.01	144.94	0.11
143.39	0.00	143.91	0.00	144.43	0.01	144.95	0.11
143.40	0.00	143.92	0.00	144.44	0.01	144.96	0.12
143.41	0.00	143.93	0.00	144.45	0.01	144.97	0.12
143.42	0.00	143.94	0.00	144.46	0.02	144.98	0.12
143.43	0.00	143.95	0.00	144.47	0.02	144.99	0.12
143.44	0.00	143.96	0.00	144.48	0.02	145.00	0.12
143.45	0.00	143.97	0.00	144.49	0.03	145.01	0.12
143.46	0.00	143.98	0.00	144.50	0.03	145.02	0.12
143.47	0.00	143.99	0.00	144.51	0.03	145.03	0.12
143.48	0.00	144.00	0.00	144.52	0.04	145.04	0.12
143.49	0.00	144.01	0.00	144.53	0.04	145.05	0.13
143.50	0.00	144.02	0.00	144.54	0.05	145.06	0.13
143.51	0.00	144.03	0.00	144.55	0.05	145.07	0.13
143.52	0.00	144.04	0.00	144.56	0.05	145.08	0.13
143.53	0.00	144.05	0.00	144.57	0.05	145.09	0.13
143.54	0.00	144.06	0.00	144.58	0.06	145.10	0.13
143.55	0.00	144.07	0.00	144.59	0.06	145.11	0.13
143.56	0.00	144.08	0.00	144.60	0.06	145.12	0.13
143.57	0.00	144.09	0.00	144.61	0.06	145.13	0.13
143.58	0.00	144.10	0.00	144.62	0.06	145.14	0.13
143.59	0.00	144.11	0.00	144.63	0.07	145.15	0.14
143.60	0.00	144.12	0.00	144.64	0.07	145.16	0.14
143.61	0.00	144.13	0.00	144.65	0.07	145.17	0.14
143.62	0.00	144.14	0.00	144.66	0.07	145.18	0.14
143.63	0.00	144.15	0.00	144.67	0.07	145.19	0.14
143.64	0.00	144.16	0.00	144.68	0.08	145.20	0.14
143.65	0.00	144.17	0.00	144.69	0.08	145.21	0.14
143.66	0.00	144.18	0.00	144.70	0.08	145.22	0.14
143.67	0.00	144.19	0.00	144.71	0.08	145.23	0.14
143.68	0.00	144.20	0.00	144.72	0.08	145.24	0.14
143.69	0.00	144.21	0.00	144.73	0.08	145.25	0.15
143.70	0.00	144.22	0.00	144.74	0.09	145.26	0.15
143.71	0.00	144.23	0.00	144.75	0.09	145.27	0.15
143.72	0.00	144.24	0.00	144.76	0.09	145.28	0.15
143.73	0.00	144.25	0.00	144.77	0.09	145.29	0.15
143.74	0.00	144.26	0.00	144.78	0.09	145.30	0.15
143.75	0.00	144.27	0.00	144.79	0.09	145.31	0.15
143.76	0.00	144.28	0.00	144.80	0.10	145.32	0.15
143.77	0.00	144.29	0.00	144.81	0.10	145.33	0.15
143.78	0.00	144.30	0.00	144.82	0.10	145.34	0.15
143.79	0.00	144.31	0.00	144.83	0.10	145.35	0.15
143.80	0.00	144.32	0.00	144.84	0.10	145.36	0.16
143.81	0.00	144.33	0.00	144.85	0.10	145.37	0.16

Stage-Discharge for Pond B-26: Basin #26 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
145.38	0.16	145.90	0.20	146.42	3.72	146.94	10.94
145.39	0.16	145.91	0.20	146.43	3.84	146.95	10.96
145.40	0.16	145.92	0.20	146.44	3.96	146.96	10.97
145.41	0.16	145.93	0.20	146.45	4.09	146.97	10.99
145.42	0.16	145.94	0.20	146.46	4.22	146.98	11.00
145.43	0.16	145.95	0.20	146.47	4.35	146.99	11.02
145.44	0.16	145.96	0.20	146.48	4.48	147.00	11.04
145.45	0.16	145.97	0.20	146.49	4.61	147.01	11.05
145.46	0.16	145.98	0.20	146.50	4.74	147.02	11.07
145.47	0.16	145.99	0.20	146.51	4.88	147.03	11.08
145.48	0.17	146.00	0.20	146.52	5.01	147.04	11.10
145.49	0.17	146.01	0.22	146.53	5.15	147.05	11.11
145.50	0.17	146.02	0.24	146.54	5.29	147.06	11.13
145.51	0.17	146.03	0.27	146.55	5.43	147.07	11.15
145.52	0.17	146.04	0.31	146.56	5.57	147.08	11.16
145.53	0.17	146.05	0.35	146.57	5.71	147.09	11.18
145.54	0.17	146.06	0.40	146.58	5.85	147.10	11.19
145.55	0.17	146.07	0.45	146.59	5.99	147.11	11.21
145.56	0.17	146.08	0.50	146.60	6.14	147.12	11.22
145.57	0.17	146.09	0.56	146.61	6.28	147.13	11.24
145.58	0.17	146.10	0.62	146.62	6.43	147.14	11.25
145.59	0.17	146.11	0.69	146.63	6.58	147.15	11.27
145.60	0.17	146.12	0.75	146.64	6.72	147.16	11.29
145.61	0.18	146.13	0.82	146.65	6.87	147.17	11.30
145.62	0.18	146.14	0.89	146.66	7.03	147.18	11.32
145.63	0.18	146.15	0.97	146.67	7.18	147.19	11.33
145.64	0.18	146.16	1.04	146.68	7.33	147.20	11.35
145.65	0.18	146.17	1.12	146.69	7.48	147.21	11.36
145.66	0.18	146.18	1.20	146.70	7.64	147.22	11.38
145.67	0.18	146.19	1.29	146.71	7.79	147.23	11.39
145.68	0.18	146.20	1.37	146.72	7.95	147.24	11.41
145.69	0.18	146.21	1.46	146.73	8.11	147.25	11.42
145.70	0.18	146.22	1.55	146.74	8.27	147.26	11.44
145.71	0.18	146.23	1.64	146.75	8.43	147.27	11.45
145.72	0.18	146.24	1.74	146.76	8.59	147.28	11.47
145.73	0.18	146.25	1.83	146.77	8.75	147.29	11.48
145.74	0.19	146.26	1.93	146.78	8.91	147.30	11.50
145.75	0.19	146.27	2.03	146.79	9.07	147.31	11.51
145.76	0.19	146.28	2.13	146.80	9.24	147.32	11.53
145.77	0.19	146.29	2.23	146.81	9.40	147.33	11.54
145.78	0.19	146.30	2.34	146.82	9.57	147.34	11.56
145.79	0.19	146.31	2.45	146.83	9.73	147.35	11.57
145.80	0.19	146.32	2.55	146.84	9.90	147.36	11.59
145.81	0.19	146.33	2.66	146.85	10.07	147.37	11.60
145.82	0.19	146.34	2.77	146.86	10.24	147.38	11.62
145.83	0.19	146.35	2.89	146.87	10.41	147.39	11.63
145.84	0.19	146.36	3.00	146.88	10.58	147.40	11.65
145.85	0.19	146.37	3.12	146.89	10.75	147.41	11.66
145.86	0.19	146.38	3.23	146.90	10.88	147.42	11.68
145.87	0.19	146.39	3.35	146.91	10.89	147.43	11.69
145.88	0.20	146.40	3.47	146.92	10.91	147.44	11.71
145.89	0.20	146.41	3.59	146.93	10.92	147.45	11.72

Stage-Discharge for Pond B-26: Basin #26 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.46	11.74	147.98	12.49	148.50	52.51
147.47	11.75	147.99	12.50	148.51	54.02
147.48	11.77	148.00	12.51	148.52	55.56
147.49	11.78	148.01	12.53	148.53	57.12
147.50	11.80	148.02	12.54	148.54	58.71
147.51	11.81	148.03	12.56	148.55	60.32
147.52	11.83	148.04	12.57	148.56	61.96
147.53	11.84	148.05	12.58	148.57	63.63
147.54	11.86	148.06	12.71	148.58	65.33
147.55	11.87	148.07	12.94	148.59	67.05
147.56	11.89	148.08	13.23	148.60	68.79
147.57	11.90	148.09	13.58	148.61	70.57
147.58	11.92	148.10	13.96	148.62	72.37
147.59	11.93	148.11	14.39	148.63	74.20
147.60	11.94	148.12	14.85	148.64	76.05
147.61	11.96	148.13	15.35	148.65	77.94
147.62	11.97	148.14	15.88	148.66	79.58
147.63	11.99	148.15	16.44	148.67	81.23
147.64	12.00	148.16	17.03	148.68	82.90
147.65	12.02	148.17	17.64	148.69	84.58
147.66	12.03	148.18	18.28	148.70	86.27
147.67	12.05	148.19	18.95	148.71	87.98
147.68	12.06	148.20	19.63	148.72	89.70
147.69	12.07	148.21	20.35	148.73	91.43
147.70	12.09	148.22	21.08	148.74	93.18
147.71	12.10	148.23	21.84	148.75	94.93
147.72	12.12	148.24	22.62	148.76	96.71
147.73	12.13	148.25	23.42	148.77	98.49
147.74	12.15	148.26	24.28	148.78	100.29
147.75	12.16	148.27	25.17	148.79	102.10
147.76	12.18	148.28	26.08	148.80	103.92
147.77	12.19	148.29	27.02	148.81	105.75
147.78	12.20	148.30	27.98	148.82	107.60
147.79	12.22	148.31	28.96	148.83	109.46
147.80	12.23	148.32	29.98	148.84	111.33
147.81	12.25	148.33	31.01	148.85	113.21
147.82	12.26	148.34	32.07	148.86	115.14
147.83	12.27	148.35	33.16	148.87	117.09
147.84	12.29	148.36	34.27	148.88	119.05
147.85	12.30	148.37	35.40	148.89	121.02
147.86	12.32	148.38	36.56	148.90	123.00
147.87	12.33	148.39	37.75	148.91	125.00
147.88	12.35	148.40	38.95	148.92	127.01
147.89	12.36	148.41	40.19	148.93	129.04
147.90	12.37	148.42	41.44	148.94	131.07
147.91	12.39	148.43	42.72	148.95	**133.12**
147.92	12.40	148.44	44.03		
147.93	12.42	148.45	45.35		
147.94	12.43	148.46	46.73		
147.95	12.44	148.47	48.14		
147.96	12.46	148.48	49.57		
147.97	12.47	148.49	51.03		

Stage-Area-Storage for Pond B-26: Basin #26

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
143.30	0	0
143.31	78	0
143.32	156	2
143.33	234	4
143.34	312	6
143.35	390	10
143.36	469	14
143.37	547	19
143.38	625	25
143.39	703	32
143.40	781	39
143.41	859	47
143.42	937	56
143.43	1,015	66
143.44	1,093	77
143.45	1,171	88
143.46	1,249	100
143.47	1,327	113
143.48	1,406	126
143.49	1,484	141
143.50	1,562	156
143.51	1,640	172
143.52	1,718	189
143.53	1,796	207
143.54	1,874	225
143.55	1,952	244
143.56	2,030	264
143.57	2,108	285
143.58	2,186	306
143.59	2,264	328
143.60	2,343	351
143.61	2,421	375
143.62	2,499	400
143.63	2,577	425
143.64	2,655	451
143.65	2,733	478
143.66	2,811	506
143.67	2,889	534
143.68	2,967	564
143.69	3,045	594
143.70	3,123	625
143.71	3,202	656
143.72	3,280	689
143.73	3,358	722
143.74	3,436	756
143.75	3,514	791
143.76	3,592	826
143.77	3,670	862
143.78	3,748	900
143.79	3,826	937
143.80	3,904	976
143.81	3,982	1,016
143.82	4,060	1,056
143.83	4,139	1,097
143.84	4,217	1,138
143.85	4,295	1,181
143.86	4,373	1,224
143.87	4,451	1,269
143.88	4,529	1,313
143.89	4,607	1,359
143.90	4,685	1,406
143.91	4,763	1,453
143.92	4,841	1,501
143.93	4,919	1,550
143.94	4,997	1,599
143.95	5,076	1,650
143.96	5,154	1,701
143.97	5,232	1,753
143.98	5,310	1,805
143.99	5,388	1,859
144.00	5,466	1,913
144.01	5,471	1,968
144.02	5,476	2,023
144.03	5,481	2,077
144.04	5,486	2,132
144.05	5,491	2,187
144.06	5,496	2,242
144.07	5,501	2,297
144.08	5,506	2,352
144.09	5,511	2,407
144.10	5,516	2,462
144.11	5,521	2,517
144.12	5,526	2,573
144.13	5,531	2,628
144.14	5,536	2,683
144.15	5,541	2,739
144.16	5,546	2,794
144.17	5,551	2,850
144.18	5,556	2,905
144.19	5,561	2,961
144.20	5,566	3,016
144.21	5,571	3,072
144.22	5,576	3,128
144.23	5,581	3,184
144.24	5,586	3,239
144.25	5,591	3,295
144.26	5,596	3,351
144.27	5,601	3,407
144.28	5,606	3,463
144.29	5,611	3,519
144.30	5,616	3,575
144.31	5,621	3,632
144.32	5,626	3,688
144.33	5,631	3,744

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.34	5,636	3,800	144.86	5,897	6,799
144.35	5,641	3,857	144.87	5,902	6,858
144.36	5,646	3,913	144.88	5,907	6,917
144.37	5,651	3,970	144.89	5,912	6,976
144.38	5,656	4,026	144.90	5,917	7,035
144.39	5,661	4,083	144.91	5,922	7,095
144.40	5,666	4,140	144.92	5,927	7,154
144.41	5,671	4,196	144.93	5,932	7,213
144.42	5,676	4,253	144.94	5,937	7,272
144.43	5,681	4,310	144.95	5,942	7,332
144.44	5,686	4,367	144.96	5,947	7,391
144.45	5,691	4,424	144.97	5,952	7,451
144.46	5,696	4,480	144.98	5,957	7,510
144.47	5,701	4,537	144.99	5,962	7,570
144.48	5,706	4,594	145.00	5,967	7,630
144.49	5,711	4,652	145.01	5,972	7,689
144.50	5,717	4,709	145.02	5,977	7,749
144.51	5,722	4,766	145.03	5,983	7,809
144.52	5,727	4,823	145.04	5,988	7,869
144.53	5,732	4,880	145.05	5,993	7,929
144.54	5,737	4,938	145.06	5,998	7,989
144.55	5,742	4,995	145.07	6,003	8,049
144.56	5,747	5,053	145.08	6,009	8,109
144.57	5,752	5,110	145.09	6,014	8,169
144.58	5,757	5,168	145.10	6,019	8,229
144.59	5,762	5,225	145.11	6,024	8,289
144.60	5,767	5,283	145.12	6,029	8,349
144.61	5,772	5,341	145.13	6,034	8,410
144.62	5,777	5,398	145.14	6,040	8,470
144.63	5,782	5,456	145.15	6,045	8,530
144.64	5,787	5,514	145.16	6,050	8,591
144.65	5,792	5,572	145.17	6,055	8,651
144.66	5,797	5,630	145.18	6,060	8,712
144.67	5,802	5,688	145.19	6,066	8,773
144.68	5,807	5,746	145.20	6,071	8,833
144.69	5,812	5,804	145.21	6,076	8,894
144.70	5,817	5,862	145.22	6,081	8,955
144.71	5,822	5,920	145.23	6,086	9,016
144.72	5,827	5,978	145.24	6,092	9,077
144.73	5,832	6,037	145.25	6,097	9,138
144.74	5,837	6,095	145.26	6,102	9,199
144.75	5,842	6,154	145.27	6,107	9,260
144.76	5,847	6,212	145.28	6,112	9,321
144.77	5,852	6,270	145.29	6,118	9,382
144.78	5,857	6,329	145.30	6,123	9,443
144.79	5,862	6,388	145.31	6,128	9,504
144.80	5,867	6,446	145.32	6,133	9,566
144.81	5,872	6,505	145.33	6,138	9,627
144.82	5,877	6,564	145.34	6,143	9,688
144.83	5,882	6,622	145.35	6,149	9,750
144.84	5,887	6,681	145.36	6,154	9,811
144.85	5,892	6,740	145.37	6,159	9,873

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.38	6,164	9,935	145.90	6,434	13,210
145.39	6,169	9,996	145.91	6,439	13,274
145.40	6,175	10,058	145.92	6,444	13,339
145.41	6,180	10,120	145.93	6,450	13,403
145.42	6,185	10,182	145.94	6,455	13,468
145.43	6,190	10,243	145.95	6,460	13,532
145.44	6,195	10,305	145.96	6,465	13,597
145.45	6,201	10,367	145.97	6,470	13,662
145.46	6,206	10,429	145.98	6,476	13,726
145.47	6,211	10,491	145.99	6,481	13,791
145.48	6,216	10,554	146.00	6,486	13,856
145.49	6,221	10,616	146.01	6,491	13,921
145.50	6,227	10,678	146.02	6,497	13,986
145.51	6,232	10,740	146.03	6,502	14,051
145.52	6,237	10,803	146.04	6,507	14,116
145.53	6,242	10,865	146.05	6,513	14,181
145.54	6,247	10,927	146.06	6,518	14,246
145.55	6,252	10,990	146.07	6,523	14,311
145.56	6,258	11,052	146.08	6,529	14,377
145.57	6,263	11,115	146.09	6,534	14,442
145.58	6,268	11,178	146.10	6,539	14,507
145.59	6,273	11,240	146.11	6,545	14,573
145.60	6,278	11,303	146.12	6,550	14,638
145.61	6,284	11,366	146.13	6,555	14,704
145.62	6,289	11,429	146.14	6,560	14,769
145.63	6,294	11,492	146.15	6,566	14,835
145.64	6,299	11,555	146.16	6,571	14,901
145.65	6,304	11,618	146.17	6,576	14,966
145.66	6,310	11,681	146.18	6,582	15,032
145.67	6,315	11,744	146.19	6,587	15,098
145.68	6,320	11,807	146.20	6,592	15,164
145.69	6,325	11,870	146.21	6,598	15,230
145.70	6,330	11,934	146.22	6,603	15,296
145.71	6,335	11,997	146.23	6,608	15,362
145.72	6,341	12,060	146.24	6,614	15,428
145.73	6,346	12,124	146.25	6,619	15,494
145.74	6,351	12,187	146.26	6,624	15,560
145.75	6,356	12,251	146.27	6,630	15,627
145.76	6,361	12,314	146.28	6,635	15,693
145.77	6,367	12,378	146.29	6,640	15,759
145.78	6,372	12,442	146.30	6,646	15,826
145.79	6,377	12,505	146.31	6,651	15,892
145.80	6,382	12,569	146.32	6,656	15,959
145.81	6,387	12,633	146.33	6,662	16,025
145.82	6,393	12,697	146.34	6,667	16,092
145.83	6,398	12,761	146.35	6,672	16,159
145.84	6,403	12,825	146.36	6,678	16,226
145.85	6,408	12,889	146.37	6,683	16,292
145.86	6,413	12,953	146.38	6,688	16,359
145.87	6,419	13,017	146.39	6,693	16,426
145.88	6,424	13,082	146.40	6,699	16,493
145.89	6,429	13,146	146.41	6,704	16,560

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.42	6,709	16,627	146.94	6,986	20,188
146.43	6,715	16,694	146.95	6,991	20,258
146.44	6,720	16,761	146.96	6,997	20,328
146.45	6,725	16,829	146.97	7,002	20,398
146.46	6,731	16,896	146.98	7,007	20,468
146.47	6,736	16,963	146.99	7,013	20,538
146.48	6,741	17,031	147.00	7,018	20,608
146.49	6,747	17,098	147.01	7,023	20,678
146.50	6,752	17,166	147.02	7,029	20,749
146.51	6,757	17,233	147.03	7,034	20,819
146.52	6,763	17,301	147.04	7,040	20,889
146.53	6,768	17,368	147.05	7,045	20,960
146.54	6,773	17,436	147.06	7,051	21,030
146.55	6,779	17,504	147.07	7,056	21,101
146.56	6,784	17,572	147.08	7,062	21,171
146.57	6,789	17,640	147.09	7,067	21,242
146.58	6,795	17,707	147.10	7,073	21,313
146.59	6,800	17,775	147.11	7,078	21,383
146.60	6,805	17,843	147.12	7,083	21,454
146.61	6,811	17,912	147.13	7,089	21,525
146.62	6,816	17,980	147.14	7,094	21,596
146.63	6,821	18,048	147.15	7,100	21,667
146.64	6,826	18,116	147.16	7,105	21,738
146.65	6,832	18,184	147.17	7,111	21,809
146.66	6,837	18,253	147.18	7,116	21,880
146.67	6,842	18,321	147.19	7,122	21,951
146.68	6,848	18,390	147.20	7,127	22,023
146.69	6,853	18,458	147.21	7,132	22,094
146.70	6,858	18,527	147.22	7,138	22,165
146.71	6,864	18,595	147.23	7,143	22,237
146.72	6,869	18,664	147.24	7,149	22,308
146.73	6,874	18,733	147.25	7,154	22,380
146.74	6,880	18,801	147.26	7,160	22,451
146.75	6,885	18,870	147.27	7,165	22,523
146.76	6,890	18,939	147.28	7,171	22,595
146.77	6,896	19,008	147.29	7,176	22,666
146.78	6,901	19,077	147.30	7,182	22,738
146.79	6,906	19,146	147.31	7,187	22,810
146.80	6,912	19,215	147.32	7,192	22,882
146.81	6,917	19,284	147.33	7,198	22,954
146.82	6,922	19,353	147.34	7,203	23,026
146.83	6,928	19,423	147.35	7,209	23,098
146.84	6,933	19,492	147.36	7,214	23,170
146.85	6,938	19,561	147.37	7,220	23,242
146.86	6,944	19,631	147.38	7,225	23,314
146.87	6,949	19,700	147.39	7,231	23,387
146.88	6,954	19,770	147.40	7,236	23,459
146.89	6,959	19,839	147.41	7,241	23,531
146.90	6,965	19,909	147.42	7,247	23,604
146.91	6,970	19,979	147.43	7,252	23,676
146.92	6,975	20,048	147.44	7,258	23,749
146.93	6,981	20,118	147.45	7,263	23,821

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.46	7,269	23,894	147.98	7,552	27,747
147.47	7,274	23,967	147.99	7,558	27,823
147.48	7,280	24,040	148.00	7,563	27,899
147.49	7,285	24,112	148.01	7,569	27,974
147.50	7,291	24,185	148.02	7,575	28,050
147.51	7,296	24,258	148.03	7,581	28,126
147.52	7,301	24,331	148.04	7,586	28,202
147.53	7,307	24,404	148.05	7,592	28,277
147.54	7,312	24,477	148.06	7,598	28,353
147.55	7,318	24,550	148.07	7,604	28,429
147.56	7,323	24,624	148.08	7,610	28,506
147.57	7,329	24,697	148.09	7,616	28,582
147.58	7,334	24,770	148.10	7,622	28,658
147.59	7,340	24,844	148.11	7,627	28,734
147.60	7,345	24,917	148.12	7,633	28,810
147.61	7,350	24,990	148.13	7,639	28,887
147.62	7,356	25,064	148.14	7,645	28,963
147.63	7,361	25,138	148.15	7,651	29,040
147.64	7,367	25,211	148.16	7,657	29,116
147.65	7,372	25,285	148.17	7,663	29,193
147.66	7,378	25,359	148.18	7,669	29,269
147.67	7,383	25,432	148.19	7,674	29,346
147.68	7,389	25,506	148.20	7,680	29,423
147.69	7,394	25,580	148.21	7,686	29,500
147.70	7,400	25,654	148.22	7,692	29,577
147.71	7,405	25,728	148.23	7,698	29,654
147.72	7,410	25,802	148.24	7,704	29,731
147.73	7,416	25,876	148.25	7,710	29,808
147.74	7,421	25,951	148.26	7,715	29,885
147.75	7,427	26,025	148.27	7,721	29,962
147.76	7,432	26,099	148.28	7,727	30,039
147.77	7,438	26,174	148.29	7,733	30,117
147.78	7,443	26,248	148.30	7,739	30,194
147.79	7,449	26,322	148.31	7,745	30,271
147.80	7,454	26,397	148.32	7,751	30,349
147.81	7,459	26,471	148.33	7,756	30,426
147.82	7,465	26,546	148.34	7,762	30,504
147.83	7,470	26,621	148.35	7,768	30,582
147.84	7,476	26,695	148.36	7,774	30,659
147.85	7,481	26,770	148.37	7,780	30,737
147.86	7,487	26,845	148.38	7,786	30,815
147.87	7,492	26,920	148.39	7,792	30,893
147.88	7,498	26,995	148.40	7,798	30,971
147.89	7,503	27,070	148.41	7,803	31,049
147.90	7,509	27,145	148.42	7,809	31,127
147.91	7,514	27,220	148.43	7,815	31,205
147.92	7,519	27,295	148.44	7,821	31,283
147.93	7,525	27,371	148.45	7,827	31,361
147.94	7,530	27,446	148.46	7,833	31,440
147.95	7,536	27,521	148.47	7,839	31,518
147.96	7,541	27,597	148.48	7,844	31,596
147.97	7,547	27,672	148.49	7,850	31,675

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.50	7,856	31,753
148.51	7,862	31,832
148.52	7,868	31,911
148.53	7,874	31,989
148.54	7,880	32,068
148.55	7,885	32,147
148.56	7,891	32,226
148.57	7,897	32,305
148.58	7,903	32,384
148.59	7,909	32,463
148.60	7,915	32,542
148.61	7,921	32,621
148.62	7,927	32,700
148.63	7,932	32,780
148.64	7,938	32,859
148.65	7,944	32,938
148.66	7,950	33,018
148.67	7,956	33,097
148.68	7,962	33,177
148.69	7,968	33,257
148.70	7,973	33,336
148.71	7,979	33,416
148.72	7,985	33,496
148.73	7,991	33,576
148.74	7,997	33,656
148.75	8,003	33,736
148.76	8,009	33,816
148.77	8,014	33,896
148.78	8,020	33,976
148.79	8,026	34,056
148.80	8,032	34,137
148.81	8,038	34,217
148.82	8,044	34,297
148.83	8,050	34,378
148.84	8,056	34,458
148.85	8,061	34,539
148.86	8,067	34,620
148.87	8,073	34,700
148.88	8,079	34,781
148.89	8,085	34,862
148.90	8,091	34,943
148.91	8,097	35,024
148.92	8,102	35,105
148.93	8,108	35,186
148.94	8,114	35,267
148.95	**8,120**	**35,348**

Summary for Pond B-27: Basin #27

Inflow Area = 1.935 ac, 46.41% Impervious, Inflow Depth = 4.16" for Current 10 yr event
Inflow = 8.17 cfs @ 12.17 hrs, Volume= 0.672 af
Outflow = 5.69 cfs @ 12.27 hrs, Volume= 0.565 af, Atten= 30%, Lag= 6.2 min
Primary = 5.69 cfs @ 12.27 hrs, Volume= 0.565 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 172.37' @ 12.27 hrs Surf.Area= 3,824 sf Storage= 10,783 cf

Plug-Flow detention time= 155.9 min calculated for 0.564 af (84% of inflow)
Center-of-Mass det. time= 86.7 min (865.5 - 778.8)

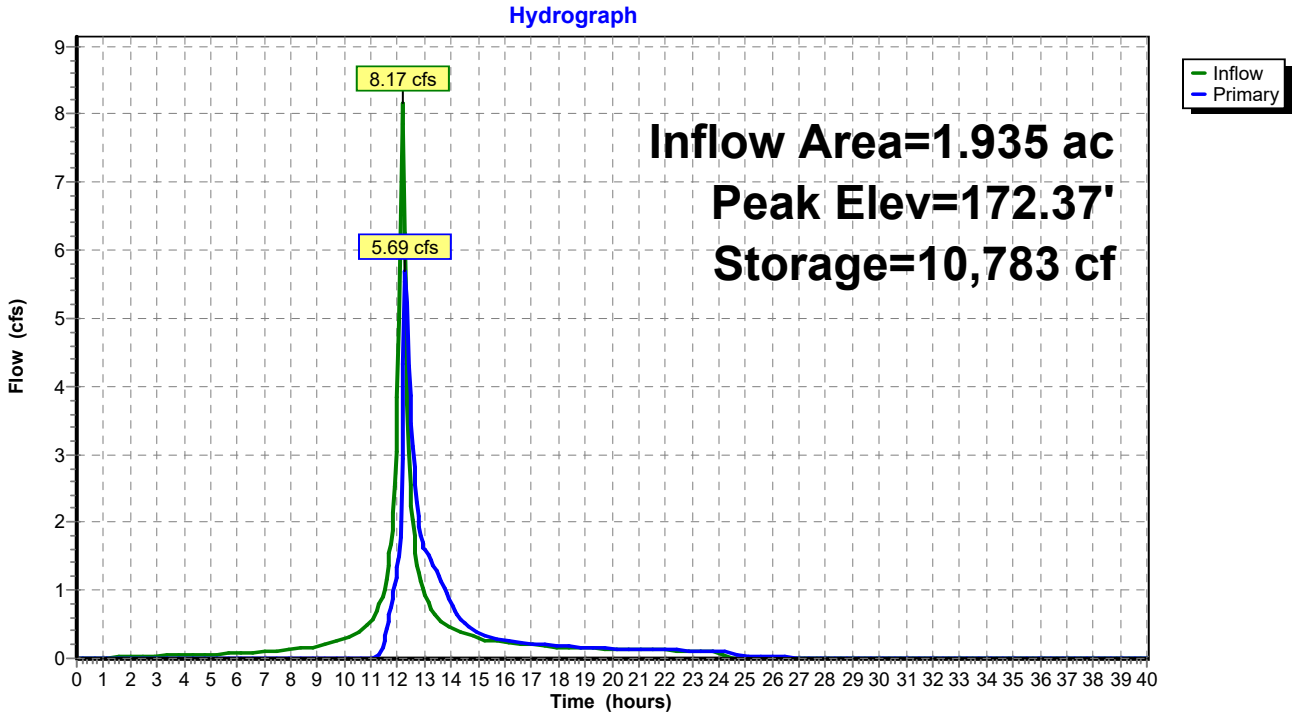
Volume	Invert	Avail.Storage	Storage Description
#1	167.35'	13,052 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
167.35	0	0	0
168.00	1,002	326	326
169.00	1,583	1,293	1,618
170.00	2,221	1,902	3,520
171.00	2,916	2,569	6,089
172.00	3,667	3,292	9,380
172.95	4,064	3,672	13,052

Device	Routing	Invert	Outlet Devices
#1	Primary	167.65'	**24.0" Round Culvert** L= 61.0' Ke= 0.500 Inlet / Outlet Invert= 167.65' / 165.16' S= 0.0408 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	170.47'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	171.75'	**2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	172.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	172.90'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.52 cfs @ 12.27 hrs HW=172.36' (Free Discharge)
- **1=Culvert** (Passes 5.52 cfs of 29.14 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.10 cfs @ 6.01 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.94 cfs @ 2.56 fps)
  - **4=Sharp-Crested Rectangular Weir** (Weir Controls 0.49 cfs @ 1.09 fps)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-27: Basin #27



Stage-Discharge for Pond B-27: Basin #27

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.35	0.00	167.87	0.00	168.39	0.00	168.91	0.00
167.36	0.00	167.88	0.00	168.40	0.00	168.92	0.00
167.37	0.00	167.89	0.00	168.41	0.00	168.93	0.00
167.38	0.00	167.90	0.00	168.42	0.00	168.94	0.00
167.39	0.00	167.91	0.00	168.43	0.00	168.95	0.00
167.40	0.00	167.92	0.00	168.44	0.00	168.96	0.00
167.41	0.00	167.93	0.00	168.45	0.00	168.97	0.00
167.42	0.00	167.94	0.00	168.46	0.00	168.98	0.00
167.43	0.00	167.95	0.00	168.47	0.00	168.99	0.00
167.44	0.00	167.96	0.00	168.48	0.00	169.00	0.00
167.45	0.00	167.97	0.00	168.49	0.00	169.01	0.00
167.46	0.00	167.98	0.00	168.50	0.00	169.02	0.00
167.47	0.00	167.99	0.00	168.51	0.00	169.03	0.00
167.48	0.00	168.00	0.00	168.52	0.00	169.04	0.00
167.49	0.00	168.01	0.00	168.53	0.00	169.05	0.00
167.50	0.00	168.02	0.00	168.54	0.00	169.06	0.00
167.51	0.00	168.03	0.00	168.55	0.00	169.07	0.00
167.52	0.00	168.04	0.00	168.56	0.00	169.08	0.00
167.53	0.00	168.05	0.00	168.57	0.00	169.09	0.00
167.54	0.00	168.06	0.00	168.58	0.00	169.10	0.00
167.55	0.00	168.07	0.00	168.59	0.00	169.11	0.00
167.56	0.00	168.08	0.00	168.60	0.00	169.12	0.00
167.57	0.00	168.09	0.00	168.61	0.00	169.13	0.00
167.58	0.00	168.10	0.00	168.62	0.00	169.14	0.00
167.59	0.00	168.11	0.00	168.63	0.00	169.15	0.00
167.60	0.00	168.12	0.00	168.64	0.00	169.16	0.00
167.61	0.00	168.13	0.00	168.65	0.00	169.17	0.00
167.62	0.00	168.14	0.00	168.66	0.00	169.18	0.00
167.63	0.00	168.15	0.00	168.67	0.00	169.19	0.00
167.64	0.00	168.16	0.00	168.68	0.00	169.20	0.00
167.65	0.00	168.17	0.00	168.69	0.00	169.21	0.00
167.66	0.00	168.18	0.00	168.70	0.00	169.22	0.00
167.67	0.00	168.19	0.00	168.71	0.00	169.23	0.00
167.68	0.00	168.20	0.00	168.72	0.00	169.24	0.00
167.69	0.00	168.21	0.00	168.73	0.00	169.25	0.00
167.70	0.00	168.22	0.00	168.74	0.00	169.26	0.00
167.71	0.00	168.23	0.00	168.75	0.00	169.27	0.00
167.72	0.00	168.24	0.00	168.76	0.00	169.28	0.00
167.73	0.00	168.25	0.00	168.77	0.00	169.29	0.00
167.74	0.00	168.26	0.00	168.78	0.00	169.30	0.00
167.75	0.00	168.27	0.00	168.79	0.00	169.31	0.00
167.76	0.00	168.28	0.00	168.80	0.00	169.32	0.00
167.77	0.00	168.29	0.00	168.81	0.00	169.33	0.00
167.78	0.00	168.30	0.00	168.82	0.00	169.34	0.00
167.79	0.00	168.31	0.00	168.83	0.00	169.35	0.00
167.80	0.00	168.32	0.00	168.84	0.00	169.36	0.00
167.81	0.00	168.33	0.00	168.85	0.00	169.37	0.00
167.82	0.00	168.34	0.00	168.86	0.00	169.38	0.00
167.83	0.00	168.35	0.00	168.87	0.00	169.39	0.00
167.84	0.00	168.36	0.00	168.88	0.00	169.40	0.00
167.85	0.00	168.37	0.00	168.89	0.00	169.41	0.00
167.86	0.00	168.38	0.00	168.90	0.00	169.42	0.00

Stage-Discharge for Pond B-27: Basin #27 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
169.43	0.00	169.95	0.00	170.47	0.00	170.99	0.72
169.44	0.00	169.96	0.00	170.48	0.00	171.00	0.74
169.45	0.00	169.97	0.00	170.49	0.00	171.01	0.76
169.46	0.00	169.98	0.00	170.50	0.00	171.02	0.78
169.47	0.00	169.99	0.00	170.51	0.01	171.03	0.80
169.48	0.00	170.00	0.00	170.52	0.01	171.04	0.82
169.49	0.00	170.01	0.00	170.53	0.01	171.05	0.84
169.50	0.00	170.02	0.00	170.54	0.02	171.06	0.85
169.51	0.00	170.03	0.00	170.55	0.02	171.07	0.87
169.52	0.00	170.04	0.00	170.56	0.03	171.08	0.89
169.53	0.00	170.05	0.00	170.57	0.04	171.09	0.91
169.54	0.00	170.06	0.00	170.58	0.04	171.10	0.92
169.55	0.00	170.07	0.00	170.59	0.05	171.11	0.94
169.56	0.00	170.08	0.00	170.60	0.06	171.12	0.95
169.57	0.00	170.09	0.00	170.61	0.07	171.13	0.96
169.58	0.00	170.10	0.00	170.62	0.08	171.14	0.98
169.59	0.00	170.11	0.00	170.63	0.09	171.15	0.99
169.60	0.00	170.12	0.00	170.64	0.10	171.16	1.00
169.61	0.00	170.13	0.00	170.65	0.11	171.17	1.02
169.62	0.00	170.14	0.00	170.66	0.12	171.18	1.03
169.63	0.00	170.15	0.00	170.67	0.13	171.19	1.05
169.64	0.00	170.16	0.00	170.68	0.15	171.20	1.06
169.65	0.00	170.17	0.00	170.69	0.16	171.21	1.07
169.66	0.00	170.18	0.00	170.70	0.17	171.22	1.08
169.67	0.00	170.19	0.00	170.71	0.19	171.23	1.10
169.68	0.00	170.20	0.00	170.72	0.20	171.24	1.11
169.69	0.00	170.21	0.00	170.73	0.22	171.25	1.12
169.70	0.00	170.22	0.00	170.74	0.23	171.26	1.14
169.71	0.00	170.23	0.00	170.75	0.25	171.27	1.15
169.72	0.00	170.24	0.00	170.76	0.27	171.28	1.16
169.73	0.00	170.25	0.00	170.77	0.28	171.29	1.17
169.74	0.00	170.26	0.00	170.78	0.30	171.30	1.18
169.75	0.00	170.27	0.00	170.79	0.32	171.31	1.20
169.76	0.00	170.28	0.00	170.80	0.34	171.32	1.21
169.77	0.00	170.29	0.00	170.81	0.36	171.33	1.22
169.78	0.00	170.30	0.00	170.82	0.37	171.34	1.23
169.79	0.00	170.31	0.00	170.83	0.39	171.35	1.24
169.80	0.00	170.32	0.00	170.84	0.41	171.36	1.25
169.81	0.00	170.33	0.00	170.85	0.43	171.37	1.27
169.82	0.00	170.34	0.00	170.86	0.45	171.38	1.28
169.83	0.00	170.35	0.00	170.87	0.47	171.39	1.29
169.84	0.00	170.36	0.00	170.88	0.49	171.40	1.30
169.85	0.00	170.37	0.00	170.89	0.51	171.41	1.31
169.86	0.00	170.38	0.00	170.90	0.53	171.42	1.32
169.87	0.00	170.39	0.00	170.91	0.55	171.43	1.33
169.88	0.00	170.40	0.00	170.92	0.57	171.44	1.34
169.89	0.00	170.41	0.00	170.93	0.59	171.45	1.35
169.90	0.00	170.42	0.00	170.94	0.61	171.46	1.36
169.91	0.00	170.43	0.00	170.95	0.63	171.47	1.37
169.92	0.00	170.44	0.00	170.96	0.66	171.48	1.38
169.93	0.00	170.45	0.00	170.97	0.68	171.49	1.39
169.94	0.00	170.46	0.00	170.98	0.70	171.50	1.40

Stage-Discharge for Pond B-27: Basin #27 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
171.51	1.41	172.03	2.80	172.55	8.64
171.52	1.42	172.04	2.86	172.56	8.83
171.53	1.43	172.05	2.92	172.57	9.02
171.54	1.44	172.06	2.98	172.58	9.21
171.55	1.45	172.07	3.04	172.59	9.41
171.56	1.46	172.08	3.10	172.60	9.60
171.57	1.47	172.09	3.16	172.61	9.80
171.58	1.48	172.10	3.22	172.62	10.00
171.59	1.49	172.11	3.28	172.63	10.20
171.60	1.50	172.12	3.35	172.64	10.40
171.61	1.51	172.13	3.41	172.65	10.61
171.62	1.52	172.14	3.47	172.66	10.81
171.63	1.53	172.15	3.54	172.67	11.02
171.64	1.54	172.16	3.60	172.68	11.23
171.65	1.55	172.17	3.67	172.69	11.44
171.66	1.56	172.18	3.74	172.70	11.65
171.67	1.56	172.19	3.80	172.71	11.87
171.68	1.57	172.20	3.87	172.72	12.08
171.69	1.58	172.21	3.94	172.73	12.30
171.70	1.59	172.22	4.01	172.74	12.52
171.71	1.60	172.23	4.08	172.75	12.74
171.72	1.61	172.24	4.15	172.76	12.96
171.73	1.62	172.25	4.22	172.77	13.18
171.74	1.63	172.26	4.30	172.78	13.41
171.75	1.64	172.27	4.40	172.79	13.63
171.76	1.65	172.28	4.50	172.80	13.86
171.77	1.67	172.29	4.61	172.81	14.09
171.78	1.69	172.30	4.72	172.82	14.32
171.79	1.72	172.31	4.84	172.83	14.55
171.80	1.75	172.32	4.97	172.84	14.78
171.81	1.78	172.33	5.09	172.85	15.02
171.82	1.81	172.34	5.22	172.86	15.25
171.83	1.85	172.35	5.36	172.87	15.49
171.84	1.89	172.36	5.50	172.88	15.72
171.85	1.92	172.37	5.64	172.89	15.96
171.86	1.96	172.38	5.78	172.90	16.20
171.87	2.00	172.39	5.93	172.91	16.56
171.88	2.05	172.40	6.08	172.92	17.02
171.89	2.09	172.41	6.24	172.93	17.54
171.90	2.13	172.42	6.39	172.94	18.11
171.91	2.18	172.43	6.55	172.95	**18.73**
171.92	2.23	172.44	6.71		
171.93	2.27	172.45	6.88		
171.94	2.32	172.46	7.04		
171.95	2.37	172.47	7.21		
171.96	2.42	172.48	7.38		
171.97	2.48	172.49	7.56		
171.98	2.53	172.50	7.73		
171.99	2.58	172.51	7.91		
172.00	2.64	172.52	8.09		
172.01	2.69	172.53	8.27		
172.02	2.75	172.54	8.46		

Stage-Area-Storage for Pond B-27: Basin #27

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.35	0	0	167.87	802	208
167.36	15	0	167.88	817	217
167.37	31	0	167.89	832	225
167.38	46	1	167.90	848	233
167.39	62	1	167.91	863	242
167.40	77	2	167.92	879	250
167.41	92	3	167.93	894	259
167.42	108	4	167.94	910	268
167.43	123	5	167.95	925	277
167.44	139	6	167.96	940	287
167.45	154	8	167.97	956	296
167.46	170	9	167.98	971	306
167.47	185	11	167.99	987	316
167.48	200	13	168.00	1,002	326
167.49	216	15	168.01	1,008	336
167.50	231	17	168.02	1,014	346
167.51	247	20	168.03	1,019	356
167.52	262	22	168.04	1,025	366
167.53	277	25	168.05	1,031	376
167.54	293	28	168.06	1,037	387
167.55	308	31	168.07	1,043	397
167.56	324	34	168.08	1,048	408
167.57	339	37	168.09	1,054	418
167.58	355	41	168.10	1,060	429
167.59	370	44	168.11	1,066	439
167.60	385	48	168.12	1,072	450
167.61	401	52	168.13	1,078	461
167.62	416	56	168.14	1,083	472
167.63	432	60	168.15	1,089	482
167.64	447	65	168.16	1,095	493
167.65	462	69	168.17	1,101	504
167.66	478	74	168.18	1,107	515
167.67	493	79	168.19	1,112	527
167.68	509	84	168.20	1,118	538
167.69	524	89	168.21	1,124	549
167.70	540	94	168.22	1,130	560
167.71	555	100	168.23	1,136	571
167.72	570	106	168.24	1,141	583
167.73	586	111	168.25	1,147	594
167.74	601	117	168.26	1,153	606
167.75	617	123	168.27	1,159	617
167.76	632	130	168.28	1,165	629
167.77	647	136	168.29	1,170	641
167.78	663	143	168.30	1,176	652
167.79	678	149	168.31	1,182	664
167.80	694	156	168.32	1,188	676
167.81	709	163	168.33	1,194	688
167.82	725	170	168.34	1,200	700
167.83	740	178	168.35	1,205	712
167.84	755	185	168.36	1,211	724
167.85	771	193	168.37	1,217	736
167.86	786	200	168.38	1,223	748

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.39	1,229	761	168.91	1,531	1,478
168.40	1,234	773	168.92	1,537	1,493
168.41	1,240	785	168.93	1,542	1,509
168.42	1,246	798	168.94	1,548	1,524
168.43	1,252	810	168.95	1,554	1,540
168.44	1,258	823	168.96	1,560	1,555
168.45	1,263	835	168.97	1,566	1,571
168.46	1,269	848	168.98	1,571	1,587
168.47	1,275	861	168.99	1,577	1,602
168.48	1,281	874	169.00	1,583	1,618
168.49	1,287	886	169.01	1,589	1,634
168.50	1,293	899	169.02	1,596	1,650
168.51	1,298	912	169.03	1,602	1,666
168.52	1,304	925	169.04	1,609	1,682
168.53	1,310	938	169.05	1,615	1,698
168.54	1,316	951	169.06	1,621	1,714
168.55	1,322	965	169.07	1,628	1,731
168.56	1,327	978	169.08	1,634	1,747
168.57	1,333	991	169.09	1,640	1,763
168.58	1,339	1,005	169.10	1,647	1,780
168.59	1,345	1,018	169.11	1,653	1,796
168.60	1,351	1,031	169.12	1,660	1,813
168.61	1,356	1,045	169.13	1,666	1,829
168.62	1,362	1,059	169.14	1,672	1,846
168.63	1,368	1,072	169.15	1,679	1,863
168.64	1,374	1,086	169.16	1,685	1,880
168.65	1,380	1,100	169.17	1,691	1,896
168.66	1,385	1,114	169.18	1,698	1,913
168.67	1,391	1,127	169.19	1,704	1,930
168.68	1,397	1,141	169.20	1,711	1,948
168.69	1,403	1,155	169.21	1,717	1,965
168.70	1,409	1,169	169.22	1,723	1,982
168.71	1,415	1,184	169.23	1,730	1,999
168.72	1,420	1,198	169.24	1,736	2,016
168.73	1,426	1,212	169.25	1,743	2,034
168.74	1,432	1,226	169.26	1,749	2,051
168.75	1,438	1,241	169.27	1,755	2,069
168.76	1,444	1,255	169.28	1,762	2,086
168.77	1,449	1,269	169.29	1,768	2,104
168.78	1,455	1,284	169.30	1,774	2,122
168.79	1,461	1,299	169.31	1,781	2,140
168.80	1,467	1,313	169.32	1,787	2,157
168.81	1,473	1,328	169.33	1,794	2,175
168.82	1,478	1,343	169.34	1,800	2,193
168.83	1,484	1,357	169.35	1,806	2,211
168.84	1,490	1,372	169.36	1,813	2,229
168.85	1,496	1,387	169.37	1,819	2,248
168.86	1,502	1,402	169.38	1,825	2,266
168.87	1,507	1,417	169.39	1,832	2,284
168.88	1,513	1,432	169.40	1,838	2,302
168.89	1,519	1,448	169.41	1,845	2,321
168.90	1,525	1,463	169.42	1,851	2,339

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.43	1,857	2,358	169.95	2,189	3,410
169.44	1,864	2,376	169.96	2,195	3,432
169.45	1,870	2,395	169.97	2,202	3,454
169.46	1,876	2,414	169.98	2,208	3,476
169.47	1,883	2,433	169.99	2,215	3,498
169.48	1,889	2,451	170.00	2,221	3,520
169.49	1,896	2,470	170.01	2,228	3,542
169.50	1,902	2,489	170.02	2,235	3,565
169.51	1,908	2,508	170.03	2,242	3,587
169.52	1,915	2,528	170.04	2,249	3,610
169.53	1,921	2,547	170.05	2,256	3,632
169.54	1,928	2,566	170.06	2,263	3,655
169.55	1,934	2,585	170.07	2,270	3,677
169.56	1,940	2,605	170.08	2,277	3,700
169.57	1,947	2,624	170.09	2,284	3,723
169.58	1,953	2,644	170.10	2,290	3,746
169.59	1,959	2,663	170.11	2,297	3,769
169.60	1,966	2,683	170.12	2,304	3,792
169.61	1,972	2,702	170.13	2,311	3,815
169.62	1,979	2,722	170.14	2,318	3,838
169.63	1,985	2,742	170.15	2,325	3,861
169.64	1,991	2,762	170.16	2,332	3,884
169.65	1,998	2,782	170.17	2,339	3,908
169.66	2,004	2,802	170.18	2,346	3,931
169.67	2,010	2,822	170.19	2,353	3,955
169.68	2,017	2,842	170.20	2,360	3,978
169.69	2,023	2,862	170.21	2,367	4,002
169.70	2,030	2,883	170.22	2,374	4,026
169.71	2,036	2,903	170.23	2,381	4,049
169.72	2,042	2,923	170.24	2,388	4,073
169.73	2,049	2,944	170.25	2,395	4,097
169.74	2,055	2,964	170.26	2,402	4,121
169.75	2,062	2,985	170.27	2,409	4,145
169.76	2,068	3,005	170.28	2,416	4,169
169.77	2,074	3,026	170.29	2,423	4,193
169.78	2,081	3,047	170.30	2,429	4,218
169.79	2,087	3,068	170.31	2,436	4,242
169.80	2,093	3,089	170.32	2,443	4,266
169.81	2,100	3,110	170.33	2,450	4,291
169.82	2,106	3,131	170.34	2,457	4,315
169.83	2,113	3,152	170.35	2,464	4,340
169.84	2,119	3,173	170.36	2,471	4,365
169.85	2,125	3,194	170.37	2,478	4,389
169.86	2,132	3,215	170.38	2,485	4,414
169.87	2,138	3,237	170.39	2,492	4,439
169.88	2,144	3,258	170.40	2,499	4,464
169.89	2,151	3,280	170.41	2,506	4,489
169.90	2,157	3,301	170.42	2,513	4,514
169.91	2,164	3,323	170.43	2,520	4,539
169.92	2,170	3,345	170.44	2,527	4,565
169.93	2,176	3,366	170.45	2,534	4,590
169.94	2,183	3,388	170.46	2,541	4,615

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
170.47	2,548	4,641	170.99	2,909	6,060
170.48	2,555	4,666	171.00	2,916	6,089
170.49	2,562	4,692	171.01	2,924	6,118
170.50	2,569	4,718	171.02	2,931	6,147
170.51	2,575	4,743	171.03	2,939	6,176
170.52	2,582	4,769	171.04	2,946	6,206
170.53	2,589	4,795	171.05	2,954	6,235
170.54	2,596	4,821	171.06	2,961	6,265
170.55	2,603	4,847	171.07	2,969	6,295
170.56	2,610	4,873	171.08	2,976	6,324
170.57	2,617	4,899	171.09	2,984	6,354
170.58	2,624	4,925	171.10	2,991	6,384
170.59	2,631	4,952	171.11	2,999	6,414
170.60	2,638	4,978	171.12	3,006	6,444
170.61	2,645	5,004	171.13	3,014	6,474
170.62	2,652	5,031	171.14	3,021	6,504
170.63	2,659	5,057	171.15	3,029	6,534
170.64	2,666	5,084	171.16	3,036	6,565
170.65	2,673	5,111	171.17	3,044	6,595
170.66	2,680	5,137	171.18	3,051	6,626
170.67	2,687	5,164	171.19	3,059	6,656
170.68	2,694	5,191	171.20	3,066	6,687
170.69	2,701	5,218	171.21	3,074	6,718
170.70	2,707	5,245	171.22	3,081	6,748
170.71	2,714	5,272	171.23	3,089	6,779
170.72	2,721	5,299	171.24	3,096	6,810
170.73	2,728	5,327	171.25	3,104	6,841
170.74	2,735	5,354	171.26	3,111	6,872
170.75	2,742	5,381	171.27	3,119	6,903
170.76	2,749	5,409	171.28	3,126	6,935
170.77	2,756	5,436	171.29	3,134	6,966
170.78	2,763	5,464	171.30	3,141	6,997
170.79	2,770	5,492	171.31	3,149	7,029
170.80	2,777	5,519	171.32	3,156	7,060
170.81	2,784	5,547	171.33	3,164	7,092
170.82	2,791	5,575	171.34	3,171	7,123
170.83	2,798	5,603	171.35	3,179	7,155
170.84	2,805	5,631	171.36	3,186	7,187
170.85	2,812	5,659	171.37	3,194	7,219
170.86	2,819	5,687	171.38	3,201	7,251
170.87	2,826	5,715	171.39	3,209	7,283
170.88	2,833	5,744	171.40	3,216	7,315
170.89	2,840	5,772	171.41	3,224	7,347
170.90	2,847	5,801	171.42	3,231	7,380
170.91	2,853	5,829	171.43	3,239	7,412
170.92	2,860	5,858	171.44	3,246	7,444
170.93	2,867	5,886	171.45	3,254	7,477
170.94	2,874	5,915	171.46	3,261	7,509
170.95	2,881	5,944	171.47	3,269	7,542
170.96	2,888	5,973	171.48	3,276	7,575
170.97	2,895	6,001	171.49	3,284	7,608
170.98	2,902	6,030	171.50	3,292	7,641

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
171.51	3,299	7,673	172.03	3,680	9,490
171.52	3,307	7,707	172.04	3,684	9,527
171.53	3,314	7,740	172.05	3,688	9,564
171.54	3,322	7,773	172.06	3,692	9,601
171.55	3,329	7,806	172.07	3,696	9,638
171.56	3,337	7,839	172.08	3,700	9,675
171.57	3,344	7,873	172.09	3,705	9,712
171.58	3,352	7,906	172.10	3,709	9,749
171.59	3,359	7,940	172.11	3,713	9,786
171.60	3,367	7,973	172.12	3,717	9,823
171.61	3,374	8,007	172.13	3,721	9,860
171.62	3,382	8,041	172.14	3,726	9,898
171.63	3,389	8,075	172.15	3,730	9,935
171.64	3,397	8,109	172.16	3,734	9,972
171.65	3,404	8,143	172.17	3,738	10,010
171.66	3,412	8,177	172.18	3,742	10,047
171.67	3,419	8,211	172.19	3,746	10,084
171.68	3,427	8,245	172.20	3,751	10,122
171.69	3,434	8,279	172.21	3,755	10,159
171.70	3,442	8,314	172.22	3,759	10,197
171.71	3,449	8,348	172.23	3,763	10,235
171.72	3,457	8,383	172.24	3,767	10,272
171.73	3,464	8,417	172.25	3,771	10,310
171.74	3,472	8,452	172.26	3,776	10,348
171.75	3,479	8,487	172.27	3,780	10,385
171.76	3,487	8,522	172.28	3,784	10,423
171.77	3,494	8,557	172.29	3,788	10,461
171.78	3,502	8,592	172.30	3,792	10,499
171.79	3,509	8,627	172.31	3,797	10,537
171.80	3,517	8,662	172.32	3,801	10,575
171.81	3,524	8,697	172.33	3,805	10,613
171.82	3,532	8,732	172.34	3,809	10,651
171.83	3,539	8,768	172.35	3,813	10,689
171.84	3,547	8,803	172.36	3,817	10,727
171.85	3,554	8,839	172.37	3,822	10,766
171.86	3,562	8,874	172.38	3,826	10,804
171.87	3,569	8,910	172.39	3,830	10,842
171.88	3,577	8,946	172.40	3,834	10,880
171.89	3,584	8,981	172.41	3,838	10,919
171.90	3,592	9,017	172.42	3,843	10,957
171.91	3,599	9,053	172.43	3,847	10,996
171.92	3,607	9,089	172.44	3,851	11,034
171.93	3,614	9,125	172.45	3,855	11,073
171.94	3,622	9,161	172.46	3,859	11,111
171.95	3,629	9,198	172.47	3,863	11,150
171.96	3,637	9,234	172.48	3,868	11,188
171.97	3,644	9,270	172.49	3,872	11,227
171.98	3,652	9,307	172.50	3,876	11,266
171.99	3,659	9,344	172.51	3,880	11,305
172.00	3,667	9,380	172.52	3,884	11,343
172.01	3,671	9,417	172.53	3,888	11,382
172.02	3,675	9,454	172.54	3,893	11,421

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
172.55	3,897	11,460
172.56	3,901	11,499
172.57	3,905	11,538
172.58	3,909	11,577
172.59	3,914	11,616
172.60	3,918	11,656
172.61	3,922	11,695
172.62	3,926	11,734
172.63	3,930	11,773
172.64	3,934	11,813
172.65	3,939	11,852
172.66	3,943	11,891
172.67	3,947	11,931
172.68	3,951	11,970
172.69	3,955	12,010
172.70	3,960	12,049
172.71	3,964	12,089
172.72	3,968	12,129
172.73	3,972	12,168
172.74	3,976	12,208
172.75	3,980	12,248
172.76	3,985	12,288
172.77	3,989	12,328
172.78	3,993	12,368
172.79	3,997	12,407
172.80	4,001	12,447
172.81	4,005	12,488
172.82	4,010	12,528
172.83	4,014	12,568
172.84	4,018	12,608
172.85	4,022	12,648
172.86	4,026	12,688
172.87	4,031	12,729
172.88	4,035	12,769
172.89	4,039	12,809
172.90	4,043	12,850
172.91	4,047	12,890
172.92	4,051	12,931
172.93	4,056	12,971
172.94	4,060	13,012
172.95	**4,064**	**13,052**

Summary for Pond B-28: Basin #28

Inflow Area = 2.333 ac, 34.85% Impervious, Inflow Depth = 3.29" for Current 10 yr event
Inflow = 7.88 cfs @ 12.17 hrs, Volume= 0.639 af
Outflow = 6.50 cfs @ 12.24 hrs, Volume= 0.559 af, Atten= 18%, Lag= 4.2 min
Primary = 6.50 cfs @ 12.24 hrs, Volume= 0.559 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 168.79' @ 12.24 hrs Surf.Area= 3,051 sf Storage= 5,954 cf

Plug-Flow detention time= 112.3 min calculated for 0.559 af (87% of inflow)
Center-of-Mass det. time= 51.7 min (848.1 - 796.5)

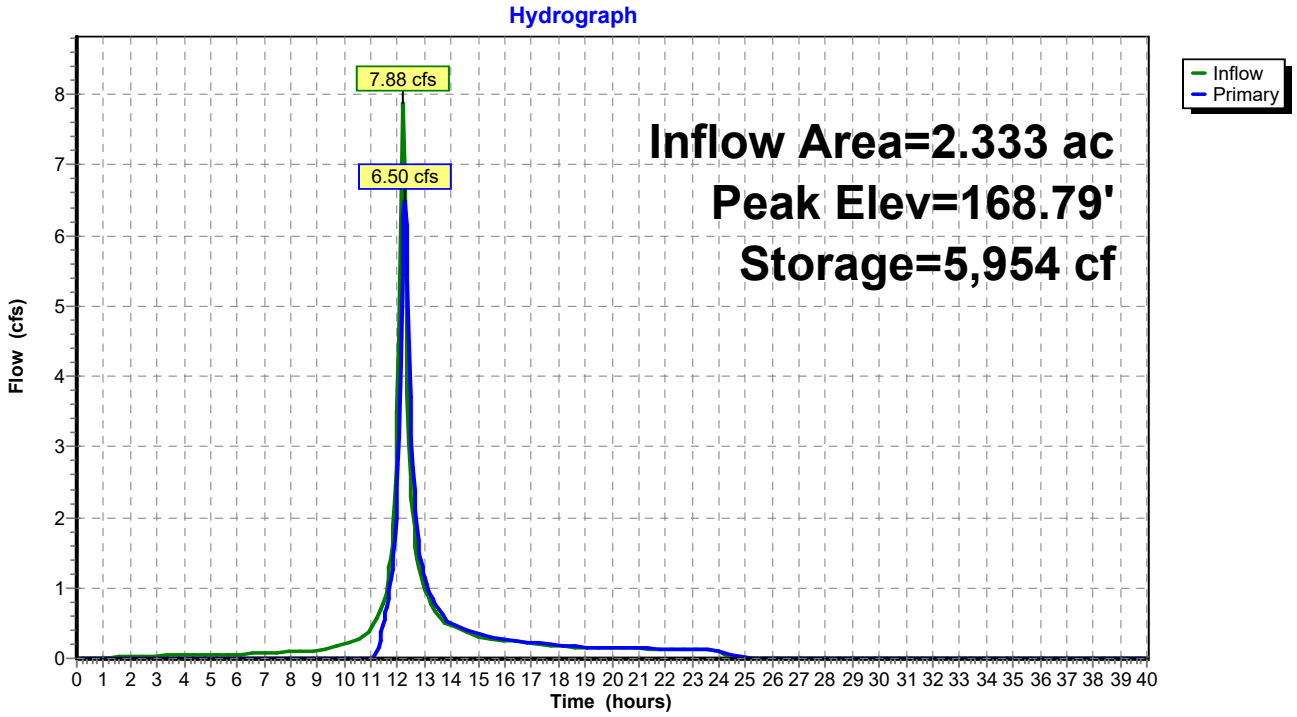
Volume	Invert	Avail.Storage	Storage Description
#1	165.65'	12,318 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.65	0	0	0
166.00	1,145	200	200
167.00	1,778	1,462	1,662
168.00	2,465	2,122	3,783
169.00	3,210	2,838	6,621
170.00	4,012	3,611	10,232
170.50	4,334	2,087	12,318

Device	Routing	Invert	Outlet Devices
#1	Primary	165.65'	**18.0" Round Culvert** L= 186.0' Ke= 0.500 Inlet / Outlet Invert= 165.65' / 163.70' S= 0.0105 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.87'	**30.0" W x 9.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	169.50'	**1.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	170.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	170.49'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.47 cfs @ 12.24 hrs HW=168.78' (Free Discharge)
- **1=Culvert** (Passes 6.47 cfs of 12.12 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 6.47 cfs @ 3.45 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
  - **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-28: Basin #28



Stage-Discharge for Pond B-28: Basin #28

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.00
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.00
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.00
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.00
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.00
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.00
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.00
165.82	0.00	166.34	0.00	166.86	0.00	167.38	0.00
165.83	0.00	166.35	0.00	166.87	0.00	167.39	0.00
165.84	0.00	166.36	0.00	166.88	0.00	167.40	0.00
165.85	0.00	166.37	0.00	166.89	0.00	167.41	0.00
165.86	0.00	166.38	0.00	166.90	0.00	167.42	0.00
165.87	0.00	166.39	0.00	166.91	0.00	167.43	0.00
165.88	0.00	166.40	0.00	166.92	0.00	167.44	0.00
165.89	0.00	166.41	0.00	166.93	0.00	167.45	0.00
165.90	0.00	166.42	0.00	166.94	0.00	167.46	0.00
165.91	0.00	166.43	0.00	166.95	0.00	167.47	0.00
165.92	0.00	166.44	0.00	166.96	0.00	167.48	0.00
165.93	0.00	166.45	0.00	166.97	0.00	167.49	0.00
165.94	0.00	166.46	0.00	166.98	0.00	167.50	0.00
165.95	0.00	166.47	0.00	166.99	0.00	167.51	0.00
165.96	0.00	166.48	0.00	167.00	0.00	167.52	0.00
165.97	0.00	166.49	0.00	167.01	0.00	167.53	0.00
165.98	0.00	166.50	0.00	167.02	0.00	167.54	0.00
165.99	0.00	166.51	0.00	167.03	0.00	167.55	0.00
166.00	0.00	166.52	0.00	167.04	0.00	167.56	0.00
166.01	0.00	166.53	0.00	167.05	0.00	167.57	0.00
166.02	0.00	166.54	0.00	167.06	0.00	167.58	0.00
166.03	0.00	166.55	0.00	167.07	0.00	167.59	0.00
166.04	0.00	166.56	0.00	167.08	0.00	167.60	0.00
166.05	0.00	166.57	0.00	167.09	0.00	167.61	0.00
166.06	0.00	166.58	0.00	167.10	0.00	167.62	0.00
166.07	0.00	166.59	0.00	167.11	0.00	167.63	0.00
166.08	0.00	166.60	0.00	167.12	0.00	167.64	0.00
166.09	0.00	166.61	0.00	167.13	0.00	167.65	0.00
166.10	0.00	166.62	0.00	167.14	0.00	167.66	0.00
166.11	0.00	166.63	0.00	167.15	0.00	167.67	0.00
166.12	0.00	166.64	0.00	167.16	0.00	167.68	0.00
166.13	0.00	166.65	0.00	167.17	0.00	167.69	0.00
166.14	0.00	166.66	0.00	167.18	0.00	167.70	0.00
166.15	0.00	166.67	0.00	167.19	0.00	167.71	0.00
166.16	0.00	166.68	0.00	167.20	0.00	167.72	0.00

Stage-Discharge for Pond B-28: Basin #28 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.73	0.00	168.25	1.88	168.77	6.39	169.29	9.18
167.74	0.00	168.26	1.95	168.78	6.45	169.30	9.22
167.75	0.00	168.27	2.03	168.79	6.52	169.31	9.27
167.76	0.00	168.28	2.11	168.80	6.58	169.32	9.31
167.77	0.00	168.29	2.18	168.81	6.65	169.33	9.36
167.78	0.00	168.30	2.26	168.82	6.71	169.34	9.40
167.79	0.00	168.31	2.34	168.83	6.78	169.35	9.44
167.80	0.00	168.32	2.42	168.84	6.84	169.36	9.49
167.81	0.00	168.33	2.50	168.85	6.90	169.37	9.53
167.82	0.00	168.34	2.59	168.86	6.96	169.38	9.57
167.83	0.00	168.35	2.67	168.87	7.02	169.39	9.62
167.84	0.00	168.36	2.75	168.88	7.08	169.40	9.66
167.85	0.00	168.37	2.84	168.89	7.14	169.41	9.70
167.86	0.00	168.38	2.92	168.90	7.20	169.42	9.74
167.87	0.00	168.39	3.01	168.91	7.26	169.43	9.79
167.88	0.01	168.40	3.10	168.92	7.32	169.44	9.83
167.89	0.02	168.41	3.18	168.93	7.37	169.45	9.87
167.90	0.04	168.42	3.27	168.94	7.43	169.46	9.91
167.91	0.06	168.43	3.36	168.95	7.49	169.47	9.95
167.92	0.09	168.44	3.45	168.96	7.54	169.48	9.99
167.93	0.12	168.45	3.54	168.97	7.60	169.49	10.03
167.94	0.15	168.46	3.64	168.98	7.65	169.50	10.08
167.95	0.18	168.47	3.73	168.99	7.71	169.51	10.12
167.96	0.22	168.48	3.82	169.00	7.76	169.52	10.17
167.97	0.25	168.49	3.92	169.01	7.81	169.53	10.21
167.98	0.29	168.50	4.01	169.02	7.87	169.54	10.26
167.99	0.33	168.51	4.11	169.03	7.92	169.55	10.31
168.00	0.38	168.52	4.21	169.04	7.97	169.56	10.36
168.01	0.42	168.53	4.30	169.05	8.02	169.57	10.42
168.02	0.47	168.54	4.40	169.06	8.08	169.58	10.47
168.03	0.51	168.55	4.50	169.07	8.13	169.59	10.52
168.04	0.56	168.56	4.60	169.08	8.18	169.60	10.58
168.05	0.61	168.57	4.70	169.09	8.23	169.61	10.63
168.06	0.66	168.58	4.80	169.10	8.28	169.62	10.69
168.07	0.72	168.59	4.90	169.11	8.33	169.63	10.74
168.08	0.77	168.60	5.01	169.12	8.38	169.64	10.80
168.09	0.83	168.61	5.11	169.13	8.43	169.65	10.85
168.10	0.89	168.62	5.21	169.14	8.48	169.66	10.91
168.11	0.94	168.63	5.31	169.15	8.52	169.67	10.97
168.12	1.00	168.64	5.40	169.16	8.57	169.68	11.02
168.13	1.06	168.65	5.49	169.17	8.62	169.69	11.08
168.14	1.13	168.66	5.57	169.18	8.67	169.70	11.14
168.15	1.19	168.67	5.65	169.19	8.72	169.71	11.20
168.16	1.25	168.68	5.73	169.20	8.76	169.72	11.26
168.17	1.32	168.69	5.81	169.21	8.81	169.73	11.32
168.18	1.39	168.70	5.89	169.22	8.86	169.74	11.38
168.19	1.45	168.71	5.96	169.23	8.90	169.75	11.43
168.20	1.52	168.72	6.04	169.24	8.95	169.76	11.49
168.21	1.59	168.73	6.11	169.25	9.00	169.77	11.55
168.22	1.66	168.74	6.18	169.26	9.04	169.78	11.61
168.23	1.73	168.75	6.25	169.27	9.09	169.79	11.67
168.24	1.81	168.76	6.32	169.28	9.13	169.80	11.74

Stage-Discharge for Pond B-28: Basin #28 (continued)

Elevation (feet)	Primary (cfs)
169.81	11.80
169.82	11.86
169.83	11.92
169.84	11.98
169.85	12.04
169.86	12.10
169.87	12.16
169.88	12.23
169.89	12.29
169.90	12.35
169.91	12.41
169.92	12.47
169.93	12.54
169.94	12.60
169.95	12.66
169.96	12.73
169.97	12.79
169.98	12.85
169.99	12.91
170.00	12.98
170.01	13.05
170.02	13.14
170.03	13.24
170.04	13.34
170.05	13.44
170.06	13.55
170.07	13.66
170.08	13.78
170.09	13.90
170.10	14.02
170.11	14.15
170.12	14.21
170.13	14.22
170.14	14.24
170.15	14.25
170.16	14.27
170.17	14.28
170.18	14.29
170.19	14.31
170.20	14.32
170.21	14.34
170.22	14.35
170.23	14.37
170.24	14.38
170.25	14.39
170.26	14.41
170.27	14.42
170.28	14.44
170.29	14.45
170.30	14.47
170.31	14.48
170.32	14.49
170.33	14.51
170.34	14.52
170.35	14.54
170.36	14.55
170.37	14.56
170.38	14.58
170.39	14.59
170.40	14.61
170.41	14.62
170.42	14.63
170.43	14.65
170.44	14.66
170.45	14.68
170.46	14.69
170.47	14.70
170.48	14.72
170.49	14.73
170.50	**14.86**

Stage-Area-Storage for Pond B-28: Basin #28

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.65	0	0	166.17	1,253	404
165.66	33	0	166.18	1,259	417
165.67	65	1	166.19	1,265	429
165.68	98	1	166.20	1,272	442
165.69	131	3	166.21	1,278	455
165.70	164	4	166.22	1,284	468
165.71	196	6	166.23	1,291	480
165.72	229	8	166.24	1,297	493
165.73	262	10	166.25	1,303	506
165.74	294	13	166.26	1,310	519
165.75	327	16	166.27	1,316	533
165.76	360	20	166.28	1,322	546
165.77	393	24	166.29	1,329	559
165.78	425	28	166.30	1,335	572
165.79	458	32	166.31	1,341	586
165.80	491	37	166.32	1,348	599
165.81	523	42	166.33	1,354	613
165.82	556	47	166.34	1,360	626
165.83	589	53	166.35	1,367	640
165.84	622	59	166.36	1,373	654
165.85	654	65	166.37	1,379	667
165.86	687	72	166.38	1,386	681
165.87	720	79	166.39	1,392	695
165.88	752	87	166.40	1,398	709
165.89	785	94	166.41	1,405	723
165.90	818	102	166.42	1,411	737
165.91	851	111	166.43	1,417	751
165.92	883	119	166.44	1,424	765
165.93	916	128	166.45	1,430	780
165.94	949	138	166.46	1,436	794
165.95	981	147	166.47	1,443	808
165.96	1,014	157	166.48	1,449	823
165.97	1,047	167	166.49	1,455	837
165.98	1,080	178	166.50	1,462	852
165.99	1,112	189	166.51	1,468	867
166.00	1,145	200	166.52	1,474	881
166.01	1,151	212	166.53	1,480	896
166.02	1,158	223	166.54	1,487	911
166.03	1,164	235	166.55	1,493	926
166.04	1,170	247	166.56	1,499	941
166.05	1,177	258	166.57	1,506	956
166.06	1,183	270	166.58	1,512	971
166.07	1,189	282	166.59	1,518	986
166.08	1,196	294	166.60	1,525	1,001
166.09	1,202	306	166.61	1,531	1,017
166.10	1,208	318	166.62	1,537	1,032
166.11	1,215	330	166.63	1,544	1,047
166.12	1,221	342	166.64	1,550	1,063
166.13	1,227	355	166.65	1,556	1,078
166.14	1,234	367	166.66	1,563	1,094
166.15	1,240	379	166.67	1,569	1,110
166.16	1,246	392	166.68	1,575	1,125

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.69	1,582	1,141	167.21	1,922	2,050
166.70	1,588	1,157	167.22	1,929	2,070
166.71	1,594	1,173	167.23	1,936	2,089
166.72	1,601	1,189	167.24	1,943	2,108
166.73	1,607	1,205	167.25	1,950	2,128
166.74	1,613	1,221	167.26	1,957	2,147
166.75	1,620	1,237	167.27	1,963	2,167
166.76	1,626	1,253	167.28	1,970	2,187
166.77	1,632	1,270	167.29	1,977	2,206
166.78	1,639	1,286	167.30	1,984	2,226
166.79	1,645	1,302	167.31	1,991	2,246
166.80	1,651	1,319	167.32	1,998	2,266
166.81	1,658	1,335	167.33	2,005	2,286
166.82	1,664	1,352	167.34	2,012	2,306
166.83	1,670	1,369	167.35	2,018	2,326
166.84	1,677	1,385	167.36	2,025	2,346
166.85	1,683	1,402	167.37	2,032	2,367
166.86	1,689	1,419	167.38	2,039	2,387
166.87	1,696	1,436	167.39	2,046	2,408
166.88	1,702	1,453	167.40	2,053	2,428
166.89	1,708	1,470	167.41	2,060	2,449
166.90	1,715	1,487	167.42	2,067	2,469
166.91	1,721	1,504	167.43	2,073	2,490
166.92	1,727	1,522	167.44	2,080	2,511
166.93	1,734	1,539	167.45	2,087	2,532
166.94	1,740	1,556	167.46	2,094	2,552
166.95	1,746	1,574	167.47	2,101	2,573
166.96	1,753	1,591	167.48	2,108	2,594
166.97	1,759	1,609	167.49	2,115	2,616
166.98	1,765	1,626	167.50	2,122	2,637
166.99	1,772	1,644	167.51	2,128	2,658
167.00	1,778	1,662	167.52	2,135	2,679
167.01	1,785	1,680	167.53	2,142	2,701
167.02	1,792	1,698	167.54	2,149	2,722
167.03	1,799	1,716	167.55	2,156	2,744
167.04	1,805	1,734	167.56	2,163	2,765
167.05	1,812	1,752	167.57	2,170	2,787
167.06	1,819	1,770	167.58	2,176	2,809
167.07	1,826	1,788	167.59	2,183	2,830
167.08	1,833	1,806	167.60	2,190	2,852
167.09	1,840	1,825	167.61	2,197	2,874
167.10	1,847	1,843	167.62	2,204	2,896
167.11	1,854	1,862	167.63	2,211	2,918
167.12	1,860	1,880	167.64	2,218	2,940
167.13	1,867	1,899	167.65	2,225	2,963
167.14	1,874	1,918	167.66	2,231	2,985
167.15	1,881	1,936	167.67	2,238	3,007
167.16	1,888	1,955	167.68	2,245	3,030
167.17	1,895	1,974	167.69	2,252	3,052
167.18	1,902	1,993	167.70	2,259	3,075
167.19	1,909	2,012	167.71	2,266	3,097
167.20	1,915	2,031	167.72	2,273	3,120

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.73	2,280	3,143	168.25	2,651	4,423
167.74	2,286	3,166	168.26	2,659	4,449
167.75	2,293	3,189	168.27	2,666	4,476
167.76	2,300	3,212	168.28	2,674	4,503
167.77	2,307	3,235	168.29	2,681	4,530
167.78	2,314	3,258	168.30	2,689	4,556
167.79	2,321	3,281	168.31	2,696	4,583
167.80	2,328	3,304	168.32	2,703	4,610
167.81	2,334	3,327	168.33	2,711	4,637
167.82	2,341	3,351	168.34	2,718	4,665
167.83	2,348	3,374	168.35	2,726	4,692
167.84	2,355	3,398	168.36	2,733	4,719
167.85	2,362	3,421	168.37	2,741	4,746
167.86	2,369	3,445	168.38	2,748	4,774
167.87	2,376	3,469	168.39	2,756	4,801
167.88	2,383	3,493	168.40	2,763	4,829
167.89	2,389	3,516	168.41	2,770	4,857
167.90	2,396	3,540	168.42	2,778	4,884
167.91	2,403	3,564	168.43	2,785	4,912
167.92	2,410	3,588	168.44	2,793	4,940
167.93	2,417	3,613	168.45	2,800	4,968
167.94	2,424	3,637	168.46	2,808	4,996
167.95	2,431	3,661	168.47	2,815	5,024
167.96	2,438	3,685	168.48	2,823	5,052
167.97	2,444	3,710	168.49	2,830	5,081
167.98	2,451	3,734	168.50	2,838	5,109
167.99	2,458	3,759	168.51	2,845	5,137
168.00	2,465	3,783	168.52	2,852	5,166
168.01	2,472	3,808	168.53	2,860	5,194
168.02	2,480	3,833	168.54	2,867	5,223
168.03	2,487	3,858	168.55	2,875	5,252
168.04	2,495	3,883	168.56	2,882	5,281
168.05	2,502	3,908	168.57	2,890	5,309
168.06	2,510	3,933	168.58	2,897	5,338
168.07	2,517	3,958	168.59	2,905	5,367
168.08	2,525	3,983	168.60	2,912	5,396
168.09	2,532	4,008	168.61	2,919	5,426
168.10	2,539	4,034	168.62	2,927	5,455
168.11	2,547	4,059	168.63	2,934	5,484
168.12	2,554	4,085	168.64	2,942	5,514
168.13	2,562	4,110	168.65	2,949	5,543
168.14	2,569	4,136	168.66	2,957	5,573
168.15	2,577	4,162	168.67	2,964	5,602
168.16	2,584	4,187	168.68	2,972	5,632
168.17	2,592	4,213	168.69	2,979	5,662
168.18	2,599	4,239	168.70	2,987	5,691
168.19	2,607	4,265	168.71	2,994	5,721
168.20	2,614	4,291	168.72	3,001	5,751
168.21	2,621	4,317	168.73	3,009	5,781
168.22	2,629	4,344	168.74	3,016	5,811
168.23	2,636	4,370	168.75	3,024	5,842
168.24	2,644	4,396	168.76	3,031	5,872

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.77	3,039	5,902	169.29	3,443	7,585
168.78	3,046	5,933	169.30	3,451	7,620
168.79	3,054	5,963	169.31	3,459	7,655
168.80	3,061	5,994	169.32	3,467	7,689
168.81	3,068	6,024	169.33	3,475	7,724
168.82	3,076	6,055	169.34	3,483	7,759
168.83	3,083	6,086	169.35	3,491	7,793
168.84	3,091	6,117	169.36	3,499	7,828
168.85	3,098	6,148	169.37	3,507	7,863
168.86	3,106	6,179	169.38	3,515	7,899
168.87	3,113	6,210	169.39	3,523	7,934
168.88	3,121	6,241	169.40	3,531	7,969
168.89	3,128	6,272	169.41	3,539	8,004
168.90	3,136	6,304	169.42	3,547	8,040
168.91	3,143	6,335	169.43	3,555	8,075
168.92	3,150	6,366	169.44	3,563	8,111
168.93	3,158	6,398	169.45	3,571	8,147
168.94	3,165	6,430	169.46	3,579	8,182
168.95	3,173	6,461	169.47	3,587	8,218
168.96	3,180	6,493	169.48	3,595	8,254
168.97	3,188	6,525	169.49	3,603	8,290
168.98	3,195	6,557	169.50	3,611	8,326
168.99	3,203	6,589	169.51	3,619	8,362
169.00	3,210	6,621	169.52	3,627	8,399
169.01	3,218	6,653	169.53	3,635	8,435
169.02	3,226	6,685	169.54	3,643	8,471
169.03	3,234	6,718	169.55	3,651	8,508
169.04	3,242	6,750	169.56	3,659	8,544
169.05	3,250	6,782	169.57	3,667	8,581
169.06	3,258	6,815	169.58	3,675	8,618
169.07	3,266	6,848	169.59	3,683	8,654
169.08	3,274	6,880	169.60	3,691	8,691
169.09	3,282	6,913	169.61	3,699	8,728
169.10	3,290	6,946	169.62	3,707	8,765
169.11	3,298	6,979	169.63	3,715	8,802
169.12	3,306	7,012	169.64	3,723	8,840
169.13	3,314	7,045	169.65	3,731	8,877
169.14	3,322	7,078	169.66	3,739	8,914
169.15	3,330	7,111	169.67	3,747	8,952
169.16	3,338	7,145	169.68	3,755	8,989
169.17	3,346	7,178	169.69	3,763	9,027
169.18	3,354	7,212	169.70	3,771	9,064
169.19	3,362	7,245	169.71	3,779	9,102
169.20	3,370	7,279	169.72	3,787	9,140
169.21	3,378	7,313	169.73	3,795	9,178
169.22	3,386	7,346	169.74	3,803	9,216
169.23	3,394	7,380	169.75	3,812	9,254
169.24	3,402	7,414	169.76	3,820	9,292
169.25	3,411	7,448	169.77	3,828	9,330
169.26	3,419	7,483	169.78	3,836	9,369
169.27	3,427	7,517	169.79	3,844	9,407
169.28	3,435	7,551	169.80	3,852	9,446

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

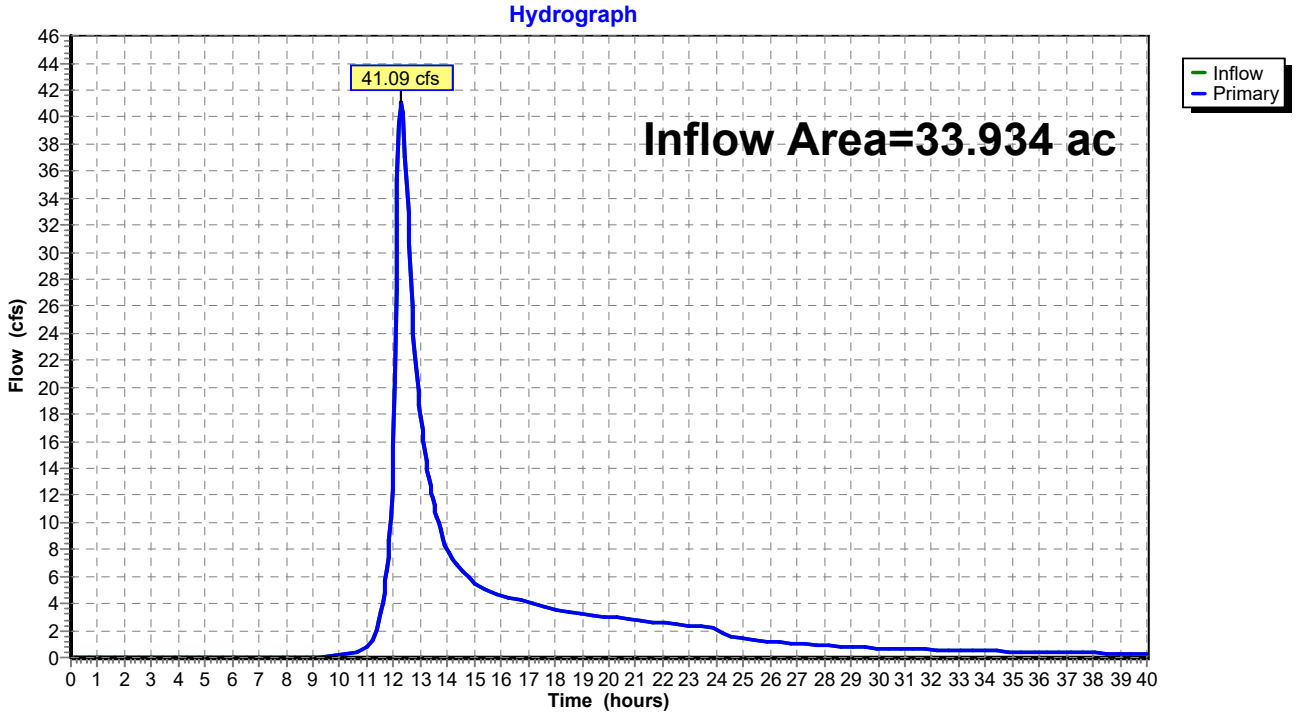
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.81	3,860	9,484
169.82	3,868	9,523
169.83	3,876	9,561
169.84	3,884	9,600
169.85	3,892	9,639
169.86	3,900	9,678
169.87	3,908	9,717
169.88	3,916	9,756
169.89	3,924	9,795
169.90	3,932	9,835
169.91	3,940	9,874
169.92	3,948	9,913
169.93	3,956	9,953
169.94	3,964	9,993
169.95	3,972	10,032
169.96	3,980	10,072
169.97	3,988	10,112
169.98	3,996	10,152
169.99	4,004	10,192
170.00	4,012	10,232
170.01	4,018	10,272
170.02	4,025	10,312
170.03	4,031	10,353
170.04	4,038	10,393
170.05	4,044	10,433
170.06	4,051	10,474
170.07	4,057	10,514
170.08	4,064	10,555
170.09	4,070	10,596
170.10	4,076	10,636
170.11	4,083	10,677
170.12	4,089	10,718
170.13	4,096	10,759
170.14	4,102	10,800
170.15	4,109	10,841
170.16	4,115	10,882
170.17	4,121	10,923
170.18	4,128	10,964
170.19	4,134	11,006
170.20	4,141	11,047
170.21	4,147	11,089
170.22	4,154	11,130
170.23	4,160	11,172
170.24	4,167	11,213
170.25	4,173	11,255
170.26	4,179	11,297
170.27	4,186	11,339
170.28	4,192	11,380
170.29	4,199	11,422
170.30	4,205	11,464
170.31	4,212	11,507
170.32	4,218	11,549
170.33	4,225	11,591
170.34	4,231	11,633
170.35	4,237	11,676
170.36	4,244	11,718
170.37	4,250	11,760
170.38	4,257	11,803
170.39	4,263	11,846
170.40	4,270	11,888
170.41	4,276	11,931
170.42	4,282	11,974
170.43	4,289	12,017
170.44	4,295	12,059
170.45	4,302	12,102
170.46	4,308	12,146
170.47	4,315	12,189
170.48	4,321	12,232
170.49	4,328	12,275
170.50	**4,334**	**12,318**

Summary for Link PDA-2: Proposed Drainage Area #2

Inflow Area = 33.934 ac, 26.90% Impervious, Inflow Depth > 2.75" for Current 10 yr event
Inflow = 41.09 cfs @ 12.30 hrs, Volume= 7.777 af
Primary = 41.09 cfs @ 12.30 hrs, Volume= 7.777 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-2: Proposed Drainage Area #2



Summary for Subcatchment 18I: PDA-18 (impervious)

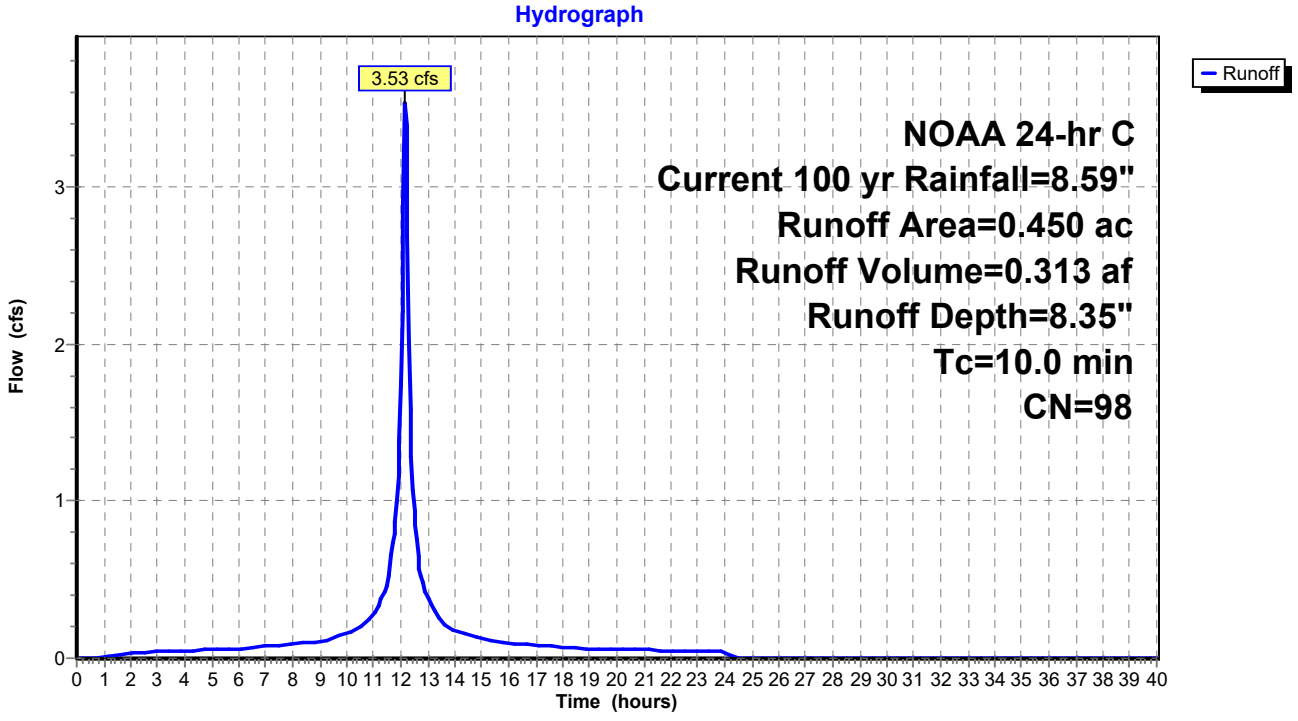
Runoff = 3.53 cfs @ 12.17 hrs, Volume= 0.313 af, Depth= 8.35"
Routed to Pond B-18 : Basin #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.450	98	Weighted Average
	0.450		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 18I: PDA-18 (impervious)



Summary for Subcatchment 18P: PDA-18 (pervious)

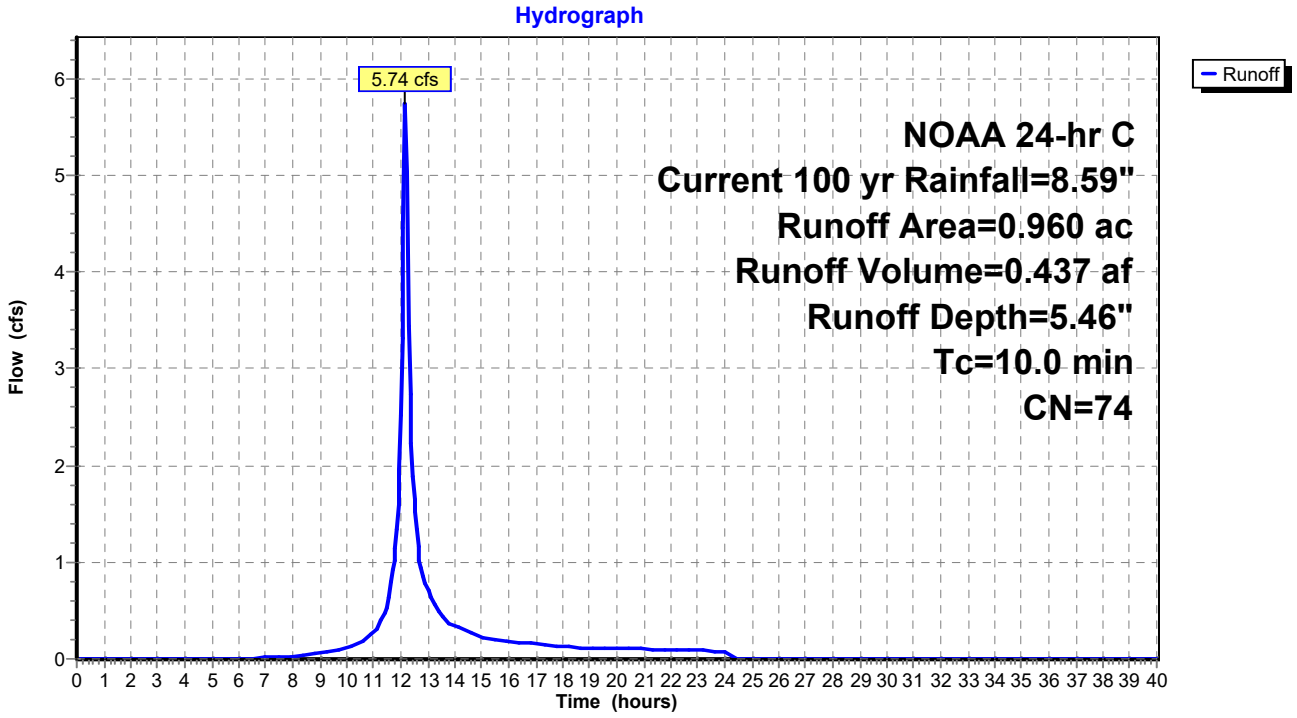
Runoff = 5.74 cfs @ 12.17 hrs, Volume= 0.437 af, Depth= 5.46"
Routed to Pond B-18 : Basin #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.960	74	>75% Grass cover, Good, HSG C
0.960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 18P: PDA-18 (pervious)



Summary for Subcatchment 19l: PDA-19 (impervious)

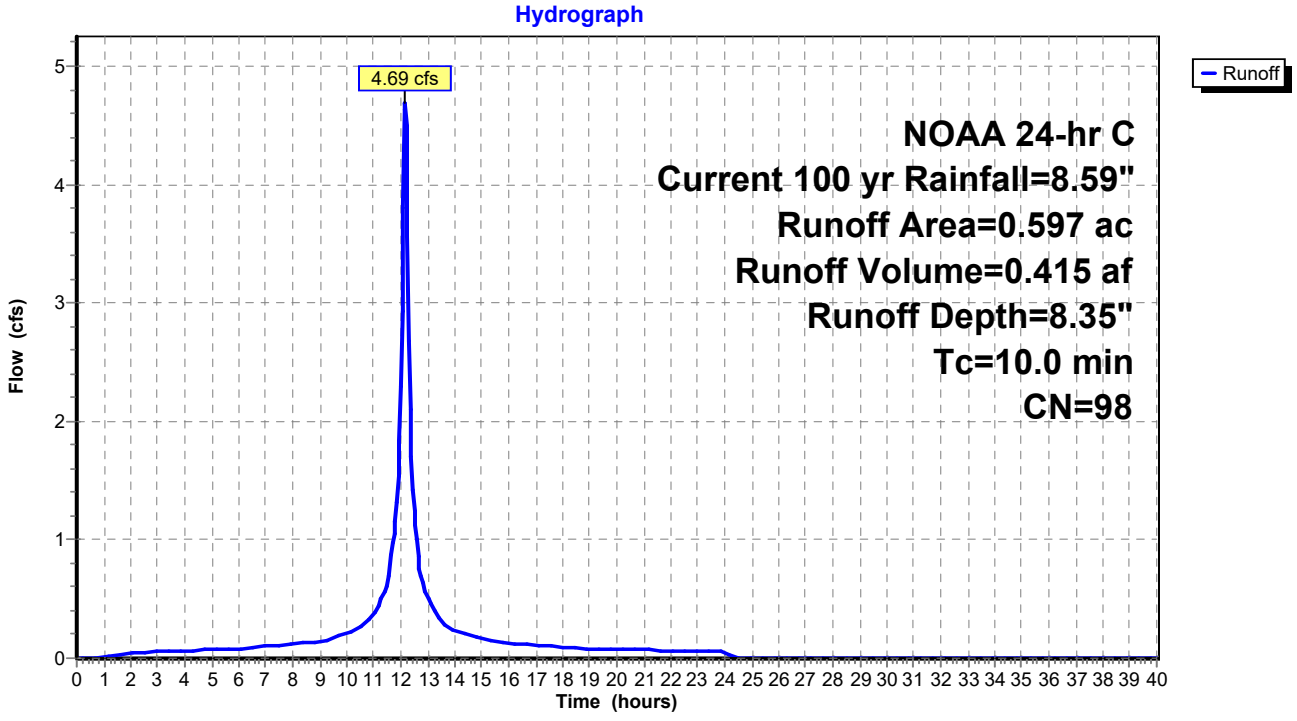
Runoff = 4.69 cfs @ 12.17 hrs, Volume= 0.415 af, Depth= 8.35"
Routed to Pond B-19 : Basin #19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.132	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.015	98	Concrete, HSG C
	0.597	98	Weighted Average
	0.597		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19l: PDA-19 (impervious)



Summary for Subcatchment 19P: PDA-19 (pervious)

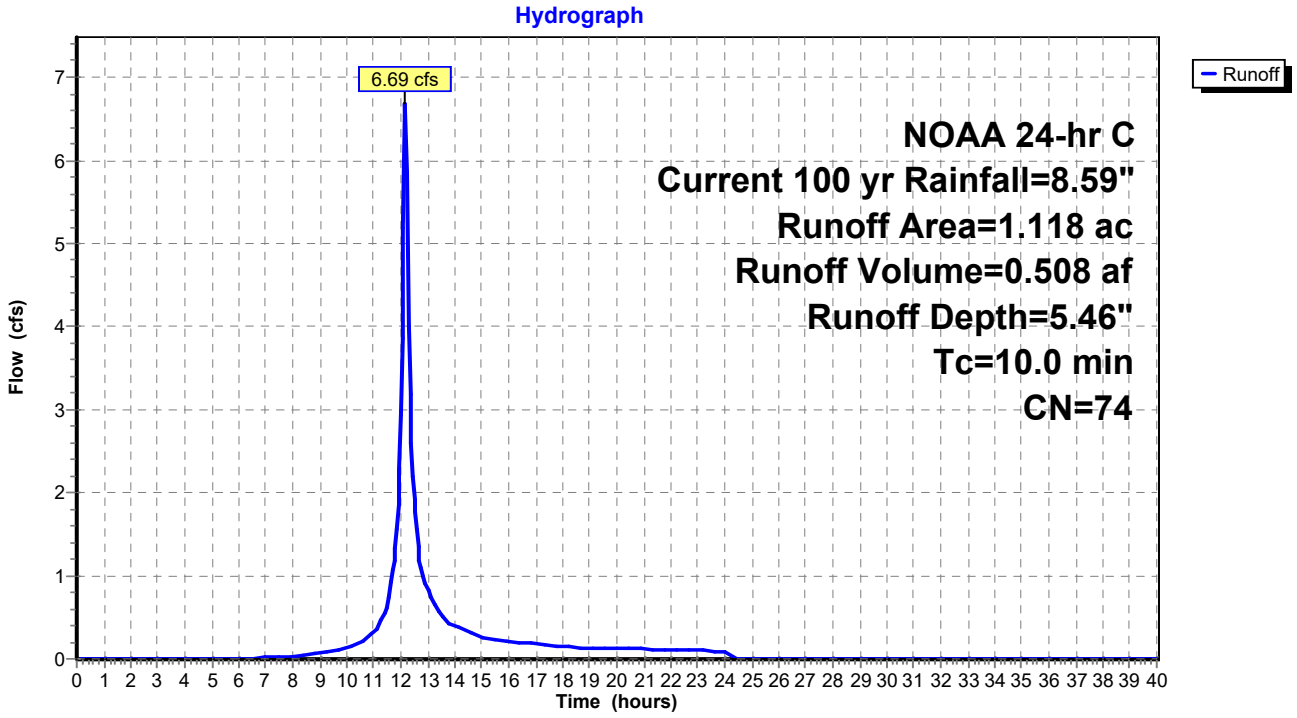
Runoff = 6.69 cfs @ 12.17 hrs, Volume= 0.508 af, Depth= 5.46"
Routed to Pond B-19 : Basin #19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.118	74	>75% Grass cover, Good, HSG C
1.118		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19P: PDA-19 (pervious)



Summary for Subcatchment 20l: PDA-20 (impervious)

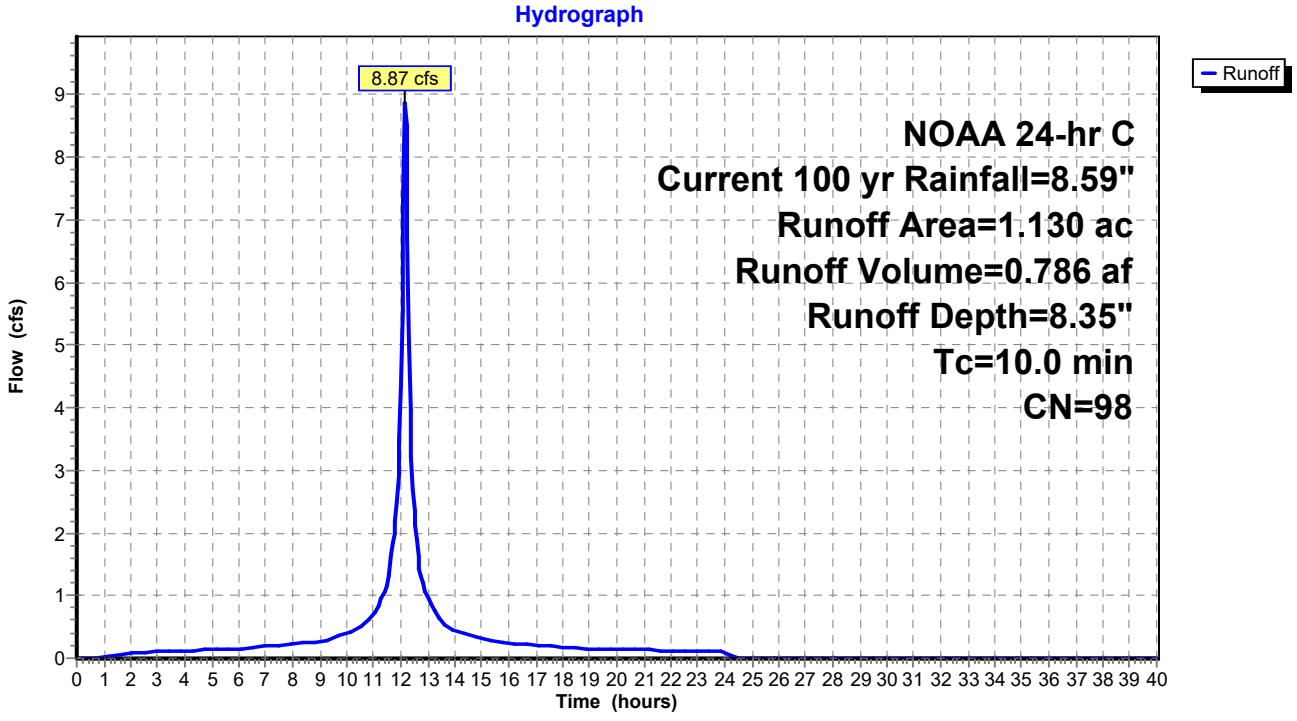
Runoff = 8.87 cfs @ 12.17 hrs, Volume= 0.786 af, Depth= 8.35"
Routed to Pond B-20 : Basin #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.572	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.108	98	Concrete, HSC C
	1.130	98	Weighted Average
	1.130		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 20l: PDA-20 (impervious)



Summary for Subcatchment 20P: PDA-20 (pervious)

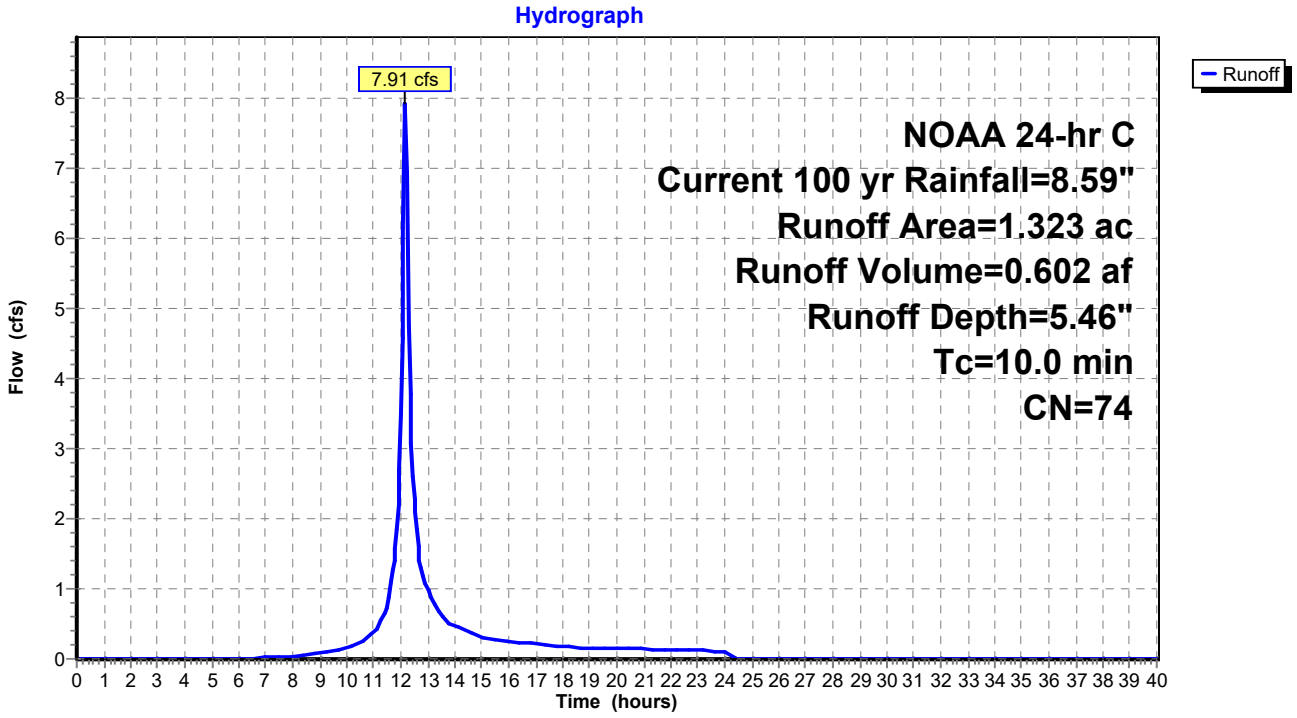
Runoff = 7.91 cfs @ 12.17 hrs, Volume= 0.602 af, Depth= 5.46"
Routed to Pond B-20 : Basin #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.323	74	>75% Grass cover, Good, HSG C
1.323		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 20P: PDA-20 (pervious)



Summary for Subcatchment 21I: PDA-21 (impervious)

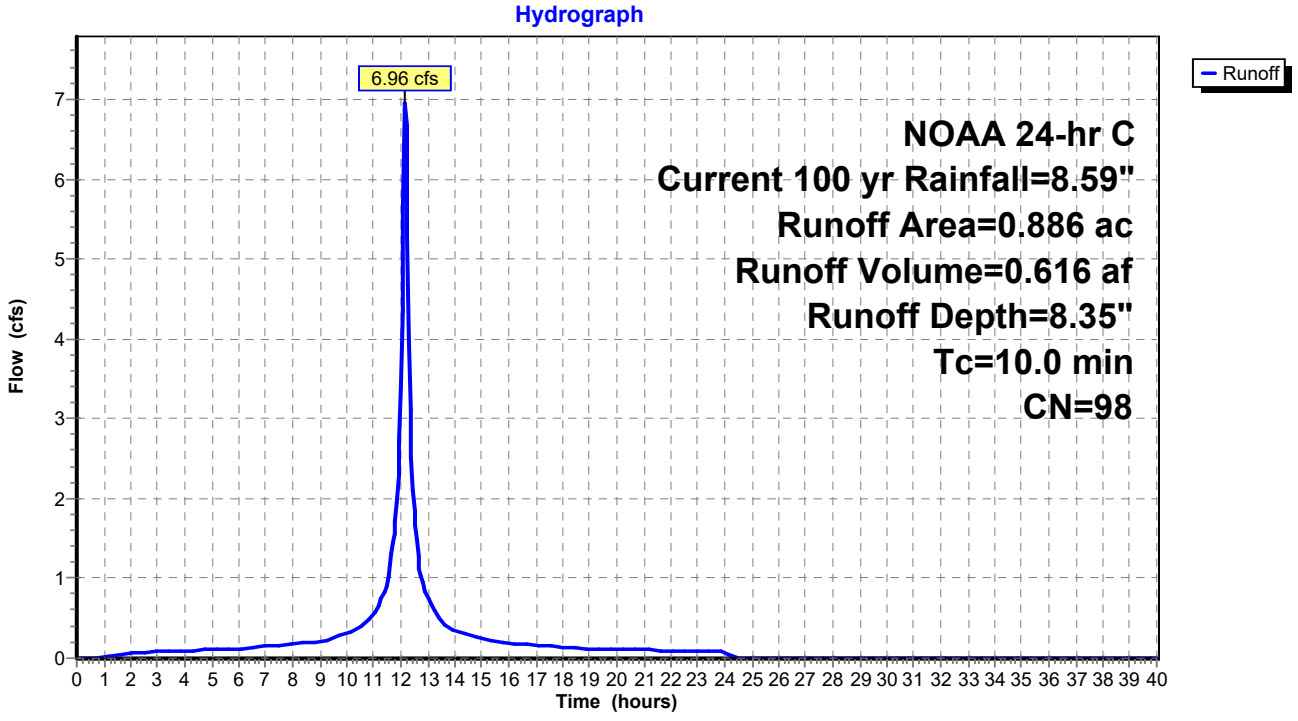
Runoff = 6.96 cfs @ 12.17 hrs, Volume= 0.616 af, Depth= 8.35"
Routed to Pond B-21 : Basin #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.511	98	Pavement, HSG C
*	0.321	98	Roof, HSG C
*	0.054	98	Concrete, HSC C
	0.886	98	Weighted Average
	0.886		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21I: PDA-21 (impervious)



Summary for Subcatchment 21P: PDA-21 (pervious)

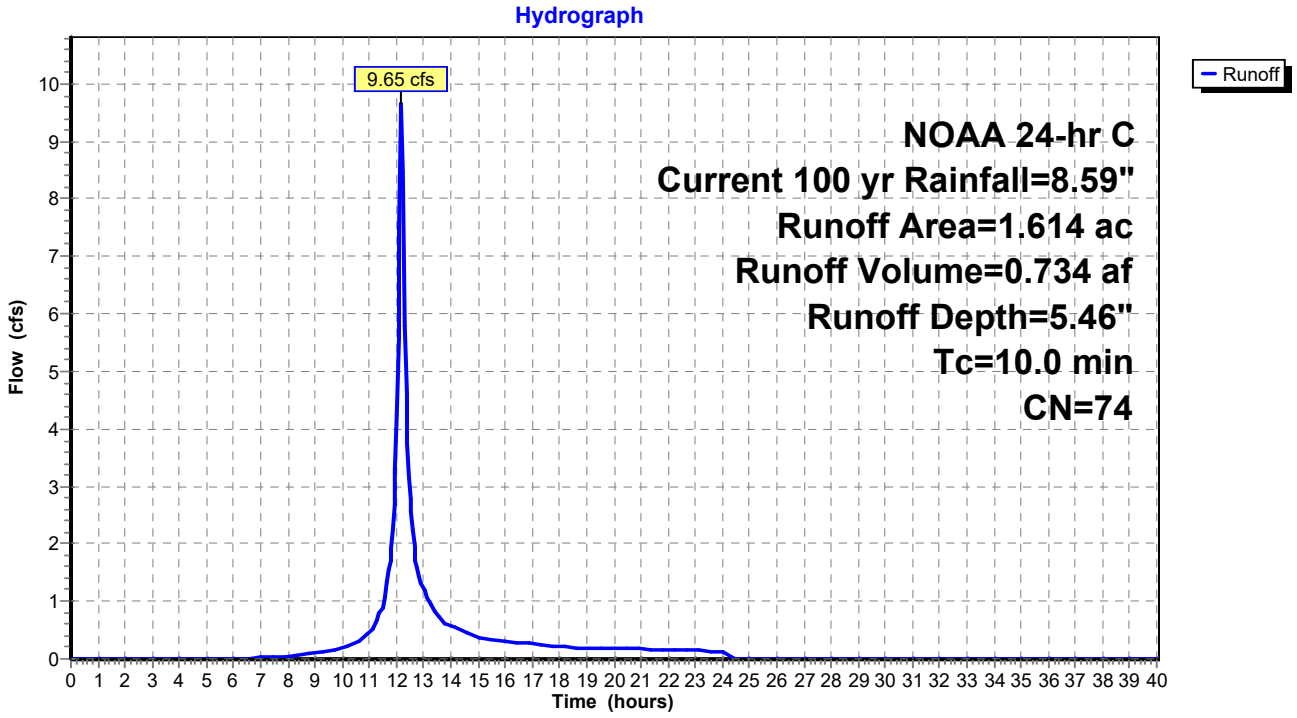
Runoff = 9.65 cfs @ 12.17 hrs, Volume= 0.734 af, Depth= 5.46"
Routed to Pond B-21 : Basin #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.614	74	>75% Grass cover, Good, HSG C
1.614		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21P: PDA-21 (pervious)



Summary for Subcatchment 22I: PDA-22 (impervious)

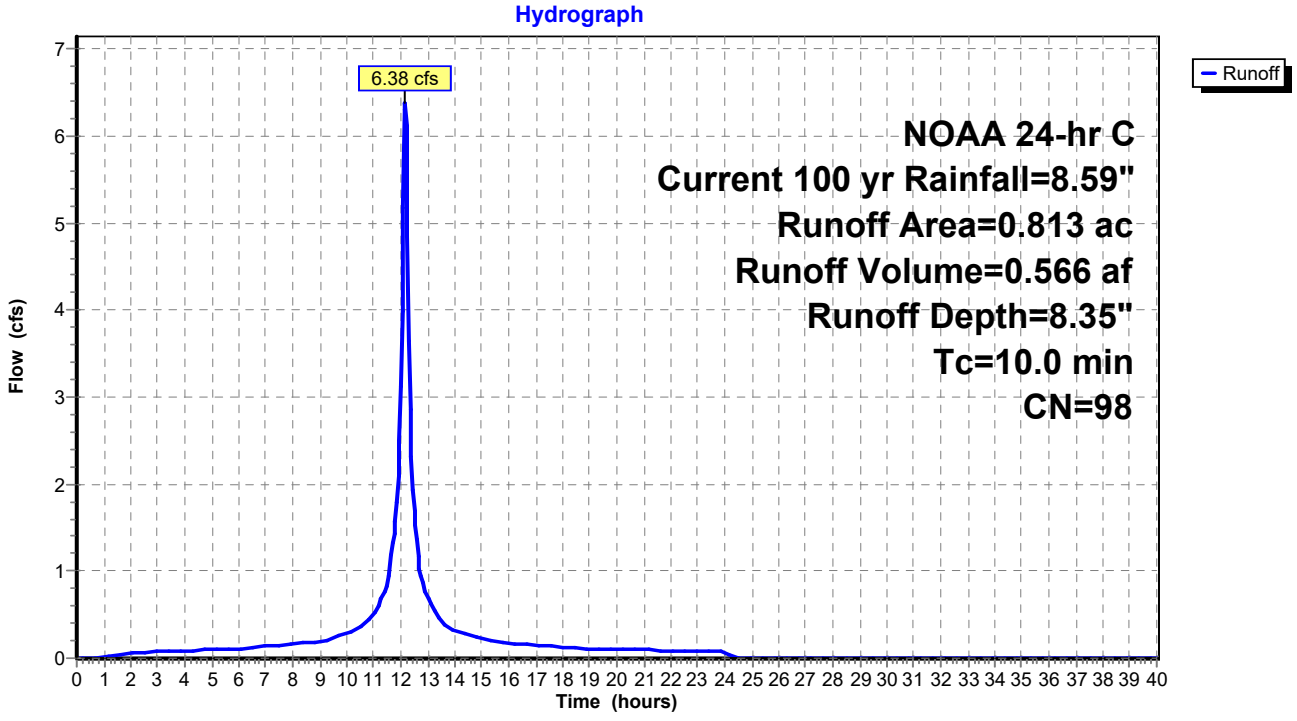
Runoff = 6.38 cfs @ 12.17 hrs, Volume= 0.566 af, Depth= 8.35"
Routed to Pond B-22 : Basin #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.083	98	Pavement, HSG C
*	0.707	98	Roof, HSG C
*	0.023	98	Concrete, HSC C
	0.813	98	Weighted Average
	0.813		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 22I: PDA-22 (impervious)



Summary for Subcatchment 22P: PDA-22 (pervious)

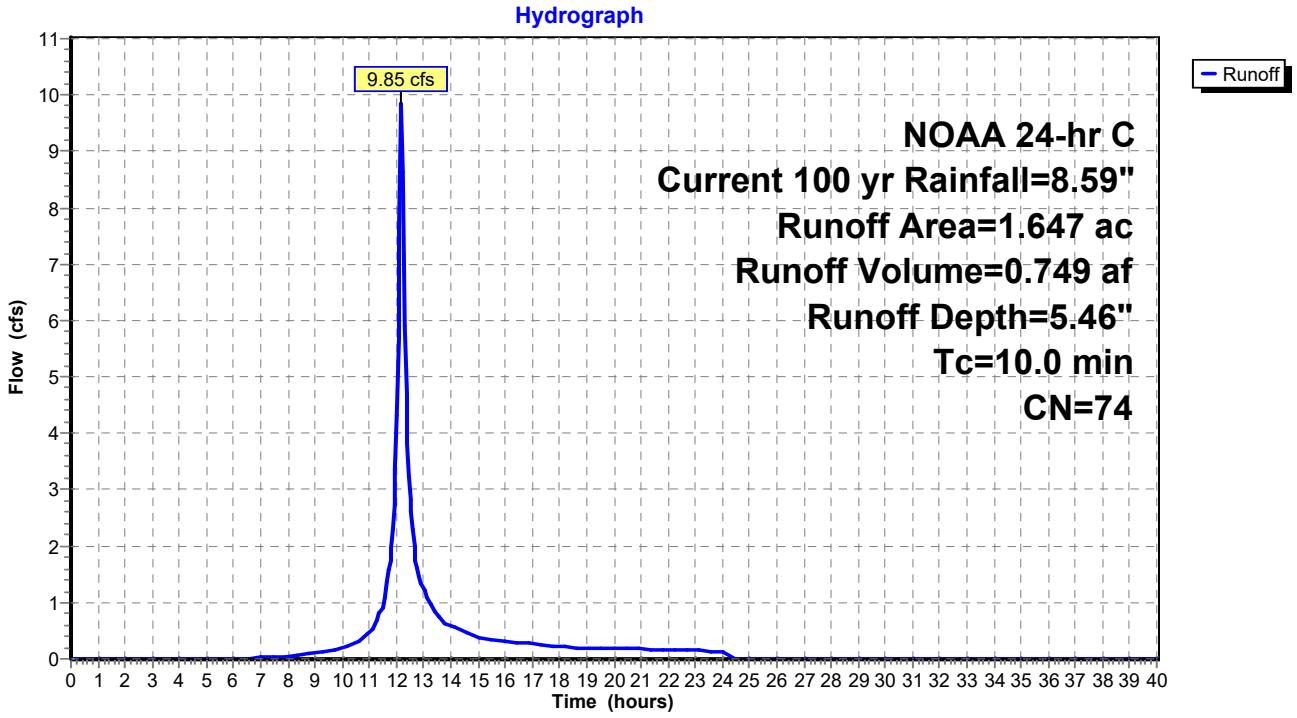
Runoff = 9.85 cfs @ 12.17 hrs, Volume= 0.749 af, Depth= 5.46"
Routed to Pond B-22 : Basin #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.647	74	>75% Grass cover, Good, HSG C
1.647		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 22P: PDA-22 (pervious)



Summary for Subcatchment 23I: PDA-23 (impervious)

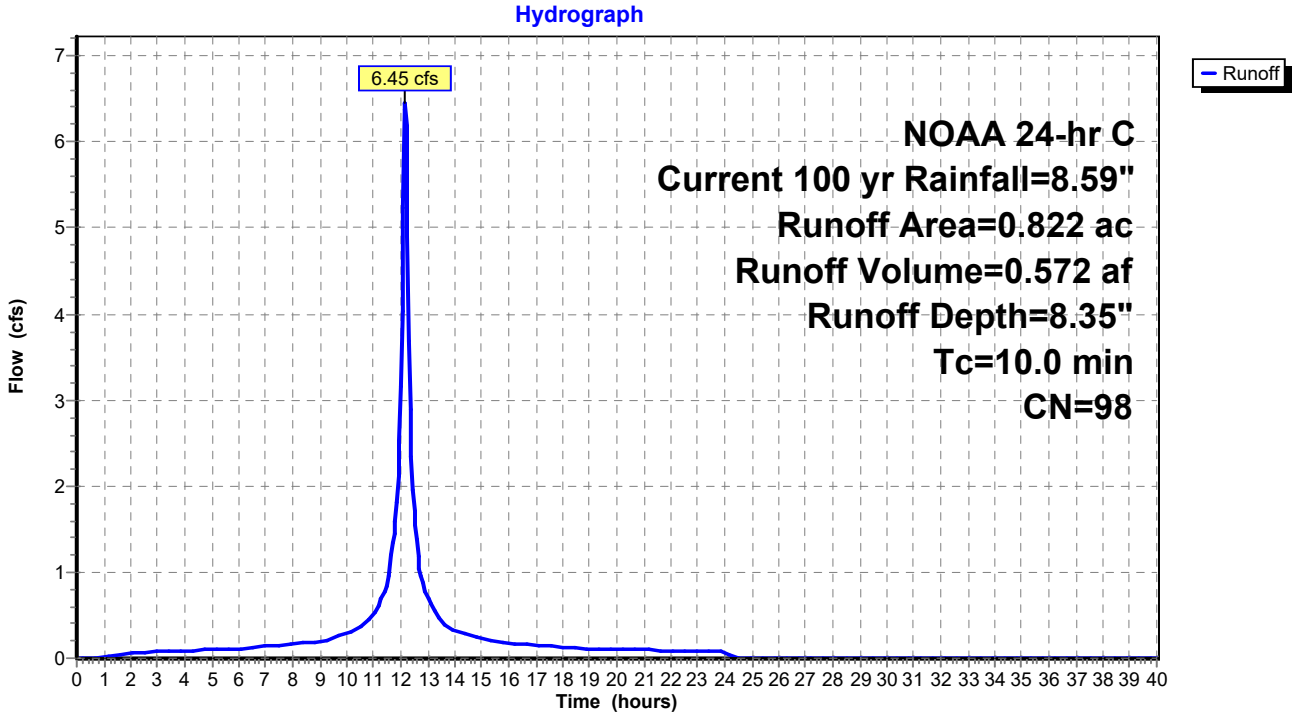
Runoff = 6.45 cfs @ 12.17 hrs, Volume= 0.572 af, Depth= 8.35"
Routed to Pond B-23 : Basin #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.719	98	Pavement, HSG C
*	0.103	98	Concrete, HSG C
	0.000	98	Roofs, HSG C
	0.822	98	Weighted Average
	0.822		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 23I: PDA-23 (impervious)



Summary for Subcatchment 23P: PDA-23 (pervious)

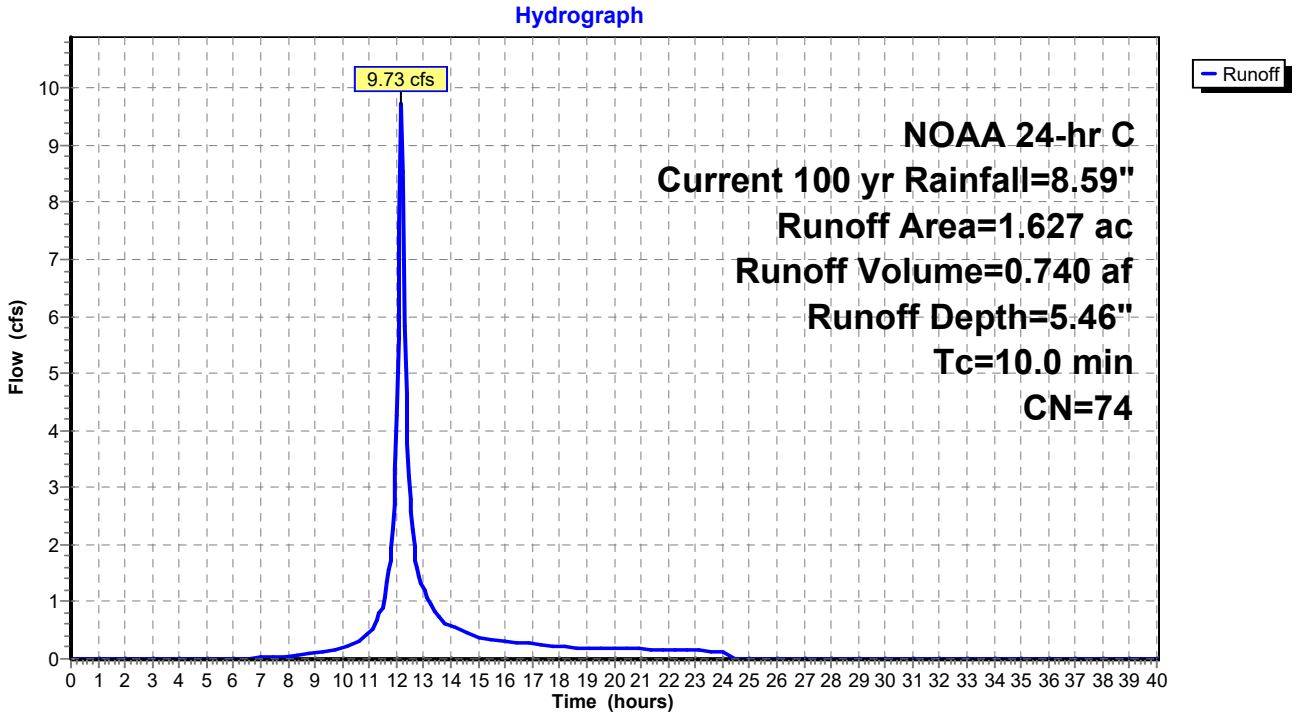
Runoff = 9.73 cfs @ 12.17 hrs, Volume= 0.740 af, Depth= 5.46"
Routed to Pond B-23 : Basin #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.627	74	>75% Grass cover, Good, HSG C
1.627		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 23P: PDA-23 (pervious)



Summary for Subcatchment 24I: PDA-24 (impervious)

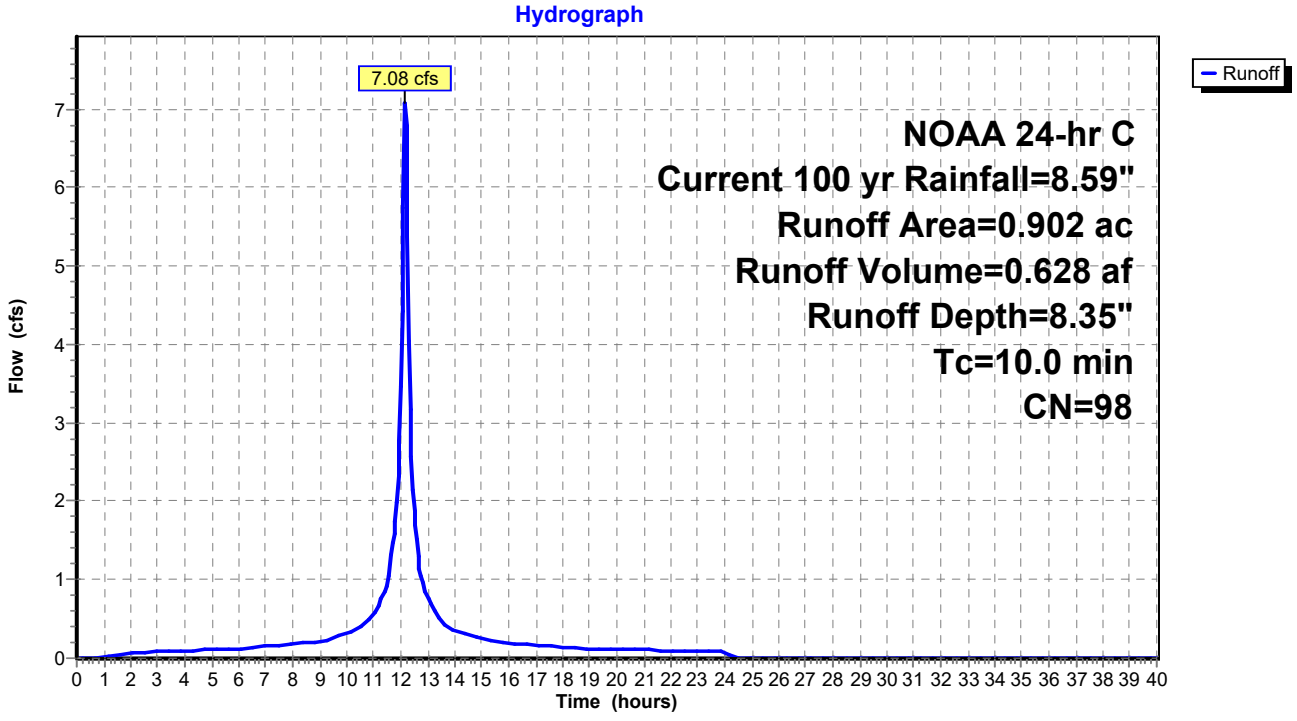
Runoff = 7.08 cfs @ 12.17 hrs, Volume= 0.628 af, Depth= 8.35"
Routed to Pond B-24 : Basin #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.277	98	Pavement, HSG C
*	0.579	98	Roof, HSG C
*	0.046	98	Concrete, HSC C
	0.902	98	Weighted Average
	0.902		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 24I: PDA-24 (impervious)



Summary for Subcatchment 24P: PDA-24 (pervious)

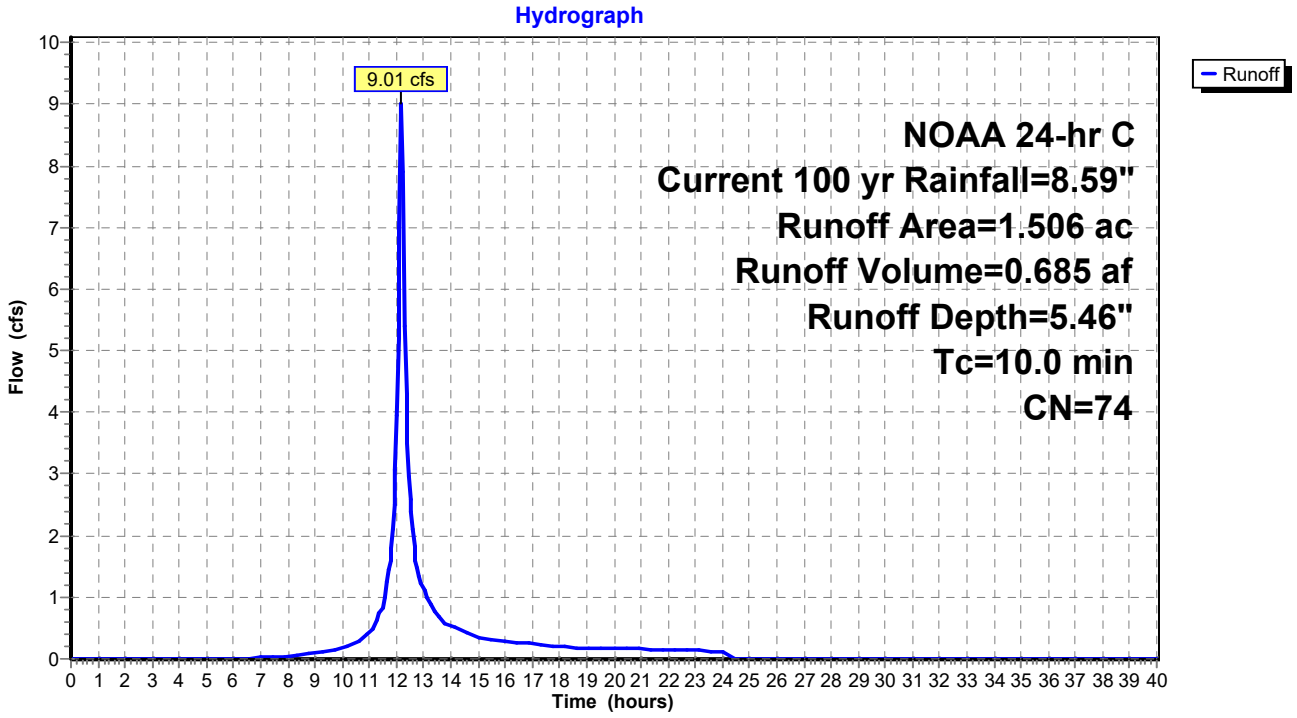
Runoff = 9.01 cfs @ 12.17 hrs, Volume= 0.685 af, Depth= 5.46"
Routed to Pond B-24 : Basin #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.506	74	>75% Grass cover, Good, HSG C
1.506		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 24P: PDA-24 (pervious)



Summary for Subcatchment 25l: PDA-25 (impervious)

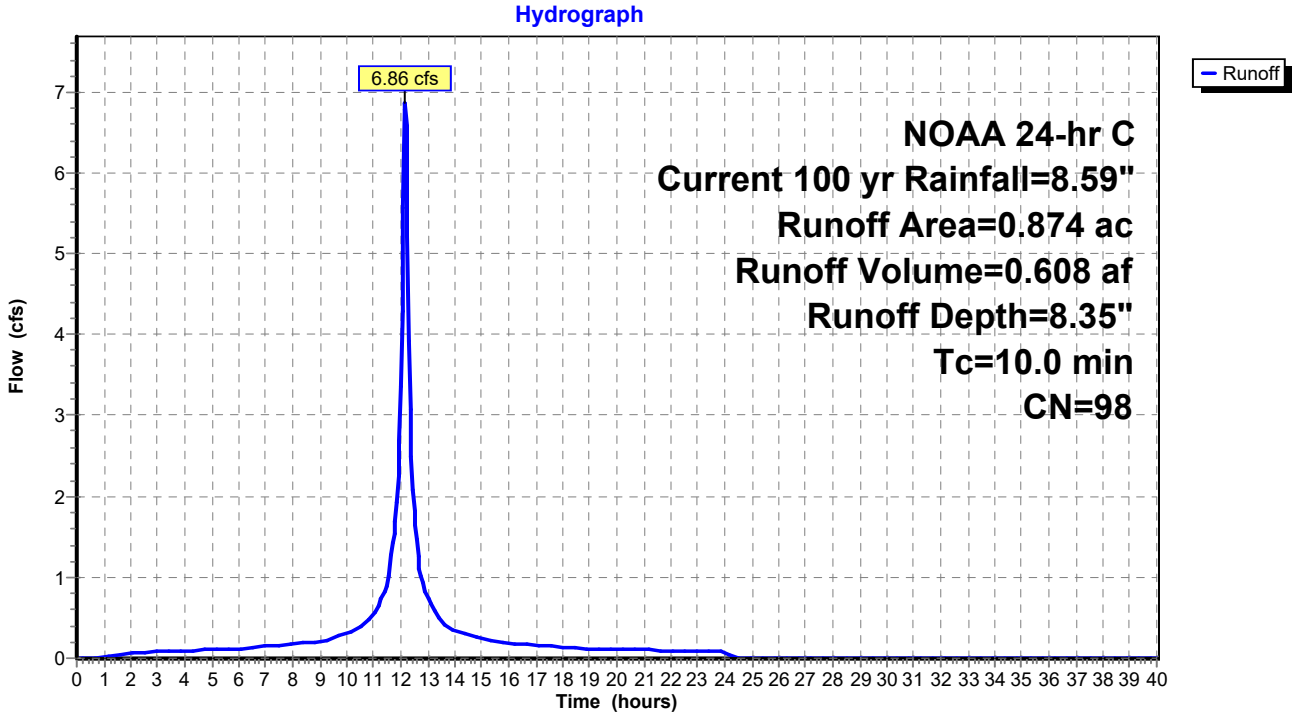
Runoff = 6.86 cfs @ 12.17 hrs, Volume= 0.608 af, Depth= 8.35"
Routed to Pond B-25 : Basin #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.388	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.036	98	Concrete, HSC C
	0.874	98	Weighted Average
	0.874		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 25l: PDA-25 (impervious)



Summary for Subcatchment 25P: PDA-25 (pervious)

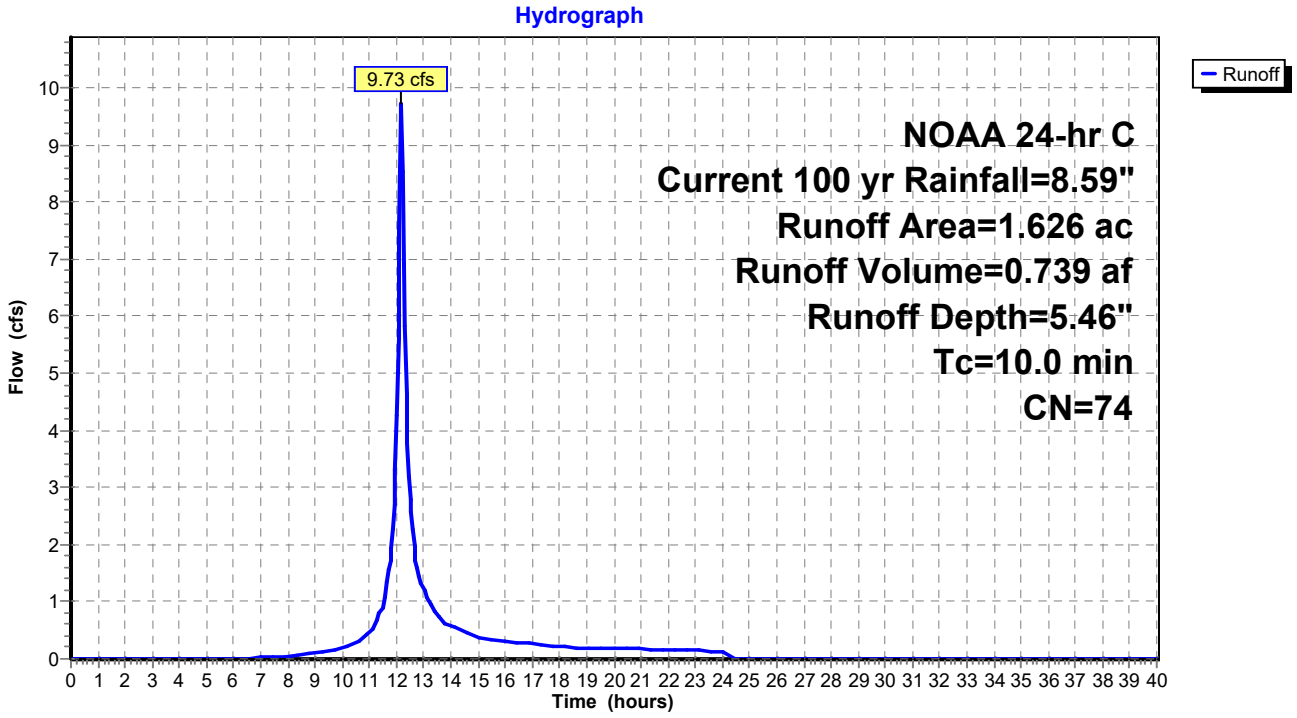
Runoff = 9.73 cfs @ 12.17 hrs, Volume= 0.739 af, Depth= 5.46"
Routed to Pond B-25 : Basin #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.626	74	>75% Grass cover, Good, HSG C
1.626		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 25P: PDA-25 (pervious)



Summary for Subcatchment 26l: PDA-26 (impervious)

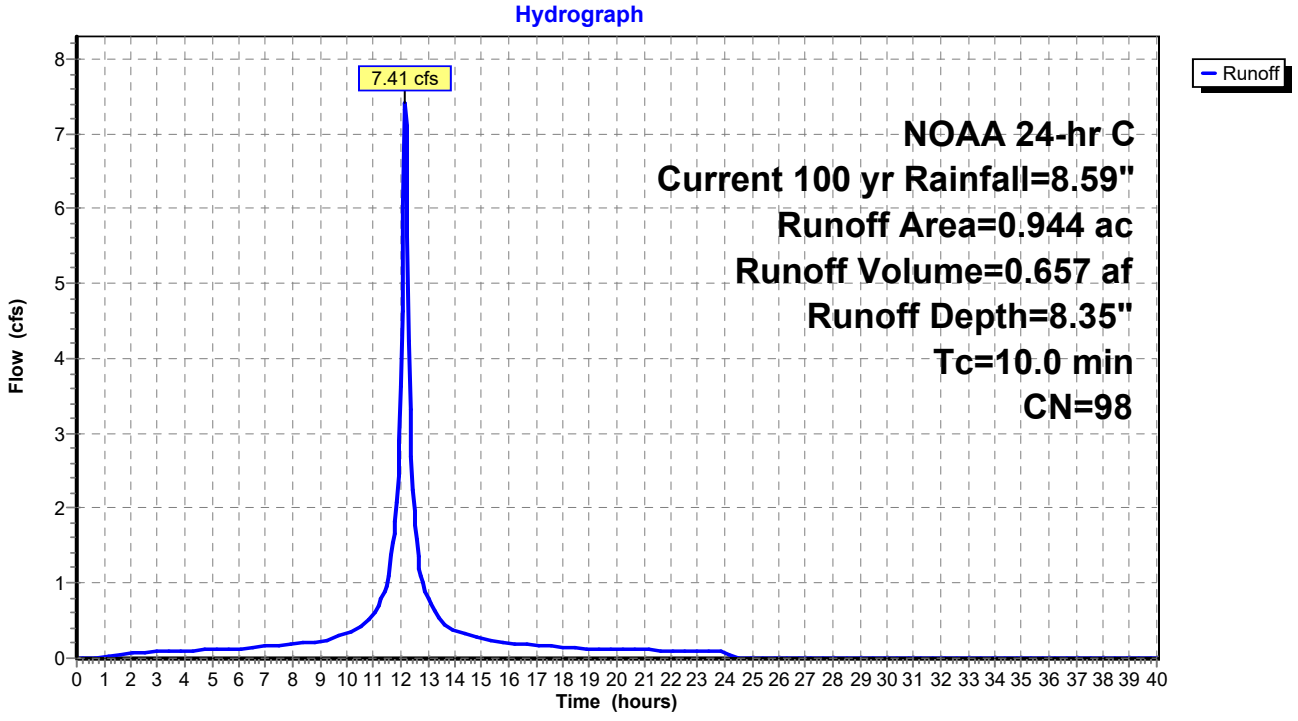
Runoff = 7.41 cfs @ 12.17 hrs, Volume= 0.657 af, Depth= 8.35"
Routed to Pond B-26 : Basin #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.944	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.944	98	Weighted Average
	0.944		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 26l: PDA-26 (impervious)



Summary for Subcatchment 26P: PDA-26 (pervious)

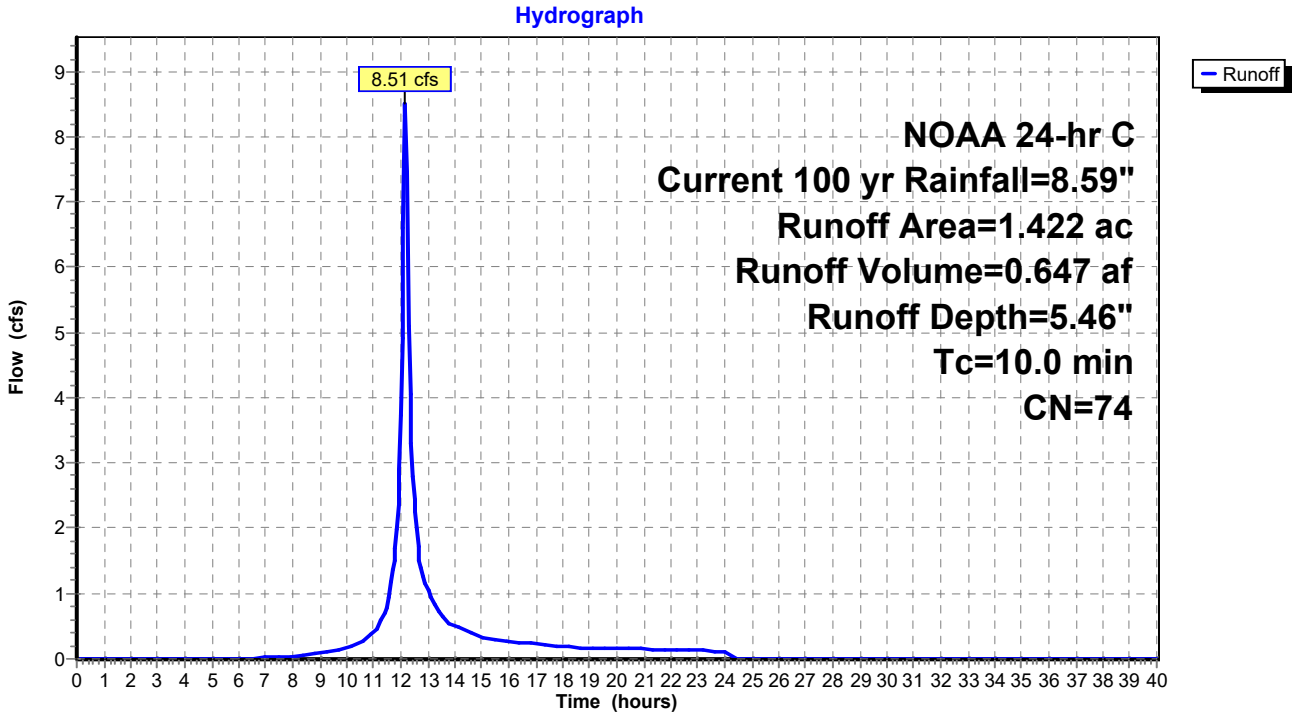
Runoff = 8.51 cfs @ 12.17 hrs, Volume= 0.647 af, Depth= 5.46"
Routed to Pond B-26 : Basin #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.422	74	>75% Grass cover, Good, HSG C
1.422		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 26P: PDA-26 (pervious)



Summary for Subcatchment 27I: PDA-27 (impervious)

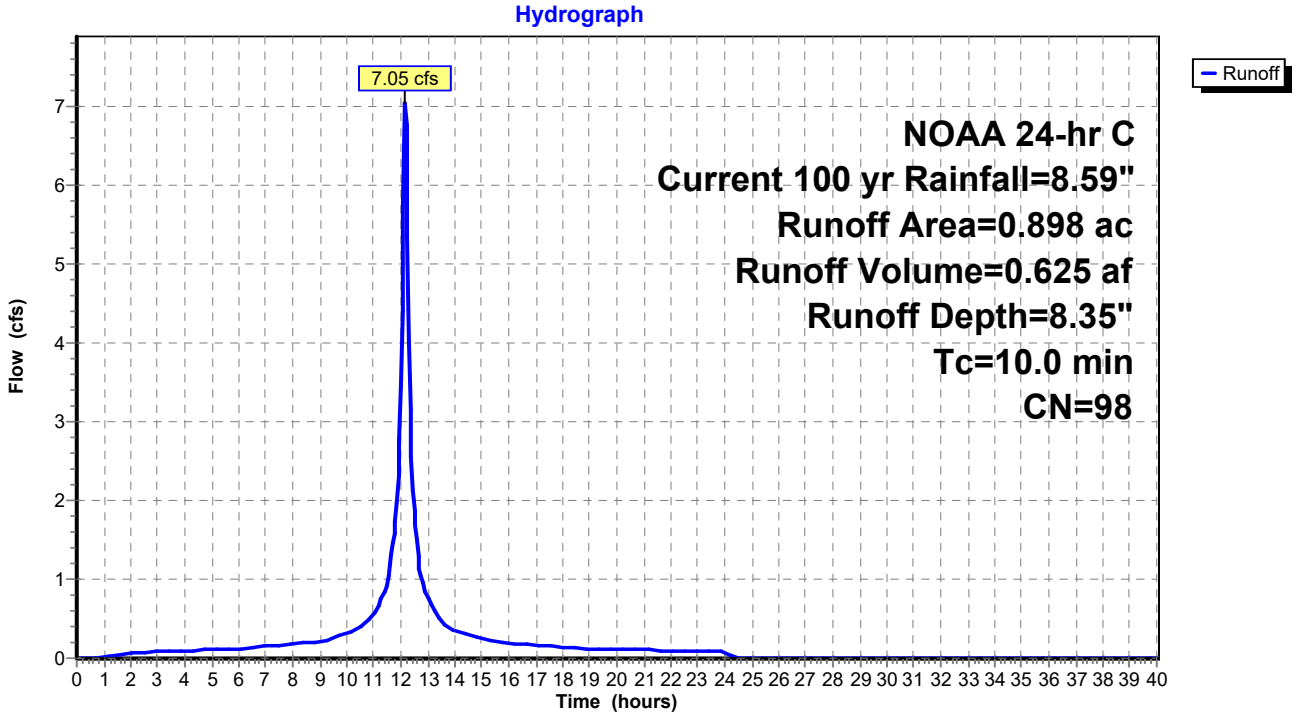
Runoff = 7.05 cfs @ 12.17 hrs, Volume= 0.625 af, Depth= 8.35"
Routed to Pond B-27 : Basin #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.233	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.022	98	Concrete, HSC C
	0.898	98	Weighted Average
	0.898		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 27I: PDA-27 (impervious)



Summary for Subcatchment 27P: PDA-27 (pervious)

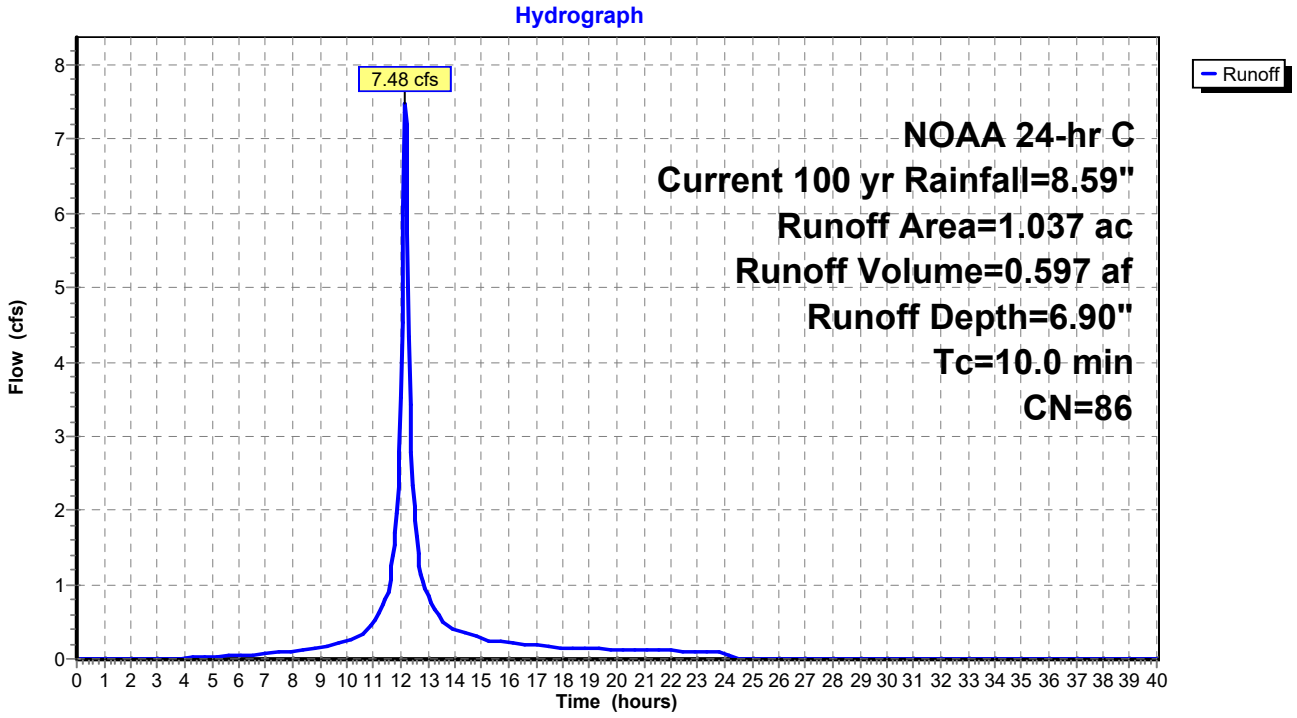
Runoff = 7.48 cfs @ 12.17 hrs, Volume= 0.597 af, Depth= 6.90"
Routed to Pond B-27 : Basin #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.037	86	<50% Grass cover, Poor, HSG C
1.037		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 27P: PDA-27 (pervious)



Summary for Subcatchment 28I: PDA-28 (impervious)

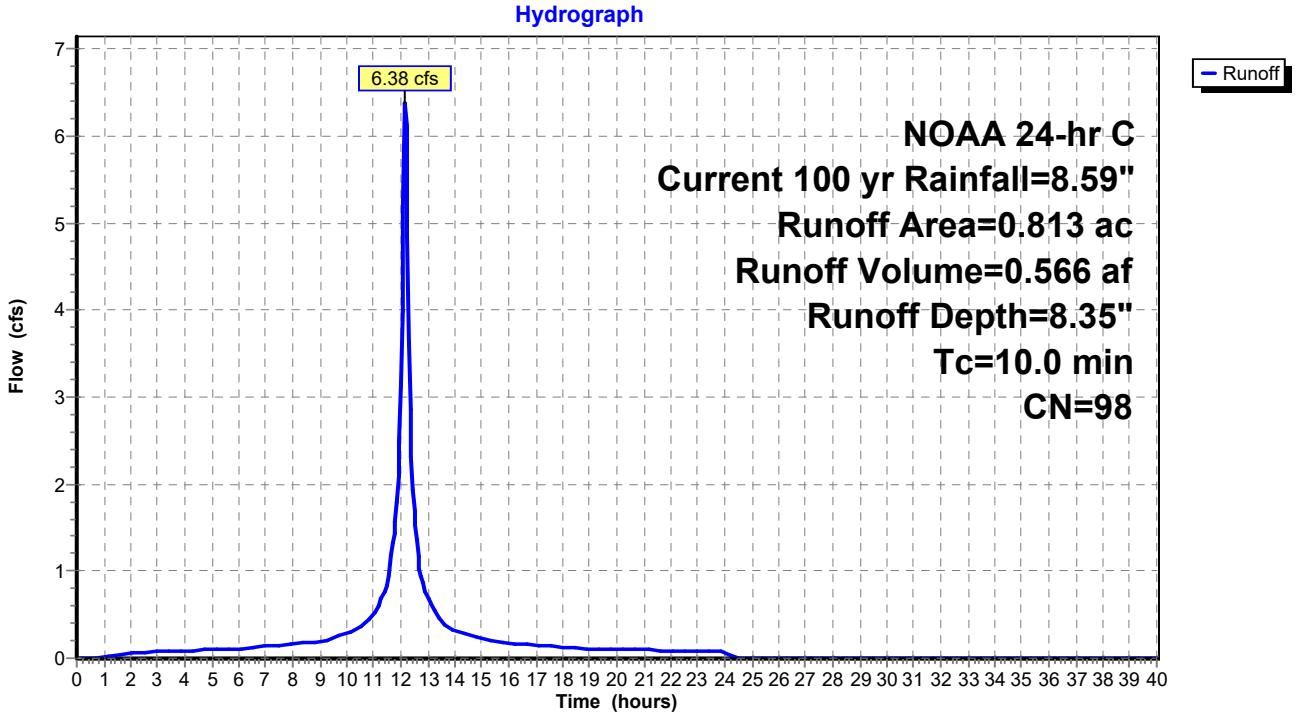
Runoff = 6.38 cfs @ 12.17 hrs, Volume= 0.566 af, Depth= 8.35"
Routed to Pond B-28 : Basin #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.235	98	Pavement, HSG C
*	0.541	98	Roof, HSG C
*	0.037	98	Concrete, HSC C
	0.813	98	Weighted Average
	0.813		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 28I: PDA-28 (impervious)



Summary for Subcatchment 28P: PDA-28 (pervious)

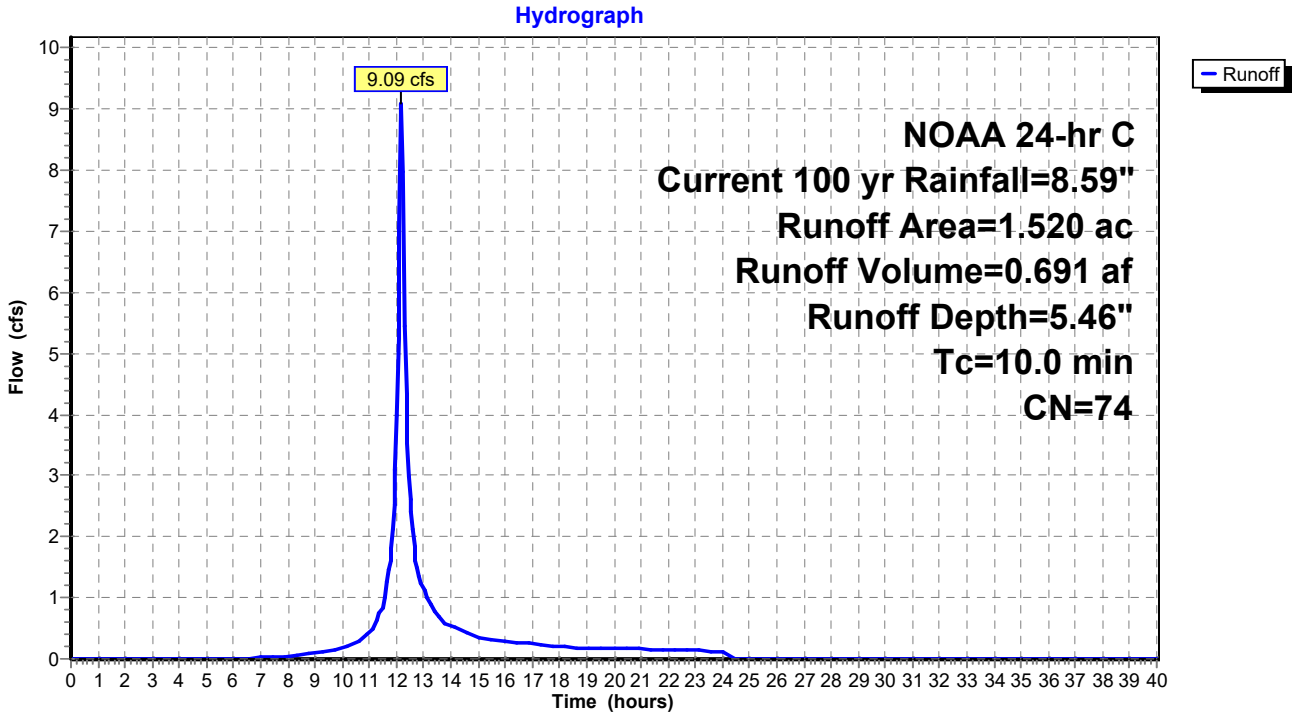
Runoff = 9.09 cfs @ 12.17 hrs, Volume= 0.691 af, Depth= 5.46"
Routed to Pond B-28 : Basin #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.520	74	>75% Grass cover, Good, HSG C
1.520		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 28P: PDA-28 (pervious)



Summary for Subcatchment UPDA-2: PDA-2 (undetained)

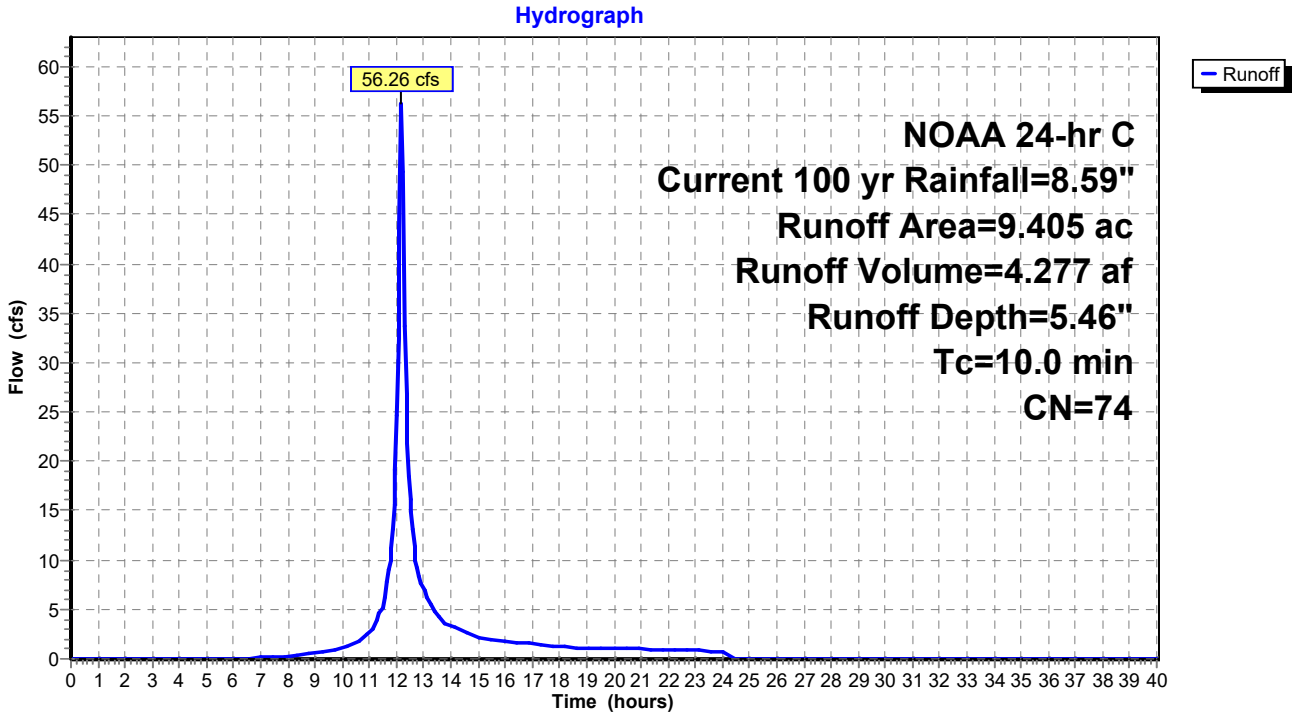
Runoff = 56.26 cfs @ 12.17 hrs, Volume= 4.277 af, Depth= 5.46"
Routed to Link PDA-2 : Proposed Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
9.405	74	>75% Grass cover, Good, HSG C
9.405		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-2: PDA-2 (undetained)



Summary for Pond B-18: Basin #18

Inflow Area = 1.410 ac, 31.91% Impervious, Inflow Depth = 6.38" for Current 100 yr event
Inflow = 9.27 cfs @ 12.17 hrs, Volume= 0.750 af
Outflow = 8.31 cfs @ 12.22 hrs, Volume= 0.704 af, Atten= 10%, Lag= 3.1 min
Primary = 8.31 cfs @ 12.22 hrs, Volume= 0.704 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 190.08' @ 12.22 hrs Surf.Area= 3,292 sf Storage= 8,892 cf

Plug-Flow detention time= 192.4 min calculated for 0.704 af (94% of inflow)
Center-of-Mass det. time= 159.3 min (947.9 - 788.6)

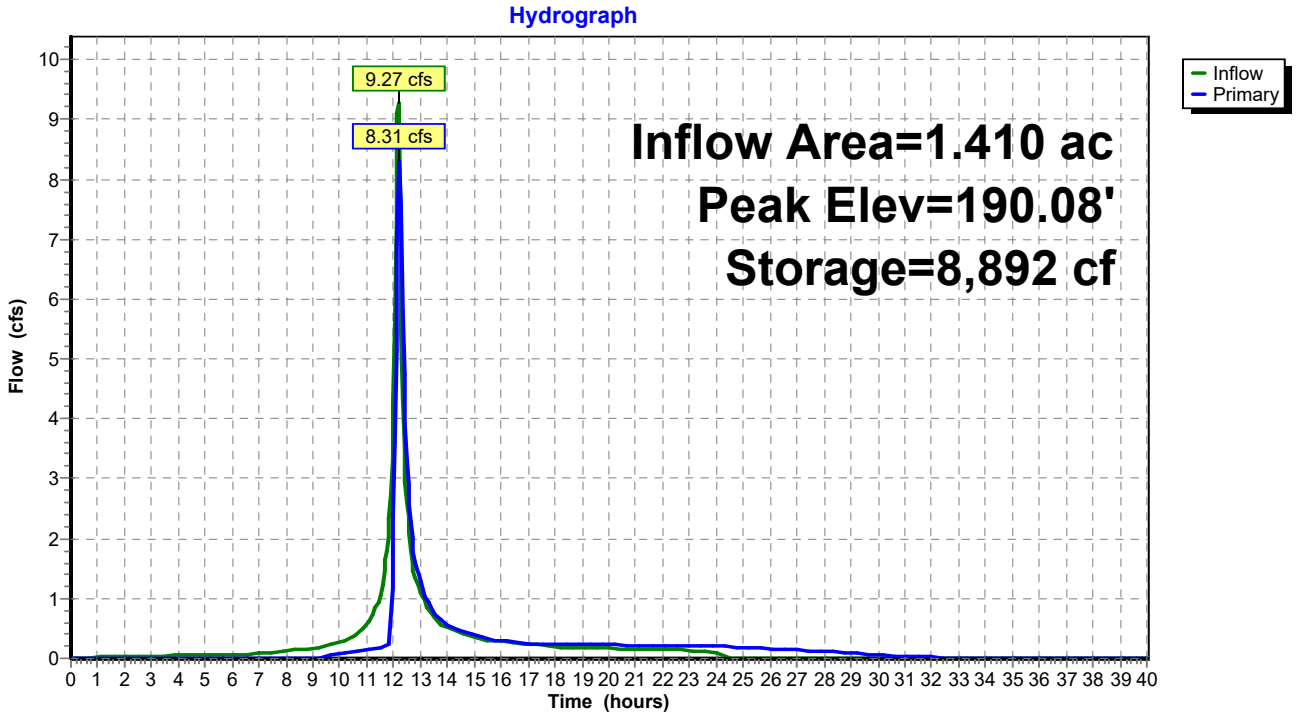
Volume	Invert	Avail.Storage	Storage Description
#1	185.65'	12,198 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
185.65	0	0	0
186.00	1,119	196	196
187.00	1,564	1,342	1,537
188.00	2,065	1,815	3,352
189.00	2,623	2,344	5,696
190.00	3,237	2,930	8,626
191.00	3,908	3,573	12,198

Device	Routing	Invert	Outlet Devices
#1	Primary	186.00'	**15.0" Round Culvert** L= 28.0' Ke= 0.500 Inlet / Outlet Invert= 186.00' / 185.86' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	187.25'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.34'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.15 cfs @ 12.22 hrs HW=190.07' (Free Discharge)
- **1=Culvert** (Passes 8.15 cfs of 10.97 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.27 cfs @ 7.94 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 7.88 cfs @ 2.80 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-18: Basin #18



Stage-Discharge for Pond B-18: Basin #18

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00
185.68	0.00	186.20	0.00	186.72	0.00	187.24	0.00
185.69	0.00	186.21	0.00	186.73	0.00	187.25	0.00
185.70	0.00	186.22	0.00	186.74	0.00	187.26	0.00
185.71	0.00	186.23	0.00	186.75	0.00	187.27	0.00
185.72	0.00	186.24	0.00	186.76	0.00	187.28	0.00
185.73	0.00	186.25	0.00	186.77	0.00	187.29	0.00
185.74	0.00	186.26	0.00	186.78	0.00	187.30	0.00
185.75	0.00	186.27	0.00	186.79	0.00	187.31	0.01
185.76	0.00	186.28	0.00	186.80	0.00	187.32	0.01
185.77	0.00	186.29	0.00	186.81	0.00	187.33	0.01
185.78	0.00	186.30	0.00	186.82	0.00	187.34	0.01
185.79	0.00	186.31	0.00	186.83	0.00	187.35	0.02
185.80	0.00	186.32	0.00	186.84	0.00	187.36	0.02
185.81	0.00	186.33	0.00	186.85	0.00	187.37	0.02
185.82	0.00	186.34	0.00	186.86	0.00	187.38	0.03
185.83	0.00	186.35	0.00	186.87	0.00	187.39	0.03
185.84	0.00	186.36	0.00	186.88	0.00	187.40	0.03
185.85	0.00	186.37	0.00	186.89	0.00	187.41	0.04
185.86	0.00	186.38	0.00	186.90	0.00	187.42	0.04
185.87	0.00	186.39	0.00	186.91	0.00	187.43	0.05
185.88	0.00	186.40	0.00	186.92	0.00	187.44	0.05
185.89	0.00	186.41	0.00	186.93	0.00	187.45	0.05
185.90	0.00	186.42	0.00	186.94	0.00	187.46	0.05
185.91	0.00	186.43	0.00	186.95	0.00	187.47	0.06
185.92	0.00	186.44	0.00	186.96	0.00	187.48	0.06
185.93	0.00	186.45	0.00	186.97	0.00	187.49	0.06
185.94	0.00	186.46	0.00	186.98	0.00	187.50	0.06
185.95	0.00	186.47	0.00	186.99	0.00	187.51	0.06
185.96	0.00	186.48	0.00	187.00	0.00	187.52	0.07
185.97	0.00	186.49	0.00	187.01	0.00	187.53	0.07
185.98	0.00	186.50	0.00	187.02	0.00	187.54	0.07
185.99	0.00	186.51	0.00	187.03	0.00	187.55	0.07
186.00	0.00	186.52	0.00	187.04	0.00	187.56	0.07
186.01	0.00	186.53	0.00	187.05	0.00	187.57	0.08
186.02	0.00	186.54	0.00	187.06	0.00	187.58	0.08
186.03	0.00	186.55	0.00	187.07	0.00	187.59	0.08
186.04	0.00	186.56	0.00	187.08	0.00	187.60	0.08
186.05	0.00	186.57	0.00	187.09	0.00	187.61	0.08
186.06	0.00	186.58	0.00	187.10	0.00	187.62	0.08
186.07	0.00	186.59	0.00	187.11	0.00	187.63	0.09
186.08	0.00	186.60	0.00	187.12	0.00	187.64	0.09
186.09	0.00	186.61	0.00	187.13	0.00	187.65	0.09
186.10	0.00	186.62	0.00	187.14	0.00	187.66	0.09
186.11	0.00	186.63	0.00	187.15	0.00	187.67	0.09
186.12	0.00	186.64	0.00	187.16	0.00	187.68	0.09
186.13	0.00	186.65	0.00	187.17	0.00	187.69	0.10
186.14	0.00	186.66	0.00	187.18	0.00	187.70	0.10
186.15	0.00	186.67	0.00	187.19	0.00	187.71	0.10
186.16	0.00	186.68	0.00	187.20	0.00	187.72	0.10

Stage-Discharge for Pond B-18: Basin #18 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.73	0.10	188.25	0.16	188.77	0.20	189.29	0.23
187.74	0.10	188.26	0.16	188.78	0.20	189.30	0.23
187.75	0.10	188.27	0.16	188.79	0.20	189.31	0.23
187.76	0.10	188.28	0.16	188.80	0.20	189.32	0.23
187.77	0.11	188.29	0.16	188.81	0.20	189.33	0.23
187.78	0.11	188.30	0.16	188.82	0.20	189.34	0.23
187.79	0.11	188.31	0.16	188.83	0.20	189.35	0.24
187.80	0.11	188.32	0.16	188.84	0.20	189.36	0.27
187.81	0.11	188.33	0.16	188.85	0.20	189.37	0.30
187.82	0.11	188.34	0.16	188.86	0.20	189.38	0.34
187.83	0.11	188.35	0.16	188.87	0.20	189.39	0.38
187.84	0.11	188.36	0.16	188.88	0.20	189.40	0.43
187.85	0.12	188.37	0.17	188.89	0.20	189.41	0.48
187.86	0.12	188.38	0.17	188.90	0.20	189.42	0.53
187.87	0.12	188.39	0.17	188.91	0.20	189.43	0.59
187.88	0.12	188.40	0.17	188.92	0.21	189.44	0.65
187.89	0.12	188.41	0.17	188.93	0.21	189.45	0.71
187.90	0.12	188.42	0.17	188.94	0.21	189.46	0.78
187.91	0.12	188.43	0.17	188.95	0.21	189.47	0.85
187.92	0.12	188.44	0.17	188.96	0.21	189.48	0.92
187.93	0.12	188.45	0.17	188.97	0.21	189.49	0.99
187.94	0.13	188.46	0.17	188.98	0.21	189.50	1.07
187.95	0.13	188.47	0.17	188.99	0.21	189.51	1.15
187.96	0.13	188.48	0.17	189.00	0.21	189.52	1.23
187.97	0.13	188.49	0.17	189.01	0.21	189.53	1.32
187.98	0.13	188.50	0.18	189.02	0.21	189.54	1.40
187.99	0.13	188.51	0.18	189.03	0.21	189.55	1.49
188.00	0.13	188.52	0.18	189.04	0.21	189.56	1.58
188.01	0.13	188.53	0.18	189.05	0.21	189.57	1.67
188.02	0.13	188.54	0.18	189.06	0.21	189.58	1.76
188.03	0.13	188.55	0.18	189.07	0.22	189.59	1.86
188.04	0.14	188.56	0.18	189.08	0.22	189.60	1.96
188.05	0.14	188.57	0.18	189.09	0.22	189.61	2.06
188.06	0.14	188.58	0.18	189.10	0.22	189.62	2.16
188.07	0.14	188.59	0.18	189.11	0.22	189.63	2.26
188.08	0.14	188.60	0.18	189.12	0.22	189.64	2.37
188.09	0.14	188.61	0.18	189.13	0.22	189.65	2.47
188.10	0.14	188.62	0.18	189.14	0.22	189.66	2.58
188.11	0.14	188.63	0.19	189.15	0.22	189.67	2.69
188.12	0.14	188.64	0.19	189.16	0.22	189.68	2.80
188.13	0.14	188.65	0.19	189.17	0.22	189.69	2.91
188.14	0.15	188.66	0.19	189.18	0.22	189.70	3.03
188.15	0.15	188.67	0.19	189.19	0.22	189.71	3.14
188.16	0.15	188.68	0.19	189.20	0.22	189.72	3.26
188.17	0.15	188.69	0.19	189.21	0.22	189.73	3.38
188.18	0.15	188.70	0.19	189.22	0.22	189.74	3.50
188.19	0.15	188.71	0.19	189.23	0.22	189.75	3.62
188.20	0.15	188.72	0.19	189.24	0.23	189.76	3.74
188.21	0.15	188.73	0.19	189.25	0.23	189.77	3.86
188.22	0.15	188.74	0.19	189.26	0.23	189.78	3.99
188.23	0.15	188.75	0.19	189.27	0.23	189.79	4.12
188.24	0.15	188.76	0.19	189.28	0.23	189.80	4.24

Stage-Discharge for Pond B-18: Basin #18 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
189.81	4.37	190.33	11.37	190.85	12.15
189.82	4.50	190.34	11.39	190.86	12.16
189.83	4.63	190.35	11.40	190.87	12.17
189.84	4.77	190.36	11.42	190.88	12.19
189.85	4.90	190.37	11.43	190.89	12.20
189.86	5.04	190.38	11.45	190.90	12.22
189.87	5.17	190.39	11.47	190.91	12.23
189.88	5.31	190.40	11.48	190.92	12.25
189.89	5.45	190.41	11.50	190.93	12.26
189.90	5.59	190.42	11.51	190.94	12.27
189.91	5.73	190.43	11.53	190.95	12.29
189.92	5.87	190.44	11.54	190.96	12.42
189.93	6.02	190.45	11.56	190.97	12.65
189.94	6.16	190.46	11.57	190.98	12.94
189.95	6.31	190.47	11.59	190.99	13.28
189.96	6.45	190.48	11.60	191.00	**13.67**
189.97	6.60	190.49	11.62		
189.98	6.75	190.50	11.63		
189.99	6.90	190.51	11.65		
190.00	7.05	190.52	11.66		
190.01	7.20	190.53	11.68		
190.02	7.35	190.54	11.69		
190.03	7.51	190.55	11.71		
190.04	7.66	190.56	11.72		
190.05	7.82	190.57	11.74		
190.06	7.97	190.58	11.75		
190.07	8.13	190.59	11.77		
190.08	8.29	190.60	11.78		
190.09	8.45	190.61	11.80		
190.10	8.61	190.62	11.81		
190.11	8.77	190.63	11.83		
190.12	8.93	190.64	11.84		
190.13	9.10	190.65	11.85		
190.14	9.26	190.66	11.87		
190.15	9.42	190.67	11.88		
190.16	9.59	190.68	11.90		
190.17	9.76	190.69	11.91		
190.18	9.92	190.70	11.93		
190.19	10.09	190.71	11.94		
190.20	10.26	190.72	11.96		
190.21	10.43	190.73	11.97		
190.22	10.60	190.74	11.99		
190.23	10.77	190.75	12.00		
190.24	10.94	190.76	12.02		
190.25	11.12	190.77	12.03		
190.26	11.27	190.78	12.04		
190.27	11.28	190.79	12.06		
190.28	11.30	190.80	12.07		
190.29	11.31	190.81	12.09		
190.30	11.33	190.82	12.10		
190.31	11.34	190.83	12.12		
190.32	11.36	190.84	12.13		

Stage-Area-Storage for Pond B-18: Basin #18

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.65	0	0
185.66	32	0
185.67	64	1
185.68	96	1
185.69	128	3
185.70	160	4
185.71	192	6
185.72	224	8
185.73	256	10
185.74	288	13
185.75	320	16
185.76	352	19
185.77	384	23
185.78	416	27
185.79	448	31
185.80	480	36
185.81	512	41
185.82	544	46
185.83	575	52
185.84	607	58
185.85	639	64
185.86	671	70
185.87	703	77
185.88	735	85
185.89	767	92
185.90	799	100
185.91	831	108
185.92	863	117
185.93	895	125
185.94	927	134
185.95	959	144
185.96	991	154
185.97	1,023	164
185.98	1,055	174
185.99	1,087	185
186.00	1,119	196
186.01	1,123	207
186.02	1,128	218
186.03	1,132	230
186.04	1,137	241
186.05	1,141	252
186.06	1,146	264
186.07	1,150	275
186.08	1,155	287
186.09	1,159	298
186.10	1,163	310
186.11	1,168	322
186.12	1,172	333
186.13	1,177	345
186.14	1,181	357
186.15	1,186	369
186.16	1,190	381
186.17	1,195	392
186.18	1,199	404
186.19	1,204	416
186.20	1,208	429
186.21	1,212	441
186.22	1,217	453
186.23	1,221	465
186.24	1,226	477
186.25	1,230	489
186.26	1,235	502
186.27	1,239	514
186.28	1,244	527
186.29	1,248	539
186.30	1,253	552
186.31	1,257	564
186.32	1,261	577
186.33	1,266	589
186.34	1,270	602
186.35	1,275	615
186.36	1,279	628
186.37	1,284	640
186.38	1,288	653
186.39	1,293	666
186.40	1,297	679
186.41	1,301	692
186.42	1,306	705
186.43	1,310	718
186.44	1,315	731
186.45	1,319	744
186.46	1,324	758
186.47	1,328	771
186.48	1,333	784
186.49	1,337	798
186.50	1,342	811
186.51	1,346	824
186.52	1,350	838
186.53	1,355	851
186.54	1,359	865
186.55	1,364	879
186.56	1,368	892
186.57	1,373	906
186.58	1,377	920
186.59	1,382	933
186.60	1,386	947
186.61	1,390	961
186.62	1,395	975
186.63	1,399	989
186.64	1,404	1,003
186.65	1,408	1,017
186.66	1,413	1,031
186.67	1,417	1,045
186.68	1,422	1,060

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.69	1,426	1,074	187.21	1,669	1,877
186.70	1,431	1,088	187.22	1,674	1,894
186.71	1,435	1,102	187.23	1,679	1,910
186.72	1,439	1,117	187.24	1,684	1,927
186.73	1,444	1,131	187.25	1,689	1,944
186.74	1,448	1,146	187.26	1,694	1,961
186.75	1,453	1,160	187.27	1,699	1,978
186.76	1,457	1,175	187.28	1,704	1,995
186.77	1,462	1,189	187.29	1,709	2,012
186.78	1,466	1,204	187.30	1,714	2,029
186.79	1,471	1,219	187.31	1,719	2,046
186.80	1,475	1,233	187.32	1,724	2,063
186.81	1,479	1,248	187.33	1,729	2,081
186.82	1,484	1,263	187.34	1,734	2,098
186.83	1,488	1,278	187.35	1,739	2,115
186.84	1,493	1,293	187.36	1,744	2,133
186.85	1,497	1,308	187.37	1,749	2,150
186.86	1,502	1,323	187.38	1,754	2,168
186.87	1,506	1,338	187.39	1,759	2,185
186.88	1,511	1,353	187.40	1,764	2,203
186.89	1,515	1,368	187.41	1,769	2,221
186.90	1,520	1,383	187.42	1,774	2,238
186.91	1,524	1,398	187.43	1,779	2,256
186.92	1,528	1,414	187.44	1,784	2,274
186.93	1,533	1,429	187.45	1,789	2,292
186.94	1,537	1,444	187.46	1,794	2,310
186.95	1,542	1,460	187.47	1,799	2,328
186.96	1,546	1,475	187.48	1,804	2,346
186.97	1,551	1,491	187.49	1,809	2,364
186.98	1,555	1,506	187.50	1,815	2,382
186.99	1,560	1,522	187.51	1,820	2,400
187.00	1,564	1,537	187.52	1,825	2,418
187.01	1,569	1,553	187.53	1,830	2,437
187.02	1,574	1,569	187.54	1,835	2,455
187.03	1,579	1,584	187.55	1,840	2,473
187.04	1,584	1,600	187.56	1,845	2,492
187.05	1,589	1,616	187.57	1,850	2,510
187.06	1,594	1,632	187.58	1,855	2,529
187.07	1,599	1,648	187.59	1,860	2,547
187.08	1,604	1,664	187.60	1,865	2,566
187.09	1,609	1,680	187.61	1,870	2,585
187.10	1,614	1,696	187.62	1,875	2,603
187.11	1,619	1,712	187.63	1,880	2,622
187.12	1,624	1,729	187.64	1,885	2,641
187.13	1,629	1,745	187.65	1,890	2,660
187.14	1,634	1,761	187.66	1,895	2,679
187.15	1,639	1,778	187.67	1,900	2,698
187.16	1,644	1,794	187.68	1,905	2,717
187.17	1,649	1,810	187.69	1,910	2,736
187.18	1,654	1,827	187.70	1,915	2,755
187.19	1,659	1,844	187.71	1,920	2,774
187.20	1,664	1,860	187.72	1,925	2,793

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.73	1,930	2,813	188.25	2,205	3,886
187.74	1,935	2,832	188.26	2,210	3,908
187.75	1,940	2,851	188.27	2,216	3,930
187.76	1,945	2,871	188.28	2,221	3,952
187.77	1,950	2,890	188.29	2,227	3,974
187.78	1,955	2,910	188.30	2,232	3,996
187.79	1,960	2,929	188.31	2,238	4,019
187.80	1,965	2,949	188.32	2,244	4,041
187.81	1,970	2,969	188.33	2,249	4,064
187.82	1,975	2,988	188.34	2,255	4,086
187.83	1,980	3,008	188.35	2,260	4,109
187.84	1,985	3,028	188.36	2,266	4,131
187.85	1,990	3,048	188.37	2,271	4,154
187.86	1,995	3,068	188.38	2,277	4,177
187.87	2,000	3,088	188.39	2,283	4,200
187.88	2,005	3,108	188.40	2,288	4,222
187.89	2,010	3,128	188.41	2,294	4,245
187.90	2,015	3,148	188.42	2,299	4,268
187.91	2,020	3,168	188.43	2,305	4,291
187.92	2,025	3,188	188.44	2,311	4,314
187.93	2,030	3,209	188.45	2,316	4,338
187.94	2,035	3,229	188.46	2,322	4,361
187.95	2,040	3,249	188.47	2,327	4,384
187.96	2,045	3,270	188.48	2,333	4,407
187.97	2,050	3,290	188.49	2,338	4,431
187.98	2,055	3,311	188.50	2,344	4,454
187.99	2,060	3,331	188.51	2,350	4,478
188.00	2,065	3,352	188.52	2,355	4,501
188.01	2,071	3,373	188.53	2,361	4,525
188.02	2,076	3,393	188.54	2,366	4,548
188.03	2,082	3,414	188.55	2,372	4,572
188.04	2,087	3,435	188.56	2,377	4,596
188.05	2,093	3,456	188.57	2,383	4,620
188.06	2,098	3,477	188.58	2,389	4,643
188.07	2,104	3,498	188.59	2,394	4,667
188.08	2,110	3,519	188.60	2,400	4,691
188.09	2,115	3,540	188.61	2,405	4,715
188.10	2,121	3,561	188.62	2,411	4,739
188.11	2,126	3,582	188.63	2,417	4,764
188.12	2,132	3,604	188.64	2,422	4,788
188.13	2,138	3,625	188.65	2,428	4,812
188.14	2,143	3,646	188.66	2,433	4,836
188.15	2,149	3,668	188.67	2,439	4,861
188.16	2,154	3,689	188.68	2,444	4,885
188.17	2,160	3,711	188.69	2,450	4,910
188.18	2,165	3,733	188.70	2,456	4,934
188.19	2,171	3,754	188.71	2,461	4,959
188.20	2,177	3,776	188.72	2,467	4,983
188.21	2,182	3,798	188.73	2,472	5,008
188.22	2,188	3,820	188.74	2,478	5,033
188.23	2,193	3,842	188.75	2,484	5,058
188.24	2,199	3,863	188.76	2,489	5,082

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.77	2,495	5,107
188.78	2,500	5,132
188.79	2,506	5,157
188.80	2,511	5,182
188.81	2,517	5,208
188.82	2,523	5,233
188.83	2,528	5,258
188.84	2,534	5,283
188.85	2,539	5,309
188.86	2,545	5,334
188.87	2,550	5,360
188.88	2,556	5,385
188.89	2,562	5,411
188.90	2,567	5,436
188.91	2,573	5,462
188.92	2,578	5,488
188.93	2,584	5,514
188.94	2,590	5,539
188.95	2,595	5,565
188.96	2,601	5,591
188.97	2,606	5,617
188.98	2,612	5,643
188.99	2,617	5,670
189.00	2,623	5,696
189.01	2,629	5,722
189.02	2,635	5,748
189.03	2,641	5,775
189.04	2,648	5,801
189.05	2,654	5,828
189.06	2,660	5,854
189.07	2,666	5,881
189.08	2,672	5,908
189.09	2,678	5,934
189.10	2,684	5,961
189.11	2,691	5,988
189.12	2,697	6,015
189.13	2,703	6,042
189.14	2,709	6,069
189.15	2,715	6,096
189.16	2,721	6,123
189.17	2,727	6,151
189.18	2,734	6,178
189.19	2,740	6,205
189.20	2,746	6,233
189.21	2,752	6,260
189.22	2,758	6,288
189.23	2,764	6,315
189.24	2,770	6,343
189.25	2,777	6,371
189.26	2,783	6,399
189.27	2,789	6,426
189.28	2,795	6,454
189.29	2,801	6,482
189.30	2,807	6,510
189.31	2,813	6,538
189.32	2,819	6,567
189.33	2,826	6,595
189.34	2,832	6,623
189.35	2,838	6,651
189.36	2,844	6,680
189.37	2,850	6,708
189.38	2,856	6,737
189.39	2,862	6,765
189.40	2,869	6,794
189.41	2,875	6,823
189.42	2,881	6,852
189.43	2,887	6,880
189.44	2,893	6,909
189.45	2,899	6,938
189.46	2,905	6,967
189.47	2,912	6,996
189.48	2,918	7,026
189.49	2,924	7,055
189.50	2,930	7,084
189.51	2,936	7,113
189.52	2,942	7,143
189.53	2,948	7,172
189.54	2,955	7,202
189.55	2,961	7,231
189.56	2,967	7,261
189.57	2,973	7,291
189.58	2,979	7,320
189.59	2,985	7,350
189.60	2,991	7,380
189.61	2,998	7,410
189.62	3,004	7,440
189.63	3,010	7,470
189.64	3,016	7,500
189.65	3,022	7,530
189.66	3,028	7,561
189.67	3,034	7,591
189.68	3,041	7,621
189.69	3,047	7,652
189.70	3,053	7,682
189.71	3,059	7,713
189.72	3,065	7,744
189.73	3,071	7,774
189.74	3,077	7,805
189.75	3,084	7,836
189.76	3,090	7,867
189.77	3,096	7,898
189.78	3,102	7,929
189.79	3,108	7,960
189.80	3,114	7,991

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.81	3,120	8,022	190.33	3,458	9,731
189.82	3,126	8,053	190.34	3,465	9,765
189.83	3,133	8,084	190.35	3,472	9,800
189.84	3,139	8,116	190.36	3,479	9,835
189.85	3,145	8,147	190.37	3,485	9,869
189.86	3,151	8,179	190.38	3,492	9,904
189.87	3,157	8,210	190.39	3,499	9,939
189.88	3,163	8,242	190.40	3,505	9,974
189.89	3,169	8,273	190.41	3,512	10,009
189.90	3,176	8,305	190.42	3,519	10,045
189.91	3,182	8,337	190.43	3,526	10,080
189.92	3,188	8,369	190.44	3,532	10,115
189.93	3,194	8,401	190.45	3,539	10,150
189.94	3,200	8,433	190.46	3,546	10,186
189.95	3,206	8,465	190.47	3,552	10,221
189.96	3,212	8,497	190.48	3,559	10,257
189.97	3,219	8,529	190.49	3,566	10,293
189.98	3,225	8,561	190.50	3,573	10,328
189.99	3,231	8,593	190.51	3,579	10,364
190.00	3,237	8,626	190.52	3,586	10,400
190.01	3,244	8,658	190.53	3,593	10,436
190.02	3,250	8,691	190.54	3,599	10,472
190.03	3,257	8,723	190.55	3,606	10,508
190.04	3,264	8,756	190.56	3,613	10,544
190.05	3,271	8,789	190.57	3,619	10,580
190.06	3,277	8,821	190.58	3,626	10,616
190.07	3,284	8,854	190.59	3,633	10,652
190.08	3,291	8,887	190.60	3,640	10,689
190.09	3,297	8,920	190.61	3,646	10,725
190.10	3,304	8,953	190.62	3,653	10,762
190.11	3,311	8,986	190.63	3,660	10,798
190.12	3,318	9,019	190.64	3,666	10,835
190.13	3,324	9,052	190.65	3,673	10,872
190.14	3,331	9,086	190.66	3,680	10,908
190.15	3,338	9,119	190.67	3,687	10,945
190.16	3,344	9,152	190.68	3,693	10,982
190.17	3,351	9,186	190.69	3,700	11,019
190.18	3,358	9,219	190.70	3,707	11,056
190.19	3,364	9,253	190.71	3,713	11,093
190.20	3,371	9,287	190.72	3,720	11,130
190.21	3,378	9,320	190.73	3,727	11,168
190.22	3,385	9,354	190.74	3,734	11,205
190.23	3,391	9,388	190.75	3,740	11,242
190.24	3,398	9,422	190.76	3,747	11,280
190.25	3,405	9,456	190.77	3,754	11,317
190.26	3,411	9,490	190.78	3,760	11,355
190.27	3,418	9,524	190.79	3,767	11,392
190.28	3,425	9,558	190.80	3,774	11,430
190.29	3,432	9,593	190.81	3,781	11,468
190.30	3,438	9,627	190.82	3,787	11,506
190.31	3,445	9,662	190.83	3,794	11,544
190.32	3,452	9,696	190.84	3,801	11,582

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.85	3,807	11,620
190.86	3,814	11,658
190.87	3,821	11,696
190.88	3,827	11,734
190.89	3,834	11,773
190.90	3,841	11,811
190.91	3,848	11,849
190.92	3,854	11,888
190.93	3,861	11,926
190.94	3,868	11,965
190.95	3,874	12,004
190.96	3,881	12,043
190.97	3,888	12,081
190.98	3,895	12,120
190.99	3,901	12,159
191.00	**3,908**	**12,198**

Summary for Pond B-19: Basin #19

Inflow Area = 1.715 ac, 34.81% Impervious, Inflow Depth = 6.46" for Current 100 yr event
Inflow = 11.37 cfs @ 12.17 hrs, Volume= 0.924 af
Outflow = 9.85 cfs @ 12.23 hrs, Volume= 0.863 af, Atten= 13%, Lag= 3.6 min
Primary = 9.85 cfs @ 12.23 hrs, Volume= 0.863 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 198.59' @ 12.23 hrs Surf.Area= 4,241 sf Storage= 11,166 cf

Plug-Flow detention time= 210.0 min calculated for 0.862 af (93% of inflow)
Center-of-Mass det. time= 174.2 min (960.4 - 786.2)

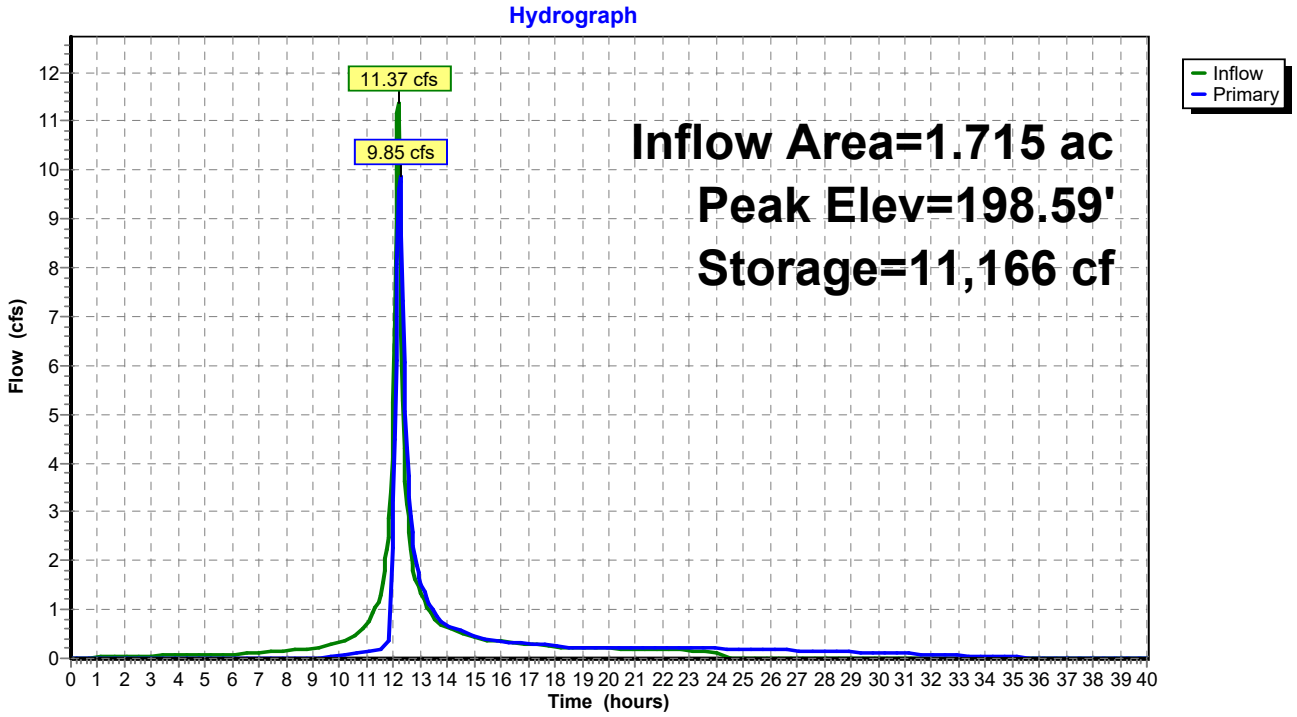
Volume	Invert	Avail.Storage	Storage Description
#1	194.65'	12,982 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
194.65	0	0	0
195.00	1,916	335	335
196.00	2,490	2,203	2,538
197.00	3,119	2,805	5,343
198.00	3,806	3,463	8,805
199.00	4,548	4,177	12,982

Device	Routing	Invert	Outlet Devices
#1	Primary	194.30'	**18.0" Round Culvert** L= 136.0' Ke= 0.500 Inlet / Outlet Invert= 194.30' / 185.86' S= 0.0621 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	196.00'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	197.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	198.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=9.71 cfs @ 12.23 hrs HW=198.58' (Free Discharge)
- **1=Culvert** (Passes 9.71 cfs of 15.98 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.26 cfs @ 7.57 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 9.45 cfs @ 2.98 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-19: Basin #19



Stage-Discharge for Pond B-19: Basin #19

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.65	0.00	195.17	0.00	195.69	0.00	196.21	0.05
194.66	0.00	195.18	0.00	195.70	0.00	196.22	0.06
194.67	0.00	195.19	0.00	195.71	0.00	196.23	0.06
194.68	0.00	195.20	0.00	195.72	0.00	196.24	0.06
194.69	0.00	195.21	0.00	195.73	0.00	196.25	0.06
194.70	0.00	195.22	0.00	195.74	0.00	196.26	0.06
194.71	0.00	195.23	0.00	195.75	0.00	196.27	0.07
194.72	0.00	195.24	0.00	195.76	0.00	196.28	0.07
194.73	0.00	195.25	0.00	195.77	0.00	196.29	0.07
194.74	0.00	195.26	0.00	195.78	0.00	196.30	0.07
194.75	0.00	195.27	0.00	195.79	0.00	196.31	0.07
194.76	0.00	195.28	0.00	195.80	0.00	196.32	0.08
194.77	0.00	195.29	0.00	195.81	0.00	196.33	0.08
194.78	0.00	195.30	0.00	195.82	0.00	196.34	0.08
194.79	0.00	195.31	0.00	195.83	0.00	196.35	0.08
194.80	0.00	195.32	0.00	195.84	0.00	196.36	0.08
194.81	0.00	195.33	0.00	195.85	0.00	196.37	0.08
194.82	0.00	195.34	0.00	195.86	0.00	196.38	0.09
194.83	0.00	195.35	0.00	195.87	0.00	196.39	0.09
194.84	0.00	195.36	0.00	195.88	0.00	196.40	0.09
194.85	0.00	195.37	0.00	195.89	0.00	196.41	0.09
194.86	0.00	195.38	0.00	195.90	0.00	196.42	0.09
194.87	0.00	195.39	0.00	195.91	0.00	196.43	0.09
194.88	0.00	195.40	0.00	195.92	0.00	196.44	0.10
194.89	0.00	195.41	0.00	195.93	0.00	196.45	0.10
194.90	0.00	195.42	0.00	195.94	0.00	196.46	0.10
194.91	0.00	195.43	0.00	195.95	0.00	196.47	0.10
194.92	0.00	195.44	0.00	195.96	0.00	196.48	0.10
194.93	0.00	195.45	0.00	195.97	0.00	196.49	0.10
194.94	0.00	195.46	0.00	195.98	0.00	196.50	0.10
194.95	0.00	195.47	0.00	195.99	0.00	196.51	0.10
194.96	0.00	195.48	0.00	196.00	0.00	196.52	0.11
194.97	0.00	195.49	0.00	196.01	0.00	196.53	0.11
194.98	0.00	195.50	0.00	196.02	0.00	196.54	0.11
194.99	0.00	195.51	0.00	196.03	0.00	196.55	0.11
195.00	0.00	195.52	0.00	196.04	0.00	196.56	0.11
195.01	0.00	195.53	0.00	196.05	0.00	196.57	0.11
195.02	0.00	195.54	0.00	196.06	0.01	196.58	0.11
195.03	0.00	195.55	0.00	196.07	0.01	196.59	0.11
195.04	0.00	195.56	0.00	196.08	0.01	196.60	0.12
195.05	0.00	195.57	0.00	196.09	0.01	196.61	0.12
195.06	0.00	195.58	0.00	196.10	0.02	196.62	0.12
195.07	0.00	195.59	0.00	196.11	0.02	196.63	0.12
195.08	0.00	195.60	0.00	196.12	0.02	196.64	0.12
195.09	0.00	195.61	0.00	196.13	0.03	196.65	0.12
195.10	0.00	195.62	0.00	196.14	0.03	196.66	0.12
195.11	0.00	195.63	0.00	196.15	0.03	196.67	0.12
195.12	0.00	195.64	0.00	196.16	0.04	196.68	0.12
195.13	0.00	195.65	0.00	196.17	0.04	196.69	0.13
195.14	0.00	195.66	0.00	196.18	0.05	196.70	0.13
195.15	0.00	195.67	0.00	196.19	0.05	196.71	0.13
195.16	0.00	195.68	0.00	196.20	0.05	196.72	0.13

Stage-Discharge for Pond B-19: Basin #19 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.73	0.13	197.25	0.18	197.77	0.25	198.29	5.29
196.74	0.13	197.26	0.18	197.78	0.28	198.30	5.43
196.75	0.13	197.27	0.18	197.79	0.32	198.31	5.57
196.76	0.13	197.28	0.18	197.80	0.36	198.32	5.71
196.77	0.13	197.29	0.18	197.81	0.41	198.33	5.85
196.78	0.13	197.30	0.18	197.82	0.46	198.34	6.00
196.79	0.14	197.31	0.18	197.83	0.51	198.35	6.14
196.80	0.14	197.32	0.18	197.84	0.57	198.36	6.29
196.81	0.14	197.33	0.18	197.85	0.63	198.37	6.43
196.82	0.14	197.34	0.18	197.86	0.69	198.38	6.58
196.83	0.14	197.35	0.18	197.87	0.76	198.39	6.73
196.84	0.14	197.36	0.18	197.88	0.83	198.40	6.88
196.85	0.14	197.37	0.18	197.89	0.90	198.41	7.03
196.86	0.14	197.38	0.19	197.90	0.97	198.42	7.18
196.87	0.14	197.39	0.19	197.91	1.05	198.43	7.34
196.88	0.14	197.40	0.19	197.92	1.13	198.44	7.49
196.89	0.15	197.41	0.19	197.93	1.21	198.45	7.64
196.90	0.15	197.42	0.19	197.94	1.30	198.46	7.80
196.91	0.15	197.43	0.19	197.95	1.38	198.47	7.96
196.92	0.15	197.44	0.19	197.96	1.47	198.48	8.11
196.93	0.15	197.45	0.19	197.97	1.56	198.49	8.27
196.94	0.15	197.46	0.19	197.98	1.65	198.50	8.43
196.95	0.15	197.47	0.19	197.99	1.74	198.51	8.59
196.96	0.15	197.48	0.19	198.00	1.84	198.52	8.75
196.97	0.15	197.49	0.19	198.01	1.94	198.53	8.91
196.98	0.15	197.50	0.19	198.02	2.04	198.54	9.08
196.99	0.15	197.51	0.19	198.03	2.14	198.55	9.24
197.00	0.16	197.52	0.20	198.04	2.24	198.56	9.41
197.01	0.16	197.53	0.20	198.05	2.35	198.57	9.57
197.02	0.16	197.54	0.20	198.06	2.45	198.58	9.74
197.03	0.16	197.55	0.20	198.07	2.56	198.59	9.91
197.04	0.16	197.56	0.20	198.08	2.67	198.60	10.07
197.05	0.16	197.57	0.20	198.09	2.78	198.61	10.24
197.06	0.16	197.58	0.20	198.10	2.89	198.62	10.41
197.07	0.16	197.59	0.20	198.11	3.01	198.63	10.58
197.08	0.16	197.60	0.20	198.12	3.12	198.64	10.75
197.09	0.16	197.61	0.20	198.13	3.24	198.65	10.93
197.10	0.16	197.62	0.20	198.14	3.36	198.66	11.10
197.11	0.16	197.63	0.20	198.15	3.48	198.67	11.27
197.12	0.17	197.64	0.20	198.16	3.60	198.68	11.45
197.13	0.17	197.65	0.20	198.17	3.72	198.69	11.62
197.14	0.17	197.66	0.20	198.18	3.85	198.70	11.80
197.15	0.17	197.67	0.21	198.19	3.97	198.71	11.98
197.16	0.17	197.68	0.21	198.20	4.10	198.72	12.16
197.17	0.17	197.69	0.21	198.21	4.23	198.73	12.33
197.18	0.17	197.70	0.21	198.22	4.35	198.74	12.51
197.19	0.17	197.71	0.21	198.23	4.48	198.75	12.69
197.20	0.17	197.72	0.21	198.24	4.62	198.76	12.87
197.21	0.17	197.73	0.21	198.25	4.75	198.77	13.06
197.22	0.17	197.74	0.21	198.26	4.88	198.78	13.24
197.23	0.17	197.75	0.21	198.27	5.02	198.79	13.42
197.24	0.17	197.76	0.22	198.28	5.16	198.80	13.60

Stage-Discharge for Pond B-19: Basin #19 (continued)

Elevation (feet)	Primary (cfs)
198.81	13.79
198.82	13.97
198.83	14.16
198.84	14.35
198.85	14.53
198.86	14.72
198.87	14.91
198.88	15.10
198.89	15.29
198.90	15.48
198.91	15.67
198.92	15.86
198.93	16.05
198.94	16.25
198.95	16.44
198.96	16.75
198.97	17.16
198.98	17.48
198.99	17.83
199.00	**18.22**

Stage-Area-Storage for Pond B-19: Basin #19

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.65	0	0	195.17	2,014	669
194.66	55	0	195.18	2,019	689
194.67	109	1	195.19	2,025	710
194.68	164	2	195.20	2,031	730
194.69	219	4	195.21	2,037	750
194.70	274	7	195.22	2,042	771
194.71	328	10	195.23	2,048	791
194.72	383	13	195.24	2,054	812
194.73	438	18	195.25	2,060	832
194.74	493	22	195.26	2,065	853
194.75	547	27	195.27	2,071	874
194.76	602	33	195.28	2,077	894
194.77	657	39	195.29	2,082	915
194.78	712	46	195.30	2,088	936
194.79	766	54	195.31	2,094	957
194.80	821	62	195.32	2,100	978
194.81	876	70	195.33	2,105	999
194.82	931	79	195.34	2,111	1,020
194.83	985	89	195.35	2,117	1,041
194.84	1,040	99	195.36	2,123	1,062
194.85	1,095	109	195.37	2,128	1,084
194.86	1,150	121	195.38	2,134	1,105
194.87	1,204	132	195.39	2,140	1,126
194.88	1,259	145	195.40	2,146	1,148
194.89	1,314	158	195.41	2,151	1,169
194.90	1,369	171	195.42	2,157	1,191
194.91	1,423	185	195.43	2,163	1,212
194.92	1,478	200	195.44	2,169	1,234
194.93	1,533	215	195.45	2,174	1,256
194.94	1,588	230	195.46	2,180	1,277
194.95	1,642	246	195.47	2,186	1,299
194.96	1,697	263	195.48	2,192	1,321
194.97	1,752	280	195.49	2,197	1,343
194.98	1,807	298	195.50	2,203	1,365
194.99	1,861	316	195.51	2,209	1,387
195.00	1,916	335	195.52	2,214	1,409
195.01	1,922	354	195.53	2,220	1,431
195.02	1,927	374	195.54	2,226	1,454
195.03	1,933	393	195.55	2,232	1,476
195.04	1,939	412	195.56	2,237	1,498
195.05	1,945	432	195.57	2,243	1,521
195.06	1,950	451	195.58	2,249	1,543
195.07	1,956	471	195.59	2,255	1,566
195.08	1,962	490	195.60	2,260	1,588
195.09	1,968	510	195.61	2,266	1,611
195.10	1,973	530	195.62	2,272	1,634
195.11	1,979	550	195.63	2,278	1,656
195.12	1,985	569	195.64	2,283	1,679
195.13	1,991	589	195.65	2,289	1,702
195.14	1,996	609	195.66	2,295	1,725
195.15	2,002	629	195.67	2,301	1,748
195.16	2,008	649	195.68	2,306	1,771

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.69	2,312	1,794	196.21	2,622	3,075
195.70	2,318	1,817	196.22	2,628	3,101
195.71	2,324	1,840	196.23	2,635	3,128
195.72	2,329	1,864	196.24	2,641	3,154
195.73	2,335	1,887	196.25	2,647	3,180
195.74	2,341	1,910	196.26	2,654	3,207
195.75	2,347	1,934	196.27	2,660	3,234
195.76	2,352	1,957	196.28	2,666	3,260
195.77	2,358	1,981	196.29	2,672	3,287
195.78	2,364	2,004	196.30	2,679	3,314
195.79	2,369	2,028	196.31	2,685	3,340
195.80	2,375	2,052	196.32	2,691	3,367
195.81	2,381	2,076	196.33	2,698	3,394
195.82	2,387	2,099	196.34	2,704	3,421
195.83	2,392	2,123	196.35	2,710	3,448
195.84	2,398	2,147	196.36	2,716	3,475
195.85	2,404	2,171	196.37	2,723	3,503
195.86	2,410	2,195	196.38	2,729	3,530
195.87	2,415	2,219	196.39	2,735	3,557
195.88	2,421	2,244	196.40	2,742	3,585
195.89	2,427	2,268	196.41	2,748	3,612
195.90	2,433	2,292	196.42	2,754	3,640
195.91	2,438	2,317	196.43	2,760	3,667
195.92	2,444	2,341	196.44	2,767	3,695
195.93	2,450	2,365	196.45	2,773	3,722
195.94	2,456	2,390	196.46	2,779	3,750
195.95	2,461	2,415	196.47	2,786	3,778
195.96	2,467	2,439	196.48	2,792	3,806
195.97	2,473	2,464	196.49	2,798	3,834
195.98	2,479	2,489	196.50	2,805	3,862
195.99	2,484	2,513	196.51	2,811	3,890
196.00	2,490	2,538	196.52	2,817	3,918
196.01	2,496	2,563	196.53	2,823	3,946
196.02	2,503	2,588	196.54	2,830	3,975
196.03	2,509	2,613	196.55	2,836	4,003
196.04	2,515	2,638	196.56	2,842	4,031
196.05	2,521	2,664	196.57	2,849	4,060
196.06	2,528	2,689	196.58	2,855	4,088
196.07	2,534	2,714	196.59	2,861	4,117
196.08	2,540	2,740	196.60	2,867	4,146
196.09	2,547	2,765	196.61	2,874	4,174
196.10	2,553	2,790	196.62	2,880	4,203
196.11	2,559	2,816	196.63	2,886	4,232
196.12	2,565	2,842	196.64	2,893	4,261
196.13	2,572	2,867	196.65	2,899	4,290
196.14	2,578	2,893	196.66	2,905	4,319
196.15	2,584	2,919	196.67	2,911	4,348
196.16	2,591	2,945	196.68	2,918	4,377
196.17	2,597	2,971	196.69	2,924	4,406
196.18	2,603	2,997	196.70	2,930	4,435
196.19	2,610	3,023	196.71	2,937	4,465
196.20	2,616	3,049	196.72	2,943	4,494

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.73	2,949	4,524	197.25	3,291	6,144
196.74	2,955	4,553	197.26	3,298	6,177
196.75	2,962	4,583	197.27	3,304	6,210
196.76	2,968	4,612	197.28	3,311	6,243
196.77	2,974	4,642	197.29	3,318	6,276
196.78	2,981	4,672	197.30	3,325	6,309
196.79	2,987	4,702	197.31	3,332	6,343
196.80	2,993	4,732	197.32	3,339	6,376
196.81	2,999	4,762	197.33	3,346	6,409
196.82	3,006	4,792	197.34	3,353	6,443
196.83	3,012	4,822	197.35	3,359	6,477
196.84	3,018	4,852	197.36	3,366	6,510
196.85	3,025	4,882	197.37	3,373	6,544
196.86	3,031	4,912	197.38	3,380	6,578
196.87	3,037	4,943	197.39	3,387	6,611
196.88	3,044	4,973	197.40	3,394	6,645
196.89	3,050	5,004	197.41	3,401	6,679
196.90	3,056	5,034	197.42	3,408	6,713
196.91	3,062	5,065	197.43	3,414	6,747
196.92	3,069	5,095	197.44	3,421	6,782
196.93	3,075	5,126	197.45	3,428	6,816
196.94	3,081	5,157	197.46	3,435	6,850
196.95	3,088	5,188	197.47	3,442	6,885
196.96	3,094	5,219	197.48	3,449	6,919
196.97	3,100	5,250	197.49	3,456	6,954
196.98	3,106	5,281	197.50	3,463	6,988
196.99	3,113	5,312	197.51	3,469	7,023
197.00	3,119	5,343	197.52	3,476	7,058
197.01	3,126	5,374	197.53	3,483	7,092
197.02	3,133	5,405	197.54	3,490	7,127
197.03	3,140	5,437	197.55	3,497	7,162
197.04	3,146	5,468	197.56	3,504	7,197
197.05	3,153	5,500	197.57	3,511	7,232
197.06	3,160	5,531	197.58	3,517	7,267
197.07	3,167	5,563	197.59	3,524	7,303
197.08	3,174	5,595	197.60	3,531	7,338
197.09	3,181	5,626	197.61	3,538	7,373
197.10	3,188	5,658	197.62	3,545	7,409
197.11	3,195	5,690	197.63	3,552	7,444
197.12	3,201	5,722	197.64	3,559	7,480
197.13	3,208	5,754	197.65	3,566	7,515
197.14	3,215	5,786	197.66	3,572	7,551
197.15	3,222	5,818	197.67	3,579	7,587
197.16	3,229	5,851	197.68	3,586	7,623
197.17	3,236	5,883	197.69	3,593	7,658
197.18	3,243	5,915	197.70	3,600	7,694
197.19	3,250	5,948	197.71	3,607	7,730
197.20	3,256	5,980	197.72	3,614	7,767
197.21	3,263	6,013	197.73	3,621	7,803
197.22	3,270	6,046	197.74	3,627	7,839
197.23	3,277	6,078	197.75	3,634	7,875
197.24	3,284	6,111	197.76	3,641	7,912

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.77	3,648	7,948	198.29	4,021	9,940
197.78	3,655	7,985	198.30	4,029	9,980
197.79	3,662	8,021	198.31	4,036	10,021
197.80	3,669	8,058	198.32	4,043	10,061
197.81	3,675	8,095	198.33	4,051	10,102
197.82	3,682	8,131	198.34	4,058	10,142
197.83	3,689	8,168	198.35	4,066	10,183
197.84	3,696	8,205	198.36	4,073	10,224
197.85	3,703	8,242	198.37	4,081	10,264
197.86	3,710	8,279	198.38	4,088	10,305
197.87	3,717	8,316	198.39	4,095	10,346
197.88	3,724	8,354	198.40	4,103	10,387
197.89	3,730	8,391	198.41	4,110	10,428
197.90	3,737	8,428	198.42	4,118	10,469
197.91	3,744	8,466	198.43	4,125	10,510
197.92	3,751	8,503	198.44	4,132	10,552
197.93	3,758	8,541	198.45	4,140	10,593
197.94	3,765	8,578	198.46	4,147	10,635
197.95	3,772	8,616	198.47	4,155	10,676
197.96	3,779	8,654	198.48	4,162	10,718
197.97	3,785	8,691	198.49	4,170	10,759
197.98	3,792	8,729	198.50	4,177	10,801
197.99	3,799	8,767	198.51	4,184	10,843
198.00	3,806	8,805	198.52	4,192	10,885
198.01	3,813	8,843	198.53	4,199	10,927
198.02	3,821	8,882	198.54	4,207	10,969
198.03	3,828	8,920	198.55	4,214	11,011
198.04	3,836	8,958	198.56	4,222	11,053
198.05	3,843	8,997	198.57	4,229	11,095
198.06	3,851	9,035	198.58	4,236	11,138
198.07	3,858	9,074	198.59	4,244	11,180
198.08	3,865	9,112	198.60	4,251	11,222
198.09	3,873	9,151	198.61	4,259	11,265
198.10	3,880	9,190	198.62	4,266	11,308
198.11	3,888	9,228	198.63	4,273	11,350
198.12	3,895	9,267	198.64	4,281	11,393
198.13	3,902	9,306	198.65	4,288	11,436
198.14	3,910	9,345	198.66	4,296	11,479
198.15	3,917	9,385	198.67	4,303	11,522
198.16	3,925	9,424	198.68	4,311	11,565
198.17	3,932	9,463	198.69	4,318	11,608
198.18	3,940	9,502	198.70	4,325	11,651
198.19	3,947	9,542	198.71	4,333	11,695
198.20	3,954	9,581	198.72	4,340	11,738
198.21	3,962	9,621	198.73	4,348	11,781
198.22	3,969	9,661	198.74	4,355	11,825
198.23	3,977	9,700	198.75	4,363	11,868
198.24	3,984	9,740	198.76	4,370	11,912
198.25	3,992	9,780	198.77	4,377	11,956
198.26	3,999	9,820	198.78	4,385	12,000
198.27	4,006	9,860	198.79	4,392	12,044
198.28	4,014	9,900	198.80	4,400	12,088

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.81	4,407	12,132
198.82	4,414	12,176
198.83	4,422	12,220
198.84	4,429	12,264
198.85	4,437	12,308
198.86	4,444	12,353
198.87	4,452	12,397
198.88	4,459	12,442
198.89	4,466	12,487
198.90	4,474	12,531
198.91	4,481	12,576
198.92	4,489	12,621
198.93	4,496	12,666
198.94	4,503	12,711
198.95	4,511	12,756
198.96	4,518	12,801
198.97	4,526	12,846
198.98	4,533	12,891
198.99	4,541	12,937
199.00	**4,548**	**12,982**

Summary for Pond B-20: Basin #20

Inflow Area = 2.453 ac, 46.07% Impervious, Inflow Depth = 6.79" for Current 100 yr event
Inflow = 16.78 cfs @ 12.17 hrs, Volume= 1.388 af
Outflow = 12.09 cfs @ 12.27 hrs, Volume= 1.252 af, Atten= 28%, Lag= 5.9 min
Primary = 12.09 cfs @ 12.27 hrs, Volume= 1.252 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 153.76' @ 12.26 hrs Surf.Area= 8,150 sf Storage= 19,796 cf

Plug-Flow detention time= 235.3 min calculated for 1.252 af (90% of inflow)
Center-of-Mass det. time= 184.1 min (961.5 - 777.4)

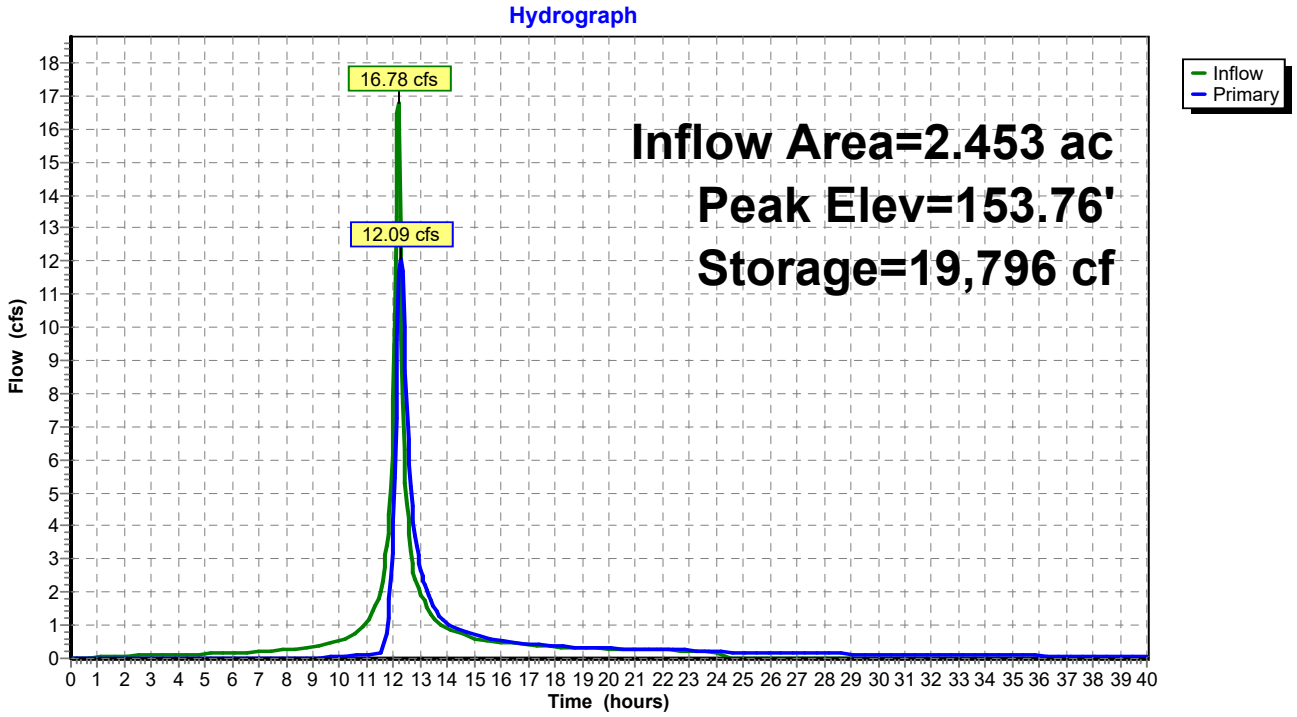
Volume	Invert	Avail.Storage	Storage Description
#1	150.87'	35,230 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
150.87	0	0	0
151.00	5,926	385	385
152.00	6,706	6,316	6,701
153.00	7,514	7,110	13,811
154.00	8,347	7,931	21,742
155.00	9,205	8,776	30,518
155.50	9,643	4,712	35,230

Device	Routing	Invert	Outlet Devices
#1	Primary	151.00'	**18.0" Round Culvert** L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 151.00' / 150.71' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	151.68'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	152.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	154.32'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.05 cfs @ 12.27 hrs HW=153.76' (Free Discharge)
- **1=Culvert** (Inlet Controls 12.05 cfs @ 6.82 fps)
  - **2=Orifice/Grate** (Passes < 0.23 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 12.52 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-20: Basin #20



Stage-Discharge for Pond B-20: Basin #20

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
150.87	0.00	151.39	0.00	151.91	0.06	152.43	0.13
150.88	0.00	151.40	0.00	151.92	0.06	152.44	0.13
150.89	0.00	151.41	0.00	151.93	0.06	152.45	0.13
150.90	0.00	151.42	0.00	151.94	0.06	152.46	0.13
150.91	0.00	151.43	0.00	151.95	0.07	152.47	0.14
150.92	0.00	151.44	0.00	151.96	0.07	152.48	0.14
150.93	0.00	151.45	0.00	151.97	0.07	152.49	0.14
150.94	0.00	151.46	0.00	151.98	0.07	152.50	0.14
150.95	0.00	151.47	0.00	151.99	0.07	152.51	0.14
150.96	0.00	151.48	0.00	152.00	0.08	152.52	0.14
150.97	0.00	151.49	0.00	152.01	0.08	152.53	0.14
150.98	0.00	151.50	0.00	152.02	0.08	152.54	0.14
150.99	0.00	151.51	0.00	152.03	0.08	152.55	0.14
151.00	0.00	151.52	0.00	152.04	0.08	152.56	0.14
151.01	0.00	151.53	0.00	152.05	0.08	152.57	0.15
151.02	0.00	151.54	0.00	152.06	0.09	152.58	0.15
151.03	0.00	151.55	0.00	152.07	0.09	152.59	0.15
151.04	0.00	151.56	0.00	152.08	0.09	152.60	0.15
151.05	0.00	151.57	0.00	152.09	0.09	152.61	0.15
151.06	0.00	151.58	0.00	152.10	0.09	152.62	0.15
151.07	0.00	151.59	0.00	152.11	0.09	152.63	0.15
151.08	0.00	151.60	0.00	152.12	0.10	152.64	0.15
151.09	0.00	151.61	0.00	152.13	0.10	152.65	0.15
151.10	0.00	151.62	0.00	152.14	0.10	152.66	0.15
151.11	0.00	151.63	0.00	152.15	0.10	152.67	0.15
151.12	0.00	151.64	0.00	152.16	0.10	152.68	0.16
151.13	0.00	151.65	0.00	152.17	0.10	152.69	0.16
151.14	0.00	151.66	0.00	152.18	0.10	152.70	0.16
151.15	0.00	151.67	0.00	152.19	0.10	152.71	0.16
151.16	0.00	151.68	0.00	152.20	0.11	152.72	0.16
151.17	0.00	151.69	0.00	152.21	0.11	152.73	0.16
151.18	0.00	151.70	0.00	152.22	0.11	152.74	0.16
151.19	0.00	151.71	0.00	152.23	0.11	152.75	0.16
151.20	0.00	151.72	0.00	152.24	0.11	152.76	0.18
151.21	0.00	151.73	0.00	152.25	0.11	152.77	0.20
151.22	0.00	151.74	0.01	152.26	0.11	152.78	0.23
151.23	0.00	151.75	0.01	152.27	0.11	152.79	0.27
151.24	0.00	151.76	0.01	152.28	0.12	152.80	0.31
151.25	0.00	151.77	0.01	152.29	0.12	152.81	0.36
151.26	0.00	151.78	0.02	152.30	0.12	152.82	0.41
151.27	0.00	151.79	0.02	152.31	0.12	152.83	0.46
151.28	0.00	151.80	0.02	152.32	0.12	152.84	0.52
151.29	0.00	151.81	0.03	152.33	0.12	152.85	0.58
151.30	0.00	151.82	0.03	152.34	0.12	152.86	0.64
151.31	0.00	151.83	0.03	152.35	0.12	152.87	0.71
151.32	0.00	151.84	0.04	152.36	0.12	152.88	0.78
151.33	0.00	151.85	0.04	152.37	0.13	152.89	0.85
151.34	0.00	151.86	0.05	152.38	0.13	152.90	0.93
151.35	0.00	151.87	0.05	152.39	0.13	152.91	1.00
151.36	0.00	151.88	0.05	152.40	0.13	152.92	1.08
151.37	0.00	151.89	0.05	152.41	0.13	152.93	1.17
151.38	0.00	151.90	0.06	152.42	0.13	152.94	1.25

Stage-Discharge for Pond B-20: Basin #20 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
152.95	1.34	153.47	7.92	153.99	12.73	154.51	23.91
152.96	1.42	153.48	8.07	154.00	12.76	154.52	24.73
152.97	1.51	153.49	8.23	154.01	12.79	154.53	25.60
152.98	1.61	153.50	8.39	154.02	12.82	154.54	26.50
152.99	1.70	153.51	8.55	154.03	12.85	154.55	27.42
153.00	1.80	153.52	8.71	154.04	12.88	154.56	28.37
153.01	1.89	153.53	8.88	154.05	12.90	154.57	29.34
153.02	1.99	153.54	9.04	154.06	12.93	154.58	30.34
153.03	2.09	153.55	9.20	154.07	12.96	154.59	31.36
153.04	2.20	153.56	9.37	154.08	12.99	154.60	32.41
153.05	2.30	153.57	9.53	154.09	13.02	154.61	33.49
153.06	2.41	153.58	9.70	154.10	13.04	154.62	34.58
153.07	2.52	153.59	9.87	154.11	13.07	154.63	35.71
153.08	2.63	153.60	10.04	154.12	13.10	154.64	36.85
153.09	2.74	153.61	10.20	154.13	13.13	154.65	38.02
153.10	2.85	153.62	10.37	154.14	13.15	154.66	39.22
153.11	2.96	153.63	10.55	154.15	13.18	154.67	40.44
153.12	3.08	153.64	10.72	154.16	13.21	154.68	41.68
153.13	3.20	153.65	10.89	154.17	13.24	154.69	42.95
153.14	3.31	153.66	11.06	154.18	13.26	154.70	44.24
153.15	3.43	153.67	11.24	154.19	13.29	154.71	45.55
153.16	3.56	153.68	11.41	154.20	13.32	154.72	46.89
153.17	3.68	153.69	11.59	154.21	13.35	154.73	48.28
153.18	3.80	153.70	11.76	154.22	13.37	154.74	49.70
153.19	3.93	153.71	11.91	154.23	13.40	154.75	51.14
153.20	4.05	153.72	11.94	154.24	13.43	154.76	52.61
153.21	4.18	153.73	11.97	154.25	13.45	154.77	54.11
153.22	4.31	153.74	12.00	154.26	13.48	154.78	55.63
153.23	4.44	153.75	12.03	154.27	13.51	154.79	57.17
153.24	4.57	153.76	12.06	154.28	13.53	154.80	58.75
153.25	4.71	153.77	12.09	154.29	13.56	154.81	60.35
153.26	4.84	153.78	12.12	154.30	13.59	154.82	61.97
153.27	4.98	153.79	12.15	154.31	13.61	154.83	63.63
153.28	5.11	153.80	12.18	154.32	13.64	154.84	65.31
153.29	5.25	153.81	12.21	154.33	13.78	154.85	67.01
153.30	5.39	153.82	12.24	154.34	14.02	154.86	68.74
153.31	5.53	153.83	12.27	154.35	14.33	154.87	70.50
153.32	5.67	153.84	12.30	154.36	14.68	154.88	72.29
153.33	5.81	153.85	12.33	154.37	15.08	154.89	74.10
153.34	5.96	153.86	12.36	154.38	15.52	154.90	75.94
153.35	6.10	153.87	12.39	154.39	16.00	154.91	77.81
153.36	6.25	153.88	12.42	154.40	16.51	154.92	79.70
153.37	6.39	153.89	12.45	154.41	17.05	154.93	81.35
153.38	6.54	153.90	12.48	154.42	17.62	154.94	83.01
153.39	6.69	153.91	12.51	154.43	18.22	154.95	84.69
153.40	6.84	153.92	12.53	154.44	18.85	154.96	86.38
153.41	6.99	153.93	12.56	154.45	19.50	154.97	88.09
153.42	7.14	153.94	12.59	154.46	20.18	154.98	89.80
153.43	7.30	153.95	12.62	154.47	20.88	154.99	91.54
153.44	7.45	153.96	12.65	154.48	21.60	155.00	93.28
153.45	7.60	153.97	12.68	154.49	22.35	155.01	95.04
153.46	7.76	153.98	12.71	154.50	23.12	155.02	96.80

Stage-Discharge for Pond B-20: Basin #20 (continued)

Elevation (feet)	Primary (cfs)
155.03	98.59
155.04	100.38
155.05	102.19
155.06	104.01
155.07	105.84
155.08	107.69
155.09	109.54
155.10	111.41
155.11	113.29
155.12	115.18
155.13	117.13
155.14	119.08
155.15	121.05
155.16	123.03
155.17	125.03
155.18	127.04
155.19	129.06
155.20	131.10
155.21	133.14
155.22	135.20
155.23	137.28
155.24	139.36
155.25	141.46
155.26	143.57
155.27	145.70
155.28	147.84
155.29	149.99
155.30	152.15
155.31	154.32
155.32	156.51
155.33	158.66
155.34	160.81
155.35	162.98
155.36	165.16
155.37	167.35
155.38	169.55
155.39	171.76
155.40	173.98
155.41	176.21
155.42	178.45
155.43	180.70
155.44	182.96
155.45	185.24
155.46	187.52
155.47	189.81
155.48	192.11
155.49	194.43
155.50	**196.75**

Stage-Area-Storage for Pond B-20: Basin #20

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.87	0	0	151.39	6,230	2,756
150.88	456	2	151.40	6,238	2,818
150.89	912	9	151.41	6,246	2,880
150.90	1,368	21	151.42	6,254	2,943
150.91	1,823	36	151.43	6,261	3,005
150.92	2,279	57	151.44	6,269	3,068
150.93	2,735	82	151.45	6,277	3,131
150.94	3,191	112	151.46	6,285	3,194
150.95	3,647	146	151.47	6,293	3,257
150.96	4,103	185	151.48	6,300	3,320
150.97	4,558	228	151.49	6,308	3,383
150.98	5,014	276	151.50	6,316	3,446
150.99	5,470	328	151.51	6,324	3,509
151.00	5,926	385	151.52	6,332	3,572
151.01	5,934	444	151.53	6,339	3,636
151.02	5,942	504	151.54	6,347	3,699
151.03	5,949	563	151.55	6,355	3,762
151.04	5,957	623	151.56	6,363	3,826
151.05	5,965	682	151.57	6,371	3,890
151.06	5,973	742	151.58	6,378	3,953
151.07	5,981	802	151.59	6,386	4,017
151.08	5,988	862	151.60	6,394	4,081
151.09	5,996	922	151.61	6,402	4,145
151.10	6,004	982	151.62	6,410	4,209
151.11	6,012	1,042	151.63	6,417	4,273
151.12	6,020	1,102	151.64	6,425	4,338
151.13	6,027	1,162	151.65	6,433	4,402
151.14	6,035	1,222	151.66	6,441	4,466
151.15	6,043	1,283	151.67	6,449	4,531
151.16	6,051	1,343	151.68	6,456	4,595
151.17	6,059	1,404	151.69	6,464	4,660
151.18	6,066	1,465	151.70	6,472	4,724
151.19	6,074	1,525	151.71	6,480	4,789
151.20	6,082	1,586	151.72	6,488	4,854
151.21	6,090	1,647	151.73	6,495	4,919
151.22	6,098	1,708	151.74	6,503	4,984
151.23	6,105	1,769	151.75	6,511	5,049
151.24	6,113	1,830	151.76	6,519	5,114
151.25	6,121	1,891	151.77	6,527	5,179
151.26	6,129	1,952	151.78	6,534	5,245
151.27	6,137	2,014	151.79	6,542	5,310
151.28	6,144	2,075	151.80	6,550	5,376
151.29	6,152	2,137	151.81	6,558	5,441
151.30	6,160	2,198	151.82	6,566	5,507
151.31	6,168	2,260	151.83	6,573	5,572
151.32	6,176	2,321	151.84	6,581	5,638
151.33	6,183	2,383	151.85	6,589	5,704
151.34	6,191	2,445	151.86	6,597	5,770
151.35	6,199	2,507	151.87	6,605	5,836
151.36	6,207	2,569	151.88	6,612	5,902
151.37	6,215	2,631	151.89	6,620	5,968
151.38	6,222	2,693	151.90	6,628	6,034

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.91	6,636	6,101	152.43	7,053	9,659
151.92	6,644	6,167	152.44	7,062	9,730
151.93	6,651	6,234	152.45	7,070	9,801
151.94	6,659	6,300	152.46	7,078	9,871
151.95	6,667	6,367	152.47	7,086	9,942
151.96	6,675	6,434	152.48	7,094	10,013
151.97	6,683	6,500	152.49	7,102	10,084
151.98	6,690	6,567	152.50	7,110	10,155
151.99	6,698	6,634	152.51	7,118	10,226
152.00	6,706	6,701	152.52	7,126	10,298
152.01	6,714	6,768	152.53	7,134	10,369
152.02	6,722	6,835	152.54	7,142	10,440
152.03	6,730	6,903	152.55	7,150	10,512
152.04	6,738	6,970	152.56	7,158	10,583
152.05	6,746	7,038	152.57	7,167	10,655
152.06	6,754	7,105	152.58	7,175	10,727
152.07	6,763	7,173	152.59	7,183	10,798
152.08	6,771	7,240	152.60	7,191	10,870
152.09	6,779	7,308	152.61	7,199	10,942
152.10	6,787	7,376	152.62	7,207	11,014
152.11	6,795	7,444	152.63	7,215	11,086
152.12	6,803	7,512	152.64	7,223	11,159
152.13	6,811	7,580	152.65	7,231	11,231
152.14	6,819	7,648	152.66	7,239	11,303
152.15	6,827	7,716	152.67	7,247	11,376
152.16	6,835	7,784	152.68	7,255	11,448
152.17	6,843	7,853	152.69	7,264	11,521
152.18	6,851	7,921	152.70	7,272	11,593
152.19	6,860	7,990	152.71	7,280	11,666
152.20	6,868	8,059	152.72	7,288	11,739
152.21	6,876	8,127	152.73	7,296	11,812
152.22	6,884	8,196	152.74	7,304	11,885
152.23	6,892	8,265	152.75	7,312	11,958
152.24	6,900	8,334	152.76	7,320	12,031
152.25	6,908	8,403	152.77	7,328	12,104
152.26	6,916	8,472	152.78	7,336	12,178
152.27	6,924	8,541	152.79	7,344	12,251
152.28	6,932	8,611	152.80	7,352	12,325
152.29	6,940	8,680	152.81	7,360	12,398
152.30	6,948	8,749	152.82	7,369	12,472
152.31	6,956	8,819	152.83	7,377	12,545
152.32	6,965	8,888	152.84	7,385	12,619
152.33	6,973	8,958	152.85	7,393	12,693
152.34	6,981	9,028	152.86	7,401	12,767
152.35	6,989	9,098	152.87	7,409	12,841
152.36	6,997	9,168	152.88	7,417	12,915
152.37	7,005	9,238	152.89	7,425	12,990
152.38	7,013	9,308	152.90	7,433	13,064
152.39	7,021	9,378	152.91	7,441	13,138
152.40	7,029	9,448	152.92	7,449	13,213
152.41	7,037	9,519	152.93	7,457	13,287
152.42	7,045	9,589	152.94	7,466	13,362

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
152.95	7,474	13,437	153.47	7,906	17,435
152.96	7,482	13,511	153.48	7,914	17,514
152.97	7,490	13,586	153.49	7,922	17,593
152.98	7,498	13,661	153.50	7,931	17,672
152.99	7,506	13,736	153.51	7,939	17,752
153.00	7,514	13,811	153.52	7,947	17,831
153.01	7,522	13,886	153.53	7,955	17,911
153.02	7,531	13,962	153.54	7,964	17,990
153.03	7,539	14,037	153.55	7,972	18,070
153.04	7,547	14,112	153.56	7,980	18,150
153.05	7,556	14,188	153.57	7,989	18,229
153.06	7,564	14,264	153.58	7,997	18,309
153.07	7,572	14,339	153.59	8,005	18,389
153.08	7,581	14,415	153.60	8,014	18,470
153.09	7,589	14,491	153.61	8,022	18,550
153.10	7,597	14,567	153.62	8,030	18,630
153.11	7,606	14,643	153.63	8,039	18,710
153.12	7,614	14,719	153.64	8,047	18,791
153.13	7,622	14,795	153.65	8,055	18,871
153.14	7,631	14,871	153.66	8,064	18,952
153.15	7,639	14,948	153.67	8,072	19,033
153.16	7,647	15,024	153.68	8,080	19,113
153.17	7,656	15,101	153.69	8,089	19,194
153.18	7,664	15,177	153.70	8,097	19,275
153.19	7,672	15,254	153.71	8,105	19,356
153.20	7,681	15,331	153.72	8,114	19,437
153.21	7,689	15,407	153.73	8,122	19,518
153.22	7,697	15,484	153.74	8,130	19,600
153.23	7,706	15,561	153.75	8,139	19,681
153.24	7,714	15,639	153.76	8,147	19,762
153.25	7,722	15,716	153.77	8,155	19,844
153.26	7,731	15,793	153.78	8,164	19,926
153.27	7,739	15,870	153.79	8,172	20,007
153.28	7,747	15,948	153.80	8,180	20,089
153.29	7,756	16,025	153.81	8,189	20,171
153.30	7,764	16,103	153.82	8,197	20,253
153.31	7,772	16,181	153.83	8,205	20,335
153.32	7,781	16,258	153.84	8,214	20,417
153.33	7,789	16,336	153.85	8,222	20,499
153.34	7,797	16,414	153.86	8,230	20,581
153.35	7,806	16,492	153.87	8,239	20,664
153.36	7,814	16,570	153.88	8,247	20,746
153.37	7,822	16,648	153.89	8,255	20,829
153.38	7,831	16,727	153.90	8,264	20,911
153.39	7,839	16,805	153.91	8,272	20,994
153.40	7,847	16,883	153.92	8,280	21,077
153.41	7,856	16,962	153.93	8,289	21,159
153.42	7,864	17,041	153.94	8,297	21,242
153.43	7,872	17,119	153.95	8,305	21,325
153.44	7,881	17,198	153.96	8,314	21,408
153.45	7,889	17,277	153.97	8,322	21,492
153.46	7,897	17,356	153.98	8,330	21,575

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.99	8,339	21,658	154.51	8,785	26,110
154.00	8,347	21,742	154.52	8,793	26,198
154.01	8,356	21,825	154.53	8,802	26,286
154.02	8,364	21,909	154.54	8,810	26,374
154.03	8,373	21,992	154.55	8,819	26,462
154.04	8,381	22,076	154.56	8,827	26,551
154.05	8,390	22,160	154.57	8,836	26,639
154.06	8,398	22,244	154.58	8,845	26,727
154.07	8,407	22,328	154.59	8,853	26,816
154.08	8,416	22,412	154.60	8,862	26,904
154.09	8,424	22,496	154.61	8,870	26,993
154.10	8,433	22,581	154.62	8,879	27,082
154.11	8,441	22,665	154.63	8,888	27,171
154.12	8,450	22,750	154.64	8,896	27,259
154.13	8,459	22,834	154.65	8,905	27,348
154.14	8,467	22,919	154.66	8,913	27,438
154.15	8,476	23,003	154.67	8,922	27,527
154.16	8,484	23,088	154.68	8,930	27,616
154.17	8,493	23,173	154.69	8,939	27,705
154.18	8,501	23,258	154.70	8,948	27,795
154.19	8,510	23,343	154.71	8,956	27,884
154.20	8,519	23,428	154.72	8,965	27,974
154.21	8,527	23,513	154.73	8,973	28,064
154.22	8,536	23,599	154.74	8,982	28,153
154.23	8,544	23,684	154.75	8,991	28,243
154.24	8,553	23,770	154.76	8,999	28,333
154.25	8,562	23,855	154.77	9,008	28,423
154.26	8,570	23,941	154.78	9,016	28,513
154.27	8,579	24,027	154.79	9,025	28,604
154.28	8,587	24,112	154.80	9,033	28,694
154.29	8,596	24,198	154.81	9,042	28,784
154.30	8,604	24,284	154.82	9,051	28,875
154.31	8,613	24,370	154.83	9,059	28,965
154.32	8,622	24,457	154.84	9,068	29,056
154.33	8,630	24,543	154.85	9,076	29,147
154.34	8,639	24,629	154.86	9,085	29,237
154.35	8,647	24,716	154.87	9,093	29,328
154.36	8,656	24,802	154.88	9,102	29,419
154.37	8,664	24,889	154.89	9,111	29,510
154.38	8,673	24,975	154.90	9,119	29,601
154.39	8,682	25,062	154.91	9,128	29,693
154.40	8,690	25,149	154.92	9,136	29,784
154.41	8,699	25,236	154.93	9,145	29,875
154.42	8,707	25,323	154.94	9,154	29,967
154.43	8,716	25,410	154.95	9,162	30,059
154.44	8,725	25,497	154.96	9,171	30,150
154.45	8,733	25,585	154.97	9,179	30,242
154.46	8,742	25,672	154.98	9,188	30,334
154.47	8,750	25,760	154.99	9,196	30,426
154.48	8,759	25,847	155.00	9,205	30,518
154.49	8,767	25,935	155.01	9,214	30,610
154.50	8,776	26,022	155.02	9,223	30,702

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
155.03	9,231	30,794
155.04	9,240	30,887
155.05	9,249	30,979
155.06	9,258	31,072
155.07	9,266	31,164
155.08	9,275	31,257
155.09	9,284	31,350
155.10	9,293	31,443
155.11	9,301	31,536
155.12	9,310	31,629
155.13	9,319	31,722
155.14	9,328	31,815
155.15	9,336	31,908
155.16	9,345	32,002
155.17	9,354	32,095
155.18	9,363	32,189
155.19	9,371	32,282
155.20	9,380	32,376
155.21	9,389	32,470
155.22	9,398	32,564
155.23	9,406	32,658
155.24	9,415	32,752
155.25	9,424	32,846
155.26	9,433	32,941
155.27	9,442	33,035
155.28	9,450	33,129
155.29	9,459	33,224
155.30	9,468	33,319
155.31	9,477	33,413
155.32	9,485	33,508
155.33	9,494	33,603
155.34	9,503	33,698
155.35	9,512	33,793
155.36	9,520	33,888
155.37	9,529	33,984
155.38	9,538	34,079
155.39	9,547	34,174
155.40	9,555	34,270
155.41	9,564	34,365
155.42	9,573	34,461
155.43	9,582	34,557
155.44	9,590	34,653
155.45	9,599	34,749
155.46	9,608	34,845
155.47	9,617	34,941
155.48	9,625	35,037
155.49	9,634	35,133
155.50	**9,643**	**35,230**

Summary for Pond B-21: Basin #21

Inflow Area = 2.500 ac, 35.44% Impervious, Inflow Depth = 6.48" for Current 100 yr event
Inflow = 16.61 cfs @ 12.17 hrs, Volume= 1.350 af
Outflow = 11.94 cfs @ 12.27 hrs, Volume= 1.217 af, Atten= 28%, Lag= 5.8 min
Primary = 11.94 cfs @ 12.27 hrs, Volume= 1.217 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 153.29' @ 12.27 hrs Surf.Area= 8,118 sf Storage= 21,399 cf

Plug-Flow detention time= 283.1 min calculated for 1.217 af (90% of inflow)
Center-of-Mass det. time= 231.9 min (1,017.5 - 785.7)

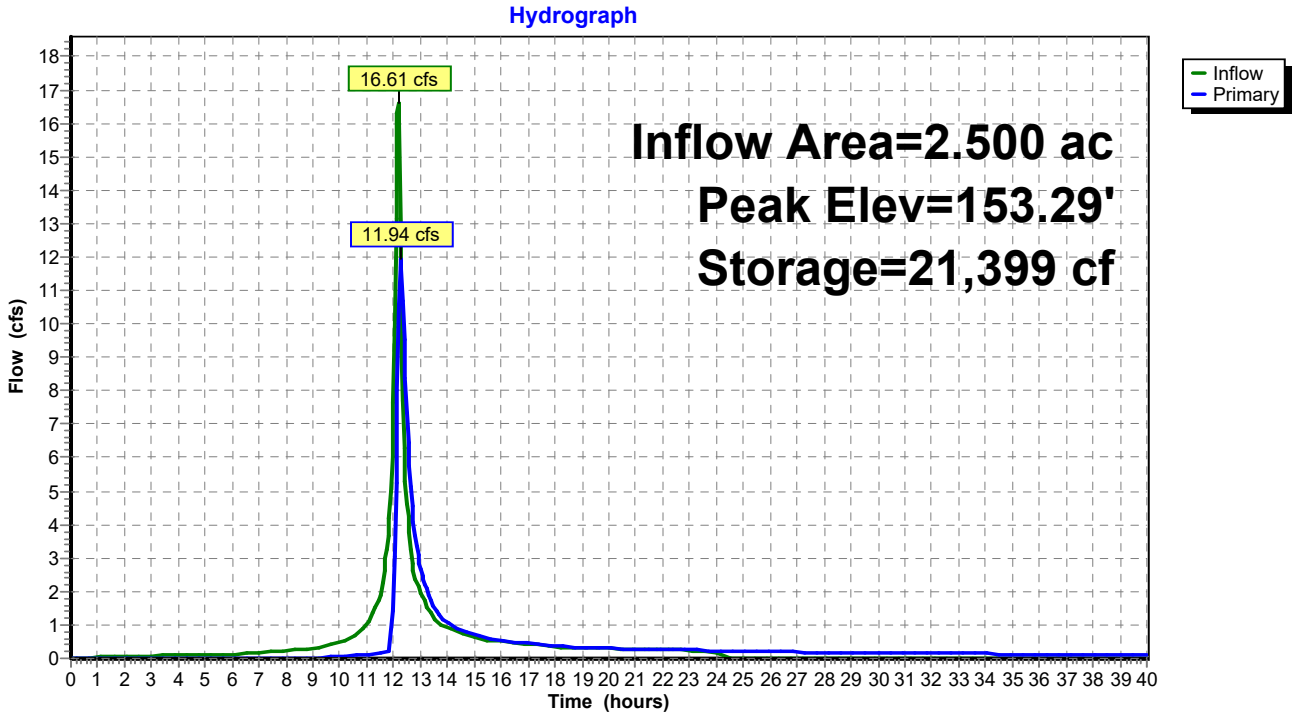
Volume	Invert	Avail.Storage	Storage Description
#1	149.90'	42,109 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
149.90	0	0	0
150.00	4,848	242	242
151.00	5,776	5,312	5,554
152.00	6,761	6,269	11,823
153.00	7,802	7,282	19,104
154.00	8,900	8,351	27,455
155.00	10,054	9,477	36,932
155.50	10,653	5,177	42,109

Device	Routing	Invert	Outlet Devices
#1	Primary	149.30'	**18.0" Round Culvert** L= 24.0' Ke= 0.500 Inlet / Outlet Invert= 149.30' / 148.32' S= 0.0408 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	150.68'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	152.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	154.16'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.77 cfs @ 12.27 hrs HW=153.28' (Free Discharge)
- **1=Culvert** (Passes 11.77 cfs of 15.29 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.26 cfs @ 7.60 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 11.51 cfs @ 3.18 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-21: Basin #21



Stage-Discharge for Pond B-21: Basin #21

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
149.90	0.00	150.42	0.00	150.94	0.06	151.46	0.13
149.91	0.00	150.43	0.00	150.95	0.07	151.47	0.14
149.92	0.00	150.44	0.00	150.96	0.07	151.48	0.14
149.93	0.00	150.45	0.00	150.97	0.07	151.49	0.14
149.94	0.00	150.46	0.00	150.98	0.07	151.50	0.14
149.95	0.00	150.47	0.00	150.99	0.07	151.51	0.14
149.96	0.00	150.48	0.00	151.00	0.08	151.52	0.14
149.97	0.00	150.49	0.00	151.01	0.08	151.53	0.14
149.98	0.00	150.50	0.00	151.02	0.08	151.54	0.14
149.99	0.00	150.51	0.00	151.03	0.08	151.55	0.14
150.00	0.00	150.52	0.00	151.04	0.08	151.56	0.14
150.01	0.00	150.53	0.00	151.05	0.08	151.57	0.15
150.02	0.00	150.54	0.00	151.06	0.09	151.58	0.15
150.03	0.00	150.55	0.00	151.07	0.09	151.59	0.15
150.04	0.00	150.56	0.00	151.08	0.09	151.60	0.15
150.05	0.00	150.57	0.00	151.09	0.09	151.61	0.15
150.06	0.00	150.58	0.00	151.10	0.09	151.62	0.15
150.07	0.00	150.59	0.00	151.11	0.09	151.63	0.15
150.08	0.00	150.60	0.00	151.12	0.10	151.64	0.15
150.09	0.00	150.61	0.00	151.13	0.10	151.65	0.15
150.10	0.00	150.62	0.00	151.14	0.10	151.66	0.15
150.11	0.00	150.63	0.00	151.15	0.10	151.67	0.15
150.12	0.00	150.64	0.00	151.16	0.10	151.68	0.16
150.13	0.00	150.65	0.00	151.17	0.10	151.69	0.16
150.14	0.00	150.66	0.00	151.18	0.10	151.70	0.16
150.15	0.00	150.67	0.00	151.19	0.10	151.71	0.16
150.16	0.00	150.68	0.00	151.20	0.11	151.72	0.16
150.17	0.00	150.69	0.00	151.21	0.11	151.73	0.16
150.18	0.00	150.70	0.00	151.22	0.11	151.74	0.16
150.19	0.00	150.71	0.00	151.23	0.11	151.75	0.16
150.20	0.00	150.72	0.00	151.24	0.11	151.76	0.16
150.21	0.00	150.73	0.00	151.25	0.11	151.77	0.16
150.22	0.00	150.74	0.01	151.26	0.11	151.78	0.16
150.23	0.00	150.75	0.01	151.27	0.11	151.79	0.16
150.24	0.00	150.76	0.01	151.28	0.12	151.80	0.17
150.25	0.00	150.77	0.01	151.29	0.12	151.81	0.17
150.26	0.00	150.78	0.02	151.30	0.12	151.82	0.17
150.27	0.00	150.79	0.02	151.31	0.12	151.83	0.17
150.28	0.00	150.80	0.02	151.32	0.12	151.84	0.17
150.29	0.00	150.81	0.03	151.33	0.12	151.85	0.17
150.30	0.00	150.82	0.03	151.34	0.12	151.86	0.17
150.31	0.00	150.83	0.03	151.35	0.12	151.87	0.17
150.32	0.00	150.84	0.04	151.36	0.12	151.88	0.17
150.33	0.00	150.85	0.04	151.37	0.13	151.89	0.17
150.34	0.00	150.86	0.05	151.38	0.13	151.90	0.17
150.35	0.00	150.87	0.05	151.39	0.13	151.91	0.17
150.36	0.00	150.88	0.05	151.40	0.13	151.92	0.17
150.37	0.00	150.89	0.05	151.41	0.13	151.93	0.18
150.38	0.00	150.90	0.06	151.42	0.13	151.94	0.18
150.39	0.00	150.91	0.06	151.43	0.13	151.95	0.18
150.40	0.00	150.92	0.06	151.44	0.13	151.96	0.18
150.41	0.00	150.93	0.06	151.45	0.13	151.97	0.18

Stage-Discharge for Pond B-21: Basin #21 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
151.98	0.18	152.50	1.12	153.02	7.48	153.54	15.90
151.99	0.18	152.51	1.21	153.03	7.64	153.55	15.92
152.00	0.18	152.52	1.29	153.04	7.79	153.56	15.94
152.01	0.18	152.53	1.38	153.05	7.95	153.57	15.96
152.02	0.18	152.54	1.46	153.06	8.11	153.58	15.99
152.03	0.18	152.55	1.55	153.07	8.27	153.59	16.01
152.04	0.18	152.56	1.64	153.08	8.43	153.60	16.03
152.05	0.18	152.57	1.74	153.09	8.59	153.61	16.05
152.06	0.19	152.58	1.83	153.10	8.75	153.62	16.08
152.07	0.19	152.59	1.93	153.11	8.91	153.63	16.10
152.08	0.19	152.60	2.03	153.12	9.07	153.64	16.12
152.09	0.19	152.61	2.13	153.13	9.24	153.65	16.14
152.10	0.19	152.62	2.24	153.14	9.40	153.66	16.17
152.11	0.19	152.63	2.34	153.15	9.57	153.67	16.19
152.12	0.19	152.64	2.45	153.16	9.73	153.68	16.21
152.13	0.19	152.65	2.55	153.17	9.90	153.69	16.23
152.14	0.19	152.66	2.66	153.18	10.07	153.70	16.26
152.15	0.19	152.67	2.77	153.19	10.24	153.71	16.28
152.16	0.19	152.68	2.89	153.20	10.41	153.72	16.30
152.17	0.19	152.69	3.00	153.21	10.58	153.73	16.32
152.18	0.19	152.70	3.12	153.22	10.75	153.74	16.34
152.19	0.19	152.71	3.23	153.23	10.92	153.75	16.37
152.20	0.20	152.72	3.35	153.24	11.10	153.76	16.39
152.21	0.20	152.73	3.47	153.25	11.27	153.77	16.41
152.22	0.20	152.74	3.59	153.26	11.44	153.78	16.43
152.23	0.20	152.75	3.72	153.27	11.62	153.79	16.46
152.24	0.20	152.76	3.84	153.28	11.80	153.80	16.48
152.25	0.20	152.77	3.96	153.29	11.97	153.81	16.50
152.26	0.20	152.78	4.09	153.30	12.15	153.82	16.52
152.27	0.20	152.79	4.22	153.31	12.33	153.83	16.54
152.28	0.20	152.80	4.35	153.32	12.51	153.84	16.56
152.29	0.20	152.81	4.48	153.33	12.69	153.85	16.59
152.30	0.20	152.82	4.61	153.34	12.87	153.86	16.61
152.31	0.20	152.83	4.74	153.35	13.05	153.87	16.63
152.32	0.20	152.84	4.88	153.36	13.23	153.88	16.65
152.33	0.20	152.85	5.01	153.37	13.42	153.89	16.67
152.34	0.22	152.86	5.15	153.38	13.60	153.90	16.70
152.35	0.24	152.87	5.29	153.39	13.78	153.91	16.72
152.36	0.27	152.88	5.43	153.40	13.97	153.92	16.74
152.37	0.31	152.89	5.57	153.41	14.15	153.93	16.76
152.38	0.35	152.90	5.71	153.42	14.34	153.94	16.78
152.39	0.40	152.91	5.85	153.43	14.53	153.95	16.80
152.40	0.45	152.92	5.99	153.44	14.72	153.96	16.82
152.41	0.50	152.93	6.14	153.45	14.90	153.97	16.85
152.42	0.56	152.94	6.28	153.46	15.09	153.98	16.87
152.43	0.62	152.95	6.43	153.47	15.28	153.99	16.89
152.44	0.69	152.96	6.58	153.48	15.47	154.00	16.91
152.45	0.75	152.97	6.73	153.49	15.66	154.01	16.93
152.46	0.82	152.98	6.87	153.50	15.80	154.02	16.95
152.47	0.89	152.99	7.03	153.51	15.83	154.03	16.97
152.48	0.97	153.00	7.18	153.52	15.85	154.04	17.00
152.49	1.04	153.01	7.33	153.53	15.87	154.05	17.02

Stage-Discharge for Pond B-21: Basin #21 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
154.06	17.04	154.58	53.10	155.10	146.75
154.07	17.06	154.59	54.54	155.11	148.87
154.08	17.08	154.60	56.00	155.12	151.01
154.09	17.10	154.61	57.49	155.13	153.15
154.10	17.12	154.62	59.01	155.14	155.31
154.11	17.14	154.63	60.55	155.15	157.48
154.12	17.17	154.64	62.12	155.16	159.67
154.13	17.19	154.65	63.71	155.17	161.81
154.14	17.21	154.66	65.33	155.18	163.96
154.15	17.23	154.67	66.98	155.19	166.13
154.16	17.25	154.68	68.66	155.20	168.30
154.17	17.39	154.69	70.36	155.21	170.49
154.18	17.62	154.70	72.09	155.22	172.68
154.19	17.92	154.71	73.84	155.23	174.89
154.20	18.27	154.72	75.62	155.24	177.11
154.21	18.67	154.73	77.43	155.25	179.33
154.22	19.10	154.74	79.26	155.26	181.57
154.23	19.57	154.75	81.13	155.27	183.82
154.24	20.07	154.76	83.02	155.28	186.08
154.25	20.61	154.77	84.66	155.29	188.35
154.26	21.18	154.78	86.32	155.30	190.63
154.27	21.77	154.79	88.00	155.31	192.91
154.28	22.39	154.80	89.68	155.32	195.21
154.29	23.04	154.81	91.38	155.33	197.52
154.30	23.71	154.82	93.10	155.34	199.84
154.31	24.41	154.83	94.82	155.35	202.17
154.32	25.13	154.84	96.56	155.36	204.51
154.33	25.87	154.85	98.31	155.37	206.89
154.34	26.64	154.86	100.08	155.38	209.29
154.35	27.42	154.87	101.86	155.39	211.70
154.36	28.23	154.88	103.65	155.40	214.11
154.37	29.10	154.89	105.45	155.41	216.54
154.38	29.99	154.90	107.27	155.42	218.98
154.39	30.91	154.91	109.09	155.43	221.43
154.40	31.85	154.92	110.94	155.44	223.89
154.41	32.82	154.93	112.79	155.45	226.35
154.42	33.81	154.94	114.65	155.46	228.83
154.43	34.83	154.95	116.53	155.47	231.33
154.44	35.88	154.96	118.42	155.48	233.83
154.45	36.94	154.97	120.36	155.49	236.34
154.46	38.04	154.98	122.31	155.50	**238.86**
154.47	39.15	154.99	124.27		
154.48	40.30	155.00	126.25		
154.49	41.46	155.01	128.24		
154.50	42.65	155.02	130.25		
154.51	43.87	155.03	132.27		
154.52	45.10	155.04	134.30		
154.53	46.37	155.05	136.34		
154.54	47.65	155.06	138.40		
154.55	48.96	155.07	140.47		
154.56	50.30	155.08	142.55		
154.57	51.69	155.09	144.65		

Stage-Area-Storage for Pond B-21: Basin #21

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
149.90	0	0
149.91	485	2
149.92	970	10
149.93	1,454	22
149.94	1,939	39
149.95	2,424	61
149.96	2,909	87
149.97	3,394	119
149.98	3,878	155
149.99	4,363	196
150.00	4,848	242
150.01	4,857	291
150.02	4,867	340
150.03	4,876	388
150.04	4,885	437
150.05	4,894	486
150.06	4,904	535
150.07	4,913	584
150.08	4,922	633
150.09	4,932	682
150.10	4,941	732
150.11	4,950	781
150.12	4,959	831
150.13	4,969	880
150.14	4,978	930
150.15	4,987	980
150.16	4,996	1,030
150.17	5,006	1,080
150.18	5,015	1,130
150.19	5,024	1,180
150.20	5,034	1,231
150.21	5,043	1,281
150.22	5,052	1,331
150.23	5,061	1,382
150.24	5,071	1,433
150.25	5,080	1,483
150.26	5,089	1,534
150.27	5,099	1,585
150.28	5,108	1,636
150.29	5,117	1,687
150.30	5,126	1,739
150.31	5,136	1,790
150.32	5,145	1,841
150.33	5,154	1,893
150.34	5,164	1,944
150.35	5,173	1,996
150.36	5,182	2,048
150.37	5,191	2,100
150.38	5,201	2,152
150.39	5,210	2,204
150.40	5,219	2,256
150.41	5,228	2,308
150.42	5,238	2,360
150.43	5,247	2,413
150.44	5,256	2,465
150.45	5,266	2,518
150.46	5,275	2,571
150.47	5,284	2,623
150.48	5,293	2,676
150.49	5,303	2,729
150.50	5,312	2,782
150.51	5,321	2,836
150.52	5,331	2,889
150.53	5,340	2,942
150.54	5,349	2,996
150.55	5,358	3,049
150.56	5,368	3,103
150.57	5,377	3,157
150.58	5,386	3,210
150.59	5,396	3,264
150.60	5,405	3,318
150.61	5,414	3,372
150.62	5,423	3,427
150.63	5,433	3,481
150.64	5,442	3,535
150.65	5,451	3,590
150.66	5,460	3,644
150.67	5,470	3,699
150.68	5,479	3,754
150.69	5,488	3,808
150.70	5,498	3,863
150.71	5,507	3,918
150.72	5,516	3,973
150.73	5,525	4,029
150.74	5,535	4,084
150.75	5,544	4,139
150.76	5,553	4,195
150.77	5,563	4,250
150.78	5,572	4,306
150.79	5,581	4,362
150.80	5,590	4,418
150.81	5,600	4,474
150.82	5,609	4,530
150.83	5,618	4,586
150.84	5,628	4,642
150.85	5,637	4,698
150.86	5,646	4,755
150.87	5,655	4,811
150.88	5,665	4,868
150.89	5,674	4,925
150.90	5,683	4,981
150.91	5,692	5,038
150.92	5,702	5,095
150.93	5,711	5,152

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.94	5,720	5,210	151.46	6,229	8,316
150.95	5,730	5,267	151.47	6,239	8,378
150.96	5,739	5,324	151.48	6,249	8,440
150.97	5,748	5,382	151.49	6,259	8,503
150.98	5,757	5,439	151.50	6,269	8,566
150.99	5,767	5,497	151.51	6,278	8,628
151.00	5,776	5,554	151.52	6,288	8,691
151.01	5,786	5,612	151.53	6,298	8,754
151.02	5,796	5,670	151.54	6,308	8,817
151.03	5,806	5,728	151.55	6,318	8,880
151.04	5,815	5,786	151.56	6,328	8,943
151.05	5,825	5,844	151.57	6,337	9,007
151.06	5,835	5,903	151.58	6,347	9,070
151.07	5,845	5,961	151.59	6,357	9,134
151.08	5,855	6,020	151.60	6,367	9,197
151.09	5,865	6,078	151.61	6,377	9,261
151.10	5,874	6,137	151.62	6,387	9,325
151.11	5,884	6,196	151.63	6,397	9,389
151.12	5,894	6,255	151.64	6,406	9,453
151.13	5,904	6,314	151.65	6,416	9,517
151.14	5,914	6,373	151.66	6,426	9,581
151.15	5,924	6,432	151.67	6,436	9,645
151.16	5,934	6,491	151.68	6,446	9,710
151.17	5,943	6,551	151.69	6,456	9,774
151.18	5,953	6,610	151.70	6,466	9,839
151.19	5,963	6,670	151.71	6,475	9,904
151.20	5,973	6,729	151.72	6,485	9,968
151.21	5,983	6,789	151.73	6,495	10,033
151.22	5,993	6,849	151.74	6,505	10,098
151.23	6,003	6,909	151.75	6,515	10,163
151.24	6,012	6,969	151.76	6,525	10,229
151.25	6,022	7,029	151.77	6,534	10,294
151.26	6,032	7,089	151.78	6,544	10,359
151.27	6,042	7,150	151.79	6,554	10,425
151.28	6,052	7,210	151.80	6,564	10,490
151.29	6,062	7,271	151.81	6,574	10,556
151.30	6,072	7,332	151.82	6,584	10,622
151.31	6,081	7,392	151.83	6,594	10,688
151.32	6,091	7,453	151.84	6,603	10,754
151.33	6,101	7,514	151.85	6,613	10,820
151.34	6,111	7,575	151.86	6,623	10,886
151.35	6,121	7,636	151.87	6,633	10,952
151.36	6,131	7,698	151.88	6,643	11,019
151.37	6,140	7,759	151.89	6,653	11,085
151.38	6,150	7,820	151.90	6,663	11,152
151.39	6,160	7,882	151.91	6,672	11,218
151.40	6,170	7,944	151.92	6,682	11,285
151.41	6,180	8,005	151.93	6,692	11,352
151.42	6,190	8,067	151.94	6,702	11,419
151.43	6,200	8,129	151.95	6,712	11,486
151.44	6,209	8,191	151.96	6,722	11,553
151.45	6,219	8,253	151.97	6,731	11,621

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.98	6,741	11,688	152.50	7,282	15,334
151.99	6,751	11,755	152.51	7,292	15,406
152.00	6,761	11,823	152.52	7,302	15,479
152.01	6,771	11,891	152.53	7,313	15,552
152.02	6,782	11,958	152.54	7,323	15,626
152.03	6,792	12,026	152.55	7,334	15,699
152.04	6,803	12,094	152.56	7,344	15,772
152.05	6,813	12,162	152.57	7,354	15,846
152.06	6,823	12,230	152.58	7,365	15,919
152.07	6,834	12,299	152.59	7,375	15,993
152.08	6,844	12,367	152.60	7,386	16,067
152.09	6,855	12,436	152.61	7,396	16,141
152.10	6,865	12,504	152.62	7,406	16,215
152.11	6,876	12,573	152.63	7,417	16,289
152.12	6,886	12,642	152.64	7,427	16,363
152.13	6,896	12,711	152.65	7,438	16,437
152.14	6,907	12,780	152.66	7,448	16,512
152.15	6,917	12,849	152.67	7,458	16,586
152.16	6,928	12,918	152.68	7,469	16,661
152.17	6,938	12,987	152.69	7,479	16,736
152.18	6,948	13,057	152.70	7,490	16,811
152.19	6,959	13,126	152.71	7,500	16,886
152.20	6,969	13,196	152.72	7,511	16,961
152.21	6,980	13,266	152.73	7,521	17,036
152.22	6,990	13,336	152.74	7,531	17,111
152.23	7,000	13,405	152.75	7,542	17,186
152.24	7,011	13,476	152.76	7,552	17,262
152.25	7,021	13,546	152.77	7,563	17,337
152.26	7,032	13,616	152.78	7,573	17,413
152.27	7,042	13,686	152.79	7,583	17,489
152.28	7,052	13,757	152.80	7,594	17,565
152.29	7,063	13,827	152.81	7,604	17,641
152.30	7,073	13,898	152.82	7,615	17,717
152.31	7,084	13,969	152.83	7,625	17,793
152.32	7,094	14,040	152.84	7,635	17,869
152.33	7,105	14,111	152.85	7,646	17,946
152.34	7,115	14,182	152.86	7,656	18,022
152.35	7,125	14,253	152.87	7,667	18,099
152.36	7,136	14,324	152.88	7,677	18,176
152.37	7,146	14,396	152.89	7,687	18,252
152.38	7,157	14,467	152.90	7,698	18,329
152.39	7,167	14,539	152.91	7,708	18,406
152.40	7,177	14,611	152.92	7,719	18,484
152.41	7,188	14,682	152.93	7,729	18,561
152.42	7,198	14,754	152.94	7,740	18,638
152.43	7,209	14,826	152.95	7,750	18,716
152.44	7,219	14,899	152.96	7,760	18,793
152.45	7,229	14,971	152.97	7,771	18,871
152.46	7,240	15,043	152.98	7,781	18,949
152.47	7,250	15,116	152.99	7,792	19,026
152.48	7,261	15,188	153.00	7,802	19,104
152.49	7,271	15,261	153.01	7,813	19,182

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.02	7,824	19,261	153.54	8,395	23,478
153.03	7,835	19,339	153.55	8,406	23,562
153.04	7,846	19,417	153.56	8,417	23,646
153.05	7,857	19,496	153.57	8,428	23,730
153.06	7,868	19,574	153.58	8,439	23,814
153.07	7,879	19,653	153.59	8,450	23,899
153.08	7,890	19,732	153.60	8,461	23,983
153.09	7,901	19,811	153.61	8,472	24,068
153.10	7,912	19,890	153.62	8,483	24,153
153.11	7,923	19,969	153.63	8,494	24,238
153.12	7,934	20,049	153.64	8,505	24,323
153.13	7,945	20,128	153.65	8,516	24,408
153.14	7,956	20,207	153.66	8,527	24,493
153.15	7,967	20,287	153.67	8,538	24,578
153.16	7,978	20,367	153.68	8,549	24,664
153.17	7,989	20,447	153.69	8,560	24,749
153.18	8,000	20,527	153.70	8,571	24,835
153.19	8,011	20,607	153.71	8,582	24,921
153.20	8,022	20,687	153.72	8,593	25,006
153.21	8,033	20,767	153.73	8,604	25,092
153.22	8,044	20,847	153.74	8,615	25,179
153.23	8,055	20,928	153.75	8,626	25,265
153.24	8,066	21,009	153.76	8,636	25,351
153.25	8,077	21,089	153.77	8,647	25,437
153.26	8,087	21,170	153.78	8,658	25,524
153.27	8,098	21,251	153.79	8,669	25,611
153.28	8,109	21,332	153.80	8,680	25,697
153.29	8,120	21,413	153.81	8,691	25,784
153.30	8,131	21,494	153.82	8,702	25,871
153.31	8,142	21,576	153.83	8,713	25,958
153.32	8,153	21,657	153.84	8,724	26,045
153.33	8,164	21,739	153.85	8,735	26,133
153.34	8,175	21,821	153.86	8,746	26,220
153.35	8,186	21,902	153.87	8,757	26,308
153.36	8,197	21,984	153.88	8,768	26,395
153.37	8,208	22,066	153.89	8,779	26,483
153.38	8,219	22,148	153.90	8,790	26,571
153.39	8,230	22,231	153.91	8,801	26,659
153.40	8,241	22,313	153.92	8,812	26,747
153.41	8,252	22,396	153.93	8,823	26,835
153.42	8,263	22,478	153.94	8,834	26,923
153.43	8,274	22,561	153.95	8,845	27,012
153.44	8,285	22,644	153.96	8,856	27,100
153.45	8,296	22,726	153.97	8,867	27,189
153.46	8,307	22,809	153.98	8,878	27,278
153.47	8,318	22,893	153.99	8,889	27,366
153.48	8,329	22,976	154.00	8,900	27,455
153.49	8,340	23,059	154.01	8,912	27,544
153.50	8,351	23,143	154.02	8,923	27,634
153.51	8,362	23,226	154.03	8,935	27,723
153.52	8,373	23,310	154.04	8,946	27,812
153.53	8,384	23,394	154.05	8,958	27,902

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
154.06	8,969	27,991	154.58	9,569	32,812
154.07	8,981	28,081	154.59	9,581	32,907
154.08	8,992	28,171	154.60	9,592	33,003
154.09	9,004	28,261	154.61	9,604	33,099
154.10	9,015	28,351	154.62	9,615	33,195
154.11	9,027	28,441	154.63	9,627	33,291
154.12	9,038	28,532	154.64	9,639	33,388
154.13	9,050	28,622	154.65	9,650	33,484
154.14	9,062	28,713	154.66	9,662	33,581
154.15	9,073	28,803	154.67	9,673	33,677
154.16	9,085	28,894	154.68	9,685	33,774
154.17	9,096	28,985	154.69	9,696	33,871
154.18	9,108	29,076	154.70	9,708	33,968
154.19	9,119	29,167	154.71	9,719	34,065
154.20	9,131	29,258	154.72	9,731	34,163
154.21	9,142	29,350	154.73	9,742	34,260
154.22	9,154	29,441	154.74	9,754	34,357
154.23	9,165	29,533	154.75	9,766	34,455
154.24	9,177	29,625	154.76	9,777	34,553
154.25	9,189	29,716	154.77	9,789	34,651
154.26	9,200	29,808	154.78	9,800	34,748
154.27	9,212	29,900	154.79	9,812	34,847
154.28	9,223	29,993	154.80	9,823	34,945
154.29	9,235	30,085	154.81	9,835	35,043
154.30	9,246	30,177	154.82	9,846	35,141
154.31	9,258	30,270	154.83	9,858	35,240
154.32	9,269	30,362	154.84	9,869	35,339
154.33	9,281	30,455	154.85	9,881	35,437
154.34	9,292	30,548	154.86	9,892	35,536
154.35	9,304	30,641	154.87	9,904	35,635
154.36	9,315	30,734	154.88	9,916	35,734
154.37	9,327	30,827	154.89	9,927	35,833
154.38	9,339	30,921	154.90	9,939	35,933
154.39	9,350	31,014	154.91	9,950	36,032
154.40	9,362	31,108	154.92	9,962	36,132
154.41	9,373	31,201	154.93	9,973	36,231
154.42	9,385	31,295	154.94	9,985	36,331
154.43	9,396	31,389	154.95	9,996	36,431
154.44	9,408	31,483	154.96	10,008	36,531
154.45	9,419	31,577	154.97	10,019	36,631
154.46	9,431	31,671	154.98	10,031	36,732
154.47	9,442	31,766	154.99	10,042	36,832
154.48	9,454	31,860	155.00	10,054	36,932
154.49	9,465	31,955	155.01	10,066	37,033
154.50	9,477	32,050	155.02	10,078	37,134
154.51	9,489	32,144	155.03	10,090	37,235
154.52	9,500	32,239	155.04	10,102	37,336
154.53	9,512	32,334	155.05	10,114	37,437
154.54	9,523	32,430	155.06	10,126	37,538
154.55	9,535	32,525	155.07	10,138	37,639
154.56	9,546	32,620	155.08	10,150	37,741
154.57	9,558	32,716	155.09	10,162	37,842

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
155.10	10,174	37,944
155.11	10,186	38,046
155.12	10,198	38,148
155.13	10,210	38,250
155.14	10,222	38,352
155.15	10,234	38,454
155.16	10,246	38,556
155.17	10,258	38,659
155.18	10,270	38,762
155.19	10,282	38,864
155.20	10,294	38,967
155.21	10,306	39,070
155.22	10,318	39,173
155.23	10,330	39,277
155.24	10,342	39,380
155.25	10,354	39,483
155.26	10,365	39,587
155.27	10,377	39,691
155.28	10,389	39,794
155.29	10,401	39,898
155.30	10,413	40,003
155.31	10,425	40,107
155.32	10,437	40,211
155.33	10,449	40,315
155.34	10,461	40,420
155.35	10,473	40,525
155.36	10,485	40,629
155.37	10,497	40,734
155.38	10,509	40,839
155.39	10,521	40,945
155.40	10,533	41,050
155.41	10,545	41,155
155.42	10,557	41,261
155.43	10,569	41,366
155.44	10,581	41,472
155.45	10,593	41,578
155.46	10,605	41,684
155.47	10,617	41,790
155.48	10,629	41,896
155.49	10,641	42,003
155.50	**10,653**	**42,109**

Summary for Pond B-22: Basin #22

Inflow Area = 2.460 ac, 33.05% Impervious, Inflow Depth = 6.41" for Current 100 yr event
Inflow = 16.23 cfs @ 12.17 hrs, Volume= 1.315 af
Outflow = 10.71 cfs @ 12.28 hrs, Volume= 1.173 af, Atten= 34%, Lag= 6.8 min
Primary = 10.71 cfs @ 12.28 hrs, Volume= 1.173 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 150.36' @ 12.28 hrs Surf.Area= 9,405 sf Storage= 21,627 cf

Plug-Flow detention time= 280.8 min calculated for 1.173 af (89% of inflow)
Center-of-Mass det. time= 226.4 min (1,014.0 - 787.6)

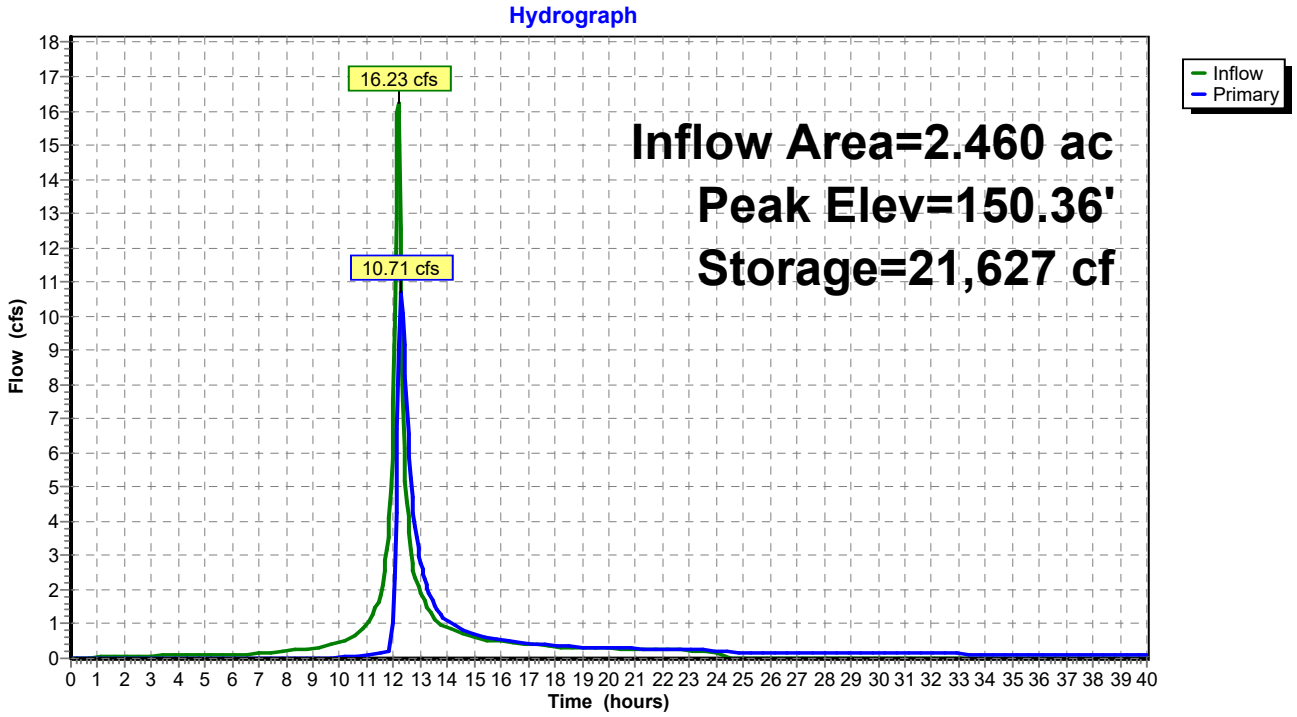
Volume	Invert	Avail.Storage	Storage Description
#1	147.30'	50,528 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
147.30	0	0	0
148.00	6,928	2,425	2,425
149.00	7,937	7,433	9,857
150.00	9,003	8,470	18,327
151.00	10,125	9,564	27,891
152.00	11,304	10,715	38,606
153.00	12,540	11,922	50,528

Device	Routing	Invert	Outlet Devices
#1	Primary	147.30'	**18.0" Round Culvert** L= 24.0' Ke= 0.500 Inlet / Outlet Invert= 147.30' / 146.20' S= 0.0458 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	148.15'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	149.47'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	152.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.63 cfs @ 12.28 hrs HW=150.35' (Free Discharge)
- **1=Culvert** (Passes 10.63 cfs of 12.92 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.24 cfs @ 6.98 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 10.39 cfs @ 3.07 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-22: Basin #22



Stage-Discharge for Pond B-22: Basin #22

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.30	0.00	147.82	0.00	148.34	0.05	148.86	0.13
147.31	0.00	147.83	0.00	148.35	0.05	148.87	0.13
147.32	0.00	147.84	0.00	148.36	0.05	148.88	0.13
147.33	0.00	147.85	0.00	148.37	0.06	148.89	0.13
147.34	0.00	147.86	0.00	148.38	0.06	148.90	0.13
147.35	0.00	147.87	0.00	148.39	0.06	148.91	0.13
147.36	0.00	147.88	0.00	148.40	0.06	148.92	0.13
147.37	0.00	147.89	0.00	148.41	0.06	148.93	0.13
147.38	0.00	147.90	0.00	148.42	0.07	148.94	0.14
147.39	0.00	147.91	0.00	148.43	0.07	148.95	0.14
147.40	0.00	147.92	0.00	148.44	0.07	148.96	0.14
147.41	0.00	147.93	0.00	148.45	0.07	148.97	0.14
147.42	0.00	147.94	0.00	148.46	0.07	148.98	0.14
147.43	0.00	147.95	0.00	148.47	0.08	148.99	0.14
147.44	0.00	147.96	0.00	148.48	0.08	149.00	0.14
147.45	0.00	147.97	0.00	148.49	0.08	149.01	0.14
147.46	0.00	147.98	0.00	148.50	0.08	149.02	0.14
147.47	0.00	147.99	0.00	148.51	0.08	149.03	0.14
147.48	0.00	148.00	0.00	148.52	0.08	149.04	0.15
147.49	0.00	148.01	0.00	148.53	0.09	149.05	0.15
147.50	0.00	148.02	0.00	148.54	0.09	149.06	0.15
147.51	0.00	148.03	0.00	148.55	0.09	149.07	0.15
147.52	0.00	148.04	0.00	148.56	0.09	149.08	0.15
147.53	0.00	148.05	0.00	148.57	0.09	149.09	0.15
147.54	0.00	148.06	0.00	148.58	0.09	149.10	0.15
147.55	0.00	148.07	0.00	148.59	0.10	149.11	0.15
147.56	0.00	148.08	0.00	148.60	0.10	149.12	0.15
147.57	0.00	148.09	0.00	148.61	0.10	149.13	0.15
147.58	0.00	148.10	0.00	148.62	0.10	149.14	0.15
147.59	0.00	148.11	0.00	148.63	0.10	149.15	0.16
147.60	0.00	148.12	0.00	148.64	0.10	149.16	0.16
147.61	0.00	148.13	0.00	148.65	0.10	149.17	0.16
147.62	0.00	148.14	0.00	148.66	0.10	149.18	0.16
147.63	0.00	148.15	0.00	148.67	0.11	149.19	0.16
147.64	0.00	148.16	0.00	148.68	0.11	149.20	0.16
147.65	0.00	148.17	0.00	148.69	0.11	149.21	0.16
147.66	0.00	148.18	0.00	148.70	0.11	149.22	0.16
147.67	0.00	148.19	0.00	148.71	0.11	149.23	0.16
147.68	0.00	148.20	0.00	148.72	0.11	149.24	0.16
147.69	0.00	148.21	0.01	148.73	0.11	149.25	0.16
147.70	0.00	148.22	0.01	148.74	0.11	149.26	0.16
147.71	0.00	148.23	0.01	148.75	0.12	149.27	0.17
147.72	0.00	148.24	0.01	148.76	0.12	149.28	0.17
147.73	0.00	148.25	0.02	148.77	0.12	149.29	0.17
147.74	0.00	148.26	0.02	148.78	0.12	149.30	0.17
147.75	0.00	148.27	0.02	148.79	0.12	149.31	0.17
147.76	0.00	148.28	0.03	148.80	0.12	149.32	0.17
147.77	0.00	148.29	0.03	148.81	0.12	149.33	0.17
147.78	0.00	148.30	0.03	148.82	0.12	149.34	0.17
147.79	0.00	148.31	0.04	148.83	0.12	149.35	0.17
147.80	0.00	148.32	0.04	148.84	0.13	149.36	0.17
147.81	0.00	148.33	0.05	148.85	0.13	149.37	0.17

Stage-Discharge for Pond B-22: Basin #22 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
149.38	0.17	149.90	3.82	150.42	11.78	150.94	14.46
149.39	0.17	149.91	3.94	150.43	11.95	150.95	14.49
149.40	0.18	149.92	4.07	150.44	12.13	150.96	14.51
149.41	0.18	149.93	4.20	150.45	12.31	150.97	14.54
149.42	0.18	149.94	4.33	150.46	12.49	150.98	14.56
149.43	0.18	149.95	4.46	150.47	12.67	150.99	14.59
149.44	0.18	149.96	4.59	150.48	12.85	151.00	14.61
149.45	0.18	149.97	4.72	150.49	13.03	151.01	14.64
149.46	0.18	149.98	4.86	150.50	13.21	151.02	14.66
149.47	0.18	149.99	4.99	150.51	13.35	151.03	14.69
149.48	0.19	150.00	5.13	150.52	13.37	151.04	14.71
149.49	0.22	150.01	5.27	150.53	13.40	151.05	14.74
149.50	0.25	150.02	5.41	150.54	13.43	151.06	14.76
149.51	0.29	150.03	5.55	150.55	13.45	151.07	14.79
149.52	0.33	150.04	5.69	150.56	13.48	151.08	14.81
149.53	0.38	150.05	5.83	150.57	13.51	151.09	14.84
149.54	0.43	150.06	5.97	150.58	13.53	151.10	14.86
149.55	0.48	150.07	6.12	150.59	13.56	151.11	14.88
149.56	0.54	150.08	6.26	150.60	13.59	151.12	14.91
149.57	0.60	150.09	6.41	150.61	13.61	151.13	14.93
149.58	0.66	150.10	6.56	150.62	13.64	151.14	14.96
149.59	0.73	150.11	6.71	150.63	13.67	151.15	14.98
149.60	0.80	150.12	6.86	150.64	13.69	151.16	15.01
149.61	0.87	150.13	7.01	150.65	13.72	151.17	15.03
149.62	0.95	150.14	7.16	150.66	13.75	151.18	15.05
149.63	1.02	150.15	7.31	150.67	13.77	151.19	15.08
149.64	1.10	150.16	7.46	150.68	13.80	151.20	15.10
149.65	1.18	150.17	7.62	150.69	13.83	151.21	15.13
149.66	1.27	150.18	7.78	150.70	13.85	151.22	15.15
149.67	1.35	150.19	7.93	150.71	13.88	151.23	15.17
149.68	1.44	150.20	8.09	150.72	13.90	151.24	15.20
149.69	1.53	150.21	8.25	150.73	13.93	151.25	15.22
149.70	1.62	150.22	8.41	150.74	13.96	151.26	15.24
149.71	1.72	150.23	8.57	150.75	13.98	151.27	15.27
149.72	1.81	150.24	8.73	150.76	14.01	151.28	15.29
149.73	1.91	150.25	8.89	150.77	14.03	151.29	15.32
149.74	2.01	150.26	9.05	150.78	14.06	151.30	15.34
149.75	2.11	150.27	9.22	150.79	14.08	151.31	15.36
149.76	2.21	150.28	9.38	150.80	14.11	151.32	15.39
149.77	2.32	150.29	9.55	150.81	14.14	151.33	15.41
149.78	2.43	150.30	9.71	150.82	14.16	151.34	15.43
149.79	2.53	150.31	9.88	150.83	14.19	151.35	15.46
149.80	2.64	150.32	10.05	150.84	14.21	151.36	15.48
149.81	2.75	150.33	10.22	150.85	14.24	151.37	15.50
149.82	2.87	150.34	10.39	150.86	14.26	151.38	15.53
149.83	2.98	150.35	10.56	150.87	14.29	151.39	15.55
149.84	3.10	150.36	10.73	150.88	14.31	151.40	15.57
149.85	3.21	150.37	10.90	150.89	14.34	151.41	15.60
149.86	3.33	150.38	11.08	150.90	14.36	151.42	15.62
149.87	3.45	150.39	11.25	150.91	14.39	151.43	15.64
149.88	3.57	150.40	11.43	150.92	14.41	151.44	15.67
149.89	3.70	150.41	11.60	150.93	14.44	151.45	15.69

Stage-Discharge for Pond B-22: Basin #22 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
151.46	15.71	151.98	16.87	152.50	17.95
151.47	15.74	151.99	16.89	152.51	17.97
151.48	15.76	152.00	16.91	152.52	17.99
151.49	15.78	152.01	16.93	152.53	18.01
151.50	15.80	152.02	16.95	152.54	18.03
151.51	15.83	152.03	16.97	152.55	18.05
151.52	15.85	152.04	17.00	152.56	18.07
151.53	15.87	152.05	17.02	152.57	18.09
151.54	15.90	152.06	17.04	152.58	18.11
151.55	15.92	152.07	17.06	152.59	18.13
151.56	15.94	152.08	17.08	152.60	18.15
151.57	15.96	152.09	17.10	152.61	18.17
151.58	15.99	152.10	17.12	152.62	18.19
151.59	16.01	152.11	17.14	152.63	18.21
151.60	16.03	152.12	17.17	152.64	18.23
151.61	16.05	152.13	17.19	152.65	18.25
151.62	16.08	152.14	17.21	152.66	18.27
151.63	16.10	152.15	17.23	152.67	18.29
151.64	16.12	152.16	17.25	152.68	18.31
151.65	16.14	152.17	17.27	152.69	18.33
151.66	16.17	152.18	17.29	152.70	18.35
151.67	16.19	152.19	17.31	152.71	18.37
151.68	16.21	152.20	17.33	152.72	18.39
151.69	16.23	152.21	17.35	152.73	18.41
151.70	16.26	152.22	17.38	152.74	18.43
151.71	16.28	152.23	17.40	152.75	18.45
151.72	16.30	152.24	17.42	152.76	18.47
151.73	16.32	152.25	17.44	152.77	18.49
151.74	16.34	152.26	17.46	152.78	18.51
151.75	16.37	152.27	17.48	152.79	18.52
151.76	16.39	152.28	17.50	152.80	18.54
151.77	16.41	152.29	17.52	152.81	18.56
151.78	16.43	152.30	17.54	152.82	18.58
151.79	16.46	152.31	17.56	152.83	18.60
151.80	16.48	152.32	17.58	152.84	18.62
151.81	16.50	152.33	17.60	152.85	18.64
151.82	16.52	152.34	17.62	152.86	18.66
151.83	16.54	152.35	17.64	152.87	18.68
151.84	16.56	152.36	17.66	152.88	18.70
151.85	16.59	152.37	17.69	152.89	18.72
151.86	16.61	152.38	17.71	152.90	18.74
151.87	16.63	152.39	17.73	152.91	18.76
151.88	16.65	152.40	17.75	152.92	18.78
151.89	16.67	152.41	17.77	152.93	18.80
151.90	16.70	152.42	17.79	152.94	18.82
151.91	16.72	152.43	17.81	152.95	18.83
151.92	16.74	152.44	17.83	152.96	18.97
151.93	16.76	152.45	17.85	152.97	19.20
151.94	16.78	152.46	17.87	152.98	19.50
151.95	16.80	152.47	17.89	152.99	19.85
151.96	16.82	152.48	17.91	153.00	**20.24**
151.97	16.85	152.49	17.93		

Stage-Area-Storage for Pond B-22: Basin #22

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.30	0	0	147.82	5,147	1,338
147.31	99	0	147.83	5,245	1,390
147.32	198	2	147.84	5,344	1,443
147.33	297	4	147.85	5,443	1,497
147.34	396	8	147.86	5,542	1,552
147.35	495	12	147.87	5,641	1,608
147.36	594	18	147.88	5,740	1,665
147.37	693	24	147.89	5,839	1,723
147.38	792	32	147.90	5,938	1,781
147.39	891	40	147.91	6,037	1,841
147.40	990	49	147.92	6,136	1,902
147.41	1,089	60	147.93	6,235	1,964
147.42	1,188	71	147.94	6,334	2,027
147.43	1,287	84	147.95	6,433	2,091
147.44	1,386	97	147.96	6,532	2,156
147.45	1,485	111	147.97	6,631	2,221
147.46	1,584	127	147.98	6,730	2,288
147.47	1,683	143	147.99	6,829	2,356
147.48	1,781	160	148.00	6,928	2,425
147.49	1,880	179	148.01	6,938	2,494
147.50	1,979	198	148.02	6,948	2,564
147.51	2,078	218	148.03	6,958	2,633
147.52	2,177	240	148.04	6,968	2,703
147.53	2,276	262	148.05	6,978	2,772
147.54	2,375	285	148.06	6,989	2,842
147.55	2,474	309	148.07	6,999	2,912
147.56	2,573	335	148.08	7,009	2,982
147.57	2,672	361	148.09	7,019	3,052
147.58	2,771	388	148.10	7,029	3,123
147.59	2,870	416	148.11	7,039	3,193
147.60	2,969	445	148.12	7,049	3,263
147.61	3,068	476	148.13	7,059	3,334
147.62	3,167	507	148.14	7,069	3,405
147.63	3,266	539	148.15	7,079	3,475
147.64	3,365	572	148.16	7,089	3,546
147.65	3,464	606	148.17	7,100	3,617
147.66	3,563	641	148.18	7,110	3,688
147.67	3,662	677	148.19	7,120	3,759
147.68	3,761	715	148.20	7,130	3,831
147.69	3,860	753	148.21	7,140	3,902
147.70	3,959	792	148.22	7,150	3,973
147.71	4,058	832	148.23	7,160	4,045
147.72	4,157	873	148.24	7,170	4,117
147.73	4,256	915	148.25	7,180	4,188
147.74	4,355	958	148.26	7,190	4,260
147.75	4,454	1,002	148.27	7,200	4,332
147.76	4,553	1,047	148.28	7,211	4,404
147.77	4,652	1,093	148.29	7,221	4,476
147.78	4,751	1,140	148.30	7,231	4,549
147.79	4,850	1,188	148.31	7,241	4,621
147.80	4,949	1,237	148.32	7,251	4,693
147.81	5,048	1,287	148.33	7,261	4,766

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.34	7,271	4,839
148.35	7,281	4,911
148.36	7,291	4,984
148.37	7,301	5,057
148.38	7,311	5,130
148.39	7,322	5,203
148.40	7,332	5,277
148.41	7,342	5,350
148.42	7,352	5,424
148.43	7,362	5,497
148.44	7,372	5,571
148.45	7,382	5,645
148.46	7,392	5,718
148.47	7,402	5,792
148.48	7,412	5,866
148.49	7,422	5,941
148.50	7,433	6,015
148.51	7,443	6,089
148.52	7,453	6,164
148.53	7,463	6,238
148.54	7,473	6,313
148.55	7,483	6,388
148.56	7,493	6,463
148.57	7,503	6,538
148.58	7,513	6,613
148.59	7,523	6,688
148.60	7,533	6,763
148.61	7,543	6,839
148.62	7,554	6,914
148.63	7,564	6,990
148.64	7,574	7,065
148.65	7,584	7,141
148.66	7,594	7,217
148.67	7,604	7,293
148.68	7,614	7,369
148.69	7,624	7,445
148.70	7,634	7,522
148.71	7,644	7,598
148.72	7,654	7,674
148.73	7,665	7,751
148.74	7,675	7,828
148.75	7,685	7,905
148.76	7,695	7,981
148.77	7,705	8,058
148.78	7,715	8,136
148.79	7,725	8,213
148.80	7,735	8,290
148.81	7,745	8,367
148.82	7,755	8,445
148.83	7,765	8,523
148.84	7,776	8,600
148.85	7,786	8,678
148.86	7,796	8,756
148.87	7,806	8,834
148.88	7,816	8,912
148.89	7,826	8,990
148.90	7,836	9,069
148.91	7,846	9,147
148.92	7,856	9,226
148.93	7,866	9,304
148.94	7,876	9,383
148.95	7,887	9,462
148.96	7,897	9,541
148.97	7,907	9,620
148.98	7,917	9,699
148.99	7,927	9,778
149.00	7,937	9,857
149.01	7,948	9,937
149.02	7,958	10,016
149.03	7,969	10,096
149.04	7,980	10,176
149.05	7,990	10,255
149.06	8,001	10,335
149.07	8,012	10,416
149.08	8,022	10,496
149.09	8,033	10,576
149.10	8,044	10,656
149.11	8,054	10,737
149.12	8,065	10,817
149.13	8,076	10,898
149.14	8,086	10,979
149.15	8,097	11,060
149.16	8,108	11,141
149.17	8,118	11,222
149.18	8,129	11,303
149.19	8,140	11,385
149.20	8,150	11,466
149.21	8,161	11,548
149.22	8,172	11,629
149.23	8,182	11,711
149.24	8,193	11,793
149.25	8,204	11,875
149.26	8,214	11,957
149.27	8,225	12,039
149.28	8,235	12,121
149.29	8,246	12,204
149.30	8,257	12,286
149.31	8,267	12,369
149.32	8,278	12,452
149.33	8,289	12,535
149.34	8,299	12,617
149.35	8,310	12,701
149.36	8,321	12,784
149.37	8,331	12,867

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
149.38	8,342	12,950	149.90	8,896	17,432
149.39	8,353	13,034	149.91	8,907	17,521
149.40	8,363	13,117	149.92	8,918	17,610
149.41	8,374	13,201	149.93	8,928	17,700
149.42	8,385	13,285	149.94	8,939	17,789
149.43	8,395	13,369	149.95	8,950	17,878
149.44	8,406	13,453	149.96	8,960	17,968
149.45	8,417	13,537	149.97	8,971	18,058
149.46	8,427	13,621	149.98	8,982	18,147
149.47	8,438	13,705	149.99	8,992	18,237
149.48	8,449	13,790	150.00	9,003	18,327
149.49	8,459	13,874	150.01	9,014	18,417
149.50	8,470	13,959	150.02	9,025	18,508
149.51	8,481	14,044	150.03	9,037	18,598
149.52	8,491	14,129	150.04	9,048	18,688
149.53	8,502	14,214	150.05	9,059	18,779
149.54	8,513	14,299	150.06	9,070	18,869
149.55	8,523	14,384	150.07	9,082	18,960
149.56	8,534	14,469	150.08	9,093	19,051
149.57	8,545	14,555	150.09	9,104	19,142
149.58	8,555	14,640	150.10	9,115	19,233
149.59	8,566	14,726	150.11	9,126	19,324
149.60	8,577	14,811	150.12	9,138	19,416
149.61	8,587	14,897	150.13	9,149	19,507
149.62	8,598	14,983	150.14	9,160	19,599
149.63	8,609	15,069	150.15	9,171	19,690
149.64	8,619	15,155	150.16	9,183	19,782
149.65	8,630	15,242	150.17	9,194	19,874
149.66	8,641	15,328	150.18	9,205	19,966
149.67	8,651	15,414	150.19	9,216	20,058
149.68	8,662	15,501	150.20	9,227	20,150
149.69	8,673	15,588	150.21	9,239	20,243
149.70	8,683	15,674	150.22	9,250	20,335
149.71	8,694	15,761	150.23	9,261	20,428
149.72	8,705	15,848	150.24	9,272	20,520
149.73	8,715	15,935	150.25	9,284	20,613
149.74	8,726	16,023	150.26	9,295	20,706
149.75	8,737	16,110	150.27	9,306	20,799
149.76	8,747	16,197	150.28	9,317	20,892
149.77	8,758	16,285	150.29	9,328	20,985
149.78	8,768	16,372	150.30	9,340	21,079
149.79	8,779	16,460	150.31	9,351	21,172
149.80	8,790	16,548	150.32	9,362	21,266
149.81	8,800	16,636	150.33	9,373	21,359
149.82	8,811	16,724	150.34	9,384	21,453
149.83	8,822	16,812	150.35	9,396	21,547
149.84	8,832	16,900	150.36	9,407	21,641
149.85	8,843	16,989	150.37	9,418	21,735
149.86	8,854	17,077	150.38	9,429	21,829
149.87	8,864	17,166	150.39	9,441	21,924
149.88	8,875	17,255	150.40	9,452	22,018
149.89	8,886	17,343	150.41	9,463	22,113

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.42	9,474	22,208	150.94	10,058	27,286
150.43	9,485	22,302	150.95	10,069	27,386
150.44	9,497	22,397	150.96	10,080	27,487
150.45	9,508	22,492	150.97	10,091	27,588
150.46	9,519	22,587	150.98	10,103	27,689
150.47	9,530	22,683	150.99	10,114	27,790
150.48	9,542	22,778	151.00	10,125	27,891
150.49	9,553	22,873	151.01	10,137	27,993
150.50	9,564	22,969	151.02	10,149	28,094
150.51	9,575	23,065	151.03	10,160	28,196
150.52	9,586	23,161	151.04	10,172	28,297
150.53	9,598	23,256	151.05	10,184	28,399
150.54	9,609	23,353	151.06	10,196	28,501
150.55	9,620	23,449	151.07	10,208	28,603
150.56	9,631	23,545	151.08	10,219	28,705
150.57	9,643	23,641	151.09	10,231	28,807
150.58	9,654	23,738	151.10	10,243	28,910
150.59	9,665	23,834	151.11	10,255	29,012
150.60	9,676	23,931	151.12	10,266	29,115
150.61	9,687	24,028	151.13	10,278	29,218
150.62	9,699	24,125	151.14	10,290	29,320
150.63	9,710	24,222	151.15	10,302	29,423
150.64	9,721	24,319	151.16	10,314	29,526
150.65	9,732	24,416	151.17	10,325	29,630
150.66	9,744	24,514	151.18	10,337	29,733
150.67	9,755	24,611	151.19	10,349	29,836
150.68	9,766	24,709	151.20	10,361	29,940
150.69	9,777	24,806	151.21	10,373	30,044
150.70	9,788	24,904	151.22	10,384	30,147
150.71	9,800	25,002	151.23	10,396	30,251
150.72	9,811	25,100	151.24	10,408	30,355
150.73	9,822	25,198	151.25	10,420	30,459
150.74	9,833	25,297	151.26	10,432	30,564
150.75	9,845	25,395	151.27	10,443	30,668
150.76	9,856	25,494	151.28	10,455	30,773
150.77	9,867	25,592	151.29	10,467	30,877
150.78	9,878	25,691	151.30	10,479	30,982
150.79	9,889	25,790	151.31	10,490	31,087
150.80	9,901	25,889	151.32	10,502	31,192
150.81	9,912	25,988	151.33	10,514	31,297
150.82	9,923	26,087	151.34	10,526	31,402
150.83	9,934	26,186	151.35	10,538	31,507
150.84	9,945	26,286	151.36	10,549	31,613
150.85	9,957	26,385	151.37	10,561	31,718
150.86	9,968	26,485	151.38	10,573	31,824
150.87	9,979	26,585	151.39	10,585	31,930
150.88	9,990	26,684	151.40	10,597	32,036
150.89	10,002	26,784	151.41	10,608	32,142
150.90	10,013	26,884	151.42	10,620	32,248
150.91	10,024	26,985	151.43	10,632	32,354
150.92	10,035	27,085	151.44	10,644	32,460
150.93	10,046	27,185	151.45	10,656	32,567

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.46	10,667	32,674	151.98	11,280	38,380
151.47	10,679	32,780	151.99	11,292	38,493
151.48	10,691	32,887	152.00	11,304	38,606
151.49	10,703	32,994	152.01	11,316	38,719
151.50	10,715	33,101	152.02	11,329	38,832
151.51	10,726	33,208	152.03	11,341	38,945
151.52	10,738	33,316	152.04	11,353	39,059
151.53	10,750	33,423	152.05	11,366	39,173
151.54	10,762	33,531	152.06	11,378	39,286
151.55	10,773	33,638	152.07	11,391	39,400
151.56	10,785	33,746	152.08	11,403	39,514
151.57	10,797	33,854	152.09	11,415	39,628
151.58	10,809	33,962	152.10	11,428	39,742
151.59	10,821	34,070	152.11	11,440	39,857
151.60	10,832	34,179	152.12	11,452	39,971
151.61	10,844	34,287	152.13	11,465	40,086
151.62	10,856	34,395	152.14	11,477	40,200
151.63	10,868	34,504	152.15	11,489	40,315
151.64	10,880	34,613	152.16	11,502	40,430
151.65	10,891	34,722	152.17	11,514	40,545
151.66	10,903	34,831	152.18	11,526	40,661
151.67	10,915	34,940	152.19	11,539	40,776
151.68	10,927	35,049	152.20	11,551	40,891
151.69	10,939	35,158	152.21	11,564	41,007
151.70	10,950	35,268	152.22	11,576	41,123
151.71	10,962	35,377	152.23	11,588	41,238
151.72	10,974	35,487	152.24	11,601	41,354
151.73	10,986	35,597	152.25	11,613	41,470
151.74	10,997	35,707	152.26	11,625	41,587
151.75	11,009	35,817	152.27	11,638	41,703
151.76	11,021	35,927	152.28	11,650	41,819
151.77	11,033	36,037	152.29	11,662	41,936
151.78	11,045	36,147	152.30	11,675	42,053
151.79	11,056	36,258	152.31	11,687	42,169
151.80	11,068	36,369	152.32	11,700	42,286
151.81	11,080	36,479	152.33	11,712	42,403
151.82	11,092	36,590	152.34	11,724	42,521
151.83	11,104	36,701	152.35	11,737	42,638
151.84	11,115	36,812	152.36	11,749	42,755
151.85	11,127	36,923	152.37	11,761	42,873
151.86	11,139	37,035	152.38	11,774	42,991
151.87	11,151	37,146	152.39	11,786	43,108
151.88	11,163	37,258	152.40	11,798	43,226
151.89	11,174	37,369	152.41	11,811	43,344
151.90	11,186	37,481	152.42	11,823	43,462
151.91	11,198	37,593	152.43	11,835	43,581
151.92	11,210	37,705	152.44	11,848	43,699
151.93	11,221	37,817	152.45	11,860	43,818
151.94	11,233	37,930	152.46	11,873	43,936
151.95	11,245	38,042	152.47	11,885	44,055
151.96	11,257	38,155	152.48	11,897	44,174
151.97	11,269	38,267	152.49	11,910	44,293

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
152.50	11,922	44,412
152.51	11,934	44,532
152.52	11,947	44,651
152.53	11,959	44,771
152.54	11,971	44,890
152.55	11,984	45,010
152.56	11,996	45,130
152.57	12,009	45,250
152.58	12,021	45,370
152.59	12,033	45,490
152.60	12,046	45,611
152.61	12,058	45,731
152.62	12,070	45,852
152.63	12,083	45,973
152.64	12,095	46,093
152.65	12,107	46,215
152.66	12,120	46,336
152.67	12,132	46,457
152.68	12,144	46,578
152.69	12,157	46,700
152.70	12,169	46,821
152.71	12,182	46,943
152.72	12,194	47,065
152.73	12,206	47,187
152.74	12,219	47,309
152.75	12,231	47,431
152.76	12,243	47,554
152.77	12,256	47,676
152.78	12,268	47,799
152.79	12,280	47,922
152.80	12,293	48,045
152.81	12,305	48,168
152.82	12,318	48,291
152.83	12,330	48,414
152.84	12,342	48,537
152.85	12,355	48,661
152.86	12,367	48,784
152.87	12,379	48,908
152.88	12,392	49,032
152.89	12,404	49,156
152.90	12,416	49,280
152.91	12,429	49,404
152.92	12,441	49,529
152.93	12,453	49,653
152.94	12,466	49,778
152.95	12,478	49,902
152.96	12,491	50,027
152.97	12,503	50,152
152.98	12,515	50,277
152.99	12,528	50,402
153.00	**12,540**	**50,528**

Summary for Pond B-23: Basin #23

Inflow Area = 2.449 ac, 33.56% Impervious, Inflow Depth = 6.43" for Current 100 yr event
Inflow = 16.18 cfs @ 12.17 hrs, Volume= 1.312 af
Outflow = 11.95 cfs @ 12.26 hrs, Volume= 1.225 af, Atten= 26%, Lag= 5.6 min
Primary = 11.95 cfs @ 12.26 hrs, Volume= 1.225 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 147.44' @ 12.26 hrs Surf.Area= 8,095 sf Storage= 18,464 cf

Plug-Flow detention time= 191.4 min calculated for 1.225 af (93% of inflow)
Center-of-Mass det. time= 154.4 min (941.6 - 787.2)

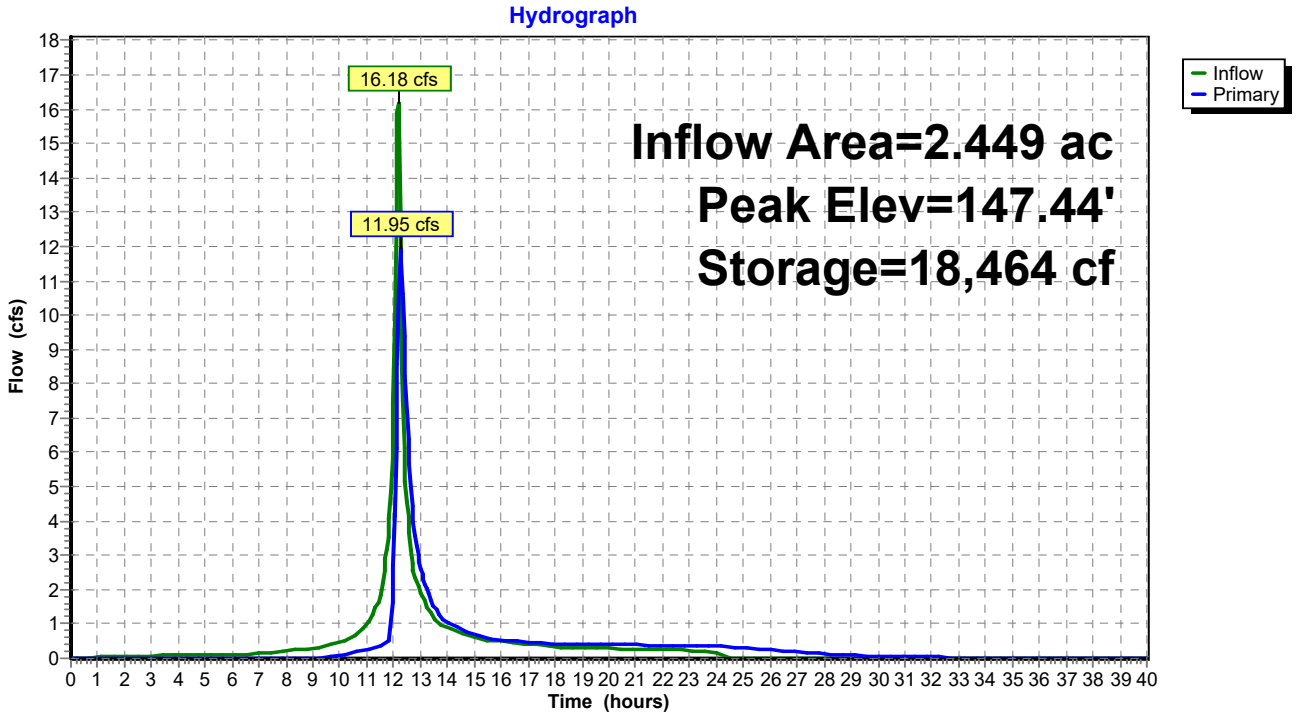
Volume	Invert	Avail.Storage	Storage Description
#1	144.30'	23,175 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
144.30	0	0	0
145.00	5,512	1,929	1,929
146.00	6,527	6,020	7,949
147.00	7,599	7,063	15,012
148.00	8,727	8,163	23,175

Device	Routing	Invert	Outlet Devices
#1	Primary	144.30'	**18.0" Round Culvert** L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 144.30' / 141.44' S= 0.0636 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	145.28'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.81 cfs @ 12.26 hrs HW=147.43' (Free Discharge)
- **1=Culvert** (Passes 11.81 cfs of 13.13 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.59 cfs @ 6.78 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 11.22 cfs @ 3.16 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-23: Basin #23



Stage-Discharge for Pond B-23: Basin #23

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
144.30	0.00	144.82	0.00	145.34	0.01	145.86	0.27
144.31	0.00	144.83	0.00	145.35	0.01	145.87	0.27
144.32	0.00	144.84	0.00	145.36	0.02	145.88	0.28
144.33	0.00	144.85	0.00	145.37	0.02	145.89	0.28
144.34	0.00	144.86	0.00	145.38	0.02	145.90	0.28
144.35	0.00	144.87	0.00	145.39	0.03	145.91	0.29
144.36	0.00	144.88	0.00	145.40	0.03	145.92	0.29
144.37	0.00	144.89	0.00	145.41	0.04	145.93	0.29
144.38	0.00	144.90	0.00	145.42	0.04	145.94	0.30
144.39	0.00	144.91	0.00	145.43	0.05	145.95	0.30
144.40	0.00	144.92	0.00	145.44	0.06	145.96	0.30
144.41	0.00	144.93	0.00	145.45	0.06	145.97	0.30
144.42	0.00	144.94	0.00	145.46	0.07	145.98	0.31
144.43	0.00	144.95	0.00	145.47	0.08	145.99	0.31
144.44	0.00	144.96	0.00	145.48	0.08	146.00	0.31
144.45	0.00	144.97	0.00	145.49	0.09	146.01	0.32
144.46	0.00	144.98	0.00	145.50	0.10	146.02	0.32
144.47	0.00	144.99	0.00	145.51	0.10	146.03	0.32
144.48	0.00	145.00	0.00	145.52	0.11	146.04	0.32
144.49	0.00	145.01	0.00	145.53	0.12	146.05	0.33
144.50	0.00	145.02	0.00	145.54	0.13	146.06	0.33
144.51	0.00	145.03	0.00	145.55	0.13	146.07	0.33
144.52	0.00	145.04	0.00	145.56	0.14	146.08	0.33
144.53	0.00	145.05	0.00	145.57	0.15	146.09	0.34
144.54	0.00	145.06	0.00	145.58	0.15	146.10	0.34
144.55	0.00	145.07	0.00	145.59	0.16	146.11	0.34
144.56	0.00	145.08	0.00	145.60	0.17	146.12	0.34
144.57	0.00	145.09	0.00	145.61	0.17	146.13	0.35
144.58	0.00	145.10	0.00	145.62	0.17	146.14	0.35
144.59	0.00	145.11	0.00	145.63	0.18	146.15	0.35
144.60	0.00	145.12	0.00	145.64	0.18	146.16	0.35
144.61	0.00	145.13	0.00	145.65	0.19	146.17	0.36
144.62	0.00	145.14	0.00	145.66	0.19	146.18	0.36
144.63	0.00	145.15	0.00	145.67	0.20	146.19	0.36
144.64	0.00	145.16	0.00	145.68	0.20	146.20	0.36
144.65	0.00	145.17	0.00	145.69	0.21	146.21	0.37
144.66	0.00	145.18	0.00	145.70	0.21	146.22	0.37
144.67	0.00	145.19	0.00	145.71	0.22	146.23	0.37
144.68	0.00	145.20	0.00	145.72	0.22	146.24	0.37
144.69	0.00	145.21	0.00	145.73	0.22	146.25	0.38
144.70	0.00	145.22	0.00	145.74	0.23	146.26	0.38
144.71	0.00	145.23	0.00	145.75	0.23	146.27	0.38
144.72	0.00	145.24	0.00	145.76	0.24	146.28	0.38
144.73	0.00	145.25	0.00	145.77	0.24	146.29	0.39
144.74	0.00	145.26	0.00	145.78	0.24	146.30	0.39
144.75	0.00	145.27	0.00	145.79	0.25	146.31	0.39
144.76	0.00	145.28	0.00	145.80	0.25	146.32	0.39
144.77	0.00	145.29	0.00	145.81	0.25	146.33	0.39
144.78	0.00	145.30	0.00	145.82	0.26	146.34	0.40
144.79	0.00	145.31	0.00	145.83	0.26	146.35	0.40
144.80	0.00	145.32	0.00	145.84	0.26	146.36	0.40
144.81	0.00	145.33	0.01	145.85	0.27	146.37	0.40

Stage-Discharge for Pond B-23: Basin #23 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
146.38	0.41	146.90	3.75	147.42	11.60	147.94	14.46
146.39	0.41	146.91	3.87	147.43	11.78	147.95	14.49
146.40	0.41	146.92	4.00	147.44	11.95	147.96	14.63
146.41	0.41	146.93	4.12	147.45	12.13	147.97	14.87
146.42	0.41	146.94	4.25	147.46	12.31	147.98	15.17
146.43	0.42	146.95	4.37	147.47	12.49	147.99	15.53
146.44	0.42	146.96	4.50	147.48	12.67	148.00	**15.93**
146.45	0.42	146.97	4.63	147.49	12.85		
146.46	0.42	146.98	4.77	147.50	13.03		
146.47	0.43	146.99	4.90	147.51	13.21		
146.48	0.43	147.00	5.03	147.52	13.37		
146.49	0.43	147.01	5.17	147.53	13.40		
146.50	0.43	147.02	5.30	147.54	13.43		
146.51	0.45	147.03	5.44	147.55	13.45		
146.52	0.47	147.04	5.58	147.56	13.48		
146.53	0.51	147.05	5.72	147.57	13.51		
146.54	0.54	147.06	5.86	147.58	13.53		
146.55	0.59	147.07	6.00	147.59	13.56		
146.56	0.64	147.08	6.15	147.60	13.59		
146.57	0.69	147.09	6.29	147.61	13.61		
146.58	0.74	147.10	6.44	147.62	13.64		
146.59	0.80	147.11	6.58	147.63	13.67		
146.60	0.86	147.12	6.73	147.64	13.69		
146.61	0.93	147.13	6.88	147.65	13.72		
146.62	1.00	147.14	7.03	147.66	13.75		
146.63	1.07	147.15	7.18	147.67	13.77		
146.64	1.14	147.16	7.33	147.68	13.80		
146.65	1.22	147.17	7.48	147.69	13.83		
146.66	1.29	147.18	7.64	147.70	13.85		
146.67	1.37	147.19	7.79	147.71	13.88		
146.68	1.46	147.20	7.95	147.72	13.90		
146.69	1.54	147.21	8.11	147.73	13.93		
146.70	1.63	147.22	8.26	147.74	13.96		
146.71	1.72	147.23	8.42	147.75	13.98		
146.72	1.81	147.24	8.58	147.76	14.01		
146.73	1.90	147.25	8.74	147.77	14.03		
146.74	2.00	147.26	8.90	147.78	14.06		
146.75	2.09	147.27	9.06	147.79	14.08		
146.76	2.19	147.28	9.23	147.80	14.11		
146.77	2.29	147.29	9.39	147.81	14.14		
146.78	2.40	147.30	9.56	147.82	14.16		
146.79	2.50	147.31	9.72	147.83	14.19		
146.80	2.61	147.32	9.89	147.84	14.21		
146.81	2.71	147.33	10.06	147.85	14.24		
146.82	2.82	147.34	10.23	147.86	14.26		
146.83	2.93	147.35	10.39	147.87	14.29		
146.84	3.05	147.36	10.56	147.88	14.31		
146.85	3.16	147.37	10.74	147.89	14.34		
146.86	3.27	147.38	10.91	147.90	14.36		
146.87	3.39	147.39	11.08	147.91	14.39		
146.88	3.51	147.40	11.25	147.92	14.41		
146.89	3.63	147.41	11.43	147.93	14.44		

Stage-Area-Storage for Pond B-23: Basin #23

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.30	0	0
144.31	79	0
144.32	157	2
144.33	236	4
144.34	315	6
144.35	394	10
144.36	472	14
144.37	551	19
144.38	630	25
144.39	709	32
144.40	787	39
144.41	866	48
144.42	945	57
144.43	1,024	67
144.44	1,102	77
144.45	1,181	89
144.46	1,260	101
144.47	1,339	114
144.48	1,417	128
144.49	1,496	142
144.50	1,575	157
144.51	1,654	174
144.52	1,732	191
144.53	1,811	208
144.54	1,890	227
144.55	1,969	246
144.56	2,047	266
144.57	2,126	287
144.58	2,205	309
144.59	2,284	331
144.60	2,362	354
144.61	2,441	378
144.62	2,520	403
144.63	2,599	429
144.64	2,677	455
144.65	2,756	482
144.66	2,835	510
144.67	2,913	539
144.68	2,992	569
144.69	3,071	599
144.70	3,150	630
144.71	3,228	662
144.72	3,307	695
144.73	3,386	728
144.74	3,465	762
144.75	3,543	797
144.76	3,622	833
144.77	3,701	870
144.78	3,780	907
144.79	3,858	945
144.80	3,937	984
144.81	4,016	1,024
144.82	4,095	1,065
144.83	4,173	1,106
144.84	4,252	1,148
144.85	4,331	1,191
144.86	4,410	1,235
144.87	4,488	1,279
144.88	4,567	1,324
144.89	4,646	1,371
144.90	4,725	1,417
144.91	4,803	1,465
144.92	4,882	1,513
144.93	4,961	1,563
144.94	5,040	1,613
144.95	5,118	1,663
144.96	5,197	1,715
144.97	5,276	1,767
144.98	5,355	1,821
144.99	5,433	1,874
145.00	5,512	1,929
145.01	5,522	1,984
145.02	5,532	2,040
145.03	5,542	2,095
145.04	5,553	2,150
145.05	5,563	2,206
145.06	5,573	2,262
145.07	5,583	2,318
145.08	5,593	2,373
145.09	5,603	2,429
145.10	5,614	2,485
145.11	5,624	2,542
145.12	5,634	2,598
145.13	5,644	2,654
145.14	5,654	2,711
145.15	5,664	2,767
145.16	5,674	2,824
145.17	5,685	2,881
145.18	5,695	2,938
145.19	5,705	2,995
145.20	5,715	3,052
145.21	5,725	3,109
145.22	5,735	3,166
145.23	5,745	3,224
145.24	5,756	3,281
145.25	5,766	3,339
145.26	5,776	3,397
145.27	5,786	3,454
145.28	5,796	3,512
145.29	5,806	3,570
145.30	5,817	3,628
145.31	5,827	3,687
145.32	5,837	3,745
145.33	5,847	3,803

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.34	5,857	3,862	145.86	6,385	7,045
145.35	5,867	3,921	145.87	6,395	7,109
145.36	5,877	3,979	145.88	6,405	7,173
145.37	5,888	4,038	145.89	6,415	7,237
145.38	5,898	4,097	145.90	6,426	7,301
145.39	5,908	4,156	145.91	6,436	7,365
145.40	5,918	4,215	145.92	6,446	7,430
145.41	5,928	4,274	145.93	6,456	7,494
145.42	5,938	4,334	145.94	6,466	7,559
145.43	5,948	4,393	145.95	6,476	7,624
145.44	5,959	4,453	145.96	6,486	7,688
145.45	5,969	4,512	145.97	6,497	7,753
145.46	5,979	4,572	145.98	6,507	7,818
145.47	5,989	4,632	145.99	6,517	7,883
145.48	5,999	4,692	146.00	6,527	7,949
145.49	6,009	4,752	146.01	6,538	8,014
145.50	6,020	4,812	146.02	6,548	8,079
145.51	6,030	4,872	146.03	6,559	8,145
145.52	6,040	4,933	146.04	6,570	8,211
145.53	6,050	4,993	146.05	6,581	8,276
145.54	6,060	5,054	146.06	6,591	8,342
145.55	6,070	5,114	146.07	6,602	8,408
145.56	6,080	5,175	146.08	6,613	8,474
145.57	6,091	5,236	146.09	6,623	8,540
145.58	6,101	5,297	146.10	6,634	8,607
145.59	6,111	5,358	146.11	6,645	8,673
145.60	6,121	5,419	146.12	6,656	8,740
145.61	6,131	5,480	146.13	6,666	8,806
145.62	6,141	5,542	146.14	6,677	8,873
145.63	6,151	5,603	146.15	6,688	8,940
145.64	6,162	5,665	146.16	6,699	9,007
145.65	6,172	5,726	146.17	6,709	9,074
145.66	6,182	5,788	146.18	6,720	9,141
145.67	6,192	5,850	146.19	6,731	9,208
145.68	6,202	5,912	146.20	6,741	9,276
145.69	6,212	5,974	146.21	6,752	9,343
145.70	6,223	6,036	146.22	6,763	9,411
145.71	6,233	6,099	146.23	6,774	9,478
145.72	6,243	6,161	146.24	6,784	9,546
145.73	6,253	6,223	146.25	6,795	9,614
145.74	6,263	6,286	146.26	6,806	9,682
145.75	6,273	6,349	146.27	6,816	9,750
145.76	6,283	6,411	146.28	6,827	9,818
145.77	6,294	6,474	146.29	6,838	9,887
145.78	6,304	6,537	146.30	6,849	9,955
145.79	6,314	6,600	146.31	6,859	10,024
145.80	6,324	6,664	146.32	6,870	10,092
145.81	6,334	6,727	146.33	6,881	10,161
145.82	6,344	6,790	146.34	6,891	10,230
145.83	6,354	6,854	146.35	6,902	10,299
145.84	6,365	6,917	146.36	6,913	10,368
145.85	6,375	6,981	146.37	6,924	10,437

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.38	6,934	10,506	146.90	7,492	14,257
146.39	6,945	10,576	146.91	7,503	14,332
146.40	6,956	10,645	146.92	7,513	14,407
146.41	6,967	10,715	146.93	7,524	14,482
146.42	6,977	10,785	146.94	7,535	14,558
146.43	6,988	10,854	146.95	7,545	14,633
146.44	6,999	10,924	146.96	7,556	14,709
146.45	7,009	10,994	146.97	7,567	14,784
146.46	7,020	11,065	146.98	7,578	14,860
146.47	7,031	11,135	146.99	7,588	14,936
146.48	7,042	11,205	147.00	7,599	15,012
146.49	7,052	11,276	147.01	7,610	15,088
146.50	7,063	11,346	147.02	7,622	15,164
146.51	7,074	11,417	147.03	7,633	15,240
146.52	7,084	11,488	147.04	7,644	15,317
146.53	7,095	11,559	147.05	7,655	15,393
146.54	7,106	11,630	147.06	7,667	15,470
146.55	7,117	11,701	147.07	7,678	15,546
146.56	7,127	11,772	147.08	7,689	15,623
146.57	7,138	11,843	147.09	7,701	15,700
146.58	7,149	11,915	147.10	7,712	15,777
146.59	7,159	11,986	147.11	7,723	15,854
146.60	7,170	12,058	147.12	7,734	15,932
146.61	7,181	12,130	147.13	7,746	16,009
146.62	7,192	12,201	147.14	7,757	16,087
146.63	7,202	12,273	147.15	7,768	16,164
146.64	7,213	12,346	147.16	7,779	16,242
146.65	7,224	12,418	147.17	7,791	16,320
146.66	7,235	12,490	147.18	7,802	16,398
146.67	7,245	12,562	147.19	7,813	16,476
146.68	7,256	12,635	147.20	7,825	16,554
146.69	7,267	12,708	147.21	7,836	16,632
146.70	7,277	12,780	147.22	7,847	16,711
146.71	7,288	12,853	147.23	7,858	16,789
146.72	7,299	12,926	147.24	7,870	16,868
146.73	7,310	12,999	147.25	7,881	16,947
146.74	7,320	13,072	147.26	7,892	17,026
146.75	7,331	13,145	147.27	7,904	17,105
146.76	7,342	13,219	147.28	7,915	17,184
146.77	7,352	13,292	147.29	7,926	17,263
146.78	7,363	13,366	147.30	7,937	17,342
146.79	7,374	13,440	147.31	7,949	17,422
146.80	7,385	13,513	147.32	7,960	17,501
146.81	7,395	13,587	147.33	7,971	17,581
146.82	7,406	13,661	147.34	7,983	17,661
146.83	7,417	13,735	147.35	7,994	17,740
146.84	7,427	13,810	147.36	8,005	17,820
146.85	7,438	13,884	147.37	8,016	17,901
146.86	7,449	13,958	147.38	8,028	17,981
146.87	7,460	14,033	147.39	8,039	18,061
146.88	7,470	14,108	147.40	8,050	18,142
146.89	7,481	14,182	147.41	8,061	18,222

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.42	8,073	18,303
147.43	8,084	18,384
147.44	8,095	18,464
147.45	8,107	18,545
147.46	8,118	18,627
147.47	8,129	18,708
147.48	8,140	18,789
147.49	8,152	18,871
147.50	8,163	18,952
147.51	8,174	19,034
147.52	8,186	19,116
147.53	8,197	19,198
147.54	8,208	19,280
147.55	8,219	19,362
147.56	8,231	19,444
147.57	8,242	19,526
147.58	8,253	19,609
147.59	8,265	19,691
147.60	8,276	19,774
147.61	8,287	19,857
147.62	8,298	19,940
147.63	8,310	20,023
147.64	8,321	20,106
147.65	8,332	20,189
147.66	8,343	20,273
147.67	8,355	20,356
147.68	8,366	20,440
147.69	8,377	20,524
147.70	8,389	20,607
147.71	8,400	20,691
147.72	8,411	20,775
147.73	8,422	20,860
147.74	8,434	20,944
147.75	8,445	21,028
147.76	8,456	21,113
147.77	8,468	21,197
147.78	8,479	21,282
147.79	8,490	21,367
147.80	8,501	21,452
147.81	8,513	21,537
147.82	8,524	21,622
147.83	8,535	21,707
147.84	8,547	21,793
147.85	8,558	21,878
147.86	8,569	21,964
147.87	8,580	22,050
147.88	8,592	22,136
147.89	8,603	22,222
147.90	8,614	22,308
147.91	8,625	22,394
147.92	8,637	22,480
147.93	8,648	22,567
147.94	8,659	22,653
147.95	8,671	22,740
147.96	8,682	22,827
147.97	8,693	22,913
147.98	8,704	23,000
147.99	8,716	23,087
148.00	**8,727**	**23,175**

Summary for Pond B-24: Basin #24

Inflow Area = 2.408 ac, 37.46% Impervious, Inflow Depth = 6.54" for Current 100 yr event
Inflow = 16.09 cfs @ 12.17 hrs, Volume= 1.312 af
Outflow = 10.71 cfs @ 12.28 hrs, Volume= 1.217 af, Atten= 33%, Lag= 6.7 min
Primary = 10.71 cfs @ 12.28 hrs, Volume= 1.217 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 147.10' @ 12.28 hrs Surf.Area= 9,460 sf Storage= 20,193 cf

Plug-Flow detention time= 185.7 min calculated for 1.216 af (93% of inflow)
Center-of-Mass det. time= 146.8 min (930.8 - 784.0)

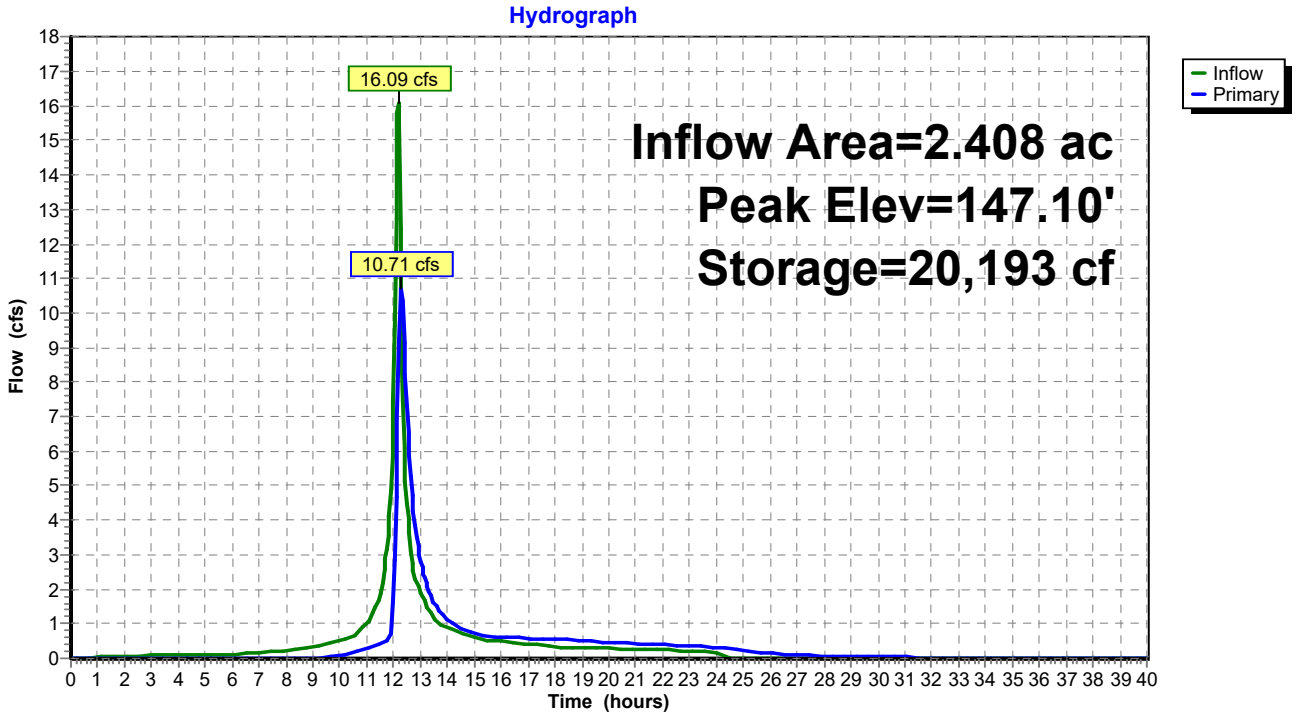
Volume	Invert	Avail.Storage	Storage Description
#1	144.30'	40,061 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
144.30	0	0	0
145.00	7,331	2,566	2,566
146.00	8,327	7,829	10,395
147.00	9,353	8,840	19,235
148.00	10,406	9,880	29,114
149.00	11,488	10,947	40,061

Device	Routing	Invert	Outlet Devices
#1	Primary	144.30'	**18.0" Round Culvert** L= 22.0' Ke= 0.500 Inlet / Outlet Invert= 144.30' / 143.04' S= 0.0573 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	145.17'	**5.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.62 cfs @ 12.28 hrs HW=147.10' (Free Discharge)
- **1=Culvert** (Passes 10.62 cfs of 12.17 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.86 cfs @ 6.31 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 9.76 cfs @ 3.01 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-24: Basin #24



Stage-Discharge for Pond B-24: Basin #24

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
144.30	0.00	144.82	0.00	145.34	0.07	145.86	0.46
144.31	0.00	144.83	0.00	145.35	0.08	145.87	0.46
144.32	0.00	144.84	0.00	145.36	0.09	145.88	0.47
144.33	0.00	144.85	0.00	145.37	0.10	145.89	0.47
144.34	0.00	144.86	0.00	145.38	0.11	145.90	0.47
144.35	0.00	144.87	0.00	145.39	0.12	145.91	0.48
144.36	0.00	144.88	0.00	145.40	0.13	145.92	0.48
144.37	0.00	144.89	0.00	145.41	0.14	145.93	0.49
144.38	0.00	144.90	0.00	145.42	0.15	145.94	0.49
144.39	0.00	144.91	0.00	145.43	0.16	145.95	0.50
144.40	0.00	144.92	0.00	145.44	0.17	145.96	0.50
144.41	0.00	144.93	0.00	145.45	0.18	145.97	0.51
144.42	0.00	144.94	0.00	145.46	0.19	145.98	0.51
144.43	0.00	144.95	0.00	145.47	0.20	145.99	0.51
144.44	0.00	144.96	0.00	145.48	0.21	146.00	0.52
144.45	0.00	144.97	0.00	145.49	0.22	146.01	0.52
144.46	0.00	144.98	0.00	145.50	0.23	146.02	0.53
144.47	0.00	144.99	0.00	145.51	0.24	146.03	0.53
144.48	0.00	145.00	0.00	145.52	0.25	146.04	0.53
144.49	0.00	145.01	0.00	145.53	0.26	146.05	0.54
144.50	0.00	145.02	0.00	145.54	0.27	146.06	0.54
144.51	0.00	145.03	0.00	145.55	0.27	146.07	0.55
144.52	0.00	145.04	0.00	145.56	0.28	146.08	0.55
144.53	0.00	145.05	0.00	145.57	0.29	146.09	0.55
144.54	0.00	145.06	0.00	145.58	0.30	146.10	0.56
144.55	0.00	145.07	0.00	145.59	0.30	146.11	0.56
144.56	0.00	145.08	0.00	145.60	0.31	146.12	0.57
144.57	0.00	145.09	0.00	145.61	0.32	146.13	0.57
144.58	0.00	145.10	0.00	145.62	0.32	146.14	0.57
144.59	0.00	145.11	0.00	145.63	0.33	146.15	0.58
144.60	0.00	145.12	0.00	145.64	0.34	146.16	0.58
144.61	0.00	145.13	0.00	145.65	0.34	146.17	0.58
144.62	0.00	145.14	0.00	145.66	0.35	146.18	0.59
144.63	0.00	145.15	0.00	145.67	0.35	146.19	0.59
144.64	0.00	145.16	0.00	145.68	0.36	146.20	0.60
144.65	0.00	145.17	0.00	145.69	0.37	146.21	0.60
144.66	0.00	145.18	0.00	145.70	0.37	146.22	0.60
144.67	0.00	145.19	0.00	145.71	0.38	146.23	0.61
144.68	0.00	145.20	0.00	145.72	0.38	146.24	0.61
144.69	0.00	145.21	0.00	145.73	0.39	146.25	0.61
144.70	0.00	145.22	0.01	145.74	0.39	146.26	0.63
144.71	0.00	145.23	0.01	145.75	0.40	146.27	0.66
144.72	0.00	145.24	0.01	145.76	0.41	146.28	0.69
144.73	0.00	145.25	0.02	145.77	0.41	146.29	0.73
144.74	0.00	145.26	0.02	145.78	0.42	146.30	0.78
144.75	0.00	145.27	0.03	145.79	0.42	146.31	0.83
144.76	0.00	145.28	0.03	145.80	0.43	146.32	0.88
144.77	0.00	145.29	0.04	145.81	0.43	146.33	0.94
144.78	0.00	145.30	0.04	145.82	0.44	146.34	1.00
144.79	0.00	145.31	0.05	145.83	0.44	146.35	1.06
144.80	0.00	145.32	0.06	145.84	0.45	146.36	1.13
144.81	0.00	145.33	0.07	145.85	0.45	146.37	1.19

Stage-Discharge for Pond B-24: Basin #24 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
146.38	1.27	146.90	7.44	147.42	13.10	147.94	14.46
146.39	1.34	146.91	7.59	147.43	13.13	147.95	14.49
146.40	1.42	146.92	7.75	147.44	13.15	147.96	14.51
146.41	1.50	146.93	7.90	147.45	13.18	147.97	14.54
146.42	1.58	146.94	8.06	147.46	13.21	147.98	14.56
146.43	1.66	146.95	8.22	147.47	13.24	147.99	14.59
146.44	1.75	146.96	8.37	147.48	13.26	148.00	14.73
146.45	1.84	146.97	8.53	147.49	13.29	148.01	14.97
146.46	1.93	146.98	8.69	147.50	13.32	148.02	15.27
146.47	2.02	146.99	8.85	147.51	13.35	148.03	15.63
146.48	2.12	147.00	9.01	147.52	13.37	148.04	16.02
146.49	2.21	147.01	9.18	147.53	13.40	148.05	16.46
146.50	2.31	147.02	9.34	147.54	13.43	148.06	16.94
146.51	2.41	147.03	9.50	147.55	13.45	148.07	17.44
146.52	2.51	147.04	9.67	147.56	13.48	148.08	17.98
146.53	2.62	147.05	9.83	147.57	13.51	148.09	18.55
146.54	2.72	147.06	10.00	147.58	13.53	148.10	19.15
146.55	2.83	147.07	10.17	147.59	13.56	148.11	19.78
146.56	2.94	147.08	10.34	147.60	13.59	148.12	20.43
146.57	3.05	147.09	10.51	147.61	13.61	148.13	21.10
146.58	3.16	147.10	10.68	147.62	13.64	148.14	21.80
146.59	3.27	147.11	10.85	147.63	13.67	148.15	22.53
146.60	3.39	147.12	11.02	147.64	13.69	148.16	23.27
146.61	3.50	147.13	11.19	147.65	13.72	148.17	24.04
146.62	3.62	147.14	11.36	147.66	13.75	148.18	24.83
146.63	3.74	147.15	11.54	147.67	13.77	148.19	25.64
146.64	3.86	147.16	11.71	147.68	13.80	148.20	26.51
146.65	3.98	147.17	11.89	147.69	13.83	148.21	27.41
146.66	4.11	147.18	12.07	147.70	13.85	148.22	28.33
146.67	4.23	147.19	12.24	147.71	13.88	148.23	29.28
146.68	4.36	147.20	12.42	147.72	13.90	148.24	30.25
146.69	4.49	147.21	12.51	147.73	13.93	148.25	31.25
146.70	4.61	147.22	12.53	147.74	13.96	148.26	32.27
146.71	4.74	147.23	12.56	147.75	13.98	148.27	33.32
146.72	4.88	147.24	12.59	147.76	14.01	148.28	34.39
146.73	5.01	147.25	12.62	147.77	14.03	148.29	35.48
146.74	5.14	147.26	12.65	147.78	14.06	148.30	36.60
146.75	5.28	147.27	12.68	147.79	14.08	148.31	37.75
146.76	5.41	147.28	12.71	147.80	14.11	148.32	38.92
146.77	5.55	147.29	12.73	147.81	14.14	148.33	40.11
146.78	5.69	147.30	12.76	147.82	14.16	148.34	41.33
146.79	5.83	147.31	12.79	147.83	14.19	148.35	42.57
146.80	5.97	147.32	12.82	147.84	14.21	148.36	43.84
146.81	6.11	147.33	12.85	147.85	14.24	148.37	45.13
146.82	6.26	147.34	12.88	147.86	14.26	148.38	46.44
146.83	6.40	147.35	12.90	147.87	14.29	148.39	47.78
146.84	6.55	147.36	12.93	147.88	14.31	148.40	49.17
146.85	6.69	147.37	12.96	147.89	14.34	148.41	50.58
146.86	6.84	147.38	12.99	147.90	14.36	148.42	52.03
146.87	6.99	147.39	13.02	147.91	14.39	148.43	53.49
146.88	7.14	147.40	13.04	147.92	14.41	148.44	54.99
146.89	7.29	147.41	13.07	147.93	14.44	148.45	56.51

Stage-Discharge for Pond B-24: Basin #24 (continued)

Elevation (feet)	Primary (cfs)
148.46	58.05
148.47	59.62
148.48	61.22
148.49	62.85
148.50	64.50
148.51	66.18
148.52	67.88
148.53	69.61
148.54	71.37
148.55	73.15
148.56	74.96
148.57	76.80
148.58	78.67
148.59	80.56
148.60	82.21
148.61	83.87
148.62	85.55
148.63	87.24
148.64	88.94
148.65	90.66
148.66	92.39
148.67	94.13
148.68	95.88
148.69	97.65
148.70	99.43
148.71	101.23
148.72	103.03
148.73	104.85
148.74	106.68
148.75	108.53
148.76	110.38
148.77	112.25
148.78	114.13
148.79	116.02
148.80	117.96
148.81	119.92
148.82	121.88
148.83	123.87
148.84	125.86
148.85	127.87
148.86	129.89
148.87	131.92
148.88	133.97
148.89	136.03
148.90	138.10
148.91	140.18
148.92	142.28
148.93	144.39
148.94	146.52
148.95	148.65
148.96	150.80
148.97	152.96
148.98	155.14
148.99	157.32
149.00	**159.47**

Stage-Area-Storage for Pond B-24: Basin #24

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.30	0	0
144.31	105	1
144.32	209	2
144.33	314	5
144.34	419	8
144.35	524	13
144.36	628	19
144.37	733	26
144.38	838	34
144.39	943	42
144.40	1,047	52
144.41	1,152	63
144.42	1,257	75
144.43	1,361	88
144.44	1,466	103
144.45	1,571	118
144.46	1,676	134
144.47	1,780	151
144.48	1,885	170
144.49	1,990	189
144.50	2,095	209
144.51	2,199	231
144.52	2,304	253
144.53	2,409	277
144.54	2,513	302
144.55	2,618	327
144.56	2,723	354
144.57	2,828	382
144.58	2,932	411
144.59	3,037	440
144.60	3,142	471
144.61	3,247	503
144.62	3,351	536
144.63	3,456	570
144.64	3,561	605
144.65	3,666	641
144.66	3,770	679
144.67	3,875	717
144.68	3,980	756
144.69	4,084	796
144.70	4,189	838
144.71	4,294	880
144.72	4,399	924
144.73	4,503	968
144.74	4,608	1,014
144.75	4,713	1,060
144.76	4,818	1,108
144.77	4,922	1,157
144.78	5,027	1,206
144.79	5,132	1,257
144.80	5,236	1,309
144.81	5,341	1,362
144.82	5,446	1,416
144.83	5,551	1,471
144.84	5,655	1,527
144.85	5,760	1,584
144.86	5,865	1,642
144.87	5,970	1,701
144.88	6,074	1,762
144.89	6,179	1,823
144.90	6,284	1,885
144.91	6,388	1,948
144.92	6,493	2,013
144.93	6,598	2,078
144.94	6,703	2,145
144.95	6,807	2,212
144.96	6,912	2,281
144.97	7,017	2,351
144.98	7,122	2,421
144.99	7,226	2,493
145.00	7,331	2,566
145.01	7,341	2,639
145.02	7,351	2,713
145.03	7,361	2,786
145.04	7,371	2,860
145.05	7,381	2,934
145.06	7,391	3,008
145.07	7,401	3,081
145.08	7,411	3,156
145.09	7,421	3,230
145.10	7,431	3,304
145.11	7,441	3,378
145.12	7,451	3,453
145.13	7,460	3,527
145.14	7,470	3,602
145.15	7,480	3,677
145.16	7,490	3,752
145.17	7,500	3,827
145.18	7,510	3,902
145.19	7,520	3,977
145.20	7,530	4,052
145.21	7,540	4,127
145.22	7,550	4,203
145.23	7,560	4,278
145.24	7,570	4,354
145.25	7,580	4,430
145.26	7,590	4,506
145.27	7,600	4,582
145.28	7,610	4,658
145.29	7,620	4,734
145.30	7,630	4,810
145.31	7,640	4,886
145.32	7,650	4,963
145.33	7,660	5,039

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.34	7,670	5,116	145.86	8,188	9,239
145.35	7,680	5,193	145.87	8,198	9,321
145.36	7,690	5,270	145.88	8,207	9,403
145.37	7,700	5,346	145.89	8,217	9,485
145.38	7,709	5,424	145.90	8,227	9,567
145.39	7,719	5,501	145.91	8,237	9,649
145.40	7,729	5,578	145.92	8,247	9,732
145.41	7,739	5,655	145.93	8,257	9,814
145.42	7,749	5,733	145.94	8,267	9,897
145.43	7,759	5,810	145.95	8,277	9,980
145.44	7,769	5,888	145.96	8,287	10,063
145.45	7,779	5,966	145.97	8,297	10,145
145.46	7,789	6,043	145.98	8,307	10,229
145.47	7,799	6,121	145.99	8,317	10,312
145.48	7,809	6,199	146.00	8,327	10,395
145.49	7,819	6,278	146.01	8,337	10,478
145.50	7,829	6,356	146.02	8,348	10,562
145.51	7,839	6,434	146.03	8,358	10,645
145.52	7,849	6,513	146.04	8,368	10,729
145.53	7,859	6,591	146.05	8,378	10,812
145.54	7,869	6,670	146.06	8,389	10,896
145.55	7,879	6,749	146.07	8,399	10,980
145.56	7,889	6,827	146.08	8,409	11,064
145.57	7,899	6,906	146.09	8,419	11,148
145.58	7,909	6,985	146.10	8,430	11,233
145.59	7,919	7,064	146.11	8,440	11,317
145.60	7,929	7,144	146.12	8,450	11,401
145.61	7,939	7,223	146.13	8,460	11,486
145.62	7,949	7,303	146.14	8,471	11,571
145.63	7,958	7,382	146.15	8,481	11,655
145.64	7,968	7,462	146.16	8,491	11,740
145.65	7,978	7,541	146.17	8,501	11,825
145.66	7,988	7,621	146.18	8,512	11,910
145.67	7,998	7,701	146.19	8,522	11,995
145.68	8,008	7,781	146.20	8,532	12,081
145.69	8,018	7,861	146.21	8,542	12,166
145.70	8,028	7,942	146.22	8,553	12,252
145.71	8,038	8,022	146.23	8,563	12,337
145.72	8,048	8,102	146.24	8,573	12,423
145.73	8,058	8,183	146.25	8,584	12,509
145.74	8,068	8,263	146.26	8,594	12,595
145.75	8,078	8,344	146.27	8,604	12,681
145.76	8,088	8,425	146.28	8,614	12,767
145.77	8,098	8,506	146.29	8,625	12,853
145.78	8,108	8,587	146.30	8,635	12,939
145.79	8,118	8,668	146.31	8,645	13,026
145.80	8,128	8,749	146.32	8,655	13,112
145.81	8,138	8,831	146.33	8,666	13,199
145.82	8,148	8,912	146.34	8,676	13,285
145.83	8,158	8,994	146.35	8,686	13,372
145.84	8,168	9,075	146.36	8,696	13,459
145.85	8,178	9,157	146.37	8,707	13,546

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.38	8,717	13,633	146.90	9,250	18,305
146.39	8,727	13,720	146.91	9,261	18,397
146.40	8,737	13,808	146.92	9,271	18,490
146.41	8,748	13,895	146.93	9,281	18,583
146.42	8,758	13,983	146.94	9,291	18,676
146.43	8,768	14,070	146.95	9,302	18,768
146.44	8,778	14,158	146.96	9,312	18,862
146.45	8,789	14,246	146.97	9,322	18,955
146.46	8,799	14,334	146.98	9,332	19,048
146.47	8,809	14,422	146.99	9,343	19,141
146.48	8,819	14,510	147.00	9,353	19,235
146.49	8,830	14,598	147.01	9,364	19,328
146.50	8,840	14,687	147.02	9,374	19,422
146.51	8,850	14,775	147.03	9,385	19,516
146.52	8,861	14,864	147.04	9,395	19,610
146.53	8,871	14,952	147.05	9,406	19,704
146.54	8,881	15,041	147.06	9,416	19,798
146.55	8,891	15,130	147.07	9,427	19,892
146.56	8,902	15,219	147.08	9,437	19,986
146.57	8,912	15,308	147.09	9,448	20,081
146.58	8,922	15,397	147.10	9,458	20,175
146.59	8,932	15,486	147.11	9,469	20,270
146.60	8,943	15,576	147.12	9,479	20,365
146.61	8,953	15,665	147.13	9,490	20,460
146.62	8,963	15,755	147.14	9,500	20,555
146.63	8,973	15,844	147.15	9,511	20,650
146.64	8,984	15,934	147.16	9,521	20,745
146.65	8,994	16,024	147.17	9,532	20,840
146.66	9,004	16,114	147.18	9,543	20,935
146.67	9,014	16,204	147.19	9,553	21,031
146.68	9,025	16,294	147.20	9,564	21,127
146.69	9,035	16,385	147.21	9,574	21,222
146.70	9,045	16,475	147.22	9,585	21,318
146.71	9,055	16,566	147.23	9,595	21,414
146.72	9,066	16,656	147.24	9,606	21,510
146.73	9,076	16,747	147.25	9,616	21,606
146.74	9,086	16,838	147.26	9,627	21,702
146.75	9,097	16,929	147.27	9,637	21,799
146.76	9,107	17,020	147.28	9,648	21,895
146.77	9,117	17,111	147.29	9,658	21,991
146.78	9,127	17,202	147.30	9,669	22,088
146.79	9,138	17,293	147.31	9,679	22,185
146.80	9,148	17,385	147.32	9,690	22,282
146.81	9,158	17,476	147.33	9,700	22,379
146.82	9,168	17,568	147.34	9,711	22,476
146.83	9,179	17,660	147.35	9,722	22,573
146.84	9,189	17,752	147.36	9,732	22,670
146.85	9,199	17,843	147.37	9,743	22,768
146.86	9,209	17,935	147.38	9,753	22,865
146.87	9,220	18,028	147.39	9,764	22,963
146.88	9,230	18,120	147.40	9,774	23,060
146.89	9,240	18,212	147.41	9,785	23,158

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.42	9,795	23,256	147.94	10,343	28,492
147.43	9,806	23,354	147.95	10,353	28,595
147.44	9,816	23,452	147.96	10,364	28,699
147.45	9,827	23,550	147.97	10,374	28,803
147.46	9,837	23,649	147.98	10,385	28,906
147.47	9,848	23,747	147.99	10,395	29,010
147.48	9,858	23,846	148.00	10,406	29,114
147.49	9,869	23,944	148.01	10,417	29,218
147.50	9,880	24,043	148.02	10,428	29,323
147.51	9,890	24,142	148.03	10,438	29,427
147.52	9,901	24,241	148.04	10,449	29,531
147.53	9,911	24,340	148.05	10,460	29,636
147.54	9,922	24,439	148.06	10,471	29,741
147.55	9,932	24,538	148.07	10,482	29,845
147.56	9,943	24,638	148.08	10,493	29,950
147.57	9,953	24,737	148.09	10,503	30,055
147.58	9,964	24,837	148.10	10,514	30,160
147.59	9,974	24,936	148.11	10,525	30,266
147.60	9,985	25,036	148.12	10,536	30,371
147.61	9,995	25,136	148.13	10,547	30,476
147.62	10,006	25,236	148.14	10,557	30,582
147.63	10,016	25,336	148.15	10,568	30,687
147.64	10,027	25,436	148.16	10,579	30,793
147.65	10,037	25,537	148.17	10,590	30,899
147.66	10,048	25,637	148.18	10,601	31,005
147.67	10,059	25,738	148.19	10,612	31,111
147.68	10,069	25,838	148.20	10,622	31,217
147.69	10,080	25,939	148.21	10,633	31,323
147.70	10,090	26,040	148.22	10,644	31,430
147.71	10,101	26,141	148.23	10,655	31,536
147.72	10,111	26,242	148.24	10,666	31,643
147.73	10,122	26,343	148.25	10,677	31,750
147.74	10,132	26,444	148.26	10,687	31,856
147.75	10,143	26,546	148.27	10,698	31,963
147.76	10,153	26,647	148.28	10,709	32,070
147.77	10,164	26,749	148.29	10,720	32,178
147.78	10,174	26,851	148.30	10,731	32,285
147.79	10,185	26,952	148.31	10,741	32,392
147.80	10,195	27,054	148.32	10,752	32,500
147.81	10,206	27,156	148.33	10,763	32,607
147.82	10,216	27,258	148.34	10,774	32,715
147.83	10,227	27,361	148.35	10,785	32,823
147.84	10,238	27,463	148.36	10,796	32,931
147.85	10,248	27,565	148.37	10,806	33,039
147.86	10,259	27,668	148.38	10,817	33,147
147.87	10,269	27,770	148.39	10,828	33,255
147.88	10,280	27,873	148.40	10,839	33,363
147.89	10,290	27,976	148.41	10,850	33,472
147.90	10,301	28,079	148.42	10,860	33,580
147.91	10,311	28,182	148.43	10,871	33,689
147.92	10,322	28,285	148.44	10,882	33,798
147.93	10,332	28,389	148.45	10,893	33,907

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.46	10,904	34,016
148.47	10,915	34,125
148.48	10,925	34,234
148.49	10,936	34,343
148.50	10,947	34,453
148.51	10,958	34,562
148.52	10,969	34,672
148.53	10,979	34,781
148.54	10,990	34,891
148.55	11,001	35,001
148.56	11,012	35,111
148.57	11,023	35,222
148.58	11,034	35,332
148.59	11,044	35,442
148.60	11,055	35,553
148.61	11,066	35,663
148.62	11,077	35,774
148.63	11,088	35,885
148.64	11,098	35,996
148.65	11,109	36,107
148.66	11,120	36,218
148.67	11,131	36,329
148.68	11,142	36,441
148.69	11,153	36,552
148.70	11,163	36,664
148.71	11,174	36,775
148.72	11,185	36,887
148.73	11,196	36,999
148.74	11,207	37,111
148.75	11,218	37,223
148.76	11,228	37,335
148.77	11,239	37,448
148.78	11,250	37,560
148.79	11,261	37,673
148.80	11,272	37,785
148.81	11,282	37,898
148.82	11,293	38,011
148.83	11,304	38,124
148.84	11,315	38,237
148.85	11,326	38,350
148.86	11,337	38,464
148.87	11,347	38,577
148.88	11,358	38,691
148.89	11,369	38,804
148.90	11,380	38,918
148.91	11,391	39,032
148.92	11,401	39,146
148.93	11,412	39,260
148.94	11,423	39,374
148.95	11,434	39,488
148.96	11,445	39,603
148.97	11,456	39,717
148.98	11,466	39,832
148.99	11,477	39,947
149.00	**11,488**	**40,061**

Summary for Pond B-25: Basin #25

Inflow Area = 2.500 ac, 34.96% Impervious, Inflow Depth = 6.47" for Current 100 yr event
Inflow = 16.58 cfs @ 12.17 hrs, Volume= 1.348 af
Outflow = 11.89 cfs @ 12.27 hrs, Volume= 1.259 af, Atten= 28%, Lag= 6.1 min
Primary = 11.89 cfs @ 12.27 hrs, Volume= 1.259 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.92' @ 12.27 hrs Surf.Area= 7,350 sf Storage= 19,168 cf

Plug-Flow detention time= 177.2 min calculated for 1.259 af (93% of inflow)
Center-of-Mass det. time= 140.4 min (926.4 - 786.1)

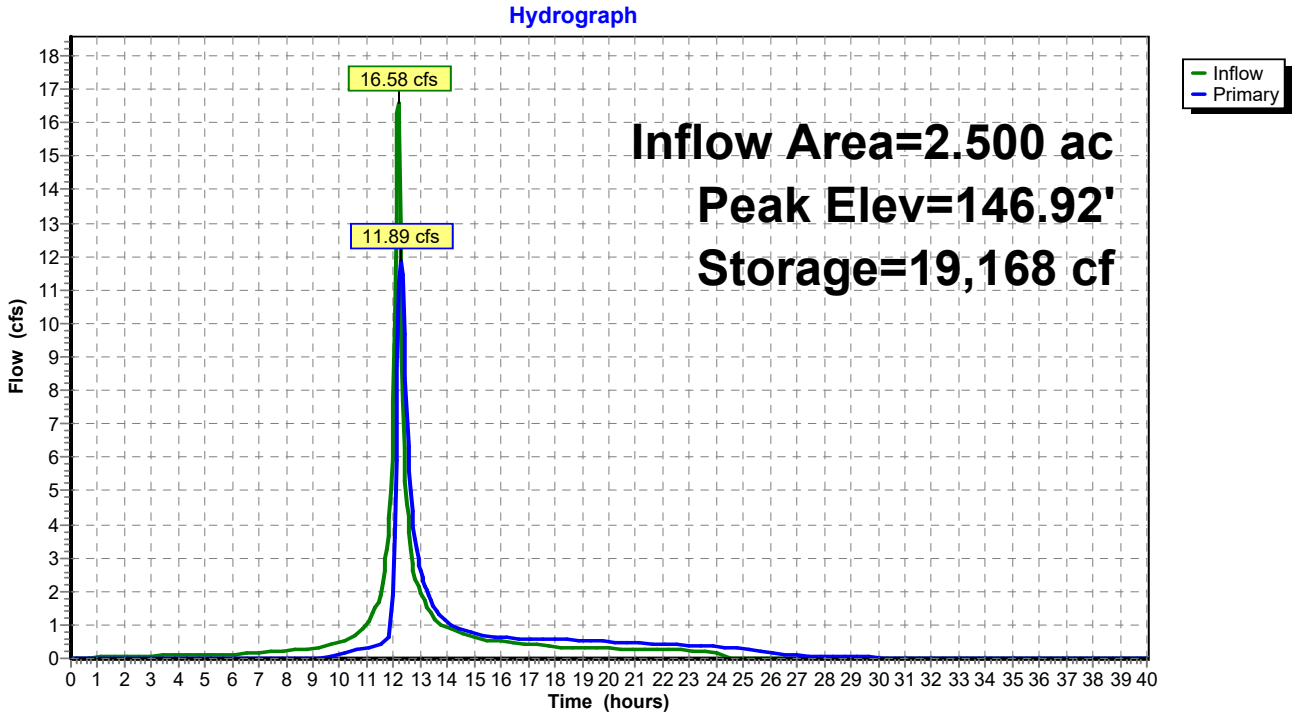
Volume	Invert	Avail.Storage	Storage Description
#1	143.30'	36,587 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
143.30	0	0	0
144.00	4,702	1,646	1,646
145.00	5,584	5,143	6,789
146.00	6,492	6,038	12,827
147.00	7,428	6,960	19,787
148.00	8,393	7,911	27,697
149.00	9,386	8,890	36,587

Device	Routing	Invert	Outlet Devices
#1	Primary	143.30'	**18.0" Round Culvert** L= 186.0' Ke= 0.500 Inlet / Outlet Invert= 143.30' / 142.00' S= 0.0070 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	144.42'	**4.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	145.95'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.96'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.82 cfs @ 12.27 hrs HW=146.91' (Free Discharge)
- **1=Culvert** (Barrel Controls 11.82 cfs @ 6.69 fps)
  - **2=Orifice/Grate** (Passes < 0.81 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 11.63 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-25: Basin #25



Stage-Discharge for Pond B-25: Basin #25

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
143.30	0.00	143.82	0.00	144.34	0.00	144.86	0.27
143.31	0.00	143.83	0.00	144.35	0.00	144.87	0.27
143.32	0.00	143.84	0.00	144.36	0.00	144.88	0.28
143.33	0.00	143.85	0.00	144.37	0.00	144.89	0.28
143.34	0.00	143.86	0.00	144.38	0.00	144.90	0.29
143.35	0.00	143.87	0.00	144.39	0.00	144.91	0.29
143.36	0.00	143.88	0.00	144.40	0.00	144.92	0.30
143.37	0.00	143.89	0.00	144.41	0.00	144.93	0.30
143.38	0.00	143.90	0.00	144.42	0.00	144.94	0.31
143.39	0.00	143.91	0.00	144.43	0.00	144.95	0.31
143.40	0.00	143.92	0.00	144.44	0.00	144.96	0.32
143.41	0.00	143.93	0.00	144.45	0.00	144.97	0.32
143.42	0.00	143.94	0.00	144.46	0.00	144.98	0.32
143.43	0.00	143.95	0.00	144.47	0.01	144.99	0.33
143.44	0.00	143.96	0.00	144.48	0.01	145.00	0.33
143.45	0.00	143.97	0.00	144.49	0.01	145.01	0.34
143.46	0.00	143.98	0.00	144.50	0.02	145.02	0.34
143.47	0.00	143.99	0.00	144.51	0.02	145.03	0.35
143.48	0.00	144.00	0.00	144.52	0.03	145.04	0.35
143.49	0.00	144.01	0.00	144.53	0.03	145.05	0.35
143.50	0.00	144.02	0.00	144.54	0.04	145.06	0.36
143.51	0.00	144.03	0.00	144.55	0.04	145.07	0.36
143.52	0.00	144.04	0.00	144.56	0.05	145.08	0.37
143.53	0.00	144.05	0.00	144.57	0.05	145.09	0.37
143.54	0.00	144.06	0.00	144.58	0.06	145.10	0.37
143.55	0.00	144.07	0.00	144.59	0.07	145.11	0.38
143.56	0.00	144.08	0.00	144.60	0.08	145.12	0.38
143.57	0.00	144.09	0.00	144.61	0.08	145.13	0.38
143.58	0.00	144.10	0.00	144.62	0.09	145.14	0.39
143.59	0.00	144.11	0.00	144.63	0.10	145.15	0.39
143.60	0.00	144.12	0.00	144.64	0.11	145.16	0.40
143.61	0.00	144.13	0.00	144.65	0.12	145.17	0.40
143.62	0.00	144.14	0.00	144.66	0.12	145.18	0.40
143.63	0.00	144.15	0.00	144.67	0.13	145.19	0.41
143.64	0.00	144.16	0.00	144.68	0.14	145.20	0.41
143.65	0.00	144.17	0.00	144.69	0.15	145.21	0.41
143.66	0.00	144.18	0.00	144.70	0.16	145.22	0.42
143.67	0.00	144.19	0.00	144.71	0.17	145.23	0.42
143.68	0.00	144.20	0.00	144.72	0.18	145.24	0.42
143.69	0.00	144.21	0.00	144.73	0.19	145.25	0.43
143.70	0.00	144.22	0.00	144.74	0.19	145.26	0.43
143.71	0.00	144.23	0.00	144.75	0.20	145.27	0.43
143.72	0.00	144.24	0.00	144.76	0.21	145.28	0.44
143.73	0.00	144.25	0.00	144.77	0.22	145.29	0.44
143.74	0.00	144.26	0.00	144.78	0.22	145.30	0.44
143.75	0.00	144.27	0.00	144.79	0.23	145.31	0.45
143.76	0.00	144.28	0.00	144.80	0.23	145.32	0.45
143.77	0.00	144.29	0.00	144.81	0.24	145.33	0.45
143.78	0.00	144.30	0.00	144.82	0.25	145.34	0.46
143.79	0.00	144.31	0.00	144.83	0.25	145.35	0.46
143.80	0.00	144.32	0.00	144.84	0.26	145.36	0.46
143.81	0.00	144.33	0.00	144.85	0.26	145.37	0.46

Stage-Discharge for Pond B-25: Basin #25 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
145.38	0.47	145.90	0.60	146.42	4.83	146.94	11.88
145.39	0.47	145.91	0.61	146.43	4.96	146.95	11.90
145.40	0.47	145.92	0.61	146.44	5.10	146.96	11.91
145.41	0.48	145.93	0.61	146.45	5.23	146.97	11.93
145.42	0.48	145.94	0.61	146.46	5.37	146.98	11.95
145.43	0.48	145.95	0.62	146.47	5.50	146.99	11.97
145.44	0.49	145.96	0.63	146.48	5.64	147.00	11.98
145.45	0.49	145.97	0.66	146.49	5.78	147.01	12.00
145.46	0.49	145.98	0.69	146.50	5.92	147.02	12.02
145.47	0.49	145.99	0.73	146.51	6.06	147.03	12.03
145.48	0.50	146.00	0.77	146.52	6.20	147.04	12.05
145.49	0.50	146.01	0.82	146.53	6.35	147.05	12.07
145.50	0.50	146.02	0.87	146.54	6.49	147.06	12.09
145.51	0.51	146.03	0.93	146.55	6.64	147.07	12.10
145.52	0.51	146.04	0.99	146.56	6.78	147.08	12.12
145.53	0.51	146.05	1.05	146.57	6.93	147.09	12.14
145.54	0.51	146.06	1.12	146.58	7.08	147.10	12.15
145.55	0.52	146.07	1.18	146.59	7.23	147.11	12.17
145.56	0.52	146.08	1.25	146.60	7.38	147.12	12.19
145.57	0.52	146.09	1.33	146.61	7.53	147.13	12.20
145.58	0.52	146.10	1.40	146.62	7.69	147.14	12.22
145.59	0.53	146.11	1.48	146.63	7.84	147.15	12.24
145.60	0.53	146.12	1.56	146.64	8.00	147.16	12.25
145.61	0.53	146.13	1.65	146.65	8.15	147.17	12.27
145.62	0.54	146.14	1.73	146.66	8.31	147.18	12.29
145.63	0.54	146.15	1.82	146.67	8.47	147.19	12.30
145.64	0.54	146.16	1.91	146.68	8.63	147.20	12.32
145.65	0.54	146.17	2.00	146.69	8.79	147.21	12.34
145.66	0.55	146.18	2.09	146.70	8.95	147.22	12.35
145.67	0.55	146.19	2.19	146.71	9.11	147.23	12.37
145.68	0.55	146.20	2.29	146.72	9.27	147.24	12.39
145.69	0.55	146.21	2.38	146.73	9.43	147.25	12.40
145.70	0.56	146.22	2.49	146.74	9.60	147.26	12.42
145.71	0.56	146.23	2.59	146.75	9.76	147.27	12.44
145.72	0.56	146.24	2.69	146.76	9.93	147.28	12.45
145.73	0.56	146.25	2.80	146.77	10.10	147.29	12.47
145.74	0.57	146.26	2.91	146.78	10.26	147.30	12.49
145.75	0.57	146.27	3.02	146.79	10.43	147.31	12.50
145.76	0.57	146.28	3.13	146.80	10.60	147.32	12.52
145.77	0.57	146.29	3.24	146.81	10.77	147.33	12.54
145.78	0.58	146.30	3.35	146.82	10.94	147.34	12.55
145.79	0.58	146.31	3.47	146.83	11.12	147.35	12.57
145.80	0.58	146.32	3.59	146.84	11.29	147.36	12.58
145.81	0.58	146.33	3.70	146.85	11.46	147.37	12.60
145.82	0.59	146.34	3.82	146.86	11.64	147.38	12.62
145.83	0.59	146.35	3.94	146.87	11.76	147.39	12.63
145.84	0.59	146.36	4.07	146.88	11.78	147.40	12.65
145.85	0.59	146.37	4.19	146.89	11.79	147.41	12.67
145.86	0.60	146.38	4.32	146.90	11.81	147.42	12.68
145.87	0.60	146.39	4.44	146.91	11.83	147.43	12.70
145.88	0.60	146.40	4.57	146.92	11.85	147.44	12.71
145.89	0.60	146.41	4.70	146.93	11.86	147.45	12.73

Stage-Discharge for Pond B-25: Basin #25 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.46	12.75	147.98	13.89	148.50	68.06
147.47	12.76	147.99	14.18	148.51	69.81
147.48	12.78	148.00	14.53	148.52	71.59
147.49	12.79	148.01	14.91	148.53	73.39
147.50	12.81	148.02	15.34	148.54	75.22
147.51	12.83	148.03	15.81	148.55	77.07
147.52	12.84	148.04	16.31	148.56	78.96
147.53	12.86	148.05	16.84	148.57	80.60
147.54	12.87	148.06	17.40	148.58	82.25
147.55	12.89	148.07	17.98	148.59	83.92
147.56	12.91	148.08	18.60	148.60	85.60
147.57	12.92	148.09	19.24	148.61	87.30
147.58	12.94	148.10	19.91	148.62	89.01
147.59	12.95	148.11	20.60	148.63	90.73
147.60	12.97	148.12	21.31	148.64	92.46
147.61	12.99	148.13	22.05	148.65	94.21
147.62	13.00	148.14	22.81	148.66	95.97
147.63	13.02	148.15	23.59	148.67	97.74
147.64	13.03	148.16	24.39	148.68	99.53
147.65	13.05	148.17	25.25	148.69	101.32
147.66	13.06	148.18	26.14	148.70	103.13
147.67	13.08	148.19	27.05	148.71	104.96
147.68	13.10	148.20	27.99	148.72	106.79
147.69	13.11	148.21	28.95	148.73	108.64
147.70	13.13	148.22	29.94	148.74	110.50
147.71	13.14	148.23	30.96	148.75	112.37
147.72	13.16	148.24	31.99	148.76	114.26
147.73	13.17	148.25	33.06	148.77	116.19
147.74	13.19	148.26	34.14	148.78	118.14
147.75	13.21	148.27	35.26	148.79	120.10
147.76	13.22	148.28	36.39	148.80	122.07
147.77	13.24	148.29	37.55	148.81	124.06
147.78	13.25	148.30	38.74	148.82	126.05
147.79	13.27	148.31	39.94	148.83	128.07
147.80	13.28	148.32	41.18	148.84	130.09
147.81	13.30	148.33	42.43	148.85	132.13
147.82	13.31	148.34	43.72	148.86	134.18
147.83	13.33	148.35	45.02	148.87	136.25
147.84	13.34	148.36	46.35	148.88	138.33
147.85	13.36	148.37	47.73	148.89	140.42
147.86	13.37	148.38	49.14	148.90	142.52
147.87	13.39	148.39	50.57	148.91	144.63
147.88	13.41	148.40	52.03	148.92	146.76
147.89	13.42	148.41	53.51	148.93	148.90
147.90	13.44	148.42	55.02	148.94	151.06
147.91	13.45	148.43	56.56	148.95	153.22
147.92	13.47	148.44	58.12	148.96	155.40
147.93	13.48	148.45	59.71	148.97	157.54
147.94	13.50	148.46	61.33	148.98	159.69
147.95	13.51	148.47	62.97	148.99	161.84
147.96	13.53	148.48	64.64	149.00	**164.01**
147.97	13.66	148.49	66.34		

Stage-Area-Storage for Pond B-25: Basin #25

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
143.30	0	0
143.31	67	0
143.32	134	1
143.33	202	3
143.34	269	5
143.35	336	8
143.36	403	12
143.37	470	16
143.38	537	21
143.39	605	27
143.40	672	34
143.41	739	41
143.42	806	48
143.43	873	57
143.44	940	66
143.45	1,008	76
143.46	1,075	86
143.47	1,142	97
143.48	1,209	109
143.49	1,276	121
143.50	1,343	134
143.51	1,411	148
143.52	1,478	163
143.53	1,545	178
143.54	1,612	193
143.55	1,679	210
143.56	1,746	227
143.57	1,814	245
143.58	1,881	263
143.59	1,948	282
143.60	2,015	302
143.61	2,082	323
143.62	2,149	344
143.63	2,217	366
143.64	2,284	388
143.65	2,351	411
143.66	2,418	435
143.67	2,485	460
143.68	2,553	485
143.69	2,620	511
143.70	2,687	537
143.71	2,754	565
143.72	2,821	592
143.73	2,888	621
143.74	2,956	650
143.75	3,023	680
143.76	3,090	711
143.77	3,157	742
143.78	3,224	774
143.79	3,291	806
143.80	3,359	840
143.81	3,426	874
143.82	3,493	908
143.83	3,560	943
143.84	3,627	979
143.85	3,694	1,016
143.86	3,762	1,053
143.87	3,829	1,091
143.88	3,896	1,130
143.89	3,963	1,169
143.90	4,030	1,209
143.91	4,097	1,250
143.92	4,165	1,291
143.93	4,232	1,333
143.94	4,299	1,376
143.95	4,366	1,419
143.96	4,433	1,463
143.97	4,500	1,508
143.98	4,568	1,553
143.99	4,635	1,599
144.00	4,702	1,646
144.01	4,711	1,693
144.02	4,720	1,740
144.03	4,728	1,787
144.04	4,737	1,834
144.05	4,746	1,882
144.06	4,755	1,929
144.07	4,764	1,977
144.08	4,773	2,025
144.09	4,781	2,072
144.10	4,790	2,120
144.11	4,799	2,168
144.12	4,808	2,216
144.13	4,817	2,264
144.14	4,825	2,313
144.15	4,834	2,361
144.16	4,843	2,409
144.17	4,852	2,458
144.18	4,861	2,506
144.19	4,870	2,555
144.20	4,878	2,604
144.21	4,887	2,653
144.22	4,896	2,701
144.23	4,905	2,750
144.24	4,914	2,800
144.25	4,923	2,849
144.26	4,931	2,898
144.27	4,940	2,947
144.28	4,949	2,997
144.29	4,958	3,046
144.30	4,967	3,096
144.31	4,975	3,146
144.32	4,984	3,195
144.33	4,993	3,245

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.34	5,002	3,295	144.86	5,461	6,016
144.35	5,011	3,345	144.87	5,469	6,070
144.36	5,020	3,396	144.88	5,478	6,125
144.37	5,028	3,446	144.89	5,487	6,180
144.38	5,037	3,496	144.90	5,496	6,235
144.39	5,046	3,547	144.91	5,505	6,290
144.40	5,055	3,597	144.92	5,513	6,345
144.41	5,064	3,648	144.93	5,522	6,400
144.42	5,072	3,698	144.94	5,531	6,455
144.43	5,081	3,749	144.95	5,540	6,511
144.44	5,090	3,800	144.96	5,549	6,566
144.45	5,099	3,851	144.97	5,558	6,622
144.46	5,108	3,902	144.98	5,566	6,677
144.47	5,117	3,953	144.99	5,575	6,733
144.48	5,125	4,004	145.00	5,584	6,789
144.49	5,134	4,056	145.01	5,593	6,845
144.50	5,143	4,107	145.02	5,602	6,901
144.51	5,152	4,158	145.03	5,611	6,957
144.52	5,161	4,210	145.04	5,620	7,013
144.53	5,169	4,262	145.05	5,629	7,069
144.54	5,178	4,313	145.06	5,638	7,125
144.55	5,187	4,365	145.07	5,648	7,182
144.56	5,196	4,417	145.08	5,657	7,238
144.57	5,205	4,469	145.09	5,666	7,295
144.58	5,214	4,521	145.10	5,675	7,352
144.59	5,222	4,573	145.11	5,684	7,408
144.60	5,231	4,626	145.12	5,693	7,465
144.61	5,240	4,678	145.13	5,702	7,522
144.62	5,249	4,730	145.14	5,711	7,579
144.63	5,258	4,783	145.15	5,720	7,637
144.64	5,266	4,836	145.16	5,729	7,694
144.65	5,275	4,888	145.17	5,738	7,751
144.66	5,284	4,941	145.18	5,747	7,809
144.67	5,293	4,994	145.19	5,757	7,866
144.68	5,302	5,047	145.20	5,766	7,924
144.69	5,311	5,100	145.21	5,775	7,981
144.70	5,319	5,153	145.22	5,784	8,039
144.71	5,328	5,206	145.23	5,793	8,097
144.72	5,337	5,260	145.24	5,802	8,155
144.73	5,346	5,313	145.25	5,811	8,213
144.74	5,355	5,367	145.26	5,820	8,271
144.75	5,364	5,420	145.27	5,829	8,329
144.76	5,372	5,474	145.28	5,838	8,388
144.77	5,381	5,528	145.29	5,847	8,446
144.78	5,390	5,582	145.30	5,856	8,505
144.79	5,399	5,636	145.31	5,865	8,563
144.80	5,408	5,690	145.32	5,875	8,622
144.81	5,416	5,744	145.33	5,884	8,681
144.82	5,425	5,798	145.34	5,893	8,740
144.83	5,434	5,852	145.35	5,902	8,799
144.84	5,443	5,907	145.36	5,911	8,858
144.85	5,452	5,961	145.37	5,920	8,917

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.38	5,929	8,976	145.90	6,401	12,182
145.39	5,938	9,036	145.91	6,410	12,246
145.40	5,947	9,095	145.92	6,419	12,310
145.41	5,956	9,154	145.93	6,428	12,374
145.42	5,965	9,214	145.94	6,438	12,439
145.43	5,974	9,274	145.95	6,447	12,503
145.44	5,984	9,334	145.96	6,456	12,568
145.45	5,993	9,393	145.97	6,465	12,632
145.46	6,002	9,453	145.98	6,474	12,697
145.47	6,011	9,513	145.99	6,483	12,762
145.48	6,020	9,574	146.00	6,492	12,827
145.49	6,029	9,634	146.01	6,501	12,892
145.50	6,038	9,694	146.02	6,511	12,957
145.51	6,047	9,755	146.03	6,520	13,022
145.52	6,056	9,815	146.04	6,529	13,087
145.53	6,065	9,876	146.05	6,539	13,152
145.54	6,074	9,936	146.06	6,548	13,218
145.55	6,083	9,997	146.07	6,558	13,283
145.56	6,092	10,058	146.08	6,567	13,349
145.57	6,102	10,119	146.09	6,576	13,415
145.58	6,111	10,180	146.10	6,586	13,481
145.59	6,120	10,241	146.11	6,595	13,546
145.60	6,129	10,303	146.12	6,604	13,612
145.61	6,138	10,364	146.13	6,614	13,679
145.62	6,147	10,425	146.14	6,623	13,745
145.63	6,156	10,487	146.15	6,632	13,811
145.64	6,165	10,548	146.16	6,642	13,877
145.65	6,174	10,610	146.17	6,651	13,944
145.66	6,183	10,672	146.18	6,660	14,010
145.67	6,192	10,734	146.19	6,670	14,077
145.68	6,201	10,796	146.20	6,679	14,144
145.69	6,211	10,858	146.21	6,689	14,211
145.70	6,220	10,920	146.22	6,698	14,278
145.71	6,229	10,982	146.23	6,707	14,345
145.72	6,238	11,045	146.24	6,717	14,412
145.73	6,247	11,107	146.25	6,726	14,479
145.74	6,256	11,169	146.26	6,735	14,546
145.75	6,265	11,232	146.27	6,745	14,614
145.76	6,274	11,295	146.28	6,754	14,681
145.77	6,283	11,358	146.29	6,763	14,749
145.78	6,292	11,420	146.30	6,773	14,816
145.79	6,301	11,483	146.31	6,782	14,884
145.80	6,310	11,546	146.32	6,792	14,952
145.81	6,319	11,610	146.33	6,801	15,020
145.82	6,329	11,673	146.34	6,810	15,088
145.83	6,338	11,736	146.35	6,820	15,156
145.84	6,347	11,800	146.36	6,829	15,224
145.85	6,356	11,863	146.37	6,838	15,293
145.86	6,365	11,927	146.38	6,848	15,361
145.87	6,374	11,990	146.39	6,857	15,430
145.88	6,383	12,054	146.40	6,866	15,498
145.89	6,392	12,118	146.41	6,876	15,567

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.42	6,885	15,636	146.94	7,372	19,343
146.43	6,894	15,705	146.95	7,381	19,416
146.44	6,904	15,774	146.96	7,391	19,490
146.45	6,913	15,843	146.97	7,400	19,564
146.46	6,923	15,912	146.98	7,409	19,638
146.47	6,932	15,981	146.99	7,419	19,712
146.48	6,941	16,051	147.00	7,428	19,787
146.49	6,951	16,120	147.01	7,438	19,861
146.50	6,960	16,190	147.02	7,447	19,935
146.51	6,969	16,259	147.03	7,457	20,010
146.52	6,979	16,329	147.04	7,467	20,085
146.53	6,988	16,399	147.05	7,476	20,159
146.54	6,997	16,469	147.06	7,486	20,234
146.55	7,007	16,539	147.07	7,496	20,309
146.56	7,016	16,609	147.08	7,505	20,384
146.57	7,026	16,679	147.09	7,515	20,459
146.58	7,035	16,749	147.10	7,525	20,534
146.59	7,044	16,820	147.11	7,534	20,610
146.60	7,054	16,890	147.12	7,544	20,685
146.61	7,063	16,961	147.13	7,553	20,760
146.62	7,072	17,032	147.14	7,563	20,836
146.63	7,082	17,102	147.15	7,573	20,912
146.64	7,091	17,173	147.16	7,582	20,988
146.65	7,100	17,244	147.17	7,592	21,063
146.66	7,110	17,315	147.18	7,602	21,139
146.67	7,119	17,386	147.19	7,611	21,215
146.68	7,128	17,458	147.20	7,621	21,292
146.69	7,138	17,529	147.21	7,631	21,368
146.70	7,147	17,600	147.22	7,640	21,444
146.71	7,157	17,672	147.23	7,650	21,521
146.72	7,166	17,744	147.24	7,660	21,597
146.73	7,175	17,815	147.25	7,669	21,674
146.74	7,185	17,887	147.26	7,679	21,751
146.75	7,194	17,959	147.27	7,689	21,827
146.76	7,203	18,031	147.28	7,698	21,904
146.77	7,213	18,103	147.29	7,708	21,981
146.78	7,222	18,175	147.30	7,718	22,059
146.79	7,231	18,247	147.31	7,727	22,136
146.80	7,241	18,320	147.32	7,737	22,213
146.81	7,250	18,392	147.33	7,746	22,290
146.82	7,260	18,465	147.34	7,756	22,368
146.83	7,269	18,537	147.35	7,766	22,446
146.84	7,278	18,610	147.36	7,775	22,523
146.85	7,288	18,683	147.37	7,785	22,601
146.86	7,297	18,756	147.38	7,795	22,679
146.87	7,306	18,829	147.39	7,804	22,757
146.88	7,316	18,902	147.40	7,814	22,835
146.89	7,325	18,975	147.41	7,824	22,913
146.90	7,334	19,049	147.42	7,833	22,992
146.91	7,344	19,122	147.43	7,843	23,070
146.92	7,353	19,195	147.44	7,853	23,148
146.93	7,362	19,269	147.45	7,862	23,227

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.46	7,872	23,306
147.47	7,882	23,384
147.48	7,891	23,463
147.49	7,901	23,542
147.50	7,911	23,621
147.51	7,920	23,700
147.52	7,930	23,780
147.53	7,939	23,859
147.54	7,949	23,939
147.55	7,959	24,018
147.56	7,968	24,098
147.57	7,978	24,177
147.58	7,988	24,257
147.59	7,997	24,337
147.60	8,007	24,417
147.61	8,017	24,497
147.62	8,026	24,578
147.63	8,036	24,658
147.64	8,046	24,738
147.65	8,055	24,819
147.66	8,065	24,899
147.67	8,075	24,980
147.68	8,084	25,061
147.69	8,094	25,142
147.70	8,104	25,223
147.71	8,113	25,304
147.72	8,123	25,385
147.73	8,132	25,466
147.74	8,142	25,548
147.75	8,152	25,629
147.76	8,161	25,711
147.77	8,171	25,792
147.78	8,181	25,874
147.79	8,190	25,956
147.80	8,200	26,038
147.81	8,210	26,120
147.82	8,219	26,202
147.83	8,229	26,284
147.84	8,239	26,367
147.85	8,248	26,449
147.86	8,258	26,532
147.87	8,268	26,614
147.88	8,277	26,697
147.89	8,287	26,780
147.90	8,297	26,863
147.91	8,306	26,946
147.92	8,316	27,029
147.93	8,325	27,112
147.94	8,335	27,195
147.95	8,345	27,279
147.96	8,354	27,362
147.97	8,364	27,446
147.98	8,374	27,530
147.99	8,383	27,613
148.00	8,393	27,697
148.01	8,403	27,781
148.02	8,413	27,865
148.03	8,423	27,949
148.04	8,433	28,034
148.05	8,443	28,118
148.06	8,453	28,203
148.07	8,463	28,287
148.08	8,472	28,372
148.09	8,482	28,457
148.10	8,492	28,541
148.11	8,502	28,626
148.12	8,512	28,712
148.13	8,522	28,797
148.14	8,532	28,882
148.15	8,542	28,967
148.16	8,552	29,053
148.17	8,562	29,138
148.18	8,572	29,224
148.19	8,582	29,310
148.20	8,592	29,396
148.21	8,602	29,482
148.22	8,611	29,568
148.23	8,621	29,654
148.24	8,631	29,740
148.25	8,641	29,826
148.26	8,651	29,913
148.27	8,661	30,000
148.28	8,671	30,086
148.29	8,681	30,173
148.30	8,691	30,260
148.31	8,701	30,347
148.32	8,711	30,434
148.33	8,721	30,521
148.34	8,731	30,608
148.35	8,741	30,696
148.36	8,750	30,783
148.37	8,760	30,871
148.38	8,770	30,958
148.39	8,780	31,046
148.40	8,790	31,134
148.41	8,800	31,222
148.42	8,810	31,310
148.43	8,820	31,398
148.44	8,830	31,486
148.45	8,840	31,575
148.46	8,850	31,663
148.47	8,860	31,752
148.48	8,870	31,840
148.49	8,880	31,929

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.50	8,890	32,018
148.51	8,899	32,107
148.52	8,909	32,196
148.53	8,919	32,285
148.54	8,929	32,374
148.55	8,939	32,464
148.56	8,949	32,553
148.57	8,959	32,643
148.58	8,969	32,732
148.59	8,979	32,822
148.60	8,989	32,912
148.61	8,999	33,002
148.62	9,009	33,092
148.63	9,019	33,182
148.64	9,029	33,272
148.65	9,038	33,362
148.66	9,048	33,453
148.67	9,058	33,543
148.68	9,068	33,634
148.69	9,078	33,725
148.70	9,088	33,816
148.71	9,098	33,907
148.72	9,108	33,998
148.73	9,118	34,089
148.74	9,128	34,180
148.75	9,138	34,271
148.76	9,148	34,363
148.77	9,158	34,454
148.78	9,168	34,546
148.79	9,177	34,638
148.80	9,187	34,729
148.81	9,197	34,821
148.82	9,207	34,913
148.83	9,217	35,005
148.84	9,227	35,098
148.85	9,237	35,190
148.86	9,247	35,282
148.87	9,257	35,375
148.88	9,267	35,468
148.89	9,277	35,560
148.90	9,287	35,653
148.91	9,297	35,746
148.92	9,307	35,839
148.93	9,316	35,932
148.94	9,326	36,025
148.95	9,336	36,119
148.96	9,346	36,212
148.97	9,356	36,306
148.98	9,366	36,399
148.99	9,376	36,493
149.00	**9,386**	**36,587**

Summary for Pond B-26: Basin #26

Inflow Area = 2.366 ac, 39.90% Impervious, Inflow Depth = 6.61" for Current 100 yr event
Inflow = 15.91 cfs @ 12.17 hrs, Volume= 1.303 af
Outflow = 11.03 cfs @ 12.27 hrs, Volume= 1.170 af, Atten= 31%, Lag= 6.1 min
Primary = 11.03 cfs @ 12.27 hrs, Volume= 1.170 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.99' @ 12.27 hrs Surf.Area= 7,012 sf Storage= 20,532 cf

Plug-Flow detention time= 286.6 min calculated for 1.170 af (90% of inflow)
Center-of-Mass det. time= 234.0 min (1,016.1 - 782.1)

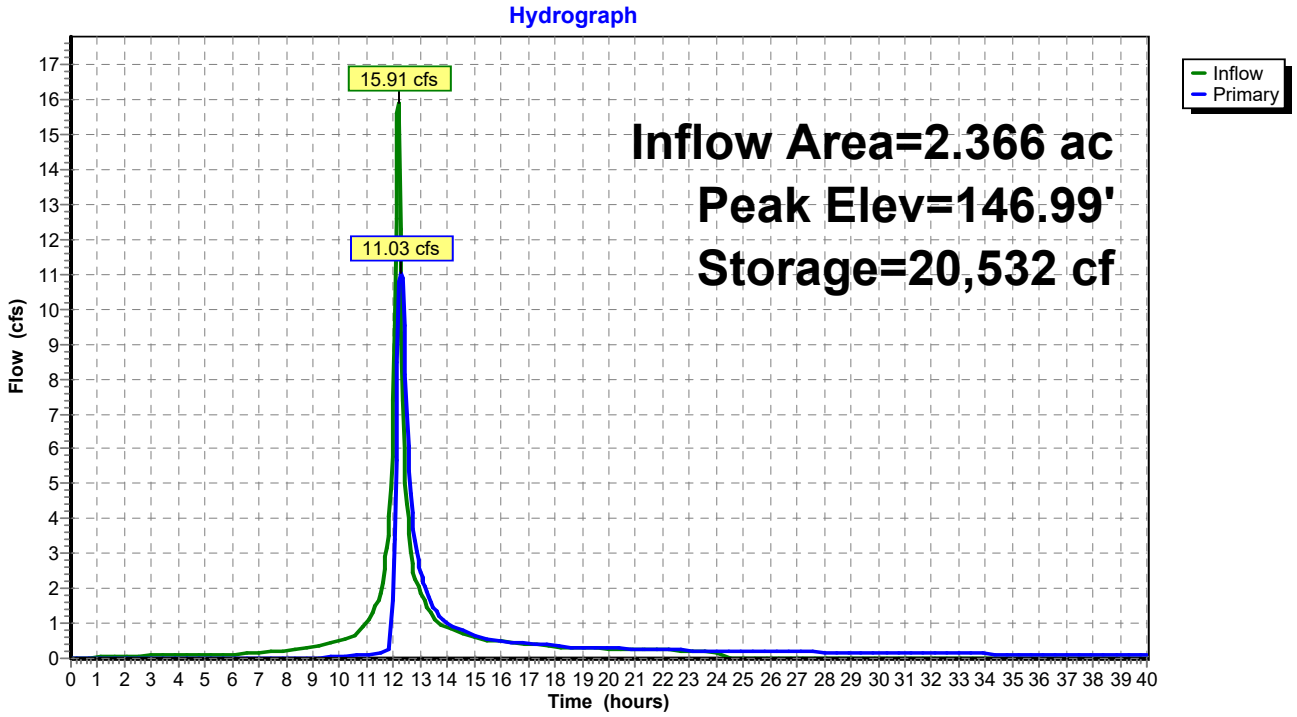
Volume	Invert	Avail.Storage	Storage Description
#1	143.30'	35,348 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
143.30	0	0	0
144.00	5,466	1,913	1,913
145.00	5,967	5,717	7,630
146.00	6,486	6,227	13,856
147.00	7,018	6,752	20,608
148.00	7,563	7,291	27,899
148.95	8,120	7,449	35,348

Device	Routing	Invert	Outlet Devices
#1	Primary	143.30'	**18.0" Round Culvert** L= 234.0' Ke= 0.500 Inlet / Outlet Invert= 143.30' / 142.00' S= 0.0056 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	144.36'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	148.05'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.00 cfs @ 12.27 hrs HW=146.98' (Free Discharge)
- **1=Culvert** (Barrel Controls 11.00 cfs @ 6.23 fps)
  - **2=Orifice/Grate** (Passes < 0.26 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 12.05 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-26: Basin #26



Stage-Discharge for Pond B-26: Basin #26

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
143.30	0.00	143.82	0.00	144.34	0.00	144.86	0.10
143.31	0.00	143.83	0.00	144.35	0.00	144.87	0.10
143.32	0.00	143.84	0.00	144.36	0.00	144.88	0.11
143.33	0.00	143.85	0.00	144.37	0.00	144.89	0.11
143.34	0.00	143.86	0.00	144.38	0.00	144.90	0.11
143.35	0.00	143.87	0.00	144.39	0.00	144.91	0.11
143.36	0.00	143.88	0.00	144.40	0.00	144.92	0.11
143.37	0.00	143.89	0.00	144.41	0.00	144.93	0.11
143.38	0.00	143.90	0.00	144.42	0.01	144.94	0.11
143.39	0.00	143.91	0.00	144.43	0.01	144.95	0.11
143.40	0.00	143.92	0.00	144.44	0.01	144.96	0.12
143.41	0.00	143.93	0.00	144.45	0.01	144.97	0.12
143.42	0.00	143.94	0.00	144.46	0.02	144.98	0.12
143.43	0.00	143.95	0.00	144.47	0.02	144.99	0.12
143.44	0.00	143.96	0.00	144.48	0.02	145.00	0.12
143.45	0.00	143.97	0.00	144.49	0.03	145.01	0.12
143.46	0.00	143.98	0.00	144.50	0.03	145.02	0.12
143.47	0.00	143.99	0.00	144.51	0.03	145.03	0.12
143.48	0.00	144.00	0.00	144.52	0.04	145.04	0.12
143.49	0.00	144.01	0.00	144.53	0.04	145.05	0.13
143.50	0.00	144.02	0.00	144.54	0.05	145.06	0.13
143.51	0.00	144.03	0.00	144.55	0.05	145.07	0.13
143.52	0.00	144.04	0.00	144.56	0.05	145.08	0.13
143.53	0.00	144.05	0.00	144.57	0.05	145.09	0.13
143.54	0.00	144.06	0.00	144.58	0.06	145.10	0.13
143.55	0.00	144.07	0.00	144.59	0.06	145.11	0.13
143.56	0.00	144.08	0.00	144.60	0.06	145.12	0.13
143.57	0.00	144.09	0.00	144.61	0.06	145.13	0.13
143.58	0.00	144.10	0.00	144.62	0.06	145.14	0.13
143.59	0.00	144.11	0.00	144.63	0.07	145.15	0.14
143.60	0.00	144.12	0.00	144.64	0.07	145.16	0.14
143.61	0.00	144.13	0.00	144.65	0.07	145.17	0.14
143.62	0.00	144.14	0.00	144.66	0.07	145.18	0.14
143.63	0.00	144.15	0.00	144.67	0.07	145.19	0.14
143.64	0.00	144.16	0.00	144.68	0.08	145.20	0.14
143.65	0.00	144.17	0.00	144.69	0.08	145.21	0.14
143.66	0.00	144.18	0.00	144.70	0.08	145.22	0.14
143.67	0.00	144.19	0.00	144.71	0.08	145.23	0.14
143.68	0.00	144.20	0.00	144.72	0.08	145.24	0.14
143.69	0.00	144.21	0.00	144.73	0.08	145.25	0.15
143.70	0.00	144.22	0.00	144.74	0.09	145.26	0.15
143.71	0.00	144.23	0.00	144.75	0.09	145.27	0.15
143.72	0.00	144.24	0.00	144.76	0.09	145.28	0.15
143.73	0.00	144.25	0.00	144.77	0.09	145.29	0.15
143.74	0.00	144.26	0.00	144.78	0.09	145.30	0.15
143.75	0.00	144.27	0.00	144.79	0.09	145.31	0.15
143.76	0.00	144.28	0.00	144.80	0.10	145.32	0.15
143.77	0.00	144.29	0.00	144.81	0.10	145.33	0.15
143.78	0.00	144.30	0.00	144.82	0.10	145.34	0.15
143.79	0.00	144.31	0.00	144.83	0.10	145.35	0.15
143.80	0.00	144.32	0.00	144.84	0.10	145.36	0.16
143.81	0.00	144.33	0.00	144.85	0.10	145.37	0.16

Stage-Discharge for Pond B-26: Basin #26 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
145.38	0.16	145.90	0.20	146.42	3.72	146.94	10.94
145.39	0.16	145.91	0.20	146.43	3.84	146.95	10.96
145.40	0.16	145.92	0.20	146.44	3.96	146.96	10.97
145.41	0.16	145.93	0.20	146.45	4.09	146.97	10.99
145.42	0.16	145.94	0.20	146.46	4.22	146.98	11.00
145.43	0.16	145.95	0.20	146.47	4.35	146.99	11.02
145.44	0.16	145.96	0.20	146.48	4.48	147.00	11.04
145.45	0.16	145.97	0.20	146.49	4.61	147.01	11.05
145.46	0.16	145.98	0.20	146.50	4.74	147.02	11.07
145.47	0.16	145.99	0.20	146.51	4.88	147.03	11.08
145.48	0.17	146.00	0.20	146.52	5.01	147.04	11.10
145.49	0.17	146.01	0.22	146.53	5.15	147.05	11.11
145.50	0.17	146.02	0.24	146.54	5.29	147.06	11.13
145.51	0.17	146.03	0.27	146.55	5.43	147.07	11.15
145.52	0.17	146.04	0.31	146.56	5.57	147.08	11.16
145.53	0.17	146.05	0.35	146.57	5.71	147.09	11.18
145.54	0.17	146.06	0.40	146.58	5.85	147.10	11.19
145.55	0.17	146.07	0.45	146.59	5.99	147.11	11.21
145.56	0.17	146.08	0.50	146.60	6.14	147.12	11.22
145.57	0.17	146.09	0.56	146.61	6.28	147.13	11.24
145.58	0.17	146.10	0.62	146.62	6.43	147.14	11.25
145.59	0.17	146.11	0.69	146.63	6.58	147.15	11.27
145.60	0.17	146.12	0.75	146.64	6.72	147.16	11.29
145.61	0.18	146.13	0.82	146.65	6.87	147.17	11.30
145.62	0.18	146.14	0.89	146.66	7.03	147.18	11.32
145.63	0.18	146.15	0.97	146.67	7.18	147.19	11.33
145.64	0.18	146.16	1.04	146.68	7.33	147.20	11.35
145.65	0.18	146.17	1.12	146.69	7.48	147.21	11.36
145.66	0.18	146.18	1.20	146.70	7.64	147.22	11.38
145.67	0.18	146.19	1.29	146.71	7.79	147.23	11.39
145.68	0.18	146.20	1.37	146.72	7.95	147.24	11.41
145.69	0.18	146.21	1.46	146.73	8.11	147.25	11.42
145.70	0.18	146.22	1.55	146.74	8.27	147.26	11.44
145.71	0.18	146.23	1.64	146.75	8.43	147.27	11.45
145.72	0.18	146.24	1.74	146.76	8.59	147.28	11.47
145.73	0.18	146.25	1.83	146.77	8.75	147.29	11.48
145.74	0.19	146.26	1.93	146.78	8.91	147.30	11.50
145.75	0.19	146.27	2.03	146.79	9.07	147.31	11.51
145.76	0.19	146.28	2.13	146.80	9.24	147.32	11.53
145.77	0.19	146.29	2.23	146.81	9.40	147.33	11.54
145.78	0.19	146.30	2.34	146.82	9.57	147.34	11.56
145.79	0.19	146.31	2.45	146.83	9.73	147.35	11.57
145.80	0.19	146.32	2.55	146.84	9.90	147.36	11.59
145.81	0.19	146.33	2.66	146.85	10.07	147.37	11.60
145.82	0.19	146.34	2.77	146.86	10.24	147.38	11.62
145.83	0.19	146.35	2.89	146.87	10.41	147.39	11.63
145.84	0.19	146.36	3.00	146.88	10.58	147.40	11.65
145.85	0.19	146.37	3.12	146.89	10.75	147.41	11.66
145.86	0.19	146.38	3.23	146.90	10.88	147.42	11.68
145.87	0.19	146.39	3.35	146.91	10.89	147.43	11.69
145.88	0.20	146.40	3.47	146.92	10.91	147.44	11.71
145.89	0.20	146.41	3.59	146.93	10.92	147.45	11.72

Stage-Discharge for Pond B-26: Basin #26 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.46	11.74	147.98	12.49	148.50	52.51
147.47	11.75	147.99	12.50	148.51	54.02
147.48	11.77	148.00	12.51	148.52	55.56
147.49	11.78	148.01	12.53	148.53	57.12
147.50	11.80	148.02	12.54	148.54	58.71
147.51	11.81	148.03	12.56	148.55	60.32
147.52	11.83	148.04	12.57	148.56	61.96
147.53	11.84	148.05	12.58	148.57	63.63
147.54	11.86	148.06	12.71	148.58	65.33
147.55	11.87	148.07	12.94	148.59	67.05
147.56	11.89	148.08	13.23	148.60	68.79
147.57	11.90	148.09	13.58	148.61	70.57
147.58	11.92	148.10	13.96	148.62	72.37
147.59	11.93	148.11	14.39	148.63	74.20
147.60	11.94	148.12	14.85	148.64	76.05
147.61	11.96	148.13	15.35	148.65	77.94
147.62	11.97	148.14	15.88	148.66	79.58
147.63	11.99	148.15	16.44	148.67	81.23
147.64	12.00	148.16	17.03	148.68	82.90
147.65	12.02	148.17	17.64	148.69	84.58
147.66	12.03	148.18	18.28	148.70	86.27
147.67	12.05	148.19	18.95	148.71	87.98
147.68	12.06	148.20	19.63	148.72	89.70
147.69	12.07	148.21	20.35	148.73	91.43
147.70	12.09	148.22	21.08	148.74	93.18
147.71	12.10	148.23	21.84	148.75	94.93
147.72	12.12	148.24	22.62	148.76	96.71
147.73	12.13	148.25	23.42	148.77	98.49
147.74	12.15	148.26	24.28	148.78	100.29
147.75	12.16	148.27	25.17	148.79	102.10
147.76	12.18	148.28	26.08	148.80	103.92
147.77	12.19	148.29	27.02	148.81	105.75
147.78	12.20	148.30	27.98	148.82	107.60
147.79	12.22	148.31	28.96	148.83	109.46
147.80	12.23	148.32	29.98	148.84	111.33
147.81	12.25	148.33	31.01	148.85	113.21
147.82	12.26	148.34	32.07	148.86	115.14
147.83	12.27	148.35	33.16	148.87	117.09
147.84	12.29	148.36	34.27	148.88	119.05
147.85	12.30	148.37	35.40	148.89	121.02
147.86	12.32	148.38	36.56	148.90	123.00
147.87	12.33	148.39	37.75	148.91	125.00
147.88	12.35	148.40	38.95	148.92	127.01
147.89	12.36	148.41	40.19	148.93	129.04
147.90	12.37	148.42	41.44	148.94	131.07
147.91	12.39	148.43	42.72	148.95	**133.12**
147.92	12.40	148.44	44.03		
147.93	12.42	148.45	45.35		
147.94	12.43	148.46	46.73		
147.95	12.44	148.47	48.14		
147.96	12.46	148.48	49.57		
147.97	12.47	148.49	51.03		

Stage-Area-Storage for Pond B-26: Basin #26

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
143.30	0	0
143.31	78	0
143.32	156	2
143.33	234	4
143.34	312	6
143.35	390	10
143.36	469	14
143.37	547	19
143.38	625	25
143.39	703	32
143.40	781	39
143.41	859	47
143.42	937	56
143.43	1,015	66
143.44	1,093	77
143.45	1,171	88
143.46	1,249	100
143.47	1,327	113
143.48	1,406	126
143.49	1,484	141
143.50	1,562	156
143.51	1,640	172
143.52	1,718	189
143.53	1,796	207
143.54	1,874	225
143.55	1,952	244
143.56	2,030	264
143.57	2,108	285
143.58	2,186	306
143.59	2,264	328
143.60	2,343	351
143.61	2,421	375
143.62	2,499	400
143.63	2,577	425
143.64	2,655	451
143.65	2,733	478
143.66	2,811	506
143.67	2,889	534
143.68	2,967	564
143.69	3,045	594
143.70	3,123	625
143.71	3,202	656
143.72	3,280	689
143.73	3,358	722
143.74	3,436	756
143.75	3,514	791
143.76	3,592	826
143.77	3,670	862
143.78	3,748	900
143.79	3,826	937
143.80	3,904	976
143.81	3,982	1,016
143.82	4,060	1,056
143.83	4,139	1,097
143.84	4,217	1,138
143.85	4,295	1,181
143.86	4,373	1,224
143.87	4,451	1,269
143.88	4,529	1,313
143.89	4,607	1,359
143.90	4,685	1,406
143.91	4,763	1,453
143.92	4,841	1,501
143.93	4,919	1,550
143.94	4,997	1,599
143.95	5,076	1,650
143.96	5,154	1,701
143.97	5,232	1,753
143.98	5,310	1,805
143.99	5,388	1,859
144.00	5,466	1,913
144.01	5,471	1,968
144.02	5,476	2,023
144.03	5,481	2,077
144.04	5,486	2,132
144.05	5,491	2,187
144.06	5,496	2,242
144.07	5,501	2,297
144.08	5,506	2,352
144.09	5,511	2,407
144.10	5,516	2,462
144.11	5,521	2,517
144.12	5,526	2,573
144.13	5,531	2,628
144.14	5,536	2,683
144.15	5,541	2,739
144.16	5,546	2,794
144.17	5,551	2,850
144.18	5,556	2,905
144.19	5,561	2,961
144.20	5,566	3,016
144.21	5,571	3,072
144.22	5,576	3,128
144.23	5,581	3,184
144.24	5,586	3,239
144.25	5,591	3,295
144.26	5,596	3,351
144.27	5,601	3,407
144.28	5,606	3,463
144.29	5,611	3,519
144.30	5,616	3,575
144.31	5,621	3,632
144.32	5,626	3,688
144.33	5,631	3,744

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.34	5,636	3,800	144.86	5,897	6,799
144.35	5,641	3,857	144.87	5,902	6,858
144.36	5,646	3,913	144.88	5,907	6,917
144.37	5,651	3,970	144.89	5,912	6,976
144.38	5,656	4,026	144.90	5,917	7,035
144.39	5,661	4,083	144.91	5,922	7,095
144.40	5,666	4,140	144.92	5,927	7,154
144.41	5,671	4,196	144.93	5,932	7,213
144.42	5,676	4,253	144.94	5,937	7,272
144.43	5,681	4,310	144.95	5,942	7,332
144.44	5,686	4,367	144.96	5,947	7,391
144.45	5,691	4,424	144.97	5,952	7,451
144.46	5,696	4,480	144.98	5,957	7,510
144.47	5,701	4,537	144.99	5,962	7,570
144.48	5,706	4,594	145.00	5,967	7,630
144.49	5,711	4,652	145.01	5,972	7,689
144.50	5,717	4,709	145.02	5,977	7,749
144.51	5,722	4,766	145.03	5,983	7,809
144.52	5,727	4,823	145.04	5,988	7,869
144.53	5,732	4,880	145.05	5,993	7,929
144.54	5,737	4,938	145.06	5,998	7,989
144.55	5,742	4,995	145.07	6,003	8,049
144.56	5,747	5,053	145.08	6,009	8,109
144.57	5,752	5,110	145.09	6,014	8,169
144.58	5,757	5,168	145.10	6,019	8,229
144.59	5,762	5,225	145.11	6,024	8,289
144.60	5,767	5,283	145.12	6,029	8,349
144.61	5,772	5,341	145.13	6,034	8,410
144.62	5,777	5,398	145.14	6,040	8,470
144.63	5,782	5,456	145.15	6,045	8,530
144.64	5,787	5,514	145.16	6,050	8,591
144.65	5,792	5,572	145.17	6,055	8,651
144.66	5,797	5,630	145.18	6,060	8,712
144.67	5,802	5,688	145.19	6,066	8,773
144.68	5,807	5,746	145.20	6,071	8,833
144.69	5,812	5,804	145.21	6,076	8,894
144.70	5,817	5,862	145.22	6,081	8,955
144.71	5,822	5,920	145.23	6,086	9,016
144.72	5,827	5,978	145.24	6,092	9,077
144.73	5,832	6,037	145.25	6,097	9,138
144.74	5,837	6,095	145.26	6,102	9,199
144.75	5,842	6,154	145.27	6,107	9,260
144.76	5,847	6,212	145.28	6,112	9,321
144.77	5,852	6,270	145.29	6,118	9,382
144.78	5,857	6,329	145.30	6,123	9,443
144.79	5,862	6,388	145.31	6,128	9,504
144.80	5,867	6,446	145.32	6,133	9,566
144.81	5,872	6,505	145.33	6,138	9,627
144.82	5,877	6,564	145.34	6,143	9,688
144.83	5,882	6,622	145.35	6,149	9,750
144.84	5,887	6,681	145.36	6,154	9,811
144.85	5,892	6,740	145.37	6,159	9,873

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.38	6,164	9,935	145.90	6,434	13,210
145.39	6,169	9,996	145.91	6,439	13,274
145.40	6,175	10,058	145.92	6,444	13,339
145.41	6,180	10,120	145.93	6,450	13,403
145.42	6,185	10,182	145.94	6,455	13,468
145.43	6,190	10,243	145.95	6,460	13,532
145.44	6,195	10,305	145.96	6,465	13,597
145.45	6,201	10,367	145.97	6,470	13,662
145.46	6,206	10,429	145.98	6,476	13,726
145.47	6,211	10,491	145.99	6,481	13,791
145.48	6,216	10,554	146.00	6,486	13,856
145.49	6,221	10,616	146.01	6,491	13,921
145.50	6,227	10,678	146.02	6,497	13,986
145.51	6,232	10,740	146.03	6,502	14,051
145.52	6,237	10,803	146.04	6,507	14,116
145.53	6,242	10,865	146.05	6,513	14,181
145.54	6,247	10,927	146.06	6,518	14,246
145.55	6,252	10,990	146.07	6,523	14,311
145.56	6,258	11,052	146.08	6,529	14,377
145.57	6,263	11,115	146.09	6,534	14,442
145.58	6,268	11,178	146.10	6,539	14,507
145.59	6,273	11,240	146.11	6,545	14,573
145.60	6,278	11,303	146.12	6,550	14,638
145.61	6,284	11,366	146.13	6,555	14,704
145.62	6,289	11,429	146.14	6,560	14,769
145.63	6,294	11,492	146.15	6,566	14,835
145.64	6,299	11,555	146.16	6,571	14,901
145.65	6,304	11,618	146.17	6,576	14,966
145.66	6,310	11,681	146.18	6,582	15,032
145.67	6,315	11,744	146.19	6,587	15,098
145.68	6,320	11,807	146.20	6,592	15,164
145.69	6,325	11,870	146.21	6,598	15,230
145.70	6,330	11,934	146.22	6,603	15,296
145.71	6,335	11,997	146.23	6,608	15,362
145.72	6,341	12,060	146.24	6,614	15,428
145.73	6,346	12,124	146.25	6,619	15,494
145.74	6,351	12,187	146.26	6,624	15,560
145.75	6,356	12,251	146.27	6,630	15,627
145.76	6,361	12,314	146.28	6,635	15,693
145.77	6,367	12,378	146.29	6,640	15,759
145.78	6,372	12,442	146.30	6,646	15,826
145.79	6,377	12,505	146.31	6,651	15,892
145.80	6,382	12,569	146.32	6,656	15,959
145.81	6,387	12,633	146.33	6,662	16,025
145.82	6,393	12,697	146.34	6,667	16,092
145.83	6,398	12,761	146.35	6,672	16,159
145.84	6,403	12,825	146.36	6,678	16,226
145.85	6,408	12,889	146.37	6,683	16,292
145.86	6,413	12,953	146.38	6,688	16,359
145.87	6,419	13,017	146.39	6,693	16,426
145.88	6,424	13,082	146.40	6,699	16,493
145.89	6,429	13,146	146.41	6,704	16,560

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.42	6,709	16,627	146.94	6,986	20,188
146.43	6,715	16,694	146.95	6,991	20,258
146.44	6,720	16,761	146.96	6,997	20,328
146.45	6,725	16,829	146.97	7,002	20,398
146.46	6,731	16,896	146.98	7,007	20,468
146.47	6,736	16,963	146.99	7,013	20,538
146.48	6,741	17,031	147.00	7,018	20,608
146.49	6,747	17,098	147.01	7,023	20,678
146.50	6,752	17,166	147.02	7,029	20,749
146.51	6,757	17,233	147.03	7,034	20,819
146.52	6,763	17,301	147.04	7,040	20,889
146.53	6,768	17,368	147.05	7,045	20,960
146.54	6,773	17,436	147.06	7,051	21,030
146.55	6,779	17,504	147.07	7,056	21,101
146.56	6,784	17,572	147.08	7,062	21,171
146.57	6,789	17,640	147.09	7,067	21,242
146.58	6,795	17,707	147.10	7,073	21,313
146.59	6,800	17,775	147.11	7,078	21,383
146.60	6,805	17,843	147.12	7,083	21,454
146.61	6,811	17,912	147.13	7,089	21,525
146.62	6,816	17,980	147.14	7,094	21,596
146.63	6,821	18,048	147.15	7,100	21,667
146.64	6,826	18,116	147.16	7,105	21,738
146.65	6,832	18,184	147.17	7,111	21,809
146.66	6,837	18,253	147.18	7,116	21,880
146.67	6,842	18,321	147.19	7,122	21,951
146.68	6,848	18,390	147.20	7,127	22,023
146.69	6,853	18,458	147.21	7,132	22,094
146.70	6,858	18,527	147.22	7,138	22,165
146.71	6,864	18,595	147.23	7,143	22,237
146.72	6,869	18,664	147.24	7,149	22,308
146.73	6,874	18,733	147.25	7,154	22,380
146.74	6,880	18,801	147.26	7,160	22,451
146.75	6,885	18,870	147.27	7,165	22,523
146.76	6,890	18,939	147.28	7,171	22,595
146.77	6,896	19,008	147.29	7,176	22,666
146.78	6,901	19,077	147.30	7,182	22,738
146.79	6,906	19,146	147.31	7,187	22,810
146.80	6,912	19,215	147.32	7,192	22,882
146.81	6,917	19,284	147.33	7,198	22,954
146.82	6,922	19,353	147.34	7,203	23,026
146.83	6,928	19,423	147.35	7,209	23,098
146.84	6,933	19,492	147.36	7,214	23,170
146.85	6,938	19,561	147.37	7,220	23,242
146.86	6,944	19,631	147.38	7,225	23,314
146.87	6,949	19,700	147.39	7,231	23,387
146.88	6,954	19,770	147.40	7,236	23,459
146.89	6,959	19,839	147.41	7,241	23,531
146.90	6,965	19,909	147.42	7,247	23,604
146.91	6,970	19,979	147.43	7,252	23,676
146.92	6,975	20,048	147.44	7,258	23,749
146.93	6,981	20,118	147.45	7,263	23,821

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.46	7,269	23,894	147.98	7,552	27,747
147.47	7,274	23,967	147.99	7,558	27,823
147.48	7,280	24,040	148.00	7,563	27,899
147.49	7,285	24,112	148.01	7,569	27,974
147.50	7,291	24,185	148.02	7,575	28,050
147.51	7,296	24,258	148.03	7,581	28,126
147.52	7,301	24,331	148.04	7,586	28,202
147.53	7,307	24,404	148.05	7,592	28,277
147.54	7,312	24,477	148.06	7,598	28,353
147.55	7,318	24,550	148.07	7,604	28,429
147.56	7,323	24,624	148.08	7,610	28,506
147.57	7,329	24,697	148.09	7,616	28,582
147.58	7,334	24,770	148.10	7,622	28,658
147.59	7,340	24,844	148.11	7,627	28,734
147.60	7,345	24,917	148.12	7,633	28,810
147.61	7,350	24,990	148.13	7,639	28,887
147.62	7,356	25,064	148.14	7,645	28,963
147.63	7,361	25,138	148.15	7,651	29,040
147.64	7,367	25,211	148.16	7,657	29,116
147.65	7,372	25,285	148.17	7,663	29,193
147.66	7,378	25,359	148.18	7,669	29,269
147.67	7,383	25,432	148.19	7,674	29,346
147.68	7,389	25,506	148.20	7,680	29,423
147.69	7,394	25,580	148.21	7,686	29,500
147.70	7,400	25,654	148.22	7,692	29,577
147.71	7,405	25,728	148.23	7,698	29,654
147.72	7,410	25,802	148.24	7,704	29,731
147.73	7,416	25,876	148.25	7,710	29,808
147.74	7,421	25,951	148.26	7,715	29,885
147.75	7,427	26,025	148.27	7,721	29,962
147.76	7,432	26,099	148.28	7,727	30,039
147.77	7,438	26,174	148.29	7,733	30,117
147.78	7,443	26,248	148.30	7,739	30,194
147.79	7,449	26,322	148.31	7,745	30,271
147.80	7,454	26,397	148.32	7,751	30,349
147.81	7,459	26,471	148.33	7,756	30,426
147.82	7,465	26,546	148.34	7,762	30,504
147.83	7,470	26,621	148.35	7,768	30,582
147.84	7,476	26,695	148.36	7,774	30,659
147.85	7,481	26,770	148.37	7,780	30,737
147.86	7,487	26,845	148.38	7,786	30,815
147.87	7,492	26,920	148.39	7,792	30,893
147.88	7,498	26,995	148.40	7,798	30,971
147.89	7,503	27,070	148.41	7,803	31,049
147.90	7,509	27,145	148.42	7,809	31,127
147.91	7,514	27,220	148.43	7,815	31,205
147.92	7,519	27,295	148.44	7,821	31,283
147.93	7,525	27,371	148.45	7,827	31,361
147.94	7,530	27,446	148.46	7,833	31,440
147.95	7,536	27,521	148.47	7,839	31,518
147.96	7,541	27,597	148.48	7,844	31,596
147.97	7,547	27,672	148.49	7,850	31,675

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.50	7,856	31,753
148.51	7,862	31,832
148.52	7,868	31,911
148.53	7,874	31,989
148.54	7,880	32,068
148.55	7,885	32,147
148.56	7,891	32,226
148.57	7,897	32,305
148.58	7,903	32,384
148.59	7,909	32,463
148.60	7,915	32,542
148.61	7,921	32,621
148.62	7,927	32,700
148.63	7,932	32,780
148.64	7,938	32,859
148.65	7,944	32,938
148.66	7,950	33,018
148.67	7,956	33,097
148.68	7,962	33,177
148.69	7,968	33,257
148.70	7,973	33,336
148.71	7,979	33,416
148.72	7,985	33,496
148.73	7,991	33,576
148.74	7,997	33,656
148.75	8,003	33,736
148.76	8,009	33,816
148.77	8,014	33,896
148.78	8,020	33,976
148.79	8,026	34,056
148.80	8,032	34,137
148.81	8,038	34,217
148.82	8,044	34,297
148.83	8,050	34,378
148.84	8,056	34,458
148.85	8,061	34,539
148.86	8,067	34,620
148.87	8,073	34,700
148.88	8,079	34,781
148.89	8,085	34,862
148.90	8,091	34,943
148.91	8,097	35,024
148.92	8,102	35,105
148.93	8,108	35,186
148.94	8,114	35,267
148.95	**8,120**	**35,348**

Summary for Pond B-27: Basin #27

Inflow Area = 1.935 ac, 46.41% Impervious, Inflow Depth = 7.58" for Current 100 yr event
Inflow = 14.53 cfs @ 12.17 hrs, Volume= 1.222 af
Outflow = 13.24 cfs @ 12.22 hrs, Volume= 1.114 af, Atten= 9%, Lag= 2.9 min
Primary = 13.24 cfs @ 12.22 hrs, Volume= 1.114 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 172.77' @ 12.22 hrs Surf.Area= 3,990 sf Storage= 12,338 cf

Plug-Flow detention time= 113.2 min calculated for 1.114 af (91% of inflow)
Center-of-Mass det. time= 66.2 min (833.7 - 767.5)

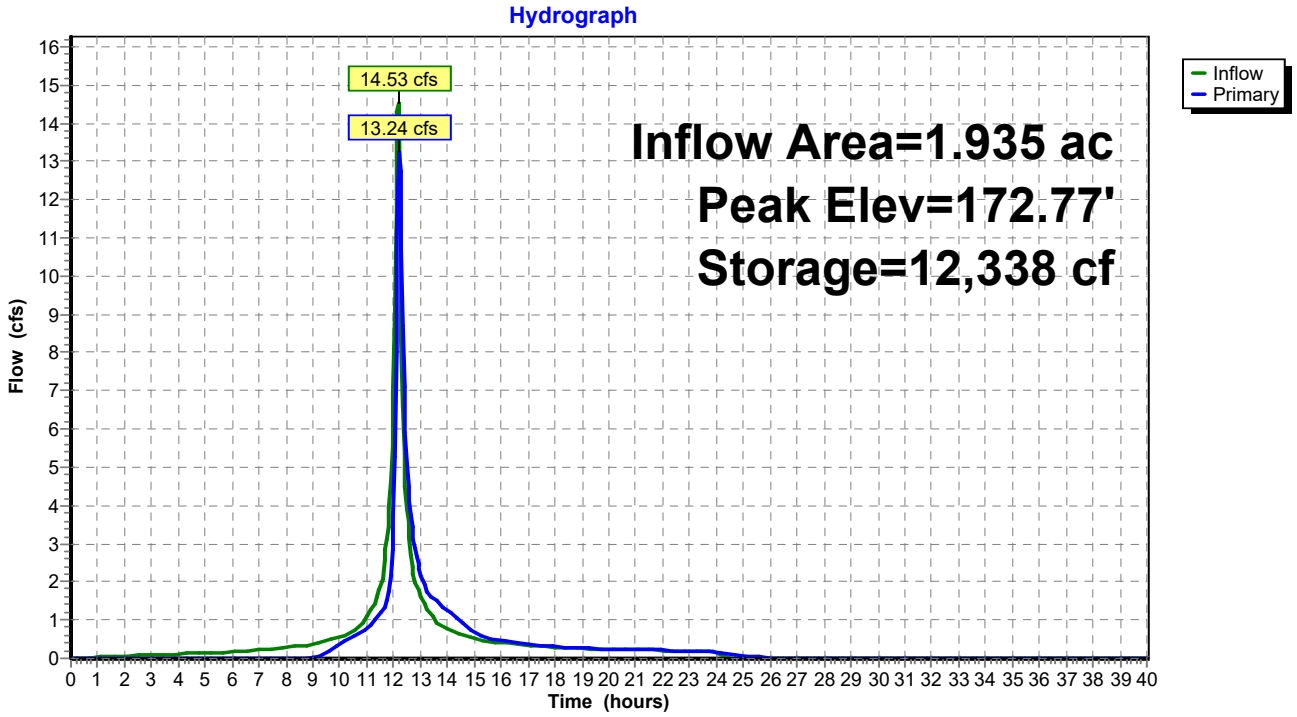
Volume	Invert	Avail.Storage	Storage Description
#1	167.35'	13,052 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
167.35	0	0	0
168.00	1,002	326	326
169.00	1,583	1,293	1,618
170.00	2,221	1,902	3,520
171.00	2,916	2,569	6,089
172.00	3,667	3,292	9,380
172.95	4,064	3,672	13,052

Device	Routing	Invert	Outlet Devices
#1	Primary	167.65'	**24.0" Round Culvert** L= 61.0' Ke= 0.500 Inlet / Outlet Invert= 167.65' / 165.16' S= 0.0408 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	170.47'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	171.75'	**2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	172.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	172.90'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.97 cfs @ 12.22 hrs HW=172.76' (Free Discharge)
- **1=Culvert** (Passes 12.97 cfs of 30.67 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.35 cfs @ 6.74 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 5.97 cfs @ 3.29 fps)
  - **4=Sharp-Crested Rectangular Weir** (Weir Controls 4.65 cfs @ 2.34 fps)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-27: Basin #27



Stage-Discharge for Pond B-27: Basin #27

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.35	0.00	167.87	0.00	168.39	0.00	168.91	0.00
167.36	0.00	167.88	0.00	168.40	0.00	168.92	0.00
167.37	0.00	167.89	0.00	168.41	0.00	168.93	0.00
167.38	0.00	167.90	0.00	168.42	0.00	168.94	0.00
167.39	0.00	167.91	0.00	168.43	0.00	168.95	0.00
167.40	0.00	167.92	0.00	168.44	0.00	168.96	0.00
167.41	0.00	167.93	0.00	168.45	0.00	168.97	0.00
167.42	0.00	167.94	0.00	168.46	0.00	168.98	0.00
167.43	0.00	167.95	0.00	168.47	0.00	168.99	0.00
167.44	0.00	167.96	0.00	168.48	0.00	169.00	0.00
167.45	0.00	167.97	0.00	168.49	0.00	169.01	0.00
167.46	0.00	167.98	0.00	168.50	0.00	169.02	0.00
167.47	0.00	167.99	0.00	168.51	0.00	169.03	0.00
167.48	0.00	168.00	0.00	168.52	0.00	169.04	0.00
167.49	0.00	168.01	0.00	168.53	0.00	169.05	0.00
167.50	0.00	168.02	0.00	168.54	0.00	169.06	0.00
167.51	0.00	168.03	0.00	168.55	0.00	169.07	0.00
167.52	0.00	168.04	0.00	168.56	0.00	169.08	0.00
167.53	0.00	168.05	0.00	168.57	0.00	169.09	0.00
167.54	0.00	168.06	0.00	168.58	0.00	169.10	0.00
167.55	0.00	168.07	0.00	168.59	0.00	169.11	0.00
167.56	0.00	168.08	0.00	168.60	0.00	169.12	0.00
167.57	0.00	168.09	0.00	168.61	0.00	169.13	0.00
167.58	0.00	168.10	0.00	168.62	0.00	169.14	0.00
167.59	0.00	168.11	0.00	168.63	0.00	169.15	0.00
167.60	0.00	168.12	0.00	168.64	0.00	169.16	0.00
167.61	0.00	168.13	0.00	168.65	0.00	169.17	0.00
167.62	0.00	168.14	0.00	168.66	0.00	169.18	0.00
167.63	0.00	168.15	0.00	168.67	0.00	169.19	0.00
167.64	0.00	168.16	0.00	168.68	0.00	169.20	0.00
167.65	0.00	168.17	0.00	168.69	0.00	169.21	0.00
167.66	0.00	168.18	0.00	168.70	0.00	169.22	0.00
167.67	0.00	168.19	0.00	168.71	0.00	169.23	0.00
167.68	0.00	168.20	0.00	168.72	0.00	169.24	0.00
167.69	0.00	168.21	0.00	168.73	0.00	169.25	0.00
167.70	0.00	168.22	0.00	168.74	0.00	169.26	0.00
167.71	0.00	168.23	0.00	168.75	0.00	169.27	0.00
167.72	0.00	168.24	0.00	168.76	0.00	169.28	0.00
167.73	0.00	168.25	0.00	168.77	0.00	169.29	0.00
167.74	0.00	168.26	0.00	168.78	0.00	169.30	0.00
167.75	0.00	168.27	0.00	168.79	0.00	169.31	0.00
167.76	0.00	168.28	0.00	168.80	0.00	169.32	0.00
167.77	0.00	168.29	0.00	168.81	0.00	169.33	0.00
167.78	0.00	168.30	0.00	168.82	0.00	169.34	0.00
167.79	0.00	168.31	0.00	168.83	0.00	169.35	0.00
167.80	0.00	168.32	0.00	168.84	0.00	169.36	0.00
167.81	0.00	168.33	0.00	168.85	0.00	169.37	0.00
167.82	0.00	168.34	0.00	168.86	0.00	169.38	0.00
167.83	0.00	168.35	0.00	168.87	0.00	169.39	0.00
167.84	0.00	168.36	0.00	168.88	0.00	169.40	0.00
167.85	0.00	168.37	0.00	168.89	0.00	169.41	0.00
167.86	0.00	168.38	0.00	168.90	0.00	169.42	0.00

Stage-Discharge for Pond B-27: Basin #27 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
169.43	0.00	169.95	0.00	170.47	0.00	170.99	0.72
169.44	0.00	169.96	0.00	170.48	0.00	171.00	0.74
169.45	0.00	169.97	0.00	170.49	0.00	171.01	0.76
169.46	0.00	169.98	0.00	170.50	0.00	171.02	0.78
169.47	0.00	169.99	0.00	170.51	0.01	171.03	0.80
169.48	0.00	170.00	0.00	170.52	0.01	171.04	0.82
169.49	0.00	170.01	0.00	170.53	0.01	171.05	0.84
169.50	0.00	170.02	0.00	170.54	0.02	171.06	0.85
169.51	0.00	170.03	0.00	170.55	0.02	171.07	0.87
169.52	0.00	170.04	0.00	170.56	0.03	171.08	0.89
169.53	0.00	170.05	0.00	170.57	0.04	171.09	0.91
169.54	0.00	170.06	0.00	170.58	0.04	171.10	0.92
169.55	0.00	170.07	0.00	170.59	0.05	171.11	0.94
169.56	0.00	170.08	0.00	170.60	0.06	171.12	0.95
169.57	0.00	170.09	0.00	170.61	0.07	171.13	0.96
169.58	0.00	170.10	0.00	170.62	0.08	171.14	0.98
169.59	0.00	170.11	0.00	170.63	0.09	171.15	0.99
169.60	0.00	170.12	0.00	170.64	0.10	171.16	1.00
169.61	0.00	170.13	0.00	170.65	0.11	171.17	1.02
169.62	0.00	170.14	0.00	170.66	0.12	171.18	1.03
169.63	0.00	170.15	0.00	170.67	0.13	171.19	1.05
169.64	0.00	170.16	0.00	170.68	0.15	171.20	1.06
169.65	0.00	170.17	0.00	170.69	0.16	171.21	1.07
169.66	0.00	170.18	0.00	170.70	0.17	171.22	1.08
169.67	0.00	170.19	0.00	170.71	0.19	171.23	1.10
169.68	0.00	170.20	0.00	170.72	0.20	171.24	1.11
169.69	0.00	170.21	0.00	170.73	0.22	171.25	1.12
169.70	0.00	170.22	0.00	170.74	0.23	171.26	1.14
169.71	0.00	170.23	0.00	170.75	0.25	171.27	1.15
169.72	0.00	170.24	0.00	170.76	0.27	171.28	1.16
169.73	0.00	170.25	0.00	170.77	0.28	171.29	1.17
169.74	0.00	170.26	0.00	170.78	0.30	171.30	1.18
169.75	0.00	170.27	0.00	170.79	0.32	171.31	1.20
169.76	0.00	170.28	0.00	170.80	0.34	171.32	1.21
169.77	0.00	170.29	0.00	170.81	0.36	171.33	1.22
169.78	0.00	170.30	0.00	170.82	0.37	171.34	1.23
169.79	0.00	170.31	0.00	170.83	0.39	171.35	1.24
169.80	0.00	170.32	0.00	170.84	0.41	171.36	1.25
169.81	0.00	170.33	0.00	170.85	0.43	171.37	1.27
169.82	0.00	170.34	0.00	170.86	0.45	171.38	1.28
169.83	0.00	170.35	0.00	170.87	0.47	171.39	1.29
169.84	0.00	170.36	0.00	170.88	0.49	171.40	1.30
169.85	0.00	170.37	0.00	170.89	0.51	171.41	1.31
169.86	0.00	170.38	0.00	170.90	0.53	171.42	1.32
169.87	0.00	170.39	0.00	170.91	0.55	171.43	1.33
169.88	0.00	170.40	0.00	170.92	0.57	171.44	1.34
169.89	0.00	170.41	0.00	170.93	0.59	171.45	1.35
169.90	0.00	170.42	0.00	170.94	0.61	171.46	1.36
169.91	0.00	170.43	0.00	170.95	0.63	171.47	1.37
169.92	0.00	170.44	0.00	170.96	0.66	171.48	1.38
169.93	0.00	170.45	0.00	170.97	0.68	171.49	1.39
169.94	0.00	170.46	0.00	170.98	0.70	171.50	1.40

Stage-Discharge for Pond B-27: Basin #27 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
171.51	1.41	172.03	2.80	172.55	8.64
171.52	1.42	172.04	2.86	172.56	8.83
171.53	1.43	172.05	2.92	172.57	9.02
171.54	1.44	172.06	2.98	172.58	9.21
171.55	1.45	172.07	3.04	172.59	9.41
171.56	1.46	172.08	3.10	172.60	9.60
171.57	1.47	172.09	3.16	172.61	9.80
171.58	1.48	172.10	3.22	172.62	10.00
171.59	1.49	172.11	3.28	172.63	10.20
171.60	1.50	172.12	3.35	172.64	10.40
171.61	1.51	172.13	3.41	172.65	10.61
171.62	1.52	172.14	3.47	172.66	10.81
171.63	1.53	172.15	3.54	172.67	11.02
171.64	1.54	172.16	3.60	172.68	11.23
171.65	1.55	172.17	3.67	172.69	11.44
171.66	1.56	172.18	3.74	172.70	11.65
171.67	1.56	172.19	3.80	172.71	11.87
171.68	1.57	172.20	3.87	172.72	12.08
171.69	1.58	172.21	3.94	172.73	12.30
171.70	1.59	172.22	4.01	172.74	12.52
171.71	1.60	172.23	4.08	172.75	12.74
171.72	1.61	172.24	4.15	172.76	12.96
171.73	1.62	172.25	4.22	172.77	13.18
171.74	1.63	172.26	4.30	172.78	13.41
171.75	1.64	172.27	4.40	172.79	13.63
171.76	1.65	172.28	4.50	172.80	13.86
171.77	1.67	172.29	4.61	172.81	14.09
171.78	1.69	172.30	4.72	172.82	14.32
171.79	1.72	172.31	4.84	172.83	14.55
171.80	1.75	172.32	4.97	172.84	14.78
171.81	1.78	172.33	5.09	172.85	15.02
171.82	1.81	172.34	5.22	172.86	15.25
171.83	1.85	172.35	5.36	172.87	15.49
171.84	1.89	172.36	5.50	172.88	15.72
171.85	1.92	172.37	5.64	172.89	15.96
171.86	1.96	172.38	5.78	172.90	16.20
171.87	2.00	172.39	5.93	172.91	16.56
171.88	2.05	172.40	6.08	172.92	17.02
171.89	2.09	172.41	6.24	172.93	17.54
171.90	2.13	172.42	6.39	172.94	18.11
171.91	2.18	172.43	6.55	172.95	**18.73**
171.92	2.23	172.44	6.71		
171.93	2.27	172.45	6.88		
171.94	2.32	172.46	7.04		
171.95	2.37	172.47	7.21		
171.96	2.42	172.48	7.38		
171.97	2.48	172.49	7.56		
171.98	2.53	172.50	7.73		
171.99	2.58	172.51	7.91		
172.00	2.64	172.52	8.09		
172.01	2.69	172.53	8.27		
172.02	2.75	172.54	8.46		

Stage-Area-Storage for Pond B-27: Basin #27

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.35	0	0	167.87	802	208
167.36	15	0	167.88	817	217
167.37	31	0	167.89	832	225
167.38	46	1	167.90	848	233
167.39	62	1	167.91	863	242
167.40	77	2	167.92	879	250
167.41	92	3	167.93	894	259
167.42	108	4	167.94	910	268
167.43	123	5	167.95	925	277
167.44	139	6	167.96	940	287
167.45	154	8	167.97	956	296
167.46	170	9	167.98	971	306
167.47	185	11	167.99	987	316
167.48	200	13	168.00	1,002	326
167.49	216	15	168.01	1,008	336
167.50	231	17	168.02	1,014	346
167.51	247	20	168.03	1,019	356
167.52	262	22	168.04	1,025	366
167.53	277	25	168.05	1,031	376
167.54	293	28	168.06	1,037	387
167.55	308	31	168.07	1,043	397
167.56	324	34	168.08	1,048	408
167.57	339	37	168.09	1,054	418
167.58	355	41	168.10	1,060	429
167.59	370	44	168.11	1,066	439
167.60	385	48	168.12	1,072	450
167.61	401	52	168.13	1,078	461
167.62	416	56	168.14	1,083	472
167.63	432	60	168.15	1,089	482
167.64	447	65	168.16	1,095	493
167.65	462	69	168.17	1,101	504
167.66	478	74	168.18	1,107	515
167.67	493	79	168.19	1,112	527
167.68	509	84	168.20	1,118	538
167.69	524	89	168.21	1,124	549
167.70	540	94	168.22	1,130	560
167.71	555	100	168.23	1,136	571
167.72	570	106	168.24	1,141	583
167.73	586	111	168.25	1,147	594
167.74	601	117	168.26	1,153	606
167.75	617	123	168.27	1,159	617
167.76	632	130	168.28	1,165	629
167.77	647	136	168.29	1,170	641
167.78	663	143	168.30	1,176	652
167.79	678	149	168.31	1,182	664
167.80	694	156	168.32	1,188	676
167.81	709	163	168.33	1,194	688
167.82	725	170	168.34	1,200	700
167.83	740	178	168.35	1,205	712
167.84	755	185	168.36	1,211	724
167.85	771	193	168.37	1,217	736
167.86	786	200	168.38	1,223	748

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.39	1,229	761	168.91	1,531	1,478
168.40	1,234	773	168.92	1,537	1,493
168.41	1,240	785	168.93	1,542	1,509
168.42	1,246	798	168.94	1,548	1,524
168.43	1,252	810	168.95	1,554	1,540
168.44	1,258	823	168.96	1,560	1,555
168.45	1,263	835	168.97	1,566	1,571
168.46	1,269	848	168.98	1,571	1,587
168.47	1,275	861	168.99	1,577	1,602
168.48	1,281	874	169.00	1,583	1,618
168.49	1,287	886	169.01	1,589	1,634
168.50	1,293	899	169.02	1,596	1,650
168.51	1,298	912	169.03	1,602	1,666
168.52	1,304	925	169.04	1,609	1,682
168.53	1,310	938	169.05	1,615	1,698
168.54	1,316	951	169.06	1,621	1,714
168.55	1,322	965	169.07	1,628	1,731
168.56	1,327	978	169.08	1,634	1,747
168.57	1,333	991	169.09	1,640	1,763
168.58	1,339	1,005	169.10	1,647	1,780
168.59	1,345	1,018	169.11	1,653	1,796
168.60	1,351	1,031	169.12	1,660	1,813
168.61	1,356	1,045	169.13	1,666	1,829
168.62	1,362	1,059	169.14	1,672	1,846
168.63	1,368	1,072	169.15	1,679	1,863
168.64	1,374	1,086	169.16	1,685	1,880
168.65	1,380	1,100	169.17	1,691	1,896
168.66	1,385	1,114	169.18	1,698	1,913
168.67	1,391	1,127	169.19	1,704	1,930
168.68	1,397	1,141	169.20	1,711	1,948
168.69	1,403	1,155	169.21	1,717	1,965
168.70	1,409	1,169	169.22	1,723	1,982
168.71	1,415	1,184	169.23	1,730	1,999
168.72	1,420	1,198	169.24	1,736	2,016
168.73	1,426	1,212	169.25	1,743	2,034
168.74	1,432	1,226	169.26	1,749	2,051
168.75	1,438	1,241	169.27	1,755	2,069
168.76	1,444	1,255	169.28	1,762	2,086
168.77	1,449	1,269	169.29	1,768	2,104
168.78	1,455	1,284	169.30	1,774	2,122
168.79	1,461	1,299	169.31	1,781	2,140
168.80	1,467	1,313	169.32	1,787	2,157
168.81	1,473	1,328	169.33	1,794	2,175
168.82	1,478	1,343	169.34	1,800	2,193
168.83	1,484	1,357	169.35	1,806	2,211
168.84	1,490	1,372	169.36	1,813	2,229
168.85	1,496	1,387	169.37	1,819	2,248
168.86	1,502	1,402	169.38	1,825	2,266
168.87	1,507	1,417	169.39	1,832	2,284
168.88	1,513	1,432	169.40	1,838	2,302
168.89	1,519	1,448	169.41	1,845	2,321
168.90	1,525	1,463	169.42	1,851	2,339

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.43	1,857	2,358	169.95	2,189	3,410
169.44	1,864	2,376	169.96	2,195	3,432
169.45	1,870	2,395	169.97	2,202	3,454
169.46	1,876	2,414	169.98	2,208	3,476
169.47	1,883	2,433	169.99	2,215	3,498
169.48	1,889	2,451	170.00	2,221	3,520
169.49	1,896	2,470	170.01	2,228	3,542
169.50	1,902	2,489	170.02	2,235	3,565
169.51	1,908	2,508	170.03	2,242	3,587
169.52	1,915	2,528	170.04	2,249	3,610
169.53	1,921	2,547	170.05	2,256	3,632
169.54	1,928	2,566	170.06	2,263	3,655
169.55	1,934	2,585	170.07	2,270	3,677
169.56	1,940	2,605	170.08	2,277	3,700
169.57	1,947	2,624	170.09	2,284	3,723
169.58	1,953	2,644	170.10	2,290	3,746
169.59	1,959	2,663	170.11	2,297	3,769
169.60	1,966	2,683	170.12	2,304	3,792
169.61	1,972	2,702	170.13	2,311	3,815
169.62	1,979	2,722	170.14	2,318	3,838
169.63	1,985	2,742	170.15	2,325	3,861
169.64	1,991	2,762	170.16	2,332	3,884
169.65	1,998	2,782	170.17	2,339	3,908
169.66	2,004	2,802	170.18	2,346	3,931
169.67	2,010	2,822	170.19	2,353	3,955
169.68	2,017	2,842	170.20	2,360	3,978
169.69	2,023	2,862	170.21	2,367	4,002
169.70	2,030	2,883	170.22	2,374	4,026
169.71	2,036	2,903	170.23	2,381	4,049
169.72	2,042	2,923	170.24	2,388	4,073
169.73	2,049	2,944	170.25	2,395	4,097
169.74	2,055	2,964	170.26	2,402	4,121
169.75	2,062	2,985	170.27	2,409	4,145
169.76	2,068	3,005	170.28	2,416	4,169
169.77	2,074	3,026	170.29	2,423	4,193
169.78	2,081	3,047	170.30	2,429	4,218
169.79	2,087	3,068	170.31	2,436	4,242
169.80	2,093	3,089	170.32	2,443	4,266
169.81	2,100	3,110	170.33	2,450	4,291
169.82	2,106	3,131	170.34	2,457	4,315
169.83	2,113	3,152	170.35	2,464	4,340
169.84	2,119	3,173	170.36	2,471	4,365
169.85	2,125	3,194	170.37	2,478	4,389
169.86	2,132	3,215	170.38	2,485	4,414
169.87	2,138	3,237	170.39	2,492	4,439
169.88	2,144	3,258	170.40	2,499	4,464
169.89	2,151	3,280	170.41	2,506	4,489
169.90	2,157	3,301	170.42	2,513	4,514
169.91	2,164	3,323	170.43	2,520	4,539
169.92	2,170	3,345	170.44	2,527	4,565
169.93	2,176	3,366	170.45	2,534	4,590
169.94	2,183	3,388	170.46	2,541	4,615

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
170.47	2,548	4,641	170.99	2,909	6,060
170.48	2,555	4,666	171.00	2,916	6,089
170.49	2,562	4,692	171.01	2,924	6,118
170.50	2,569	4,718	171.02	2,931	6,147
170.51	2,575	4,743	171.03	2,939	6,176
170.52	2,582	4,769	171.04	2,946	6,206
170.53	2,589	4,795	171.05	2,954	6,235
170.54	2,596	4,821	171.06	2,961	6,265
170.55	2,603	4,847	171.07	2,969	6,295
170.56	2,610	4,873	171.08	2,976	6,324
170.57	2,617	4,899	171.09	2,984	6,354
170.58	2,624	4,925	171.10	2,991	6,384
170.59	2,631	4,952	171.11	2,999	6,414
170.60	2,638	4,978	171.12	3,006	6,444
170.61	2,645	5,004	171.13	3,014	6,474
170.62	2,652	5,031	171.14	3,021	6,504
170.63	2,659	5,057	171.15	3,029	6,534
170.64	2,666	5,084	171.16	3,036	6,565
170.65	2,673	5,111	171.17	3,044	6,595
170.66	2,680	5,137	171.18	3,051	6,626
170.67	2,687	5,164	171.19	3,059	6,656
170.68	2,694	5,191	171.20	3,066	6,687
170.69	2,701	5,218	171.21	3,074	6,718
170.70	2,707	5,245	171.22	3,081	6,748
170.71	2,714	5,272	171.23	3,089	6,779
170.72	2,721	5,299	171.24	3,096	6,810
170.73	2,728	5,327	171.25	3,104	6,841
170.74	2,735	5,354	171.26	3,111	6,872
170.75	2,742	5,381	171.27	3,119	6,903
170.76	2,749	5,409	171.28	3,126	6,935
170.77	2,756	5,436	171.29	3,134	6,966
170.78	2,763	5,464	171.30	3,141	6,997
170.79	2,770	5,492	171.31	3,149	7,029
170.80	2,777	5,519	171.32	3,156	7,060
170.81	2,784	5,547	171.33	3,164	7,092
170.82	2,791	5,575	171.34	3,171	7,123
170.83	2,798	5,603	171.35	3,179	7,155
170.84	2,805	5,631	171.36	3,186	7,187
170.85	2,812	5,659	171.37	3,194	7,219
170.86	2,819	5,687	171.38	3,201	7,251
170.87	2,826	5,715	171.39	3,209	7,283
170.88	2,833	5,744	171.40	3,216	7,315
170.89	2,840	5,772	171.41	3,224	7,347
170.90	2,847	5,801	171.42	3,231	7,380
170.91	2,853	5,829	171.43	3,239	7,412
170.92	2,860	5,858	171.44	3,246	7,444
170.93	2,867	5,886	171.45	3,254	7,477
170.94	2,874	5,915	171.46	3,261	7,509
170.95	2,881	5,944	171.47	3,269	7,542
170.96	2,888	5,973	171.48	3,276	7,575
170.97	2,895	6,001	171.49	3,284	7,608
170.98	2,902	6,030	171.50	3,292	7,641

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
171.51	3,299	7,673	172.03	3,680	9,490
171.52	3,307	7,707	172.04	3,684	9,527
171.53	3,314	7,740	172.05	3,688	9,564
171.54	3,322	7,773	172.06	3,692	9,601
171.55	3,329	7,806	172.07	3,696	9,638
171.56	3,337	7,839	172.08	3,700	9,675
171.57	3,344	7,873	172.09	3,705	9,712
171.58	3,352	7,906	172.10	3,709	9,749
171.59	3,359	7,940	172.11	3,713	9,786
171.60	3,367	7,973	172.12	3,717	9,823
171.61	3,374	8,007	172.13	3,721	9,860
171.62	3,382	8,041	172.14	3,726	9,898
171.63	3,389	8,075	172.15	3,730	9,935
171.64	3,397	8,109	172.16	3,734	9,972
171.65	3,404	8,143	172.17	3,738	10,010
171.66	3,412	8,177	172.18	3,742	10,047
171.67	3,419	8,211	172.19	3,746	10,084
171.68	3,427	8,245	172.20	3,751	10,122
171.69	3,434	8,279	172.21	3,755	10,159
171.70	3,442	8,314	172.22	3,759	10,197
171.71	3,449	8,348	172.23	3,763	10,235
171.72	3,457	8,383	172.24	3,767	10,272
171.73	3,464	8,417	172.25	3,771	10,310
171.74	3,472	8,452	172.26	3,776	10,348
171.75	3,479	8,487	172.27	3,780	10,385
171.76	3,487	8,522	172.28	3,784	10,423
171.77	3,494	8,557	172.29	3,788	10,461
171.78	3,502	8,592	172.30	3,792	10,499
171.79	3,509	8,627	172.31	3,797	10,537
171.80	3,517	8,662	172.32	3,801	10,575
171.81	3,524	8,697	172.33	3,805	10,613
171.82	3,532	8,732	172.34	3,809	10,651
171.83	3,539	8,768	172.35	3,813	10,689
171.84	3,547	8,803	172.36	3,817	10,727
171.85	3,554	8,839	172.37	3,822	10,766
171.86	3,562	8,874	172.38	3,826	10,804
171.87	3,569	8,910	172.39	3,830	10,842
171.88	3,577	8,946	172.40	3,834	10,880
171.89	3,584	8,981	172.41	3,838	10,919
171.90	3,592	9,017	172.42	3,843	10,957
171.91	3,599	9,053	172.43	3,847	10,996
171.92	3,607	9,089	172.44	3,851	11,034
171.93	3,614	9,125	172.45	3,855	11,073
171.94	3,622	9,161	172.46	3,859	11,111
171.95	3,629	9,198	172.47	3,863	11,150
171.96	3,637	9,234	172.48	3,868	11,188
171.97	3,644	9,270	172.49	3,872	11,227
171.98	3,652	9,307	172.50	3,876	11,266
171.99	3,659	9,344	172.51	3,880	11,305
172.00	3,667	9,380	172.52	3,884	11,343
172.01	3,671	9,417	172.53	3,888	11,382
172.02	3,675	9,454	172.54	3,893	11,421

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
172.55	3,897	11,460
172.56	3,901	11,499
172.57	3,905	11,538
172.58	3,909	11,577
172.59	3,914	11,616
172.60	3,918	11,656
172.61	3,922	11,695
172.62	3,926	11,734
172.63	3,930	11,773
172.64	3,934	11,813
172.65	3,939	11,852
172.66	3,943	11,891
172.67	3,947	11,931
172.68	3,951	11,970
172.69	3,955	12,010
172.70	3,960	12,049
172.71	3,964	12,089
172.72	3,968	12,129
172.73	3,972	12,168
172.74	3,976	12,208
172.75	3,980	12,248
172.76	3,985	12,288
172.77	3,989	12,328
172.78	3,993	12,368
172.79	3,997	12,407
172.80	4,001	12,447
172.81	4,005	12,488
172.82	4,010	12,528
172.83	4,014	12,568
172.84	4,018	12,608
172.85	4,022	12,648
172.86	4,026	12,688
172.87	4,031	12,729
172.88	4,035	12,769
172.89	4,039	12,809
172.90	4,043	12,850
172.91	4,047	12,890
172.92	4,051	12,931
172.93	4,056	12,971
172.94	4,060	13,012
172.95	**4,064**	**13,052**

Summary for Pond B-28: Basin #28

Inflow Area = 2.333 ac, 34.85% Impervious, Inflow Depth = 6.46" for Current 100 yr event
Inflow = 15.47 cfs @ 12.17 hrs, Volume= 1.257 af
Outflow = 11.09 cfs @ 12.27 hrs, Volume= 1.177 af, Atten= 28%, Lag= 5.8 min
Primary = 11.09 cfs @ 12.27 hrs, Volume= 1.177 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 169.69' @ 12.27 hrs Surf.Area= 3,765 sf Storage= 9,036 cf

Plug-Flow detention time= 73.7 min calculated for 1.177 af (94% of inflow)
Center-of-Mass det. time= 37.5 min (823.6 - 786.2)

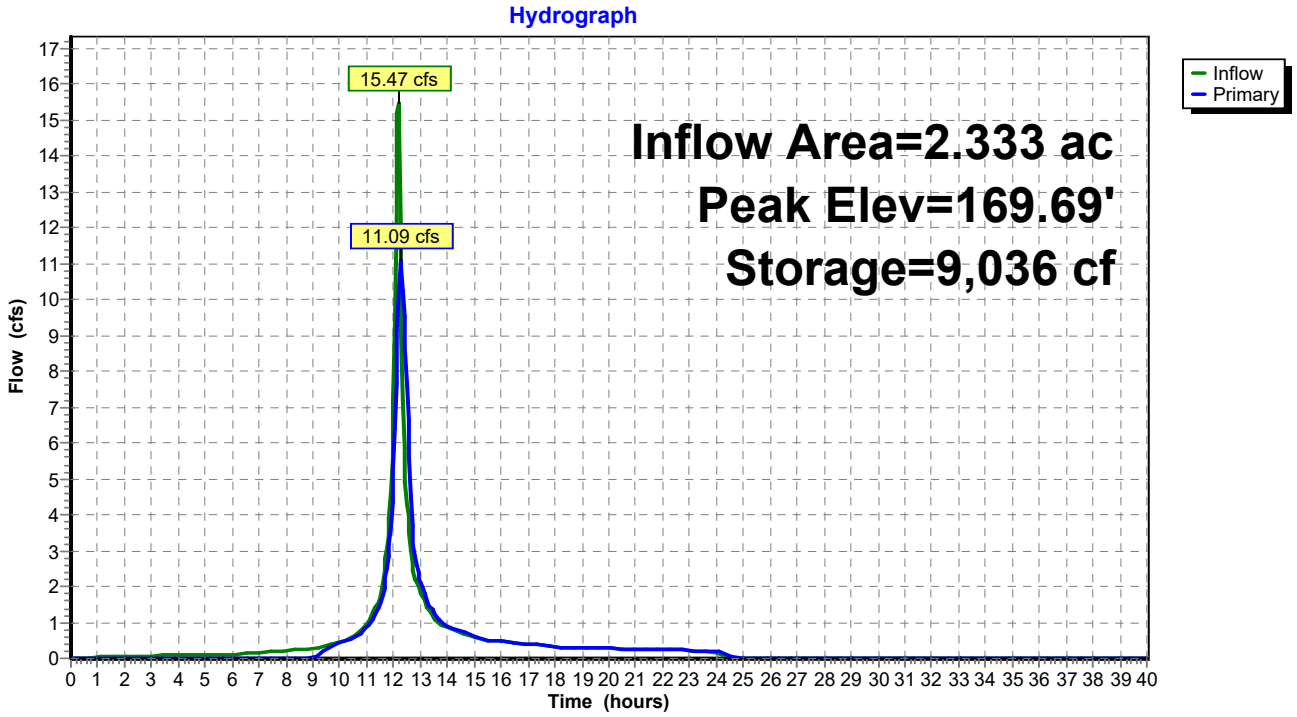
Volume	Invert	Avail.Storage	Storage Description
#1	165.65'	12,318 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.65	0	0	0
166.00	1,145	200	200
167.00	1,778	1,462	1,662
168.00	2,465	2,122	3,783
169.00	3,210	2,838	6,621
170.00	4,012	3,611	10,232
170.50	4,334	2,087	12,318

Device	Routing	Invert	Outlet Devices
#1	Primary	165.65'	**18.0" Round Culvert** L= 186.0' Ke= 0.500 Inlet / Outlet Invert= 165.65' / 163.70' S= 0.0105 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.87'	**30.0" W x 9.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	169.50'	**1.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	170.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	170.49'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.99 cfs @ 12.27 hrs HW=169.67' (Free Discharge)
- **1=Culvert** (Passes 10.99 cfs of 13.55 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 10.76 cfs @ 5.74 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.23 cfs @ 1.37 fps)
  - **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-28: Basin #28



Stage-Discharge for Pond B-28: Basin #28

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.00
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.00
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.00
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.00
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.00
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.00
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.00
165.82	0.00	166.34	0.00	166.86	0.00	167.38	0.00
165.83	0.00	166.35	0.00	166.87	0.00	167.39	0.00
165.84	0.00	166.36	0.00	166.88	0.00	167.40	0.00
165.85	0.00	166.37	0.00	166.89	0.00	167.41	0.00
165.86	0.00	166.38	0.00	166.90	0.00	167.42	0.00
165.87	0.00	166.39	0.00	166.91	0.00	167.43	0.00
165.88	0.00	166.40	0.00	166.92	0.00	167.44	0.00
165.89	0.00	166.41	0.00	166.93	0.00	167.45	0.00
165.90	0.00	166.42	0.00	166.94	0.00	167.46	0.00
165.91	0.00	166.43	0.00	166.95	0.00	167.47	0.00
165.92	0.00	166.44	0.00	166.96	0.00	167.48	0.00
165.93	0.00	166.45	0.00	166.97	0.00	167.49	0.00
165.94	0.00	166.46	0.00	166.98	0.00	167.50	0.00
165.95	0.00	166.47	0.00	166.99	0.00	167.51	0.00
165.96	0.00	166.48	0.00	167.00	0.00	167.52	0.00
165.97	0.00	166.49	0.00	167.01	0.00	167.53	0.00
165.98	0.00	166.50	0.00	167.02	0.00	167.54	0.00
165.99	0.00	166.51	0.00	167.03	0.00	167.55	0.00
166.00	0.00	166.52	0.00	167.04	0.00	167.56	0.00
166.01	0.00	166.53	0.00	167.05	0.00	167.57	0.00
166.02	0.00	166.54	0.00	167.06	0.00	167.58	0.00
166.03	0.00	166.55	0.00	167.07	0.00	167.59	0.00
166.04	0.00	166.56	0.00	167.08	0.00	167.60	0.00
166.05	0.00	166.57	0.00	167.09	0.00	167.61	0.00
166.06	0.00	166.58	0.00	167.10	0.00	167.62	0.00
166.07	0.00	166.59	0.00	167.11	0.00	167.63	0.00
166.08	0.00	166.60	0.00	167.12	0.00	167.64	0.00
166.09	0.00	166.61	0.00	167.13	0.00	167.65	0.00
166.10	0.00	166.62	0.00	167.14	0.00	167.66	0.00
166.11	0.00	166.63	0.00	167.15	0.00	167.67	0.00
166.12	0.00	166.64	0.00	167.16	0.00	167.68	0.00
166.13	0.00	166.65	0.00	167.17	0.00	167.69	0.00
166.14	0.00	166.66	0.00	167.18	0.00	167.70	0.00
166.15	0.00	166.67	0.00	167.19	0.00	167.71	0.00
166.16	0.00	166.68	0.00	167.20	0.00	167.72	0.00

Stage-Discharge for Pond B-28: Basin #28 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.73	0.00	168.25	1.88	168.77	6.39	169.29	9.18
167.74	0.00	168.26	1.95	168.78	6.45	169.30	9.22
167.75	0.00	168.27	2.03	168.79	6.52	169.31	9.27
167.76	0.00	168.28	2.11	168.80	6.58	169.32	9.31
167.77	0.00	168.29	2.18	168.81	6.65	169.33	9.36
167.78	0.00	168.30	2.26	168.82	6.71	169.34	9.40
167.79	0.00	168.31	2.34	168.83	6.78	169.35	9.44
167.80	0.00	168.32	2.42	168.84	6.84	169.36	9.49
167.81	0.00	168.33	2.50	168.85	6.90	169.37	9.53
167.82	0.00	168.34	2.59	168.86	6.96	169.38	9.57
167.83	0.00	168.35	2.67	168.87	7.02	169.39	9.62
167.84	0.00	168.36	2.75	168.88	7.08	169.40	9.66
167.85	0.00	168.37	2.84	168.89	7.14	169.41	9.70
167.86	0.00	168.38	2.92	168.90	7.20	169.42	9.74
167.87	0.00	168.39	3.01	168.91	7.26	169.43	9.79
167.88	0.01	168.40	3.10	168.92	7.32	169.44	9.83
167.89	0.02	168.41	3.18	168.93	7.37	169.45	9.87
167.90	0.04	168.42	3.27	168.94	7.43	169.46	9.91
167.91	0.06	168.43	3.36	168.95	7.49	169.47	9.95
167.92	0.09	168.44	3.45	168.96	7.54	169.48	9.99
167.93	0.12	168.45	3.54	168.97	7.60	169.49	10.03
167.94	0.15	168.46	3.64	168.98	7.65	169.50	10.08
167.95	0.18	168.47	3.73	168.99	7.71	169.51	10.12
167.96	0.22	168.48	3.82	169.00	7.76	169.52	10.17
167.97	0.25	168.49	3.92	169.01	7.81	169.53	10.21
167.98	0.29	168.50	4.01	169.02	7.87	169.54	10.26
167.99	0.33	168.51	4.11	169.03	7.92	169.55	10.31
168.00	0.38	168.52	4.21	169.04	7.97	169.56	10.36
168.01	0.42	168.53	4.30	169.05	8.02	169.57	10.42
168.02	0.47	168.54	4.40	169.06	8.08	169.58	10.47
168.03	0.51	168.55	4.50	169.07	8.13	169.59	10.52
168.04	0.56	168.56	4.60	169.08	8.18	169.60	10.58
168.05	0.61	168.57	4.70	169.09	8.23	169.61	10.63
168.06	0.66	168.58	4.80	169.10	8.28	169.62	10.69
168.07	0.72	168.59	4.90	169.11	8.33	169.63	10.74
168.08	0.77	168.60	5.01	169.12	8.38	169.64	10.80
168.09	0.83	168.61	5.11	169.13	8.43	169.65	10.85
168.10	0.89	168.62	5.21	169.14	8.48	169.66	10.91
168.11	0.94	168.63	5.31	169.15	8.52	169.67	10.97
168.12	1.00	168.64	5.40	169.16	8.57	169.68	11.02
168.13	1.06	168.65	5.49	169.17	8.62	169.69	11.08
168.14	1.13	168.66	5.57	169.18	8.67	169.70	11.14
168.15	1.19	168.67	5.65	169.19	8.72	169.71	11.20
168.16	1.25	168.68	5.73	169.20	8.76	169.72	11.26
168.17	1.32	168.69	5.81	169.21	8.81	169.73	11.32
168.18	1.39	168.70	5.89	169.22	8.86	169.74	11.38
168.19	1.45	168.71	5.96	169.23	8.90	169.75	11.43
168.20	1.52	168.72	6.04	169.24	8.95	169.76	11.49
168.21	1.59	168.73	6.11	169.25	9.00	169.77	11.55
168.22	1.66	168.74	6.18	169.26	9.04	169.78	11.61
168.23	1.73	168.75	6.25	169.27	9.09	169.79	11.67
168.24	1.81	168.76	6.32	169.28	9.13	169.80	11.74

Stage-Discharge for Pond B-28: Basin #28 (continued)

Elevation (feet)	Primary (cfs)
169.81	11.80
169.82	11.86
169.83	11.92
169.84	11.98
169.85	12.04
169.86	12.10
169.87	12.16
169.88	12.23
169.89	12.29
169.90	12.35
169.91	12.41
169.92	12.47
169.93	12.54
169.94	12.60
169.95	12.66
169.96	12.73
169.97	12.79
169.98	12.85
169.99	12.91
170.00	12.98
170.01	13.05
170.02	13.14
170.03	13.24
170.04	13.34
170.05	13.44
170.06	13.55
170.07	13.66
170.08	13.78
170.09	13.90
170.10	14.02
170.11	14.15
170.12	14.21
170.13	14.22
170.14	14.24
170.15	14.25
170.16	14.27
170.17	14.28
170.18	14.29
170.19	14.31
170.20	14.32
170.21	14.34
170.22	14.35
170.23	14.37
170.24	14.38
170.25	14.39
170.26	14.41
170.27	14.42
170.28	14.44
170.29	14.45
170.30	14.47
170.31	14.48
170.32	14.49
170.33	14.51
170.34	14.52
170.35	14.54
170.36	14.55
170.37	14.56
170.38	14.58
170.39	14.59
170.40	14.61
170.41	14.62
170.42	14.63
170.43	14.65
170.44	14.66
170.45	14.68
170.46	14.69
170.47	14.70
170.48	14.72
170.49	14.73
170.50	**14.86**

Stage-Area-Storage for Pond B-28: Basin #28

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.65	0	0	166.17	1,253	404
165.66	33	0	166.18	1,259	417
165.67	65	1	166.19	1,265	429
165.68	98	1	166.20	1,272	442
165.69	131	3	166.21	1,278	455
165.70	164	4	166.22	1,284	468
165.71	196	6	166.23	1,291	480
165.72	229	8	166.24	1,297	493
165.73	262	10	166.25	1,303	506
165.74	294	13	166.26	1,310	519
165.75	327	16	166.27	1,316	533
165.76	360	20	166.28	1,322	546
165.77	393	24	166.29	1,329	559
165.78	425	28	166.30	1,335	572
165.79	458	32	166.31	1,341	586
165.80	491	37	166.32	1,348	599
165.81	523	42	166.33	1,354	613
165.82	556	47	166.34	1,360	626
165.83	589	53	166.35	1,367	640
165.84	622	59	166.36	1,373	654
165.85	654	65	166.37	1,379	667
165.86	687	72	166.38	1,386	681
165.87	720	79	166.39	1,392	695
165.88	752	87	166.40	1,398	709
165.89	785	94	166.41	1,405	723
165.90	818	102	166.42	1,411	737
165.91	851	111	166.43	1,417	751
165.92	883	119	166.44	1,424	765
165.93	916	128	166.45	1,430	780
165.94	949	138	166.46	1,436	794
165.95	981	147	166.47	1,443	808
165.96	1,014	157	166.48	1,449	823
165.97	1,047	167	166.49	1,455	837
165.98	1,080	178	166.50	1,462	852
165.99	1,112	189	166.51	1,468	867
166.00	1,145	200	166.52	1,474	881
166.01	1,151	212	166.53	1,480	896
166.02	1,158	223	166.54	1,487	911
166.03	1,164	235	166.55	1,493	926
166.04	1,170	247	166.56	1,499	941
166.05	1,177	258	166.57	1,506	956
166.06	1,183	270	166.58	1,512	971
166.07	1,189	282	166.59	1,518	986
166.08	1,196	294	166.60	1,525	1,001
166.09	1,202	306	166.61	1,531	1,017
166.10	1,208	318	166.62	1,537	1,032
166.11	1,215	330	166.63	1,544	1,047
166.12	1,221	342	166.64	1,550	1,063
166.13	1,227	355	166.65	1,556	1,078
166.14	1,234	367	166.66	1,563	1,094
166.15	1,240	379	166.67	1,569	1,110
166.16	1,246	392	166.68	1,575	1,125

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.69	1,582	1,141	167.21	1,922	2,050
166.70	1,588	1,157	167.22	1,929	2,070
166.71	1,594	1,173	167.23	1,936	2,089
166.72	1,601	1,189	167.24	1,943	2,108
166.73	1,607	1,205	167.25	1,950	2,128
166.74	1,613	1,221	167.26	1,957	2,147
166.75	1,620	1,237	167.27	1,963	2,167
166.76	1,626	1,253	167.28	1,970	2,187
166.77	1,632	1,270	167.29	1,977	2,206
166.78	1,639	1,286	167.30	1,984	2,226
166.79	1,645	1,302	167.31	1,991	2,246
166.80	1,651	1,319	167.32	1,998	2,266
166.81	1,658	1,335	167.33	2,005	2,286
166.82	1,664	1,352	167.34	2,012	2,306
166.83	1,670	1,369	167.35	2,018	2,326
166.84	1,677	1,385	167.36	2,025	2,346
166.85	1,683	1,402	167.37	2,032	2,367
166.86	1,689	1,419	167.38	2,039	2,387
166.87	1,696	1,436	167.39	2,046	2,408
166.88	1,702	1,453	167.40	2,053	2,428
166.89	1,708	1,470	167.41	2,060	2,449
166.90	1,715	1,487	167.42	2,067	2,469
166.91	1,721	1,504	167.43	2,073	2,490
166.92	1,727	1,522	167.44	2,080	2,511
166.93	1,734	1,539	167.45	2,087	2,532
166.94	1,740	1,556	167.46	2,094	2,552
166.95	1,746	1,574	167.47	2,101	2,573
166.96	1,753	1,591	167.48	2,108	2,594
166.97	1,759	1,609	167.49	2,115	2,616
166.98	1,765	1,626	167.50	2,122	2,637
166.99	1,772	1,644	167.51	2,128	2,658
167.00	1,778	1,662	167.52	2,135	2,679
167.01	1,785	1,680	167.53	2,142	2,701
167.02	1,792	1,698	167.54	2,149	2,722
167.03	1,799	1,716	167.55	2,156	2,744
167.04	1,805	1,734	167.56	2,163	2,765
167.05	1,812	1,752	167.57	2,170	2,787
167.06	1,819	1,770	167.58	2,176	2,809
167.07	1,826	1,788	167.59	2,183	2,830
167.08	1,833	1,806	167.60	2,190	2,852
167.09	1,840	1,825	167.61	2,197	2,874
167.10	1,847	1,843	167.62	2,204	2,896
167.11	1,854	1,862	167.63	2,211	2,918
167.12	1,860	1,880	167.64	2,218	2,940
167.13	1,867	1,899	167.65	2,225	2,963
167.14	1,874	1,918	167.66	2,231	2,985
167.15	1,881	1,936	167.67	2,238	3,007
167.16	1,888	1,955	167.68	2,245	3,030
167.17	1,895	1,974	167.69	2,252	3,052
167.18	1,902	1,993	167.70	2,259	3,075
167.19	1,909	2,012	167.71	2,266	3,097
167.20	1,915	2,031	167.72	2,273	3,120

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.73	2,280	3,143	168.25	2,651	4,423
167.74	2,286	3,166	168.26	2,659	4,449
167.75	2,293	3,189	168.27	2,666	4,476
167.76	2,300	3,212	168.28	2,674	4,503
167.77	2,307	3,235	168.29	2,681	4,530
167.78	2,314	3,258	168.30	2,689	4,556
167.79	2,321	3,281	168.31	2,696	4,583
167.80	2,328	3,304	168.32	2,703	4,610
167.81	2,334	3,327	168.33	2,711	4,637
167.82	2,341	3,351	168.34	2,718	4,665
167.83	2,348	3,374	168.35	2,726	4,692
167.84	2,355	3,398	168.36	2,733	4,719
167.85	2,362	3,421	168.37	2,741	4,746
167.86	2,369	3,445	168.38	2,748	4,774
167.87	2,376	3,469	168.39	2,756	4,801
167.88	2,383	3,493	168.40	2,763	4,829
167.89	2,389	3,516	168.41	2,770	4,857
167.90	2,396	3,540	168.42	2,778	4,884
167.91	2,403	3,564	168.43	2,785	4,912
167.92	2,410	3,588	168.44	2,793	4,940
167.93	2,417	3,613	168.45	2,800	4,968
167.94	2,424	3,637	168.46	2,808	4,996
167.95	2,431	3,661	168.47	2,815	5,024
167.96	2,438	3,685	168.48	2,823	5,052
167.97	2,444	3,710	168.49	2,830	5,081
167.98	2,451	3,734	168.50	2,838	5,109
167.99	2,458	3,759	168.51	2,845	5,137
168.00	2,465	3,783	168.52	2,852	5,166
168.01	2,472	3,808	168.53	2,860	5,194
168.02	2,480	3,833	168.54	2,867	5,223
168.03	2,487	3,858	168.55	2,875	5,252
168.04	2,495	3,883	168.56	2,882	5,281
168.05	2,502	3,908	168.57	2,890	5,309
168.06	2,510	3,933	168.58	2,897	5,338
168.07	2,517	3,958	168.59	2,905	5,367
168.08	2,525	3,983	168.60	2,912	5,396
168.09	2,532	4,008	168.61	2,919	5,426
168.10	2,539	4,034	168.62	2,927	5,455
168.11	2,547	4,059	168.63	2,934	5,484
168.12	2,554	4,085	168.64	2,942	5,514
168.13	2,562	4,110	168.65	2,949	5,543
168.14	2,569	4,136	168.66	2,957	5,573
168.15	2,577	4,162	168.67	2,964	5,602
168.16	2,584	4,187	168.68	2,972	5,632
168.17	2,592	4,213	168.69	2,979	5,662
168.18	2,599	4,239	168.70	2,987	5,691
168.19	2,607	4,265	168.71	2,994	5,721
168.20	2,614	4,291	168.72	3,001	5,751
168.21	2,621	4,317	168.73	3,009	5,781
168.22	2,629	4,344	168.74	3,016	5,811
168.23	2,636	4,370	168.75	3,024	5,842
168.24	2,644	4,396	168.76	3,031	5,872

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.77	3,039	5,902	169.29	3,443	7,585
168.78	3,046	5,933	169.30	3,451	7,620
168.79	3,054	5,963	169.31	3,459	7,655
168.80	3,061	5,994	169.32	3,467	7,689
168.81	3,068	6,024	169.33	3,475	7,724
168.82	3,076	6,055	169.34	3,483	7,759
168.83	3,083	6,086	169.35	3,491	7,793
168.84	3,091	6,117	169.36	3,499	7,828
168.85	3,098	6,148	169.37	3,507	7,863
168.86	3,106	6,179	169.38	3,515	7,899
168.87	3,113	6,210	169.39	3,523	7,934
168.88	3,121	6,241	169.40	3,531	7,969
168.89	3,128	6,272	169.41	3,539	8,004
168.90	3,136	6,304	169.42	3,547	8,040
168.91	3,143	6,335	169.43	3,555	8,075
168.92	3,150	6,366	169.44	3,563	8,111
168.93	3,158	6,398	169.45	3,571	8,147
168.94	3,165	6,430	169.46	3,579	8,182
168.95	3,173	6,461	169.47	3,587	8,218
168.96	3,180	6,493	169.48	3,595	8,254
168.97	3,188	6,525	169.49	3,603	8,290
168.98	3,195	6,557	169.50	3,611	8,326
168.99	3,203	6,589	169.51	3,619	8,362
169.00	3,210	6,621	169.52	3,627	8,399
169.01	3,218	6,653	169.53	3,635	8,435
169.02	3,226	6,685	169.54	3,643	8,471
169.03	3,234	6,718	169.55	3,651	8,508
169.04	3,242	6,750	169.56	3,659	8,544
169.05	3,250	6,782	169.57	3,667	8,581
169.06	3,258	6,815	169.58	3,675	8,618
169.07	3,266	6,848	169.59	3,683	8,654
169.08	3,274	6,880	169.60	3,691	8,691
169.09	3,282	6,913	169.61	3,699	8,728
169.10	3,290	6,946	169.62	3,707	8,765
169.11	3,298	6,979	169.63	3,715	8,802
169.12	3,306	7,012	169.64	3,723	8,840
169.13	3,314	7,045	169.65	3,731	8,877
169.14	3,322	7,078	169.66	3,739	8,914
169.15	3,330	7,111	169.67	3,747	8,952
169.16	3,338	7,145	169.68	3,755	8,989
169.17	3,346	7,178	169.69	3,763	9,027
169.18	3,354	7,212	169.70	3,771	9,064
169.19	3,362	7,245	169.71	3,779	9,102
169.20	3,370	7,279	169.72	3,787	9,140
169.21	3,378	7,313	169.73	3,795	9,178
169.22	3,386	7,346	169.74	3,803	9,216
169.23	3,394	7,380	169.75	3,812	9,254
169.24	3,402	7,414	169.76	3,820	9,292
169.25	3,411	7,448	169.77	3,828	9,330
169.26	3,419	7,483	169.78	3,836	9,369
169.27	3,427	7,517	169.79	3,844	9,407
169.28	3,435	7,551	169.80	3,852	9,446

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

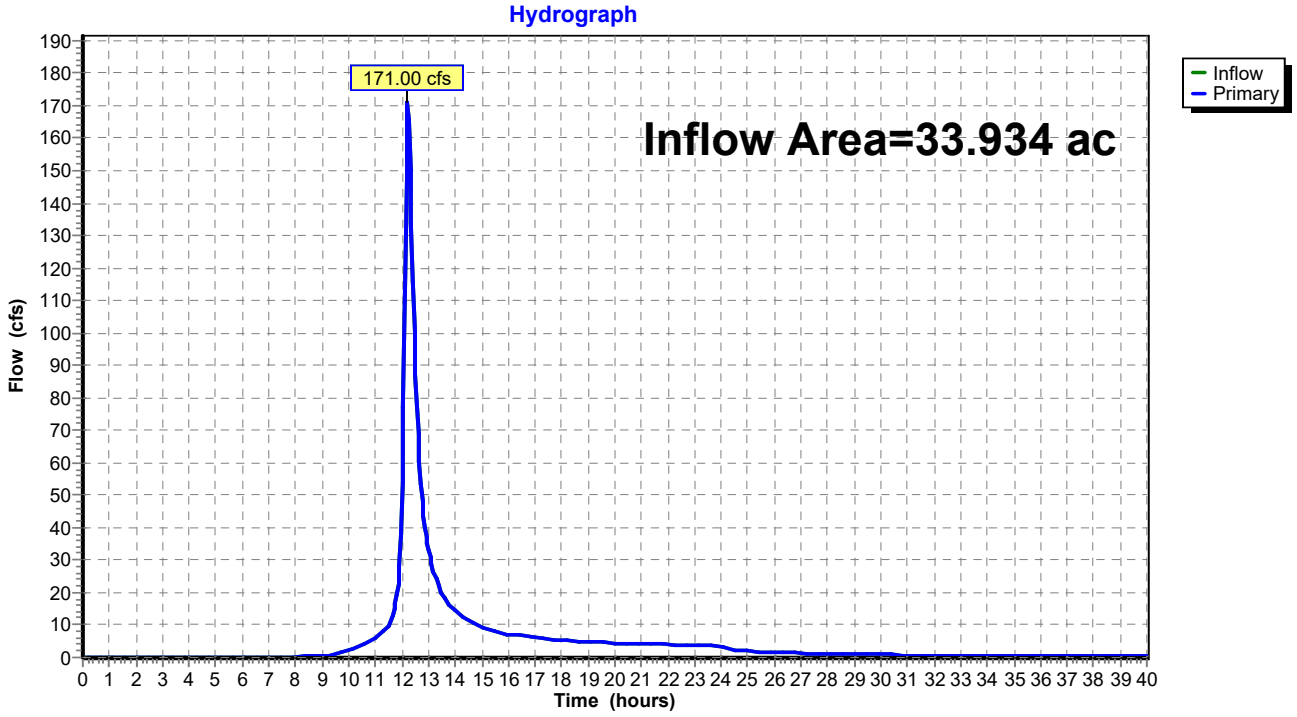
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.81	3,860	9,484
169.82	3,868	9,523
169.83	3,876	9,561
169.84	3,884	9,600
169.85	3,892	9,639
169.86	3,900	9,678
169.87	3,908	9,717
169.88	3,916	9,756
169.89	3,924	9,795
169.90	3,932	9,835
169.91	3,940	9,874
169.92	3,948	9,913
169.93	3,956	9,953
169.94	3,964	9,993
169.95	3,972	10,032
169.96	3,980	10,072
169.97	3,988	10,112
169.98	3,996	10,152
169.99	4,004	10,192
170.00	4,012	10,232
170.01	4,018	10,272
170.02	4,025	10,312
170.03	4,031	10,353
170.04	4,038	10,393
170.05	4,044	10,433
170.06	4,051	10,474
170.07	4,057	10,514
170.08	4,064	10,555
170.09	4,070	10,596
170.10	4,076	10,636
170.11	4,083	10,677
170.12	4,089	10,718
170.13	4,096	10,759
170.14	4,102	10,800
170.15	4,109	10,841
170.16	4,115	10,882
170.17	4,121	10,923
170.18	4,128	10,964
170.19	4,134	11,006
170.20	4,141	11,047
170.21	4,147	11,089
170.22	4,154	11,130
170.23	4,160	11,172
170.24	4,167	11,213
170.25	4,173	11,255
170.26	4,179	11,297
170.27	4,186	11,339
170.28	4,192	11,380
170.29	4,199	11,422
170.30	4,205	11,464
170.31	4,212	11,507
170.32	4,218	11,549
170.33	4,225	11,591
170.34	4,231	11,633
170.35	4,237	11,676
170.36	4,244	11,718
170.37	4,250	11,760
170.38	4,257	11,803
170.39	4,263	11,846
170.40	4,270	11,888
170.41	4,276	11,931
170.42	4,282	11,974
170.43	4,289	12,017
170.44	4,295	12,059
170.45	4,302	12,102
170.46	4,308	12,146
170.47	4,315	12,189
170.48	4,321	12,232
170.49	4,328	12,275
170.50	**4,334**	**12,318**

Summary for Link PDA-2: Proposed Drainage Area #2

Inflow Area = 33.934 ac, 26.90% Impervious, Inflow Depth > 5.89" for Current 100 yr event
Inflow = 171.00 cfs @ 12.22 hrs, Volume= 16.649 af
Primary = 171.00 cfs @ 12.22 hrs, Volume= 16.649 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-2: Proposed Drainage Area #2



Summary for Subcatchment 18l: PDA-18 (impervious)

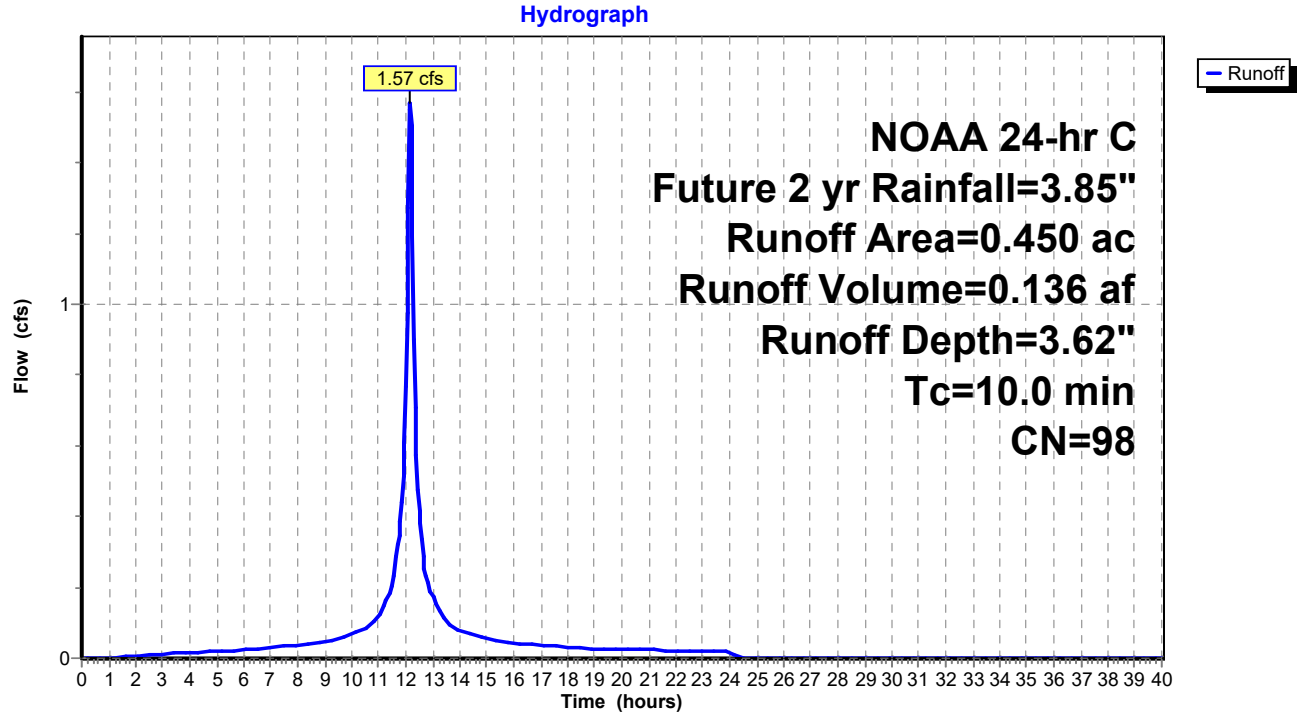
Runoff = 1.57 cfs @ 12.17 hrs, Volume= 0.136 af, Depth= 3.62"
Routed to Pond B-18 : Basin #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.450	98	Weighted Average
	0.450		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 18l: PDA-18 (impervious)



Summary for Subcatchment 18P: PDA-18 (pervious)

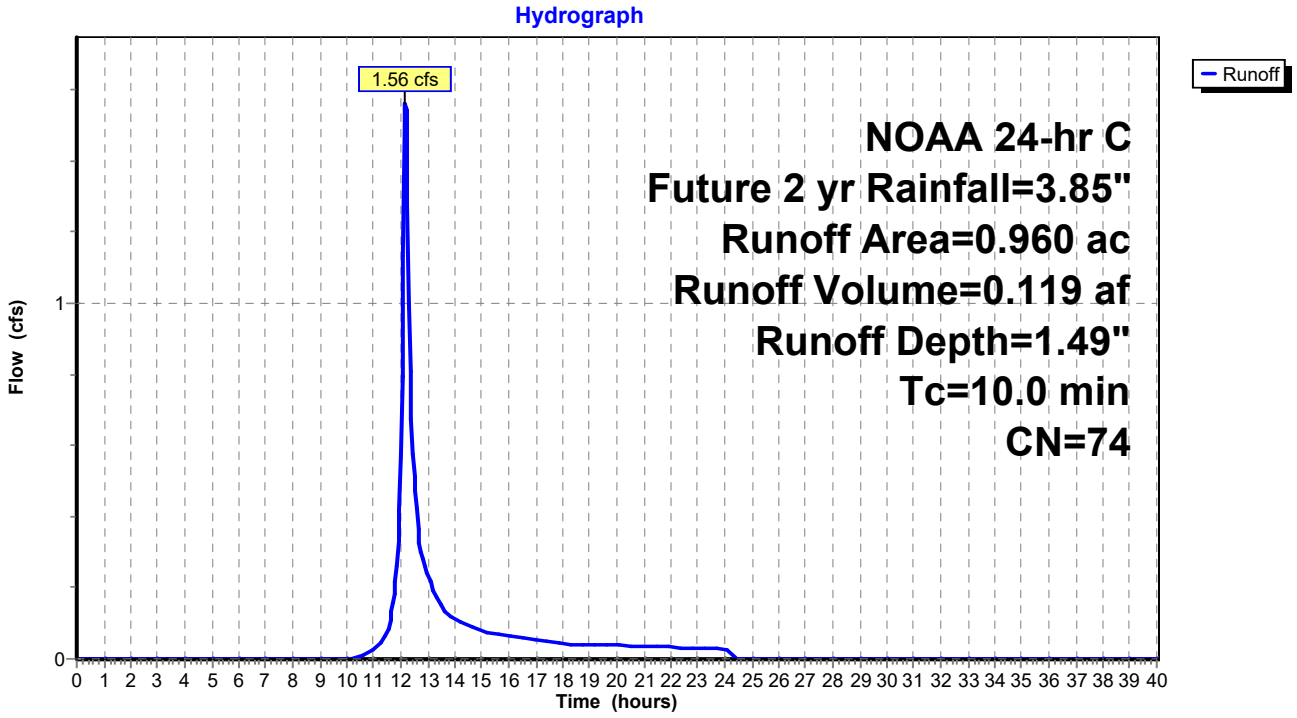
Runoff = 1.56 cfs @ 12.18 hrs, Volume= 0.119 af, Depth= 1.49"
Routed to Pond B-18 : Basin #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.960	74	>75% Grass cover, Good, HSG C
0.960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 18P: PDA-18 (pervious)



Summary for Subcatchment 19l: PDA-19 (impervious)

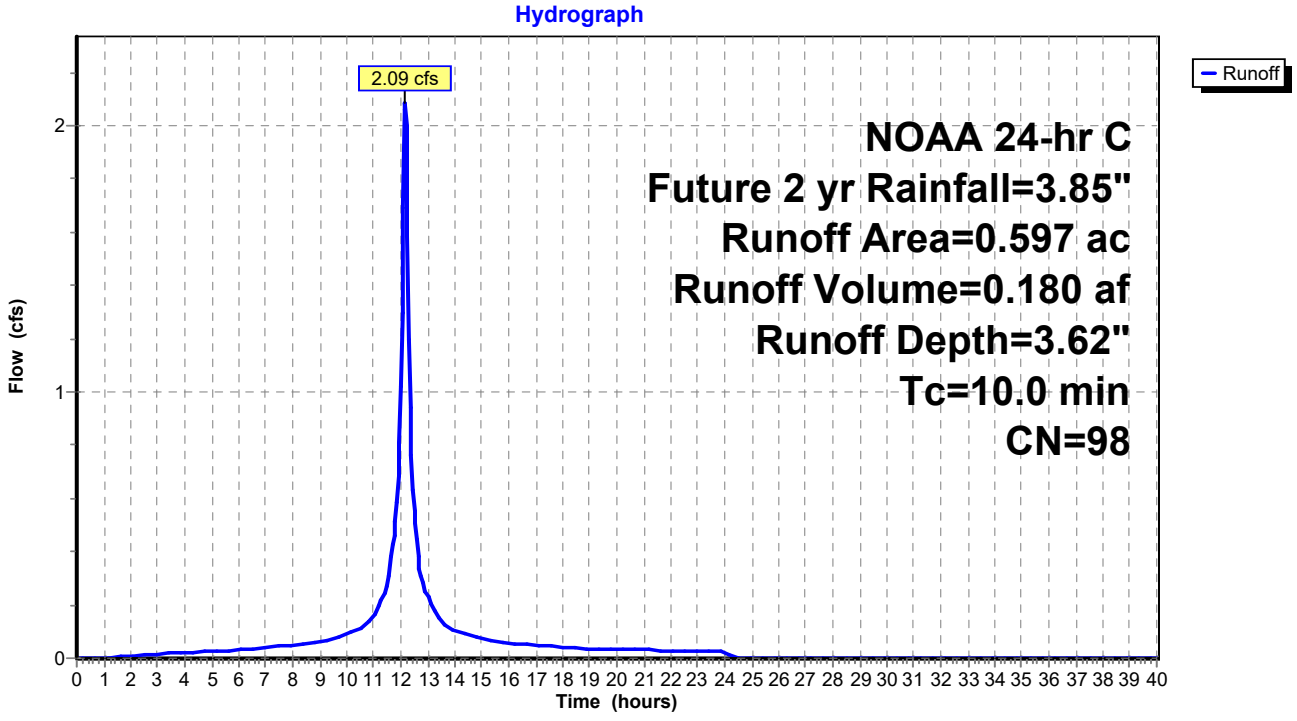
Runoff = 2.09 cfs @ 12.17 hrs, Volume= 0.180 af, Depth= 3.62"
Routed to Pond B-19 : Basin #19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.132	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.015	98	Concrete, HSG C
	0.597	98	Weighted Average
	0.597		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19l: PDA-19 (impervious)



Summary for Subcatchment 19P: PDA-19 (pervious)

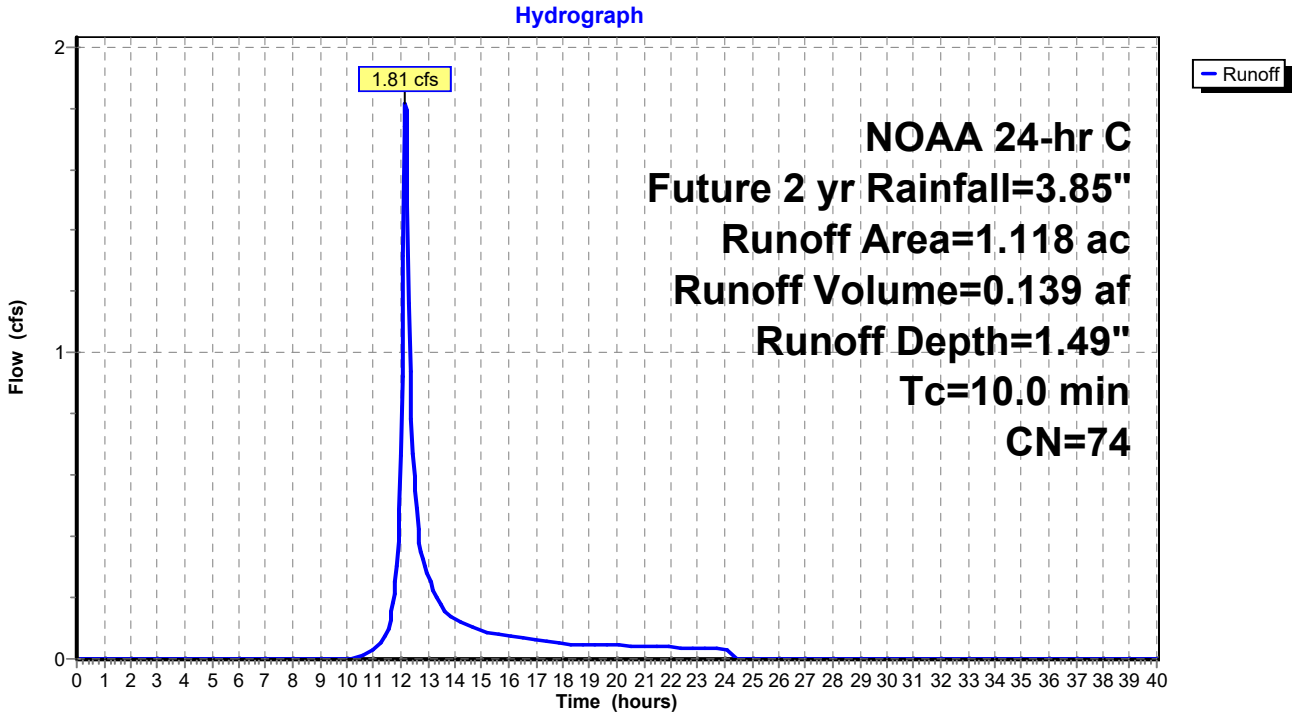
Runoff = 1.81 cfs @ 12.18 hrs, Volume= 0.139 af, Depth= 1.49"
Routed to Pond B-19 : Basin #19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.118	74	>75% Grass cover, Good, HSG C
1.118		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19P: PDA-19 (pervious)



Summary for Subcatchment 20l: PDA-20 (impervious)

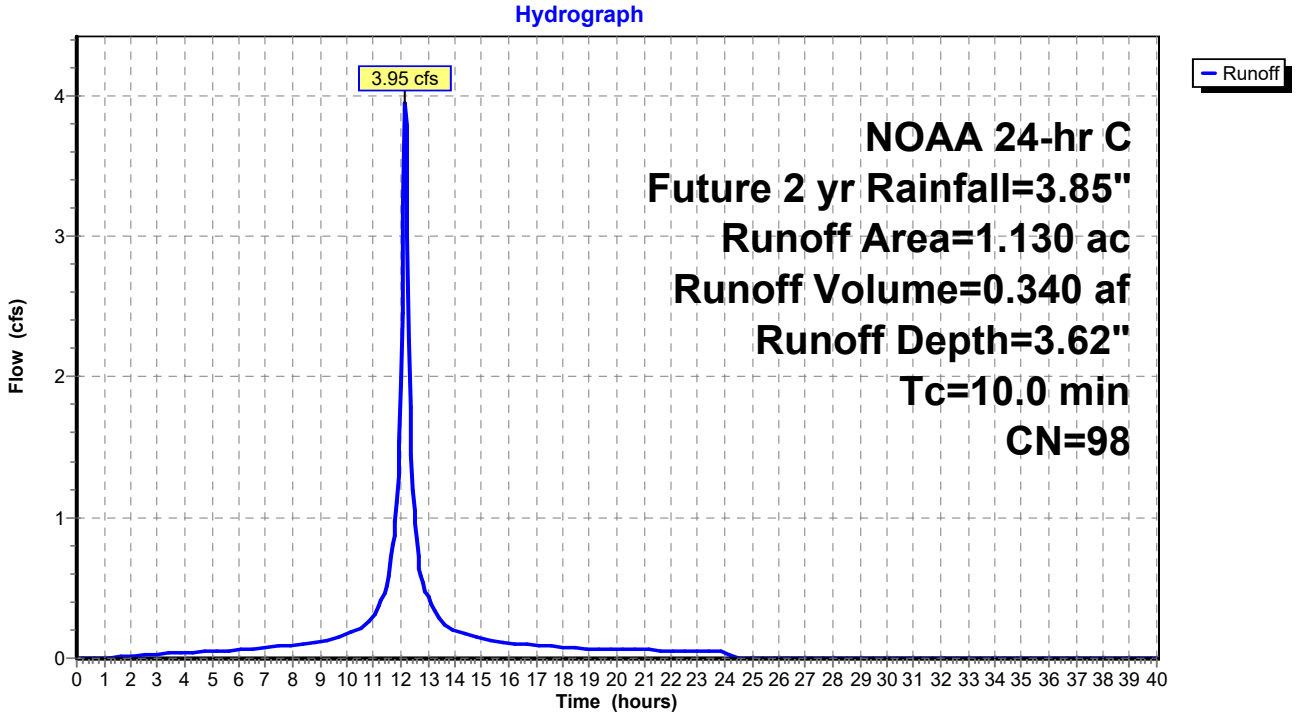
Runoff = 3.95 cfs @ 12.17 hrs, Volume= 0.340 af, Depth= 3.62"
Routed to Pond B-20 : Basin #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.572	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.108	98	Concrete, HSC C
	1.130	98	Weighted Average
	1.130		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 20l: PDA-20 (impervious)



Summary for Subcatchment 20P: PDA-20 (pervious)

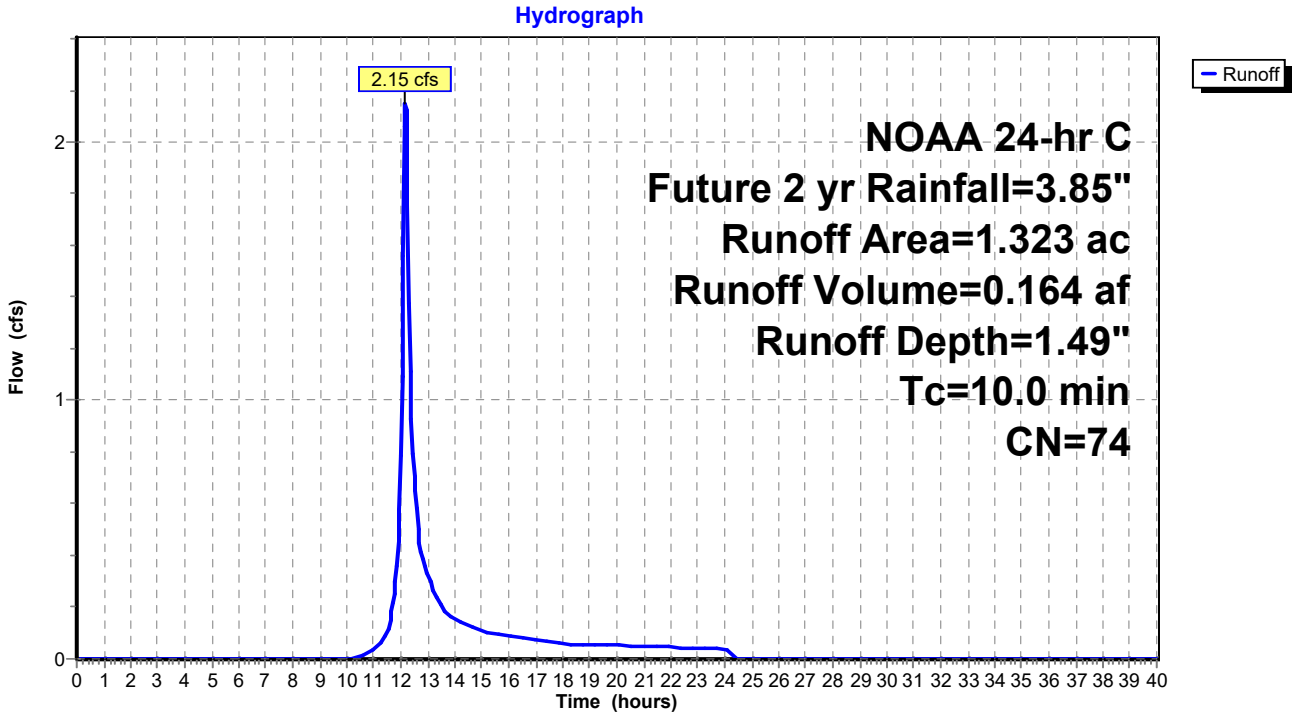
Runoff = 2.15 cfs @ 12.18 hrs, Volume= 0.164 af, Depth= 1.49"
Routed to Pond B-20 : Basin #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.323	74	>75% Grass cover, Good, HSG C
1.323		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 20P: PDA-20 (pervious)



Summary for Subcatchment 21I: PDA-21 (impervious)

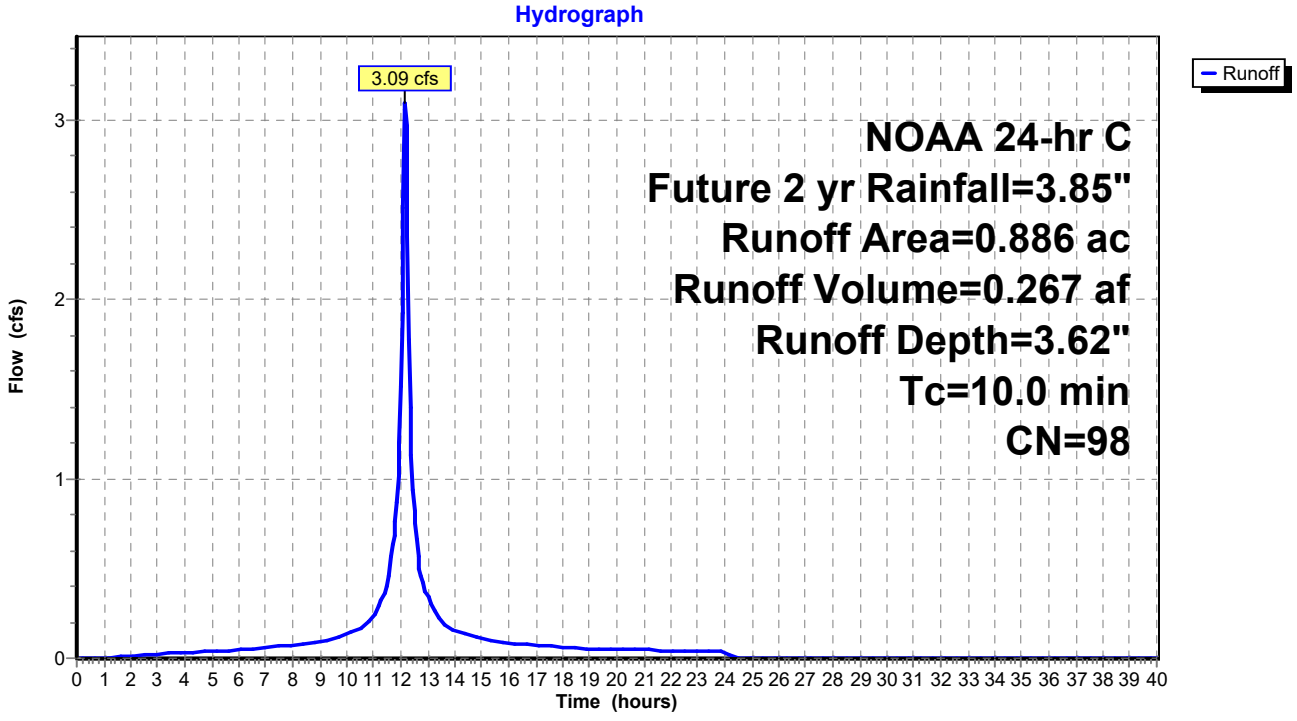
Runoff = 3.09 cfs @ 12.17 hrs, Volume= 0.267 af, Depth= 3.62"
Routed to Pond B-21 : Basin #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.511	98	Pavement, HSG C
*	0.321	98	Roof, HSG C
*	0.054	98	Concrete, HSC C
	0.886	98	Weighted Average
	0.886		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21I: PDA-21 (impervious)



Summary for Subcatchment 21P: PDA-21 (pervious)

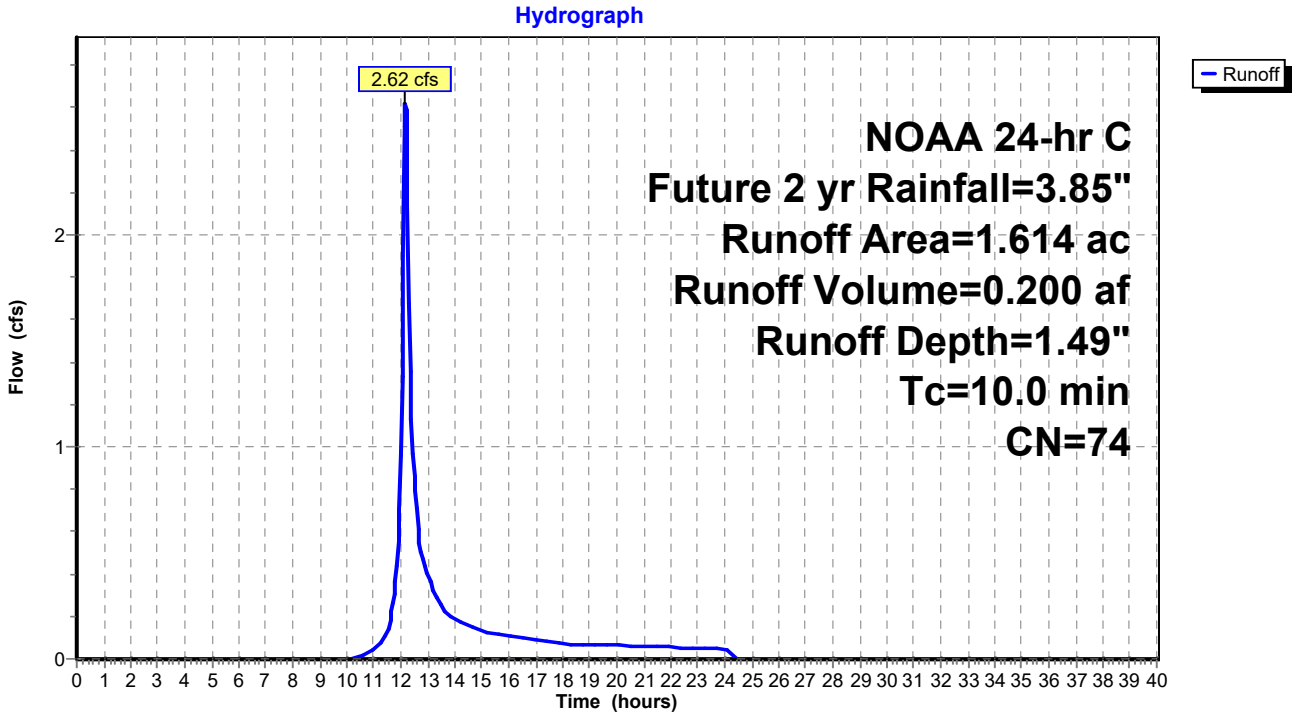
Runoff = 2.62 cfs @ 12.18 hrs, Volume= 0.200 af, Depth= 1.49"
Routed to Pond B-21 : Basin #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.614	74	>75% Grass cover, Good, HSG C
1.614		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21P: PDA-21 (pervious)



Summary for Subcatchment 22l: PDA-22 (impervious)

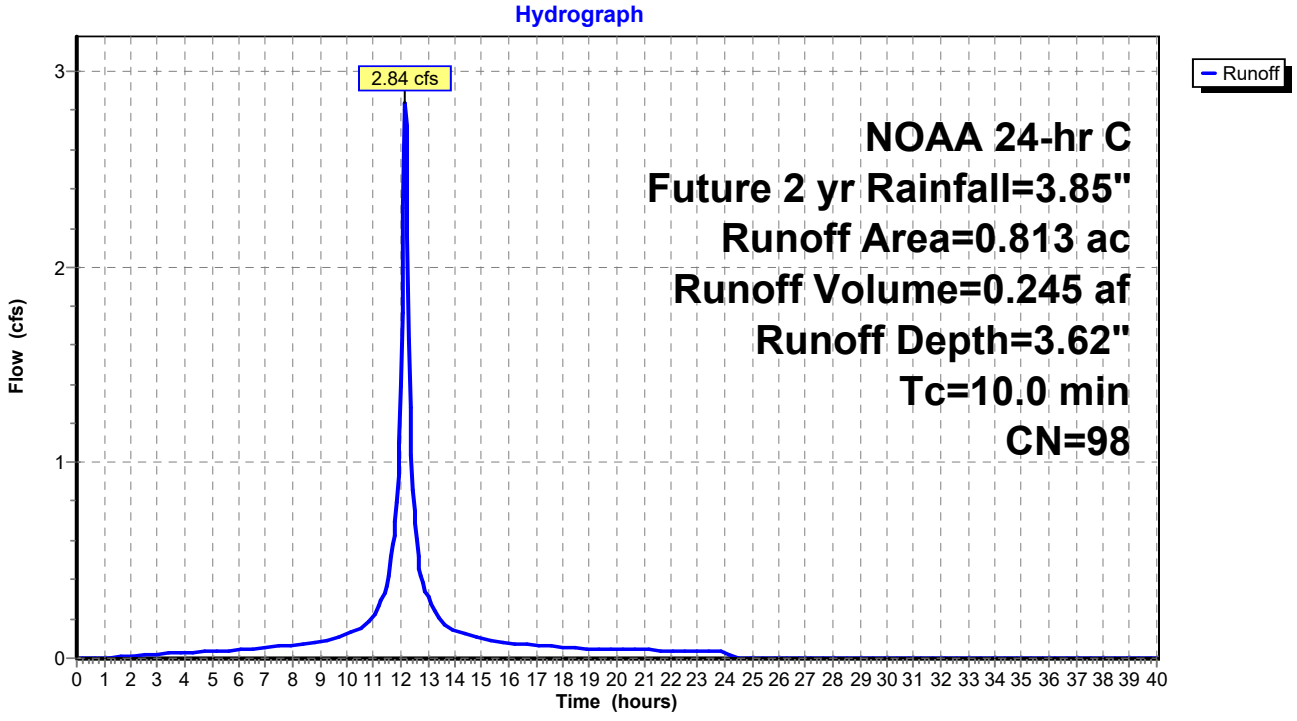
Runoff = 2.84 cfs @ 12.17 hrs, Volume= 0.245 af, Depth= 3.62"
Routed to Pond B-22 : Basin #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.083	98	Pavement, HSG C
*	0.707	98	Roof, HSG C
*	0.023	98	Concrete, HSC C
	0.813	98	Weighted Average
	0.813		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 22l: PDA-22 (impervious)



Summary for Subcatchment 22P: PDA-22 (pervious)

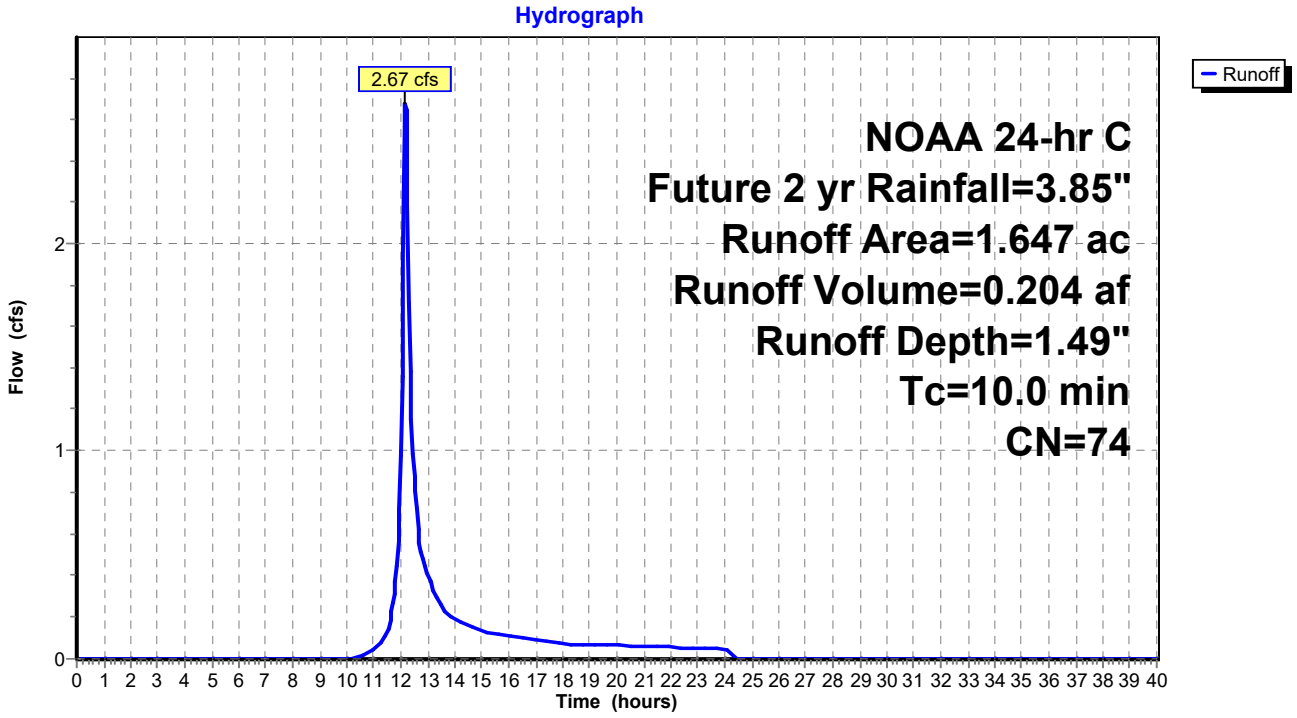
Runoff = 2.67 cfs @ 12.18 hrs, Volume= 0.204 af, Depth= 1.49"
Routed to Pond B-22 : Basin #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.647	74	>75% Grass cover, Good, HSG C
1.647		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 22P: PDA-22 (pervious)



Summary for Subcatchment 23I: PDA-23 (impervious)

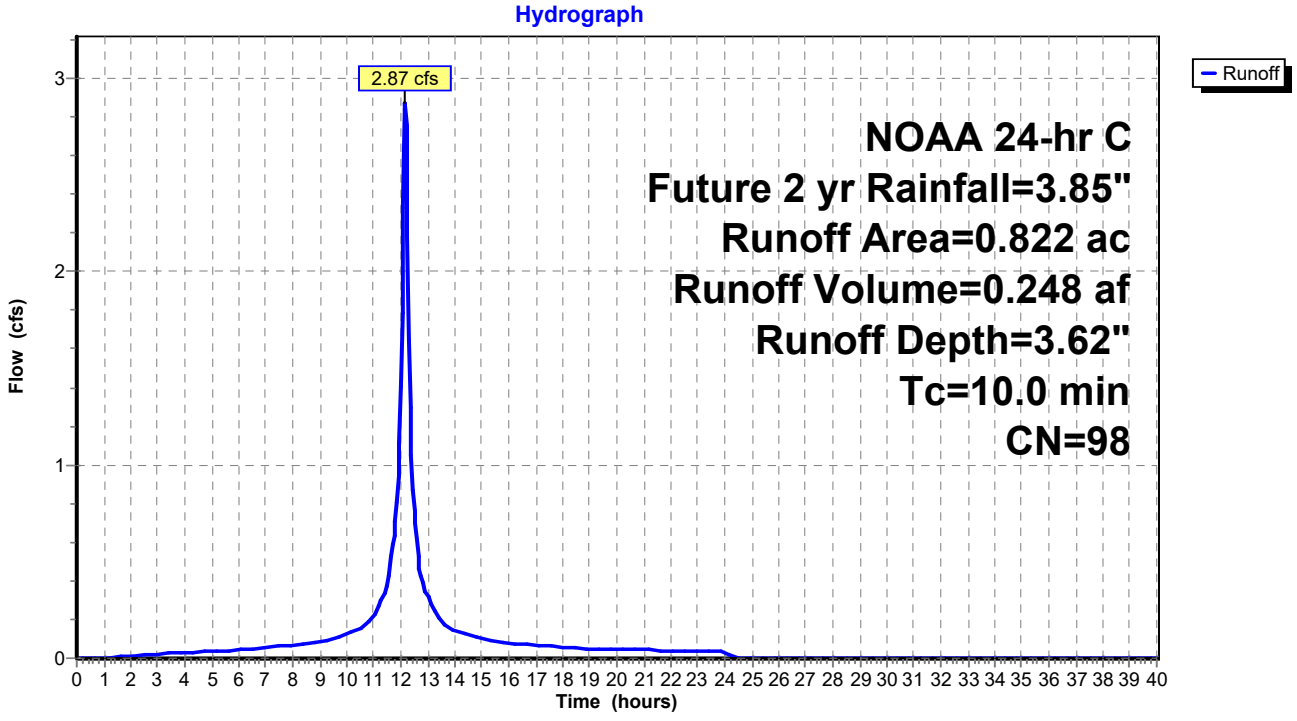
Runoff = 2.87 cfs @ 12.17 hrs, Volume= 0.248 af, Depth= 3.62"
Routed to Pond B-23 : Basin #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.719	98	Pavement, HSG C
*	0.103	98	Concrete, HSG C
	0.000	98	Roofs, HSG C
	0.822	98	Weighted Average
	0.822		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 23I: PDA-23 (impervious)



Summary for Subcatchment 23P: PDA-23 (pervious)

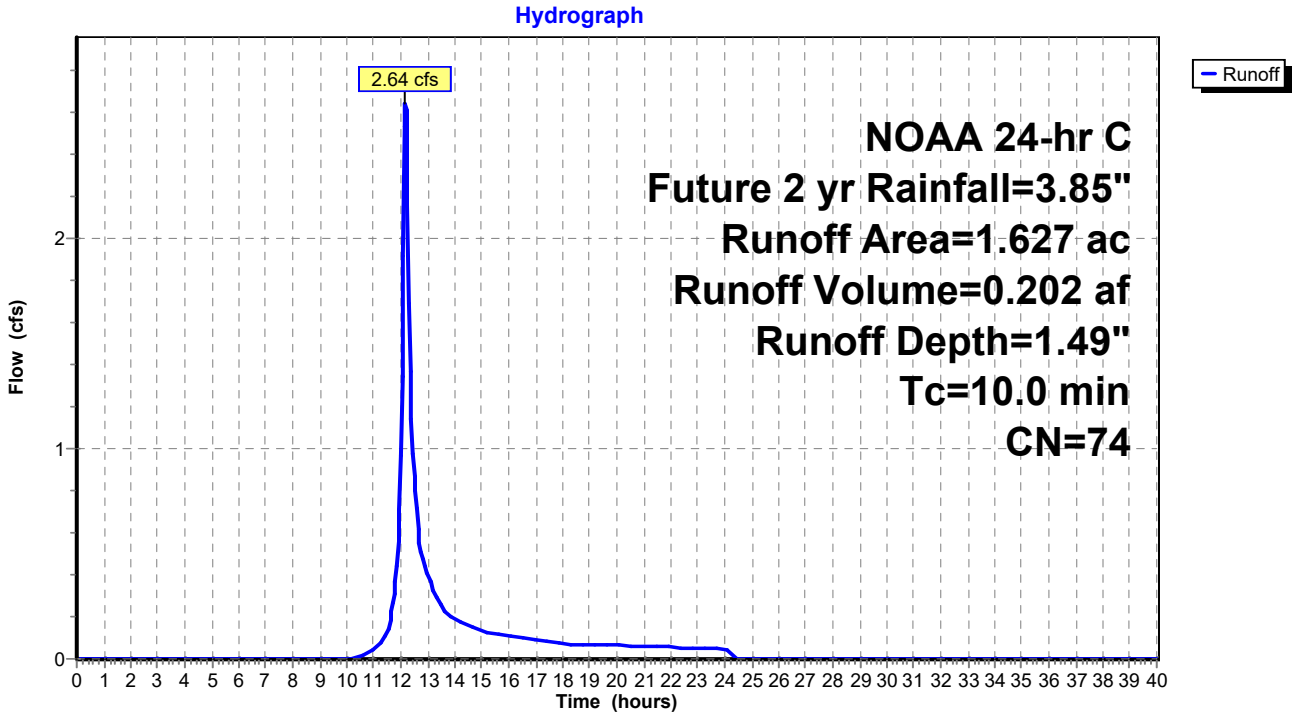
Runoff = 2.64 cfs @ 12.18 hrs, Volume= 0.202 af, Depth= 1.49"
Routed to Pond B-23 : Basin #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.627	74	>75% Grass cover, Good, HSG C
1.627		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 23P: PDA-23 (pervious)



Summary for Subcatchment 24l: PDA-24 (impervious)

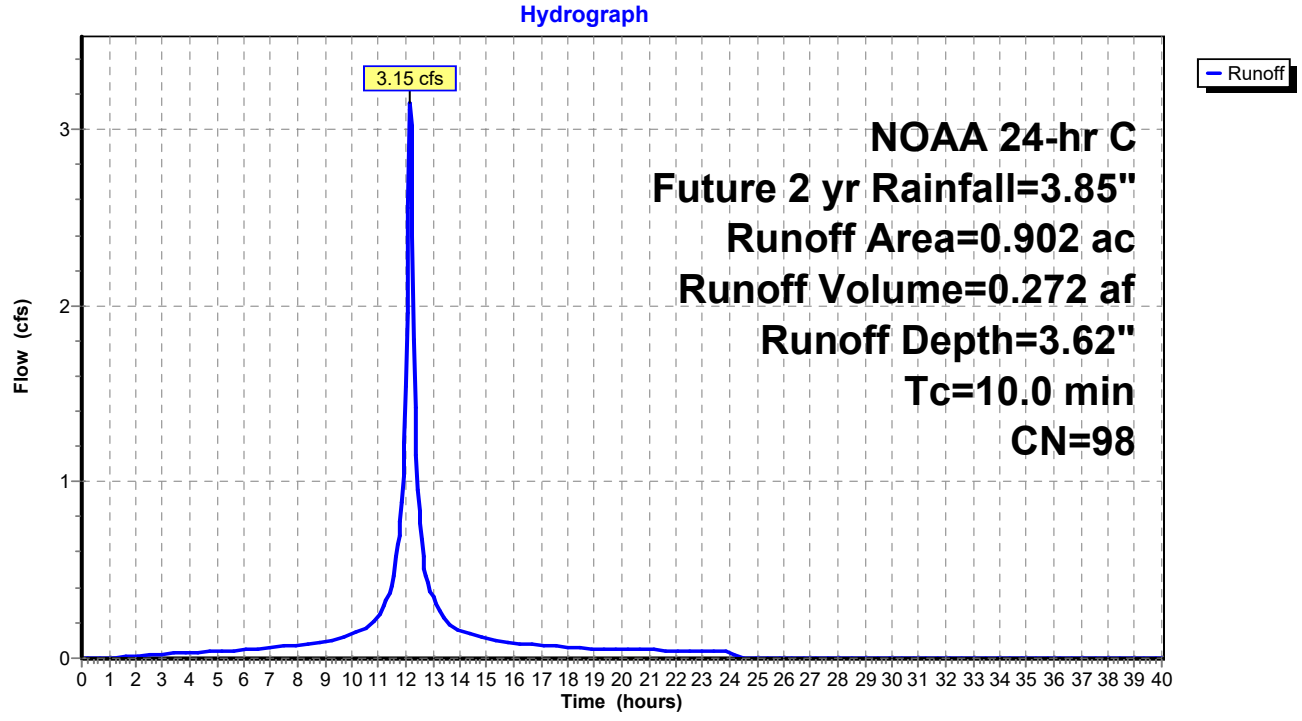
Runoff = 3.15 cfs @ 12.17 hrs, Volume= 0.272 af, Depth= 3.62"
Routed to Pond B-24 : Basin #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.277	98	Pavement, HSG C
*	0.579	98	Roof, HSG C
*	0.046	98	Concrete, HSC C
	0.902	98	Weighted Average
	0.902		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 24l: PDA-24 (impervious)



Summary for Subcatchment 24P: PDA-24 (pervious)

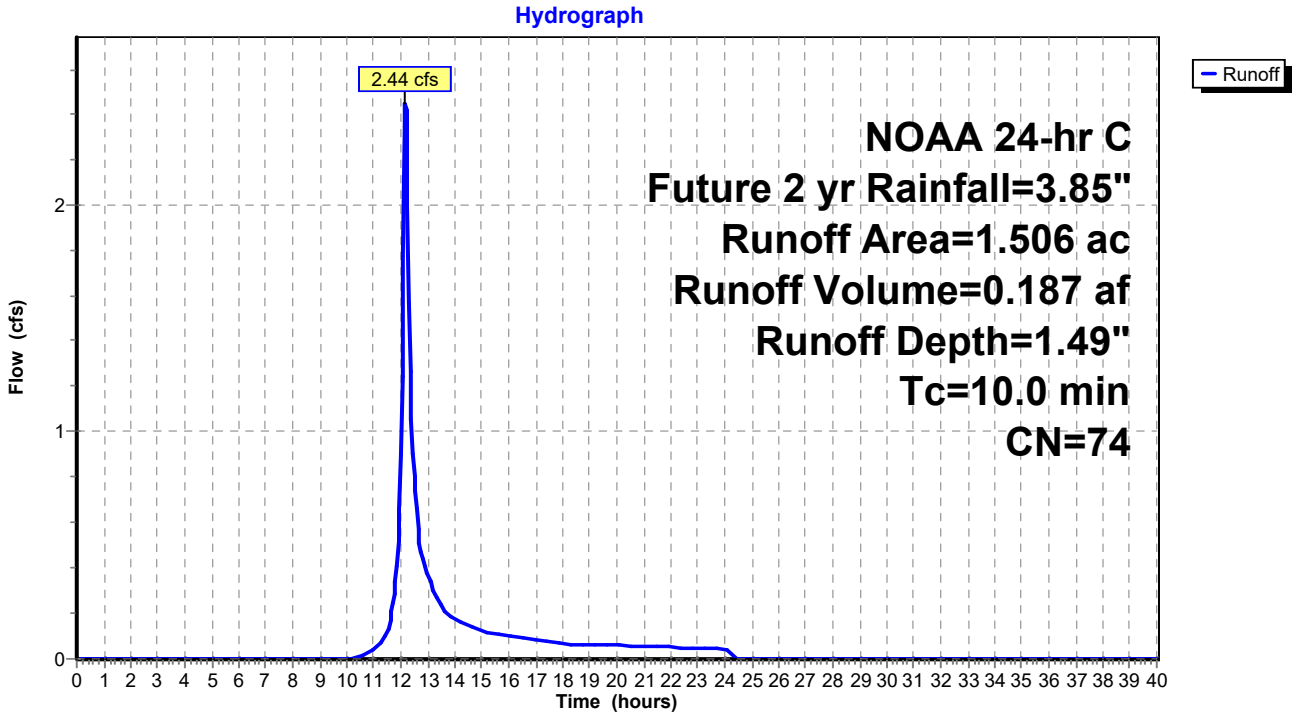
Runoff = 2.44 cfs @ 12.18 hrs, Volume= 0.187 af, Depth= 1.49"
Routed to Pond B-24 : Basin #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.506	74	>75% Grass cover, Good, HSG C
1.506		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 24P: PDA-24 (pervious)



Summary for Subcatchment 25l: PDA-25 (impervious)

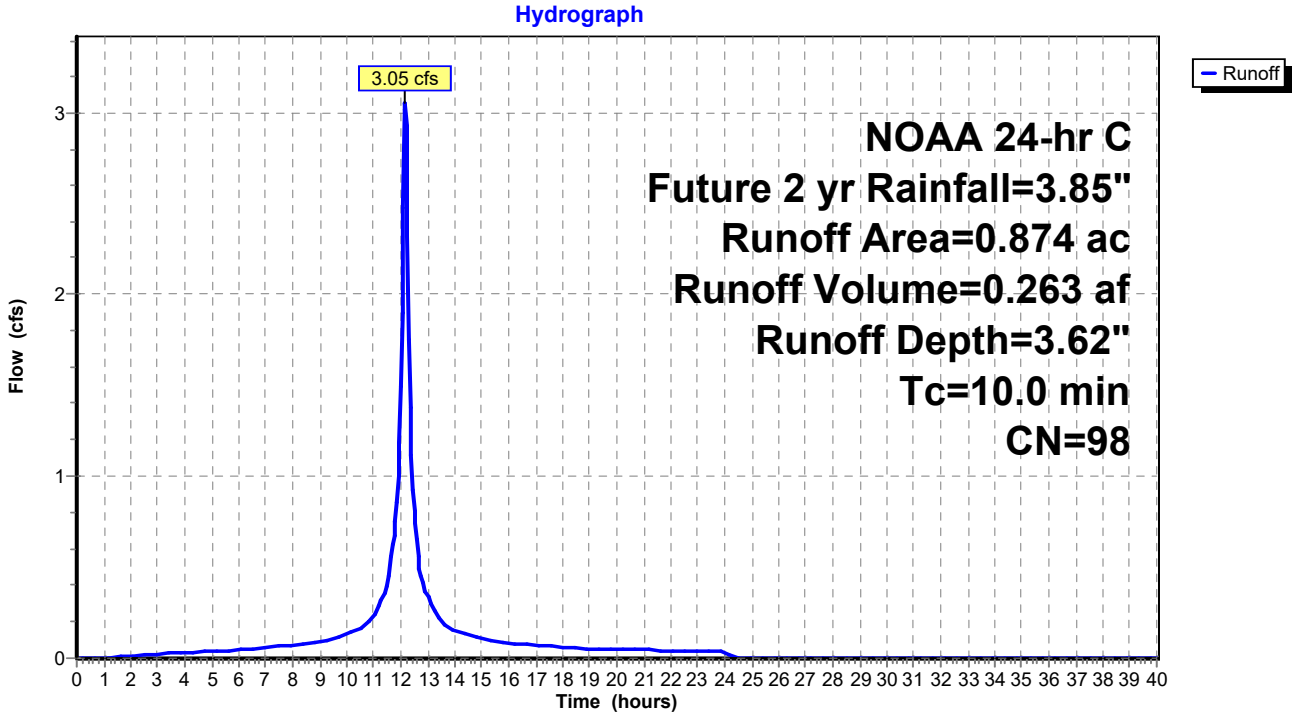
Runoff = 3.05 cfs @ 12.17 hrs, Volume= 0.263 af, Depth= 3.62"
Routed to Pond B-25 : Basin #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.388	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.036	98	Concrete, HSC C
	0.874	98	Weighted Average
	0.874		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 25l: PDA-25 (impervious)



Summary for Subcatchment 25P: PDA-25 (pervious)

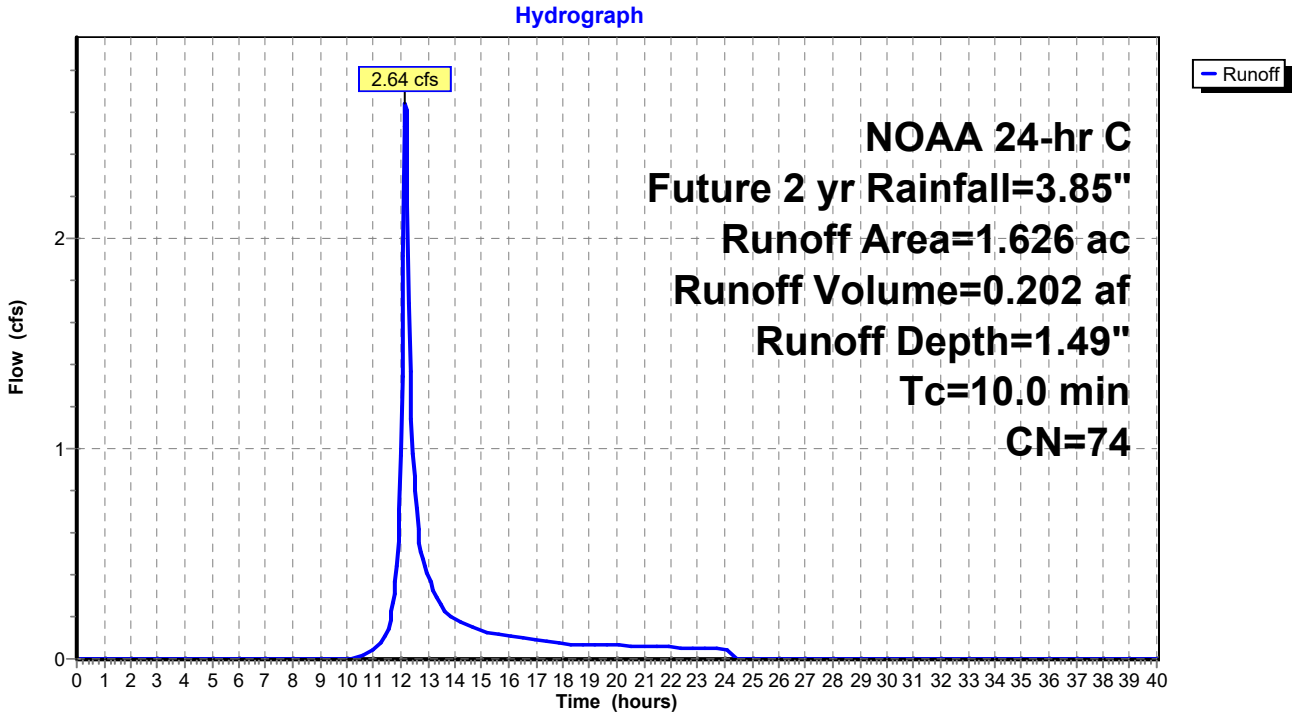
Runoff = 2.64 cfs @ 12.18 hrs, Volume= 0.202 af, Depth= 1.49"
Routed to Pond B-25 : Basin #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.626	74	>75% Grass cover, Good, HSG C
1.626		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 25P: PDA-25 (pervious)



Summary for Subcatchment 26l: PDA-26 (impervious)

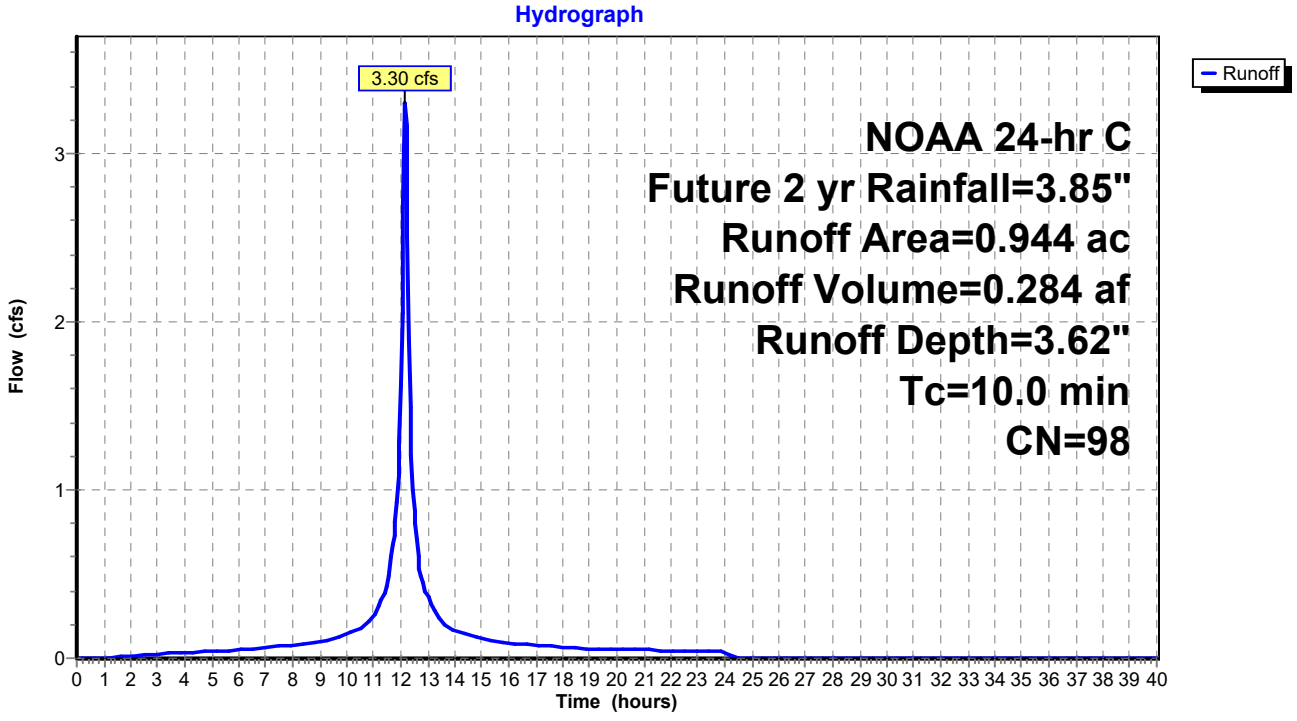
Runoff = 3.30 cfs @ 12.17 hrs, Volume= 0.284 af, Depth= 3.62"
Routed to Pond B-26 : Basin #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.944	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.944	98	Weighted Average
	0.944		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 26l: PDA-26 (impervious)



Summary for Subcatchment 26P: PDA-26 (pervious)

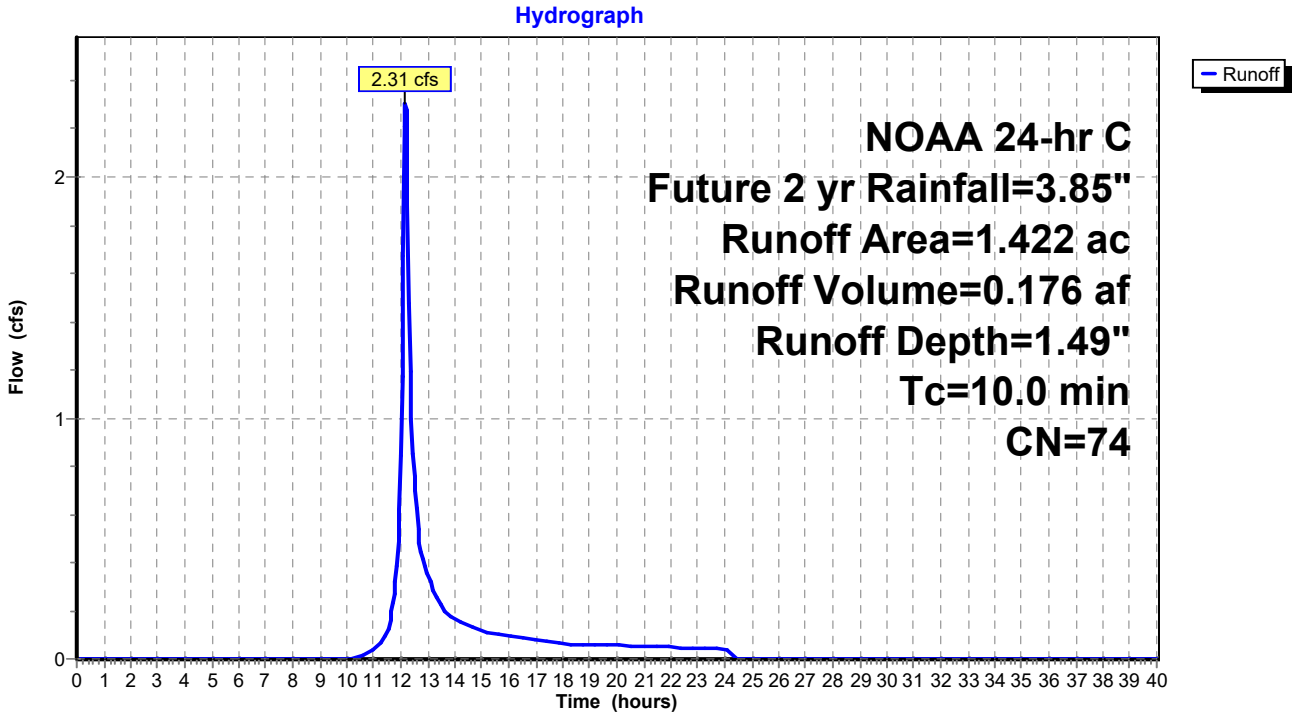
Runoff = 2.31 cfs @ 12.18 hrs, Volume= 0.176 af, Depth= 1.49"
Routed to Pond B-26 : Basin #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.422	74	>75% Grass cover, Good, HSG C
1.422		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 26P: PDA-26 (pervious)



Summary for Subcatchment 27I: PDA-27 (impervious)

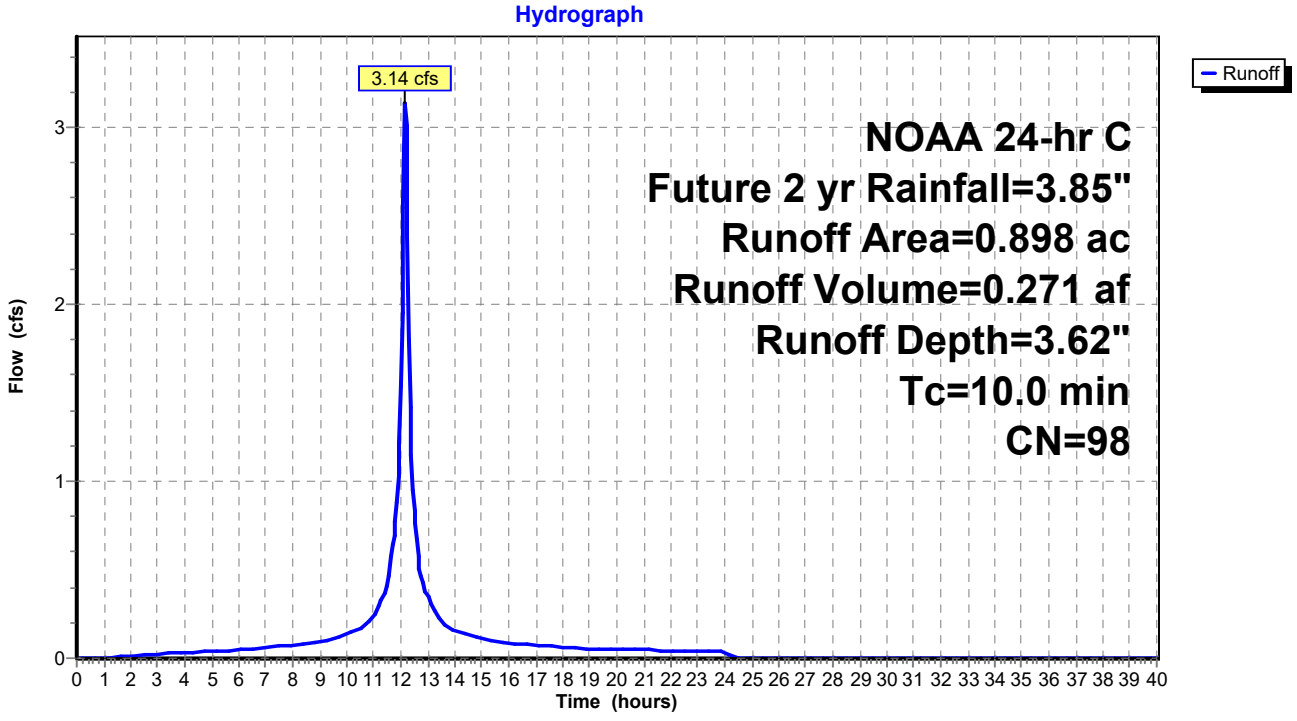
Runoff = 3.14 cfs @ 12.17 hrs, Volume= 0.271 af, Depth= 3.62"
Routed to Pond B-27 : Basin #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.233	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.022	98	Concrete, HSC C
	0.898	98	Weighted Average
	0.898		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 27I: PDA-27 (impervious)



Summary for Subcatchment 27P: PDA-27 (pervious)

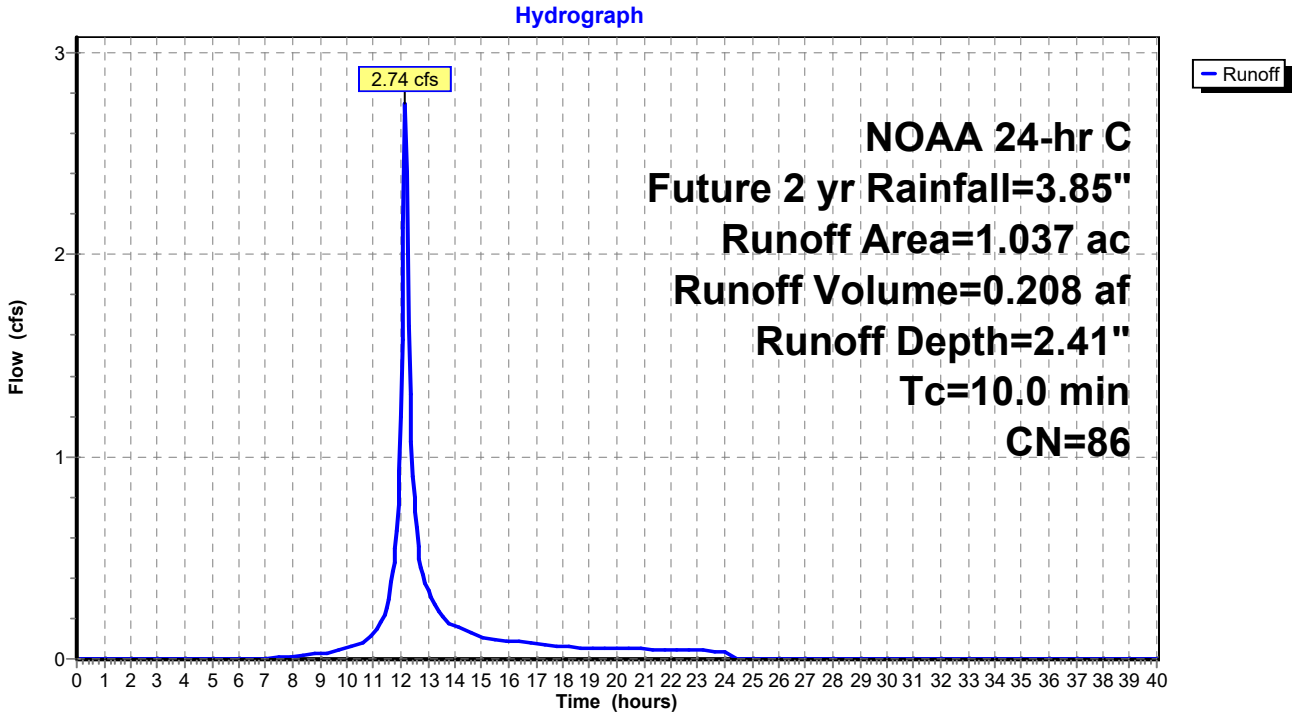
Runoff = 2.74 cfs @ 12.17 hrs, Volume= 0.208 af, Depth= 2.41"
Routed to Pond B-27 : Basin #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.037	86	<50% Grass cover, Poor, HSG C
1.037		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 27P: PDA-27 (pervious)



Summary for Subcatchment 28I: PDA-28 (impervious)

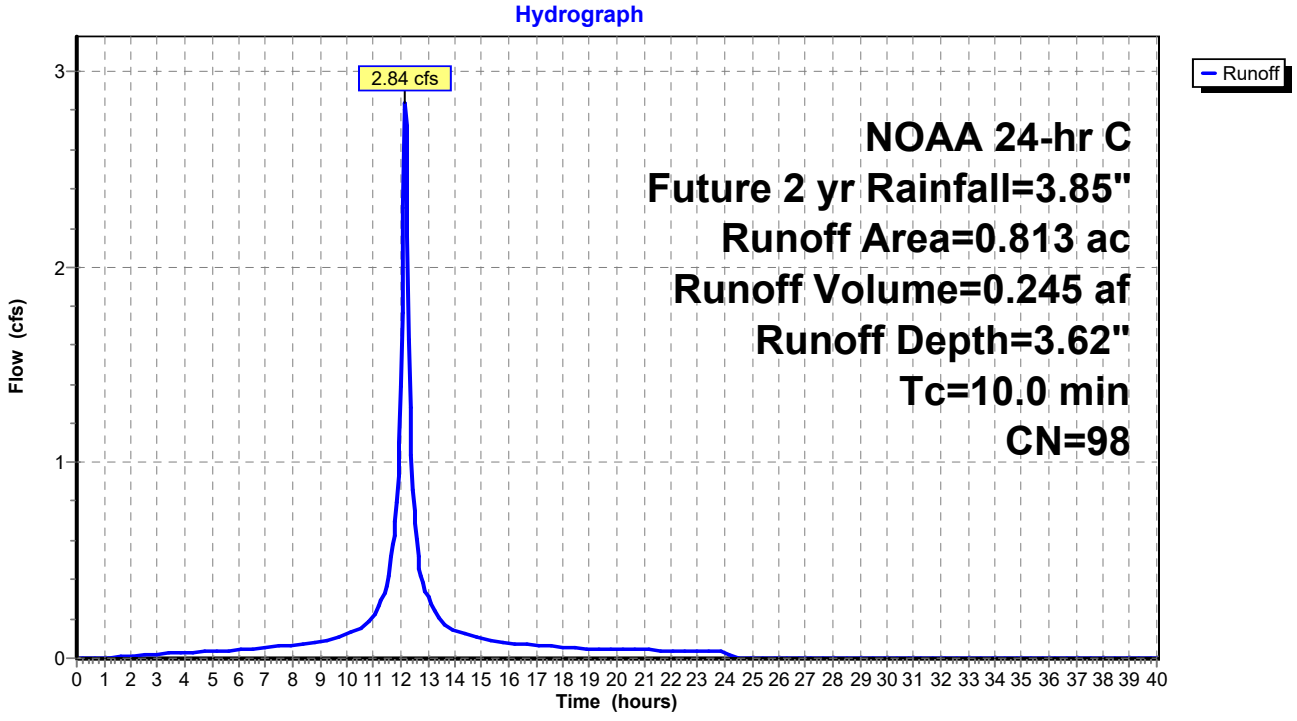
Runoff = 2.84 cfs @ 12.17 hrs, Volume= 0.245 af, Depth= 3.62"
Routed to Pond B-28 : Basin #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.235	98	Pavement, HSG C
*	0.541	98	Roof, HSG C
*	0.037	98	Concrete, HSC C
	0.813	98	Weighted Average
	0.813		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 28I: PDA-28 (impervious)



Summary for Subcatchment 28P: PDA-28 (pervious)

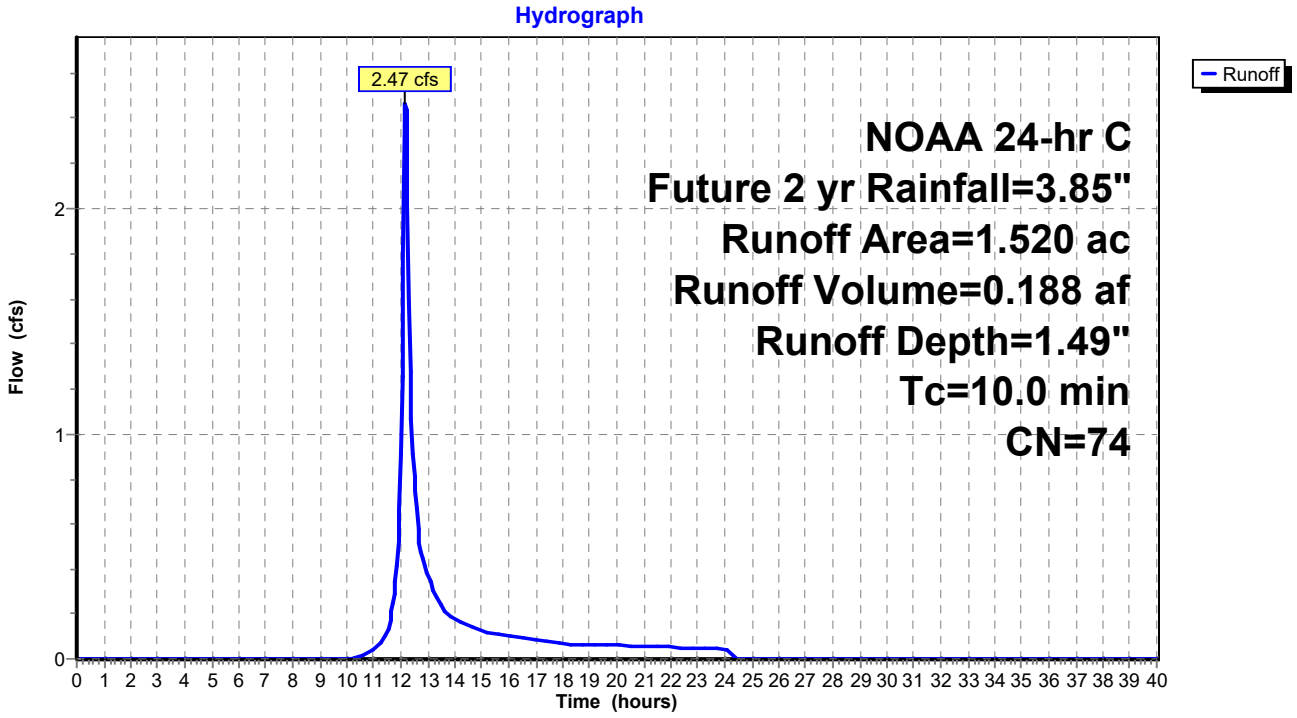
Runoff = 2.47 cfs @ 12.18 hrs, Volume= 0.188 af, Depth= 1.49"
Routed to Pond B-28 : Basin #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.520	74	>75% Grass cover, Good, HSG C
1.520		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 28P: PDA-28 (pervious)



Summary for Subcatchment UPDA-2: PDA-2 (undetained)

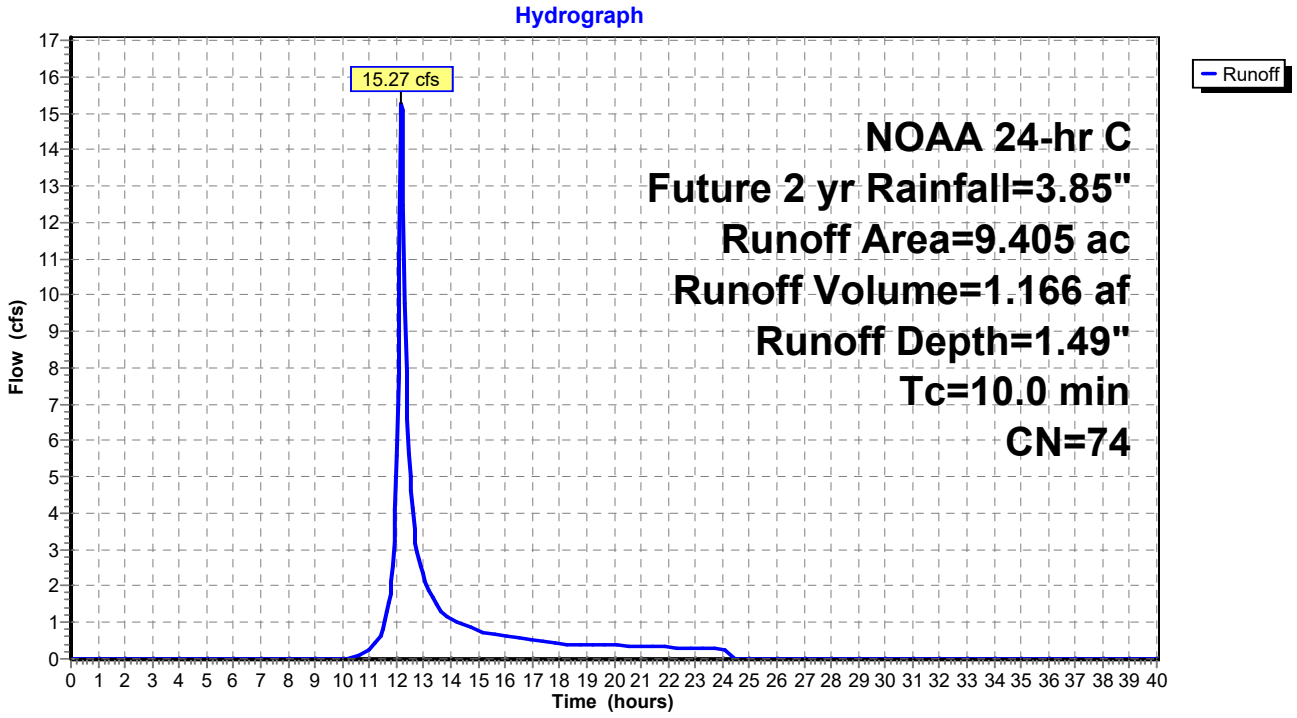
Runoff = 15.27 cfs @ 12.18 hrs, Volume= 1.166 af, Depth= 1.49"
Routed to Link PDA-2 : Proposed Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
9.405	74	>75% Grass cover, Good, HSG C
9.405		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-2: PDA-2 (undetained)



Summary for Pond B-18: Basin #18

Inflow Area = 1.410 ac, 31.91% Impervious, Inflow Depth = 2.17" for Future 2 yr event
Inflow = 3.12 cfs @ 12.18 hrs, Volume= 0.255 af
Outflow = 0.23 cfs @ 13.60 hrs, Volume= 0.210 af, Atten= 92%, Lag= 85.4 min
Primary = 0.23 cfs @ 13.60 hrs, Volume= 0.210 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 189.34' @ 13.60 hrs Surf.Area= 2,833 sf Storage= 6,629 cf

Plug-Flow detention time= 379.5 min calculated for 0.209 af (82% of inflow)
Center-of-Mass det. time= 302.5 min (1,107.1 - 804.6)

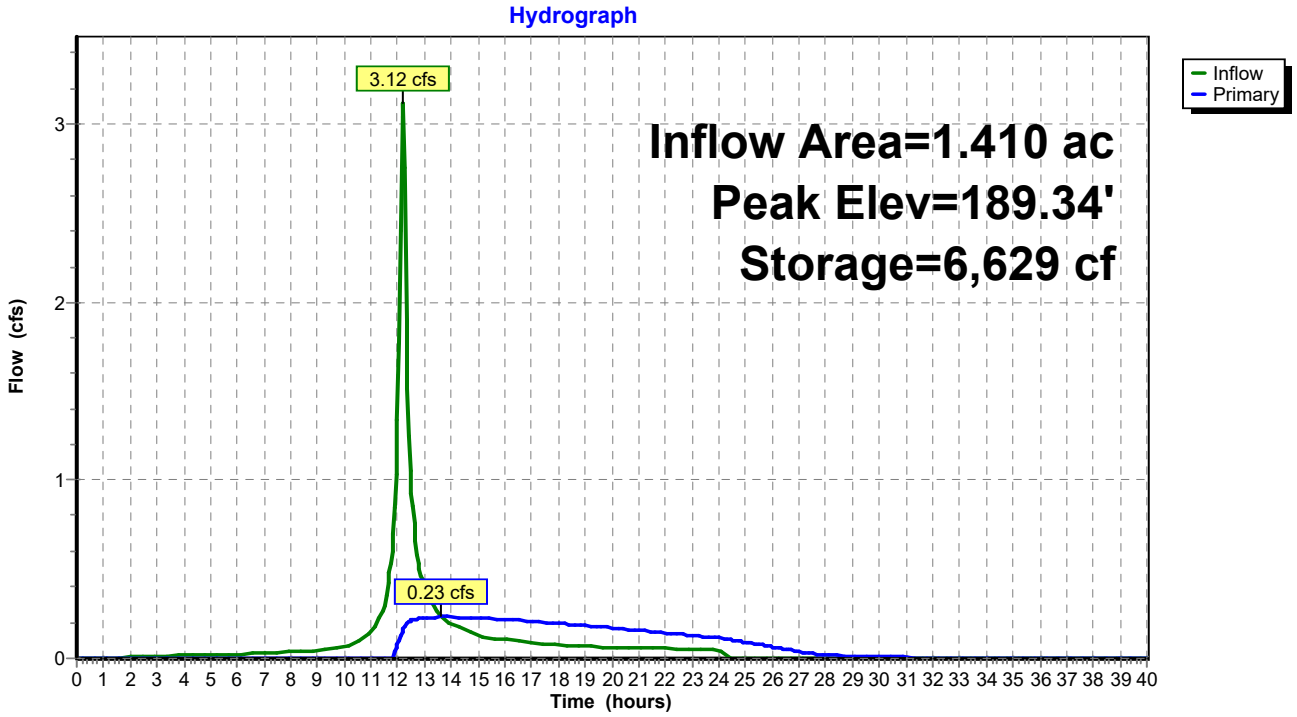
Volume	Invert	Avail.Storage	Storage Description
#1	185.65'	12,198 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
185.65	0	0	0
186.00	1,119	196	196
187.00	1,564	1,342	1,537
188.00	2,065	1,815	3,352
189.00	2,623	2,344	5,696
190.00	3,237	2,930	8,626
191.00	3,908	3,573	12,198

Device	Routing	Invert	Outlet Devices
#1	Primary	186.00'	**15.0" Round Culvert** L= 28.0' Ke= 0.500 Inlet / Outlet Invert= 186.00' / 185.86' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	187.25'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.34'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.23 cfs @ 13.60 hrs HW=189.34' (Free Discharge)
- **1=Culvert** (Passes 0.23 cfs of 9.74 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.79 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.15 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-18: Basin #18



Stage-Discharge for Pond B-18: Basin #18

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00
185.68	0.00	186.20	0.00	186.72	0.00	187.24	0.00
185.69	0.00	186.21	0.00	186.73	0.00	187.25	0.00
185.70	0.00	186.22	0.00	186.74	0.00	187.26	0.00
185.71	0.00	186.23	0.00	186.75	0.00	187.27	0.00
185.72	0.00	186.24	0.00	186.76	0.00	187.28	0.00
185.73	0.00	186.25	0.00	186.77	0.00	187.29	0.00
185.74	0.00	186.26	0.00	186.78	0.00	187.30	0.00
185.75	0.00	186.27	0.00	186.79	0.00	187.31	0.01
185.76	0.00	186.28	0.00	186.80	0.00	187.32	0.01
185.77	0.00	186.29	0.00	186.81	0.00	187.33	0.01
185.78	0.00	186.30	0.00	186.82	0.00	187.34	0.01
185.79	0.00	186.31	0.00	186.83	0.00	187.35	0.02
185.80	0.00	186.32	0.00	186.84	0.00	187.36	0.02
185.81	0.00	186.33	0.00	186.85	0.00	187.37	0.02
185.82	0.00	186.34	0.00	186.86	0.00	187.38	0.03
185.83	0.00	186.35	0.00	186.87	0.00	187.39	0.03
185.84	0.00	186.36	0.00	186.88	0.00	187.40	0.03
185.85	0.00	186.37	0.00	186.89	0.00	187.41	0.04
185.86	0.00	186.38	0.00	186.90	0.00	187.42	0.04
185.87	0.00	186.39	0.00	186.91	0.00	187.43	0.05
185.88	0.00	186.40	0.00	186.92	0.00	187.44	0.05
185.89	0.00	186.41	0.00	186.93	0.00	187.45	0.05
185.90	0.00	186.42	0.00	186.94	0.00	187.46	0.05
185.91	0.00	186.43	0.00	186.95	0.00	187.47	0.06
185.92	0.00	186.44	0.00	186.96	0.00	187.48	0.06
185.93	0.00	186.45	0.00	186.97	0.00	187.49	0.06
185.94	0.00	186.46	0.00	186.98	0.00	187.50	0.06
185.95	0.00	186.47	0.00	186.99	0.00	187.51	0.06
185.96	0.00	186.48	0.00	187.00	0.00	187.52	0.07
185.97	0.00	186.49	0.00	187.01	0.00	187.53	0.07
185.98	0.00	186.50	0.00	187.02	0.00	187.54	0.07
185.99	0.00	186.51	0.00	187.03	0.00	187.55	0.07
186.00	0.00	186.52	0.00	187.04	0.00	187.56	0.07
186.01	0.00	186.53	0.00	187.05	0.00	187.57	0.08
186.02	0.00	186.54	0.00	187.06	0.00	187.58	0.08
186.03	0.00	186.55	0.00	187.07	0.00	187.59	0.08
186.04	0.00	186.56	0.00	187.08	0.00	187.60	0.08
186.05	0.00	186.57	0.00	187.09	0.00	187.61	0.08
186.06	0.00	186.58	0.00	187.10	0.00	187.62	0.08
186.07	0.00	186.59	0.00	187.11	0.00	187.63	0.09
186.08	0.00	186.60	0.00	187.12	0.00	187.64	0.09
186.09	0.00	186.61	0.00	187.13	0.00	187.65	0.09
186.10	0.00	186.62	0.00	187.14	0.00	187.66	0.09
186.11	0.00	186.63	0.00	187.15	0.00	187.67	0.09
186.12	0.00	186.64	0.00	187.16	0.00	187.68	0.09
186.13	0.00	186.65	0.00	187.17	0.00	187.69	0.10
186.14	0.00	186.66	0.00	187.18	0.00	187.70	0.10
186.15	0.00	186.67	0.00	187.19	0.00	187.71	0.10
186.16	0.00	186.68	0.00	187.20	0.00	187.72	0.10

Stage-Discharge for Pond B-18: Basin #18 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.73	0.10	188.25	0.16	188.77	0.20	189.29	0.23
187.74	0.10	188.26	0.16	188.78	0.20	189.30	0.23
187.75	0.10	188.27	0.16	188.79	0.20	189.31	0.23
187.76	0.10	188.28	0.16	188.80	0.20	189.32	0.23
187.77	0.11	188.29	0.16	188.81	0.20	189.33	0.23
187.78	0.11	188.30	0.16	188.82	0.20	189.34	0.23
187.79	0.11	188.31	0.16	188.83	0.20	189.35	0.24
187.80	0.11	188.32	0.16	188.84	0.20	189.36	0.27
187.81	0.11	188.33	0.16	188.85	0.20	189.37	0.30
187.82	0.11	188.34	0.16	188.86	0.20	189.38	0.34
187.83	0.11	188.35	0.16	188.87	0.20	189.39	0.38
187.84	0.11	188.36	0.16	188.88	0.20	189.40	0.43
187.85	0.12	188.37	0.17	188.89	0.20	189.41	0.48
187.86	0.12	188.38	0.17	188.90	0.20	189.42	0.53
187.87	0.12	188.39	0.17	188.91	0.20	189.43	0.59
187.88	0.12	188.40	0.17	188.92	0.21	189.44	0.65
187.89	0.12	188.41	0.17	188.93	0.21	189.45	0.71
187.90	0.12	188.42	0.17	188.94	0.21	189.46	0.78
187.91	0.12	188.43	0.17	188.95	0.21	189.47	0.85
187.92	0.12	188.44	0.17	188.96	0.21	189.48	0.92
187.93	0.12	188.45	0.17	188.97	0.21	189.49	0.99
187.94	0.13	188.46	0.17	188.98	0.21	189.50	1.07
187.95	0.13	188.47	0.17	188.99	0.21	189.51	1.15
187.96	0.13	188.48	0.17	189.00	0.21	189.52	1.23
187.97	0.13	188.49	0.17	189.01	0.21	189.53	1.32
187.98	0.13	188.50	0.18	189.02	0.21	189.54	1.40
187.99	0.13	188.51	0.18	189.03	0.21	189.55	1.49
188.00	0.13	188.52	0.18	189.04	0.21	189.56	1.58
188.01	0.13	188.53	0.18	189.05	0.21	189.57	1.67
188.02	0.13	188.54	0.18	189.06	0.21	189.58	1.76
188.03	0.13	188.55	0.18	189.07	0.22	189.59	1.86
188.04	0.14	188.56	0.18	189.08	0.22	189.60	1.96
188.05	0.14	188.57	0.18	189.09	0.22	189.61	2.06
188.06	0.14	188.58	0.18	189.10	0.22	189.62	2.16
188.07	0.14	188.59	0.18	189.11	0.22	189.63	2.26
188.08	0.14	188.60	0.18	189.12	0.22	189.64	2.37
188.09	0.14	188.61	0.18	189.13	0.22	189.65	2.47
188.10	0.14	188.62	0.18	189.14	0.22	189.66	2.58
188.11	0.14	188.63	0.19	189.15	0.22	189.67	2.69
188.12	0.14	188.64	0.19	189.16	0.22	189.68	2.80
188.13	0.14	188.65	0.19	189.17	0.22	189.69	2.91
188.14	0.15	188.66	0.19	189.18	0.22	189.70	3.03
188.15	0.15	188.67	0.19	189.19	0.22	189.71	3.14
188.16	0.15	188.68	0.19	189.20	0.22	189.72	3.26
188.17	0.15	188.69	0.19	189.21	0.22	189.73	3.38
188.18	0.15	188.70	0.19	189.22	0.22	189.74	3.50
188.19	0.15	188.71	0.19	189.23	0.22	189.75	3.62
188.20	0.15	188.72	0.19	189.24	0.23	189.76	3.74
188.21	0.15	188.73	0.19	189.25	0.23	189.77	3.86
188.22	0.15	188.74	0.19	189.26	0.23	189.78	3.99
188.23	0.15	188.75	0.19	189.27	0.23	189.79	4.12
188.24	0.15	188.76	0.19	189.28	0.23	189.80	4.24

Stage-Discharge for Pond B-18: Basin #18 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
189.81	4.37	190.33	11.37	190.85	12.15
189.82	4.50	190.34	11.39	190.86	12.16
189.83	4.63	190.35	11.40	190.87	12.17
189.84	4.77	190.36	11.42	190.88	12.19
189.85	4.90	190.37	11.43	190.89	12.20
189.86	5.04	190.38	11.45	190.90	12.22
189.87	5.17	190.39	11.47	190.91	12.23
189.88	5.31	190.40	11.48	190.92	12.25
189.89	5.45	190.41	11.50	190.93	12.26
189.90	5.59	190.42	11.51	190.94	12.27
189.91	5.73	190.43	11.53	190.95	12.29
189.92	5.87	190.44	11.54	190.96	12.42
189.93	6.02	190.45	11.56	190.97	12.65
189.94	6.16	190.46	11.57	190.98	12.94
189.95	6.31	190.47	11.59	190.99	13.28
189.96	6.45	190.48	11.60	191.00	**13.67**
189.97	6.60	190.49	11.62		
189.98	6.75	190.50	11.63		
189.99	6.90	190.51	11.65		
190.00	7.05	190.52	11.66		
190.01	7.20	190.53	11.68		
190.02	7.35	190.54	11.69		
190.03	7.51	190.55	11.71		
190.04	7.66	190.56	11.72		
190.05	7.82	190.57	11.74		
190.06	7.97	190.58	11.75		
190.07	8.13	190.59	11.77		
190.08	8.29	190.60	11.78		
190.09	8.45	190.61	11.80		
190.10	8.61	190.62	11.81		
190.11	8.77	190.63	11.83		
190.12	8.93	190.64	11.84		
190.13	9.10	190.65	11.85		
190.14	9.26	190.66	11.87		
190.15	9.42	190.67	11.88		
190.16	9.59	190.68	11.90		
190.17	9.76	190.69	11.91		
190.18	9.92	190.70	11.93		
190.19	10.09	190.71	11.94		
190.20	10.26	190.72	11.96		
190.21	10.43	190.73	11.97		
190.22	10.60	190.74	11.99		
190.23	10.77	190.75	12.00		
190.24	10.94	190.76	12.02		
190.25	11.12	190.77	12.03		
190.26	11.27	190.78	12.04		
190.27	11.28	190.79	12.06		
190.28	11.30	190.80	12.07		
190.29	11.31	190.81	12.09		
190.30	11.33	190.82	12.10		
190.31	11.34	190.83	12.12		
190.32	11.36	190.84	12.13		

Stage-Area-Storage for Pond B-18: Basin #18

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.65	0	0	186.17	1,195	392
185.66	32	0	186.18	1,199	404
185.67	64	1	186.19	1,204	416
185.68	96	1	186.20	1,208	429
185.69	128	3	186.21	1,212	441
185.70	160	4	186.22	1,217	453
185.71	192	6	186.23	1,221	465
185.72	224	8	186.24	1,226	477
185.73	256	10	186.25	1,230	489
185.74	288	13	186.26	1,235	502
185.75	320	16	186.27	1,239	514
185.76	352	19	186.28	1,244	527
185.77	384	23	186.29	1,248	539
185.78	416	27	186.30	1,253	552
185.79	448	31	186.31	1,257	564
185.80	480	36	186.32	1,261	577
185.81	512	41	186.33	1,266	589
185.82	544	46	186.34	1,270	602
185.83	575	52	186.35	1,275	615
185.84	607	58	186.36	1,279	628
185.85	639	64	186.37	1,284	640
185.86	671	70	186.38	1,288	653
185.87	703	77	186.39	1,293	666
185.88	735	85	186.40	1,297	679
185.89	767	92	186.41	1,301	692
185.90	799	100	186.42	1,306	705
185.91	831	108	186.43	1,310	718
185.92	863	117	186.44	1,315	731
185.93	895	125	186.45	1,319	744
185.94	927	134	186.46	1,324	758
185.95	959	144	186.47	1,328	771
185.96	991	154	186.48	1,333	784
185.97	1,023	164	186.49	1,337	798
185.98	1,055	174	186.50	1,342	811
185.99	1,087	185	186.51	1,346	824
186.00	1,119	196	186.52	1,350	838
186.01	1,123	207	186.53	1,355	851
186.02	1,128	218	186.54	1,359	865
186.03	1,132	230	186.55	1,364	879
186.04	1,137	241	186.56	1,368	892
186.05	1,141	252	186.57	1,373	906
186.06	1,146	264	186.58	1,377	920
186.07	1,150	275	186.59	1,382	933
186.08	1,155	287	186.60	1,386	947
186.09	1,159	298	186.61	1,390	961
186.10	1,163	310	186.62	1,395	975
186.11	1,168	322	186.63	1,399	989
186.12	1,172	333	186.64	1,404	1,003
186.13	1,177	345	186.65	1,408	1,017
186.14	1,181	357	186.66	1,413	1,031
186.15	1,186	369	186.67	1,417	1,045
186.16	1,190	381	186.68	1,422	1,060

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.69	1,426	1,074	187.21	1,669	1,877
186.70	1,431	1,088	187.22	1,674	1,894
186.71	1,435	1,102	187.23	1,679	1,910
186.72	1,439	1,117	187.24	1,684	1,927
186.73	1,444	1,131	187.25	1,689	1,944
186.74	1,448	1,146	187.26	1,694	1,961
186.75	1,453	1,160	187.27	1,699	1,978
186.76	1,457	1,175	187.28	1,704	1,995
186.77	1,462	1,189	187.29	1,709	2,012
186.78	1,466	1,204	187.30	1,714	2,029
186.79	1,471	1,219	187.31	1,719	2,046
186.80	1,475	1,233	187.32	1,724	2,063
186.81	1,479	1,248	187.33	1,729	2,081
186.82	1,484	1,263	187.34	1,734	2,098
186.83	1,488	1,278	187.35	1,739	2,115
186.84	1,493	1,293	187.36	1,744	2,133
186.85	1,497	1,308	187.37	1,749	2,150
186.86	1,502	1,323	187.38	1,754	2,168
186.87	1,506	1,338	187.39	1,759	2,185
186.88	1,511	1,353	187.40	1,764	2,203
186.89	1,515	1,368	187.41	1,769	2,221
186.90	1,520	1,383	187.42	1,774	2,238
186.91	1,524	1,398	187.43	1,779	2,256
186.92	1,528	1,414	187.44	1,784	2,274
186.93	1,533	1,429	187.45	1,789	2,292
186.94	1,537	1,444	187.46	1,794	2,310
186.95	1,542	1,460	187.47	1,799	2,328
186.96	1,546	1,475	187.48	1,804	2,346
186.97	1,551	1,491	187.49	1,809	2,364
186.98	1,555	1,506	187.50	1,815	2,382
186.99	1,560	1,522	187.51	1,820	2,400
187.00	1,564	1,537	187.52	1,825	2,418
187.01	1,569	1,553	187.53	1,830	2,437
187.02	1,574	1,569	187.54	1,835	2,455
187.03	1,579	1,584	187.55	1,840	2,473
187.04	1,584	1,600	187.56	1,845	2,492
187.05	1,589	1,616	187.57	1,850	2,510
187.06	1,594	1,632	187.58	1,855	2,529
187.07	1,599	1,648	187.59	1,860	2,547
187.08	1,604	1,664	187.60	1,865	2,566
187.09	1,609	1,680	187.61	1,870	2,585
187.10	1,614	1,696	187.62	1,875	2,603
187.11	1,619	1,712	187.63	1,880	2,622
187.12	1,624	1,729	187.64	1,885	2,641
187.13	1,629	1,745	187.65	1,890	2,660
187.14	1,634	1,761	187.66	1,895	2,679
187.15	1,639	1,778	187.67	1,900	2,698
187.16	1,644	1,794	187.68	1,905	2,717
187.17	1,649	1,810	187.69	1,910	2,736
187.18	1,654	1,827	187.70	1,915	2,755
187.19	1,659	1,844	187.71	1,920	2,774
187.20	1,664	1,860	187.72	1,925	2,793

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.73	1,930	2,813	188.25	2,205	3,886
187.74	1,935	2,832	188.26	2,210	3,908
187.75	1,940	2,851	188.27	2,216	3,930
187.76	1,945	2,871	188.28	2,221	3,952
187.77	1,950	2,890	188.29	2,227	3,974
187.78	1,955	2,910	188.30	2,232	3,996
187.79	1,960	2,929	188.31	2,238	4,019
187.80	1,965	2,949	188.32	2,244	4,041
187.81	1,970	2,969	188.33	2,249	4,064
187.82	1,975	2,988	188.34	2,255	4,086
187.83	1,980	3,008	188.35	2,260	4,109
187.84	1,985	3,028	188.36	2,266	4,131
187.85	1,990	3,048	188.37	2,271	4,154
187.86	1,995	3,068	188.38	2,277	4,177
187.87	2,000	3,088	188.39	2,283	4,200
187.88	2,005	3,108	188.40	2,288	4,222
187.89	2,010	3,128	188.41	2,294	4,245
187.90	2,015	3,148	188.42	2,299	4,268
187.91	2,020	3,168	188.43	2,305	4,291
187.92	2,025	3,188	188.44	2,311	4,314
187.93	2,030	3,209	188.45	2,316	4,338
187.94	2,035	3,229	188.46	2,322	4,361
187.95	2,040	3,249	188.47	2,327	4,384
187.96	2,045	3,270	188.48	2,333	4,407
187.97	2,050	3,290	188.49	2,338	4,431
187.98	2,055	3,311	188.50	2,344	4,454
187.99	2,060	3,331	188.51	2,350	4,478
188.00	2,065	3,352	188.52	2,355	4,501
188.01	2,071	3,373	188.53	2,361	4,525
188.02	2,076	3,393	188.54	2,366	4,548
188.03	2,082	3,414	188.55	2,372	4,572
188.04	2,087	3,435	188.56	2,377	4,596
188.05	2,093	3,456	188.57	2,383	4,620
188.06	2,098	3,477	188.58	2,389	4,643
188.07	2,104	3,498	188.59	2,394	4,667
188.08	2,110	3,519	188.60	2,400	4,691
188.09	2,115	3,540	188.61	2,405	4,715
188.10	2,121	3,561	188.62	2,411	4,739
188.11	2,126	3,582	188.63	2,417	4,764
188.12	2,132	3,604	188.64	2,422	4,788
188.13	2,138	3,625	188.65	2,428	4,812
188.14	2,143	3,646	188.66	2,433	4,836
188.15	2,149	3,668	188.67	2,439	4,861
188.16	2,154	3,689	188.68	2,444	4,885
188.17	2,160	3,711	188.69	2,450	4,910
188.18	2,165	3,733	188.70	2,456	4,934
188.19	2,171	3,754	188.71	2,461	4,959
188.20	2,177	3,776	188.72	2,467	4,983
188.21	2,182	3,798	188.73	2,472	5,008
188.22	2,188	3,820	188.74	2,478	5,033
188.23	2,193	3,842	188.75	2,484	5,058
188.24	2,199	3,863	188.76	2,489	5,082

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.77	2,495	5,107	189.29	2,801	6,482
188.78	2,500	5,132	189.30	2,807	6,510
188.79	2,506	5,157	189.31	2,813	6,538
188.80	2,511	5,182	189.32	2,819	6,567
188.81	2,517	5,208	189.33	2,826	6,595
188.82	2,523	5,233	189.34	2,832	6,623
188.83	2,528	5,258	189.35	2,838	6,651
188.84	2,534	5,283	189.36	2,844	6,680
188.85	2,539	5,309	189.37	2,850	6,708
188.86	2,545	5,334	189.38	2,856	6,737
188.87	2,550	5,360	189.39	2,862	6,765
188.88	2,556	5,385	189.40	2,869	6,794
188.89	2,562	5,411	189.41	2,875	6,823
188.90	2,567	5,436	189.42	2,881	6,852
188.91	2,573	5,462	189.43	2,887	6,880
188.92	2,578	5,488	189.44	2,893	6,909
188.93	2,584	5,514	189.45	2,899	6,938
188.94	2,590	5,539	189.46	2,905	6,967
188.95	2,595	5,565	189.47	2,912	6,996
188.96	2,601	5,591	189.48	2,918	7,026
188.97	2,606	5,617	189.49	2,924	7,055
188.98	2,612	5,643	189.50	2,930	7,084
188.99	2,617	5,670	189.51	2,936	7,113
189.00	2,623	5,696	189.52	2,942	7,143
189.01	2,629	5,722	189.53	2,948	7,172
189.02	2,635	5,748	189.54	2,955	7,202
189.03	2,641	5,775	189.55	2,961	7,231
189.04	2,648	5,801	189.56	2,967	7,261
189.05	2,654	5,828	189.57	2,973	7,291
189.06	2,660	5,854	189.58	2,979	7,320
189.07	2,666	5,881	189.59	2,985	7,350
189.08	2,672	5,908	189.60	2,991	7,380
189.09	2,678	5,934	189.61	2,998	7,410
189.10	2,684	5,961	189.62	3,004	7,440
189.11	2,691	5,988	189.63	3,010	7,470
189.12	2,697	6,015	189.64	3,016	7,500
189.13	2,703	6,042	189.65	3,022	7,530
189.14	2,709	6,069	189.66	3,028	7,561
189.15	2,715	6,096	189.67	3,034	7,591
189.16	2,721	6,123	189.68	3,041	7,621
189.17	2,727	6,151	189.69	3,047	7,652
189.18	2,734	6,178	189.70	3,053	7,682
189.19	2,740	6,205	189.71	3,059	7,713
189.20	2,746	6,233	189.72	3,065	7,744
189.21	2,752	6,260	189.73	3,071	7,774
189.22	2,758	6,288	189.74	3,077	7,805
189.23	2,764	6,315	189.75	3,084	7,836
189.24	2,770	6,343	189.76	3,090	7,867
189.25	2,777	6,371	189.77	3,096	7,898
189.26	2,783	6,399	189.78	3,102	7,929
189.27	2,789	6,426	189.79	3,108	7,960
189.28	2,795	6,454	189.80	3,114	7,991

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.81	3,120	8,022	190.33	3,458	9,731
189.82	3,126	8,053	190.34	3,465	9,765
189.83	3,133	8,084	190.35	3,472	9,800
189.84	3,139	8,116	190.36	3,479	9,835
189.85	3,145	8,147	190.37	3,485	9,869
189.86	3,151	8,179	190.38	3,492	9,904
189.87	3,157	8,210	190.39	3,499	9,939
189.88	3,163	8,242	190.40	3,505	9,974
189.89	3,169	8,273	190.41	3,512	10,009
189.90	3,176	8,305	190.42	3,519	10,045
189.91	3,182	8,337	190.43	3,526	10,080
189.92	3,188	8,369	190.44	3,532	10,115
189.93	3,194	8,401	190.45	3,539	10,150
189.94	3,200	8,433	190.46	3,546	10,186
189.95	3,206	8,465	190.47	3,552	10,221
189.96	3,212	8,497	190.48	3,559	10,257
189.97	3,219	8,529	190.49	3,566	10,293
189.98	3,225	8,561	190.50	3,573	10,328
189.99	3,231	8,593	190.51	3,579	10,364
190.00	3,237	8,626	190.52	3,586	10,400
190.01	3,244	8,658	190.53	3,593	10,436
190.02	3,250	8,691	190.54	3,599	10,472
190.03	3,257	8,723	190.55	3,606	10,508
190.04	3,264	8,756	190.56	3,613	10,544
190.05	3,271	8,789	190.57	3,619	10,580
190.06	3,277	8,821	190.58	3,626	10,616
190.07	3,284	8,854	190.59	3,633	10,652
190.08	3,291	8,887	190.60	3,640	10,689
190.09	3,297	8,920	190.61	3,646	10,725
190.10	3,304	8,953	190.62	3,653	10,762
190.11	3,311	8,986	190.63	3,660	10,798
190.12	3,318	9,019	190.64	3,666	10,835
190.13	3,324	9,052	190.65	3,673	10,872
190.14	3,331	9,086	190.66	3,680	10,908
190.15	3,338	9,119	190.67	3,687	10,945
190.16	3,344	9,152	190.68	3,693	10,982
190.17	3,351	9,186	190.69	3,700	11,019
190.18	3,358	9,219	190.70	3,707	11,056
190.19	3,364	9,253	190.71	3,713	11,093
190.20	3,371	9,287	190.72	3,720	11,130
190.21	3,378	9,320	190.73	3,727	11,168
190.22	3,385	9,354	190.74	3,734	11,205
190.23	3,391	9,388	190.75	3,740	11,242
190.24	3,398	9,422	190.76	3,747	11,280
190.25	3,405	9,456	190.77	3,754	11,317
190.26	3,411	9,490	190.78	3,760	11,355
190.27	3,418	9,524	190.79	3,767	11,392
190.28	3,425	9,558	190.80	3,774	11,430
190.29	3,432	9,593	190.81	3,781	11,468
190.30	3,438	9,627	190.82	3,787	11,506
190.31	3,445	9,662	190.83	3,794	11,544
190.32	3,452	9,696	190.84	3,801	11,582

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.85	3,807	11,620
190.86	3,814	11,658
190.87	3,821	11,696
190.88	3,827	11,734
190.89	3,834	11,773
190.90	3,841	11,811
190.91	3,848	11,849
190.92	3,854	11,888
190.93	3,861	11,926
190.94	3,868	11,965
190.95	3,874	12,004
190.96	3,881	12,043
190.97	3,888	12,081
190.98	3,895	12,120
190.99	3,901	12,159
191.00	**3,908**	**12,198**

Summary for Pond B-19: Basin #19

Inflow Area = 1.715 ac, 34.81% Impervious, Inflow Depth = 2.23" for Future 2 yr event
Inflow = 3.89 cfs @ 12.17 hrs, Volume= 0.318 af
Outflow = 0.49 cfs @ 13.03 hrs, Volume= 0.259 af, Atten= 87%, Lag= 51.1 min
Primary = 0.49 cfs @ 13.03 hrs, Volume= 0.259 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 197.83' @ 13.03 hrs Surf.Area= 3,687 sf Storage= 8,156 cf

Plug-Flow detention time= 434.8 min calculated for 0.258 af (81% of inflow)
Center-of-Mass det. time= 354.9 min (1,156.2 - 801.3)

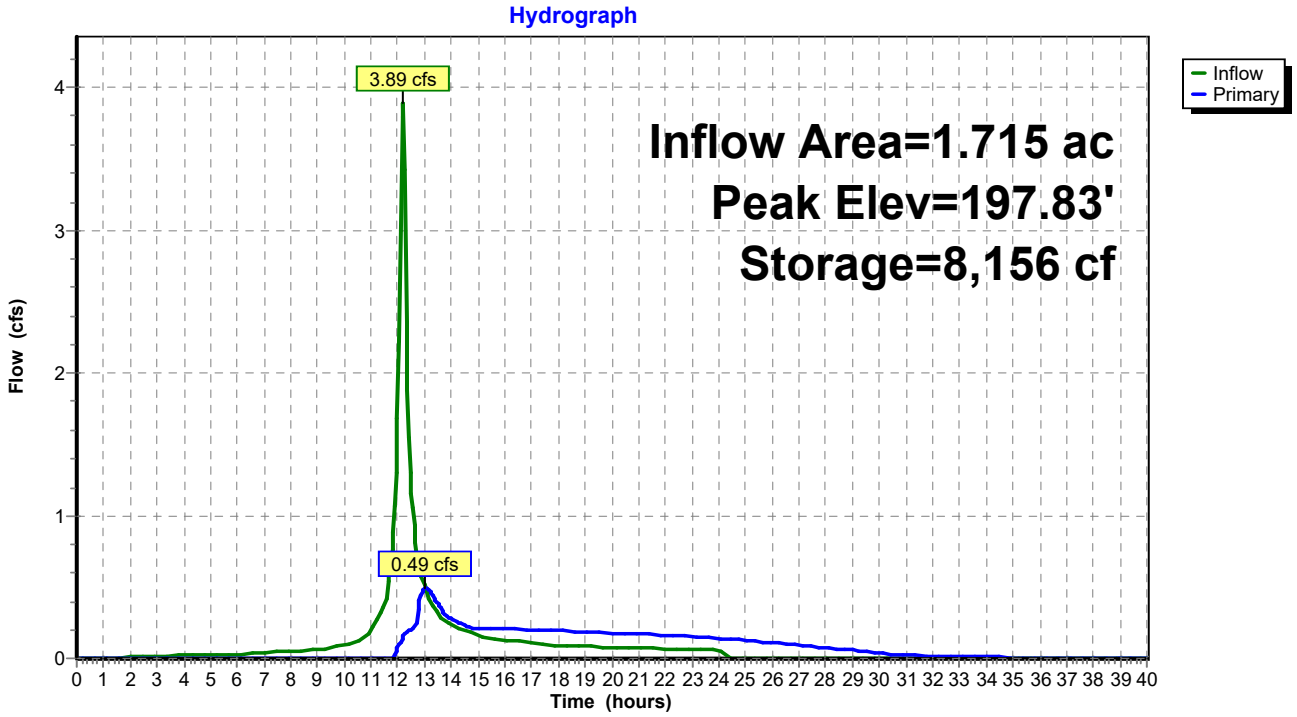
Volume	Invert	Avail.Storage	Storage Description
#1	194.65'	12,982 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
194.65	0	0	0
195.00	1,916	335	335
196.00	2,490	2,203	2,538
197.00	3,119	2,805	5,343
198.00	3,806	3,463	8,805
199.00	4,548	4,177	12,982

Device	Routing	Invert	Outlet Devices
#1	Primary	194.30'	**18.0" Round Culvert** L= 136.0' Ke= 0.500 Inlet / Outlet Invert= 194.30' / 185.86' S= 0.0621 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	196.00'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	197.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	198.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.49 cfs @ 13.03 hrs HW=197.83' (Free Discharge)
- **1=Culvert** (Passes 0.49 cfs of 14.18 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.22 cfs @ 6.32 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.28 cfs @ 0.90 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-19: Basin #19



Stage-Discharge for Pond B-19: Basin #19

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.65	0.00	195.17	0.00	195.69	0.00	196.21	0.05
194.66	0.00	195.18	0.00	195.70	0.00	196.22	0.06
194.67	0.00	195.19	0.00	195.71	0.00	196.23	0.06
194.68	0.00	195.20	0.00	195.72	0.00	196.24	0.06
194.69	0.00	195.21	0.00	195.73	0.00	196.25	0.06
194.70	0.00	195.22	0.00	195.74	0.00	196.26	0.06
194.71	0.00	195.23	0.00	195.75	0.00	196.27	0.07
194.72	0.00	195.24	0.00	195.76	0.00	196.28	0.07
194.73	0.00	195.25	0.00	195.77	0.00	196.29	0.07
194.74	0.00	195.26	0.00	195.78	0.00	196.30	0.07
194.75	0.00	195.27	0.00	195.79	0.00	196.31	0.07
194.76	0.00	195.28	0.00	195.80	0.00	196.32	0.08
194.77	0.00	195.29	0.00	195.81	0.00	196.33	0.08
194.78	0.00	195.30	0.00	195.82	0.00	196.34	0.08
194.79	0.00	195.31	0.00	195.83	0.00	196.35	0.08
194.80	0.00	195.32	0.00	195.84	0.00	196.36	0.08
194.81	0.00	195.33	0.00	195.85	0.00	196.37	0.08
194.82	0.00	195.34	0.00	195.86	0.00	196.38	0.09
194.83	0.00	195.35	0.00	195.87	0.00	196.39	0.09
194.84	0.00	195.36	0.00	195.88	0.00	196.40	0.09
194.85	0.00	195.37	0.00	195.89	0.00	196.41	0.09
194.86	0.00	195.38	0.00	195.90	0.00	196.42	0.09
194.87	0.00	195.39	0.00	195.91	0.00	196.43	0.09
194.88	0.00	195.40	0.00	195.92	0.00	196.44	0.10
194.89	0.00	195.41	0.00	195.93	0.00	196.45	0.10
194.90	0.00	195.42	0.00	195.94	0.00	196.46	0.10
194.91	0.00	195.43	0.00	195.95	0.00	196.47	0.10
194.92	0.00	195.44	0.00	195.96	0.00	196.48	0.10
194.93	0.00	195.45	0.00	195.97	0.00	196.49	0.10
194.94	0.00	195.46	0.00	195.98	0.00	196.50	0.10
194.95	0.00	195.47	0.00	195.99	0.00	196.51	0.10
194.96	0.00	195.48	0.00	196.00	0.00	196.52	0.11
194.97	0.00	195.49	0.00	196.01	0.00	196.53	0.11
194.98	0.00	195.50	0.00	196.02	0.00	196.54	0.11
194.99	0.00	195.51	0.00	196.03	0.00	196.55	0.11
195.00	0.00	195.52	0.00	196.04	0.00	196.56	0.11
195.01	0.00	195.53	0.00	196.05	0.00	196.57	0.11
195.02	0.00	195.54	0.00	196.06	0.01	196.58	0.11
195.03	0.00	195.55	0.00	196.07	0.01	196.59	0.11
195.04	0.00	195.56	0.00	196.08	0.01	196.60	0.12
195.05	0.00	195.57	0.00	196.09	0.01	196.61	0.12
195.06	0.00	195.58	0.00	196.10	0.02	196.62	0.12
195.07	0.00	195.59	0.00	196.11	0.02	196.63	0.12
195.08	0.00	195.60	0.00	196.12	0.02	196.64	0.12
195.09	0.00	195.61	0.00	196.13	0.03	196.65	0.12
195.10	0.00	195.62	0.00	196.14	0.03	196.66	0.12
195.11	0.00	195.63	0.00	196.15	0.03	196.67	0.12
195.12	0.00	195.64	0.00	196.16	0.04	196.68	0.12
195.13	0.00	195.65	0.00	196.17	0.04	196.69	0.13
195.14	0.00	195.66	0.00	196.18	0.05	196.70	0.13
195.15	0.00	195.67	0.00	196.19	0.05	196.71	0.13
195.16	0.00	195.68	0.00	196.20	0.05	196.72	0.13

Stage-Discharge for Pond B-19: Basin #19 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.73	0.13	197.25	0.18	197.77	0.25	198.29	5.29
196.74	0.13	197.26	0.18	197.78	0.28	198.30	5.43
196.75	0.13	197.27	0.18	197.79	0.32	198.31	5.57
196.76	0.13	197.28	0.18	197.80	0.36	198.32	5.71
196.77	0.13	197.29	0.18	197.81	0.41	198.33	5.85
196.78	0.13	197.30	0.18	197.82	0.46	198.34	6.00
196.79	0.14	197.31	0.18	197.83	0.51	198.35	6.14
196.80	0.14	197.32	0.18	197.84	0.57	198.36	6.29
196.81	0.14	197.33	0.18	197.85	0.63	198.37	6.43
196.82	0.14	197.34	0.18	197.86	0.69	198.38	6.58
196.83	0.14	197.35	0.18	197.87	0.76	198.39	6.73
196.84	0.14	197.36	0.18	197.88	0.83	198.40	6.88
196.85	0.14	197.37	0.18	197.89	0.90	198.41	7.03
196.86	0.14	197.38	0.19	197.90	0.97	198.42	7.18
196.87	0.14	197.39	0.19	197.91	1.05	198.43	7.34
196.88	0.14	197.40	0.19	197.92	1.13	198.44	7.49
196.89	0.15	197.41	0.19	197.93	1.21	198.45	7.64
196.90	0.15	197.42	0.19	197.94	1.30	198.46	7.80
196.91	0.15	197.43	0.19	197.95	1.38	198.47	7.96
196.92	0.15	197.44	0.19	197.96	1.47	198.48	8.11
196.93	0.15	197.45	0.19	197.97	1.56	198.49	8.27
196.94	0.15	197.46	0.19	197.98	1.65	198.50	8.43
196.95	0.15	197.47	0.19	197.99	1.74	198.51	8.59
196.96	0.15	197.48	0.19	198.00	1.84	198.52	8.75
196.97	0.15	197.49	0.19	198.01	1.94	198.53	8.91
196.98	0.15	197.50	0.19	198.02	2.04	198.54	9.08
196.99	0.15	197.51	0.19	198.03	2.14	198.55	9.24
197.00	0.16	197.52	0.20	198.04	2.24	198.56	9.41
197.01	0.16	197.53	0.20	198.05	2.35	198.57	9.57
197.02	0.16	197.54	0.20	198.06	2.45	198.58	9.74
197.03	0.16	197.55	0.20	198.07	2.56	198.59	9.91
197.04	0.16	197.56	0.20	198.08	2.67	198.60	10.07
197.05	0.16	197.57	0.20	198.09	2.78	198.61	10.24
197.06	0.16	197.58	0.20	198.10	2.89	198.62	10.41
197.07	0.16	197.59	0.20	198.11	3.01	198.63	10.58
197.08	0.16	197.60	0.20	198.12	3.12	198.64	10.75
197.09	0.16	197.61	0.20	198.13	3.24	198.65	10.93
197.10	0.16	197.62	0.20	198.14	3.36	198.66	11.10
197.11	0.16	197.63	0.20	198.15	3.48	198.67	11.27
197.12	0.17	197.64	0.20	198.16	3.60	198.68	11.45
197.13	0.17	197.65	0.20	198.17	3.72	198.69	11.62
197.14	0.17	197.66	0.20	198.18	3.85	198.70	11.80
197.15	0.17	197.67	0.21	198.19	3.97	198.71	11.98
197.16	0.17	197.68	0.21	198.20	4.10	198.72	12.16
197.17	0.17	197.69	0.21	198.21	4.23	198.73	12.33
197.18	0.17	197.70	0.21	198.22	4.35	198.74	12.51
197.19	0.17	197.71	0.21	198.23	4.48	198.75	12.69
197.20	0.17	197.72	0.21	198.24	4.62	198.76	12.87
197.21	0.17	197.73	0.21	198.25	4.75	198.77	13.06
197.22	0.17	197.74	0.21	198.26	4.88	198.78	13.24
197.23	0.17	197.75	0.21	198.27	5.02	198.79	13.42
197.24	0.17	197.76	0.22	198.28	5.16	198.80	13.60

Stage-Discharge for Pond B-19: Basin #19 (continued)

Elevation (feet)	Primary (cfs)
198.81	13.79
198.82	13.97
198.83	14.16
198.84	14.35
198.85	14.53
198.86	14.72
198.87	14.91
198.88	15.10
198.89	15.29
198.90	15.48
198.91	15.67
198.92	15.86
198.93	16.05
198.94	16.25
198.95	16.44
198.96	16.75
198.97	17.16
198.98	17.48
198.99	17.83
199.00	**18.22**

Stage-Area-Storage for Pond B-19: Basin #19

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.65	0	0	195.17	2,014	669
194.66	55	0	195.18	2,019	689
194.67	109	1	195.19	2,025	710
194.68	164	2	195.20	2,031	730
194.69	219	4	195.21	2,037	750
194.70	274	7	195.22	2,042	771
194.71	328	10	195.23	2,048	791
194.72	383	13	195.24	2,054	812
194.73	438	18	195.25	2,060	832
194.74	493	22	195.26	2,065	853
194.75	547	27	195.27	2,071	874
194.76	602	33	195.28	2,077	894
194.77	657	39	195.29	2,082	915
194.78	712	46	195.30	2,088	936
194.79	766	54	195.31	2,094	957
194.80	821	62	195.32	2,100	978
194.81	876	70	195.33	2,105	999
194.82	931	79	195.34	2,111	1,020
194.83	985	89	195.35	2,117	1,041
194.84	1,040	99	195.36	2,123	1,062
194.85	1,095	109	195.37	2,128	1,084
194.86	1,150	121	195.38	2,134	1,105
194.87	1,204	132	195.39	2,140	1,126
194.88	1,259	145	195.40	2,146	1,148
194.89	1,314	158	195.41	2,151	1,169
194.90	1,369	171	195.42	2,157	1,191
194.91	1,423	185	195.43	2,163	1,212
194.92	1,478	200	195.44	2,169	1,234
194.93	1,533	215	195.45	2,174	1,256
194.94	1,588	230	195.46	2,180	1,277
194.95	1,642	246	195.47	2,186	1,299
194.96	1,697	263	195.48	2,192	1,321
194.97	1,752	280	195.49	2,197	1,343
194.98	1,807	298	195.50	2,203	1,365
194.99	1,861	316	195.51	2,209	1,387
195.00	1,916	335	195.52	2,214	1,409
195.01	1,922	354	195.53	2,220	1,431
195.02	1,927	374	195.54	2,226	1,454
195.03	1,933	393	195.55	2,232	1,476
195.04	1,939	412	195.56	2,237	1,498
195.05	1,945	432	195.57	2,243	1,521
195.06	1,950	451	195.58	2,249	1,543
195.07	1,956	471	195.59	2,255	1,566
195.08	1,962	490	195.60	2,260	1,588
195.09	1,968	510	195.61	2,266	1,611
195.10	1,973	530	195.62	2,272	1,634
195.11	1,979	550	195.63	2,278	1,656
195.12	1,985	569	195.64	2,283	1,679
195.13	1,991	589	195.65	2,289	1,702
195.14	1,996	609	195.66	2,295	1,725
195.15	2,002	629	195.67	2,301	1,748
195.16	2,008	649	195.68	2,306	1,771

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.69	2,312	1,794	196.21	2,622	3,075
195.70	2,318	1,817	196.22	2,628	3,101
195.71	2,324	1,840	196.23	2,635	3,128
195.72	2,329	1,864	196.24	2,641	3,154
195.73	2,335	1,887	196.25	2,647	3,180
195.74	2,341	1,910	196.26	2,654	3,207
195.75	2,347	1,934	196.27	2,660	3,234
195.76	2,352	1,957	196.28	2,666	3,260
195.77	2,358	1,981	196.29	2,672	3,287
195.78	2,364	2,004	196.30	2,679	3,314
195.79	2,369	2,028	196.31	2,685	3,340
195.80	2,375	2,052	196.32	2,691	3,367
195.81	2,381	2,076	196.33	2,698	3,394
195.82	2,387	2,099	196.34	2,704	3,421
195.83	2,392	2,123	196.35	2,710	3,448
195.84	2,398	2,147	196.36	2,716	3,475
195.85	2,404	2,171	196.37	2,723	3,503
195.86	2,410	2,195	196.38	2,729	3,530
195.87	2,415	2,219	196.39	2,735	3,557
195.88	2,421	2,244	196.40	2,742	3,585
195.89	2,427	2,268	196.41	2,748	3,612
195.90	2,433	2,292	196.42	2,754	3,640
195.91	2,438	2,317	196.43	2,760	3,667
195.92	2,444	2,341	196.44	2,767	3,695
195.93	2,450	2,365	196.45	2,773	3,722
195.94	2,456	2,390	196.46	2,779	3,750
195.95	2,461	2,415	196.47	2,786	3,778
195.96	2,467	2,439	196.48	2,792	3,806
195.97	2,473	2,464	196.49	2,798	3,834
195.98	2,479	2,489	196.50	2,805	3,862
195.99	2,484	2,513	196.51	2,811	3,890
196.00	2,490	2,538	196.52	2,817	3,918
196.01	2,496	2,563	196.53	2,823	3,946
196.02	2,503	2,588	196.54	2,830	3,975
196.03	2,509	2,613	196.55	2,836	4,003
196.04	2,515	2,638	196.56	2,842	4,031
196.05	2,521	2,664	196.57	2,849	4,060
196.06	2,528	2,689	196.58	2,855	4,088
196.07	2,534	2,714	196.59	2,861	4,117
196.08	2,540	2,740	196.60	2,867	4,146
196.09	2,547	2,765	196.61	2,874	4,174
196.10	2,553	2,790	196.62	2,880	4,203
196.11	2,559	2,816	196.63	2,886	4,232
196.12	2,565	2,842	196.64	2,893	4,261
196.13	2,572	2,867	196.65	2,899	4,290
196.14	2,578	2,893	196.66	2,905	4,319
196.15	2,584	2,919	196.67	2,911	4,348
196.16	2,591	2,945	196.68	2,918	4,377
196.17	2,597	2,971	196.69	2,924	4,406
196.18	2,603	2,997	196.70	2,930	4,435
196.19	2,610	3,023	196.71	2,937	4,465
196.20	2,616	3,049	196.72	2,943	4,494

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.73	2,949	4,524	197.25	3,291	6,144
196.74	2,955	4,553	197.26	3,298	6,177
196.75	2,962	4,583	197.27	3,304	6,210
196.76	2,968	4,612	197.28	3,311	6,243
196.77	2,974	4,642	197.29	3,318	6,276
196.78	2,981	4,672	197.30	3,325	6,309
196.79	2,987	4,702	197.31	3,332	6,343
196.80	2,993	4,732	197.32	3,339	6,376
196.81	2,999	4,762	197.33	3,346	6,409
196.82	3,006	4,792	197.34	3,353	6,443
196.83	3,012	4,822	197.35	3,359	6,477
196.84	3,018	4,852	197.36	3,366	6,510
196.85	3,025	4,882	197.37	3,373	6,544
196.86	3,031	4,912	197.38	3,380	6,578
196.87	3,037	4,943	197.39	3,387	6,611
196.88	3,044	4,973	197.40	3,394	6,645
196.89	3,050	5,004	197.41	3,401	6,679
196.90	3,056	5,034	197.42	3,408	6,713
196.91	3,062	5,065	197.43	3,414	6,747
196.92	3,069	5,095	197.44	3,421	6,782
196.93	3,075	5,126	197.45	3,428	6,816
196.94	3,081	5,157	197.46	3,435	6,850
196.95	3,088	5,188	197.47	3,442	6,885
196.96	3,094	5,219	197.48	3,449	6,919
196.97	3,100	5,250	197.49	3,456	6,954
196.98	3,106	5,281	197.50	3,463	6,988
196.99	3,113	5,312	197.51	3,469	7,023
197.00	3,119	5,343	197.52	3,476	7,058
197.01	3,126	5,374	197.53	3,483	7,092
197.02	3,133	5,405	197.54	3,490	7,127
197.03	3,140	5,437	197.55	3,497	7,162
197.04	3,146	5,468	197.56	3,504	7,197
197.05	3,153	5,500	197.57	3,511	7,232
197.06	3,160	5,531	197.58	3,517	7,267
197.07	3,167	5,563	197.59	3,524	7,303
197.08	3,174	5,595	197.60	3,531	7,338
197.09	3,181	5,626	197.61	3,538	7,373
197.10	3,188	5,658	197.62	3,545	7,409
197.11	3,195	5,690	197.63	3,552	7,444
197.12	3,201	5,722	197.64	3,559	7,480
197.13	3,208	5,754	197.65	3,566	7,515
197.14	3,215	5,786	197.66	3,572	7,551
197.15	3,222	5,818	197.67	3,579	7,587
197.16	3,229	5,851	197.68	3,586	7,623
197.17	3,236	5,883	197.69	3,593	7,658
197.18	3,243	5,915	197.70	3,600	7,694
197.19	3,250	5,948	197.71	3,607	7,730
197.20	3,256	5,980	197.72	3,614	7,767
197.21	3,263	6,013	197.73	3,621	7,803
197.22	3,270	6,046	197.74	3,627	7,839
197.23	3,277	6,078	197.75	3,634	7,875
197.24	3,284	6,111	197.76	3,641	7,912

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.77	3,648	7,948	198.29	4,021	9,940
197.78	3,655	7,985	198.30	4,029	9,980
197.79	3,662	8,021	198.31	4,036	10,021
197.80	3,669	8,058	198.32	4,043	10,061
197.81	3,675	8,095	198.33	4,051	10,102
197.82	3,682	8,131	198.34	4,058	10,142
197.83	3,689	8,168	198.35	4,066	10,183
197.84	3,696	8,205	198.36	4,073	10,224
197.85	3,703	8,242	198.37	4,081	10,264
197.86	3,710	8,279	198.38	4,088	10,305
197.87	3,717	8,316	198.39	4,095	10,346
197.88	3,724	8,354	198.40	4,103	10,387
197.89	3,730	8,391	198.41	4,110	10,428
197.90	3,737	8,428	198.42	4,118	10,469
197.91	3,744	8,466	198.43	4,125	10,510
197.92	3,751	8,503	198.44	4,132	10,552
197.93	3,758	8,541	198.45	4,140	10,593
197.94	3,765	8,578	198.46	4,147	10,635
197.95	3,772	8,616	198.47	4,155	10,676
197.96	3,779	8,654	198.48	4,162	10,718
197.97	3,785	8,691	198.49	4,170	10,759
197.98	3,792	8,729	198.50	4,177	10,801
197.99	3,799	8,767	198.51	4,184	10,843
198.00	3,806	8,805	198.52	4,192	10,885
198.01	3,813	8,843	198.53	4,199	10,927
198.02	3,821	8,882	198.54	4,207	10,969
198.03	3,828	8,920	198.55	4,214	11,011
198.04	3,836	8,958	198.56	4,222	11,053
198.05	3,843	8,997	198.57	4,229	11,095
198.06	3,851	9,035	198.58	4,236	11,138
198.07	3,858	9,074	198.59	4,244	11,180
198.08	3,865	9,112	198.60	4,251	11,222
198.09	3,873	9,151	198.61	4,259	11,265
198.10	3,880	9,190	198.62	4,266	11,308
198.11	3,888	9,228	198.63	4,273	11,350
198.12	3,895	9,267	198.64	4,281	11,393
198.13	3,902	9,306	198.65	4,288	11,436
198.14	3,910	9,345	198.66	4,296	11,479
198.15	3,917	9,385	198.67	4,303	11,522
198.16	3,925	9,424	198.68	4,311	11,565
198.17	3,932	9,463	198.69	4,318	11,608
198.18	3,940	9,502	198.70	4,325	11,651
198.19	3,947	9,542	198.71	4,333	11,695
198.20	3,954	9,581	198.72	4,340	11,738
198.21	3,962	9,621	198.73	4,348	11,781
198.22	3,969	9,661	198.74	4,355	11,825
198.23	3,977	9,700	198.75	4,363	11,868
198.24	3,984	9,740	198.76	4,370	11,912
198.25	3,992	9,780	198.77	4,377	11,956
198.26	3,999	9,820	198.78	4,385	12,000
198.27	4,006	9,860	198.79	4,392	12,044
198.28	4,014	9,900	198.80	4,400	12,088

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.81	4,407	12,132
198.82	4,414	12,176
198.83	4,422	12,220
198.84	4,429	12,264
198.85	4,437	12,308
198.86	4,444	12,353
198.87	4,452	12,397
198.88	4,459	12,442
198.89	4,466	12,487
198.90	4,474	12,531
198.91	4,481	12,576
198.92	4,489	12,621
198.93	4,496	12,666
198.94	4,503	12,711
198.95	4,511	12,756
198.96	4,518	12,801
198.97	4,526	12,846
198.98	4,533	12,891
198.99	4,541	12,937
199.00	**4,548**	**12,982**

Summary for Pond B-20: Basin #20

Inflow Area = 2.453 ac, 46.07% Impervious, Inflow Depth = 2.47" for Future 2 yr event
Inflow = 6.08 cfs @ 12.17 hrs, Volume= 0.504 af
Outflow = 0.92 cfs @ 12.82 hrs, Volume= 0.376 af, Atten= 85%, Lag= 38.7 min
Primary = 0.92 cfs @ 12.82 hrs, Volume= 0.376 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 152.90' @ 12.82 hrs Surf.Area= 7,432 sf Storage= 13,054 cf

Plug-Flow detention time= 559.8 min calculated for 0.376 af (74% of inflow)
Center-of-Mass det. time= 466.5 min (1,256.7 - 790.2)

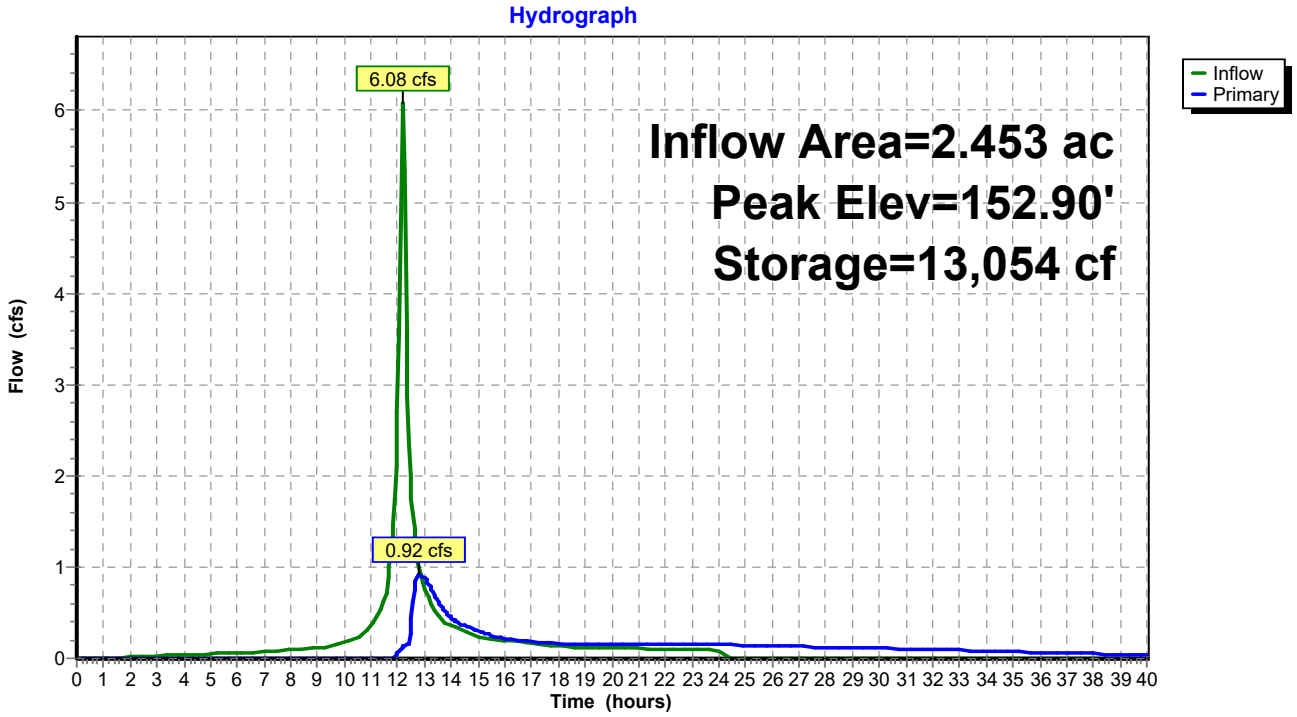
Volume	Invert	Avail.Storage	Storage Description
#1	150.87'	35,230 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
150.87	0	0	0
151.00	5,926	385	385
152.00	6,706	6,316	6,701
153.00	7,514	7,110	13,811
154.00	8,347	7,931	21,742
155.00	9,205	8,776	30,518
155.50	9,643	4,712	35,230

Device	Routing	Invert	Outlet Devices
#1	Primary	151.00'	**18.0" Round Culvert** L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 151.00' / 150.71' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	151.68'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	152.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	154.32'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.92 cfs @ 12.82 hrs HW=152.90' (Free Discharge)
- **1=Culvert** (Passes 0.92 cfs of 8.73 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 5.08 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.74 cfs @ 1.26 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-20: Basin #20



Stage-Discharge for Pond B-20: Basin #20

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
150.87	0.00	151.39	0.00	151.91	0.06	152.43	0.13
150.88	0.00	151.40	0.00	151.92	0.06	152.44	0.13
150.89	0.00	151.41	0.00	151.93	0.06	152.45	0.13
150.90	0.00	151.42	0.00	151.94	0.06	152.46	0.13
150.91	0.00	151.43	0.00	151.95	0.07	152.47	0.14
150.92	0.00	151.44	0.00	151.96	0.07	152.48	0.14
150.93	0.00	151.45	0.00	151.97	0.07	152.49	0.14
150.94	0.00	151.46	0.00	151.98	0.07	152.50	0.14
150.95	0.00	151.47	0.00	151.99	0.07	152.51	0.14
150.96	0.00	151.48	0.00	152.00	0.08	152.52	0.14
150.97	0.00	151.49	0.00	152.01	0.08	152.53	0.14
150.98	0.00	151.50	0.00	152.02	0.08	152.54	0.14
150.99	0.00	151.51	0.00	152.03	0.08	152.55	0.14
151.00	0.00	151.52	0.00	152.04	0.08	152.56	0.14
151.01	0.00	151.53	0.00	152.05	0.08	152.57	0.15
151.02	0.00	151.54	0.00	152.06	0.09	152.58	0.15
151.03	0.00	151.55	0.00	152.07	0.09	152.59	0.15
151.04	0.00	151.56	0.00	152.08	0.09	152.60	0.15
151.05	0.00	151.57	0.00	152.09	0.09	152.61	0.15
151.06	0.00	151.58	0.00	152.10	0.09	152.62	0.15
151.07	0.00	151.59	0.00	152.11	0.09	152.63	0.15
151.08	0.00	151.60	0.00	152.12	0.10	152.64	0.15
151.09	0.00	151.61	0.00	152.13	0.10	152.65	0.15
151.10	0.00	151.62	0.00	152.14	0.10	152.66	0.15
151.11	0.00	151.63	0.00	152.15	0.10	152.67	0.15
151.12	0.00	151.64	0.00	152.16	0.10	152.68	0.16
151.13	0.00	151.65	0.00	152.17	0.10	152.69	0.16
151.14	0.00	151.66	0.00	152.18	0.10	152.70	0.16
151.15	0.00	151.67	0.00	152.19	0.10	152.71	0.16
151.16	0.00	151.68	0.00	152.20	0.11	152.72	0.16
151.17	0.00	151.69	0.00	152.21	0.11	152.73	0.16
151.18	0.00	151.70	0.00	152.22	0.11	152.74	0.16
151.19	0.00	151.71	0.00	152.23	0.11	152.75	0.16
151.20	0.00	151.72	0.00	152.24	0.11	152.76	0.18
151.21	0.00	151.73	0.00	152.25	0.11	152.77	0.20
151.22	0.00	151.74	0.01	152.26	0.11	152.78	0.23
151.23	0.00	151.75	0.01	152.27	0.11	152.79	0.27
151.24	0.00	151.76	0.01	152.28	0.12	152.80	0.31
151.25	0.00	151.77	0.01	152.29	0.12	152.81	0.36
151.26	0.00	151.78	0.02	152.30	0.12	152.82	0.41
151.27	0.00	151.79	0.02	152.31	0.12	152.83	0.46
151.28	0.00	151.80	0.02	152.32	0.12	152.84	0.52
151.29	0.00	151.81	0.03	152.33	0.12	152.85	0.58
151.30	0.00	151.82	0.03	152.34	0.12	152.86	0.64
151.31	0.00	151.83	0.03	152.35	0.12	152.87	0.71
151.32	0.00	151.84	0.04	152.36	0.12	152.88	0.78
151.33	0.00	151.85	0.04	152.37	0.13	152.89	0.85
151.34	0.00	151.86	0.05	152.38	0.13	152.90	0.93
151.35	0.00	151.87	0.05	152.39	0.13	152.91	1.00
151.36	0.00	151.88	0.05	152.40	0.13	152.92	1.08
151.37	0.00	151.89	0.05	152.41	0.13	152.93	1.17
151.38	0.00	151.90	0.06	152.42	0.13	152.94	1.25

Stage-Discharge for Pond B-20: Basin #20 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
152.95	1.34	153.47	7.92	153.99	12.73	154.51	23.91
152.96	1.42	153.48	8.07	154.00	12.76	154.52	24.73
152.97	1.51	153.49	8.23	154.01	12.79	154.53	25.60
152.98	1.61	153.50	8.39	154.02	12.82	154.54	26.50
152.99	1.70	153.51	8.55	154.03	12.85	154.55	27.42
153.00	1.80	153.52	8.71	154.04	12.88	154.56	28.37
153.01	1.89	153.53	8.88	154.05	12.90	154.57	29.34
153.02	1.99	153.54	9.04	154.06	12.93	154.58	30.34
153.03	2.09	153.55	9.20	154.07	12.96	154.59	31.36
153.04	2.20	153.56	9.37	154.08	12.99	154.60	32.41
153.05	2.30	153.57	9.53	154.09	13.02	154.61	33.49
153.06	2.41	153.58	9.70	154.10	13.04	154.62	34.58
153.07	2.52	153.59	9.87	154.11	13.07	154.63	35.71
153.08	2.63	153.60	10.04	154.12	13.10	154.64	36.85
153.09	2.74	153.61	10.20	154.13	13.13	154.65	38.02
153.10	2.85	153.62	10.37	154.14	13.15	154.66	39.22
153.11	2.96	153.63	10.55	154.15	13.18	154.67	40.44
153.12	3.08	153.64	10.72	154.16	13.21	154.68	41.68
153.13	3.20	153.65	10.89	154.17	13.24	154.69	42.95
153.14	3.31	153.66	11.06	154.18	13.26	154.70	44.24
153.15	3.43	153.67	11.24	154.19	13.29	154.71	45.55
153.16	3.56	153.68	11.41	154.20	13.32	154.72	46.89
153.17	3.68	153.69	11.59	154.21	13.35	154.73	48.28
153.18	3.80	153.70	11.76	154.22	13.37	154.74	49.70
153.19	3.93	153.71	11.91	154.23	13.40	154.75	51.14
153.20	4.05	153.72	11.94	154.24	13.43	154.76	52.61
153.21	4.18	153.73	11.97	154.25	13.45	154.77	54.11
153.22	4.31	153.74	12.00	154.26	13.48	154.78	55.63
153.23	4.44	153.75	12.03	154.27	13.51	154.79	57.17
153.24	4.57	153.76	12.06	154.28	13.53	154.80	58.75
153.25	4.71	153.77	12.09	154.29	13.56	154.81	60.35
153.26	4.84	153.78	12.12	154.30	13.59	154.82	61.97
153.27	4.98	153.79	12.15	154.31	13.61	154.83	63.63
153.28	5.11	153.80	12.18	154.32	13.64	154.84	65.31
153.29	5.25	153.81	12.21	154.33	13.78	154.85	67.01
153.30	5.39	153.82	12.24	154.34	14.02	154.86	68.74
153.31	5.53	153.83	12.27	154.35	14.33	154.87	70.50
153.32	5.67	153.84	12.30	154.36	14.68	154.88	72.29
153.33	5.81	153.85	12.33	154.37	15.08	154.89	74.10
153.34	5.96	153.86	12.36	154.38	15.52	154.90	75.94
153.35	6.10	153.87	12.39	154.39	16.00	154.91	77.81
153.36	6.25	153.88	12.42	154.40	16.51	154.92	79.70
153.37	6.39	153.89	12.45	154.41	17.05	154.93	81.35
153.38	6.54	153.90	12.48	154.42	17.62	154.94	83.01
153.39	6.69	153.91	12.51	154.43	18.22	154.95	84.69
153.40	6.84	153.92	12.53	154.44	18.85	154.96	86.38
153.41	6.99	153.93	12.56	154.45	19.50	154.97	88.09
153.42	7.14	153.94	12.59	154.46	20.18	154.98	89.80
153.43	7.30	153.95	12.62	154.47	20.88	154.99	91.54
153.44	7.45	153.96	12.65	154.48	21.60	155.00	93.28
153.45	7.60	153.97	12.68	154.49	22.35	155.01	95.04
153.46	7.76	153.98	12.71	154.50	23.12	155.02	96.80

Stage-Discharge for Pond B-20: Basin #20 (continued)

Elevation (feet)	Primary (cfs)
155.03	98.59
155.04	100.38
155.05	102.19
155.06	104.01
155.07	105.84
155.08	107.69
155.09	109.54
155.10	111.41
155.11	113.29
155.12	115.18
155.13	117.13
155.14	119.08
155.15	121.05
155.16	123.03
155.17	125.03
155.18	127.04
155.19	129.06
155.20	131.10
155.21	133.14
155.22	135.20
155.23	137.28
155.24	139.36
155.25	141.46
155.26	143.57
155.27	145.70
155.28	147.84
155.29	149.99
155.30	152.15
155.31	154.32
155.32	156.51
155.33	158.66
155.34	160.81
155.35	162.98
155.36	165.16
155.37	167.35
155.38	169.55
155.39	171.76
155.40	173.98
155.41	176.21
155.42	178.45
155.43	180.70
155.44	182.96
155.45	185.24
155.46	187.52
155.47	189.81
155.48	192.11
155.49	194.43
155.50	**196.75**

Stage-Area-Storage for Pond B-20: Basin #20

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.87	0	0	151.39	6,230	2,756
150.88	456	2	151.40	6,238	2,818
150.89	912	9	151.41	6,246	2,880
150.90	1,368	21	151.42	6,254	2,943
150.91	1,823	36	151.43	6,261	3,005
150.92	2,279	57	151.44	6,269	3,068
150.93	2,735	82	151.45	6,277	3,131
150.94	3,191	112	151.46	6,285	3,194
150.95	3,647	146	151.47	6,293	3,257
150.96	4,103	185	151.48	6,300	3,320
150.97	4,558	228	151.49	6,308	3,383
150.98	5,014	276	151.50	6,316	3,446
150.99	5,470	328	151.51	6,324	3,509
151.00	5,926	385	151.52	6,332	3,572
151.01	5,934	444	151.53	6,339	3,636
151.02	5,942	504	151.54	6,347	3,699
151.03	5,949	563	151.55	6,355	3,762
151.04	5,957	623	151.56	6,363	3,826
151.05	5,965	682	151.57	6,371	3,890
151.06	5,973	742	151.58	6,378	3,953
151.07	5,981	802	151.59	6,386	4,017
151.08	5,988	862	151.60	6,394	4,081
151.09	5,996	922	151.61	6,402	4,145
151.10	6,004	982	151.62	6,410	4,209
151.11	6,012	1,042	151.63	6,417	4,273
151.12	6,020	1,102	151.64	6,425	4,338
151.13	6,027	1,162	151.65	6,433	4,402
151.14	6,035	1,222	151.66	6,441	4,466
151.15	6,043	1,283	151.67	6,449	4,531
151.16	6,051	1,343	151.68	6,456	4,595
151.17	6,059	1,404	151.69	6,464	4,660
151.18	6,066	1,465	151.70	6,472	4,724
151.19	6,074	1,525	151.71	6,480	4,789
151.20	6,082	1,586	151.72	6,488	4,854
151.21	6,090	1,647	151.73	6,495	4,919
151.22	6,098	1,708	151.74	6,503	4,984
151.23	6,105	1,769	151.75	6,511	5,049
151.24	6,113	1,830	151.76	6,519	5,114
151.25	6,121	1,891	151.77	6,527	5,179
151.26	6,129	1,952	151.78	6,534	5,245
151.27	6,137	2,014	151.79	6,542	5,310
151.28	6,144	2,075	151.80	6,550	5,376
151.29	6,152	2,137	151.81	6,558	5,441
151.30	6,160	2,198	151.82	6,566	5,507
151.31	6,168	2,260	151.83	6,573	5,572
151.32	6,176	2,321	151.84	6,581	5,638
151.33	6,183	2,383	151.85	6,589	5,704
151.34	6,191	2,445	151.86	6,597	5,770
151.35	6,199	2,507	151.87	6,605	5,836
151.36	6,207	2,569	151.88	6,612	5,902
151.37	6,215	2,631	151.89	6,620	5,968
151.38	6,222	2,693	151.90	6,628	6,034

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.91	6,636	6,101	152.43	7,053	9,659
151.92	6,644	6,167	152.44	7,062	9,730
151.93	6,651	6,234	152.45	7,070	9,801
151.94	6,659	6,300	152.46	7,078	9,871
151.95	6,667	6,367	152.47	7,086	9,942
151.96	6,675	6,434	152.48	7,094	10,013
151.97	6,683	6,500	152.49	7,102	10,084
151.98	6,690	6,567	152.50	7,110	10,155
151.99	6,698	6,634	152.51	7,118	10,226
152.00	6,706	6,701	152.52	7,126	10,298
152.01	6,714	6,768	152.53	7,134	10,369
152.02	6,722	6,835	152.54	7,142	10,440
152.03	6,730	6,903	152.55	7,150	10,512
152.04	6,738	6,970	152.56	7,158	10,583
152.05	6,746	7,038	152.57	7,167	10,655
152.06	6,754	7,105	152.58	7,175	10,727
152.07	6,763	7,173	152.59	7,183	10,798
152.08	6,771	7,240	152.60	7,191	10,870
152.09	6,779	7,308	152.61	7,199	10,942
152.10	6,787	7,376	152.62	7,207	11,014
152.11	6,795	7,444	152.63	7,215	11,086
152.12	6,803	7,512	152.64	7,223	11,159
152.13	6,811	7,580	152.65	7,231	11,231
152.14	6,819	7,648	152.66	7,239	11,303
152.15	6,827	7,716	152.67	7,247	11,376
152.16	6,835	7,784	152.68	7,255	11,448
152.17	6,843	7,853	152.69	7,264	11,521
152.18	6,851	7,921	152.70	7,272	11,593
152.19	6,860	7,990	152.71	7,280	11,666
152.20	6,868	8,059	152.72	7,288	11,739
152.21	6,876	8,127	152.73	7,296	11,812
152.22	6,884	8,196	152.74	7,304	11,885
152.23	6,892	8,265	152.75	7,312	11,958
152.24	6,900	8,334	152.76	7,320	12,031
152.25	6,908	8,403	152.77	7,328	12,104
152.26	6,916	8,472	152.78	7,336	12,178
152.27	6,924	8,541	152.79	7,344	12,251
152.28	6,932	8,611	152.80	7,352	12,325
152.29	6,940	8,680	152.81	7,360	12,398
152.30	6,948	8,749	152.82	7,369	12,472
152.31	6,956	8,819	152.83	7,377	12,545
152.32	6,965	8,888	152.84	7,385	12,619
152.33	6,973	8,958	152.85	7,393	12,693
152.34	6,981	9,028	152.86	7,401	12,767
152.35	6,989	9,098	152.87	7,409	12,841
152.36	6,997	9,168	152.88	7,417	12,915
152.37	7,005	9,238	152.89	7,425	12,990
152.38	7,013	9,308	152.90	7,433	13,064
152.39	7,021	9,378	152.91	7,441	13,138
152.40	7,029	9,448	152.92	7,449	13,213
152.41	7,037	9,519	152.93	7,457	13,287
152.42	7,045	9,589	152.94	7,466	13,362

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
152.95	7,474	13,437	153.47	7,906	17,435
152.96	7,482	13,511	153.48	7,914	17,514
152.97	7,490	13,586	153.49	7,922	17,593
152.98	7,498	13,661	153.50	7,931	17,672
152.99	7,506	13,736	153.51	7,939	17,752
153.00	7,514	13,811	153.52	7,947	17,831
153.01	7,522	13,886	153.53	7,955	17,911
153.02	7,531	13,962	153.54	7,964	17,990
153.03	7,539	14,037	153.55	7,972	18,070
153.04	7,547	14,112	153.56	7,980	18,150
153.05	7,556	14,188	153.57	7,989	18,229
153.06	7,564	14,264	153.58	7,997	18,309
153.07	7,572	14,339	153.59	8,005	18,389
153.08	7,581	14,415	153.60	8,014	18,470
153.09	7,589	14,491	153.61	8,022	18,550
153.10	7,597	14,567	153.62	8,030	18,630
153.11	7,606	14,643	153.63	8,039	18,710
153.12	7,614	14,719	153.64	8,047	18,791
153.13	7,622	14,795	153.65	8,055	18,871
153.14	7,631	14,871	153.66	8,064	18,952
153.15	7,639	14,948	153.67	8,072	19,033
153.16	7,647	15,024	153.68	8,080	19,113
153.17	7,656	15,101	153.69	8,089	19,194
153.18	7,664	15,177	153.70	8,097	19,275
153.19	7,672	15,254	153.71	8,105	19,356
153.20	7,681	15,331	153.72	8,114	19,437
153.21	7,689	15,407	153.73	8,122	19,518
153.22	7,697	15,484	153.74	8,130	19,600
153.23	7,706	15,561	153.75	8,139	19,681
153.24	7,714	15,639	153.76	8,147	19,762
153.25	7,722	15,716	153.77	8,155	19,844
153.26	7,731	15,793	153.78	8,164	19,926
153.27	7,739	15,870	153.79	8,172	20,007
153.28	7,747	15,948	153.80	8,180	20,089
153.29	7,756	16,025	153.81	8,189	20,171
153.30	7,764	16,103	153.82	8,197	20,253
153.31	7,772	16,181	153.83	8,205	20,335
153.32	7,781	16,258	153.84	8,214	20,417
153.33	7,789	16,336	153.85	8,222	20,499
153.34	7,797	16,414	153.86	8,230	20,581
153.35	7,806	16,492	153.87	8,239	20,664
153.36	7,814	16,570	153.88	8,247	20,746
153.37	7,822	16,648	153.89	8,255	20,829
153.38	7,831	16,727	153.90	8,264	20,911
153.39	7,839	16,805	153.91	8,272	20,994
153.40	7,847	16,883	153.92	8,280	21,077
153.41	7,856	16,962	153.93	8,289	21,159
153.42	7,864	17,041	153.94	8,297	21,242
153.43	7,872	17,119	153.95	8,305	21,325
153.44	7,881	17,198	153.96	8,314	21,408
153.45	7,889	17,277	153.97	8,322	21,492
153.46	7,897	17,356	153.98	8,330	21,575

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.99	8,339	21,658	154.51	8,785	26,110
154.00	8,347	21,742	154.52	8,793	26,198
154.01	8,356	21,825	154.53	8,802	26,286
154.02	8,364	21,909	154.54	8,810	26,374
154.03	8,373	21,992	154.55	8,819	26,462
154.04	8,381	22,076	154.56	8,827	26,551
154.05	8,390	22,160	154.57	8,836	26,639
154.06	8,398	22,244	154.58	8,845	26,727
154.07	8,407	22,328	154.59	8,853	26,816
154.08	8,416	22,412	154.60	8,862	26,904
154.09	8,424	22,496	154.61	8,870	26,993
154.10	8,433	22,581	154.62	8,879	27,082
154.11	8,441	22,665	154.63	8,888	27,171
154.12	8,450	22,750	154.64	8,896	27,259
154.13	8,459	22,834	154.65	8,905	27,348
154.14	8,467	22,919	154.66	8,913	27,438
154.15	8,476	23,003	154.67	8,922	27,527
154.16	8,484	23,088	154.68	8,930	27,616
154.17	8,493	23,173	154.69	8,939	27,705
154.18	8,501	23,258	154.70	8,948	27,795
154.19	8,510	23,343	154.71	8,956	27,884
154.20	8,519	23,428	154.72	8,965	27,974
154.21	8,527	23,513	154.73	8,973	28,064
154.22	8,536	23,599	154.74	8,982	28,153
154.23	8,544	23,684	154.75	8,991	28,243
154.24	8,553	23,770	154.76	8,999	28,333
154.25	8,562	23,855	154.77	9,008	28,423
154.26	8,570	23,941	154.78	9,016	28,513
154.27	8,579	24,027	154.79	9,025	28,604
154.28	8,587	24,112	154.80	9,033	28,694
154.29	8,596	24,198	154.81	9,042	28,784
154.30	8,604	24,284	154.82	9,051	28,875
154.31	8,613	24,370	154.83	9,059	28,965
154.32	8,622	24,457	154.84	9,068	29,056
154.33	8,630	24,543	154.85	9,076	29,147
154.34	8,639	24,629	154.86	9,085	29,237
154.35	8,647	24,716	154.87	9,093	29,328
154.36	8,656	24,802	154.88	9,102	29,419
154.37	8,664	24,889	154.89	9,111	29,510
154.38	8,673	24,975	154.90	9,119	29,601
154.39	8,682	25,062	154.91	9,128	29,693
154.40	8,690	25,149	154.92	9,136	29,784
154.41	8,699	25,236	154.93	9,145	29,875
154.42	8,707	25,323	154.94	9,154	29,967
154.43	8,716	25,410	154.95	9,162	30,059
154.44	8,725	25,497	154.96	9,171	30,150
154.45	8,733	25,585	154.97	9,179	30,242
154.46	8,742	25,672	154.98	9,188	30,334
154.47	8,750	25,760	154.99	9,196	30,426
154.48	8,759	25,847	155.00	9,205	30,518
154.49	8,767	25,935	155.01	9,214	30,610
154.50	8,776	26,022	155.02	9,223	30,702

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
155.03	9,231	30,794
155.04	9,240	30,887
155.05	9,249	30,979
155.06	9,258	31,072
155.07	9,266	31,164
155.08	9,275	31,257
155.09	9,284	31,350
155.10	9,293	31,443
155.11	9,301	31,536
155.12	9,310	31,629
155.13	9,319	31,722
155.14	9,328	31,815
155.15	9,336	31,908
155.16	9,345	32,002
155.17	9,354	32,095
155.18	9,363	32,189
155.19	9,371	32,282
155.20	9,380	32,376
155.21	9,389	32,470
155.22	9,398	32,564
155.23	9,406	32,658
155.24	9,415	32,752
155.25	9,424	32,846
155.26	9,433	32,941
155.27	9,442	33,035
155.28	9,450	33,129
155.29	9,459	33,224
155.30	9,468	33,319
155.31	9,477	33,413
155.32	9,485	33,508
155.33	9,494	33,603
155.34	9,503	33,698
155.35	9,512	33,793
155.36	9,520	33,888
155.37	9,529	33,984
155.38	9,538	34,079
155.39	9,547	34,174
155.40	9,555	34,270
155.41	9,564	34,365
155.42	9,573	34,461
155.43	9,582	34,557
155.44	9,590	34,653
155.45	9,599	34,749
155.46	9,608	34,845
155.47	9,617	34,941
155.48	9,625	35,037
155.49	9,634	35,133
155.50	**9,643**	**35,230**

Summary for Pond B-21: Basin #21

Inflow Area = 2.500 ac, 35.44% Impervious, Inflow Depth = 2.24" for Future 2 yr event
Inflow = 5.71 cfs @ 12.17 hrs, Volume= 0.467 af
Outflow = 0.21 cfs @ 15.49 hrs, Volume= 0.353 af, Atten= 96%, Lag= 198.7 min
Primary = 0.21 cfs @ 15.49 hrs, Volume= 0.353 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 152.33' @ 15.49 hrs Surf.Area= 7,105 sf Storage= 14,115 cf

Plug-Flow detention time= 717.6 min calculated for 0.353 af (76% of inflow)
Center-of-Mass det. time= 623.6 min (1,424.3 - 800.6)

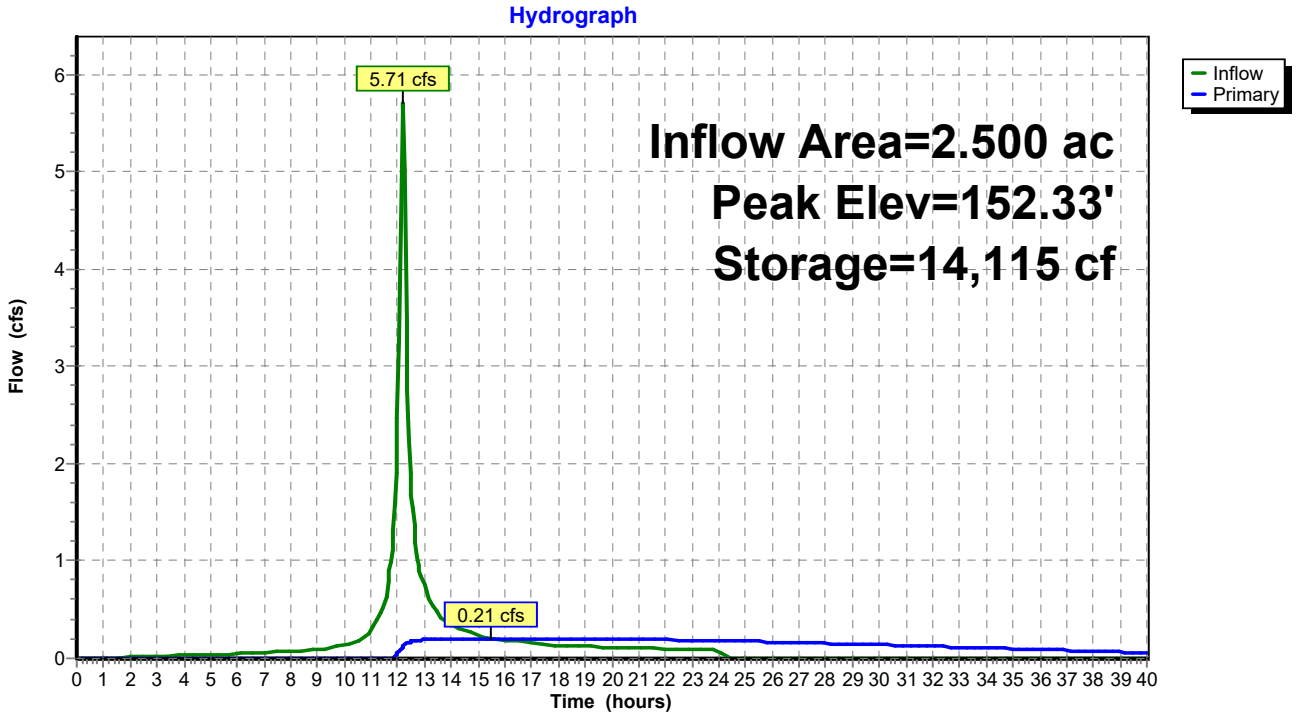
Volume	Invert	Avail.Storage	Storage Description
#1	149.90'	42,109 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
149.90	0	0	0
150.00	4,848	242	242
151.00	5,776	5,312	5,554
152.00	6,761	6,269	11,823
153.00	7,802	7,282	19,104
154.00	8,900	8,351	27,455
155.00	10,054	9,477	36,932
155.50	10,653	5,177	42,109

Device	Routing	Invert	Outlet Devices
#1	Primary	149.30'	**18.0" Round Culvert** L= 24.0' Ke= 0.500 Inlet / Outlet Invert= 149.30' / 148.32' S= 0.0408 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	150.68'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	152.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	154.16'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.20 cfs @ 15.49 hrs HW=152.33' (Free Discharge)
- **1=Culvert** (Passes 0.20 cfs of 12.85 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.99 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.08 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-21: Basin #21



Stage-Discharge for Pond B-21: Basin #21

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
149.90	0.00	150.42	0.00	150.94	0.06	151.46	0.13
149.91	0.00	150.43	0.00	150.95	0.07	151.47	0.14
149.92	0.00	150.44	0.00	150.96	0.07	151.48	0.14
149.93	0.00	150.45	0.00	150.97	0.07	151.49	0.14
149.94	0.00	150.46	0.00	150.98	0.07	151.50	0.14
149.95	0.00	150.47	0.00	150.99	0.07	151.51	0.14
149.96	0.00	150.48	0.00	151.00	0.08	151.52	0.14
149.97	0.00	150.49	0.00	151.01	0.08	151.53	0.14
149.98	0.00	150.50	0.00	151.02	0.08	151.54	0.14
149.99	0.00	150.51	0.00	151.03	0.08	151.55	0.14
150.00	0.00	150.52	0.00	151.04	0.08	151.56	0.14
150.01	0.00	150.53	0.00	151.05	0.08	151.57	0.15
150.02	0.00	150.54	0.00	151.06	0.09	151.58	0.15
150.03	0.00	150.55	0.00	151.07	0.09	151.59	0.15
150.04	0.00	150.56	0.00	151.08	0.09	151.60	0.15
150.05	0.00	150.57	0.00	151.09	0.09	151.61	0.15
150.06	0.00	150.58	0.00	151.10	0.09	151.62	0.15
150.07	0.00	150.59	0.00	151.11	0.09	151.63	0.15
150.08	0.00	150.60	0.00	151.12	0.10	151.64	0.15
150.09	0.00	150.61	0.00	151.13	0.10	151.65	0.15
150.10	0.00	150.62	0.00	151.14	0.10	151.66	0.15
150.11	0.00	150.63	0.00	151.15	0.10	151.67	0.15
150.12	0.00	150.64	0.00	151.16	0.10	151.68	0.16
150.13	0.00	150.65	0.00	151.17	0.10	151.69	0.16
150.14	0.00	150.66	0.00	151.18	0.10	151.70	0.16
150.15	0.00	150.67	0.00	151.19	0.10	151.71	0.16
150.16	0.00	150.68	0.00	151.20	0.11	151.72	0.16
150.17	0.00	150.69	0.00	151.21	0.11	151.73	0.16
150.18	0.00	150.70	0.00	151.22	0.11	151.74	0.16
150.19	0.00	150.71	0.00	151.23	0.11	151.75	0.16
150.20	0.00	150.72	0.00	151.24	0.11	151.76	0.16
150.21	0.00	150.73	0.00	151.25	0.11	151.77	0.16
150.22	0.00	150.74	0.01	151.26	0.11	151.78	0.16
150.23	0.00	150.75	0.01	151.27	0.11	151.79	0.16
150.24	0.00	150.76	0.01	151.28	0.12	151.80	0.17
150.25	0.00	150.77	0.01	151.29	0.12	151.81	0.17
150.26	0.00	150.78	0.02	151.30	0.12	151.82	0.17
150.27	0.00	150.79	0.02	151.31	0.12	151.83	0.17
150.28	0.00	150.80	0.02	151.32	0.12	151.84	0.17
150.29	0.00	150.81	0.03	151.33	0.12	151.85	0.17
150.30	0.00	150.82	0.03	151.34	0.12	151.86	0.17
150.31	0.00	150.83	0.03	151.35	0.12	151.87	0.17
150.32	0.00	150.84	0.04	151.36	0.12	151.88	0.17
150.33	0.00	150.85	0.04	151.37	0.13	151.89	0.17
150.34	0.00	150.86	0.05	151.38	0.13	151.90	0.17
150.35	0.00	150.87	0.05	151.39	0.13	151.91	0.17
150.36	0.00	150.88	0.05	151.40	0.13	151.92	0.17
150.37	0.00	150.89	0.05	151.41	0.13	151.93	0.18
150.38	0.00	150.90	0.06	151.42	0.13	151.94	0.18
150.39	0.00	150.91	0.06	151.43	0.13	151.95	0.18
150.40	0.00	150.92	0.06	151.44	0.13	151.96	0.18
150.41	0.00	150.93	0.06	151.45	0.13	151.97	0.18

Stage-Discharge for Pond B-21: Basin #21 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
151.98	0.18	152.50	1.12	153.02	7.48	153.54	15.90
151.99	0.18	152.51	1.21	153.03	7.64	153.55	15.92
152.00	0.18	152.52	1.29	153.04	7.79	153.56	15.94
152.01	0.18	152.53	1.38	153.05	7.95	153.57	15.96
152.02	0.18	152.54	1.46	153.06	8.11	153.58	15.99
152.03	0.18	152.55	1.55	153.07	8.27	153.59	16.01
152.04	0.18	152.56	1.64	153.08	8.43	153.60	16.03
152.05	0.18	152.57	1.74	153.09	8.59	153.61	16.05
152.06	0.19	152.58	1.83	153.10	8.75	153.62	16.08
152.07	0.19	152.59	1.93	153.11	8.91	153.63	16.10
152.08	0.19	152.60	2.03	153.12	9.07	153.64	16.12
152.09	0.19	152.61	2.13	153.13	9.24	153.65	16.14
152.10	0.19	152.62	2.24	153.14	9.40	153.66	16.17
152.11	0.19	152.63	2.34	153.15	9.57	153.67	16.19
152.12	0.19	152.64	2.45	153.16	9.73	153.68	16.21
152.13	0.19	152.65	2.55	153.17	9.90	153.69	16.23
152.14	0.19	152.66	2.66	153.18	10.07	153.70	16.26
152.15	0.19	152.67	2.77	153.19	10.24	153.71	16.28
152.16	0.19	152.68	2.89	153.20	10.41	153.72	16.30
152.17	0.19	152.69	3.00	153.21	10.58	153.73	16.32
152.18	0.19	152.70	3.12	153.22	10.75	153.74	16.34
152.19	0.19	152.71	3.23	153.23	10.92	153.75	16.37
152.20	0.20	152.72	3.35	153.24	11.10	153.76	16.39
152.21	0.20	152.73	3.47	153.25	11.27	153.77	16.41
152.22	0.20	152.74	3.59	153.26	11.44	153.78	16.43
152.23	0.20	152.75	3.72	153.27	11.62	153.79	16.46
152.24	0.20	152.76	3.84	153.28	11.80	153.80	16.48
152.25	0.20	152.77	3.96	153.29	11.97	153.81	16.50
152.26	0.20	152.78	4.09	153.30	12.15	153.82	16.52
152.27	0.20	152.79	4.22	153.31	12.33	153.83	16.54
152.28	0.20	152.80	4.35	153.32	12.51	153.84	16.56
152.29	0.20	152.81	4.48	153.33	12.69	153.85	16.59
152.30	0.20	152.82	4.61	153.34	12.87	153.86	16.61
152.31	0.20	152.83	4.74	153.35	13.05	153.87	16.63
152.32	0.20	152.84	4.88	153.36	13.23	153.88	16.65
152.33	0.20	152.85	5.01	153.37	13.42	153.89	16.67
152.34	0.22	152.86	5.15	153.38	13.60	153.90	16.70
152.35	0.24	152.87	5.29	153.39	13.78	153.91	16.72
152.36	0.27	152.88	5.43	153.40	13.97	153.92	16.74
152.37	0.31	152.89	5.57	153.41	14.15	153.93	16.76
152.38	0.35	152.90	5.71	153.42	14.34	153.94	16.78
152.39	0.40	152.91	5.85	153.43	14.53	153.95	16.80
152.40	0.45	152.92	5.99	153.44	14.72	153.96	16.82
152.41	0.50	152.93	6.14	153.45	14.90	153.97	16.85
152.42	0.56	152.94	6.28	153.46	15.09	153.98	16.87
152.43	0.62	152.95	6.43	153.47	15.28	153.99	16.89
152.44	0.69	152.96	6.58	153.48	15.47	154.00	16.91
152.45	0.75	152.97	6.73	153.49	15.66	154.01	16.93
152.46	0.82	152.98	6.87	153.50	15.80	154.02	16.95
152.47	0.89	152.99	7.03	153.51	15.83	154.03	16.97
152.48	0.97	153.00	7.18	153.52	15.85	154.04	17.00
152.49	1.04	153.01	7.33	153.53	15.87	154.05	17.02

Stage-Discharge for Pond B-21: Basin #21 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
154.06	17.04	154.58	53.10	155.10	146.75
154.07	17.06	154.59	54.54	155.11	148.87
154.08	17.08	154.60	56.00	155.12	151.01
154.09	17.10	154.61	57.49	155.13	153.15
154.10	17.12	154.62	59.01	155.14	155.31
154.11	17.14	154.63	60.55	155.15	157.48
154.12	17.17	154.64	62.12	155.16	159.67
154.13	17.19	154.65	63.71	155.17	161.81
154.14	17.21	154.66	65.33	155.18	163.96
154.15	17.23	154.67	66.98	155.19	166.13
154.16	17.25	154.68	68.66	155.20	168.30
154.17	17.39	154.69	70.36	155.21	170.49
154.18	17.62	154.70	72.09	155.22	172.68
154.19	17.92	154.71	73.84	155.23	174.89
154.20	18.27	154.72	75.62	155.24	177.11
154.21	18.67	154.73	77.43	155.25	179.33
154.22	19.10	154.74	79.26	155.26	181.57
154.23	19.57	154.75	81.13	155.27	183.82
154.24	20.07	154.76	83.02	155.28	186.08
154.25	20.61	154.77	84.66	155.29	188.35
154.26	21.18	154.78	86.32	155.30	190.63
154.27	21.77	154.79	88.00	155.31	192.91
154.28	22.39	154.80	89.68	155.32	195.21
154.29	23.04	154.81	91.38	155.33	197.52
154.30	23.71	154.82	93.10	155.34	199.84
154.31	24.41	154.83	94.82	155.35	202.17
154.32	25.13	154.84	96.56	155.36	204.51
154.33	25.87	154.85	98.31	155.37	206.89
154.34	26.64	154.86	100.08	155.38	209.29
154.35	27.42	154.87	101.86	155.39	211.70
154.36	28.23	154.88	103.65	155.40	214.11
154.37	29.10	154.89	105.45	155.41	216.54
154.38	29.99	154.90	107.27	155.42	218.98
154.39	30.91	154.91	109.09	155.43	221.43
154.40	31.85	154.92	110.94	155.44	223.89
154.41	32.82	154.93	112.79	155.45	226.35
154.42	33.81	154.94	114.65	155.46	228.83
154.43	34.83	154.95	116.53	155.47	231.33
154.44	35.88	154.96	118.42	155.48	233.83
154.45	36.94	154.97	120.36	155.49	236.34
154.46	38.04	154.98	122.31	155.50	**238.86**
154.47	39.15	154.99	124.27		
154.48	40.30	155.00	126.25		
154.49	41.46	155.01	128.24		
154.50	42.65	155.02	130.25		
154.51	43.87	155.03	132.27		
154.52	45.10	155.04	134.30		
154.53	46.37	155.05	136.34		
154.54	47.65	155.06	138.40		
154.55	48.96	155.07	140.47		
154.56	50.30	155.08	142.55		
154.57	51.69	155.09	144.65		

Stage-Area-Storage for Pond B-21: Basin #21

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
149.90	0	0	150.42	5,238	2,360
149.91	485	2	150.43	5,247	2,413
149.92	970	10	150.44	5,256	2,465
149.93	1,454	22	150.45	5,266	2,518
149.94	1,939	39	150.46	5,275	2,571
149.95	2,424	61	150.47	5,284	2,623
149.96	2,909	87	150.48	5,293	2,676
149.97	3,394	119	150.49	5,303	2,729
149.98	3,878	155	150.50	5,312	2,782
149.99	4,363	196	150.51	5,321	2,836
150.00	4,848	242	150.52	5,331	2,889
150.01	4,857	291	150.53	5,340	2,942
150.02	4,867	340	150.54	5,349	2,996
150.03	4,876	388	150.55	5,358	3,049
150.04	4,885	437	150.56	5,368	3,103
150.05	4,894	486	150.57	5,377	3,157
150.06	4,904	535	150.58	5,386	3,210
150.07	4,913	584	150.59	5,396	3,264
150.08	4,922	633	150.60	5,405	3,318
150.09	4,932	682	150.61	5,414	3,372
150.10	4,941	732	150.62	5,423	3,427
150.11	4,950	781	150.63	5,433	3,481
150.12	4,959	831	150.64	5,442	3,535
150.13	4,969	880	150.65	5,451	3,590
150.14	4,978	930	150.66	5,460	3,644
150.15	4,987	980	150.67	5,470	3,699
150.16	4,996	1,030	150.68	5,479	3,754
150.17	5,006	1,080	150.69	5,488	3,808
150.18	5,015	1,130	150.70	5,498	3,863
150.19	5,024	1,180	150.71	5,507	3,918
150.20	5,034	1,231	150.72	5,516	3,973
150.21	5,043	1,281	150.73	5,525	4,029
150.22	5,052	1,331	150.74	5,535	4,084
150.23	5,061	1,382	150.75	5,544	4,139
150.24	5,071	1,433	150.76	5,553	4,195
150.25	5,080	1,483	150.77	5,563	4,250
150.26	5,089	1,534	150.78	5,572	4,306
150.27	5,099	1,585	150.79	5,581	4,362
150.28	5,108	1,636	150.80	5,590	4,418
150.29	5,117	1,687	150.81	5,600	4,474
150.30	5,126	1,739	150.82	5,609	4,530
150.31	5,136	1,790	150.83	5,618	4,586
150.32	5,145	1,841	150.84	5,628	4,642
150.33	5,154	1,893	150.85	5,637	4,698
150.34	5,164	1,944	150.86	5,646	4,755
150.35	5,173	1,996	150.87	5,655	4,811
150.36	5,182	2,048	150.88	5,665	4,868
150.37	5,191	2,100	150.89	5,674	4,925
150.38	5,201	2,152	150.90	5,683	4,981
150.39	5,210	2,204	150.91	5,692	5,038
150.40	5,219	2,256	150.92	5,702	5,095
150.41	5,228	2,308	150.93	5,711	5,152

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.94	5,720	5,210	151.46	6,229	8,316
150.95	5,730	5,267	151.47	6,239	8,378
150.96	5,739	5,324	151.48	6,249	8,440
150.97	5,748	5,382	151.49	6,259	8,503
150.98	5,757	5,439	151.50	6,269	8,566
150.99	5,767	5,497	151.51	6,278	8,628
151.00	5,776	5,554	151.52	6,288	8,691
151.01	5,786	5,612	151.53	6,298	8,754
151.02	5,796	5,670	151.54	6,308	8,817
151.03	5,806	5,728	151.55	6,318	8,880
151.04	5,815	5,786	151.56	6,328	8,943
151.05	5,825	5,844	151.57	6,337	9,007
151.06	5,835	5,903	151.58	6,347	9,070
151.07	5,845	5,961	151.59	6,357	9,134
151.08	5,855	6,020	151.60	6,367	9,197
151.09	5,865	6,078	151.61	6,377	9,261
151.10	5,874	6,137	151.62	6,387	9,325
151.11	5,884	6,196	151.63	6,397	9,389
151.12	5,894	6,255	151.64	6,406	9,453
151.13	5,904	6,314	151.65	6,416	9,517
151.14	5,914	6,373	151.66	6,426	9,581
151.15	5,924	6,432	151.67	6,436	9,645
151.16	5,934	6,491	151.68	6,446	9,710
151.17	5,943	6,551	151.69	6,456	9,774
151.18	5,953	6,610	151.70	6,466	9,839
151.19	5,963	6,670	151.71	6,475	9,904
151.20	5,973	6,729	151.72	6,485	9,968
151.21	5,983	6,789	151.73	6,495	10,033
151.22	5,993	6,849	151.74	6,505	10,098
151.23	6,003	6,909	151.75	6,515	10,163
151.24	6,012	6,969	151.76	6,525	10,229
151.25	6,022	7,029	151.77	6,534	10,294
151.26	6,032	7,089	151.78	6,544	10,359
151.27	6,042	7,150	151.79	6,554	10,425
151.28	6,052	7,210	151.80	6,564	10,490
151.29	6,062	7,271	151.81	6,574	10,556
151.30	6,072	7,332	151.82	6,584	10,622
151.31	6,081	7,392	151.83	6,594	10,688
151.32	6,091	7,453	151.84	6,603	10,754
151.33	6,101	7,514	151.85	6,613	10,820
151.34	6,111	7,575	151.86	6,623	10,886
151.35	6,121	7,636	151.87	6,633	10,952
151.36	6,131	7,698	151.88	6,643	11,019
151.37	6,140	7,759	151.89	6,653	11,085
151.38	6,150	7,820	151.90	6,663	11,152
151.39	6,160	7,882	151.91	6,672	11,218
151.40	6,170	7,944	151.92	6,682	11,285
151.41	6,180	8,005	151.93	6,692	11,352
151.42	6,190	8,067	151.94	6,702	11,419
151.43	6,200	8,129	151.95	6,712	11,486
151.44	6,209	8,191	151.96	6,722	11,553
151.45	6,219	8,253	151.97	6,731	11,621

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.98	6,741	11,688	152.50	7,282	15,334
151.99	6,751	11,755	152.51	7,292	15,406
152.00	6,761	11,823	152.52	7,302	15,479
152.01	6,771	11,891	152.53	7,313	15,552
152.02	6,782	11,958	152.54	7,323	15,626
152.03	6,792	12,026	152.55	7,334	15,699
152.04	6,803	12,094	152.56	7,344	15,772
152.05	6,813	12,162	152.57	7,354	15,846
152.06	6,823	12,230	152.58	7,365	15,919
152.07	6,834	12,299	152.59	7,375	15,993
152.08	6,844	12,367	152.60	7,386	16,067
152.09	6,855	12,436	152.61	7,396	16,141
152.10	6,865	12,504	152.62	7,406	16,215
152.11	6,876	12,573	152.63	7,417	16,289
152.12	6,886	12,642	152.64	7,427	16,363
152.13	6,896	12,711	152.65	7,438	16,437
152.14	6,907	12,780	152.66	7,448	16,512
152.15	6,917	12,849	152.67	7,458	16,586
152.16	6,928	12,918	152.68	7,469	16,661
152.17	6,938	12,987	152.69	7,479	16,736
152.18	6,948	13,057	152.70	7,490	16,811
152.19	6,959	13,126	152.71	7,500	16,886
152.20	6,969	13,196	152.72	7,511	16,961
152.21	6,980	13,266	152.73	7,521	17,036
152.22	6,990	13,336	152.74	7,531	17,111
152.23	7,000	13,405	152.75	7,542	17,186
152.24	7,011	13,476	152.76	7,552	17,262
152.25	7,021	13,546	152.77	7,563	17,337
152.26	7,032	13,616	152.78	7,573	17,413
152.27	7,042	13,686	152.79	7,583	17,489
152.28	7,052	13,757	152.80	7,594	17,565
152.29	7,063	13,827	152.81	7,604	17,641
152.30	7,073	13,898	152.82	7,615	17,717
152.31	7,084	13,969	152.83	7,625	17,793
152.32	7,094	14,040	152.84	7,635	17,869
152.33	7,105	14,111	152.85	7,646	17,946
152.34	7,115	14,182	152.86	7,656	18,022
152.35	7,125	14,253	152.87	7,667	18,099
152.36	7,136	14,324	152.88	7,677	18,176
152.37	7,146	14,396	152.89	7,687	18,252
152.38	7,157	14,467	152.90	7,698	18,329
152.39	7,167	14,539	152.91	7,708	18,406
152.40	7,177	14,611	152.92	7,719	18,484
152.41	7,188	14,682	152.93	7,729	18,561
152.42	7,198	14,754	152.94	7,740	18,638
152.43	7,209	14,826	152.95	7,750	18,716
152.44	7,219	14,899	152.96	7,760	18,793
152.45	7,229	14,971	152.97	7,771	18,871
152.46	7,240	15,043	152.98	7,781	18,949
152.47	7,250	15,116	152.99	7,792	19,026
152.48	7,261	15,188	153.00	7,802	19,104
152.49	7,271	15,261	153.01	7,813	19,182

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.02	7,824	19,261	153.54	8,395	23,478
153.03	7,835	19,339	153.55	8,406	23,562
153.04	7,846	19,417	153.56	8,417	23,646
153.05	7,857	19,496	153.57	8,428	23,730
153.06	7,868	19,574	153.58	8,439	23,814
153.07	7,879	19,653	153.59	8,450	23,899
153.08	7,890	19,732	153.60	8,461	23,983
153.09	7,901	19,811	153.61	8,472	24,068
153.10	7,912	19,890	153.62	8,483	24,153
153.11	7,923	19,969	153.63	8,494	24,238
153.12	7,934	20,049	153.64	8,505	24,323
153.13	7,945	20,128	153.65	8,516	24,408
153.14	7,956	20,207	153.66	8,527	24,493
153.15	7,967	20,287	153.67	8,538	24,578
153.16	7,978	20,367	153.68	8,549	24,664
153.17	7,989	20,447	153.69	8,560	24,749
153.18	8,000	20,527	153.70	8,571	24,835
153.19	8,011	20,607	153.71	8,582	24,921
153.20	8,022	20,687	153.72	8,593	25,006
153.21	8,033	20,767	153.73	8,604	25,092
153.22	8,044	20,847	153.74	8,615	25,179
153.23	8,055	20,928	153.75	8,626	25,265
153.24	8,066	21,009	153.76	8,636	25,351
153.25	8,077	21,089	153.77	8,647	25,437
153.26	8,087	21,170	153.78	8,658	25,524
153.27	8,098	21,251	153.79	8,669	25,611
153.28	8,109	21,332	153.80	8,680	25,697
153.29	8,120	21,413	153.81	8,691	25,784
153.30	8,131	21,494	153.82	8,702	25,871
153.31	8,142	21,576	153.83	8,713	25,958
153.32	8,153	21,657	153.84	8,724	26,045
153.33	8,164	21,739	153.85	8,735	26,133
153.34	8,175	21,821	153.86	8,746	26,220
153.35	8,186	21,902	153.87	8,757	26,308
153.36	8,197	21,984	153.88	8,768	26,395
153.37	8,208	22,066	153.89	8,779	26,483
153.38	8,219	22,148	153.90	8,790	26,571
153.39	8,230	22,231	153.91	8,801	26,659
153.40	8,241	22,313	153.92	8,812	26,747
153.41	8,252	22,396	153.93	8,823	26,835
153.42	8,263	22,478	153.94	8,834	26,923
153.43	8,274	22,561	153.95	8,845	27,012
153.44	8,285	22,644	153.96	8,856	27,100
153.45	8,296	22,726	153.97	8,867	27,189
153.46	8,307	22,809	153.98	8,878	27,278
153.47	8,318	22,893	153.99	8,889	27,366
153.48	8,329	22,976	154.00	8,900	27,455
153.49	8,340	23,059	154.01	8,912	27,544
153.50	8,351	23,143	154.02	8,923	27,634
153.51	8,362	23,226	154.03	8,935	27,723
153.52	8,373	23,310	154.04	8,946	27,812
153.53	8,384	23,394	154.05	8,958	27,902

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
154.06	8,969	27,991	154.58	9,569	32,812
154.07	8,981	28,081	154.59	9,581	32,907
154.08	8,992	28,171	154.60	9,592	33,003
154.09	9,004	28,261	154.61	9,604	33,099
154.10	9,015	28,351	154.62	9,615	33,195
154.11	9,027	28,441	154.63	9,627	33,291
154.12	9,038	28,532	154.64	9,639	33,388
154.13	9,050	28,622	154.65	9,650	33,484
154.14	9,062	28,713	154.66	9,662	33,581
154.15	9,073	28,803	154.67	9,673	33,677
154.16	9,085	28,894	154.68	9,685	33,774
154.17	9,096	28,985	154.69	9,696	33,871
154.18	9,108	29,076	154.70	9,708	33,968
154.19	9,119	29,167	154.71	9,719	34,065
154.20	9,131	29,258	154.72	9,731	34,163
154.21	9,142	29,350	154.73	9,742	34,260
154.22	9,154	29,441	154.74	9,754	34,357
154.23	9,165	29,533	154.75	9,766	34,455
154.24	9,177	29,625	154.76	9,777	34,553
154.25	9,189	29,716	154.77	9,789	34,651
154.26	9,200	29,808	154.78	9,800	34,748
154.27	9,212	29,900	154.79	9,812	34,847
154.28	9,223	29,993	154.80	9,823	34,945
154.29	9,235	30,085	154.81	9,835	35,043
154.30	9,246	30,177	154.82	9,846	35,141
154.31	9,258	30,270	154.83	9,858	35,240
154.32	9,269	30,362	154.84	9,869	35,339
154.33	9,281	30,455	154.85	9,881	35,437
154.34	9,292	30,548	154.86	9,892	35,536
154.35	9,304	30,641	154.87	9,904	35,635
154.36	9,315	30,734	154.88	9,916	35,734
154.37	9,327	30,827	154.89	9,927	35,833
154.38	9,339	30,921	154.90	9,939	35,933
154.39	9,350	31,014	154.91	9,950	36,032
154.40	9,362	31,108	154.92	9,962	36,132
154.41	9,373	31,201	154.93	9,973	36,231
154.42	9,385	31,295	154.94	9,985	36,331
154.43	9,396	31,389	154.95	9,996	36,431
154.44	9,408	31,483	154.96	10,008	36,531
154.45	9,419	31,577	154.97	10,019	36,631
154.46	9,431	31,671	154.98	10,031	36,732
154.47	9,442	31,766	154.99	10,042	36,832
154.48	9,454	31,860	155.00	10,054	36,932
154.49	9,465	31,955	155.01	10,066	37,033
154.50	9,477	32,050	155.02	10,078	37,134
154.51	9,489	32,144	155.03	10,090	37,235
154.52	9,500	32,239	155.04	10,102	37,336
154.53	9,512	32,334	155.05	10,114	37,437
154.54	9,523	32,430	155.06	10,126	37,538
154.55	9,535	32,525	155.07	10,138	37,639
154.56	9,546	32,620	155.08	10,150	37,741
154.57	9,558	32,716	155.09	10,162	37,842

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
155.10	10,174	37,944
155.11	10,186	38,046
155.12	10,198	38,148
155.13	10,210	38,250
155.14	10,222	38,352
155.15	10,234	38,454
155.16	10,246	38,556
155.17	10,258	38,659
155.18	10,270	38,762
155.19	10,282	38,864
155.20	10,294	38,967
155.21	10,306	39,070
155.22	10,318	39,173
155.23	10,330	39,277
155.24	10,342	39,380
155.25	10,354	39,483
155.26	10,365	39,587
155.27	10,377	39,691
155.28	10,389	39,794
155.29	10,401	39,898
155.30	10,413	40,003
155.31	10,425	40,107
155.32	10,437	40,211
155.33	10,449	40,315
155.34	10,461	40,420
155.35	10,473	40,525
155.36	10,485	40,629
155.37	10,497	40,734
155.38	10,509	40,839
155.39	10,521	40,945
155.40	10,533	41,050
155.41	10,545	41,155
155.42	10,557	41,261
155.43	10,569	41,366
155.44	10,581	41,472
155.45	10,593	41,578
155.46	10,605	41,684
155.47	10,617	41,790
155.48	10,629	41,896
155.49	10,641	42,003
155.50	**10,653**	**42,109**

Summary for Pond B-22: Basin #22

Inflow Area = 2.460 ac, 33.05% Impervious, Inflow Depth = 2.19" for Future 2 yr event
Inflow = 5.49 cfs @ 12.18 hrs, Volume= 0.449 af
Outflow = 0.19 cfs @ 15.86 hrs, Volume= 0.326 af, Atten= 97%, Lag= 220.9 min
Primary = 0.19 cfs @ 15.86 hrs, Volume= 0.326 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 149.47' @ 15.86 hrs Surf.Area= 8,441 sf Storage= 13,729 cf

Plug-Flow detention time= 742.0 min calculated for 0.326 af (73% of inflow)
Center-of-Mass det. time= 642.4 min (1,445.6 - 803.3)

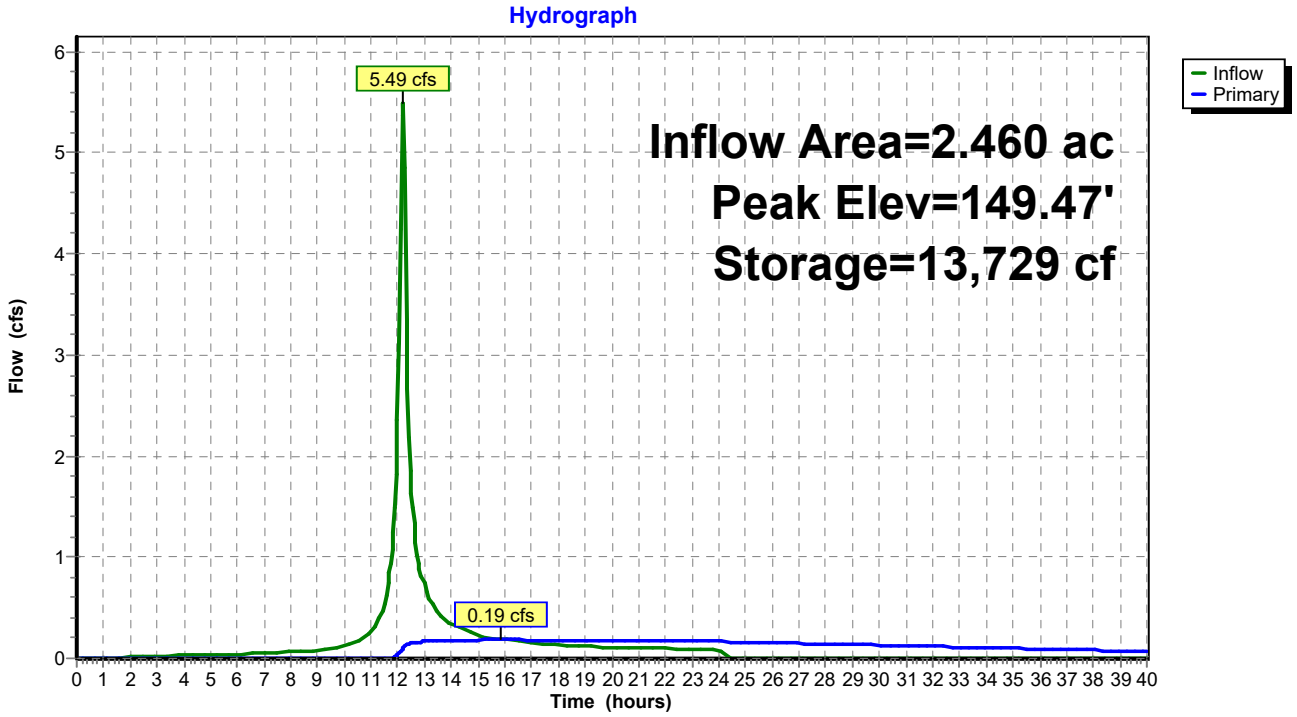
Volume	Invert	Avail.Storage	Storage Description
#1	147.30'	50,528 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
147.30	0	0	0
148.00	6,928	2,425	2,425
149.00	7,937	7,433	9,857
150.00	9,003	8,470	18,327
151.00	10,125	9,564	27,891
152.00	11,304	10,715	38,606
153.00	12,540	11,922	50,528

Device	Routing	Invert	Outlet Devices
#1	Primary	147.30'	**18.0" Round Culvert** L= 24.0' Ke= 0.500 Inlet / Outlet Invert= 147.30' / 146.20' S= 0.0458 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	148.15'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	149.47'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	152.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.18 cfs @ 15.86 hrs HW=149.47' (Free Discharge)
- **1=Culvert** (Passes 0.18 cfs of 10.15 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.32 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.17 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-22: Basin #22



Stage-Discharge for Pond B-22: Basin #22

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.30	0.00	147.82	0.00	148.34	0.05	148.86	0.13
147.31	0.00	147.83	0.00	148.35	0.05	148.87	0.13
147.32	0.00	147.84	0.00	148.36	0.05	148.88	0.13
147.33	0.00	147.85	0.00	148.37	0.06	148.89	0.13
147.34	0.00	147.86	0.00	148.38	0.06	148.90	0.13
147.35	0.00	147.87	0.00	148.39	0.06	148.91	0.13
147.36	0.00	147.88	0.00	148.40	0.06	148.92	0.13
147.37	0.00	147.89	0.00	148.41	0.06	148.93	0.13
147.38	0.00	147.90	0.00	148.42	0.07	148.94	0.14
147.39	0.00	147.91	0.00	148.43	0.07	148.95	0.14
147.40	0.00	147.92	0.00	148.44	0.07	148.96	0.14
147.41	0.00	147.93	0.00	148.45	0.07	148.97	0.14
147.42	0.00	147.94	0.00	148.46	0.07	148.98	0.14
147.43	0.00	147.95	0.00	148.47	0.08	148.99	0.14
147.44	0.00	147.96	0.00	148.48	0.08	149.00	0.14
147.45	0.00	147.97	0.00	148.49	0.08	149.01	0.14
147.46	0.00	147.98	0.00	148.50	0.08	149.02	0.14
147.47	0.00	147.99	0.00	148.51	0.08	149.03	0.14
147.48	0.00	148.00	0.00	148.52	0.08	149.04	0.15
147.49	0.00	148.01	0.00	148.53	0.09	149.05	0.15
147.50	0.00	148.02	0.00	148.54	0.09	149.06	0.15
147.51	0.00	148.03	0.00	148.55	0.09	149.07	0.15
147.52	0.00	148.04	0.00	148.56	0.09	149.08	0.15
147.53	0.00	148.05	0.00	148.57	0.09	149.09	0.15
147.54	0.00	148.06	0.00	148.58	0.09	149.10	0.15
147.55	0.00	148.07	0.00	148.59	0.10	149.11	0.15
147.56	0.00	148.08	0.00	148.60	0.10	149.12	0.15
147.57	0.00	148.09	0.00	148.61	0.10	149.13	0.15
147.58	0.00	148.10	0.00	148.62	0.10	149.14	0.15
147.59	0.00	148.11	0.00	148.63	0.10	149.15	0.16
147.60	0.00	148.12	0.00	148.64	0.10	149.16	0.16
147.61	0.00	148.13	0.00	148.65	0.10	149.17	0.16
147.62	0.00	148.14	0.00	148.66	0.10	149.18	0.16
147.63	0.00	148.15	0.00	148.67	0.11	149.19	0.16
147.64	0.00	148.16	0.00	148.68	0.11	149.20	0.16
147.65	0.00	148.17	0.00	148.69	0.11	149.21	0.16
147.66	0.00	148.18	0.00	148.70	0.11	149.22	0.16
147.67	0.00	148.19	0.00	148.71	0.11	149.23	0.16
147.68	0.00	148.20	0.00	148.72	0.11	149.24	0.16
147.69	0.00	148.21	0.01	148.73	0.11	149.25	0.16
147.70	0.00	148.22	0.01	148.74	0.11	149.26	0.16
147.71	0.00	148.23	0.01	148.75	0.12	149.27	0.17
147.72	0.00	148.24	0.01	148.76	0.12	149.28	0.17
147.73	0.00	148.25	0.02	148.77	0.12	149.29	0.17
147.74	0.00	148.26	0.02	148.78	0.12	149.30	0.17
147.75	0.00	148.27	0.02	148.79	0.12	149.31	0.17
147.76	0.00	148.28	0.03	148.80	0.12	149.32	0.17
147.77	0.00	148.29	0.03	148.81	0.12	149.33	0.17
147.78	0.00	148.30	0.03	148.82	0.12	149.34	0.17
147.79	0.00	148.31	0.04	148.83	0.12	149.35	0.17
147.80	0.00	148.32	0.04	148.84	0.13	149.36	0.17
147.81	0.00	148.33	0.05	148.85	0.13	149.37	0.17

Stage-Discharge for Pond B-22: Basin #22 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
149.38	0.17	149.90	3.82	150.42	11.78	150.94	14.46
149.39	0.17	149.91	3.94	150.43	11.95	150.95	14.49
149.40	0.18	149.92	4.07	150.44	12.13	150.96	14.51
149.41	0.18	149.93	4.20	150.45	12.31	150.97	14.54
149.42	0.18	149.94	4.33	150.46	12.49	150.98	14.56
149.43	0.18	149.95	4.46	150.47	12.67	150.99	14.59
149.44	0.18	149.96	4.59	150.48	12.85	151.00	14.61
149.45	0.18	149.97	4.72	150.49	13.03	151.01	14.64
149.46	0.18	149.98	4.86	150.50	13.21	151.02	14.66
149.47	0.18	149.99	4.99	150.51	13.35	151.03	14.69
149.48	0.19	150.00	5.13	150.52	13.37	151.04	14.71
149.49	0.22	150.01	5.27	150.53	13.40	151.05	14.74
149.50	0.25	150.02	5.41	150.54	13.43	151.06	14.76
149.51	0.29	150.03	5.55	150.55	13.45	151.07	14.79
149.52	0.33	150.04	5.69	150.56	13.48	151.08	14.81
149.53	0.38	150.05	5.83	150.57	13.51	151.09	14.84
149.54	0.43	150.06	5.97	150.58	13.53	151.10	14.86
149.55	0.48	150.07	6.12	150.59	13.56	151.11	14.88
149.56	0.54	150.08	6.26	150.60	13.59	151.12	14.91
149.57	0.60	150.09	6.41	150.61	13.61	151.13	14.93
149.58	0.66	150.10	6.56	150.62	13.64	151.14	14.96
149.59	0.73	150.11	6.71	150.63	13.67	151.15	14.98
149.60	0.80	150.12	6.86	150.64	13.69	151.16	15.01
149.61	0.87	150.13	7.01	150.65	13.72	151.17	15.03
149.62	0.95	150.14	7.16	150.66	13.75	151.18	15.05
149.63	1.02	150.15	7.31	150.67	13.77	151.19	15.08
149.64	1.10	150.16	7.46	150.68	13.80	151.20	15.10
149.65	1.18	150.17	7.62	150.69	13.83	151.21	15.13
149.66	1.27	150.18	7.78	150.70	13.85	151.22	15.15
149.67	1.35	150.19	7.93	150.71	13.88	151.23	15.17
149.68	1.44	150.20	8.09	150.72	13.90	151.24	15.20
149.69	1.53	150.21	8.25	150.73	13.93	151.25	15.22
149.70	1.62	150.22	8.41	150.74	13.96	151.26	15.24
149.71	1.72	150.23	8.57	150.75	13.98	151.27	15.27
149.72	1.81	150.24	8.73	150.76	14.01	151.28	15.29
149.73	1.91	150.25	8.89	150.77	14.03	151.29	15.32
149.74	2.01	150.26	9.05	150.78	14.06	151.30	15.34
149.75	2.11	150.27	9.22	150.79	14.08	151.31	15.36
149.76	2.21	150.28	9.38	150.80	14.11	151.32	15.39
149.77	2.32	150.29	9.55	150.81	14.14	151.33	15.41
149.78	2.43	150.30	9.71	150.82	14.16	151.34	15.43
149.79	2.53	150.31	9.88	150.83	14.19	151.35	15.46
149.80	2.64	150.32	10.05	150.84	14.21	151.36	15.48
149.81	2.75	150.33	10.22	150.85	14.24	151.37	15.50
149.82	2.87	150.34	10.39	150.86	14.26	151.38	15.53
149.83	2.98	150.35	10.56	150.87	14.29	151.39	15.55
149.84	3.10	150.36	10.73	150.88	14.31	151.40	15.57
149.85	3.21	150.37	10.90	150.89	14.34	151.41	15.60
149.86	3.33	150.38	11.08	150.90	14.36	151.42	15.62
149.87	3.45	150.39	11.25	150.91	14.39	151.43	15.64
149.88	3.57	150.40	11.43	150.92	14.41	151.44	15.67
149.89	3.70	150.41	11.60	150.93	14.44	151.45	15.69

Stage-Discharge for Pond B-22: Basin #22 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
151.46	15.71	151.98	16.87	152.50	17.95
151.47	15.74	151.99	16.89	152.51	17.97
151.48	15.76	152.00	16.91	152.52	17.99
151.49	15.78	152.01	16.93	152.53	18.01
151.50	15.80	152.02	16.95	152.54	18.03
151.51	15.83	152.03	16.97	152.55	18.05
151.52	15.85	152.04	17.00	152.56	18.07
151.53	15.87	152.05	17.02	152.57	18.09
151.54	15.90	152.06	17.04	152.58	18.11
151.55	15.92	152.07	17.06	152.59	18.13
151.56	15.94	152.08	17.08	152.60	18.15
151.57	15.96	152.09	17.10	152.61	18.17
151.58	15.99	152.10	17.12	152.62	18.19
151.59	16.01	152.11	17.14	152.63	18.21
151.60	16.03	152.12	17.17	152.64	18.23
151.61	16.05	152.13	17.19	152.65	18.25
151.62	16.08	152.14	17.21	152.66	18.27
151.63	16.10	152.15	17.23	152.67	18.29
151.64	16.12	152.16	17.25	152.68	18.31
151.65	16.14	152.17	17.27	152.69	18.33
151.66	16.17	152.18	17.29	152.70	18.35
151.67	16.19	152.19	17.31	152.71	18.37
151.68	16.21	152.20	17.33	152.72	18.39
151.69	16.23	152.21	17.35	152.73	18.41
151.70	16.26	152.22	17.38	152.74	18.43
151.71	16.28	152.23	17.40	152.75	18.45
151.72	16.30	152.24	17.42	152.76	18.47
151.73	16.32	152.25	17.44	152.77	18.49
151.74	16.34	152.26	17.46	152.78	18.51
151.75	16.37	152.27	17.48	152.79	18.52
151.76	16.39	152.28	17.50	152.80	18.54
151.77	16.41	152.29	17.52	152.81	18.56
151.78	16.43	152.30	17.54	152.82	18.58
151.79	16.46	152.31	17.56	152.83	18.60
151.80	16.48	152.32	17.58	152.84	18.62
151.81	16.50	152.33	17.60	152.85	18.64
151.82	16.52	152.34	17.62	152.86	18.66
151.83	16.54	152.35	17.64	152.87	18.68
151.84	16.56	152.36	17.66	152.88	18.70
151.85	16.59	152.37	17.69	152.89	18.72
151.86	16.61	152.38	17.71	152.90	18.74
151.87	16.63	152.39	17.73	152.91	18.76
151.88	16.65	152.40	17.75	152.92	18.78
151.89	16.67	152.41	17.77	152.93	18.80
151.90	16.70	152.42	17.79	152.94	18.82
151.91	16.72	152.43	17.81	152.95	18.83
151.92	16.74	152.44	17.83	152.96	18.97
151.93	16.76	152.45	17.85	152.97	19.20
151.94	16.78	152.46	17.87	152.98	19.50
151.95	16.80	152.47	17.89	152.99	19.85
151.96	16.82	152.48	17.91	153.00	**20.24**
151.97	16.85	152.49	17.93		

Stage-Area-Storage for Pond B-22: Basin #22

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.30	0	0	147.82	5,147	1,338
147.31	99	0	147.83	5,245	1,390
147.32	198	2	147.84	5,344	1,443
147.33	297	4	147.85	5,443	1,497
147.34	396	8	147.86	5,542	1,552
147.35	495	12	147.87	5,641	1,608
147.36	594	18	147.88	5,740	1,665
147.37	693	24	147.89	5,839	1,723
147.38	792	32	147.90	5,938	1,781
147.39	891	40	147.91	6,037	1,841
147.40	990	49	147.92	6,136	1,902
147.41	1,089	60	147.93	6,235	1,964
147.42	1,188	71	147.94	6,334	2,027
147.43	1,287	84	147.95	6,433	2,091
147.44	1,386	97	147.96	6,532	2,156
147.45	1,485	111	147.97	6,631	2,221
147.46	1,584	127	147.98	6,730	2,288
147.47	1,683	143	147.99	6,829	2,356
147.48	1,781	160	148.00	6,928	2,425
147.49	1,880	179	148.01	6,938	2,494
147.50	1,979	198	148.02	6,948	2,564
147.51	2,078	218	148.03	6,958	2,633
147.52	2,177	240	148.04	6,968	2,703
147.53	2,276	262	148.05	6,978	2,772
147.54	2,375	285	148.06	6,989	2,842
147.55	2,474	309	148.07	6,999	2,912
147.56	2,573	335	148.08	7,009	2,982
147.57	2,672	361	148.09	7,019	3,052
147.58	2,771	388	148.10	7,029	3,123
147.59	2,870	416	148.11	7,039	3,193
147.60	2,969	445	148.12	7,049	3,263
147.61	3,068	476	148.13	7,059	3,334
147.62	3,167	507	148.14	7,069	3,405
147.63	3,266	539	148.15	7,079	3,475
147.64	3,365	572	148.16	7,089	3,546
147.65	3,464	606	148.17	7,100	3,617
147.66	3,563	641	148.18	7,110	3,688
147.67	3,662	677	148.19	7,120	3,759
147.68	3,761	715	148.20	7,130	3,831
147.69	3,860	753	148.21	7,140	3,902
147.70	3,959	792	148.22	7,150	3,973
147.71	4,058	832	148.23	7,160	4,045
147.72	4,157	873	148.24	7,170	4,117
147.73	4,256	915	148.25	7,180	4,188
147.74	4,355	958	148.26	7,190	4,260
147.75	4,454	1,002	148.27	7,200	4,332
147.76	4,553	1,047	148.28	7,211	4,404
147.77	4,652	1,093	148.29	7,221	4,476
147.78	4,751	1,140	148.30	7,231	4,549
147.79	4,850	1,188	148.31	7,241	4,621
147.80	4,949	1,237	148.32	7,251	4,693
147.81	5,048	1,287	148.33	7,261	4,766

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.34	7,271	4,839	148.86	7,796	8,756
148.35	7,281	4,911	148.87	7,806	8,834
148.36	7,291	4,984	148.88	7,816	8,912
148.37	7,301	5,057	148.89	7,826	8,990
148.38	7,311	5,130	148.90	7,836	9,069
148.39	7,322	5,203	148.91	7,846	9,147
148.40	7,332	5,277	148.92	7,856	9,226
148.41	7,342	5,350	148.93	7,866	9,304
148.42	7,352	5,424	148.94	7,876	9,383
148.43	7,362	5,497	148.95	7,887	9,462
148.44	7,372	5,571	148.96	7,897	9,541
148.45	7,382	5,645	148.97	7,907	9,620
148.46	7,392	5,718	148.98	7,917	9,699
148.47	7,402	5,792	148.99	7,927	9,778
148.48	7,412	5,866	149.00	7,937	9,857
148.49	7,422	5,941	149.01	7,948	9,937
148.50	7,433	6,015	149.02	7,958	10,016
148.51	7,443	6,089	149.03	7,969	10,096
148.52	7,453	6,164	149.04	7,980	10,176
148.53	7,463	6,238	149.05	7,990	10,255
148.54	7,473	6,313	149.06	8,001	10,335
148.55	7,483	6,388	149.07	8,012	10,416
148.56	7,493	6,463	149.08	8,022	10,496
148.57	7,503	6,538	149.09	8,033	10,576
148.58	7,513	6,613	149.10	8,044	10,656
148.59	7,523	6,688	149.11	8,054	10,737
148.60	7,533	6,763	149.12	8,065	10,817
148.61	7,543	6,839	149.13	8,076	10,898
148.62	7,554	6,914	149.14	8,086	10,979
148.63	7,564	6,990	149.15	8,097	11,060
148.64	7,574	7,065	149.16	8,108	11,141
148.65	7,584	7,141	149.17	8,118	11,222
148.66	7,594	7,217	149.18	8,129	11,303
148.67	7,604	7,293	149.19	8,140	11,385
148.68	7,614	7,369	149.20	8,150	11,466
148.69	7,624	7,445	149.21	8,161	11,548
148.70	7,634	7,522	149.22	8,172	11,629
148.71	7,644	7,598	149.23	8,182	11,711
148.72	7,654	7,674	149.24	8,193	11,793
148.73	7,665	7,751	149.25	8,204	11,875
148.74	7,675	7,828	149.26	8,214	11,957
148.75	7,685	7,905	149.27	8,225	12,039
148.76	7,695	7,981	149.28	8,235	12,121
148.77	7,705	8,058	149.29	8,246	12,204
148.78	7,715	8,136	149.30	8,257	12,286
148.79	7,725	8,213	149.31	8,267	12,369
148.80	7,735	8,290	149.32	8,278	12,452
148.81	7,745	8,367	149.33	8,289	12,535
148.82	7,755	8,445	149.34	8,299	12,617
148.83	7,765	8,523	149.35	8,310	12,701
148.84	7,776	8,600	149.36	8,321	12,784
148.85	7,786	8,678	149.37	8,331	12,867

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
149.38	8,342	12,950	149.90	8,896	17,432
149.39	8,353	13,034	149.91	8,907	17,521
149.40	8,363	13,117	149.92	8,918	17,610
149.41	8,374	13,201	149.93	8,928	17,700
149.42	8,385	13,285	149.94	8,939	17,789
149.43	8,395	13,369	149.95	8,950	17,878
149.44	8,406	13,453	149.96	8,960	17,968
149.45	8,417	13,537	149.97	8,971	18,058
149.46	8,427	13,621	149.98	8,982	18,147
149.47	8,438	13,705	149.99	8,992	18,237
149.48	8,449	13,790	150.00	9,003	18,327
149.49	8,459	13,874	150.01	9,014	18,417
149.50	8,470	13,959	150.02	9,025	18,508
149.51	8,481	14,044	150.03	9,037	18,598
149.52	8,491	14,129	150.04	9,048	18,688
149.53	8,502	14,214	150.05	9,059	18,779
149.54	8,513	14,299	150.06	9,070	18,869
149.55	8,523	14,384	150.07	9,082	18,960
149.56	8,534	14,469	150.08	9,093	19,051
149.57	8,545	14,555	150.09	9,104	19,142
149.58	8,555	14,640	150.10	9,115	19,233
149.59	8,566	14,726	150.11	9,126	19,324
149.60	8,577	14,811	150.12	9,138	19,416
149.61	8,587	14,897	150.13	9,149	19,507
149.62	8,598	14,983	150.14	9,160	19,599
149.63	8,609	15,069	150.15	9,171	19,690
149.64	8,619	15,155	150.16	9,183	19,782
149.65	8,630	15,242	150.17	9,194	19,874
149.66	8,641	15,328	150.18	9,205	19,966
149.67	8,651	15,414	150.19	9,216	20,058
149.68	8,662	15,501	150.20	9,227	20,150
149.69	8,673	15,588	150.21	9,239	20,243
149.70	8,683	15,674	150.22	9,250	20,335
149.71	8,694	15,761	150.23	9,261	20,428
149.72	8,705	15,848	150.24	9,272	20,520
149.73	8,715	15,935	150.25	9,284	20,613
149.74	8,726	16,023	150.26	9,295	20,706
149.75	8,737	16,110	150.27	9,306	20,799
149.76	8,747	16,197	150.28	9,317	20,892
149.77	8,758	16,285	150.29	9,328	20,985
149.78	8,768	16,372	150.30	9,340	21,079
149.79	8,779	16,460	150.31	9,351	21,172
149.80	8,790	16,548	150.32	9,362	21,266
149.81	8,800	16,636	150.33	9,373	21,359
149.82	8,811	16,724	150.34	9,384	21,453
149.83	8,822	16,812	150.35	9,396	21,547
149.84	8,832	16,900	150.36	9,407	21,641
149.85	8,843	16,989	150.37	9,418	21,735
149.86	8,854	17,077	150.38	9,429	21,829
149.87	8,864	17,166	150.39	9,441	21,924
149.88	8,875	17,255	150.40	9,452	22,018
149.89	8,886	17,343	150.41	9,463	22,113

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.42	9,474	22,208	150.94	10,058	27,286
150.43	9,485	22,302	150.95	10,069	27,386
150.44	9,497	22,397	150.96	10,080	27,487
150.45	9,508	22,492	150.97	10,091	27,588
150.46	9,519	22,587	150.98	10,103	27,689
150.47	9,530	22,683	150.99	10,114	27,790
150.48	9,542	22,778	151.00	10,125	27,891
150.49	9,553	22,873	151.01	10,137	27,993
150.50	9,564	22,969	151.02	10,149	28,094
150.51	9,575	23,065	151.03	10,160	28,196
150.52	9,586	23,161	151.04	10,172	28,297
150.53	9,598	23,256	151.05	10,184	28,399
150.54	9,609	23,353	151.06	10,196	28,501
150.55	9,620	23,449	151.07	10,208	28,603
150.56	9,631	23,545	151.08	10,219	28,705
150.57	9,643	23,641	151.09	10,231	28,807
150.58	9,654	23,738	151.10	10,243	28,910
150.59	9,665	23,834	151.11	10,255	29,012
150.60	9,676	23,931	151.12	10,266	29,115
150.61	9,687	24,028	151.13	10,278	29,218
150.62	9,699	24,125	151.14	10,290	29,320
150.63	9,710	24,222	151.15	10,302	29,423
150.64	9,721	24,319	151.16	10,314	29,526
150.65	9,732	24,416	151.17	10,325	29,630
150.66	9,744	24,514	151.18	10,337	29,733
150.67	9,755	24,611	151.19	10,349	29,836
150.68	9,766	24,709	151.20	10,361	29,940
150.69	9,777	24,806	151.21	10,373	30,044
150.70	9,788	24,904	151.22	10,384	30,147
150.71	9,800	25,002	151.23	10,396	30,251
150.72	9,811	25,100	151.24	10,408	30,355
150.73	9,822	25,198	151.25	10,420	30,459
150.74	9,833	25,297	151.26	10,432	30,564
150.75	9,845	25,395	151.27	10,443	30,668
150.76	9,856	25,494	151.28	10,455	30,773
150.77	9,867	25,592	151.29	10,467	30,877
150.78	9,878	25,691	151.30	10,479	30,982
150.79	9,889	25,790	151.31	10,490	31,087
150.80	9,901	25,889	151.32	10,502	31,192
150.81	9,912	25,988	151.33	10,514	31,297
150.82	9,923	26,087	151.34	10,526	31,402
150.83	9,934	26,186	151.35	10,538	31,507
150.84	9,945	26,286	151.36	10,549	31,613
150.85	9,957	26,385	151.37	10,561	31,718
150.86	9,968	26,485	151.38	10,573	31,824
150.87	9,979	26,585	151.39	10,585	31,930
150.88	9,990	26,684	151.40	10,597	32,036
150.89	10,002	26,784	151.41	10,608	32,142
150.90	10,013	26,884	151.42	10,620	32,248
150.91	10,024	26,985	151.43	10,632	32,354
150.92	10,035	27,085	151.44	10,644	32,460
150.93	10,046	27,185	151.45	10,656	32,567

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.46	10,667	32,674	151.98	11,280	38,380
151.47	10,679	32,780	151.99	11,292	38,493
151.48	10,691	32,887	152.00	11,304	38,606
151.49	10,703	32,994	152.01	11,316	38,719
151.50	10,715	33,101	152.02	11,329	38,832
151.51	10,726	33,208	152.03	11,341	38,945
151.52	10,738	33,316	152.04	11,353	39,059
151.53	10,750	33,423	152.05	11,366	39,173
151.54	10,762	33,531	152.06	11,378	39,286
151.55	10,773	33,638	152.07	11,391	39,400
151.56	10,785	33,746	152.08	11,403	39,514
151.57	10,797	33,854	152.09	11,415	39,628
151.58	10,809	33,962	152.10	11,428	39,742
151.59	10,821	34,070	152.11	11,440	39,857
151.60	10,832	34,179	152.12	11,452	39,971
151.61	10,844	34,287	152.13	11,465	40,086
151.62	10,856	34,395	152.14	11,477	40,200
151.63	10,868	34,504	152.15	11,489	40,315
151.64	10,880	34,613	152.16	11,502	40,430
151.65	10,891	34,722	152.17	11,514	40,545
151.66	10,903	34,831	152.18	11,526	40,661
151.67	10,915	34,940	152.19	11,539	40,776
151.68	10,927	35,049	152.20	11,551	40,891
151.69	10,939	35,158	152.21	11,564	41,007
151.70	10,950	35,268	152.22	11,576	41,123
151.71	10,962	35,377	152.23	11,588	41,238
151.72	10,974	35,487	152.24	11,601	41,354
151.73	10,986	35,597	152.25	11,613	41,470
151.74	10,997	35,707	152.26	11,625	41,587
151.75	11,009	35,817	152.27	11,638	41,703
151.76	11,021	35,927	152.28	11,650	41,819
151.77	11,033	36,037	152.29	11,662	41,936
151.78	11,045	36,147	152.30	11,675	42,053
151.79	11,056	36,258	152.31	11,687	42,169
151.80	11,068	36,369	152.32	11,700	42,286
151.81	11,080	36,479	152.33	11,712	42,403
151.82	11,092	36,590	152.34	11,724	42,521
151.83	11,104	36,701	152.35	11,737	42,638
151.84	11,115	36,812	152.36	11,749	42,755
151.85	11,127	36,923	152.37	11,761	42,873
151.86	11,139	37,035	152.38	11,774	42,991
151.87	11,151	37,146	152.39	11,786	43,108
151.88	11,163	37,258	152.40	11,798	43,226
151.89	11,174	37,369	152.41	11,811	43,344
151.90	11,186	37,481	152.42	11,823	43,462
151.91	11,198	37,593	152.43	11,835	43,581
151.92	11,210	37,705	152.44	11,848	43,699
151.93	11,221	37,817	152.45	11,860	43,818
151.94	11,233	37,930	152.46	11,873	43,936
151.95	11,245	38,042	152.47	11,885	44,055
151.96	11,257	38,155	152.48	11,897	44,174
151.97	11,269	38,267	152.49	11,910	44,293

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
152.50	11,922	44,412
152.51	11,934	44,532
152.52	11,947	44,651
152.53	11,959	44,771
152.54	11,971	44,890
152.55	11,984	45,010
152.56	11,996	45,130
152.57	12,009	45,250
152.58	12,021	45,370
152.59	12,033	45,490
152.60	12,046	45,611
152.61	12,058	45,731
152.62	12,070	45,852
152.63	12,083	45,973
152.64	12,095	46,093
152.65	12,107	46,215
152.66	12,120	46,336
152.67	12,132	46,457
152.68	12,144	46,578
152.69	12,157	46,700
152.70	12,169	46,821
152.71	12,182	46,943
152.72	12,194	47,065
152.73	12,206	47,187
152.74	12,219	47,309
152.75	12,231	47,431
152.76	12,243	47,554
152.77	12,256	47,676
152.78	12,268	47,799
152.79	12,280	47,922
152.80	12,293	48,045
152.81	12,305	48,168
152.82	12,318	48,291
152.83	12,330	48,414
152.84	12,342	48,537
152.85	12,355	48,661
152.86	12,367	48,784
152.87	12,379	48,908
152.88	12,392	49,032
152.89	12,404	49,156
152.90	12,416	49,280
152.91	12,429	49,404
152.92	12,441	49,529
152.93	12,453	49,653
152.94	12,466	49,778
152.95	12,478	49,902
152.96	12,491	50,027
152.97	12,503	50,152
152.98	12,515	50,277
152.99	12,528	50,402
153.00	**12,540**	**50,528**

Summary for Pond B-23: Basin #23

Inflow Area = 2.449 ac, 33.56% Impervious, Inflow Depth = 2.20" for Future 2 yr event
Inflow = 5.50 cfs @ 12.17 hrs, Volume= 0.449 af
Outflow = 0.52 cfs @ 13.33 hrs, Volume= 0.364 af, Atten= 91%, Lag= 69.3 min
Primary = 0.52 cfs @ 13.33 hrs, Volume= 0.364 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.53' @ 13.33 hrs Surf.Area= 7,097 sf Storage= 11,569 cf

Plug-Flow detention time= 372.4 min calculated for 0.363 af (81% of inflow)
Center-of-Mass det. time= 292.0 min (1,094.7 - 802.7)

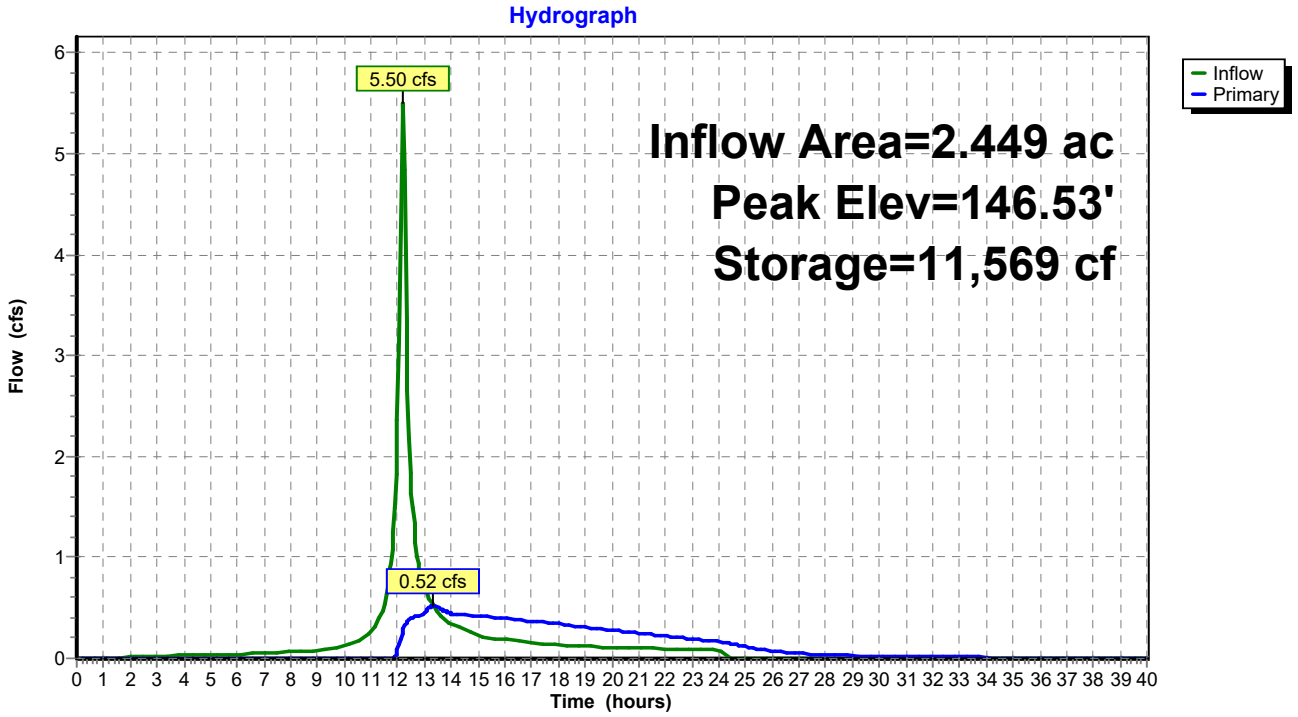
Volume	Invert	Avail.Storage	Storage Description
#1	144.30'	23,175 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
144.30	0	0	0
145.00	5,512	1,929	1,929
146.00	6,527	6,020	7,949
147.00	7,599	7,063	15,012
148.00	8,727	8,163	23,175

Device	Routing	Invert	Outlet Devices
#1	Primary	144.30'	**18.0" Round Culvert** L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 144.30' / 141.44' S= 0.0636 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	145.28'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.51 cfs @ 13.33 hrs HW=146.53' (Free Discharge)
- **1=Culvert** (Passes 0.51 cfs of 10.36 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.44 cfs @ 5.01 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.07 cfs @ 0.58 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-23: Basin #23



Stage-Discharge for Pond B-23: Basin #23

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
144.30	0.00	144.82	0.00	145.34	0.01	145.86	0.27
144.31	0.00	144.83	0.00	145.35	0.01	145.87	0.27
144.32	0.00	144.84	0.00	145.36	0.02	145.88	0.28
144.33	0.00	144.85	0.00	145.37	0.02	145.89	0.28
144.34	0.00	144.86	0.00	145.38	0.02	145.90	0.28
144.35	0.00	144.87	0.00	145.39	0.03	145.91	0.29
144.36	0.00	144.88	0.00	145.40	0.03	145.92	0.29
144.37	0.00	144.89	0.00	145.41	0.04	145.93	0.29
144.38	0.00	144.90	0.00	145.42	0.04	145.94	0.30
144.39	0.00	144.91	0.00	145.43	0.05	145.95	0.30
144.40	0.00	144.92	0.00	145.44	0.06	145.96	0.30
144.41	0.00	144.93	0.00	145.45	0.06	145.97	0.30
144.42	0.00	144.94	0.00	145.46	0.07	145.98	0.31
144.43	0.00	144.95	0.00	145.47	0.08	145.99	0.31
144.44	0.00	144.96	0.00	145.48	0.08	146.00	0.31
144.45	0.00	144.97	0.00	145.49	0.09	146.01	0.32
144.46	0.00	144.98	0.00	145.50	0.10	146.02	0.32
144.47	0.00	144.99	0.00	145.51	0.10	146.03	0.32
144.48	0.00	145.00	0.00	145.52	0.11	146.04	0.32
144.49	0.00	145.01	0.00	145.53	0.12	146.05	0.33
144.50	0.00	145.02	0.00	145.54	0.13	146.06	0.33
144.51	0.00	145.03	0.00	145.55	0.13	146.07	0.33
144.52	0.00	145.04	0.00	145.56	0.14	146.08	0.33
144.53	0.00	145.05	0.00	145.57	0.15	146.09	0.34
144.54	0.00	145.06	0.00	145.58	0.15	146.10	0.34
144.55	0.00	145.07	0.00	145.59	0.16	146.11	0.34
144.56	0.00	145.08	0.00	145.60	0.17	146.12	0.34
144.57	0.00	145.09	0.00	145.61	0.17	146.13	0.35
144.58	0.00	145.10	0.00	145.62	0.17	146.14	0.35
144.59	0.00	145.11	0.00	145.63	0.18	146.15	0.35
144.60	0.00	145.12	0.00	145.64	0.18	146.16	0.35
144.61	0.00	145.13	0.00	145.65	0.19	146.17	0.36
144.62	0.00	145.14	0.00	145.66	0.19	146.18	0.36
144.63	0.00	145.15	0.00	145.67	0.20	146.19	0.36
144.64	0.00	145.16	0.00	145.68	0.20	146.20	0.36
144.65	0.00	145.17	0.00	145.69	0.21	146.21	0.37
144.66	0.00	145.18	0.00	145.70	0.21	146.22	0.37
144.67	0.00	145.19	0.00	145.71	0.22	146.23	0.37
144.68	0.00	145.20	0.00	145.72	0.22	146.24	0.37
144.69	0.00	145.21	0.00	145.73	0.22	146.25	0.38
144.70	0.00	145.22	0.00	145.74	0.23	146.26	0.38
144.71	0.00	145.23	0.00	145.75	0.23	146.27	0.38
144.72	0.00	145.24	0.00	145.76	0.24	146.28	0.38
144.73	0.00	145.25	0.00	145.77	0.24	146.29	0.39
144.74	0.00	145.26	0.00	145.78	0.24	146.30	0.39
144.75	0.00	145.27	0.00	145.79	0.25	146.31	0.39
144.76	0.00	145.28	0.00	145.80	0.25	146.32	0.39
144.77	0.00	145.29	0.00	145.81	0.25	146.33	0.39
144.78	0.00	145.30	0.00	145.82	0.26	146.34	0.40
144.79	0.00	145.31	0.00	145.83	0.26	146.35	0.40
144.80	0.00	145.32	0.00	145.84	0.26	146.36	0.40
144.81	0.00	145.33	0.01	145.85	0.27	146.37	0.40

Stage-Discharge for Pond B-23: Basin #23 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
146.38	0.41	146.90	3.75	147.42	11.60	147.94	14.46
146.39	0.41	146.91	3.87	147.43	11.78	147.95	14.49
146.40	0.41	146.92	4.00	147.44	11.95	147.96	14.63
146.41	0.41	146.93	4.12	147.45	12.13	147.97	14.87
146.42	0.41	146.94	4.25	147.46	12.31	147.98	15.17
146.43	0.42	146.95	4.37	147.47	12.49	147.99	15.53
146.44	0.42	146.96	4.50	147.48	12.67	148.00	**15.93**
146.45	0.42	146.97	4.63	147.49	12.85		
146.46	0.42	146.98	4.77	147.50	13.03		
146.47	0.43	146.99	4.90	147.51	13.21		
146.48	0.43	147.00	5.03	147.52	13.37		
146.49	0.43	147.01	5.17	147.53	13.40		
146.50	0.43	147.02	5.30	147.54	13.43		
146.51	0.45	147.03	5.44	147.55	13.45		
146.52	0.47	147.04	5.58	147.56	13.48		
146.53	0.51	147.05	5.72	147.57	13.51		
146.54	0.54	147.06	5.86	147.58	13.53		
146.55	0.59	147.07	6.00	147.59	13.56		
146.56	0.64	147.08	6.15	147.60	13.59		
146.57	0.69	147.09	6.29	147.61	13.61		
146.58	0.74	147.10	6.44	147.62	13.64		
146.59	0.80	147.11	6.58	147.63	13.67		
146.60	0.86	147.12	6.73	147.64	13.69		
146.61	0.93	147.13	6.88	147.65	13.72		
146.62	1.00	147.14	7.03	147.66	13.75		
146.63	1.07	147.15	7.18	147.67	13.77		
146.64	1.14	147.16	7.33	147.68	13.80		
146.65	1.22	147.17	7.48	147.69	13.83		
146.66	1.29	147.18	7.64	147.70	13.85		
146.67	1.37	147.19	7.79	147.71	13.88		
146.68	1.46	147.20	7.95	147.72	13.90		
146.69	1.54	147.21	8.11	147.73	13.93		
146.70	1.63	147.22	8.26	147.74	13.96		
146.71	1.72	147.23	8.42	147.75	13.98		
146.72	1.81	147.24	8.58	147.76	14.01		
146.73	1.90	147.25	8.74	147.77	14.03		
146.74	2.00	147.26	8.90	147.78	14.06		
146.75	2.09	147.27	9.06	147.79	14.08		
146.76	2.19	147.28	9.23	147.80	14.11		
146.77	2.29	147.29	9.39	147.81	14.14		
146.78	2.40	147.30	9.56	147.82	14.16		
146.79	2.50	147.31	9.72	147.83	14.19		
146.80	2.61	147.32	9.89	147.84	14.21		
146.81	2.71	147.33	10.06	147.85	14.24		
146.82	2.82	147.34	10.23	147.86	14.26		
146.83	2.93	147.35	10.39	147.87	14.29		
146.84	3.05	147.36	10.56	147.88	14.31		
146.85	3.16	147.37	10.74	147.89	14.34		
146.86	3.27	147.38	10.91	147.90	14.36		
146.87	3.39	147.39	11.08	147.91	14.39		
146.88	3.51	147.40	11.25	147.92	14.41		
146.89	3.63	147.41	11.43	147.93	14.44		

Stage-Area-Storage for Pond B-23: Basin #23

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.30	0	0	144.82	4,095	1,065
144.31	79	0	144.83	4,173	1,106
144.32	157	2	144.84	4,252	1,148
144.33	236	4	144.85	4,331	1,191
144.34	315	6	144.86	4,410	1,235
144.35	394	10	144.87	4,488	1,279
144.36	472	14	144.88	4,567	1,324
144.37	551	19	144.89	4,646	1,371
144.38	630	25	144.90	4,725	1,417
144.39	709	32	144.91	4,803	1,465
144.40	787	39	144.92	4,882	1,513
144.41	866	48	144.93	4,961	1,563
144.42	945	57	144.94	5,040	1,613
144.43	1,024	67	144.95	5,118	1,663
144.44	1,102	77	144.96	5,197	1,715
144.45	1,181	89	144.97	5,276	1,767
144.46	1,260	101	144.98	5,355	1,821
144.47	1,339	114	144.99	5,433	1,874
144.48	1,417	128	145.00	5,512	1,929
144.49	1,496	142	145.01	5,522	1,984
144.50	1,575	157	145.02	5,532	2,040
144.51	1,654	174	145.03	5,542	2,095
144.52	1,732	191	145.04	5,553	2,150
144.53	1,811	208	145.05	5,563	2,206
144.54	1,890	227	145.06	5,573	2,262
144.55	1,969	246	145.07	5,583	2,318
144.56	2,047	266	145.08	5,593	2,373
144.57	2,126	287	145.09	5,603	2,429
144.58	2,205	309	145.10	5,614	2,485
144.59	2,284	331	145.11	5,624	2,542
144.60	2,362	354	145.12	5,634	2,598
144.61	2,441	378	145.13	5,644	2,654
144.62	2,520	403	145.14	5,654	2,711
144.63	2,599	429	145.15	5,664	2,767
144.64	2,677	455	145.16	5,674	2,824
144.65	2,756	482	145.17	5,685	2,881
144.66	2,835	510	145.18	5,695	2,938
144.67	2,913	539	145.19	5,705	2,995
144.68	2,992	569	145.20	5,715	3,052
144.69	3,071	599	145.21	5,725	3,109
144.70	3,150	630	145.22	5,735	3,166
144.71	3,228	662	145.23	5,745	3,224
144.72	3,307	695	145.24	5,756	3,281
144.73	3,386	728	145.25	5,766	3,339
144.74	3,465	762	145.26	5,776	3,397
144.75	3,543	797	145.27	5,786	3,454
144.76	3,622	833	145.28	5,796	3,512
144.77	3,701	870	145.29	5,806	3,570
144.78	3,780	907	145.30	5,817	3,628
144.79	3,858	945	145.31	5,827	3,687
144.80	3,937	984	145.32	5,837	3,745
144.81	4,016	1,024	145.33	5,847	3,803

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.34	5,857	3,862	145.86	6,385	7,045
145.35	5,867	3,921	145.87	6,395	7,109
145.36	5,877	3,979	145.88	6,405	7,173
145.37	5,888	4,038	145.89	6,415	7,237
145.38	5,898	4,097	145.90	6,426	7,301
145.39	5,908	4,156	145.91	6,436	7,365
145.40	5,918	4,215	145.92	6,446	7,430
145.41	5,928	4,274	145.93	6,456	7,494
145.42	5,938	4,334	145.94	6,466	7,559
145.43	5,948	4,393	145.95	6,476	7,624
145.44	5,959	4,453	145.96	6,486	7,688
145.45	5,969	4,512	145.97	6,497	7,753
145.46	5,979	4,572	145.98	6,507	7,818
145.47	5,989	4,632	145.99	6,517	7,883
145.48	5,999	4,692	146.00	6,527	7,949
145.49	6,009	4,752	146.01	6,538	8,014
145.50	6,020	4,812	146.02	6,548	8,079
145.51	6,030	4,872	146.03	6,559	8,145
145.52	6,040	4,933	146.04	6,570	8,211
145.53	6,050	4,993	146.05	6,581	8,276
145.54	6,060	5,054	146.06	6,591	8,342
145.55	6,070	5,114	146.07	6,602	8,408
145.56	6,080	5,175	146.08	6,613	8,474
145.57	6,091	5,236	146.09	6,623	8,540
145.58	6,101	5,297	146.10	6,634	8,607
145.59	6,111	5,358	146.11	6,645	8,673
145.60	6,121	5,419	146.12	6,656	8,740
145.61	6,131	5,480	146.13	6,666	8,806
145.62	6,141	5,542	146.14	6,677	8,873
145.63	6,151	5,603	146.15	6,688	8,940
145.64	6,162	5,665	146.16	6,699	9,007
145.65	6,172	5,726	146.17	6,709	9,074
145.66	6,182	5,788	146.18	6,720	9,141
145.67	6,192	5,850	146.19	6,731	9,208
145.68	6,202	5,912	146.20	6,741	9,276
145.69	6,212	5,974	146.21	6,752	9,343
145.70	6,223	6,036	146.22	6,763	9,411
145.71	6,233	6,099	146.23	6,774	9,478
145.72	6,243	6,161	146.24	6,784	9,546
145.73	6,253	6,223	146.25	6,795	9,614
145.74	6,263	6,286	146.26	6,806	9,682
145.75	6,273	6,349	146.27	6,816	9,750
145.76	6,283	6,411	146.28	6,827	9,818
145.77	6,294	6,474	146.29	6,838	9,887
145.78	6,304	6,537	146.30	6,849	9,955
145.79	6,314	6,600	146.31	6,859	10,024
145.80	6,324	6,664	146.32	6,870	10,092
145.81	6,334	6,727	146.33	6,881	10,161
145.82	6,344	6,790	146.34	6,891	10,230
145.83	6,354	6,854	146.35	6,902	10,299
145.84	6,365	6,917	146.36	6,913	10,368
145.85	6,375	6,981	146.37	6,924	10,437

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.38	6,934	10,506	146.90	7,492	14,257
146.39	6,945	10,576	146.91	7,503	14,332
146.40	6,956	10,645	146.92	7,513	14,407
146.41	6,967	10,715	146.93	7,524	14,482
146.42	6,977	10,785	146.94	7,535	14,558
146.43	6,988	10,854	146.95	7,545	14,633
146.44	6,999	10,924	146.96	7,556	14,709
146.45	7,009	10,994	146.97	7,567	14,784
146.46	7,020	11,065	146.98	7,578	14,860
146.47	7,031	11,135	146.99	7,588	14,936
146.48	7,042	11,205	147.00	7,599	15,012
146.49	7,052	11,276	147.01	7,610	15,088
146.50	7,063	11,346	147.02	7,622	15,164
146.51	7,074	11,417	147.03	7,633	15,240
146.52	7,084	11,488	147.04	7,644	15,317
146.53	7,095	11,559	147.05	7,655	15,393
146.54	7,106	11,630	147.06	7,667	15,470
146.55	7,117	11,701	147.07	7,678	15,546
146.56	7,127	11,772	147.08	7,689	15,623
146.57	7,138	11,843	147.09	7,701	15,700
146.58	7,149	11,915	147.10	7,712	15,777
146.59	7,159	11,986	147.11	7,723	15,854
146.60	7,170	12,058	147.12	7,734	15,932
146.61	7,181	12,130	147.13	7,746	16,009
146.62	7,192	12,201	147.14	7,757	16,087
146.63	7,202	12,273	147.15	7,768	16,164
146.64	7,213	12,346	147.16	7,779	16,242
146.65	7,224	12,418	147.17	7,791	16,320
146.66	7,235	12,490	147.18	7,802	16,398
146.67	7,245	12,562	147.19	7,813	16,476
146.68	7,256	12,635	147.20	7,825	16,554
146.69	7,267	12,708	147.21	7,836	16,632
146.70	7,277	12,780	147.22	7,847	16,711
146.71	7,288	12,853	147.23	7,858	16,789
146.72	7,299	12,926	147.24	7,870	16,868
146.73	7,310	12,999	147.25	7,881	16,947
146.74	7,320	13,072	147.26	7,892	17,026
146.75	7,331	13,145	147.27	7,904	17,105
146.76	7,342	13,219	147.28	7,915	17,184
146.77	7,352	13,292	147.29	7,926	17,263
146.78	7,363	13,366	147.30	7,937	17,342
146.79	7,374	13,440	147.31	7,949	17,422
146.80	7,385	13,513	147.32	7,960	17,501
146.81	7,395	13,587	147.33	7,971	17,581
146.82	7,406	13,661	147.34	7,983	17,661
146.83	7,417	13,735	147.35	7,994	17,740
146.84	7,427	13,810	147.36	8,005	17,820
146.85	7,438	13,884	147.37	8,016	17,901
146.86	7,449	13,958	147.38	8,028	17,981
146.87	7,460	14,033	147.39	8,039	18,061
146.88	7,470	14,108	147.40	8,050	18,142
146.89	7,481	14,182	147.41	8,061	18,222

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.42	8,073	18,303
147.43	8,084	18,384
147.44	8,095	18,464
147.45	8,107	18,545
147.46	8,118	18,627
147.47	8,129	18,708
147.48	8,140	18,789
147.49	8,152	18,871
147.50	8,163	18,952
147.51	8,174	19,034
147.52	8,186	19,116
147.53	8,197	19,198
147.54	8,208	19,280
147.55	8,219	19,362
147.56	8,231	19,444
147.57	8,242	19,526
147.58	8,253	19,609
147.59	8,265	19,691
147.60	8,276	19,774
147.61	8,287	19,857
147.62	8,298	19,940
147.63	8,310	20,023
147.64	8,321	20,106
147.65	8,332	20,189
147.66	8,343	20,273
147.67	8,355	20,356
147.68	8,366	20,440
147.69	8,377	20,524
147.70	8,389	20,607
147.71	8,400	20,691
147.72	8,411	20,775
147.73	8,422	20,860
147.74	8,434	20,944
147.75	8,445	21,028
147.76	8,456	21,113
147.77	8,468	21,197
147.78	8,479	21,282
147.79	8,490	21,367
147.80	8,501	21,452
147.81	8,513	21,537
147.82	8,524	21,622
147.83	8,535	21,707
147.84	8,547	21,793
147.85	8,558	21,878
147.86	8,569	21,964
147.87	8,580	22,050
147.88	8,592	22,136
147.89	8,603	22,222
147.90	8,614	22,308
147.91	8,625	22,394
147.92	8,637	22,480
147.93	8,648	22,567
147.94	8,659	22,653
147.95	8,671	22,740
147.96	8,682	22,827
147.97	8,693	22,913
147.98	8,704	23,000
147.99	8,716	23,087
148.00	**8,727**	**23,175**

Summary for Pond B-24: Basin #24

Inflow Area = 2.408 ac, 37.46% Impervious, Inflow Depth = 2.28" for Future 2 yr event
Inflow = 5.59 cfs @ 12.17 hrs, Volume= 0.458 af
Outflow = 0.57 cfs @ 13.22 hrs, Volume= 0.364 af, Atten= 90%, Lag= 62.4 min
Primary = 0.57 cfs @ 13.22 hrs, Volume= 0.364 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.14' @ 13.22 hrs Surf.Area= 8,467 sf Storage= 11,538 cf

Plug-Flow detention time= 337.0 min calculated for 0.364 af (79% of inflow)
Center-of-Mass det. time= 251.8 min (1,050.3 - 798.5)

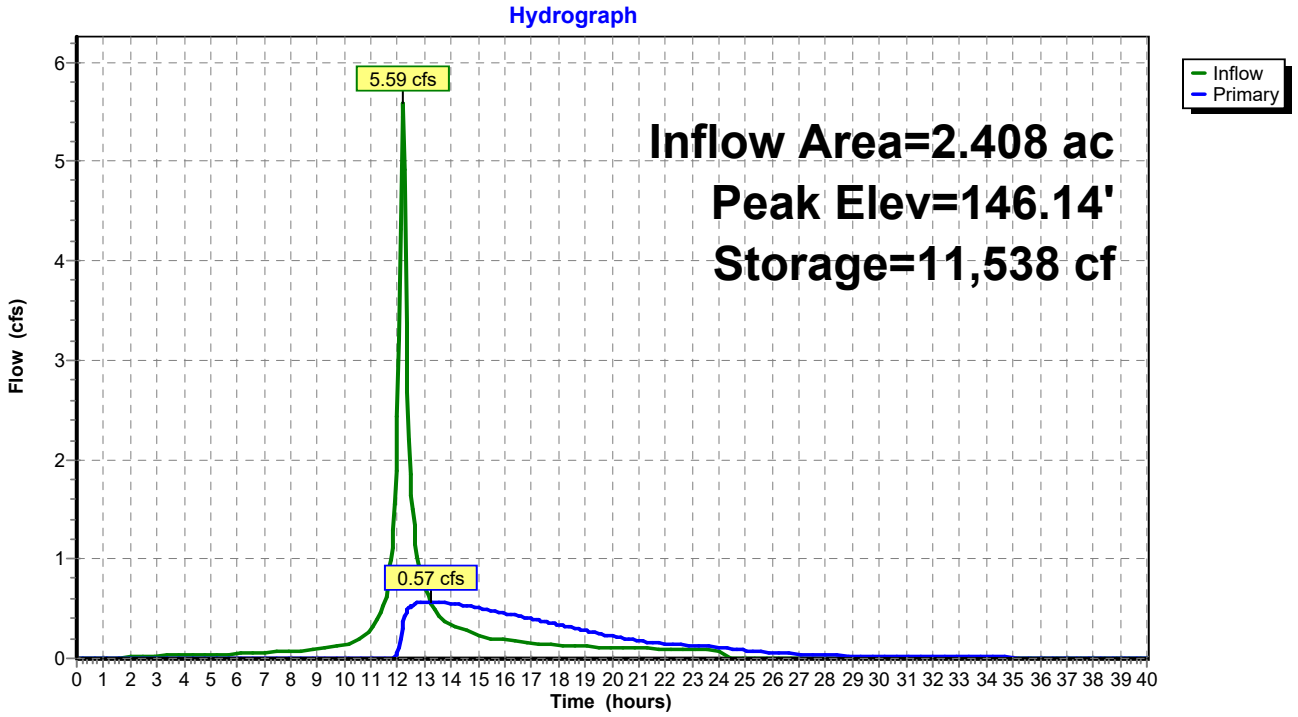
Volume	Invert	Avail.Storage	Storage Description
#1	144.30'	40,061 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
144.30	0	0	0
145.00	7,331	2,566	2,566
146.00	8,327	7,829	10,395
147.00	9,353	8,840	19,235
148.00	10,406	9,880	29,114
149.00	11,488	10,947	40,061

Device	Routing	Invert	Outlet Devices
#1	Primary	144.30'	**18.0" Round Culvert** L= 22.0' Ke= 0.500 Inlet / Outlet Invert= 144.30' / 143.04' S= 0.0573 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	145.17'	**5.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.57 cfs @ 13.22 hrs HW=146.14' (Free Discharge)
- **1=Culvert** (Passes 0.57 cfs of 8.87 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.57 cfs @ 4.19 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-24: Basin #24



Stage-Discharge for Pond B-24: Basin #24

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
144.30	0.00	144.82	0.00	145.34	0.07	145.86	0.46
144.31	0.00	144.83	0.00	145.35	0.08	145.87	0.46
144.32	0.00	144.84	0.00	145.36	0.09	145.88	0.47
144.33	0.00	144.85	0.00	145.37	0.10	145.89	0.47
144.34	0.00	144.86	0.00	145.38	0.11	145.90	0.47
144.35	0.00	144.87	0.00	145.39	0.12	145.91	0.48
144.36	0.00	144.88	0.00	145.40	0.13	145.92	0.48
144.37	0.00	144.89	0.00	145.41	0.14	145.93	0.49
144.38	0.00	144.90	0.00	145.42	0.15	145.94	0.49
144.39	0.00	144.91	0.00	145.43	0.16	145.95	0.50
144.40	0.00	144.92	0.00	145.44	0.17	145.96	0.50
144.41	0.00	144.93	0.00	145.45	0.18	145.97	0.51
144.42	0.00	144.94	0.00	145.46	0.19	145.98	0.51
144.43	0.00	144.95	0.00	145.47	0.20	145.99	0.51
144.44	0.00	144.96	0.00	145.48	0.21	146.00	0.52
144.45	0.00	144.97	0.00	145.49	0.22	146.01	0.52
144.46	0.00	144.98	0.00	145.50	0.23	146.02	0.53
144.47	0.00	144.99	0.00	145.51	0.24	146.03	0.53
144.48	0.00	145.00	0.00	145.52	0.25	146.04	0.53
144.49	0.00	145.01	0.00	145.53	0.26	146.05	0.54
144.50	0.00	145.02	0.00	145.54	0.27	146.06	0.54
144.51	0.00	145.03	0.00	145.55	0.27	146.07	0.55
144.52	0.00	145.04	0.00	145.56	0.28	146.08	0.55
144.53	0.00	145.05	0.00	145.57	0.29	146.09	0.55
144.54	0.00	145.06	0.00	145.58	0.30	146.10	0.56
144.55	0.00	145.07	0.00	145.59	0.30	146.11	0.56
144.56	0.00	145.08	0.00	145.60	0.31	146.12	0.57
144.57	0.00	145.09	0.00	145.61	0.32	146.13	0.57
144.58	0.00	145.10	0.00	145.62	0.32	146.14	0.57
144.59	0.00	145.11	0.00	145.63	0.33	146.15	0.58
144.60	0.00	145.12	0.00	145.64	0.34	146.16	0.58
144.61	0.00	145.13	0.00	145.65	0.34	146.17	0.58
144.62	0.00	145.14	0.00	145.66	0.35	146.18	0.59
144.63	0.00	145.15	0.00	145.67	0.35	146.19	0.59
144.64	0.00	145.16	0.00	145.68	0.36	146.20	0.60
144.65	0.00	145.17	0.00	145.69	0.37	146.21	0.60
144.66	0.00	145.18	0.00	145.70	0.37	146.22	0.60
144.67	0.00	145.19	0.00	145.71	0.38	146.23	0.61
144.68	0.00	145.20	0.00	145.72	0.38	146.24	0.61
144.69	0.00	145.21	0.00	145.73	0.39	146.25	0.61
144.70	0.00	145.22	0.01	145.74	0.39	146.26	0.63
144.71	0.00	145.23	0.01	145.75	0.40	146.27	0.66
144.72	0.00	145.24	0.01	145.76	0.41	146.28	0.69
144.73	0.00	145.25	0.02	145.77	0.41	146.29	0.73
144.74	0.00	145.26	0.02	145.78	0.42	146.30	0.78
144.75	0.00	145.27	0.03	145.79	0.42	146.31	0.83
144.76	0.00	145.28	0.03	145.80	0.43	146.32	0.88
144.77	0.00	145.29	0.04	145.81	0.43	146.33	0.94
144.78	0.00	145.30	0.04	145.82	0.44	146.34	1.00
144.79	0.00	145.31	0.05	145.83	0.44	146.35	1.06
144.80	0.00	145.32	0.06	145.84	0.45	146.36	1.13
144.81	0.00	145.33	0.07	145.85	0.45	146.37	1.19

Stage-Discharge for Pond B-24: Basin #24 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
146.38	1.27	146.90	7.44	147.42	13.10	147.94	14.46
146.39	1.34	146.91	7.59	147.43	13.13	147.95	14.49
146.40	1.42	146.92	7.75	147.44	13.15	147.96	14.51
146.41	1.50	146.93	7.90	147.45	13.18	147.97	14.54
146.42	1.58	146.94	8.06	147.46	13.21	147.98	14.56
146.43	1.66	146.95	8.22	147.47	13.24	147.99	14.59
146.44	1.75	146.96	8.37	147.48	13.26	148.00	14.73
146.45	1.84	146.97	8.53	147.49	13.29	148.01	14.97
146.46	1.93	146.98	8.69	147.50	13.32	148.02	15.27
146.47	2.02	146.99	8.85	147.51	13.35	148.03	15.63
146.48	2.12	147.00	9.01	147.52	13.37	148.04	16.02
146.49	2.21	147.01	9.18	147.53	13.40	148.05	16.46
146.50	2.31	147.02	9.34	147.54	13.43	148.06	16.94
146.51	2.41	147.03	9.50	147.55	13.45	148.07	17.44
146.52	2.51	147.04	9.67	147.56	13.48	148.08	17.98
146.53	2.62	147.05	9.83	147.57	13.51	148.09	18.55
146.54	2.72	147.06	10.00	147.58	13.53	148.10	19.15
146.55	2.83	147.07	10.17	147.59	13.56	148.11	19.78
146.56	2.94	147.08	10.34	147.60	13.59	148.12	20.43
146.57	3.05	147.09	10.51	147.61	13.61	148.13	21.10
146.58	3.16	147.10	10.68	147.62	13.64	148.14	21.80
146.59	3.27	147.11	10.85	147.63	13.67	148.15	22.53
146.60	3.39	147.12	11.02	147.64	13.69	148.16	23.27
146.61	3.50	147.13	11.19	147.65	13.72	148.17	24.04
146.62	3.62	147.14	11.36	147.66	13.75	148.18	24.83
146.63	3.74	147.15	11.54	147.67	13.77	148.19	25.64
146.64	3.86	147.16	11.71	147.68	13.80	148.20	26.51
146.65	3.98	147.17	11.89	147.69	13.83	148.21	27.41
146.66	4.11	147.18	12.07	147.70	13.85	148.22	28.33
146.67	4.23	147.19	12.24	147.71	13.88	148.23	29.28
146.68	4.36	147.20	12.42	147.72	13.90	148.24	30.25
146.69	4.49	147.21	12.51	147.73	13.93	148.25	31.25
146.70	4.61	147.22	12.53	147.74	13.96	148.26	32.27
146.71	4.74	147.23	12.56	147.75	13.98	148.27	33.32
146.72	4.88	147.24	12.59	147.76	14.01	148.28	34.39
146.73	5.01	147.25	12.62	147.77	14.03	148.29	35.48
146.74	5.14	147.26	12.65	147.78	14.06	148.30	36.60
146.75	5.28	147.27	12.68	147.79	14.08	148.31	37.75
146.76	5.41	147.28	12.71	147.80	14.11	148.32	38.92
146.77	5.55	147.29	12.73	147.81	14.14	148.33	40.11
146.78	5.69	147.30	12.76	147.82	14.16	148.34	41.33
146.79	5.83	147.31	12.79	147.83	14.19	148.35	42.57
146.80	5.97	147.32	12.82	147.84	14.21	148.36	43.84
146.81	6.11	147.33	12.85	147.85	14.24	148.37	45.13
146.82	6.26	147.34	12.88	147.86	14.26	148.38	46.44
146.83	6.40	147.35	12.90	147.87	14.29	148.39	47.78
146.84	6.55	147.36	12.93	147.88	14.31	148.40	49.17
146.85	6.69	147.37	12.96	147.89	14.34	148.41	50.58
146.86	6.84	147.38	12.99	147.90	14.36	148.42	52.03
146.87	6.99	147.39	13.02	147.91	14.39	148.43	53.49
146.88	7.14	147.40	13.04	147.92	14.41	148.44	54.99
146.89	7.29	147.41	13.07	147.93	14.44	148.45	56.51

Stage-Discharge for Pond B-24: Basin #24 (continued)

Elevation (feet)	Primary (cfs)
148.46	58.05
148.47	59.62
148.48	61.22
148.49	62.85
148.50	64.50
148.51	66.18
148.52	67.88
148.53	69.61
148.54	71.37
148.55	73.15
148.56	74.96
148.57	76.80
148.58	78.67
148.59	80.56
148.60	82.21
148.61	83.87
148.62	85.55
148.63	87.24
148.64	88.94
148.65	90.66
148.66	92.39
148.67	94.13
148.68	95.88
148.69	97.65
148.70	99.43
148.71	101.23
148.72	103.03
148.73	104.85
148.74	106.68
148.75	108.53
148.76	110.38
148.77	112.25
148.78	114.13
148.79	116.02
148.80	117.96
148.81	119.92
148.82	121.88
148.83	123.87
148.84	125.86
148.85	127.87
148.86	129.89
148.87	131.92
148.88	133.97
148.89	136.03
148.90	138.10
148.91	140.18
148.92	142.28
148.93	144.39
148.94	146.52
148.95	148.65
148.96	150.80
148.97	152.96
148.98	155.14
148.99	157.32
149.00	**159.47**

Stage-Area-Storage for Pond B-24: Basin #24

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.30	0	0	144.82	5,446	1,416
144.31	105	1	144.83	5,551	1,471
144.32	209	2	144.84	5,655	1,527
144.33	314	5	144.85	5,760	1,584
144.34	419	8	144.86	5,865	1,642
144.35	524	13	144.87	5,970	1,701
144.36	628	19	144.88	6,074	1,762
144.37	733	26	144.89	6,179	1,823
144.38	838	34	144.90	6,284	1,885
144.39	943	42	144.91	6,388	1,948
144.40	1,047	52	144.92	6,493	2,013
144.41	1,152	63	144.93	6,598	2,078
144.42	1,257	75	144.94	6,703	2,145
144.43	1,361	88	144.95	6,807	2,212
144.44	1,466	103	144.96	6,912	2,281
144.45	1,571	118	144.97	7,017	2,351
144.46	1,676	134	144.98	7,122	2,421
144.47	1,780	151	144.99	7,226	2,493
144.48	1,885	170	145.00	7,331	2,566
144.49	1,990	189	145.01	7,341	2,639
144.50	2,095	209	145.02	7,351	2,713
144.51	2,199	231	145.03	7,361	2,786
144.52	2,304	253	145.04	7,371	2,860
144.53	2,409	277	145.05	7,381	2,934
144.54	2,513	302	145.06	7,391	3,008
144.55	2,618	327	145.07	7,401	3,081
144.56	2,723	354	145.08	7,411	3,156
144.57	2,828	382	145.09	7,421	3,230
144.58	2,932	411	145.10	7,431	3,304
144.59	3,037	440	145.11	7,441	3,378
144.60	3,142	471	145.12	7,451	3,453
144.61	3,247	503	145.13	7,460	3,527
144.62	3,351	536	145.14	7,470	3,602
144.63	3,456	570	145.15	7,480	3,677
144.64	3,561	605	145.16	7,490	3,752
144.65	3,666	641	145.17	7,500	3,827
144.66	3,770	679	145.18	7,510	3,902
144.67	3,875	717	145.19	7,520	3,977
144.68	3,980	756	145.20	7,530	4,052
144.69	4,084	796	145.21	7,540	4,127
144.70	4,189	838	145.22	7,550	4,203
144.71	4,294	880	145.23	7,560	4,278
144.72	4,399	924	145.24	7,570	4,354
144.73	4,503	968	145.25	7,580	4,430
144.74	4,608	1,014	145.26	7,590	4,506
144.75	4,713	1,060	145.27	7,600	4,582
144.76	4,818	1,108	145.28	7,610	4,658
144.77	4,922	1,157	145.29	7,620	4,734
144.78	5,027	1,206	145.30	7,630	4,810
144.79	5,132	1,257	145.31	7,640	4,886
144.80	5,236	1,309	145.32	7,650	4,963
144.81	5,341	1,362	145.33	7,660	5,039

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.34	7,670	5,116	145.86	8,188	9,239
145.35	7,680	5,193	145.87	8,198	9,321
145.36	7,690	5,270	145.88	8,207	9,403
145.37	7,700	5,346	145.89	8,217	9,485
145.38	7,709	5,424	145.90	8,227	9,567
145.39	7,719	5,501	145.91	8,237	9,649
145.40	7,729	5,578	145.92	8,247	9,732
145.41	7,739	5,655	145.93	8,257	9,814
145.42	7,749	5,733	145.94	8,267	9,897
145.43	7,759	5,810	145.95	8,277	9,980
145.44	7,769	5,888	145.96	8,287	10,063
145.45	7,779	5,966	145.97	8,297	10,145
145.46	7,789	6,043	145.98	8,307	10,229
145.47	7,799	6,121	145.99	8,317	10,312
145.48	7,809	6,199	146.00	8,327	10,395
145.49	7,819	6,278	146.01	8,337	10,478
145.50	7,829	6,356	146.02	8,348	10,562
145.51	7,839	6,434	146.03	8,358	10,645
145.52	7,849	6,513	146.04	8,368	10,729
145.53	7,859	6,591	146.05	8,378	10,812
145.54	7,869	6,670	146.06	8,389	10,896
145.55	7,879	6,749	146.07	8,399	10,980
145.56	7,889	6,827	146.08	8,409	11,064
145.57	7,899	6,906	146.09	8,419	11,148
145.58	7,909	6,985	146.10	8,430	11,233
145.59	7,919	7,064	146.11	8,440	11,317
145.60	7,929	7,144	146.12	8,450	11,401
145.61	7,939	7,223	146.13	8,460	11,486
145.62	7,949	7,303	146.14	8,471	11,571
145.63	7,958	7,382	146.15	8,481	11,655
145.64	7,968	7,462	146.16	8,491	11,740
145.65	7,978	7,541	146.17	8,501	11,825
145.66	7,988	7,621	146.18	8,512	11,910
145.67	7,998	7,701	146.19	8,522	11,995
145.68	8,008	7,781	146.20	8,532	12,081
145.69	8,018	7,861	146.21	8,542	12,166
145.70	8,028	7,942	146.22	8,553	12,252
145.71	8,038	8,022	146.23	8,563	12,337
145.72	8,048	8,102	146.24	8,573	12,423
145.73	8,058	8,183	146.25	8,584	12,509
145.74	8,068	8,263	146.26	8,594	12,595
145.75	8,078	8,344	146.27	8,604	12,681
145.76	8,088	8,425	146.28	8,614	12,767
145.77	8,098	8,506	146.29	8,625	12,853
145.78	8,108	8,587	146.30	8,635	12,939
145.79	8,118	8,668	146.31	8,645	13,026
145.80	8,128	8,749	146.32	8,655	13,112
145.81	8,138	8,831	146.33	8,666	13,199
145.82	8,148	8,912	146.34	8,676	13,285
145.83	8,158	8,994	146.35	8,686	13,372
145.84	8,168	9,075	146.36	8,696	13,459
145.85	8,178	9,157	146.37	8,707	13,546

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.38	8,717	13,633	146.90	9,250	18,305
146.39	8,727	13,720	146.91	9,261	18,397
146.40	8,737	13,808	146.92	9,271	18,490
146.41	8,748	13,895	146.93	9,281	18,583
146.42	8,758	13,983	146.94	9,291	18,676
146.43	8,768	14,070	146.95	9,302	18,768
146.44	8,778	14,158	146.96	9,312	18,862
146.45	8,789	14,246	146.97	9,322	18,955
146.46	8,799	14,334	146.98	9,332	19,048
146.47	8,809	14,422	146.99	9,343	19,141
146.48	8,819	14,510	147.00	9,353	19,235
146.49	8,830	14,598	147.01	9,364	19,328
146.50	8,840	14,687	147.02	9,374	19,422
146.51	8,850	14,775	147.03	9,385	19,516
146.52	8,861	14,864	147.04	9,395	19,610
146.53	8,871	14,952	147.05	9,406	19,704
146.54	8,881	15,041	147.06	9,416	19,798
146.55	8,891	15,130	147.07	9,427	19,892
146.56	8,902	15,219	147.08	9,437	19,986
146.57	8,912	15,308	147.09	9,448	20,081
146.58	8,922	15,397	147.10	9,458	20,175
146.59	8,932	15,486	147.11	9,469	20,270
146.60	8,943	15,576	147.12	9,479	20,365
146.61	8,953	15,665	147.13	9,490	20,460
146.62	8,963	15,755	147.14	9,500	20,555
146.63	8,973	15,844	147.15	9,511	20,650
146.64	8,984	15,934	147.16	9,521	20,745
146.65	8,994	16,024	147.17	9,532	20,840
146.66	9,004	16,114	147.18	9,543	20,935
146.67	9,014	16,204	147.19	9,553	21,031
146.68	9,025	16,294	147.20	9,564	21,127
146.69	9,035	16,385	147.21	9,574	21,222
146.70	9,045	16,475	147.22	9,585	21,318
146.71	9,055	16,566	147.23	9,595	21,414
146.72	9,066	16,656	147.24	9,606	21,510
146.73	9,076	16,747	147.25	9,616	21,606
146.74	9,086	16,838	147.26	9,627	21,702
146.75	9,097	16,929	147.27	9,637	21,799
146.76	9,107	17,020	147.28	9,648	21,895
146.77	9,117	17,111	147.29	9,658	21,991
146.78	9,127	17,202	147.30	9,669	22,088
146.79	9,138	17,293	147.31	9,679	22,185
146.80	9,148	17,385	147.32	9,690	22,282
146.81	9,158	17,476	147.33	9,700	22,379
146.82	9,168	17,568	147.34	9,711	22,476
146.83	9,179	17,660	147.35	9,722	22,573
146.84	9,189	17,752	147.36	9,732	22,670
146.85	9,199	17,843	147.37	9,743	22,768
146.86	9,209	17,935	147.38	9,753	22,865
146.87	9,220	18,028	147.39	9,764	22,963
146.88	9,230	18,120	147.40	9,774	23,060
146.89	9,240	18,212	147.41	9,785	23,158

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.42	9,795	23,256	147.94	10,343	28,492
147.43	9,806	23,354	147.95	10,353	28,595
147.44	9,816	23,452	147.96	10,364	28,699
147.45	9,827	23,550	147.97	10,374	28,803
147.46	9,837	23,649	147.98	10,385	28,906
147.47	9,848	23,747	147.99	10,395	29,010
147.48	9,858	23,846	148.00	10,406	29,114
147.49	9,869	23,944	148.01	10,417	29,218
147.50	9,880	24,043	148.02	10,428	29,323
147.51	9,890	24,142	148.03	10,438	29,427
147.52	9,901	24,241	148.04	10,449	29,531
147.53	9,911	24,340	148.05	10,460	29,636
147.54	9,922	24,439	148.06	10,471	29,741
147.55	9,932	24,538	148.07	10,482	29,845
147.56	9,943	24,638	148.08	10,493	29,950
147.57	9,953	24,737	148.09	10,503	30,055
147.58	9,964	24,837	148.10	10,514	30,160
147.59	9,974	24,936	148.11	10,525	30,266
147.60	9,985	25,036	148.12	10,536	30,371
147.61	9,995	25,136	148.13	10,547	30,476
147.62	10,006	25,236	148.14	10,557	30,582
147.63	10,016	25,336	148.15	10,568	30,687
147.64	10,027	25,436	148.16	10,579	30,793
147.65	10,037	25,537	148.17	10,590	30,899
147.66	10,048	25,637	148.18	10,601	31,005
147.67	10,059	25,738	148.19	10,612	31,111
147.68	10,069	25,838	148.20	10,622	31,217
147.69	10,080	25,939	148.21	10,633	31,323
147.70	10,090	26,040	148.22	10,644	31,430
147.71	10,101	26,141	148.23	10,655	31,536
147.72	10,111	26,242	148.24	10,666	31,643
147.73	10,122	26,343	148.25	10,677	31,750
147.74	10,132	26,444	148.26	10,687	31,856
147.75	10,143	26,546	148.27	10,698	31,963
147.76	10,153	26,647	148.28	10,709	32,070
147.77	10,164	26,749	148.29	10,720	32,178
147.78	10,174	26,851	148.30	10,731	32,285
147.79	10,185	26,952	148.31	10,741	32,392
147.80	10,195	27,054	148.32	10,752	32,500
147.81	10,206	27,156	148.33	10,763	32,607
147.82	10,216	27,258	148.34	10,774	32,715
147.83	10,227	27,361	148.35	10,785	32,823
147.84	10,238	27,463	148.36	10,796	32,931
147.85	10,248	27,565	148.37	10,806	33,039
147.86	10,259	27,668	148.38	10,817	33,147
147.87	10,269	27,770	148.39	10,828	33,255
147.88	10,280	27,873	148.40	10,839	33,363
147.89	10,290	27,976	148.41	10,850	33,472
147.90	10,301	28,079	148.42	10,860	33,580
147.91	10,311	28,182	148.43	10,871	33,689
147.92	10,322	28,285	148.44	10,882	33,798
147.93	10,332	28,389	148.45	10,893	33,907

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.46	10,904	34,016
148.47	10,915	34,125
148.48	10,925	34,234
148.49	10,936	34,343
148.50	10,947	34,453
148.51	10,958	34,562
148.52	10,969	34,672
148.53	10,979	34,781
148.54	10,990	34,891
148.55	11,001	35,001
148.56	11,012	35,111
148.57	11,023	35,222
148.58	11,034	35,332
148.59	11,044	35,442
148.60	11,055	35,553
148.61	11,066	35,663
148.62	11,077	35,774
148.63	11,088	35,885
148.64	11,098	35,996
148.65	11,109	36,107
148.66	11,120	36,218
148.67	11,131	36,329
148.68	11,142	36,441
148.69	11,153	36,552
148.70	11,163	36,664
148.71	11,174	36,775
148.72	11,185	36,887
148.73	11,196	36,999
148.74	11,207	37,111
148.75	11,218	37,223
148.76	11,228	37,335
148.77	11,239	37,448
148.78	11,250	37,560
148.79	11,261	37,673
148.80	11,272	37,785
148.81	11,282	37,898
148.82	11,293	38,011
148.83	11,304	38,124
148.84	11,315	38,237
148.85	11,326	38,350
148.86	11,337	38,464
148.87	11,347	38,577
148.88	11,358	38,691
148.89	11,369	38,804
148.90	11,380	38,918
148.91	11,391	39,032
148.92	11,401	39,146
148.93	11,412	39,260
148.94	11,423	39,374
148.95	11,434	39,488
148.96	11,445	39,603
148.97	11,456	39,717
148.98	11,466	39,832
148.99	11,477	39,947
149.00	**11,488**	**40,061**

Summary for Pond B-25: Basin #25

Inflow Area = 2.500 ac, 34.96% Impervious, Inflow Depth = 2.23" for Future 2 yr event
Inflow = 5.68 cfs @ 12.17 hrs, Volume= 0.465 af
Outflow = 0.58 cfs @ 13.23 hrs, Volume= 0.377 af, Atten= 90%, Lag= 63.0 min
Primary = 0.58 cfs @ 13.23 hrs, Volume= 0.377 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 145.80' @ 13.23 hrs Surf.Area= 6,309 sf Storage= 11,536 cf

Plug-Flow detention time= 314.4 min calculated for 0.377 af (81% of inflow)
Center-of-Mass det. time= 234.4 min (1,035.6 - 801.1)

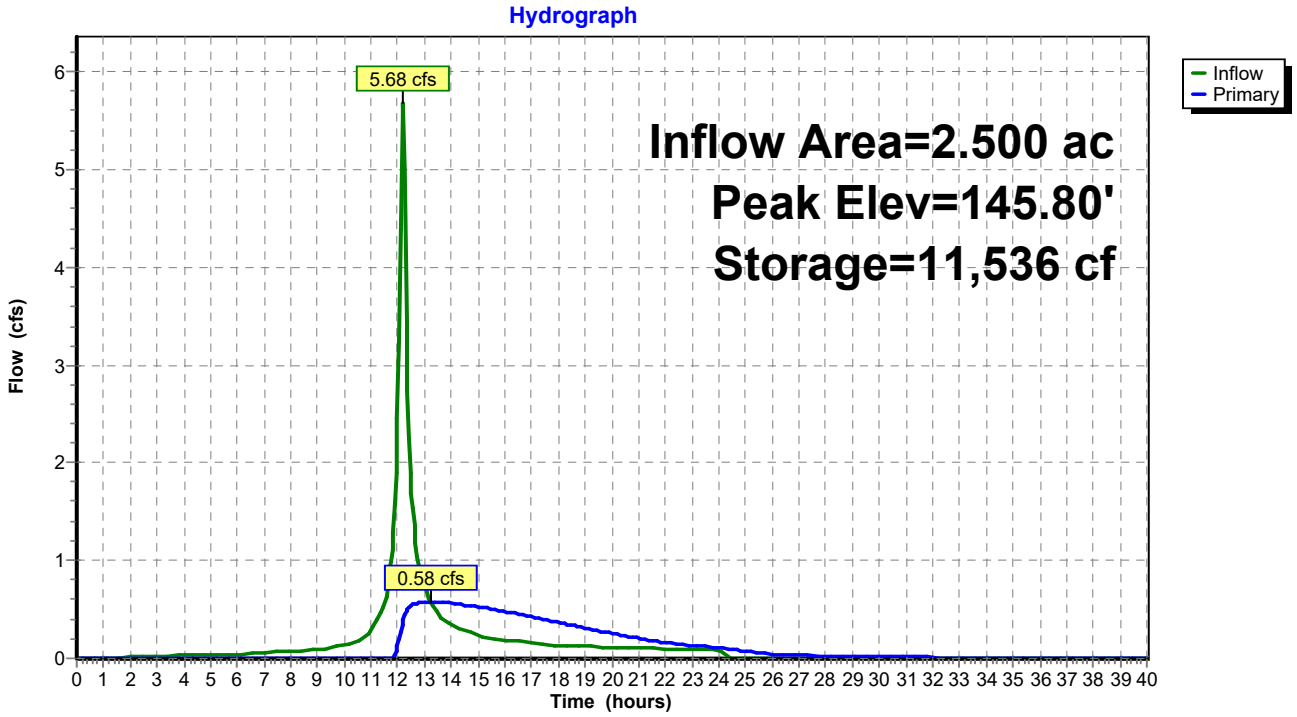
Volume	Invert	Avail.Storage	Storage Description
#1	143.30'	36,587 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
143.30	0	0	0
144.00	4,702	1,646	1,646
145.00	5,584	5,143	6,789
146.00	6,492	6,038	12,827
147.00	7,428	6,960	19,787
148.00	8,393	7,911	27,697
149.00	9,386	8,890	36,587

Device	Routing	Invert	Outlet Devices
#1	Primary	143.30'	**18.0" Round Culvert** L= 186.0' Ke= 0.500 Inlet / Outlet Invert= 143.30' / 142.00' S= 0.0070 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	144.42'	**4.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	145.95'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.96'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.58 cfs @ 13.23 hrs HW=145.80' (Free Discharge)
- **1=Culvert** (Passes 0.58 cfs of 9.71 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.58 cfs @ 5.25 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-25: Basin #25



Stage-Discharge for Pond B-25: Basin #25

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
143.30	0.00	143.82	0.00	144.34	0.00	144.86	0.27
143.31	0.00	143.83	0.00	144.35	0.00	144.87	0.27
143.32	0.00	143.84	0.00	144.36	0.00	144.88	0.28
143.33	0.00	143.85	0.00	144.37	0.00	144.89	0.28
143.34	0.00	143.86	0.00	144.38	0.00	144.90	0.29
143.35	0.00	143.87	0.00	144.39	0.00	144.91	0.29
143.36	0.00	143.88	0.00	144.40	0.00	144.92	0.30
143.37	0.00	143.89	0.00	144.41	0.00	144.93	0.30
143.38	0.00	143.90	0.00	144.42	0.00	144.94	0.31
143.39	0.00	143.91	0.00	144.43	0.00	144.95	0.31
143.40	0.00	143.92	0.00	144.44	0.00	144.96	0.32
143.41	0.00	143.93	0.00	144.45	0.00	144.97	0.32
143.42	0.00	143.94	0.00	144.46	0.00	144.98	0.32
143.43	0.00	143.95	0.00	144.47	0.01	144.99	0.33
143.44	0.00	143.96	0.00	144.48	0.01	145.00	0.33
143.45	0.00	143.97	0.00	144.49	0.01	145.01	0.34
143.46	0.00	143.98	0.00	144.50	0.02	145.02	0.34
143.47	0.00	143.99	0.00	144.51	0.02	145.03	0.35
143.48	0.00	144.00	0.00	144.52	0.03	145.04	0.35
143.49	0.00	144.01	0.00	144.53	0.03	145.05	0.35
143.50	0.00	144.02	0.00	144.54	0.04	145.06	0.36
143.51	0.00	144.03	0.00	144.55	0.04	145.07	0.36
143.52	0.00	144.04	0.00	144.56	0.05	145.08	0.37
143.53	0.00	144.05	0.00	144.57	0.05	145.09	0.37
143.54	0.00	144.06	0.00	144.58	0.06	145.10	0.37
143.55	0.00	144.07	0.00	144.59	0.07	145.11	0.38
143.56	0.00	144.08	0.00	144.60	0.08	145.12	0.38
143.57	0.00	144.09	0.00	144.61	0.08	145.13	0.38
143.58	0.00	144.10	0.00	144.62	0.09	145.14	0.39
143.59	0.00	144.11	0.00	144.63	0.10	145.15	0.39
143.60	0.00	144.12	0.00	144.64	0.11	145.16	0.40
143.61	0.00	144.13	0.00	144.65	0.12	145.17	0.40
143.62	0.00	144.14	0.00	144.66	0.12	145.18	0.40
143.63	0.00	144.15	0.00	144.67	0.13	145.19	0.41
143.64	0.00	144.16	0.00	144.68	0.14	145.20	0.41
143.65	0.00	144.17	0.00	144.69	0.15	145.21	0.41
143.66	0.00	144.18	0.00	144.70	0.16	145.22	0.42
143.67	0.00	144.19	0.00	144.71	0.17	145.23	0.42
143.68	0.00	144.20	0.00	144.72	0.18	145.24	0.42
143.69	0.00	144.21	0.00	144.73	0.19	145.25	0.43
143.70	0.00	144.22	0.00	144.74	0.19	145.26	0.43
143.71	0.00	144.23	0.00	144.75	0.20	145.27	0.43
143.72	0.00	144.24	0.00	144.76	0.21	145.28	0.44
143.73	0.00	144.25	0.00	144.77	0.22	145.29	0.44
143.74	0.00	144.26	0.00	144.78	0.22	145.30	0.44
143.75	0.00	144.27	0.00	144.79	0.23	145.31	0.45
143.76	0.00	144.28	0.00	144.80	0.23	145.32	0.45
143.77	0.00	144.29	0.00	144.81	0.24	145.33	0.45
143.78	0.00	144.30	0.00	144.82	0.25	145.34	0.46
143.79	0.00	144.31	0.00	144.83	0.25	145.35	0.46
143.80	0.00	144.32	0.00	144.84	0.26	145.36	0.46
143.81	0.00	144.33	0.00	144.85	0.26	145.37	0.46

Stage-Discharge for Pond B-25: Basin #25 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
145.38	0.47	145.90	0.60	146.42	4.83	146.94	11.88
145.39	0.47	145.91	0.61	146.43	4.96	146.95	11.90
145.40	0.47	145.92	0.61	146.44	5.10	146.96	11.91
145.41	0.48	145.93	0.61	146.45	5.23	146.97	11.93
145.42	0.48	145.94	0.61	146.46	5.37	146.98	11.95
145.43	0.48	145.95	0.62	146.47	5.50	146.99	11.97
145.44	0.49	145.96	0.63	146.48	5.64	147.00	11.98
145.45	0.49	145.97	0.66	146.49	5.78	147.01	12.00
145.46	0.49	145.98	0.69	146.50	5.92	147.02	12.02
145.47	0.49	145.99	0.73	146.51	6.06	147.03	12.03
145.48	0.50	146.00	0.77	146.52	6.20	147.04	12.05
145.49	0.50	146.01	0.82	146.53	6.35	147.05	12.07
145.50	0.50	146.02	0.87	146.54	6.49	147.06	12.09
145.51	0.51	146.03	0.93	146.55	6.64	147.07	12.10
145.52	0.51	146.04	0.99	146.56	6.78	147.08	12.12
145.53	0.51	146.05	1.05	146.57	6.93	147.09	12.14
145.54	0.51	146.06	1.12	146.58	7.08	147.10	12.15
145.55	0.52	146.07	1.18	146.59	7.23	147.11	12.17
145.56	0.52	146.08	1.25	146.60	7.38	147.12	12.19
145.57	0.52	146.09	1.33	146.61	7.53	147.13	12.20
145.58	0.52	146.10	1.40	146.62	7.69	147.14	12.22
145.59	0.53	146.11	1.48	146.63	7.84	147.15	12.24
145.60	0.53	146.12	1.56	146.64	8.00	147.16	12.25
145.61	0.53	146.13	1.65	146.65	8.15	147.17	12.27
145.62	0.54	146.14	1.73	146.66	8.31	147.18	12.29
145.63	0.54	146.15	1.82	146.67	8.47	147.19	12.30
145.64	0.54	146.16	1.91	146.68	8.63	147.20	12.32
145.65	0.54	146.17	2.00	146.69	8.79	147.21	12.34
145.66	0.55	146.18	2.09	146.70	8.95	147.22	12.35
145.67	0.55	146.19	2.19	146.71	9.11	147.23	12.37
145.68	0.55	146.20	2.29	146.72	9.27	147.24	12.39
145.69	0.55	146.21	2.38	146.73	9.43	147.25	12.40
145.70	0.56	146.22	2.49	146.74	9.60	147.26	12.42
145.71	0.56	146.23	2.59	146.75	9.76	147.27	12.44
145.72	0.56	146.24	2.69	146.76	9.93	147.28	12.45
145.73	0.56	146.25	2.80	146.77	10.10	147.29	12.47
145.74	0.57	146.26	2.91	146.78	10.26	147.30	12.49
145.75	0.57	146.27	3.02	146.79	10.43	147.31	12.50
145.76	0.57	146.28	3.13	146.80	10.60	147.32	12.52
145.77	0.57	146.29	3.24	146.81	10.77	147.33	12.54
145.78	0.58	146.30	3.35	146.82	10.94	147.34	12.55
145.79	0.58	146.31	3.47	146.83	11.12	147.35	12.57
145.80	0.58	146.32	3.59	146.84	11.29	147.36	12.58
145.81	0.58	146.33	3.70	146.85	11.46	147.37	12.60
145.82	0.59	146.34	3.82	146.86	11.64	147.38	12.62
145.83	0.59	146.35	3.94	146.87	11.76	147.39	12.63
145.84	0.59	146.36	4.07	146.88	11.78	147.40	12.65
145.85	0.59	146.37	4.19	146.89	11.79	147.41	12.67
145.86	0.60	146.38	4.32	146.90	11.81	147.42	12.68
145.87	0.60	146.39	4.44	146.91	11.83	147.43	12.70
145.88	0.60	146.40	4.57	146.92	11.85	147.44	12.71
145.89	0.60	146.41	4.70	146.93	11.86	147.45	12.73

Stage-Discharge for Pond B-25: Basin #25 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.46	12.75	147.98	13.89	148.50	68.06
147.47	12.76	147.99	14.18	148.51	69.81
147.48	12.78	148.00	14.53	148.52	71.59
147.49	12.79	148.01	14.91	148.53	73.39
147.50	12.81	148.02	15.34	148.54	75.22
147.51	12.83	148.03	15.81	148.55	77.07
147.52	12.84	148.04	16.31	148.56	78.96
147.53	12.86	148.05	16.84	148.57	80.60
147.54	12.87	148.06	17.40	148.58	82.25
147.55	12.89	148.07	17.98	148.59	83.92
147.56	12.91	148.08	18.60	148.60	85.60
147.57	12.92	148.09	19.24	148.61	87.30
147.58	12.94	148.10	19.91	148.62	89.01
147.59	12.95	148.11	20.60	148.63	90.73
147.60	12.97	148.12	21.31	148.64	92.46
147.61	12.99	148.13	22.05	148.65	94.21
147.62	13.00	148.14	22.81	148.66	95.97
147.63	13.02	148.15	23.59	148.67	97.74
147.64	13.03	148.16	24.39	148.68	99.53
147.65	13.05	148.17	25.25	148.69	101.32
147.66	13.06	148.18	26.14	148.70	103.13
147.67	13.08	148.19	27.05	148.71	104.96
147.68	13.10	148.20	27.99	148.72	106.79
147.69	13.11	148.21	28.95	148.73	108.64
147.70	13.13	148.22	29.94	148.74	110.50
147.71	13.14	148.23	30.96	148.75	112.37
147.72	13.16	148.24	31.99	148.76	114.26
147.73	13.17	148.25	33.06	148.77	116.19
147.74	13.19	148.26	34.14	148.78	118.14
147.75	13.21	148.27	35.26	148.79	120.10
147.76	13.22	148.28	36.39	148.80	122.07
147.77	13.24	148.29	37.55	148.81	124.06
147.78	13.25	148.30	38.74	148.82	126.05
147.79	13.27	148.31	39.94	148.83	128.07
147.80	13.28	148.32	41.18	148.84	130.09
147.81	13.30	148.33	42.43	148.85	132.13
147.82	13.31	148.34	43.72	148.86	134.18
147.83	13.33	148.35	45.02	148.87	136.25
147.84	13.34	148.36	46.35	148.88	138.33
147.85	13.36	148.37	47.73	148.89	140.42
147.86	13.37	148.38	49.14	148.90	142.52
147.87	13.39	148.39	50.57	148.91	144.63
147.88	13.41	148.40	52.03	148.92	146.76
147.89	13.42	148.41	53.51	148.93	148.90
147.90	13.44	148.42	55.02	148.94	151.06
147.91	13.45	148.43	56.56	148.95	153.22
147.92	13.47	148.44	58.12	148.96	155.40
147.93	13.48	148.45	59.71	148.97	157.54
147.94	13.50	148.46	61.33	148.98	159.69
147.95	13.51	148.47	62.97	148.99	161.84
147.96	13.53	148.48	64.64	149.00	**164.01**
147.97	13.66	148.49	66.34		

Stage-Area-Storage for Pond B-25: Basin #25

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
143.30	0	0	143.82	3,493	908
143.31	67	0	143.83	3,560	943
143.32	134	1	143.84	3,627	979
143.33	202	3	143.85	3,694	1,016
143.34	269	5	143.86	3,762	1,053
143.35	336	8	143.87	3,829	1,091
143.36	403	12	143.88	3,896	1,130
143.37	470	16	143.89	3,963	1,169
143.38	537	21	143.90	4,030	1,209
143.39	605	27	143.91	4,097	1,250
143.40	672	34	143.92	4,165	1,291
143.41	739	41	143.93	4,232	1,333
143.42	806	48	143.94	4,299	1,376
143.43	873	57	143.95	4,366	1,419
143.44	940	66	143.96	4,433	1,463
143.45	1,008	76	143.97	4,500	1,508
143.46	1,075	86	143.98	4,568	1,553
143.47	1,142	97	143.99	4,635	1,599
143.48	1,209	109	144.00	4,702	1,646
143.49	1,276	121	144.01	4,711	1,693
143.50	1,343	134	144.02	4,720	1,740
143.51	1,411	148	144.03	4,728	1,787
143.52	1,478	163	144.04	4,737	1,834
143.53	1,545	178	144.05	4,746	1,882
143.54	1,612	193	144.06	4,755	1,929
143.55	1,679	210	144.07	4,764	1,977
143.56	1,746	227	144.08	4,773	2,025
143.57	1,814	245	144.09	4,781	2,072
143.58	1,881	263	144.10	4,790	2,120
143.59	1,948	282	144.11	4,799	2,168
143.60	2,015	302	144.12	4,808	2,216
143.61	2,082	323	144.13	4,817	2,264
143.62	2,149	344	144.14	4,825	2,313
143.63	2,217	366	144.15	4,834	2,361
143.64	2,284	388	144.16	4,843	2,409
143.65	2,351	411	144.17	4,852	2,458
143.66	2,418	435	144.18	4,861	2,506
143.67	2,485	460	144.19	4,870	2,555
143.68	2,553	485	144.20	4,878	2,604
143.69	2,620	511	144.21	4,887	2,653
143.70	2,687	537	144.22	4,896	2,701
143.71	2,754	565	144.23	4,905	2,750
143.72	2,821	592	144.24	4,914	2,800
143.73	2,888	621	144.25	4,923	2,849
143.74	2,956	650	144.26	4,931	2,898
143.75	3,023	680	144.27	4,940	2,947
143.76	3,090	711	144.28	4,949	2,997
143.77	3,157	742	144.29	4,958	3,046
143.78	3,224	774	144.30	4,967	3,096
143.79	3,291	806	144.31	4,975	3,146
143.80	3,359	840	144.32	4,984	3,195
143.81	3,426	874	144.33	4,993	3,245

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.34	5,002	3,295	144.86	5,461	6,016
144.35	5,011	3,345	144.87	5,469	6,070
144.36	5,020	3,396	144.88	5,478	6,125
144.37	5,028	3,446	144.89	5,487	6,180
144.38	5,037	3,496	144.90	5,496	6,235
144.39	5,046	3,547	144.91	5,505	6,290
144.40	5,055	3,597	144.92	5,513	6,345
144.41	5,064	3,648	144.93	5,522	6,400
144.42	5,072	3,698	144.94	5,531	6,455
144.43	5,081	3,749	144.95	5,540	6,511
144.44	5,090	3,800	144.96	5,549	6,566
144.45	5,099	3,851	144.97	5,558	6,622
144.46	5,108	3,902	144.98	5,566	6,677
144.47	5,117	3,953	144.99	5,575	6,733
144.48	5,125	4,004	145.00	5,584	6,789
144.49	5,134	4,056	145.01	5,593	6,845
144.50	5,143	4,107	145.02	5,602	6,901
144.51	5,152	4,158	145.03	5,611	6,957
144.52	5,161	4,210	145.04	5,620	7,013
144.53	5,169	4,262	145.05	5,629	7,069
144.54	5,178	4,313	145.06	5,638	7,125
144.55	5,187	4,365	145.07	5,648	7,182
144.56	5,196	4,417	145.08	5,657	7,238
144.57	5,205	4,469	145.09	5,666	7,295
144.58	5,214	4,521	145.10	5,675	7,352
144.59	5,222	4,573	145.11	5,684	7,408
144.60	5,231	4,626	145.12	5,693	7,465
144.61	5,240	4,678	145.13	5,702	7,522
144.62	5,249	4,730	145.14	5,711	7,579
144.63	5,258	4,783	145.15	5,720	7,637
144.64	5,266	4,836	145.16	5,729	7,694
144.65	5,275	4,888	145.17	5,738	7,751
144.66	5,284	4,941	145.18	5,747	7,809
144.67	5,293	4,994	145.19	5,757	7,866
144.68	5,302	5,047	145.20	5,766	7,924
144.69	5,311	5,100	145.21	5,775	7,981
144.70	5,319	5,153	145.22	5,784	8,039
144.71	5,328	5,206	145.23	5,793	8,097
144.72	5,337	5,260	145.24	5,802	8,155
144.73	5,346	5,313	145.25	5,811	8,213
144.74	5,355	5,367	145.26	5,820	8,271
144.75	5,364	5,420	145.27	5,829	8,329
144.76	5,372	5,474	145.28	5,838	8,388
144.77	5,381	5,528	145.29	5,847	8,446
144.78	5,390	5,582	145.30	5,856	8,505
144.79	5,399	5,636	145.31	5,865	8,563
144.80	5,408	5,690	145.32	5,875	8,622
144.81	5,416	5,744	145.33	5,884	8,681
144.82	5,425	5,798	145.34	5,893	8,740
144.83	5,434	5,852	145.35	5,902	8,799
144.84	5,443	5,907	145.36	5,911	8,858
144.85	5,452	5,961	145.37	5,920	8,917

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.38	5,929	8,976	145.90	6,401	12,182
145.39	5,938	9,036	145.91	6,410	12,246
145.40	5,947	9,095	145.92	6,419	12,310
145.41	5,956	9,154	145.93	6,428	12,374
145.42	5,965	9,214	145.94	6,438	12,439
145.43	5,974	9,274	145.95	6,447	12,503
145.44	5,984	9,334	145.96	6,456	12,568
145.45	5,993	9,393	145.97	6,465	12,632
145.46	6,002	9,453	145.98	6,474	12,697
145.47	6,011	9,513	145.99	6,483	12,762
145.48	6,020	9,574	146.00	6,492	12,827
145.49	6,029	9,634	146.01	6,501	12,892
145.50	6,038	9,694	146.02	6,511	12,957
145.51	6,047	9,755	146.03	6,520	13,022
145.52	6,056	9,815	146.04	6,529	13,087
145.53	6,065	9,876	146.05	6,539	13,152
145.54	6,074	9,936	146.06	6,548	13,218
145.55	6,083	9,997	146.07	6,558	13,283
145.56	6,092	10,058	146.08	6,567	13,349
145.57	6,102	10,119	146.09	6,576	13,415
145.58	6,111	10,180	146.10	6,586	13,481
145.59	6,120	10,241	146.11	6,595	13,546
145.60	6,129	10,303	146.12	6,604	13,612
145.61	6,138	10,364	146.13	6,614	13,679
145.62	6,147	10,425	146.14	6,623	13,745
145.63	6,156	10,487	146.15	6,632	13,811
145.64	6,165	10,548	146.16	6,642	13,877
145.65	6,174	10,610	146.17	6,651	13,944
145.66	6,183	10,672	146.18	6,660	14,010
145.67	6,192	10,734	146.19	6,670	14,077
145.68	6,201	10,796	146.20	6,679	14,144
145.69	6,211	10,858	146.21	6,689	14,211
145.70	6,220	10,920	146.22	6,698	14,278
145.71	6,229	10,982	146.23	6,707	14,345
145.72	6,238	11,045	146.24	6,717	14,412
145.73	6,247	11,107	146.25	6,726	14,479
145.74	6,256	11,169	146.26	6,735	14,546
145.75	6,265	11,232	146.27	6,745	14,614
145.76	6,274	11,295	146.28	6,754	14,681
145.77	6,283	11,358	146.29	6,763	14,749
145.78	6,292	11,420	146.30	6,773	14,816
145.79	6,301	11,483	146.31	6,782	14,884
145.80	6,310	11,546	146.32	6,792	14,952
145.81	6,319	11,610	146.33	6,801	15,020
145.82	6,329	11,673	146.34	6,810	15,088
145.83	6,338	11,736	146.35	6,820	15,156
145.84	6,347	11,800	146.36	6,829	15,224
145.85	6,356	11,863	146.37	6,838	15,293
145.86	6,365	11,927	146.38	6,848	15,361
145.87	6,374	11,990	146.39	6,857	15,430
145.88	6,383	12,054	146.40	6,866	15,498
145.89	6,392	12,118	146.41	6,876	15,567

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.42	6,885	15,636	146.94	7,372	19,343
146.43	6,894	15,705	146.95	7,381	19,416
146.44	6,904	15,774	146.96	7,391	19,490
146.45	6,913	15,843	146.97	7,400	19,564
146.46	6,923	15,912	146.98	7,409	19,638
146.47	6,932	15,981	146.99	7,419	19,712
146.48	6,941	16,051	147.00	7,428	19,787
146.49	6,951	16,120	147.01	7,438	19,861
146.50	6,960	16,190	147.02	7,447	19,935
146.51	6,969	16,259	147.03	7,457	20,010
146.52	6,979	16,329	147.04	7,467	20,085
146.53	6,988	16,399	147.05	7,476	20,159
146.54	6,997	16,469	147.06	7,486	20,234
146.55	7,007	16,539	147.07	7,496	20,309
146.56	7,016	16,609	147.08	7,505	20,384
146.57	7,026	16,679	147.09	7,515	20,459
146.58	7,035	16,749	147.10	7,525	20,534
146.59	7,044	16,820	147.11	7,534	20,610
146.60	7,054	16,890	147.12	7,544	20,685
146.61	7,063	16,961	147.13	7,553	20,760
146.62	7,072	17,032	147.14	7,563	20,836
146.63	7,082	17,102	147.15	7,573	20,912
146.64	7,091	17,173	147.16	7,582	20,988
146.65	7,100	17,244	147.17	7,592	21,063
146.66	7,110	17,315	147.18	7,602	21,139
146.67	7,119	17,386	147.19	7,611	21,215
146.68	7,128	17,458	147.20	7,621	21,292
146.69	7,138	17,529	147.21	7,631	21,368
146.70	7,147	17,600	147.22	7,640	21,444
146.71	7,157	17,672	147.23	7,650	21,521
146.72	7,166	17,744	147.24	7,660	21,597
146.73	7,175	17,815	147.25	7,669	21,674
146.74	7,185	17,887	147.26	7,679	21,751
146.75	7,194	17,959	147.27	7,689	21,827
146.76	7,203	18,031	147.28	7,698	21,904
146.77	7,213	18,103	147.29	7,708	21,981
146.78	7,222	18,175	147.30	7,718	22,059
146.79	7,231	18,247	147.31	7,727	22,136
146.80	7,241	18,320	147.32	7,737	22,213
146.81	7,250	18,392	147.33	7,746	22,290
146.82	7,260	18,465	147.34	7,756	22,368
146.83	7,269	18,537	147.35	7,766	22,446
146.84	7,278	18,610	147.36	7,775	22,523
146.85	7,288	18,683	147.37	7,785	22,601
146.86	7,297	18,756	147.38	7,795	22,679
146.87	7,306	18,829	147.39	7,804	22,757
146.88	7,316	18,902	147.40	7,814	22,835
146.89	7,325	18,975	147.41	7,824	22,913
146.90	7,334	19,049	147.42	7,833	22,992
146.91	7,344	19,122	147.43	7,843	23,070
146.92	7,353	19,195	147.44	7,853	23,148
146.93	7,362	19,269	147.45	7,862	23,227

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.46	7,872	23,306	147.98	8,374	27,530
147.47	7,882	23,384	147.99	8,383	27,613
147.48	7,891	23,463	148.00	8,393	27,697
147.49	7,901	23,542	148.01	8,403	27,781
147.50	7,911	23,621	148.02	8,413	27,865
147.51	7,920	23,700	148.03	8,423	27,949
147.52	7,930	23,780	148.04	8,433	28,034
147.53	7,939	23,859	148.05	8,443	28,118
147.54	7,949	23,939	148.06	8,453	28,203
147.55	7,959	24,018	148.07	8,463	28,287
147.56	7,968	24,098	148.08	8,472	28,372
147.57	7,978	24,177	148.09	8,482	28,457
147.58	7,988	24,257	148.10	8,492	28,541
147.59	7,997	24,337	148.11	8,502	28,626
147.60	8,007	24,417	148.12	8,512	28,712
147.61	8,017	24,497	148.13	8,522	28,797
147.62	8,026	24,578	148.14	8,532	28,882
147.63	8,036	24,658	148.15	8,542	28,967
147.64	8,046	24,738	148.16	8,552	29,053
147.65	8,055	24,819	148.17	8,562	29,138
147.66	8,065	24,899	148.18	8,572	29,224
147.67	8,075	24,980	148.19	8,582	29,310
147.68	8,084	25,061	148.20	8,592	29,396
147.69	8,094	25,142	148.21	8,602	29,482
147.70	8,104	25,223	148.22	8,611	29,568
147.71	8,113	25,304	148.23	8,621	29,654
147.72	8,123	25,385	148.24	8,631	29,740
147.73	8,132	25,466	148.25	8,641	29,826
147.74	8,142	25,548	148.26	8,651	29,913
147.75	8,152	25,629	148.27	8,661	30,000
147.76	8,161	25,711	148.28	8,671	30,086
147.77	8,171	25,792	148.29	8,681	30,173
147.78	8,181	25,874	148.30	8,691	30,260
147.79	8,190	25,956	148.31	8,701	30,347
147.80	8,200	26,038	148.32	8,711	30,434
147.81	8,210	26,120	148.33	8,721	30,521
147.82	8,219	26,202	148.34	8,731	30,608
147.83	8,229	26,284	148.35	8,741	30,696
147.84	8,239	26,367	148.36	8,750	30,783
147.85	8,248	26,449	148.37	8,760	30,871
147.86	8,258	26,532	148.38	8,770	30,958
147.87	8,268	26,614	148.39	8,780	31,046
147.88	8,277	26,697	148.40	8,790	31,134
147.89	8,287	26,780	148.41	8,800	31,222
147.90	8,297	26,863	148.42	8,810	31,310
147.91	8,306	26,946	148.43	8,820	31,398
147.92	8,316	27,029	148.44	8,830	31,486
147.93	8,325	27,112	148.45	8,840	31,575
147.94	8,335	27,195	148.46	8,850	31,663
147.95	8,345	27,279	148.47	8,860	31,752
147.96	8,354	27,362	148.48	8,870	31,840
147.97	8,364	27,446	148.49	8,880	31,929

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.50	8,890	32,018
148.51	8,899	32,107
148.52	8,909	32,196
148.53	8,919	32,285
148.54	8,929	32,374
148.55	8,939	32,464
148.56	8,949	32,553
148.57	8,959	32,643
148.58	8,969	32,732
148.59	8,979	32,822
148.60	8,989	32,912
148.61	8,999	33,002
148.62	9,009	33,092
148.63	9,019	33,182
148.64	9,029	33,272
148.65	9,038	33,362
148.66	9,048	33,453
148.67	9,058	33,543
148.68	9,068	33,634
148.69	9,078	33,725
148.70	9,088	33,816
148.71	9,098	33,907
148.72	9,108	33,998
148.73	9,118	34,089
148.74	9,128	34,180
148.75	9,138	34,271
148.76	9,148	34,363
148.77	9,158	34,454
148.78	9,168	34,546
148.79	9,177	34,638
148.80	9,187	34,729
148.81	9,197	34,821
148.82	9,207	34,913
148.83	9,217	35,005
148.84	9,227	35,098
148.85	9,237	35,190
148.86	9,247	35,282
148.87	9,257	35,375
148.88	9,267	35,468
148.89	9,277	35,560
148.90	9,287	35,653
148.91	9,297	35,746
148.92	9,307	35,839
148.93	9,316	35,932
148.94	9,326	36,025
148.95	9,336	36,119
148.96	9,346	36,212
148.97	9,356	36,306
148.98	9,366	36,399
148.99	9,376	36,493
149.00	**9,386**	**36,587**

Summary for Pond B-26: Basin #26

Inflow Area = 2.366 ac, 39.90% Impervious, Inflow Depth = 2.34" for Future 2 yr event
Inflow = 5.60 cfs @ 12.17 hrs, Volume= 0.461 af
Outflow = 0.23 cfs @ 15.00 hrs, Volume= 0.345 af, Atten= 96%, Lag= 169.8 min
Primary = 0.23 cfs @ 15.00 hrs, Volume= 0.345 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.01' @ 15.00 hrs Surf.Area= 6,493 sf Storage= 13,944 cf

Plug-Flow detention time= 708.0 min calculated for 0.345 af (75% of inflow)
Center-of-Mass det. time= 613.5 min (1,409.5 - 796.0)

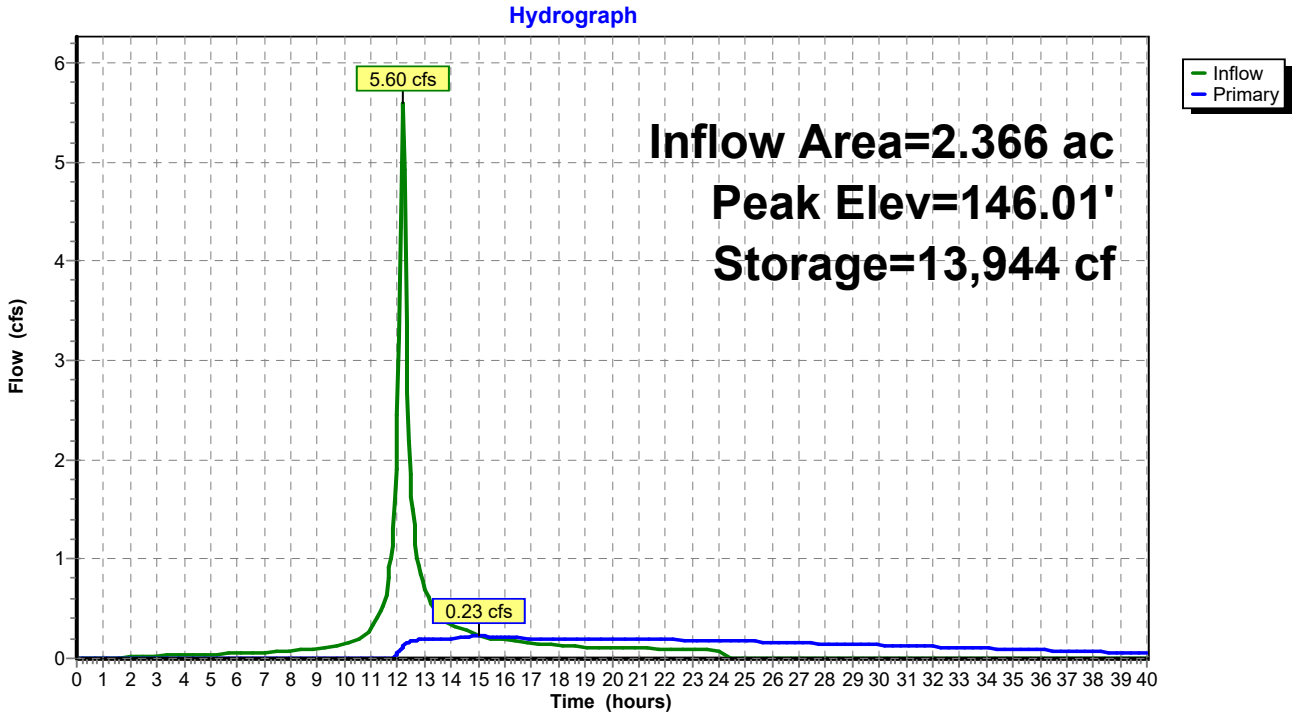
Volume	Invert	Avail.Storage	Storage Description
#1	143.30'	35,348 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
143.30	0	0	0
144.00	5,466	1,913	1,913
145.00	5,967	5,717	7,630
146.00	6,486	6,227	13,856
147.00	7,018	6,752	20,608
148.00	7,563	7,291	27,899
148.95	8,120	7,449	35,348

Device	Routing	Invert	Outlet Devices
#1	Primary	143.30'	**18.0" Round Culvert** L= 234.0' Ke= 0.500 Inlet / Outlet Invert= 143.30' / 142.00' S= 0.0056 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	144.36'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	148.05'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.22 cfs @ 15.00 hrs HW=146.01' (Free Discharge)
- **1=Culvert** (Passes 0.22 cfs of 9.35 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.99 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.02 cfs @ 0.38 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-26: Basin #26



Stage-Discharge for Pond B-26: Basin #26

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
143.30	0.00	143.82	0.00	144.34	0.00	144.86	0.10
143.31	0.00	143.83	0.00	144.35	0.00	144.87	0.10
143.32	0.00	143.84	0.00	144.36	0.00	144.88	0.11
143.33	0.00	143.85	0.00	144.37	0.00	144.89	0.11
143.34	0.00	143.86	0.00	144.38	0.00	144.90	0.11
143.35	0.00	143.87	0.00	144.39	0.00	144.91	0.11
143.36	0.00	143.88	0.00	144.40	0.00	144.92	0.11
143.37	0.00	143.89	0.00	144.41	0.00	144.93	0.11
143.38	0.00	143.90	0.00	144.42	0.01	144.94	0.11
143.39	0.00	143.91	0.00	144.43	0.01	144.95	0.11
143.40	0.00	143.92	0.00	144.44	0.01	144.96	0.12
143.41	0.00	143.93	0.00	144.45	0.01	144.97	0.12
143.42	0.00	143.94	0.00	144.46	0.02	144.98	0.12
143.43	0.00	143.95	0.00	144.47	0.02	144.99	0.12
143.44	0.00	143.96	0.00	144.48	0.02	145.00	0.12
143.45	0.00	143.97	0.00	144.49	0.03	145.01	0.12
143.46	0.00	143.98	0.00	144.50	0.03	145.02	0.12
143.47	0.00	143.99	0.00	144.51	0.03	145.03	0.12
143.48	0.00	144.00	0.00	144.52	0.04	145.04	0.12
143.49	0.00	144.01	0.00	144.53	0.04	145.05	0.13
143.50	0.00	144.02	0.00	144.54	0.05	145.06	0.13
143.51	0.00	144.03	0.00	144.55	0.05	145.07	0.13
143.52	0.00	144.04	0.00	144.56	0.05	145.08	0.13
143.53	0.00	144.05	0.00	144.57	0.05	145.09	0.13
143.54	0.00	144.06	0.00	144.58	0.06	145.10	0.13
143.55	0.00	144.07	0.00	144.59	0.06	145.11	0.13
143.56	0.00	144.08	0.00	144.60	0.06	145.12	0.13
143.57	0.00	144.09	0.00	144.61	0.06	145.13	0.13
143.58	0.00	144.10	0.00	144.62	0.06	145.14	0.13
143.59	0.00	144.11	0.00	144.63	0.07	145.15	0.14
143.60	0.00	144.12	0.00	144.64	0.07	145.16	0.14
143.61	0.00	144.13	0.00	144.65	0.07	145.17	0.14
143.62	0.00	144.14	0.00	144.66	0.07	145.18	0.14
143.63	0.00	144.15	0.00	144.67	0.07	145.19	0.14
143.64	0.00	144.16	0.00	144.68	0.08	145.20	0.14
143.65	0.00	144.17	0.00	144.69	0.08	145.21	0.14
143.66	0.00	144.18	0.00	144.70	0.08	145.22	0.14
143.67	0.00	144.19	0.00	144.71	0.08	145.23	0.14
143.68	0.00	144.20	0.00	144.72	0.08	145.24	0.14
143.69	0.00	144.21	0.00	144.73	0.08	145.25	0.15
143.70	0.00	144.22	0.00	144.74	0.09	145.26	0.15
143.71	0.00	144.23	0.00	144.75	0.09	145.27	0.15
143.72	0.00	144.24	0.00	144.76	0.09	145.28	0.15
143.73	0.00	144.25	0.00	144.77	0.09	145.29	0.15
143.74	0.00	144.26	0.00	144.78	0.09	145.30	0.15
143.75	0.00	144.27	0.00	144.79	0.09	145.31	0.15
143.76	0.00	144.28	0.00	144.80	0.10	145.32	0.15
143.77	0.00	144.29	0.00	144.81	0.10	145.33	0.15
143.78	0.00	144.30	0.00	144.82	0.10	145.34	0.15
143.79	0.00	144.31	0.00	144.83	0.10	145.35	0.15
143.80	0.00	144.32	0.00	144.84	0.10	145.36	0.16
143.81	0.00	144.33	0.00	144.85	0.10	145.37	0.16

Stage-Discharge for Pond B-26: Basin #26 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
145.38	0.16	145.90	0.20	146.42	3.72	146.94	10.94
145.39	0.16	145.91	0.20	146.43	3.84	146.95	10.96
145.40	0.16	145.92	0.20	146.44	3.96	146.96	10.97
145.41	0.16	145.93	0.20	146.45	4.09	146.97	10.99
145.42	0.16	145.94	0.20	146.46	4.22	146.98	11.00
145.43	0.16	145.95	0.20	146.47	4.35	146.99	11.02
145.44	0.16	145.96	0.20	146.48	4.48	147.00	11.04
145.45	0.16	145.97	0.20	146.49	4.61	147.01	11.05
145.46	0.16	145.98	0.20	146.50	4.74	147.02	11.07
145.47	0.16	145.99	0.20	146.51	4.88	147.03	11.08
145.48	0.17	146.00	0.20	146.52	5.01	147.04	11.10
145.49	0.17	146.01	0.22	146.53	5.15	147.05	11.11
145.50	0.17	146.02	0.24	146.54	5.29	147.06	11.13
145.51	0.17	146.03	0.27	146.55	5.43	147.07	11.15
145.52	0.17	146.04	0.31	146.56	5.57	147.08	11.16
145.53	0.17	146.05	0.35	146.57	5.71	147.09	11.18
145.54	0.17	146.06	0.40	146.58	5.85	147.10	11.19
145.55	0.17	146.07	0.45	146.59	5.99	147.11	11.21
145.56	0.17	146.08	0.50	146.60	6.14	147.12	11.22
145.57	0.17	146.09	0.56	146.61	6.28	147.13	11.24
145.58	0.17	146.10	0.62	146.62	6.43	147.14	11.25
145.59	0.17	146.11	0.69	146.63	6.58	147.15	11.27
145.60	0.17	146.12	0.75	146.64	6.72	147.16	11.29
145.61	0.18	146.13	0.82	146.65	6.87	147.17	11.30
145.62	0.18	146.14	0.89	146.66	7.03	147.18	11.32
145.63	0.18	146.15	0.97	146.67	7.18	147.19	11.33
145.64	0.18	146.16	1.04	146.68	7.33	147.20	11.35
145.65	0.18	146.17	1.12	146.69	7.48	147.21	11.36
145.66	0.18	146.18	1.20	146.70	7.64	147.22	11.38
145.67	0.18	146.19	1.29	146.71	7.79	147.23	11.39
145.68	0.18	146.20	1.37	146.72	7.95	147.24	11.41
145.69	0.18	146.21	1.46	146.73	8.11	147.25	11.42
145.70	0.18	146.22	1.55	146.74	8.27	147.26	11.44
145.71	0.18	146.23	1.64	146.75	8.43	147.27	11.45
145.72	0.18	146.24	1.74	146.76	8.59	147.28	11.47
145.73	0.18	146.25	1.83	146.77	8.75	147.29	11.48
145.74	0.19	146.26	1.93	146.78	8.91	147.30	11.50
145.75	0.19	146.27	2.03	146.79	9.07	147.31	11.51
145.76	0.19	146.28	2.13	146.80	9.24	147.32	11.53
145.77	0.19	146.29	2.23	146.81	9.40	147.33	11.54
145.78	0.19	146.30	2.34	146.82	9.57	147.34	11.56
145.79	0.19	146.31	2.45	146.83	9.73	147.35	11.57
145.80	0.19	146.32	2.55	146.84	9.90	147.36	11.59
145.81	0.19	146.33	2.66	146.85	10.07	147.37	11.60
145.82	0.19	146.34	2.77	146.86	10.24	147.38	11.62
145.83	0.19	146.35	2.89	146.87	10.41	147.39	11.63
145.84	0.19	146.36	3.00	146.88	10.58	147.40	11.65
145.85	0.19	146.37	3.12	146.89	10.75	147.41	11.66
145.86	0.19	146.38	3.23	146.90	10.88	147.42	11.68
145.87	0.19	146.39	3.35	146.91	10.89	147.43	11.69
145.88	0.20	146.40	3.47	146.92	10.91	147.44	11.71
145.89	0.20	146.41	3.59	146.93	10.92	147.45	11.72

Stage-Discharge for Pond B-26: Basin #26 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.46	11.74	147.98	12.49	148.50	52.51
147.47	11.75	147.99	12.50	148.51	54.02
147.48	11.77	148.00	12.51	148.52	55.56
147.49	11.78	148.01	12.53	148.53	57.12
147.50	11.80	148.02	12.54	148.54	58.71
147.51	11.81	148.03	12.56	148.55	60.32
147.52	11.83	148.04	12.57	148.56	61.96
147.53	11.84	148.05	12.58	148.57	63.63
147.54	11.86	148.06	12.71	148.58	65.33
147.55	11.87	148.07	12.94	148.59	67.05
147.56	11.89	148.08	13.23	148.60	68.79
147.57	11.90	148.09	13.58	148.61	70.57
147.58	11.92	148.10	13.96	148.62	72.37
147.59	11.93	148.11	14.39	148.63	74.20
147.60	11.94	148.12	14.85	148.64	76.05
147.61	11.96	148.13	15.35	148.65	77.94
147.62	11.97	148.14	15.88	148.66	79.58
147.63	11.99	148.15	16.44	148.67	81.23
147.64	12.00	148.16	17.03	148.68	82.90
147.65	12.02	148.17	17.64	148.69	84.58
147.66	12.03	148.18	18.28	148.70	86.27
147.67	12.05	148.19	18.95	148.71	87.98
147.68	12.06	148.20	19.63	148.72	89.70
147.69	12.07	148.21	20.35	148.73	91.43
147.70	12.09	148.22	21.08	148.74	93.18
147.71	12.10	148.23	21.84	148.75	94.93
147.72	12.12	148.24	22.62	148.76	96.71
147.73	12.13	148.25	23.42	148.77	98.49
147.74	12.15	148.26	24.28	148.78	100.29
147.75	12.16	148.27	25.17	148.79	102.10
147.76	12.18	148.28	26.08	148.80	103.92
147.77	12.19	148.29	27.02	148.81	105.75
147.78	12.20	148.30	27.98	148.82	107.60
147.79	12.22	148.31	28.96	148.83	109.46
147.80	12.23	148.32	29.98	148.84	111.33
147.81	12.25	148.33	31.01	148.85	113.21
147.82	12.26	148.34	32.07	148.86	115.14
147.83	12.27	148.35	33.16	148.87	117.09
147.84	12.29	148.36	34.27	148.88	119.05
147.85	12.30	148.37	35.40	148.89	121.02
147.86	12.32	148.38	36.56	148.90	123.00
147.87	12.33	148.39	37.75	148.91	125.00
147.88	12.35	148.40	38.95	148.92	127.01
147.89	12.36	148.41	40.19	148.93	129.04
147.90	12.37	148.42	41.44	148.94	131.07
147.91	12.39	148.43	42.72	148.95	**133.12**
147.92	12.40	148.44	44.03		
147.93	12.42	148.45	45.35		
147.94	12.43	148.46	46.73		
147.95	12.44	148.47	48.14		
147.96	12.46	148.48	49.57		
147.97	12.47	148.49	51.03		

Stage-Area-Storage for Pond B-26: Basin #26

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
143.30	0	0
143.31	78	0
143.32	156	2
143.33	234	4
143.34	312	6
143.35	390	10
143.36	469	14
143.37	547	19
143.38	625	25
143.39	703	32
143.40	781	39
143.41	859	47
143.42	937	56
143.43	1,015	66
143.44	1,093	77
143.45	1,171	88
143.46	1,249	100
143.47	1,327	113
143.48	1,406	126
143.49	1,484	141
143.50	1,562	156
143.51	1,640	172
143.52	1,718	189
143.53	1,796	207
143.54	1,874	225
143.55	1,952	244
143.56	2,030	264
143.57	2,108	285
143.58	2,186	306
143.59	2,264	328
143.60	2,343	351
143.61	2,421	375
143.62	2,499	400
143.63	2,577	425
143.64	2,655	451
143.65	2,733	478
143.66	2,811	506
143.67	2,889	534
143.68	2,967	564
143.69	3,045	594
143.70	3,123	625
143.71	3,202	656
143.72	3,280	689
143.73	3,358	722
143.74	3,436	756
143.75	3,514	791
143.76	3,592	826
143.77	3,670	862
143.78	3,748	900
143.79	3,826	937
143.80	3,904	976
143.81	3,982	1,016
143.82	4,060	1,056
143.83	4,139	1,097
143.84	4,217	1,138
143.85	4,295	1,181
143.86	4,373	1,224
143.87	4,451	1,269
143.88	4,529	1,313
143.89	4,607	1,359
143.90	4,685	1,406
143.91	4,763	1,453
143.92	4,841	1,501
143.93	4,919	1,550
143.94	4,997	1,599
143.95	5,076	1,650
143.96	5,154	1,701
143.97	5,232	1,753
143.98	5,310	1,805
143.99	5,388	1,859
144.00	5,466	1,913
144.01	5,471	1,968
144.02	5,476	2,023
144.03	5,481	2,077
144.04	5,486	2,132
144.05	5,491	2,187
144.06	5,496	2,242
144.07	5,501	2,297
144.08	5,506	2,352
144.09	5,511	2,407
144.10	5,516	2,462
144.11	5,521	2,517
144.12	5,526	2,573
144.13	5,531	2,628
144.14	5,536	2,683
144.15	5,541	2,739
144.16	5,546	2,794
144.17	5,551	2,850
144.18	5,556	2,905
144.19	5,561	2,961
144.20	5,566	3,016
144.21	5,571	3,072
144.22	5,576	3,128
144.23	5,581	3,184
144.24	5,586	3,239
144.25	5,591	3,295
144.26	5,596	3,351
144.27	5,601	3,407
144.28	5,606	3,463
144.29	5,611	3,519
144.30	5,616	3,575
144.31	5,621	3,632
144.32	5,626	3,688
144.33	5,631	3,744

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.34	5,636	3,800	144.86	5,897	6,799
144.35	5,641	3,857	144.87	5,902	6,858
144.36	5,646	3,913	144.88	5,907	6,917
144.37	5,651	3,970	144.89	5,912	6,976
144.38	5,656	4,026	144.90	5,917	7,035
144.39	5,661	4,083	144.91	5,922	7,095
144.40	5,666	4,140	144.92	5,927	7,154
144.41	5,671	4,196	144.93	5,932	7,213
144.42	5,676	4,253	144.94	5,937	7,272
144.43	5,681	4,310	144.95	5,942	7,332
144.44	5,686	4,367	144.96	5,947	7,391
144.45	5,691	4,424	144.97	5,952	7,451
144.46	5,696	4,480	144.98	5,957	7,510
144.47	5,701	4,537	144.99	5,962	7,570
144.48	5,706	4,594	145.00	5,967	7,630
144.49	5,711	4,652	145.01	5,972	7,689
144.50	5,717	4,709	145.02	5,977	7,749
144.51	5,722	4,766	145.03	5,983	7,809
144.52	5,727	4,823	145.04	5,988	7,869
144.53	5,732	4,880	145.05	5,993	7,929
144.54	5,737	4,938	145.06	5,998	7,989
144.55	5,742	4,995	145.07	6,003	8,049
144.56	5,747	5,053	145.08	6,009	8,109
144.57	5,752	5,110	145.09	6,014	8,169
144.58	5,757	5,168	145.10	6,019	8,229
144.59	5,762	5,225	145.11	6,024	8,289
144.60	5,767	5,283	145.12	6,029	8,349
144.61	5,772	5,341	145.13	6,034	8,410
144.62	5,777	5,398	145.14	6,040	8,470
144.63	5,782	5,456	145.15	6,045	8,530
144.64	5,787	5,514	145.16	6,050	8,591
144.65	5,792	5,572	145.17	6,055	8,651
144.66	5,797	5,630	145.18	6,060	8,712
144.67	5,802	5,688	145.19	6,066	8,773
144.68	5,807	5,746	145.20	6,071	8,833
144.69	5,812	5,804	145.21	6,076	8,894
144.70	5,817	5,862	145.22	6,081	8,955
144.71	5,822	5,920	145.23	6,086	9,016
144.72	5,827	5,978	145.24	6,092	9,077
144.73	5,832	6,037	145.25	6,097	9,138
144.74	5,837	6,095	145.26	6,102	9,199
144.75	5,842	6,154	145.27	6,107	9,260
144.76	5,847	6,212	145.28	6,112	9,321
144.77	5,852	6,270	145.29	6,118	9,382
144.78	5,857	6,329	145.30	6,123	9,443
144.79	5,862	6,388	145.31	6,128	9,504
144.80	5,867	6,446	145.32	6,133	9,566
144.81	5,872	6,505	145.33	6,138	9,627
144.82	5,877	6,564	145.34	6,143	9,688
144.83	5,882	6,622	145.35	6,149	9,750
144.84	5,887	6,681	145.36	6,154	9,811
144.85	5,892	6,740	145.37	6,159	9,873

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.38	6,164	9,935	145.90	6,434	13,210
145.39	6,169	9,996	145.91	6,439	13,274
145.40	6,175	10,058	145.92	6,444	13,339
145.41	6,180	10,120	145.93	6,450	13,403
145.42	6,185	10,182	145.94	6,455	13,468
145.43	6,190	10,243	145.95	6,460	13,532
145.44	6,195	10,305	145.96	6,465	13,597
145.45	6,201	10,367	145.97	6,470	13,662
145.46	6,206	10,429	145.98	6,476	13,726
145.47	6,211	10,491	145.99	6,481	13,791
145.48	6,216	10,554	146.00	6,486	13,856
145.49	6,221	10,616	146.01	6,491	13,921
145.50	6,227	10,678	146.02	6,497	13,986
145.51	6,232	10,740	146.03	6,502	14,051
145.52	6,237	10,803	146.04	6,507	14,116
145.53	6,242	10,865	146.05	6,513	14,181
145.54	6,247	10,927	146.06	6,518	14,246
145.55	6,252	10,990	146.07	6,523	14,311
145.56	6,258	11,052	146.08	6,529	14,377
145.57	6,263	11,115	146.09	6,534	14,442
145.58	6,268	11,178	146.10	6,539	14,507
145.59	6,273	11,240	146.11	6,545	14,573
145.60	6,278	11,303	146.12	6,550	14,638
145.61	6,284	11,366	146.13	6,555	14,704
145.62	6,289	11,429	146.14	6,560	14,769
145.63	6,294	11,492	146.15	6,566	14,835
145.64	6,299	11,555	146.16	6,571	14,901
145.65	6,304	11,618	146.17	6,576	14,966
145.66	6,310	11,681	146.18	6,582	15,032
145.67	6,315	11,744	146.19	6,587	15,098
145.68	6,320	11,807	146.20	6,592	15,164
145.69	6,325	11,870	146.21	6,598	15,230
145.70	6,330	11,934	146.22	6,603	15,296
145.71	6,335	11,997	146.23	6,608	15,362
145.72	6,341	12,060	146.24	6,614	15,428
145.73	6,346	12,124	146.25	6,619	15,494
145.74	6,351	12,187	146.26	6,624	15,560
145.75	6,356	12,251	146.27	6,630	15,627
145.76	6,361	12,314	146.28	6,635	15,693
145.77	6,367	12,378	146.29	6,640	15,759
145.78	6,372	12,442	146.30	6,646	15,826
145.79	6,377	12,505	146.31	6,651	15,892
145.80	6,382	12,569	146.32	6,656	15,959
145.81	6,387	12,633	146.33	6,662	16,025
145.82	6,393	12,697	146.34	6,667	16,092
145.83	6,398	12,761	146.35	6,672	16,159
145.84	6,403	12,825	146.36	6,678	16,226
145.85	6,408	12,889	146.37	6,683	16,292
145.86	6,413	12,953	146.38	6,688	16,359
145.87	6,419	13,017	146.39	6,693	16,426
145.88	6,424	13,082	146.40	6,699	16,493
145.89	6,429	13,146	146.41	6,704	16,560

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.42	6,709	16,627	146.94	6,986	20,188
146.43	6,715	16,694	146.95	6,991	20,258
146.44	6,720	16,761	146.96	6,997	20,328
146.45	6,725	16,829	146.97	7,002	20,398
146.46	6,731	16,896	146.98	7,007	20,468
146.47	6,736	16,963	146.99	7,013	20,538
146.48	6,741	17,031	147.00	7,018	20,608
146.49	6,747	17,098	147.01	7,023	20,678
146.50	6,752	17,166	147.02	7,029	20,749
146.51	6,757	17,233	147.03	7,034	20,819
146.52	6,763	17,301	147.04	7,040	20,889
146.53	6,768	17,368	147.05	7,045	20,960
146.54	6,773	17,436	147.06	7,051	21,030
146.55	6,779	17,504	147.07	7,056	21,101
146.56	6,784	17,572	147.08	7,062	21,171
146.57	6,789	17,640	147.09	7,067	21,242
146.58	6,795	17,707	147.10	7,073	21,313
146.59	6,800	17,775	147.11	7,078	21,383
146.60	6,805	17,843	147.12	7,083	21,454
146.61	6,811	17,912	147.13	7,089	21,525
146.62	6,816	17,980	147.14	7,094	21,596
146.63	6,821	18,048	147.15	7,100	21,667
146.64	6,826	18,116	147.16	7,105	21,738
146.65	6,832	18,184	147.17	7,111	21,809
146.66	6,837	18,253	147.18	7,116	21,880
146.67	6,842	18,321	147.19	7,122	21,951
146.68	6,848	18,390	147.20	7,127	22,023
146.69	6,853	18,458	147.21	7,132	22,094
146.70	6,858	18,527	147.22	7,138	22,165
146.71	6,864	18,595	147.23	7,143	22,237
146.72	6,869	18,664	147.24	7,149	22,308
146.73	6,874	18,733	147.25	7,154	22,380
146.74	6,880	18,801	147.26	7,160	22,451
146.75	6,885	18,870	147.27	7,165	22,523
146.76	6,890	18,939	147.28	7,171	22,595
146.77	6,896	19,008	147.29	7,176	22,666
146.78	6,901	19,077	147.30	7,182	22,738
146.79	6,906	19,146	147.31	7,187	22,810
146.80	6,912	19,215	147.32	7,192	22,882
146.81	6,917	19,284	147.33	7,198	22,954
146.82	6,922	19,353	147.34	7,203	23,026
146.83	6,928	19,423	147.35	7,209	23,098
146.84	6,933	19,492	147.36	7,214	23,170
146.85	6,938	19,561	147.37	7,220	23,242
146.86	6,944	19,631	147.38	7,225	23,314
146.87	6,949	19,700	147.39	7,231	23,387
146.88	6,954	19,770	147.40	7,236	23,459
146.89	6,959	19,839	147.41	7,241	23,531
146.90	6,965	19,909	147.42	7,247	23,604
146.91	6,970	19,979	147.43	7,252	23,676
146.92	6,975	20,048	147.44	7,258	23,749
146.93	6,981	20,118	147.45	7,263	23,821

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.46	7,269	23,894	147.98	7,552	27,747
147.47	7,274	23,967	147.99	7,558	27,823
147.48	7,280	24,040	148.00	7,563	27,899
147.49	7,285	24,112	148.01	7,569	27,974
147.50	7,291	24,185	148.02	7,575	28,050
147.51	7,296	24,258	148.03	7,581	28,126
147.52	7,301	24,331	148.04	7,586	28,202
147.53	7,307	24,404	148.05	7,592	28,277
147.54	7,312	24,477	148.06	7,598	28,353
147.55	7,318	24,550	148.07	7,604	28,429
147.56	7,323	24,624	148.08	7,610	28,506
147.57	7,329	24,697	148.09	7,616	28,582
147.58	7,334	24,770	148.10	7,622	28,658
147.59	7,340	24,844	148.11	7,627	28,734
147.60	7,345	24,917	148.12	7,633	28,810
147.61	7,350	24,990	148.13	7,639	28,887
147.62	7,356	25,064	148.14	7,645	28,963
147.63	7,361	25,138	148.15	7,651	29,040
147.64	7,367	25,211	148.16	7,657	29,116
147.65	7,372	25,285	148.17	7,663	29,193
147.66	7,378	25,359	148.18	7,669	29,269
147.67	7,383	25,432	148.19	7,674	29,346
147.68	7,389	25,506	148.20	7,680	29,423
147.69	7,394	25,580	148.21	7,686	29,500
147.70	7,400	25,654	148.22	7,692	29,577
147.71	7,405	25,728	148.23	7,698	29,654
147.72	7,410	25,802	148.24	7,704	29,731
147.73	7,416	25,876	148.25	7,710	29,808
147.74	7,421	25,951	148.26	7,715	29,885
147.75	7,427	26,025	148.27	7,721	29,962
147.76	7,432	26,099	148.28	7,727	30,039
147.77	7,438	26,174	148.29	7,733	30,117
147.78	7,443	26,248	148.30	7,739	30,194
147.79	7,449	26,322	148.31	7,745	30,271
147.80	7,454	26,397	148.32	7,751	30,349
147.81	7,459	26,471	148.33	7,756	30,426
147.82	7,465	26,546	148.34	7,762	30,504
147.83	7,470	26,621	148.35	7,768	30,582
147.84	7,476	26,695	148.36	7,774	30,659
147.85	7,481	26,770	148.37	7,780	30,737
147.86	7,487	26,845	148.38	7,786	30,815
147.87	7,492	26,920	148.39	7,792	30,893
147.88	7,498	26,995	148.40	7,798	30,971
147.89	7,503	27,070	148.41	7,803	31,049
147.90	7,509	27,145	148.42	7,809	31,127
147.91	7,514	27,220	148.43	7,815	31,205
147.92	7,519	27,295	148.44	7,821	31,283
147.93	7,525	27,371	148.45	7,827	31,361
147.94	7,530	27,446	148.46	7,833	31,440
147.95	7,536	27,521	148.47	7,839	31,518
147.96	7,541	27,597	148.48	7,844	31,596
147.97	7,547	27,672	148.49	7,850	31,675

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.50	7,856	31,753
148.51	7,862	31,832
148.52	7,868	31,911
148.53	7,874	31,989
148.54	7,880	32,068
148.55	7,885	32,147
148.56	7,891	32,226
148.57	7,897	32,305
148.58	7,903	32,384
148.59	7,909	32,463
148.60	7,915	32,542
148.61	7,921	32,621
148.62	7,927	32,700
148.63	7,932	32,780
148.64	7,938	32,859
148.65	7,944	32,938
148.66	7,950	33,018
148.67	7,956	33,097
148.68	7,962	33,177
148.69	7,968	33,257
148.70	7,973	33,336
148.71	7,979	33,416
148.72	7,985	33,496
148.73	7,991	33,576
148.74	7,997	33,656
148.75	8,003	33,736
148.76	8,009	33,816
148.77	8,014	33,896
148.78	8,020	33,976
148.79	8,026	34,056
148.80	8,032	34,137
148.81	8,038	34,217
148.82	8,044	34,297
148.83	8,050	34,378
148.84	8,056	34,458
148.85	8,061	34,539
148.86	8,067	34,620
148.87	8,073	34,700
148.88	8,079	34,781
148.89	8,085	34,862
148.90	8,091	34,943
148.91	8,097	35,024
148.92	8,102	35,105
148.93	8,108	35,186
148.94	8,114	35,267
148.95	**8,120**	**35,348**

Summary for Pond B-27: Basin #27

Inflow Area = 1.935 ac, 46.41% Impervious, Inflow Depth = 2.97" for Future 2 yr event
Inflow = 5.88 cfs @ 12.17 hrs, Volume= 0.479 af
Outflow = 2.60 cfs @ 12.37 hrs, Volume= 0.372 af, Atten= 56%, Lag= 11.8 min
Primary = 2.60 cfs @ 12.37 hrs, Volume= 0.372 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 171.99' @ 12.37 hrs Surf.Area= 3,661 sf Storage= 9,352 cf

Plug-Flow detention time= 187.9 min calculated for 0.372 af (78% of inflow)
Center-of-Mass det. time= 102.7 min (888.0 - 785.3)

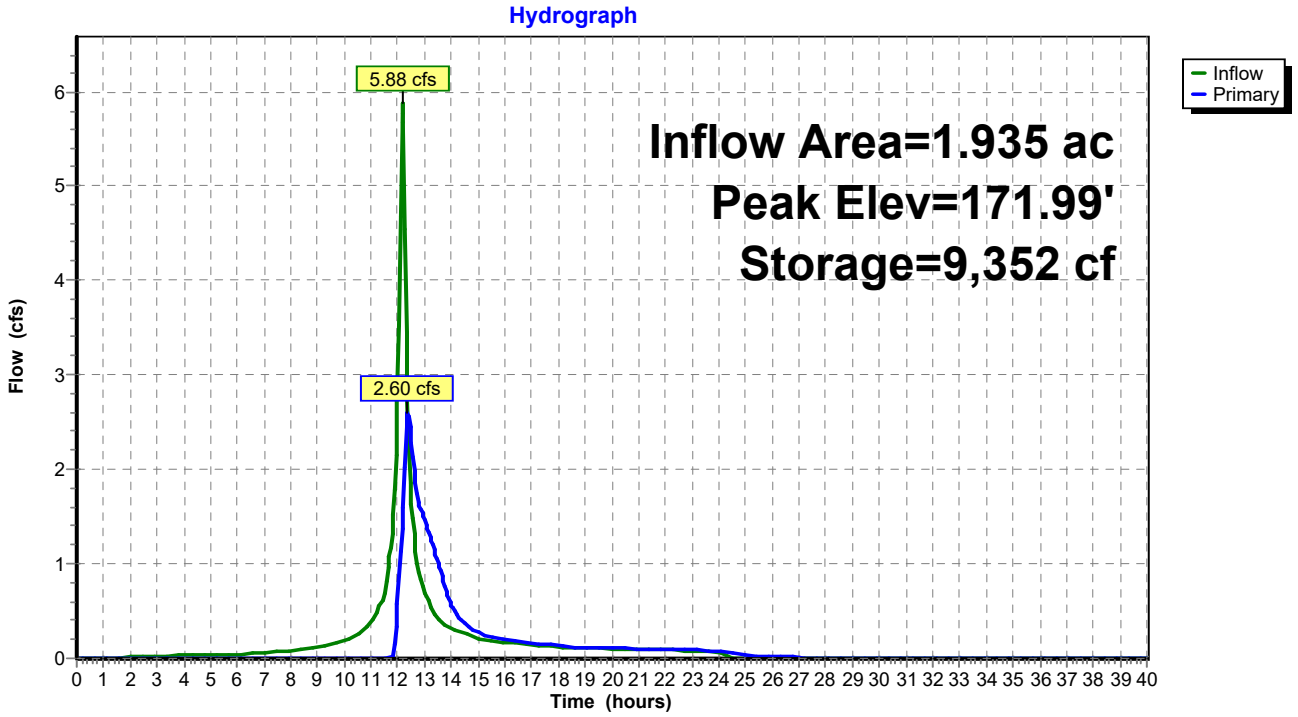
Volume	Invert	Avail.Storage	Storage Description
#1	167.35'	13,052 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
167.35	0	0	0
168.00	1,002	326	326
169.00	1,583	1,293	1,618
170.00	2,221	1,902	3,520
171.00	2,916	2,569	6,089
172.00	3,667	3,292	9,380
172.95	4,064	3,672	13,052

Device	Routing	Invert	Outlet Devices
#1	Primary	167.65'	**24.0" Round Culvert** L= 61.0' Ke= 0.500 Inlet / Outlet Invert= 167.65' / 165.16' S= 0.0408 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	170.47'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	171.75'	**2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	172.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	172.90'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.57 cfs @ 12.37 hrs HW=171.99' (Free Discharge)
- **1=Culvert** (Passes 2.57 cfs of 27.64 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.83 cfs @ 5.24 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.74 cfs @ 1.60 fps)
  - **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-27: Basin #27



Stage-Discharge for Pond B-27: Basin #27

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.35	0.00	167.87	0.00	168.39	0.00	168.91	0.00
167.36	0.00	167.88	0.00	168.40	0.00	168.92	0.00
167.37	0.00	167.89	0.00	168.41	0.00	168.93	0.00
167.38	0.00	167.90	0.00	168.42	0.00	168.94	0.00
167.39	0.00	167.91	0.00	168.43	0.00	168.95	0.00
167.40	0.00	167.92	0.00	168.44	0.00	168.96	0.00
167.41	0.00	167.93	0.00	168.45	0.00	168.97	0.00
167.42	0.00	167.94	0.00	168.46	0.00	168.98	0.00
167.43	0.00	167.95	0.00	168.47	0.00	168.99	0.00
167.44	0.00	167.96	0.00	168.48	0.00	169.00	0.00
167.45	0.00	167.97	0.00	168.49	0.00	169.01	0.00
167.46	0.00	167.98	0.00	168.50	0.00	169.02	0.00
167.47	0.00	167.99	0.00	168.51	0.00	169.03	0.00
167.48	0.00	168.00	0.00	168.52	0.00	169.04	0.00
167.49	0.00	168.01	0.00	168.53	0.00	169.05	0.00
167.50	0.00	168.02	0.00	168.54	0.00	169.06	0.00
167.51	0.00	168.03	0.00	168.55	0.00	169.07	0.00
167.52	0.00	168.04	0.00	168.56	0.00	169.08	0.00
167.53	0.00	168.05	0.00	168.57	0.00	169.09	0.00
167.54	0.00	168.06	0.00	168.58	0.00	169.10	0.00
167.55	0.00	168.07	0.00	168.59	0.00	169.11	0.00
167.56	0.00	168.08	0.00	168.60	0.00	169.12	0.00
167.57	0.00	168.09	0.00	168.61	0.00	169.13	0.00
167.58	0.00	168.10	0.00	168.62	0.00	169.14	0.00
167.59	0.00	168.11	0.00	168.63	0.00	169.15	0.00
167.60	0.00	168.12	0.00	168.64	0.00	169.16	0.00
167.61	0.00	168.13	0.00	168.65	0.00	169.17	0.00
167.62	0.00	168.14	0.00	168.66	0.00	169.18	0.00
167.63	0.00	168.15	0.00	168.67	0.00	169.19	0.00
167.64	0.00	168.16	0.00	168.68	0.00	169.20	0.00
167.65	0.00	168.17	0.00	168.69	0.00	169.21	0.00
167.66	0.00	168.18	0.00	168.70	0.00	169.22	0.00
167.67	0.00	168.19	0.00	168.71	0.00	169.23	0.00
167.68	0.00	168.20	0.00	168.72	0.00	169.24	0.00
167.69	0.00	168.21	0.00	168.73	0.00	169.25	0.00
167.70	0.00	168.22	0.00	168.74	0.00	169.26	0.00
167.71	0.00	168.23	0.00	168.75	0.00	169.27	0.00
167.72	0.00	168.24	0.00	168.76	0.00	169.28	0.00
167.73	0.00	168.25	0.00	168.77	0.00	169.29	0.00
167.74	0.00	168.26	0.00	168.78	0.00	169.30	0.00
167.75	0.00	168.27	0.00	168.79	0.00	169.31	0.00
167.76	0.00	168.28	0.00	168.80	0.00	169.32	0.00
167.77	0.00	168.29	0.00	168.81	0.00	169.33	0.00
167.78	0.00	168.30	0.00	168.82	0.00	169.34	0.00
167.79	0.00	168.31	0.00	168.83	0.00	169.35	0.00
167.80	0.00	168.32	0.00	168.84	0.00	169.36	0.00
167.81	0.00	168.33	0.00	168.85	0.00	169.37	0.00
167.82	0.00	168.34	0.00	168.86	0.00	169.38	0.00
167.83	0.00	168.35	0.00	168.87	0.00	169.39	0.00
167.84	0.00	168.36	0.00	168.88	0.00	169.40	0.00
167.85	0.00	168.37	0.00	168.89	0.00	169.41	0.00
167.86	0.00	168.38	0.00	168.90	0.00	169.42	0.00

Stage-Discharge for Pond B-27: Basin #27 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
169.43	0.00	169.95	0.00	170.47	0.00	170.99	0.72
169.44	0.00	169.96	0.00	170.48	0.00	171.00	0.74
169.45	0.00	169.97	0.00	170.49	0.00	171.01	0.76
169.46	0.00	169.98	0.00	170.50	0.00	171.02	0.78
169.47	0.00	169.99	0.00	170.51	0.01	171.03	0.80
169.48	0.00	170.00	0.00	170.52	0.01	171.04	0.82
169.49	0.00	170.01	0.00	170.53	0.01	171.05	0.84
169.50	0.00	170.02	0.00	170.54	0.02	171.06	0.85
169.51	0.00	170.03	0.00	170.55	0.02	171.07	0.87
169.52	0.00	170.04	0.00	170.56	0.03	171.08	0.89
169.53	0.00	170.05	0.00	170.57	0.04	171.09	0.91
169.54	0.00	170.06	0.00	170.58	0.04	171.10	0.92
169.55	0.00	170.07	0.00	170.59	0.05	171.11	0.94
169.56	0.00	170.08	0.00	170.60	0.06	171.12	0.95
169.57	0.00	170.09	0.00	170.61	0.07	171.13	0.96
169.58	0.00	170.10	0.00	170.62	0.08	171.14	0.98
169.59	0.00	170.11	0.00	170.63	0.09	171.15	0.99
169.60	0.00	170.12	0.00	170.64	0.10	171.16	1.00
169.61	0.00	170.13	0.00	170.65	0.11	171.17	1.02
169.62	0.00	170.14	0.00	170.66	0.12	171.18	1.03
169.63	0.00	170.15	0.00	170.67	0.13	171.19	1.05
169.64	0.00	170.16	0.00	170.68	0.15	171.20	1.06
169.65	0.00	170.17	0.00	170.69	0.16	171.21	1.07
169.66	0.00	170.18	0.00	170.70	0.17	171.22	1.08
169.67	0.00	170.19	0.00	170.71	0.19	171.23	1.10
169.68	0.00	170.20	0.00	170.72	0.20	171.24	1.11
169.69	0.00	170.21	0.00	170.73	0.22	171.25	1.12
169.70	0.00	170.22	0.00	170.74	0.23	171.26	1.14
169.71	0.00	170.23	0.00	170.75	0.25	171.27	1.15
169.72	0.00	170.24	0.00	170.76	0.27	171.28	1.16
169.73	0.00	170.25	0.00	170.77	0.28	171.29	1.17
169.74	0.00	170.26	0.00	170.78	0.30	171.30	1.18
169.75	0.00	170.27	0.00	170.79	0.32	171.31	1.20
169.76	0.00	170.28	0.00	170.80	0.34	171.32	1.21
169.77	0.00	170.29	0.00	170.81	0.36	171.33	1.22
169.78	0.00	170.30	0.00	170.82	0.37	171.34	1.23
169.79	0.00	170.31	0.00	170.83	0.39	171.35	1.24
169.80	0.00	170.32	0.00	170.84	0.41	171.36	1.25
169.81	0.00	170.33	0.00	170.85	0.43	171.37	1.27
169.82	0.00	170.34	0.00	170.86	0.45	171.38	1.28
169.83	0.00	170.35	0.00	170.87	0.47	171.39	1.29
169.84	0.00	170.36	0.00	170.88	0.49	171.40	1.30
169.85	0.00	170.37	0.00	170.89	0.51	171.41	1.31
169.86	0.00	170.38	0.00	170.90	0.53	171.42	1.32
169.87	0.00	170.39	0.00	170.91	0.55	171.43	1.33
169.88	0.00	170.40	0.00	170.92	0.57	171.44	1.34
169.89	0.00	170.41	0.00	170.93	0.59	171.45	1.35
169.90	0.00	170.42	0.00	170.94	0.61	171.46	1.36
169.91	0.00	170.43	0.00	170.95	0.63	171.47	1.37
169.92	0.00	170.44	0.00	170.96	0.66	171.48	1.38
169.93	0.00	170.45	0.00	170.97	0.68	171.49	1.39
169.94	0.00	170.46	0.00	170.98	0.70	171.50	1.40

Stage-Discharge for Pond B-27: Basin #27 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
171.51	1.41	172.03	2.80	172.55	8.64
171.52	1.42	172.04	2.86	172.56	8.83
171.53	1.43	172.05	2.92	172.57	9.02
171.54	1.44	172.06	2.98	172.58	9.21
171.55	1.45	172.07	3.04	172.59	9.41
171.56	1.46	172.08	3.10	172.60	9.60
171.57	1.47	172.09	3.16	172.61	9.80
171.58	1.48	172.10	3.22	172.62	10.00
171.59	1.49	172.11	3.28	172.63	10.20
171.60	1.50	172.12	3.35	172.64	10.40
171.61	1.51	172.13	3.41	172.65	10.61
171.62	1.52	172.14	3.47	172.66	10.81
171.63	1.53	172.15	3.54	172.67	11.02
171.64	1.54	172.16	3.60	172.68	11.23
171.65	1.55	172.17	3.67	172.69	11.44
171.66	1.56	172.18	3.74	172.70	11.65
171.67	1.56	172.19	3.80	172.71	11.87
171.68	1.57	172.20	3.87	172.72	12.08
171.69	1.58	172.21	3.94	172.73	12.30
171.70	1.59	172.22	4.01	172.74	12.52
171.71	1.60	172.23	4.08	172.75	12.74
171.72	1.61	172.24	4.15	172.76	12.96
171.73	1.62	172.25	4.22	172.77	13.18
171.74	1.63	172.26	4.30	172.78	13.41
171.75	1.64	172.27	4.40	172.79	13.63
171.76	1.65	172.28	4.50	172.80	13.86
171.77	1.67	172.29	4.61	172.81	14.09
171.78	1.69	172.30	4.72	172.82	14.32
171.79	1.72	172.31	4.84	172.83	14.55
171.80	1.75	172.32	4.97	172.84	14.78
171.81	1.78	172.33	5.09	172.85	15.02
171.82	1.81	172.34	5.22	172.86	15.25
171.83	1.85	172.35	5.36	172.87	15.49
171.84	1.89	172.36	5.50	172.88	15.72
171.85	1.92	172.37	5.64	172.89	15.96
171.86	1.96	172.38	5.78	172.90	16.20
171.87	2.00	172.39	5.93	172.91	16.56
171.88	2.05	172.40	6.08	172.92	17.02
171.89	2.09	172.41	6.24	172.93	17.54
171.90	2.13	172.42	6.39	172.94	18.11
171.91	2.18	172.43	6.55	172.95	**18.73**
171.92	2.23	172.44	6.71		
171.93	2.27	172.45	6.88		
171.94	2.32	172.46	7.04		
171.95	2.37	172.47	7.21		
171.96	2.42	172.48	7.38		
171.97	2.48	172.49	7.56		
171.98	2.53	172.50	7.73		
171.99	2.58	172.51	7.91		
172.00	2.64	172.52	8.09		
172.01	2.69	172.53	8.27		
172.02	2.75	172.54	8.46		

Stage-Area-Storage for Pond B-27: Basin #27

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.35	0	0	167.87	802	208
167.36	15	0	167.88	817	217
167.37	31	0	167.89	832	225
167.38	46	1	167.90	848	233
167.39	62	1	167.91	863	242
167.40	77	2	167.92	879	250
167.41	92	3	167.93	894	259
167.42	108	4	167.94	910	268
167.43	123	5	167.95	925	277
167.44	139	6	167.96	940	287
167.45	154	8	167.97	956	296
167.46	170	9	167.98	971	306
167.47	185	11	167.99	987	316
167.48	200	13	168.00	1,002	326
167.49	216	15	168.01	1,008	336
167.50	231	17	168.02	1,014	346
167.51	247	20	168.03	1,019	356
167.52	262	22	168.04	1,025	366
167.53	277	25	168.05	1,031	376
167.54	293	28	168.06	1,037	387
167.55	308	31	168.07	1,043	397
167.56	324	34	168.08	1,048	408
167.57	339	37	168.09	1,054	418
167.58	355	41	168.10	1,060	429
167.59	370	44	168.11	1,066	439
167.60	385	48	168.12	1,072	450
167.61	401	52	168.13	1,078	461
167.62	416	56	168.14	1,083	472
167.63	432	60	168.15	1,089	482
167.64	447	65	168.16	1,095	493
167.65	462	69	168.17	1,101	504
167.66	478	74	168.18	1,107	515
167.67	493	79	168.19	1,112	527
167.68	509	84	168.20	1,118	538
167.69	524	89	168.21	1,124	549
167.70	540	94	168.22	1,130	560
167.71	555	100	168.23	1,136	571
167.72	570	106	168.24	1,141	583
167.73	586	111	168.25	1,147	594
167.74	601	117	168.26	1,153	606
167.75	617	123	168.27	1,159	617
167.76	632	130	168.28	1,165	629
167.77	647	136	168.29	1,170	641
167.78	663	143	168.30	1,176	652
167.79	678	149	168.31	1,182	664
167.80	694	156	168.32	1,188	676
167.81	709	163	168.33	1,194	688
167.82	725	170	168.34	1,200	700
167.83	740	178	168.35	1,205	712
167.84	755	185	168.36	1,211	724
167.85	771	193	168.37	1,217	736
167.86	786	200	168.38	1,223	748

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.39	1,229	761	168.91	1,531	1,478
168.40	1,234	773	168.92	1,537	1,493
168.41	1,240	785	168.93	1,542	1,509
168.42	1,246	798	168.94	1,548	1,524
168.43	1,252	810	168.95	1,554	1,540
168.44	1,258	823	168.96	1,560	1,555
168.45	1,263	835	168.97	1,566	1,571
168.46	1,269	848	168.98	1,571	1,587
168.47	1,275	861	168.99	1,577	1,602
168.48	1,281	874	169.00	1,583	1,618
168.49	1,287	886	169.01	1,589	1,634
168.50	1,293	899	169.02	1,596	1,650
168.51	1,298	912	169.03	1,602	1,666
168.52	1,304	925	169.04	1,609	1,682
168.53	1,310	938	169.05	1,615	1,698
168.54	1,316	951	169.06	1,621	1,714
168.55	1,322	965	169.07	1,628	1,731
168.56	1,327	978	169.08	1,634	1,747
168.57	1,333	991	169.09	1,640	1,763
168.58	1,339	1,005	169.10	1,647	1,780
168.59	1,345	1,018	169.11	1,653	1,796
168.60	1,351	1,031	169.12	1,660	1,813
168.61	1,356	1,045	169.13	1,666	1,829
168.62	1,362	1,059	169.14	1,672	1,846
168.63	1,368	1,072	169.15	1,679	1,863
168.64	1,374	1,086	169.16	1,685	1,880
168.65	1,380	1,100	169.17	1,691	1,896
168.66	1,385	1,114	169.18	1,698	1,913
168.67	1,391	1,127	169.19	1,704	1,930
168.68	1,397	1,141	169.20	1,711	1,948
168.69	1,403	1,155	169.21	1,717	1,965
168.70	1,409	1,169	169.22	1,723	1,982
168.71	1,415	1,184	169.23	1,730	1,999
168.72	1,420	1,198	169.24	1,736	2,016
168.73	1,426	1,212	169.25	1,743	2,034
168.74	1,432	1,226	169.26	1,749	2,051
168.75	1,438	1,241	169.27	1,755	2,069
168.76	1,444	1,255	169.28	1,762	2,086
168.77	1,449	1,269	169.29	1,768	2,104
168.78	1,455	1,284	169.30	1,774	2,122
168.79	1,461	1,299	169.31	1,781	2,140
168.80	1,467	1,313	169.32	1,787	2,157
168.81	1,473	1,328	169.33	1,794	2,175
168.82	1,478	1,343	169.34	1,800	2,193
168.83	1,484	1,357	169.35	1,806	2,211
168.84	1,490	1,372	169.36	1,813	2,229
168.85	1,496	1,387	169.37	1,819	2,248
168.86	1,502	1,402	169.38	1,825	2,266
168.87	1,507	1,417	169.39	1,832	2,284
168.88	1,513	1,432	169.40	1,838	2,302
168.89	1,519	1,448	169.41	1,845	2,321
168.90	1,525	1,463	169.42	1,851	2,339

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.43	1,857	2,358	169.95	2,189	3,410
169.44	1,864	2,376	169.96	2,195	3,432
169.45	1,870	2,395	169.97	2,202	3,454
169.46	1,876	2,414	169.98	2,208	3,476
169.47	1,883	2,433	169.99	2,215	3,498
169.48	1,889	2,451	170.00	2,221	3,520
169.49	1,896	2,470	170.01	2,228	3,542
169.50	1,902	2,489	170.02	2,235	3,565
169.51	1,908	2,508	170.03	2,242	3,587
169.52	1,915	2,528	170.04	2,249	3,610
169.53	1,921	2,547	170.05	2,256	3,632
169.54	1,928	2,566	170.06	2,263	3,655
169.55	1,934	2,585	170.07	2,270	3,677
169.56	1,940	2,605	170.08	2,277	3,700
169.57	1,947	2,624	170.09	2,284	3,723
169.58	1,953	2,644	170.10	2,290	3,746
169.59	1,959	2,663	170.11	2,297	3,769
169.60	1,966	2,683	170.12	2,304	3,792
169.61	1,972	2,702	170.13	2,311	3,815
169.62	1,979	2,722	170.14	2,318	3,838
169.63	1,985	2,742	170.15	2,325	3,861
169.64	1,991	2,762	170.16	2,332	3,884
169.65	1,998	2,782	170.17	2,339	3,908
169.66	2,004	2,802	170.18	2,346	3,931
169.67	2,010	2,822	170.19	2,353	3,955
169.68	2,017	2,842	170.20	2,360	3,978
169.69	2,023	2,862	170.21	2,367	4,002
169.70	2,030	2,883	170.22	2,374	4,026
169.71	2,036	2,903	170.23	2,381	4,049
169.72	2,042	2,923	170.24	2,388	4,073
169.73	2,049	2,944	170.25	2,395	4,097
169.74	2,055	2,964	170.26	2,402	4,121
169.75	2,062	2,985	170.27	2,409	4,145
169.76	2,068	3,005	170.28	2,416	4,169
169.77	2,074	3,026	170.29	2,423	4,193
169.78	2,081	3,047	170.30	2,429	4,218
169.79	2,087	3,068	170.31	2,436	4,242
169.80	2,093	3,089	170.32	2,443	4,266
169.81	2,100	3,110	170.33	2,450	4,291
169.82	2,106	3,131	170.34	2,457	4,315
169.83	2,113	3,152	170.35	2,464	4,340
169.84	2,119	3,173	170.36	2,471	4,365
169.85	2,125	3,194	170.37	2,478	4,389
169.86	2,132	3,215	170.38	2,485	4,414
169.87	2,138	3,237	170.39	2,492	4,439
169.88	2,144	3,258	170.40	2,499	4,464
169.89	2,151	3,280	170.41	2,506	4,489
169.90	2,157	3,301	170.42	2,513	4,514
169.91	2,164	3,323	170.43	2,520	4,539
169.92	2,170	3,345	170.44	2,527	4,565
169.93	2,176	3,366	170.45	2,534	4,590
169.94	2,183	3,388	170.46	2,541	4,615

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
170.47	2,548	4,641	170.99	2,909	6,060
170.48	2,555	4,666	171.00	2,916	6,089
170.49	2,562	4,692	171.01	2,924	6,118
170.50	2,569	4,718	171.02	2,931	6,147
170.51	2,575	4,743	171.03	2,939	6,176
170.52	2,582	4,769	171.04	2,946	6,206
170.53	2,589	4,795	171.05	2,954	6,235
170.54	2,596	4,821	171.06	2,961	6,265
170.55	2,603	4,847	171.07	2,969	6,295
170.56	2,610	4,873	171.08	2,976	6,324
170.57	2,617	4,899	171.09	2,984	6,354
170.58	2,624	4,925	171.10	2,991	6,384
170.59	2,631	4,952	171.11	2,999	6,414
170.60	2,638	4,978	171.12	3,006	6,444
170.61	2,645	5,004	171.13	3,014	6,474
170.62	2,652	5,031	171.14	3,021	6,504
170.63	2,659	5,057	171.15	3,029	6,534
170.64	2,666	5,084	171.16	3,036	6,565
170.65	2,673	5,111	171.17	3,044	6,595
170.66	2,680	5,137	171.18	3,051	6,626
170.67	2,687	5,164	171.19	3,059	6,656
170.68	2,694	5,191	171.20	3,066	6,687
170.69	2,701	5,218	171.21	3,074	6,718
170.70	2,707	5,245	171.22	3,081	6,748
170.71	2,714	5,272	171.23	3,089	6,779
170.72	2,721	5,299	171.24	3,096	6,810
170.73	2,728	5,327	171.25	3,104	6,841
170.74	2,735	5,354	171.26	3,111	6,872
170.75	2,742	5,381	171.27	3,119	6,903
170.76	2,749	5,409	171.28	3,126	6,935
170.77	2,756	5,436	171.29	3,134	6,966
170.78	2,763	5,464	171.30	3,141	6,997
170.79	2,770	5,492	171.31	3,149	7,029
170.80	2,777	5,519	171.32	3,156	7,060
170.81	2,784	5,547	171.33	3,164	7,092
170.82	2,791	5,575	171.34	3,171	7,123
170.83	2,798	5,603	171.35	3,179	7,155
170.84	2,805	5,631	171.36	3,186	7,187
170.85	2,812	5,659	171.37	3,194	7,219
170.86	2,819	5,687	171.38	3,201	7,251
170.87	2,826	5,715	171.39	3,209	7,283
170.88	2,833	5,744	171.40	3,216	7,315
170.89	2,840	5,772	171.41	3,224	7,347
170.90	2,847	5,801	171.42	3,231	7,380
170.91	2,853	5,829	171.43	3,239	7,412
170.92	2,860	5,858	171.44	3,246	7,444
170.93	2,867	5,886	171.45	3,254	7,477
170.94	2,874	5,915	171.46	3,261	7,509
170.95	2,881	5,944	171.47	3,269	7,542
170.96	2,888	5,973	171.48	3,276	7,575
170.97	2,895	6,001	171.49	3,284	7,608
170.98	2,902	6,030	171.50	3,292	7,641

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
171.51	3,299	7,673	172.03	3,680	9,490
171.52	3,307	7,707	172.04	3,684	9,527
171.53	3,314	7,740	172.05	3,688	9,564
171.54	3,322	7,773	172.06	3,692	9,601
171.55	3,329	7,806	172.07	3,696	9,638
171.56	3,337	7,839	172.08	3,700	9,675
171.57	3,344	7,873	172.09	3,705	9,712
171.58	3,352	7,906	172.10	3,709	9,749
171.59	3,359	7,940	172.11	3,713	9,786
171.60	3,367	7,973	172.12	3,717	9,823
171.61	3,374	8,007	172.13	3,721	9,860
171.62	3,382	8,041	172.14	3,726	9,898
171.63	3,389	8,075	172.15	3,730	9,935
171.64	3,397	8,109	172.16	3,734	9,972
171.65	3,404	8,143	172.17	3,738	10,010
171.66	3,412	8,177	172.18	3,742	10,047
171.67	3,419	8,211	172.19	3,746	10,084
171.68	3,427	8,245	172.20	3,751	10,122
171.69	3,434	8,279	172.21	3,755	10,159
171.70	3,442	8,314	172.22	3,759	10,197
171.71	3,449	8,348	172.23	3,763	10,235
171.72	3,457	8,383	172.24	3,767	10,272
171.73	3,464	8,417	172.25	3,771	10,310
171.74	3,472	8,452	172.26	3,776	10,348
171.75	3,479	8,487	172.27	3,780	10,385
171.76	3,487	8,522	172.28	3,784	10,423
171.77	3,494	8,557	172.29	3,788	10,461
171.78	3,502	8,592	172.30	3,792	10,499
171.79	3,509	8,627	172.31	3,797	10,537
171.80	3,517	8,662	172.32	3,801	10,575
171.81	3,524	8,697	172.33	3,805	10,613
171.82	3,532	8,732	172.34	3,809	10,651
171.83	3,539	8,768	172.35	3,813	10,689
171.84	3,547	8,803	172.36	3,817	10,727
171.85	3,554	8,839	172.37	3,822	10,766
171.86	3,562	8,874	172.38	3,826	10,804
171.87	3,569	8,910	172.39	3,830	10,842
171.88	3,577	8,946	172.40	3,834	10,880
171.89	3,584	8,981	172.41	3,838	10,919
171.90	3,592	9,017	172.42	3,843	10,957
171.91	3,599	9,053	172.43	3,847	10,996
171.92	3,607	9,089	172.44	3,851	11,034
171.93	3,614	9,125	172.45	3,855	11,073
171.94	3,622	9,161	172.46	3,859	11,111
171.95	3,629	9,198	172.47	3,863	11,150
171.96	3,637	9,234	172.48	3,868	11,188
171.97	3,644	9,270	172.49	3,872	11,227
171.98	3,652	9,307	172.50	3,876	11,266
171.99	3,659	9,344	172.51	3,880	11,305
172.00	3,667	9,380	172.52	3,884	11,343
172.01	3,671	9,417	172.53	3,888	11,382
172.02	3,675	9,454	172.54	3,893	11,421

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
172.55	3,897	11,460
172.56	3,901	11,499
172.57	3,905	11,538
172.58	3,909	11,577
172.59	3,914	11,616
172.60	3,918	11,656
172.61	3,922	11,695
172.62	3,926	11,734
172.63	3,930	11,773
172.64	3,934	11,813
172.65	3,939	11,852
172.66	3,943	11,891
172.67	3,947	11,931
172.68	3,951	11,970
172.69	3,955	12,010
172.70	3,960	12,049
172.71	3,964	12,089
172.72	3,968	12,129
172.73	3,972	12,168
172.74	3,976	12,208
172.75	3,980	12,248
172.76	3,985	12,288
172.77	3,989	12,328
172.78	3,993	12,368
172.79	3,997	12,407
172.80	4,001	12,447
172.81	4,005	12,488
172.82	4,010	12,528
172.83	4,014	12,568
172.84	4,018	12,608
172.85	4,022	12,648
172.86	4,026	12,688
172.87	4,031	12,729
172.88	4,035	12,769
172.89	4,039	12,809
172.90	4,043	12,850
172.91	4,047	12,890
172.92	4,051	12,931
172.93	4,056	12,971
172.94	4,060	13,012
172.95	**4,064**	**13,052**

Summary for Pond B-28: Basin #28

Inflow Area = 2.333 ac, 34.85% Impervious, Inflow Depth = 2.23" for Future 2 yr event
Inflow = 5.30 cfs @ 12.17 hrs, Volume= 0.433 af
Outflow = 4.45 cfs @ 12.24 hrs, Volume= 0.354 af, Atten= 16%, Lag= 4.1 min
Primary = 4.45 cfs @ 12.24 hrs, Volume= 0.354 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 168.54' @ 12.24 hrs Surf.Area= 2,871 sf Storage= 5,236 cf

Plug-Flow detention time= 143.1 min calculated for 0.353 af (82% of inflow)
Center-of-Mass det. time= 63.7 min (865.0 - 801.3)

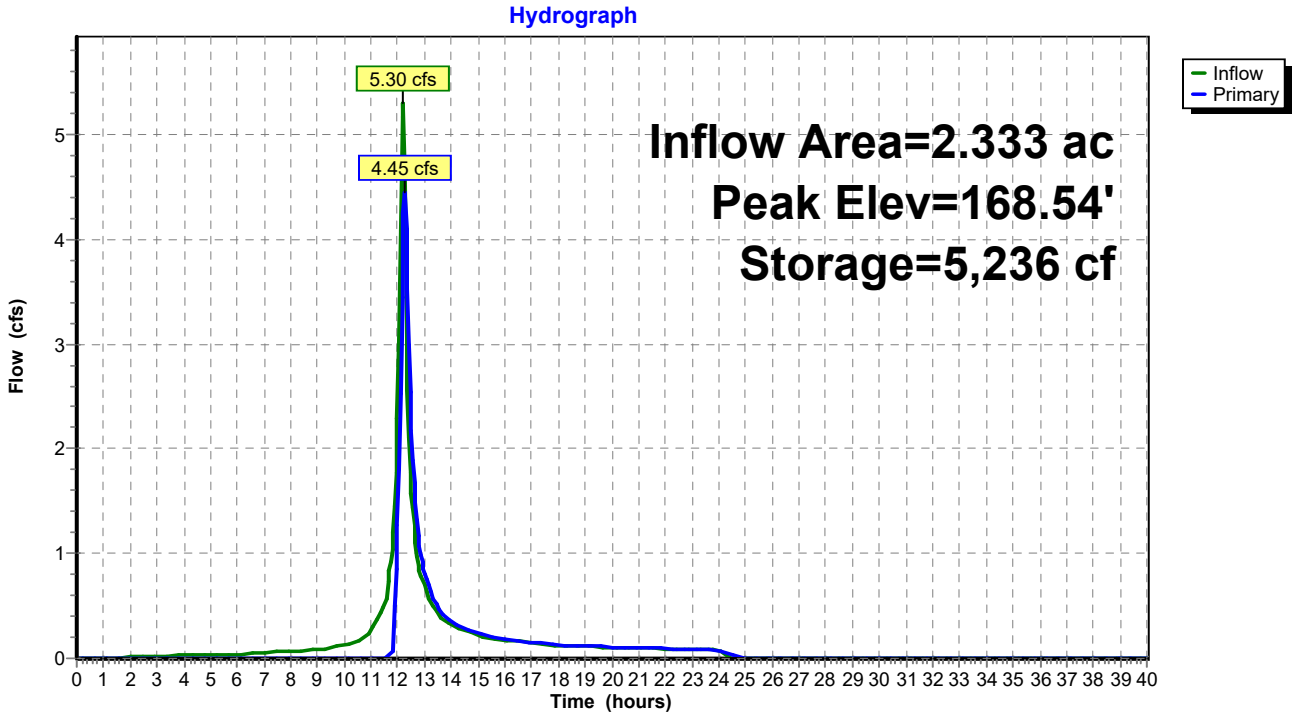
Volume	Invert	Avail.Storage	Storage Description
#1	165.65'	12,318 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.65	0	0	0
166.00	1,145	200	200
167.00	1,778	1,462	1,662
168.00	2,465	2,122	3,783
169.00	3,210	2,838	6,621
170.00	4,012	3,611	10,232
170.50	4,334	2,087	12,318

Device	Routing	Invert	Outlet Devices
#1	Primary	165.65'	**18.0" Round Culvert** L= 186.0' Ke= 0.500 Inlet / Outlet Invert= 165.65' / 163.70' S= 0.0105 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.87'	**30.0" W x 9.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	169.50'	**1.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	170.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	170.49'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.41 cfs @ 12.24 hrs HW=168.54' (Free Discharge)
- **1=Culvert** (Passes 4.41 cfs of 11.71 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 4.41 cfs @ 2.63 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
  - **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-28: Basin #28



Stage-Discharge for Pond B-28: Basin #28

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.00
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.00
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.00
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.00
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.00
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.00
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.00
165.82	0.00	166.34	0.00	166.86	0.00	167.38	0.00
165.83	0.00	166.35	0.00	166.87	0.00	167.39	0.00
165.84	0.00	166.36	0.00	166.88	0.00	167.40	0.00
165.85	0.00	166.37	0.00	166.89	0.00	167.41	0.00
165.86	0.00	166.38	0.00	166.90	0.00	167.42	0.00
165.87	0.00	166.39	0.00	166.91	0.00	167.43	0.00
165.88	0.00	166.40	0.00	166.92	0.00	167.44	0.00
165.89	0.00	166.41	0.00	166.93	0.00	167.45	0.00
165.90	0.00	166.42	0.00	166.94	0.00	167.46	0.00
165.91	0.00	166.43	0.00	166.95	0.00	167.47	0.00
165.92	0.00	166.44	0.00	166.96	0.00	167.48	0.00
165.93	0.00	166.45	0.00	166.97	0.00	167.49	0.00
165.94	0.00	166.46	0.00	166.98	0.00	167.50	0.00
165.95	0.00	166.47	0.00	166.99	0.00	167.51	0.00
165.96	0.00	166.48	0.00	167.00	0.00	167.52	0.00
165.97	0.00	166.49	0.00	167.01	0.00	167.53	0.00
165.98	0.00	166.50	0.00	167.02	0.00	167.54	0.00
165.99	0.00	166.51	0.00	167.03	0.00	167.55	0.00
166.00	0.00	166.52	0.00	167.04	0.00	167.56	0.00
166.01	0.00	166.53	0.00	167.05	0.00	167.57	0.00
166.02	0.00	166.54	0.00	167.06	0.00	167.58	0.00
166.03	0.00	166.55	0.00	167.07	0.00	167.59	0.00
166.04	0.00	166.56	0.00	167.08	0.00	167.60	0.00
166.05	0.00	166.57	0.00	167.09	0.00	167.61	0.00
166.06	0.00	166.58	0.00	167.10	0.00	167.62	0.00
166.07	0.00	166.59	0.00	167.11	0.00	167.63	0.00
166.08	0.00	166.60	0.00	167.12	0.00	167.64	0.00
166.09	0.00	166.61	0.00	167.13	0.00	167.65	0.00
166.10	0.00	166.62	0.00	167.14	0.00	167.66	0.00
166.11	0.00	166.63	0.00	167.15	0.00	167.67	0.00
166.12	0.00	166.64	0.00	167.16	0.00	167.68	0.00
166.13	0.00	166.65	0.00	167.17	0.00	167.69	0.00
166.14	0.00	166.66	0.00	167.18	0.00	167.70	0.00
166.15	0.00	166.67	0.00	167.19	0.00	167.71	0.00
166.16	0.00	166.68	0.00	167.20	0.00	167.72	0.00

Stage-Discharge for Pond B-28: Basin #28 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.73	0.00	168.25	1.88	168.77	6.39	169.29	9.18
167.74	0.00	168.26	1.95	168.78	6.45	169.30	9.22
167.75	0.00	168.27	2.03	168.79	6.52	169.31	9.27
167.76	0.00	168.28	2.11	168.80	6.58	169.32	9.31
167.77	0.00	168.29	2.18	168.81	6.65	169.33	9.36
167.78	0.00	168.30	2.26	168.82	6.71	169.34	9.40
167.79	0.00	168.31	2.34	168.83	6.78	169.35	9.44
167.80	0.00	168.32	2.42	168.84	6.84	169.36	9.49
167.81	0.00	168.33	2.50	168.85	6.90	169.37	9.53
167.82	0.00	168.34	2.59	168.86	6.96	169.38	9.57
167.83	0.00	168.35	2.67	168.87	7.02	169.39	9.62
167.84	0.00	168.36	2.75	168.88	7.08	169.40	9.66
167.85	0.00	168.37	2.84	168.89	7.14	169.41	9.70
167.86	0.00	168.38	2.92	168.90	7.20	169.42	9.74
167.87	0.00	168.39	3.01	168.91	7.26	169.43	9.79
167.88	0.01	168.40	3.10	168.92	7.32	169.44	9.83
167.89	0.02	168.41	3.18	168.93	7.37	169.45	9.87
167.90	0.04	168.42	3.27	168.94	7.43	169.46	9.91
167.91	0.06	168.43	3.36	168.95	7.49	169.47	9.95
167.92	0.09	168.44	3.45	168.96	7.54	169.48	9.99
167.93	0.12	168.45	3.54	168.97	7.60	169.49	10.03
167.94	0.15	168.46	3.64	168.98	7.65	169.50	10.08
167.95	0.18	168.47	3.73	168.99	7.71	169.51	10.12
167.96	0.22	168.48	3.82	169.00	7.76	169.52	10.17
167.97	0.25	168.49	3.92	169.01	7.81	169.53	10.21
167.98	0.29	168.50	4.01	169.02	7.87	169.54	10.26
167.99	0.33	168.51	4.11	169.03	7.92	169.55	10.31
168.00	0.38	168.52	4.21	169.04	7.97	169.56	10.36
168.01	0.42	168.53	4.30	169.05	8.02	169.57	10.42
168.02	0.47	168.54	4.40	169.06	8.08	169.58	10.47
168.03	0.51	168.55	4.50	169.07	8.13	169.59	10.52
168.04	0.56	168.56	4.60	169.08	8.18	169.60	10.58
168.05	0.61	168.57	4.70	169.09	8.23	169.61	10.63
168.06	0.66	168.58	4.80	169.10	8.28	169.62	10.69
168.07	0.72	168.59	4.90	169.11	8.33	169.63	10.74
168.08	0.77	168.60	5.01	169.12	8.38	169.64	10.80
168.09	0.83	168.61	5.11	169.13	8.43	169.65	10.85
168.10	0.89	168.62	5.21	169.14	8.48	169.66	10.91
168.11	0.94	168.63	5.31	169.15	8.52	169.67	10.97
168.12	1.00	168.64	5.40	169.16	8.57	169.68	11.02
168.13	1.06	168.65	5.49	169.17	8.62	169.69	11.08
168.14	1.13	168.66	5.57	169.18	8.67	169.70	11.14
168.15	1.19	168.67	5.65	169.19	8.72	169.71	11.20
168.16	1.25	168.68	5.73	169.20	8.76	169.72	11.26
168.17	1.32	168.69	5.81	169.21	8.81	169.73	11.32
168.18	1.39	168.70	5.89	169.22	8.86	169.74	11.38
168.19	1.45	168.71	5.96	169.23	8.90	169.75	11.43
168.20	1.52	168.72	6.04	169.24	8.95	169.76	11.49
168.21	1.59	168.73	6.11	169.25	9.00	169.77	11.55
168.22	1.66	168.74	6.18	169.26	9.04	169.78	11.61
168.23	1.73	168.75	6.25	169.27	9.09	169.79	11.67
168.24	1.81	168.76	6.32	169.28	9.13	169.80	11.74

Stage-Discharge for Pond B-28: Basin #28 (continued)

Elevation (feet)	Primary (cfs)
169.81	11.80
169.82	11.86
169.83	11.92
169.84	11.98
169.85	12.04
169.86	12.10
169.87	12.16
169.88	12.23
169.89	12.29
169.90	12.35
169.91	12.41
169.92	12.47
169.93	12.54
169.94	12.60
169.95	12.66
169.96	12.73
169.97	12.79
169.98	12.85
169.99	12.91
170.00	12.98
170.01	13.05
170.02	13.14
170.03	13.24
170.04	13.34
170.05	13.44
170.06	13.55
170.07	13.66
170.08	13.78
170.09	13.90
170.10	14.02
170.11	14.15
170.12	14.21
170.13	14.22
170.14	14.24
170.15	14.25
170.16	14.27
170.17	14.28
170.18	14.29
170.19	14.31
170.20	14.32
170.21	14.34
170.22	14.35
170.23	14.37
170.24	14.38
170.25	14.39
170.26	14.41
170.27	14.42
170.28	14.44
170.29	14.45
170.30	14.47
170.31	14.48
170.32	14.49
170.33	14.51
170.34	14.52
170.35	14.54
170.36	14.55
170.37	14.56
170.38	14.58
170.39	14.59
170.40	14.61
170.41	14.62
170.42	14.63
170.43	14.65
170.44	14.66
170.45	14.68
170.46	14.69
170.47	14.70
170.48	14.72
170.49	14.73
170.50	**14.86**

Stage-Area-Storage for Pond B-28: Basin #28

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.65	0	0	166.17	1,253	404
165.66	33	0	166.18	1,259	417
165.67	65	1	166.19	1,265	429
165.68	98	1	166.20	1,272	442
165.69	131	3	166.21	1,278	455
165.70	164	4	166.22	1,284	468
165.71	196	6	166.23	1,291	480
165.72	229	8	166.24	1,297	493
165.73	262	10	166.25	1,303	506
165.74	294	13	166.26	1,310	519
165.75	327	16	166.27	1,316	533
165.76	360	20	166.28	1,322	546
165.77	393	24	166.29	1,329	559
165.78	425	28	166.30	1,335	572
165.79	458	32	166.31	1,341	586
165.80	491	37	166.32	1,348	599
165.81	523	42	166.33	1,354	613
165.82	556	47	166.34	1,360	626
165.83	589	53	166.35	1,367	640
165.84	622	59	166.36	1,373	654
165.85	654	65	166.37	1,379	667
165.86	687	72	166.38	1,386	681
165.87	720	79	166.39	1,392	695
165.88	752	87	166.40	1,398	709
165.89	785	94	166.41	1,405	723
165.90	818	102	166.42	1,411	737
165.91	851	111	166.43	1,417	751
165.92	883	119	166.44	1,424	765
165.93	916	128	166.45	1,430	780
165.94	949	138	166.46	1,436	794
165.95	981	147	166.47	1,443	808
165.96	1,014	157	166.48	1,449	823
165.97	1,047	167	166.49	1,455	837
165.98	1,080	178	166.50	1,462	852
165.99	1,112	189	166.51	1,468	867
166.00	1,145	200	166.52	1,474	881
166.01	1,151	212	166.53	1,480	896
166.02	1,158	223	166.54	1,487	911
166.03	1,164	235	166.55	1,493	926
166.04	1,170	247	166.56	1,499	941
166.05	1,177	258	166.57	1,506	956
166.06	1,183	270	166.58	1,512	971
166.07	1,189	282	166.59	1,518	986
166.08	1,196	294	166.60	1,525	1,001
166.09	1,202	306	166.61	1,531	1,017
166.10	1,208	318	166.62	1,537	1,032
166.11	1,215	330	166.63	1,544	1,047
166.12	1,221	342	166.64	1,550	1,063
166.13	1,227	355	166.65	1,556	1,078
166.14	1,234	367	166.66	1,563	1,094
166.15	1,240	379	166.67	1,569	1,110
166.16	1,246	392	166.68	1,575	1,125

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.69	1,582	1,141	167.21	1,922	2,050
166.70	1,588	1,157	167.22	1,929	2,070
166.71	1,594	1,173	167.23	1,936	2,089
166.72	1,601	1,189	167.24	1,943	2,108
166.73	1,607	1,205	167.25	1,950	2,128
166.74	1,613	1,221	167.26	1,957	2,147
166.75	1,620	1,237	167.27	1,963	2,167
166.76	1,626	1,253	167.28	1,970	2,187
166.77	1,632	1,270	167.29	1,977	2,206
166.78	1,639	1,286	167.30	1,984	2,226
166.79	1,645	1,302	167.31	1,991	2,246
166.80	1,651	1,319	167.32	1,998	2,266
166.81	1,658	1,335	167.33	2,005	2,286
166.82	1,664	1,352	167.34	2,012	2,306
166.83	1,670	1,369	167.35	2,018	2,326
166.84	1,677	1,385	167.36	2,025	2,346
166.85	1,683	1,402	167.37	2,032	2,367
166.86	1,689	1,419	167.38	2,039	2,387
166.87	1,696	1,436	167.39	2,046	2,408
166.88	1,702	1,453	167.40	2,053	2,428
166.89	1,708	1,470	167.41	2,060	2,449
166.90	1,715	1,487	167.42	2,067	2,469
166.91	1,721	1,504	167.43	2,073	2,490
166.92	1,727	1,522	167.44	2,080	2,511
166.93	1,734	1,539	167.45	2,087	2,532
166.94	1,740	1,556	167.46	2,094	2,552
166.95	1,746	1,574	167.47	2,101	2,573
166.96	1,753	1,591	167.48	2,108	2,594
166.97	1,759	1,609	167.49	2,115	2,616
166.98	1,765	1,626	167.50	2,122	2,637
166.99	1,772	1,644	167.51	2,128	2,658
167.00	1,778	1,662	167.52	2,135	2,679
167.01	1,785	1,680	167.53	2,142	2,701
167.02	1,792	1,698	167.54	2,149	2,722
167.03	1,799	1,716	167.55	2,156	2,744
167.04	1,805	1,734	167.56	2,163	2,765
167.05	1,812	1,752	167.57	2,170	2,787
167.06	1,819	1,770	167.58	2,176	2,809
167.07	1,826	1,788	167.59	2,183	2,830
167.08	1,833	1,806	167.60	2,190	2,852
167.09	1,840	1,825	167.61	2,197	2,874
167.10	1,847	1,843	167.62	2,204	2,896
167.11	1,854	1,862	167.63	2,211	2,918
167.12	1,860	1,880	167.64	2,218	2,940
167.13	1,867	1,899	167.65	2,225	2,963
167.14	1,874	1,918	167.66	2,231	2,985
167.15	1,881	1,936	167.67	2,238	3,007
167.16	1,888	1,955	167.68	2,245	3,030
167.17	1,895	1,974	167.69	2,252	3,052
167.18	1,902	1,993	167.70	2,259	3,075
167.19	1,909	2,012	167.71	2,266	3,097
167.20	1,915	2,031	167.72	2,273	3,120

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.73	2,280	3,143	168.25	2,651	4,423
167.74	2,286	3,166	168.26	2,659	4,449
167.75	2,293	3,189	168.27	2,666	4,476
167.76	2,300	3,212	168.28	2,674	4,503
167.77	2,307	3,235	168.29	2,681	4,530
167.78	2,314	3,258	168.30	2,689	4,556
167.79	2,321	3,281	168.31	2,696	4,583
167.80	2,328	3,304	168.32	2,703	4,610
167.81	2,334	3,327	168.33	2,711	4,637
167.82	2,341	3,351	168.34	2,718	4,665
167.83	2,348	3,374	168.35	2,726	4,692
167.84	2,355	3,398	168.36	2,733	4,719
167.85	2,362	3,421	168.37	2,741	4,746
167.86	2,369	3,445	168.38	2,748	4,774
167.87	2,376	3,469	168.39	2,756	4,801
167.88	2,383	3,493	168.40	2,763	4,829
167.89	2,389	3,516	168.41	2,770	4,857
167.90	2,396	3,540	168.42	2,778	4,884
167.91	2,403	3,564	168.43	2,785	4,912
167.92	2,410	3,588	168.44	2,793	4,940
167.93	2,417	3,613	168.45	2,800	4,968
167.94	2,424	3,637	168.46	2,808	4,996
167.95	2,431	3,661	168.47	2,815	5,024
167.96	2,438	3,685	168.48	2,823	5,052
167.97	2,444	3,710	168.49	2,830	5,081
167.98	2,451	3,734	168.50	2,838	5,109
167.99	2,458	3,759	168.51	2,845	5,137
168.00	2,465	3,783	168.52	2,852	5,166
168.01	2,472	3,808	168.53	2,860	5,194
168.02	2,480	3,833	168.54	2,867	5,223
168.03	2,487	3,858	168.55	2,875	5,252
168.04	2,495	3,883	168.56	2,882	5,281
168.05	2,502	3,908	168.57	2,890	5,309
168.06	2,510	3,933	168.58	2,897	5,338
168.07	2,517	3,958	168.59	2,905	5,367
168.08	2,525	3,983	168.60	2,912	5,396
168.09	2,532	4,008	168.61	2,919	5,426
168.10	2,539	4,034	168.62	2,927	5,455
168.11	2,547	4,059	168.63	2,934	5,484
168.12	2,554	4,085	168.64	2,942	5,514
168.13	2,562	4,110	168.65	2,949	5,543
168.14	2,569	4,136	168.66	2,957	5,573
168.15	2,577	4,162	168.67	2,964	5,602
168.16	2,584	4,187	168.68	2,972	5,632
168.17	2,592	4,213	168.69	2,979	5,662
168.18	2,599	4,239	168.70	2,987	5,691
168.19	2,607	4,265	168.71	2,994	5,721
168.20	2,614	4,291	168.72	3,001	5,751
168.21	2,621	4,317	168.73	3,009	5,781
168.22	2,629	4,344	168.74	3,016	5,811
168.23	2,636	4,370	168.75	3,024	5,842
168.24	2,644	4,396	168.76	3,031	5,872

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.77	3,039	5,902	169.29	3,443	7,585
168.78	3,046	5,933	169.30	3,451	7,620
168.79	3,054	5,963	169.31	3,459	7,655
168.80	3,061	5,994	169.32	3,467	7,689
168.81	3,068	6,024	169.33	3,475	7,724
168.82	3,076	6,055	169.34	3,483	7,759
168.83	3,083	6,086	169.35	3,491	7,793
168.84	3,091	6,117	169.36	3,499	7,828
168.85	3,098	6,148	169.37	3,507	7,863
168.86	3,106	6,179	169.38	3,515	7,899
168.87	3,113	6,210	169.39	3,523	7,934
168.88	3,121	6,241	169.40	3,531	7,969
168.89	3,128	6,272	169.41	3,539	8,004
168.90	3,136	6,304	169.42	3,547	8,040
168.91	3,143	6,335	169.43	3,555	8,075
168.92	3,150	6,366	169.44	3,563	8,111
168.93	3,158	6,398	169.45	3,571	8,147
168.94	3,165	6,430	169.46	3,579	8,182
168.95	3,173	6,461	169.47	3,587	8,218
168.96	3,180	6,493	169.48	3,595	8,254
168.97	3,188	6,525	169.49	3,603	8,290
168.98	3,195	6,557	169.50	3,611	8,326
168.99	3,203	6,589	169.51	3,619	8,362
169.00	3,210	6,621	169.52	3,627	8,399
169.01	3,218	6,653	169.53	3,635	8,435
169.02	3,226	6,685	169.54	3,643	8,471
169.03	3,234	6,718	169.55	3,651	8,508
169.04	3,242	6,750	169.56	3,659	8,544
169.05	3,250	6,782	169.57	3,667	8,581
169.06	3,258	6,815	169.58	3,675	8,618
169.07	3,266	6,848	169.59	3,683	8,654
169.08	3,274	6,880	169.60	3,691	8,691
169.09	3,282	6,913	169.61	3,699	8,728
169.10	3,290	6,946	169.62	3,707	8,765
169.11	3,298	6,979	169.63	3,715	8,802
169.12	3,306	7,012	169.64	3,723	8,840
169.13	3,314	7,045	169.65	3,731	8,877
169.14	3,322	7,078	169.66	3,739	8,914
169.15	3,330	7,111	169.67	3,747	8,952
169.16	3,338	7,145	169.68	3,755	8,989
169.17	3,346	7,178	169.69	3,763	9,027
169.18	3,354	7,212	169.70	3,771	9,064
169.19	3,362	7,245	169.71	3,779	9,102
169.20	3,370	7,279	169.72	3,787	9,140
169.21	3,378	7,313	169.73	3,795	9,178
169.22	3,386	7,346	169.74	3,803	9,216
169.23	3,394	7,380	169.75	3,812	9,254
169.24	3,402	7,414	169.76	3,820	9,292
169.25	3,411	7,448	169.77	3,828	9,330
169.26	3,419	7,483	169.78	3,836	9,369
169.27	3,427	7,517	169.79	3,844	9,407
169.28	3,435	7,551	169.80	3,852	9,446

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

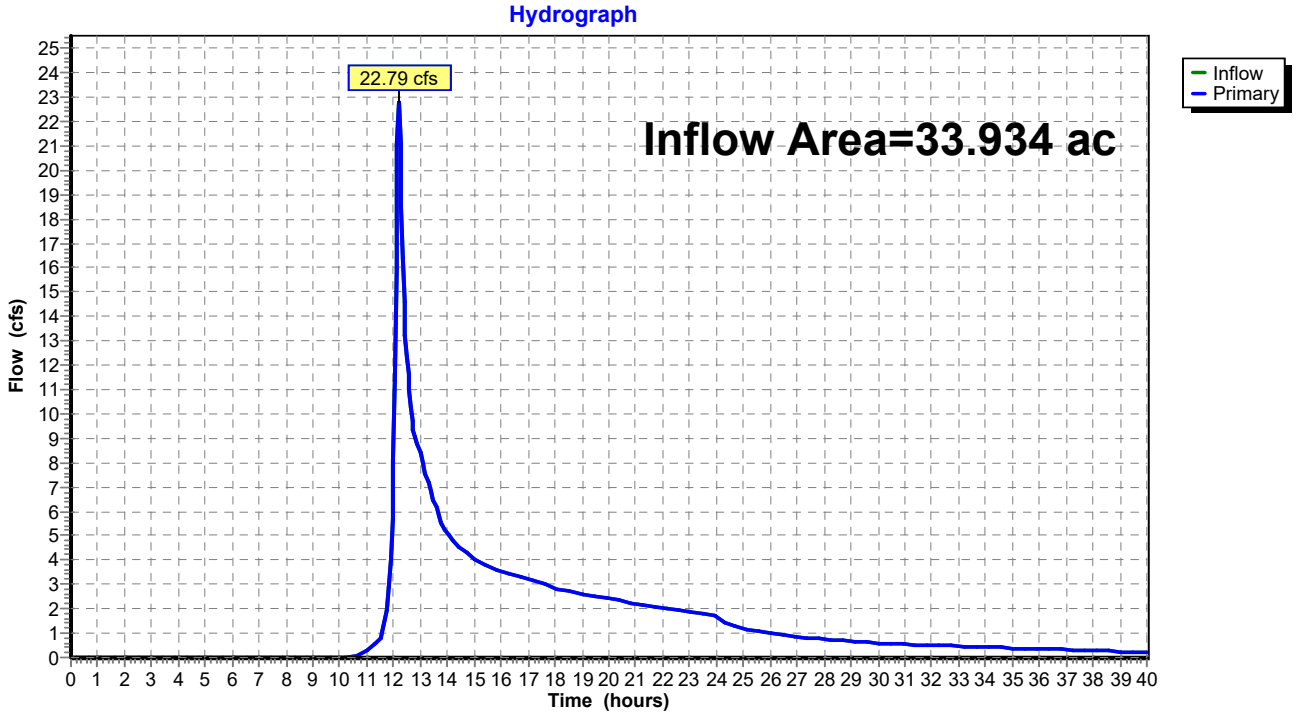
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.81	3,860	9,484
169.82	3,868	9,523
169.83	3,876	9,561
169.84	3,884	9,600
169.85	3,892	9,639
169.86	3,900	9,678
169.87	3,908	9,717
169.88	3,916	9,756
169.89	3,924	9,795
169.90	3,932	9,835
169.91	3,940	9,874
169.92	3,948	9,913
169.93	3,956	9,953
169.94	3,964	9,993
169.95	3,972	10,032
169.96	3,980	10,072
169.97	3,988	10,112
169.98	3,996	10,152
169.99	4,004	10,192
170.00	4,012	10,232
170.01	4,018	10,272
170.02	4,025	10,312
170.03	4,031	10,353
170.04	4,038	10,393
170.05	4,044	10,433
170.06	4,051	10,474
170.07	4,057	10,514
170.08	4,064	10,555
170.09	4,070	10,596
170.10	4,076	10,636
170.11	4,083	10,677
170.12	4,089	10,718
170.13	4,096	10,759
170.14	4,102	10,800
170.15	4,109	10,841
170.16	4,115	10,882
170.17	4,121	10,923
170.18	4,128	10,964
170.19	4,134	11,006
170.20	4,141	11,047
170.21	4,147	11,089
170.22	4,154	11,130
170.23	4,160	11,172
170.24	4,167	11,213
170.25	4,173	11,255
170.26	4,179	11,297
170.27	4,186	11,339
170.28	4,192	11,380
170.29	4,199	11,422
170.30	4,205	11,464
170.31	4,212	11,507
170.32	4,218	11,549
170.33	4,225	11,591
170.34	4,231	11,633
170.35	4,237	11,676
170.36	4,244	11,718
170.37	4,250	11,760
170.38	4,257	11,803
170.39	4,263	11,846
170.40	4,270	11,888
170.41	4,276	11,931
170.42	4,282	11,974
170.43	4,289	12,017
170.44	4,295	12,059
170.45	4,302	12,102
170.46	4,308	12,146
170.47	4,315	12,189
170.48	4,321	12,232
170.49	4,328	12,275
170.50	**4,334**	**12,318**

Summary for Link PDA-2: Proposed Drainage Area #2

Inflow Area = 33.934 ac, 26.90% Impervious, Inflow Depth > 1.72" for Future 2 yr event
Inflow = 22.79 cfs @ 12.20 hrs, Volume= 4.865 af
Primary = 22.79 cfs @ 12.20 hrs, Volume= 4.865 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-2: Proposed Drainage Area #2



Summary for Subcatchment 18l: PDA-18 (impervious)

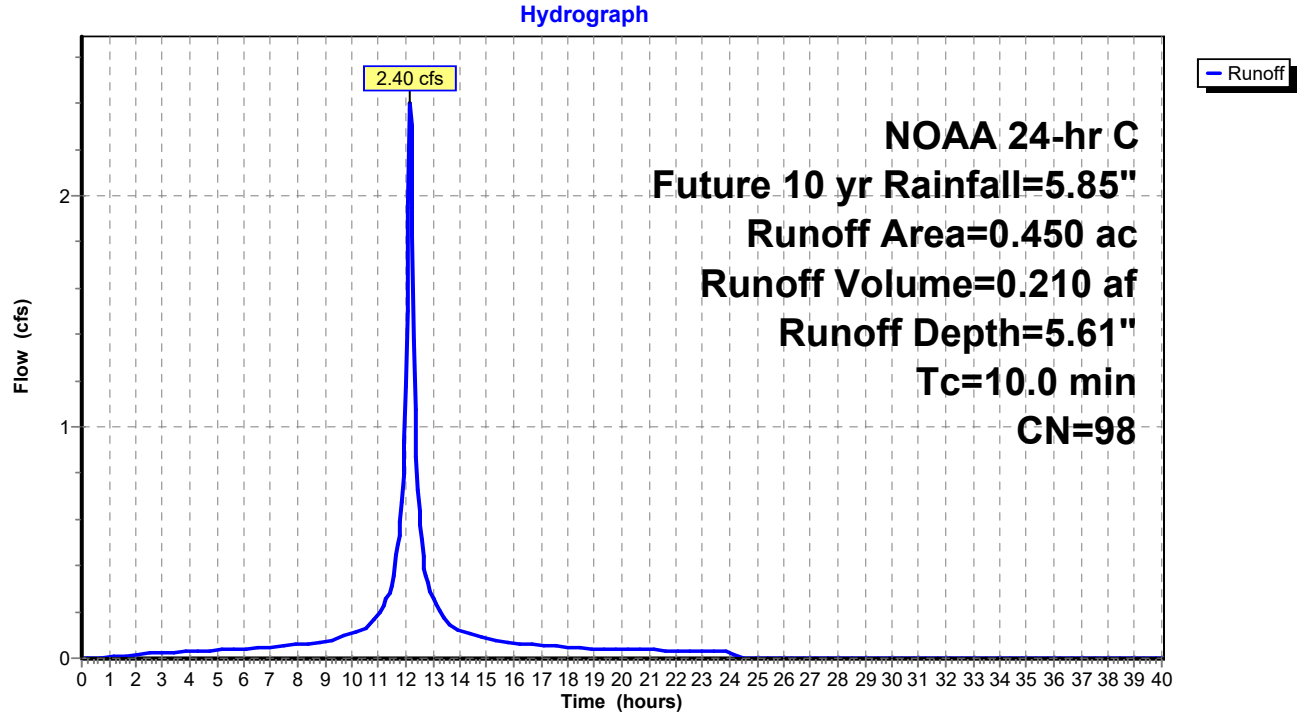
Runoff = 2.40 cfs @ 12.17 hrs, Volume= 0.210 af, Depth= 5.61"
Routed to Pond B-18 : Basin #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.450	98	Weighted Average
	0.450		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 18l: PDA-18 (impervious)



Summary for Subcatchment 18P: PDA-18 (pervious)

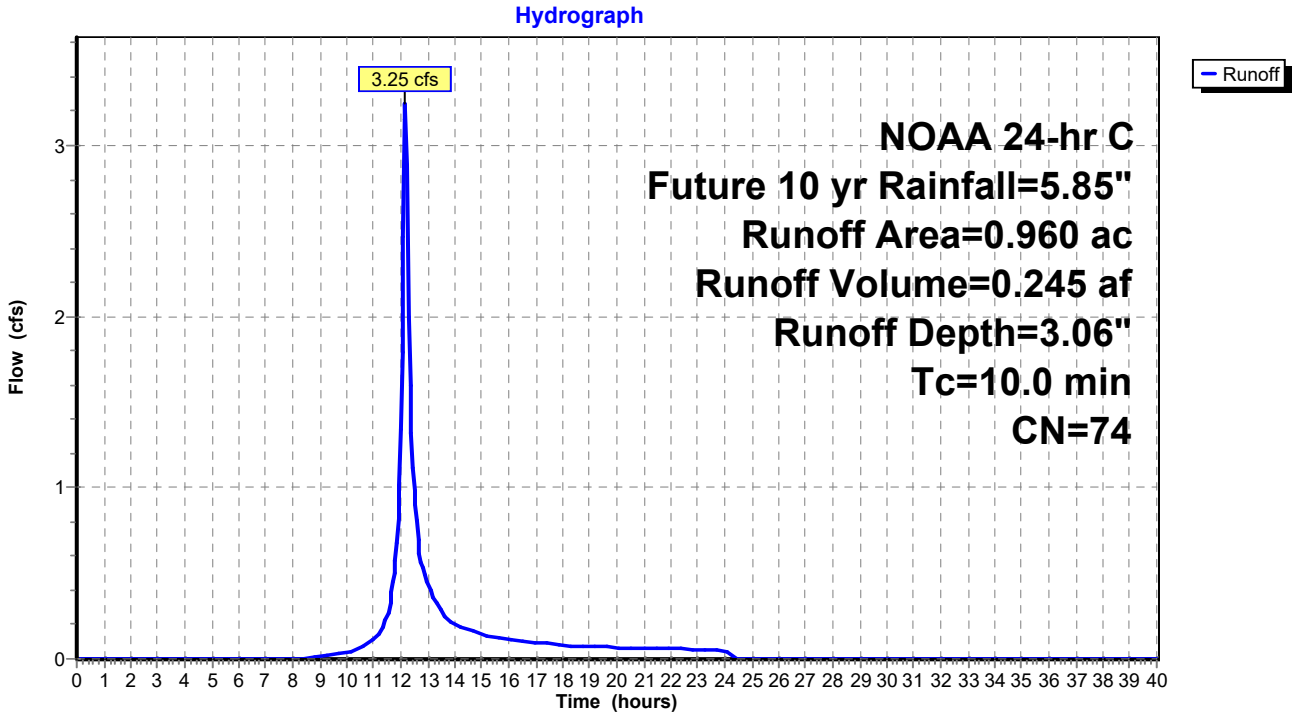
Runoff = 3.25 cfs @ 12.18 hrs, Volume= 0.245 af, Depth= 3.06"
Routed to Pond B-18 : Basin #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.960	74	>75% Grass cover, Good, HSG C
0.960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 18P: PDA-18 (pervious)



Summary for Subcatchment 19l: PDA-19 (impervious)

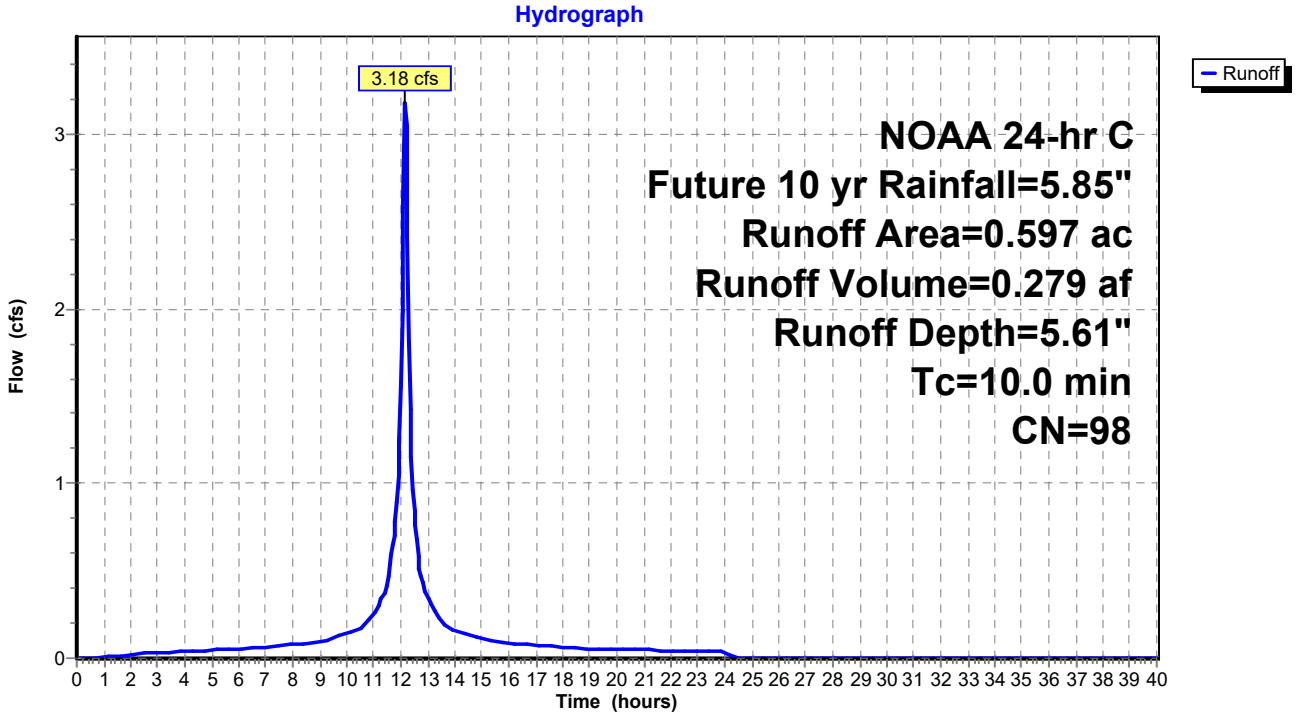
Runoff = 3.18 cfs @ 12.17 hrs, Volume= 0.279 af, Depth= 5.61"
Routed to Pond B-19 : Basin #19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.132	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.015	98	Concrete, HSG C
	0.597	98	Weighted Average
	0.597		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19l: PDA-19 (impervious)



Summary for Subcatchment 19P: PDA-19 (pervious)

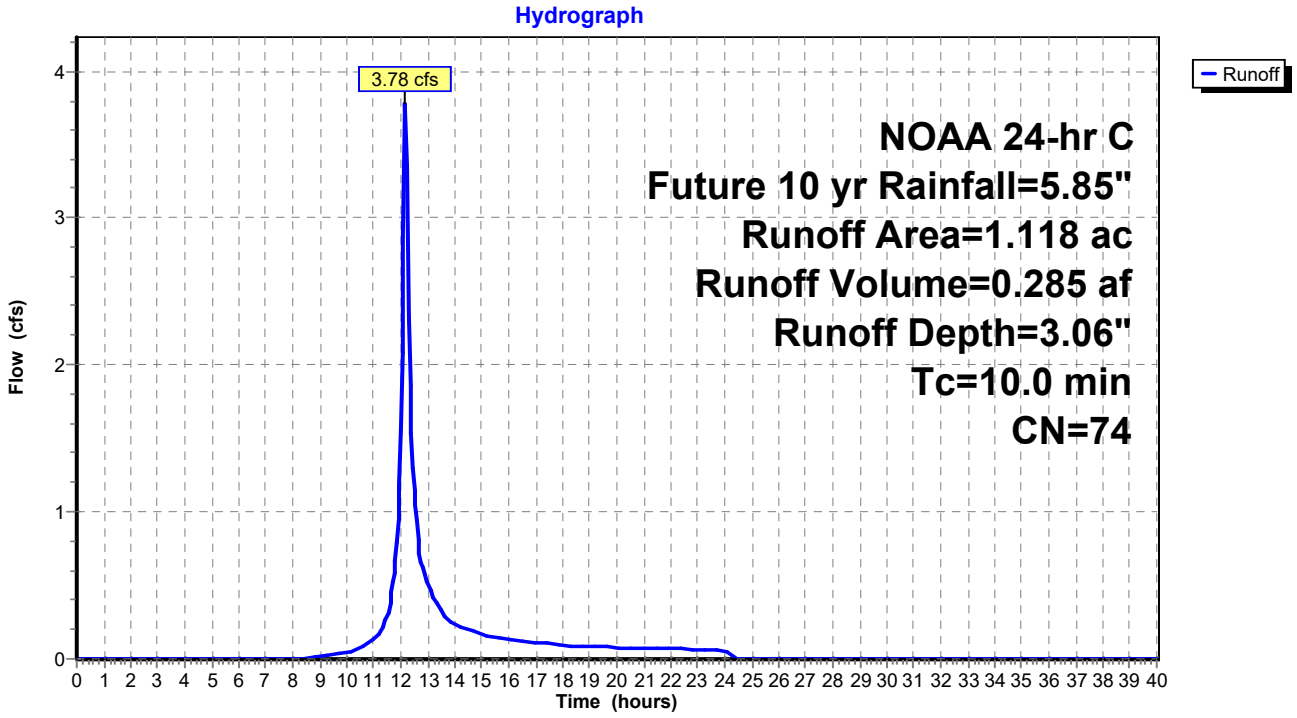
Runoff = 3.78 cfs @ 12.18 hrs, Volume= 0.285 af, Depth= 3.06"
Routed to Pond B-19 : Basin #19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.118	74	>75% Grass cover, Good, HSG C
1.118		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19P: PDA-19 (pervious)



Summary for Subcatchment 20l: PDA-20 (impervious)

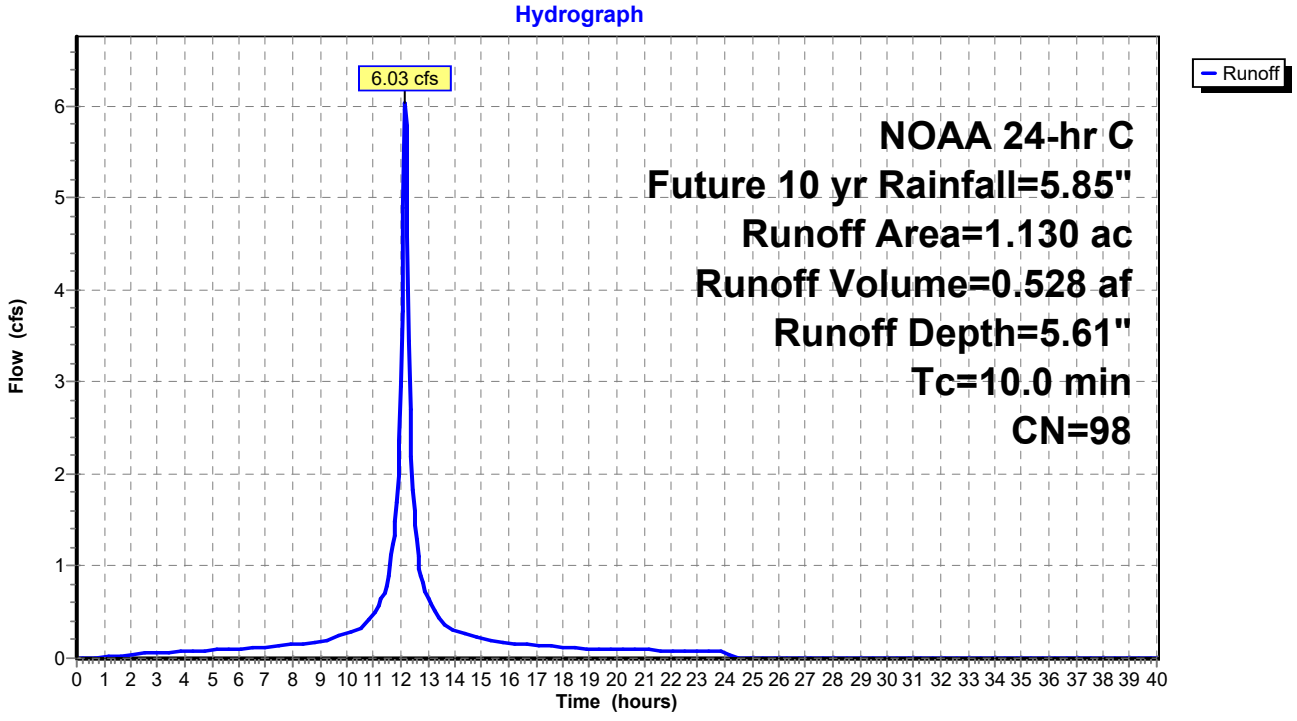
Runoff = 6.03 cfs @ 12.17 hrs, Volume= 0.528 af, Depth= 5.61"
Routed to Pond B-20 : Basin #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.572	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.108	98	Concrete, HSC C
	1.130	98	Weighted Average
	1.130		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 20l: PDA-20 (impervious)



Summary for Subcatchment 20P: PDA-20 (pervious)

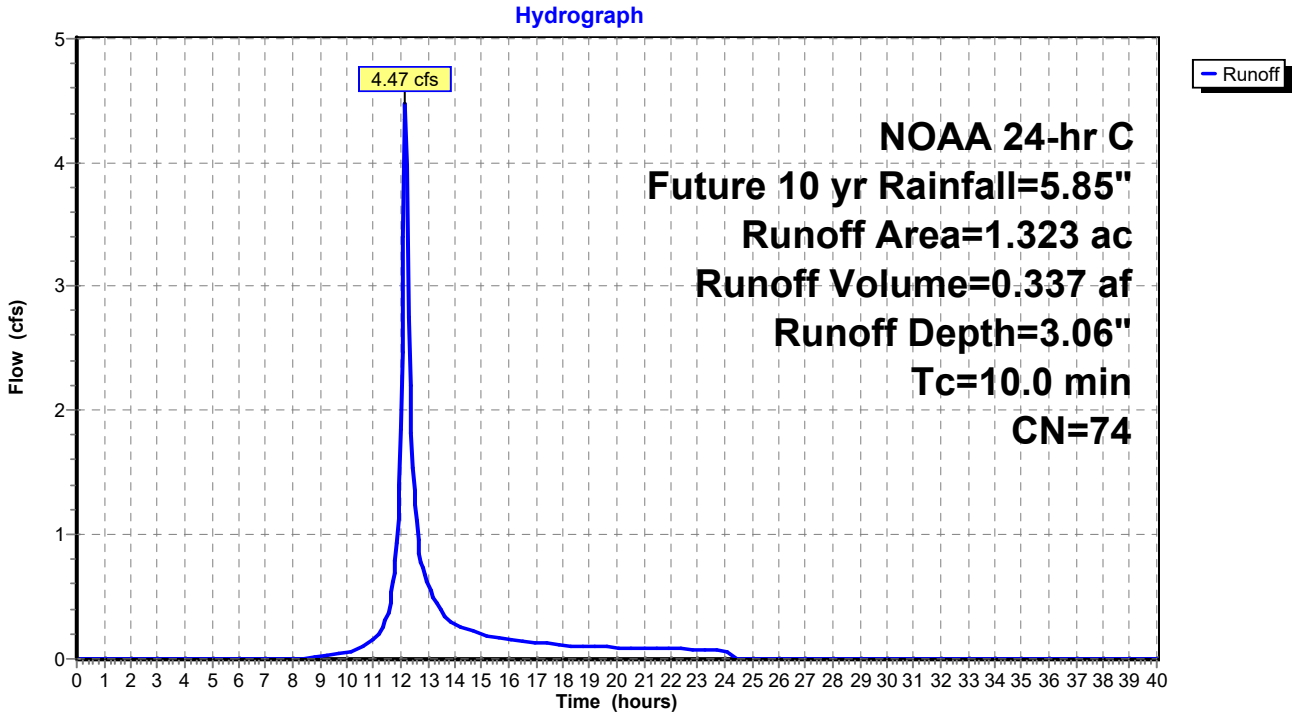
Runoff = 4.47 cfs @ 12.18 hrs, Volume= 0.337 af, Depth= 3.06"
Routed to Pond B-20 : Basin #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.323	74	>75% Grass cover, Good, HSG C
1.323		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 20P: PDA-20 (pervious)



Summary for Subcatchment 21I: PDA-21 (impervious)

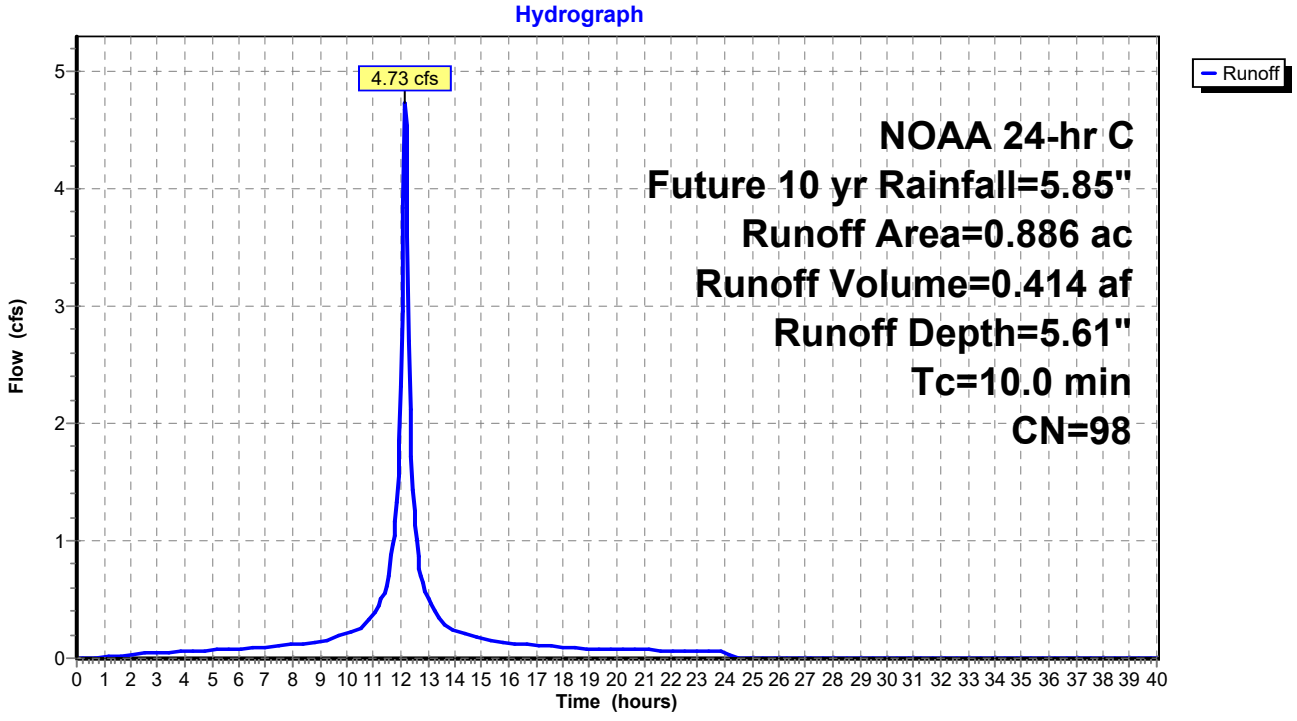
Runoff = 4.73 cfs @ 12.17 hrs, Volume= 0.414 af, Depth= 5.61"
Routed to Pond B-21 : Basin #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.511	98	Pavement, HSG C
*	0.321	98	Roof, HSG C
*	0.054	98	Concrete, HSC C
	0.886	98	Weighted Average
	0.886		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21I: PDA-21 (impervious)



Summary for Subcatchment 21P: PDA-21 (pervious)

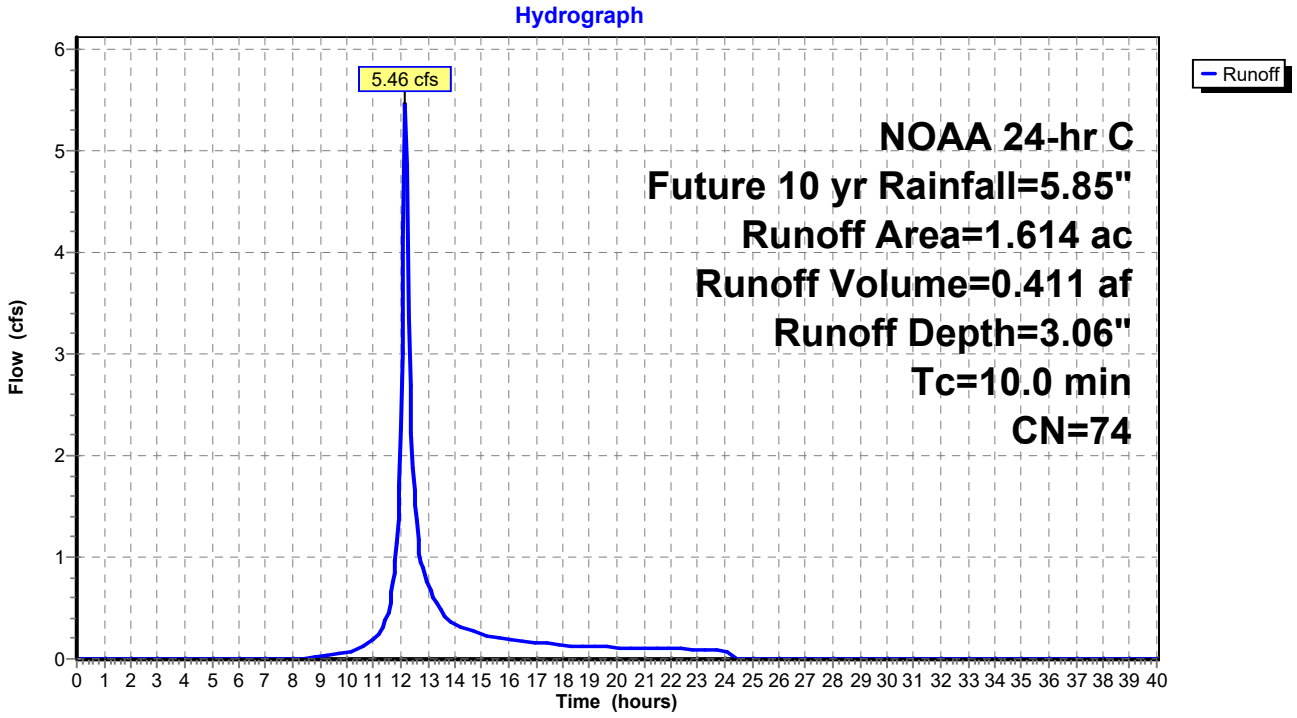
Runoff = 5.46 cfs @ 12.18 hrs, Volume= 0.411 af, Depth= 3.06"
Routed to Pond B-21 : Basin #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.614	74	>75% Grass cover, Good, HSG C
1.614		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21P: PDA-21 (pervious)



Summary for Subcatchment 22l: PDA-22 (impervious)

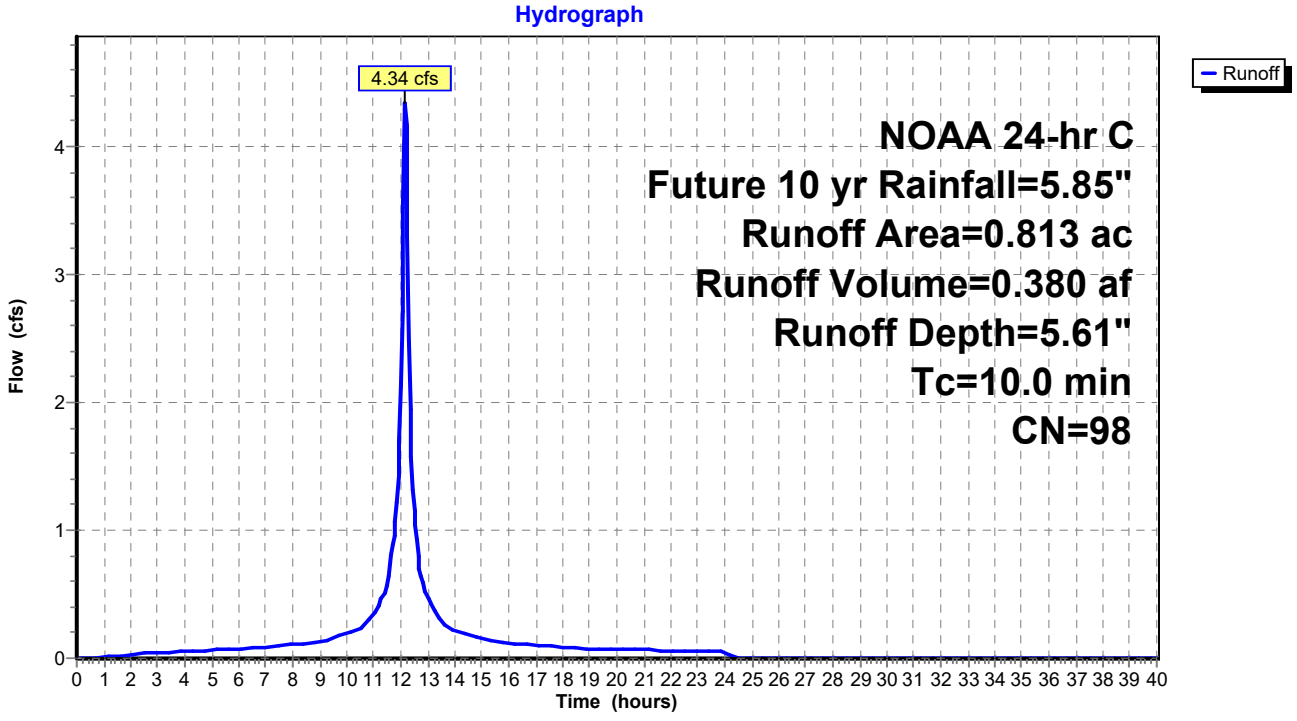
Runoff = 4.34 cfs @ 12.17 hrs, Volume= 0.380 af, Depth= 5.61"
Routed to Pond B-22 : Basin #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.083	98	Pavement, HSG C
*	0.707	98	Roof, HSG C
*	0.023	98	Concrete, HSC C
	0.813	98	Weighted Average
	0.813		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 22l: PDA-22 (impervious)



Summary for Subcatchment 22P: PDA-22 (pervious)

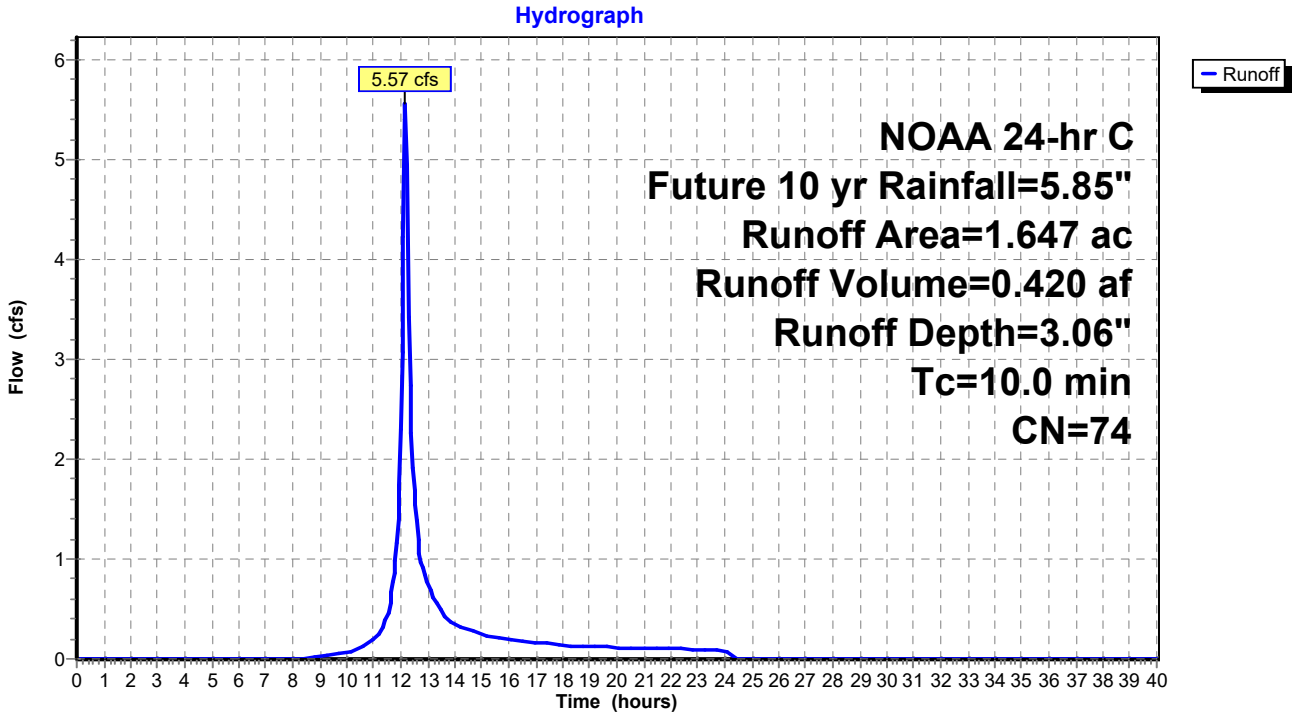
Runoff = 5.57 cfs @ 12.18 hrs, Volume= 0.420 af, Depth= 3.06"
Routed to Pond B-22 : Basin #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.647	74	>75% Grass cover, Good, HSG C
1.647		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 22P: PDA-22 (pervious)



Summary for Subcatchment 23I: PDA-23 (impervious)

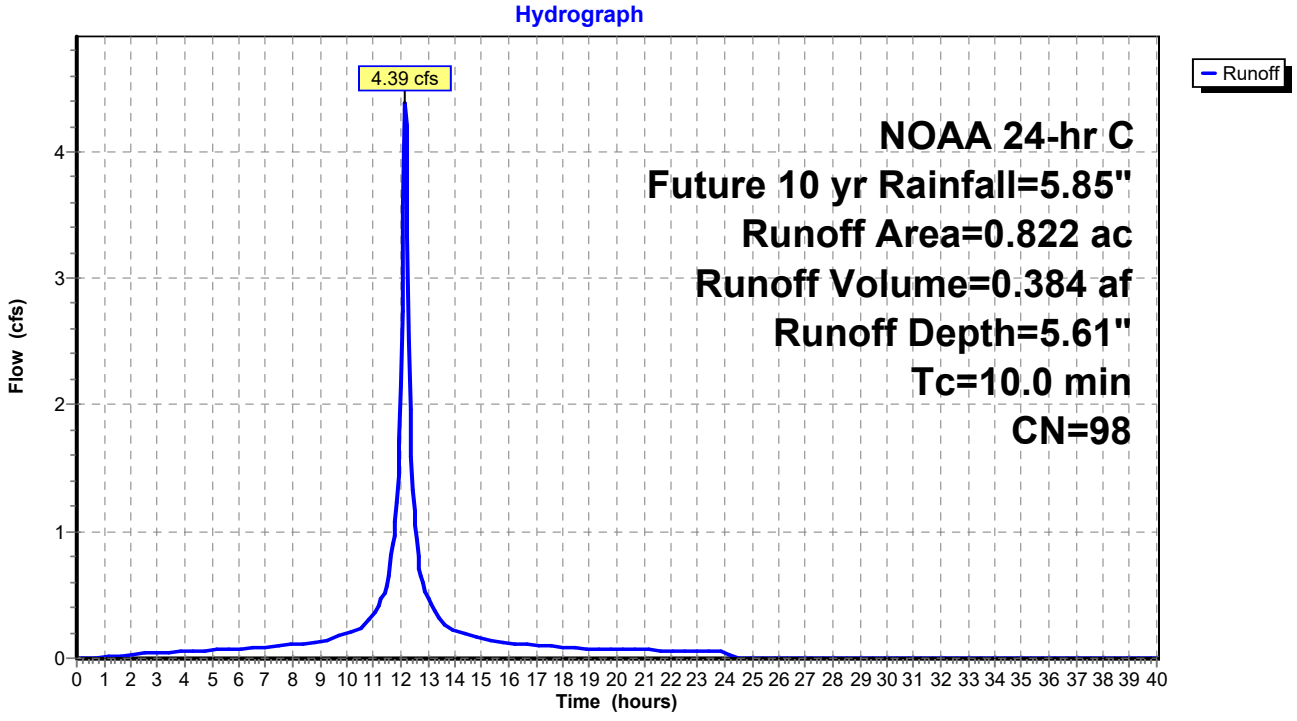
Runoff = 4.39 cfs @ 12.17 hrs, Volume= 0.384 af, Depth= 5.61"
Routed to Pond B-23 : Basin #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.719	98	Pavement, HSG C
*	0.103	98	Concrete, HSG C
	0.000	98	Roofs, HSG C
	0.822	98	Weighted Average
	0.822		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 23I: PDA-23 (impervious)



Summary for Subcatchment 23P: PDA-23 (pervious)

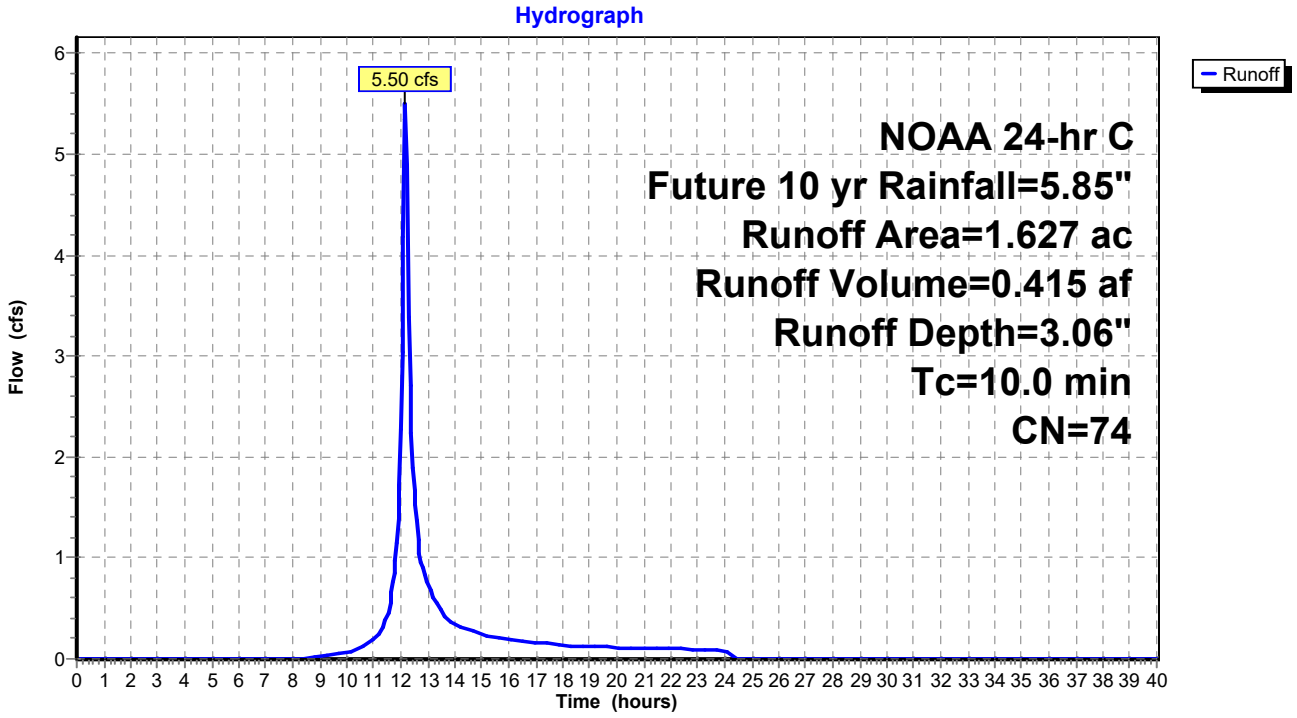
Runoff = 5.50 cfs @ 12.18 hrs, Volume= 0.415 af, Depth= 3.06"
Routed to Pond B-23 : Basin #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.627	74	>75% Grass cover, Good, HSG C
1.627		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 23P: PDA-23 (pervious)



Summary for Subcatchment 24l: PDA-24 (impervious)

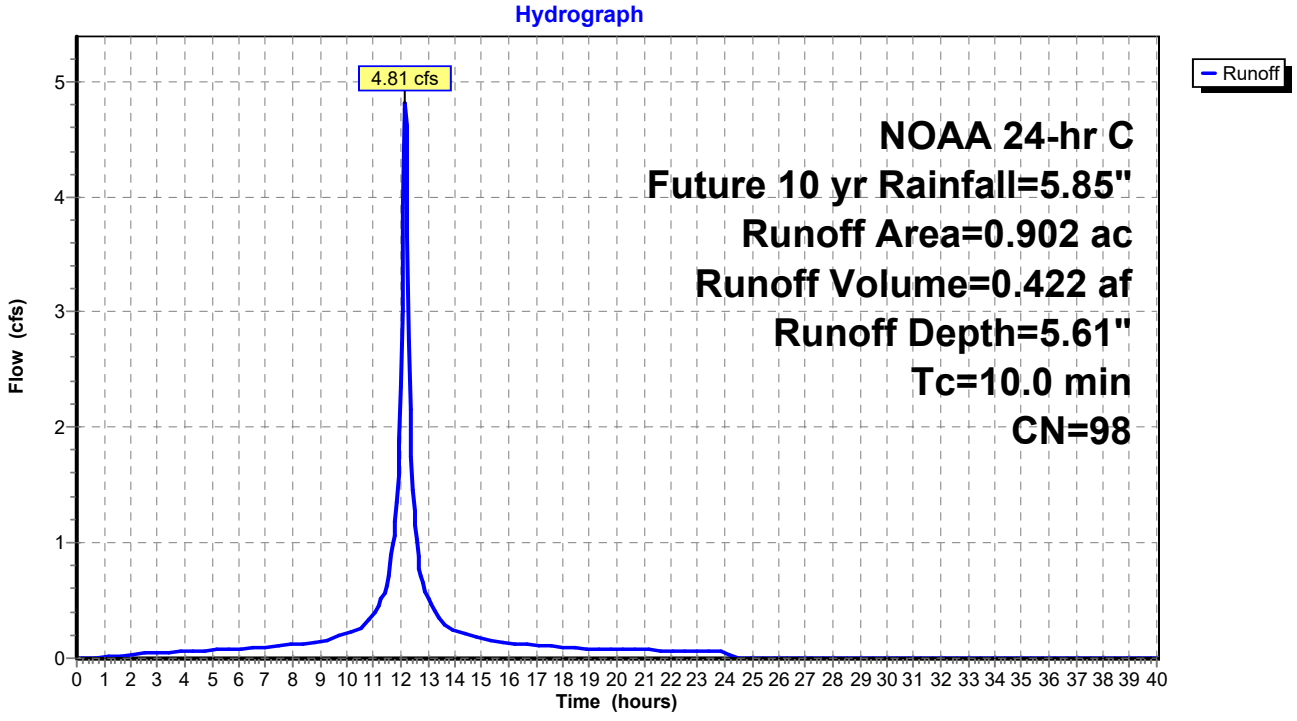
Runoff = 4.81 cfs @ 12.17 hrs, Volume= 0.422 af, Depth= 5.61"
Routed to Pond B-24 : Basin #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.277	98	Pavement, HSG C
*	0.579	98	Roof, HSG C
*	0.046	98	Concrete, HSC C
	0.902	98	Weighted Average
	0.902		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 24l: PDA-24 (impervious)



Summary for Subcatchment 24P: PDA-24 (pervious)

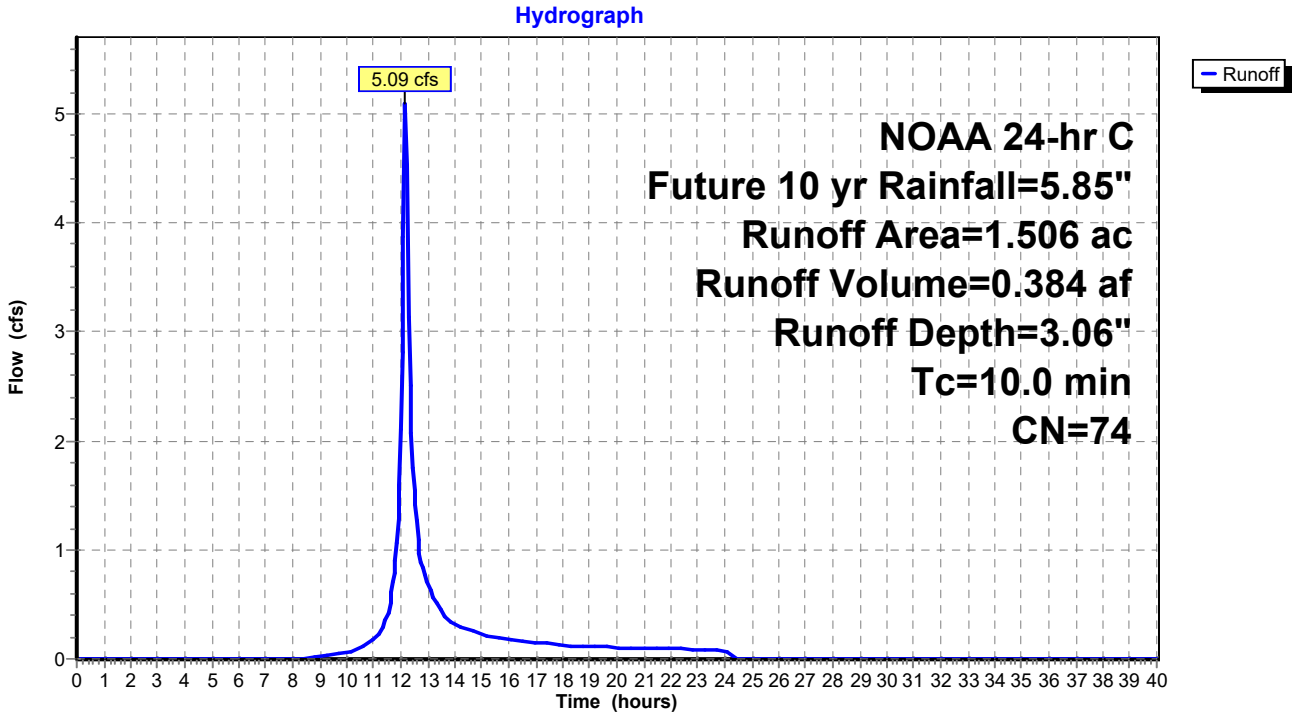
Runoff = 5.09 cfs @ 12.18 hrs, Volume= 0.384 af, Depth= 3.06"
Routed to Pond B-24 : Basin #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.506	74	>75% Grass cover, Good, HSG C
1.506		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 24P: PDA-24 (pervious)



Summary for Subcatchment 25l: PDA-25 (impervious)

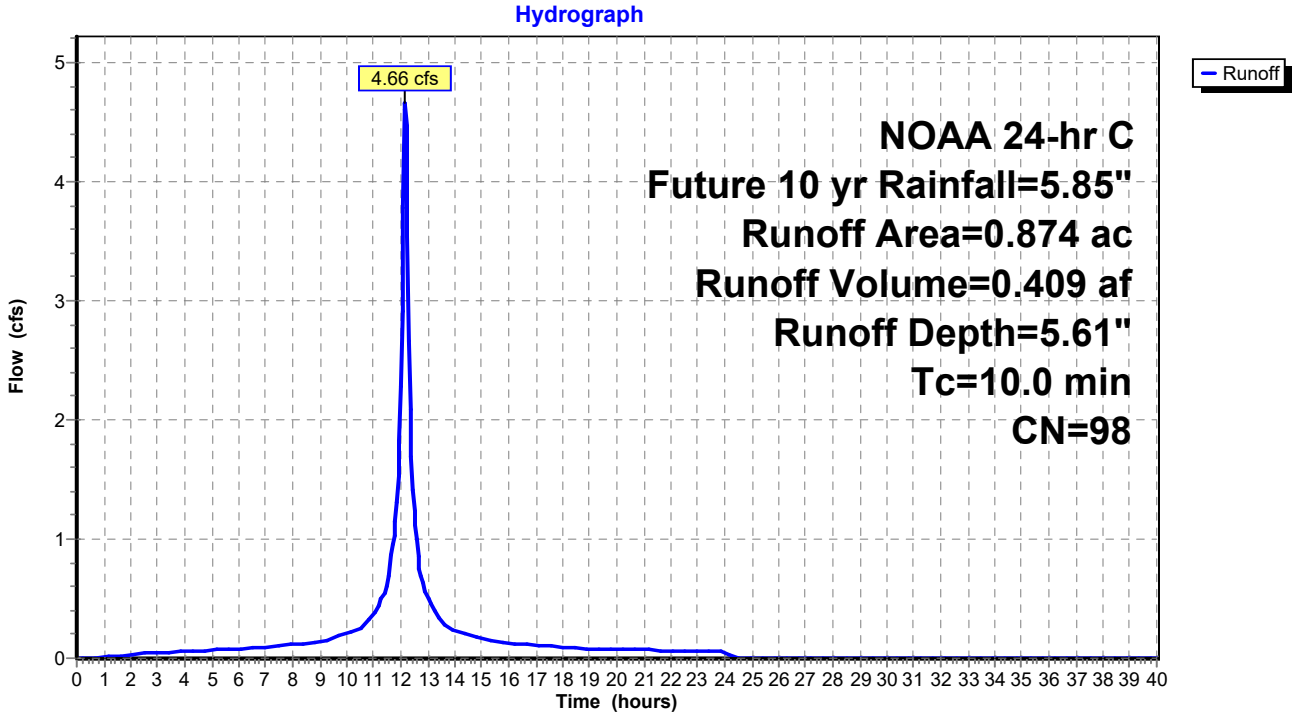
Runoff = 4.66 cfs @ 12.17 hrs, Volume= 0.409 af, Depth= 5.61"
Routed to Pond B-25 : Basin #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.388	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.036	98	Concrete, HSC C
	0.874	98	Weighted Average
	0.874		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 25l: PDA-25 (impervious)



Summary for Subcatchment 25P: PDA-25 (pervious)

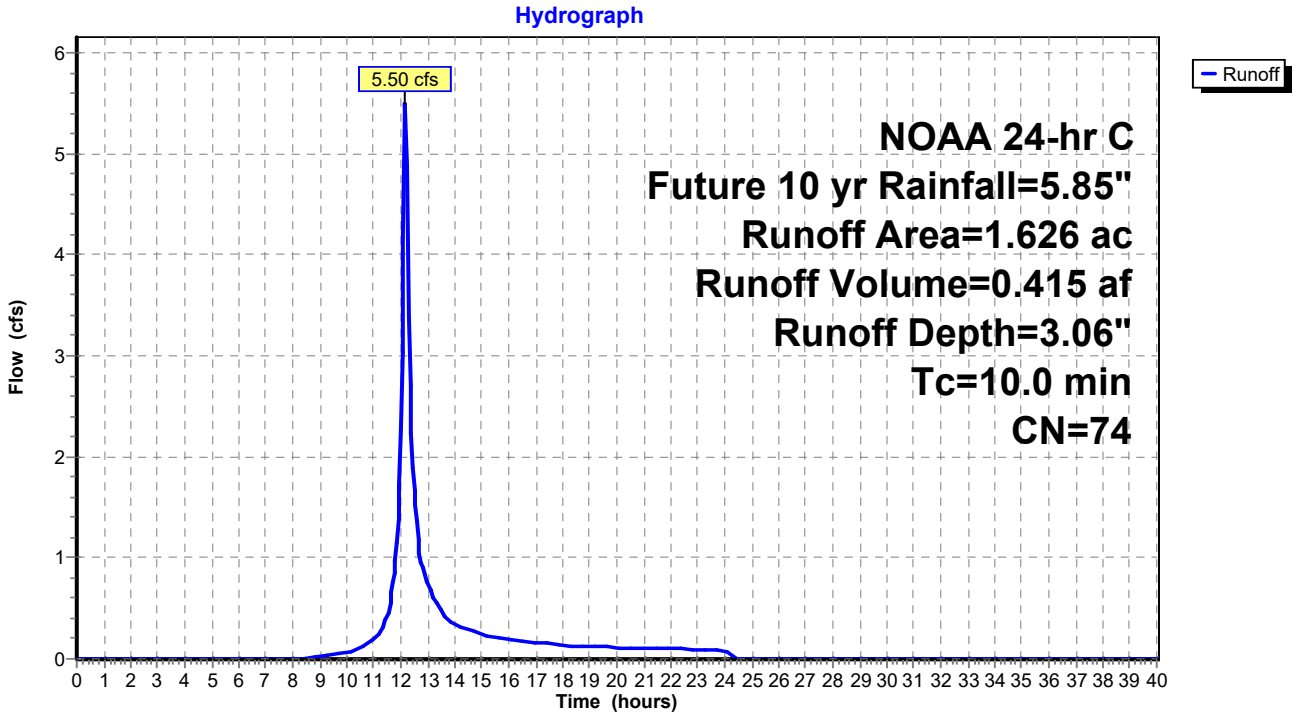
Runoff = 5.50 cfs @ 12.18 hrs, Volume= 0.415 af, Depth= 3.06"
Routed to Pond B-25 : Basin #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.626	74	>75% Grass cover, Good, HSG C
1.626		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 25P: PDA-25 (pervious)



Summary for Subcatchment 26l: PDA-26 (impervious)

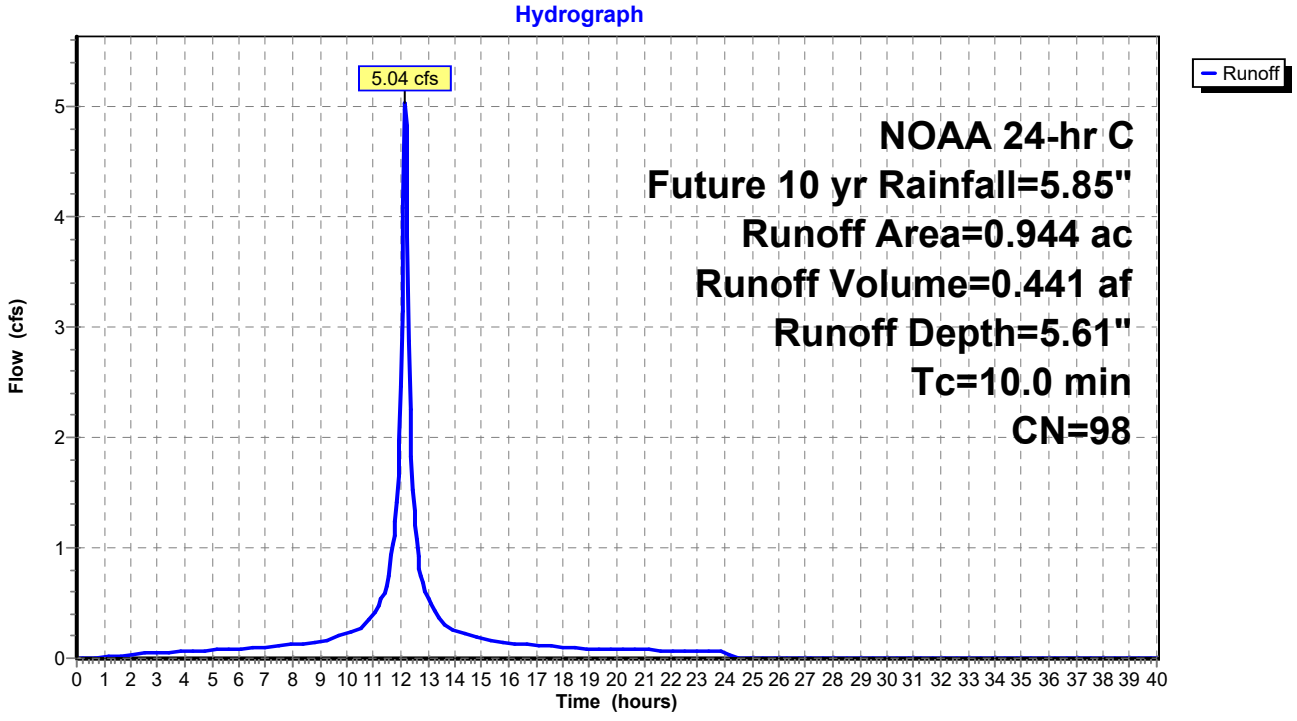
Runoff = 5.04 cfs @ 12.17 hrs, Volume= 0.441 af, Depth= 5.61"
Routed to Pond B-26 : Basin #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.944	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.944	98	Weighted Average
	0.944		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 26l: PDA-26 (impervious)



Summary for Subcatchment 26P: PDA-26 (pervious)

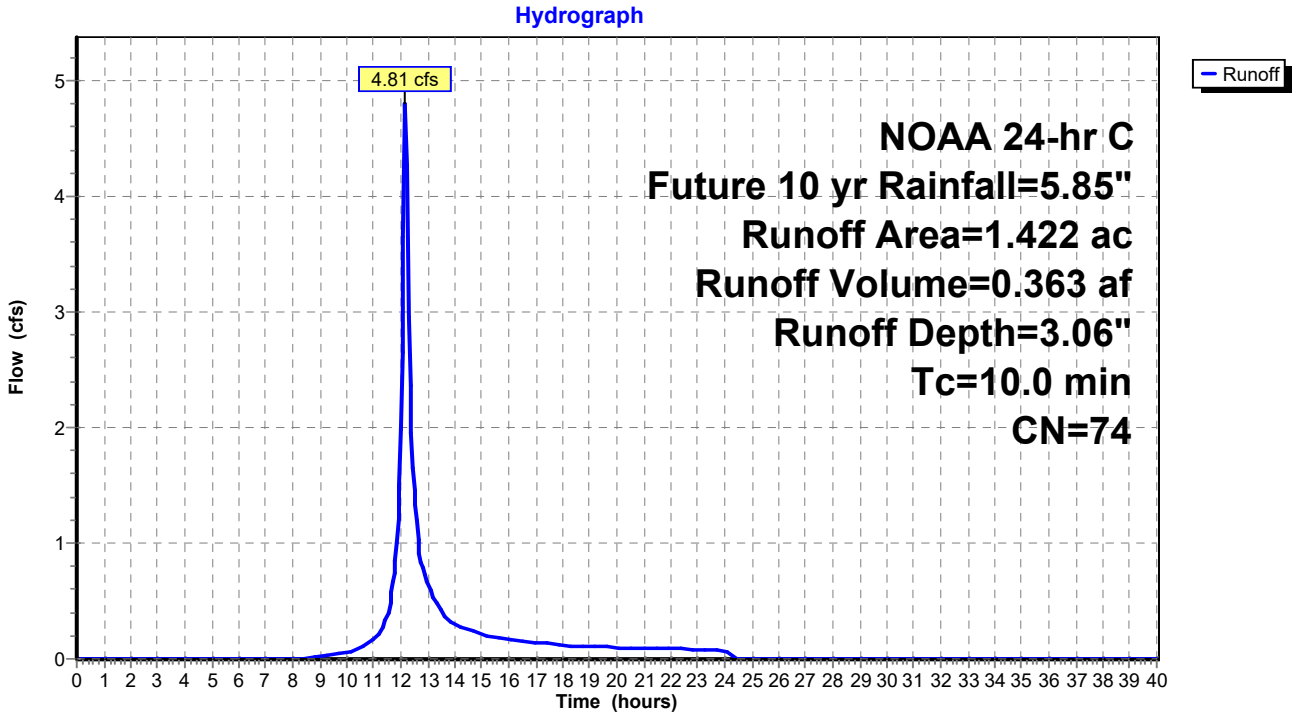
Runoff = 4.81 cfs @ 12.18 hrs, Volume= 0.363 af, Depth= 3.06"
Routed to Pond B-26 : Basin #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.422	74	>75% Grass cover, Good, HSG C
1.422		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 26P: PDA-26 (pervious)



Summary for Subcatchment 27I: PDA-27 (impervious)

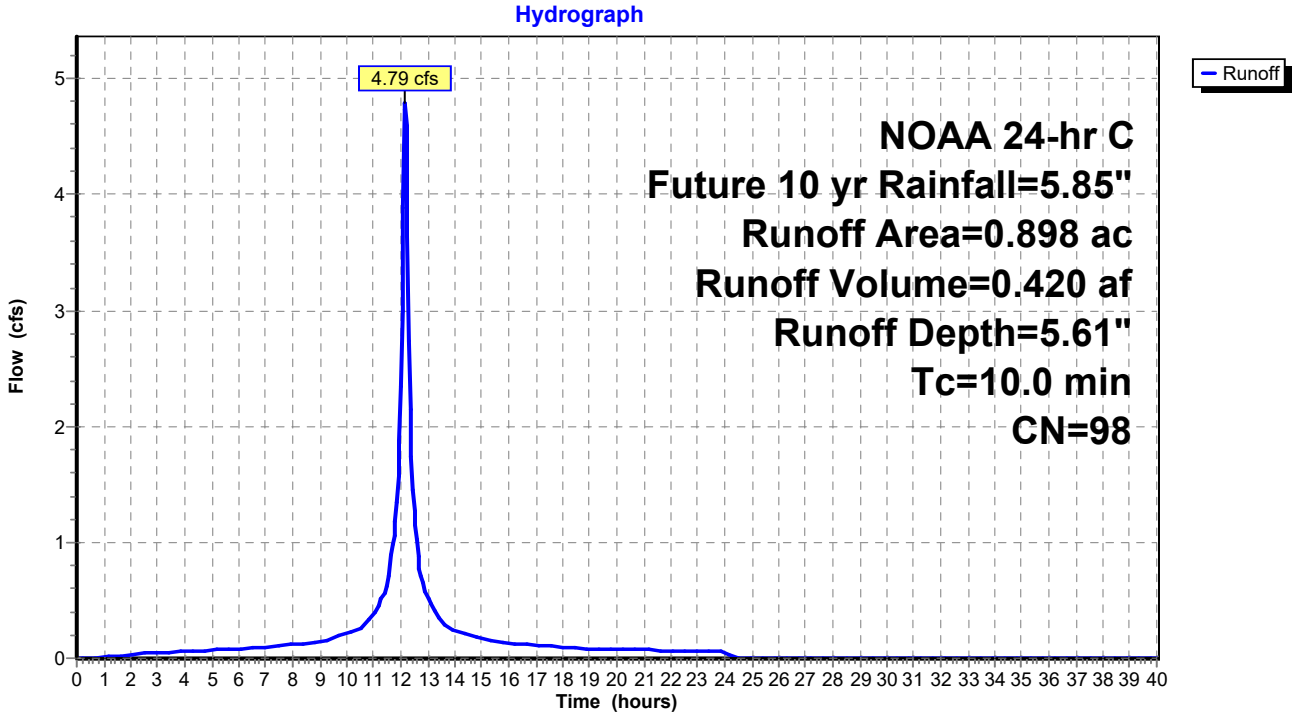
Runoff = 4.79 cfs @ 12.17 hrs, Volume= 0.420 af, Depth= 5.61"
Routed to Pond B-27 : Basin #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.233	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.022	98	Concrete, HSC C
	0.898	98	Weighted Average
	0.898		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 27I: PDA-27 (impervious)



Summary for Subcatchment 27P: PDA-27 (pervious)

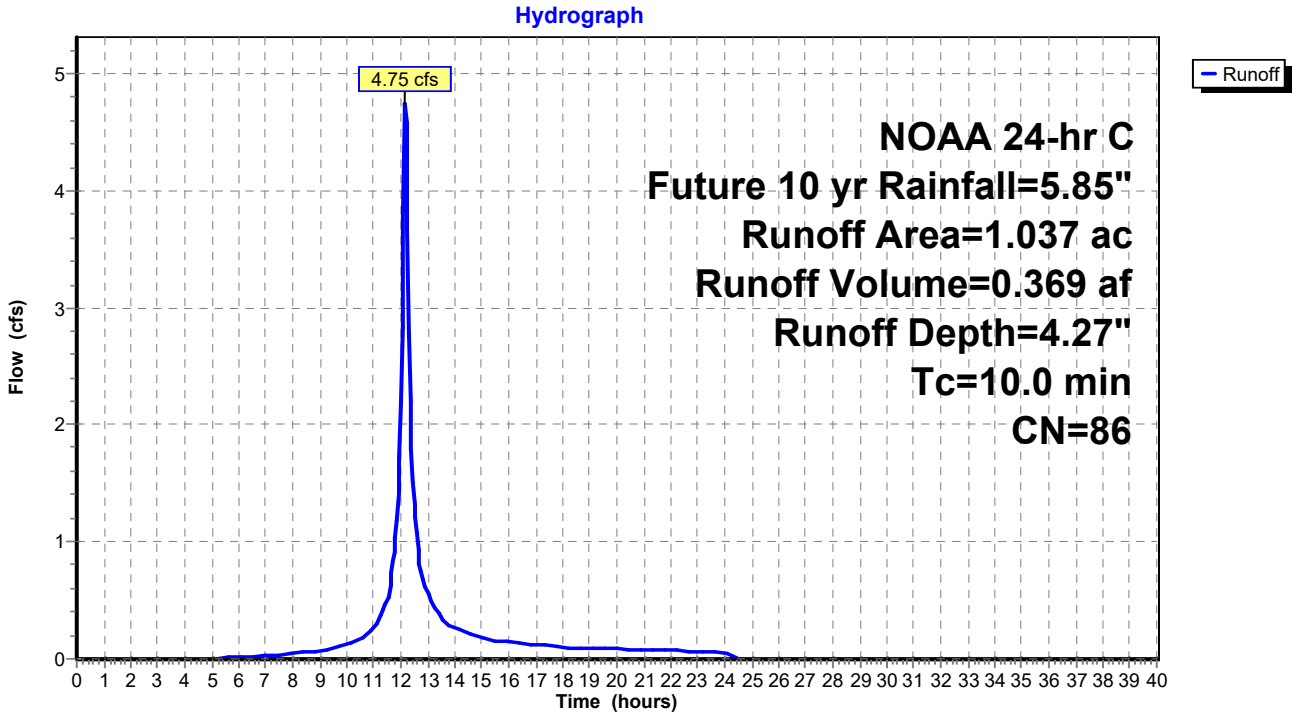
Runoff = 4.75 cfs @ 12.17 hrs, Volume= 0.369 af, Depth= 4.27"
Routed to Pond B-27 : Basin #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.037	86	<50% Grass cover, Poor, HSG C
1.037		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 27P: PDA-27 (pervious)



Summary for Subcatchment 28I: PDA-28 (impervious)

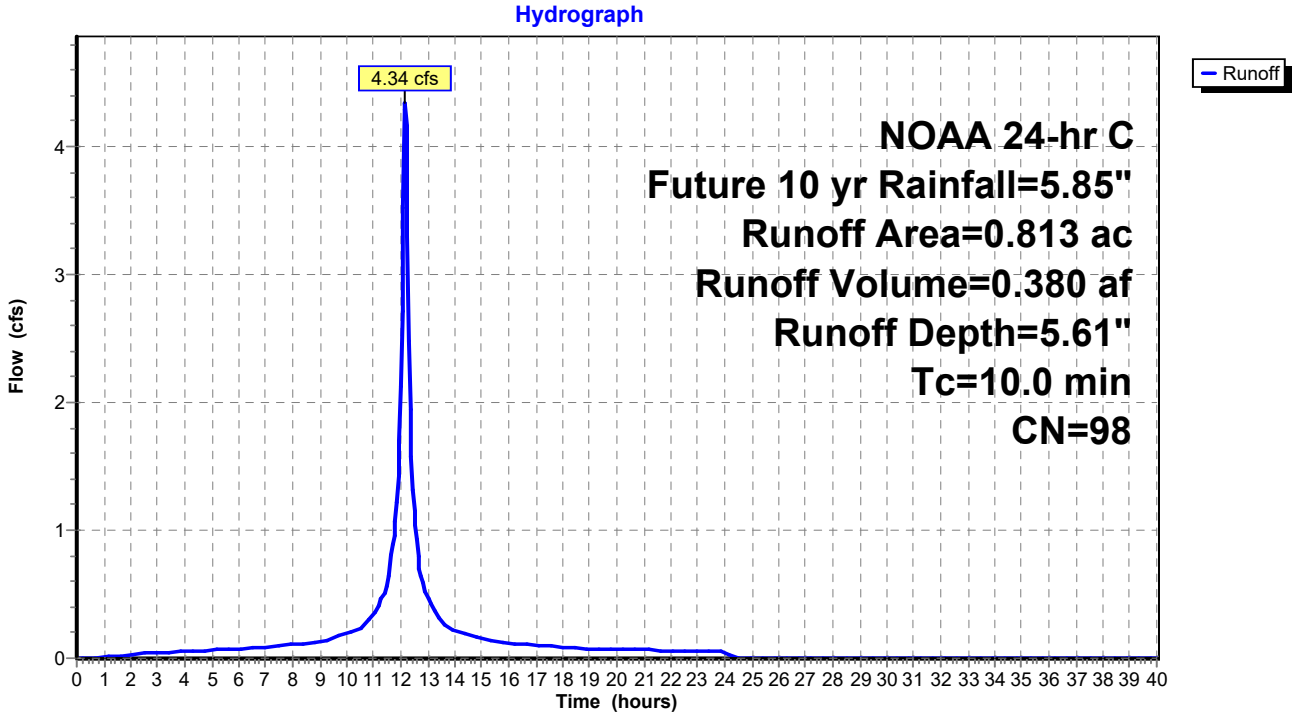
Runoff = 4.34 cfs @ 12.17 hrs, Volume= 0.380 af, Depth= 5.61"
Routed to Pond B-28 : Basin #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.235	98	Pavement, HSG C
*	0.541	98	Roof, HSG C
*	0.037	98	Concrete, HSC C
	0.813	98	Weighted Average
	0.813		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 28I: PDA-28 (impervious)



Summary for Subcatchment 28P: PDA-28 (pervious)

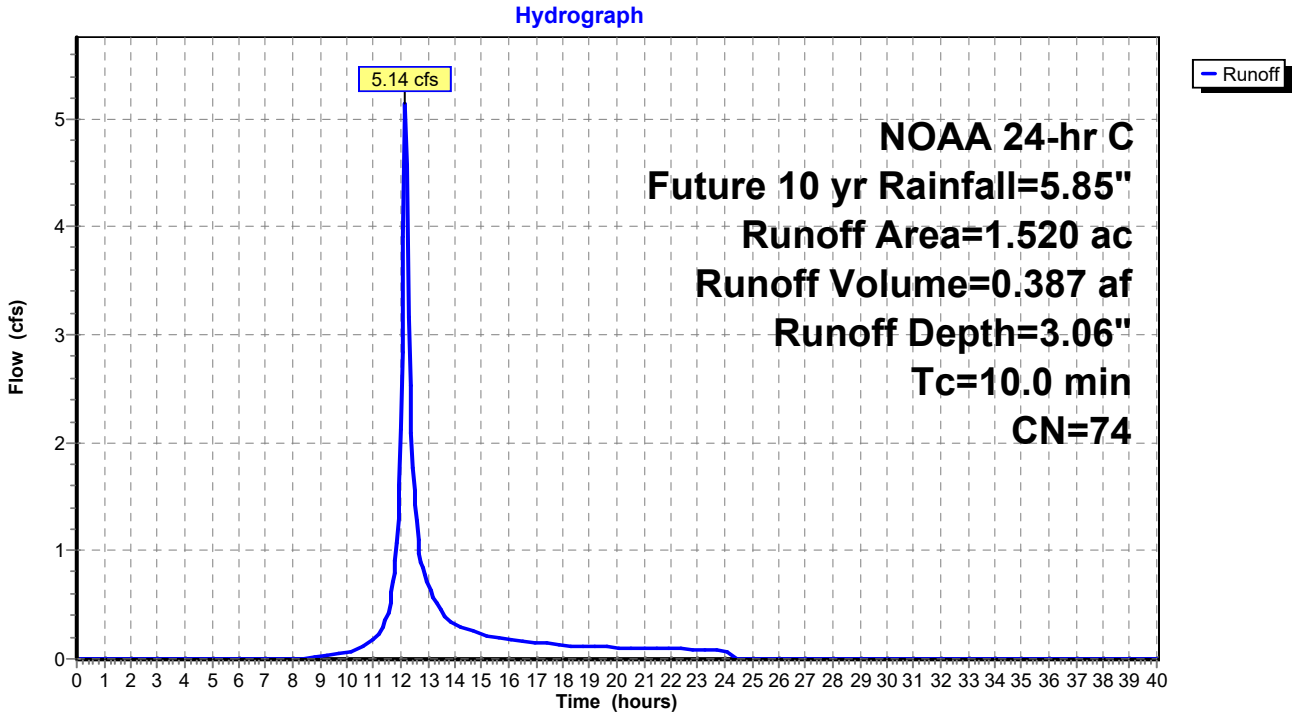
Runoff = 5.14 cfs @ 12.18 hrs, Volume= 0.387 af, Depth= 3.06"
Routed to Pond B-28 : Basin #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.520	74	>75% Grass cover, Good, HSG C
1.520		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 28P: PDA-28 (pervious)



Summary for Subcatchment UPDA-2: PDA-2 (undetained)

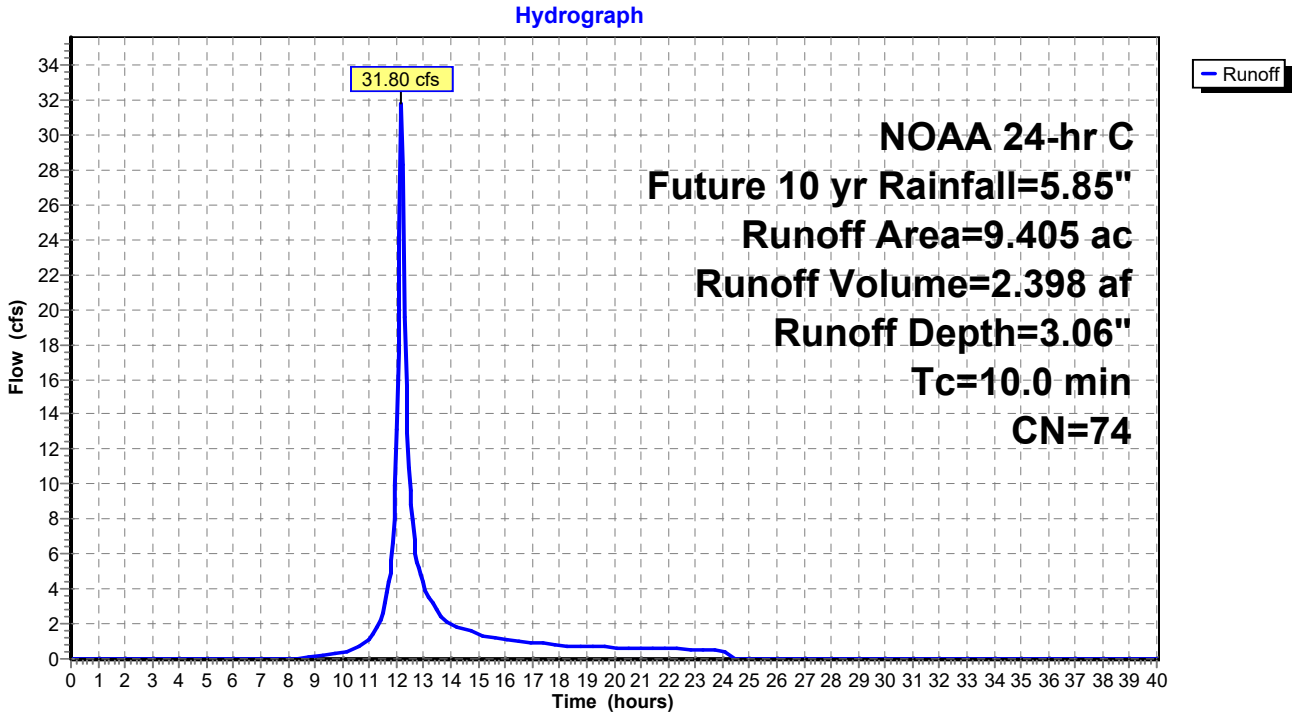
Runoff = 31.80 cfs @ 12.18 hrs, Volume= 2.398 af, Depth= 3.06"
Routed to Link PDA-2 : Proposed Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
9.405	74	>75% Grass cover, Good, HSG C
9.405		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-2: PDA-2 (undetained)



Summary for Pond B-18: Basin #18

Inflow Area = 1.410 ac, 31.91% Impervious, Inflow Depth = 3.87" for Future 10 yr event
Inflow = 5.65 cfs @ 12.17 hrs, Volume= 0.455 af
Outflow = 3.73 cfs @ 12.29 hrs, Volume= 0.410 af, Atten= 34%, Lag= 7.1 min
Primary = 3.73 cfs @ 12.29 hrs, Volume= 0.410 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 189.76' @ 12.29 hrs Surf.Area= 3,089 sf Storage= 7,864 cf

Plug-Flow detention time= 261.4 min calculated for 0.410 af (90% of inflow)
Center-of-Mass det. time= 211.2 min (1,007.9 - 796.7)

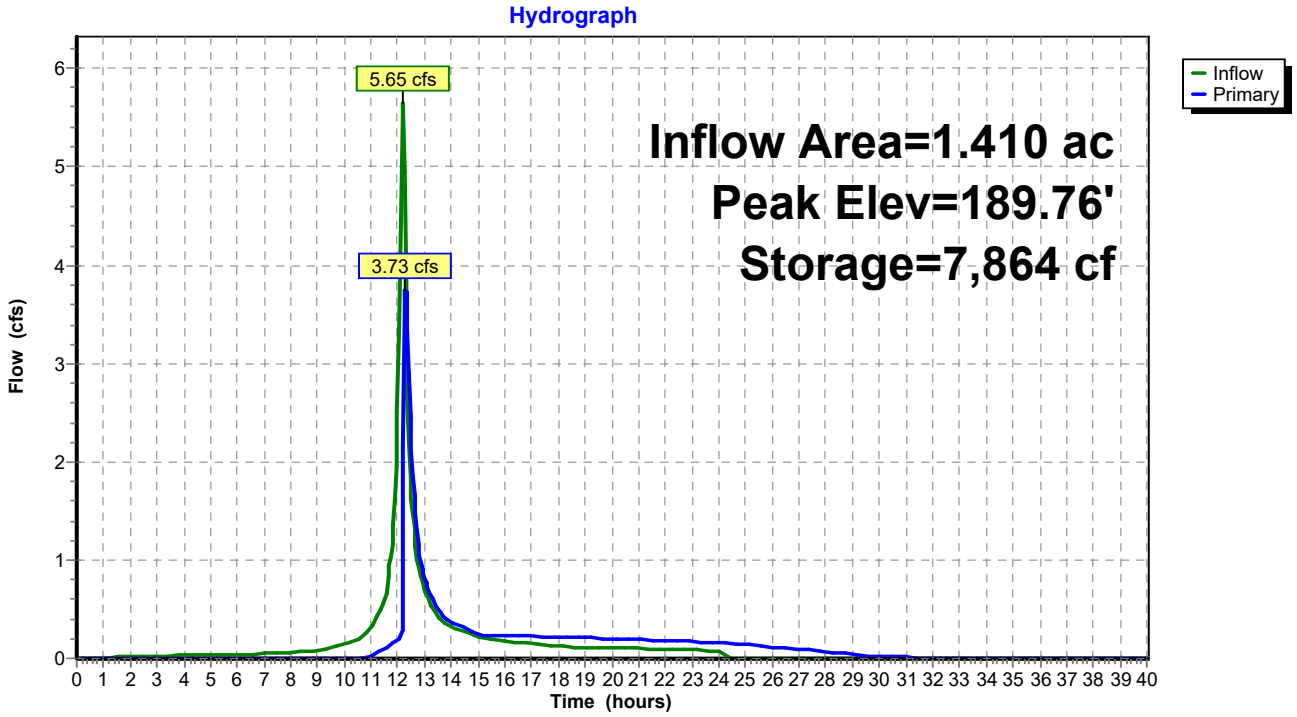
Volume	Invert	Avail.Storage	Storage Description
#1	185.65'	12,198 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
185.65	0	0	0
186.00	1,119	196	196
187.00	1,564	1,342	1,537
188.00	2,065	1,815	3,352
189.00	2,623	2,344	5,696
190.00	3,237	2,930	8,626
191.00	3,908	3,573	12,198

Device	Routing	Invert	Outlet Devices
#1	Primary	186.00'	**15.0" Round Culvert** L= 28.0' Ke= 0.500 Inlet / Outlet Invert= 186.00' / 185.86' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	187.25'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.34'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.69 cfs @ 12.29 hrs HW=189.76' (Free Discharge)
- **1=Culvert** (Passes 3.69 cfs of 10.46 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.25 cfs @ 7.46 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.44 cfs @ 2.11 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-18: Basin #18



Stage-Discharge for Pond B-18: Basin #18

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00
185.68	0.00	186.20	0.00	186.72	0.00	187.24	0.00
185.69	0.00	186.21	0.00	186.73	0.00	187.25	0.00
185.70	0.00	186.22	0.00	186.74	0.00	187.26	0.00
185.71	0.00	186.23	0.00	186.75	0.00	187.27	0.00
185.72	0.00	186.24	0.00	186.76	0.00	187.28	0.00
185.73	0.00	186.25	0.00	186.77	0.00	187.29	0.00
185.74	0.00	186.26	0.00	186.78	0.00	187.30	0.00
185.75	0.00	186.27	0.00	186.79	0.00	187.31	0.01
185.76	0.00	186.28	0.00	186.80	0.00	187.32	0.01
185.77	0.00	186.29	0.00	186.81	0.00	187.33	0.01
185.78	0.00	186.30	0.00	186.82	0.00	187.34	0.01
185.79	0.00	186.31	0.00	186.83	0.00	187.35	0.02
185.80	0.00	186.32	0.00	186.84	0.00	187.36	0.02
185.81	0.00	186.33	0.00	186.85	0.00	187.37	0.02
185.82	0.00	186.34	0.00	186.86	0.00	187.38	0.03
185.83	0.00	186.35	0.00	186.87	0.00	187.39	0.03
185.84	0.00	186.36	0.00	186.88	0.00	187.40	0.03
185.85	0.00	186.37	0.00	186.89	0.00	187.41	0.04
185.86	0.00	186.38	0.00	186.90	0.00	187.42	0.04
185.87	0.00	186.39	0.00	186.91	0.00	187.43	0.05
185.88	0.00	186.40	0.00	186.92	0.00	187.44	0.05
185.89	0.00	186.41	0.00	186.93	0.00	187.45	0.05
185.90	0.00	186.42	0.00	186.94	0.00	187.46	0.05
185.91	0.00	186.43	0.00	186.95	0.00	187.47	0.06
185.92	0.00	186.44	0.00	186.96	0.00	187.48	0.06
185.93	0.00	186.45	0.00	186.97	0.00	187.49	0.06
185.94	0.00	186.46	0.00	186.98	0.00	187.50	0.06
185.95	0.00	186.47	0.00	186.99	0.00	187.51	0.06
185.96	0.00	186.48	0.00	187.00	0.00	187.52	0.07
185.97	0.00	186.49	0.00	187.01	0.00	187.53	0.07
185.98	0.00	186.50	0.00	187.02	0.00	187.54	0.07
185.99	0.00	186.51	0.00	187.03	0.00	187.55	0.07
186.00	0.00	186.52	0.00	187.04	0.00	187.56	0.07
186.01	0.00	186.53	0.00	187.05	0.00	187.57	0.08
186.02	0.00	186.54	0.00	187.06	0.00	187.58	0.08
186.03	0.00	186.55	0.00	187.07	0.00	187.59	0.08
186.04	0.00	186.56	0.00	187.08	0.00	187.60	0.08
186.05	0.00	186.57	0.00	187.09	0.00	187.61	0.08
186.06	0.00	186.58	0.00	187.10	0.00	187.62	0.08
186.07	0.00	186.59	0.00	187.11	0.00	187.63	0.09
186.08	0.00	186.60	0.00	187.12	0.00	187.64	0.09
186.09	0.00	186.61	0.00	187.13	0.00	187.65	0.09
186.10	0.00	186.62	0.00	187.14	0.00	187.66	0.09
186.11	0.00	186.63	0.00	187.15	0.00	187.67	0.09
186.12	0.00	186.64	0.00	187.16	0.00	187.68	0.09
186.13	0.00	186.65	0.00	187.17	0.00	187.69	0.10
186.14	0.00	186.66	0.00	187.18	0.00	187.70	0.10
186.15	0.00	186.67	0.00	187.19	0.00	187.71	0.10
186.16	0.00	186.68	0.00	187.20	0.00	187.72	0.10

Stage-Discharge for Pond B-18: Basin #18 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.73	0.10	188.25	0.16	188.77	0.20	189.29	0.23
187.74	0.10	188.26	0.16	188.78	0.20	189.30	0.23
187.75	0.10	188.27	0.16	188.79	0.20	189.31	0.23
187.76	0.10	188.28	0.16	188.80	0.20	189.32	0.23
187.77	0.11	188.29	0.16	188.81	0.20	189.33	0.23
187.78	0.11	188.30	0.16	188.82	0.20	189.34	0.23
187.79	0.11	188.31	0.16	188.83	0.20	189.35	0.24
187.80	0.11	188.32	0.16	188.84	0.20	189.36	0.27
187.81	0.11	188.33	0.16	188.85	0.20	189.37	0.30
187.82	0.11	188.34	0.16	188.86	0.20	189.38	0.34
187.83	0.11	188.35	0.16	188.87	0.20	189.39	0.38
187.84	0.11	188.36	0.16	188.88	0.20	189.40	0.43
187.85	0.12	188.37	0.17	188.89	0.20	189.41	0.48
187.86	0.12	188.38	0.17	188.90	0.20	189.42	0.53
187.87	0.12	188.39	0.17	188.91	0.20	189.43	0.59
187.88	0.12	188.40	0.17	188.92	0.21	189.44	0.65
187.89	0.12	188.41	0.17	188.93	0.21	189.45	0.71
187.90	0.12	188.42	0.17	188.94	0.21	189.46	0.78
187.91	0.12	188.43	0.17	188.95	0.21	189.47	0.85
187.92	0.12	188.44	0.17	188.96	0.21	189.48	0.92
187.93	0.12	188.45	0.17	188.97	0.21	189.49	0.99
187.94	0.13	188.46	0.17	188.98	0.21	189.50	1.07
187.95	0.13	188.47	0.17	188.99	0.21	189.51	1.15
187.96	0.13	188.48	0.17	189.00	0.21	189.52	1.23
187.97	0.13	188.49	0.17	189.01	0.21	189.53	1.32
187.98	0.13	188.50	0.18	189.02	0.21	189.54	1.40
187.99	0.13	188.51	0.18	189.03	0.21	189.55	1.49
188.00	0.13	188.52	0.18	189.04	0.21	189.56	1.58
188.01	0.13	188.53	0.18	189.05	0.21	189.57	1.67
188.02	0.13	188.54	0.18	189.06	0.21	189.58	1.76
188.03	0.13	188.55	0.18	189.07	0.22	189.59	1.86
188.04	0.14	188.56	0.18	189.08	0.22	189.60	1.96
188.05	0.14	188.57	0.18	189.09	0.22	189.61	2.06
188.06	0.14	188.58	0.18	189.10	0.22	189.62	2.16
188.07	0.14	188.59	0.18	189.11	0.22	189.63	2.26
188.08	0.14	188.60	0.18	189.12	0.22	189.64	2.37
188.09	0.14	188.61	0.18	189.13	0.22	189.65	2.47
188.10	0.14	188.62	0.18	189.14	0.22	189.66	2.58
188.11	0.14	188.63	0.19	189.15	0.22	189.67	2.69
188.12	0.14	188.64	0.19	189.16	0.22	189.68	2.80
188.13	0.14	188.65	0.19	189.17	0.22	189.69	2.91
188.14	0.15	188.66	0.19	189.18	0.22	189.70	3.03
188.15	0.15	188.67	0.19	189.19	0.22	189.71	3.14
188.16	0.15	188.68	0.19	189.20	0.22	189.72	3.26
188.17	0.15	188.69	0.19	189.21	0.22	189.73	3.38
188.18	0.15	188.70	0.19	189.22	0.22	189.74	3.50
188.19	0.15	188.71	0.19	189.23	0.22	189.75	3.62
188.20	0.15	188.72	0.19	189.24	0.23	189.76	3.74
188.21	0.15	188.73	0.19	189.25	0.23	189.77	3.86
188.22	0.15	188.74	0.19	189.26	0.23	189.78	3.99
188.23	0.15	188.75	0.19	189.27	0.23	189.79	4.12
188.24	0.15	188.76	0.19	189.28	0.23	189.80	4.24

Stage-Discharge for Pond B-18: Basin #18 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
189.81	4.37	190.33	11.37	190.85	12.15
189.82	4.50	190.34	11.39	190.86	12.16
189.83	4.63	190.35	11.40	190.87	12.17
189.84	4.77	190.36	11.42	190.88	12.19
189.85	4.90	190.37	11.43	190.89	12.20
189.86	5.04	190.38	11.45	190.90	12.22
189.87	5.17	190.39	11.47	190.91	12.23
189.88	5.31	190.40	11.48	190.92	12.25
189.89	5.45	190.41	11.50	190.93	12.26
189.90	5.59	190.42	11.51	190.94	12.27
189.91	5.73	190.43	11.53	190.95	12.29
189.92	5.87	190.44	11.54	190.96	12.42
189.93	6.02	190.45	11.56	190.97	12.65
189.94	6.16	190.46	11.57	190.98	12.94
189.95	6.31	190.47	11.59	190.99	13.28
189.96	6.45	190.48	11.60	191.00	**13.67**
189.97	6.60	190.49	11.62		
189.98	6.75	190.50	11.63		
189.99	6.90	190.51	11.65		
190.00	7.05	190.52	11.66		
190.01	7.20	190.53	11.68		
190.02	7.35	190.54	11.69		
190.03	7.51	190.55	11.71		
190.04	7.66	190.56	11.72		
190.05	7.82	190.57	11.74		
190.06	7.97	190.58	11.75		
190.07	8.13	190.59	11.77		
190.08	8.29	190.60	11.78		
190.09	8.45	190.61	11.80		
190.10	8.61	190.62	11.81		
190.11	8.77	190.63	11.83		
190.12	8.93	190.64	11.84		
190.13	9.10	190.65	11.85		
190.14	9.26	190.66	11.87		
190.15	9.42	190.67	11.88		
190.16	9.59	190.68	11.90		
190.17	9.76	190.69	11.91		
190.18	9.92	190.70	11.93		
190.19	10.09	190.71	11.94		
190.20	10.26	190.72	11.96		
190.21	10.43	190.73	11.97		
190.22	10.60	190.74	11.99		
190.23	10.77	190.75	12.00		
190.24	10.94	190.76	12.02		
190.25	11.12	190.77	12.03		
190.26	11.27	190.78	12.04		
190.27	11.28	190.79	12.06		
190.28	11.30	190.80	12.07		
190.29	11.31	190.81	12.09		
190.30	11.33	190.82	12.10		
190.31	11.34	190.83	12.12		
190.32	11.36	190.84	12.13		

Stage-Area-Storage for Pond B-18: Basin #18

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.65	0	0	186.17	1,195	392
185.66	32	0	186.18	1,199	404
185.67	64	1	186.19	1,204	416
185.68	96	1	186.20	1,208	429
185.69	128	3	186.21	1,212	441
185.70	160	4	186.22	1,217	453
185.71	192	6	186.23	1,221	465
185.72	224	8	186.24	1,226	477
185.73	256	10	186.25	1,230	489
185.74	288	13	186.26	1,235	502
185.75	320	16	186.27	1,239	514
185.76	352	19	186.28	1,244	527
185.77	384	23	186.29	1,248	539
185.78	416	27	186.30	1,253	552
185.79	448	31	186.31	1,257	564
185.80	480	36	186.32	1,261	577
185.81	512	41	186.33	1,266	589
185.82	544	46	186.34	1,270	602
185.83	575	52	186.35	1,275	615
185.84	607	58	186.36	1,279	628
185.85	639	64	186.37	1,284	640
185.86	671	70	186.38	1,288	653
185.87	703	77	186.39	1,293	666
185.88	735	85	186.40	1,297	679
185.89	767	92	186.41	1,301	692
185.90	799	100	186.42	1,306	705
185.91	831	108	186.43	1,310	718
185.92	863	117	186.44	1,315	731
185.93	895	125	186.45	1,319	744
185.94	927	134	186.46	1,324	758
185.95	959	144	186.47	1,328	771
185.96	991	154	186.48	1,333	784
185.97	1,023	164	186.49	1,337	798
185.98	1,055	174	186.50	1,342	811
185.99	1,087	185	186.51	1,346	824
186.00	1,119	196	186.52	1,350	838
186.01	1,123	207	186.53	1,355	851
186.02	1,128	218	186.54	1,359	865
186.03	1,132	230	186.55	1,364	879
186.04	1,137	241	186.56	1,368	892
186.05	1,141	252	186.57	1,373	906
186.06	1,146	264	186.58	1,377	920
186.07	1,150	275	186.59	1,382	933
186.08	1,155	287	186.60	1,386	947
186.09	1,159	298	186.61	1,390	961
186.10	1,163	310	186.62	1,395	975
186.11	1,168	322	186.63	1,399	989
186.12	1,172	333	186.64	1,404	1,003
186.13	1,177	345	186.65	1,408	1,017
186.14	1,181	357	186.66	1,413	1,031
186.15	1,186	369	186.67	1,417	1,045
186.16	1,190	381	186.68	1,422	1,060

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.69	1,426	1,074	187.21	1,669	1,877
186.70	1,431	1,088	187.22	1,674	1,894
186.71	1,435	1,102	187.23	1,679	1,910
186.72	1,439	1,117	187.24	1,684	1,927
186.73	1,444	1,131	187.25	1,689	1,944
186.74	1,448	1,146	187.26	1,694	1,961
186.75	1,453	1,160	187.27	1,699	1,978
186.76	1,457	1,175	187.28	1,704	1,995
186.77	1,462	1,189	187.29	1,709	2,012
186.78	1,466	1,204	187.30	1,714	2,029
186.79	1,471	1,219	187.31	1,719	2,046
186.80	1,475	1,233	187.32	1,724	2,063
186.81	1,479	1,248	187.33	1,729	2,081
186.82	1,484	1,263	187.34	1,734	2,098
186.83	1,488	1,278	187.35	1,739	2,115
186.84	1,493	1,293	187.36	1,744	2,133
186.85	1,497	1,308	187.37	1,749	2,150
186.86	1,502	1,323	187.38	1,754	2,168
186.87	1,506	1,338	187.39	1,759	2,185
186.88	1,511	1,353	187.40	1,764	2,203
186.89	1,515	1,368	187.41	1,769	2,221
186.90	1,520	1,383	187.42	1,774	2,238
186.91	1,524	1,398	187.43	1,779	2,256
186.92	1,528	1,414	187.44	1,784	2,274
186.93	1,533	1,429	187.45	1,789	2,292
186.94	1,537	1,444	187.46	1,794	2,310
186.95	1,542	1,460	187.47	1,799	2,328
186.96	1,546	1,475	187.48	1,804	2,346
186.97	1,551	1,491	187.49	1,809	2,364
186.98	1,555	1,506	187.50	1,815	2,382
186.99	1,560	1,522	187.51	1,820	2,400
187.00	1,564	1,537	187.52	1,825	2,418
187.01	1,569	1,553	187.53	1,830	2,437
187.02	1,574	1,569	187.54	1,835	2,455
187.03	1,579	1,584	187.55	1,840	2,473
187.04	1,584	1,600	187.56	1,845	2,492
187.05	1,589	1,616	187.57	1,850	2,510
187.06	1,594	1,632	187.58	1,855	2,529
187.07	1,599	1,648	187.59	1,860	2,547
187.08	1,604	1,664	187.60	1,865	2,566
187.09	1,609	1,680	187.61	1,870	2,585
187.10	1,614	1,696	187.62	1,875	2,603
187.11	1,619	1,712	187.63	1,880	2,622
187.12	1,624	1,729	187.64	1,885	2,641
187.13	1,629	1,745	187.65	1,890	2,660
187.14	1,634	1,761	187.66	1,895	2,679
187.15	1,639	1,778	187.67	1,900	2,698
187.16	1,644	1,794	187.68	1,905	2,717
187.17	1,649	1,810	187.69	1,910	2,736
187.18	1,654	1,827	187.70	1,915	2,755
187.19	1,659	1,844	187.71	1,920	2,774
187.20	1,664	1,860	187.72	1,925	2,793

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.73	1,930	2,813	188.25	2,205	3,886
187.74	1,935	2,832	188.26	2,210	3,908
187.75	1,940	2,851	188.27	2,216	3,930
187.76	1,945	2,871	188.28	2,221	3,952
187.77	1,950	2,890	188.29	2,227	3,974
187.78	1,955	2,910	188.30	2,232	3,996
187.79	1,960	2,929	188.31	2,238	4,019
187.80	1,965	2,949	188.32	2,244	4,041
187.81	1,970	2,969	188.33	2,249	4,064
187.82	1,975	2,988	188.34	2,255	4,086
187.83	1,980	3,008	188.35	2,260	4,109
187.84	1,985	3,028	188.36	2,266	4,131
187.85	1,990	3,048	188.37	2,271	4,154
187.86	1,995	3,068	188.38	2,277	4,177
187.87	2,000	3,088	188.39	2,283	4,200
187.88	2,005	3,108	188.40	2,288	4,222
187.89	2,010	3,128	188.41	2,294	4,245
187.90	2,015	3,148	188.42	2,299	4,268
187.91	2,020	3,168	188.43	2,305	4,291
187.92	2,025	3,188	188.44	2,311	4,314
187.93	2,030	3,209	188.45	2,316	4,338
187.94	2,035	3,229	188.46	2,322	4,361
187.95	2,040	3,249	188.47	2,327	4,384
187.96	2,045	3,270	188.48	2,333	4,407
187.97	2,050	3,290	188.49	2,338	4,431
187.98	2,055	3,311	188.50	2,344	4,454
187.99	2,060	3,331	188.51	2,350	4,478
188.00	2,065	3,352	188.52	2,355	4,501
188.01	2,071	3,373	188.53	2,361	4,525
188.02	2,076	3,393	188.54	2,366	4,548
188.03	2,082	3,414	188.55	2,372	4,572
188.04	2,087	3,435	188.56	2,377	4,596
188.05	2,093	3,456	188.57	2,383	4,620
188.06	2,098	3,477	188.58	2,389	4,643
188.07	2,104	3,498	188.59	2,394	4,667
188.08	2,110	3,519	188.60	2,400	4,691
188.09	2,115	3,540	188.61	2,405	4,715
188.10	2,121	3,561	188.62	2,411	4,739
188.11	2,126	3,582	188.63	2,417	4,764
188.12	2,132	3,604	188.64	2,422	4,788
188.13	2,138	3,625	188.65	2,428	4,812
188.14	2,143	3,646	188.66	2,433	4,836
188.15	2,149	3,668	188.67	2,439	4,861
188.16	2,154	3,689	188.68	2,444	4,885
188.17	2,160	3,711	188.69	2,450	4,910
188.18	2,165	3,733	188.70	2,456	4,934
188.19	2,171	3,754	188.71	2,461	4,959
188.20	2,177	3,776	188.72	2,467	4,983
188.21	2,182	3,798	188.73	2,472	5,008
188.22	2,188	3,820	188.74	2,478	5,033
188.23	2,193	3,842	188.75	2,484	5,058
188.24	2,199	3,863	188.76	2,489	5,082

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.77	2,495	5,107	189.29	2,801	6,482
188.78	2,500	5,132	189.30	2,807	6,510
188.79	2,506	5,157	189.31	2,813	6,538
188.80	2,511	5,182	189.32	2,819	6,567
188.81	2,517	5,208	189.33	2,826	6,595
188.82	2,523	5,233	189.34	2,832	6,623
188.83	2,528	5,258	189.35	2,838	6,651
188.84	2,534	5,283	189.36	2,844	6,680
188.85	2,539	5,309	189.37	2,850	6,708
188.86	2,545	5,334	189.38	2,856	6,737
188.87	2,550	5,360	189.39	2,862	6,765
188.88	2,556	5,385	189.40	2,869	6,794
188.89	2,562	5,411	189.41	2,875	6,823
188.90	2,567	5,436	189.42	2,881	6,852
188.91	2,573	5,462	189.43	2,887	6,880
188.92	2,578	5,488	189.44	2,893	6,909
188.93	2,584	5,514	189.45	2,899	6,938
188.94	2,590	5,539	189.46	2,905	6,967
188.95	2,595	5,565	189.47	2,912	6,996
188.96	2,601	5,591	189.48	2,918	7,026
188.97	2,606	5,617	189.49	2,924	7,055
188.98	2,612	5,643	189.50	2,930	7,084
188.99	2,617	5,670	189.51	2,936	7,113
189.00	2,623	5,696	189.52	2,942	7,143
189.01	2,629	5,722	189.53	2,948	7,172
189.02	2,635	5,748	189.54	2,955	7,202
189.03	2,641	5,775	189.55	2,961	7,231
189.04	2,648	5,801	189.56	2,967	7,261
189.05	2,654	5,828	189.57	2,973	7,291
189.06	2,660	5,854	189.58	2,979	7,320
189.07	2,666	5,881	189.59	2,985	7,350
189.08	2,672	5,908	189.60	2,991	7,380
189.09	2,678	5,934	189.61	2,998	7,410
189.10	2,684	5,961	189.62	3,004	7,440
189.11	2,691	5,988	189.63	3,010	7,470
189.12	2,697	6,015	189.64	3,016	7,500
189.13	2,703	6,042	189.65	3,022	7,530
189.14	2,709	6,069	189.66	3,028	7,561
189.15	2,715	6,096	189.67	3,034	7,591
189.16	2,721	6,123	189.68	3,041	7,621
189.17	2,727	6,151	189.69	3,047	7,652
189.18	2,734	6,178	189.70	3,053	7,682
189.19	2,740	6,205	189.71	3,059	7,713
189.20	2,746	6,233	189.72	3,065	7,744
189.21	2,752	6,260	189.73	3,071	7,774
189.22	2,758	6,288	189.74	3,077	7,805
189.23	2,764	6,315	189.75	3,084	7,836
189.24	2,770	6,343	189.76	3,090	7,867
189.25	2,777	6,371	189.77	3,096	7,898
189.26	2,783	6,399	189.78	3,102	7,929
189.27	2,789	6,426	189.79	3,108	7,960
189.28	2,795	6,454	189.80	3,114	7,991

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.81	3,120	8,022	190.33	3,458	9,731
189.82	3,126	8,053	190.34	3,465	9,765
189.83	3,133	8,084	190.35	3,472	9,800
189.84	3,139	8,116	190.36	3,479	9,835
189.85	3,145	8,147	190.37	3,485	9,869
189.86	3,151	8,179	190.38	3,492	9,904
189.87	3,157	8,210	190.39	3,499	9,939
189.88	3,163	8,242	190.40	3,505	9,974
189.89	3,169	8,273	190.41	3,512	10,009
189.90	3,176	8,305	190.42	3,519	10,045
189.91	3,182	8,337	190.43	3,526	10,080
189.92	3,188	8,369	190.44	3,532	10,115
189.93	3,194	8,401	190.45	3,539	10,150
189.94	3,200	8,433	190.46	3,546	10,186
189.95	3,206	8,465	190.47	3,552	10,221
189.96	3,212	8,497	190.48	3,559	10,257
189.97	3,219	8,529	190.49	3,566	10,293
189.98	3,225	8,561	190.50	3,573	10,328
189.99	3,231	8,593	190.51	3,579	10,364
190.00	3,237	8,626	190.52	3,586	10,400
190.01	3,244	8,658	190.53	3,593	10,436
190.02	3,250	8,691	190.54	3,599	10,472
190.03	3,257	8,723	190.55	3,606	10,508
190.04	3,264	8,756	190.56	3,613	10,544
190.05	3,271	8,789	190.57	3,619	10,580
190.06	3,277	8,821	190.58	3,626	10,616
190.07	3,284	8,854	190.59	3,633	10,652
190.08	3,291	8,887	190.60	3,640	10,689
190.09	3,297	8,920	190.61	3,646	10,725
190.10	3,304	8,953	190.62	3,653	10,762
190.11	3,311	8,986	190.63	3,660	10,798
190.12	3,318	9,019	190.64	3,666	10,835
190.13	3,324	9,052	190.65	3,673	10,872
190.14	3,331	9,086	190.66	3,680	10,908
190.15	3,338	9,119	190.67	3,687	10,945
190.16	3,344	9,152	190.68	3,693	10,982
190.17	3,351	9,186	190.69	3,700	11,019
190.18	3,358	9,219	190.70	3,707	11,056
190.19	3,364	9,253	190.71	3,713	11,093
190.20	3,371	9,287	190.72	3,720	11,130
190.21	3,378	9,320	190.73	3,727	11,168
190.22	3,385	9,354	190.74	3,734	11,205
190.23	3,391	9,388	190.75	3,740	11,242
190.24	3,398	9,422	190.76	3,747	11,280
190.25	3,405	9,456	190.77	3,754	11,317
190.26	3,411	9,490	190.78	3,760	11,355
190.27	3,418	9,524	190.79	3,767	11,392
190.28	3,425	9,558	190.80	3,774	11,430
190.29	3,432	9,593	190.81	3,781	11,468
190.30	3,438	9,627	190.82	3,787	11,506
190.31	3,445	9,662	190.83	3,794	11,544
190.32	3,452	9,696	190.84	3,801	11,582

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.85	3,807	11,620
190.86	3,814	11,658
190.87	3,821	11,696
190.88	3,827	11,734
190.89	3,834	11,773
190.90	3,841	11,811
190.91	3,848	11,849
190.92	3,854	11,888
190.93	3,861	11,926
190.94	3,868	11,965
190.95	3,874	12,004
190.96	3,881	12,043
190.97	3,888	12,081
190.98	3,895	12,120
190.99	3,901	12,159
191.00	**3,908**	**12,198**

Summary for Pond B-19: Basin #19

Inflow Area = 1.715 ac, 34.81% Impervious, Inflow Depth = 3.95" for Future 10 yr event
Inflow = 6.97 cfs @ 12.17 hrs, Volume= 0.564 af
Outflow = 4.67 cfs @ 12.29 hrs, Volume= 0.504 af, Atten= 33%, Lag= 6.8 min
Primary = 4.67 cfs @ 12.29 hrs, Volume= 0.504 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 198.24' @ 12.29 hrs Surf.Area= 3,987 sf Storage= 9,757 cf

Plug-Flow detention time= 292.6 min calculated for 0.503 af (89% of inflow)
Center-of-Mass det. time= 239.3 min (1,033.3 - 793.9)

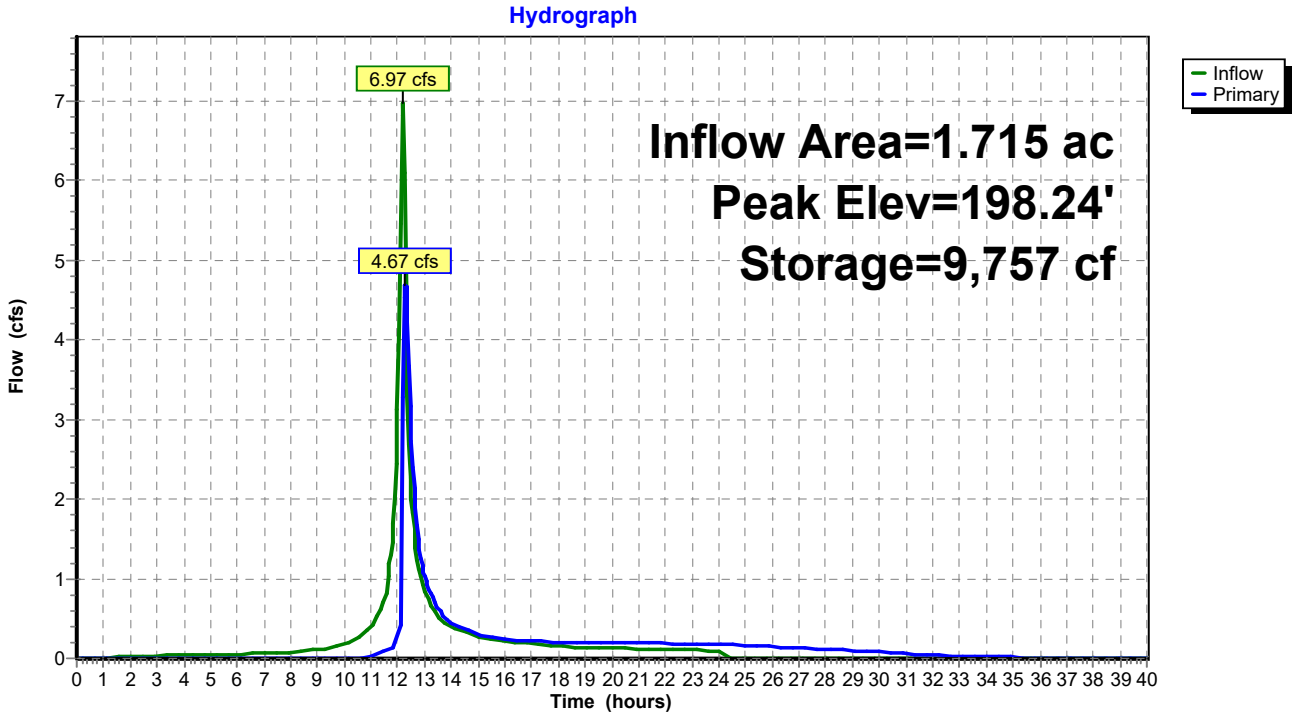
Volume	Invert	Avail.Storage	Storage Description
#1	194.65'	12,982 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
194.65	0	0	0
195.00	1,916	335	335
196.00	2,490	2,203	2,538
197.00	3,119	2,805	5,343
198.00	3,806	3,463	8,805
199.00	4,548	4,177	12,982

Device	Routing	Invert	Outlet Devices
#1	Primary	194.30'	**18.0" Round Culvert** L= 136.0' Ke= 0.500 Inlet / Outlet Invert= 194.30' / 185.86' S= 0.0621 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	196.00'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	197.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	198.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.62 cfs @ 12.29 hrs HW=198.24' (Free Discharge)
- **1=Culvert** (Passes 4.62 cfs of 15.20 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.24 cfs @ 7.04 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.38 cfs @ 2.29 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-19: Basin #19



Stage-Discharge for Pond B-19: Basin #19

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.65	0.00	195.17	0.00	195.69	0.00	196.21	0.05
194.66	0.00	195.18	0.00	195.70	0.00	196.22	0.06
194.67	0.00	195.19	0.00	195.71	0.00	196.23	0.06
194.68	0.00	195.20	0.00	195.72	0.00	196.24	0.06
194.69	0.00	195.21	0.00	195.73	0.00	196.25	0.06
194.70	0.00	195.22	0.00	195.74	0.00	196.26	0.06
194.71	0.00	195.23	0.00	195.75	0.00	196.27	0.07
194.72	0.00	195.24	0.00	195.76	0.00	196.28	0.07
194.73	0.00	195.25	0.00	195.77	0.00	196.29	0.07
194.74	0.00	195.26	0.00	195.78	0.00	196.30	0.07
194.75	0.00	195.27	0.00	195.79	0.00	196.31	0.07
194.76	0.00	195.28	0.00	195.80	0.00	196.32	0.08
194.77	0.00	195.29	0.00	195.81	0.00	196.33	0.08
194.78	0.00	195.30	0.00	195.82	0.00	196.34	0.08
194.79	0.00	195.31	0.00	195.83	0.00	196.35	0.08
194.80	0.00	195.32	0.00	195.84	0.00	196.36	0.08
194.81	0.00	195.33	0.00	195.85	0.00	196.37	0.08
194.82	0.00	195.34	0.00	195.86	0.00	196.38	0.09
194.83	0.00	195.35	0.00	195.87	0.00	196.39	0.09
194.84	0.00	195.36	0.00	195.88	0.00	196.40	0.09
194.85	0.00	195.37	0.00	195.89	0.00	196.41	0.09
194.86	0.00	195.38	0.00	195.90	0.00	196.42	0.09
194.87	0.00	195.39	0.00	195.91	0.00	196.43	0.09
194.88	0.00	195.40	0.00	195.92	0.00	196.44	0.10
194.89	0.00	195.41	0.00	195.93	0.00	196.45	0.10
194.90	0.00	195.42	0.00	195.94	0.00	196.46	0.10
194.91	0.00	195.43	0.00	195.95	0.00	196.47	0.10
194.92	0.00	195.44	0.00	195.96	0.00	196.48	0.10
194.93	0.00	195.45	0.00	195.97	0.00	196.49	0.10
194.94	0.00	195.46	0.00	195.98	0.00	196.50	0.10
194.95	0.00	195.47	0.00	195.99	0.00	196.51	0.10
194.96	0.00	195.48	0.00	196.00	0.00	196.52	0.11
194.97	0.00	195.49	0.00	196.01	0.00	196.53	0.11
194.98	0.00	195.50	0.00	196.02	0.00	196.54	0.11
194.99	0.00	195.51	0.00	196.03	0.00	196.55	0.11
195.00	0.00	195.52	0.00	196.04	0.00	196.56	0.11
195.01	0.00	195.53	0.00	196.05	0.00	196.57	0.11
195.02	0.00	195.54	0.00	196.06	0.01	196.58	0.11
195.03	0.00	195.55	0.00	196.07	0.01	196.59	0.11
195.04	0.00	195.56	0.00	196.08	0.01	196.60	0.12
195.05	0.00	195.57	0.00	196.09	0.01	196.61	0.12
195.06	0.00	195.58	0.00	196.10	0.02	196.62	0.12
195.07	0.00	195.59	0.00	196.11	0.02	196.63	0.12
195.08	0.00	195.60	0.00	196.12	0.02	196.64	0.12
195.09	0.00	195.61	0.00	196.13	0.03	196.65	0.12
195.10	0.00	195.62	0.00	196.14	0.03	196.66	0.12
195.11	0.00	195.63	0.00	196.15	0.03	196.67	0.12
195.12	0.00	195.64	0.00	196.16	0.04	196.68	0.12
195.13	0.00	195.65	0.00	196.17	0.04	196.69	0.13
195.14	0.00	195.66	0.00	196.18	0.05	196.70	0.13
195.15	0.00	195.67	0.00	196.19	0.05	196.71	0.13
195.16	0.00	195.68	0.00	196.20	0.05	196.72	0.13

Stage-Discharge for Pond B-19: Basin #19 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.73	0.13	197.25	0.18	197.77	0.25	198.29	5.29
196.74	0.13	197.26	0.18	197.78	0.28	198.30	5.43
196.75	0.13	197.27	0.18	197.79	0.32	198.31	5.57
196.76	0.13	197.28	0.18	197.80	0.36	198.32	5.71
196.77	0.13	197.29	0.18	197.81	0.41	198.33	5.85
196.78	0.13	197.30	0.18	197.82	0.46	198.34	6.00
196.79	0.14	197.31	0.18	197.83	0.51	198.35	6.14
196.80	0.14	197.32	0.18	197.84	0.57	198.36	6.29
196.81	0.14	197.33	0.18	197.85	0.63	198.37	6.43
196.82	0.14	197.34	0.18	197.86	0.69	198.38	6.58
196.83	0.14	197.35	0.18	197.87	0.76	198.39	6.73
196.84	0.14	197.36	0.18	197.88	0.83	198.40	6.88
196.85	0.14	197.37	0.18	197.89	0.90	198.41	7.03
196.86	0.14	197.38	0.19	197.90	0.97	198.42	7.18
196.87	0.14	197.39	0.19	197.91	1.05	198.43	7.34
196.88	0.14	197.40	0.19	197.92	1.13	198.44	7.49
196.89	0.15	197.41	0.19	197.93	1.21	198.45	7.64
196.90	0.15	197.42	0.19	197.94	1.30	198.46	7.80
196.91	0.15	197.43	0.19	197.95	1.38	198.47	7.96
196.92	0.15	197.44	0.19	197.96	1.47	198.48	8.11
196.93	0.15	197.45	0.19	197.97	1.56	198.49	8.27
196.94	0.15	197.46	0.19	197.98	1.65	198.50	8.43
196.95	0.15	197.47	0.19	197.99	1.74	198.51	8.59
196.96	0.15	197.48	0.19	198.00	1.84	198.52	8.75
196.97	0.15	197.49	0.19	198.01	1.94	198.53	8.91
196.98	0.15	197.50	0.19	198.02	2.04	198.54	9.08
196.99	0.15	197.51	0.19	198.03	2.14	198.55	9.24
197.00	0.16	197.52	0.20	198.04	2.24	198.56	9.41
197.01	0.16	197.53	0.20	198.05	2.35	198.57	9.57
197.02	0.16	197.54	0.20	198.06	2.45	198.58	9.74
197.03	0.16	197.55	0.20	198.07	2.56	198.59	9.91
197.04	0.16	197.56	0.20	198.08	2.67	198.60	10.07
197.05	0.16	197.57	0.20	198.09	2.78	198.61	10.24
197.06	0.16	197.58	0.20	198.10	2.89	198.62	10.41
197.07	0.16	197.59	0.20	198.11	3.01	198.63	10.58
197.08	0.16	197.60	0.20	198.12	3.12	198.64	10.75
197.09	0.16	197.61	0.20	198.13	3.24	198.65	10.93
197.10	0.16	197.62	0.20	198.14	3.36	198.66	11.10
197.11	0.16	197.63	0.20	198.15	3.48	198.67	11.27
197.12	0.17	197.64	0.20	198.16	3.60	198.68	11.45
197.13	0.17	197.65	0.20	198.17	3.72	198.69	11.62
197.14	0.17	197.66	0.20	198.18	3.85	198.70	11.80
197.15	0.17	197.67	0.21	198.19	3.97	198.71	11.98
197.16	0.17	197.68	0.21	198.20	4.10	198.72	12.16
197.17	0.17	197.69	0.21	198.21	4.23	198.73	12.33
197.18	0.17	197.70	0.21	198.22	4.35	198.74	12.51
197.19	0.17	197.71	0.21	198.23	4.48	198.75	12.69
197.20	0.17	197.72	0.21	198.24	4.62	198.76	12.87
197.21	0.17	197.73	0.21	198.25	4.75	198.77	13.06
197.22	0.17	197.74	0.21	198.26	4.88	198.78	13.24
197.23	0.17	197.75	0.21	198.27	5.02	198.79	13.42
197.24	0.17	197.76	0.22	198.28	5.16	198.80	13.60

Stage-Discharge for Pond B-19: Basin #19 (continued)

Elevation (feet)	Primary (cfs)
198.81	13.79
198.82	13.97
198.83	14.16
198.84	14.35
198.85	14.53
198.86	14.72
198.87	14.91
198.88	15.10
198.89	15.29
198.90	15.48
198.91	15.67
198.92	15.86
198.93	16.05
198.94	16.25
198.95	16.44
198.96	16.75
198.97	17.16
198.98	17.48
198.99	17.83
199.00	**18.22**

Stage-Area-Storage for Pond B-19: Basin #19

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.65	0	0	195.17	2,014	669
194.66	55	0	195.18	2,019	689
194.67	109	1	195.19	2,025	710
194.68	164	2	195.20	2,031	730
194.69	219	4	195.21	2,037	750
194.70	274	7	195.22	2,042	771
194.71	328	10	195.23	2,048	791
194.72	383	13	195.24	2,054	812
194.73	438	18	195.25	2,060	832
194.74	493	22	195.26	2,065	853
194.75	547	27	195.27	2,071	874
194.76	602	33	195.28	2,077	894
194.77	657	39	195.29	2,082	915
194.78	712	46	195.30	2,088	936
194.79	766	54	195.31	2,094	957
194.80	821	62	195.32	2,100	978
194.81	876	70	195.33	2,105	999
194.82	931	79	195.34	2,111	1,020
194.83	985	89	195.35	2,117	1,041
194.84	1,040	99	195.36	2,123	1,062
194.85	1,095	109	195.37	2,128	1,084
194.86	1,150	121	195.38	2,134	1,105
194.87	1,204	132	195.39	2,140	1,126
194.88	1,259	145	195.40	2,146	1,148
194.89	1,314	158	195.41	2,151	1,169
194.90	1,369	171	195.42	2,157	1,191
194.91	1,423	185	195.43	2,163	1,212
194.92	1,478	200	195.44	2,169	1,234
194.93	1,533	215	195.45	2,174	1,256
194.94	1,588	230	195.46	2,180	1,277
194.95	1,642	246	195.47	2,186	1,299
194.96	1,697	263	195.48	2,192	1,321
194.97	1,752	280	195.49	2,197	1,343
194.98	1,807	298	195.50	2,203	1,365
194.99	1,861	316	195.51	2,209	1,387
195.00	1,916	335	195.52	2,214	1,409
195.01	1,922	354	195.53	2,220	1,431
195.02	1,927	374	195.54	2,226	1,454
195.03	1,933	393	195.55	2,232	1,476
195.04	1,939	412	195.56	2,237	1,498
195.05	1,945	432	195.57	2,243	1,521
195.06	1,950	451	195.58	2,249	1,543
195.07	1,956	471	195.59	2,255	1,566
195.08	1,962	490	195.60	2,260	1,588
195.09	1,968	510	195.61	2,266	1,611
195.10	1,973	530	195.62	2,272	1,634
195.11	1,979	550	195.63	2,278	1,656
195.12	1,985	569	195.64	2,283	1,679
195.13	1,991	589	195.65	2,289	1,702
195.14	1,996	609	195.66	2,295	1,725
195.15	2,002	629	195.67	2,301	1,748
195.16	2,008	649	195.68	2,306	1,771

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.69	2,312	1,794	196.21	2,622	3,075
195.70	2,318	1,817	196.22	2,628	3,101
195.71	2,324	1,840	196.23	2,635	3,128
195.72	2,329	1,864	196.24	2,641	3,154
195.73	2,335	1,887	196.25	2,647	3,180
195.74	2,341	1,910	196.26	2,654	3,207
195.75	2,347	1,934	196.27	2,660	3,234
195.76	2,352	1,957	196.28	2,666	3,260
195.77	2,358	1,981	196.29	2,672	3,287
195.78	2,364	2,004	196.30	2,679	3,314
195.79	2,369	2,028	196.31	2,685	3,340
195.80	2,375	2,052	196.32	2,691	3,367
195.81	2,381	2,076	196.33	2,698	3,394
195.82	2,387	2,099	196.34	2,704	3,421
195.83	2,392	2,123	196.35	2,710	3,448
195.84	2,398	2,147	196.36	2,716	3,475
195.85	2,404	2,171	196.37	2,723	3,503
195.86	2,410	2,195	196.38	2,729	3,530
195.87	2,415	2,219	196.39	2,735	3,557
195.88	2,421	2,244	196.40	2,742	3,585
195.89	2,427	2,268	196.41	2,748	3,612
195.90	2,433	2,292	196.42	2,754	3,640
195.91	2,438	2,317	196.43	2,760	3,667
195.92	2,444	2,341	196.44	2,767	3,695
195.93	2,450	2,365	196.45	2,773	3,722
195.94	2,456	2,390	196.46	2,779	3,750
195.95	2,461	2,415	196.47	2,786	3,778
195.96	2,467	2,439	196.48	2,792	3,806
195.97	2,473	2,464	196.49	2,798	3,834
195.98	2,479	2,489	196.50	2,805	3,862
195.99	2,484	2,513	196.51	2,811	3,890
196.00	2,490	2,538	196.52	2,817	3,918
196.01	2,496	2,563	196.53	2,823	3,946
196.02	2,503	2,588	196.54	2,830	3,975
196.03	2,509	2,613	196.55	2,836	4,003
196.04	2,515	2,638	196.56	2,842	4,031
196.05	2,521	2,664	196.57	2,849	4,060
196.06	2,528	2,689	196.58	2,855	4,088
196.07	2,534	2,714	196.59	2,861	4,117
196.08	2,540	2,740	196.60	2,867	4,146
196.09	2,547	2,765	196.61	2,874	4,174
196.10	2,553	2,790	196.62	2,880	4,203
196.11	2,559	2,816	196.63	2,886	4,232
196.12	2,565	2,842	196.64	2,893	4,261
196.13	2,572	2,867	196.65	2,899	4,290
196.14	2,578	2,893	196.66	2,905	4,319
196.15	2,584	2,919	196.67	2,911	4,348
196.16	2,591	2,945	196.68	2,918	4,377
196.17	2,597	2,971	196.69	2,924	4,406
196.18	2,603	2,997	196.70	2,930	4,435
196.19	2,610	3,023	196.71	2,937	4,465
196.20	2,616	3,049	196.72	2,943	4,494

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.73	2,949	4,524	197.25	3,291	6,144
196.74	2,955	4,553	197.26	3,298	6,177
196.75	2,962	4,583	197.27	3,304	6,210
196.76	2,968	4,612	197.28	3,311	6,243
196.77	2,974	4,642	197.29	3,318	6,276
196.78	2,981	4,672	197.30	3,325	6,309
196.79	2,987	4,702	197.31	3,332	6,343
196.80	2,993	4,732	197.32	3,339	6,376
196.81	2,999	4,762	197.33	3,346	6,409
196.82	3,006	4,792	197.34	3,353	6,443
196.83	3,012	4,822	197.35	3,359	6,477
196.84	3,018	4,852	197.36	3,366	6,510
196.85	3,025	4,882	197.37	3,373	6,544
196.86	3,031	4,912	197.38	3,380	6,578
196.87	3,037	4,943	197.39	3,387	6,611
196.88	3,044	4,973	197.40	3,394	6,645
196.89	3,050	5,004	197.41	3,401	6,679
196.90	3,056	5,034	197.42	3,408	6,713
196.91	3,062	5,065	197.43	3,414	6,747
196.92	3,069	5,095	197.44	3,421	6,782
196.93	3,075	5,126	197.45	3,428	6,816
196.94	3,081	5,157	197.46	3,435	6,850
196.95	3,088	5,188	197.47	3,442	6,885
196.96	3,094	5,219	197.48	3,449	6,919
196.97	3,100	5,250	197.49	3,456	6,954
196.98	3,106	5,281	197.50	3,463	6,988
196.99	3,113	5,312	197.51	3,469	7,023
197.00	3,119	5,343	197.52	3,476	7,058
197.01	3,126	5,374	197.53	3,483	7,092
197.02	3,133	5,405	197.54	3,490	7,127
197.03	3,140	5,437	197.55	3,497	7,162
197.04	3,146	5,468	197.56	3,504	7,197
197.05	3,153	5,500	197.57	3,511	7,232
197.06	3,160	5,531	197.58	3,517	7,267
197.07	3,167	5,563	197.59	3,524	7,303
197.08	3,174	5,595	197.60	3,531	7,338
197.09	3,181	5,626	197.61	3,538	7,373
197.10	3,188	5,658	197.62	3,545	7,409
197.11	3,195	5,690	197.63	3,552	7,444
197.12	3,201	5,722	197.64	3,559	7,480
197.13	3,208	5,754	197.65	3,566	7,515
197.14	3,215	5,786	197.66	3,572	7,551
197.15	3,222	5,818	197.67	3,579	7,587
197.16	3,229	5,851	197.68	3,586	7,623
197.17	3,236	5,883	197.69	3,593	7,658
197.18	3,243	5,915	197.70	3,600	7,694
197.19	3,250	5,948	197.71	3,607	7,730
197.20	3,256	5,980	197.72	3,614	7,767
197.21	3,263	6,013	197.73	3,621	7,803
197.22	3,270	6,046	197.74	3,627	7,839
197.23	3,277	6,078	197.75	3,634	7,875
197.24	3,284	6,111	197.76	3,641	7,912

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.77	3,648	7,948	198.29	4,021	9,940
197.78	3,655	7,985	198.30	4,029	9,980
197.79	3,662	8,021	198.31	4,036	10,021
197.80	3,669	8,058	198.32	4,043	10,061
197.81	3,675	8,095	198.33	4,051	10,102
197.82	3,682	8,131	198.34	4,058	10,142
197.83	3,689	8,168	198.35	4,066	10,183
197.84	3,696	8,205	198.36	4,073	10,224
197.85	3,703	8,242	198.37	4,081	10,264
197.86	3,710	8,279	198.38	4,088	10,305
197.87	3,717	8,316	198.39	4,095	10,346
197.88	3,724	8,354	198.40	4,103	10,387
197.89	3,730	8,391	198.41	4,110	10,428
197.90	3,737	8,428	198.42	4,118	10,469
197.91	3,744	8,466	198.43	4,125	10,510
197.92	3,751	8,503	198.44	4,132	10,552
197.93	3,758	8,541	198.45	4,140	10,593
197.94	3,765	8,578	198.46	4,147	10,635
197.95	3,772	8,616	198.47	4,155	10,676
197.96	3,779	8,654	198.48	4,162	10,718
197.97	3,785	8,691	198.49	4,170	10,759
197.98	3,792	8,729	198.50	4,177	10,801
197.99	3,799	8,767	198.51	4,184	10,843
198.00	3,806	8,805	198.52	4,192	10,885
198.01	3,813	8,843	198.53	4,199	10,927
198.02	3,821	8,882	198.54	4,207	10,969
198.03	3,828	8,920	198.55	4,214	11,011
198.04	3,836	8,958	198.56	4,222	11,053
198.05	3,843	8,997	198.57	4,229	11,095
198.06	3,851	9,035	198.58	4,236	11,138
198.07	3,858	9,074	198.59	4,244	11,180
198.08	3,865	9,112	198.60	4,251	11,222
198.09	3,873	9,151	198.61	4,259	11,265
198.10	3,880	9,190	198.62	4,266	11,308
198.11	3,888	9,228	198.63	4,273	11,350
198.12	3,895	9,267	198.64	4,281	11,393
198.13	3,902	9,306	198.65	4,288	11,436
198.14	3,910	9,345	198.66	4,296	11,479
198.15	3,917	9,385	198.67	4,303	11,522
198.16	3,925	9,424	198.68	4,311	11,565
198.17	3,932	9,463	198.69	4,318	11,608
198.18	3,940	9,502	198.70	4,325	11,651
198.19	3,947	9,542	198.71	4,333	11,695
198.20	3,954	9,581	198.72	4,340	11,738
198.21	3,962	9,621	198.73	4,348	11,781
198.22	3,969	9,661	198.74	4,355	11,825
198.23	3,977	9,700	198.75	4,363	11,868
198.24	3,984	9,740	198.76	4,370	11,912
198.25	3,992	9,780	198.77	4,377	11,956
198.26	3,999	9,820	198.78	4,385	12,000
198.27	4,006	9,860	198.79	4,392	12,044
198.28	4,014	9,900	198.80	4,400	12,088

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.81	4,407	12,132
198.82	4,414	12,176
198.83	4,422	12,220
198.84	4,429	12,264
198.85	4,437	12,308
198.86	4,444	12,353
198.87	4,452	12,397
198.88	4,459	12,442
198.89	4,466	12,487
198.90	4,474	12,531
198.91	4,481	12,576
198.92	4,489	12,621
198.93	4,496	12,666
198.94	4,503	12,711
198.95	4,511	12,756
198.96	4,518	12,801
198.97	4,526	12,846
198.98	4,533	12,891
198.99	4,541	12,937
199.00	**4,548**	**12,982**

Summary for Pond B-20: Basin #20

Inflow Area = 2.453 ac, 46.07% Impervious, Inflow Depth = 4.24" for Future 10 yr event
Inflow = 10.50 cfs @ 12.17 hrs, Volume= 0.866 af
Outflow = 6.00 cfs @ 12.31 hrs, Volume= 0.731 af, Atten= 43%, Lag= 8.6 min
Primary = 6.00 cfs @ 12.31 hrs, Volume= 0.731 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 153.34' @ 12.32 hrs Surf.Area= 7,799 sf Storage= 16,435 cf

Plug-Flow detention time= 349.0 min calculated for 0.731 af (84% of inflow)
Center-of-Mass det. time= 278.3 min (1,062.1 - 783.9)

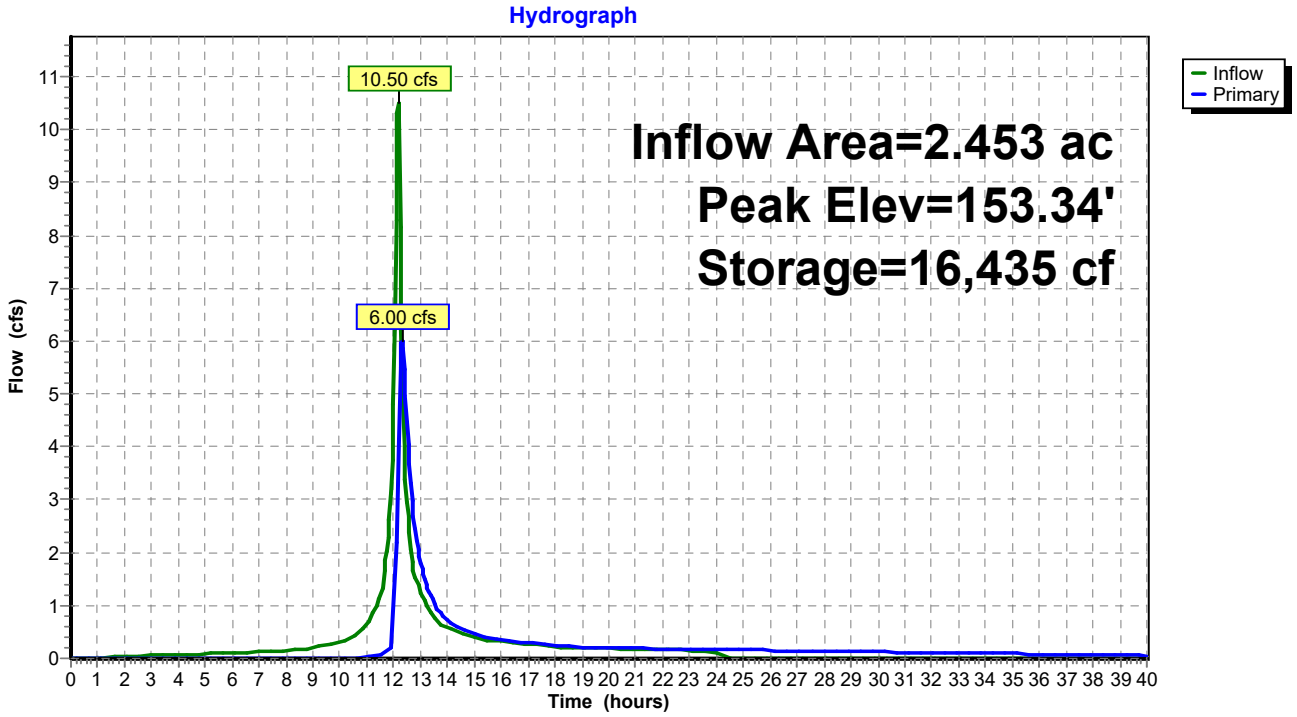
Volume	Invert	Avail.Storage	Storage Description
#1	150.87'	35,230 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
150.87	0	0	0
151.00	5,926	385	385
152.00	6,706	6,316	6,701
153.00	7,514	7,110	13,811
154.00	8,347	7,931	21,742
155.00	9,205	8,776	30,518
155.50	9,643	4,712	35,230

Device	Routing	Invert	Outlet Devices
#1	Primary	151.00'	**18.0" Round Culvert** L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 151.00' / 150.71' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	151.68'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	152.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	154.32'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.93 cfs @ 12.31 hrs HW=153.34' (Free Discharge)
- **1=Culvert** (Passes 5.93 cfs of 10.57 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 6.00 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 5.73 cfs @ 2.51 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-20: Basin #20



Stage-Discharge for Pond B-20: Basin #20

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
150.87	0.00	151.39	0.00	151.91	0.06	152.43	0.13
150.88	0.00	151.40	0.00	151.92	0.06	152.44	0.13
150.89	0.00	151.41	0.00	151.93	0.06	152.45	0.13
150.90	0.00	151.42	0.00	151.94	0.06	152.46	0.13
150.91	0.00	151.43	0.00	151.95	0.07	152.47	0.14
150.92	0.00	151.44	0.00	151.96	0.07	152.48	0.14
150.93	0.00	151.45	0.00	151.97	0.07	152.49	0.14
150.94	0.00	151.46	0.00	151.98	0.07	152.50	0.14
150.95	0.00	151.47	0.00	151.99	0.07	152.51	0.14
150.96	0.00	151.48	0.00	152.00	0.08	152.52	0.14
150.97	0.00	151.49	0.00	152.01	0.08	152.53	0.14
150.98	0.00	151.50	0.00	152.02	0.08	152.54	0.14
150.99	0.00	151.51	0.00	152.03	0.08	152.55	0.14
151.00	0.00	151.52	0.00	152.04	0.08	152.56	0.14
151.01	0.00	151.53	0.00	152.05	0.08	152.57	0.15
151.02	0.00	151.54	0.00	152.06	0.09	152.58	0.15
151.03	0.00	151.55	0.00	152.07	0.09	152.59	0.15
151.04	0.00	151.56	0.00	152.08	0.09	152.60	0.15
151.05	0.00	151.57	0.00	152.09	0.09	152.61	0.15
151.06	0.00	151.58	0.00	152.10	0.09	152.62	0.15
151.07	0.00	151.59	0.00	152.11	0.09	152.63	0.15
151.08	0.00	151.60	0.00	152.12	0.10	152.64	0.15
151.09	0.00	151.61	0.00	152.13	0.10	152.65	0.15
151.10	0.00	151.62	0.00	152.14	0.10	152.66	0.15
151.11	0.00	151.63	0.00	152.15	0.10	152.67	0.15
151.12	0.00	151.64	0.00	152.16	0.10	152.68	0.16
151.13	0.00	151.65	0.00	152.17	0.10	152.69	0.16
151.14	0.00	151.66	0.00	152.18	0.10	152.70	0.16
151.15	0.00	151.67	0.00	152.19	0.10	152.71	0.16
151.16	0.00	151.68	0.00	152.20	0.11	152.72	0.16
151.17	0.00	151.69	0.00	152.21	0.11	152.73	0.16
151.18	0.00	151.70	0.00	152.22	0.11	152.74	0.16
151.19	0.00	151.71	0.00	152.23	0.11	152.75	0.16
151.20	0.00	151.72	0.00	152.24	0.11	152.76	0.18
151.21	0.00	151.73	0.00	152.25	0.11	152.77	0.20
151.22	0.00	151.74	0.01	152.26	0.11	152.78	0.23
151.23	0.00	151.75	0.01	152.27	0.11	152.79	0.27
151.24	0.00	151.76	0.01	152.28	0.12	152.80	0.31
151.25	0.00	151.77	0.01	152.29	0.12	152.81	0.36
151.26	0.00	151.78	0.02	152.30	0.12	152.82	0.41
151.27	0.00	151.79	0.02	152.31	0.12	152.83	0.46
151.28	0.00	151.80	0.02	152.32	0.12	152.84	0.52
151.29	0.00	151.81	0.03	152.33	0.12	152.85	0.58
151.30	0.00	151.82	0.03	152.34	0.12	152.86	0.64
151.31	0.00	151.83	0.03	152.35	0.12	152.87	0.71
151.32	0.00	151.84	0.04	152.36	0.12	152.88	0.78
151.33	0.00	151.85	0.04	152.37	0.13	152.89	0.85
151.34	0.00	151.86	0.05	152.38	0.13	152.90	0.93
151.35	0.00	151.87	0.05	152.39	0.13	152.91	1.00
151.36	0.00	151.88	0.05	152.40	0.13	152.92	1.08
151.37	0.00	151.89	0.05	152.41	0.13	152.93	1.17
151.38	0.00	151.90	0.06	152.42	0.13	152.94	1.25

Stage-Discharge for Pond B-20: Basin #20 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
152.95	1.34	153.47	7.92	153.99	12.73	154.51	23.91
152.96	1.42	153.48	8.07	154.00	12.76	154.52	24.73
152.97	1.51	153.49	8.23	154.01	12.79	154.53	25.60
152.98	1.61	153.50	8.39	154.02	12.82	154.54	26.50
152.99	1.70	153.51	8.55	154.03	12.85	154.55	27.42
153.00	1.80	153.52	8.71	154.04	12.88	154.56	28.37
153.01	1.89	153.53	8.88	154.05	12.90	154.57	29.34
153.02	1.99	153.54	9.04	154.06	12.93	154.58	30.34
153.03	2.09	153.55	9.20	154.07	12.96	154.59	31.36
153.04	2.20	153.56	9.37	154.08	12.99	154.60	32.41
153.05	2.30	153.57	9.53	154.09	13.02	154.61	33.49
153.06	2.41	153.58	9.70	154.10	13.04	154.62	34.58
153.07	2.52	153.59	9.87	154.11	13.07	154.63	35.71
153.08	2.63	153.60	10.04	154.12	13.10	154.64	36.85
153.09	2.74	153.61	10.20	154.13	13.13	154.65	38.02
153.10	2.85	153.62	10.37	154.14	13.15	154.66	39.22
153.11	2.96	153.63	10.55	154.15	13.18	154.67	40.44
153.12	3.08	153.64	10.72	154.16	13.21	154.68	41.68
153.13	3.20	153.65	10.89	154.17	13.24	154.69	42.95
153.14	3.31	153.66	11.06	154.18	13.26	154.70	44.24
153.15	3.43	153.67	11.24	154.19	13.29	154.71	45.55
153.16	3.56	153.68	11.41	154.20	13.32	154.72	46.89
153.17	3.68	153.69	11.59	154.21	13.35	154.73	48.28
153.18	3.80	153.70	11.76	154.22	13.37	154.74	49.70
153.19	3.93	153.71	11.91	154.23	13.40	154.75	51.14
153.20	4.05	153.72	11.94	154.24	13.43	154.76	52.61
153.21	4.18	153.73	11.97	154.25	13.45	154.77	54.11
153.22	4.31	153.74	12.00	154.26	13.48	154.78	55.63
153.23	4.44	153.75	12.03	154.27	13.51	154.79	57.17
153.24	4.57	153.76	12.06	154.28	13.53	154.80	58.75
153.25	4.71	153.77	12.09	154.29	13.56	154.81	60.35
153.26	4.84	153.78	12.12	154.30	13.59	154.82	61.97
153.27	4.98	153.79	12.15	154.31	13.61	154.83	63.63
153.28	5.11	153.80	12.18	154.32	13.64	154.84	65.31
153.29	5.25	153.81	12.21	154.33	13.78	154.85	67.01
153.30	5.39	153.82	12.24	154.34	14.02	154.86	68.74
153.31	5.53	153.83	12.27	154.35	14.33	154.87	70.50
153.32	5.67	153.84	12.30	154.36	14.68	154.88	72.29
153.33	5.81	153.85	12.33	154.37	15.08	154.89	74.10
153.34	5.96	153.86	12.36	154.38	15.52	154.90	75.94
153.35	6.10	153.87	12.39	154.39	16.00	154.91	77.81
153.36	6.25	153.88	12.42	154.40	16.51	154.92	79.70
153.37	6.39	153.89	12.45	154.41	17.05	154.93	81.35
153.38	6.54	153.90	12.48	154.42	17.62	154.94	83.01
153.39	6.69	153.91	12.51	154.43	18.22	154.95	84.69
153.40	6.84	153.92	12.53	154.44	18.85	154.96	86.38
153.41	6.99	153.93	12.56	154.45	19.50	154.97	88.09
153.42	7.14	153.94	12.59	154.46	20.18	154.98	89.80
153.43	7.30	153.95	12.62	154.47	20.88	154.99	91.54
153.44	7.45	153.96	12.65	154.48	21.60	155.00	93.28
153.45	7.60	153.97	12.68	154.49	22.35	155.01	95.04
153.46	7.76	153.98	12.71	154.50	23.12	155.02	96.80

Stage-Discharge for Pond B-20: Basin #20 (continued)

Elevation (feet)	Primary (cfs)
155.03	98.59
155.04	100.38
155.05	102.19
155.06	104.01
155.07	105.84
155.08	107.69
155.09	109.54
155.10	111.41
155.11	113.29
155.12	115.18
155.13	117.13
155.14	119.08
155.15	121.05
155.16	123.03
155.17	125.03
155.18	127.04
155.19	129.06
155.20	131.10
155.21	133.14
155.22	135.20
155.23	137.28
155.24	139.36
155.25	141.46
155.26	143.57
155.27	145.70
155.28	147.84
155.29	149.99
155.30	152.15
155.31	154.32
155.32	156.51
155.33	158.66
155.34	160.81
155.35	162.98
155.36	165.16
155.37	167.35
155.38	169.55
155.39	171.76
155.40	173.98
155.41	176.21
155.42	178.45
155.43	180.70
155.44	182.96
155.45	185.24
155.46	187.52
155.47	189.81
155.48	192.11
155.49	194.43
155.50	**196.75**

Stage-Area-Storage for Pond B-20: Basin #20

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.87	0	0	151.39	6,230	2,756
150.88	456	2	151.40	6,238	2,818
150.89	912	9	151.41	6,246	2,880
150.90	1,368	21	151.42	6,254	2,943
150.91	1,823	36	151.43	6,261	3,005
150.92	2,279	57	151.44	6,269	3,068
150.93	2,735	82	151.45	6,277	3,131
150.94	3,191	112	151.46	6,285	3,194
150.95	3,647	146	151.47	6,293	3,257
150.96	4,103	185	151.48	6,300	3,320
150.97	4,558	228	151.49	6,308	3,383
150.98	5,014	276	151.50	6,316	3,446
150.99	5,470	328	151.51	6,324	3,509
151.00	5,926	385	151.52	6,332	3,572
151.01	5,934	444	151.53	6,339	3,636
151.02	5,942	504	151.54	6,347	3,699
151.03	5,949	563	151.55	6,355	3,762
151.04	5,957	623	151.56	6,363	3,826
151.05	5,965	682	151.57	6,371	3,890
151.06	5,973	742	151.58	6,378	3,953
151.07	5,981	802	151.59	6,386	4,017
151.08	5,988	862	151.60	6,394	4,081
151.09	5,996	922	151.61	6,402	4,145
151.10	6,004	982	151.62	6,410	4,209
151.11	6,012	1,042	151.63	6,417	4,273
151.12	6,020	1,102	151.64	6,425	4,338
151.13	6,027	1,162	151.65	6,433	4,402
151.14	6,035	1,222	151.66	6,441	4,466
151.15	6,043	1,283	151.67	6,449	4,531
151.16	6,051	1,343	151.68	6,456	4,595
151.17	6,059	1,404	151.69	6,464	4,660
151.18	6,066	1,465	151.70	6,472	4,724
151.19	6,074	1,525	151.71	6,480	4,789
151.20	6,082	1,586	151.72	6,488	4,854
151.21	6,090	1,647	151.73	6,495	4,919
151.22	6,098	1,708	151.74	6,503	4,984
151.23	6,105	1,769	151.75	6,511	5,049
151.24	6,113	1,830	151.76	6,519	5,114
151.25	6,121	1,891	151.77	6,527	5,179
151.26	6,129	1,952	151.78	6,534	5,245
151.27	6,137	2,014	151.79	6,542	5,310
151.28	6,144	2,075	151.80	6,550	5,376
151.29	6,152	2,137	151.81	6,558	5,441
151.30	6,160	2,198	151.82	6,566	5,507
151.31	6,168	2,260	151.83	6,573	5,572
151.32	6,176	2,321	151.84	6,581	5,638
151.33	6,183	2,383	151.85	6,589	5,704
151.34	6,191	2,445	151.86	6,597	5,770
151.35	6,199	2,507	151.87	6,605	5,836
151.36	6,207	2,569	151.88	6,612	5,902
151.37	6,215	2,631	151.89	6,620	5,968
151.38	6,222	2,693	151.90	6,628	6,034

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.91	6,636	6,101	152.43	7,053	9,659
151.92	6,644	6,167	152.44	7,062	9,730
151.93	6,651	6,234	152.45	7,070	9,801
151.94	6,659	6,300	152.46	7,078	9,871
151.95	6,667	6,367	152.47	7,086	9,942
151.96	6,675	6,434	152.48	7,094	10,013
151.97	6,683	6,500	152.49	7,102	10,084
151.98	6,690	6,567	152.50	7,110	10,155
151.99	6,698	6,634	152.51	7,118	10,226
152.00	6,706	6,701	152.52	7,126	10,298
152.01	6,714	6,768	152.53	7,134	10,369
152.02	6,722	6,835	152.54	7,142	10,440
152.03	6,730	6,903	152.55	7,150	10,512
152.04	6,738	6,970	152.56	7,158	10,583
152.05	6,746	7,038	152.57	7,167	10,655
152.06	6,754	7,105	152.58	7,175	10,727
152.07	6,763	7,173	152.59	7,183	10,798
152.08	6,771	7,240	152.60	7,191	10,870
152.09	6,779	7,308	152.61	7,199	10,942
152.10	6,787	7,376	152.62	7,207	11,014
152.11	6,795	7,444	152.63	7,215	11,086
152.12	6,803	7,512	152.64	7,223	11,159
152.13	6,811	7,580	152.65	7,231	11,231
152.14	6,819	7,648	152.66	7,239	11,303
152.15	6,827	7,716	152.67	7,247	11,376
152.16	6,835	7,784	152.68	7,255	11,448
152.17	6,843	7,853	152.69	7,264	11,521
152.18	6,851	7,921	152.70	7,272	11,593
152.19	6,860	7,990	152.71	7,280	11,666
152.20	6,868	8,059	152.72	7,288	11,739
152.21	6,876	8,127	152.73	7,296	11,812
152.22	6,884	8,196	152.74	7,304	11,885
152.23	6,892	8,265	152.75	7,312	11,958
152.24	6,900	8,334	152.76	7,320	12,031
152.25	6,908	8,403	152.77	7,328	12,104
152.26	6,916	8,472	152.78	7,336	12,178
152.27	6,924	8,541	152.79	7,344	12,251
152.28	6,932	8,611	152.80	7,352	12,325
152.29	6,940	8,680	152.81	7,360	12,398
152.30	6,948	8,749	152.82	7,369	12,472
152.31	6,956	8,819	152.83	7,377	12,545
152.32	6,965	8,888	152.84	7,385	12,619
152.33	6,973	8,958	152.85	7,393	12,693
152.34	6,981	9,028	152.86	7,401	12,767
152.35	6,989	9,098	152.87	7,409	12,841
152.36	6,997	9,168	152.88	7,417	12,915
152.37	7,005	9,238	152.89	7,425	12,990
152.38	7,013	9,308	152.90	7,433	13,064
152.39	7,021	9,378	152.91	7,441	13,138
152.40	7,029	9,448	152.92	7,449	13,213
152.41	7,037	9,519	152.93	7,457	13,287
152.42	7,045	9,589	152.94	7,466	13,362

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
152.95	7,474	13,437	153.47	7,906	17,435
152.96	7,482	13,511	153.48	7,914	17,514
152.97	7,490	13,586	153.49	7,922	17,593
152.98	7,498	13,661	153.50	7,931	17,672
152.99	7,506	13,736	153.51	7,939	17,752
153.00	7,514	13,811	153.52	7,947	17,831
153.01	7,522	13,886	153.53	7,955	17,911
153.02	7,531	13,962	153.54	7,964	17,990
153.03	7,539	14,037	153.55	7,972	18,070
153.04	7,547	14,112	153.56	7,980	18,150
153.05	7,556	14,188	153.57	7,989	18,229
153.06	7,564	14,264	153.58	7,997	18,309
153.07	7,572	14,339	153.59	8,005	18,389
153.08	7,581	14,415	153.60	8,014	18,470
153.09	7,589	14,491	153.61	8,022	18,550
153.10	7,597	14,567	153.62	8,030	18,630
153.11	7,606	14,643	153.63	8,039	18,710
153.12	7,614	14,719	153.64	8,047	18,791
153.13	7,622	14,795	153.65	8,055	18,871
153.14	7,631	14,871	153.66	8,064	18,952
153.15	7,639	14,948	153.67	8,072	19,033
153.16	7,647	15,024	153.68	8,080	19,113
153.17	7,656	15,101	153.69	8,089	19,194
153.18	7,664	15,177	153.70	8,097	19,275
153.19	7,672	15,254	153.71	8,105	19,356
153.20	7,681	15,331	153.72	8,114	19,437
153.21	7,689	15,407	153.73	8,122	19,518
153.22	7,697	15,484	153.74	8,130	19,600
153.23	7,706	15,561	153.75	8,139	19,681
153.24	7,714	15,639	153.76	8,147	19,762
153.25	7,722	15,716	153.77	8,155	19,844
153.26	7,731	15,793	153.78	8,164	19,926
153.27	7,739	15,870	153.79	8,172	20,007
153.28	7,747	15,948	153.80	8,180	20,089
153.29	7,756	16,025	153.81	8,189	20,171
153.30	7,764	16,103	153.82	8,197	20,253
153.31	7,772	16,181	153.83	8,205	20,335
153.32	7,781	16,258	153.84	8,214	20,417
153.33	7,789	16,336	153.85	8,222	20,499
153.34	7,797	16,414	153.86	8,230	20,581
153.35	7,806	16,492	153.87	8,239	20,664
153.36	7,814	16,570	153.88	8,247	20,746
153.37	7,822	16,648	153.89	8,255	20,829
153.38	7,831	16,727	153.90	8,264	20,911
153.39	7,839	16,805	153.91	8,272	20,994
153.40	7,847	16,883	153.92	8,280	21,077
153.41	7,856	16,962	153.93	8,289	21,159
153.42	7,864	17,041	153.94	8,297	21,242
153.43	7,872	17,119	153.95	8,305	21,325
153.44	7,881	17,198	153.96	8,314	21,408
153.45	7,889	17,277	153.97	8,322	21,492
153.46	7,897	17,356	153.98	8,330	21,575

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.99	8,339	21,658	154.51	8,785	26,110
154.00	8,347	21,742	154.52	8,793	26,198
154.01	8,356	21,825	154.53	8,802	26,286
154.02	8,364	21,909	154.54	8,810	26,374
154.03	8,373	21,992	154.55	8,819	26,462
154.04	8,381	22,076	154.56	8,827	26,551
154.05	8,390	22,160	154.57	8,836	26,639
154.06	8,398	22,244	154.58	8,845	26,727
154.07	8,407	22,328	154.59	8,853	26,816
154.08	8,416	22,412	154.60	8,862	26,904
154.09	8,424	22,496	154.61	8,870	26,993
154.10	8,433	22,581	154.62	8,879	27,082
154.11	8,441	22,665	154.63	8,888	27,171
154.12	8,450	22,750	154.64	8,896	27,259
154.13	8,459	22,834	154.65	8,905	27,348
154.14	8,467	22,919	154.66	8,913	27,438
154.15	8,476	23,003	154.67	8,922	27,527
154.16	8,484	23,088	154.68	8,930	27,616
154.17	8,493	23,173	154.69	8,939	27,705
154.18	8,501	23,258	154.70	8,948	27,795
154.19	8,510	23,343	154.71	8,956	27,884
154.20	8,519	23,428	154.72	8,965	27,974
154.21	8,527	23,513	154.73	8,973	28,064
154.22	8,536	23,599	154.74	8,982	28,153
154.23	8,544	23,684	154.75	8,991	28,243
154.24	8,553	23,770	154.76	8,999	28,333
154.25	8,562	23,855	154.77	9,008	28,423
154.26	8,570	23,941	154.78	9,016	28,513
154.27	8,579	24,027	154.79	9,025	28,604
154.28	8,587	24,112	154.80	9,033	28,694
154.29	8,596	24,198	154.81	9,042	28,784
154.30	8,604	24,284	154.82	9,051	28,875
154.31	8,613	24,370	154.83	9,059	28,965
154.32	8,622	24,457	154.84	9,068	29,056
154.33	8,630	24,543	154.85	9,076	29,147
154.34	8,639	24,629	154.86	9,085	29,237
154.35	8,647	24,716	154.87	9,093	29,328
154.36	8,656	24,802	154.88	9,102	29,419
154.37	8,664	24,889	154.89	9,111	29,510
154.38	8,673	24,975	154.90	9,119	29,601
154.39	8,682	25,062	154.91	9,128	29,693
154.40	8,690	25,149	154.92	9,136	29,784
154.41	8,699	25,236	154.93	9,145	29,875
154.42	8,707	25,323	154.94	9,154	29,967
154.43	8,716	25,410	154.95	9,162	30,059
154.44	8,725	25,497	154.96	9,171	30,150
154.45	8,733	25,585	154.97	9,179	30,242
154.46	8,742	25,672	154.98	9,188	30,334
154.47	8,750	25,760	154.99	9,196	30,426
154.48	8,759	25,847	155.00	9,205	30,518
154.49	8,767	25,935	155.01	9,214	30,610
154.50	8,776	26,022	155.02	9,223	30,702

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
155.03	9,231	30,794
155.04	9,240	30,887
155.05	9,249	30,979
155.06	9,258	31,072
155.07	9,266	31,164
155.08	9,275	31,257
155.09	9,284	31,350
155.10	9,293	31,443
155.11	9,301	31,536
155.12	9,310	31,629
155.13	9,319	31,722
155.14	9,328	31,815
155.15	9,336	31,908
155.16	9,345	32,002
155.17	9,354	32,095
155.18	9,363	32,189
155.19	9,371	32,282
155.20	9,380	32,376
155.21	9,389	32,470
155.22	9,398	32,564
155.23	9,406	32,658
155.24	9,415	32,752
155.25	9,424	32,846
155.26	9,433	32,941
155.27	9,442	33,035
155.28	9,450	33,129
155.29	9,459	33,224
155.30	9,468	33,319
155.31	9,477	33,413
155.32	9,485	33,508
155.33	9,494	33,603
155.34	9,503	33,698
155.35	9,512	33,793
155.36	9,520	33,888
155.37	9,529	33,984
155.38	9,538	34,079
155.39	9,547	34,174
155.40	9,555	34,270
155.41	9,564	34,365
155.42	9,573	34,461
155.43	9,582	34,557
155.44	9,590	34,653
155.45	9,599	34,749
155.46	9,608	34,845
155.47	9,617	34,941
155.48	9,625	35,037
155.49	9,634	35,133
155.50	**9,643**	**35,230**

Summary for Pond B-21: Basin #21

Inflow Area = 2.500 ac, 35.44% Impervious, Inflow Depth = 3.96" for Future 10 yr event
Inflow = 10.19 cfs @ 12.17 hrs, Volume= 0.826 af
Outflow = 3.88 cfs @ 12.41 hrs, Volume= 0.698 af, Atten= 62%, Lag= 14.3 min
Primary = 3.88 cfs @ 12.41 hrs, Volume= 0.698 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 152.76' @ 12.41 hrs Surf.Area= 7,555 sf Storage= 17,286 cf

Plug-Flow detention time= 434.7 min calculated for 0.698 af (84% of inflow)
Center-of-Mass det. time= 365.5 min (1,158.8 - 793.3)

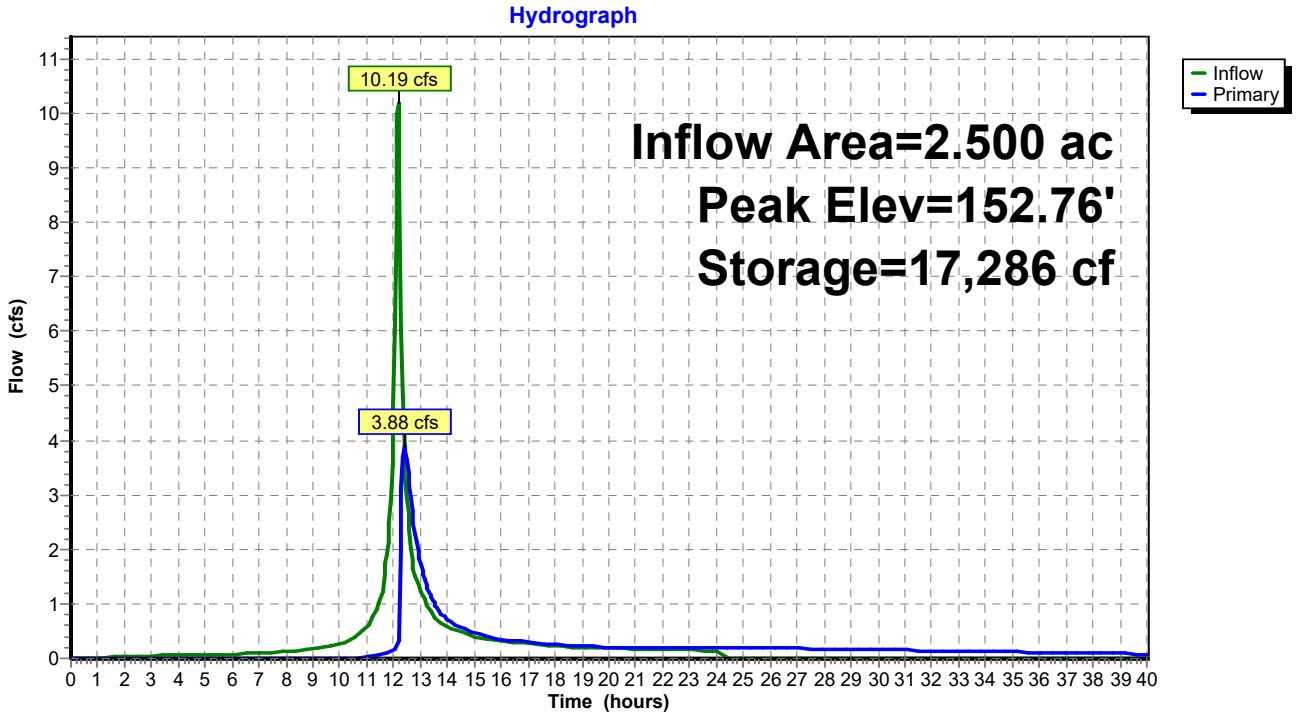
Volume	Invert	Avail.Storage	Storage Description
#1	149.90'	42,109 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
149.90	0	0	0
150.00	4,848	242	242
151.00	5,776	5,312	5,554
152.00	6,761	6,269	11,823
153.00	7,802	7,282	19,104
154.00	8,900	8,351	27,455
155.00	10,054	9,477	36,932
155.50	10,653	5,177	42,109

Device	Routing	Invert	Outlet Devices
#1	Primary	149.30'	**18.0" Round Culvert** L= 24.0' Ke= 0.500 Inlet / Outlet Invert= 149.30' / 148.32' S= 0.0408 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	150.68'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	152.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	154.16'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.86 cfs @ 12.41 hrs HW=152.76' (Free Discharge)
- **1=Culvert** (Passes 3.86 cfs of 14.01 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.77 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.63 cfs @ 2.15 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-21: Basin #21



Stage-Discharge for Pond B-21: Basin #21

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
149.90	0.00	150.42	0.00	150.94	0.06	151.46	0.13
149.91	0.00	150.43	0.00	150.95	0.07	151.47	0.14
149.92	0.00	150.44	0.00	150.96	0.07	151.48	0.14
149.93	0.00	150.45	0.00	150.97	0.07	151.49	0.14
149.94	0.00	150.46	0.00	150.98	0.07	151.50	0.14
149.95	0.00	150.47	0.00	150.99	0.07	151.51	0.14
149.96	0.00	150.48	0.00	151.00	0.08	151.52	0.14
149.97	0.00	150.49	0.00	151.01	0.08	151.53	0.14
149.98	0.00	150.50	0.00	151.02	0.08	151.54	0.14
149.99	0.00	150.51	0.00	151.03	0.08	151.55	0.14
150.00	0.00	150.52	0.00	151.04	0.08	151.56	0.14
150.01	0.00	150.53	0.00	151.05	0.08	151.57	0.15
150.02	0.00	150.54	0.00	151.06	0.09	151.58	0.15
150.03	0.00	150.55	0.00	151.07	0.09	151.59	0.15
150.04	0.00	150.56	0.00	151.08	0.09	151.60	0.15
150.05	0.00	150.57	0.00	151.09	0.09	151.61	0.15
150.06	0.00	150.58	0.00	151.10	0.09	151.62	0.15
150.07	0.00	150.59	0.00	151.11	0.09	151.63	0.15
150.08	0.00	150.60	0.00	151.12	0.10	151.64	0.15
150.09	0.00	150.61	0.00	151.13	0.10	151.65	0.15
150.10	0.00	150.62	0.00	151.14	0.10	151.66	0.15
150.11	0.00	150.63	0.00	151.15	0.10	151.67	0.15
150.12	0.00	150.64	0.00	151.16	0.10	151.68	0.16
150.13	0.00	150.65	0.00	151.17	0.10	151.69	0.16
150.14	0.00	150.66	0.00	151.18	0.10	151.70	0.16
150.15	0.00	150.67	0.00	151.19	0.10	151.71	0.16
150.16	0.00	150.68	0.00	151.20	0.11	151.72	0.16
150.17	0.00	150.69	0.00	151.21	0.11	151.73	0.16
150.18	0.00	150.70	0.00	151.22	0.11	151.74	0.16
150.19	0.00	150.71	0.00	151.23	0.11	151.75	0.16
150.20	0.00	150.72	0.00	151.24	0.11	151.76	0.16
150.21	0.00	150.73	0.00	151.25	0.11	151.77	0.16
150.22	0.00	150.74	0.01	151.26	0.11	151.78	0.16
150.23	0.00	150.75	0.01	151.27	0.11	151.79	0.16
150.24	0.00	150.76	0.01	151.28	0.12	151.80	0.17
150.25	0.00	150.77	0.01	151.29	0.12	151.81	0.17
150.26	0.00	150.78	0.02	151.30	0.12	151.82	0.17
150.27	0.00	150.79	0.02	151.31	0.12	151.83	0.17
150.28	0.00	150.80	0.02	151.32	0.12	151.84	0.17
150.29	0.00	150.81	0.03	151.33	0.12	151.85	0.17
150.30	0.00	150.82	0.03	151.34	0.12	151.86	0.17
150.31	0.00	150.83	0.03	151.35	0.12	151.87	0.17
150.32	0.00	150.84	0.04	151.36	0.12	151.88	0.17
150.33	0.00	150.85	0.04	151.37	0.13	151.89	0.17
150.34	0.00	150.86	0.05	151.38	0.13	151.90	0.17
150.35	0.00	150.87	0.05	151.39	0.13	151.91	0.17
150.36	0.00	150.88	0.05	151.40	0.13	151.92	0.17
150.37	0.00	150.89	0.05	151.41	0.13	151.93	0.18
150.38	0.00	150.90	0.06	151.42	0.13	151.94	0.18
150.39	0.00	150.91	0.06	151.43	0.13	151.95	0.18
150.40	0.00	150.92	0.06	151.44	0.13	151.96	0.18
150.41	0.00	150.93	0.06	151.45	0.13	151.97	0.18

Stage-Discharge for Pond B-21: Basin #21 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
151.98	0.18	152.50	1.12	153.02	7.48	153.54	15.90
151.99	0.18	152.51	1.21	153.03	7.64	153.55	15.92
152.00	0.18	152.52	1.29	153.04	7.79	153.56	15.94
152.01	0.18	152.53	1.38	153.05	7.95	153.57	15.96
152.02	0.18	152.54	1.46	153.06	8.11	153.58	15.99
152.03	0.18	152.55	1.55	153.07	8.27	153.59	16.01
152.04	0.18	152.56	1.64	153.08	8.43	153.60	16.03
152.05	0.18	152.57	1.74	153.09	8.59	153.61	16.05
152.06	0.19	152.58	1.83	153.10	8.75	153.62	16.08
152.07	0.19	152.59	1.93	153.11	8.91	153.63	16.10
152.08	0.19	152.60	2.03	153.12	9.07	153.64	16.12
152.09	0.19	152.61	2.13	153.13	9.24	153.65	16.14
152.10	0.19	152.62	2.24	153.14	9.40	153.66	16.17
152.11	0.19	152.63	2.34	153.15	9.57	153.67	16.19
152.12	0.19	152.64	2.45	153.16	9.73	153.68	16.21
152.13	0.19	152.65	2.55	153.17	9.90	153.69	16.23
152.14	0.19	152.66	2.66	153.18	10.07	153.70	16.26
152.15	0.19	152.67	2.77	153.19	10.24	153.71	16.28
152.16	0.19	152.68	2.89	153.20	10.41	153.72	16.30
152.17	0.19	152.69	3.00	153.21	10.58	153.73	16.32
152.18	0.19	152.70	3.12	153.22	10.75	153.74	16.34
152.19	0.19	152.71	3.23	153.23	10.92	153.75	16.37
152.20	0.20	152.72	3.35	153.24	11.10	153.76	16.39
152.21	0.20	152.73	3.47	153.25	11.27	153.77	16.41
152.22	0.20	152.74	3.59	153.26	11.44	153.78	16.43
152.23	0.20	152.75	3.72	153.27	11.62	153.79	16.46
152.24	0.20	152.76	3.84	153.28	11.80	153.80	16.48
152.25	0.20	152.77	3.96	153.29	11.97	153.81	16.50
152.26	0.20	152.78	4.09	153.30	12.15	153.82	16.52
152.27	0.20	152.79	4.22	153.31	12.33	153.83	16.54
152.28	0.20	152.80	4.35	153.32	12.51	153.84	16.56
152.29	0.20	152.81	4.48	153.33	12.69	153.85	16.59
152.30	0.20	152.82	4.61	153.34	12.87	153.86	16.61
152.31	0.20	152.83	4.74	153.35	13.05	153.87	16.63
152.32	0.20	152.84	4.88	153.36	13.23	153.88	16.65
152.33	0.20	152.85	5.01	153.37	13.42	153.89	16.67
152.34	0.22	152.86	5.15	153.38	13.60	153.90	16.70
152.35	0.24	152.87	5.29	153.39	13.78	153.91	16.72
152.36	0.27	152.88	5.43	153.40	13.97	153.92	16.74
152.37	0.31	152.89	5.57	153.41	14.15	153.93	16.76
152.38	0.35	152.90	5.71	153.42	14.34	153.94	16.78
152.39	0.40	152.91	5.85	153.43	14.53	153.95	16.80
152.40	0.45	152.92	5.99	153.44	14.72	153.96	16.82
152.41	0.50	152.93	6.14	153.45	14.90	153.97	16.85
152.42	0.56	152.94	6.28	153.46	15.09	153.98	16.87
152.43	0.62	152.95	6.43	153.47	15.28	153.99	16.89
152.44	0.69	152.96	6.58	153.48	15.47	154.00	16.91
152.45	0.75	152.97	6.73	153.49	15.66	154.01	16.93
152.46	0.82	152.98	6.87	153.50	15.80	154.02	16.95
152.47	0.89	152.99	7.03	153.51	15.83	154.03	16.97
152.48	0.97	153.00	7.18	153.52	15.85	154.04	17.00
152.49	1.04	153.01	7.33	153.53	15.87	154.05	17.02

Stage-Discharge for Pond B-21: Basin #21 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
154.06	17.04	154.58	53.10	155.10	146.75
154.07	17.06	154.59	54.54	155.11	148.87
154.08	17.08	154.60	56.00	155.12	151.01
154.09	17.10	154.61	57.49	155.13	153.15
154.10	17.12	154.62	59.01	155.14	155.31
154.11	17.14	154.63	60.55	155.15	157.48
154.12	17.17	154.64	62.12	155.16	159.67
154.13	17.19	154.65	63.71	155.17	161.81
154.14	17.21	154.66	65.33	155.18	163.96
154.15	17.23	154.67	66.98	155.19	166.13
154.16	17.25	154.68	68.66	155.20	168.30
154.17	17.39	154.69	70.36	155.21	170.49
154.18	17.62	154.70	72.09	155.22	172.68
154.19	17.92	154.71	73.84	155.23	174.89
154.20	18.27	154.72	75.62	155.24	177.11
154.21	18.67	154.73	77.43	155.25	179.33
154.22	19.10	154.74	79.26	155.26	181.57
154.23	19.57	154.75	81.13	155.27	183.82
154.24	20.07	154.76	83.02	155.28	186.08
154.25	20.61	154.77	84.66	155.29	188.35
154.26	21.18	154.78	86.32	155.30	190.63
154.27	21.77	154.79	88.00	155.31	192.91
154.28	22.39	154.80	89.68	155.32	195.21
154.29	23.04	154.81	91.38	155.33	197.52
154.30	23.71	154.82	93.10	155.34	199.84
154.31	24.41	154.83	94.82	155.35	202.17
154.32	25.13	154.84	96.56	155.36	204.51
154.33	25.87	154.85	98.31	155.37	206.89
154.34	26.64	154.86	100.08	155.38	209.29
154.35	27.42	154.87	101.86	155.39	211.70
154.36	28.23	154.88	103.65	155.40	214.11
154.37	29.10	154.89	105.45	155.41	216.54
154.38	29.99	154.90	107.27	155.42	218.98
154.39	30.91	154.91	109.09	155.43	221.43
154.40	31.85	154.92	110.94	155.44	223.89
154.41	32.82	154.93	112.79	155.45	226.35
154.42	33.81	154.94	114.65	155.46	228.83
154.43	34.83	154.95	116.53	155.47	231.33
154.44	35.88	154.96	118.42	155.48	233.83
154.45	36.94	154.97	120.36	155.49	236.34
154.46	38.04	154.98	122.31	155.50	**238.86**
154.47	39.15	154.99	124.27		
154.48	40.30	155.00	126.25		
154.49	41.46	155.01	128.24		
154.50	42.65	155.02	130.25		
154.51	43.87	155.03	132.27		
154.52	45.10	155.04	134.30		
154.53	46.37	155.05	136.34		
154.54	47.65	155.06	138.40		
154.55	48.96	155.07	140.47		
154.56	50.30	155.08	142.55		
154.57	51.69	155.09	144.65		

Stage-Area-Storage for Pond B-21: Basin #21

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
149.90	0	0
149.91	485	2
149.92	970	10
149.93	1,454	22
149.94	1,939	39
149.95	2,424	61
149.96	2,909	87
149.97	3,394	119
149.98	3,878	155
149.99	4,363	196
150.00	4,848	242
150.01	4,857	291
150.02	4,867	340
150.03	4,876	388
150.04	4,885	437
150.05	4,894	486
150.06	4,904	535
150.07	4,913	584
150.08	4,922	633
150.09	4,932	682
150.10	4,941	732
150.11	4,950	781
150.12	4,959	831
150.13	4,969	880
150.14	4,978	930
150.15	4,987	980
150.16	4,996	1,030
150.17	5,006	1,080
150.18	5,015	1,130
150.19	5,024	1,180
150.20	5,034	1,231
150.21	5,043	1,281
150.22	5,052	1,331
150.23	5,061	1,382
150.24	5,071	1,433
150.25	5,080	1,483
150.26	5,089	1,534
150.27	5,099	1,585
150.28	5,108	1,636
150.29	5,117	1,687
150.30	5,126	1,739
150.31	5,136	1,790
150.32	5,145	1,841
150.33	5,154	1,893
150.34	5,164	1,944
150.35	5,173	1,996
150.36	5,182	2,048
150.37	5,191	2,100
150.38	5,201	2,152
150.39	5,210	2,204
150.40	5,219	2,256
150.41	5,228	2,308
150.42	5,238	2,360
150.43	5,247	2,413
150.44	5,256	2,465
150.45	5,266	2,518
150.46	5,275	2,571
150.47	5,284	2,623
150.48	5,293	2,676
150.49	5,303	2,729
150.50	5,312	2,782
150.51	5,321	2,836
150.52	5,331	2,889
150.53	5,340	2,942
150.54	5,349	2,996
150.55	5,358	3,049
150.56	5,368	3,103
150.57	5,377	3,157
150.58	5,386	3,210
150.59	5,396	3,264
150.60	5,405	3,318
150.61	5,414	3,372
150.62	5,423	3,427
150.63	5,433	3,481
150.64	5,442	3,535
150.65	5,451	3,590
150.66	5,460	3,644
150.67	5,470	3,699
150.68	5,479	3,754
150.69	5,488	3,808
150.70	5,498	3,863
150.71	5,507	3,918
150.72	5,516	3,973
150.73	5,525	4,029
150.74	5,535	4,084
150.75	5,544	4,139
150.76	5,553	4,195
150.77	5,563	4,250
150.78	5,572	4,306
150.79	5,581	4,362
150.80	5,590	4,418
150.81	5,600	4,474
150.82	5,609	4,530
150.83	5,618	4,586
150.84	5,628	4,642
150.85	5,637	4,698
150.86	5,646	4,755
150.87	5,655	4,811
150.88	5,665	4,868
150.89	5,674	4,925
150.90	5,683	4,981
150.91	5,692	5,038
150.92	5,702	5,095
150.93	5,711	5,152

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.94	5,720	5,210	151.46	6,229	8,316
150.95	5,730	5,267	151.47	6,239	8,378
150.96	5,739	5,324	151.48	6,249	8,440
150.97	5,748	5,382	151.49	6,259	8,503
150.98	5,757	5,439	151.50	6,269	8,566
150.99	5,767	5,497	151.51	6,278	8,628
151.00	5,776	5,554	151.52	6,288	8,691
151.01	5,786	5,612	151.53	6,298	8,754
151.02	5,796	5,670	151.54	6,308	8,817
151.03	5,806	5,728	151.55	6,318	8,880
151.04	5,815	5,786	151.56	6,328	8,943
151.05	5,825	5,844	151.57	6,337	9,007
151.06	5,835	5,903	151.58	6,347	9,070
151.07	5,845	5,961	151.59	6,357	9,134
151.08	5,855	6,020	151.60	6,367	9,197
151.09	5,865	6,078	151.61	6,377	9,261
151.10	5,874	6,137	151.62	6,387	9,325
151.11	5,884	6,196	151.63	6,397	9,389
151.12	5,894	6,255	151.64	6,406	9,453
151.13	5,904	6,314	151.65	6,416	9,517
151.14	5,914	6,373	151.66	6,426	9,581
151.15	5,924	6,432	151.67	6,436	9,645
151.16	5,934	6,491	151.68	6,446	9,710
151.17	5,943	6,551	151.69	6,456	9,774
151.18	5,953	6,610	151.70	6,466	9,839
151.19	5,963	6,670	151.71	6,475	9,904
151.20	5,973	6,729	151.72	6,485	9,968
151.21	5,983	6,789	151.73	6,495	10,033
151.22	5,993	6,849	151.74	6,505	10,098
151.23	6,003	6,909	151.75	6,515	10,163
151.24	6,012	6,969	151.76	6,525	10,229
151.25	6,022	7,029	151.77	6,534	10,294
151.26	6,032	7,089	151.78	6,544	10,359
151.27	6,042	7,150	151.79	6,554	10,425
151.28	6,052	7,210	151.80	6,564	10,490
151.29	6,062	7,271	151.81	6,574	10,556
151.30	6,072	7,332	151.82	6,584	10,622
151.31	6,081	7,392	151.83	6,594	10,688
151.32	6,091	7,453	151.84	6,603	10,754
151.33	6,101	7,514	151.85	6,613	10,820
151.34	6,111	7,575	151.86	6,623	10,886
151.35	6,121	7,636	151.87	6,633	10,952
151.36	6,131	7,698	151.88	6,643	11,019
151.37	6,140	7,759	151.89	6,653	11,085
151.38	6,150	7,820	151.90	6,663	11,152
151.39	6,160	7,882	151.91	6,672	11,218
151.40	6,170	7,944	151.92	6,682	11,285
151.41	6,180	8,005	151.93	6,692	11,352
151.42	6,190	8,067	151.94	6,702	11,419
151.43	6,200	8,129	151.95	6,712	11,486
151.44	6,209	8,191	151.96	6,722	11,553
151.45	6,219	8,253	151.97	6,731	11,621

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.98	6,741	11,688	152.50	7,282	15,334
151.99	6,751	11,755	152.51	7,292	15,406
152.00	6,761	11,823	152.52	7,302	15,479
152.01	6,771	11,891	152.53	7,313	15,552
152.02	6,782	11,958	152.54	7,323	15,626
152.03	6,792	12,026	152.55	7,334	15,699
152.04	6,803	12,094	152.56	7,344	15,772
152.05	6,813	12,162	152.57	7,354	15,846
152.06	6,823	12,230	152.58	7,365	15,919
152.07	6,834	12,299	152.59	7,375	15,993
152.08	6,844	12,367	152.60	7,386	16,067
152.09	6,855	12,436	152.61	7,396	16,141
152.10	6,865	12,504	152.62	7,406	16,215
152.11	6,876	12,573	152.63	7,417	16,289
152.12	6,886	12,642	152.64	7,427	16,363
152.13	6,896	12,711	152.65	7,438	16,437
152.14	6,907	12,780	152.66	7,448	16,512
152.15	6,917	12,849	152.67	7,458	16,586
152.16	6,928	12,918	152.68	7,469	16,661
152.17	6,938	12,987	152.69	7,479	16,736
152.18	6,948	13,057	152.70	7,490	16,811
152.19	6,959	13,126	152.71	7,500	16,886
152.20	6,969	13,196	152.72	7,511	16,961
152.21	6,980	13,266	152.73	7,521	17,036
152.22	6,990	13,336	152.74	7,531	17,111
152.23	7,000	13,405	152.75	7,542	17,186
152.24	7,011	13,476	152.76	7,552	17,262
152.25	7,021	13,546	152.77	7,563	17,337
152.26	7,032	13,616	152.78	7,573	17,413
152.27	7,042	13,686	152.79	7,583	17,489
152.28	7,052	13,757	152.80	7,594	17,565
152.29	7,063	13,827	152.81	7,604	17,641
152.30	7,073	13,898	152.82	7,615	17,717
152.31	7,084	13,969	152.83	7,625	17,793
152.32	7,094	14,040	152.84	7,635	17,869
152.33	7,105	14,111	152.85	7,646	17,946
152.34	7,115	14,182	152.86	7,656	18,022
152.35	7,125	14,253	152.87	7,667	18,099
152.36	7,136	14,324	152.88	7,677	18,176
152.37	7,146	14,396	152.89	7,687	18,252
152.38	7,157	14,467	152.90	7,698	18,329
152.39	7,167	14,539	152.91	7,708	18,406
152.40	7,177	14,611	152.92	7,719	18,484
152.41	7,188	14,682	152.93	7,729	18,561
152.42	7,198	14,754	152.94	7,740	18,638
152.43	7,209	14,826	152.95	7,750	18,716
152.44	7,219	14,899	152.96	7,760	18,793
152.45	7,229	14,971	152.97	7,771	18,871
152.46	7,240	15,043	152.98	7,781	18,949
152.47	7,250	15,116	152.99	7,792	19,026
152.48	7,261	15,188	153.00	7,802	19,104
152.49	7,271	15,261	153.01	7,813	19,182

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.02	7,824	19,261	153.54	8,395	23,478
153.03	7,835	19,339	153.55	8,406	23,562
153.04	7,846	19,417	153.56	8,417	23,646
153.05	7,857	19,496	153.57	8,428	23,730
153.06	7,868	19,574	153.58	8,439	23,814
153.07	7,879	19,653	153.59	8,450	23,899
153.08	7,890	19,732	153.60	8,461	23,983
153.09	7,901	19,811	153.61	8,472	24,068
153.10	7,912	19,890	153.62	8,483	24,153
153.11	7,923	19,969	153.63	8,494	24,238
153.12	7,934	20,049	153.64	8,505	24,323
153.13	7,945	20,128	153.65	8,516	24,408
153.14	7,956	20,207	153.66	8,527	24,493
153.15	7,967	20,287	153.67	8,538	24,578
153.16	7,978	20,367	153.68	8,549	24,664
153.17	7,989	20,447	153.69	8,560	24,749
153.18	8,000	20,527	153.70	8,571	24,835
153.19	8,011	20,607	153.71	8,582	24,921
153.20	8,022	20,687	153.72	8,593	25,006
153.21	8,033	20,767	153.73	8,604	25,092
153.22	8,044	20,847	153.74	8,615	25,179
153.23	8,055	20,928	153.75	8,626	25,265
153.24	8,066	21,009	153.76	8,636	25,351
153.25	8,077	21,089	153.77	8,647	25,437
153.26	8,087	21,170	153.78	8,658	25,524
153.27	8,098	21,251	153.79	8,669	25,611
153.28	8,109	21,332	153.80	8,680	25,697
153.29	8,120	21,413	153.81	8,691	25,784
153.30	8,131	21,494	153.82	8,702	25,871
153.31	8,142	21,576	153.83	8,713	25,958
153.32	8,153	21,657	153.84	8,724	26,045
153.33	8,164	21,739	153.85	8,735	26,133
153.34	8,175	21,821	153.86	8,746	26,220
153.35	8,186	21,902	153.87	8,757	26,308
153.36	8,197	21,984	153.88	8,768	26,395
153.37	8,208	22,066	153.89	8,779	26,483
153.38	8,219	22,148	153.90	8,790	26,571
153.39	8,230	22,231	153.91	8,801	26,659
153.40	8,241	22,313	153.92	8,812	26,747
153.41	8,252	22,396	153.93	8,823	26,835
153.42	8,263	22,478	153.94	8,834	26,923
153.43	8,274	22,561	153.95	8,845	27,012
153.44	8,285	22,644	153.96	8,856	27,100
153.45	8,296	22,726	153.97	8,867	27,189
153.46	8,307	22,809	153.98	8,878	27,278
153.47	8,318	22,893	153.99	8,889	27,366
153.48	8,329	22,976	154.00	8,900	27,455
153.49	8,340	23,059	154.01	8,912	27,544
153.50	8,351	23,143	154.02	8,923	27,634
153.51	8,362	23,226	154.03	8,935	27,723
153.52	8,373	23,310	154.04	8,946	27,812
153.53	8,384	23,394	154.05	8,958	27,902

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
154.06	8,969	27,991	154.58	9,569	32,812
154.07	8,981	28,081	154.59	9,581	32,907
154.08	8,992	28,171	154.60	9,592	33,003
154.09	9,004	28,261	154.61	9,604	33,099
154.10	9,015	28,351	154.62	9,615	33,195
154.11	9,027	28,441	154.63	9,627	33,291
154.12	9,038	28,532	154.64	9,639	33,388
154.13	9,050	28,622	154.65	9,650	33,484
154.14	9,062	28,713	154.66	9,662	33,581
154.15	9,073	28,803	154.67	9,673	33,677
154.16	9,085	28,894	154.68	9,685	33,774
154.17	9,096	28,985	154.69	9,696	33,871
154.18	9,108	29,076	154.70	9,708	33,968
154.19	9,119	29,167	154.71	9,719	34,065
154.20	9,131	29,258	154.72	9,731	34,163
154.21	9,142	29,350	154.73	9,742	34,260
154.22	9,154	29,441	154.74	9,754	34,357
154.23	9,165	29,533	154.75	9,766	34,455
154.24	9,177	29,625	154.76	9,777	34,553
154.25	9,189	29,716	154.77	9,789	34,651
154.26	9,200	29,808	154.78	9,800	34,748
154.27	9,212	29,900	154.79	9,812	34,847
154.28	9,223	29,993	154.80	9,823	34,945
154.29	9,235	30,085	154.81	9,835	35,043
154.30	9,246	30,177	154.82	9,846	35,141
154.31	9,258	30,270	154.83	9,858	35,240
154.32	9,269	30,362	154.84	9,869	35,339
154.33	9,281	30,455	154.85	9,881	35,437
154.34	9,292	30,548	154.86	9,892	35,536
154.35	9,304	30,641	154.87	9,904	35,635
154.36	9,315	30,734	154.88	9,916	35,734
154.37	9,327	30,827	154.89	9,927	35,833
154.38	9,339	30,921	154.90	9,939	35,933
154.39	9,350	31,014	154.91	9,950	36,032
154.40	9,362	31,108	154.92	9,962	36,132
154.41	9,373	31,201	154.93	9,973	36,231
154.42	9,385	31,295	154.94	9,985	36,331
154.43	9,396	31,389	154.95	9,996	36,431
154.44	9,408	31,483	154.96	10,008	36,531
154.45	9,419	31,577	154.97	10,019	36,631
154.46	9,431	31,671	154.98	10,031	36,732
154.47	9,442	31,766	154.99	10,042	36,832
154.48	9,454	31,860	155.00	10,054	36,932
154.49	9,465	31,955	155.01	10,066	37,033
154.50	9,477	32,050	155.02	10,078	37,134
154.51	9,489	32,144	155.03	10,090	37,235
154.52	9,500	32,239	155.04	10,102	37,336
154.53	9,512	32,334	155.05	10,114	37,437
154.54	9,523	32,430	155.06	10,126	37,538
154.55	9,535	32,525	155.07	10,138	37,639
154.56	9,546	32,620	155.08	10,150	37,741
154.57	9,558	32,716	155.09	10,162	37,842

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
155.10	10,174	37,944
155.11	10,186	38,046
155.12	10,198	38,148
155.13	10,210	38,250
155.14	10,222	38,352
155.15	10,234	38,454
155.16	10,246	38,556
155.17	10,258	38,659
155.18	10,270	38,762
155.19	10,282	38,864
155.20	10,294	38,967
155.21	10,306	39,070
155.22	10,318	39,173
155.23	10,330	39,277
155.24	10,342	39,380
155.25	10,354	39,483
155.26	10,365	39,587
155.27	10,377	39,691
155.28	10,389	39,794
155.29	10,401	39,898
155.30	10,413	40,003
155.31	10,425	40,107
155.32	10,437	40,211
155.33	10,449	40,315
155.34	10,461	40,420
155.35	10,473	40,525
155.36	10,485	40,629
155.37	10,497	40,734
155.38	10,509	40,839
155.39	10,521	40,945
155.40	10,533	41,050
155.41	10,545	41,155
155.42	10,557	41,261
155.43	10,569	41,366
155.44	10,581	41,472
155.45	10,593	41,578
155.46	10,605	41,684
155.47	10,617	41,790
155.48	10,629	41,896
155.49	10,641	42,003
155.50	**10,653**	**42,109**

Summary for Pond B-22: Basin #22

Inflow Area = 2.460 ac, 33.05% Impervious, Inflow Depth = 3.90" for Future 10 yr event
Inflow = 9.91 cfs @ 12.17 hrs, Volume= 0.800 af
Outflow = 3.32 cfs @ 12.45 hrs, Volume= 0.663 af, Atten= 66%, Lag= 16.6 min
Primary = 3.32 cfs @ 12.45 hrs, Volume= 0.663 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 149.86' @ 12.45 hrs Surf.Area= 8,853 sf Storage= 17,068 cf

Plug-Flow detention time= 436.0 min calculated for 0.662 af (83% of inflow)
Center-of-Mass det. time= 362.0 min (1,157.7 - 795.6)

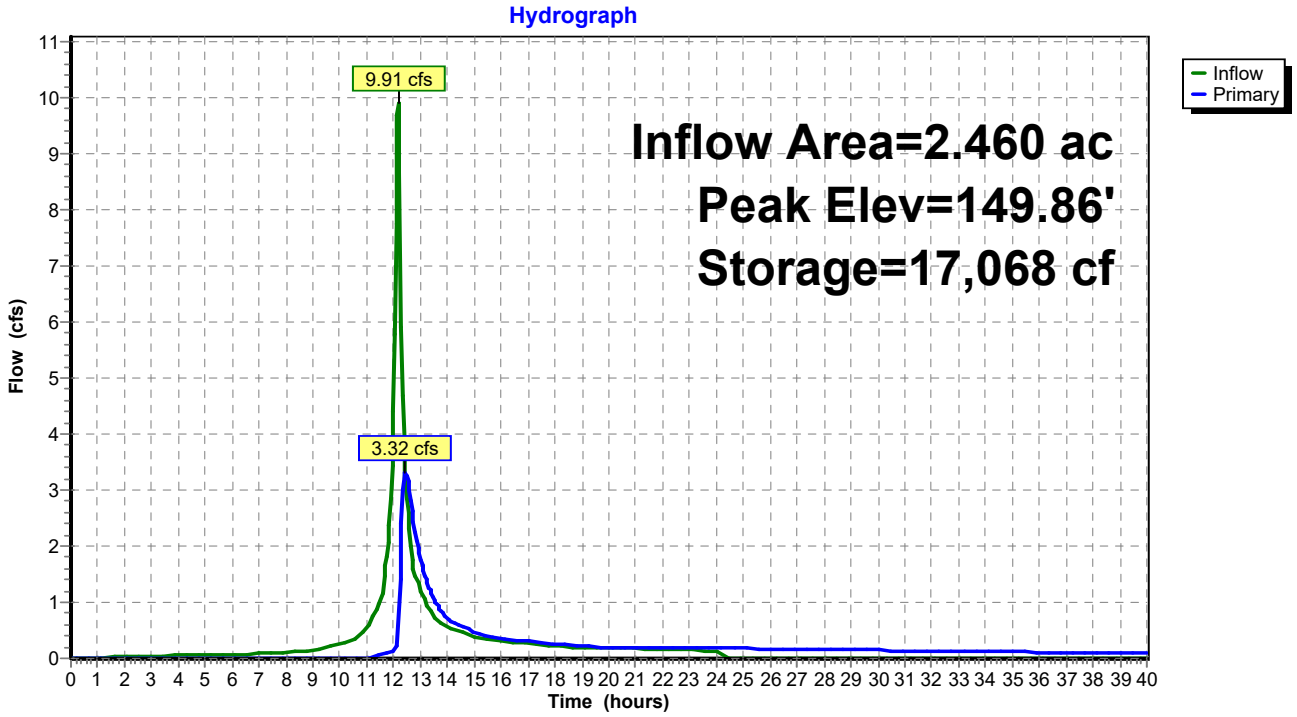
Volume	Invert	Avail.Storage	Storage Description
#1	147.30'	50,528 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
147.30	0	0	0
148.00	6,928	2,425	2,425
149.00	7,937	7,433	9,857
150.00	9,003	8,470	18,327
151.00	10,125	9,564	27,891
152.00	11,304	10,715	38,606
153.00	12,540	11,922	50,528

Device	Routing	Invert	Outlet Devices
#1	Primary	147.30'	**18.0" Round Culvert** L= 24.0' Ke= 0.500 Inlet / Outlet Invert= 147.30' / 146.20' S= 0.0458 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	148.15'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	149.47'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	152.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.32 cfs @ 12.45 hrs HW=149.86' (Free Discharge)
- **1=Culvert** (Passes 3.32 cfs of 11.44 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.21 cfs @ 6.10 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.11 cfs @ 2.04 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-22: Basin #22



Stage-Discharge for Pond B-22: Basin #22

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.30	0.00	147.82	0.00	148.34	0.05	148.86	0.13
147.31	0.00	147.83	0.00	148.35	0.05	148.87	0.13
147.32	0.00	147.84	0.00	148.36	0.05	148.88	0.13
147.33	0.00	147.85	0.00	148.37	0.06	148.89	0.13
147.34	0.00	147.86	0.00	148.38	0.06	148.90	0.13
147.35	0.00	147.87	0.00	148.39	0.06	148.91	0.13
147.36	0.00	147.88	0.00	148.40	0.06	148.92	0.13
147.37	0.00	147.89	0.00	148.41	0.06	148.93	0.13
147.38	0.00	147.90	0.00	148.42	0.07	148.94	0.14
147.39	0.00	147.91	0.00	148.43	0.07	148.95	0.14
147.40	0.00	147.92	0.00	148.44	0.07	148.96	0.14
147.41	0.00	147.93	0.00	148.45	0.07	148.97	0.14
147.42	0.00	147.94	0.00	148.46	0.07	148.98	0.14
147.43	0.00	147.95	0.00	148.47	0.08	148.99	0.14
147.44	0.00	147.96	0.00	148.48	0.08	149.00	0.14
147.45	0.00	147.97	0.00	148.49	0.08	149.01	0.14
147.46	0.00	147.98	0.00	148.50	0.08	149.02	0.14
147.47	0.00	147.99	0.00	148.51	0.08	149.03	0.14
147.48	0.00	148.00	0.00	148.52	0.08	149.04	0.15
147.49	0.00	148.01	0.00	148.53	0.09	149.05	0.15
147.50	0.00	148.02	0.00	148.54	0.09	149.06	0.15
147.51	0.00	148.03	0.00	148.55	0.09	149.07	0.15
147.52	0.00	148.04	0.00	148.56	0.09	149.08	0.15
147.53	0.00	148.05	0.00	148.57	0.09	149.09	0.15
147.54	0.00	148.06	0.00	148.58	0.09	149.10	0.15
147.55	0.00	148.07	0.00	148.59	0.10	149.11	0.15
147.56	0.00	148.08	0.00	148.60	0.10	149.12	0.15
147.57	0.00	148.09	0.00	148.61	0.10	149.13	0.15
147.58	0.00	148.10	0.00	148.62	0.10	149.14	0.15
147.59	0.00	148.11	0.00	148.63	0.10	149.15	0.16
147.60	0.00	148.12	0.00	148.64	0.10	149.16	0.16
147.61	0.00	148.13	0.00	148.65	0.10	149.17	0.16
147.62	0.00	148.14	0.00	148.66	0.10	149.18	0.16
147.63	0.00	148.15	0.00	148.67	0.11	149.19	0.16
147.64	0.00	148.16	0.00	148.68	0.11	149.20	0.16
147.65	0.00	148.17	0.00	148.69	0.11	149.21	0.16
147.66	0.00	148.18	0.00	148.70	0.11	149.22	0.16
147.67	0.00	148.19	0.00	148.71	0.11	149.23	0.16
147.68	0.00	148.20	0.00	148.72	0.11	149.24	0.16
147.69	0.00	148.21	0.01	148.73	0.11	149.25	0.16
147.70	0.00	148.22	0.01	148.74	0.11	149.26	0.16
147.71	0.00	148.23	0.01	148.75	0.12	149.27	0.17
147.72	0.00	148.24	0.01	148.76	0.12	149.28	0.17
147.73	0.00	148.25	0.02	148.77	0.12	149.29	0.17
147.74	0.00	148.26	0.02	148.78	0.12	149.30	0.17
147.75	0.00	148.27	0.02	148.79	0.12	149.31	0.17
147.76	0.00	148.28	0.03	148.80	0.12	149.32	0.17
147.77	0.00	148.29	0.03	148.81	0.12	149.33	0.17
147.78	0.00	148.30	0.03	148.82	0.12	149.34	0.17
147.79	0.00	148.31	0.04	148.83	0.12	149.35	0.17
147.80	0.00	148.32	0.04	148.84	0.13	149.36	0.17
147.81	0.00	148.33	0.05	148.85	0.13	149.37	0.17

Stage-Discharge for Pond B-22: Basin #22 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
149.38	0.17	149.90	3.82	150.42	11.78	150.94	14.46
149.39	0.17	149.91	3.94	150.43	11.95	150.95	14.49
149.40	0.18	149.92	4.07	150.44	12.13	150.96	14.51
149.41	0.18	149.93	4.20	150.45	12.31	150.97	14.54
149.42	0.18	149.94	4.33	150.46	12.49	150.98	14.56
149.43	0.18	149.95	4.46	150.47	12.67	150.99	14.59
149.44	0.18	149.96	4.59	150.48	12.85	151.00	14.61
149.45	0.18	149.97	4.72	150.49	13.03	151.01	14.64
149.46	0.18	149.98	4.86	150.50	13.21	151.02	14.66
149.47	0.18	149.99	4.99	150.51	13.35	151.03	14.69
149.48	0.19	150.00	5.13	150.52	13.37	151.04	14.71
149.49	0.22	150.01	5.27	150.53	13.40	151.05	14.74
149.50	0.25	150.02	5.41	150.54	13.43	151.06	14.76
149.51	0.29	150.03	5.55	150.55	13.45	151.07	14.79
149.52	0.33	150.04	5.69	150.56	13.48	151.08	14.81
149.53	0.38	150.05	5.83	150.57	13.51	151.09	14.84
149.54	0.43	150.06	5.97	150.58	13.53	151.10	14.86
149.55	0.48	150.07	6.12	150.59	13.56	151.11	14.88
149.56	0.54	150.08	6.26	150.60	13.59	151.12	14.91
149.57	0.60	150.09	6.41	150.61	13.61	151.13	14.93
149.58	0.66	150.10	6.56	150.62	13.64	151.14	14.96
149.59	0.73	150.11	6.71	150.63	13.67	151.15	14.98
149.60	0.80	150.12	6.86	150.64	13.69	151.16	15.01
149.61	0.87	150.13	7.01	150.65	13.72	151.17	15.03
149.62	0.95	150.14	7.16	150.66	13.75	151.18	15.05
149.63	1.02	150.15	7.31	150.67	13.77	151.19	15.08
149.64	1.10	150.16	7.46	150.68	13.80	151.20	15.10
149.65	1.18	150.17	7.62	150.69	13.83	151.21	15.13
149.66	1.27	150.18	7.78	150.70	13.85	151.22	15.15
149.67	1.35	150.19	7.93	150.71	13.88	151.23	15.17
149.68	1.44	150.20	8.09	150.72	13.90	151.24	15.20
149.69	1.53	150.21	8.25	150.73	13.93	151.25	15.22
149.70	1.62	150.22	8.41	150.74	13.96	151.26	15.24
149.71	1.72	150.23	8.57	150.75	13.98	151.27	15.27
149.72	1.81	150.24	8.73	150.76	14.01	151.28	15.29
149.73	1.91	150.25	8.89	150.77	14.03	151.29	15.32
149.74	2.01	150.26	9.05	150.78	14.06	151.30	15.34
149.75	2.11	150.27	9.22	150.79	14.08	151.31	15.36
149.76	2.21	150.28	9.38	150.80	14.11	151.32	15.39
149.77	2.32	150.29	9.55	150.81	14.14	151.33	15.41
149.78	2.43	150.30	9.71	150.82	14.16	151.34	15.43
149.79	2.53	150.31	9.88	150.83	14.19	151.35	15.46
149.80	2.64	150.32	10.05	150.84	14.21	151.36	15.48
149.81	2.75	150.33	10.22	150.85	14.24	151.37	15.50
149.82	2.87	150.34	10.39	150.86	14.26	151.38	15.53
149.83	2.98	150.35	10.56	150.87	14.29	151.39	15.55
149.84	3.10	150.36	10.73	150.88	14.31	151.40	15.57
149.85	3.21	150.37	10.90	150.89	14.34	151.41	15.60
149.86	3.33	150.38	11.08	150.90	14.36	151.42	15.62
149.87	3.45	150.39	11.25	150.91	14.39	151.43	15.64
149.88	3.57	150.40	11.43	150.92	14.41	151.44	15.67
149.89	3.70	150.41	11.60	150.93	14.44	151.45	15.69

Stage-Discharge for Pond B-22: Basin #22 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
151.46	15.71	151.98	16.87	152.50	17.95
151.47	15.74	151.99	16.89	152.51	17.97
151.48	15.76	152.00	16.91	152.52	17.99
151.49	15.78	152.01	16.93	152.53	18.01
151.50	15.80	152.02	16.95	152.54	18.03
151.51	15.83	152.03	16.97	152.55	18.05
151.52	15.85	152.04	17.00	152.56	18.07
151.53	15.87	152.05	17.02	152.57	18.09
151.54	15.90	152.06	17.04	152.58	18.11
151.55	15.92	152.07	17.06	152.59	18.13
151.56	15.94	152.08	17.08	152.60	18.15
151.57	15.96	152.09	17.10	152.61	18.17
151.58	15.99	152.10	17.12	152.62	18.19
151.59	16.01	152.11	17.14	152.63	18.21
151.60	16.03	152.12	17.17	152.64	18.23
151.61	16.05	152.13	17.19	152.65	18.25
151.62	16.08	152.14	17.21	152.66	18.27
151.63	16.10	152.15	17.23	152.67	18.29
151.64	16.12	152.16	17.25	152.68	18.31
151.65	16.14	152.17	17.27	152.69	18.33
151.66	16.17	152.18	17.29	152.70	18.35
151.67	16.19	152.19	17.31	152.71	18.37
151.68	16.21	152.20	17.33	152.72	18.39
151.69	16.23	152.21	17.35	152.73	18.41
151.70	16.26	152.22	17.38	152.74	18.43
151.71	16.28	152.23	17.40	152.75	18.45
151.72	16.30	152.24	17.42	152.76	18.47
151.73	16.32	152.25	17.44	152.77	18.49
151.74	16.34	152.26	17.46	152.78	18.51
151.75	16.37	152.27	17.48	152.79	18.52
151.76	16.39	152.28	17.50	152.80	18.54
151.77	16.41	152.29	17.52	152.81	18.56
151.78	16.43	152.30	17.54	152.82	18.58
151.79	16.46	152.31	17.56	152.83	18.60
151.80	16.48	152.32	17.58	152.84	18.62
151.81	16.50	152.33	17.60	152.85	18.64
151.82	16.52	152.34	17.62	152.86	18.66
151.83	16.54	152.35	17.64	152.87	18.68
151.84	16.56	152.36	17.66	152.88	18.70
151.85	16.59	152.37	17.69	152.89	18.72
151.86	16.61	152.38	17.71	152.90	18.74
151.87	16.63	152.39	17.73	152.91	18.76
151.88	16.65	152.40	17.75	152.92	18.78
151.89	16.67	152.41	17.77	152.93	18.80
151.90	16.70	152.42	17.79	152.94	18.82
151.91	16.72	152.43	17.81	152.95	18.83
151.92	16.74	152.44	17.83	152.96	18.97
151.93	16.76	152.45	17.85	152.97	19.20
151.94	16.78	152.46	17.87	152.98	19.50
151.95	16.80	152.47	17.89	152.99	19.85
151.96	16.82	152.48	17.91	153.00	**20.24**
151.97	16.85	152.49	17.93		

Stage-Area-Storage for Pond B-22: Basin #22

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.30	0	0	147.82	5,147	1,338
147.31	99	0	147.83	5,245	1,390
147.32	198	2	147.84	5,344	1,443
147.33	297	4	147.85	5,443	1,497
147.34	396	8	147.86	5,542	1,552
147.35	495	12	147.87	5,641	1,608
147.36	594	18	147.88	5,740	1,665
147.37	693	24	147.89	5,839	1,723
147.38	792	32	147.90	5,938	1,781
147.39	891	40	147.91	6,037	1,841
147.40	990	49	147.92	6,136	1,902
147.41	1,089	60	147.93	6,235	1,964
147.42	1,188	71	147.94	6,334	2,027
147.43	1,287	84	147.95	6,433	2,091
147.44	1,386	97	147.96	6,532	2,156
147.45	1,485	111	147.97	6,631	2,221
147.46	1,584	127	147.98	6,730	2,288
147.47	1,683	143	147.99	6,829	2,356
147.48	1,781	160	148.00	6,928	2,425
147.49	1,880	179	148.01	6,938	2,494
147.50	1,979	198	148.02	6,948	2,564
147.51	2,078	218	148.03	6,958	2,633
147.52	2,177	240	148.04	6,968	2,703
147.53	2,276	262	148.05	6,978	2,772
147.54	2,375	285	148.06	6,989	2,842
147.55	2,474	309	148.07	6,999	2,912
147.56	2,573	335	148.08	7,009	2,982
147.57	2,672	361	148.09	7,019	3,052
147.58	2,771	388	148.10	7,029	3,123
147.59	2,870	416	148.11	7,039	3,193
147.60	2,969	445	148.12	7,049	3,263
147.61	3,068	476	148.13	7,059	3,334
147.62	3,167	507	148.14	7,069	3,405
147.63	3,266	539	148.15	7,079	3,475
147.64	3,365	572	148.16	7,089	3,546
147.65	3,464	606	148.17	7,100	3,617
147.66	3,563	641	148.18	7,110	3,688
147.67	3,662	677	148.19	7,120	3,759
147.68	3,761	715	148.20	7,130	3,831
147.69	3,860	753	148.21	7,140	3,902
147.70	3,959	792	148.22	7,150	3,973
147.71	4,058	832	148.23	7,160	4,045
147.72	4,157	873	148.24	7,170	4,117
147.73	4,256	915	148.25	7,180	4,188
147.74	4,355	958	148.26	7,190	4,260
147.75	4,454	1,002	148.27	7,200	4,332
147.76	4,553	1,047	148.28	7,211	4,404
147.77	4,652	1,093	148.29	7,221	4,476
147.78	4,751	1,140	148.30	7,231	4,549
147.79	4,850	1,188	148.31	7,241	4,621
147.80	4,949	1,237	148.32	7,251	4,693
147.81	5,048	1,287	148.33	7,261	4,766

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.34	7,271	4,839	148.86	7,796	8,756
148.35	7,281	4,911	148.87	7,806	8,834
148.36	7,291	4,984	148.88	7,816	8,912
148.37	7,301	5,057	148.89	7,826	8,990
148.38	7,311	5,130	148.90	7,836	9,069
148.39	7,322	5,203	148.91	7,846	9,147
148.40	7,332	5,277	148.92	7,856	9,226
148.41	7,342	5,350	148.93	7,866	9,304
148.42	7,352	5,424	148.94	7,876	9,383
148.43	7,362	5,497	148.95	7,887	9,462
148.44	7,372	5,571	148.96	7,897	9,541
148.45	7,382	5,645	148.97	7,907	9,620
148.46	7,392	5,718	148.98	7,917	9,699
148.47	7,402	5,792	148.99	7,927	9,778
148.48	7,412	5,866	149.00	7,937	9,857
148.49	7,422	5,941	149.01	7,948	9,937
148.50	7,433	6,015	149.02	7,958	10,016
148.51	7,443	6,089	149.03	7,969	10,096
148.52	7,453	6,164	149.04	7,980	10,176
148.53	7,463	6,238	149.05	7,990	10,255
148.54	7,473	6,313	149.06	8,001	10,335
148.55	7,483	6,388	149.07	8,012	10,416
148.56	7,493	6,463	149.08	8,022	10,496
148.57	7,503	6,538	149.09	8,033	10,576
148.58	7,513	6,613	149.10	8,044	10,656
148.59	7,523	6,688	149.11	8,054	10,737
148.60	7,533	6,763	149.12	8,065	10,817
148.61	7,543	6,839	149.13	8,076	10,898
148.62	7,554	6,914	149.14	8,086	10,979
148.63	7,564	6,990	149.15	8,097	11,060
148.64	7,574	7,065	149.16	8,108	11,141
148.65	7,584	7,141	149.17	8,118	11,222
148.66	7,594	7,217	149.18	8,129	11,303
148.67	7,604	7,293	149.19	8,140	11,385
148.68	7,614	7,369	149.20	8,150	11,466
148.69	7,624	7,445	149.21	8,161	11,548
148.70	7,634	7,522	149.22	8,172	11,629
148.71	7,644	7,598	149.23	8,182	11,711
148.72	7,654	7,674	149.24	8,193	11,793
148.73	7,665	7,751	149.25	8,204	11,875
148.74	7,675	7,828	149.26	8,214	11,957
148.75	7,685	7,905	149.27	8,225	12,039
148.76	7,695	7,981	149.28	8,235	12,121
148.77	7,705	8,058	149.29	8,246	12,204
148.78	7,715	8,136	149.30	8,257	12,286
148.79	7,725	8,213	149.31	8,267	12,369
148.80	7,735	8,290	149.32	8,278	12,452
148.81	7,745	8,367	149.33	8,289	12,535
148.82	7,755	8,445	149.34	8,299	12,617
148.83	7,765	8,523	149.35	8,310	12,701
148.84	7,776	8,600	149.36	8,321	12,784
148.85	7,786	8,678	149.37	8,331	12,867

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
149.38	8,342	12,950	149.90	8,896	17,432
149.39	8,353	13,034	149.91	8,907	17,521
149.40	8,363	13,117	149.92	8,918	17,610
149.41	8,374	13,201	149.93	8,928	17,700
149.42	8,385	13,285	149.94	8,939	17,789
149.43	8,395	13,369	149.95	8,950	17,878
149.44	8,406	13,453	149.96	8,960	17,968
149.45	8,417	13,537	149.97	8,971	18,058
149.46	8,427	13,621	149.98	8,982	18,147
149.47	8,438	13,705	149.99	8,992	18,237
149.48	8,449	13,790	150.00	9,003	18,327
149.49	8,459	13,874	150.01	9,014	18,417
149.50	8,470	13,959	150.02	9,025	18,508
149.51	8,481	14,044	150.03	9,037	18,598
149.52	8,491	14,129	150.04	9,048	18,688
149.53	8,502	14,214	150.05	9,059	18,779
149.54	8,513	14,299	150.06	9,070	18,869
149.55	8,523	14,384	150.07	9,082	18,960
149.56	8,534	14,469	150.08	9,093	19,051
149.57	8,545	14,555	150.09	9,104	19,142
149.58	8,555	14,640	150.10	9,115	19,233
149.59	8,566	14,726	150.11	9,126	19,324
149.60	8,577	14,811	150.12	9,138	19,416
149.61	8,587	14,897	150.13	9,149	19,507
149.62	8,598	14,983	150.14	9,160	19,599
149.63	8,609	15,069	150.15	9,171	19,690
149.64	8,619	15,155	150.16	9,183	19,782
149.65	8,630	15,242	150.17	9,194	19,874
149.66	8,641	15,328	150.18	9,205	19,966
149.67	8,651	15,414	150.19	9,216	20,058
149.68	8,662	15,501	150.20	9,227	20,150
149.69	8,673	15,588	150.21	9,239	20,243
149.70	8,683	15,674	150.22	9,250	20,335
149.71	8,694	15,761	150.23	9,261	20,428
149.72	8,705	15,848	150.24	9,272	20,520
149.73	8,715	15,935	150.25	9,284	20,613
149.74	8,726	16,023	150.26	9,295	20,706
149.75	8,737	16,110	150.27	9,306	20,799
149.76	8,747	16,197	150.28	9,317	20,892
149.77	8,758	16,285	150.29	9,328	20,985
149.78	8,768	16,372	150.30	9,340	21,079
149.79	8,779	16,460	150.31	9,351	21,172
149.80	8,790	16,548	150.32	9,362	21,266
149.81	8,800	16,636	150.33	9,373	21,359
149.82	8,811	16,724	150.34	9,384	21,453
149.83	8,822	16,812	150.35	9,396	21,547
149.84	8,832	16,900	150.36	9,407	21,641
149.85	8,843	16,989	150.37	9,418	21,735
149.86	8,854	17,077	150.38	9,429	21,829
149.87	8,864	17,166	150.39	9,441	21,924
149.88	8,875	17,255	150.40	9,452	22,018
149.89	8,886	17,343	150.41	9,463	22,113

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.42	9,474	22,208	150.94	10,058	27,286
150.43	9,485	22,302	150.95	10,069	27,386
150.44	9,497	22,397	150.96	10,080	27,487
150.45	9,508	22,492	150.97	10,091	27,588
150.46	9,519	22,587	150.98	10,103	27,689
150.47	9,530	22,683	150.99	10,114	27,790
150.48	9,542	22,778	151.00	10,125	27,891
150.49	9,553	22,873	151.01	10,137	27,993
150.50	9,564	22,969	151.02	10,149	28,094
150.51	9,575	23,065	151.03	10,160	28,196
150.52	9,586	23,161	151.04	10,172	28,297
150.53	9,598	23,256	151.05	10,184	28,399
150.54	9,609	23,353	151.06	10,196	28,501
150.55	9,620	23,449	151.07	10,208	28,603
150.56	9,631	23,545	151.08	10,219	28,705
150.57	9,643	23,641	151.09	10,231	28,807
150.58	9,654	23,738	151.10	10,243	28,910
150.59	9,665	23,834	151.11	10,255	29,012
150.60	9,676	23,931	151.12	10,266	29,115
150.61	9,687	24,028	151.13	10,278	29,218
150.62	9,699	24,125	151.14	10,290	29,320
150.63	9,710	24,222	151.15	10,302	29,423
150.64	9,721	24,319	151.16	10,314	29,526
150.65	9,732	24,416	151.17	10,325	29,630
150.66	9,744	24,514	151.18	10,337	29,733
150.67	9,755	24,611	151.19	10,349	29,836
150.68	9,766	24,709	151.20	10,361	29,940
150.69	9,777	24,806	151.21	10,373	30,044
150.70	9,788	24,904	151.22	10,384	30,147
150.71	9,800	25,002	151.23	10,396	30,251
150.72	9,811	25,100	151.24	10,408	30,355
150.73	9,822	25,198	151.25	10,420	30,459
150.74	9,833	25,297	151.26	10,432	30,564
150.75	9,845	25,395	151.27	10,443	30,668
150.76	9,856	25,494	151.28	10,455	30,773
150.77	9,867	25,592	151.29	10,467	30,877
150.78	9,878	25,691	151.30	10,479	30,982
150.79	9,889	25,790	151.31	10,490	31,087
150.80	9,901	25,889	151.32	10,502	31,192
150.81	9,912	25,988	151.33	10,514	31,297
150.82	9,923	26,087	151.34	10,526	31,402
150.83	9,934	26,186	151.35	10,538	31,507
150.84	9,945	26,286	151.36	10,549	31,613
150.85	9,957	26,385	151.37	10,561	31,718
150.86	9,968	26,485	151.38	10,573	31,824
150.87	9,979	26,585	151.39	10,585	31,930
150.88	9,990	26,684	151.40	10,597	32,036
150.89	10,002	26,784	151.41	10,608	32,142
150.90	10,013	26,884	151.42	10,620	32,248
150.91	10,024	26,985	151.43	10,632	32,354
150.92	10,035	27,085	151.44	10,644	32,460
150.93	10,046	27,185	151.45	10,656	32,567

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.46	10,667	32,674	151.98	11,280	38,380
151.47	10,679	32,780	151.99	11,292	38,493
151.48	10,691	32,887	152.00	11,304	38,606
151.49	10,703	32,994	152.01	11,316	38,719
151.50	10,715	33,101	152.02	11,329	38,832
151.51	10,726	33,208	152.03	11,341	38,945
151.52	10,738	33,316	152.04	11,353	39,059
151.53	10,750	33,423	152.05	11,366	39,173
151.54	10,762	33,531	152.06	11,378	39,286
151.55	10,773	33,638	152.07	11,391	39,400
151.56	10,785	33,746	152.08	11,403	39,514
151.57	10,797	33,854	152.09	11,415	39,628
151.58	10,809	33,962	152.10	11,428	39,742
151.59	10,821	34,070	152.11	11,440	39,857
151.60	10,832	34,179	152.12	11,452	39,971
151.61	10,844	34,287	152.13	11,465	40,086
151.62	10,856	34,395	152.14	11,477	40,200
151.63	10,868	34,504	152.15	11,489	40,315
151.64	10,880	34,613	152.16	11,502	40,430
151.65	10,891	34,722	152.17	11,514	40,545
151.66	10,903	34,831	152.18	11,526	40,661
151.67	10,915	34,940	152.19	11,539	40,776
151.68	10,927	35,049	152.20	11,551	40,891
151.69	10,939	35,158	152.21	11,564	41,007
151.70	10,950	35,268	152.22	11,576	41,123
151.71	10,962	35,377	152.23	11,588	41,238
151.72	10,974	35,487	152.24	11,601	41,354
151.73	10,986	35,597	152.25	11,613	41,470
151.74	10,997	35,707	152.26	11,625	41,587
151.75	11,009	35,817	152.27	11,638	41,703
151.76	11,021	35,927	152.28	11,650	41,819
151.77	11,033	36,037	152.29	11,662	41,936
151.78	11,045	36,147	152.30	11,675	42,053
151.79	11,056	36,258	152.31	11,687	42,169
151.80	11,068	36,369	152.32	11,700	42,286
151.81	11,080	36,479	152.33	11,712	42,403
151.82	11,092	36,590	152.34	11,724	42,521
151.83	11,104	36,701	152.35	11,737	42,638
151.84	11,115	36,812	152.36	11,749	42,755
151.85	11,127	36,923	152.37	11,761	42,873
151.86	11,139	37,035	152.38	11,774	42,991
151.87	11,151	37,146	152.39	11,786	43,108
151.88	11,163	37,258	152.40	11,798	43,226
151.89	11,174	37,369	152.41	11,811	43,344
151.90	11,186	37,481	152.42	11,823	43,462
151.91	11,198	37,593	152.43	11,835	43,581
151.92	11,210	37,705	152.44	11,848	43,699
151.93	11,221	37,817	152.45	11,860	43,818
151.94	11,233	37,930	152.46	11,873	43,936
151.95	11,245	38,042	152.47	11,885	44,055
151.96	11,257	38,155	152.48	11,897	44,174
151.97	11,269	38,267	152.49	11,910	44,293

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
152.50	11,922	44,412
152.51	11,934	44,532
152.52	11,947	44,651
152.53	11,959	44,771
152.54	11,971	44,890
152.55	11,984	45,010
152.56	11,996	45,130
152.57	12,009	45,250
152.58	12,021	45,370
152.59	12,033	45,490
152.60	12,046	45,611
152.61	12,058	45,731
152.62	12,070	45,852
152.63	12,083	45,973
152.64	12,095	46,093
152.65	12,107	46,215
152.66	12,120	46,336
152.67	12,132	46,457
152.68	12,144	46,578
152.69	12,157	46,700
152.70	12,169	46,821
152.71	12,182	46,943
152.72	12,194	47,065
152.73	12,206	47,187
152.74	12,219	47,309
152.75	12,231	47,431
152.76	12,243	47,554
152.77	12,256	47,676
152.78	12,268	47,799
152.79	12,280	47,922
152.80	12,293	48,045
152.81	12,305	48,168
152.82	12,318	48,291
152.83	12,330	48,414
152.84	12,342	48,537
152.85	12,355	48,661
152.86	12,367	48,784
152.87	12,379	48,908
152.88	12,392	49,032
152.89	12,404	49,156
152.90	12,416	49,280
152.91	12,429	49,404
152.92	12,441	49,529
152.93	12,453	49,653
152.94	12,466	49,778
152.95	12,478	49,902
152.96	12,491	50,027
152.97	12,503	50,152
152.98	12,515	50,277
152.99	12,528	50,402
153.00	**12,540**	**50,528**

Summary for Pond B-23: Basin #23

Inflow Area = 2.449 ac, 33.56% Impervious, Inflow Depth = 3.92" for Future 10 yr event
Inflow = 9.89 cfs @ 12.17 hrs, Volume= 0.799 af
Outflow = 4.85 cfs @ 12.35 hrs, Volume= 0.713 af, Atten= 51%, Lag= 10.6 min
Primary = 4.85 cfs @ 12.35 hrs, Volume= 0.713 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.99' @ 12.35 hrs Surf.Area= 7,584 sf Storage= 14,908 cf

Plug-Flow detention time= 258.1 min calculated for 0.713 af (89% of inflow)
Center-of-Mass det. time= 203.3 min (998.5 - 795.1)

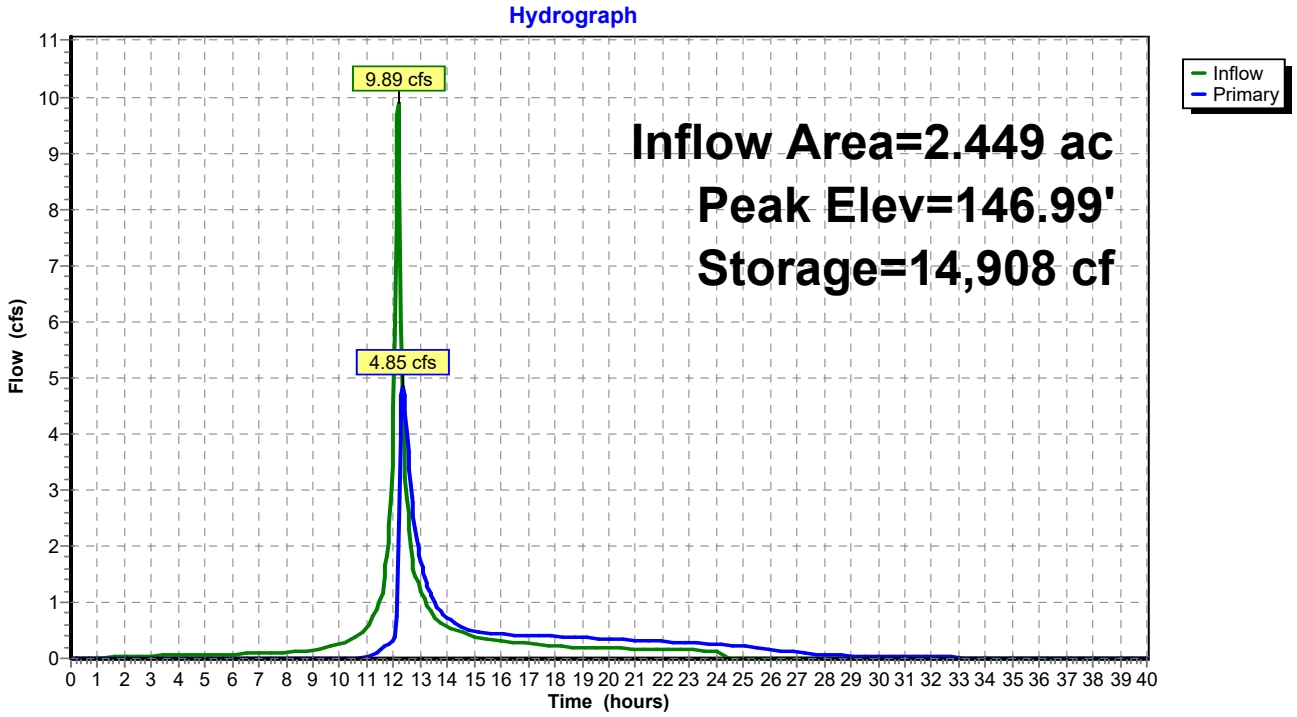
Volume	Invert	Avail.Storage	Storage Description
#1	144.30'	23,175 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
144.30	0	0	0
145.00	5,512	1,929	1,929
146.00	6,527	6,020	7,949
147.00	7,599	7,063	15,012
148.00	8,727	8,163	23,175

Device	Routing	Invert	Outlet Devices
#1	Primary	144.30'	**18.0" Round Culvert** L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 144.30' / 141.44' S= 0.0636 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	145.28'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.85 cfs @ 12.35 hrs HW=146.99' (Free Discharge)
- **1=Culvert** (Passes 4.85 cfs of 11.84 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.52 cfs @ 5.97 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.33 cfs @ 2.28 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-23: Basin #23



Stage-Discharge for Pond B-23: Basin #23

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
144.30	0.00	144.82	0.00	145.34	0.01	145.86	0.27
144.31	0.00	144.83	0.00	145.35	0.01	145.87	0.27
144.32	0.00	144.84	0.00	145.36	0.02	145.88	0.28
144.33	0.00	144.85	0.00	145.37	0.02	145.89	0.28
144.34	0.00	144.86	0.00	145.38	0.02	145.90	0.28
144.35	0.00	144.87	0.00	145.39	0.03	145.91	0.29
144.36	0.00	144.88	0.00	145.40	0.03	145.92	0.29
144.37	0.00	144.89	0.00	145.41	0.04	145.93	0.29
144.38	0.00	144.90	0.00	145.42	0.04	145.94	0.30
144.39	0.00	144.91	0.00	145.43	0.05	145.95	0.30
144.40	0.00	144.92	0.00	145.44	0.06	145.96	0.30
144.41	0.00	144.93	0.00	145.45	0.06	145.97	0.30
144.42	0.00	144.94	0.00	145.46	0.07	145.98	0.31
144.43	0.00	144.95	0.00	145.47	0.08	145.99	0.31
144.44	0.00	144.96	0.00	145.48	0.08	146.00	0.31
144.45	0.00	144.97	0.00	145.49	0.09	146.01	0.32
144.46	0.00	144.98	0.00	145.50	0.10	146.02	0.32
144.47	0.00	144.99	0.00	145.51	0.10	146.03	0.32
144.48	0.00	145.00	0.00	145.52	0.11	146.04	0.32
144.49	0.00	145.01	0.00	145.53	0.12	146.05	0.33
144.50	0.00	145.02	0.00	145.54	0.13	146.06	0.33
144.51	0.00	145.03	0.00	145.55	0.13	146.07	0.33
144.52	0.00	145.04	0.00	145.56	0.14	146.08	0.33
144.53	0.00	145.05	0.00	145.57	0.15	146.09	0.34
144.54	0.00	145.06	0.00	145.58	0.15	146.10	0.34
144.55	0.00	145.07	0.00	145.59	0.16	146.11	0.34
144.56	0.00	145.08	0.00	145.60	0.17	146.12	0.34
144.57	0.00	145.09	0.00	145.61	0.17	146.13	0.35
144.58	0.00	145.10	0.00	145.62	0.17	146.14	0.35
144.59	0.00	145.11	0.00	145.63	0.18	146.15	0.35
144.60	0.00	145.12	0.00	145.64	0.18	146.16	0.35
144.61	0.00	145.13	0.00	145.65	0.19	146.17	0.36
144.62	0.00	145.14	0.00	145.66	0.19	146.18	0.36
144.63	0.00	145.15	0.00	145.67	0.20	146.19	0.36
144.64	0.00	145.16	0.00	145.68	0.20	146.20	0.36
144.65	0.00	145.17	0.00	145.69	0.21	146.21	0.37
144.66	0.00	145.18	0.00	145.70	0.21	146.22	0.37
144.67	0.00	145.19	0.00	145.71	0.22	146.23	0.37
144.68	0.00	145.20	0.00	145.72	0.22	146.24	0.37
144.69	0.00	145.21	0.00	145.73	0.22	146.25	0.38
144.70	0.00	145.22	0.00	145.74	0.23	146.26	0.38
144.71	0.00	145.23	0.00	145.75	0.23	146.27	0.38
144.72	0.00	145.24	0.00	145.76	0.24	146.28	0.38
144.73	0.00	145.25	0.00	145.77	0.24	146.29	0.39
144.74	0.00	145.26	0.00	145.78	0.24	146.30	0.39
144.75	0.00	145.27	0.00	145.79	0.25	146.31	0.39
144.76	0.00	145.28	0.00	145.80	0.25	146.32	0.39
144.77	0.00	145.29	0.00	145.81	0.25	146.33	0.39
144.78	0.00	145.30	0.00	145.82	0.26	146.34	0.40
144.79	0.00	145.31	0.00	145.83	0.26	146.35	0.40
144.80	0.00	145.32	0.00	145.84	0.26	146.36	0.40
144.81	0.00	145.33	0.01	145.85	0.27	146.37	0.40

Stage-Discharge for Pond B-23: Basin #23 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
146.38	0.41	146.90	3.75	147.42	11.60	147.94	14.46
146.39	0.41	146.91	3.87	147.43	11.78	147.95	14.49
146.40	0.41	146.92	4.00	147.44	11.95	147.96	14.63
146.41	0.41	146.93	4.12	147.45	12.13	147.97	14.87
146.42	0.41	146.94	4.25	147.46	12.31	147.98	15.17
146.43	0.42	146.95	4.37	147.47	12.49	147.99	15.53
146.44	0.42	146.96	4.50	147.48	12.67	148.00	**15.93**
146.45	0.42	146.97	4.63	147.49	12.85		
146.46	0.42	146.98	4.77	147.50	13.03		
146.47	0.43	146.99	4.90	147.51	13.21		
146.48	0.43	147.00	5.03	147.52	13.37		
146.49	0.43	147.01	5.17	147.53	13.40		
146.50	0.43	147.02	5.30	147.54	13.43		
146.51	0.45	147.03	5.44	147.55	13.45		
146.52	0.47	147.04	5.58	147.56	13.48		
146.53	0.51	147.05	5.72	147.57	13.51		
146.54	0.54	147.06	5.86	147.58	13.53		
146.55	0.59	147.07	6.00	147.59	13.56		
146.56	0.64	147.08	6.15	147.60	13.59		
146.57	0.69	147.09	6.29	147.61	13.61		
146.58	0.74	147.10	6.44	147.62	13.64		
146.59	0.80	147.11	6.58	147.63	13.67		
146.60	0.86	147.12	6.73	147.64	13.69		
146.61	0.93	147.13	6.88	147.65	13.72		
146.62	1.00	147.14	7.03	147.66	13.75		
146.63	1.07	147.15	7.18	147.67	13.77		
146.64	1.14	147.16	7.33	147.68	13.80		
146.65	1.22	147.17	7.48	147.69	13.83		
146.66	1.29	147.18	7.64	147.70	13.85		
146.67	1.37	147.19	7.79	147.71	13.88		
146.68	1.46	147.20	7.95	147.72	13.90		
146.69	1.54	147.21	8.11	147.73	13.93		
146.70	1.63	147.22	8.26	147.74	13.96		
146.71	1.72	147.23	8.42	147.75	13.98		
146.72	1.81	147.24	8.58	147.76	14.01		
146.73	1.90	147.25	8.74	147.77	14.03		
146.74	2.00	147.26	8.90	147.78	14.06		
146.75	2.09	147.27	9.06	147.79	14.08		
146.76	2.19	147.28	9.23	147.80	14.11		
146.77	2.29	147.29	9.39	147.81	14.14		
146.78	2.40	147.30	9.56	147.82	14.16		
146.79	2.50	147.31	9.72	147.83	14.19		
146.80	2.61	147.32	9.89	147.84	14.21		
146.81	2.71	147.33	10.06	147.85	14.24		
146.82	2.82	147.34	10.23	147.86	14.26		
146.83	2.93	147.35	10.39	147.87	14.29		
146.84	3.05	147.36	10.56	147.88	14.31		
146.85	3.16	147.37	10.74	147.89	14.34		
146.86	3.27	147.38	10.91	147.90	14.36		
146.87	3.39	147.39	11.08	147.91	14.39		
146.88	3.51	147.40	11.25	147.92	14.41		
146.89	3.63	147.41	11.43	147.93	14.44		

Stage-Area-Storage for Pond B-23: Basin #23

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.30	0	0	144.82	4,095	1,065
144.31	79	0	144.83	4,173	1,106
144.32	157	2	144.84	4,252	1,148
144.33	236	4	144.85	4,331	1,191
144.34	315	6	144.86	4,410	1,235
144.35	394	10	144.87	4,488	1,279
144.36	472	14	144.88	4,567	1,324
144.37	551	19	144.89	4,646	1,371
144.38	630	25	144.90	4,725	1,417
144.39	709	32	144.91	4,803	1,465
144.40	787	39	144.92	4,882	1,513
144.41	866	48	144.93	4,961	1,563
144.42	945	57	144.94	5,040	1,613
144.43	1,024	67	144.95	5,118	1,663
144.44	1,102	77	144.96	5,197	1,715
144.45	1,181	89	144.97	5,276	1,767
144.46	1,260	101	144.98	5,355	1,821
144.47	1,339	114	144.99	5,433	1,874
144.48	1,417	128	145.00	5,512	1,929
144.49	1,496	142	145.01	5,522	1,984
144.50	1,575	157	145.02	5,532	2,040
144.51	1,654	174	145.03	5,542	2,095
144.52	1,732	191	145.04	5,553	2,150
144.53	1,811	208	145.05	5,563	2,206
144.54	1,890	227	145.06	5,573	2,262
144.55	1,969	246	145.07	5,583	2,318
144.56	2,047	266	145.08	5,593	2,373
144.57	2,126	287	145.09	5,603	2,429
144.58	2,205	309	145.10	5,614	2,485
144.59	2,284	331	145.11	5,624	2,542
144.60	2,362	354	145.12	5,634	2,598
144.61	2,441	378	145.13	5,644	2,654
144.62	2,520	403	145.14	5,654	2,711
144.63	2,599	429	145.15	5,664	2,767
144.64	2,677	455	145.16	5,674	2,824
144.65	2,756	482	145.17	5,685	2,881
144.66	2,835	510	145.18	5,695	2,938
144.67	2,913	539	145.19	5,705	2,995
144.68	2,992	569	145.20	5,715	3,052
144.69	3,071	599	145.21	5,725	3,109
144.70	3,150	630	145.22	5,735	3,166
144.71	3,228	662	145.23	5,745	3,224
144.72	3,307	695	145.24	5,756	3,281
144.73	3,386	728	145.25	5,766	3,339
144.74	3,465	762	145.26	5,776	3,397
144.75	3,543	797	145.27	5,786	3,454
144.76	3,622	833	145.28	5,796	3,512
144.77	3,701	870	145.29	5,806	3,570
144.78	3,780	907	145.30	5,817	3,628
144.79	3,858	945	145.31	5,827	3,687
144.80	3,937	984	145.32	5,837	3,745
144.81	4,016	1,024	145.33	5,847	3,803

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.34	5,857	3,862	145.86	6,385	7,045
145.35	5,867	3,921	145.87	6,395	7,109
145.36	5,877	3,979	145.88	6,405	7,173
145.37	5,888	4,038	145.89	6,415	7,237
145.38	5,898	4,097	145.90	6,426	7,301
145.39	5,908	4,156	145.91	6,436	7,365
145.40	5,918	4,215	145.92	6,446	7,430
145.41	5,928	4,274	145.93	6,456	7,494
145.42	5,938	4,334	145.94	6,466	7,559
145.43	5,948	4,393	145.95	6,476	7,624
145.44	5,959	4,453	145.96	6,486	7,688
145.45	5,969	4,512	145.97	6,497	7,753
145.46	5,979	4,572	145.98	6,507	7,818
145.47	5,989	4,632	145.99	6,517	7,883
145.48	5,999	4,692	146.00	6,527	7,949
145.49	6,009	4,752	146.01	6,538	8,014
145.50	6,020	4,812	146.02	6,548	8,079
145.51	6,030	4,872	146.03	6,559	8,145
145.52	6,040	4,933	146.04	6,570	8,211
145.53	6,050	4,993	146.05	6,581	8,276
145.54	6,060	5,054	146.06	6,591	8,342
145.55	6,070	5,114	146.07	6,602	8,408
145.56	6,080	5,175	146.08	6,613	8,474
145.57	6,091	5,236	146.09	6,623	8,540
145.58	6,101	5,297	146.10	6,634	8,607
145.59	6,111	5,358	146.11	6,645	8,673
145.60	6,121	5,419	146.12	6,656	8,740
145.61	6,131	5,480	146.13	6,666	8,806
145.62	6,141	5,542	146.14	6,677	8,873
145.63	6,151	5,603	146.15	6,688	8,940
145.64	6,162	5,665	146.16	6,699	9,007
145.65	6,172	5,726	146.17	6,709	9,074
145.66	6,182	5,788	146.18	6,720	9,141
145.67	6,192	5,850	146.19	6,731	9,208
145.68	6,202	5,912	146.20	6,741	9,276
145.69	6,212	5,974	146.21	6,752	9,343
145.70	6,223	6,036	146.22	6,763	9,411
145.71	6,233	6,099	146.23	6,774	9,478
145.72	6,243	6,161	146.24	6,784	9,546
145.73	6,253	6,223	146.25	6,795	9,614
145.74	6,263	6,286	146.26	6,806	9,682
145.75	6,273	6,349	146.27	6,816	9,750
145.76	6,283	6,411	146.28	6,827	9,818
145.77	6,294	6,474	146.29	6,838	9,887
145.78	6,304	6,537	146.30	6,849	9,955
145.79	6,314	6,600	146.31	6,859	10,024
145.80	6,324	6,664	146.32	6,870	10,092
145.81	6,334	6,727	146.33	6,881	10,161
145.82	6,344	6,790	146.34	6,891	10,230
145.83	6,354	6,854	146.35	6,902	10,299
145.84	6,365	6,917	146.36	6,913	10,368
145.85	6,375	6,981	146.37	6,924	10,437

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.38	6,934	10,506	146.90	7,492	14,257
146.39	6,945	10,576	146.91	7,503	14,332
146.40	6,956	10,645	146.92	7,513	14,407
146.41	6,967	10,715	146.93	7,524	14,482
146.42	6,977	10,785	146.94	7,535	14,558
146.43	6,988	10,854	146.95	7,545	14,633
146.44	6,999	10,924	146.96	7,556	14,709
146.45	7,009	10,994	146.97	7,567	14,784
146.46	7,020	11,065	146.98	7,578	14,860
146.47	7,031	11,135	146.99	7,588	14,936
146.48	7,042	11,205	147.00	7,599	15,012
146.49	7,052	11,276	147.01	7,610	15,088
146.50	7,063	11,346	147.02	7,622	15,164
146.51	7,074	11,417	147.03	7,633	15,240
146.52	7,084	11,488	147.04	7,644	15,317
146.53	7,095	11,559	147.05	7,655	15,393
146.54	7,106	11,630	147.06	7,667	15,470
146.55	7,117	11,701	147.07	7,678	15,546
146.56	7,127	11,772	147.08	7,689	15,623
146.57	7,138	11,843	147.09	7,701	15,700
146.58	7,149	11,915	147.10	7,712	15,777
146.59	7,159	11,986	147.11	7,723	15,854
146.60	7,170	12,058	147.12	7,734	15,932
146.61	7,181	12,130	147.13	7,746	16,009
146.62	7,192	12,201	147.14	7,757	16,087
146.63	7,202	12,273	147.15	7,768	16,164
146.64	7,213	12,346	147.16	7,779	16,242
146.65	7,224	12,418	147.17	7,791	16,320
146.66	7,235	12,490	147.18	7,802	16,398
146.67	7,245	12,562	147.19	7,813	16,476
146.68	7,256	12,635	147.20	7,825	16,554
146.69	7,267	12,708	147.21	7,836	16,632
146.70	7,277	12,780	147.22	7,847	16,711
146.71	7,288	12,853	147.23	7,858	16,789
146.72	7,299	12,926	147.24	7,870	16,868
146.73	7,310	12,999	147.25	7,881	16,947
146.74	7,320	13,072	147.26	7,892	17,026
146.75	7,331	13,145	147.27	7,904	17,105
146.76	7,342	13,219	147.28	7,915	17,184
146.77	7,352	13,292	147.29	7,926	17,263
146.78	7,363	13,366	147.30	7,937	17,342
146.79	7,374	13,440	147.31	7,949	17,422
146.80	7,385	13,513	147.32	7,960	17,501
146.81	7,395	13,587	147.33	7,971	17,581
146.82	7,406	13,661	147.34	7,983	17,661
146.83	7,417	13,735	147.35	7,994	17,740
146.84	7,427	13,810	147.36	8,005	17,820
146.85	7,438	13,884	147.37	8,016	17,901
146.86	7,449	13,958	147.38	8,028	17,981
146.87	7,460	14,033	147.39	8,039	18,061
146.88	7,470	14,108	147.40	8,050	18,142
146.89	7,481	14,182	147.41	8,061	18,222

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.42	8,073	18,303
147.43	8,084	18,384
147.44	8,095	18,464
147.45	8,107	18,545
147.46	8,118	18,627
147.47	8,129	18,708
147.48	8,140	18,789
147.49	8,152	18,871
147.50	8,163	18,952
147.51	8,174	19,034
147.52	8,186	19,116
147.53	8,197	19,198
147.54	8,208	19,280
147.55	8,219	19,362
147.56	8,231	19,444
147.57	8,242	19,526
147.58	8,253	19,609
147.59	8,265	19,691
147.60	8,276	19,774
147.61	8,287	19,857
147.62	8,298	19,940
147.63	8,310	20,023
147.64	8,321	20,106
147.65	8,332	20,189
147.66	8,343	20,273
147.67	8,355	20,356
147.68	8,366	20,440
147.69	8,377	20,524
147.70	8,389	20,607
147.71	8,400	20,691
147.72	8,411	20,775
147.73	8,422	20,860
147.74	8,434	20,944
147.75	8,445	21,028
147.76	8,456	21,113
147.77	8,468	21,197
147.78	8,479	21,282
147.79	8,490	21,367
147.80	8,501	21,452
147.81	8,513	21,537
147.82	8,524	21,622
147.83	8,535	21,707
147.84	8,547	21,793
147.85	8,558	21,878
147.86	8,569	21,964
147.87	8,580	22,050
147.88	8,592	22,136
147.89	8,603	22,222
147.90	8,614	22,308
147.91	8,625	22,394
147.92	8,637	22,480
147.93	8,648	22,567
147.94	8,659	22,653
147.95	8,671	22,740
147.96	8,682	22,827
147.97	8,693	22,913
147.98	8,704	23,000
147.99	8,716	23,087
148.00	**8,727**	**23,175**

Summary for Pond B-24: Basin #24

Inflow Area = 2.408 ac, 37.46% Impervious, Inflow Depth = 4.02" for Future 10 yr event
Inflow = 9.91 cfs @ 12.17 hrs, Volume= 0.806 af
Outflow = 3.97 cfs @ 12.40 hrs, Volume= 0.711 af, Atten= 60%, Lag= 13.5 min
Primary = 3.97 cfs @ 12.40 hrs, Volume= 0.711 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.65' @ 12.40 hrs Surf.Area= 8,992 sf Storage= 16,011 cf

Plug-Flow detention time= 248.0 min calculated for 0.710 af (88% of inflow)
Center-of-Mass det. time= 190.9 min (982.3 - 791.4)

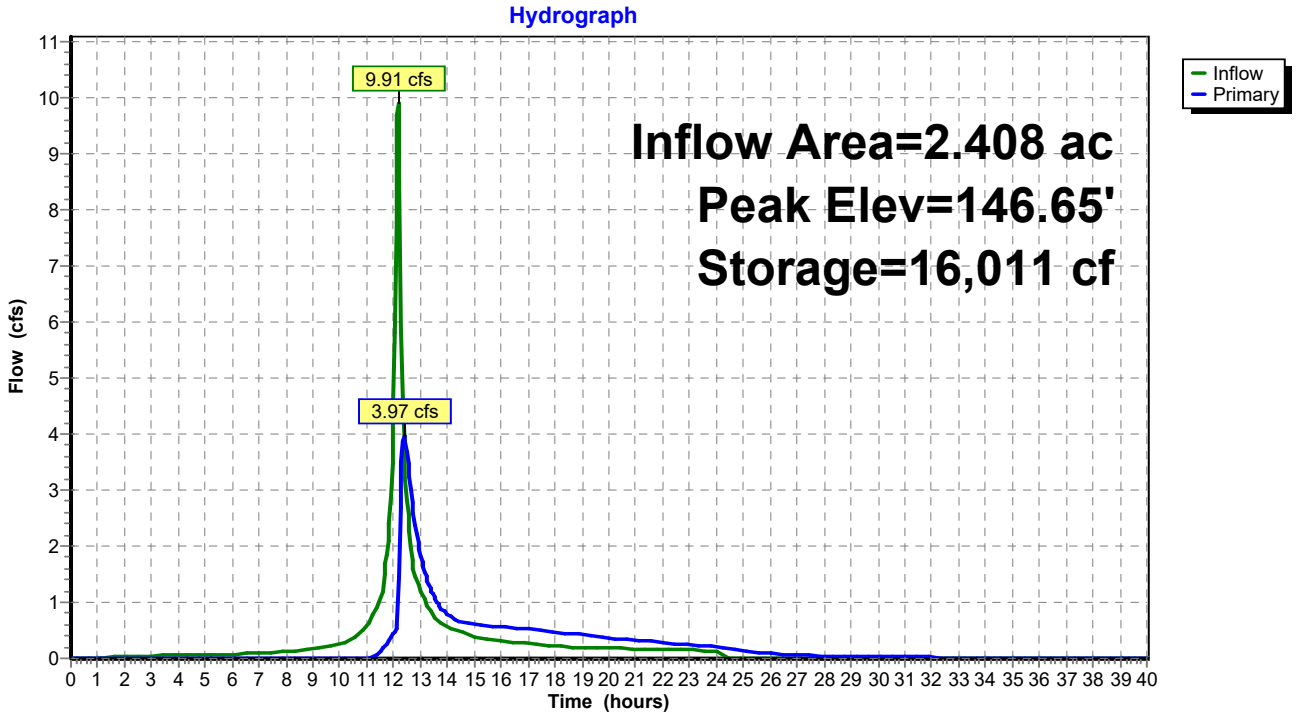
Volume	Invert	Avail.Storage	Storage Description
#1	144.30'	40,061 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
144.30	0	0	0
145.00	7,331	2,566	2,566
146.00	8,327	7,829	10,395
147.00	9,353	8,840	19,235
148.00	10,406	9,880	29,114
149.00	11,488	10,947	40,061

Device	Routing	Invert	Outlet Devices
#1	Primary	144.30'	**18.0" Round Culvert** L= 22.0' Ke= 0.500 Inlet / Outlet Invert= 144.30' / 143.04' S= 0.0573 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	145.17'	**5.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.96 cfs @ 12.40 hrs HW=146.65' (Free Discharge)
- **1=Culvert** (Passes 3.96 cfs of 10.76 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.74 cfs @ 5.43 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.22 cfs @ 2.06 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-24: Basin #24



Stage-Discharge for Pond B-24: Basin #24

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
144.30	0.00	144.82	0.00	145.34	0.07	145.86	0.46
144.31	0.00	144.83	0.00	145.35	0.08	145.87	0.46
144.32	0.00	144.84	0.00	145.36	0.09	145.88	0.47
144.33	0.00	144.85	0.00	145.37	0.10	145.89	0.47
144.34	0.00	144.86	0.00	145.38	0.11	145.90	0.47
144.35	0.00	144.87	0.00	145.39	0.12	145.91	0.48
144.36	0.00	144.88	0.00	145.40	0.13	145.92	0.48
144.37	0.00	144.89	0.00	145.41	0.14	145.93	0.49
144.38	0.00	144.90	0.00	145.42	0.15	145.94	0.49
144.39	0.00	144.91	0.00	145.43	0.16	145.95	0.50
144.40	0.00	144.92	0.00	145.44	0.17	145.96	0.50
144.41	0.00	144.93	0.00	145.45	0.18	145.97	0.51
144.42	0.00	144.94	0.00	145.46	0.19	145.98	0.51
144.43	0.00	144.95	0.00	145.47	0.20	145.99	0.51
144.44	0.00	144.96	0.00	145.48	0.21	146.00	0.52
144.45	0.00	144.97	0.00	145.49	0.22	146.01	0.52
144.46	0.00	144.98	0.00	145.50	0.23	146.02	0.53
144.47	0.00	144.99	0.00	145.51	0.24	146.03	0.53
144.48	0.00	145.00	0.00	145.52	0.25	146.04	0.53
144.49	0.00	145.01	0.00	145.53	0.26	146.05	0.54
144.50	0.00	145.02	0.00	145.54	0.27	146.06	0.54
144.51	0.00	145.03	0.00	145.55	0.27	146.07	0.55
144.52	0.00	145.04	0.00	145.56	0.28	146.08	0.55
144.53	0.00	145.05	0.00	145.57	0.29	146.09	0.55
144.54	0.00	145.06	0.00	145.58	0.30	146.10	0.56
144.55	0.00	145.07	0.00	145.59	0.30	146.11	0.56
144.56	0.00	145.08	0.00	145.60	0.31	146.12	0.57
144.57	0.00	145.09	0.00	145.61	0.32	146.13	0.57
144.58	0.00	145.10	0.00	145.62	0.32	146.14	0.57
144.59	0.00	145.11	0.00	145.63	0.33	146.15	0.58
144.60	0.00	145.12	0.00	145.64	0.34	146.16	0.58
144.61	0.00	145.13	0.00	145.65	0.34	146.17	0.58
144.62	0.00	145.14	0.00	145.66	0.35	146.18	0.59
144.63	0.00	145.15	0.00	145.67	0.35	146.19	0.59
144.64	0.00	145.16	0.00	145.68	0.36	146.20	0.60
144.65	0.00	145.17	0.00	145.69	0.37	146.21	0.60
144.66	0.00	145.18	0.00	145.70	0.37	146.22	0.60
144.67	0.00	145.19	0.00	145.71	0.38	146.23	0.61
144.68	0.00	145.20	0.00	145.72	0.38	146.24	0.61
144.69	0.00	145.21	0.00	145.73	0.39	146.25	0.61
144.70	0.00	145.22	0.01	145.74	0.39	146.26	0.63
144.71	0.00	145.23	0.01	145.75	0.40	146.27	0.66
144.72	0.00	145.24	0.01	145.76	0.41	146.28	0.69
144.73	0.00	145.25	0.02	145.77	0.41	146.29	0.73
144.74	0.00	145.26	0.02	145.78	0.42	146.30	0.78
144.75	0.00	145.27	0.03	145.79	0.42	146.31	0.83
144.76	0.00	145.28	0.03	145.80	0.43	146.32	0.88
144.77	0.00	145.29	0.04	145.81	0.43	146.33	0.94
144.78	0.00	145.30	0.04	145.82	0.44	146.34	1.00
144.79	0.00	145.31	0.05	145.83	0.44	146.35	1.06
144.80	0.00	145.32	0.06	145.84	0.45	146.36	1.13
144.81	0.00	145.33	0.07	145.85	0.45	146.37	1.19

Stage-Discharge for Pond B-24: Basin #24 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
146.38	1.27	146.90	7.44	147.42	13.10	147.94	14.46
146.39	1.34	146.91	7.59	147.43	13.13	147.95	14.49
146.40	1.42	146.92	7.75	147.44	13.15	147.96	14.51
146.41	1.50	146.93	7.90	147.45	13.18	147.97	14.54
146.42	1.58	146.94	8.06	147.46	13.21	147.98	14.56
146.43	1.66	146.95	8.22	147.47	13.24	147.99	14.59
146.44	1.75	146.96	8.37	147.48	13.26	148.00	14.73
146.45	1.84	146.97	8.53	147.49	13.29	148.01	14.97
146.46	1.93	146.98	8.69	147.50	13.32	148.02	15.27
146.47	2.02	146.99	8.85	147.51	13.35	148.03	15.63
146.48	2.12	147.00	9.01	147.52	13.37	148.04	16.02
146.49	2.21	147.01	9.18	147.53	13.40	148.05	16.46
146.50	2.31	147.02	9.34	147.54	13.43	148.06	16.94
146.51	2.41	147.03	9.50	147.55	13.45	148.07	17.44
146.52	2.51	147.04	9.67	147.56	13.48	148.08	17.98
146.53	2.62	147.05	9.83	147.57	13.51	148.09	18.55
146.54	2.72	147.06	10.00	147.58	13.53	148.10	19.15
146.55	2.83	147.07	10.17	147.59	13.56	148.11	19.78
146.56	2.94	147.08	10.34	147.60	13.59	148.12	20.43
146.57	3.05	147.09	10.51	147.61	13.61	148.13	21.10
146.58	3.16	147.10	10.68	147.62	13.64	148.14	21.80
146.59	3.27	147.11	10.85	147.63	13.67	148.15	22.53
146.60	3.39	147.12	11.02	147.64	13.69	148.16	23.27
146.61	3.50	147.13	11.19	147.65	13.72	148.17	24.04
146.62	3.62	147.14	11.36	147.66	13.75	148.18	24.83
146.63	3.74	147.15	11.54	147.67	13.77	148.19	25.64
146.64	3.86	147.16	11.71	147.68	13.80	148.20	26.51
146.65	3.98	147.17	11.89	147.69	13.83	148.21	27.41
146.66	4.11	147.18	12.07	147.70	13.85	148.22	28.33
146.67	4.23	147.19	12.24	147.71	13.88	148.23	29.28
146.68	4.36	147.20	12.42	147.72	13.90	148.24	30.25
146.69	4.49	147.21	12.51	147.73	13.93	148.25	31.25
146.70	4.61	147.22	12.53	147.74	13.96	148.26	32.27
146.71	4.74	147.23	12.56	147.75	13.98	148.27	33.32
146.72	4.88	147.24	12.59	147.76	14.01	148.28	34.39
146.73	5.01	147.25	12.62	147.77	14.03	148.29	35.48
146.74	5.14	147.26	12.65	147.78	14.06	148.30	36.60
146.75	5.28	147.27	12.68	147.79	14.08	148.31	37.75
146.76	5.41	147.28	12.71	147.80	14.11	148.32	38.92
146.77	5.55	147.29	12.73	147.81	14.14	148.33	40.11
146.78	5.69	147.30	12.76	147.82	14.16	148.34	41.33
146.79	5.83	147.31	12.79	147.83	14.19	148.35	42.57
146.80	5.97	147.32	12.82	147.84	14.21	148.36	43.84
146.81	6.11	147.33	12.85	147.85	14.24	148.37	45.13
146.82	6.26	147.34	12.88	147.86	14.26	148.38	46.44
146.83	6.40	147.35	12.90	147.87	14.29	148.39	47.78
146.84	6.55	147.36	12.93	147.88	14.31	148.40	49.17
146.85	6.69	147.37	12.96	147.89	14.34	148.41	50.58
146.86	6.84	147.38	12.99	147.90	14.36	148.42	52.03
146.87	6.99	147.39	13.02	147.91	14.39	148.43	53.49
146.88	7.14	147.40	13.04	147.92	14.41	148.44	54.99
146.89	7.29	147.41	13.07	147.93	14.44	148.45	56.51

Stage-Discharge for Pond B-24: Basin #24 (continued)

Elevation (feet)	Primary (cfs)
148.46	58.05
148.47	59.62
148.48	61.22
148.49	62.85
148.50	64.50
148.51	66.18
148.52	67.88
148.53	69.61
148.54	71.37
148.55	73.15
148.56	74.96
148.57	76.80
148.58	78.67
148.59	80.56
148.60	82.21
148.61	83.87
148.62	85.55
148.63	87.24
148.64	88.94
148.65	90.66
148.66	92.39
148.67	94.13
148.68	95.88
148.69	97.65
148.70	99.43
148.71	101.23
148.72	103.03
148.73	104.85
148.74	106.68
148.75	108.53
148.76	110.38
148.77	112.25
148.78	114.13
148.79	116.02
148.80	117.96
148.81	119.92
148.82	121.88
148.83	123.87
148.84	125.86
148.85	127.87
148.86	129.89
148.87	131.92
148.88	133.97
148.89	136.03
148.90	138.10
148.91	140.18
148.92	142.28
148.93	144.39
148.94	146.52
148.95	148.65
148.96	150.80
148.97	152.96
148.98	155.14
148.99	157.32
149.00	**159.47**

Stage-Area-Storage for Pond B-24: Basin #24

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.30	0	0	144.82	5,446	1,416
144.31	105	1	144.83	5,551	1,471
144.32	209	2	144.84	5,655	1,527
144.33	314	5	144.85	5,760	1,584
144.34	419	8	144.86	5,865	1,642
144.35	524	13	144.87	5,970	1,701
144.36	628	19	144.88	6,074	1,762
144.37	733	26	144.89	6,179	1,823
144.38	838	34	144.90	6,284	1,885
144.39	943	42	144.91	6,388	1,948
144.40	1,047	52	144.92	6,493	2,013
144.41	1,152	63	144.93	6,598	2,078
144.42	1,257	75	144.94	6,703	2,145
144.43	1,361	88	144.95	6,807	2,212
144.44	1,466	103	144.96	6,912	2,281
144.45	1,571	118	144.97	7,017	2,351
144.46	1,676	134	144.98	7,122	2,421
144.47	1,780	151	144.99	7,226	2,493
144.48	1,885	170	145.00	7,331	2,566
144.49	1,990	189	145.01	7,341	2,639
144.50	2,095	209	145.02	7,351	2,713
144.51	2,199	231	145.03	7,361	2,786
144.52	2,304	253	145.04	7,371	2,860
144.53	2,409	277	145.05	7,381	2,934
144.54	2,513	302	145.06	7,391	3,008
144.55	2,618	327	145.07	7,401	3,081
144.56	2,723	354	145.08	7,411	3,156
144.57	2,828	382	145.09	7,421	3,230
144.58	2,932	411	145.10	7,431	3,304
144.59	3,037	440	145.11	7,441	3,378
144.60	3,142	471	145.12	7,451	3,453
144.61	3,247	503	145.13	7,460	3,527
144.62	3,351	536	145.14	7,470	3,602
144.63	3,456	570	145.15	7,480	3,677
144.64	3,561	605	145.16	7,490	3,752
144.65	3,666	641	145.17	7,500	3,827
144.66	3,770	679	145.18	7,510	3,902
144.67	3,875	717	145.19	7,520	3,977
144.68	3,980	756	145.20	7,530	4,052
144.69	4,084	796	145.21	7,540	4,127
144.70	4,189	838	145.22	7,550	4,203
144.71	4,294	880	145.23	7,560	4,278
144.72	4,399	924	145.24	7,570	4,354
144.73	4,503	968	145.25	7,580	4,430
144.74	4,608	1,014	145.26	7,590	4,506
144.75	4,713	1,060	145.27	7,600	4,582
144.76	4,818	1,108	145.28	7,610	4,658
144.77	4,922	1,157	145.29	7,620	4,734
144.78	5,027	1,206	145.30	7,630	4,810
144.79	5,132	1,257	145.31	7,640	4,886
144.80	5,236	1,309	145.32	7,650	4,963
144.81	5,341	1,362	145.33	7,660	5,039

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.34	7,670	5,116	145.86	8,188	9,239
145.35	7,680	5,193	145.87	8,198	9,321
145.36	7,690	5,270	145.88	8,207	9,403
145.37	7,700	5,346	145.89	8,217	9,485
145.38	7,709	5,424	145.90	8,227	9,567
145.39	7,719	5,501	145.91	8,237	9,649
145.40	7,729	5,578	145.92	8,247	9,732
145.41	7,739	5,655	145.93	8,257	9,814
145.42	7,749	5,733	145.94	8,267	9,897
145.43	7,759	5,810	145.95	8,277	9,980
145.44	7,769	5,888	145.96	8,287	10,063
145.45	7,779	5,966	145.97	8,297	10,145
145.46	7,789	6,043	145.98	8,307	10,229
145.47	7,799	6,121	145.99	8,317	10,312
145.48	7,809	6,199	146.00	8,327	10,395
145.49	7,819	6,278	146.01	8,337	10,478
145.50	7,829	6,356	146.02	8,348	10,562
145.51	7,839	6,434	146.03	8,358	10,645
145.52	7,849	6,513	146.04	8,368	10,729
145.53	7,859	6,591	146.05	8,378	10,812
145.54	7,869	6,670	146.06	8,389	10,896
145.55	7,879	6,749	146.07	8,399	10,980
145.56	7,889	6,827	146.08	8,409	11,064
145.57	7,899	6,906	146.09	8,419	11,148
145.58	7,909	6,985	146.10	8,430	11,233
145.59	7,919	7,064	146.11	8,440	11,317
145.60	7,929	7,144	146.12	8,450	11,401
145.61	7,939	7,223	146.13	8,460	11,486
145.62	7,949	7,303	146.14	8,471	11,571
145.63	7,958	7,382	146.15	8,481	11,655
145.64	7,968	7,462	146.16	8,491	11,740
145.65	7,978	7,541	146.17	8,501	11,825
145.66	7,988	7,621	146.18	8,512	11,910
145.67	7,998	7,701	146.19	8,522	11,995
145.68	8,008	7,781	146.20	8,532	12,081
145.69	8,018	7,861	146.21	8,542	12,166
145.70	8,028	7,942	146.22	8,553	12,252
145.71	8,038	8,022	146.23	8,563	12,337
145.72	8,048	8,102	146.24	8,573	12,423
145.73	8,058	8,183	146.25	8,584	12,509
145.74	8,068	8,263	146.26	8,594	12,595
145.75	8,078	8,344	146.27	8,604	12,681
145.76	8,088	8,425	146.28	8,614	12,767
145.77	8,098	8,506	146.29	8,625	12,853
145.78	8,108	8,587	146.30	8,635	12,939
145.79	8,118	8,668	146.31	8,645	13,026
145.80	8,128	8,749	146.32	8,655	13,112
145.81	8,138	8,831	146.33	8,666	13,199
145.82	8,148	8,912	146.34	8,676	13,285
145.83	8,158	8,994	146.35	8,686	13,372
145.84	8,168	9,075	146.36	8,696	13,459
145.85	8,178	9,157	146.37	8,707	13,546

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.38	8,717	13,633	146.90	9,250	18,305
146.39	8,727	13,720	146.91	9,261	18,397
146.40	8,737	13,808	146.92	9,271	18,490
146.41	8,748	13,895	146.93	9,281	18,583
146.42	8,758	13,983	146.94	9,291	18,676
146.43	8,768	14,070	146.95	9,302	18,768
146.44	8,778	14,158	146.96	9,312	18,862
146.45	8,789	14,246	146.97	9,322	18,955
146.46	8,799	14,334	146.98	9,332	19,048
146.47	8,809	14,422	146.99	9,343	19,141
146.48	8,819	14,510	147.00	9,353	19,235
146.49	8,830	14,598	147.01	9,364	19,328
146.50	8,840	14,687	147.02	9,374	19,422
146.51	8,850	14,775	147.03	9,385	19,516
146.52	8,861	14,864	147.04	9,395	19,610
146.53	8,871	14,952	147.05	9,406	19,704
146.54	8,881	15,041	147.06	9,416	19,798
146.55	8,891	15,130	147.07	9,427	19,892
146.56	8,902	15,219	147.08	9,437	19,986
146.57	8,912	15,308	147.09	9,448	20,081
146.58	8,922	15,397	147.10	9,458	20,175
146.59	8,932	15,486	147.11	9,469	20,270
146.60	8,943	15,576	147.12	9,479	20,365
146.61	8,953	15,665	147.13	9,490	20,460
146.62	8,963	15,755	147.14	9,500	20,555
146.63	8,973	15,844	147.15	9,511	20,650
146.64	8,984	15,934	147.16	9,521	20,745
146.65	8,994	16,024	147.17	9,532	20,840
146.66	9,004	16,114	147.18	9,543	20,935
146.67	9,014	16,204	147.19	9,553	21,031
146.68	9,025	16,294	147.20	9,564	21,127
146.69	9,035	16,385	147.21	9,574	21,222
146.70	9,045	16,475	147.22	9,585	21,318
146.71	9,055	16,566	147.23	9,595	21,414
146.72	9,066	16,656	147.24	9,606	21,510
146.73	9,076	16,747	147.25	9,616	21,606
146.74	9,086	16,838	147.26	9,627	21,702
146.75	9,097	16,929	147.27	9,637	21,799
146.76	9,107	17,020	147.28	9,648	21,895
146.77	9,117	17,111	147.29	9,658	21,991
146.78	9,127	17,202	147.30	9,669	22,088
146.79	9,138	17,293	147.31	9,679	22,185
146.80	9,148	17,385	147.32	9,690	22,282
146.81	9,158	17,476	147.33	9,700	22,379
146.82	9,168	17,568	147.34	9,711	22,476
146.83	9,179	17,660	147.35	9,722	22,573
146.84	9,189	17,752	147.36	9,732	22,670
146.85	9,199	17,843	147.37	9,743	22,768
146.86	9,209	17,935	147.38	9,753	22,865
146.87	9,220	18,028	147.39	9,764	22,963
146.88	9,230	18,120	147.40	9,774	23,060
146.89	9,240	18,212	147.41	9,785	23,158

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.42	9,795	23,256	147.94	10,343	28,492
147.43	9,806	23,354	147.95	10,353	28,595
147.44	9,816	23,452	147.96	10,364	28,699
147.45	9,827	23,550	147.97	10,374	28,803
147.46	9,837	23,649	147.98	10,385	28,906
147.47	9,848	23,747	147.99	10,395	29,010
147.48	9,858	23,846	148.00	10,406	29,114
147.49	9,869	23,944	148.01	10,417	29,218
147.50	9,880	24,043	148.02	10,428	29,323
147.51	9,890	24,142	148.03	10,438	29,427
147.52	9,901	24,241	148.04	10,449	29,531
147.53	9,911	24,340	148.05	10,460	29,636
147.54	9,922	24,439	148.06	10,471	29,741
147.55	9,932	24,538	148.07	10,482	29,845
147.56	9,943	24,638	148.08	10,493	29,950
147.57	9,953	24,737	148.09	10,503	30,055
147.58	9,964	24,837	148.10	10,514	30,160
147.59	9,974	24,936	148.11	10,525	30,266
147.60	9,985	25,036	148.12	10,536	30,371
147.61	9,995	25,136	148.13	10,547	30,476
147.62	10,006	25,236	148.14	10,557	30,582
147.63	10,016	25,336	148.15	10,568	30,687
147.64	10,027	25,436	148.16	10,579	30,793
147.65	10,037	25,537	148.17	10,590	30,899
147.66	10,048	25,637	148.18	10,601	31,005
147.67	10,059	25,738	148.19	10,612	31,111
147.68	10,069	25,838	148.20	10,622	31,217
147.69	10,080	25,939	148.21	10,633	31,323
147.70	10,090	26,040	148.22	10,644	31,430
147.71	10,101	26,141	148.23	10,655	31,536
147.72	10,111	26,242	148.24	10,666	31,643
147.73	10,122	26,343	148.25	10,677	31,750
147.74	10,132	26,444	148.26	10,687	31,856
147.75	10,143	26,546	148.27	10,698	31,963
147.76	10,153	26,647	148.28	10,709	32,070
147.77	10,164	26,749	148.29	10,720	32,178
147.78	10,174	26,851	148.30	10,731	32,285
147.79	10,185	26,952	148.31	10,741	32,392
147.80	10,195	27,054	148.32	10,752	32,500
147.81	10,206	27,156	148.33	10,763	32,607
147.82	10,216	27,258	148.34	10,774	32,715
147.83	10,227	27,361	148.35	10,785	32,823
147.84	10,238	27,463	148.36	10,796	32,931
147.85	10,248	27,565	148.37	10,806	33,039
147.86	10,259	27,668	148.38	10,817	33,147
147.87	10,269	27,770	148.39	10,828	33,255
147.88	10,280	27,873	148.40	10,839	33,363
147.89	10,290	27,976	148.41	10,850	33,472
147.90	10,301	28,079	148.42	10,860	33,580
147.91	10,311	28,182	148.43	10,871	33,689
147.92	10,322	28,285	148.44	10,882	33,798
147.93	10,332	28,389	148.45	10,893	33,907

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.46	10,904	34,016
148.47	10,915	34,125
148.48	10,925	34,234
148.49	10,936	34,343
148.50	10,947	34,453
148.51	10,958	34,562
148.52	10,969	34,672
148.53	10,979	34,781
148.54	10,990	34,891
148.55	11,001	35,001
148.56	11,012	35,111
148.57	11,023	35,222
148.58	11,034	35,332
148.59	11,044	35,442
148.60	11,055	35,553
148.61	11,066	35,663
148.62	11,077	35,774
148.63	11,088	35,885
148.64	11,098	35,996
148.65	11,109	36,107
148.66	11,120	36,218
148.67	11,131	36,329
148.68	11,142	36,441
148.69	11,153	36,552
148.70	11,163	36,664
148.71	11,174	36,775
148.72	11,185	36,887
148.73	11,196	36,999
148.74	11,207	37,111
148.75	11,218	37,223
148.76	11,228	37,335
148.77	11,239	37,448
148.78	11,250	37,560
148.79	11,261	37,673
148.80	11,272	37,785
148.81	11,282	37,898
148.82	11,293	38,011
148.83	11,304	38,124
148.84	11,315	38,237
148.85	11,326	38,350
148.86	11,337	38,464
148.87	11,347	38,577
148.88	11,358	38,691
148.89	11,369	38,804
148.90	11,380	38,918
148.91	11,391	39,032
148.92	11,401	39,146
148.93	11,412	39,260
148.94	11,423	39,374
148.95	11,434	39,488
148.96	11,445	39,603
148.97	11,456	39,717
148.98	11,466	39,832
148.99	11,477	39,947
149.00	**11,488**	**40,061**

Summary for Pond B-25: Basin #25

Inflow Area = 2.500 ac, 34.96% Impervious, Inflow Depth = 3.95" for Future 10 yr event
Inflow = 10.16 cfs @ 12.17 hrs, Volume= 0.823 af
Outflow = 4.74 cfs @ 12.36 hrs, Volume= 0.735 af, Atten= 53%, Lag= 11.3 min
Primary = 4.74 cfs @ 12.36 hrs, Volume= 0.735 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.41' @ 12.36 hrs Surf.Area= 6,878 sf Storage= 15,584 cf

Plug-Flow detention time= 235.3 min calculated for 0.735 af (89% of inflow)
Center-of-Mass det. time= 180.8 min (974.6 - 793.8)

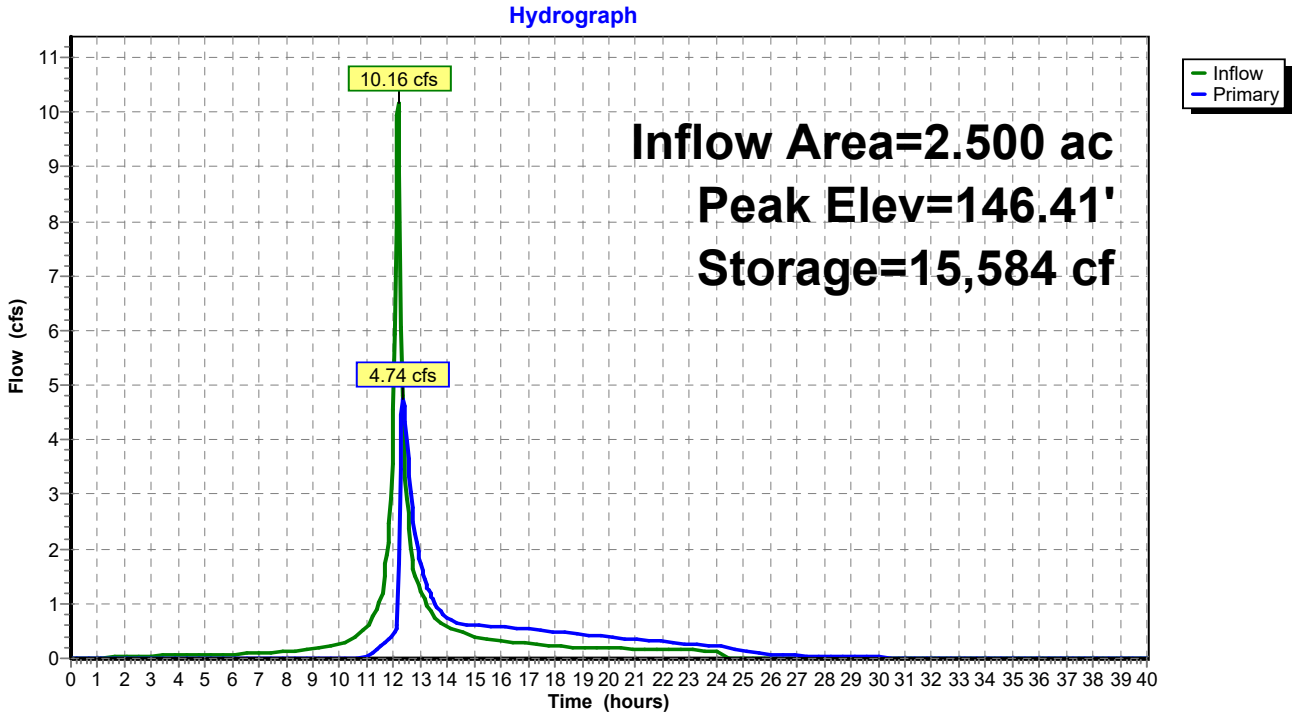
Volume	Invert	Avail.Storage	Storage Description
#1	143.30'	36,587 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
143.30	0	0	0
144.00	4,702	1,646	1,646
145.00	5,584	5,143	6,789
146.00	6,492	6,038	12,827
147.00	7,428	6,960	19,787
148.00	8,393	7,911	27,697
149.00	9,386	8,890	36,587

Device	Routing	Invert	Outlet Devices
#1	Primary	143.30'	**18.0" Round Culvert** L= 186.0' Ke= 0.500 Inlet / Outlet Invert= 143.30' / 142.00' S= 0.0070 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	144.42'	**4.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	145.95'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.96'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.70 cfs @ 12.36 hrs HW=146.41' (Free Discharge)
- **1=Culvert** (Passes 4.70 cfs of 10.93 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.71 cfs @ 6.46 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.98 cfs @ 2.22 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-25: Basin #25



Stage-Discharge for Pond B-25: Basin #25

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
143.30	0.00	143.82	0.00	144.34	0.00	144.86	0.27
143.31	0.00	143.83	0.00	144.35	0.00	144.87	0.27
143.32	0.00	143.84	0.00	144.36	0.00	144.88	0.28
143.33	0.00	143.85	0.00	144.37	0.00	144.89	0.28
143.34	0.00	143.86	0.00	144.38	0.00	144.90	0.29
143.35	0.00	143.87	0.00	144.39	0.00	144.91	0.29
143.36	0.00	143.88	0.00	144.40	0.00	144.92	0.30
143.37	0.00	143.89	0.00	144.41	0.00	144.93	0.30
143.38	0.00	143.90	0.00	144.42	0.00	144.94	0.31
143.39	0.00	143.91	0.00	144.43	0.00	144.95	0.31
143.40	0.00	143.92	0.00	144.44	0.00	144.96	0.32
143.41	0.00	143.93	0.00	144.45	0.00	144.97	0.32
143.42	0.00	143.94	0.00	144.46	0.00	144.98	0.32
143.43	0.00	143.95	0.00	144.47	0.01	144.99	0.33
143.44	0.00	143.96	0.00	144.48	0.01	145.00	0.33
143.45	0.00	143.97	0.00	144.49	0.01	145.01	0.34
143.46	0.00	143.98	0.00	144.50	0.02	145.02	0.34
143.47	0.00	143.99	0.00	144.51	0.02	145.03	0.35
143.48	0.00	144.00	0.00	144.52	0.03	145.04	0.35
143.49	0.00	144.01	0.00	144.53	0.03	145.05	0.35
143.50	0.00	144.02	0.00	144.54	0.04	145.06	0.36
143.51	0.00	144.03	0.00	144.55	0.04	145.07	0.36
143.52	0.00	144.04	0.00	144.56	0.05	145.08	0.37
143.53	0.00	144.05	0.00	144.57	0.05	145.09	0.37
143.54	0.00	144.06	0.00	144.58	0.06	145.10	0.37
143.55	0.00	144.07	0.00	144.59	0.07	145.11	0.38
143.56	0.00	144.08	0.00	144.60	0.08	145.12	0.38
143.57	0.00	144.09	0.00	144.61	0.08	145.13	0.38
143.58	0.00	144.10	0.00	144.62	0.09	145.14	0.39
143.59	0.00	144.11	0.00	144.63	0.10	145.15	0.39
143.60	0.00	144.12	0.00	144.64	0.11	145.16	0.40
143.61	0.00	144.13	0.00	144.65	0.12	145.17	0.40
143.62	0.00	144.14	0.00	144.66	0.12	145.18	0.40
143.63	0.00	144.15	0.00	144.67	0.13	145.19	0.41
143.64	0.00	144.16	0.00	144.68	0.14	145.20	0.41
143.65	0.00	144.17	0.00	144.69	0.15	145.21	0.41
143.66	0.00	144.18	0.00	144.70	0.16	145.22	0.42
143.67	0.00	144.19	0.00	144.71	0.17	145.23	0.42
143.68	0.00	144.20	0.00	144.72	0.18	145.24	0.42
143.69	0.00	144.21	0.00	144.73	0.19	145.25	0.43
143.70	0.00	144.22	0.00	144.74	0.19	145.26	0.43
143.71	0.00	144.23	0.00	144.75	0.20	145.27	0.43
143.72	0.00	144.24	0.00	144.76	0.21	145.28	0.44
143.73	0.00	144.25	0.00	144.77	0.22	145.29	0.44
143.74	0.00	144.26	0.00	144.78	0.22	145.30	0.44
143.75	0.00	144.27	0.00	144.79	0.23	145.31	0.45
143.76	0.00	144.28	0.00	144.80	0.23	145.32	0.45
143.77	0.00	144.29	0.00	144.81	0.24	145.33	0.45
143.78	0.00	144.30	0.00	144.82	0.25	145.34	0.46
143.79	0.00	144.31	0.00	144.83	0.25	145.35	0.46
143.80	0.00	144.32	0.00	144.84	0.26	145.36	0.46
143.81	0.00	144.33	0.00	144.85	0.26	145.37	0.46

Stage-Discharge for Pond B-25: Basin #25 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
145.38	0.47	145.90	0.60	146.42	4.83	146.94	11.88
145.39	0.47	145.91	0.61	146.43	4.96	146.95	11.90
145.40	0.47	145.92	0.61	146.44	5.10	146.96	11.91
145.41	0.48	145.93	0.61	146.45	5.23	146.97	11.93
145.42	0.48	145.94	0.61	146.46	5.37	146.98	11.95
145.43	0.48	145.95	0.62	146.47	5.50	146.99	11.97
145.44	0.49	145.96	0.63	146.48	5.64	147.00	11.98
145.45	0.49	145.97	0.66	146.49	5.78	147.01	12.00
145.46	0.49	145.98	0.69	146.50	5.92	147.02	12.02
145.47	0.49	145.99	0.73	146.51	6.06	147.03	12.03
145.48	0.50	146.00	0.77	146.52	6.20	147.04	12.05
145.49	0.50	146.01	0.82	146.53	6.35	147.05	12.07
145.50	0.50	146.02	0.87	146.54	6.49	147.06	12.09
145.51	0.51	146.03	0.93	146.55	6.64	147.07	12.10
145.52	0.51	146.04	0.99	146.56	6.78	147.08	12.12
145.53	0.51	146.05	1.05	146.57	6.93	147.09	12.14
145.54	0.51	146.06	1.12	146.58	7.08	147.10	12.15
145.55	0.52	146.07	1.18	146.59	7.23	147.11	12.17
145.56	0.52	146.08	1.25	146.60	7.38	147.12	12.19
145.57	0.52	146.09	1.33	146.61	7.53	147.13	12.20
145.58	0.52	146.10	1.40	146.62	7.69	147.14	12.22
145.59	0.53	146.11	1.48	146.63	7.84	147.15	12.24
145.60	0.53	146.12	1.56	146.64	8.00	147.16	12.25
145.61	0.53	146.13	1.65	146.65	8.15	147.17	12.27
145.62	0.54	146.14	1.73	146.66	8.31	147.18	12.29
145.63	0.54	146.15	1.82	146.67	8.47	147.19	12.30
145.64	0.54	146.16	1.91	146.68	8.63	147.20	12.32
145.65	0.54	146.17	2.00	146.69	8.79	147.21	12.34
145.66	0.55	146.18	2.09	146.70	8.95	147.22	12.35
145.67	0.55	146.19	2.19	146.71	9.11	147.23	12.37
145.68	0.55	146.20	2.29	146.72	9.27	147.24	12.39
145.69	0.55	146.21	2.38	146.73	9.43	147.25	12.40
145.70	0.56	146.22	2.49	146.74	9.60	147.26	12.42
145.71	0.56	146.23	2.59	146.75	9.76	147.27	12.44
145.72	0.56	146.24	2.69	146.76	9.93	147.28	12.45
145.73	0.56	146.25	2.80	146.77	10.10	147.29	12.47
145.74	0.57	146.26	2.91	146.78	10.26	147.30	12.49
145.75	0.57	146.27	3.02	146.79	10.43	147.31	12.50
145.76	0.57	146.28	3.13	146.80	10.60	147.32	12.52
145.77	0.57	146.29	3.24	146.81	10.77	147.33	12.54
145.78	0.58	146.30	3.35	146.82	10.94	147.34	12.55
145.79	0.58	146.31	3.47	146.83	11.12	147.35	12.57
145.80	0.58	146.32	3.59	146.84	11.29	147.36	12.58
145.81	0.58	146.33	3.70	146.85	11.46	147.37	12.60
145.82	0.59	146.34	3.82	146.86	11.64	147.38	12.62
145.83	0.59	146.35	3.94	146.87	11.76	147.39	12.63
145.84	0.59	146.36	4.07	146.88	11.78	147.40	12.65
145.85	0.59	146.37	4.19	146.89	11.79	147.41	12.67
145.86	0.60	146.38	4.32	146.90	11.81	147.42	12.68
145.87	0.60	146.39	4.44	146.91	11.83	147.43	12.70
145.88	0.60	146.40	4.57	146.92	11.85	147.44	12.71
145.89	0.60	146.41	4.70	146.93	11.86	147.45	12.73

Stage-Discharge for Pond B-25: Basin #25 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.46	12.75	147.98	13.89	148.50	68.06
147.47	12.76	147.99	14.18	148.51	69.81
147.48	12.78	148.00	14.53	148.52	71.59
147.49	12.79	148.01	14.91	148.53	73.39
147.50	12.81	148.02	15.34	148.54	75.22
147.51	12.83	148.03	15.81	148.55	77.07
147.52	12.84	148.04	16.31	148.56	78.96
147.53	12.86	148.05	16.84	148.57	80.60
147.54	12.87	148.06	17.40	148.58	82.25
147.55	12.89	148.07	17.98	148.59	83.92
147.56	12.91	148.08	18.60	148.60	85.60
147.57	12.92	148.09	19.24	148.61	87.30
147.58	12.94	148.10	19.91	148.62	89.01
147.59	12.95	148.11	20.60	148.63	90.73
147.60	12.97	148.12	21.31	148.64	92.46
147.61	12.99	148.13	22.05	148.65	94.21
147.62	13.00	148.14	22.81	148.66	95.97
147.63	13.02	148.15	23.59	148.67	97.74
147.64	13.03	148.16	24.39	148.68	99.53
147.65	13.05	148.17	25.25	148.69	101.32
147.66	13.06	148.18	26.14	148.70	103.13
147.67	13.08	148.19	27.05	148.71	104.96
147.68	13.10	148.20	27.99	148.72	106.79
147.69	13.11	148.21	28.95	148.73	108.64
147.70	13.13	148.22	29.94	148.74	110.50
147.71	13.14	148.23	30.96	148.75	112.37
147.72	13.16	148.24	31.99	148.76	114.26
147.73	13.17	148.25	33.06	148.77	116.19
147.74	13.19	148.26	34.14	148.78	118.14
147.75	13.21	148.27	35.26	148.79	120.10
147.76	13.22	148.28	36.39	148.80	122.07
147.77	13.24	148.29	37.55	148.81	124.06
147.78	13.25	148.30	38.74	148.82	126.05
147.79	13.27	148.31	39.94	148.83	128.07
147.80	13.28	148.32	41.18	148.84	130.09
147.81	13.30	148.33	42.43	148.85	132.13
147.82	13.31	148.34	43.72	148.86	134.18
147.83	13.33	148.35	45.02	148.87	136.25
147.84	13.34	148.36	46.35	148.88	138.33
147.85	13.36	148.37	47.73	148.89	140.42
147.86	13.37	148.38	49.14	148.90	142.52
147.87	13.39	148.39	50.57	148.91	144.63
147.88	13.41	148.40	52.03	148.92	146.76
147.89	13.42	148.41	53.51	148.93	148.90
147.90	13.44	148.42	55.02	148.94	151.06
147.91	13.45	148.43	56.56	148.95	153.22
147.92	13.47	148.44	58.12	148.96	155.40
147.93	13.48	148.45	59.71	148.97	157.54
147.94	13.50	148.46	61.33	148.98	159.69
147.95	13.51	148.47	62.97	148.99	161.84
147.96	13.53	148.48	64.64	149.00	**164.01**
147.97	13.66	148.49	66.34		

Stage-Area-Storage for Pond B-25: Basin #25

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
143.30	0	0	143.82	3,493	908
143.31	67	0	143.83	3,560	943
143.32	134	1	143.84	3,627	979
143.33	202	3	143.85	3,694	1,016
143.34	269	5	143.86	3,762	1,053
143.35	336	8	143.87	3,829	1,091
143.36	403	12	143.88	3,896	1,130
143.37	470	16	143.89	3,963	1,169
143.38	537	21	143.90	4,030	1,209
143.39	605	27	143.91	4,097	1,250
143.40	672	34	143.92	4,165	1,291
143.41	739	41	143.93	4,232	1,333
143.42	806	48	143.94	4,299	1,376
143.43	873	57	143.95	4,366	1,419
143.44	940	66	143.96	4,433	1,463
143.45	1,008	76	143.97	4,500	1,508
143.46	1,075	86	143.98	4,568	1,553
143.47	1,142	97	143.99	4,635	1,599
143.48	1,209	109	144.00	4,702	1,646
143.49	1,276	121	144.01	4,711	1,693
143.50	1,343	134	144.02	4,720	1,740
143.51	1,411	148	144.03	4,728	1,787
143.52	1,478	163	144.04	4,737	1,834
143.53	1,545	178	144.05	4,746	1,882
143.54	1,612	193	144.06	4,755	1,929
143.55	1,679	210	144.07	4,764	1,977
143.56	1,746	227	144.08	4,773	2,025
143.57	1,814	245	144.09	4,781	2,072
143.58	1,881	263	144.10	4,790	2,120
143.59	1,948	282	144.11	4,799	2,168
143.60	2,015	302	144.12	4,808	2,216
143.61	2,082	323	144.13	4,817	2,264
143.62	2,149	344	144.14	4,825	2,313
143.63	2,217	366	144.15	4,834	2,361
143.64	2,284	388	144.16	4,843	2,409
143.65	2,351	411	144.17	4,852	2,458
143.66	2,418	435	144.18	4,861	2,506
143.67	2,485	460	144.19	4,870	2,555
143.68	2,553	485	144.20	4,878	2,604
143.69	2,620	511	144.21	4,887	2,653
143.70	2,687	537	144.22	4,896	2,701
143.71	2,754	565	144.23	4,905	2,750
143.72	2,821	592	144.24	4,914	2,800
143.73	2,888	621	144.25	4,923	2,849
143.74	2,956	650	144.26	4,931	2,898
143.75	3,023	680	144.27	4,940	2,947
143.76	3,090	711	144.28	4,949	2,997
143.77	3,157	742	144.29	4,958	3,046
143.78	3,224	774	144.30	4,967	3,096
143.79	3,291	806	144.31	4,975	3,146
143.80	3,359	840	144.32	4,984	3,195
143.81	3,426	874	144.33	4,993	3,245

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.34	5,002	3,295	144.86	5,461	6,016
144.35	5,011	3,345	144.87	5,469	6,070
144.36	5,020	3,396	144.88	5,478	6,125
144.37	5,028	3,446	144.89	5,487	6,180
144.38	5,037	3,496	144.90	5,496	6,235
144.39	5,046	3,547	144.91	5,505	6,290
144.40	5,055	3,597	144.92	5,513	6,345
144.41	5,064	3,648	144.93	5,522	6,400
144.42	5,072	3,698	144.94	5,531	6,455
144.43	5,081	3,749	144.95	5,540	6,511
144.44	5,090	3,800	144.96	5,549	6,566
144.45	5,099	3,851	144.97	5,558	6,622
144.46	5,108	3,902	144.98	5,566	6,677
144.47	5,117	3,953	144.99	5,575	6,733
144.48	5,125	4,004	145.00	5,584	6,789
144.49	5,134	4,056	145.01	5,593	6,845
144.50	5,143	4,107	145.02	5,602	6,901
144.51	5,152	4,158	145.03	5,611	6,957
144.52	5,161	4,210	145.04	5,620	7,013
144.53	5,169	4,262	145.05	5,629	7,069
144.54	5,178	4,313	145.06	5,638	7,125
144.55	5,187	4,365	145.07	5,648	7,182
144.56	5,196	4,417	145.08	5,657	7,238
144.57	5,205	4,469	145.09	5,666	7,295
144.58	5,214	4,521	145.10	5,675	7,352
144.59	5,222	4,573	145.11	5,684	7,408
144.60	5,231	4,626	145.12	5,693	7,465
144.61	5,240	4,678	145.13	5,702	7,522
144.62	5,249	4,730	145.14	5,711	7,579
144.63	5,258	4,783	145.15	5,720	7,637
144.64	5,266	4,836	145.16	5,729	7,694
144.65	5,275	4,888	145.17	5,738	7,751
144.66	5,284	4,941	145.18	5,747	7,809
144.67	5,293	4,994	145.19	5,757	7,866
144.68	5,302	5,047	145.20	5,766	7,924
144.69	5,311	5,100	145.21	5,775	7,981
144.70	5,319	5,153	145.22	5,784	8,039
144.71	5,328	5,206	145.23	5,793	8,097
144.72	5,337	5,260	145.24	5,802	8,155
144.73	5,346	5,313	145.25	5,811	8,213
144.74	5,355	5,367	145.26	5,820	8,271
144.75	5,364	5,420	145.27	5,829	8,329
144.76	5,372	5,474	145.28	5,838	8,388
144.77	5,381	5,528	145.29	5,847	8,446
144.78	5,390	5,582	145.30	5,856	8,505
144.79	5,399	5,636	145.31	5,865	8,563
144.80	5,408	5,690	145.32	5,875	8,622
144.81	5,416	5,744	145.33	5,884	8,681
144.82	5,425	5,798	145.34	5,893	8,740
144.83	5,434	5,852	145.35	5,902	8,799
144.84	5,443	5,907	145.36	5,911	8,858
144.85	5,452	5,961	145.37	5,920	8,917

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.38	5,929	8,976	145.90	6,401	12,182
145.39	5,938	9,036	145.91	6,410	12,246
145.40	5,947	9,095	145.92	6,419	12,310
145.41	5,956	9,154	145.93	6,428	12,374
145.42	5,965	9,214	145.94	6,438	12,439
145.43	5,974	9,274	145.95	6,447	12,503
145.44	5,984	9,334	145.96	6,456	12,568
145.45	5,993	9,393	145.97	6,465	12,632
145.46	6,002	9,453	145.98	6,474	12,697
145.47	6,011	9,513	145.99	6,483	12,762
145.48	6,020	9,574	146.00	6,492	12,827
145.49	6,029	9,634	146.01	6,501	12,892
145.50	6,038	9,694	146.02	6,511	12,957
145.51	6,047	9,755	146.03	6,520	13,022
145.52	6,056	9,815	146.04	6,529	13,087
145.53	6,065	9,876	146.05	6,539	13,152
145.54	6,074	9,936	146.06	6,548	13,218
145.55	6,083	9,997	146.07	6,558	13,283
145.56	6,092	10,058	146.08	6,567	13,349
145.57	6,102	10,119	146.09	6,576	13,415
145.58	6,111	10,180	146.10	6,586	13,481
145.59	6,120	10,241	146.11	6,595	13,546
145.60	6,129	10,303	146.12	6,604	13,612
145.61	6,138	10,364	146.13	6,614	13,679
145.62	6,147	10,425	146.14	6,623	13,745
145.63	6,156	10,487	146.15	6,632	13,811
145.64	6,165	10,548	146.16	6,642	13,877
145.65	6,174	10,610	146.17	6,651	13,944
145.66	6,183	10,672	146.18	6,660	14,010
145.67	6,192	10,734	146.19	6,670	14,077
145.68	6,201	10,796	146.20	6,679	14,144
145.69	6,211	10,858	146.21	6,689	14,211
145.70	6,220	10,920	146.22	6,698	14,278
145.71	6,229	10,982	146.23	6,707	14,345
145.72	6,238	11,045	146.24	6,717	14,412
145.73	6,247	11,107	146.25	6,726	14,479
145.74	6,256	11,169	146.26	6,735	14,546
145.75	6,265	11,232	146.27	6,745	14,614
145.76	6,274	11,295	146.28	6,754	14,681
145.77	6,283	11,358	146.29	6,763	14,749
145.78	6,292	11,420	146.30	6,773	14,816
145.79	6,301	11,483	146.31	6,782	14,884
145.80	6,310	11,546	146.32	6,792	14,952
145.81	6,319	11,610	146.33	6,801	15,020
145.82	6,329	11,673	146.34	6,810	15,088
145.83	6,338	11,736	146.35	6,820	15,156
145.84	6,347	11,800	146.36	6,829	15,224
145.85	6,356	11,863	146.37	6,838	15,293
145.86	6,365	11,927	146.38	6,848	15,361
145.87	6,374	11,990	146.39	6,857	15,430
145.88	6,383	12,054	146.40	6,866	15,498
145.89	6,392	12,118	146.41	6,876	15,567

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.42	6,885	15,636	146.94	7,372	19,343
146.43	6,894	15,705	146.95	7,381	19,416
146.44	6,904	15,774	146.96	7,391	19,490
146.45	6,913	15,843	146.97	7,400	19,564
146.46	6,923	15,912	146.98	7,409	19,638
146.47	6,932	15,981	146.99	7,419	19,712
146.48	6,941	16,051	147.00	7,428	19,787
146.49	6,951	16,120	147.01	7,438	19,861
146.50	6,960	16,190	147.02	7,447	19,935
146.51	6,969	16,259	147.03	7,457	20,010
146.52	6,979	16,329	147.04	7,467	20,085
146.53	6,988	16,399	147.05	7,476	20,159
146.54	6,997	16,469	147.06	7,486	20,234
146.55	7,007	16,539	147.07	7,496	20,309
146.56	7,016	16,609	147.08	7,505	20,384
146.57	7,026	16,679	147.09	7,515	20,459
146.58	7,035	16,749	147.10	7,525	20,534
146.59	7,044	16,820	147.11	7,534	20,610
146.60	7,054	16,890	147.12	7,544	20,685
146.61	7,063	16,961	147.13	7,553	20,760
146.62	7,072	17,032	147.14	7,563	20,836
146.63	7,082	17,102	147.15	7,573	20,912
146.64	7,091	17,173	147.16	7,582	20,988
146.65	7,100	17,244	147.17	7,592	21,063
146.66	7,110	17,315	147.18	7,602	21,139
146.67	7,119	17,386	147.19	7,611	21,215
146.68	7,128	17,458	147.20	7,621	21,292
146.69	7,138	17,529	147.21	7,631	21,368
146.70	7,147	17,600	147.22	7,640	21,444
146.71	7,157	17,672	147.23	7,650	21,521
146.72	7,166	17,744	147.24	7,660	21,597
146.73	7,175	17,815	147.25	7,669	21,674
146.74	7,185	17,887	147.26	7,679	21,751
146.75	7,194	17,959	147.27	7,689	21,827
146.76	7,203	18,031	147.28	7,698	21,904
146.77	7,213	18,103	147.29	7,708	21,981
146.78	7,222	18,175	147.30	7,718	22,059
146.79	7,231	18,247	147.31	7,727	22,136
146.80	7,241	18,320	147.32	7,737	22,213
146.81	7,250	18,392	147.33	7,746	22,290
146.82	7,260	18,465	147.34	7,756	22,368
146.83	7,269	18,537	147.35	7,766	22,446
146.84	7,278	18,610	147.36	7,775	22,523
146.85	7,288	18,683	147.37	7,785	22,601
146.86	7,297	18,756	147.38	7,795	22,679
146.87	7,306	18,829	147.39	7,804	22,757
146.88	7,316	18,902	147.40	7,814	22,835
146.89	7,325	18,975	147.41	7,824	22,913
146.90	7,334	19,049	147.42	7,833	22,992
146.91	7,344	19,122	147.43	7,843	23,070
146.92	7,353	19,195	147.44	7,853	23,148
146.93	7,362	19,269	147.45	7,862	23,227

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.46	7,872	23,306	147.98	8,374	27,530
147.47	7,882	23,384	147.99	8,383	27,613
147.48	7,891	23,463	148.00	8,393	27,697
147.49	7,901	23,542	148.01	8,403	27,781
147.50	7,911	23,621	148.02	8,413	27,865
147.51	7,920	23,700	148.03	8,423	27,949
147.52	7,930	23,780	148.04	8,433	28,034
147.53	7,939	23,859	148.05	8,443	28,118
147.54	7,949	23,939	148.06	8,453	28,203
147.55	7,959	24,018	148.07	8,463	28,287
147.56	7,968	24,098	148.08	8,472	28,372
147.57	7,978	24,177	148.09	8,482	28,457
147.58	7,988	24,257	148.10	8,492	28,541
147.59	7,997	24,337	148.11	8,502	28,626
147.60	8,007	24,417	148.12	8,512	28,712
147.61	8,017	24,497	148.13	8,522	28,797
147.62	8,026	24,578	148.14	8,532	28,882
147.63	8,036	24,658	148.15	8,542	28,967
147.64	8,046	24,738	148.16	8,552	29,053
147.65	8,055	24,819	148.17	8,562	29,138
147.66	8,065	24,899	148.18	8,572	29,224
147.67	8,075	24,980	148.19	8,582	29,310
147.68	8,084	25,061	148.20	8,592	29,396
147.69	8,094	25,142	148.21	8,602	29,482
147.70	8,104	25,223	148.22	8,611	29,568
147.71	8,113	25,304	148.23	8,621	29,654
147.72	8,123	25,385	148.24	8,631	29,740
147.73	8,132	25,466	148.25	8,641	29,826
147.74	8,142	25,548	148.26	8,651	29,913
147.75	8,152	25,629	148.27	8,661	30,000
147.76	8,161	25,711	148.28	8,671	30,086
147.77	8,171	25,792	148.29	8,681	30,173
147.78	8,181	25,874	148.30	8,691	30,260
147.79	8,190	25,956	148.31	8,701	30,347
147.80	8,200	26,038	148.32	8,711	30,434
147.81	8,210	26,120	148.33	8,721	30,521
147.82	8,219	26,202	148.34	8,731	30,608
147.83	8,229	26,284	148.35	8,741	30,696
147.84	8,239	26,367	148.36	8,750	30,783
147.85	8,248	26,449	148.37	8,760	30,871
147.86	8,258	26,532	148.38	8,770	30,958
147.87	8,268	26,614	148.39	8,780	31,046
147.88	8,277	26,697	148.40	8,790	31,134
147.89	8,287	26,780	148.41	8,800	31,222
147.90	8,297	26,863	148.42	8,810	31,310
147.91	8,306	26,946	148.43	8,820	31,398
147.92	8,316	27,029	148.44	8,830	31,486
147.93	8,325	27,112	148.45	8,840	31,575
147.94	8,335	27,195	148.46	8,850	31,663
147.95	8,345	27,279	148.47	8,860	31,752
147.96	8,354	27,362	148.48	8,870	31,840
147.97	8,364	27,446	148.49	8,880	31,929

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.50	8,890	32,018
148.51	8,899	32,107
148.52	8,909	32,196
148.53	8,919	32,285
148.54	8,929	32,374
148.55	8,939	32,464
148.56	8,949	32,553
148.57	8,959	32,643
148.58	8,969	32,732
148.59	8,979	32,822
148.60	8,989	32,912
148.61	8,999	33,002
148.62	9,009	33,092
148.63	9,019	33,182
148.64	9,029	33,272
148.65	9,038	33,362
148.66	9,048	33,453
148.67	9,058	33,543
148.68	9,068	33,634
148.69	9,078	33,725
148.70	9,088	33,816
148.71	9,098	33,907
148.72	9,108	33,998
148.73	9,118	34,089
148.74	9,128	34,180
148.75	9,138	34,271
148.76	9,148	34,363
148.77	9,158	34,454
148.78	9,168	34,546
148.79	9,177	34,638
148.80	9,187	34,729
148.81	9,197	34,821
148.82	9,207	34,913
148.83	9,217	35,005
148.84	9,227	35,098
148.85	9,237	35,190
148.86	9,247	35,282
148.87	9,257	35,375
148.88	9,267	35,468
148.89	9,277	35,560
148.90	9,287	35,653
148.91	9,297	35,746
148.92	9,307	35,839
148.93	9,316	35,932
148.94	9,326	36,025
148.95	9,336	36,119
148.96	9,346	36,212
148.97	9,356	36,306
148.98	9,366	36,399
148.99	9,376	36,493
149.00	**9,386**	**36,587**

Summary for Pond B-26: Basin #26

Inflow Area = 2.366 ac, 39.90% Impervious, Inflow Depth = 4.08" for Future 10 yr event
Inflow = 9.85 cfs @ 12.17 hrs, Volume= 0.804 af
Outflow = 4.06 cfs @ 12.39 hrs, Volume= 0.678 af, Atten= 59%, Lag= 13.0 min
Primary = 4.06 cfs @ 12.39 hrs, Volume= 0.678 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 146.45' @ 12.39 hrs Surf.Area= 6,724 sf Storage= 16,808 cf

Plug-Flow detention time= 434.3 min calculated for 0.677 af (84% of inflow)
Center-of-Mass det. time= 364.2 min (1,153.4 - 789.2)

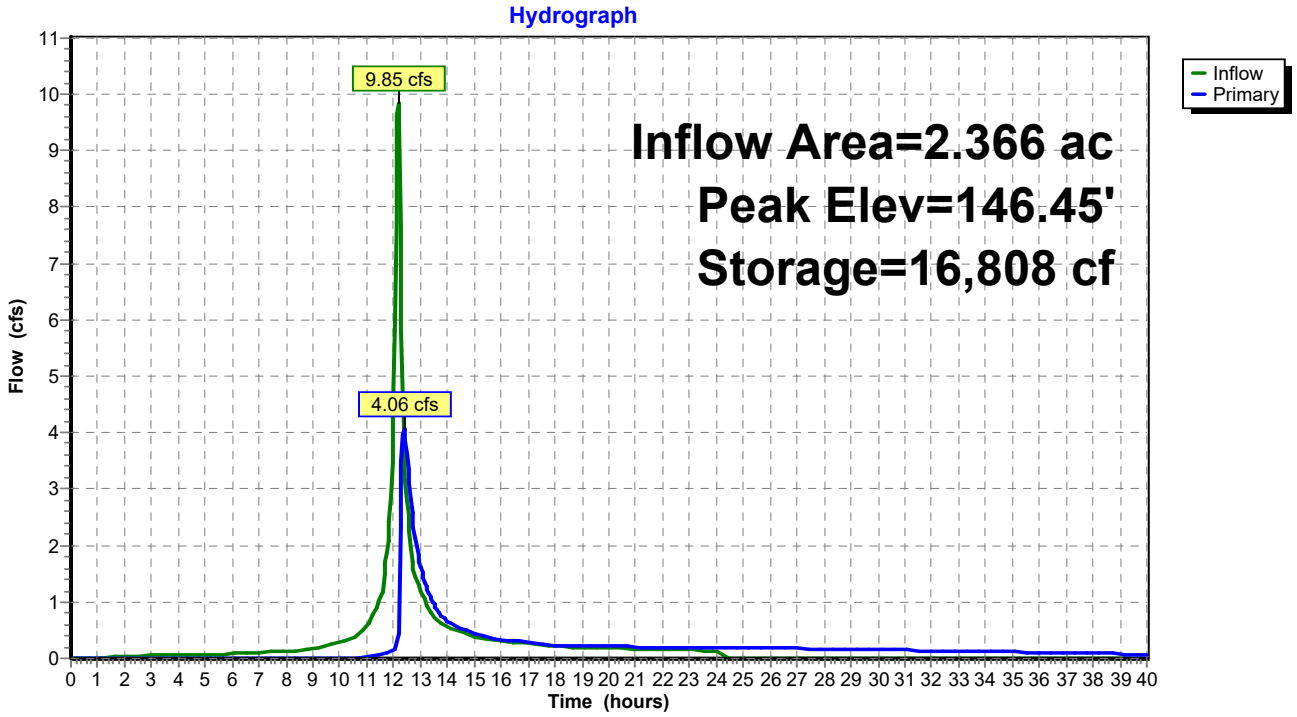
Volume	Invert	Avail.Storage	Storage Description
#1	143.30'	35,348 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
143.30	0	0	0
144.00	5,466	1,913	1,913
145.00	5,967	5,717	7,630
146.00	6,486	6,227	13,856
147.00	7,018	6,752	20,608
148.00	7,563	7,291	27,899
148.95	8,120	7,449	35,348

Device	Routing	Invert	Outlet Devices
#1	Primary	143.30'	**18.0" Round Culvert** L= 234.0' Ke= 0.500 Inlet / Outlet Invert= 143.30' / 142.00' S= 0.0056 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	144.36'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	148.05'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.03 cfs @ 12.39 hrs HW=146.45' (Free Discharge)
- **1=Culvert** (Passes 4.03 cfs of 10.12 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.78 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.80 cfs @ 2.18 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-26: Basin #26



Stage-Discharge for Pond B-26: Basin #26

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
143.30	0.00	143.82	0.00	144.34	0.00	144.86	0.10
143.31	0.00	143.83	0.00	144.35	0.00	144.87	0.10
143.32	0.00	143.84	0.00	144.36	0.00	144.88	0.11
143.33	0.00	143.85	0.00	144.37	0.00	144.89	0.11
143.34	0.00	143.86	0.00	144.38	0.00	144.90	0.11
143.35	0.00	143.87	0.00	144.39	0.00	144.91	0.11
143.36	0.00	143.88	0.00	144.40	0.00	144.92	0.11
143.37	0.00	143.89	0.00	144.41	0.00	144.93	0.11
143.38	0.00	143.90	0.00	144.42	0.01	144.94	0.11
143.39	0.00	143.91	0.00	144.43	0.01	144.95	0.11
143.40	0.00	143.92	0.00	144.44	0.01	144.96	0.12
143.41	0.00	143.93	0.00	144.45	0.01	144.97	0.12
143.42	0.00	143.94	0.00	144.46	0.02	144.98	0.12
143.43	0.00	143.95	0.00	144.47	0.02	144.99	0.12
143.44	0.00	143.96	0.00	144.48	0.02	145.00	0.12
143.45	0.00	143.97	0.00	144.49	0.03	145.01	0.12
143.46	0.00	143.98	0.00	144.50	0.03	145.02	0.12
143.47	0.00	143.99	0.00	144.51	0.03	145.03	0.12
143.48	0.00	144.00	0.00	144.52	0.04	145.04	0.12
143.49	0.00	144.01	0.00	144.53	0.04	145.05	0.13
143.50	0.00	144.02	0.00	144.54	0.05	145.06	0.13
143.51	0.00	144.03	0.00	144.55	0.05	145.07	0.13
143.52	0.00	144.04	0.00	144.56	0.05	145.08	0.13
143.53	0.00	144.05	0.00	144.57	0.05	145.09	0.13
143.54	0.00	144.06	0.00	144.58	0.06	145.10	0.13
143.55	0.00	144.07	0.00	144.59	0.06	145.11	0.13
143.56	0.00	144.08	0.00	144.60	0.06	145.12	0.13
143.57	0.00	144.09	0.00	144.61	0.06	145.13	0.13
143.58	0.00	144.10	0.00	144.62	0.06	145.14	0.13
143.59	0.00	144.11	0.00	144.63	0.07	145.15	0.14
143.60	0.00	144.12	0.00	144.64	0.07	145.16	0.14
143.61	0.00	144.13	0.00	144.65	0.07	145.17	0.14
143.62	0.00	144.14	0.00	144.66	0.07	145.18	0.14
143.63	0.00	144.15	0.00	144.67	0.07	145.19	0.14
143.64	0.00	144.16	0.00	144.68	0.08	145.20	0.14
143.65	0.00	144.17	0.00	144.69	0.08	145.21	0.14
143.66	0.00	144.18	0.00	144.70	0.08	145.22	0.14
143.67	0.00	144.19	0.00	144.71	0.08	145.23	0.14
143.68	0.00	144.20	0.00	144.72	0.08	145.24	0.14
143.69	0.00	144.21	0.00	144.73	0.08	145.25	0.15
143.70	0.00	144.22	0.00	144.74	0.09	145.26	0.15
143.71	0.00	144.23	0.00	144.75	0.09	145.27	0.15
143.72	0.00	144.24	0.00	144.76	0.09	145.28	0.15
143.73	0.00	144.25	0.00	144.77	0.09	145.29	0.15
143.74	0.00	144.26	0.00	144.78	0.09	145.30	0.15
143.75	0.00	144.27	0.00	144.79	0.09	145.31	0.15
143.76	0.00	144.28	0.00	144.80	0.10	145.32	0.15
143.77	0.00	144.29	0.00	144.81	0.10	145.33	0.15
143.78	0.00	144.30	0.00	144.82	0.10	145.34	0.15
143.79	0.00	144.31	0.00	144.83	0.10	145.35	0.15
143.80	0.00	144.32	0.00	144.84	0.10	145.36	0.16
143.81	0.00	144.33	0.00	144.85	0.10	145.37	0.16

Stage-Discharge for Pond B-26: Basin #26 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
145.38	0.16	145.90	0.20	146.42	3.72	146.94	10.94
145.39	0.16	145.91	0.20	146.43	3.84	146.95	10.96
145.40	0.16	145.92	0.20	146.44	3.96	146.96	10.97
145.41	0.16	145.93	0.20	146.45	4.09	146.97	10.99
145.42	0.16	145.94	0.20	146.46	4.22	146.98	11.00
145.43	0.16	145.95	0.20	146.47	4.35	146.99	11.02
145.44	0.16	145.96	0.20	146.48	4.48	147.00	11.04
145.45	0.16	145.97	0.20	146.49	4.61	147.01	11.05
145.46	0.16	145.98	0.20	146.50	4.74	147.02	11.07
145.47	0.16	145.99	0.20	146.51	4.88	147.03	11.08
145.48	0.17	146.00	0.20	146.52	5.01	147.04	11.10
145.49	0.17	146.01	0.22	146.53	5.15	147.05	11.11
145.50	0.17	146.02	0.24	146.54	5.29	147.06	11.13
145.51	0.17	146.03	0.27	146.55	5.43	147.07	11.15
145.52	0.17	146.04	0.31	146.56	5.57	147.08	11.16
145.53	0.17	146.05	0.35	146.57	5.71	147.09	11.18
145.54	0.17	146.06	0.40	146.58	5.85	147.10	11.19
145.55	0.17	146.07	0.45	146.59	5.99	147.11	11.21
145.56	0.17	146.08	0.50	146.60	6.14	147.12	11.22
145.57	0.17	146.09	0.56	146.61	6.28	147.13	11.24
145.58	0.17	146.10	0.62	146.62	6.43	147.14	11.25
145.59	0.17	146.11	0.69	146.63	6.58	147.15	11.27
145.60	0.17	146.12	0.75	146.64	6.72	147.16	11.29
145.61	0.18	146.13	0.82	146.65	6.87	147.17	11.30
145.62	0.18	146.14	0.89	146.66	7.03	147.18	11.32
145.63	0.18	146.15	0.97	146.67	7.18	147.19	11.33
145.64	0.18	146.16	1.04	146.68	7.33	147.20	11.35
145.65	0.18	146.17	1.12	146.69	7.48	147.21	11.36
145.66	0.18	146.18	1.20	146.70	7.64	147.22	11.38
145.67	0.18	146.19	1.29	146.71	7.79	147.23	11.39
145.68	0.18	146.20	1.37	146.72	7.95	147.24	11.41
145.69	0.18	146.21	1.46	146.73	8.11	147.25	11.42
145.70	0.18	146.22	1.55	146.74	8.27	147.26	11.44
145.71	0.18	146.23	1.64	146.75	8.43	147.27	11.45
145.72	0.18	146.24	1.74	146.76	8.59	147.28	11.47
145.73	0.18	146.25	1.83	146.77	8.75	147.29	11.48
145.74	0.19	146.26	1.93	146.78	8.91	147.30	11.50
145.75	0.19	146.27	2.03	146.79	9.07	147.31	11.51
145.76	0.19	146.28	2.13	146.80	9.24	147.32	11.53
145.77	0.19	146.29	2.23	146.81	9.40	147.33	11.54
145.78	0.19	146.30	2.34	146.82	9.57	147.34	11.56
145.79	0.19	146.31	2.45	146.83	9.73	147.35	11.57
145.80	0.19	146.32	2.55	146.84	9.90	147.36	11.59
145.81	0.19	146.33	2.66	146.85	10.07	147.37	11.60
145.82	0.19	146.34	2.77	146.86	10.24	147.38	11.62
145.83	0.19	146.35	2.89	146.87	10.41	147.39	11.63
145.84	0.19	146.36	3.00	146.88	10.58	147.40	11.65
145.85	0.19	146.37	3.12	146.89	10.75	147.41	11.66
145.86	0.19	146.38	3.23	146.90	10.88	147.42	11.68
145.87	0.19	146.39	3.35	146.91	10.89	147.43	11.69
145.88	0.20	146.40	3.47	146.92	10.91	147.44	11.71
145.89	0.20	146.41	3.59	146.93	10.92	147.45	11.72

Stage-Discharge for Pond B-26: Basin #26 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.46	11.74	147.98	12.49	148.50	52.51
147.47	11.75	147.99	12.50	148.51	54.02
147.48	11.77	148.00	12.51	148.52	55.56
147.49	11.78	148.01	12.53	148.53	57.12
147.50	11.80	148.02	12.54	148.54	58.71
147.51	11.81	148.03	12.56	148.55	60.32
147.52	11.83	148.04	12.57	148.56	61.96
147.53	11.84	148.05	12.58	148.57	63.63
147.54	11.86	148.06	12.71	148.58	65.33
147.55	11.87	148.07	12.94	148.59	67.05
147.56	11.89	148.08	13.23	148.60	68.79
147.57	11.90	148.09	13.58	148.61	70.57
147.58	11.92	148.10	13.96	148.62	72.37
147.59	11.93	148.11	14.39	148.63	74.20
147.60	11.94	148.12	14.85	148.64	76.05
147.61	11.96	148.13	15.35	148.65	77.94
147.62	11.97	148.14	15.88	148.66	79.58
147.63	11.99	148.15	16.44	148.67	81.23
147.64	12.00	148.16	17.03	148.68	82.90
147.65	12.02	148.17	17.64	148.69	84.58
147.66	12.03	148.18	18.28	148.70	86.27
147.67	12.05	148.19	18.95	148.71	87.98
147.68	12.06	148.20	19.63	148.72	89.70
147.69	12.07	148.21	20.35	148.73	91.43
147.70	12.09	148.22	21.08	148.74	93.18
147.71	12.10	148.23	21.84	148.75	94.93
147.72	12.12	148.24	22.62	148.76	96.71
147.73	12.13	148.25	23.42	148.77	98.49
147.74	12.15	148.26	24.28	148.78	100.29
147.75	12.16	148.27	25.17	148.79	102.10
147.76	12.18	148.28	26.08	148.80	103.92
147.77	12.19	148.29	27.02	148.81	105.75
147.78	12.20	148.30	27.98	148.82	107.60
147.79	12.22	148.31	28.96	148.83	109.46
147.80	12.23	148.32	29.98	148.84	111.33
147.81	12.25	148.33	31.01	148.85	113.21
147.82	12.26	148.34	32.07	148.86	115.14
147.83	12.27	148.35	33.16	148.87	117.09
147.84	12.29	148.36	34.27	148.88	119.05
147.85	12.30	148.37	35.40	148.89	121.02
147.86	12.32	148.38	36.56	148.90	123.00
147.87	12.33	148.39	37.75	148.91	125.00
147.88	12.35	148.40	38.95	148.92	127.01
147.89	12.36	148.41	40.19	148.93	129.04
147.90	12.37	148.42	41.44	148.94	131.07
147.91	12.39	148.43	42.72	148.95	**133.12**
147.92	12.40	148.44	44.03		
147.93	12.42	148.45	45.35		
147.94	12.43	148.46	46.73		
147.95	12.44	148.47	48.14		
147.96	12.46	148.48	49.57		
147.97	12.47	148.49	51.03		

Stage-Area-Storage for Pond B-26: Basin #26

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
143.30	0	0	143.82	4,060	1,056
143.31	78	0	143.83	4,139	1,097
143.32	156	2	143.84	4,217	1,138
143.33	234	4	143.85	4,295	1,181
143.34	312	6	143.86	4,373	1,224
143.35	390	10	143.87	4,451	1,269
143.36	469	14	143.88	4,529	1,313
143.37	547	19	143.89	4,607	1,359
143.38	625	25	143.90	4,685	1,406
143.39	703	32	143.91	4,763	1,453
143.40	781	39	143.92	4,841	1,501
143.41	859	47	143.93	4,919	1,550
143.42	937	56	143.94	4,997	1,599
143.43	1,015	66	143.95	5,076	1,650
143.44	1,093	77	143.96	5,154	1,701
143.45	1,171	88	143.97	5,232	1,753
143.46	1,249	100	143.98	5,310	1,805
143.47	1,327	113	143.99	5,388	1,859
143.48	1,406	126	144.00	5,466	1,913
143.49	1,484	141	144.01	5,471	1,968
143.50	1,562	156	144.02	5,476	2,023
143.51	1,640	172	144.03	5,481	2,077
143.52	1,718	189	144.04	5,486	2,132
143.53	1,796	207	144.05	5,491	2,187
143.54	1,874	225	144.06	5,496	2,242
143.55	1,952	244	144.07	5,501	2,297
143.56	2,030	264	144.08	5,506	2,352
143.57	2,108	285	144.09	5,511	2,407
143.58	2,186	306	144.10	5,516	2,462
143.59	2,264	328	144.11	5,521	2,517
143.60	2,343	351	144.12	5,526	2,573
143.61	2,421	375	144.13	5,531	2,628
143.62	2,499	400	144.14	5,536	2,683
143.63	2,577	425	144.15	5,541	2,739
143.64	2,655	451	144.16	5,546	2,794
143.65	2,733	478	144.17	5,551	2,850
143.66	2,811	506	144.18	5,556	2,905
143.67	2,889	534	144.19	5,561	2,961
143.68	2,967	564	144.20	5,566	3,016
143.69	3,045	594	144.21	5,571	3,072
143.70	3,123	625	144.22	5,576	3,128
143.71	3,202	656	144.23	5,581	3,184
143.72	3,280	689	144.24	5,586	3,239
143.73	3,358	722	144.25	5,591	3,295
143.74	3,436	756	144.26	5,596	3,351
143.75	3,514	791	144.27	5,601	3,407
143.76	3,592	826	144.28	5,606	3,463
143.77	3,670	862	144.29	5,611	3,519
143.78	3,748	900	144.30	5,616	3,575
143.79	3,826	937	144.31	5,621	3,632
143.80	3,904	976	144.32	5,626	3,688
143.81	3,982	1,016	144.33	5,631	3,744

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.34	5,636	3,800	144.86	5,897	6,799
144.35	5,641	3,857	144.87	5,902	6,858
144.36	5,646	3,913	144.88	5,907	6,917
144.37	5,651	3,970	144.89	5,912	6,976
144.38	5,656	4,026	144.90	5,917	7,035
144.39	5,661	4,083	144.91	5,922	7,095
144.40	5,666	4,140	144.92	5,927	7,154
144.41	5,671	4,196	144.93	5,932	7,213
144.42	5,676	4,253	144.94	5,937	7,272
144.43	5,681	4,310	144.95	5,942	7,332
144.44	5,686	4,367	144.96	5,947	7,391
144.45	5,691	4,424	144.97	5,952	7,451
144.46	5,696	4,480	144.98	5,957	7,510
144.47	5,701	4,537	144.99	5,962	7,570
144.48	5,706	4,594	145.00	5,967	7,630
144.49	5,711	4,652	145.01	5,972	7,689
144.50	5,717	4,709	145.02	5,977	7,749
144.51	5,722	4,766	145.03	5,983	7,809
144.52	5,727	4,823	145.04	5,988	7,869
144.53	5,732	4,880	145.05	5,993	7,929
144.54	5,737	4,938	145.06	5,998	7,989
144.55	5,742	4,995	145.07	6,003	8,049
144.56	5,747	5,053	145.08	6,009	8,109
144.57	5,752	5,110	145.09	6,014	8,169
144.58	5,757	5,168	145.10	6,019	8,229
144.59	5,762	5,225	145.11	6,024	8,289
144.60	5,767	5,283	145.12	6,029	8,349
144.61	5,772	5,341	145.13	6,034	8,410
144.62	5,777	5,398	145.14	6,040	8,470
144.63	5,782	5,456	145.15	6,045	8,530
144.64	5,787	5,514	145.16	6,050	8,591
144.65	5,792	5,572	145.17	6,055	8,651
144.66	5,797	5,630	145.18	6,060	8,712
144.67	5,802	5,688	145.19	6,066	8,773
144.68	5,807	5,746	145.20	6,071	8,833
144.69	5,812	5,804	145.21	6,076	8,894
144.70	5,817	5,862	145.22	6,081	8,955
144.71	5,822	5,920	145.23	6,086	9,016
144.72	5,827	5,978	145.24	6,092	9,077
144.73	5,832	6,037	145.25	6,097	9,138
144.74	5,837	6,095	145.26	6,102	9,199
144.75	5,842	6,154	145.27	6,107	9,260
144.76	5,847	6,212	145.28	6,112	9,321
144.77	5,852	6,270	145.29	6,118	9,382
144.78	5,857	6,329	145.30	6,123	9,443
144.79	5,862	6,388	145.31	6,128	9,504
144.80	5,867	6,446	145.32	6,133	9,566
144.81	5,872	6,505	145.33	6,138	9,627
144.82	5,877	6,564	145.34	6,143	9,688
144.83	5,882	6,622	145.35	6,149	9,750
144.84	5,887	6,681	145.36	6,154	9,811
144.85	5,892	6,740	145.37	6,159	9,873

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.38	6,164	9,935	145.90	6,434	13,210
145.39	6,169	9,996	145.91	6,439	13,274
145.40	6,175	10,058	145.92	6,444	13,339
145.41	6,180	10,120	145.93	6,450	13,403
145.42	6,185	10,182	145.94	6,455	13,468
145.43	6,190	10,243	145.95	6,460	13,532
145.44	6,195	10,305	145.96	6,465	13,597
145.45	6,201	10,367	145.97	6,470	13,662
145.46	6,206	10,429	145.98	6,476	13,726
145.47	6,211	10,491	145.99	6,481	13,791
145.48	6,216	10,554	146.00	6,486	13,856
145.49	6,221	10,616	146.01	6,491	13,921
145.50	6,227	10,678	146.02	6,497	13,986
145.51	6,232	10,740	146.03	6,502	14,051
145.52	6,237	10,803	146.04	6,507	14,116
145.53	6,242	10,865	146.05	6,513	14,181
145.54	6,247	10,927	146.06	6,518	14,246
145.55	6,252	10,990	146.07	6,523	14,311
145.56	6,258	11,052	146.08	6,529	14,377
145.57	6,263	11,115	146.09	6,534	14,442
145.58	6,268	11,178	146.10	6,539	14,507
145.59	6,273	11,240	146.11	6,545	14,573
145.60	6,278	11,303	146.12	6,550	14,638
145.61	6,284	11,366	146.13	6,555	14,704
145.62	6,289	11,429	146.14	6,560	14,769
145.63	6,294	11,492	146.15	6,566	14,835
145.64	6,299	11,555	146.16	6,571	14,901
145.65	6,304	11,618	146.17	6,576	14,966
145.66	6,310	11,681	146.18	6,582	15,032
145.67	6,315	11,744	146.19	6,587	15,098
145.68	6,320	11,807	146.20	6,592	15,164
145.69	6,325	11,870	146.21	6,598	15,230
145.70	6,330	11,934	146.22	6,603	15,296
145.71	6,335	11,997	146.23	6,608	15,362
145.72	6,341	12,060	146.24	6,614	15,428
145.73	6,346	12,124	146.25	6,619	15,494
145.74	6,351	12,187	146.26	6,624	15,560
145.75	6,356	12,251	146.27	6,630	15,627
145.76	6,361	12,314	146.28	6,635	15,693
145.77	6,367	12,378	146.29	6,640	15,759
145.78	6,372	12,442	146.30	6,646	15,826
145.79	6,377	12,505	146.31	6,651	15,892
145.80	6,382	12,569	146.32	6,656	15,959
145.81	6,387	12,633	146.33	6,662	16,025
145.82	6,393	12,697	146.34	6,667	16,092
145.83	6,398	12,761	146.35	6,672	16,159
145.84	6,403	12,825	146.36	6,678	16,226
145.85	6,408	12,889	146.37	6,683	16,292
145.86	6,413	12,953	146.38	6,688	16,359
145.87	6,419	13,017	146.39	6,693	16,426
145.88	6,424	13,082	146.40	6,699	16,493
145.89	6,429	13,146	146.41	6,704	16,560

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.42	6,709	16,627	146.94	6,986	20,188
146.43	6,715	16,694	146.95	6,991	20,258
146.44	6,720	16,761	146.96	6,997	20,328
146.45	6,725	16,829	146.97	7,002	20,398
146.46	6,731	16,896	146.98	7,007	20,468
146.47	6,736	16,963	146.99	7,013	20,538
146.48	6,741	17,031	147.00	7,018	20,608
146.49	6,747	17,098	147.01	7,023	20,678
146.50	6,752	17,166	147.02	7,029	20,749
146.51	6,757	17,233	147.03	7,034	20,819
146.52	6,763	17,301	147.04	7,040	20,889
146.53	6,768	17,368	147.05	7,045	20,960
146.54	6,773	17,436	147.06	7,051	21,030
146.55	6,779	17,504	147.07	7,056	21,101
146.56	6,784	17,572	147.08	7,062	21,171
146.57	6,789	17,640	147.09	7,067	21,242
146.58	6,795	17,707	147.10	7,073	21,313
146.59	6,800	17,775	147.11	7,078	21,383
146.60	6,805	17,843	147.12	7,083	21,454
146.61	6,811	17,912	147.13	7,089	21,525
146.62	6,816	17,980	147.14	7,094	21,596
146.63	6,821	18,048	147.15	7,100	21,667
146.64	6,826	18,116	147.16	7,105	21,738
146.65	6,832	18,184	147.17	7,111	21,809
146.66	6,837	18,253	147.18	7,116	21,880
146.67	6,842	18,321	147.19	7,122	21,951
146.68	6,848	18,390	147.20	7,127	22,023
146.69	6,853	18,458	147.21	7,132	22,094
146.70	6,858	18,527	147.22	7,138	22,165
146.71	6,864	18,595	147.23	7,143	22,237
146.72	6,869	18,664	147.24	7,149	22,308
146.73	6,874	18,733	147.25	7,154	22,380
146.74	6,880	18,801	147.26	7,160	22,451
146.75	6,885	18,870	147.27	7,165	22,523
146.76	6,890	18,939	147.28	7,171	22,595
146.77	6,896	19,008	147.29	7,176	22,666
146.78	6,901	19,077	147.30	7,182	22,738
146.79	6,906	19,146	147.31	7,187	22,810
146.80	6,912	19,215	147.32	7,192	22,882
146.81	6,917	19,284	147.33	7,198	22,954
146.82	6,922	19,353	147.34	7,203	23,026
146.83	6,928	19,423	147.35	7,209	23,098
146.84	6,933	19,492	147.36	7,214	23,170
146.85	6,938	19,561	147.37	7,220	23,242
146.86	6,944	19,631	147.38	7,225	23,314
146.87	6,949	19,700	147.39	7,231	23,387
146.88	6,954	19,770	147.40	7,236	23,459
146.89	6,959	19,839	147.41	7,241	23,531
146.90	6,965	19,909	147.42	7,247	23,604
146.91	6,970	19,979	147.43	7,252	23,676
146.92	6,975	20,048	147.44	7,258	23,749
146.93	6,981	20,118	147.45	7,263	23,821

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.46	7,269	23,894	147.98	7,552	27,747
147.47	7,274	23,967	147.99	7,558	27,823
147.48	7,280	24,040	148.00	7,563	27,899
147.49	7,285	24,112	148.01	7,569	27,974
147.50	7,291	24,185	148.02	7,575	28,050
147.51	7,296	24,258	148.03	7,581	28,126
147.52	7,301	24,331	148.04	7,586	28,202
147.53	7,307	24,404	148.05	7,592	28,277
147.54	7,312	24,477	148.06	7,598	28,353
147.55	7,318	24,550	148.07	7,604	28,429
147.56	7,323	24,624	148.08	7,610	28,506
147.57	7,329	24,697	148.09	7,616	28,582
147.58	7,334	24,770	148.10	7,622	28,658
147.59	7,340	24,844	148.11	7,627	28,734
147.60	7,345	24,917	148.12	7,633	28,810
147.61	7,350	24,990	148.13	7,639	28,887
147.62	7,356	25,064	148.14	7,645	28,963
147.63	7,361	25,138	148.15	7,651	29,040
147.64	7,367	25,211	148.16	7,657	29,116
147.65	7,372	25,285	148.17	7,663	29,193
147.66	7,378	25,359	148.18	7,669	29,269
147.67	7,383	25,432	148.19	7,674	29,346
147.68	7,389	25,506	148.20	7,680	29,423
147.69	7,394	25,580	148.21	7,686	29,500
147.70	7,400	25,654	148.22	7,692	29,577
147.71	7,405	25,728	148.23	7,698	29,654
147.72	7,410	25,802	148.24	7,704	29,731
147.73	7,416	25,876	148.25	7,710	29,808
147.74	7,421	25,951	148.26	7,715	29,885
147.75	7,427	26,025	148.27	7,721	29,962
147.76	7,432	26,099	148.28	7,727	30,039
147.77	7,438	26,174	148.29	7,733	30,117
147.78	7,443	26,248	148.30	7,739	30,194
147.79	7,449	26,322	148.31	7,745	30,271
147.80	7,454	26,397	148.32	7,751	30,349
147.81	7,459	26,471	148.33	7,756	30,426
147.82	7,465	26,546	148.34	7,762	30,504
147.83	7,470	26,621	148.35	7,768	30,582
147.84	7,476	26,695	148.36	7,774	30,659
147.85	7,481	26,770	148.37	7,780	30,737
147.86	7,487	26,845	148.38	7,786	30,815
147.87	7,492	26,920	148.39	7,792	30,893
147.88	7,498	26,995	148.40	7,798	30,971
147.89	7,503	27,070	148.41	7,803	31,049
147.90	7,509	27,145	148.42	7,809	31,127
147.91	7,514	27,220	148.43	7,815	31,205
147.92	7,519	27,295	148.44	7,821	31,283
147.93	7,525	27,371	148.45	7,827	31,361
147.94	7,530	27,446	148.46	7,833	31,440
147.95	7,536	27,521	148.47	7,839	31,518
147.96	7,541	27,597	148.48	7,844	31,596
147.97	7,547	27,672	148.49	7,850	31,675

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.50	7,856	31,753
148.51	7,862	31,832
148.52	7,868	31,911
148.53	7,874	31,989
148.54	7,880	32,068
148.55	7,885	32,147
148.56	7,891	32,226
148.57	7,897	32,305
148.58	7,903	32,384
148.59	7,909	32,463
148.60	7,915	32,542
148.61	7,921	32,621
148.62	7,927	32,700
148.63	7,932	32,780
148.64	7,938	32,859
148.65	7,944	32,938
148.66	7,950	33,018
148.67	7,956	33,097
148.68	7,962	33,177
148.69	7,968	33,257
148.70	7,973	33,336
148.71	7,979	33,416
148.72	7,985	33,496
148.73	7,991	33,576
148.74	7,997	33,656
148.75	8,003	33,736
148.76	8,009	33,816
148.77	8,014	33,896
148.78	8,020	33,976
148.79	8,026	34,056
148.80	8,032	34,137
148.81	8,038	34,217
148.82	8,044	34,297
148.83	8,050	34,378
148.84	8,056	34,458
148.85	8,061	34,539
148.86	8,067	34,620
148.87	8,073	34,700
148.88	8,079	34,781
148.89	8,085	34,862
148.90	8,091	34,943
148.91	8,097	35,024
148.92	8,102	35,105
148.93	8,108	35,186
148.94	8,114	35,267
148.95	**8,120**	**35,348**

Summary for Pond B-27: Basin #27

Inflow Area = 1.935 ac, 46.41% Impervious, Inflow Depth = 4.89" for Future 10 yr event
Inflow = 9.54 cfs @ 12.17 hrs, Volume= 0.789 af
Outflow = 7.63 cfs @ 12.25 hrs, Volume= 0.682 af, Atten= 20%, Lag= 4.9 min
Primary = 7.63 cfs @ 12.25 hrs, Volume= 0.682 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 172.49' @ 12.25 hrs Surf.Area= 3,873 sf Storage= 11,242 cf

Plug-Flow detention time= 143.0 min calculated for 0.681 af (86% of inflow)
Center-of-Mass det. time= 80.5 min (856.3 - 775.7)

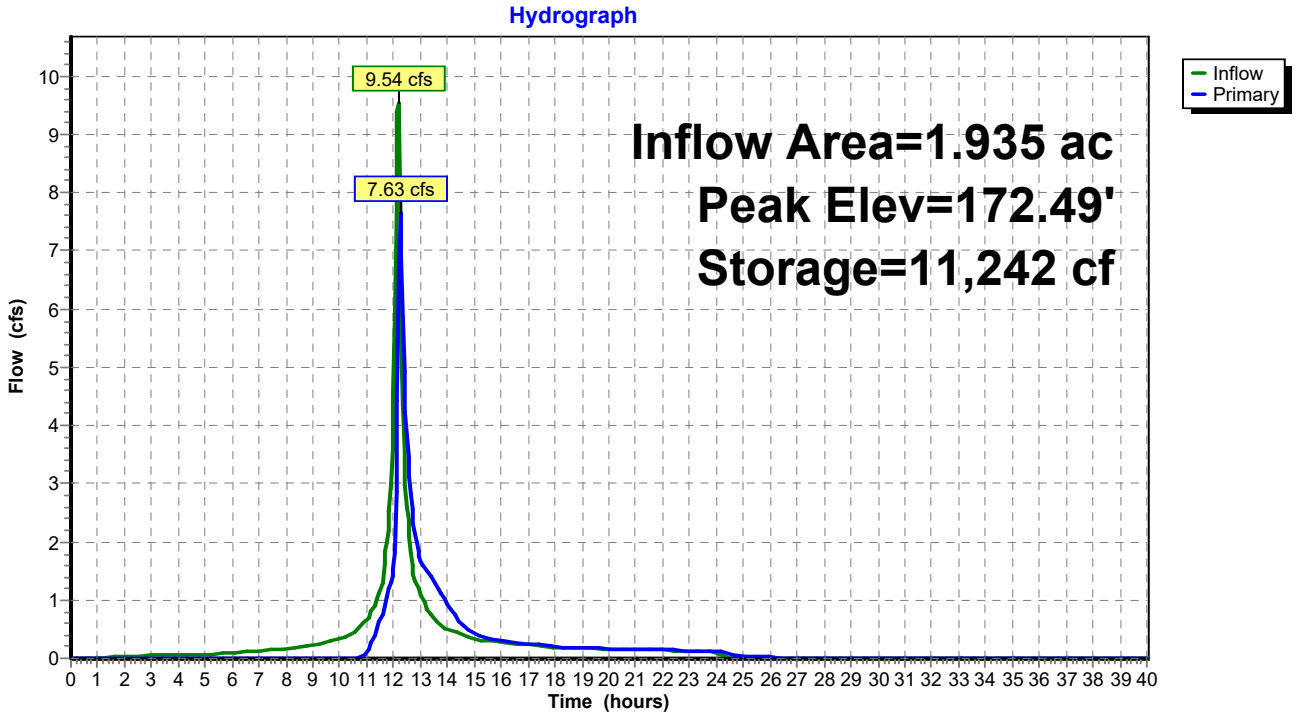
Volume	Invert	Avail.Storage	Storage Description
#1	167.35'	13,052 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
167.35	0	0	0
168.00	1,002	326	326
169.00	1,583	1,293	1,618
170.00	2,221	1,902	3,520
171.00	2,916	2,569	6,089
172.00	3,667	3,292	9,380
172.95	4,064	3,672	13,052

Device	Routing	Invert	Outlet Devices
#1	Primary	167.65'	**24.0" Round Culvert** L= 61.0' Ke= 0.500 Inlet / Outlet Invert= 167.65' / 165.16' S= 0.0408 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	170.47'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	171.75'	**2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	172.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	172.90'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.59 cfs @ 12.25 hrs HW=172.49' (Free Discharge)
- **1=Culvert** (Passes 7.59 cfs of 29.65 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.18 cfs @ 6.26 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.87 cfs @ 2.82 fps)
  - **4=Sharp-Crested Rectangular Weir** (Weir Controls 1.54 cfs @ 1.61 fps)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-27: Basin #27



Stage-Discharge for Pond B-27: Basin #27

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.35	0.00	167.87	0.00	168.39	0.00	168.91	0.00
167.36	0.00	167.88	0.00	168.40	0.00	168.92	0.00
167.37	0.00	167.89	0.00	168.41	0.00	168.93	0.00
167.38	0.00	167.90	0.00	168.42	0.00	168.94	0.00
167.39	0.00	167.91	0.00	168.43	0.00	168.95	0.00
167.40	0.00	167.92	0.00	168.44	0.00	168.96	0.00
167.41	0.00	167.93	0.00	168.45	0.00	168.97	0.00
167.42	0.00	167.94	0.00	168.46	0.00	168.98	0.00
167.43	0.00	167.95	0.00	168.47	0.00	168.99	0.00
167.44	0.00	167.96	0.00	168.48	0.00	169.00	0.00
167.45	0.00	167.97	0.00	168.49	0.00	169.01	0.00
167.46	0.00	167.98	0.00	168.50	0.00	169.02	0.00
167.47	0.00	167.99	0.00	168.51	0.00	169.03	0.00
167.48	0.00	168.00	0.00	168.52	0.00	169.04	0.00
167.49	0.00	168.01	0.00	168.53	0.00	169.05	0.00
167.50	0.00	168.02	0.00	168.54	0.00	169.06	0.00
167.51	0.00	168.03	0.00	168.55	0.00	169.07	0.00
167.52	0.00	168.04	0.00	168.56	0.00	169.08	0.00
167.53	0.00	168.05	0.00	168.57	0.00	169.09	0.00
167.54	0.00	168.06	0.00	168.58	0.00	169.10	0.00
167.55	0.00	168.07	0.00	168.59	0.00	169.11	0.00
167.56	0.00	168.08	0.00	168.60	0.00	169.12	0.00
167.57	0.00	168.09	0.00	168.61	0.00	169.13	0.00
167.58	0.00	168.10	0.00	168.62	0.00	169.14	0.00
167.59	0.00	168.11	0.00	168.63	0.00	169.15	0.00
167.60	0.00	168.12	0.00	168.64	0.00	169.16	0.00
167.61	0.00	168.13	0.00	168.65	0.00	169.17	0.00
167.62	0.00	168.14	0.00	168.66	0.00	169.18	0.00
167.63	0.00	168.15	0.00	168.67	0.00	169.19	0.00
167.64	0.00	168.16	0.00	168.68	0.00	169.20	0.00
167.65	0.00	168.17	0.00	168.69	0.00	169.21	0.00
167.66	0.00	168.18	0.00	168.70	0.00	169.22	0.00
167.67	0.00	168.19	0.00	168.71	0.00	169.23	0.00
167.68	0.00	168.20	0.00	168.72	0.00	169.24	0.00
167.69	0.00	168.21	0.00	168.73	0.00	169.25	0.00
167.70	0.00	168.22	0.00	168.74	0.00	169.26	0.00
167.71	0.00	168.23	0.00	168.75	0.00	169.27	0.00
167.72	0.00	168.24	0.00	168.76	0.00	169.28	0.00
167.73	0.00	168.25	0.00	168.77	0.00	169.29	0.00
167.74	0.00	168.26	0.00	168.78	0.00	169.30	0.00
167.75	0.00	168.27	0.00	168.79	0.00	169.31	0.00
167.76	0.00	168.28	0.00	168.80	0.00	169.32	0.00
167.77	0.00	168.29	0.00	168.81	0.00	169.33	0.00
167.78	0.00	168.30	0.00	168.82	0.00	169.34	0.00
167.79	0.00	168.31	0.00	168.83	0.00	169.35	0.00
167.80	0.00	168.32	0.00	168.84	0.00	169.36	0.00
167.81	0.00	168.33	0.00	168.85	0.00	169.37	0.00
167.82	0.00	168.34	0.00	168.86	0.00	169.38	0.00
167.83	0.00	168.35	0.00	168.87	0.00	169.39	0.00
167.84	0.00	168.36	0.00	168.88	0.00	169.40	0.00
167.85	0.00	168.37	0.00	168.89	0.00	169.41	0.00
167.86	0.00	168.38	0.00	168.90	0.00	169.42	0.00

Stage-Discharge for Pond B-27: Basin #27 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
169.43	0.00	169.95	0.00	170.47	0.00	170.99	0.72
169.44	0.00	169.96	0.00	170.48	0.00	171.00	0.74
169.45	0.00	169.97	0.00	170.49	0.00	171.01	0.76
169.46	0.00	169.98	0.00	170.50	0.00	171.02	0.78
169.47	0.00	169.99	0.00	170.51	0.01	171.03	0.80
169.48	0.00	170.00	0.00	170.52	0.01	171.04	0.82
169.49	0.00	170.01	0.00	170.53	0.01	171.05	0.84
169.50	0.00	170.02	0.00	170.54	0.02	171.06	0.85
169.51	0.00	170.03	0.00	170.55	0.02	171.07	0.87
169.52	0.00	170.04	0.00	170.56	0.03	171.08	0.89
169.53	0.00	170.05	0.00	170.57	0.04	171.09	0.91
169.54	0.00	170.06	0.00	170.58	0.04	171.10	0.92
169.55	0.00	170.07	0.00	170.59	0.05	171.11	0.94
169.56	0.00	170.08	0.00	170.60	0.06	171.12	0.95
169.57	0.00	170.09	0.00	170.61	0.07	171.13	0.96
169.58	0.00	170.10	0.00	170.62	0.08	171.14	0.98
169.59	0.00	170.11	0.00	170.63	0.09	171.15	0.99
169.60	0.00	170.12	0.00	170.64	0.10	171.16	1.00
169.61	0.00	170.13	0.00	170.65	0.11	171.17	1.02
169.62	0.00	170.14	0.00	170.66	0.12	171.18	1.03
169.63	0.00	170.15	0.00	170.67	0.13	171.19	1.05
169.64	0.00	170.16	0.00	170.68	0.15	171.20	1.06
169.65	0.00	170.17	0.00	170.69	0.16	171.21	1.07
169.66	0.00	170.18	0.00	170.70	0.17	171.22	1.08
169.67	0.00	170.19	0.00	170.71	0.19	171.23	1.10
169.68	0.00	170.20	0.00	170.72	0.20	171.24	1.11
169.69	0.00	170.21	0.00	170.73	0.22	171.25	1.12
169.70	0.00	170.22	0.00	170.74	0.23	171.26	1.14
169.71	0.00	170.23	0.00	170.75	0.25	171.27	1.15
169.72	0.00	170.24	0.00	170.76	0.27	171.28	1.16
169.73	0.00	170.25	0.00	170.77	0.28	171.29	1.17
169.74	0.00	170.26	0.00	170.78	0.30	171.30	1.18
169.75	0.00	170.27	0.00	170.79	0.32	171.31	1.20
169.76	0.00	170.28	0.00	170.80	0.34	171.32	1.21
169.77	0.00	170.29	0.00	170.81	0.36	171.33	1.22
169.78	0.00	170.30	0.00	170.82	0.37	171.34	1.23
169.79	0.00	170.31	0.00	170.83	0.39	171.35	1.24
169.80	0.00	170.32	0.00	170.84	0.41	171.36	1.25
169.81	0.00	170.33	0.00	170.85	0.43	171.37	1.27
169.82	0.00	170.34	0.00	170.86	0.45	171.38	1.28
169.83	0.00	170.35	0.00	170.87	0.47	171.39	1.29
169.84	0.00	170.36	0.00	170.88	0.49	171.40	1.30
169.85	0.00	170.37	0.00	170.89	0.51	171.41	1.31
169.86	0.00	170.38	0.00	170.90	0.53	171.42	1.32
169.87	0.00	170.39	0.00	170.91	0.55	171.43	1.33
169.88	0.00	170.40	0.00	170.92	0.57	171.44	1.34
169.89	0.00	170.41	0.00	170.93	0.59	171.45	1.35
169.90	0.00	170.42	0.00	170.94	0.61	171.46	1.36
169.91	0.00	170.43	0.00	170.95	0.63	171.47	1.37
169.92	0.00	170.44	0.00	170.96	0.66	171.48	1.38
169.93	0.00	170.45	0.00	170.97	0.68	171.49	1.39
169.94	0.00	170.46	0.00	170.98	0.70	171.50	1.40

Stage-Discharge for Pond B-27: Basin #27 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
171.51	1.41	172.03	2.80	172.55	8.64
171.52	1.42	172.04	2.86	172.56	8.83
171.53	1.43	172.05	2.92	172.57	9.02
171.54	1.44	172.06	2.98	172.58	9.21
171.55	1.45	172.07	3.04	172.59	9.41
171.56	1.46	172.08	3.10	172.60	9.60
171.57	1.47	172.09	3.16	172.61	9.80
171.58	1.48	172.10	3.22	172.62	10.00
171.59	1.49	172.11	3.28	172.63	10.20
171.60	1.50	172.12	3.35	172.64	10.40
171.61	1.51	172.13	3.41	172.65	10.61
171.62	1.52	172.14	3.47	172.66	10.81
171.63	1.53	172.15	3.54	172.67	11.02
171.64	1.54	172.16	3.60	172.68	11.23
171.65	1.55	172.17	3.67	172.69	11.44
171.66	1.56	172.18	3.74	172.70	11.65
171.67	1.56	172.19	3.80	172.71	11.87
171.68	1.57	172.20	3.87	172.72	12.08
171.69	1.58	172.21	3.94	172.73	12.30
171.70	1.59	172.22	4.01	172.74	12.52
171.71	1.60	172.23	4.08	172.75	12.74
171.72	1.61	172.24	4.15	172.76	12.96
171.73	1.62	172.25	4.22	172.77	13.18
171.74	1.63	172.26	4.30	172.78	13.41
171.75	1.64	172.27	4.40	172.79	13.63
171.76	1.65	172.28	4.50	172.80	13.86
171.77	1.67	172.29	4.61	172.81	14.09
171.78	1.69	172.30	4.72	172.82	14.32
171.79	1.72	172.31	4.84	172.83	14.55
171.80	1.75	172.32	4.97	172.84	14.78
171.81	1.78	172.33	5.09	172.85	15.02
171.82	1.81	172.34	5.22	172.86	15.25
171.83	1.85	172.35	5.36	172.87	15.49
171.84	1.89	172.36	5.50	172.88	15.72
171.85	1.92	172.37	5.64	172.89	15.96
171.86	1.96	172.38	5.78	172.90	16.20
171.87	2.00	172.39	5.93	172.91	16.56
171.88	2.05	172.40	6.08	172.92	17.02
171.89	2.09	172.41	6.24	172.93	17.54
171.90	2.13	172.42	6.39	172.94	18.11
171.91	2.18	172.43	6.55	172.95	**18.73**
171.92	2.23	172.44	6.71		
171.93	2.27	172.45	6.88		
171.94	2.32	172.46	7.04		
171.95	2.37	172.47	7.21		
171.96	2.42	172.48	7.38		
171.97	2.48	172.49	7.56		
171.98	2.53	172.50	7.73		
171.99	2.58	172.51	7.91		
172.00	2.64	172.52	8.09		
172.01	2.69	172.53	8.27		
172.02	2.75	172.54	8.46		

Stage-Area-Storage for Pond B-27: Basin #27

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.35	0	0	167.87	802	208
167.36	15	0	167.88	817	217
167.37	31	0	167.89	832	225
167.38	46	1	167.90	848	233
167.39	62	1	167.91	863	242
167.40	77	2	167.92	879	250
167.41	92	3	167.93	894	259
167.42	108	4	167.94	910	268
167.43	123	5	167.95	925	277
167.44	139	6	167.96	940	287
167.45	154	8	167.97	956	296
167.46	170	9	167.98	971	306
167.47	185	11	167.99	987	316
167.48	200	13	168.00	1,002	326
167.49	216	15	168.01	1,008	336
167.50	231	17	168.02	1,014	346
167.51	247	20	168.03	1,019	356
167.52	262	22	168.04	1,025	366
167.53	277	25	168.05	1,031	376
167.54	293	28	168.06	1,037	387
167.55	308	31	168.07	1,043	397
167.56	324	34	168.08	1,048	408
167.57	339	37	168.09	1,054	418
167.58	355	41	168.10	1,060	429
167.59	370	44	168.11	1,066	439
167.60	385	48	168.12	1,072	450
167.61	401	52	168.13	1,078	461
167.62	416	56	168.14	1,083	472
167.63	432	60	168.15	1,089	482
167.64	447	65	168.16	1,095	493
167.65	462	69	168.17	1,101	504
167.66	478	74	168.18	1,107	515
167.67	493	79	168.19	1,112	527
167.68	509	84	168.20	1,118	538
167.69	524	89	168.21	1,124	549
167.70	540	94	168.22	1,130	560
167.71	555	100	168.23	1,136	571
167.72	570	106	168.24	1,141	583
167.73	586	111	168.25	1,147	594
167.74	601	117	168.26	1,153	606
167.75	617	123	168.27	1,159	617
167.76	632	130	168.28	1,165	629
167.77	647	136	168.29	1,170	641
167.78	663	143	168.30	1,176	652
167.79	678	149	168.31	1,182	664
167.80	694	156	168.32	1,188	676
167.81	709	163	168.33	1,194	688
167.82	725	170	168.34	1,200	700
167.83	740	178	168.35	1,205	712
167.84	755	185	168.36	1,211	724
167.85	771	193	168.37	1,217	736
167.86	786	200	168.38	1,223	748

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.39	1,229	761	168.91	1,531	1,478
168.40	1,234	773	168.92	1,537	1,493
168.41	1,240	785	168.93	1,542	1,509
168.42	1,246	798	168.94	1,548	1,524
168.43	1,252	810	168.95	1,554	1,540
168.44	1,258	823	168.96	1,560	1,555
168.45	1,263	835	168.97	1,566	1,571
168.46	1,269	848	168.98	1,571	1,587
168.47	1,275	861	168.99	1,577	1,602
168.48	1,281	874	169.00	1,583	1,618
168.49	1,287	886	169.01	1,589	1,634
168.50	1,293	899	169.02	1,596	1,650
168.51	1,298	912	169.03	1,602	1,666
168.52	1,304	925	169.04	1,609	1,682
168.53	1,310	938	169.05	1,615	1,698
168.54	1,316	951	169.06	1,621	1,714
168.55	1,322	965	169.07	1,628	1,731
168.56	1,327	978	169.08	1,634	1,747
168.57	1,333	991	169.09	1,640	1,763
168.58	1,339	1,005	169.10	1,647	1,780
168.59	1,345	1,018	169.11	1,653	1,796
168.60	1,351	1,031	169.12	1,660	1,813
168.61	1,356	1,045	169.13	1,666	1,829
168.62	1,362	1,059	169.14	1,672	1,846
168.63	1,368	1,072	169.15	1,679	1,863
168.64	1,374	1,086	169.16	1,685	1,880
168.65	1,380	1,100	169.17	1,691	1,896
168.66	1,385	1,114	169.18	1,698	1,913
168.67	1,391	1,127	169.19	1,704	1,930
168.68	1,397	1,141	169.20	1,711	1,948
168.69	1,403	1,155	169.21	1,717	1,965
168.70	1,409	1,169	169.22	1,723	1,982
168.71	1,415	1,184	169.23	1,730	1,999
168.72	1,420	1,198	169.24	1,736	2,016
168.73	1,426	1,212	169.25	1,743	2,034
168.74	1,432	1,226	169.26	1,749	2,051
168.75	1,438	1,241	169.27	1,755	2,069
168.76	1,444	1,255	169.28	1,762	2,086
168.77	1,449	1,269	169.29	1,768	2,104
168.78	1,455	1,284	169.30	1,774	2,122
168.79	1,461	1,299	169.31	1,781	2,140
168.80	1,467	1,313	169.32	1,787	2,157
168.81	1,473	1,328	169.33	1,794	2,175
168.82	1,478	1,343	169.34	1,800	2,193
168.83	1,484	1,357	169.35	1,806	2,211
168.84	1,490	1,372	169.36	1,813	2,229
168.85	1,496	1,387	169.37	1,819	2,248
168.86	1,502	1,402	169.38	1,825	2,266
168.87	1,507	1,417	169.39	1,832	2,284
168.88	1,513	1,432	169.40	1,838	2,302
168.89	1,519	1,448	169.41	1,845	2,321
168.90	1,525	1,463	169.42	1,851	2,339

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.43	1,857	2,358	169.95	2,189	3,410
169.44	1,864	2,376	169.96	2,195	3,432
169.45	1,870	2,395	169.97	2,202	3,454
169.46	1,876	2,414	169.98	2,208	3,476
169.47	1,883	2,433	169.99	2,215	3,498
169.48	1,889	2,451	170.00	2,221	3,520
169.49	1,896	2,470	170.01	2,228	3,542
169.50	1,902	2,489	170.02	2,235	3,565
169.51	1,908	2,508	170.03	2,242	3,587
169.52	1,915	2,528	170.04	2,249	3,610
169.53	1,921	2,547	170.05	2,256	3,632
169.54	1,928	2,566	170.06	2,263	3,655
169.55	1,934	2,585	170.07	2,270	3,677
169.56	1,940	2,605	170.08	2,277	3,700
169.57	1,947	2,624	170.09	2,284	3,723
169.58	1,953	2,644	170.10	2,290	3,746
169.59	1,959	2,663	170.11	2,297	3,769
169.60	1,966	2,683	170.12	2,304	3,792
169.61	1,972	2,702	170.13	2,311	3,815
169.62	1,979	2,722	170.14	2,318	3,838
169.63	1,985	2,742	170.15	2,325	3,861
169.64	1,991	2,762	170.16	2,332	3,884
169.65	1,998	2,782	170.17	2,339	3,908
169.66	2,004	2,802	170.18	2,346	3,931
169.67	2,010	2,822	170.19	2,353	3,955
169.68	2,017	2,842	170.20	2,360	3,978
169.69	2,023	2,862	170.21	2,367	4,002
169.70	2,030	2,883	170.22	2,374	4,026
169.71	2,036	2,903	170.23	2,381	4,049
169.72	2,042	2,923	170.24	2,388	4,073
169.73	2,049	2,944	170.25	2,395	4,097
169.74	2,055	2,964	170.26	2,402	4,121
169.75	2,062	2,985	170.27	2,409	4,145
169.76	2,068	3,005	170.28	2,416	4,169
169.77	2,074	3,026	170.29	2,423	4,193
169.78	2,081	3,047	170.30	2,429	4,218
169.79	2,087	3,068	170.31	2,436	4,242
169.80	2,093	3,089	170.32	2,443	4,266
169.81	2,100	3,110	170.33	2,450	4,291
169.82	2,106	3,131	170.34	2,457	4,315
169.83	2,113	3,152	170.35	2,464	4,340
169.84	2,119	3,173	170.36	2,471	4,365
169.85	2,125	3,194	170.37	2,478	4,389
169.86	2,132	3,215	170.38	2,485	4,414
169.87	2,138	3,237	170.39	2,492	4,439
169.88	2,144	3,258	170.40	2,499	4,464
169.89	2,151	3,280	170.41	2,506	4,489
169.90	2,157	3,301	170.42	2,513	4,514
169.91	2,164	3,323	170.43	2,520	4,539
169.92	2,170	3,345	170.44	2,527	4,565
169.93	2,176	3,366	170.45	2,534	4,590
169.94	2,183	3,388	170.46	2,541	4,615

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
170.47	2,548	4,641	170.99	2,909	6,060
170.48	2,555	4,666	171.00	2,916	6,089
170.49	2,562	4,692	171.01	2,924	6,118
170.50	2,569	4,718	171.02	2,931	6,147
170.51	2,575	4,743	171.03	2,939	6,176
170.52	2,582	4,769	171.04	2,946	6,206
170.53	2,589	4,795	171.05	2,954	6,235
170.54	2,596	4,821	171.06	2,961	6,265
170.55	2,603	4,847	171.07	2,969	6,295
170.56	2,610	4,873	171.08	2,976	6,324
170.57	2,617	4,899	171.09	2,984	6,354
170.58	2,624	4,925	171.10	2,991	6,384
170.59	2,631	4,952	171.11	2,999	6,414
170.60	2,638	4,978	171.12	3,006	6,444
170.61	2,645	5,004	171.13	3,014	6,474
170.62	2,652	5,031	171.14	3,021	6,504
170.63	2,659	5,057	171.15	3,029	6,534
170.64	2,666	5,084	171.16	3,036	6,565
170.65	2,673	5,111	171.17	3,044	6,595
170.66	2,680	5,137	171.18	3,051	6,626
170.67	2,687	5,164	171.19	3,059	6,656
170.68	2,694	5,191	171.20	3,066	6,687
170.69	2,701	5,218	171.21	3,074	6,718
170.70	2,707	5,245	171.22	3,081	6,748
170.71	2,714	5,272	171.23	3,089	6,779
170.72	2,721	5,299	171.24	3,096	6,810
170.73	2,728	5,327	171.25	3,104	6,841
170.74	2,735	5,354	171.26	3,111	6,872
170.75	2,742	5,381	171.27	3,119	6,903
170.76	2,749	5,409	171.28	3,126	6,935
170.77	2,756	5,436	171.29	3,134	6,966
170.78	2,763	5,464	171.30	3,141	6,997
170.79	2,770	5,492	171.31	3,149	7,029
170.80	2,777	5,519	171.32	3,156	7,060
170.81	2,784	5,547	171.33	3,164	7,092
170.82	2,791	5,575	171.34	3,171	7,123
170.83	2,798	5,603	171.35	3,179	7,155
170.84	2,805	5,631	171.36	3,186	7,187
170.85	2,812	5,659	171.37	3,194	7,219
170.86	2,819	5,687	171.38	3,201	7,251
170.87	2,826	5,715	171.39	3,209	7,283
170.88	2,833	5,744	171.40	3,216	7,315
170.89	2,840	5,772	171.41	3,224	7,347
170.90	2,847	5,801	171.42	3,231	7,380
170.91	2,853	5,829	171.43	3,239	7,412
170.92	2,860	5,858	171.44	3,246	7,444
170.93	2,867	5,886	171.45	3,254	7,477
170.94	2,874	5,915	171.46	3,261	7,509
170.95	2,881	5,944	171.47	3,269	7,542
170.96	2,888	5,973	171.48	3,276	7,575
170.97	2,895	6,001	171.49	3,284	7,608
170.98	2,902	6,030	171.50	3,292	7,641

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
171.51	3,299	7,673	172.03	3,680	9,490
171.52	3,307	7,707	172.04	3,684	9,527
171.53	3,314	7,740	172.05	3,688	9,564
171.54	3,322	7,773	172.06	3,692	9,601
171.55	3,329	7,806	172.07	3,696	9,638
171.56	3,337	7,839	172.08	3,700	9,675
171.57	3,344	7,873	172.09	3,705	9,712
171.58	3,352	7,906	172.10	3,709	9,749
171.59	3,359	7,940	172.11	3,713	9,786
171.60	3,367	7,973	172.12	3,717	9,823
171.61	3,374	8,007	172.13	3,721	9,860
171.62	3,382	8,041	172.14	3,726	9,898
171.63	3,389	8,075	172.15	3,730	9,935
171.64	3,397	8,109	172.16	3,734	9,972
171.65	3,404	8,143	172.17	3,738	10,010
171.66	3,412	8,177	172.18	3,742	10,047
171.67	3,419	8,211	172.19	3,746	10,084
171.68	3,427	8,245	172.20	3,751	10,122
171.69	3,434	8,279	172.21	3,755	10,159
171.70	3,442	8,314	172.22	3,759	10,197
171.71	3,449	8,348	172.23	3,763	10,235
171.72	3,457	8,383	172.24	3,767	10,272
171.73	3,464	8,417	172.25	3,771	10,310
171.74	3,472	8,452	172.26	3,776	10,348
171.75	3,479	8,487	172.27	3,780	10,385
171.76	3,487	8,522	172.28	3,784	10,423
171.77	3,494	8,557	172.29	3,788	10,461
171.78	3,502	8,592	172.30	3,792	10,499
171.79	3,509	8,627	172.31	3,797	10,537
171.80	3,517	8,662	172.32	3,801	10,575
171.81	3,524	8,697	172.33	3,805	10,613
171.82	3,532	8,732	172.34	3,809	10,651
171.83	3,539	8,768	172.35	3,813	10,689
171.84	3,547	8,803	172.36	3,817	10,727
171.85	3,554	8,839	172.37	3,822	10,766
171.86	3,562	8,874	172.38	3,826	10,804
171.87	3,569	8,910	172.39	3,830	10,842
171.88	3,577	8,946	172.40	3,834	10,880
171.89	3,584	8,981	172.41	3,838	10,919
171.90	3,592	9,017	172.42	3,843	10,957
171.91	3,599	9,053	172.43	3,847	10,996
171.92	3,607	9,089	172.44	3,851	11,034
171.93	3,614	9,125	172.45	3,855	11,073
171.94	3,622	9,161	172.46	3,859	11,111
171.95	3,629	9,198	172.47	3,863	11,150
171.96	3,637	9,234	172.48	3,868	11,188
171.97	3,644	9,270	172.49	3,872	11,227
171.98	3,652	9,307	172.50	3,876	11,266
171.99	3,659	9,344	172.51	3,880	11,305
172.00	3,667	9,380	172.52	3,884	11,343
172.01	3,671	9,417	172.53	3,888	11,382
172.02	3,675	9,454	172.54	3,893	11,421

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
172.55	3,897	11,460
172.56	3,901	11,499
172.57	3,905	11,538
172.58	3,909	11,577
172.59	3,914	11,616
172.60	3,918	11,656
172.61	3,922	11,695
172.62	3,926	11,734
172.63	3,930	11,773
172.64	3,934	11,813
172.65	3,939	11,852
172.66	3,943	11,891
172.67	3,947	11,931
172.68	3,951	11,970
172.69	3,955	12,010
172.70	3,960	12,049
172.71	3,964	12,089
172.72	3,968	12,129
172.73	3,972	12,168
172.74	3,976	12,208
172.75	3,980	12,248
172.76	3,985	12,288
172.77	3,989	12,328
172.78	3,993	12,368
172.79	3,997	12,407
172.80	4,001	12,447
172.81	4,005	12,488
172.82	4,010	12,528
172.83	4,014	12,568
172.84	4,018	12,608
172.85	4,022	12,648
172.86	4,026	12,688
172.87	4,031	12,729
172.88	4,035	12,769
172.89	4,039	12,809
172.90	4,043	12,850
172.91	4,047	12,890
172.92	4,051	12,931
172.93	4,056	12,971
172.94	4,060	13,012
172.95	**4,064**	**13,052**

Summary for Pond B-28: Basin #28

Inflow Area = 2.333 ac, 34.85% Impervious, Inflow Depth = 3.95" for Future 10 yr event
Inflow = 9.48 cfs @ 12.17 hrs, Volume= 0.768 af
Outflow = 7.54 cfs @ 12.25 hrs, Volume= 0.688 af, Atten= 20%, Lag= 4.6 min
Primary = 7.54 cfs @ 12.25 hrs, Volume= 0.688 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 168.96' @ 12.25 hrs Surf.Area= 3,180 sf Storage= 6,494 cf

Plug-Flow detention time= 101.0 min calculated for 0.688 af (90% of inflow)
Center-of-Mass det. time= 47.2 min (841.1 - 793.9)

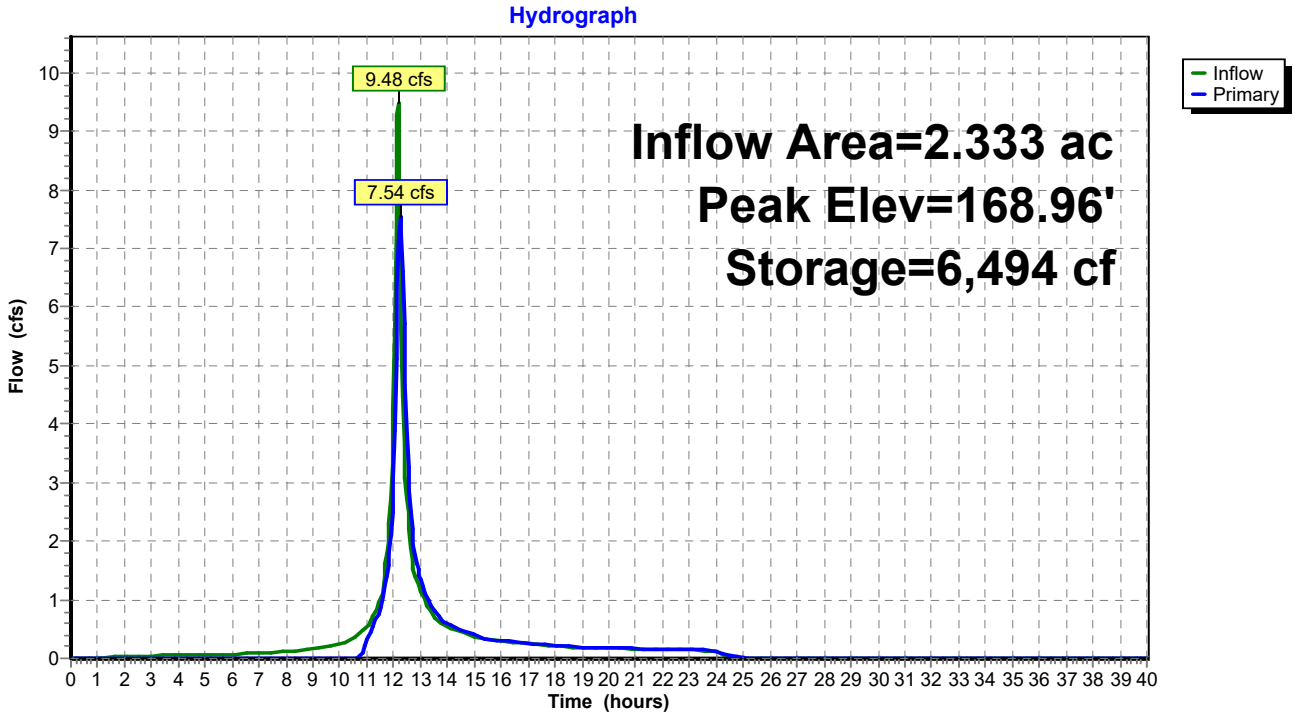
Volume	Invert	Avail.Storage	Storage Description
#1	165.65'	12,318 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.65	0	0	0
166.00	1,145	200	200
167.00	1,778	1,462	1,662
168.00	2,465	2,122	3,783
169.00	3,210	2,838	6,621
170.00	4,012	3,611	10,232
170.50	4,334	2,087	12,318

Device	Routing	Invert	Outlet Devices
#1	Primary	165.65'	**18.0" Round Culvert** L= 186.0' Ke= 0.500 Inlet / Outlet Invert= 165.65' / 163.70' S= 0.0105 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.87'	**30.0" W x 9.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	169.50'	**1.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	170.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	170.49'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.54 cfs @ 12.25 hrs HW=168.96' (Free Discharge)
- **1=Culvert** (Passes 7.54 cfs of 12.42 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 7.54 cfs @ 4.02 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
  - **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-28: Basin #28



Stage-Discharge for Pond B-28: Basin #28

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.00
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.00
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.00
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.00
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.00
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.00
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.00
165.82	0.00	166.34	0.00	166.86	0.00	167.38	0.00
165.83	0.00	166.35	0.00	166.87	0.00	167.39	0.00
165.84	0.00	166.36	0.00	166.88	0.00	167.40	0.00
165.85	0.00	166.37	0.00	166.89	0.00	167.41	0.00
165.86	0.00	166.38	0.00	166.90	0.00	167.42	0.00
165.87	0.00	166.39	0.00	166.91	0.00	167.43	0.00
165.88	0.00	166.40	0.00	166.92	0.00	167.44	0.00
165.89	0.00	166.41	0.00	166.93	0.00	167.45	0.00
165.90	0.00	166.42	0.00	166.94	0.00	167.46	0.00
165.91	0.00	166.43	0.00	166.95	0.00	167.47	0.00
165.92	0.00	166.44	0.00	166.96	0.00	167.48	0.00
165.93	0.00	166.45	0.00	166.97	0.00	167.49	0.00
165.94	0.00	166.46	0.00	166.98	0.00	167.50	0.00
165.95	0.00	166.47	0.00	166.99	0.00	167.51	0.00
165.96	0.00	166.48	0.00	167.00	0.00	167.52	0.00
165.97	0.00	166.49	0.00	167.01	0.00	167.53	0.00
165.98	0.00	166.50	0.00	167.02	0.00	167.54	0.00
165.99	0.00	166.51	0.00	167.03	0.00	167.55	0.00
166.00	0.00	166.52	0.00	167.04	0.00	167.56	0.00
166.01	0.00	166.53	0.00	167.05	0.00	167.57	0.00
166.02	0.00	166.54	0.00	167.06	0.00	167.58	0.00
166.03	0.00	166.55	0.00	167.07	0.00	167.59	0.00
166.04	0.00	166.56	0.00	167.08	0.00	167.60	0.00
166.05	0.00	166.57	0.00	167.09	0.00	167.61	0.00
166.06	0.00	166.58	0.00	167.10	0.00	167.62	0.00
166.07	0.00	166.59	0.00	167.11	0.00	167.63	0.00
166.08	0.00	166.60	0.00	167.12	0.00	167.64	0.00
166.09	0.00	166.61	0.00	167.13	0.00	167.65	0.00
166.10	0.00	166.62	0.00	167.14	0.00	167.66	0.00
166.11	0.00	166.63	0.00	167.15	0.00	167.67	0.00
166.12	0.00	166.64	0.00	167.16	0.00	167.68	0.00
166.13	0.00	166.65	0.00	167.17	0.00	167.69	0.00
166.14	0.00	166.66	0.00	167.18	0.00	167.70	0.00
166.15	0.00	166.67	0.00	167.19	0.00	167.71	0.00
166.16	0.00	166.68	0.00	167.20	0.00	167.72	0.00

Stage-Discharge for Pond B-28: Basin #28 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.73	0.00	168.25	1.88	168.77	6.39	169.29	9.18
167.74	0.00	168.26	1.95	168.78	6.45	169.30	9.22
167.75	0.00	168.27	2.03	168.79	6.52	169.31	9.27
167.76	0.00	168.28	2.11	168.80	6.58	169.32	9.31
167.77	0.00	168.29	2.18	168.81	6.65	169.33	9.36
167.78	0.00	168.30	2.26	168.82	6.71	169.34	9.40
167.79	0.00	168.31	2.34	168.83	6.78	169.35	9.44
167.80	0.00	168.32	2.42	168.84	6.84	169.36	9.49
167.81	0.00	168.33	2.50	168.85	6.90	169.37	9.53
167.82	0.00	168.34	2.59	168.86	6.96	169.38	9.57
167.83	0.00	168.35	2.67	168.87	7.02	169.39	9.62
167.84	0.00	168.36	2.75	168.88	7.08	169.40	9.66
167.85	0.00	168.37	2.84	168.89	7.14	169.41	9.70
167.86	0.00	168.38	2.92	168.90	7.20	169.42	9.74
167.87	0.00	168.39	3.01	168.91	7.26	169.43	9.79
167.88	0.01	168.40	3.10	168.92	7.32	169.44	9.83
167.89	0.02	168.41	3.18	168.93	7.37	169.45	9.87
167.90	0.04	168.42	3.27	168.94	7.43	169.46	9.91
167.91	0.06	168.43	3.36	168.95	7.49	169.47	9.95
167.92	0.09	168.44	3.45	168.96	7.54	169.48	9.99
167.93	0.12	168.45	3.54	168.97	7.60	169.49	10.03
167.94	0.15	168.46	3.64	168.98	7.65	169.50	10.08
167.95	0.18	168.47	3.73	168.99	7.71	169.51	10.12
167.96	0.22	168.48	3.82	169.00	7.76	169.52	10.17
167.97	0.25	168.49	3.92	169.01	7.81	169.53	10.21
167.98	0.29	168.50	4.01	169.02	7.87	169.54	10.26
167.99	0.33	168.51	4.11	169.03	7.92	169.55	10.31
168.00	0.38	168.52	4.21	169.04	7.97	169.56	10.36
168.01	0.42	168.53	4.30	169.05	8.02	169.57	10.42
168.02	0.47	168.54	4.40	169.06	8.08	169.58	10.47
168.03	0.51	168.55	4.50	169.07	8.13	169.59	10.52
168.04	0.56	168.56	4.60	169.08	8.18	169.60	10.58
168.05	0.61	168.57	4.70	169.09	8.23	169.61	10.63
168.06	0.66	168.58	4.80	169.10	8.28	169.62	10.69
168.07	0.72	168.59	4.90	169.11	8.33	169.63	10.74
168.08	0.77	168.60	5.01	169.12	8.38	169.64	10.80
168.09	0.83	168.61	5.11	169.13	8.43	169.65	10.85
168.10	0.89	168.62	5.21	169.14	8.48	169.66	10.91
168.11	0.94	168.63	5.31	169.15	8.52	169.67	10.97
168.12	1.00	168.64	5.40	169.16	8.57	169.68	11.02
168.13	1.06	168.65	5.49	169.17	8.62	169.69	11.08
168.14	1.13	168.66	5.57	169.18	8.67	169.70	11.14
168.15	1.19	168.67	5.65	169.19	8.72	169.71	11.20
168.16	1.25	168.68	5.73	169.20	8.76	169.72	11.26
168.17	1.32	168.69	5.81	169.21	8.81	169.73	11.32
168.18	1.39	168.70	5.89	169.22	8.86	169.74	11.38
168.19	1.45	168.71	5.96	169.23	8.90	169.75	11.43
168.20	1.52	168.72	6.04	169.24	8.95	169.76	11.49
168.21	1.59	168.73	6.11	169.25	9.00	169.77	11.55
168.22	1.66	168.74	6.18	169.26	9.04	169.78	11.61
168.23	1.73	168.75	6.25	169.27	9.09	169.79	11.67
168.24	1.81	168.76	6.32	169.28	9.13	169.80	11.74

Stage-Discharge for Pond B-28: Basin #28 (continued)

Elevation (feet)	Primary (cfs)
169.81	11.80
169.82	11.86
169.83	11.92
169.84	11.98
169.85	12.04
169.86	12.10
169.87	12.16
169.88	12.23
169.89	12.29
169.90	12.35
169.91	12.41
169.92	12.47
169.93	12.54
169.94	12.60
169.95	12.66
169.96	12.73
169.97	12.79
169.98	12.85
169.99	12.91
170.00	12.98
170.01	13.05
170.02	13.14
170.03	13.24
170.04	13.34
170.05	13.44
170.06	13.55
170.07	13.66
170.08	13.78
170.09	13.90
170.10	14.02
170.11	14.15
170.12	14.21
170.13	14.22
170.14	14.24
170.15	14.25
170.16	14.27
170.17	14.28
170.18	14.29
170.19	14.31
170.20	14.32
170.21	14.34
170.22	14.35
170.23	14.37
170.24	14.38
170.25	14.39
170.26	14.41
170.27	14.42
170.28	14.44
170.29	14.45
170.30	14.47
170.31	14.48
170.32	14.49
170.33	14.51
170.34	14.52
170.35	14.54
170.36	14.55
170.37	14.56
170.38	14.58
170.39	14.59
170.40	14.61
170.41	14.62
170.42	14.63
170.43	14.65
170.44	14.66
170.45	14.68
170.46	14.69
170.47	14.70
170.48	14.72
170.49	14.73
170.50	**14.86**

Stage-Area-Storage for Pond B-28: Basin #28

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.65	0	0	166.17	1,253	404
165.66	33	0	166.18	1,259	417
165.67	65	1	166.19	1,265	429
165.68	98	1	166.20	1,272	442
165.69	131	3	166.21	1,278	455
165.70	164	4	166.22	1,284	468
165.71	196	6	166.23	1,291	480
165.72	229	8	166.24	1,297	493
165.73	262	10	166.25	1,303	506
165.74	294	13	166.26	1,310	519
165.75	327	16	166.27	1,316	533
165.76	360	20	166.28	1,322	546
165.77	393	24	166.29	1,329	559
165.78	425	28	166.30	1,335	572
165.79	458	32	166.31	1,341	586
165.80	491	37	166.32	1,348	599
165.81	523	42	166.33	1,354	613
165.82	556	47	166.34	1,360	626
165.83	589	53	166.35	1,367	640
165.84	622	59	166.36	1,373	654
165.85	654	65	166.37	1,379	667
165.86	687	72	166.38	1,386	681
165.87	720	79	166.39	1,392	695
165.88	752	87	166.40	1,398	709
165.89	785	94	166.41	1,405	723
165.90	818	102	166.42	1,411	737
165.91	851	111	166.43	1,417	751
165.92	883	119	166.44	1,424	765
165.93	916	128	166.45	1,430	780
165.94	949	138	166.46	1,436	794
165.95	981	147	166.47	1,443	808
165.96	1,014	157	166.48	1,449	823
165.97	1,047	167	166.49	1,455	837
165.98	1,080	178	166.50	1,462	852
165.99	1,112	189	166.51	1,468	867
166.00	1,145	200	166.52	1,474	881
166.01	1,151	212	166.53	1,480	896
166.02	1,158	223	166.54	1,487	911
166.03	1,164	235	166.55	1,493	926
166.04	1,170	247	166.56	1,499	941
166.05	1,177	258	166.57	1,506	956
166.06	1,183	270	166.58	1,512	971
166.07	1,189	282	166.59	1,518	986
166.08	1,196	294	166.60	1,525	1,001
166.09	1,202	306	166.61	1,531	1,017
166.10	1,208	318	166.62	1,537	1,032
166.11	1,215	330	166.63	1,544	1,047
166.12	1,221	342	166.64	1,550	1,063
166.13	1,227	355	166.65	1,556	1,078
166.14	1,234	367	166.66	1,563	1,094
166.15	1,240	379	166.67	1,569	1,110
166.16	1,246	392	166.68	1,575	1,125

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.69	1,582	1,141	167.21	1,922	2,050
166.70	1,588	1,157	167.22	1,929	2,070
166.71	1,594	1,173	167.23	1,936	2,089
166.72	1,601	1,189	167.24	1,943	2,108
166.73	1,607	1,205	167.25	1,950	2,128
166.74	1,613	1,221	167.26	1,957	2,147
166.75	1,620	1,237	167.27	1,963	2,167
166.76	1,626	1,253	167.28	1,970	2,187
166.77	1,632	1,270	167.29	1,977	2,206
166.78	1,639	1,286	167.30	1,984	2,226
166.79	1,645	1,302	167.31	1,991	2,246
166.80	1,651	1,319	167.32	1,998	2,266
166.81	1,658	1,335	167.33	2,005	2,286
166.82	1,664	1,352	167.34	2,012	2,306
166.83	1,670	1,369	167.35	2,018	2,326
166.84	1,677	1,385	167.36	2,025	2,346
166.85	1,683	1,402	167.37	2,032	2,367
166.86	1,689	1,419	167.38	2,039	2,387
166.87	1,696	1,436	167.39	2,046	2,408
166.88	1,702	1,453	167.40	2,053	2,428
166.89	1,708	1,470	167.41	2,060	2,449
166.90	1,715	1,487	167.42	2,067	2,469
166.91	1,721	1,504	167.43	2,073	2,490
166.92	1,727	1,522	167.44	2,080	2,511
166.93	1,734	1,539	167.45	2,087	2,532
166.94	1,740	1,556	167.46	2,094	2,552
166.95	1,746	1,574	167.47	2,101	2,573
166.96	1,753	1,591	167.48	2,108	2,594
166.97	1,759	1,609	167.49	2,115	2,616
166.98	1,765	1,626	167.50	2,122	2,637
166.99	1,772	1,644	167.51	2,128	2,658
167.00	1,778	1,662	167.52	2,135	2,679
167.01	1,785	1,680	167.53	2,142	2,701
167.02	1,792	1,698	167.54	2,149	2,722
167.03	1,799	1,716	167.55	2,156	2,744
167.04	1,805	1,734	167.56	2,163	2,765
167.05	1,812	1,752	167.57	2,170	2,787
167.06	1,819	1,770	167.58	2,176	2,809
167.07	1,826	1,788	167.59	2,183	2,830
167.08	1,833	1,806	167.60	2,190	2,852
167.09	1,840	1,825	167.61	2,197	2,874
167.10	1,847	1,843	167.62	2,204	2,896
167.11	1,854	1,862	167.63	2,211	2,918
167.12	1,860	1,880	167.64	2,218	2,940
167.13	1,867	1,899	167.65	2,225	2,963
167.14	1,874	1,918	167.66	2,231	2,985
167.15	1,881	1,936	167.67	2,238	3,007
167.16	1,888	1,955	167.68	2,245	3,030
167.17	1,895	1,974	167.69	2,252	3,052
167.18	1,902	1,993	167.70	2,259	3,075
167.19	1,909	2,012	167.71	2,266	3,097
167.20	1,915	2,031	167.72	2,273	3,120

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.73	2,280	3,143	168.25	2,651	4,423
167.74	2,286	3,166	168.26	2,659	4,449
167.75	2,293	3,189	168.27	2,666	4,476
167.76	2,300	3,212	168.28	2,674	4,503
167.77	2,307	3,235	168.29	2,681	4,530
167.78	2,314	3,258	168.30	2,689	4,556
167.79	2,321	3,281	168.31	2,696	4,583
167.80	2,328	3,304	168.32	2,703	4,610
167.81	2,334	3,327	168.33	2,711	4,637
167.82	2,341	3,351	168.34	2,718	4,665
167.83	2,348	3,374	168.35	2,726	4,692
167.84	2,355	3,398	168.36	2,733	4,719
167.85	2,362	3,421	168.37	2,741	4,746
167.86	2,369	3,445	168.38	2,748	4,774
167.87	2,376	3,469	168.39	2,756	4,801
167.88	2,383	3,493	168.40	2,763	4,829
167.89	2,389	3,516	168.41	2,770	4,857
167.90	2,396	3,540	168.42	2,778	4,884
167.91	2,403	3,564	168.43	2,785	4,912
167.92	2,410	3,588	168.44	2,793	4,940
167.93	2,417	3,613	168.45	2,800	4,968
167.94	2,424	3,637	168.46	2,808	4,996
167.95	2,431	3,661	168.47	2,815	5,024
167.96	2,438	3,685	168.48	2,823	5,052
167.97	2,444	3,710	168.49	2,830	5,081
167.98	2,451	3,734	168.50	2,838	5,109
167.99	2,458	3,759	168.51	2,845	5,137
168.00	2,465	3,783	168.52	2,852	5,166
168.01	2,472	3,808	168.53	2,860	5,194
168.02	2,480	3,833	168.54	2,867	5,223
168.03	2,487	3,858	168.55	2,875	5,252
168.04	2,495	3,883	168.56	2,882	5,281
168.05	2,502	3,908	168.57	2,890	5,309
168.06	2,510	3,933	168.58	2,897	5,338
168.07	2,517	3,958	168.59	2,905	5,367
168.08	2,525	3,983	168.60	2,912	5,396
168.09	2,532	4,008	168.61	2,919	5,426
168.10	2,539	4,034	168.62	2,927	5,455
168.11	2,547	4,059	168.63	2,934	5,484
168.12	2,554	4,085	168.64	2,942	5,514
168.13	2,562	4,110	168.65	2,949	5,543
168.14	2,569	4,136	168.66	2,957	5,573
168.15	2,577	4,162	168.67	2,964	5,602
168.16	2,584	4,187	168.68	2,972	5,632
168.17	2,592	4,213	168.69	2,979	5,662
168.18	2,599	4,239	168.70	2,987	5,691
168.19	2,607	4,265	168.71	2,994	5,721
168.20	2,614	4,291	168.72	3,001	5,751
168.21	2,621	4,317	168.73	3,009	5,781
168.22	2,629	4,344	168.74	3,016	5,811
168.23	2,636	4,370	168.75	3,024	5,842
168.24	2,644	4,396	168.76	3,031	5,872

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.77	3,039	5,902	169.29	3,443	7,585
168.78	3,046	5,933	169.30	3,451	7,620
168.79	3,054	5,963	169.31	3,459	7,655
168.80	3,061	5,994	169.32	3,467	7,689
168.81	3,068	6,024	169.33	3,475	7,724
168.82	3,076	6,055	169.34	3,483	7,759
168.83	3,083	6,086	169.35	3,491	7,793
168.84	3,091	6,117	169.36	3,499	7,828
168.85	3,098	6,148	169.37	3,507	7,863
168.86	3,106	6,179	169.38	3,515	7,899
168.87	3,113	6,210	169.39	3,523	7,934
168.88	3,121	6,241	169.40	3,531	7,969
168.89	3,128	6,272	169.41	3,539	8,004
168.90	3,136	6,304	169.42	3,547	8,040
168.91	3,143	6,335	169.43	3,555	8,075
168.92	3,150	6,366	169.44	3,563	8,111
168.93	3,158	6,398	169.45	3,571	8,147
168.94	3,165	6,430	169.46	3,579	8,182
168.95	3,173	6,461	169.47	3,587	8,218
168.96	3,180	6,493	169.48	3,595	8,254
168.97	3,188	6,525	169.49	3,603	8,290
168.98	3,195	6,557	169.50	3,611	8,326
168.99	3,203	6,589	169.51	3,619	8,362
169.00	3,210	6,621	169.52	3,627	8,399
169.01	3,218	6,653	169.53	3,635	8,435
169.02	3,226	6,685	169.54	3,643	8,471
169.03	3,234	6,718	169.55	3,651	8,508
169.04	3,242	6,750	169.56	3,659	8,544
169.05	3,250	6,782	169.57	3,667	8,581
169.06	3,258	6,815	169.58	3,675	8,618
169.07	3,266	6,848	169.59	3,683	8,654
169.08	3,274	6,880	169.60	3,691	8,691
169.09	3,282	6,913	169.61	3,699	8,728
169.10	3,290	6,946	169.62	3,707	8,765
169.11	3,298	6,979	169.63	3,715	8,802
169.12	3,306	7,012	169.64	3,723	8,840
169.13	3,314	7,045	169.65	3,731	8,877
169.14	3,322	7,078	169.66	3,739	8,914
169.15	3,330	7,111	169.67	3,747	8,952
169.16	3,338	7,145	169.68	3,755	8,989
169.17	3,346	7,178	169.69	3,763	9,027
169.18	3,354	7,212	169.70	3,771	9,064
169.19	3,362	7,245	169.71	3,779	9,102
169.20	3,370	7,279	169.72	3,787	9,140
169.21	3,378	7,313	169.73	3,795	9,178
169.22	3,386	7,346	169.74	3,803	9,216
169.23	3,394	7,380	169.75	3,812	9,254
169.24	3,402	7,414	169.76	3,820	9,292
169.25	3,411	7,448	169.77	3,828	9,330
169.26	3,419	7,483	169.78	3,836	9,369
169.27	3,427	7,517	169.79	3,844	9,407
169.28	3,435	7,551	169.80	3,852	9,446

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

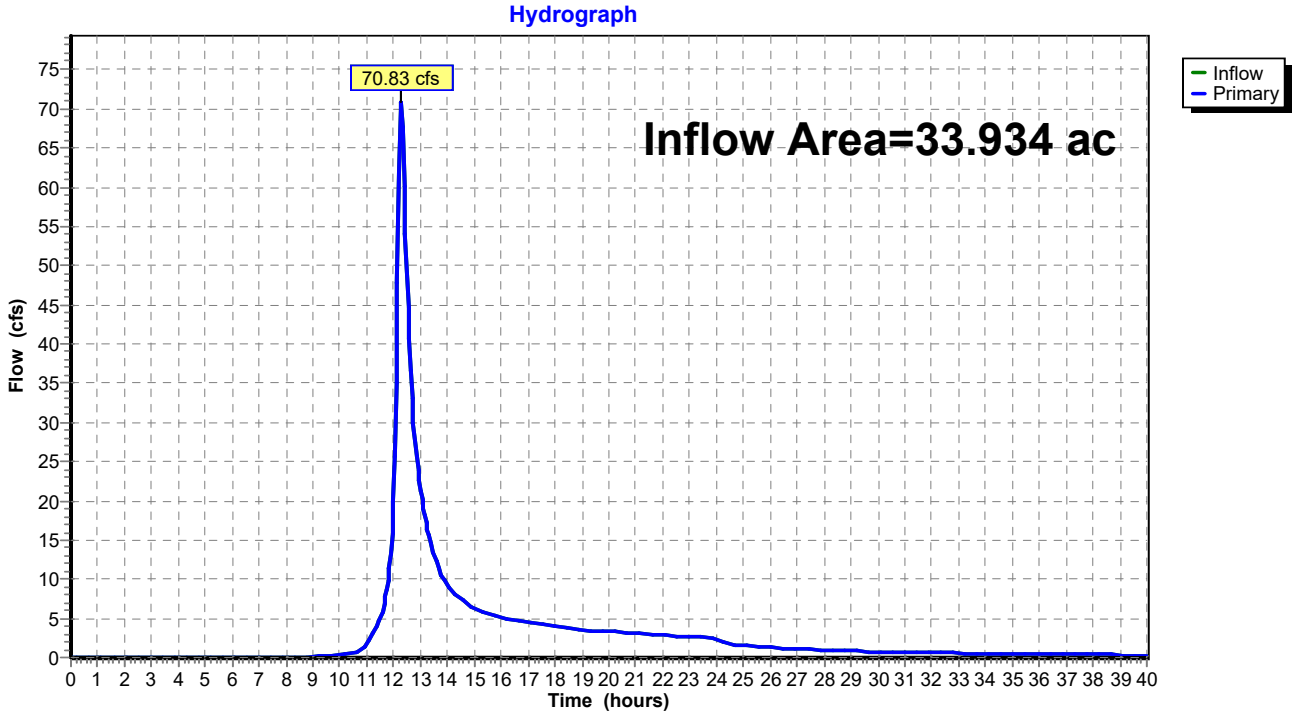
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.81	3,860	9,484
169.82	3,868	9,523
169.83	3,876	9,561
169.84	3,884	9,600
169.85	3,892	9,639
169.86	3,900	9,678
169.87	3,908	9,717
169.88	3,916	9,756
169.89	3,924	9,795
169.90	3,932	9,835
169.91	3,940	9,874
169.92	3,948	9,913
169.93	3,956	9,953
169.94	3,964	9,993
169.95	3,972	10,032
169.96	3,980	10,072
169.97	3,988	10,112
169.98	3,996	10,152
169.99	4,004	10,192
170.00	4,012	10,232
170.01	4,018	10,272
170.02	4,025	10,312
170.03	4,031	10,353
170.04	4,038	10,393
170.05	4,044	10,433
170.06	4,051	10,474
170.07	4,057	10,514
170.08	4,064	10,555
170.09	4,070	10,596
170.10	4,076	10,636
170.11	4,083	10,677
170.12	4,089	10,718
170.13	4,096	10,759
170.14	4,102	10,800
170.15	4,109	10,841
170.16	4,115	10,882
170.17	4,121	10,923
170.18	4,128	10,964
170.19	4,134	11,006
170.20	4,141	11,047
170.21	4,147	11,089
170.22	4,154	11,130
170.23	4,160	11,172
170.24	4,167	11,213
170.25	4,173	11,255
170.26	4,179	11,297
170.27	4,186	11,339
170.28	4,192	11,380
170.29	4,199	11,422
170.30	4,205	11,464
170.31	4,212	11,507
170.32	4,218	11,549
170.33	4,225	11,591
170.34	4,231	11,633
170.35	4,237	11,676
170.36	4,244	11,718
170.37	4,250	11,760
170.38	4,257	11,803
170.39	4,263	11,846
170.40	4,270	11,888
170.41	4,276	11,931
170.42	4,282	11,974
170.43	4,289	12,017
170.44	4,295	12,059
170.45	4,302	12,102
170.46	4,308	12,146
170.47	4,315	12,189
170.48	4,321	12,232
170.49	4,328	12,275
170.50	**4,334**	**12,318**

Summary for Link PDA-2: Proposed Drainage Area #2

Inflow Area = 33.934 ac, 26.90% Impervious, Inflow Depth > 3.40" for Future 10 yr event
Inflow = 70.83 cfs @ 12.27 hrs, Volume= 9.611 af
Primary = 70.83 cfs @ 12.27 hrs, Volume= 9.611 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-2: Proposed Drainage Area #2



Summary for Subcatchment 18I: PDA-18 (impervious)

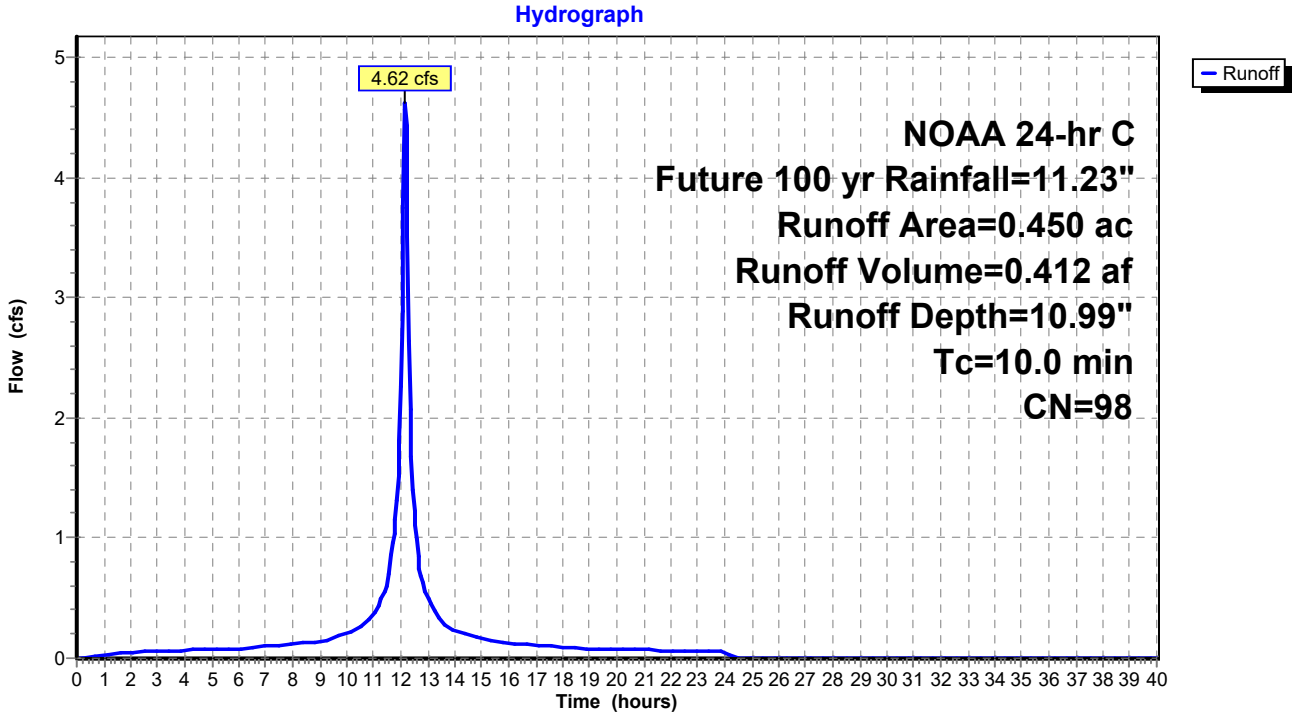
Runoff = 4.62 cfs @ 12.17 hrs, Volume= 0.412 af, Depth=10.99"
Routed to Pond B-18 : Basin #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.450	98	Weighted Average
	0.450		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 18I: PDA-18 (impervious)



Summary for Subcatchment 18P: PDA-18 (pervious)

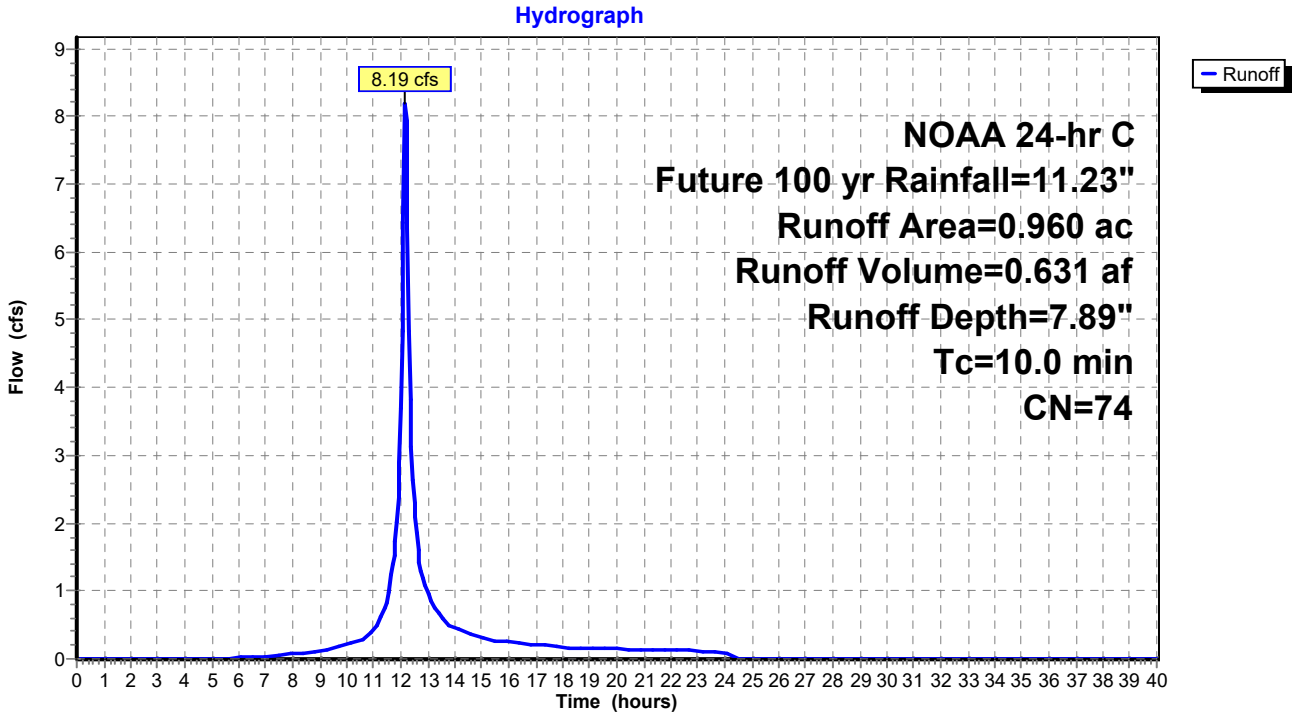
Runoff = 8.19 cfs @ 12.17 hrs, Volume= 0.631 af, Depth= 7.89"
Routed to Pond B-18 : Basin #18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.960	74	>75% Grass cover, Good, HSG C
0.960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 18P: PDA-18 (pervious)



Summary for Subcatchment 19l: PDA-19 (impervious)

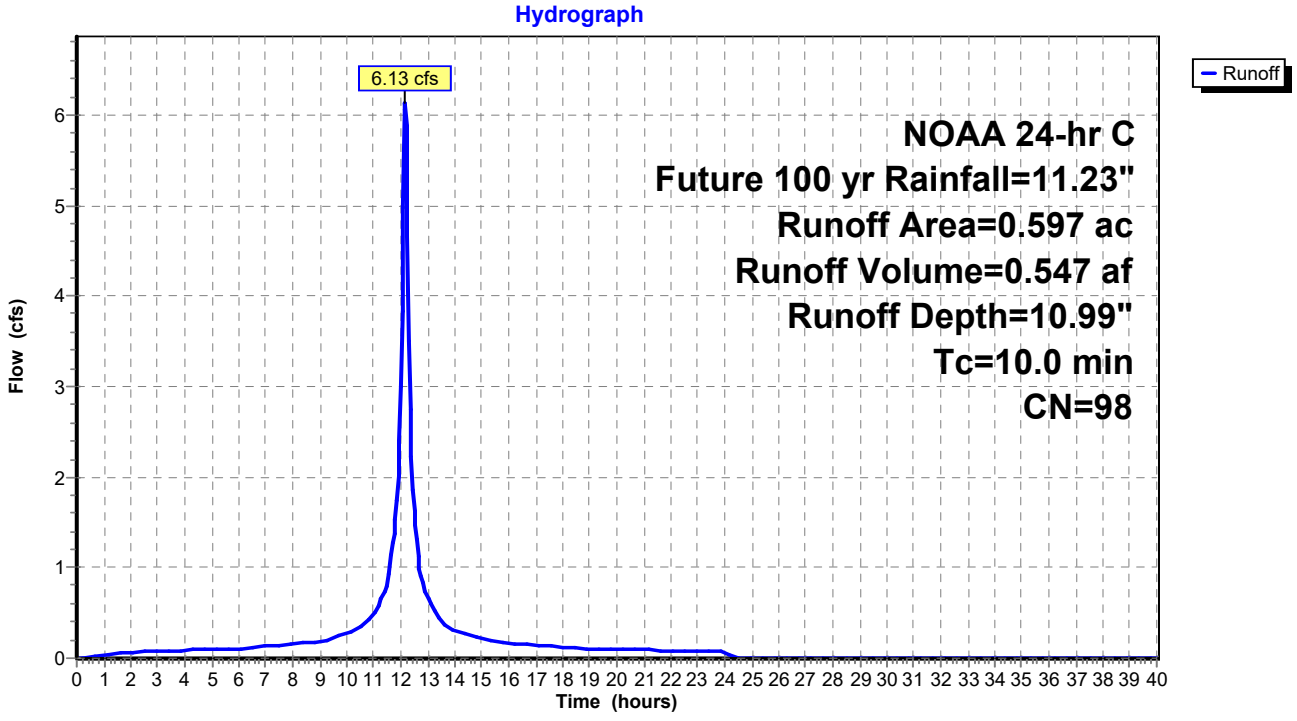
Runoff = 6.13 cfs @ 12.17 hrs, Volume= 0.547 af, Depth=10.99"
Routed to Pond B-19 : Basin #19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.132	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.015	98	Concrete, HSG C
	0.597	98	Weighted Average
	0.597		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19l: PDA-19 (impervious)



Summary for Subcatchment 19P: PDA-19 (pervious)

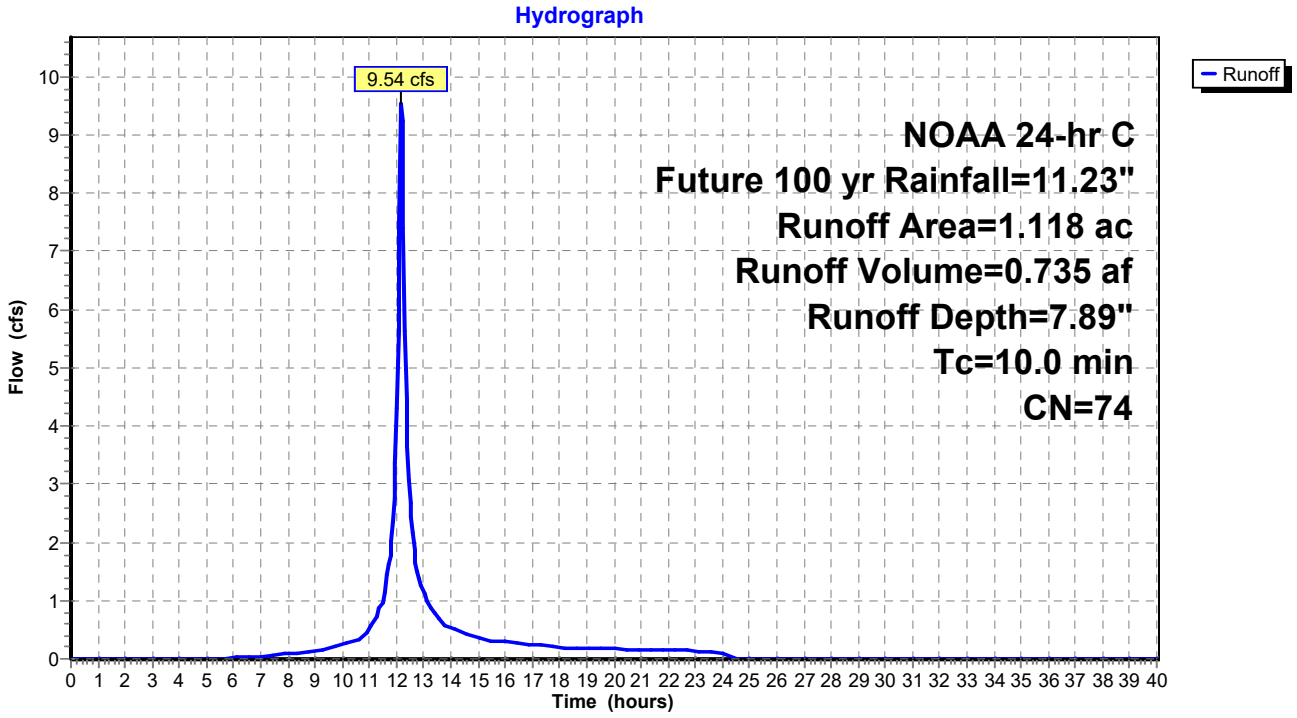
Runoff = 9.54 cfs @ 12.17 hrs, Volume= 0.735 af, Depth= 7.89"
Routed to Pond B-19 : Basin #19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.118	74	>75% Grass cover, Good, HSG C
1.118		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 19P: PDA-19 (pervious)



Summary for Subcatchment 20I: PDA-20 (impervious)

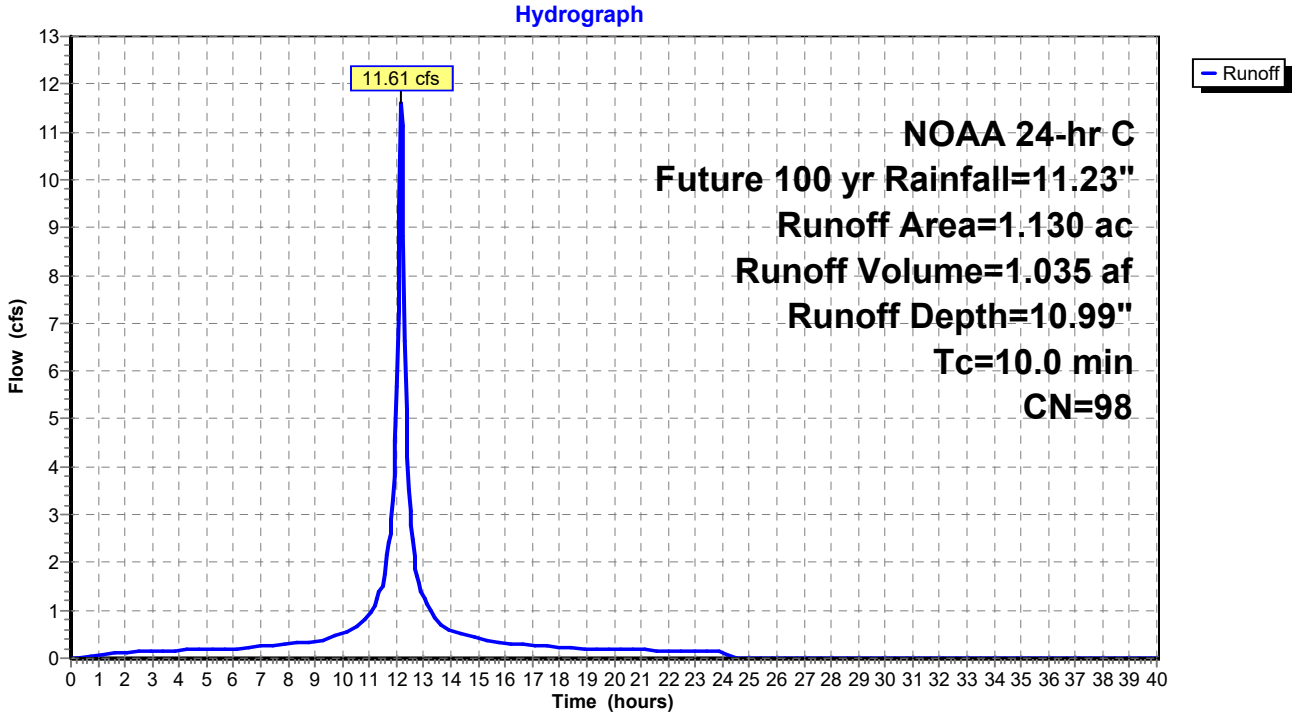
Runoff = 11.61 cfs @ 12.17 hrs, Volume= 1.035 af, Depth=10.99"
Routed to Pond B-20 : Basin #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.572	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.108	98	Concrete, HSC C
	1.130	98	Weighted Average
	1.130		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 20I: PDA-20 (impervious)



Summary for Subcatchment 20P: PDA-20 (pervious)

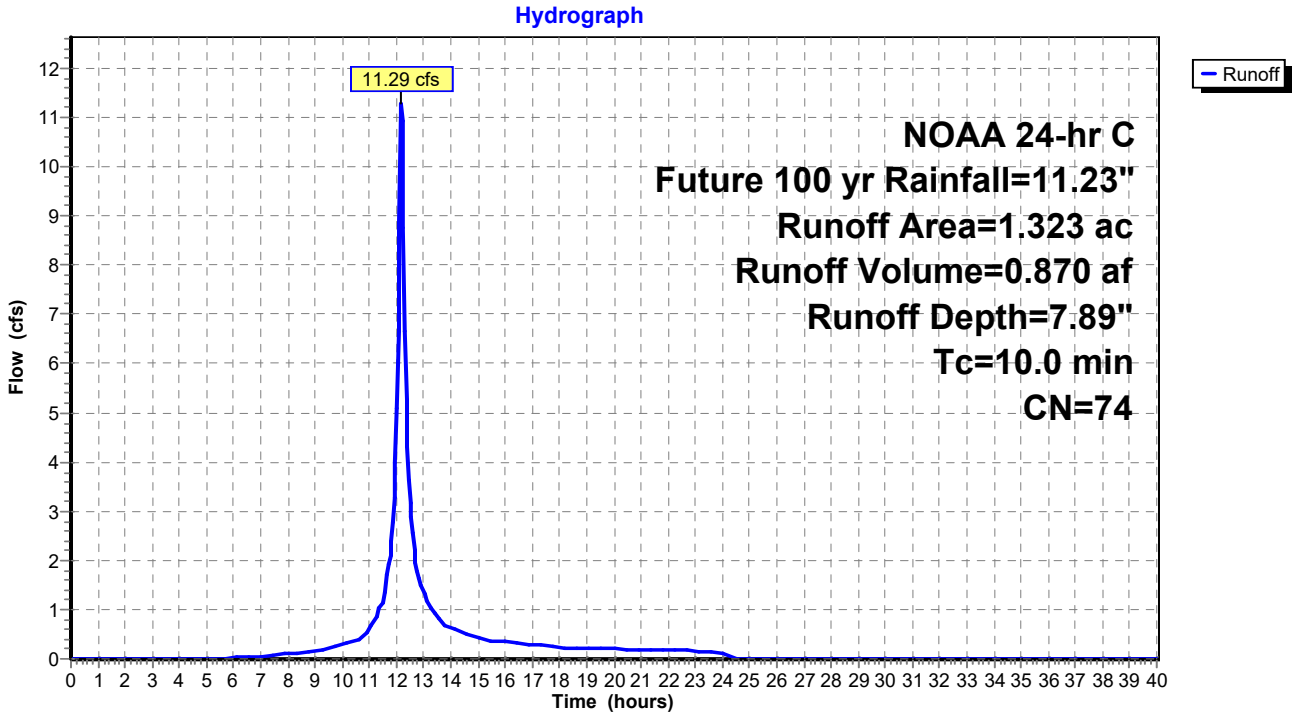
Runoff = 11.29 cfs @ 12.17 hrs, Volume= 0.870 af, Depth= 7.89"
Routed to Pond B-20 : Basin #20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.323	74	>75% Grass cover, Good, HSG C
1.323		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 20P: PDA-20 (pervious)



Summary for Subcatchment 21I: PDA-21 (impervious)

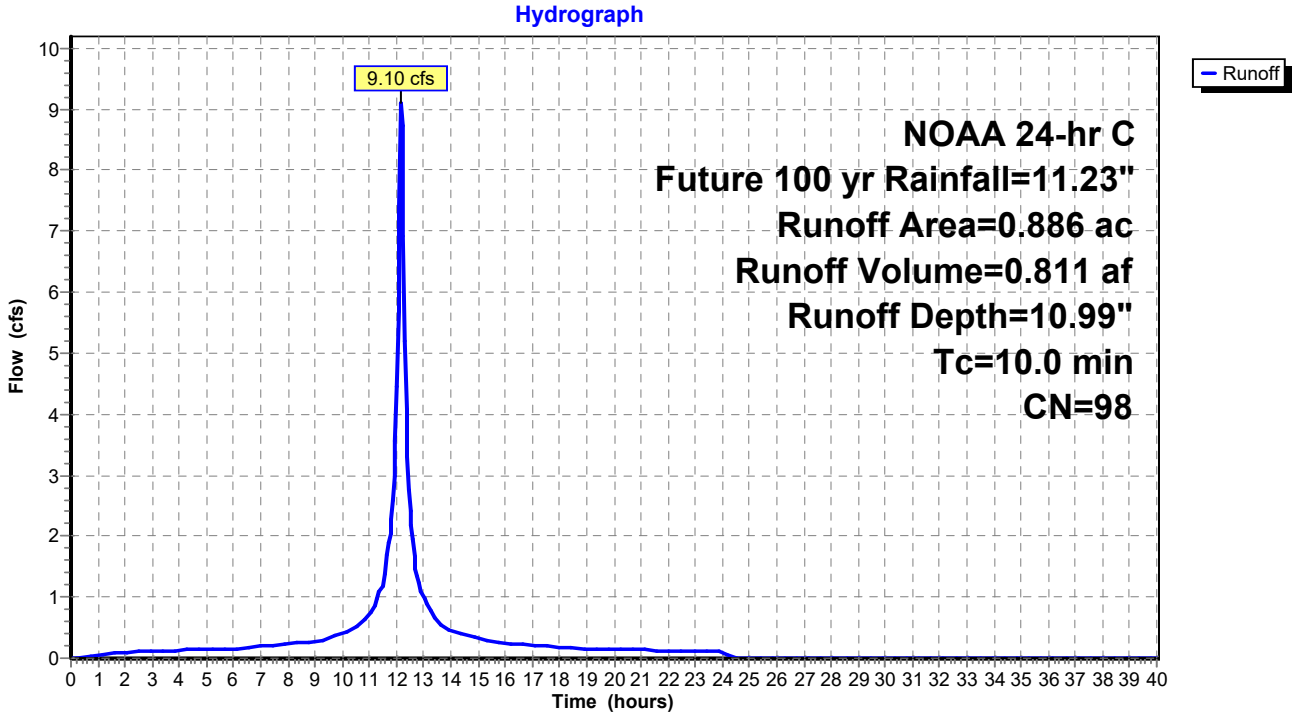
Runoff = 9.10 cfs @ 12.17 hrs, Volume= 0.811 af, Depth=10.99"
Routed to Pond B-21 : Basin #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.511	98	Pavement, HSG C
*	0.321	98	Roof, HSG C
*	0.054	98	Concrete, HSC C
	0.886	98	Weighted Average
	0.886		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21I: PDA-21 (impervious)



Summary for Subcatchment 21P: PDA-21 (pervious)

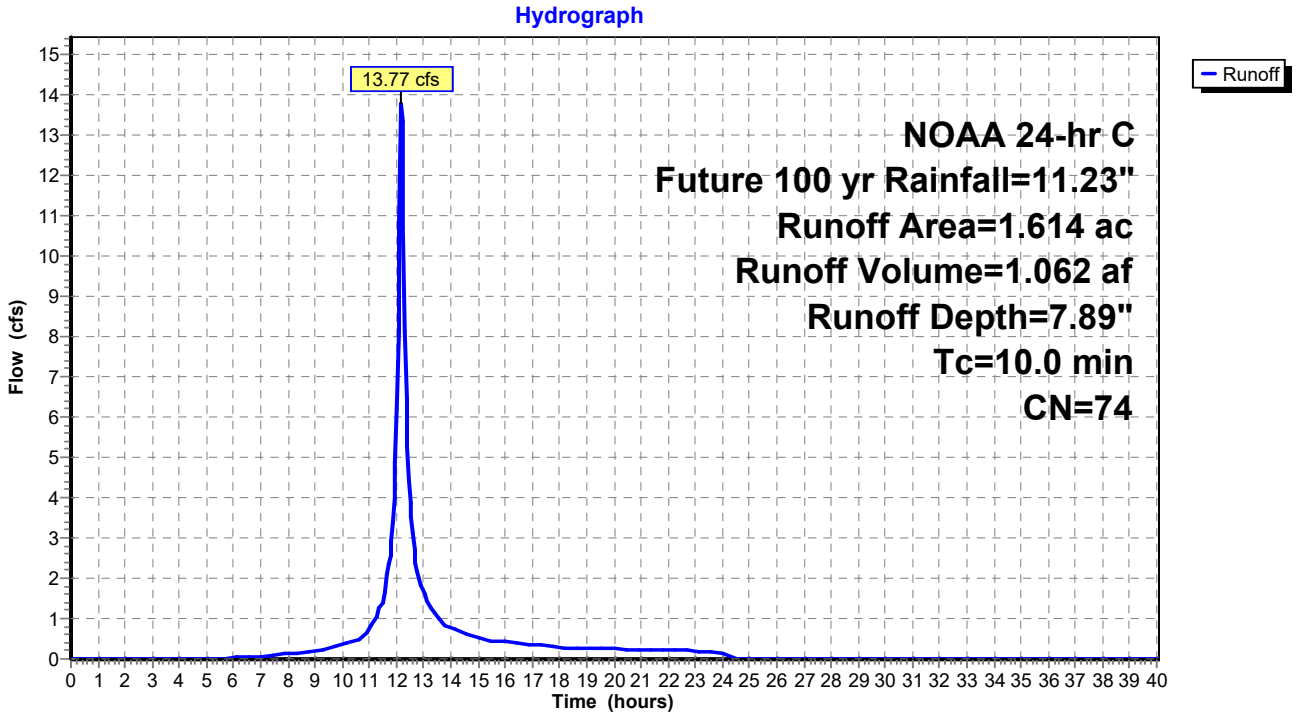
Runoff = 13.77 cfs @ 12.17 hrs, Volume= 1.062 af, Depth= 7.89"
Routed to Pond B-21 : Basin #21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.614	74	>75% Grass cover, Good, HSG C
1.614		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 21P: PDA-21 (pervious)



Summary for Subcatchment 22l: PDA-22 (impervious)

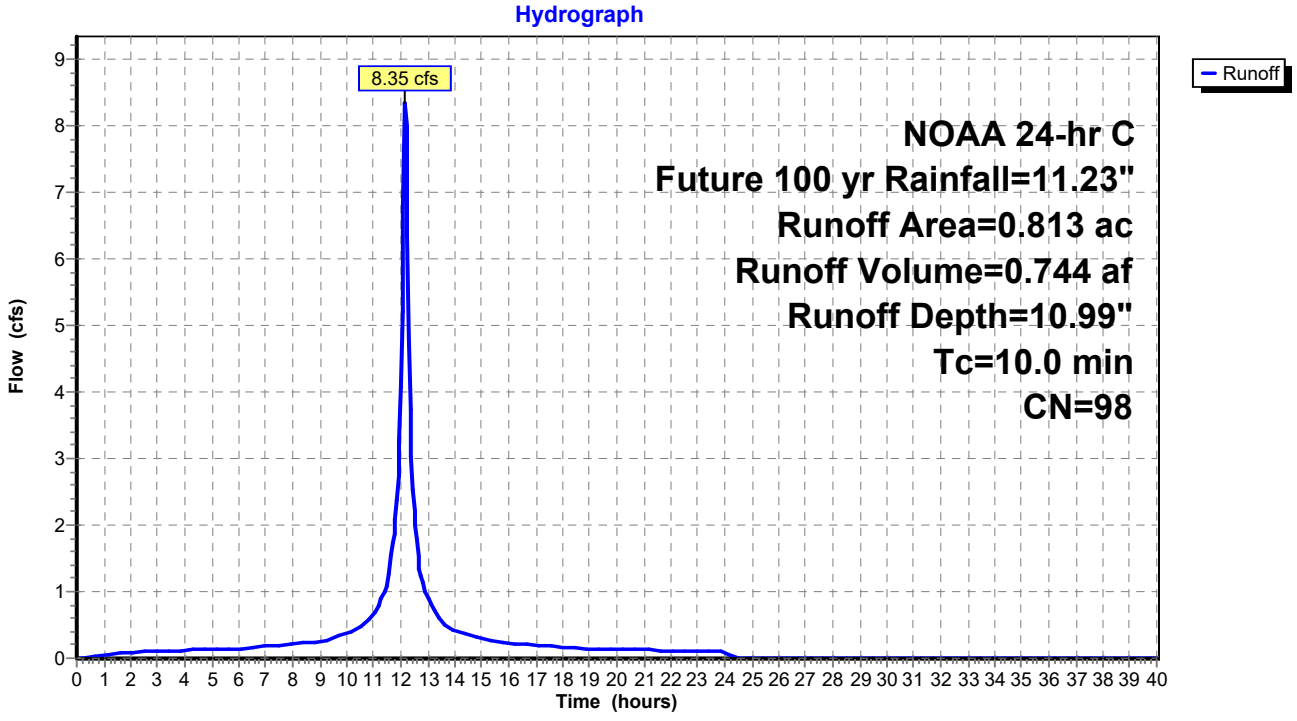
Runoff = 8.35 cfs @ 12.17 hrs, Volume= 0.744 af, Depth=10.99"
Routed to Pond B-22 : Basin #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.083	98	Pavement, HSG C
*	0.707	98	Roof, HSG C
*	0.023	98	Concrete, HSC C
	0.813	98	Weighted Average
	0.813		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 22l: PDA-22 (impervious)



Summary for Subcatchment 22P: PDA-22 (pervious)

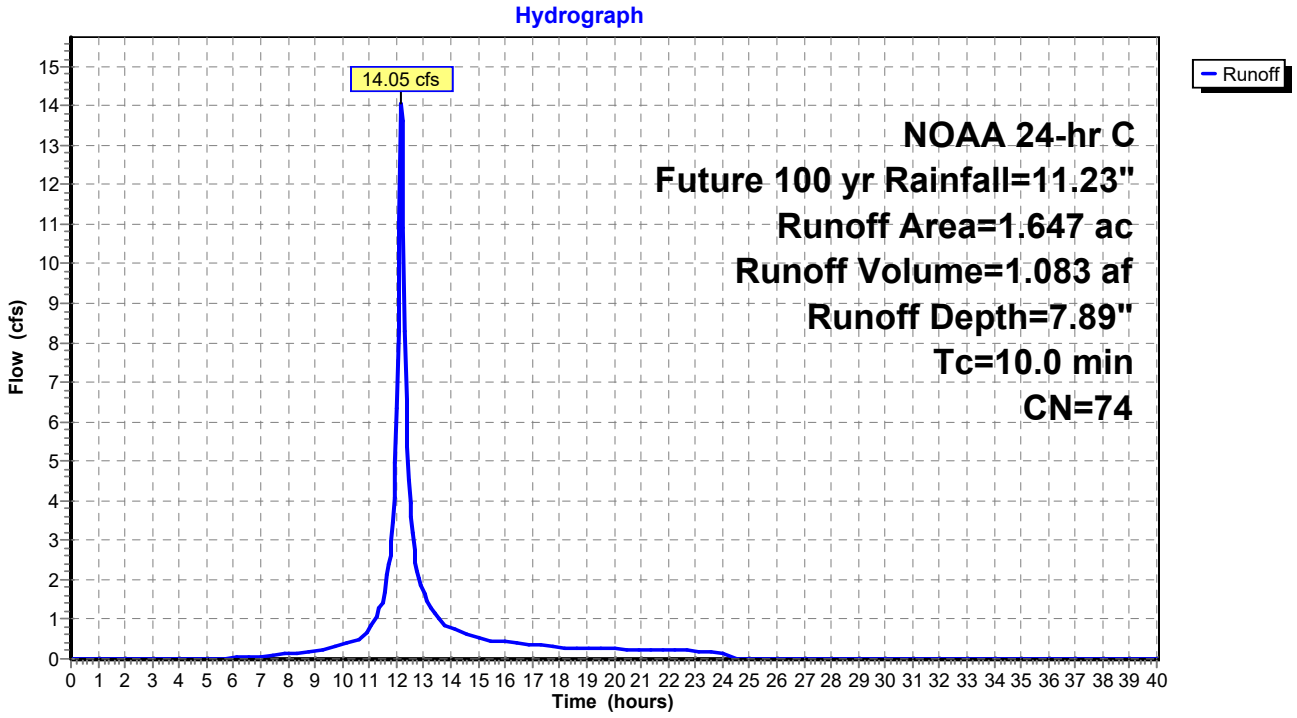
Runoff = 14.05 cfs @ 12.17 hrs, Volume= 1.083 af, Depth= 7.89"
Routed to Pond B-22 : Basin #22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.647	74	>75% Grass cover, Good, HSG C
1.647		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 22P: PDA-22 (pervious)



Summary for Subcatchment 23I: PDA-23 (impervious)

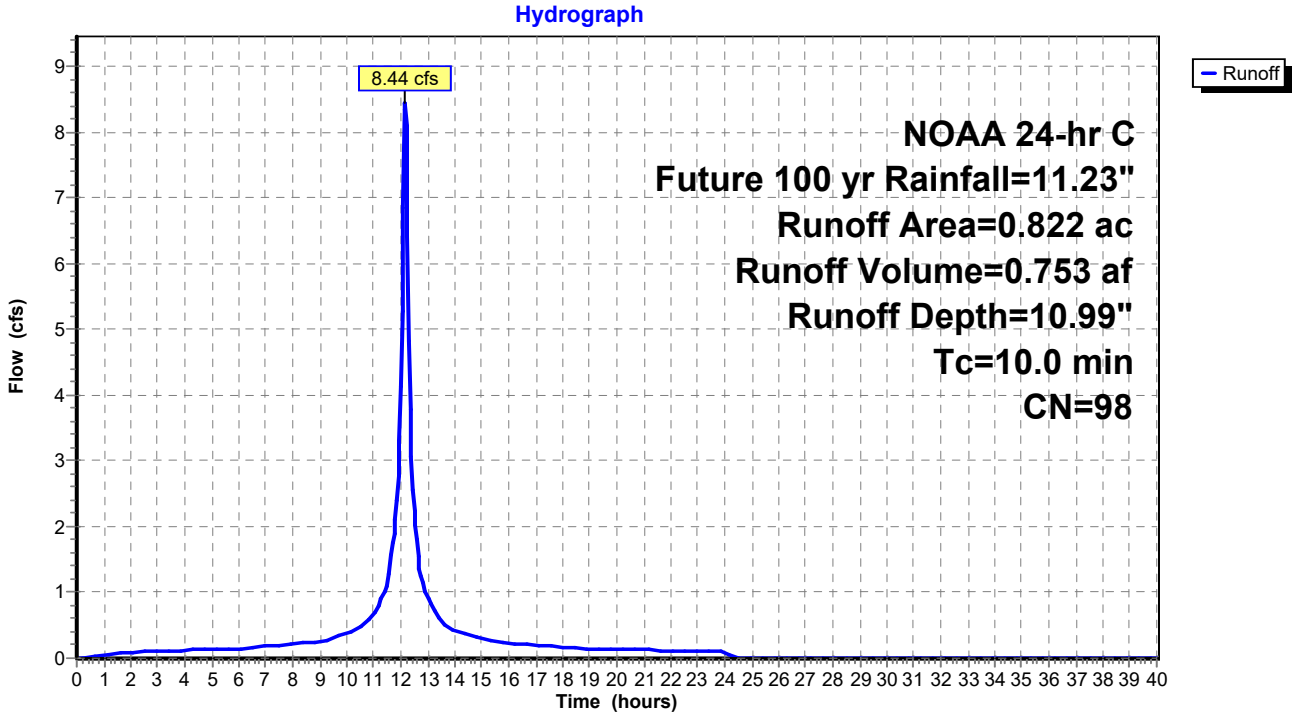
Runoff = 8.44 cfs @ 12.17 hrs, Volume= 0.753 af, Depth=10.99"
Routed to Pond B-23 : Basin #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.719	98	Pavement, HSG C
*	0.103	98	Concrete, HSG C
	0.000	98	Roofs, HSG C
	0.822	98	Weighted Average
	0.822		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 23I: PDA-23 (impervious)



Summary for Subcatchment 23P: PDA-23 (pervious)

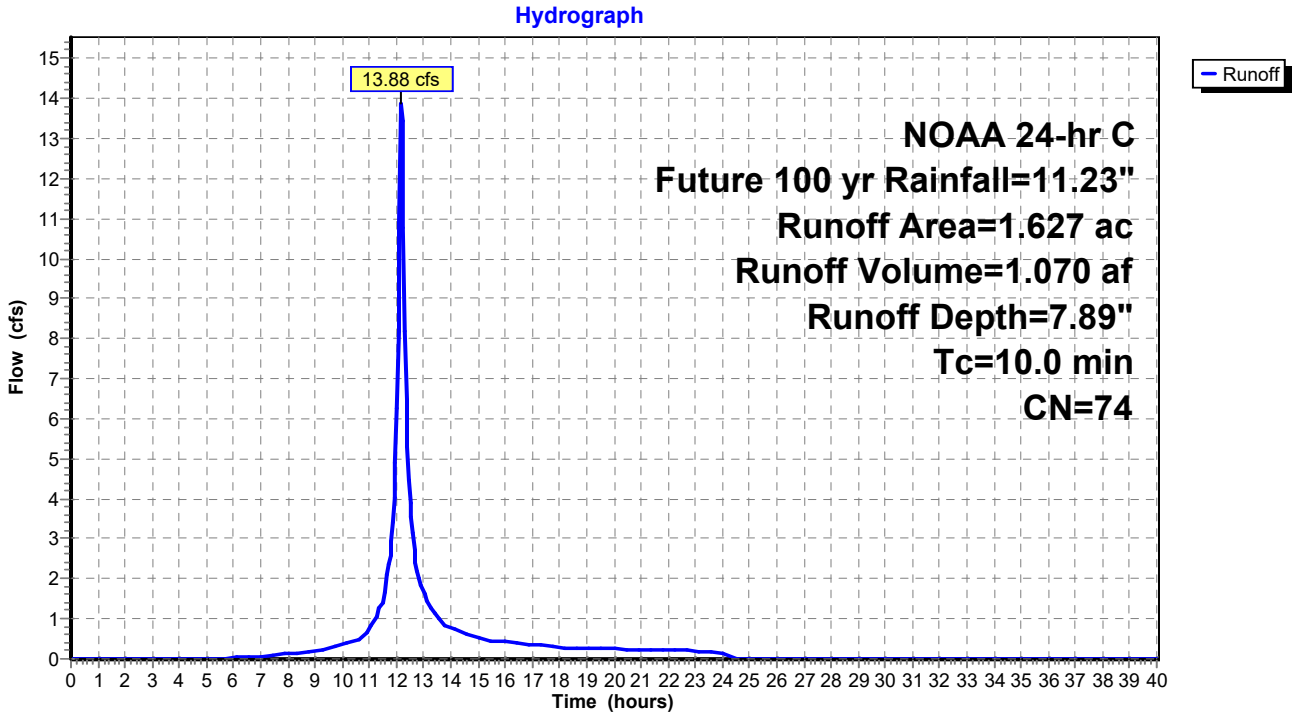
Runoff = 13.88 cfs @ 12.17 hrs, Volume= 1.070 af, Depth= 7.89"
Routed to Pond B-23 : Basin #23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.627	74	>75% Grass cover, Good, HSG C
1.627		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 23P: PDA-23 (pervious)



Summary for Subcatchment 24l: PDA-24 (impervious)

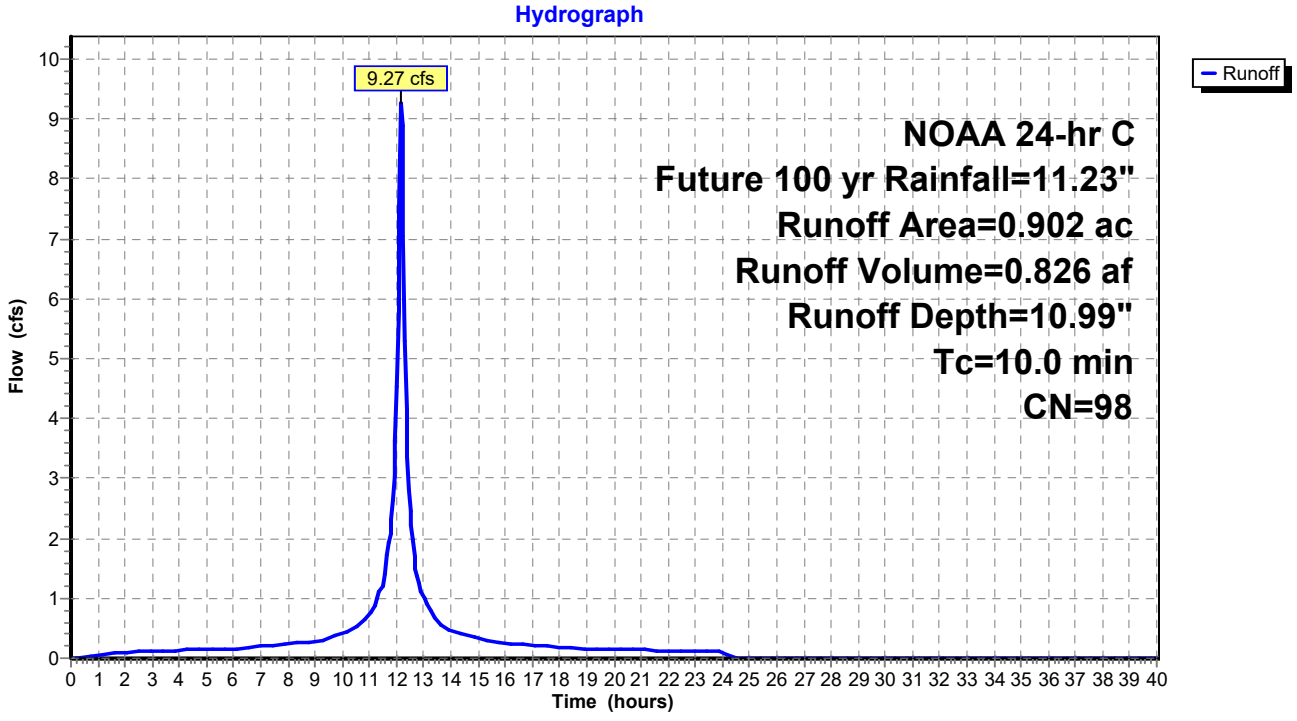
Runoff = 9.27 cfs @ 12.17 hrs, Volume= 0.826 af, Depth=10.99"
Routed to Pond B-24 : Basin #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.277	98	Pavement, HSG C
*	0.579	98	Roof, HSG C
*	0.046	98	Concrete, HSC C
	0.902	98	Weighted Average
	0.902		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 24l: PDA-24 (impervious)



Summary for Subcatchment 24P: PDA-24 (pervious)

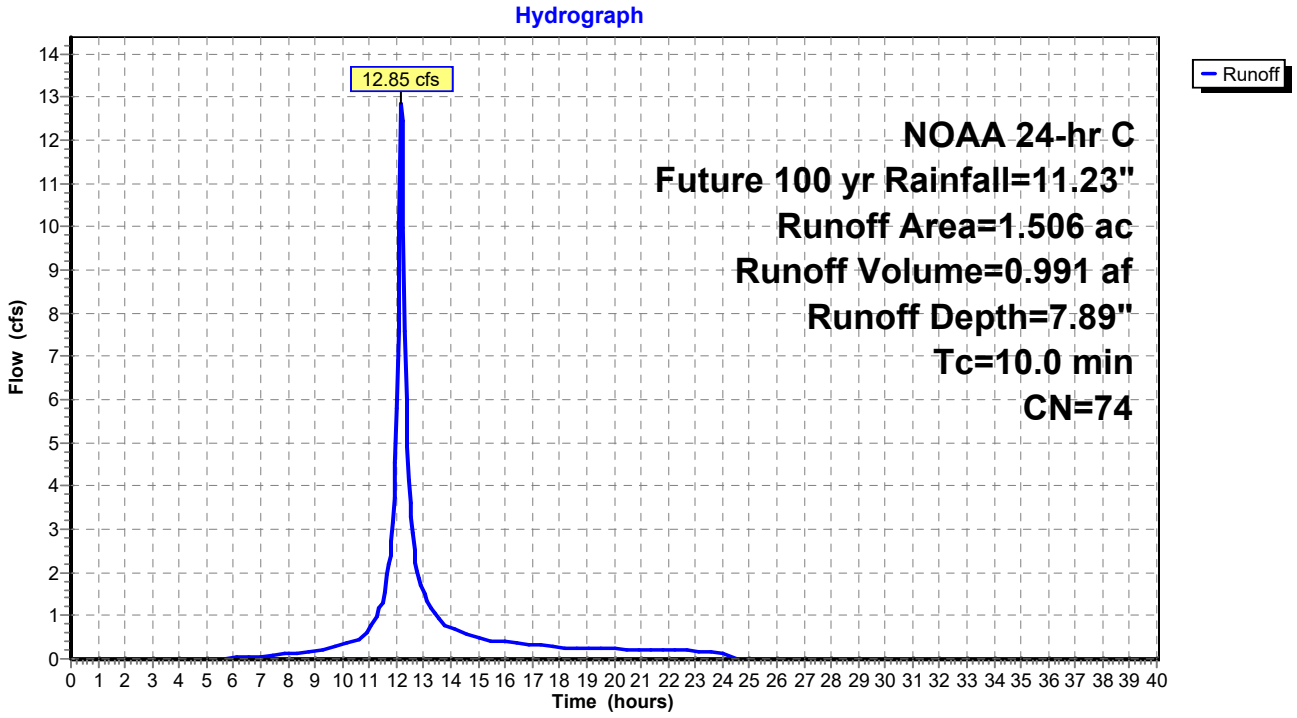
Runoff = 12.85 cfs @ 12.17 hrs, Volume= 0.991 af, Depth= 7.89"
Routed to Pond B-24 : Basin #24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.506	74	>75% Grass cover, Good, HSG C
1.506		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 24P: PDA-24 (pervious)



Summary for Subcatchment 25l: PDA-25 (impervious)

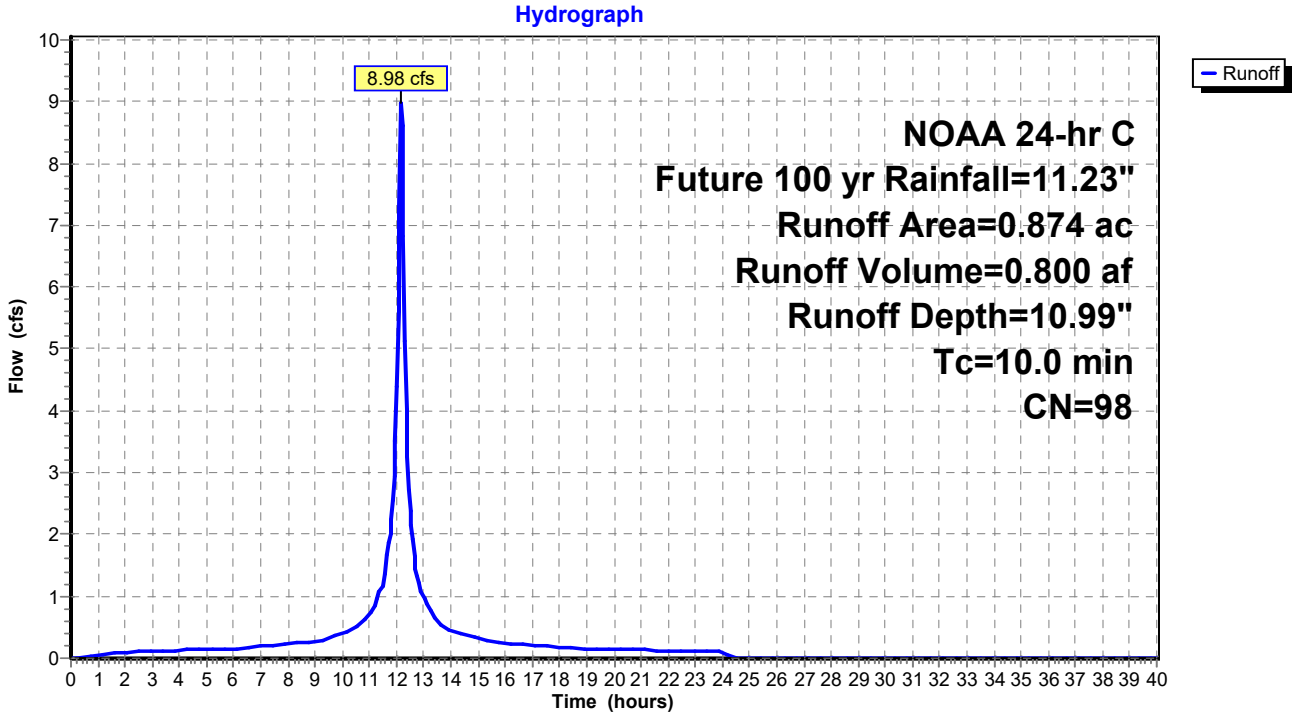
Runoff = 8.98 cfs @ 12.17 hrs, Volume= 0.800 af, Depth=10.99"
Routed to Pond B-25 : Basin #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.388	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.036	98	Concrete, HSC C
	0.874	98	Weighted Average
	0.874		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 25l: PDA-25 (impervious)



Summary for Subcatchment 25P: PDA-25 (pervious)

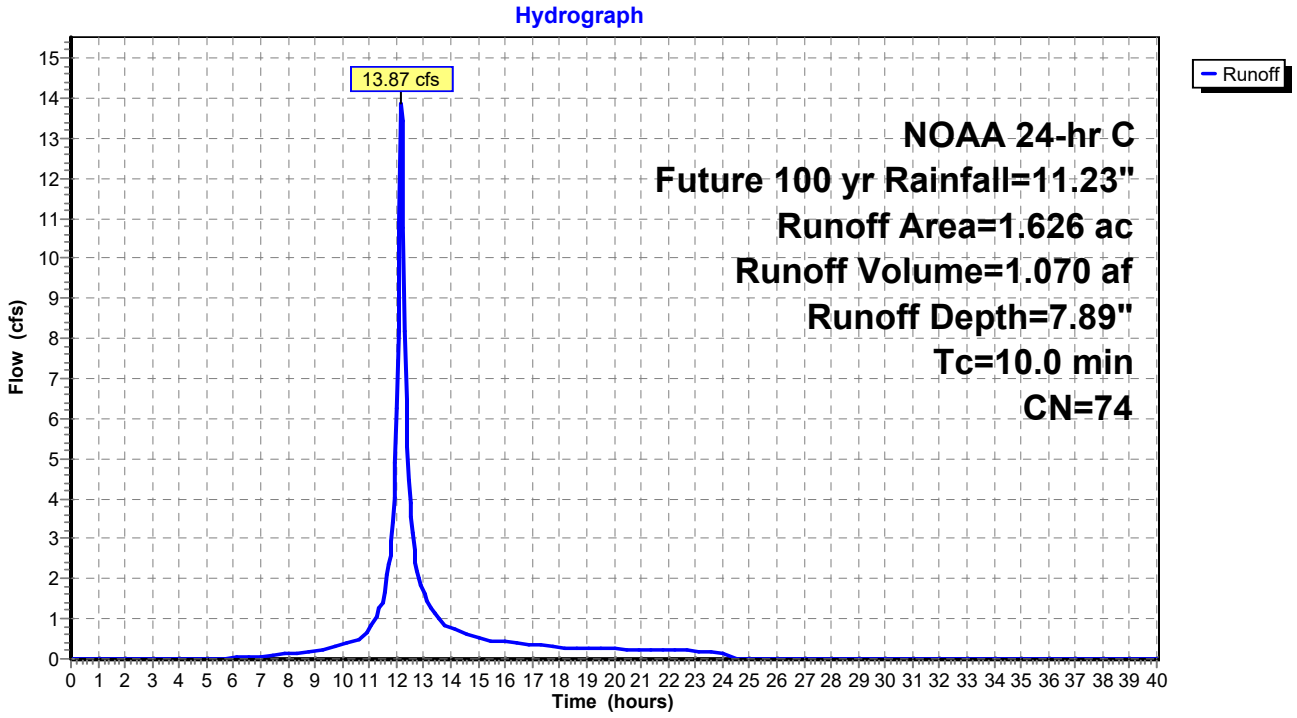
Runoff = 13.87 cfs @ 12.17 hrs, Volume= 1.070 af, Depth= 7.89"
Routed to Pond B-25 : Basin #25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.626	74	>75% Grass cover, Good, HSG C
1.626		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 25P: PDA-25 (pervious)



Summary for Subcatchment 26l: PDA-26 (impervious)

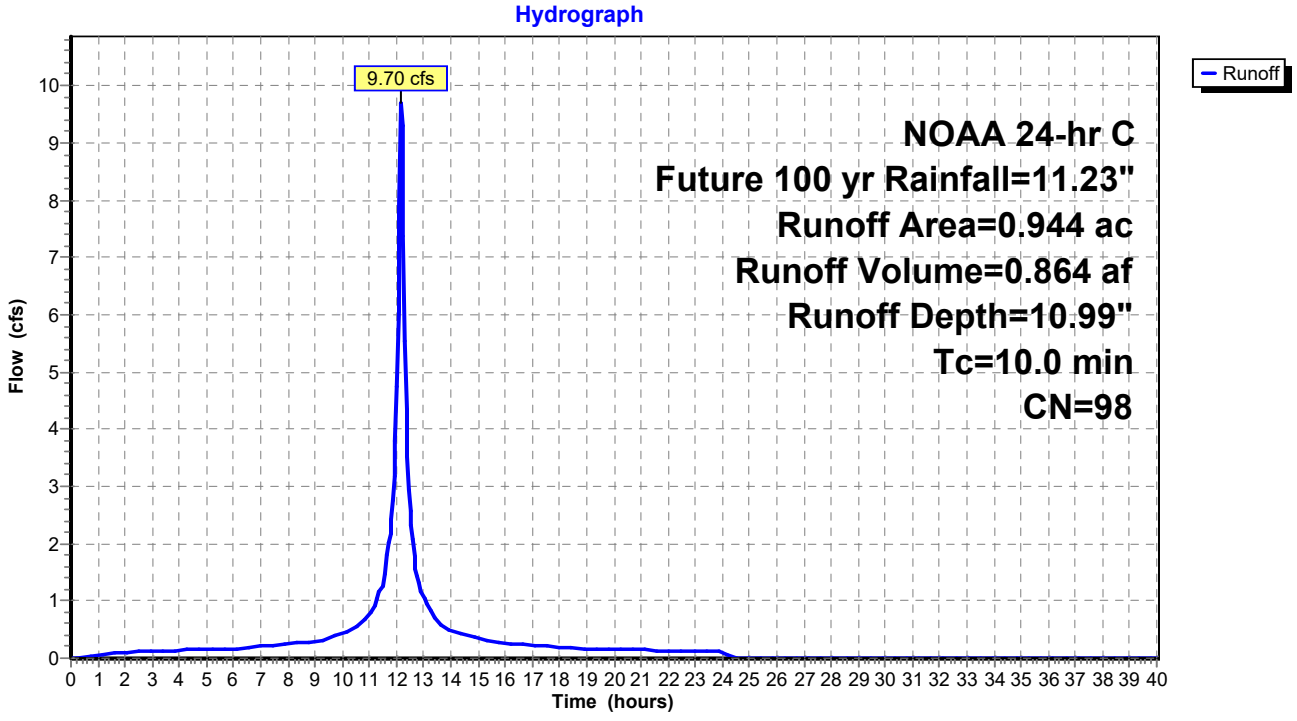
Runoff = 9.70 cfs @ 12.17 hrs, Volume= 0.864 af, Depth=10.99"
Routed to Pond B-26 : Basin #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.944	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.944	98	Weighted Average
	0.944		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 26l: PDA-26 (impervious)



Summary for Subcatchment 26P: PDA-26 (pervious)

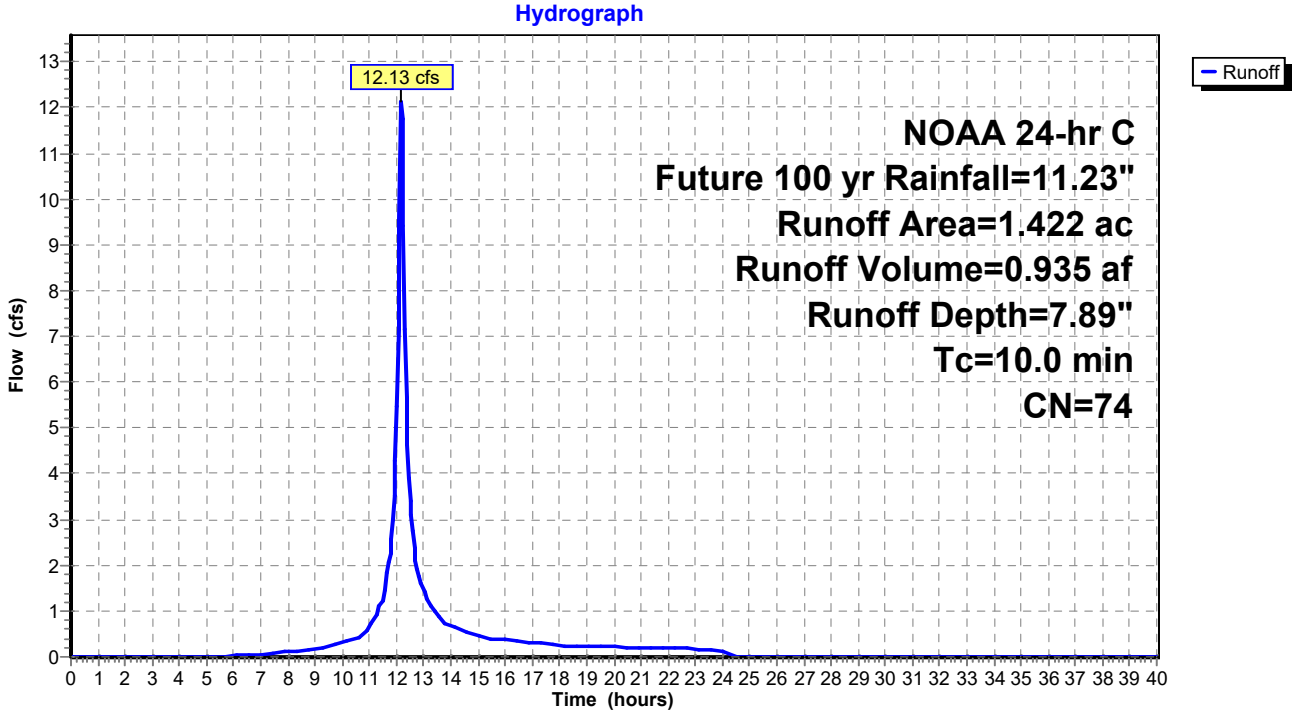
Runoff = 12.13 cfs @ 12.17 hrs, Volume= 0.935 af, Depth= 7.89"
Routed to Pond B-26 : Basin #26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.422	74	>75% Grass cover, Good, HSG C
1.422		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 26P: PDA-26 (pervious)



Summary for Subcatchment 27I: PDA-27 (impervious)

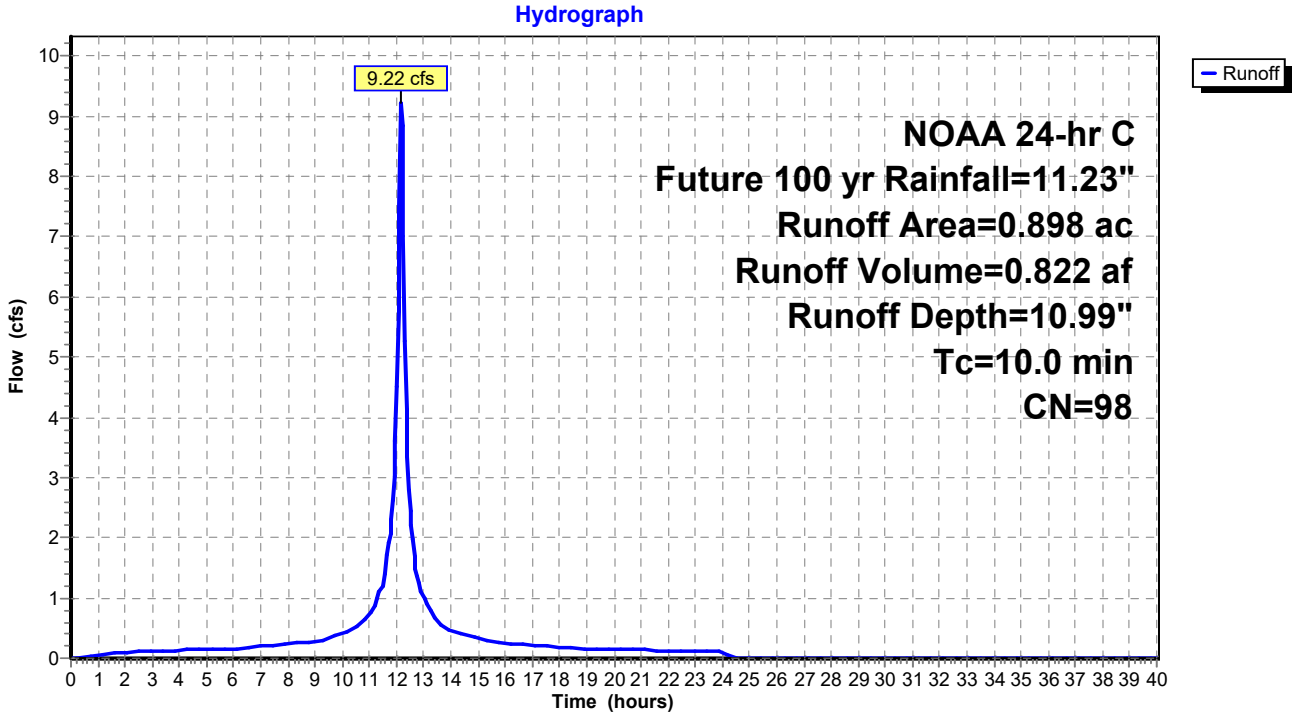
Runoff = 9.22 cfs @ 12.17 hrs, Volume= 0.822 af, Depth=10.99"
Routed to Pond B-27 : Basin #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.233	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.022	98	Concrete, HSC C
	0.898	98	Weighted Average
	0.898		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 27I: PDA-27 (impervious)



Summary for Subcatchment 27P: PDA-27 (pervious)

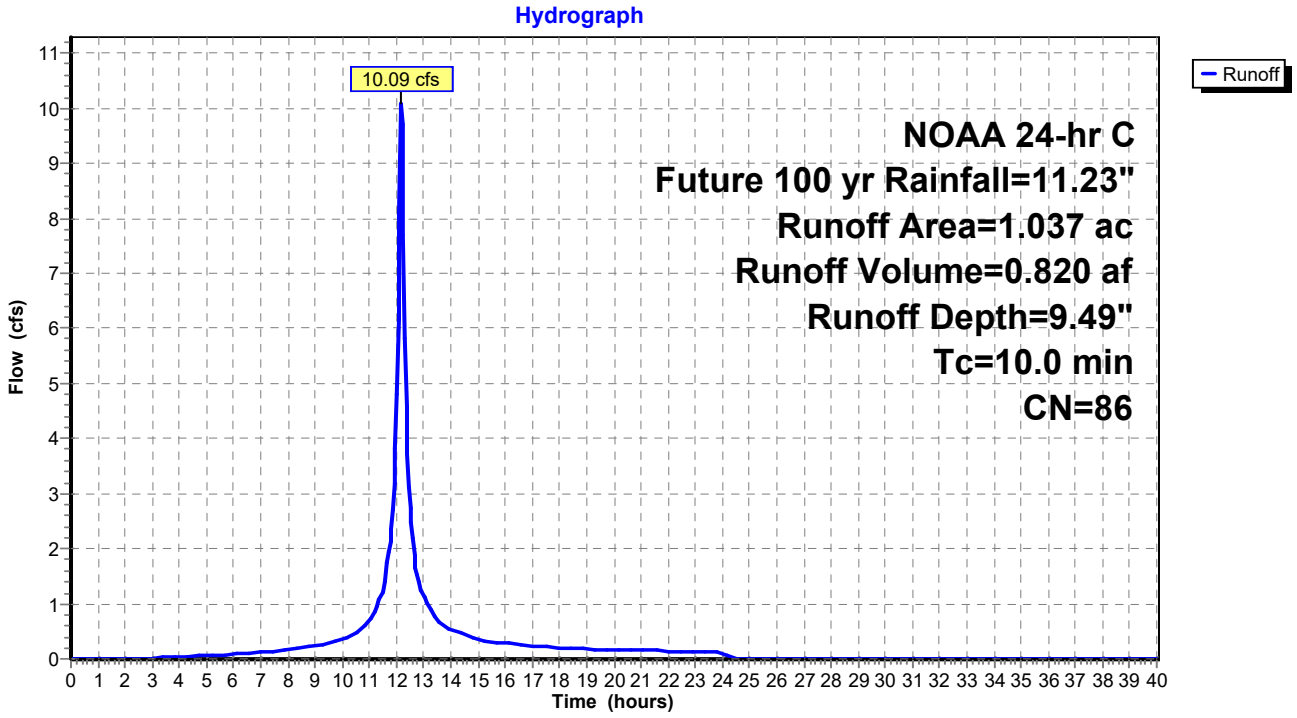
Runoff = 10.09 cfs @ 12.17 hrs, Volume= 0.820 af, Depth= 9.49"
Routed to Pond B-27 : Basin #27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.037	86	<50% Grass cover, Poor, HSG C
1.037		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 27P: PDA-27 (pervious)



Summary for Subcatchment 28I: PDA-28 (impervious)

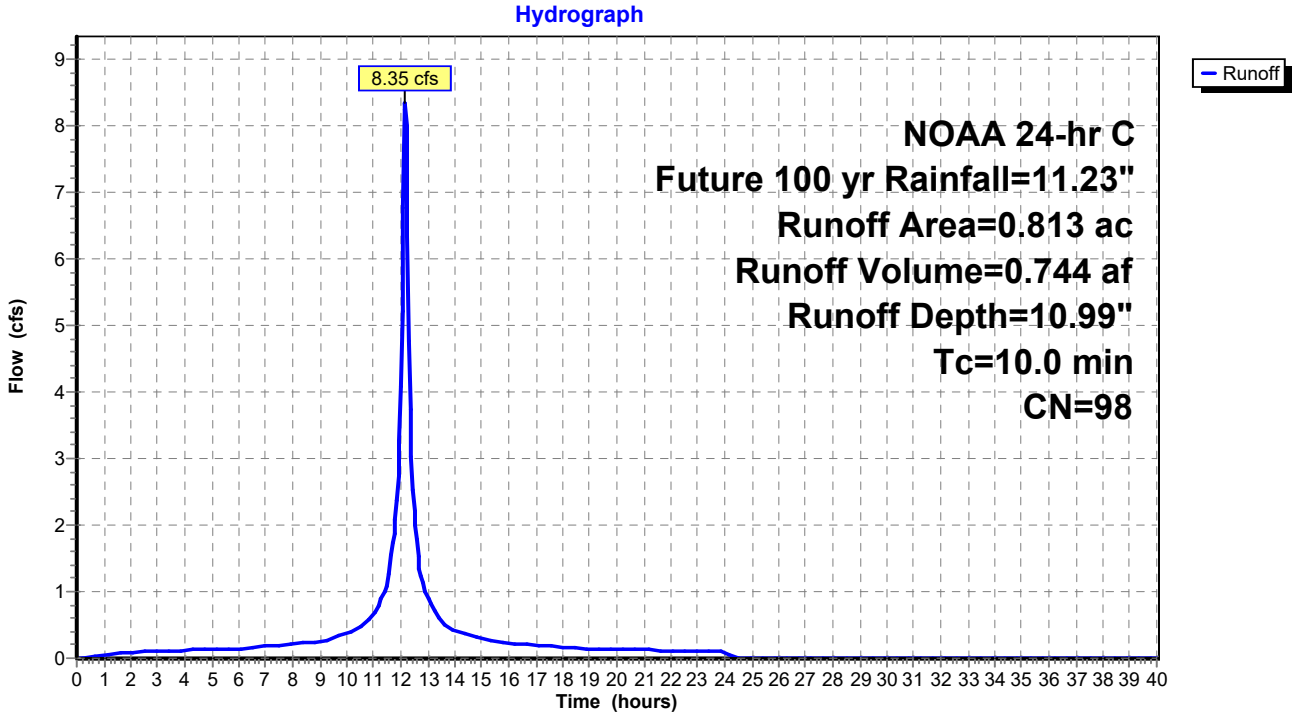
Runoff = 8.35 cfs @ 12.17 hrs, Volume= 0.744 af, Depth=10.99"
Routed to Pond B-28 : Basin #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.235	98	Pavement, HSG C
*	0.541	98	Roof, HSG C
*	0.037	98	Concrete, HSC C
	0.813	98	Weighted Average
	0.813		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 28I: PDA-28 (impervious)



Summary for Subcatchment 28P: PDA-28 (pervious)

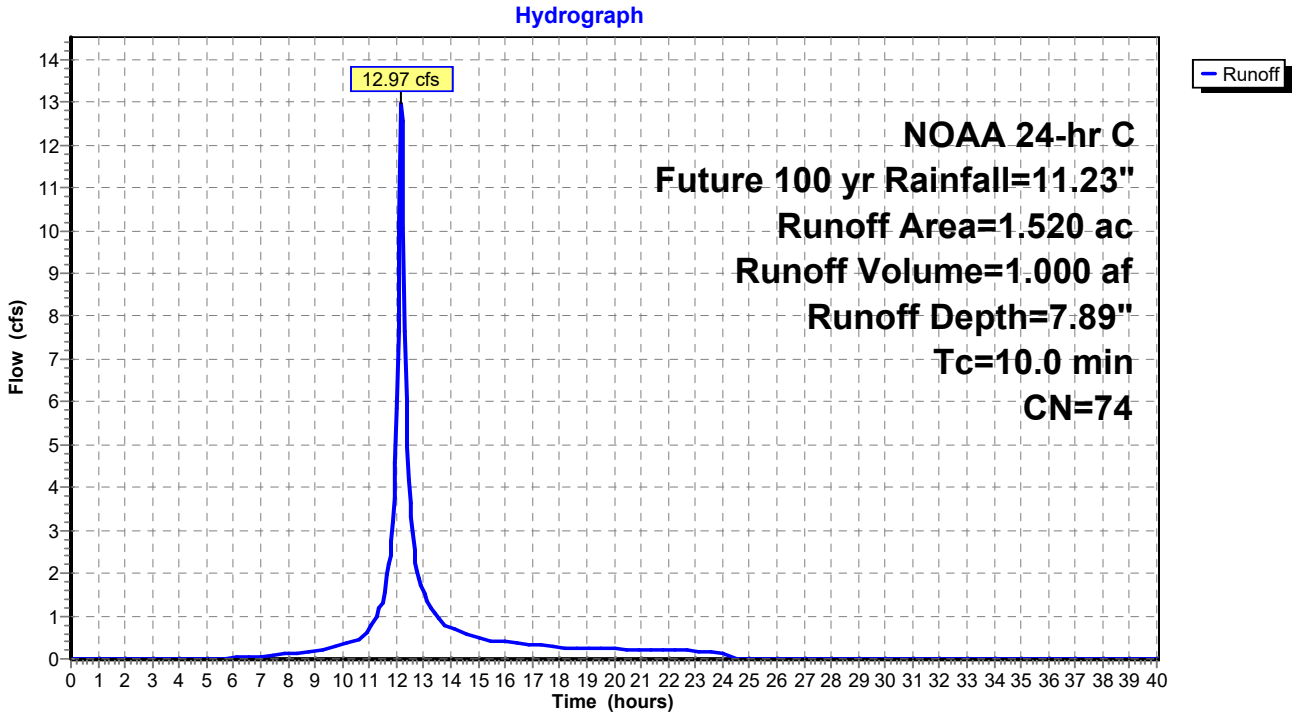
Runoff = 12.97 cfs @ 12.17 hrs, Volume= 1.000 af, Depth= 7.89"
Routed to Pond B-28 : Basin #28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.520	74	>75% Grass cover, Good, HSG C
1.520		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 28P: PDA-28 (pervious)



Summary for Subcatchment UPDA-2: PDA-2 (undetained)

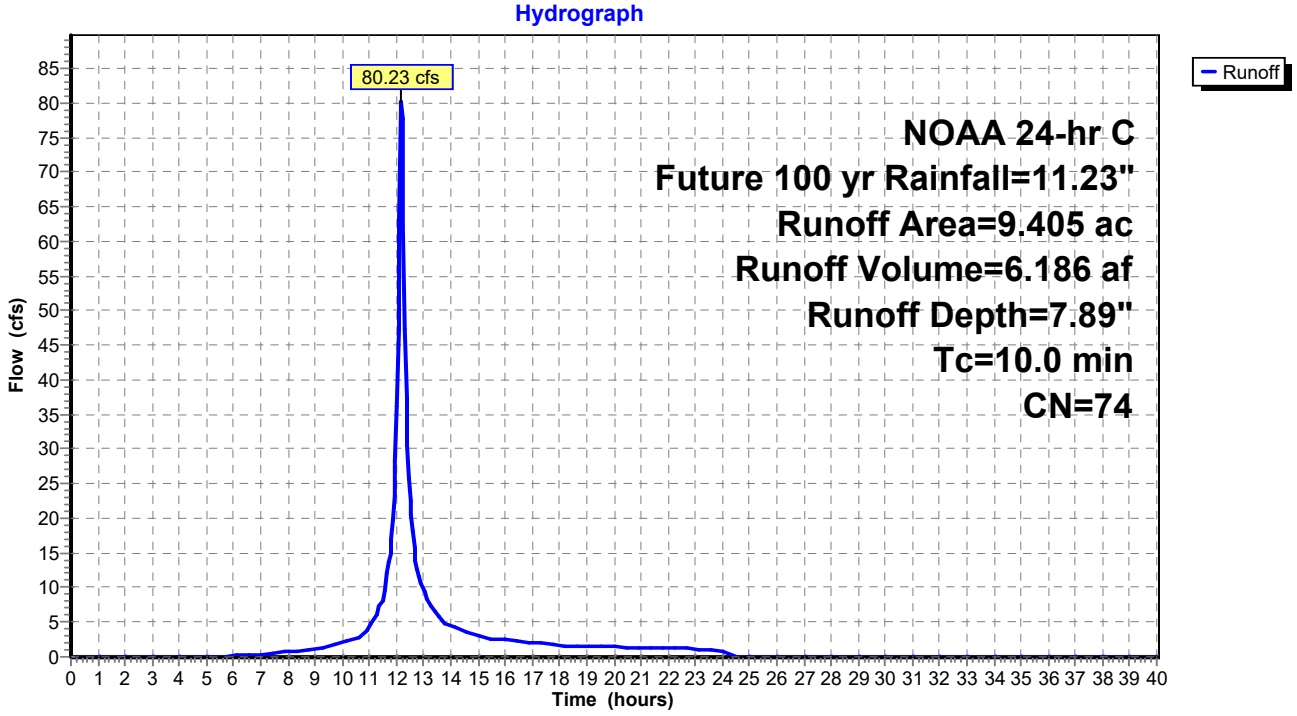
Runoff = 80.23 cfs @ 12.17 hrs, Volume= 6.186 af, Depth= 7.89"
Routed to Link PDA-2 : Proposed Drainage Area #2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
9.405	74	>75% Grass cover, Good, HSG C
9.405		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-2: PDA-2 (undetained)



Summary for Pond B-18: Basin #18

Inflow Area = 1.410 ac, 31.91% Impervious, Inflow Depth = 8.88" for Future 100 yr event
Inflow = 12.81 cfs @ 12.17 hrs, Volume= 1.044 af
Outflow = 11.40 cfs @ 12.22 hrs, Volume= 0.998 af, Atten= 11%, Lag= 3.2 min
Primary = 11.40 cfs @ 12.22 hrs, Volume= 0.998 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 190.29' @ 12.22 hrs Surf.Area= 3,432 sf Storage= 9,597 cf

Plug-Flow detention time= 156.6 min calculated for 0.997 af (96% of inflow)
Center-of-Mass det. time= 131.9 min (914.6 - 782.7)

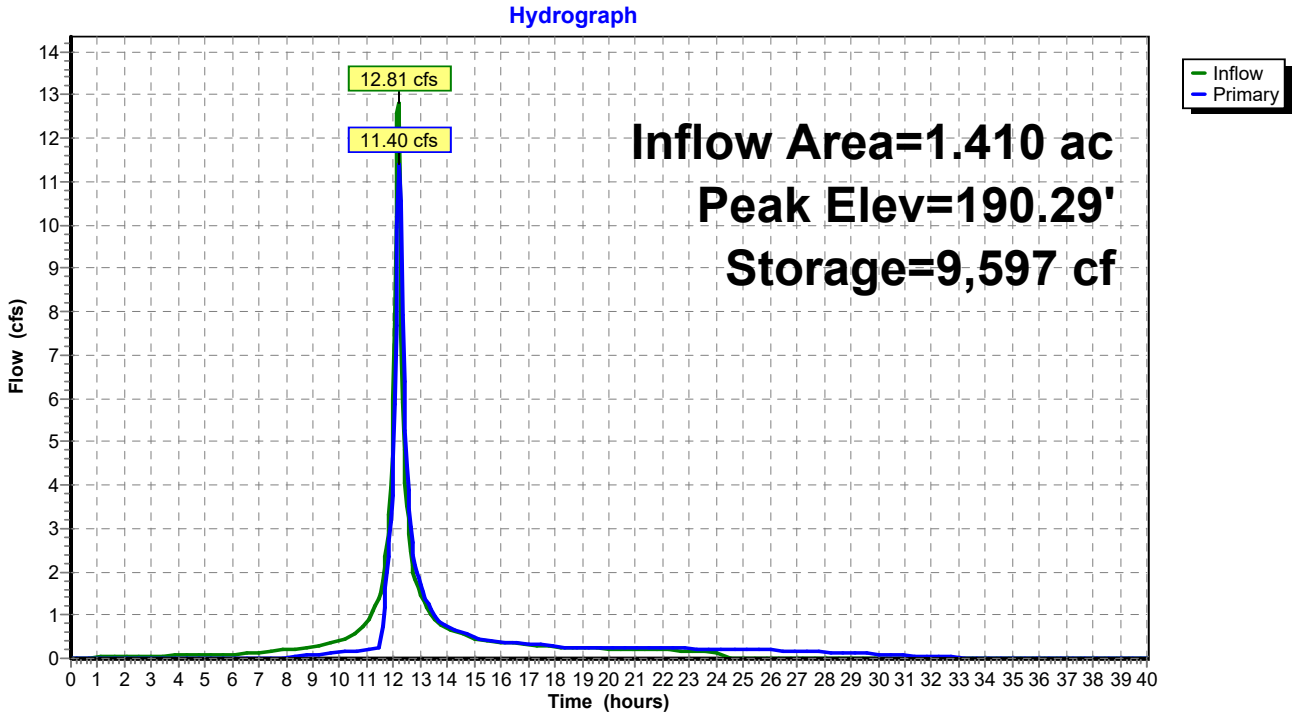
Volume	Invert	Avail.Storage	Storage Description
#1	185.65'	12,198 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
185.65	0	0	0
186.00	1,119	196	196
187.00	1,564	1,342	1,537
188.00	2,065	1,815	3,352
189.00	2,623	2,344	5,696
190.00	3,237	2,930	8,626
191.00	3,908	3,573	12,198

Device	Routing	Invert	Outlet Devices
#1	Primary	186.00'	**15.0" Round Culvert** L= 28.0' Ke= 0.500 Inlet / Outlet Invert= 186.00' / 185.86' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	187.25'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.34'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.29 cfs @ 12.22 hrs HW=190.28' (Free Discharge)
- **1=Culvert** (Inlet Controls 11.29 cfs @ 9.20 fps)
  - **2=Orifice/Grate** (Passes < 0.28 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 11.32 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-18: Basin #18



Stage-Discharge for Pond B-18: Basin #18

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00
185.68	0.00	186.20	0.00	186.72	0.00	187.24	0.00
185.69	0.00	186.21	0.00	186.73	0.00	187.25	0.00
185.70	0.00	186.22	0.00	186.74	0.00	187.26	0.00
185.71	0.00	186.23	0.00	186.75	0.00	187.27	0.00
185.72	0.00	186.24	0.00	186.76	0.00	187.28	0.00
185.73	0.00	186.25	0.00	186.77	0.00	187.29	0.00
185.74	0.00	186.26	0.00	186.78	0.00	187.30	0.00
185.75	0.00	186.27	0.00	186.79	0.00	187.31	0.01
185.76	0.00	186.28	0.00	186.80	0.00	187.32	0.01
185.77	0.00	186.29	0.00	186.81	0.00	187.33	0.01
185.78	0.00	186.30	0.00	186.82	0.00	187.34	0.01
185.79	0.00	186.31	0.00	186.83	0.00	187.35	0.02
185.80	0.00	186.32	0.00	186.84	0.00	187.36	0.02
185.81	0.00	186.33	0.00	186.85	0.00	187.37	0.02
185.82	0.00	186.34	0.00	186.86	0.00	187.38	0.03
185.83	0.00	186.35	0.00	186.87	0.00	187.39	0.03
185.84	0.00	186.36	0.00	186.88	0.00	187.40	0.03
185.85	0.00	186.37	0.00	186.89	0.00	187.41	0.04
185.86	0.00	186.38	0.00	186.90	0.00	187.42	0.04
185.87	0.00	186.39	0.00	186.91	0.00	187.43	0.05
185.88	0.00	186.40	0.00	186.92	0.00	187.44	0.05
185.89	0.00	186.41	0.00	186.93	0.00	187.45	0.05
185.90	0.00	186.42	0.00	186.94	0.00	187.46	0.05
185.91	0.00	186.43	0.00	186.95	0.00	187.47	0.06
185.92	0.00	186.44	0.00	186.96	0.00	187.48	0.06
185.93	0.00	186.45	0.00	186.97	0.00	187.49	0.06
185.94	0.00	186.46	0.00	186.98	0.00	187.50	0.06
185.95	0.00	186.47	0.00	186.99	0.00	187.51	0.06
185.96	0.00	186.48	0.00	187.00	0.00	187.52	0.07
185.97	0.00	186.49	0.00	187.01	0.00	187.53	0.07
185.98	0.00	186.50	0.00	187.02	0.00	187.54	0.07
185.99	0.00	186.51	0.00	187.03	0.00	187.55	0.07
186.00	0.00	186.52	0.00	187.04	0.00	187.56	0.07
186.01	0.00	186.53	0.00	187.05	0.00	187.57	0.08
186.02	0.00	186.54	0.00	187.06	0.00	187.58	0.08
186.03	0.00	186.55	0.00	187.07	0.00	187.59	0.08
186.04	0.00	186.56	0.00	187.08	0.00	187.60	0.08
186.05	0.00	186.57	0.00	187.09	0.00	187.61	0.08
186.06	0.00	186.58	0.00	187.10	0.00	187.62	0.08
186.07	0.00	186.59	0.00	187.11	0.00	187.63	0.09
186.08	0.00	186.60	0.00	187.12	0.00	187.64	0.09
186.09	0.00	186.61	0.00	187.13	0.00	187.65	0.09
186.10	0.00	186.62	0.00	187.14	0.00	187.66	0.09
186.11	0.00	186.63	0.00	187.15	0.00	187.67	0.09
186.12	0.00	186.64	0.00	187.16	0.00	187.68	0.09
186.13	0.00	186.65	0.00	187.17	0.00	187.69	0.10
186.14	0.00	186.66	0.00	187.18	0.00	187.70	0.10
186.15	0.00	186.67	0.00	187.19	0.00	187.71	0.10
186.16	0.00	186.68	0.00	187.20	0.00	187.72	0.10

Stage-Discharge for Pond B-18: Basin #18 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.73	0.10	188.25	0.16	188.77	0.20	189.29	0.23
187.74	0.10	188.26	0.16	188.78	0.20	189.30	0.23
187.75	0.10	188.27	0.16	188.79	0.20	189.31	0.23
187.76	0.10	188.28	0.16	188.80	0.20	189.32	0.23
187.77	0.11	188.29	0.16	188.81	0.20	189.33	0.23
187.78	0.11	188.30	0.16	188.82	0.20	189.34	0.23
187.79	0.11	188.31	0.16	188.83	0.20	189.35	0.24
187.80	0.11	188.32	0.16	188.84	0.20	189.36	0.27
187.81	0.11	188.33	0.16	188.85	0.20	189.37	0.30
187.82	0.11	188.34	0.16	188.86	0.20	189.38	0.34
187.83	0.11	188.35	0.16	188.87	0.20	189.39	0.38
187.84	0.11	188.36	0.16	188.88	0.20	189.40	0.43
187.85	0.12	188.37	0.17	188.89	0.20	189.41	0.48
187.86	0.12	188.38	0.17	188.90	0.20	189.42	0.53
187.87	0.12	188.39	0.17	188.91	0.20	189.43	0.59
187.88	0.12	188.40	0.17	188.92	0.21	189.44	0.65
187.89	0.12	188.41	0.17	188.93	0.21	189.45	0.71
187.90	0.12	188.42	0.17	188.94	0.21	189.46	0.78
187.91	0.12	188.43	0.17	188.95	0.21	189.47	0.85
187.92	0.12	188.44	0.17	188.96	0.21	189.48	0.92
187.93	0.12	188.45	0.17	188.97	0.21	189.49	0.99
187.94	0.13	188.46	0.17	188.98	0.21	189.50	1.07
187.95	0.13	188.47	0.17	188.99	0.21	189.51	1.15
187.96	0.13	188.48	0.17	189.00	0.21	189.52	1.23
187.97	0.13	188.49	0.17	189.01	0.21	189.53	1.32
187.98	0.13	188.50	0.18	189.02	0.21	189.54	1.40
187.99	0.13	188.51	0.18	189.03	0.21	189.55	1.49
188.00	0.13	188.52	0.18	189.04	0.21	189.56	1.58
188.01	0.13	188.53	0.18	189.05	0.21	189.57	1.67
188.02	0.13	188.54	0.18	189.06	0.21	189.58	1.76
188.03	0.13	188.55	0.18	189.07	0.22	189.59	1.86
188.04	0.14	188.56	0.18	189.08	0.22	189.60	1.96
188.05	0.14	188.57	0.18	189.09	0.22	189.61	2.06
188.06	0.14	188.58	0.18	189.10	0.22	189.62	2.16
188.07	0.14	188.59	0.18	189.11	0.22	189.63	2.26
188.08	0.14	188.60	0.18	189.12	0.22	189.64	2.37
188.09	0.14	188.61	0.18	189.13	0.22	189.65	2.47
188.10	0.14	188.62	0.18	189.14	0.22	189.66	2.58
188.11	0.14	188.63	0.19	189.15	0.22	189.67	2.69
188.12	0.14	188.64	0.19	189.16	0.22	189.68	2.80
188.13	0.14	188.65	0.19	189.17	0.22	189.69	2.91
188.14	0.15	188.66	0.19	189.18	0.22	189.70	3.03
188.15	0.15	188.67	0.19	189.19	0.22	189.71	3.14
188.16	0.15	188.68	0.19	189.20	0.22	189.72	3.26
188.17	0.15	188.69	0.19	189.21	0.22	189.73	3.38
188.18	0.15	188.70	0.19	189.22	0.22	189.74	3.50
188.19	0.15	188.71	0.19	189.23	0.22	189.75	3.62
188.20	0.15	188.72	0.19	189.24	0.23	189.76	3.74
188.21	0.15	188.73	0.19	189.25	0.23	189.77	3.86
188.22	0.15	188.74	0.19	189.26	0.23	189.78	3.99
188.23	0.15	188.75	0.19	189.27	0.23	189.79	4.12
188.24	0.15	188.76	0.19	189.28	0.23	189.80	4.24

Stage-Discharge for Pond B-18: Basin #18 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
189.81	4.37	190.33	11.37	190.85	12.15
189.82	4.50	190.34	11.39	190.86	12.16
189.83	4.63	190.35	11.40	190.87	12.17
189.84	4.77	190.36	11.42	190.88	12.19
189.85	4.90	190.37	11.43	190.89	12.20
189.86	5.04	190.38	11.45	190.90	12.22
189.87	5.17	190.39	11.47	190.91	12.23
189.88	5.31	190.40	11.48	190.92	12.25
189.89	5.45	190.41	11.50	190.93	12.26
189.90	5.59	190.42	11.51	190.94	12.27
189.91	5.73	190.43	11.53	190.95	12.29
189.92	5.87	190.44	11.54	190.96	12.42
189.93	6.02	190.45	11.56	190.97	12.65
189.94	6.16	190.46	11.57	190.98	12.94
189.95	6.31	190.47	11.59	190.99	13.28
189.96	6.45	190.48	11.60	191.00	**13.67**
189.97	6.60	190.49	11.62		
189.98	6.75	190.50	11.63		
189.99	6.90	190.51	11.65		
190.00	7.05	190.52	11.66		
190.01	7.20	190.53	11.68		
190.02	7.35	190.54	11.69		
190.03	7.51	190.55	11.71		
190.04	7.66	190.56	11.72		
190.05	7.82	190.57	11.74		
190.06	7.97	190.58	11.75		
190.07	8.13	190.59	11.77		
190.08	8.29	190.60	11.78		
190.09	8.45	190.61	11.80		
190.10	8.61	190.62	11.81		
190.11	8.77	190.63	11.83		
190.12	8.93	190.64	11.84		
190.13	9.10	190.65	11.85		
190.14	9.26	190.66	11.87		
190.15	9.42	190.67	11.88		
190.16	9.59	190.68	11.90		
190.17	9.76	190.69	11.91		
190.18	9.92	190.70	11.93		
190.19	10.09	190.71	11.94		
190.20	10.26	190.72	11.96		
190.21	10.43	190.73	11.97		
190.22	10.60	190.74	11.99		
190.23	10.77	190.75	12.00		
190.24	10.94	190.76	12.02		
190.25	11.12	190.77	12.03		
190.26	11.27	190.78	12.04		
190.27	11.28	190.79	12.06		
190.28	11.30	190.80	12.07		
190.29	11.31	190.81	12.09		
190.30	11.33	190.82	12.10		
190.31	11.34	190.83	12.12		
190.32	11.36	190.84	12.13		

Stage-Area-Storage for Pond B-18: Basin #18

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.65	0	0	186.17	1,195	392
185.66	32	0	186.18	1,199	404
185.67	64	1	186.19	1,204	416
185.68	96	1	186.20	1,208	429
185.69	128	3	186.21	1,212	441
185.70	160	4	186.22	1,217	453
185.71	192	6	186.23	1,221	465
185.72	224	8	186.24	1,226	477
185.73	256	10	186.25	1,230	489
185.74	288	13	186.26	1,235	502
185.75	320	16	186.27	1,239	514
185.76	352	19	186.28	1,244	527
185.77	384	23	186.29	1,248	539
185.78	416	27	186.30	1,253	552
185.79	448	31	186.31	1,257	564
185.80	480	36	186.32	1,261	577
185.81	512	41	186.33	1,266	589
185.82	544	46	186.34	1,270	602
185.83	575	52	186.35	1,275	615
185.84	607	58	186.36	1,279	628
185.85	639	64	186.37	1,284	640
185.86	671	70	186.38	1,288	653
185.87	703	77	186.39	1,293	666
185.88	735	85	186.40	1,297	679
185.89	767	92	186.41	1,301	692
185.90	799	100	186.42	1,306	705
185.91	831	108	186.43	1,310	718
185.92	863	117	186.44	1,315	731
185.93	895	125	186.45	1,319	744
185.94	927	134	186.46	1,324	758
185.95	959	144	186.47	1,328	771
185.96	991	154	186.48	1,333	784
185.97	1,023	164	186.49	1,337	798
185.98	1,055	174	186.50	1,342	811
185.99	1,087	185	186.51	1,346	824
186.00	1,119	196	186.52	1,350	838
186.01	1,123	207	186.53	1,355	851
186.02	1,128	218	186.54	1,359	865
186.03	1,132	230	186.55	1,364	879
186.04	1,137	241	186.56	1,368	892
186.05	1,141	252	186.57	1,373	906
186.06	1,146	264	186.58	1,377	920
186.07	1,150	275	186.59	1,382	933
186.08	1,155	287	186.60	1,386	947
186.09	1,159	298	186.61	1,390	961
186.10	1,163	310	186.62	1,395	975
186.11	1,168	322	186.63	1,399	989
186.12	1,172	333	186.64	1,404	1,003
186.13	1,177	345	186.65	1,408	1,017
186.14	1,181	357	186.66	1,413	1,031
186.15	1,186	369	186.67	1,417	1,045
186.16	1,190	381	186.68	1,422	1,060

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.69	1,426	1,074	187.21	1,669	1,877
186.70	1,431	1,088	187.22	1,674	1,894
186.71	1,435	1,102	187.23	1,679	1,910
186.72	1,439	1,117	187.24	1,684	1,927
186.73	1,444	1,131	187.25	1,689	1,944
186.74	1,448	1,146	187.26	1,694	1,961
186.75	1,453	1,160	187.27	1,699	1,978
186.76	1,457	1,175	187.28	1,704	1,995
186.77	1,462	1,189	187.29	1,709	2,012
186.78	1,466	1,204	187.30	1,714	2,029
186.79	1,471	1,219	187.31	1,719	2,046
186.80	1,475	1,233	187.32	1,724	2,063
186.81	1,479	1,248	187.33	1,729	2,081
186.82	1,484	1,263	187.34	1,734	2,098
186.83	1,488	1,278	187.35	1,739	2,115
186.84	1,493	1,293	187.36	1,744	2,133
186.85	1,497	1,308	187.37	1,749	2,150
186.86	1,502	1,323	187.38	1,754	2,168
186.87	1,506	1,338	187.39	1,759	2,185
186.88	1,511	1,353	187.40	1,764	2,203
186.89	1,515	1,368	187.41	1,769	2,221
186.90	1,520	1,383	187.42	1,774	2,238
186.91	1,524	1,398	187.43	1,779	2,256
186.92	1,528	1,414	187.44	1,784	2,274
186.93	1,533	1,429	187.45	1,789	2,292
186.94	1,537	1,444	187.46	1,794	2,310
186.95	1,542	1,460	187.47	1,799	2,328
186.96	1,546	1,475	187.48	1,804	2,346
186.97	1,551	1,491	187.49	1,809	2,364
186.98	1,555	1,506	187.50	1,815	2,382
186.99	1,560	1,522	187.51	1,820	2,400
187.00	1,564	1,537	187.52	1,825	2,418
187.01	1,569	1,553	187.53	1,830	2,437
187.02	1,574	1,569	187.54	1,835	2,455
187.03	1,579	1,584	187.55	1,840	2,473
187.04	1,584	1,600	187.56	1,845	2,492
187.05	1,589	1,616	187.57	1,850	2,510
187.06	1,594	1,632	187.58	1,855	2,529
187.07	1,599	1,648	187.59	1,860	2,547
187.08	1,604	1,664	187.60	1,865	2,566
187.09	1,609	1,680	187.61	1,870	2,585
187.10	1,614	1,696	187.62	1,875	2,603
187.11	1,619	1,712	187.63	1,880	2,622
187.12	1,624	1,729	187.64	1,885	2,641
187.13	1,629	1,745	187.65	1,890	2,660
187.14	1,634	1,761	187.66	1,895	2,679
187.15	1,639	1,778	187.67	1,900	2,698
187.16	1,644	1,794	187.68	1,905	2,717
187.17	1,649	1,810	187.69	1,910	2,736
187.18	1,654	1,827	187.70	1,915	2,755
187.19	1,659	1,844	187.71	1,920	2,774
187.20	1,664	1,860	187.72	1,925	2,793

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.73	1,930	2,813	188.25	2,205	3,886
187.74	1,935	2,832	188.26	2,210	3,908
187.75	1,940	2,851	188.27	2,216	3,930
187.76	1,945	2,871	188.28	2,221	3,952
187.77	1,950	2,890	188.29	2,227	3,974
187.78	1,955	2,910	188.30	2,232	3,996
187.79	1,960	2,929	188.31	2,238	4,019
187.80	1,965	2,949	188.32	2,244	4,041
187.81	1,970	2,969	188.33	2,249	4,064
187.82	1,975	2,988	188.34	2,255	4,086
187.83	1,980	3,008	188.35	2,260	4,109
187.84	1,985	3,028	188.36	2,266	4,131
187.85	1,990	3,048	188.37	2,271	4,154
187.86	1,995	3,068	188.38	2,277	4,177
187.87	2,000	3,088	188.39	2,283	4,200
187.88	2,005	3,108	188.40	2,288	4,222
187.89	2,010	3,128	188.41	2,294	4,245
187.90	2,015	3,148	188.42	2,299	4,268
187.91	2,020	3,168	188.43	2,305	4,291
187.92	2,025	3,188	188.44	2,311	4,314
187.93	2,030	3,209	188.45	2,316	4,338
187.94	2,035	3,229	188.46	2,322	4,361
187.95	2,040	3,249	188.47	2,327	4,384
187.96	2,045	3,270	188.48	2,333	4,407
187.97	2,050	3,290	188.49	2,338	4,431
187.98	2,055	3,311	188.50	2,344	4,454
187.99	2,060	3,331	188.51	2,350	4,478
188.00	2,065	3,352	188.52	2,355	4,501
188.01	2,071	3,373	188.53	2,361	4,525
188.02	2,076	3,393	188.54	2,366	4,548
188.03	2,082	3,414	188.55	2,372	4,572
188.04	2,087	3,435	188.56	2,377	4,596
188.05	2,093	3,456	188.57	2,383	4,620
188.06	2,098	3,477	188.58	2,389	4,643
188.07	2,104	3,498	188.59	2,394	4,667
188.08	2,110	3,519	188.60	2,400	4,691
188.09	2,115	3,540	188.61	2,405	4,715
188.10	2,121	3,561	188.62	2,411	4,739
188.11	2,126	3,582	188.63	2,417	4,764
188.12	2,132	3,604	188.64	2,422	4,788
188.13	2,138	3,625	188.65	2,428	4,812
188.14	2,143	3,646	188.66	2,433	4,836
188.15	2,149	3,668	188.67	2,439	4,861
188.16	2,154	3,689	188.68	2,444	4,885
188.17	2,160	3,711	188.69	2,450	4,910
188.18	2,165	3,733	188.70	2,456	4,934
188.19	2,171	3,754	188.71	2,461	4,959
188.20	2,177	3,776	188.72	2,467	4,983
188.21	2,182	3,798	188.73	2,472	5,008
188.22	2,188	3,820	188.74	2,478	5,033
188.23	2,193	3,842	188.75	2,484	5,058
188.24	2,199	3,863	188.76	2,489	5,082

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.77	2,495	5,107	189.29	2,801	6,482
188.78	2,500	5,132	189.30	2,807	6,510
188.79	2,506	5,157	189.31	2,813	6,538
188.80	2,511	5,182	189.32	2,819	6,567
188.81	2,517	5,208	189.33	2,826	6,595
188.82	2,523	5,233	189.34	2,832	6,623
188.83	2,528	5,258	189.35	2,838	6,651
188.84	2,534	5,283	189.36	2,844	6,680
188.85	2,539	5,309	189.37	2,850	6,708
188.86	2,545	5,334	189.38	2,856	6,737
188.87	2,550	5,360	189.39	2,862	6,765
188.88	2,556	5,385	189.40	2,869	6,794
188.89	2,562	5,411	189.41	2,875	6,823
188.90	2,567	5,436	189.42	2,881	6,852
188.91	2,573	5,462	189.43	2,887	6,880
188.92	2,578	5,488	189.44	2,893	6,909
188.93	2,584	5,514	189.45	2,899	6,938
188.94	2,590	5,539	189.46	2,905	6,967
188.95	2,595	5,565	189.47	2,912	6,996
188.96	2,601	5,591	189.48	2,918	7,026
188.97	2,606	5,617	189.49	2,924	7,055
188.98	2,612	5,643	189.50	2,930	7,084
188.99	2,617	5,670	189.51	2,936	7,113
189.00	2,623	5,696	189.52	2,942	7,143
189.01	2,629	5,722	189.53	2,948	7,172
189.02	2,635	5,748	189.54	2,955	7,202
189.03	2,641	5,775	189.55	2,961	7,231
189.04	2,648	5,801	189.56	2,967	7,261
189.05	2,654	5,828	189.57	2,973	7,291
189.06	2,660	5,854	189.58	2,979	7,320
189.07	2,666	5,881	189.59	2,985	7,350
189.08	2,672	5,908	189.60	2,991	7,380
189.09	2,678	5,934	189.61	2,998	7,410
189.10	2,684	5,961	189.62	3,004	7,440
189.11	2,691	5,988	189.63	3,010	7,470
189.12	2,697	6,015	189.64	3,016	7,500
189.13	2,703	6,042	189.65	3,022	7,530
189.14	2,709	6,069	189.66	3,028	7,561
189.15	2,715	6,096	189.67	3,034	7,591
189.16	2,721	6,123	189.68	3,041	7,621
189.17	2,727	6,151	189.69	3,047	7,652
189.18	2,734	6,178	189.70	3,053	7,682
189.19	2,740	6,205	189.71	3,059	7,713
189.20	2,746	6,233	189.72	3,065	7,744
189.21	2,752	6,260	189.73	3,071	7,774
189.22	2,758	6,288	189.74	3,077	7,805
189.23	2,764	6,315	189.75	3,084	7,836
189.24	2,770	6,343	189.76	3,090	7,867
189.25	2,777	6,371	189.77	3,096	7,898
189.26	2,783	6,399	189.78	3,102	7,929
189.27	2,789	6,426	189.79	3,108	7,960
189.28	2,795	6,454	189.80	3,114	7,991

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.81	3,120	8,022	190.33	3,458	9,731
189.82	3,126	8,053	190.34	3,465	9,765
189.83	3,133	8,084	190.35	3,472	9,800
189.84	3,139	8,116	190.36	3,479	9,835
189.85	3,145	8,147	190.37	3,485	9,869
189.86	3,151	8,179	190.38	3,492	9,904
189.87	3,157	8,210	190.39	3,499	9,939
189.88	3,163	8,242	190.40	3,505	9,974
189.89	3,169	8,273	190.41	3,512	10,009
189.90	3,176	8,305	190.42	3,519	10,045
189.91	3,182	8,337	190.43	3,526	10,080
189.92	3,188	8,369	190.44	3,532	10,115
189.93	3,194	8,401	190.45	3,539	10,150
189.94	3,200	8,433	190.46	3,546	10,186
189.95	3,206	8,465	190.47	3,552	10,221
189.96	3,212	8,497	190.48	3,559	10,257
189.97	3,219	8,529	190.49	3,566	10,293
189.98	3,225	8,561	190.50	3,573	10,328
189.99	3,231	8,593	190.51	3,579	10,364
190.00	3,237	8,626	190.52	3,586	10,400
190.01	3,244	8,658	190.53	3,593	10,436
190.02	3,250	8,691	190.54	3,599	10,472
190.03	3,257	8,723	190.55	3,606	10,508
190.04	3,264	8,756	190.56	3,613	10,544
190.05	3,271	8,789	190.57	3,619	10,580
190.06	3,277	8,821	190.58	3,626	10,616
190.07	3,284	8,854	190.59	3,633	10,652
190.08	3,291	8,887	190.60	3,640	10,689
190.09	3,297	8,920	190.61	3,646	10,725
190.10	3,304	8,953	190.62	3,653	10,762
190.11	3,311	8,986	190.63	3,660	10,798
190.12	3,318	9,019	190.64	3,666	10,835
190.13	3,324	9,052	190.65	3,673	10,872
190.14	3,331	9,086	190.66	3,680	10,908
190.15	3,338	9,119	190.67	3,687	10,945
190.16	3,344	9,152	190.68	3,693	10,982
190.17	3,351	9,186	190.69	3,700	11,019
190.18	3,358	9,219	190.70	3,707	11,056
190.19	3,364	9,253	190.71	3,713	11,093
190.20	3,371	9,287	190.72	3,720	11,130
190.21	3,378	9,320	190.73	3,727	11,168
190.22	3,385	9,354	190.74	3,734	11,205
190.23	3,391	9,388	190.75	3,740	11,242
190.24	3,398	9,422	190.76	3,747	11,280
190.25	3,405	9,456	190.77	3,754	11,317
190.26	3,411	9,490	190.78	3,760	11,355
190.27	3,418	9,524	190.79	3,767	11,392
190.28	3,425	9,558	190.80	3,774	11,430
190.29	3,432	9,593	190.81	3,781	11,468
190.30	3,438	9,627	190.82	3,787	11,506
190.31	3,445	9,662	190.83	3,794	11,544
190.32	3,452	9,696	190.84	3,801	11,582

Stage-Area-Storage for Pond B-18: Basin #18 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.85	3,807	11,620
190.86	3,814	11,658
190.87	3,821	11,696
190.88	3,827	11,734
190.89	3,834	11,773
190.90	3,841	11,811
190.91	3,848	11,849
190.92	3,854	11,888
190.93	3,861	11,926
190.94	3,868	11,965
190.95	3,874	12,004
190.96	3,881	12,043
190.97	3,888	12,081
190.98	3,895	12,120
190.99	3,901	12,159
191.00	**3,908**	**12,198**

Summary for Pond B-19: Basin #19

Inflow Area = 1.715 ac, 34.81% Impervious, Inflow Depth = 8.97" for Future 100 yr event
Inflow = 15.67 cfs @ 12.17 hrs, Volume= 1.282 af
Outflow = 13.78 cfs @ 12.23 hrs, Volume= 1.221 af, Atten= 12%, Lag= 3.3 min
Primary = 13.78 cfs @ 12.23 hrs, Volume= 1.221 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 198.81' @ 12.23 hrs Surf.Area= 4,407 sf Storage= 12,130 cf

Plug-Flow detention time= 164.8 min calculated for 1.219 af (95% of inflow)
Center-of-Mass det. time= 138.0 min (918.5 - 780.5)

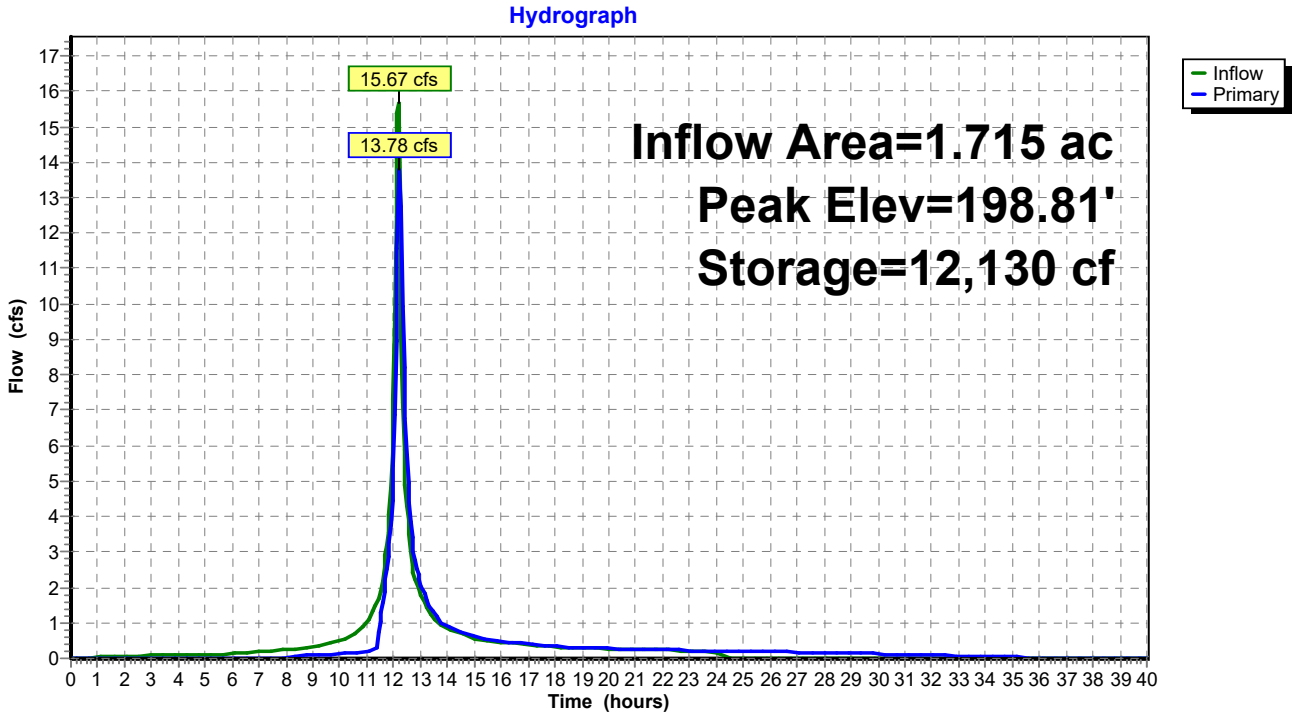
Volume	Invert	Avail.Storage	Storage Description
#1	194.65'	12,982 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
194.65	0	0	0
195.00	1,916	335	335
196.00	2,490	2,203	2,538
197.00	3,119	2,805	5,343
198.00	3,806	3,463	8,805
199.00	4,548	4,177	12,982

Device	Routing	Invert	Outlet Devices
#1	Primary	194.30'	**18.0" Round Culvert** L= 136.0' Ke= 0.500 Inlet / Outlet Invert= 194.30' / 185.86' S= 0.0621 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	196.00'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	197.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	198.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.57 cfs @ 12.23 hrs HW=198.80' (Free Discharge)
- **1=Culvert** (Passes 13.57 cfs of 16.47 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.27 cfs @ 7.90 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 13.30 cfs @ 3.35 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-19: Basin #19



Stage-Discharge for Pond B-19: Basin #19

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.65	0.00	195.17	0.00	195.69	0.00	196.21	0.05
194.66	0.00	195.18	0.00	195.70	0.00	196.22	0.06
194.67	0.00	195.19	0.00	195.71	0.00	196.23	0.06
194.68	0.00	195.20	0.00	195.72	0.00	196.24	0.06
194.69	0.00	195.21	0.00	195.73	0.00	196.25	0.06
194.70	0.00	195.22	0.00	195.74	0.00	196.26	0.06
194.71	0.00	195.23	0.00	195.75	0.00	196.27	0.07
194.72	0.00	195.24	0.00	195.76	0.00	196.28	0.07
194.73	0.00	195.25	0.00	195.77	0.00	196.29	0.07
194.74	0.00	195.26	0.00	195.78	0.00	196.30	0.07
194.75	0.00	195.27	0.00	195.79	0.00	196.31	0.07
194.76	0.00	195.28	0.00	195.80	0.00	196.32	0.08
194.77	0.00	195.29	0.00	195.81	0.00	196.33	0.08
194.78	0.00	195.30	0.00	195.82	0.00	196.34	0.08
194.79	0.00	195.31	0.00	195.83	0.00	196.35	0.08
194.80	0.00	195.32	0.00	195.84	0.00	196.36	0.08
194.81	0.00	195.33	0.00	195.85	0.00	196.37	0.08
194.82	0.00	195.34	0.00	195.86	0.00	196.38	0.09
194.83	0.00	195.35	0.00	195.87	0.00	196.39	0.09
194.84	0.00	195.36	0.00	195.88	0.00	196.40	0.09
194.85	0.00	195.37	0.00	195.89	0.00	196.41	0.09
194.86	0.00	195.38	0.00	195.90	0.00	196.42	0.09
194.87	0.00	195.39	0.00	195.91	0.00	196.43	0.09
194.88	0.00	195.40	0.00	195.92	0.00	196.44	0.10
194.89	0.00	195.41	0.00	195.93	0.00	196.45	0.10
194.90	0.00	195.42	0.00	195.94	0.00	196.46	0.10
194.91	0.00	195.43	0.00	195.95	0.00	196.47	0.10
194.92	0.00	195.44	0.00	195.96	0.00	196.48	0.10
194.93	0.00	195.45	0.00	195.97	0.00	196.49	0.10
194.94	0.00	195.46	0.00	195.98	0.00	196.50	0.10
194.95	0.00	195.47	0.00	195.99	0.00	196.51	0.10
194.96	0.00	195.48	0.00	196.00	0.00	196.52	0.11
194.97	0.00	195.49	0.00	196.01	0.00	196.53	0.11
194.98	0.00	195.50	0.00	196.02	0.00	196.54	0.11
194.99	0.00	195.51	0.00	196.03	0.00	196.55	0.11
195.00	0.00	195.52	0.00	196.04	0.00	196.56	0.11
195.01	0.00	195.53	0.00	196.05	0.00	196.57	0.11
195.02	0.00	195.54	0.00	196.06	0.01	196.58	0.11
195.03	0.00	195.55	0.00	196.07	0.01	196.59	0.11
195.04	0.00	195.56	0.00	196.08	0.01	196.60	0.12
195.05	0.00	195.57	0.00	196.09	0.01	196.61	0.12
195.06	0.00	195.58	0.00	196.10	0.02	196.62	0.12
195.07	0.00	195.59	0.00	196.11	0.02	196.63	0.12
195.08	0.00	195.60	0.00	196.12	0.02	196.64	0.12
195.09	0.00	195.61	0.00	196.13	0.03	196.65	0.12
195.10	0.00	195.62	0.00	196.14	0.03	196.66	0.12
195.11	0.00	195.63	0.00	196.15	0.03	196.67	0.12
195.12	0.00	195.64	0.00	196.16	0.04	196.68	0.12
195.13	0.00	195.65	0.00	196.17	0.04	196.69	0.13
195.14	0.00	195.66	0.00	196.18	0.05	196.70	0.13
195.15	0.00	195.67	0.00	196.19	0.05	196.71	0.13
195.16	0.00	195.68	0.00	196.20	0.05	196.72	0.13

Stage-Discharge for Pond B-19: Basin #19 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.73	0.13	197.25	0.18	197.77	0.25	198.29	5.29
196.74	0.13	197.26	0.18	197.78	0.28	198.30	5.43
196.75	0.13	197.27	0.18	197.79	0.32	198.31	5.57
196.76	0.13	197.28	0.18	197.80	0.36	198.32	5.71
196.77	0.13	197.29	0.18	197.81	0.41	198.33	5.85
196.78	0.13	197.30	0.18	197.82	0.46	198.34	6.00
196.79	0.14	197.31	0.18	197.83	0.51	198.35	6.14
196.80	0.14	197.32	0.18	197.84	0.57	198.36	6.29
196.81	0.14	197.33	0.18	197.85	0.63	198.37	6.43
196.82	0.14	197.34	0.18	197.86	0.69	198.38	6.58
196.83	0.14	197.35	0.18	197.87	0.76	198.39	6.73
196.84	0.14	197.36	0.18	197.88	0.83	198.40	6.88
196.85	0.14	197.37	0.18	197.89	0.90	198.41	7.03
196.86	0.14	197.38	0.19	197.90	0.97	198.42	7.18
196.87	0.14	197.39	0.19	197.91	1.05	198.43	7.34
196.88	0.14	197.40	0.19	197.92	1.13	198.44	7.49
196.89	0.15	197.41	0.19	197.93	1.21	198.45	7.64
196.90	0.15	197.42	0.19	197.94	1.30	198.46	7.80
196.91	0.15	197.43	0.19	197.95	1.38	198.47	7.96
196.92	0.15	197.44	0.19	197.96	1.47	198.48	8.11
196.93	0.15	197.45	0.19	197.97	1.56	198.49	8.27
196.94	0.15	197.46	0.19	197.98	1.65	198.50	8.43
196.95	0.15	197.47	0.19	197.99	1.74	198.51	8.59
196.96	0.15	197.48	0.19	198.00	1.84	198.52	8.75
196.97	0.15	197.49	0.19	198.01	1.94	198.53	8.91
196.98	0.15	197.50	0.19	198.02	2.04	198.54	9.08
196.99	0.15	197.51	0.19	198.03	2.14	198.55	9.24
197.00	0.16	197.52	0.20	198.04	2.24	198.56	9.41
197.01	0.16	197.53	0.20	198.05	2.35	198.57	9.57
197.02	0.16	197.54	0.20	198.06	2.45	198.58	9.74
197.03	0.16	197.55	0.20	198.07	2.56	198.59	9.91
197.04	0.16	197.56	0.20	198.08	2.67	198.60	10.07
197.05	0.16	197.57	0.20	198.09	2.78	198.61	10.24
197.06	0.16	197.58	0.20	198.10	2.89	198.62	10.41
197.07	0.16	197.59	0.20	198.11	3.01	198.63	10.58
197.08	0.16	197.60	0.20	198.12	3.12	198.64	10.75
197.09	0.16	197.61	0.20	198.13	3.24	198.65	10.93
197.10	0.16	197.62	0.20	198.14	3.36	198.66	11.10
197.11	0.16	197.63	0.20	198.15	3.48	198.67	11.27
197.12	0.17	197.64	0.20	198.16	3.60	198.68	11.45
197.13	0.17	197.65	0.20	198.17	3.72	198.69	11.62
197.14	0.17	197.66	0.20	198.18	3.85	198.70	11.80
197.15	0.17	197.67	0.21	198.19	3.97	198.71	11.98
197.16	0.17	197.68	0.21	198.20	4.10	198.72	12.16
197.17	0.17	197.69	0.21	198.21	4.23	198.73	12.33
197.18	0.17	197.70	0.21	198.22	4.35	198.74	12.51
197.19	0.17	197.71	0.21	198.23	4.48	198.75	12.69
197.20	0.17	197.72	0.21	198.24	4.62	198.76	12.87
197.21	0.17	197.73	0.21	198.25	4.75	198.77	13.06
197.22	0.17	197.74	0.21	198.26	4.88	198.78	13.24
197.23	0.17	197.75	0.21	198.27	5.02	198.79	13.42
197.24	0.17	197.76	0.22	198.28	5.16	198.80	13.60

Stage-Discharge for Pond B-19: Basin #19 (continued)

Elevation (feet)	Primary (cfs)
198.81	13.79
198.82	13.97
198.83	14.16
198.84	14.35
198.85	14.53
198.86	14.72
198.87	14.91
198.88	15.10
198.89	15.29
198.90	15.48
198.91	15.67
198.92	15.86
198.93	16.05
198.94	16.25
198.95	16.44
198.96	16.75
198.97	17.16
198.98	17.48
198.99	17.83
199.00	**18.22**

Stage-Area-Storage for Pond B-19: Basin #19

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.65	0	0	195.17	2,014	669
194.66	55	0	195.18	2,019	689
194.67	109	1	195.19	2,025	710
194.68	164	2	195.20	2,031	730
194.69	219	4	195.21	2,037	750
194.70	274	7	195.22	2,042	771
194.71	328	10	195.23	2,048	791
194.72	383	13	195.24	2,054	812
194.73	438	18	195.25	2,060	832
194.74	493	22	195.26	2,065	853
194.75	547	27	195.27	2,071	874
194.76	602	33	195.28	2,077	894
194.77	657	39	195.29	2,082	915
194.78	712	46	195.30	2,088	936
194.79	766	54	195.31	2,094	957
194.80	821	62	195.32	2,100	978
194.81	876	70	195.33	2,105	999
194.82	931	79	195.34	2,111	1,020
194.83	985	89	195.35	2,117	1,041
194.84	1,040	99	195.36	2,123	1,062
194.85	1,095	109	195.37	2,128	1,084
194.86	1,150	121	195.38	2,134	1,105
194.87	1,204	132	195.39	2,140	1,126
194.88	1,259	145	195.40	2,146	1,148
194.89	1,314	158	195.41	2,151	1,169
194.90	1,369	171	195.42	2,157	1,191
194.91	1,423	185	195.43	2,163	1,212
194.92	1,478	200	195.44	2,169	1,234
194.93	1,533	215	195.45	2,174	1,256
194.94	1,588	230	195.46	2,180	1,277
194.95	1,642	246	195.47	2,186	1,299
194.96	1,697	263	195.48	2,192	1,321
194.97	1,752	280	195.49	2,197	1,343
194.98	1,807	298	195.50	2,203	1,365
194.99	1,861	316	195.51	2,209	1,387
195.00	1,916	335	195.52	2,214	1,409
195.01	1,922	354	195.53	2,220	1,431
195.02	1,927	374	195.54	2,226	1,454
195.03	1,933	393	195.55	2,232	1,476
195.04	1,939	412	195.56	2,237	1,498
195.05	1,945	432	195.57	2,243	1,521
195.06	1,950	451	195.58	2,249	1,543
195.07	1,956	471	195.59	2,255	1,566
195.08	1,962	490	195.60	2,260	1,588
195.09	1,968	510	195.61	2,266	1,611
195.10	1,973	530	195.62	2,272	1,634
195.11	1,979	550	195.63	2,278	1,656
195.12	1,985	569	195.64	2,283	1,679
195.13	1,991	589	195.65	2,289	1,702
195.14	1,996	609	195.66	2,295	1,725
195.15	2,002	629	195.67	2,301	1,748
195.16	2,008	649	195.68	2,306	1,771

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.69	2,312	1,794	196.21	2,622	3,075
195.70	2,318	1,817	196.22	2,628	3,101
195.71	2,324	1,840	196.23	2,635	3,128
195.72	2,329	1,864	196.24	2,641	3,154
195.73	2,335	1,887	196.25	2,647	3,180
195.74	2,341	1,910	196.26	2,654	3,207
195.75	2,347	1,934	196.27	2,660	3,234
195.76	2,352	1,957	196.28	2,666	3,260
195.77	2,358	1,981	196.29	2,672	3,287
195.78	2,364	2,004	196.30	2,679	3,314
195.79	2,369	2,028	196.31	2,685	3,340
195.80	2,375	2,052	196.32	2,691	3,367
195.81	2,381	2,076	196.33	2,698	3,394
195.82	2,387	2,099	196.34	2,704	3,421
195.83	2,392	2,123	196.35	2,710	3,448
195.84	2,398	2,147	196.36	2,716	3,475
195.85	2,404	2,171	196.37	2,723	3,503
195.86	2,410	2,195	196.38	2,729	3,530
195.87	2,415	2,219	196.39	2,735	3,557
195.88	2,421	2,244	196.40	2,742	3,585
195.89	2,427	2,268	196.41	2,748	3,612
195.90	2,433	2,292	196.42	2,754	3,640
195.91	2,438	2,317	196.43	2,760	3,667
195.92	2,444	2,341	196.44	2,767	3,695
195.93	2,450	2,365	196.45	2,773	3,722
195.94	2,456	2,390	196.46	2,779	3,750
195.95	2,461	2,415	196.47	2,786	3,778
195.96	2,467	2,439	196.48	2,792	3,806
195.97	2,473	2,464	196.49	2,798	3,834
195.98	2,479	2,489	196.50	2,805	3,862
195.99	2,484	2,513	196.51	2,811	3,890
196.00	2,490	2,538	196.52	2,817	3,918
196.01	2,496	2,563	196.53	2,823	3,946
196.02	2,503	2,588	196.54	2,830	3,975
196.03	2,509	2,613	196.55	2,836	4,003
196.04	2,515	2,638	196.56	2,842	4,031
196.05	2,521	2,664	196.57	2,849	4,060
196.06	2,528	2,689	196.58	2,855	4,088
196.07	2,534	2,714	196.59	2,861	4,117
196.08	2,540	2,740	196.60	2,867	4,146
196.09	2,547	2,765	196.61	2,874	4,174
196.10	2,553	2,790	196.62	2,880	4,203
196.11	2,559	2,816	196.63	2,886	4,232
196.12	2,565	2,842	196.64	2,893	4,261
196.13	2,572	2,867	196.65	2,899	4,290
196.14	2,578	2,893	196.66	2,905	4,319
196.15	2,584	2,919	196.67	2,911	4,348
196.16	2,591	2,945	196.68	2,918	4,377
196.17	2,597	2,971	196.69	2,924	4,406
196.18	2,603	2,997	196.70	2,930	4,435
196.19	2,610	3,023	196.71	2,937	4,465
196.20	2,616	3,049	196.72	2,943	4,494

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.73	2,949	4,524	197.25	3,291	6,144
196.74	2,955	4,553	197.26	3,298	6,177
196.75	2,962	4,583	197.27	3,304	6,210
196.76	2,968	4,612	197.28	3,311	6,243
196.77	2,974	4,642	197.29	3,318	6,276
196.78	2,981	4,672	197.30	3,325	6,309
196.79	2,987	4,702	197.31	3,332	6,343
196.80	2,993	4,732	197.32	3,339	6,376
196.81	2,999	4,762	197.33	3,346	6,409
196.82	3,006	4,792	197.34	3,353	6,443
196.83	3,012	4,822	197.35	3,359	6,477
196.84	3,018	4,852	197.36	3,366	6,510
196.85	3,025	4,882	197.37	3,373	6,544
196.86	3,031	4,912	197.38	3,380	6,578
196.87	3,037	4,943	197.39	3,387	6,611
196.88	3,044	4,973	197.40	3,394	6,645
196.89	3,050	5,004	197.41	3,401	6,679
196.90	3,056	5,034	197.42	3,408	6,713
196.91	3,062	5,065	197.43	3,414	6,747
196.92	3,069	5,095	197.44	3,421	6,782
196.93	3,075	5,126	197.45	3,428	6,816
196.94	3,081	5,157	197.46	3,435	6,850
196.95	3,088	5,188	197.47	3,442	6,885
196.96	3,094	5,219	197.48	3,449	6,919
196.97	3,100	5,250	197.49	3,456	6,954
196.98	3,106	5,281	197.50	3,463	6,988
196.99	3,113	5,312	197.51	3,469	7,023
197.00	3,119	5,343	197.52	3,476	7,058
197.01	3,126	5,374	197.53	3,483	7,092
197.02	3,133	5,405	197.54	3,490	7,127
197.03	3,140	5,437	197.55	3,497	7,162
197.04	3,146	5,468	197.56	3,504	7,197
197.05	3,153	5,500	197.57	3,511	7,232
197.06	3,160	5,531	197.58	3,517	7,267
197.07	3,167	5,563	197.59	3,524	7,303
197.08	3,174	5,595	197.60	3,531	7,338
197.09	3,181	5,626	197.61	3,538	7,373
197.10	3,188	5,658	197.62	3,545	7,409
197.11	3,195	5,690	197.63	3,552	7,444
197.12	3,201	5,722	197.64	3,559	7,480
197.13	3,208	5,754	197.65	3,566	7,515
197.14	3,215	5,786	197.66	3,572	7,551
197.15	3,222	5,818	197.67	3,579	7,587
197.16	3,229	5,851	197.68	3,586	7,623
197.17	3,236	5,883	197.69	3,593	7,658
197.18	3,243	5,915	197.70	3,600	7,694
197.19	3,250	5,948	197.71	3,607	7,730
197.20	3,256	5,980	197.72	3,614	7,767
197.21	3,263	6,013	197.73	3,621	7,803
197.22	3,270	6,046	197.74	3,627	7,839
197.23	3,277	6,078	197.75	3,634	7,875
197.24	3,284	6,111	197.76	3,641	7,912

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.77	3,648	7,948	198.29	4,021	9,940
197.78	3,655	7,985	198.30	4,029	9,980
197.79	3,662	8,021	198.31	4,036	10,021
197.80	3,669	8,058	198.32	4,043	10,061
197.81	3,675	8,095	198.33	4,051	10,102
197.82	3,682	8,131	198.34	4,058	10,142
197.83	3,689	8,168	198.35	4,066	10,183
197.84	3,696	8,205	198.36	4,073	10,224
197.85	3,703	8,242	198.37	4,081	10,264
197.86	3,710	8,279	198.38	4,088	10,305
197.87	3,717	8,316	198.39	4,095	10,346
197.88	3,724	8,354	198.40	4,103	10,387
197.89	3,730	8,391	198.41	4,110	10,428
197.90	3,737	8,428	198.42	4,118	10,469
197.91	3,744	8,466	198.43	4,125	10,510
197.92	3,751	8,503	198.44	4,132	10,552
197.93	3,758	8,541	198.45	4,140	10,593
197.94	3,765	8,578	198.46	4,147	10,635
197.95	3,772	8,616	198.47	4,155	10,676
197.96	3,779	8,654	198.48	4,162	10,718
197.97	3,785	8,691	198.49	4,170	10,759
197.98	3,792	8,729	198.50	4,177	10,801
197.99	3,799	8,767	198.51	4,184	10,843
198.00	3,806	8,805	198.52	4,192	10,885
198.01	3,813	8,843	198.53	4,199	10,927
198.02	3,821	8,882	198.54	4,207	10,969
198.03	3,828	8,920	198.55	4,214	11,011
198.04	3,836	8,958	198.56	4,222	11,053
198.05	3,843	8,997	198.57	4,229	11,095
198.06	3,851	9,035	198.58	4,236	11,138
198.07	3,858	9,074	198.59	4,244	11,180
198.08	3,865	9,112	198.60	4,251	11,222
198.09	3,873	9,151	198.61	4,259	11,265
198.10	3,880	9,190	198.62	4,266	11,308
198.11	3,888	9,228	198.63	4,273	11,350
198.12	3,895	9,267	198.64	4,281	11,393
198.13	3,902	9,306	198.65	4,288	11,436
198.14	3,910	9,345	198.66	4,296	11,479
198.15	3,917	9,385	198.67	4,303	11,522
198.16	3,925	9,424	198.68	4,311	11,565
198.17	3,932	9,463	198.69	4,318	11,608
198.18	3,940	9,502	198.70	4,325	11,651
198.19	3,947	9,542	198.71	4,333	11,695
198.20	3,954	9,581	198.72	4,340	11,738
198.21	3,962	9,621	198.73	4,348	11,781
198.22	3,969	9,661	198.74	4,355	11,825
198.23	3,977	9,700	198.75	4,363	11,868
198.24	3,984	9,740	198.76	4,370	11,912
198.25	3,992	9,780	198.77	4,377	11,956
198.26	3,999	9,820	198.78	4,385	12,000
198.27	4,006	9,860	198.79	4,392	12,044
198.28	4,014	9,900	198.80	4,400	12,088

Stage-Area-Storage for Pond B-19: Basin #19 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.81	4,407	12,132
198.82	4,414	12,176
198.83	4,422	12,220
198.84	4,429	12,264
198.85	4,437	12,308
198.86	4,444	12,353
198.87	4,452	12,397
198.88	4,459	12,442
198.89	4,466	12,487
198.90	4,474	12,531
198.91	4,481	12,576
198.92	4,489	12,621
198.93	4,496	12,666
198.94	4,503	12,711
198.95	4,511	12,756
198.96	4,518	12,801
198.97	4,526	12,846
198.98	4,533	12,891
198.99	4,541	12,937
199.00	**4,548**	**12,982**

Summary for Pond B-20: Basin #20

Inflow Area = 2.453 ac, 46.07% Impervious, Inflow Depth = 9.32" for Future 100 yr event
Inflow = 22.89 cfs @ 12.17 hrs, Volume= 1.905 af
Outflow = 13.43 cfs @ 12.30 hrs, Volume= 1.768 af, Atten= 41%, Lag= 8.0 min
Primary = 13.43 cfs @ 12.30 hrs, Volume= 1.768 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 154.24' @ 12.30 hrs Surf.Area= 8,554 sf Storage= 23,781 cf

Plug-Flow detention time= 183.1 min calculated for 1.766 af (93% of inflow)
Center-of-Mass det. time= 144.3 min (917.0 - 772.6)

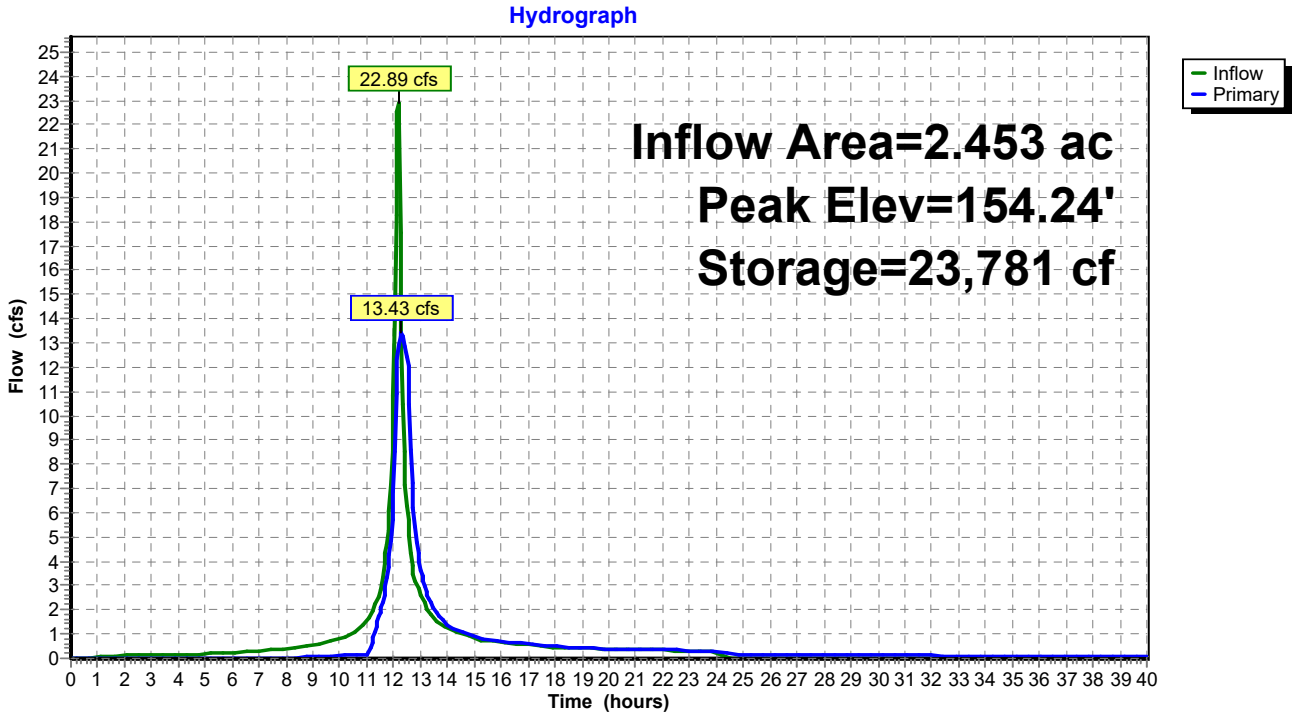
Volume	Invert	Avail.Storage	Storage Description
#1	150.87'	35,230 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
150.87	0	0	0
151.00	5,926	385	385
152.00	6,706	6,316	6,701
153.00	7,514	7,110	13,811
154.00	8,347	7,931	21,742
155.00	9,205	8,776	30,518
155.50	9,643	4,712	35,230

Device	Routing	Invert	Outlet Devices
#1	Primary	151.00'	**18.0" Round Culvert** L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 151.00' / 150.71' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	151.68'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	152.75'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	154.32'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.42 cfs @ 12.30 hrs HW=154.24' (Free Discharge)
- **1=Culvert** (Inlet Controls 13.42 cfs @ 7.60 fps)
  - **2=Orifice/Grate** (Passes < 0.26 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 21.99 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-20: Basin #20



Stage-Discharge for Pond B-20: Basin #20

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
150.87	0.00	151.39	0.00	151.91	0.06	152.43	0.13
150.88	0.00	151.40	0.00	151.92	0.06	152.44	0.13
150.89	0.00	151.41	0.00	151.93	0.06	152.45	0.13
150.90	0.00	151.42	0.00	151.94	0.06	152.46	0.13
150.91	0.00	151.43	0.00	151.95	0.07	152.47	0.14
150.92	0.00	151.44	0.00	151.96	0.07	152.48	0.14
150.93	0.00	151.45	0.00	151.97	0.07	152.49	0.14
150.94	0.00	151.46	0.00	151.98	0.07	152.50	0.14
150.95	0.00	151.47	0.00	151.99	0.07	152.51	0.14
150.96	0.00	151.48	0.00	152.00	0.08	152.52	0.14
150.97	0.00	151.49	0.00	152.01	0.08	152.53	0.14
150.98	0.00	151.50	0.00	152.02	0.08	152.54	0.14
150.99	0.00	151.51	0.00	152.03	0.08	152.55	0.14
151.00	0.00	151.52	0.00	152.04	0.08	152.56	0.14
151.01	0.00	151.53	0.00	152.05	0.08	152.57	0.15
151.02	0.00	151.54	0.00	152.06	0.09	152.58	0.15
151.03	0.00	151.55	0.00	152.07	0.09	152.59	0.15
151.04	0.00	151.56	0.00	152.08	0.09	152.60	0.15
151.05	0.00	151.57	0.00	152.09	0.09	152.61	0.15
151.06	0.00	151.58	0.00	152.10	0.09	152.62	0.15
151.07	0.00	151.59	0.00	152.11	0.09	152.63	0.15
151.08	0.00	151.60	0.00	152.12	0.10	152.64	0.15
151.09	0.00	151.61	0.00	152.13	0.10	152.65	0.15
151.10	0.00	151.62	0.00	152.14	0.10	152.66	0.15
151.11	0.00	151.63	0.00	152.15	0.10	152.67	0.15
151.12	0.00	151.64	0.00	152.16	0.10	152.68	0.16
151.13	0.00	151.65	0.00	152.17	0.10	152.69	0.16
151.14	0.00	151.66	0.00	152.18	0.10	152.70	0.16
151.15	0.00	151.67	0.00	152.19	0.10	152.71	0.16
151.16	0.00	151.68	0.00	152.20	0.11	152.72	0.16
151.17	0.00	151.69	0.00	152.21	0.11	152.73	0.16
151.18	0.00	151.70	0.00	152.22	0.11	152.74	0.16
151.19	0.00	151.71	0.00	152.23	0.11	152.75	0.16
151.20	0.00	151.72	0.00	152.24	0.11	152.76	0.18
151.21	0.00	151.73	0.00	152.25	0.11	152.77	0.20
151.22	0.00	151.74	0.01	152.26	0.11	152.78	0.23
151.23	0.00	151.75	0.01	152.27	0.11	152.79	0.27
151.24	0.00	151.76	0.01	152.28	0.12	152.80	0.31
151.25	0.00	151.77	0.01	152.29	0.12	152.81	0.36
151.26	0.00	151.78	0.02	152.30	0.12	152.82	0.41
151.27	0.00	151.79	0.02	152.31	0.12	152.83	0.46
151.28	0.00	151.80	0.02	152.32	0.12	152.84	0.52
151.29	0.00	151.81	0.03	152.33	0.12	152.85	0.58
151.30	0.00	151.82	0.03	152.34	0.12	152.86	0.64
151.31	0.00	151.83	0.03	152.35	0.12	152.87	0.71
151.32	0.00	151.84	0.04	152.36	0.12	152.88	0.78
151.33	0.00	151.85	0.04	152.37	0.13	152.89	0.85
151.34	0.00	151.86	0.05	152.38	0.13	152.90	0.93
151.35	0.00	151.87	0.05	152.39	0.13	152.91	1.00
151.36	0.00	151.88	0.05	152.40	0.13	152.92	1.08
151.37	0.00	151.89	0.05	152.41	0.13	152.93	1.17
151.38	0.00	151.90	0.06	152.42	0.13	152.94	1.25

Stage-Discharge for Pond B-20: Basin #20 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
152.95	1.34	153.47	7.92	153.99	12.73	154.51	23.91
152.96	1.42	153.48	8.07	154.00	12.76	154.52	24.73
152.97	1.51	153.49	8.23	154.01	12.79	154.53	25.60
152.98	1.61	153.50	8.39	154.02	12.82	154.54	26.50
152.99	1.70	153.51	8.55	154.03	12.85	154.55	27.42
153.00	1.80	153.52	8.71	154.04	12.88	154.56	28.37
153.01	1.89	153.53	8.88	154.05	12.90	154.57	29.34
153.02	1.99	153.54	9.04	154.06	12.93	154.58	30.34
153.03	2.09	153.55	9.20	154.07	12.96	154.59	31.36
153.04	2.20	153.56	9.37	154.08	12.99	154.60	32.41
153.05	2.30	153.57	9.53	154.09	13.02	154.61	33.49
153.06	2.41	153.58	9.70	154.10	13.04	154.62	34.58
153.07	2.52	153.59	9.87	154.11	13.07	154.63	35.71
153.08	2.63	153.60	10.04	154.12	13.10	154.64	36.85
153.09	2.74	153.61	10.20	154.13	13.13	154.65	38.02
153.10	2.85	153.62	10.37	154.14	13.15	154.66	39.22
153.11	2.96	153.63	10.55	154.15	13.18	154.67	40.44
153.12	3.08	153.64	10.72	154.16	13.21	154.68	41.68
153.13	3.20	153.65	10.89	154.17	13.24	154.69	42.95
153.14	3.31	153.66	11.06	154.18	13.26	154.70	44.24
153.15	3.43	153.67	11.24	154.19	13.29	154.71	45.55
153.16	3.56	153.68	11.41	154.20	13.32	154.72	46.89
153.17	3.68	153.69	11.59	154.21	13.35	154.73	48.28
153.18	3.80	153.70	11.76	154.22	13.37	154.74	49.70
153.19	3.93	153.71	11.91	154.23	13.40	154.75	51.14
153.20	4.05	153.72	11.94	154.24	13.43	154.76	52.61
153.21	4.18	153.73	11.97	154.25	13.45	154.77	54.11
153.22	4.31	153.74	12.00	154.26	13.48	154.78	55.63
153.23	4.44	153.75	12.03	154.27	13.51	154.79	57.17
153.24	4.57	153.76	12.06	154.28	13.53	154.80	58.75
153.25	4.71	153.77	12.09	154.29	13.56	154.81	60.35
153.26	4.84	153.78	12.12	154.30	13.59	154.82	61.97
153.27	4.98	153.79	12.15	154.31	13.61	154.83	63.63
153.28	5.11	153.80	12.18	154.32	13.64	154.84	65.31
153.29	5.25	153.81	12.21	154.33	13.78	154.85	67.01
153.30	5.39	153.82	12.24	154.34	14.02	154.86	68.74
153.31	5.53	153.83	12.27	154.35	14.33	154.87	70.50
153.32	5.67	153.84	12.30	154.36	14.68	154.88	72.29
153.33	5.81	153.85	12.33	154.37	15.08	154.89	74.10
153.34	5.96	153.86	12.36	154.38	15.52	154.90	75.94
153.35	6.10	153.87	12.39	154.39	16.00	154.91	77.81
153.36	6.25	153.88	12.42	154.40	16.51	154.92	79.70
153.37	6.39	153.89	12.45	154.41	17.05	154.93	81.35
153.38	6.54	153.90	12.48	154.42	17.62	154.94	83.01
153.39	6.69	153.91	12.51	154.43	18.22	154.95	84.69
153.40	6.84	153.92	12.53	154.44	18.85	154.96	86.38
153.41	6.99	153.93	12.56	154.45	19.50	154.97	88.09
153.42	7.14	153.94	12.59	154.46	20.18	154.98	89.80
153.43	7.30	153.95	12.62	154.47	20.88	154.99	91.54
153.44	7.45	153.96	12.65	154.48	21.60	155.00	93.28
153.45	7.60	153.97	12.68	154.49	22.35	155.01	95.04
153.46	7.76	153.98	12.71	154.50	23.12	155.02	96.80

Stage-Discharge for Pond B-20: Basin #20 (continued)

Elevation (feet)	Primary (cfs)
155.03	98.59
155.04	100.38
155.05	102.19
155.06	104.01
155.07	105.84
155.08	107.69
155.09	109.54
155.10	111.41
155.11	113.29
155.12	115.18
155.13	117.13
155.14	119.08
155.15	121.05
155.16	123.03
155.17	125.03
155.18	127.04
155.19	129.06
155.20	131.10
155.21	133.14
155.22	135.20
155.23	137.28
155.24	139.36
155.25	141.46
155.26	143.57
155.27	145.70
155.28	147.84
155.29	149.99
155.30	152.15
155.31	154.32
155.32	156.51
155.33	158.66
155.34	160.81
155.35	162.98
155.36	165.16
155.37	167.35
155.38	169.55
155.39	171.76
155.40	173.98
155.41	176.21
155.42	178.45
155.43	180.70
155.44	182.96
155.45	185.24
155.46	187.52
155.47	189.81
155.48	192.11
155.49	194.43
155.50	**196.75**

Stage-Area-Storage for Pond B-20: Basin #20

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.87	0	0	151.39	6,230	2,756
150.88	456	2	151.40	6,238	2,818
150.89	912	9	151.41	6,246	2,880
150.90	1,368	21	151.42	6,254	2,943
150.91	1,823	36	151.43	6,261	3,005
150.92	2,279	57	151.44	6,269	3,068
150.93	2,735	82	151.45	6,277	3,131
150.94	3,191	112	151.46	6,285	3,194
150.95	3,647	146	151.47	6,293	3,257
150.96	4,103	185	151.48	6,300	3,320
150.97	4,558	228	151.49	6,308	3,383
150.98	5,014	276	151.50	6,316	3,446
150.99	5,470	328	151.51	6,324	3,509
151.00	5,926	385	151.52	6,332	3,572
151.01	5,934	444	151.53	6,339	3,636
151.02	5,942	504	151.54	6,347	3,699
151.03	5,949	563	151.55	6,355	3,762
151.04	5,957	623	151.56	6,363	3,826
151.05	5,965	682	151.57	6,371	3,890
151.06	5,973	742	151.58	6,378	3,953
151.07	5,981	802	151.59	6,386	4,017
151.08	5,988	862	151.60	6,394	4,081
151.09	5,996	922	151.61	6,402	4,145
151.10	6,004	982	151.62	6,410	4,209
151.11	6,012	1,042	151.63	6,417	4,273
151.12	6,020	1,102	151.64	6,425	4,338
151.13	6,027	1,162	151.65	6,433	4,402
151.14	6,035	1,222	151.66	6,441	4,466
151.15	6,043	1,283	151.67	6,449	4,531
151.16	6,051	1,343	151.68	6,456	4,595
151.17	6,059	1,404	151.69	6,464	4,660
151.18	6,066	1,465	151.70	6,472	4,724
151.19	6,074	1,525	151.71	6,480	4,789
151.20	6,082	1,586	151.72	6,488	4,854
151.21	6,090	1,647	151.73	6,495	4,919
151.22	6,098	1,708	151.74	6,503	4,984
151.23	6,105	1,769	151.75	6,511	5,049
151.24	6,113	1,830	151.76	6,519	5,114
151.25	6,121	1,891	151.77	6,527	5,179
151.26	6,129	1,952	151.78	6,534	5,245
151.27	6,137	2,014	151.79	6,542	5,310
151.28	6,144	2,075	151.80	6,550	5,376
151.29	6,152	2,137	151.81	6,558	5,441
151.30	6,160	2,198	151.82	6,566	5,507
151.31	6,168	2,260	151.83	6,573	5,572
151.32	6,176	2,321	151.84	6,581	5,638
151.33	6,183	2,383	151.85	6,589	5,704
151.34	6,191	2,445	151.86	6,597	5,770
151.35	6,199	2,507	151.87	6,605	5,836
151.36	6,207	2,569	151.88	6,612	5,902
151.37	6,215	2,631	151.89	6,620	5,968
151.38	6,222	2,693	151.90	6,628	6,034

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.91	6,636	6,101	152.43	7,053	9,659
151.92	6,644	6,167	152.44	7,062	9,730
151.93	6,651	6,234	152.45	7,070	9,801
151.94	6,659	6,300	152.46	7,078	9,871
151.95	6,667	6,367	152.47	7,086	9,942
151.96	6,675	6,434	152.48	7,094	10,013
151.97	6,683	6,500	152.49	7,102	10,084
151.98	6,690	6,567	152.50	7,110	10,155
151.99	6,698	6,634	152.51	7,118	10,226
152.00	6,706	6,701	152.52	7,126	10,298
152.01	6,714	6,768	152.53	7,134	10,369
152.02	6,722	6,835	152.54	7,142	10,440
152.03	6,730	6,903	152.55	7,150	10,512
152.04	6,738	6,970	152.56	7,158	10,583
152.05	6,746	7,038	152.57	7,167	10,655
152.06	6,754	7,105	152.58	7,175	10,727
152.07	6,763	7,173	152.59	7,183	10,798
152.08	6,771	7,240	152.60	7,191	10,870
152.09	6,779	7,308	152.61	7,199	10,942
152.10	6,787	7,376	152.62	7,207	11,014
152.11	6,795	7,444	152.63	7,215	11,086
152.12	6,803	7,512	152.64	7,223	11,159
152.13	6,811	7,580	152.65	7,231	11,231
152.14	6,819	7,648	152.66	7,239	11,303
152.15	6,827	7,716	152.67	7,247	11,376
152.16	6,835	7,784	152.68	7,255	11,448
152.17	6,843	7,853	152.69	7,264	11,521
152.18	6,851	7,921	152.70	7,272	11,593
152.19	6,860	7,990	152.71	7,280	11,666
152.20	6,868	8,059	152.72	7,288	11,739
152.21	6,876	8,127	152.73	7,296	11,812
152.22	6,884	8,196	152.74	7,304	11,885
152.23	6,892	8,265	152.75	7,312	11,958
152.24	6,900	8,334	152.76	7,320	12,031
152.25	6,908	8,403	152.77	7,328	12,104
152.26	6,916	8,472	152.78	7,336	12,178
152.27	6,924	8,541	152.79	7,344	12,251
152.28	6,932	8,611	152.80	7,352	12,325
152.29	6,940	8,680	152.81	7,360	12,398
152.30	6,948	8,749	152.82	7,369	12,472
152.31	6,956	8,819	152.83	7,377	12,545
152.32	6,965	8,888	152.84	7,385	12,619
152.33	6,973	8,958	152.85	7,393	12,693
152.34	6,981	9,028	152.86	7,401	12,767
152.35	6,989	9,098	152.87	7,409	12,841
152.36	6,997	9,168	152.88	7,417	12,915
152.37	7,005	9,238	152.89	7,425	12,990
152.38	7,013	9,308	152.90	7,433	13,064
152.39	7,021	9,378	152.91	7,441	13,138
152.40	7,029	9,448	152.92	7,449	13,213
152.41	7,037	9,519	152.93	7,457	13,287
152.42	7,045	9,589	152.94	7,466	13,362

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
152.95	7,474	13,437	153.47	7,906	17,435
152.96	7,482	13,511	153.48	7,914	17,514
152.97	7,490	13,586	153.49	7,922	17,593
152.98	7,498	13,661	153.50	7,931	17,672
152.99	7,506	13,736	153.51	7,939	17,752
153.00	7,514	13,811	153.52	7,947	17,831
153.01	7,522	13,886	153.53	7,955	17,911
153.02	7,531	13,962	153.54	7,964	17,990
153.03	7,539	14,037	153.55	7,972	18,070
153.04	7,547	14,112	153.56	7,980	18,150
153.05	7,556	14,188	153.57	7,989	18,229
153.06	7,564	14,264	153.58	7,997	18,309
153.07	7,572	14,339	153.59	8,005	18,389
153.08	7,581	14,415	153.60	8,014	18,470
153.09	7,589	14,491	153.61	8,022	18,550
153.10	7,597	14,567	153.62	8,030	18,630
153.11	7,606	14,643	153.63	8,039	18,710
153.12	7,614	14,719	153.64	8,047	18,791
153.13	7,622	14,795	153.65	8,055	18,871
153.14	7,631	14,871	153.66	8,064	18,952
153.15	7,639	14,948	153.67	8,072	19,033
153.16	7,647	15,024	153.68	8,080	19,113
153.17	7,656	15,101	153.69	8,089	19,194
153.18	7,664	15,177	153.70	8,097	19,275
153.19	7,672	15,254	153.71	8,105	19,356
153.20	7,681	15,331	153.72	8,114	19,437
153.21	7,689	15,407	153.73	8,122	19,518
153.22	7,697	15,484	153.74	8,130	19,600
153.23	7,706	15,561	153.75	8,139	19,681
153.24	7,714	15,639	153.76	8,147	19,762
153.25	7,722	15,716	153.77	8,155	19,844
153.26	7,731	15,793	153.78	8,164	19,926
153.27	7,739	15,870	153.79	8,172	20,007
153.28	7,747	15,948	153.80	8,180	20,089
153.29	7,756	16,025	153.81	8,189	20,171
153.30	7,764	16,103	153.82	8,197	20,253
153.31	7,772	16,181	153.83	8,205	20,335
153.32	7,781	16,258	153.84	8,214	20,417
153.33	7,789	16,336	153.85	8,222	20,499
153.34	7,797	16,414	153.86	8,230	20,581
153.35	7,806	16,492	153.87	8,239	20,664
153.36	7,814	16,570	153.88	8,247	20,746
153.37	7,822	16,648	153.89	8,255	20,829
153.38	7,831	16,727	153.90	8,264	20,911
153.39	7,839	16,805	153.91	8,272	20,994
153.40	7,847	16,883	153.92	8,280	21,077
153.41	7,856	16,962	153.93	8,289	21,159
153.42	7,864	17,041	153.94	8,297	21,242
153.43	7,872	17,119	153.95	8,305	21,325
153.44	7,881	17,198	153.96	8,314	21,408
153.45	7,889	17,277	153.97	8,322	21,492
153.46	7,897	17,356	153.98	8,330	21,575

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.99	8,339	21,658	154.51	8,785	26,110
154.00	8,347	21,742	154.52	8,793	26,198
154.01	8,356	21,825	154.53	8,802	26,286
154.02	8,364	21,909	154.54	8,810	26,374
154.03	8,373	21,992	154.55	8,819	26,462
154.04	8,381	22,076	154.56	8,827	26,551
154.05	8,390	22,160	154.57	8,836	26,639
154.06	8,398	22,244	154.58	8,845	26,727
154.07	8,407	22,328	154.59	8,853	26,816
154.08	8,416	22,412	154.60	8,862	26,904
154.09	8,424	22,496	154.61	8,870	26,993
154.10	8,433	22,581	154.62	8,879	27,082
154.11	8,441	22,665	154.63	8,888	27,171
154.12	8,450	22,750	154.64	8,896	27,259
154.13	8,459	22,834	154.65	8,905	27,348
154.14	8,467	22,919	154.66	8,913	27,438
154.15	8,476	23,003	154.67	8,922	27,527
154.16	8,484	23,088	154.68	8,930	27,616
154.17	8,493	23,173	154.69	8,939	27,705
154.18	8,501	23,258	154.70	8,948	27,795
154.19	8,510	23,343	154.71	8,956	27,884
154.20	8,519	23,428	154.72	8,965	27,974
154.21	8,527	23,513	154.73	8,973	28,064
154.22	8,536	23,599	154.74	8,982	28,153
154.23	8,544	23,684	154.75	8,991	28,243
154.24	8,553	23,770	154.76	8,999	28,333
154.25	8,562	23,855	154.77	9,008	28,423
154.26	8,570	23,941	154.78	9,016	28,513
154.27	8,579	24,027	154.79	9,025	28,604
154.28	8,587	24,112	154.80	9,033	28,694
154.29	8,596	24,198	154.81	9,042	28,784
154.30	8,604	24,284	154.82	9,051	28,875
154.31	8,613	24,370	154.83	9,059	28,965
154.32	8,622	24,457	154.84	9,068	29,056
154.33	8,630	24,543	154.85	9,076	29,147
154.34	8,639	24,629	154.86	9,085	29,237
154.35	8,647	24,716	154.87	9,093	29,328
154.36	8,656	24,802	154.88	9,102	29,419
154.37	8,664	24,889	154.89	9,111	29,510
154.38	8,673	24,975	154.90	9,119	29,601
154.39	8,682	25,062	154.91	9,128	29,693
154.40	8,690	25,149	154.92	9,136	29,784
154.41	8,699	25,236	154.93	9,145	29,875
154.42	8,707	25,323	154.94	9,154	29,967
154.43	8,716	25,410	154.95	9,162	30,059
154.44	8,725	25,497	154.96	9,171	30,150
154.45	8,733	25,585	154.97	9,179	30,242
154.46	8,742	25,672	154.98	9,188	30,334
154.47	8,750	25,760	154.99	9,196	30,426
154.48	8,759	25,847	155.00	9,205	30,518
154.49	8,767	25,935	155.01	9,214	30,610
154.50	8,776	26,022	155.02	9,223	30,702

Stage-Area-Storage for Pond B-20: Basin #20 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
155.03	9,231	30,794
155.04	9,240	30,887
155.05	9,249	30,979
155.06	9,258	31,072
155.07	9,266	31,164
155.08	9,275	31,257
155.09	9,284	31,350
155.10	9,293	31,443
155.11	9,301	31,536
155.12	9,310	31,629
155.13	9,319	31,722
155.14	9,328	31,815
155.15	9,336	31,908
155.16	9,345	32,002
155.17	9,354	32,095
155.18	9,363	32,189
155.19	9,371	32,282
155.20	9,380	32,376
155.21	9,389	32,470
155.22	9,398	32,564
155.23	9,406	32,658
155.24	9,415	32,752
155.25	9,424	32,846
155.26	9,433	32,941
155.27	9,442	33,035
155.28	9,450	33,129
155.29	9,459	33,224
155.30	9,468	33,319
155.31	9,477	33,413
155.32	9,485	33,508
155.33	9,494	33,603
155.34	9,503	33,698
155.35	9,512	33,793
155.36	9,520	33,888
155.37	9,529	33,984
155.38	9,538	34,079
155.39	9,547	34,174
155.40	9,555	34,270
155.41	9,564	34,365
155.42	9,573	34,461
155.43	9,582	34,557
155.44	9,590	34,653
155.45	9,599	34,749
155.46	9,608	34,845
155.47	9,617	34,941
155.48	9,625	35,037
155.49	9,634	35,133
155.50	**9,643**	**35,230**

Summary for Pond B-21: Basin #21

Inflow Area = 2.500 ac, 35.44% Impervious, Inflow Depth = 8.99" for Future 100 yr event
Inflow = 22.87 cfs @ 12.17 hrs, Volume= 1.873 af
Outflow = 16.12 cfs @ 12.27 hrs, Volume= 1.738 af, Atten= 30%, Lag= 5.8 min
Primary = 16.12 cfs @ 12.27 hrs, Volume= 1.738 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 153.64' @ 12.27 hrs Surf.Area= 8,504 sf Storage= 24,318 cf

Plug-Flow detention time= 215.7 min calculated for 1.738 af (93% of inflow)
Center-of-Mass det. time= 175.7 min (955.8 - 780.1)

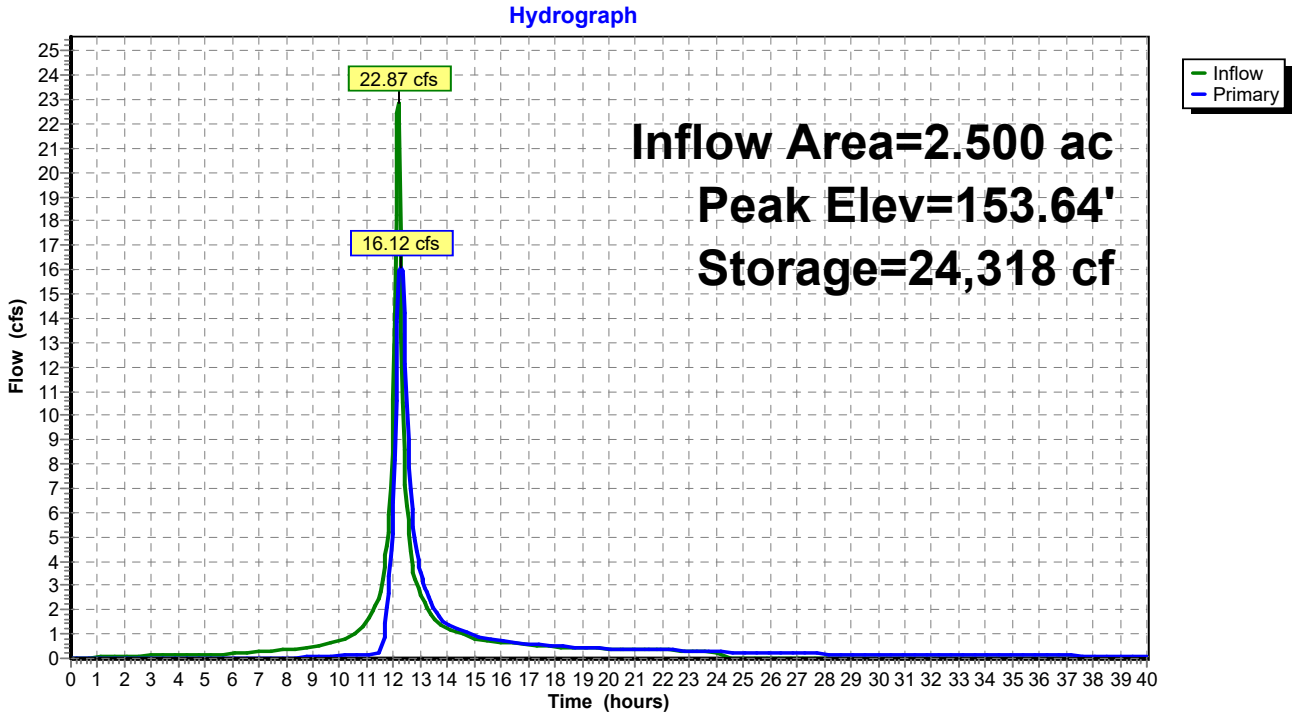
Volume	Invert	Avail.Storage	Storage Description
#1	149.90'	42,109 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
149.90	0	0	0
150.00	4,848	242	242
151.00	5,776	5,312	5,554
152.00	6,761	6,269	11,823
153.00	7,802	7,282	19,104
154.00	8,900	8,351	27,455
155.00	10,054	9,477	36,932
155.50	10,653	5,177	42,109

Device	Routing	Invert	Outlet Devices
#1	Primary	149.30'	**18.0" Round Culvert** L= 24.0' Ke= 0.500 Inlet / Outlet Invert= 149.30' / 148.32' S= 0.0408 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	150.68'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	152.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	154.16'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=16.10 cfs @ 12.27 hrs HW=153.63' (Free Discharge)
- **1=Culvert** (Inlet Controls 16.10 cfs @ 9.11 fps)
  - **2=Orifice/Grate** (Passes < 0.28 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 18.10 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-21: Basin #21



Stage-Discharge for Pond B-21: Basin #21

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
149.90	0.00	150.42	0.00	150.94	0.06	151.46	0.13
149.91	0.00	150.43	0.00	150.95	0.07	151.47	0.14
149.92	0.00	150.44	0.00	150.96	0.07	151.48	0.14
149.93	0.00	150.45	0.00	150.97	0.07	151.49	0.14
149.94	0.00	150.46	0.00	150.98	0.07	151.50	0.14
149.95	0.00	150.47	0.00	150.99	0.07	151.51	0.14
149.96	0.00	150.48	0.00	151.00	0.08	151.52	0.14
149.97	0.00	150.49	0.00	151.01	0.08	151.53	0.14
149.98	0.00	150.50	0.00	151.02	0.08	151.54	0.14
149.99	0.00	150.51	0.00	151.03	0.08	151.55	0.14
150.00	0.00	150.52	0.00	151.04	0.08	151.56	0.14
150.01	0.00	150.53	0.00	151.05	0.08	151.57	0.15
150.02	0.00	150.54	0.00	151.06	0.09	151.58	0.15
150.03	0.00	150.55	0.00	151.07	0.09	151.59	0.15
150.04	0.00	150.56	0.00	151.08	0.09	151.60	0.15
150.05	0.00	150.57	0.00	151.09	0.09	151.61	0.15
150.06	0.00	150.58	0.00	151.10	0.09	151.62	0.15
150.07	0.00	150.59	0.00	151.11	0.09	151.63	0.15
150.08	0.00	150.60	0.00	151.12	0.10	151.64	0.15
150.09	0.00	150.61	0.00	151.13	0.10	151.65	0.15
150.10	0.00	150.62	0.00	151.14	0.10	151.66	0.15
150.11	0.00	150.63	0.00	151.15	0.10	151.67	0.15
150.12	0.00	150.64	0.00	151.16	0.10	151.68	0.16
150.13	0.00	150.65	0.00	151.17	0.10	151.69	0.16
150.14	0.00	150.66	0.00	151.18	0.10	151.70	0.16
150.15	0.00	150.67	0.00	151.19	0.10	151.71	0.16
150.16	0.00	150.68	0.00	151.20	0.11	151.72	0.16
150.17	0.00	150.69	0.00	151.21	0.11	151.73	0.16
150.18	0.00	150.70	0.00	151.22	0.11	151.74	0.16
150.19	0.00	150.71	0.00	151.23	0.11	151.75	0.16
150.20	0.00	150.72	0.00	151.24	0.11	151.76	0.16
150.21	0.00	150.73	0.00	151.25	0.11	151.77	0.16
150.22	0.00	150.74	0.01	151.26	0.11	151.78	0.16
150.23	0.00	150.75	0.01	151.27	0.11	151.79	0.16
150.24	0.00	150.76	0.01	151.28	0.12	151.80	0.17
150.25	0.00	150.77	0.01	151.29	0.12	151.81	0.17
150.26	0.00	150.78	0.02	151.30	0.12	151.82	0.17
150.27	0.00	150.79	0.02	151.31	0.12	151.83	0.17
150.28	0.00	150.80	0.02	151.32	0.12	151.84	0.17
150.29	0.00	150.81	0.03	151.33	0.12	151.85	0.17
150.30	0.00	150.82	0.03	151.34	0.12	151.86	0.17
150.31	0.00	150.83	0.03	151.35	0.12	151.87	0.17
150.32	0.00	150.84	0.04	151.36	0.12	151.88	0.17
150.33	0.00	150.85	0.04	151.37	0.13	151.89	0.17
150.34	0.00	150.86	0.05	151.38	0.13	151.90	0.17
150.35	0.00	150.87	0.05	151.39	0.13	151.91	0.17
150.36	0.00	150.88	0.05	151.40	0.13	151.92	0.17
150.37	0.00	150.89	0.05	151.41	0.13	151.93	0.18
150.38	0.00	150.90	0.06	151.42	0.13	151.94	0.18
150.39	0.00	150.91	0.06	151.43	0.13	151.95	0.18
150.40	0.00	150.92	0.06	151.44	0.13	151.96	0.18
150.41	0.00	150.93	0.06	151.45	0.13	151.97	0.18

Stage-Discharge for Pond B-21: Basin #21 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
151.98	0.18	152.50	1.12	153.02	7.48	153.54	15.90
151.99	0.18	152.51	1.21	153.03	7.64	153.55	15.92
152.00	0.18	152.52	1.29	153.04	7.79	153.56	15.94
152.01	0.18	152.53	1.38	153.05	7.95	153.57	15.96
152.02	0.18	152.54	1.46	153.06	8.11	153.58	15.99
152.03	0.18	152.55	1.55	153.07	8.27	153.59	16.01
152.04	0.18	152.56	1.64	153.08	8.43	153.60	16.03
152.05	0.18	152.57	1.74	153.09	8.59	153.61	16.05
152.06	0.19	152.58	1.83	153.10	8.75	153.62	16.08
152.07	0.19	152.59	1.93	153.11	8.91	153.63	16.10
152.08	0.19	152.60	2.03	153.12	9.07	153.64	16.12
152.09	0.19	152.61	2.13	153.13	9.24	153.65	16.14
152.10	0.19	152.62	2.24	153.14	9.40	153.66	16.17
152.11	0.19	152.63	2.34	153.15	9.57	153.67	16.19
152.12	0.19	152.64	2.45	153.16	9.73	153.68	16.21
152.13	0.19	152.65	2.55	153.17	9.90	153.69	16.23
152.14	0.19	152.66	2.66	153.18	10.07	153.70	16.26
152.15	0.19	152.67	2.77	153.19	10.24	153.71	16.28
152.16	0.19	152.68	2.89	153.20	10.41	153.72	16.30
152.17	0.19	152.69	3.00	153.21	10.58	153.73	16.32
152.18	0.19	152.70	3.12	153.22	10.75	153.74	16.34
152.19	0.19	152.71	3.23	153.23	10.92	153.75	16.37
152.20	0.20	152.72	3.35	153.24	11.10	153.76	16.39
152.21	0.20	152.73	3.47	153.25	11.27	153.77	16.41
152.22	0.20	152.74	3.59	153.26	11.44	153.78	16.43
152.23	0.20	152.75	3.72	153.27	11.62	153.79	16.46
152.24	0.20	152.76	3.84	153.28	11.80	153.80	16.48
152.25	0.20	152.77	3.96	153.29	11.97	153.81	16.50
152.26	0.20	152.78	4.09	153.30	12.15	153.82	16.52
152.27	0.20	152.79	4.22	153.31	12.33	153.83	16.54
152.28	0.20	152.80	4.35	153.32	12.51	153.84	16.56
152.29	0.20	152.81	4.48	153.33	12.69	153.85	16.59
152.30	0.20	152.82	4.61	153.34	12.87	153.86	16.61
152.31	0.20	152.83	4.74	153.35	13.05	153.87	16.63
152.32	0.20	152.84	4.88	153.36	13.23	153.88	16.65
152.33	0.20	152.85	5.01	153.37	13.42	153.89	16.67
152.34	0.22	152.86	5.15	153.38	13.60	153.90	16.70
152.35	0.24	152.87	5.29	153.39	13.78	153.91	16.72
152.36	0.27	152.88	5.43	153.40	13.97	153.92	16.74
152.37	0.31	152.89	5.57	153.41	14.15	153.93	16.76
152.38	0.35	152.90	5.71	153.42	14.34	153.94	16.78
152.39	0.40	152.91	5.85	153.43	14.53	153.95	16.80
152.40	0.45	152.92	5.99	153.44	14.72	153.96	16.82
152.41	0.50	152.93	6.14	153.45	14.90	153.97	16.85
152.42	0.56	152.94	6.28	153.46	15.09	153.98	16.87
152.43	0.62	152.95	6.43	153.47	15.28	153.99	16.89
152.44	0.69	152.96	6.58	153.48	15.47	154.00	16.91
152.45	0.75	152.97	6.73	153.49	15.66	154.01	16.93
152.46	0.82	152.98	6.87	153.50	15.80	154.02	16.95
152.47	0.89	152.99	7.03	153.51	15.83	154.03	16.97
152.48	0.97	153.00	7.18	153.52	15.85	154.04	17.00
152.49	1.04	153.01	7.33	153.53	15.87	154.05	17.02

Stage-Discharge for Pond B-21: Basin #21 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
154.06	17.04	154.58	53.10	155.10	146.75
154.07	17.06	154.59	54.54	155.11	148.87
154.08	17.08	154.60	56.00	155.12	151.01
154.09	17.10	154.61	57.49	155.13	153.15
154.10	17.12	154.62	59.01	155.14	155.31
154.11	17.14	154.63	60.55	155.15	157.48
154.12	17.17	154.64	62.12	155.16	159.67
154.13	17.19	154.65	63.71	155.17	161.81
154.14	17.21	154.66	65.33	155.18	163.96
154.15	17.23	154.67	66.98	155.19	166.13
154.16	17.25	154.68	68.66	155.20	168.30
154.17	17.39	154.69	70.36	155.21	170.49
154.18	17.62	154.70	72.09	155.22	172.68
154.19	17.92	154.71	73.84	155.23	174.89
154.20	18.27	154.72	75.62	155.24	177.11
154.21	18.67	154.73	77.43	155.25	179.33
154.22	19.10	154.74	79.26	155.26	181.57
154.23	19.57	154.75	81.13	155.27	183.82
154.24	20.07	154.76	83.02	155.28	186.08
154.25	20.61	154.77	84.66	155.29	188.35
154.26	21.18	154.78	86.32	155.30	190.63
154.27	21.77	154.79	88.00	155.31	192.91
154.28	22.39	154.80	89.68	155.32	195.21
154.29	23.04	154.81	91.38	155.33	197.52
154.30	23.71	154.82	93.10	155.34	199.84
154.31	24.41	154.83	94.82	155.35	202.17
154.32	25.13	154.84	96.56	155.36	204.51
154.33	25.87	154.85	98.31	155.37	206.89
154.34	26.64	154.86	100.08	155.38	209.29
154.35	27.42	154.87	101.86	155.39	211.70
154.36	28.23	154.88	103.65	155.40	214.11
154.37	29.10	154.89	105.45	155.41	216.54
154.38	29.99	154.90	107.27	155.42	218.98
154.39	30.91	154.91	109.09	155.43	221.43
154.40	31.85	154.92	110.94	155.44	223.89
154.41	32.82	154.93	112.79	155.45	226.35
154.42	33.81	154.94	114.65	155.46	228.83
154.43	34.83	154.95	116.53	155.47	231.33
154.44	35.88	154.96	118.42	155.48	233.83
154.45	36.94	154.97	120.36	155.49	236.34
154.46	38.04	154.98	122.31	155.50	**238.86**
154.47	39.15	154.99	124.27		
154.48	40.30	155.00	126.25		
154.49	41.46	155.01	128.24		
154.50	42.65	155.02	130.25		
154.51	43.87	155.03	132.27		
154.52	45.10	155.04	134.30		
154.53	46.37	155.05	136.34		
154.54	47.65	155.06	138.40		
154.55	48.96	155.07	140.47		
154.56	50.30	155.08	142.55		
154.57	51.69	155.09	144.65		

Stage-Area-Storage for Pond B-21: Basin #21

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
149.90	0	0	150.42	5,238	2,360
149.91	485	2	150.43	5,247	2,413
149.92	970	10	150.44	5,256	2,465
149.93	1,454	22	150.45	5,266	2,518
149.94	1,939	39	150.46	5,275	2,571
149.95	2,424	61	150.47	5,284	2,623
149.96	2,909	87	150.48	5,293	2,676
149.97	3,394	119	150.49	5,303	2,729
149.98	3,878	155	150.50	5,312	2,782
149.99	4,363	196	150.51	5,321	2,836
150.00	4,848	242	150.52	5,331	2,889
150.01	4,857	291	150.53	5,340	2,942
150.02	4,867	340	150.54	5,349	2,996
150.03	4,876	388	150.55	5,358	3,049
150.04	4,885	437	150.56	5,368	3,103
150.05	4,894	486	150.57	5,377	3,157
150.06	4,904	535	150.58	5,386	3,210
150.07	4,913	584	150.59	5,396	3,264
150.08	4,922	633	150.60	5,405	3,318
150.09	4,932	682	150.61	5,414	3,372
150.10	4,941	732	150.62	5,423	3,427
150.11	4,950	781	150.63	5,433	3,481
150.12	4,959	831	150.64	5,442	3,535
150.13	4,969	880	150.65	5,451	3,590
150.14	4,978	930	150.66	5,460	3,644
150.15	4,987	980	150.67	5,470	3,699
150.16	4,996	1,030	150.68	5,479	3,754
150.17	5,006	1,080	150.69	5,488	3,808
150.18	5,015	1,130	150.70	5,498	3,863
150.19	5,024	1,180	150.71	5,507	3,918
150.20	5,034	1,231	150.72	5,516	3,973
150.21	5,043	1,281	150.73	5,525	4,029
150.22	5,052	1,331	150.74	5,535	4,084
150.23	5,061	1,382	150.75	5,544	4,139
150.24	5,071	1,433	150.76	5,553	4,195
150.25	5,080	1,483	150.77	5,563	4,250
150.26	5,089	1,534	150.78	5,572	4,306
150.27	5,099	1,585	150.79	5,581	4,362
150.28	5,108	1,636	150.80	5,590	4,418
150.29	5,117	1,687	150.81	5,600	4,474
150.30	5,126	1,739	150.82	5,609	4,530
150.31	5,136	1,790	150.83	5,618	4,586
150.32	5,145	1,841	150.84	5,628	4,642
150.33	5,154	1,893	150.85	5,637	4,698
150.34	5,164	1,944	150.86	5,646	4,755
150.35	5,173	1,996	150.87	5,655	4,811
150.36	5,182	2,048	150.88	5,665	4,868
150.37	5,191	2,100	150.89	5,674	4,925
150.38	5,201	2,152	150.90	5,683	4,981
150.39	5,210	2,204	150.91	5,692	5,038
150.40	5,219	2,256	150.92	5,702	5,095
150.41	5,228	2,308	150.93	5,711	5,152

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.94	5,720	5,210	151.46	6,229	8,316
150.95	5,730	5,267	151.47	6,239	8,378
150.96	5,739	5,324	151.48	6,249	8,440
150.97	5,748	5,382	151.49	6,259	8,503
150.98	5,757	5,439	151.50	6,269	8,566
150.99	5,767	5,497	151.51	6,278	8,628
151.00	5,776	5,554	151.52	6,288	8,691
151.01	5,786	5,612	151.53	6,298	8,754
151.02	5,796	5,670	151.54	6,308	8,817
151.03	5,806	5,728	151.55	6,318	8,880
151.04	5,815	5,786	151.56	6,328	8,943
151.05	5,825	5,844	151.57	6,337	9,007
151.06	5,835	5,903	151.58	6,347	9,070
151.07	5,845	5,961	151.59	6,357	9,134
151.08	5,855	6,020	151.60	6,367	9,197
151.09	5,865	6,078	151.61	6,377	9,261
151.10	5,874	6,137	151.62	6,387	9,325
151.11	5,884	6,196	151.63	6,397	9,389
151.12	5,894	6,255	151.64	6,406	9,453
151.13	5,904	6,314	151.65	6,416	9,517
151.14	5,914	6,373	151.66	6,426	9,581
151.15	5,924	6,432	151.67	6,436	9,645
151.16	5,934	6,491	151.68	6,446	9,710
151.17	5,943	6,551	151.69	6,456	9,774
151.18	5,953	6,610	151.70	6,466	9,839
151.19	5,963	6,670	151.71	6,475	9,904
151.20	5,973	6,729	151.72	6,485	9,968
151.21	5,983	6,789	151.73	6,495	10,033
151.22	5,993	6,849	151.74	6,505	10,098
151.23	6,003	6,909	151.75	6,515	10,163
151.24	6,012	6,969	151.76	6,525	10,229
151.25	6,022	7,029	151.77	6,534	10,294
151.26	6,032	7,089	151.78	6,544	10,359
151.27	6,042	7,150	151.79	6,554	10,425
151.28	6,052	7,210	151.80	6,564	10,490
151.29	6,062	7,271	151.81	6,574	10,556
151.30	6,072	7,332	151.82	6,584	10,622
151.31	6,081	7,392	151.83	6,594	10,688
151.32	6,091	7,453	151.84	6,603	10,754
151.33	6,101	7,514	151.85	6,613	10,820
151.34	6,111	7,575	151.86	6,623	10,886
151.35	6,121	7,636	151.87	6,633	10,952
151.36	6,131	7,698	151.88	6,643	11,019
151.37	6,140	7,759	151.89	6,653	11,085
151.38	6,150	7,820	151.90	6,663	11,152
151.39	6,160	7,882	151.91	6,672	11,218
151.40	6,170	7,944	151.92	6,682	11,285
151.41	6,180	8,005	151.93	6,692	11,352
151.42	6,190	8,067	151.94	6,702	11,419
151.43	6,200	8,129	151.95	6,712	11,486
151.44	6,209	8,191	151.96	6,722	11,553
151.45	6,219	8,253	151.97	6,731	11,621

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.98	6,741	11,688	152.50	7,282	15,334
151.99	6,751	11,755	152.51	7,292	15,406
152.00	6,761	11,823	152.52	7,302	15,479
152.01	6,771	11,891	152.53	7,313	15,552
152.02	6,782	11,958	152.54	7,323	15,626
152.03	6,792	12,026	152.55	7,334	15,699
152.04	6,803	12,094	152.56	7,344	15,772
152.05	6,813	12,162	152.57	7,354	15,846
152.06	6,823	12,230	152.58	7,365	15,919
152.07	6,834	12,299	152.59	7,375	15,993
152.08	6,844	12,367	152.60	7,386	16,067
152.09	6,855	12,436	152.61	7,396	16,141
152.10	6,865	12,504	152.62	7,406	16,215
152.11	6,876	12,573	152.63	7,417	16,289
152.12	6,886	12,642	152.64	7,427	16,363
152.13	6,896	12,711	152.65	7,438	16,437
152.14	6,907	12,780	152.66	7,448	16,512
152.15	6,917	12,849	152.67	7,458	16,586
152.16	6,928	12,918	152.68	7,469	16,661
152.17	6,938	12,987	152.69	7,479	16,736
152.18	6,948	13,057	152.70	7,490	16,811
152.19	6,959	13,126	152.71	7,500	16,886
152.20	6,969	13,196	152.72	7,511	16,961
152.21	6,980	13,266	152.73	7,521	17,036
152.22	6,990	13,336	152.74	7,531	17,111
152.23	7,000	13,405	152.75	7,542	17,186
152.24	7,011	13,476	152.76	7,552	17,262
152.25	7,021	13,546	152.77	7,563	17,337
152.26	7,032	13,616	152.78	7,573	17,413
152.27	7,042	13,686	152.79	7,583	17,489
152.28	7,052	13,757	152.80	7,594	17,565
152.29	7,063	13,827	152.81	7,604	17,641
152.30	7,073	13,898	152.82	7,615	17,717
152.31	7,084	13,969	152.83	7,625	17,793
152.32	7,094	14,040	152.84	7,635	17,869
152.33	7,105	14,111	152.85	7,646	17,946
152.34	7,115	14,182	152.86	7,656	18,022
152.35	7,125	14,253	152.87	7,667	18,099
152.36	7,136	14,324	152.88	7,677	18,176
152.37	7,146	14,396	152.89	7,687	18,252
152.38	7,157	14,467	152.90	7,698	18,329
152.39	7,167	14,539	152.91	7,708	18,406
152.40	7,177	14,611	152.92	7,719	18,484
152.41	7,188	14,682	152.93	7,729	18,561
152.42	7,198	14,754	152.94	7,740	18,638
152.43	7,209	14,826	152.95	7,750	18,716
152.44	7,219	14,899	152.96	7,760	18,793
152.45	7,229	14,971	152.97	7,771	18,871
152.46	7,240	15,043	152.98	7,781	18,949
152.47	7,250	15,116	152.99	7,792	19,026
152.48	7,261	15,188	153.00	7,802	19,104
152.49	7,271	15,261	153.01	7,813	19,182

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
153.02	7,824	19,261	153.54	8,395	23,478
153.03	7,835	19,339	153.55	8,406	23,562
153.04	7,846	19,417	153.56	8,417	23,646
153.05	7,857	19,496	153.57	8,428	23,730
153.06	7,868	19,574	153.58	8,439	23,814
153.07	7,879	19,653	153.59	8,450	23,899
153.08	7,890	19,732	153.60	8,461	23,983
153.09	7,901	19,811	153.61	8,472	24,068
153.10	7,912	19,890	153.62	8,483	24,153
153.11	7,923	19,969	153.63	8,494	24,238
153.12	7,934	20,049	153.64	8,505	24,323
153.13	7,945	20,128	153.65	8,516	24,408
153.14	7,956	20,207	153.66	8,527	24,493
153.15	7,967	20,287	153.67	8,538	24,578
153.16	7,978	20,367	153.68	8,549	24,664
153.17	7,989	20,447	153.69	8,560	24,749
153.18	8,000	20,527	153.70	8,571	24,835
153.19	8,011	20,607	153.71	8,582	24,921
153.20	8,022	20,687	153.72	8,593	25,006
153.21	8,033	20,767	153.73	8,604	25,092
153.22	8,044	20,847	153.74	8,615	25,179
153.23	8,055	20,928	153.75	8,626	25,265
153.24	8,066	21,009	153.76	8,636	25,351
153.25	8,077	21,089	153.77	8,647	25,437
153.26	8,087	21,170	153.78	8,658	25,524
153.27	8,098	21,251	153.79	8,669	25,611
153.28	8,109	21,332	153.80	8,680	25,697
153.29	8,120	21,413	153.81	8,691	25,784
153.30	8,131	21,494	153.82	8,702	25,871
153.31	8,142	21,576	153.83	8,713	25,958
153.32	8,153	21,657	153.84	8,724	26,045
153.33	8,164	21,739	153.85	8,735	26,133
153.34	8,175	21,821	153.86	8,746	26,220
153.35	8,186	21,902	153.87	8,757	26,308
153.36	8,197	21,984	153.88	8,768	26,395
153.37	8,208	22,066	153.89	8,779	26,483
153.38	8,219	22,148	153.90	8,790	26,571
153.39	8,230	22,231	153.91	8,801	26,659
153.40	8,241	22,313	153.92	8,812	26,747
153.41	8,252	22,396	153.93	8,823	26,835
153.42	8,263	22,478	153.94	8,834	26,923
153.43	8,274	22,561	153.95	8,845	27,012
153.44	8,285	22,644	153.96	8,856	27,100
153.45	8,296	22,726	153.97	8,867	27,189
153.46	8,307	22,809	153.98	8,878	27,278
153.47	8,318	22,893	153.99	8,889	27,366
153.48	8,329	22,976	154.00	8,900	27,455
153.49	8,340	23,059	154.01	8,912	27,544
153.50	8,351	23,143	154.02	8,923	27,634
153.51	8,362	23,226	154.03	8,935	27,723
153.52	8,373	23,310	154.04	8,946	27,812
153.53	8,384	23,394	154.05	8,958	27,902

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
154.06	8,969	27,991	154.58	9,569	32,812
154.07	8,981	28,081	154.59	9,581	32,907
154.08	8,992	28,171	154.60	9,592	33,003
154.09	9,004	28,261	154.61	9,604	33,099
154.10	9,015	28,351	154.62	9,615	33,195
154.11	9,027	28,441	154.63	9,627	33,291
154.12	9,038	28,532	154.64	9,639	33,388
154.13	9,050	28,622	154.65	9,650	33,484
154.14	9,062	28,713	154.66	9,662	33,581
154.15	9,073	28,803	154.67	9,673	33,677
154.16	9,085	28,894	154.68	9,685	33,774
154.17	9,096	28,985	154.69	9,696	33,871
154.18	9,108	29,076	154.70	9,708	33,968
154.19	9,119	29,167	154.71	9,719	34,065
154.20	9,131	29,258	154.72	9,731	34,163
154.21	9,142	29,350	154.73	9,742	34,260
154.22	9,154	29,441	154.74	9,754	34,357
154.23	9,165	29,533	154.75	9,766	34,455
154.24	9,177	29,625	154.76	9,777	34,553
154.25	9,189	29,716	154.77	9,789	34,651
154.26	9,200	29,808	154.78	9,800	34,748
154.27	9,212	29,900	154.79	9,812	34,847
154.28	9,223	29,993	154.80	9,823	34,945
154.29	9,235	30,085	154.81	9,835	35,043
154.30	9,246	30,177	154.82	9,846	35,141
154.31	9,258	30,270	154.83	9,858	35,240
154.32	9,269	30,362	154.84	9,869	35,339
154.33	9,281	30,455	154.85	9,881	35,437
154.34	9,292	30,548	154.86	9,892	35,536
154.35	9,304	30,641	154.87	9,904	35,635
154.36	9,315	30,734	154.88	9,916	35,734
154.37	9,327	30,827	154.89	9,927	35,833
154.38	9,339	30,921	154.90	9,939	35,933
154.39	9,350	31,014	154.91	9,950	36,032
154.40	9,362	31,108	154.92	9,962	36,132
154.41	9,373	31,201	154.93	9,973	36,231
154.42	9,385	31,295	154.94	9,985	36,331
154.43	9,396	31,389	154.95	9,996	36,431
154.44	9,408	31,483	154.96	10,008	36,531
154.45	9,419	31,577	154.97	10,019	36,631
154.46	9,431	31,671	154.98	10,031	36,732
154.47	9,442	31,766	154.99	10,042	36,832
154.48	9,454	31,860	155.00	10,054	36,932
154.49	9,465	31,955	155.01	10,066	37,033
154.50	9,477	32,050	155.02	10,078	37,134
154.51	9,489	32,144	155.03	10,090	37,235
154.52	9,500	32,239	155.04	10,102	37,336
154.53	9,512	32,334	155.05	10,114	37,437
154.54	9,523	32,430	155.06	10,126	37,538
154.55	9,535	32,525	155.07	10,138	37,639
154.56	9,546	32,620	155.08	10,150	37,741
154.57	9,558	32,716	155.09	10,162	37,842

Stage-Area-Storage for Pond B-21: Basin #21 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
155.10	10,174	37,944
155.11	10,186	38,046
155.12	10,198	38,148
155.13	10,210	38,250
155.14	10,222	38,352
155.15	10,234	38,454
155.16	10,246	38,556
155.17	10,258	38,659
155.18	10,270	38,762
155.19	10,282	38,864
155.20	10,294	38,967
155.21	10,306	39,070
155.22	10,318	39,173
155.23	10,330	39,277
155.24	10,342	39,380
155.25	10,354	39,483
155.26	10,365	39,587
155.27	10,377	39,691
155.28	10,389	39,794
155.29	10,401	39,898
155.30	10,413	40,003
155.31	10,425	40,107
155.32	10,437	40,211
155.33	10,449	40,315
155.34	10,461	40,420
155.35	10,473	40,525
155.36	10,485	40,629
155.37	10,497	40,734
155.38	10,509	40,839
155.39	10,521	40,945
155.40	10,533	41,050
155.41	10,545	41,155
155.42	10,557	41,261
155.43	10,569	41,366
155.44	10,581	41,472
155.45	10,593	41,578
155.46	10,605	41,684
155.47	10,617	41,790
155.48	10,629	41,896
155.49	10,641	42,003
155.50	**10,653**	**42,109**

Summary for Pond B-22: Basin #22

Inflow Area = 2.460 ac, 33.05% Impervious, Inflow Depth = 8.92" for Future 100 yr event
Inflow = 22.40 cfs @ 12.17 hrs, Volume= 1.828 af
Outflow = 13.98 cfs @ 12.29 hrs, Volume= 1.685 af, Atten= 38%, Lag= 7.3 min
Primary = 13.98 cfs @ 12.29 hrs, Volume= 1.685 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 150.75' @ 12.29 hrs Surf.Area= 9,845 sf Storage= 25,395 cf

Plug-Flow detention time= 213.2 min calculated for 1.683 af (92% of inflow)
Center-of-Mass det. time= 171.9 min (953.8 - 781.8)

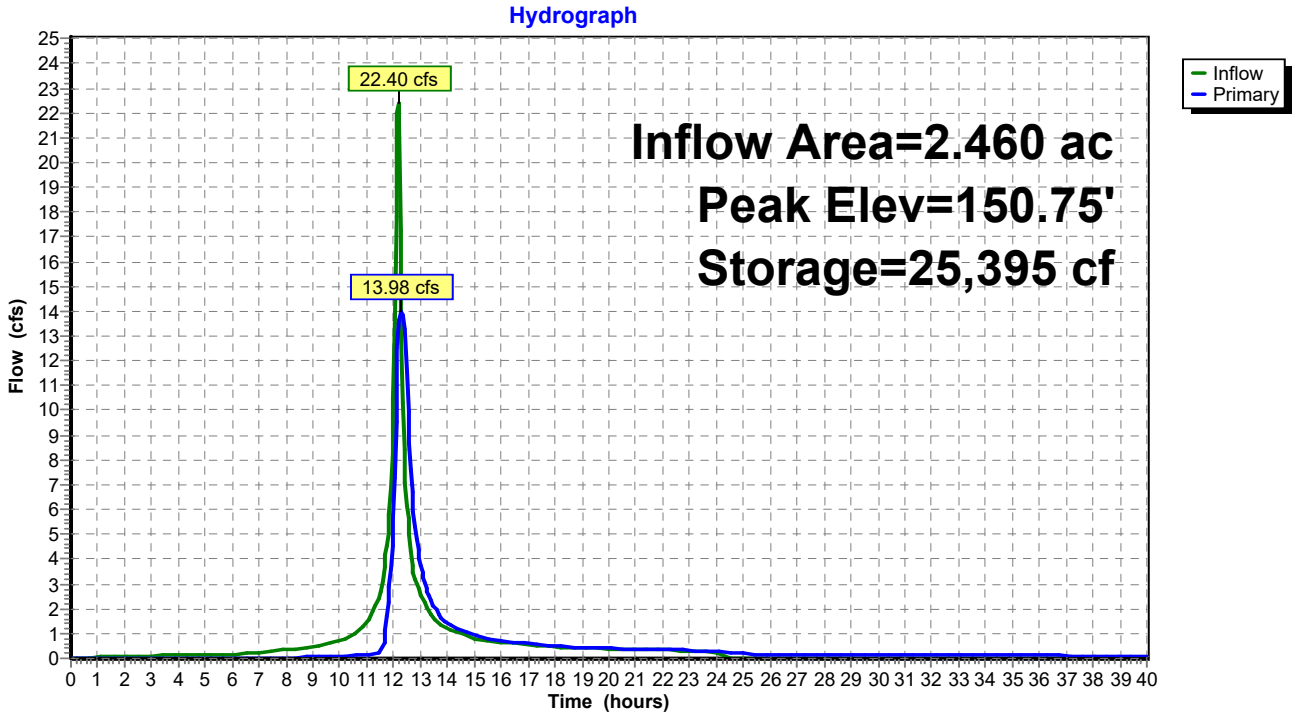
Volume	Invert	Avail.Storage	Storage Description
#1	147.30'	50,528 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
147.30	0	0	0
148.00	6,928	2,425	2,425
149.00	7,937	7,433	9,857
150.00	9,003	8,470	18,327
151.00	10,125	9,564	27,891
152.00	11,304	10,715	38,606
153.00	12,540	11,922	50,528

Device	Routing	Invert	Outlet Devices
#1	Primary	147.30'	**18.0" Round Culvert** L= 24.0' Ke= 0.500 Inlet / Outlet Invert= 147.30' / 146.20' S= 0.0458 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	148.15'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	149.47'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	152.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.97 cfs @ 12.29 hrs HW=150.75' (Free Discharge)
- **1=Culvert** (Inlet Controls 13.97 cfs @ 7.91 fps)
  - **2=Orifice/Grate** (Passes < 0.26 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 17.65 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-22: Basin #22



Stage-Discharge for Pond B-22: Basin #22

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.30	0.00	147.82	0.00	148.34	0.05	148.86	0.13
147.31	0.00	147.83	0.00	148.35	0.05	148.87	0.13
147.32	0.00	147.84	0.00	148.36	0.05	148.88	0.13
147.33	0.00	147.85	0.00	148.37	0.06	148.89	0.13
147.34	0.00	147.86	0.00	148.38	0.06	148.90	0.13
147.35	0.00	147.87	0.00	148.39	0.06	148.91	0.13
147.36	0.00	147.88	0.00	148.40	0.06	148.92	0.13
147.37	0.00	147.89	0.00	148.41	0.06	148.93	0.13
147.38	0.00	147.90	0.00	148.42	0.07	148.94	0.14
147.39	0.00	147.91	0.00	148.43	0.07	148.95	0.14
147.40	0.00	147.92	0.00	148.44	0.07	148.96	0.14
147.41	0.00	147.93	0.00	148.45	0.07	148.97	0.14
147.42	0.00	147.94	0.00	148.46	0.07	148.98	0.14
147.43	0.00	147.95	0.00	148.47	0.08	148.99	0.14
147.44	0.00	147.96	0.00	148.48	0.08	149.00	0.14
147.45	0.00	147.97	0.00	148.49	0.08	149.01	0.14
147.46	0.00	147.98	0.00	148.50	0.08	149.02	0.14
147.47	0.00	147.99	0.00	148.51	0.08	149.03	0.14
147.48	0.00	148.00	0.00	148.52	0.08	149.04	0.15
147.49	0.00	148.01	0.00	148.53	0.09	149.05	0.15
147.50	0.00	148.02	0.00	148.54	0.09	149.06	0.15
147.51	0.00	148.03	0.00	148.55	0.09	149.07	0.15
147.52	0.00	148.04	0.00	148.56	0.09	149.08	0.15
147.53	0.00	148.05	0.00	148.57	0.09	149.09	0.15
147.54	0.00	148.06	0.00	148.58	0.09	149.10	0.15
147.55	0.00	148.07	0.00	148.59	0.10	149.11	0.15
147.56	0.00	148.08	0.00	148.60	0.10	149.12	0.15
147.57	0.00	148.09	0.00	148.61	0.10	149.13	0.15
147.58	0.00	148.10	0.00	148.62	0.10	149.14	0.15
147.59	0.00	148.11	0.00	148.63	0.10	149.15	0.16
147.60	0.00	148.12	0.00	148.64	0.10	149.16	0.16
147.61	0.00	148.13	0.00	148.65	0.10	149.17	0.16
147.62	0.00	148.14	0.00	148.66	0.10	149.18	0.16
147.63	0.00	148.15	0.00	148.67	0.11	149.19	0.16
147.64	0.00	148.16	0.00	148.68	0.11	149.20	0.16
147.65	0.00	148.17	0.00	148.69	0.11	149.21	0.16
147.66	0.00	148.18	0.00	148.70	0.11	149.22	0.16
147.67	0.00	148.19	0.00	148.71	0.11	149.23	0.16
147.68	0.00	148.20	0.00	148.72	0.11	149.24	0.16
147.69	0.00	148.21	0.01	148.73	0.11	149.25	0.16
147.70	0.00	148.22	0.01	148.74	0.11	149.26	0.16
147.71	0.00	148.23	0.01	148.75	0.12	149.27	0.17
147.72	0.00	148.24	0.01	148.76	0.12	149.28	0.17
147.73	0.00	148.25	0.02	148.77	0.12	149.29	0.17
147.74	0.00	148.26	0.02	148.78	0.12	149.30	0.17
147.75	0.00	148.27	0.02	148.79	0.12	149.31	0.17
147.76	0.00	148.28	0.03	148.80	0.12	149.32	0.17
147.77	0.00	148.29	0.03	148.81	0.12	149.33	0.17
147.78	0.00	148.30	0.03	148.82	0.12	149.34	0.17
147.79	0.00	148.31	0.04	148.83	0.12	149.35	0.17
147.80	0.00	148.32	0.04	148.84	0.13	149.36	0.17
147.81	0.00	148.33	0.05	148.85	0.13	149.37	0.17

Stage-Discharge for Pond B-22: Basin #22 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
149.38	0.17	149.90	3.82	150.42	11.78	150.94	14.46
149.39	0.17	149.91	3.94	150.43	11.95	150.95	14.49
149.40	0.18	149.92	4.07	150.44	12.13	150.96	14.51
149.41	0.18	149.93	4.20	150.45	12.31	150.97	14.54
149.42	0.18	149.94	4.33	150.46	12.49	150.98	14.56
149.43	0.18	149.95	4.46	150.47	12.67	150.99	14.59
149.44	0.18	149.96	4.59	150.48	12.85	151.00	14.61
149.45	0.18	149.97	4.72	150.49	13.03	151.01	14.64
149.46	0.18	149.98	4.86	150.50	13.21	151.02	14.66
149.47	0.18	149.99	4.99	150.51	13.35	151.03	14.69
149.48	0.19	150.00	5.13	150.52	13.37	151.04	14.71
149.49	0.22	150.01	5.27	150.53	13.40	151.05	14.74
149.50	0.25	150.02	5.41	150.54	13.43	151.06	14.76
149.51	0.29	150.03	5.55	150.55	13.45	151.07	14.79
149.52	0.33	150.04	5.69	150.56	13.48	151.08	14.81
149.53	0.38	150.05	5.83	150.57	13.51	151.09	14.84
149.54	0.43	150.06	5.97	150.58	13.53	151.10	14.86
149.55	0.48	150.07	6.12	150.59	13.56	151.11	14.88
149.56	0.54	150.08	6.26	150.60	13.59	151.12	14.91
149.57	0.60	150.09	6.41	150.61	13.61	151.13	14.93
149.58	0.66	150.10	6.56	150.62	13.64	151.14	14.96
149.59	0.73	150.11	6.71	150.63	13.67	151.15	14.98
149.60	0.80	150.12	6.86	150.64	13.69	151.16	15.01
149.61	0.87	150.13	7.01	150.65	13.72	151.17	15.03
149.62	0.95	150.14	7.16	150.66	13.75	151.18	15.05
149.63	1.02	150.15	7.31	150.67	13.77	151.19	15.08
149.64	1.10	150.16	7.46	150.68	13.80	151.20	15.10
149.65	1.18	150.17	7.62	150.69	13.83	151.21	15.13
149.66	1.27	150.18	7.78	150.70	13.85	151.22	15.15
149.67	1.35	150.19	7.93	150.71	13.88	151.23	15.17
149.68	1.44	150.20	8.09	150.72	13.90	151.24	15.20
149.69	1.53	150.21	8.25	150.73	13.93	151.25	15.22
149.70	1.62	150.22	8.41	150.74	13.96	151.26	15.24
149.71	1.72	150.23	8.57	150.75	13.98	151.27	15.27
149.72	1.81	150.24	8.73	150.76	14.01	151.28	15.29
149.73	1.91	150.25	8.89	150.77	14.03	151.29	15.32
149.74	2.01	150.26	9.05	150.78	14.06	151.30	15.34
149.75	2.11	150.27	9.22	150.79	14.08	151.31	15.36
149.76	2.21	150.28	9.38	150.80	14.11	151.32	15.39
149.77	2.32	150.29	9.55	150.81	14.14	151.33	15.41
149.78	2.43	150.30	9.71	150.82	14.16	151.34	15.43
149.79	2.53	150.31	9.88	150.83	14.19	151.35	15.46
149.80	2.64	150.32	10.05	150.84	14.21	151.36	15.48
149.81	2.75	150.33	10.22	150.85	14.24	151.37	15.50
149.82	2.87	150.34	10.39	150.86	14.26	151.38	15.53
149.83	2.98	150.35	10.56	150.87	14.29	151.39	15.55
149.84	3.10	150.36	10.73	150.88	14.31	151.40	15.57
149.85	3.21	150.37	10.90	150.89	14.34	151.41	15.60
149.86	3.33	150.38	11.08	150.90	14.36	151.42	15.62
149.87	3.45	150.39	11.25	150.91	14.39	151.43	15.64
149.88	3.57	150.40	11.43	150.92	14.41	151.44	15.67
149.89	3.70	150.41	11.60	150.93	14.44	151.45	15.69

Stage-Discharge for Pond B-22: Basin #22 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
151.46	15.71	151.98	16.87	152.50	17.95
151.47	15.74	151.99	16.89	152.51	17.97
151.48	15.76	152.00	16.91	152.52	17.99
151.49	15.78	152.01	16.93	152.53	18.01
151.50	15.80	152.02	16.95	152.54	18.03
151.51	15.83	152.03	16.97	152.55	18.05
151.52	15.85	152.04	17.00	152.56	18.07
151.53	15.87	152.05	17.02	152.57	18.09
151.54	15.90	152.06	17.04	152.58	18.11
151.55	15.92	152.07	17.06	152.59	18.13
151.56	15.94	152.08	17.08	152.60	18.15
151.57	15.96	152.09	17.10	152.61	18.17
151.58	15.99	152.10	17.12	152.62	18.19
151.59	16.01	152.11	17.14	152.63	18.21
151.60	16.03	152.12	17.17	152.64	18.23
151.61	16.05	152.13	17.19	152.65	18.25
151.62	16.08	152.14	17.21	152.66	18.27
151.63	16.10	152.15	17.23	152.67	18.29
151.64	16.12	152.16	17.25	152.68	18.31
151.65	16.14	152.17	17.27	152.69	18.33
151.66	16.17	152.18	17.29	152.70	18.35
151.67	16.19	152.19	17.31	152.71	18.37
151.68	16.21	152.20	17.33	152.72	18.39
151.69	16.23	152.21	17.35	152.73	18.41
151.70	16.26	152.22	17.38	152.74	18.43
151.71	16.28	152.23	17.40	152.75	18.45
151.72	16.30	152.24	17.42	152.76	18.47
151.73	16.32	152.25	17.44	152.77	18.49
151.74	16.34	152.26	17.46	152.78	18.51
151.75	16.37	152.27	17.48	152.79	18.52
151.76	16.39	152.28	17.50	152.80	18.54
151.77	16.41	152.29	17.52	152.81	18.56
151.78	16.43	152.30	17.54	152.82	18.58
151.79	16.46	152.31	17.56	152.83	18.60
151.80	16.48	152.32	17.58	152.84	18.62
151.81	16.50	152.33	17.60	152.85	18.64
151.82	16.52	152.34	17.62	152.86	18.66
151.83	16.54	152.35	17.64	152.87	18.68
151.84	16.56	152.36	17.66	152.88	18.70
151.85	16.59	152.37	17.69	152.89	18.72
151.86	16.61	152.38	17.71	152.90	18.74
151.87	16.63	152.39	17.73	152.91	18.76
151.88	16.65	152.40	17.75	152.92	18.78
151.89	16.67	152.41	17.77	152.93	18.80
151.90	16.70	152.42	17.79	152.94	18.82
151.91	16.72	152.43	17.81	152.95	18.83
151.92	16.74	152.44	17.83	152.96	18.97
151.93	16.76	152.45	17.85	152.97	19.20
151.94	16.78	152.46	17.87	152.98	19.50
151.95	16.80	152.47	17.89	152.99	19.85
151.96	16.82	152.48	17.91	153.00	**20.24**
151.97	16.85	152.49	17.93		

Stage-Area-Storage for Pond B-22: Basin #22

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.30	0	0	147.82	5,147	1,338
147.31	99	0	147.83	5,245	1,390
147.32	198	2	147.84	5,344	1,443
147.33	297	4	147.85	5,443	1,497
147.34	396	8	147.86	5,542	1,552
147.35	495	12	147.87	5,641	1,608
147.36	594	18	147.88	5,740	1,665
147.37	693	24	147.89	5,839	1,723
147.38	792	32	147.90	5,938	1,781
147.39	891	40	147.91	6,037	1,841
147.40	990	49	147.92	6,136	1,902
147.41	1,089	60	147.93	6,235	1,964
147.42	1,188	71	147.94	6,334	2,027
147.43	1,287	84	147.95	6,433	2,091
147.44	1,386	97	147.96	6,532	2,156
147.45	1,485	111	147.97	6,631	2,221
147.46	1,584	127	147.98	6,730	2,288
147.47	1,683	143	147.99	6,829	2,356
147.48	1,781	160	148.00	6,928	2,425
147.49	1,880	179	148.01	6,938	2,494
147.50	1,979	198	148.02	6,948	2,564
147.51	2,078	218	148.03	6,958	2,633
147.52	2,177	240	148.04	6,968	2,703
147.53	2,276	262	148.05	6,978	2,772
147.54	2,375	285	148.06	6,989	2,842
147.55	2,474	309	148.07	6,999	2,912
147.56	2,573	335	148.08	7,009	2,982
147.57	2,672	361	148.09	7,019	3,052
147.58	2,771	388	148.10	7,029	3,123
147.59	2,870	416	148.11	7,039	3,193
147.60	2,969	445	148.12	7,049	3,263
147.61	3,068	476	148.13	7,059	3,334
147.62	3,167	507	148.14	7,069	3,405
147.63	3,266	539	148.15	7,079	3,475
147.64	3,365	572	148.16	7,089	3,546
147.65	3,464	606	148.17	7,100	3,617
147.66	3,563	641	148.18	7,110	3,688
147.67	3,662	677	148.19	7,120	3,759
147.68	3,761	715	148.20	7,130	3,831
147.69	3,860	753	148.21	7,140	3,902
147.70	3,959	792	148.22	7,150	3,973
147.71	4,058	832	148.23	7,160	4,045
147.72	4,157	873	148.24	7,170	4,117
147.73	4,256	915	148.25	7,180	4,188
147.74	4,355	958	148.26	7,190	4,260
147.75	4,454	1,002	148.27	7,200	4,332
147.76	4,553	1,047	148.28	7,211	4,404
147.77	4,652	1,093	148.29	7,221	4,476
147.78	4,751	1,140	148.30	7,231	4,549
147.79	4,850	1,188	148.31	7,241	4,621
147.80	4,949	1,237	148.32	7,251	4,693
147.81	5,048	1,287	148.33	7,261	4,766

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.34	7,271	4,839	148.86	7,796	8,756
148.35	7,281	4,911	148.87	7,806	8,834
148.36	7,291	4,984	148.88	7,816	8,912
148.37	7,301	5,057	148.89	7,826	8,990
148.38	7,311	5,130	148.90	7,836	9,069
148.39	7,322	5,203	148.91	7,846	9,147
148.40	7,332	5,277	148.92	7,856	9,226
148.41	7,342	5,350	148.93	7,866	9,304
148.42	7,352	5,424	148.94	7,876	9,383
148.43	7,362	5,497	148.95	7,887	9,462
148.44	7,372	5,571	148.96	7,897	9,541
148.45	7,382	5,645	148.97	7,907	9,620
148.46	7,392	5,718	148.98	7,917	9,699
148.47	7,402	5,792	148.99	7,927	9,778
148.48	7,412	5,866	149.00	7,937	9,857
148.49	7,422	5,941	149.01	7,948	9,937
148.50	7,433	6,015	149.02	7,958	10,016
148.51	7,443	6,089	149.03	7,969	10,096
148.52	7,453	6,164	149.04	7,980	10,176
148.53	7,463	6,238	149.05	7,990	10,255
148.54	7,473	6,313	149.06	8,001	10,335
148.55	7,483	6,388	149.07	8,012	10,416
148.56	7,493	6,463	149.08	8,022	10,496
148.57	7,503	6,538	149.09	8,033	10,576
148.58	7,513	6,613	149.10	8,044	10,656
148.59	7,523	6,688	149.11	8,054	10,737
148.60	7,533	6,763	149.12	8,065	10,817
148.61	7,543	6,839	149.13	8,076	10,898
148.62	7,554	6,914	149.14	8,086	10,979
148.63	7,564	6,990	149.15	8,097	11,060
148.64	7,574	7,065	149.16	8,108	11,141
148.65	7,584	7,141	149.17	8,118	11,222
148.66	7,594	7,217	149.18	8,129	11,303
148.67	7,604	7,293	149.19	8,140	11,385
148.68	7,614	7,369	149.20	8,150	11,466
148.69	7,624	7,445	149.21	8,161	11,548
148.70	7,634	7,522	149.22	8,172	11,629
148.71	7,644	7,598	149.23	8,182	11,711
148.72	7,654	7,674	149.24	8,193	11,793
148.73	7,665	7,751	149.25	8,204	11,875
148.74	7,675	7,828	149.26	8,214	11,957
148.75	7,685	7,905	149.27	8,225	12,039
148.76	7,695	7,981	149.28	8,235	12,121
148.77	7,705	8,058	149.29	8,246	12,204
148.78	7,715	8,136	149.30	8,257	12,286
148.79	7,725	8,213	149.31	8,267	12,369
148.80	7,735	8,290	149.32	8,278	12,452
148.81	7,745	8,367	149.33	8,289	12,535
148.82	7,755	8,445	149.34	8,299	12,617
148.83	7,765	8,523	149.35	8,310	12,701
148.84	7,776	8,600	149.36	8,321	12,784
148.85	7,786	8,678	149.37	8,331	12,867

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
149.38	8,342	12,950	149.90	8,896	17,432
149.39	8,353	13,034	149.91	8,907	17,521
149.40	8,363	13,117	149.92	8,918	17,610
149.41	8,374	13,201	149.93	8,928	17,700
149.42	8,385	13,285	149.94	8,939	17,789
149.43	8,395	13,369	149.95	8,950	17,878
149.44	8,406	13,453	149.96	8,960	17,968
149.45	8,417	13,537	149.97	8,971	18,058
149.46	8,427	13,621	149.98	8,982	18,147
149.47	8,438	13,705	149.99	8,992	18,237
149.48	8,449	13,790	150.00	9,003	18,327
149.49	8,459	13,874	150.01	9,014	18,417
149.50	8,470	13,959	150.02	9,025	18,508
149.51	8,481	14,044	150.03	9,037	18,598
149.52	8,491	14,129	150.04	9,048	18,688
149.53	8,502	14,214	150.05	9,059	18,779
149.54	8,513	14,299	150.06	9,070	18,869
149.55	8,523	14,384	150.07	9,082	18,960
149.56	8,534	14,469	150.08	9,093	19,051
149.57	8,545	14,555	150.09	9,104	19,142
149.58	8,555	14,640	150.10	9,115	19,233
149.59	8,566	14,726	150.11	9,126	19,324
149.60	8,577	14,811	150.12	9,138	19,416
149.61	8,587	14,897	150.13	9,149	19,507
149.62	8,598	14,983	150.14	9,160	19,599
149.63	8,609	15,069	150.15	9,171	19,690
149.64	8,619	15,155	150.16	9,183	19,782
149.65	8,630	15,242	150.17	9,194	19,874
149.66	8,641	15,328	150.18	9,205	19,966
149.67	8,651	15,414	150.19	9,216	20,058
149.68	8,662	15,501	150.20	9,227	20,150
149.69	8,673	15,588	150.21	9,239	20,243
149.70	8,683	15,674	150.22	9,250	20,335
149.71	8,694	15,761	150.23	9,261	20,428
149.72	8,705	15,848	150.24	9,272	20,520
149.73	8,715	15,935	150.25	9,284	20,613
149.74	8,726	16,023	150.26	9,295	20,706
149.75	8,737	16,110	150.27	9,306	20,799
149.76	8,747	16,197	150.28	9,317	20,892
149.77	8,758	16,285	150.29	9,328	20,985
149.78	8,768	16,372	150.30	9,340	21,079
149.79	8,779	16,460	150.31	9,351	21,172
149.80	8,790	16,548	150.32	9,362	21,266
149.81	8,800	16,636	150.33	9,373	21,359
149.82	8,811	16,724	150.34	9,384	21,453
149.83	8,822	16,812	150.35	9,396	21,547
149.84	8,832	16,900	150.36	9,407	21,641
149.85	8,843	16,989	150.37	9,418	21,735
149.86	8,854	17,077	150.38	9,429	21,829
149.87	8,864	17,166	150.39	9,441	21,924
149.88	8,875	17,255	150.40	9,452	22,018
149.89	8,886	17,343	150.41	9,463	22,113

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
150.42	9,474	22,208	150.94	10,058	27,286
150.43	9,485	22,302	150.95	10,069	27,386
150.44	9,497	22,397	150.96	10,080	27,487
150.45	9,508	22,492	150.97	10,091	27,588
150.46	9,519	22,587	150.98	10,103	27,689
150.47	9,530	22,683	150.99	10,114	27,790
150.48	9,542	22,778	151.00	10,125	27,891
150.49	9,553	22,873	151.01	10,137	27,993
150.50	9,564	22,969	151.02	10,149	28,094
150.51	9,575	23,065	151.03	10,160	28,196
150.52	9,586	23,161	151.04	10,172	28,297
150.53	9,598	23,256	151.05	10,184	28,399
150.54	9,609	23,353	151.06	10,196	28,501
150.55	9,620	23,449	151.07	10,208	28,603
150.56	9,631	23,545	151.08	10,219	28,705
150.57	9,643	23,641	151.09	10,231	28,807
150.58	9,654	23,738	151.10	10,243	28,910
150.59	9,665	23,834	151.11	10,255	29,012
150.60	9,676	23,931	151.12	10,266	29,115
150.61	9,687	24,028	151.13	10,278	29,218
150.62	9,699	24,125	151.14	10,290	29,320
150.63	9,710	24,222	151.15	10,302	29,423
150.64	9,721	24,319	151.16	10,314	29,526
150.65	9,732	24,416	151.17	10,325	29,630
150.66	9,744	24,514	151.18	10,337	29,733
150.67	9,755	24,611	151.19	10,349	29,836
150.68	9,766	24,709	151.20	10,361	29,940
150.69	9,777	24,806	151.21	10,373	30,044
150.70	9,788	24,904	151.22	10,384	30,147
150.71	9,800	25,002	151.23	10,396	30,251
150.72	9,811	25,100	151.24	10,408	30,355
150.73	9,822	25,198	151.25	10,420	30,459
150.74	9,833	25,297	151.26	10,432	30,564
150.75	9,845	25,395	151.27	10,443	30,668
150.76	9,856	25,494	151.28	10,455	30,773
150.77	9,867	25,592	151.29	10,467	30,877
150.78	9,878	25,691	151.30	10,479	30,982
150.79	9,889	25,790	151.31	10,490	31,087
150.80	9,901	25,889	151.32	10,502	31,192
150.81	9,912	25,988	151.33	10,514	31,297
150.82	9,923	26,087	151.34	10,526	31,402
150.83	9,934	26,186	151.35	10,538	31,507
150.84	9,945	26,286	151.36	10,549	31,613
150.85	9,957	26,385	151.37	10,561	31,718
150.86	9,968	26,485	151.38	10,573	31,824
150.87	9,979	26,585	151.39	10,585	31,930
150.88	9,990	26,684	151.40	10,597	32,036
150.89	10,002	26,784	151.41	10,608	32,142
150.90	10,013	26,884	151.42	10,620	32,248
150.91	10,024	26,985	151.43	10,632	32,354
150.92	10,035	27,085	151.44	10,644	32,460
150.93	10,046	27,185	151.45	10,656	32,567

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
151.46	10,667	32,674	151.98	11,280	38,380
151.47	10,679	32,780	151.99	11,292	38,493
151.48	10,691	32,887	152.00	11,304	38,606
151.49	10,703	32,994	152.01	11,316	38,719
151.50	10,715	33,101	152.02	11,329	38,832
151.51	10,726	33,208	152.03	11,341	38,945
151.52	10,738	33,316	152.04	11,353	39,059
151.53	10,750	33,423	152.05	11,366	39,173
151.54	10,762	33,531	152.06	11,378	39,286
151.55	10,773	33,638	152.07	11,391	39,400
151.56	10,785	33,746	152.08	11,403	39,514
151.57	10,797	33,854	152.09	11,415	39,628
151.58	10,809	33,962	152.10	11,428	39,742
151.59	10,821	34,070	152.11	11,440	39,857
151.60	10,832	34,179	152.12	11,452	39,971
151.61	10,844	34,287	152.13	11,465	40,086
151.62	10,856	34,395	152.14	11,477	40,200
151.63	10,868	34,504	152.15	11,489	40,315
151.64	10,880	34,613	152.16	11,502	40,430
151.65	10,891	34,722	152.17	11,514	40,545
151.66	10,903	34,831	152.18	11,526	40,661
151.67	10,915	34,940	152.19	11,539	40,776
151.68	10,927	35,049	152.20	11,551	40,891
151.69	10,939	35,158	152.21	11,564	41,007
151.70	10,950	35,268	152.22	11,576	41,123
151.71	10,962	35,377	152.23	11,588	41,238
151.72	10,974	35,487	152.24	11,601	41,354
151.73	10,986	35,597	152.25	11,613	41,470
151.74	10,997	35,707	152.26	11,625	41,587
151.75	11,009	35,817	152.27	11,638	41,703
151.76	11,021	35,927	152.28	11,650	41,819
151.77	11,033	36,037	152.29	11,662	41,936
151.78	11,045	36,147	152.30	11,675	42,053
151.79	11,056	36,258	152.31	11,687	42,169
151.80	11,068	36,369	152.32	11,700	42,286
151.81	11,080	36,479	152.33	11,712	42,403
151.82	11,092	36,590	152.34	11,724	42,521
151.83	11,104	36,701	152.35	11,737	42,638
151.84	11,115	36,812	152.36	11,749	42,755
151.85	11,127	36,923	152.37	11,761	42,873
151.86	11,139	37,035	152.38	11,774	42,991
151.87	11,151	37,146	152.39	11,786	43,108
151.88	11,163	37,258	152.40	11,798	43,226
151.89	11,174	37,369	152.41	11,811	43,344
151.90	11,186	37,481	152.42	11,823	43,462
151.91	11,198	37,593	152.43	11,835	43,581
151.92	11,210	37,705	152.44	11,848	43,699
151.93	11,221	37,817	152.45	11,860	43,818
151.94	11,233	37,930	152.46	11,873	43,936
151.95	11,245	38,042	152.47	11,885	44,055
151.96	11,257	38,155	152.48	11,897	44,174
151.97	11,269	38,267	152.49	11,910	44,293

Stage-Area-Storage for Pond B-22: Basin #22 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
152.50	11,922	44,412
152.51	11,934	44,532
152.52	11,947	44,651
152.53	11,959	44,771
152.54	11,971	44,890
152.55	11,984	45,010
152.56	11,996	45,130
152.57	12,009	45,250
152.58	12,021	45,370
152.59	12,033	45,490
152.60	12,046	45,611
152.61	12,058	45,731
152.62	12,070	45,852
152.63	12,083	45,973
152.64	12,095	46,093
152.65	12,107	46,215
152.66	12,120	46,336
152.67	12,132	46,457
152.68	12,144	46,578
152.69	12,157	46,700
152.70	12,169	46,821
152.71	12,182	46,943
152.72	12,194	47,065
152.73	12,206	47,187
152.74	12,219	47,309
152.75	12,231	47,431
152.76	12,243	47,554
152.77	12,256	47,676
152.78	12,268	47,799
152.79	12,280	47,922
152.80	12,293	48,045
152.81	12,305	48,168
152.82	12,318	48,291
152.83	12,330	48,414
152.84	12,342	48,537
152.85	12,355	48,661
152.86	12,367	48,784
152.87	12,379	48,908
152.88	12,392	49,032
152.89	12,404	49,156
152.90	12,416	49,280
152.91	12,429	49,404
152.92	12,441	49,529
152.93	12,453	49,653
152.94	12,466	49,778
152.95	12,478	49,902
152.96	12,491	50,027
152.97	12,503	50,152
152.98	12,515	50,277
152.99	12,528	50,402
153.00	**12,540**	**50,528**

Summary for Pond B-23: Basin #23

Inflow Area = 2.449 ac, 33.56% Impervious, Inflow Depth = 8.93" for Future 100 yr event
Inflow = 22.32 cfs @ 12.17 hrs, Volume= 1.823 af
Outflow = 14.21 cfs @ 12.29 hrs, Volume= 1.735 af, Atten= 36%, Lag= 7.1 min
Primary = 14.21 cfs @ 12.29 hrs, Volume= 1.735 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 147.84' @ 12.29 hrs Surf.Area= 8,545 sf Storage= 21,784 cf

Plug-Flow detention time= 156.5 min calculated for 1.733 af (95% of inflow)
Center-of-Mass det. time= 129.5 min (910.9 - 781.5)

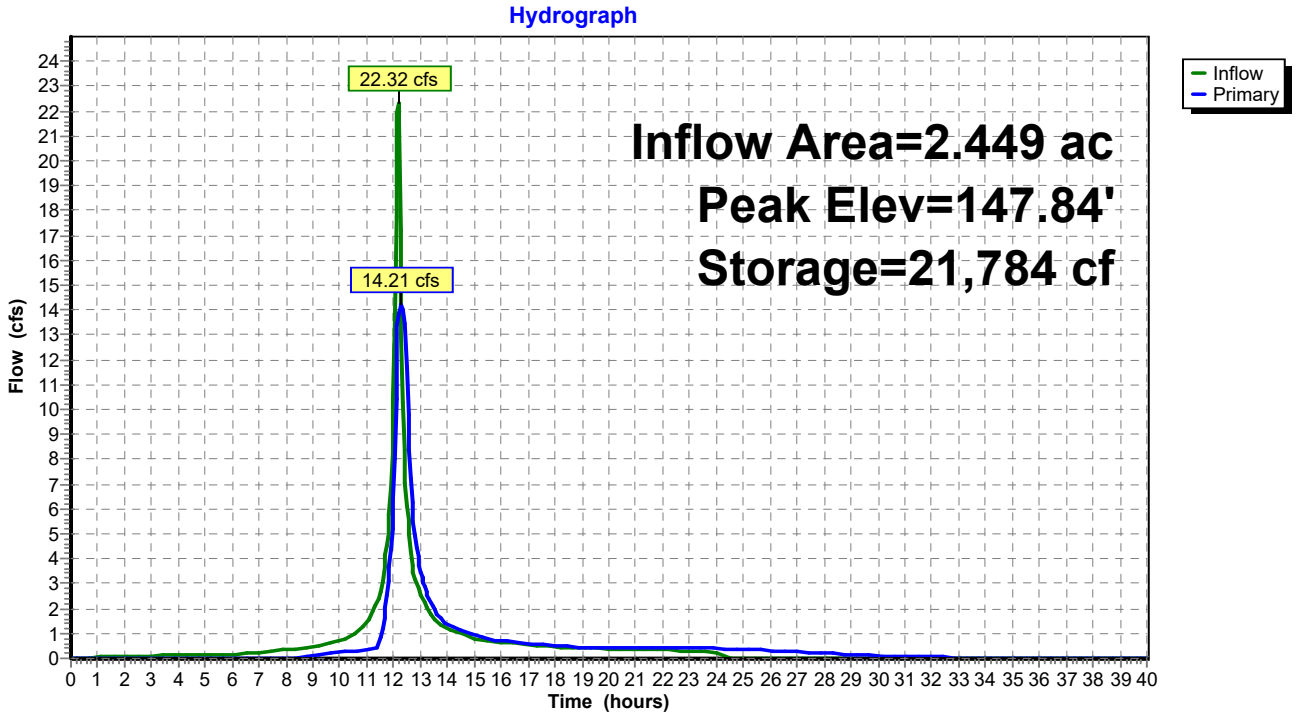
Volume	Invert	Avail.Storage	Storage Description
#1	144.30'	23,175 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
144.30	0	0	0
145.00	5,512	1,929	1,929
146.00	6,527	6,020	7,949
147.00	7,599	7,063	15,012
148.00	8,727	8,163	23,175

Device	Routing	Invert	Outlet Devices
#1	Primary	144.30'	**18.0" Round Culvert** L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 144.30' / 141.44' S= 0.0636 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	145.28'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.19 cfs @ 12.29 hrs HW=147.83' (Free Discharge)
- **1=Culvert** (Inlet Controls 14.19 cfs @ 8.03 fps)
  - **2=Orifice/Grate** (Passes < 0.65 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 18.78 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-23: Basin #23



Stage-Discharge for Pond B-23: Basin #23

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
144.30	0.00	144.82	0.00	145.34	0.01	145.86	0.27
144.31	0.00	144.83	0.00	145.35	0.01	145.87	0.27
144.32	0.00	144.84	0.00	145.36	0.02	145.88	0.28
144.33	0.00	144.85	0.00	145.37	0.02	145.89	0.28
144.34	0.00	144.86	0.00	145.38	0.02	145.90	0.28
144.35	0.00	144.87	0.00	145.39	0.03	145.91	0.29
144.36	0.00	144.88	0.00	145.40	0.03	145.92	0.29
144.37	0.00	144.89	0.00	145.41	0.04	145.93	0.29
144.38	0.00	144.90	0.00	145.42	0.04	145.94	0.30
144.39	0.00	144.91	0.00	145.43	0.05	145.95	0.30
144.40	0.00	144.92	0.00	145.44	0.06	145.96	0.30
144.41	0.00	144.93	0.00	145.45	0.06	145.97	0.30
144.42	0.00	144.94	0.00	145.46	0.07	145.98	0.31
144.43	0.00	144.95	0.00	145.47	0.08	145.99	0.31
144.44	0.00	144.96	0.00	145.48	0.08	146.00	0.31
144.45	0.00	144.97	0.00	145.49	0.09	146.01	0.32
144.46	0.00	144.98	0.00	145.50	0.10	146.02	0.32
144.47	0.00	144.99	0.00	145.51	0.10	146.03	0.32
144.48	0.00	145.00	0.00	145.52	0.11	146.04	0.32
144.49	0.00	145.01	0.00	145.53	0.12	146.05	0.33
144.50	0.00	145.02	0.00	145.54	0.13	146.06	0.33
144.51	0.00	145.03	0.00	145.55	0.13	146.07	0.33
144.52	0.00	145.04	0.00	145.56	0.14	146.08	0.33
144.53	0.00	145.05	0.00	145.57	0.15	146.09	0.34
144.54	0.00	145.06	0.00	145.58	0.15	146.10	0.34
144.55	0.00	145.07	0.00	145.59	0.16	146.11	0.34
144.56	0.00	145.08	0.00	145.60	0.17	146.12	0.34
144.57	0.00	145.09	0.00	145.61	0.17	146.13	0.35
144.58	0.00	145.10	0.00	145.62	0.17	146.14	0.35
144.59	0.00	145.11	0.00	145.63	0.18	146.15	0.35
144.60	0.00	145.12	0.00	145.64	0.18	146.16	0.35
144.61	0.00	145.13	0.00	145.65	0.19	146.17	0.36
144.62	0.00	145.14	0.00	145.66	0.19	146.18	0.36
144.63	0.00	145.15	0.00	145.67	0.20	146.19	0.36
144.64	0.00	145.16	0.00	145.68	0.20	146.20	0.36
144.65	0.00	145.17	0.00	145.69	0.21	146.21	0.37
144.66	0.00	145.18	0.00	145.70	0.21	146.22	0.37
144.67	0.00	145.19	0.00	145.71	0.22	146.23	0.37
144.68	0.00	145.20	0.00	145.72	0.22	146.24	0.37
144.69	0.00	145.21	0.00	145.73	0.22	146.25	0.38
144.70	0.00	145.22	0.00	145.74	0.23	146.26	0.38
144.71	0.00	145.23	0.00	145.75	0.23	146.27	0.38
144.72	0.00	145.24	0.00	145.76	0.24	146.28	0.38
144.73	0.00	145.25	0.00	145.77	0.24	146.29	0.39
144.74	0.00	145.26	0.00	145.78	0.24	146.30	0.39
144.75	0.00	145.27	0.00	145.79	0.25	146.31	0.39
144.76	0.00	145.28	0.00	145.80	0.25	146.32	0.39
144.77	0.00	145.29	0.00	145.81	0.25	146.33	0.39
144.78	0.00	145.30	0.00	145.82	0.26	146.34	0.40
144.79	0.00	145.31	0.00	145.83	0.26	146.35	0.40
144.80	0.00	145.32	0.00	145.84	0.26	146.36	0.40
144.81	0.00	145.33	0.01	145.85	0.27	146.37	0.40

Stage-Discharge for Pond B-23: Basin #23 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
146.38	0.41	146.90	3.75	147.42	11.60	147.94	14.46
146.39	0.41	146.91	3.87	147.43	11.78	147.95	14.49
146.40	0.41	146.92	4.00	147.44	11.95	147.96	14.63
146.41	0.41	146.93	4.12	147.45	12.13	147.97	14.87
146.42	0.41	146.94	4.25	147.46	12.31	147.98	15.17
146.43	0.42	146.95	4.37	147.47	12.49	147.99	15.53
146.44	0.42	146.96	4.50	147.48	12.67	148.00	**15.93**
146.45	0.42	146.97	4.63	147.49	12.85		
146.46	0.42	146.98	4.77	147.50	13.03		
146.47	0.43	146.99	4.90	147.51	13.21		
146.48	0.43	147.00	5.03	147.52	13.37		
146.49	0.43	147.01	5.17	147.53	13.40		
146.50	0.43	147.02	5.30	147.54	13.43		
146.51	0.45	147.03	5.44	147.55	13.45		
146.52	0.47	147.04	5.58	147.56	13.48		
146.53	0.51	147.05	5.72	147.57	13.51		
146.54	0.54	147.06	5.86	147.58	13.53		
146.55	0.59	147.07	6.00	147.59	13.56		
146.56	0.64	147.08	6.15	147.60	13.59		
146.57	0.69	147.09	6.29	147.61	13.61		
146.58	0.74	147.10	6.44	147.62	13.64		
146.59	0.80	147.11	6.58	147.63	13.67		
146.60	0.86	147.12	6.73	147.64	13.69		
146.61	0.93	147.13	6.88	147.65	13.72		
146.62	1.00	147.14	7.03	147.66	13.75		
146.63	1.07	147.15	7.18	147.67	13.77		
146.64	1.14	147.16	7.33	147.68	13.80		
146.65	1.22	147.17	7.48	147.69	13.83		
146.66	1.29	147.18	7.64	147.70	13.85		
146.67	1.37	147.19	7.79	147.71	13.88		
146.68	1.46	147.20	7.95	147.72	13.90		
146.69	1.54	147.21	8.11	147.73	13.93		
146.70	1.63	147.22	8.26	147.74	13.96		
146.71	1.72	147.23	8.42	147.75	13.98		
146.72	1.81	147.24	8.58	147.76	14.01		
146.73	1.90	147.25	8.74	147.77	14.03		
146.74	2.00	147.26	8.90	147.78	14.06		
146.75	2.09	147.27	9.06	147.79	14.08		
146.76	2.19	147.28	9.23	147.80	14.11		
146.77	2.29	147.29	9.39	147.81	14.14		
146.78	2.40	147.30	9.56	147.82	14.16		
146.79	2.50	147.31	9.72	147.83	14.19		
146.80	2.61	147.32	9.89	147.84	14.21		
146.81	2.71	147.33	10.06	147.85	14.24		
146.82	2.82	147.34	10.23	147.86	14.26		
146.83	2.93	147.35	10.39	147.87	14.29		
146.84	3.05	147.36	10.56	147.88	14.31		
146.85	3.16	147.37	10.74	147.89	14.34		
146.86	3.27	147.38	10.91	147.90	14.36		
146.87	3.39	147.39	11.08	147.91	14.39		
146.88	3.51	147.40	11.25	147.92	14.41		
146.89	3.63	147.41	11.43	147.93	14.44		

Stage-Area-Storage for Pond B-23: Basin #23

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.30	0	0
144.31	79	0
144.32	157	2
144.33	236	4
144.34	315	6
144.35	394	10
144.36	472	14
144.37	551	19
144.38	630	25
144.39	709	32
144.40	787	39
144.41	866	48
144.42	945	57
144.43	1,024	67
144.44	1,102	77
144.45	1,181	89
144.46	1,260	101
144.47	1,339	114
144.48	1,417	128
144.49	1,496	142
144.50	1,575	157
144.51	1,654	174
144.52	1,732	191
144.53	1,811	208
144.54	1,890	227
144.55	1,969	246
144.56	2,047	266
144.57	2,126	287
144.58	2,205	309
144.59	2,284	331
144.60	2,362	354
144.61	2,441	378
144.62	2,520	403
144.63	2,599	429
144.64	2,677	455
144.65	2,756	482
144.66	2,835	510
144.67	2,913	539
144.68	2,992	569
144.69	3,071	599
144.70	3,150	630
144.71	3,228	662
144.72	3,307	695
144.73	3,386	728
144.74	3,465	762
144.75	3,543	797
144.76	3,622	833
144.77	3,701	870
144.78	3,780	907
144.79	3,858	945
144.80	3,937	984
144.81	4,016	1,024
144.82	4,095	1,065
144.83	4,173	1,106
144.84	4,252	1,148
144.85	4,331	1,191
144.86	4,410	1,235
144.87	4,488	1,279
144.88	4,567	1,324
144.89	4,646	1,371
144.90	4,725	1,417
144.91	4,803	1,465
144.92	4,882	1,513
144.93	4,961	1,563
144.94	5,040	1,613
144.95	5,118	1,663
144.96	5,197	1,715
144.97	5,276	1,767
144.98	5,355	1,821
144.99	5,433	1,874
145.00	5,512	1,929
145.01	5,522	1,984
145.02	5,532	2,040
145.03	5,542	2,095
145.04	5,553	2,150
145.05	5,563	2,206
145.06	5,573	2,262
145.07	5,583	2,318
145.08	5,593	2,373
145.09	5,603	2,429
145.10	5,614	2,485
145.11	5,624	2,542
145.12	5,634	2,598
145.13	5,644	2,654
145.14	5,654	2,711
145.15	5,664	2,767
145.16	5,674	2,824
145.17	5,685	2,881
145.18	5,695	2,938
145.19	5,705	2,995
145.20	5,715	3,052
145.21	5,725	3,109
145.22	5,735	3,166
145.23	5,745	3,224
145.24	5,756	3,281
145.25	5,766	3,339
145.26	5,776	3,397
145.27	5,786	3,454
145.28	5,796	3,512
145.29	5,806	3,570
145.30	5,817	3,628
145.31	5,827	3,687
145.32	5,837	3,745
145.33	5,847	3,803

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.34	5,857	3,862	145.86	6,385	7,045
145.35	5,867	3,921	145.87	6,395	7,109
145.36	5,877	3,979	145.88	6,405	7,173
145.37	5,888	4,038	145.89	6,415	7,237
145.38	5,898	4,097	145.90	6,426	7,301
145.39	5,908	4,156	145.91	6,436	7,365
145.40	5,918	4,215	145.92	6,446	7,430
145.41	5,928	4,274	145.93	6,456	7,494
145.42	5,938	4,334	145.94	6,466	7,559
145.43	5,948	4,393	145.95	6,476	7,624
145.44	5,959	4,453	145.96	6,486	7,688
145.45	5,969	4,512	145.97	6,497	7,753
145.46	5,979	4,572	145.98	6,507	7,818
145.47	5,989	4,632	145.99	6,517	7,883
145.48	5,999	4,692	146.00	6,527	7,949
145.49	6,009	4,752	146.01	6,538	8,014
145.50	6,020	4,812	146.02	6,548	8,079
145.51	6,030	4,872	146.03	6,559	8,145
145.52	6,040	4,933	146.04	6,570	8,211
145.53	6,050	4,993	146.05	6,581	8,276
145.54	6,060	5,054	146.06	6,591	8,342
145.55	6,070	5,114	146.07	6,602	8,408
145.56	6,080	5,175	146.08	6,613	8,474
145.57	6,091	5,236	146.09	6,623	8,540
145.58	6,101	5,297	146.10	6,634	8,607
145.59	6,111	5,358	146.11	6,645	8,673
145.60	6,121	5,419	146.12	6,656	8,740
145.61	6,131	5,480	146.13	6,666	8,806
145.62	6,141	5,542	146.14	6,677	8,873
145.63	6,151	5,603	146.15	6,688	8,940
145.64	6,162	5,665	146.16	6,699	9,007
145.65	6,172	5,726	146.17	6,709	9,074
145.66	6,182	5,788	146.18	6,720	9,141
145.67	6,192	5,850	146.19	6,731	9,208
145.68	6,202	5,912	146.20	6,741	9,276
145.69	6,212	5,974	146.21	6,752	9,343
145.70	6,223	6,036	146.22	6,763	9,411
145.71	6,233	6,099	146.23	6,774	9,478
145.72	6,243	6,161	146.24	6,784	9,546
145.73	6,253	6,223	146.25	6,795	9,614
145.74	6,263	6,286	146.26	6,806	9,682
145.75	6,273	6,349	146.27	6,816	9,750
145.76	6,283	6,411	146.28	6,827	9,818
145.77	6,294	6,474	146.29	6,838	9,887
145.78	6,304	6,537	146.30	6,849	9,955
145.79	6,314	6,600	146.31	6,859	10,024
145.80	6,324	6,664	146.32	6,870	10,092
145.81	6,334	6,727	146.33	6,881	10,161
145.82	6,344	6,790	146.34	6,891	10,230
145.83	6,354	6,854	146.35	6,902	10,299
145.84	6,365	6,917	146.36	6,913	10,368
145.85	6,375	6,981	146.37	6,924	10,437

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.38	6,934	10,506	146.90	7,492	14,257
146.39	6,945	10,576	146.91	7,503	14,332
146.40	6,956	10,645	146.92	7,513	14,407
146.41	6,967	10,715	146.93	7,524	14,482
146.42	6,977	10,785	146.94	7,535	14,558
146.43	6,988	10,854	146.95	7,545	14,633
146.44	6,999	10,924	146.96	7,556	14,709
146.45	7,009	10,994	146.97	7,567	14,784
146.46	7,020	11,065	146.98	7,578	14,860
146.47	7,031	11,135	146.99	7,588	14,936
146.48	7,042	11,205	147.00	7,599	15,012
146.49	7,052	11,276	147.01	7,610	15,088
146.50	7,063	11,346	147.02	7,622	15,164
146.51	7,074	11,417	147.03	7,633	15,240
146.52	7,084	11,488	147.04	7,644	15,317
146.53	7,095	11,559	147.05	7,655	15,393
146.54	7,106	11,630	147.06	7,667	15,470
146.55	7,117	11,701	147.07	7,678	15,546
146.56	7,127	11,772	147.08	7,689	15,623
146.57	7,138	11,843	147.09	7,701	15,700
146.58	7,149	11,915	147.10	7,712	15,777
146.59	7,159	11,986	147.11	7,723	15,854
146.60	7,170	12,058	147.12	7,734	15,932
146.61	7,181	12,130	147.13	7,746	16,009
146.62	7,192	12,201	147.14	7,757	16,087
146.63	7,202	12,273	147.15	7,768	16,164
146.64	7,213	12,346	147.16	7,779	16,242
146.65	7,224	12,418	147.17	7,791	16,320
146.66	7,235	12,490	147.18	7,802	16,398
146.67	7,245	12,562	147.19	7,813	16,476
146.68	7,256	12,635	147.20	7,825	16,554
146.69	7,267	12,708	147.21	7,836	16,632
146.70	7,277	12,780	147.22	7,847	16,711
146.71	7,288	12,853	147.23	7,858	16,789
146.72	7,299	12,926	147.24	7,870	16,868
146.73	7,310	12,999	147.25	7,881	16,947
146.74	7,320	13,072	147.26	7,892	17,026
146.75	7,331	13,145	147.27	7,904	17,105
146.76	7,342	13,219	147.28	7,915	17,184
146.77	7,352	13,292	147.29	7,926	17,263
146.78	7,363	13,366	147.30	7,937	17,342
146.79	7,374	13,440	147.31	7,949	17,422
146.80	7,385	13,513	147.32	7,960	17,501
146.81	7,395	13,587	147.33	7,971	17,581
146.82	7,406	13,661	147.34	7,983	17,661
146.83	7,417	13,735	147.35	7,994	17,740
146.84	7,427	13,810	147.36	8,005	17,820
146.85	7,438	13,884	147.37	8,016	17,901
146.86	7,449	13,958	147.38	8,028	17,981
146.87	7,460	14,033	147.39	8,039	18,061
146.88	7,470	14,108	147.40	8,050	18,142
146.89	7,481	14,182	147.41	8,061	18,222

Stage-Area-Storage for Pond B-23: Basin #23 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.42	8,073	18,303
147.43	8,084	18,384
147.44	8,095	18,464
147.45	8,107	18,545
147.46	8,118	18,627
147.47	8,129	18,708
147.48	8,140	18,789
147.49	8,152	18,871
147.50	8,163	18,952
147.51	8,174	19,034
147.52	8,186	19,116
147.53	8,197	19,198
147.54	8,208	19,280
147.55	8,219	19,362
147.56	8,231	19,444
147.57	8,242	19,526
147.58	8,253	19,609
147.59	8,265	19,691
147.60	8,276	19,774
147.61	8,287	19,857
147.62	8,298	19,940
147.63	8,310	20,023
147.64	8,321	20,106
147.65	8,332	20,189
147.66	8,343	20,273
147.67	8,355	20,356
147.68	8,366	20,440
147.69	8,377	20,524
147.70	8,389	20,607
147.71	8,400	20,691
147.72	8,411	20,775
147.73	8,422	20,860
147.74	8,434	20,944
147.75	8,445	21,028
147.76	8,456	21,113
147.77	8,468	21,197
147.78	8,479	21,282
147.79	8,490	21,367
147.80	8,501	21,452
147.81	8,513	21,537
147.82	8,524	21,622
147.83	8,535	21,707
147.84	8,547	21,793
147.85	8,558	21,878
147.86	8,569	21,964
147.87	8,580	22,050
147.88	8,592	22,136
147.89	8,603	22,222
147.90	8,614	22,308
147.91	8,625	22,394
147.92	8,637	22,480
147.93	8,648	22,567
147.94	8,659	22,653
147.95	8,671	22,740
147.96	8,682	22,827
147.97	8,693	22,913
147.98	8,704	23,000
147.99	8,716	23,087
148.00	**8,727**	**23,175**

Summary for Pond B-24: Basin #24

Inflow Area = 2.408 ac, 37.46% Impervious, Inflow Depth = 9.05" for Future 100 yr event
Inflow = 22.11 cfs @ 12.17 hrs, Volume= 1.817 af
Outflow = 13.31 cfs @ 12.30 hrs, Volume= 1.721 af, Atten= 40%, Lag= 7.7 min
Primary = 13.31 cfs @ 12.30 hrs, Volume= 1.721 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 147.50' @ 12.30 hrs Surf.Area= 9,878 sf Storage= 24,024 cf

Plug-Flow detention time= 156.4 min calculated for 1.721 af (95% of inflow)
Center-of-Mass det. time= 125.8 min (904.4 - 778.6)

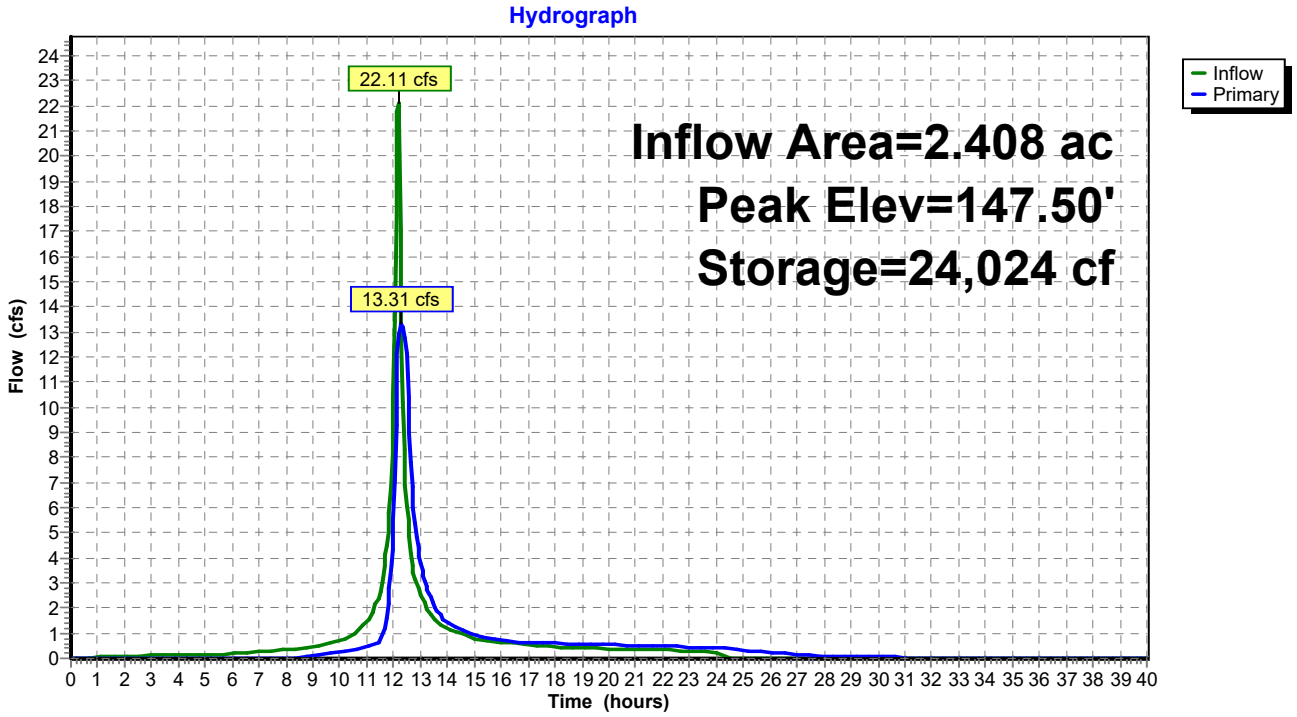
Volume	Invert	Avail.Storage	Storage Description
#1	144.30'	40,061 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
144.30	0	0	0
145.00	7,331	2,566	2,566
146.00	8,327	7,829	10,395
147.00	9,353	8,840	19,235
148.00	10,406	9,880	29,114
149.00	11,488	10,947	40,061

Device	Routing	Invert	Outlet Devices
#1	Primary	144.30'	**18.0" Round Culvert** L= 22.0' Ke= 0.500 Inlet / Outlet Invert= 144.30' / 143.04' S= 0.0573 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	145.17'	**5.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.31 cfs @ 12.30 hrs HW=147.50' (Free Discharge)
- **1=Culvert** (Inlet Controls 13.31 cfs @ 7.53 fps)
  - **2=Orifice/Grate** (Passes < 0.96 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 17.09 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-24: Basin #24



Stage-Discharge for Pond B-24: Basin #24

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
144.30	0.00	144.82	0.00	145.34	0.07	145.86	0.46
144.31	0.00	144.83	0.00	145.35	0.08	145.87	0.46
144.32	0.00	144.84	0.00	145.36	0.09	145.88	0.47
144.33	0.00	144.85	0.00	145.37	0.10	145.89	0.47
144.34	0.00	144.86	0.00	145.38	0.11	145.90	0.47
144.35	0.00	144.87	0.00	145.39	0.12	145.91	0.48
144.36	0.00	144.88	0.00	145.40	0.13	145.92	0.48
144.37	0.00	144.89	0.00	145.41	0.14	145.93	0.49
144.38	0.00	144.90	0.00	145.42	0.15	145.94	0.49
144.39	0.00	144.91	0.00	145.43	0.16	145.95	0.50
144.40	0.00	144.92	0.00	145.44	0.17	145.96	0.50
144.41	0.00	144.93	0.00	145.45	0.18	145.97	0.51
144.42	0.00	144.94	0.00	145.46	0.19	145.98	0.51
144.43	0.00	144.95	0.00	145.47	0.20	145.99	0.51
144.44	0.00	144.96	0.00	145.48	0.21	146.00	0.52
144.45	0.00	144.97	0.00	145.49	0.22	146.01	0.52
144.46	0.00	144.98	0.00	145.50	0.23	146.02	0.53
144.47	0.00	144.99	0.00	145.51	0.24	146.03	0.53
144.48	0.00	145.00	0.00	145.52	0.25	146.04	0.53
144.49	0.00	145.01	0.00	145.53	0.26	146.05	0.54
144.50	0.00	145.02	0.00	145.54	0.27	146.06	0.54
144.51	0.00	145.03	0.00	145.55	0.27	146.07	0.55
144.52	0.00	145.04	0.00	145.56	0.28	146.08	0.55
144.53	0.00	145.05	0.00	145.57	0.29	146.09	0.55
144.54	0.00	145.06	0.00	145.58	0.30	146.10	0.56
144.55	0.00	145.07	0.00	145.59	0.30	146.11	0.56
144.56	0.00	145.08	0.00	145.60	0.31	146.12	0.57
144.57	0.00	145.09	0.00	145.61	0.32	146.13	0.57
144.58	0.00	145.10	0.00	145.62	0.32	146.14	0.57
144.59	0.00	145.11	0.00	145.63	0.33	146.15	0.58
144.60	0.00	145.12	0.00	145.64	0.34	146.16	0.58
144.61	0.00	145.13	0.00	145.65	0.34	146.17	0.58
144.62	0.00	145.14	0.00	145.66	0.35	146.18	0.59
144.63	0.00	145.15	0.00	145.67	0.35	146.19	0.59
144.64	0.00	145.16	0.00	145.68	0.36	146.20	0.60
144.65	0.00	145.17	0.00	145.69	0.37	146.21	0.60
144.66	0.00	145.18	0.00	145.70	0.37	146.22	0.60
144.67	0.00	145.19	0.00	145.71	0.38	146.23	0.61
144.68	0.00	145.20	0.00	145.72	0.38	146.24	0.61
144.69	0.00	145.21	0.00	145.73	0.39	146.25	0.61
144.70	0.00	145.22	0.01	145.74	0.39	146.26	0.63
144.71	0.00	145.23	0.01	145.75	0.40	146.27	0.66
144.72	0.00	145.24	0.01	145.76	0.41	146.28	0.69
144.73	0.00	145.25	0.02	145.77	0.41	146.29	0.73
144.74	0.00	145.26	0.02	145.78	0.42	146.30	0.78
144.75	0.00	145.27	0.03	145.79	0.42	146.31	0.83
144.76	0.00	145.28	0.03	145.80	0.43	146.32	0.88
144.77	0.00	145.29	0.04	145.81	0.43	146.33	0.94
144.78	0.00	145.30	0.04	145.82	0.44	146.34	1.00
144.79	0.00	145.31	0.05	145.83	0.44	146.35	1.06
144.80	0.00	145.32	0.06	145.84	0.45	146.36	1.13
144.81	0.00	145.33	0.07	145.85	0.45	146.37	1.19

Stage-Discharge for Pond B-24: Basin #24 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
146.38	1.27	146.90	7.44	147.42	13.10	147.94	14.46
146.39	1.34	146.91	7.59	147.43	13.13	147.95	14.49
146.40	1.42	146.92	7.75	147.44	13.15	147.96	14.51
146.41	1.50	146.93	7.90	147.45	13.18	147.97	14.54
146.42	1.58	146.94	8.06	147.46	13.21	147.98	14.56
146.43	1.66	146.95	8.22	147.47	13.24	147.99	14.59
146.44	1.75	146.96	8.37	147.48	13.26	148.00	14.73
146.45	1.84	146.97	8.53	147.49	13.29	148.01	14.97
146.46	1.93	146.98	8.69	147.50	13.32	148.02	15.27
146.47	2.02	146.99	8.85	147.51	13.35	148.03	15.63
146.48	2.12	147.00	9.01	147.52	13.37	148.04	16.02
146.49	2.21	147.01	9.18	147.53	13.40	148.05	16.46
146.50	2.31	147.02	9.34	147.54	13.43	148.06	16.94
146.51	2.41	147.03	9.50	147.55	13.45	148.07	17.44
146.52	2.51	147.04	9.67	147.56	13.48	148.08	17.98
146.53	2.62	147.05	9.83	147.57	13.51	148.09	18.55
146.54	2.72	147.06	10.00	147.58	13.53	148.10	19.15
146.55	2.83	147.07	10.17	147.59	13.56	148.11	19.78
146.56	2.94	147.08	10.34	147.60	13.59	148.12	20.43
146.57	3.05	147.09	10.51	147.61	13.61	148.13	21.10
146.58	3.16	147.10	10.68	147.62	13.64	148.14	21.80
146.59	3.27	147.11	10.85	147.63	13.67	148.15	22.53
146.60	3.39	147.12	11.02	147.64	13.69	148.16	23.27
146.61	3.50	147.13	11.19	147.65	13.72	148.17	24.04
146.62	3.62	147.14	11.36	147.66	13.75	148.18	24.83
146.63	3.74	147.15	11.54	147.67	13.77	148.19	25.64
146.64	3.86	147.16	11.71	147.68	13.80	148.20	26.51
146.65	3.98	147.17	11.89	147.69	13.83	148.21	27.41
146.66	4.11	147.18	12.07	147.70	13.85	148.22	28.33
146.67	4.23	147.19	12.24	147.71	13.88	148.23	29.28
146.68	4.36	147.20	12.42	147.72	13.90	148.24	30.25
146.69	4.49	147.21	12.51	147.73	13.93	148.25	31.25
146.70	4.61	147.22	12.53	147.74	13.96	148.26	32.27
146.71	4.74	147.23	12.56	147.75	13.98	148.27	33.32
146.72	4.88	147.24	12.59	147.76	14.01	148.28	34.39
146.73	5.01	147.25	12.62	147.77	14.03	148.29	35.48
146.74	5.14	147.26	12.65	147.78	14.06	148.30	36.60
146.75	5.28	147.27	12.68	147.79	14.08	148.31	37.75
146.76	5.41	147.28	12.71	147.80	14.11	148.32	38.92
146.77	5.55	147.29	12.73	147.81	14.14	148.33	40.11
146.78	5.69	147.30	12.76	147.82	14.16	148.34	41.33
146.79	5.83	147.31	12.79	147.83	14.19	148.35	42.57
146.80	5.97	147.32	12.82	147.84	14.21	148.36	43.84
146.81	6.11	147.33	12.85	147.85	14.24	148.37	45.13
146.82	6.26	147.34	12.88	147.86	14.26	148.38	46.44
146.83	6.40	147.35	12.90	147.87	14.29	148.39	47.78
146.84	6.55	147.36	12.93	147.88	14.31	148.40	49.17
146.85	6.69	147.37	12.96	147.89	14.34	148.41	50.58
146.86	6.84	147.38	12.99	147.90	14.36	148.42	52.03
146.87	6.99	147.39	13.02	147.91	14.39	148.43	53.49
146.88	7.14	147.40	13.04	147.92	14.41	148.44	54.99
146.89	7.29	147.41	13.07	147.93	14.44	148.45	56.51

Stage-Discharge for Pond B-24: Basin #24 (continued)

Elevation (feet)	Primary (cfs)
148.46	58.05
148.47	59.62
148.48	61.22
148.49	62.85
148.50	64.50
148.51	66.18
148.52	67.88
148.53	69.61
148.54	71.37
148.55	73.15
148.56	74.96
148.57	76.80
148.58	78.67
148.59	80.56
148.60	82.21
148.61	83.87
148.62	85.55
148.63	87.24
148.64	88.94
148.65	90.66
148.66	92.39
148.67	94.13
148.68	95.88
148.69	97.65
148.70	99.43
148.71	101.23
148.72	103.03
148.73	104.85
148.74	106.68
148.75	108.53
148.76	110.38
148.77	112.25
148.78	114.13
148.79	116.02
148.80	117.96
148.81	119.92
148.82	121.88
148.83	123.87
148.84	125.86
148.85	127.87
148.86	129.89
148.87	131.92
148.88	133.97
148.89	136.03
148.90	138.10
148.91	140.18
148.92	142.28
148.93	144.39
148.94	146.52
148.95	148.65
148.96	150.80
148.97	152.96
148.98	155.14
148.99	157.32
149.00	**159.47**

Stage-Area-Storage for Pond B-24: Basin #24

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.30	0	0	144.82	5,446	1,416
144.31	105	1	144.83	5,551	1,471
144.32	209	2	144.84	5,655	1,527
144.33	314	5	144.85	5,760	1,584
144.34	419	8	144.86	5,865	1,642
144.35	524	13	144.87	5,970	1,701
144.36	628	19	144.88	6,074	1,762
144.37	733	26	144.89	6,179	1,823
144.38	838	34	144.90	6,284	1,885
144.39	943	42	144.91	6,388	1,948
144.40	1,047	52	144.92	6,493	2,013
144.41	1,152	63	144.93	6,598	2,078
144.42	1,257	75	144.94	6,703	2,145
144.43	1,361	88	144.95	6,807	2,212
144.44	1,466	103	144.96	6,912	2,281
144.45	1,571	118	144.97	7,017	2,351
144.46	1,676	134	144.98	7,122	2,421
144.47	1,780	151	144.99	7,226	2,493
144.48	1,885	170	145.00	7,331	2,566
144.49	1,990	189	145.01	7,341	2,639
144.50	2,095	209	145.02	7,351	2,713
144.51	2,199	231	145.03	7,361	2,786
144.52	2,304	253	145.04	7,371	2,860
144.53	2,409	277	145.05	7,381	2,934
144.54	2,513	302	145.06	7,391	3,008
144.55	2,618	327	145.07	7,401	3,081
144.56	2,723	354	145.08	7,411	3,156
144.57	2,828	382	145.09	7,421	3,230
144.58	2,932	411	145.10	7,431	3,304
144.59	3,037	440	145.11	7,441	3,378
144.60	3,142	471	145.12	7,451	3,453
144.61	3,247	503	145.13	7,460	3,527
144.62	3,351	536	145.14	7,470	3,602
144.63	3,456	570	145.15	7,480	3,677
144.64	3,561	605	145.16	7,490	3,752
144.65	3,666	641	145.17	7,500	3,827
144.66	3,770	679	145.18	7,510	3,902
144.67	3,875	717	145.19	7,520	3,977
144.68	3,980	756	145.20	7,530	4,052
144.69	4,084	796	145.21	7,540	4,127
144.70	4,189	838	145.22	7,550	4,203
144.71	4,294	880	145.23	7,560	4,278
144.72	4,399	924	145.24	7,570	4,354
144.73	4,503	968	145.25	7,580	4,430
144.74	4,608	1,014	145.26	7,590	4,506
144.75	4,713	1,060	145.27	7,600	4,582
144.76	4,818	1,108	145.28	7,610	4,658
144.77	4,922	1,157	145.29	7,620	4,734
144.78	5,027	1,206	145.30	7,630	4,810
144.79	5,132	1,257	145.31	7,640	4,886
144.80	5,236	1,309	145.32	7,650	4,963
144.81	5,341	1,362	145.33	7,660	5,039

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.34	7,670	5,116	145.86	8,188	9,239
145.35	7,680	5,193	145.87	8,198	9,321
145.36	7,690	5,270	145.88	8,207	9,403
145.37	7,700	5,346	145.89	8,217	9,485
145.38	7,709	5,424	145.90	8,227	9,567
145.39	7,719	5,501	145.91	8,237	9,649
145.40	7,729	5,578	145.92	8,247	9,732
145.41	7,739	5,655	145.93	8,257	9,814
145.42	7,749	5,733	145.94	8,267	9,897
145.43	7,759	5,810	145.95	8,277	9,980
145.44	7,769	5,888	145.96	8,287	10,063
145.45	7,779	5,966	145.97	8,297	10,145
145.46	7,789	6,043	145.98	8,307	10,229
145.47	7,799	6,121	145.99	8,317	10,312
145.48	7,809	6,199	146.00	8,327	10,395
145.49	7,819	6,278	146.01	8,337	10,478
145.50	7,829	6,356	146.02	8,348	10,562
145.51	7,839	6,434	146.03	8,358	10,645
145.52	7,849	6,513	146.04	8,368	10,729
145.53	7,859	6,591	146.05	8,378	10,812
145.54	7,869	6,670	146.06	8,389	10,896
145.55	7,879	6,749	146.07	8,399	10,980
145.56	7,889	6,827	146.08	8,409	11,064
145.57	7,899	6,906	146.09	8,419	11,148
145.58	7,909	6,985	146.10	8,430	11,233
145.59	7,919	7,064	146.11	8,440	11,317
145.60	7,929	7,144	146.12	8,450	11,401
145.61	7,939	7,223	146.13	8,460	11,486
145.62	7,949	7,303	146.14	8,471	11,571
145.63	7,958	7,382	146.15	8,481	11,655
145.64	7,968	7,462	146.16	8,491	11,740
145.65	7,978	7,541	146.17	8,501	11,825
145.66	7,988	7,621	146.18	8,512	11,910
145.67	7,998	7,701	146.19	8,522	11,995
145.68	8,008	7,781	146.20	8,532	12,081
145.69	8,018	7,861	146.21	8,542	12,166
145.70	8,028	7,942	146.22	8,553	12,252
145.71	8,038	8,022	146.23	8,563	12,337
145.72	8,048	8,102	146.24	8,573	12,423
145.73	8,058	8,183	146.25	8,584	12,509
145.74	8,068	8,263	146.26	8,594	12,595
145.75	8,078	8,344	146.27	8,604	12,681
145.76	8,088	8,425	146.28	8,614	12,767
145.77	8,098	8,506	146.29	8,625	12,853
145.78	8,108	8,587	146.30	8,635	12,939
145.79	8,118	8,668	146.31	8,645	13,026
145.80	8,128	8,749	146.32	8,655	13,112
145.81	8,138	8,831	146.33	8,666	13,199
145.82	8,148	8,912	146.34	8,676	13,285
145.83	8,158	8,994	146.35	8,686	13,372
145.84	8,168	9,075	146.36	8,696	13,459
145.85	8,178	9,157	146.37	8,707	13,546

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.38	8,717	13,633	146.90	9,250	18,305
146.39	8,727	13,720	146.91	9,261	18,397
146.40	8,737	13,808	146.92	9,271	18,490
146.41	8,748	13,895	146.93	9,281	18,583
146.42	8,758	13,983	146.94	9,291	18,676
146.43	8,768	14,070	146.95	9,302	18,768
146.44	8,778	14,158	146.96	9,312	18,862
146.45	8,789	14,246	146.97	9,322	18,955
146.46	8,799	14,334	146.98	9,332	19,048
146.47	8,809	14,422	146.99	9,343	19,141
146.48	8,819	14,510	147.00	9,353	19,235
146.49	8,830	14,598	147.01	9,364	19,328
146.50	8,840	14,687	147.02	9,374	19,422
146.51	8,850	14,775	147.03	9,385	19,516
146.52	8,861	14,864	147.04	9,395	19,610
146.53	8,871	14,952	147.05	9,406	19,704
146.54	8,881	15,041	147.06	9,416	19,798
146.55	8,891	15,130	147.07	9,427	19,892
146.56	8,902	15,219	147.08	9,437	19,986
146.57	8,912	15,308	147.09	9,448	20,081
146.58	8,922	15,397	147.10	9,458	20,175
146.59	8,932	15,486	147.11	9,469	20,270
146.60	8,943	15,576	147.12	9,479	20,365
146.61	8,953	15,665	147.13	9,490	20,460
146.62	8,963	15,755	147.14	9,500	20,555
146.63	8,973	15,844	147.15	9,511	20,650
146.64	8,984	15,934	147.16	9,521	20,745
146.65	8,994	16,024	147.17	9,532	20,840
146.66	9,004	16,114	147.18	9,543	20,935
146.67	9,014	16,204	147.19	9,553	21,031
146.68	9,025	16,294	147.20	9,564	21,127
146.69	9,035	16,385	147.21	9,574	21,222
146.70	9,045	16,475	147.22	9,585	21,318
146.71	9,055	16,566	147.23	9,595	21,414
146.72	9,066	16,656	147.24	9,606	21,510
146.73	9,076	16,747	147.25	9,616	21,606
146.74	9,086	16,838	147.26	9,627	21,702
146.75	9,097	16,929	147.27	9,637	21,799
146.76	9,107	17,020	147.28	9,648	21,895
146.77	9,117	17,111	147.29	9,658	21,991
146.78	9,127	17,202	147.30	9,669	22,088
146.79	9,138	17,293	147.31	9,679	22,185
146.80	9,148	17,385	147.32	9,690	22,282
146.81	9,158	17,476	147.33	9,700	22,379
146.82	9,168	17,568	147.34	9,711	22,476
146.83	9,179	17,660	147.35	9,722	22,573
146.84	9,189	17,752	147.36	9,732	22,670
146.85	9,199	17,843	147.37	9,743	22,768
146.86	9,209	17,935	147.38	9,753	22,865
146.87	9,220	18,028	147.39	9,764	22,963
146.88	9,230	18,120	147.40	9,774	23,060
146.89	9,240	18,212	147.41	9,785	23,158

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.42	9,795	23,256	147.94	10,343	28,492
147.43	9,806	23,354	147.95	10,353	28,595
147.44	9,816	23,452	147.96	10,364	28,699
147.45	9,827	23,550	147.97	10,374	28,803
147.46	9,837	23,649	147.98	10,385	28,906
147.47	9,848	23,747	147.99	10,395	29,010
147.48	9,858	23,846	148.00	10,406	29,114
147.49	9,869	23,944	148.01	10,417	29,218
147.50	9,880	24,043	148.02	10,428	29,323
147.51	9,890	24,142	148.03	10,438	29,427
147.52	9,901	24,241	148.04	10,449	29,531
147.53	9,911	24,340	148.05	10,460	29,636
147.54	9,922	24,439	148.06	10,471	29,741
147.55	9,932	24,538	148.07	10,482	29,845
147.56	9,943	24,638	148.08	10,493	29,950
147.57	9,953	24,737	148.09	10,503	30,055
147.58	9,964	24,837	148.10	10,514	30,160
147.59	9,974	24,936	148.11	10,525	30,266
147.60	9,985	25,036	148.12	10,536	30,371
147.61	9,995	25,136	148.13	10,547	30,476
147.62	10,006	25,236	148.14	10,557	30,582
147.63	10,016	25,336	148.15	10,568	30,687
147.64	10,027	25,436	148.16	10,579	30,793
147.65	10,037	25,537	148.17	10,590	30,899
147.66	10,048	25,637	148.18	10,601	31,005
147.67	10,059	25,738	148.19	10,612	31,111
147.68	10,069	25,838	148.20	10,622	31,217
147.69	10,080	25,939	148.21	10,633	31,323
147.70	10,090	26,040	148.22	10,644	31,430
147.71	10,101	26,141	148.23	10,655	31,536
147.72	10,111	26,242	148.24	10,666	31,643
147.73	10,122	26,343	148.25	10,677	31,750
147.74	10,132	26,444	148.26	10,687	31,856
147.75	10,143	26,546	148.27	10,698	31,963
147.76	10,153	26,647	148.28	10,709	32,070
147.77	10,164	26,749	148.29	10,720	32,178
147.78	10,174	26,851	148.30	10,731	32,285
147.79	10,185	26,952	148.31	10,741	32,392
147.80	10,195	27,054	148.32	10,752	32,500
147.81	10,206	27,156	148.33	10,763	32,607
147.82	10,216	27,258	148.34	10,774	32,715
147.83	10,227	27,361	148.35	10,785	32,823
147.84	10,238	27,463	148.36	10,796	32,931
147.85	10,248	27,565	148.37	10,806	33,039
147.86	10,259	27,668	148.38	10,817	33,147
147.87	10,269	27,770	148.39	10,828	33,255
147.88	10,280	27,873	148.40	10,839	33,363
147.89	10,290	27,976	148.41	10,850	33,472
147.90	10,301	28,079	148.42	10,860	33,580
147.91	10,311	28,182	148.43	10,871	33,689
147.92	10,322	28,285	148.44	10,882	33,798
147.93	10,332	28,389	148.45	10,893	33,907

Stage-Area-Storage for Pond B-24: Basin #24 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.46	10,904	34,016
148.47	10,915	34,125
148.48	10,925	34,234
148.49	10,936	34,343
148.50	10,947	34,453
148.51	10,958	34,562
148.52	10,969	34,672
148.53	10,979	34,781
148.54	10,990	34,891
148.55	11,001	35,001
148.56	11,012	35,111
148.57	11,023	35,222
148.58	11,034	35,332
148.59	11,044	35,442
148.60	11,055	35,553
148.61	11,066	35,663
148.62	11,077	35,774
148.63	11,088	35,885
148.64	11,098	35,996
148.65	11,109	36,107
148.66	11,120	36,218
148.67	11,131	36,329
148.68	11,142	36,441
148.69	11,153	36,552
148.70	11,163	36,664
148.71	11,174	36,775
148.72	11,185	36,887
148.73	11,196	36,999
148.74	11,207	37,111
148.75	11,218	37,223
148.76	11,228	37,335
148.77	11,239	37,448
148.78	11,250	37,560
148.79	11,261	37,673
148.80	11,272	37,785
148.81	11,282	37,898
148.82	11,293	38,011
148.83	11,304	38,124
148.84	11,315	38,237
148.85	11,326	38,350
148.86	11,337	38,464
148.87	11,347	38,577
148.88	11,358	38,691
148.89	11,369	38,804
148.90	11,380	38,918
148.91	11,391	39,032
148.92	11,401	39,146
148.93	11,412	39,260
148.94	11,423	39,374
148.95	11,434	39,488
148.96	11,445	39,603
148.97	11,456	39,717
148.98	11,466	39,832
148.99	11,477	39,947
149.00	**11,488**	**40,061**

Summary for Pond B-25: Basin #25

Inflow Area = 2.500 ac, 34.96% Impervious, Inflow Depth = 8.98" for Future 100 yr event
Inflow = 22.85 cfs @ 12.17 hrs, Volume= 1.870 af
Outflow = 12.82 cfs @ 12.31 hrs, Volume= 1.781 af, Atten= 44%, Lag= 8.5 min
Primary = 12.82 cfs @ 12.31 hrs, Volume= 1.781 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 147.51' @ 12.31 hrs Surf.Area= 7,917 sf Storage= 23,675 cf

Plug-Flow detention time= 149.1 min calculated for 1.781 af (95% of inflow)
Center-of-Mass det. time= 121.2 min (901.6 - 780.4)

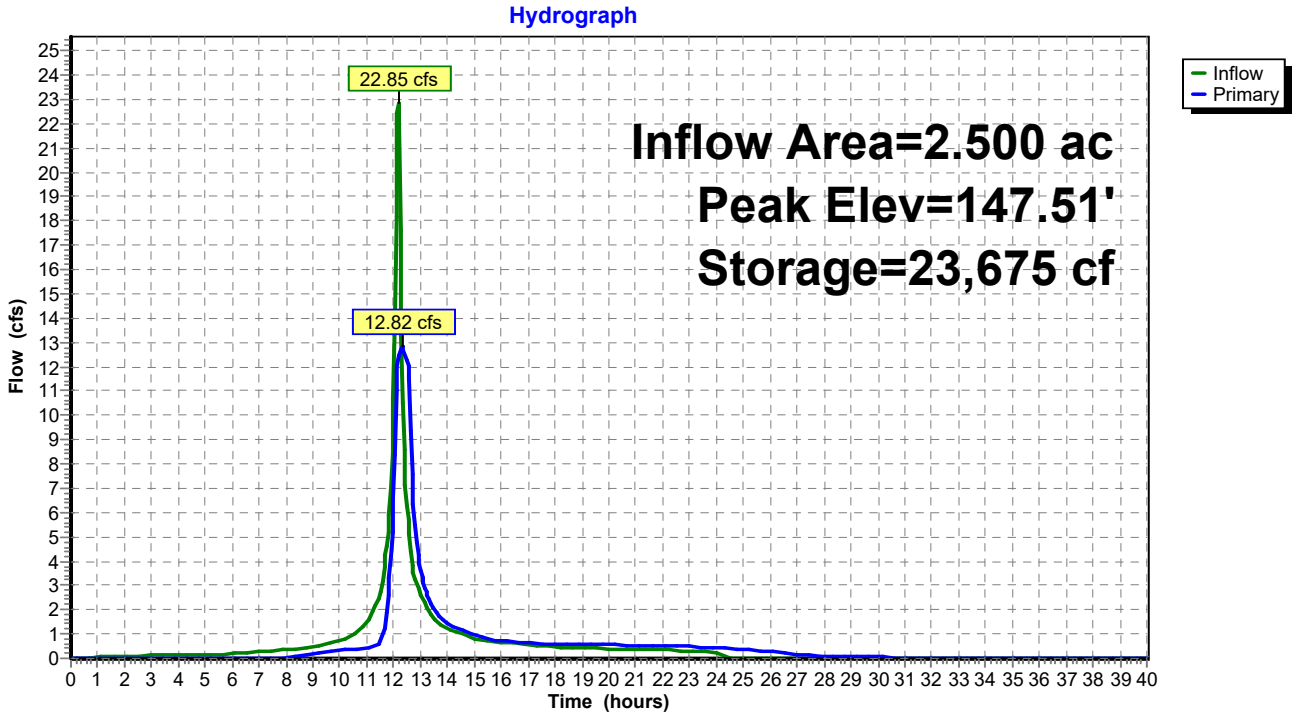
Volume	Invert	Avail.Storage	Storage Description
#1	143.30'	36,587 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
143.30	0	0	0
144.00	4,702	1,646	1,646
145.00	5,584	5,143	6,789
146.00	6,492	6,038	12,827
147.00	7,428	6,960	19,787
148.00	8,393	7,911	27,697
149.00	9,386	8,890	36,587

Device	Routing	Invert	Outlet Devices
#1	Primary	143.30'	**18.0" Round Culvert** L= 186.0' Ke= 0.500 Inlet / Outlet Invert= 143.30' / 142.00' S= 0.0070 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	144.42'	**4.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	145.95'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	147.96'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.81 cfs @ 12.31 hrs HW=147.50' (Free Discharge)
- **1=Culvert** (Barrel Controls 12.81 cfs @ 7.25 fps)
  - **2=Orifice/Grate** (Passes < 0.90 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 23.26 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-25: Basin #25



Stage-Discharge for Pond B-25: Basin #25

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
143.30	0.00	143.82	0.00	144.34	0.00	144.86	0.27
143.31	0.00	143.83	0.00	144.35	0.00	144.87	0.27
143.32	0.00	143.84	0.00	144.36	0.00	144.88	0.28
143.33	0.00	143.85	0.00	144.37	0.00	144.89	0.28
143.34	0.00	143.86	0.00	144.38	0.00	144.90	0.29
143.35	0.00	143.87	0.00	144.39	0.00	144.91	0.29
143.36	0.00	143.88	0.00	144.40	0.00	144.92	0.30
143.37	0.00	143.89	0.00	144.41	0.00	144.93	0.30
143.38	0.00	143.90	0.00	144.42	0.00	144.94	0.31
143.39	0.00	143.91	0.00	144.43	0.00	144.95	0.31
143.40	0.00	143.92	0.00	144.44	0.00	144.96	0.32
143.41	0.00	143.93	0.00	144.45	0.00	144.97	0.32
143.42	0.00	143.94	0.00	144.46	0.00	144.98	0.32
143.43	0.00	143.95	0.00	144.47	0.01	144.99	0.33
143.44	0.00	143.96	0.00	144.48	0.01	145.00	0.33
143.45	0.00	143.97	0.00	144.49	0.01	145.01	0.34
143.46	0.00	143.98	0.00	144.50	0.02	145.02	0.34
143.47	0.00	143.99	0.00	144.51	0.02	145.03	0.35
143.48	0.00	144.00	0.00	144.52	0.03	145.04	0.35
143.49	0.00	144.01	0.00	144.53	0.03	145.05	0.35
143.50	0.00	144.02	0.00	144.54	0.04	145.06	0.36
143.51	0.00	144.03	0.00	144.55	0.04	145.07	0.36
143.52	0.00	144.04	0.00	144.56	0.05	145.08	0.37
143.53	0.00	144.05	0.00	144.57	0.05	145.09	0.37
143.54	0.00	144.06	0.00	144.58	0.06	145.10	0.37
143.55	0.00	144.07	0.00	144.59	0.07	145.11	0.38
143.56	0.00	144.08	0.00	144.60	0.08	145.12	0.38
143.57	0.00	144.09	0.00	144.61	0.08	145.13	0.38
143.58	0.00	144.10	0.00	144.62	0.09	145.14	0.39
143.59	0.00	144.11	0.00	144.63	0.10	145.15	0.39
143.60	0.00	144.12	0.00	144.64	0.11	145.16	0.40
143.61	0.00	144.13	0.00	144.65	0.12	145.17	0.40
143.62	0.00	144.14	0.00	144.66	0.12	145.18	0.40
143.63	0.00	144.15	0.00	144.67	0.13	145.19	0.41
143.64	0.00	144.16	0.00	144.68	0.14	145.20	0.41
143.65	0.00	144.17	0.00	144.69	0.15	145.21	0.41
143.66	0.00	144.18	0.00	144.70	0.16	145.22	0.42
143.67	0.00	144.19	0.00	144.71	0.17	145.23	0.42
143.68	0.00	144.20	0.00	144.72	0.18	145.24	0.42
143.69	0.00	144.21	0.00	144.73	0.19	145.25	0.43
143.70	0.00	144.22	0.00	144.74	0.19	145.26	0.43
143.71	0.00	144.23	0.00	144.75	0.20	145.27	0.43
143.72	0.00	144.24	0.00	144.76	0.21	145.28	0.44
143.73	0.00	144.25	0.00	144.77	0.22	145.29	0.44
143.74	0.00	144.26	0.00	144.78	0.22	145.30	0.44
143.75	0.00	144.27	0.00	144.79	0.23	145.31	0.45
143.76	0.00	144.28	0.00	144.80	0.23	145.32	0.45
143.77	0.00	144.29	0.00	144.81	0.24	145.33	0.45
143.78	0.00	144.30	0.00	144.82	0.25	145.34	0.46
143.79	0.00	144.31	0.00	144.83	0.25	145.35	0.46
143.80	0.00	144.32	0.00	144.84	0.26	145.36	0.46
143.81	0.00	144.33	0.00	144.85	0.26	145.37	0.46

Stage-Discharge for Pond B-25: Basin #25 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
145.38	0.47	145.90	0.60	146.42	4.83	146.94	11.88
145.39	0.47	145.91	0.61	146.43	4.96	146.95	11.90
145.40	0.47	145.92	0.61	146.44	5.10	146.96	11.91
145.41	0.48	145.93	0.61	146.45	5.23	146.97	11.93
145.42	0.48	145.94	0.61	146.46	5.37	146.98	11.95
145.43	0.48	145.95	0.62	146.47	5.50	146.99	11.97
145.44	0.49	145.96	0.63	146.48	5.64	147.00	11.98
145.45	0.49	145.97	0.66	146.49	5.78	147.01	12.00
145.46	0.49	145.98	0.69	146.50	5.92	147.02	12.02
145.47	0.49	145.99	0.73	146.51	6.06	147.03	12.03
145.48	0.50	146.00	0.77	146.52	6.20	147.04	12.05
145.49	0.50	146.01	0.82	146.53	6.35	147.05	12.07
145.50	0.50	146.02	0.87	146.54	6.49	147.06	12.09
145.51	0.51	146.03	0.93	146.55	6.64	147.07	12.10
145.52	0.51	146.04	0.99	146.56	6.78	147.08	12.12
145.53	0.51	146.05	1.05	146.57	6.93	147.09	12.14
145.54	0.51	146.06	1.12	146.58	7.08	147.10	12.15
145.55	0.52	146.07	1.18	146.59	7.23	147.11	12.17
145.56	0.52	146.08	1.25	146.60	7.38	147.12	12.19
145.57	0.52	146.09	1.33	146.61	7.53	147.13	12.20
145.58	0.52	146.10	1.40	146.62	7.69	147.14	12.22
145.59	0.53	146.11	1.48	146.63	7.84	147.15	12.24
145.60	0.53	146.12	1.56	146.64	8.00	147.16	12.25
145.61	0.53	146.13	1.65	146.65	8.15	147.17	12.27
145.62	0.54	146.14	1.73	146.66	8.31	147.18	12.29
145.63	0.54	146.15	1.82	146.67	8.47	147.19	12.30
145.64	0.54	146.16	1.91	146.68	8.63	147.20	12.32
145.65	0.54	146.17	2.00	146.69	8.79	147.21	12.34
145.66	0.55	146.18	2.09	146.70	8.95	147.22	12.35
145.67	0.55	146.19	2.19	146.71	9.11	147.23	12.37
145.68	0.55	146.20	2.29	146.72	9.27	147.24	12.39
145.69	0.55	146.21	2.38	146.73	9.43	147.25	12.40
145.70	0.56	146.22	2.49	146.74	9.60	147.26	12.42
145.71	0.56	146.23	2.59	146.75	9.76	147.27	12.44
145.72	0.56	146.24	2.69	146.76	9.93	147.28	12.45
145.73	0.56	146.25	2.80	146.77	10.10	147.29	12.47
145.74	0.57	146.26	2.91	146.78	10.26	147.30	12.49
145.75	0.57	146.27	3.02	146.79	10.43	147.31	12.50
145.76	0.57	146.28	3.13	146.80	10.60	147.32	12.52
145.77	0.57	146.29	3.24	146.81	10.77	147.33	12.54
145.78	0.58	146.30	3.35	146.82	10.94	147.34	12.55
145.79	0.58	146.31	3.47	146.83	11.12	147.35	12.57
145.80	0.58	146.32	3.59	146.84	11.29	147.36	12.58
145.81	0.58	146.33	3.70	146.85	11.46	147.37	12.60
145.82	0.59	146.34	3.82	146.86	11.64	147.38	12.62
145.83	0.59	146.35	3.94	146.87	11.76	147.39	12.63
145.84	0.59	146.36	4.07	146.88	11.78	147.40	12.65
145.85	0.59	146.37	4.19	146.89	11.79	147.41	12.67
145.86	0.60	146.38	4.32	146.90	11.81	147.42	12.68
145.87	0.60	146.39	4.44	146.91	11.83	147.43	12.70
145.88	0.60	146.40	4.57	146.92	11.85	147.44	12.71
145.89	0.60	146.41	4.70	146.93	11.86	147.45	12.73

Stage-Discharge for Pond B-25: Basin #25 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.46	12.75	147.98	13.89	148.50	68.06
147.47	12.76	147.99	14.18	148.51	69.81
147.48	12.78	148.00	14.53	148.52	71.59
147.49	12.79	148.01	14.91	148.53	73.39
147.50	12.81	148.02	15.34	148.54	75.22
147.51	12.83	148.03	15.81	148.55	77.07
147.52	12.84	148.04	16.31	148.56	78.96
147.53	12.86	148.05	16.84	148.57	80.60
147.54	12.87	148.06	17.40	148.58	82.25
147.55	12.89	148.07	17.98	148.59	83.92
147.56	12.91	148.08	18.60	148.60	85.60
147.57	12.92	148.09	19.24	148.61	87.30
147.58	12.94	148.10	19.91	148.62	89.01
147.59	12.95	148.11	20.60	148.63	90.73
147.60	12.97	148.12	21.31	148.64	92.46
147.61	12.99	148.13	22.05	148.65	94.21
147.62	13.00	148.14	22.81	148.66	95.97
147.63	13.02	148.15	23.59	148.67	97.74
147.64	13.03	148.16	24.39	148.68	99.53
147.65	13.05	148.17	25.25	148.69	101.32
147.66	13.06	148.18	26.14	148.70	103.13
147.67	13.08	148.19	27.05	148.71	104.96
147.68	13.10	148.20	27.99	148.72	106.79
147.69	13.11	148.21	28.95	148.73	108.64
147.70	13.13	148.22	29.94	148.74	110.50
147.71	13.14	148.23	30.96	148.75	112.37
147.72	13.16	148.24	31.99	148.76	114.26
147.73	13.17	148.25	33.06	148.77	116.19
147.74	13.19	148.26	34.14	148.78	118.14
147.75	13.21	148.27	35.26	148.79	120.10
147.76	13.22	148.28	36.39	148.80	122.07
147.77	13.24	148.29	37.55	148.81	124.06
147.78	13.25	148.30	38.74	148.82	126.05
147.79	13.27	148.31	39.94	148.83	128.07
147.80	13.28	148.32	41.18	148.84	130.09
147.81	13.30	148.33	42.43	148.85	132.13
147.82	13.31	148.34	43.72	148.86	134.18
147.83	13.33	148.35	45.02	148.87	136.25
147.84	13.34	148.36	46.35	148.88	138.33
147.85	13.36	148.37	47.73	148.89	140.42
147.86	13.37	148.38	49.14	148.90	142.52
147.87	13.39	148.39	50.57	148.91	144.63
147.88	13.41	148.40	52.03	148.92	146.76
147.89	13.42	148.41	53.51	148.93	148.90
147.90	13.44	148.42	55.02	148.94	151.06
147.91	13.45	148.43	56.56	148.95	153.22
147.92	13.47	148.44	58.12	148.96	155.40
147.93	13.48	148.45	59.71	148.97	157.54
147.94	13.50	148.46	61.33	148.98	159.69
147.95	13.51	148.47	62.97	148.99	161.84
147.96	13.53	148.48	64.64	149.00	**164.01**
147.97	13.66	148.49	66.34		

Stage-Area-Storage for Pond B-25: Basin #25

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
143.30	0	0
143.31	67	0
143.32	134	1
143.33	202	3
143.34	269	5
143.35	336	8
143.36	403	12
143.37	470	16
143.38	537	21
143.39	605	27
143.40	672	34
143.41	739	41
143.42	806	48
143.43	873	57
143.44	940	66
143.45	1,008	76
143.46	1,075	86
143.47	1,142	97
143.48	1,209	109
143.49	1,276	121
143.50	1,343	134
143.51	1,411	148
143.52	1,478	163
143.53	1,545	178
143.54	1,612	193
143.55	1,679	210
143.56	1,746	227
143.57	1,814	245
143.58	1,881	263
143.59	1,948	282
143.60	2,015	302
143.61	2,082	323
143.62	2,149	344
143.63	2,217	366
143.64	2,284	388
143.65	2,351	411
143.66	2,418	435
143.67	2,485	460
143.68	2,553	485
143.69	2,620	511
143.70	2,687	537
143.71	2,754	565
143.72	2,821	592
143.73	2,888	621
143.74	2,956	650
143.75	3,023	680
143.76	3,090	711
143.77	3,157	742
143.78	3,224	774
143.79	3,291	806
143.80	3,359	840
143.81	3,426	874
143.82	3,493	908
143.83	3,560	943
143.84	3,627	979
143.85	3,694	1,016
143.86	3,762	1,053
143.87	3,829	1,091
143.88	3,896	1,130
143.89	3,963	1,169
143.90	4,030	1,209
143.91	4,097	1,250
143.92	4,165	1,291
143.93	4,232	1,333
143.94	4,299	1,376
143.95	4,366	1,419
143.96	4,433	1,463
143.97	4,500	1,508
143.98	4,568	1,553
143.99	4,635	1,599
144.00	4,702	1,646
144.01	4,711	1,693
144.02	4,720	1,740
144.03	4,728	1,787
144.04	4,737	1,834
144.05	4,746	1,882
144.06	4,755	1,929
144.07	4,764	1,977
144.08	4,773	2,025
144.09	4,781	2,072
144.10	4,790	2,120
144.11	4,799	2,168
144.12	4,808	2,216
144.13	4,817	2,264
144.14	4,825	2,313
144.15	4,834	2,361
144.16	4,843	2,409
144.17	4,852	2,458
144.18	4,861	2,506
144.19	4,870	2,555
144.20	4,878	2,604
144.21	4,887	2,653
144.22	4,896	2,701
144.23	4,905	2,750
144.24	4,914	2,800
144.25	4,923	2,849
144.26	4,931	2,898
144.27	4,940	2,947
144.28	4,949	2,997
144.29	4,958	3,046
144.30	4,967	3,096
144.31	4,975	3,146
144.32	4,984	3,195
144.33	4,993	3,245

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.34	5,002	3,295	144.86	5,461	6,016
144.35	5,011	3,345	144.87	5,469	6,070
144.36	5,020	3,396	144.88	5,478	6,125
144.37	5,028	3,446	144.89	5,487	6,180
144.38	5,037	3,496	144.90	5,496	6,235
144.39	5,046	3,547	144.91	5,505	6,290
144.40	5,055	3,597	144.92	5,513	6,345
144.41	5,064	3,648	144.93	5,522	6,400
144.42	5,072	3,698	144.94	5,531	6,455
144.43	5,081	3,749	144.95	5,540	6,511
144.44	5,090	3,800	144.96	5,549	6,566
144.45	5,099	3,851	144.97	5,558	6,622
144.46	5,108	3,902	144.98	5,566	6,677
144.47	5,117	3,953	144.99	5,575	6,733
144.48	5,125	4,004	145.00	5,584	6,789
144.49	5,134	4,056	145.01	5,593	6,845
144.50	5,143	4,107	145.02	5,602	6,901
144.51	5,152	4,158	145.03	5,611	6,957
144.52	5,161	4,210	145.04	5,620	7,013
144.53	5,169	4,262	145.05	5,629	7,069
144.54	5,178	4,313	145.06	5,638	7,125
144.55	5,187	4,365	145.07	5,648	7,182
144.56	5,196	4,417	145.08	5,657	7,238
144.57	5,205	4,469	145.09	5,666	7,295
144.58	5,214	4,521	145.10	5,675	7,352
144.59	5,222	4,573	145.11	5,684	7,408
144.60	5,231	4,626	145.12	5,693	7,465
144.61	5,240	4,678	145.13	5,702	7,522
144.62	5,249	4,730	145.14	5,711	7,579
144.63	5,258	4,783	145.15	5,720	7,637
144.64	5,266	4,836	145.16	5,729	7,694
144.65	5,275	4,888	145.17	5,738	7,751
144.66	5,284	4,941	145.18	5,747	7,809
144.67	5,293	4,994	145.19	5,757	7,866
144.68	5,302	5,047	145.20	5,766	7,924
144.69	5,311	5,100	145.21	5,775	7,981
144.70	5,319	5,153	145.22	5,784	8,039
144.71	5,328	5,206	145.23	5,793	8,097
144.72	5,337	5,260	145.24	5,802	8,155
144.73	5,346	5,313	145.25	5,811	8,213
144.74	5,355	5,367	145.26	5,820	8,271
144.75	5,364	5,420	145.27	5,829	8,329
144.76	5,372	5,474	145.28	5,838	8,388
144.77	5,381	5,528	145.29	5,847	8,446
144.78	5,390	5,582	145.30	5,856	8,505
144.79	5,399	5,636	145.31	5,865	8,563
144.80	5,408	5,690	145.32	5,875	8,622
144.81	5,416	5,744	145.33	5,884	8,681
144.82	5,425	5,798	145.34	5,893	8,740
144.83	5,434	5,852	145.35	5,902	8,799
144.84	5,443	5,907	145.36	5,911	8,858
144.85	5,452	5,961	145.37	5,920	8,917

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.38	5,929	8,976	145.90	6,401	12,182
145.39	5,938	9,036	145.91	6,410	12,246
145.40	5,947	9,095	145.92	6,419	12,310
145.41	5,956	9,154	145.93	6,428	12,374
145.42	5,965	9,214	145.94	6,438	12,439
145.43	5,974	9,274	145.95	6,447	12,503
145.44	5,984	9,334	145.96	6,456	12,568
145.45	5,993	9,393	145.97	6,465	12,632
145.46	6,002	9,453	145.98	6,474	12,697
145.47	6,011	9,513	145.99	6,483	12,762
145.48	6,020	9,574	146.00	6,492	12,827
145.49	6,029	9,634	146.01	6,501	12,892
145.50	6,038	9,694	146.02	6,511	12,957
145.51	6,047	9,755	146.03	6,520	13,022
145.52	6,056	9,815	146.04	6,529	13,087
145.53	6,065	9,876	146.05	6,539	13,152
145.54	6,074	9,936	146.06	6,548	13,218
145.55	6,083	9,997	146.07	6,558	13,283
145.56	6,092	10,058	146.08	6,567	13,349
145.57	6,102	10,119	146.09	6,576	13,415
145.58	6,111	10,180	146.10	6,586	13,481
145.59	6,120	10,241	146.11	6,595	13,546
145.60	6,129	10,303	146.12	6,604	13,612
145.61	6,138	10,364	146.13	6,614	13,679
145.62	6,147	10,425	146.14	6,623	13,745
145.63	6,156	10,487	146.15	6,632	13,811
145.64	6,165	10,548	146.16	6,642	13,877
145.65	6,174	10,610	146.17	6,651	13,944
145.66	6,183	10,672	146.18	6,660	14,010
145.67	6,192	10,734	146.19	6,670	14,077
145.68	6,201	10,796	146.20	6,679	14,144
145.69	6,211	10,858	146.21	6,689	14,211
145.70	6,220	10,920	146.22	6,698	14,278
145.71	6,229	10,982	146.23	6,707	14,345
145.72	6,238	11,045	146.24	6,717	14,412
145.73	6,247	11,107	146.25	6,726	14,479
145.74	6,256	11,169	146.26	6,735	14,546
145.75	6,265	11,232	146.27	6,745	14,614
145.76	6,274	11,295	146.28	6,754	14,681
145.77	6,283	11,358	146.29	6,763	14,749
145.78	6,292	11,420	146.30	6,773	14,816
145.79	6,301	11,483	146.31	6,782	14,884
145.80	6,310	11,546	146.32	6,792	14,952
145.81	6,319	11,610	146.33	6,801	15,020
145.82	6,329	11,673	146.34	6,810	15,088
145.83	6,338	11,736	146.35	6,820	15,156
145.84	6,347	11,800	146.36	6,829	15,224
145.85	6,356	11,863	146.37	6,838	15,293
145.86	6,365	11,927	146.38	6,848	15,361
145.87	6,374	11,990	146.39	6,857	15,430
145.88	6,383	12,054	146.40	6,866	15,498
145.89	6,392	12,118	146.41	6,876	15,567

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.42	6,885	15,636	146.94	7,372	19,343
146.43	6,894	15,705	146.95	7,381	19,416
146.44	6,904	15,774	146.96	7,391	19,490
146.45	6,913	15,843	146.97	7,400	19,564
146.46	6,923	15,912	146.98	7,409	19,638
146.47	6,932	15,981	146.99	7,419	19,712
146.48	6,941	16,051	147.00	7,428	19,787
146.49	6,951	16,120	147.01	7,438	19,861
146.50	6,960	16,190	147.02	7,447	19,935
146.51	6,969	16,259	147.03	7,457	20,010
146.52	6,979	16,329	147.04	7,467	20,085
146.53	6,988	16,399	147.05	7,476	20,159
146.54	6,997	16,469	147.06	7,486	20,234
146.55	7,007	16,539	147.07	7,496	20,309
146.56	7,016	16,609	147.08	7,505	20,384
146.57	7,026	16,679	147.09	7,515	20,459
146.58	7,035	16,749	147.10	7,525	20,534
146.59	7,044	16,820	147.11	7,534	20,610
146.60	7,054	16,890	147.12	7,544	20,685
146.61	7,063	16,961	147.13	7,553	20,760
146.62	7,072	17,032	147.14	7,563	20,836
146.63	7,082	17,102	147.15	7,573	20,912
146.64	7,091	17,173	147.16	7,582	20,988
146.65	7,100	17,244	147.17	7,592	21,063
146.66	7,110	17,315	147.18	7,602	21,139
146.67	7,119	17,386	147.19	7,611	21,215
146.68	7,128	17,458	147.20	7,621	21,292
146.69	7,138	17,529	147.21	7,631	21,368
146.70	7,147	17,600	147.22	7,640	21,444
146.71	7,157	17,672	147.23	7,650	21,521
146.72	7,166	17,744	147.24	7,660	21,597
146.73	7,175	17,815	147.25	7,669	21,674
146.74	7,185	17,887	147.26	7,679	21,751
146.75	7,194	17,959	147.27	7,689	21,827
146.76	7,203	18,031	147.28	7,698	21,904
146.77	7,213	18,103	147.29	7,708	21,981
146.78	7,222	18,175	147.30	7,718	22,059
146.79	7,231	18,247	147.31	7,727	22,136
146.80	7,241	18,320	147.32	7,737	22,213
146.81	7,250	18,392	147.33	7,746	22,290
146.82	7,260	18,465	147.34	7,756	22,368
146.83	7,269	18,537	147.35	7,766	22,446
146.84	7,278	18,610	147.36	7,775	22,523
146.85	7,288	18,683	147.37	7,785	22,601
146.86	7,297	18,756	147.38	7,795	22,679
146.87	7,306	18,829	147.39	7,804	22,757
146.88	7,316	18,902	147.40	7,814	22,835
146.89	7,325	18,975	147.41	7,824	22,913
146.90	7,334	19,049	147.42	7,833	22,992
146.91	7,344	19,122	147.43	7,843	23,070
146.92	7,353	19,195	147.44	7,853	23,148
146.93	7,362	19,269	147.45	7,862	23,227

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.46	7,872	23,306	147.98	8,374	27,530
147.47	7,882	23,384	147.99	8,383	27,613
147.48	7,891	23,463	148.00	8,393	27,697
147.49	7,901	23,542	148.01	8,403	27,781
147.50	7,911	23,621	148.02	8,413	27,865
147.51	7,920	23,700	148.03	8,423	27,949
147.52	7,930	23,780	148.04	8,433	28,034
147.53	7,939	23,859	148.05	8,443	28,118
147.54	7,949	23,939	148.06	8,453	28,203
147.55	7,959	24,018	148.07	8,463	28,287
147.56	7,968	24,098	148.08	8,472	28,372
147.57	7,978	24,177	148.09	8,482	28,457
147.58	7,988	24,257	148.10	8,492	28,541
147.59	7,997	24,337	148.11	8,502	28,626
147.60	8,007	24,417	148.12	8,512	28,712
147.61	8,017	24,497	148.13	8,522	28,797
147.62	8,026	24,578	148.14	8,532	28,882
147.63	8,036	24,658	148.15	8,542	28,967
147.64	8,046	24,738	148.16	8,552	29,053
147.65	8,055	24,819	148.17	8,562	29,138
147.66	8,065	24,899	148.18	8,572	29,224
147.67	8,075	24,980	148.19	8,582	29,310
147.68	8,084	25,061	148.20	8,592	29,396
147.69	8,094	25,142	148.21	8,602	29,482
147.70	8,104	25,223	148.22	8,611	29,568
147.71	8,113	25,304	148.23	8,621	29,654
147.72	8,123	25,385	148.24	8,631	29,740
147.73	8,132	25,466	148.25	8,641	29,826
147.74	8,142	25,548	148.26	8,651	29,913
147.75	8,152	25,629	148.27	8,661	30,000
147.76	8,161	25,711	148.28	8,671	30,086
147.77	8,171	25,792	148.29	8,681	30,173
147.78	8,181	25,874	148.30	8,691	30,260
147.79	8,190	25,956	148.31	8,701	30,347
147.80	8,200	26,038	148.32	8,711	30,434
147.81	8,210	26,120	148.33	8,721	30,521
147.82	8,219	26,202	148.34	8,731	30,608
147.83	8,229	26,284	148.35	8,741	30,696
147.84	8,239	26,367	148.36	8,750	30,783
147.85	8,248	26,449	148.37	8,760	30,871
147.86	8,258	26,532	148.38	8,770	30,958
147.87	8,268	26,614	148.39	8,780	31,046
147.88	8,277	26,697	148.40	8,790	31,134
147.89	8,287	26,780	148.41	8,800	31,222
147.90	8,297	26,863	148.42	8,810	31,310
147.91	8,306	26,946	148.43	8,820	31,398
147.92	8,316	27,029	148.44	8,830	31,486
147.93	8,325	27,112	148.45	8,840	31,575
147.94	8,335	27,195	148.46	8,850	31,663
147.95	8,345	27,279	148.47	8,860	31,752
147.96	8,354	27,362	148.48	8,870	31,840
147.97	8,364	27,446	148.49	8,880	31,929

Stage-Area-Storage for Pond B-25: Basin #25 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.50	8,890	32,018
148.51	8,899	32,107
148.52	8,909	32,196
148.53	8,919	32,285
148.54	8,929	32,374
148.55	8,939	32,464
148.56	8,949	32,553
148.57	8,959	32,643
148.58	8,969	32,732
148.59	8,979	32,822
148.60	8,989	32,912
148.61	8,999	33,002
148.62	9,009	33,092
148.63	9,019	33,182
148.64	9,029	33,272
148.65	9,038	33,362
148.66	9,048	33,453
148.67	9,058	33,543
148.68	9,068	33,634
148.69	9,078	33,725
148.70	9,088	33,816
148.71	9,098	33,907
148.72	9,108	33,998
148.73	9,118	34,089
148.74	9,128	34,180
148.75	9,138	34,271
148.76	9,148	34,363
148.77	9,158	34,454
148.78	9,168	34,546
148.79	9,177	34,638
148.80	9,187	34,729
148.81	9,197	34,821
148.82	9,207	34,913
148.83	9,217	35,005
148.84	9,227	35,098
148.85	9,237	35,190
148.86	9,247	35,282
148.87	9,257	35,375
148.88	9,267	35,468
148.89	9,277	35,560
148.90	9,287	35,653
148.91	9,297	35,746
148.92	9,307	35,839
148.93	9,316	35,932
148.94	9,326	36,025
148.95	9,336	36,119
148.96	9,346	36,212
148.97	9,356	36,306
148.98	9,366	36,399
148.99	9,376	36,493
149.00	**9,386**	**36,587**

Summary for Pond B-26: Basin #26

Inflow Area = 2.366 ac, 39.90% Impervious, Inflow Depth = 9.13" for Future 100 yr event
Inflow = 21.82 cfs @ 12.17 hrs, Volume= 1.800 af
Outflow = 11.96 cfs @ 12.32 hrs, Volume= 1.666 af, Atten= 45%, Lag= 8.8 min
Primary = 11.96 cfs @ 12.32 hrs, Volume= 1.666 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 147.61' @ 12.32 hrs Surf.Area= 7,351 sf Storage= 25,001 cf

Plug-Flow detention time= 218.9 min calculated for 1.664 af (92% of inflow)
Center-of-Mass det. time= 179.0 min (955.9 - 776.9)

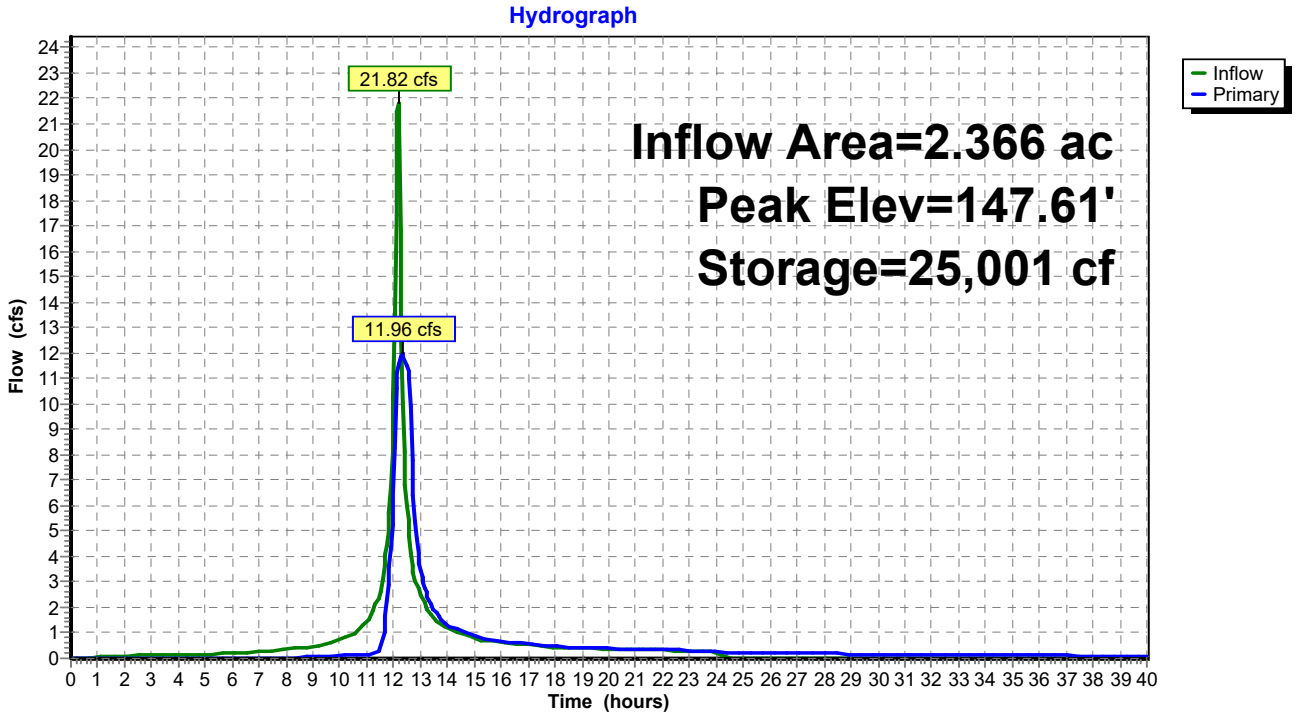
Volume	Invert	Avail.Storage	Storage Description
#1	143.30'	35,348 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
143.30	0	0	0
144.00	5,466	1,913	1,913
145.00	5,967	5,717	7,630
146.00	6,486	6,227	13,856
147.00	7,018	6,752	20,608
148.00	7,563	7,291	27,899
148.95	8,120	7,449	35,348

Device	Routing	Invert	Outlet Devices
#1	Primary	143.30'	**18.0" Round Culvert** L= 234.0' Ke= 0.500 Inlet / Outlet Invert= 143.30' / 142.00' S= 0.0056 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	144.36'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	148.05'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.95 cfs @ 12.32 hrs HW=147.60' (Free Discharge)
- **1=Culvert** (Barrel Controls 11.95 cfs @ 6.76 fps)
  - **2=Orifice/Grate** (Passes < 0.29 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 24.40 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-26: Basin #26



Stage-Discharge for Pond B-26: Basin #26

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
143.30	0.00	143.82	0.00	144.34	0.00	144.86	0.10
143.31	0.00	143.83	0.00	144.35	0.00	144.87	0.10
143.32	0.00	143.84	0.00	144.36	0.00	144.88	0.11
143.33	0.00	143.85	0.00	144.37	0.00	144.89	0.11
143.34	0.00	143.86	0.00	144.38	0.00	144.90	0.11
143.35	0.00	143.87	0.00	144.39	0.00	144.91	0.11
143.36	0.00	143.88	0.00	144.40	0.00	144.92	0.11
143.37	0.00	143.89	0.00	144.41	0.00	144.93	0.11
143.38	0.00	143.90	0.00	144.42	0.01	144.94	0.11
143.39	0.00	143.91	0.00	144.43	0.01	144.95	0.11
143.40	0.00	143.92	0.00	144.44	0.01	144.96	0.12
143.41	0.00	143.93	0.00	144.45	0.01	144.97	0.12
143.42	0.00	143.94	0.00	144.46	0.02	144.98	0.12
143.43	0.00	143.95	0.00	144.47	0.02	144.99	0.12
143.44	0.00	143.96	0.00	144.48	0.02	145.00	0.12
143.45	0.00	143.97	0.00	144.49	0.03	145.01	0.12
143.46	0.00	143.98	0.00	144.50	0.03	145.02	0.12
143.47	0.00	143.99	0.00	144.51	0.03	145.03	0.12
143.48	0.00	144.00	0.00	144.52	0.04	145.04	0.12
143.49	0.00	144.01	0.00	144.53	0.04	145.05	0.13
143.50	0.00	144.02	0.00	144.54	0.05	145.06	0.13
143.51	0.00	144.03	0.00	144.55	0.05	145.07	0.13
143.52	0.00	144.04	0.00	144.56	0.05	145.08	0.13
143.53	0.00	144.05	0.00	144.57	0.05	145.09	0.13
143.54	0.00	144.06	0.00	144.58	0.06	145.10	0.13
143.55	0.00	144.07	0.00	144.59	0.06	145.11	0.13
143.56	0.00	144.08	0.00	144.60	0.06	145.12	0.13
143.57	0.00	144.09	0.00	144.61	0.06	145.13	0.13
143.58	0.00	144.10	0.00	144.62	0.06	145.14	0.13
143.59	0.00	144.11	0.00	144.63	0.07	145.15	0.14
143.60	0.00	144.12	0.00	144.64	0.07	145.16	0.14
143.61	0.00	144.13	0.00	144.65	0.07	145.17	0.14
143.62	0.00	144.14	0.00	144.66	0.07	145.18	0.14
143.63	0.00	144.15	0.00	144.67	0.07	145.19	0.14
143.64	0.00	144.16	0.00	144.68	0.08	145.20	0.14
143.65	0.00	144.17	0.00	144.69	0.08	145.21	0.14
143.66	0.00	144.18	0.00	144.70	0.08	145.22	0.14
143.67	0.00	144.19	0.00	144.71	0.08	145.23	0.14
143.68	0.00	144.20	0.00	144.72	0.08	145.24	0.14
143.69	0.00	144.21	0.00	144.73	0.08	145.25	0.15
143.70	0.00	144.22	0.00	144.74	0.09	145.26	0.15
143.71	0.00	144.23	0.00	144.75	0.09	145.27	0.15
143.72	0.00	144.24	0.00	144.76	0.09	145.28	0.15
143.73	0.00	144.25	0.00	144.77	0.09	145.29	0.15
143.74	0.00	144.26	0.00	144.78	0.09	145.30	0.15
143.75	0.00	144.27	0.00	144.79	0.09	145.31	0.15
143.76	0.00	144.28	0.00	144.80	0.10	145.32	0.15
143.77	0.00	144.29	0.00	144.81	0.10	145.33	0.15
143.78	0.00	144.30	0.00	144.82	0.10	145.34	0.15
143.79	0.00	144.31	0.00	144.83	0.10	145.35	0.15
143.80	0.00	144.32	0.00	144.84	0.10	145.36	0.16
143.81	0.00	144.33	0.00	144.85	0.10	145.37	0.16

Stage-Discharge for Pond B-26: Basin #26 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
145.38	0.16	145.90	0.20	146.42	3.72	146.94	10.94
145.39	0.16	145.91	0.20	146.43	3.84	146.95	10.96
145.40	0.16	145.92	0.20	146.44	3.96	146.96	10.97
145.41	0.16	145.93	0.20	146.45	4.09	146.97	10.99
145.42	0.16	145.94	0.20	146.46	4.22	146.98	11.00
145.43	0.16	145.95	0.20	146.47	4.35	146.99	11.02
145.44	0.16	145.96	0.20	146.48	4.48	147.00	11.04
145.45	0.16	145.97	0.20	146.49	4.61	147.01	11.05
145.46	0.16	145.98	0.20	146.50	4.74	147.02	11.07
145.47	0.16	145.99	0.20	146.51	4.88	147.03	11.08
145.48	0.17	146.00	0.20	146.52	5.01	147.04	11.10
145.49	0.17	146.01	0.22	146.53	5.15	147.05	11.11
145.50	0.17	146.02	0.24	146.54	5.29	147.06	11.13
145.51	0.17	146.03	0.27	146.55	5.43	147.07	11.15
145.52	0.17	146.04	0.31	146.56	5.57	147.08	11.16
145.53	0.17	146.05	0.35	146.57	5.71	147.09	11.18
145.54	0.17	146.06	0.40	146.58	5.85	147.10	11.19
145.55	0.17	146.07	0.45	146.59	5.99	147.11	11.21
145.56	0.17	146.08	0.50	146.60	6.14	147.12	11.22
145.57	0.17	146.09	0.56	146.61	6.28	147.13	11.24
145.58	0.17	146.10	0.62	146.62	6.43	147.14	11.25
145.59	0.17	146.11	0.69	146.63	6.58	147.15	11.27
145.60	0.17	146.12	0.75	146.64	6.72	147.16	11.29
145.61	0.18	146.13	0.82	146.65	6.87	147.17	11.30
145.62	0.18	146.14	0.89	146.66	7.03	147.18	11.32
145.63	0.18	146.15	0.97	146.67	7.18	147.19	11.33
145.64	0.18	146.16	1.04	146.68	7.33	147.20	11.35
145.65	0.18	146.17	1.12	146.69	7.48	147.21	11.36
145.66	0.18	146.18	1.20	146.70	7.64	147.22	11.38
145.67	0.18	146.19	1.29	146.71	7.79	147.23	11.39
145.68	0.18	146.20	1.37	146.72	7.95	147.24	11.41
145.69	0.18	146.21	1.46	146.73	8.11	147.25	11.42
145.70	0.18	146.22	1.55	146.74	8.27	147.26	11.44
145.71	0.18	146.23	1.64	146.75	8.43	147.27	11.45
145.72	0.18	146.24	1.74	146.76	8.59	147.28	11.47
145.73	0.18	146.25	1.83	146.77	8.75	147.29	11.48
145.74	0.19	146.26	1.93	146.78	8.91	147.30	11.50
145.75	0.19	146.27	2.03	146.79	9.07	147.31	11.51
145.76	0.19	146.28	2.13	146.80	9.24	147.32	11.53
145.77	0.19	146.29	2.23	146.81	9.40	147.33	11.54
145.78	0.19	146.30	2.34	146.82	9.57	147.34	11.56
145.79	0.19	146.31	2.45	146.83	9.73	147.35	11.57
145.80	0.19	146.32	2.55	146.84	9.90	147.36	11.59
145.81	0.19	146.33	2.66	146.85	10.07	147.37	11.60
145.82	0.19	146.34	2.77	146.86	10.24	147.38	11.62
145.83	0.19	146.35	2.89	146.87	10.41	147.39	11.63
145.84	0.19	146.36	3.00	146.88	10.58	147.40	11.65
145.85	0.19	146.37	3.12	146.89	10.75	147.41	11.66
145.86	0.19	146.38	3.23	146.90	10.88	147.42	11.68
145.87	0.19	146.39	3.35	146.91	10.89	147.43	11.69
145.88	0.20	146.40	3.47	146.92	10.91	147.44	11.71
145.89	0.20	146.41	3.59	146.93	10.92	147.45	11.72

Stage-Discharge for Pond B-26: Basin #26 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
147.46	11.74	147.98	12.49	148.50	52.51
147.47	11.75	147.99	12.50	148.51	54.02
147.48	11.77	148.00	12.51	148.52	55.56
147.49	11.78	148.01	12.53	148.53	57.12
147.50	11.80	148.02	12.54	148.54	58.71
147.51	11.81	148.03	12.56	148.55	60.32
147.52	11.83	148.04	12.57	148.56	61.96
147.53	11.84	148.05	12.58	148.57	63.63
147.54	11.86	148.06	12.71	148.58	65.33
147.55	11.87	148.07	12.94	148.59	67.05
147.56	11.89	148.08	13.23	148.60	68.79
147.57	11.90	148.09	13.58	148.61	70.57
147.58	11.92	148.10	13.96	148.62	72.37
147.59	11.93	148.11	14.39	148.63	74.20
147.60	11.94	148.12	14.85	148.64	76.05
147.61	11.96	148.13	15.35	148.65	77.94
147.62	11.97	148.14	15.88	148.66	79.58
147.63	11.99	148.15	16.44	148.67	81.23
147.64	12.00	148.16	17.03	148.68	82.90
147.65	12.02	148.17	17.64	148.69	84.58
147.66	12.03	148.18	18.28	148.70	86.27
147.67	12.05	148.19	18.95	148.71	87.98
147.68	12.06	148.20	19.63	148.72	89.70
147.69	12.07	148.21	20.35	148.73	91.43
147.70	12.09	148.22	21.08	148.74	93.18
147.71	12.10	148.23	21.84	148.75	94.93
147.72	12.12	148.24	22.62	148.76	96.71
147.73	12.13	148.25	23.42	148.77	98.49
147.74	12.15	148.26	24.28	148.78	100.29
147.75	12.16	148.27	25.17	148.79	102.10
147.76	12.18	148.28	26.08	148.80	103.92
147.77	12.19	148.29	27.02	148.81	105.75
147.78	12.20	148.30	27.98	148.82	107.60
147.79	12.22	148.31	28.96	148.83	109.46
147.80	12.23	148.32	29.98	148.84	111.33
147.81	12.25	148.33	31.01	148.85	113.21
147.82	12.26	148.34	32.07	148.86	115.14
147.83	12.27	148.35	33.16	148.87	117.09
147.84	12.29	148.36	34.27	148.88	119.05
147.85	12.30	148.37	35.40	148.89	121.02
147.86	12.32	148.38	36.56	148.90	123.00
147.87	12.33	148.39	37.75	148.91	125.00
147.88	12.35	148.40	38.95	148.92	127.01
147.89	12.36	148.41	40.19	148.93	129.04
147.90	12.37	148.42	41.44	148.94	131.07
147.91	12.39	148.43	42.72	148.95	**133.12**
147.92	12.40	148.44	44.03		
147.93	12.42	148.45	45.35		
147.94	12.43	148.46	46.73		
147.95	12.44	148.47	48.14		
147.96	12.46	148.48	49.57		
147.97	12.47	148.49	51.03		

Stage-Area-Storage for Pond B-26: Basin #26

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
143.30	0	0
143.31	78	0
143.32	156	2
143.33	234	4
143.34	312	6
143.35	390	10
143.36	469	14
143.37	547	19
143.38	625	25
143.39	703	32
143.40	781	39
143.41	859	47
143.42	937	56
143.43	1,015	66
143.44	1,093	77
143.45	1,171	88
143.46	1,249	100
143.47	1,327	113
143.48	1,406	126
143.49	1,484	141
143.50	1,562	156
143.51	1,640	172
143.52	1,718	189
143.53	1,796	207
143.54	1,874	225
143.55	1,952	244
143.56	2,030	264
143.57	2,108	285
143.58	2,186	306
143.59	2,264	328
143.60	2,343	351
143.61	2,421	375
143.62	2,499	400
143.63	2,577	425
143.64	2,655	451
143.65	2,733	478
143.66	2,811	506
143.67	2,889	534
143.68	2,967	564
143.69	3,045	594
143.70	3,123	625
143.71	3,202	656
143.72	3,280	689
143.73	3,358	722
143.74	3,436	756
143.75	3,514	791
143.76	3,592	826
143.77	3,670	862
143.78	3,748	900
143.79	3,826	937
143.80	3,904	976
143.81	3,982	1,016
143.82	4,060	1,056
143.83	4,139	1,097
143.84	4,217	1,138
143.85	4,295	1,181
143.86	4,373	1,224
143.87	4,451	1,269
143.88	4,529	1,313
143.89	4,607	1,359
143.90	4,685	1,406
143.91	4,763	1,453
143.92	4,841	1,501
143.93	4,919	1,550
143.94	4,997	1,599
143.95	5,076	1,650
143.96	5,154	1,701
143.97	5,232	1,753
143.98	5,310	1,805
143.99	5,388	1,859
144.00	5,466	1,913
144.01	5,471	1,968
144.02	5,476	2,023
144.03	5,481	2,077
144.04	5,486	2,132
144.05	5,491	2,187
144.06	5,496	2,242
144.07	5,501	2,297
144.08	5,506	2,352
144.09	5,511	2,407
144.10	5,516	2,462
144.11	5,521	2,517
144.12	5,526	2,573
144.13	5,531	2,628
144.14	5,536	2,683
144.15	5,541	2,739
144.16	5,546	2,794
144.17	5,551	2,850
144.18	5,556	2,905
144.19	5,561	2,961
144.20	5,566	3,016
144.21	5,571	3,072
144.22	5,576	3,128
144.23	5,581	3,184
144.24	5,586	3,239
144.25	5,591	3,295
144.26	5,596	3,351
144.27	5,601	3,407
144.28	5,606	3,463
144.29	5,611	3,519
144.30	5,616	3,575
144.31	5,621	3,632
144.32	5,626	3,688
144.33	5,631	3,744

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
144.34	5,636	3,800
144.35	5,641	3,857
144.36	5,646	3,913
144.37	5,651	3,970
144.38	5,656	4,026
144.39	5,661	4,083
144.40	5,666	4,140
144.41	5,671	4,196
144.42	5,676	4,253
144.43	5,681	4,310
144.44	5,686	4,367
144.45	5,691	4,424
144.46	5,696	4,480
144.47	5,701	4,537
144.48	5,706	4,594
144.49	5,711	4,652
144.50	5,717	4,709
144.51	5,722	4,766
144.52	5,727	4,823
144.53	5,732	4,880
144.54	5,737	4,938
144.55	5,742	4,995
144.56	5,747	5,053
144.57	5,752	5,110
144.58	5,757	5,168
144.59	5,762	5,225
144.60	5,767	5,283
144.61	5,772	5,341
144.62	5,777	5,398
144.63	5,782	5,456
144.64	5,787	5,514
144.65	5,792	5,572
144.66	5,797	5,630
144.67	5,802	5,688
144.68	5,807	5,746
144.69	5,812	5,804
144.70	5,817	5,862
144.71	5,822	5,920
144.72	5,827	5,978
144.73	5,832	6,037
144.74	5,837	6,095
144.75	5,842	6,154
144.76	5,847	6,212
144.77	5,852	6,270
144.78	5,857	6,329
144.79	5,862	6,388
144.80	5,867	6,446
144.81	5,872	6,505
144.82	5,877	6,564
144.83	5,882	6,622
144.84	5,887	6,681
144.85	5,892	6,740
144.86	5,897	6,799
144.87	5,902	6,858
144.88	5,907	6,917
144.89	5,912	6,976
144.90	5,917	7,035
144.91	5,922	7,095
144.92	5,927	7,154
144.93	5,932	7,213
144.94	5,937	7,272
144.95	5,942	7,332
144.96	5,947	7,391
144.97	5,952	7,451
144.98	5,957	7,510
144.99	5,962	7,570
145.00	5,967	7,630
145.01	5,972	7,689
145.02	5,977	7,749
145.03	5,983	7,809
145.04	5,988	7,869
145.05	5,993	7,929
145.06	5,998	7,989
145.07	6,003	8,049
145.08	6,009	8,109
145.09	6,014	8,169
145.10	6,019	8,229
145.11	6,024	8,289
145.12	6,029	8,349
145.13	6,034	8,410
145.14	6,040	8,470
145.15	6,045	8,530
145.16	6,050	8,591
145.17	6,055	8,651
145.18	6,060	8,712
145.19	6,066	8,773
145.20	6,071	8,833
145.21	6,076	8,894
145.22	6,081	8,955
145.23	6,086	9,016
145.24	6,092	9,077
145.25	6,097	9,138
145.26	6,102	9,199
145.27	6,107	9,260
145.28	6,112	9,321
145.29	6,118	9,382
145.30	6,123	9,443
145.31	6,128	9,504
145.32	6,133	9,566
145.33	6,138	9,627
145.34	6,143	9,688
145.35	6,149	9,750
145.36	6,154	9,811
145.37	6,159	9,873

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
145.38	6,164	9,935	145.90	6,434	13,210
145.39	6,169	9,996	145.91	6,439	13,274
145.40	6,175	10,058	145.92	6,444	13,339
145.41	6,180	10,120	145.93	6,450	13,403
145.42	6,185	10,182	145.94	6,455	13,468
145.43	6,190	10,243	145.95	6,460	13,532
145.44	6,195	10,305	145.96	6,465	13,597
145.45	6,201	10,367	145.97	6,470	13,662
145.46	6,206	10,429	145.98	6,476	13,726
145.47	6,211	10,491	145.99	6,481	13,791
145.48	6,216	10,554	146.00	6,486	13,856
145.49	6,221	10,616	146.01	6,491	13,921
145.50	6,227	10,678	146.02	6,497	13,986
145.51	6,232	10,740	146.03	6,502	14,051
145.52	6,237	10,803	146.04	6,507	14,116
145.53	6,242	10,865	146.05	6,513	14,181
145.54	6,247	10,927	146.06	6,518	14,246
145.55	6,252	10,990	146.07	6,523	14,311
145.56	6,258	11,052	146.08	6,529	14,377
145.57	6,263	11,115	146.09	6,534	14,442
145.58	6,268	11,178	146.10	6,539	14,507
145.59	6,273	11,240	146.11	6,545	14,573
145.60	6,278	11,303	146.12	6,550	14,638
145.61	6,284	11,366	146.13	6,555	14,704
145.62	6,289	11,429	146.14	6,560	14,769
145.63	6,294	11,492	146.15	6,566	14,835
145.64	6,299	11,555	146.16	6,571	14,901
145.65	6,304	11,618	146.17	6,576	14,966
145.66	6,310	11,681	146.18	6,582	15,032
145.67	6,315	11,744	146.19	6,587	15,098
145.68	6,320	11,807	146.20	6,592	15,164
145.69	6,325	11,870	146.21	6,598	15,230
145.70	6,330	11,934	146.22	6,603	15,296
145.71	6,335	11,997	146.23	6,608	15,362
145.72	6,341	12,060	146.24	6,614	15,428
145.73	6,346	12,124	146.25	6,619	15,494
145.74	6,351	12,187	146.26	6,624	15,560
145.75	6,356	12,251	146.27	6,630	15,627
145.76	6,361	12,314	146.28	6,635	15,693
145.77	6,367	12,378	146.29	6,640	15,759
145.78	6,372	12,442	146.30	6,646	15,826
145.79	6,377	12,505	146.31	6,651	15,892
145.80	6,382	12,569	146.32	6,656	15,959
145.81	6,387	12,633	146.33	6,662	16,025
145.82	6,393	12,697	146.34	6,667	16,092
145.83	6,398	12,761	146.35	6,672	16,159
145.84	6,403	12,825	146.36	6,678	16,226
145.85	6,408	12,889	146.37	6,683	16,292
145.86	6,413	12,953	146.38	6,688	16,359
145.87	6,419	13,017	146.39	6,693	16,426
145.88	6,424	13,082	146.40	6,699	16,493
145.89	6,429	13,146	146.41	6,704	16,560

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
146.42	6,709	16,627	146.94	6,986	20,188
146.43	6,715	16,694	146.95	6,991	20,258
146.44	6,720	16,761	146.96	6,997	20,328
146.45	6,725	16,829	146.97	7,002	20,398
146.46	6,731	16,896	146.98	7,007	20,468
146.47	6,736	16,963	146.99	7,013	20,538
146.48	6,741	17,031	147.00	7,018	20,608
146.49	6,747	17,098	147.01	7,023	20,678
146.50	6,752	17,166	147.02	7,029	20,749
146.51	6,757	17,233	147.03	7,034	20,819
146.52	6,763	17,301	147.04	7,040	20,889
146.53	6,768	17,368	147.05	7,045	20,960
146.54	6,773	17,436	147.06	7,051	21,030
146.55	6,779	17,504	147.07	7,056	21,101
146.56	6,784	17,572	147.08	7,062	21,171
146.57	6,789	17,640	147.09	7,067	21,242
146.58	6,795	17,707	147.10	7,073	21,313
146.59	6,800	17,775	147.11	7,078	21,383
146.60	6,805	17,843	147.12	7,083	21,454
146.61	6,811	17,912	147.13	7,089	21,525
146.62	6,816	17,980	147.14	7,094	21,596
146.63	6,821	18,048	147.15	7,100	21,667
146.64	6,826	18,116	147.16	7,105	21,738
146.65	6,832	18,184	147.17	7,111	21,809
146.66	6,837	18,253	147.18	7,116	21,880
146.67	6,842	18,321	147.19	7,122	21,951
146.68	6,848	18,390	147.20	7,127	22,023
146.69	6,853	18,458	147.21	7,132	22,094
146.70	6,858	18,527	147.22	7,138	22,165
146.71	6,864	18,595	147.23	7,143	22,237
146.72	6,869	18,664	147.24	7,149	22,308
146.73	6,874	18,733	147.25	7,154	22,380
146.74	6,880	18,801	147.26	7,160	22,451
146.75	6,885	18,870	147.27	7,165	22,523
146.76	6,890	18,939	147.28	7,171	22,595
146.77	6,896	19,008	147.29	7,176	22,666
146.78	6,901	19,077	147.30	7,182	22,738
146.79	6,906	19,146	147.31	7,187	22,810
146.80	6,912	19,215	147.32	7,192	22,882
146.81	6,917	19,284	147.33	7,198	22,954
146.82	6,922	19,353	147.34	7,203	23,026
146.83	6,928	19,423	147.35	7,209	23,098
146.84	6,933	19,492	147.36	7,214	23,170
146.85	6,938	19,561	147.37	7,220	23,242
146.86	6,944	19,631	147.38	7,225	23,314
146.87	6,949	19,700	147.39	7,231	23,387
146.88	6,954	19,770	147.40	7,236	23,459
146.89	6,959	19,839	147.41	7,241	23,531
146.90	6,965	19,909	147.42	7,247	23,604
146.91	6,970	19,979	147.43	7,252	23,676
146.92	6,975	20,048	147.44	7,258	23,749
146.93	6,981	20,118	147.45	7,263	23,821

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
147.46	7,269	23,894	147.98	7,552	27,747
147.47	7,274	23,967	147.99	7,558	27,823
147.48	7,280	24,040	148.00	7,563	27,899
147.49	7,285	24,112	148.01	7,569	27,974
147.50	7,291	24,185	148.02	7,575	28,050
147.51	7,296	24,258	148.03	7,581	28,126
147.52	7,301	24,331	148.04	7,586	28,202
147.53	7,307	24,404	148.05	7,592	28,277
147.54	7,312	24,477	148.06	7,598	28,353
147.55	7,318	24,550	148.07	7,604	28,429
147.56	7,323	24,624	148.08	7,610	28,506
147.57	7,329	24,697	148.09	7,616	28,582
147.58	7,334	24,770	148.10	7,622	28,658
147.59	7,340	24,844	148.11	7,627	28,734
147.60	7,345	24,917	148.12	7,633	28,810
147.61	7,350	24,990	148.13	7,639	28,887
147.62	7,356	25,064	148.14	7,645	28,963
147.63	7,361	25,138	148.15	7,651	29,040
147.64	7,367	25,211	148.16	7,657	29,116
147.65	7,372	25,285	148.17	7,663	29,193
147.66	7,378	25,359	148.18	7,669	29,269
147.67	7,383	25,432	148.19	7,674	29,346
147.68	7,389	25,506	148.20	7,680	29,423
147.69	7,394	25,580	148.21	7,686	29,500
147.70	7,400	25,654	148.22	7,692	29,577
147.71	7,405	25,728	148.23	7,698	29,654
147.72	7,410	25,802	148.24	7,704	29,731
147.73	7,416	25,876	148.25	7,710	29,808
147.74	7,421	25,951	148.26	7,715	29,885
147.75	7,427	26,025	148.27	7,721	29,962
147.76	7,432	26,099	148.28	7,727	30,039
147.77	7,438	26,174	148.29	7,733	30,117
147.78	7,443	26,248	148.30	7,739	30,194
147.79	7,449	26,322	148.31	7,745	30,271
147.80	7,454	26,397	148.32	7,751	30,349
147.81	7,459	26,471	148.33	7,756	30,426
147.82	7,465	26,546	148.34	7,762	30,504
147.83	7,470	26,621	148.35	7,768	30,582
147.84	7,476	26,695	148.36	7,774	30,659
147.85	7,481	26,770	148.37	7,780	30,737
147.86	7,487	26,845	148.38	7,786	30,815
147.87	7,492	26,920	148.39	7,792	30,893
147.88	7,498	26,995	148.40	7,798	30,971
147.89	7,503	27,070	148.41	7,803	31,049
147.90	7,509	27,145	148.42	7,809	31,127
147.91	7,514	27,220	148.43	7,815	31,205
147.92	7,519	27,295	148.44	7,821	31,283
147.93	7,525	27,371	148.45	7,827	31,361
147.94	7,530	27,446	148.46	7,833	31,440
147.95	7,536	27,521	148.47	7,839	31,518
147.96	7,541	27,597	148.48	7,844	31,596
147.97	7,547	27,672	148.49	7,850	31,675

Stage-Area-Storage for Pond B-26: Basin #26 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
148.50	7,856	31,753
148.51	7,862	31,832
148.52	7,868	31,911
148.53	7,874	31,989
148.54	7,880	32,068
148.55	7,885	32,147
148.56	7,891	32,226
148.57	7,897	32,305
148.58	7,903	32,384
148.59	7,909	32,463
148.60	7,915	32,542
148.61	7,921	32,621
148.62	7,927	32,700
148.63	7,932	32,780
148.64	7,938	32,859
148.65	7,944	32,938
148.66	7,950	33,018
148.67	7,956	33,097
148.68	7,962	33,177
148.69	7,968	33,257
148.70	7,973	33,336
148.71	7,979	33,416
148.72	7,985	33,496
148.73	7,991	33,576
148.74	7,997	33,656
148.75	8,003	33,736
148.76	8,009	33,816
148.77	8,014	33,896
148.78	8,020	33,976
148.79	8,026	34,056
148.80	8,032	34,137
148.81	8,038	34,217
148.82	8,044	34,297
148.83	8,050	34,378
148.84	8,056	34,458
148.85	8,061	34,539
148.86	8,067	34,620
148.87	8,073	34,700
148.88	8,079	34,781
148.89	8,085	34,862
148.90	8,091	34,943
148.91	8,097	35,024
148.92	8,102	35,105
148.93	8,108	35,186
148.94	8,114	35,267
148.95	**8,120**	**35,348**

Summary for Pond B-27: Basin #27

Inflow Area = 1.935 ac, 46.41% Impervious, Inflow Depth = 10.18" for Future 100 yr event
Inflow = 19.31 cfs @ 12.17 hrs, Volume= 1.642 af
Outflow = 18.68 cfs @ 12.20 hrs, Volume= 1.535 af, Atten= 3%, Lag= 2.1 min
Primary = 18.68 cfs @ 12.20 hrs, Volume= 1.535 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 172.95' @ 12.21 hrs Surf.Area= 4,064 sf Storage= 13,051 cf

Plug-Flow detention time= 93.9 min calculated for 1.533 af (93% of inflow)
Center-of-Mass det. time= 57.5 min (819.7 - 762.2)

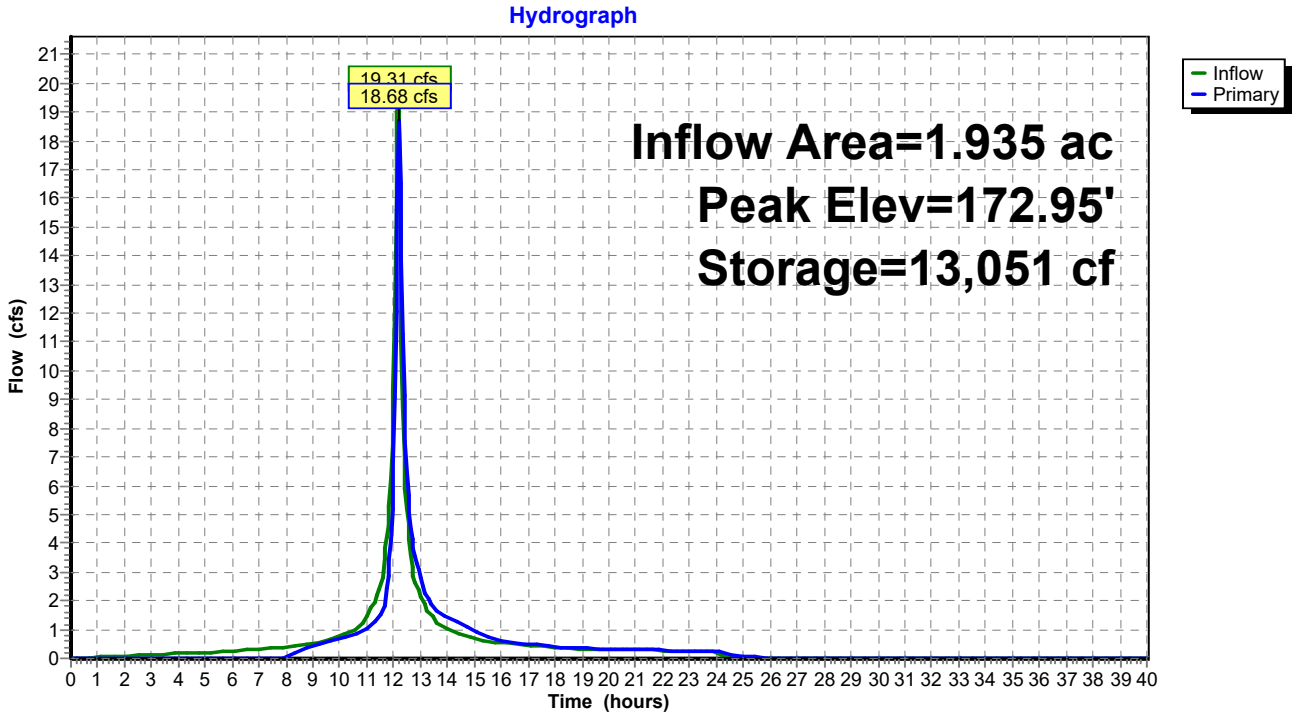
Volume	Invert	Avail.Storage	Storage Description
#1	167.35'	13,052 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
167.35	0	0	0
168.00	1,002	326	326
169.00	1,583	1,293	1,618
170.00	2,221	1,902	3,520
171.00	2,916	2,569	6,089
172.00	3,667	3,292	9,380
172.95	4,064	3,672	13,052

Device	Routing	Invert	Outlet Devices
#1	Primary	167.65'	**24.0" Round Culvert** L= 61.0' Ke= 0.500 Inlet / Outlet Invert= 167.65' / 165.16' S= 0.0408 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf
#2	Device 1	170.47'	**8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	171.75'	**2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	172.25'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	172.90'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=18.40 cfs @ 12.20 hrs HW=172.94' (Free Discharge)
- **1=Culvert** (Passes 17.29 cfs of 31.35 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.46 cfs @ 7.05 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 7.52 cfs @ 3.57 fps)
  - **4=Sharp-Crested Rectangular Weir** (Weir Controls 7.31 cfs @ 2.73 fps)
- **5=Broad-Crested Rectangular Weir** (Weir Controls 1.11 cfs @ 0.50 fps)

Pond B-27: Basin #27



Stage-Discharge for Pond B-27: Basin #27

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.35	0.00	167.87	0.00	168.39	0.00	168.91	0.00
167.36	0.00	167.88	0.00	168.40	0.00	168.92	0.00
167.37	0.00	167.89	0.00	168.41	0.00	168.93	0.00
167.38	0.00	167.90	0.00	168.42	0.00	168.94	0.00
167.39	0.00	167.91	0.00	168.43	0.00	168.95	0.00
167.40	0.00	167.92	0.00	168.44	0.00	168.96	0.00
167.41	0.00	167.93	0.00	168.45	0.00	168.97	0.00
167.42	0.00	167.94	0.00	168.46	0.00	168.98	0.00
167.43	0.00	167.95	0.00	168.47	0.00	168.99	0.00
167.44	0.00	167.96	0.00	168.48	0.00	169.00	0.00
167.45	0.00	167.97	0.00	168.49	0.00	169.01	0.00
167.46	0.00	167.98	0.00	168.50	0.00	169.02	0.00
167.47	0.00	167.99	0.00	168.51	0.00	169.03	0.00
167.48	0.00	168.00	0.00	168.52	0.00	169.04	0.00
167.49	0.00	168.01	0.00	168.53	0.00	169.05	0.00
167.50	0.00	168.02	0.00	168.54	0.00	169.06	0.00
167.51	0.00	168.03	0.00	168.55	0.00	169.07	0.00
167.52	0.00	168.04	0.00	168.56	0.00	169.08	0.00
167.53	0.00	168.05	0.00	168.57	0.00	169.09	0.00
167.54	0.00	168.06	0.00	168.58	0.00	169.10	0.00
167.55	0.00	168.07	0.00	168.59	0.00	169.11	0.00
167.56	0.00	168.08	0.00	168.60	0.00	169.12	0.00
167.57	0.00	168.09	0.00	168.61	0.00	169.13	0.00
167.58	0.00	168.10	0.00	168.62	0.00	169.14	0.00
167.59	0.00	168.11	0.00	168.63	0.00	169.15	0.00
167.60	0.00	168.12	0.00	168.64	0.00	169.16	0.00
167.61	0.00	168.13	0.00	168.65	0.00	169.17	0.00
167.62	0.00	168.14	0.00	168.66	0.00	169.18	0.00
167.63	0.00	168.15	0.00	168.67	0.00	169.19	0.00
167.64	0.00	168.16	0.00	168.68	0.00	169.20	0.00
167.65	0.00	168.17	0.00	168.69	0.00	169.21	0.00
167.66	0.00	168.18	0.00	168.70	0.00	169.22	0.00
167.67	0.00	168.19	0.00	168.71	0.00	169.23	0.00
167.68	0.00	168.20	0.00	168.72	0.00	169.24	0.00
167.69	0.00	168.21	0.00	168.73	0.00	169.25	0.00
167.70	0.00	168.22	0.00	168.74	0.00	169.26	0.00
167.71	0.00	168.23	0.00	168.75	0.00	169.27	0.00
167.72	0.00	168.24	0.00	168.76	0.00	169.28	0.00
167.73	0.00	168.25	0.00	168.77	0.00	169.29	0.00
167.74	0.00	168.26	0.00	168.78	0.00	169.30	0.00
167.75	0.00	168.27	0.00	168.79	0.00	169.31	0.00
167.76	0.00	168.28	0.00	168.80	0.00	169.32	0.00
167.77	0.00	168.29	0.00	168.81	0.00	169.33	0.00
167.78	0.00	168.30	0.00	168.82	0.00	169.34	0.00
167.79	0.00	168.31	0.00	168.83	0.00	169.35	0.00
167.80	0.00	168.32	0.00	168.84	0.00	169.36	0.00
167.81	0.00	168.33	0.00	168.85	0.00	169.37	0.00
167.82	0.00	168.34	0.00	168.86	0.00	169.38	0.00
167.83	0.00	168.35	0.00	168.87	0.00	169.39	0.00
167.84	0.00	168.36	0.00	168.88	0.00	169.40	0.00
167.85	0.00	168.37	0.00	168.89	0.00	169.41	0.00
167.86	0.00	168.38	0.00	168.90	0.00	169.42	0.00

Stage-Discharge for Pond B-27: Basin #27 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
169.43	0.00	169.95	0.00	170.47	0.00	170.99	0.72
169.44	0.00	169.96	0.00	170.48	0.00	171.00	0.74
169.45	0.00	169.97	0.00	170.49	0.00	171.01	0.76
169.46	0.00	169.98	0.00	170.50	0.00	171.02	0.78
169.47	0.00	169.99	0.00	170.51	0.01	171.03	0.80
169.48	0.00	170.00	0.00	170.52	0.01	171.04	0.82
169.49	0.00	170.01	0.00	170.53	0.01	171.05	0.84
169.50	0.00	170.02	0.00	170.54	0.02	171.06	0.85
169.51	0.00	170.03	0.00	170.55	0.02	171.07	0.87
169.52	0.00	170.04	0.00	170.56	0.03	171.08	0.89
169.53	0.00	170.05	0.00	170.57	0.04	171.09	0.91
169.54	0.00	170.06	0.00	170.58	0.04	171.10	0.92
169.55	0.00	170.07	0.00	170.59	0.05	171.11	0.94
169.56	0.00	170.08	0.00	170.60	0.06	171.12	0.95
169.57	0.00	170.09	0.00	170.61	0.07	171.13	0.96
169.58	0.00	170.10	0.00	170.62	0.08	171.14	0.98
169.59	0.00	170.11	0.00	170.63	0.09	171.15	0.99
169.60	0.00	170.12	0.00	170.64	0.10	171.16	1.00
169.61	0.00	170.13	0.00	170.65	0.11	171.17	1.02
169.62	0.00	170.14	0.00	170.66	0.12	171.18	1.03
169.63	0.00	170.15	0.00	170.67	0.13	171.19	1.05
169.64	0.00	170.16	0.00	170.68	0.15	171.20	1.06
169.65	0.00	170.17	0.00	170.69	0.16	171.21	1.07
169.66	0.00	170.18	0.00	170.70	0.17	171.22	1.08
169.67	0.00	170.19	0.00	170.71	0.19	171.23	1.10
169.68	0.00	170.20	0.00	170.72	0.20	171.24	1.11
169.69	0.00	170.21	0.00	170.73	0.22	171.25	1.12
169.70	0.00	170.22	0.00	170.74	0.23	171.26	1.14
169.71	0.00	170.23	0.00	170.75	0.25	171.27	1.15
169.72	0.00	170.24	0.00	170.76	0.27	171.28	1.16
169.73	0.00	170.25	0.00	170.77	0.28	171.29	1.17
169.74	0.00	170.26	0.00	170.78	0.30	171.30	1.18
169.75	0.00	170.27	0.00	170.79	0.32	171.31	1.20
169.76	0.00	170.28	0.00	170.80	0.34	171.32	1.21
169.77	0.00	170.29	0.00	170.81	0.36	171.33	1.22
169.78	0.00	170.30	0.00	170.82	0.37	171.34	1.23
169.79	0.00	170.31	0.00	170.83	0.39	171.35	1.24
169.80	0.00	170.32	0.00	170.84	0.41	171.36	1.25
169.81	0.00	170.33	0.00	170.85	0.43	171.37	1.27
169.82	0.00	170.34	0.00	170.86	0.45	171.38	1.28
169.83	0.00	170.35	0.00	170.87	0.47	171.39	1.29
169.84	0.00	170.36	0.00	170.88	0.49	171.40	1.30
169.85	0.00	170.37	0.00	170.89	0.51	171.41	1.31
169.86	0.00	170.38	0.00	170.90	0.53	171.42	1.32
169.87	0.00	170.39	0.00	170.91	0.55	171.43	1.33
169.88	0.00	170.40	0.00	170.92	0.57	171.44	1.34
169.89	0.00	170.41	0.00	170.93	0.59	171.45	1.35
169.90	0.00	170.42	0.00	170.94	0.61	171.46	1.36
169.91	0.00	170.43	0.00	170.95	0.63	171.47	1.37
169.92	0.00	170.44	0.00	170.96	0.66	171.48	1.38
169.93	0.00	170.45	0.00	170.97	0.68	171.49	1.39
169.94	0.00	170.46	0.00	170.98	0.70	171.50	1.40

Stage-Discharge for Pond B-27: Basin #27 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
171.51	1.41	172.03	2.80	172.55	8.64
171.52	1.42	172.04	2.86	172.56	8.83
171.53	1.43	172.05	2.92	172.57	9.02
171.54	1.44	172.06	2.98	172.58	9.21
171.55	1.45	172.07	3.04	172.59	9.41
171.56	1.46	172.08	3.10	172.60	9.60
171.57	1.47	172.09	3.16	172.61	9.80
171.58	1.48	172.10	3.22	172.62	10.00
171.59	1.49	172.11	3.28	172.63	10.20
171.60	1.50	172.12	3.35	172.64	10.40
171.61	1.51	172.13	3.41	172.65	10.61
171.62	1.52	172.14	3.47	172.66	10.81
171.63	1.53	172.15	3.54	172.67	11.02
171.64	1.54	172.16	3.60	172.68	11.23
171.65	1.55	172.17	3.67	172.69	11.44
171.66	1.56	172.18	3.74	172.70	11.65
171.67	1.56	172.19	3.80	172.71	11.87
171.68	1.57	172.20	3.87	172.72	12.08
171.69	1.58	172.21	3.94	172.73	12.30
171.70	1.59	172.22	4.01	172.74	12.52
171.71	1.60	172.23	4.08	172.75	12.74
171.72	1.61	172.24	4.15	172.76	12.96
171.73	1.62	172.25	4.22	172.77	13.18
171.74	1.63	172.26	4.30	172.78	13.41
171.75	1.64	172.27	4.40	172.79	13.63
171.76	1.65	172.28	4.50	172.80	13.86
171.77	1.67	172.29	4.61	172.81	14.09
171.78	1.69	172.30	4.72	172.82	14.32
171.79	1.72	172.31	4.84	172.83	14.55
171.80	1.75	172.32	4.97	172.84	14.78
171.81	1.78	172.33	5.09	172.85	15.02
171.82	1.81	172.34	5.22	172.86	15.25
171.83	1.85	172.35	5.36	172.87	15.49
171.84	1.89	172.36	5.50	172.88	15.72
171.85	1.92	172.37	5.64	172.89	15.96
171.86	1.96	172.38	5.78	172.90	16.20
171.87	2.00	172.39	5.93	172.91	16.56
171.88	2.05	172.40	6.08	172.92	17.02
171.89	2.09	172.41	6.24	172.93	17.54
171.90	2.13	172.42	6.39	172.94	18.11
171.91	2.18	172.43	6.55	172.95	**18.73**
171.92	2.23	172.44	6.71		
171.93	2.27	172.45	6.88		
171.94	2.32	172.46	7.04		
171.95	2.37	172.47	7.21		
171.96	2.42	172.48	7.38		
171.97	2.48	172.49	7.56		
171.98	2.53	172.50	7.73		
171.99	2.58	172.51	7.91		
172.00	2.64	172.52	8.09		
172.01	2.69	172.53	8.27		
172.02	2.75	172.54	8.46		

Stage-Area-Storage for Pond B-27: Basin #27

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.35	0	0	167.87	802	208
167.36	15	0	167.88	817	217
167.37	31	0	167.89	832	225
167.38	46	1	167.90	848	233
167.39	62	1	167.91	863	242
167.40	77	2	167.92	879	250
167.41	92	3	167.93	894	259
167.42	108	4	167.94	910	268
167.43	123	5	167.95	925	277
167.44	139	6	167.96	940	287
167.45	154	8	167.97	956	296
167.46	170	9	167.98	971	306
167.47	185	11	167.99	987	316
167.48	200	13	168.00	1,002	326
167.49	216	15	168.01	1,008	336
167.50	231	17	168.02	1,014	346
167.51	247	20	168.03	1,019	356
167.52	262	22	168.04	1,025	366
167.53	277	25	168.05	1,031	376
167.54	293	28	168.06	1,037	387
167.55	308	31	168.07	1,043	397
167.56	324	34	168.08	1,048	408
167.57	339	37	168.09	1,054	418
167.58	355	41	168.10	1,060	429
167.59	370	44	168.11	1,066	439
167.60	385	48	168.12	1,072	450
167.61	401	52	168.13	1,078	461
167.62	416	56	168.14	1,083	472
167.63	432	60	168.15	1,089	482
167.64	447	65	168.16	1,095	493
167.65	462	69	168.17	1,101	504
167.66	478	74	168.18	1,107	515
167.67	493	79	168.19	1,112	527
167.68	509	84	168.20	1,118	538
167.69	524	89	168.21	1,124	549
167.70	540	94	168.22	1,130	560
167.71	555	100	168.23	1,136	571
167.72	570	106	168.24	1,141	583
167.73	586	111	168.25	1,147	594
167.74	601	117	168.26	1,153	606
167.75	617	123	168.27	1,159	617
167.76	632	130	168.28	1,165	629
167.77	647	136	168.29	1,170	641
167.78	663	143	168.30	1,176	652
167.79	678	149	168.31	1,182	664
167.80	694	156	168.32	1,188	676
167.81	709	163	168.33	1,194	688
167.82	725	170	168.34	1,200	700
167.83	740	178	168.35	1,205	712
167.84	755	185	168.36	1,211	724
167.85	771	193	168.37	1,217	736
167.86	786	200	168.38	1,223	748

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.39	1,229	761	168.91	1,531	1,478
168.40	1,234	773	168.92	1,537	1,493
168.41	1,240	785	168.93	1,542	1,509
168.42	1,246	798	168.94	1,548	1,524
168.43	1,252	810	168.95	1,554	1,540
168.44	1,258	823	168.96	1,560	1,555
168.45	1,263	835	168.97	1,566	1,571
168.46	1,269	848	168.98	1,571	1,587
168.47	1,275	861	168.99	1,577	1,602
168.48	1,281	874	169.00	1,583	1,618
168.49	1,287	886	169.01	1,589	1,634
168.50	1,293	899	169.02	1,596	1,650
168.51	1,298	912	169.03	1,602	1,666
168.52	1,304	925	169.04	1,609	1,682
168.53	1,310	938	169.05	1,615	1,698
168.54	1,316	951	169.06	1,621	1,714
168.55	1,322	965	169.07	1,628	1,731
168.56	1,327	978	169.08	1,634	1,747
168.57	1,333	991	169.09	1,640	1,763
168.58	1,339	1,005	169.10	1,647	1,780
168.59	1,345	1,018	169.11	1,653	1,796
168.60	1,351	1,031	169.12	1,660	1,813
168.61	1,356	1,045	169.13	1,666	1,829
168.62	1,362	1,059	169.14	1,672	1,846
168.63	1,368	1,072	169.15	1,679	1,863
168.64	1,374	1,086	169.16	1,685	1,880
168.65	1,380	1,100	169.17	1,691	1,896
168.66	1,385	1,114	169.18	1,698	1,913
168.67	1,391	1,127	169.19	1,704	1,930
168.68	1,397	1,141	169.20	1,711	1,948
168.69	1,403	1,155	169.21	1,717	1,965
168.70	1,409	1,169	169.22	1,723	1,982
168.71	1,415	1,184	169.23	1,730	1,999
168.72	1,420	1,198	169.24	1,736	2,016
168.73	1,426	1,212	169.25	1,743	2,034
168.74	1,432	1,226	169.26	1,749	2,051
168.75	1,438	1,241	169.27	1,755	2,069
168.76	1,444	1,255	169.28	1,762	2,086
168.77	1,449	1,269	169.29	1,768	2,104
168.78	1,455	1,284	169.30	1,774	2,122
168.79	1,461	1,299	169.31	1,781	2,140
168.80	1,467	1,313	169.32	1,787	2,157
168.81	1,473	1,328	169.33	1,794	2,175
168.82	1,478	1,343	169.34	1,800	2,193
168.83	1,484	1,357	169.35	1,806	2,211
168.84	1,490	1,372	169.36	1,813	2,229
168.85	1,496	1,387	169.37	1,819	2,248
168.86	1,502	1,402	169.38	1,825	2,266
168.87	1,507	1,417	169.39	1,832	2,284
168.88	1,513	1,432	169.40	1,838	2,302
168.89	1,519	1,448	169.41	1,845	2,321
168.90	1,525	1,463	169.42	1,851	2,339

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.43	1,857	2,358	169.95	2,189	3,410
169.44	1,864	2,376	169.96	2,195	3,432
169.45	1,870	2,395	169.97	2,202	3,454
169.46	1,876	2,414	169.98	2,208	3,476
169.47	1,883	2,433	169.99	2,215	3,498
169.48	1,889	2,451	170.00	2,221	3,520
169.49	1,896	2,470	170.01	2,228	3,542
169.50	1,902	2,489	170.02	2,235	3,565
169.51	1,908	2,508	170.03	2,242	3,587
169.52	1,915	2,528	170.04	2,249	3,610
169.53	1,921	2,547	170.05	2,256	3,632
169.54	1,928	2,566	170.06	2,263	3,655
169.55	1,934	2,585	170.07	2,270	3,677
169.56	1,940	2,605	170.08	2,277	3,700
169.57	1,947	2,624	170.09	2,284	3,723
169.58	1,953	2,644	170.10	2,290	3,746
169.59	1,959	2,663	170.11	2,297	3,769
169.60	1,966	2,683	170.12	2,304	3,792
169.61	1,972	2,702	170.13	2,311	3,815
169.62	1,979	2,722	170.14	2,318	3,838
169.63	1,985	2,742	170.15	2,325	3,861
169.64	1,991	2,762	170.16	2,332	3,884
169.65	1,998	2,782	170.17	2,339	3,908
169.66	2,004	2,802	170.18	2,346	3,931
169.67	2,010	2,822	170.19	2,353	3,955
169.68	2,017	2,842	170.20	2,360	3,978
169.69	2,023	2,862	170.21	2,367	4,002
169.70	2,030	2,883	170.22	2,374	4,026
169.71	2,036	2,903	170.23	2,381	4,049
169.72	2,042	2,923	170.24	2,388	4,073
169.73	2,049	2,944	170.25	2,395	4,097
169.74	2,055	2,964	170.26	2,402	4,121
169.75	2,062	2,985	170.27	2,409	4,145
169.76	2,068	3,005	170.28	2,416	4,169
169.77	2,074	3,026	170.29	2,423	4,193
169.78	2,081	3,047	170.30	2,429	4,218
169.79	2,087	3,068	170.31	2,436	4,242
169.80	2,093	3,089	170.32	2,443	4,266
169.81	2,100	3,110	170.33	2,450	4,291
169.82	2,106	3,131	170.34	2,457	4,315
169.83	2,113	3,152	170.35	2,464	4,340
169.84	2,119	3,173	170.36	2,471	4,365
169.85	2,125	3,194	170.37	2,478	4,389
169.86	2,132	3,215	170.38	2,485	4,414
169.87	2,138	3,237	170.39	2,492	4,439
169.88	2,144	3,258	170.40	2,499	4,464
169.89	2,151	3,280	170.41	2,506	4,489
169.90	2,157	3,301	170.42	2,513	4,514
169.91	2,164	3,323	170.43	2,520	4,539
169.92	2,170	3,345	170.44	2,527	4,565
169.93	2,176	3,366	170.45	2,534	4,590
169.94	2,183	3,388	170.46	2,541	4,615

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
170.47	2,548	4,641	170.99	2,909	6,060
170.48	2,555	4,666	171.00	2,916	6,089
170.49	2,562	4,692	171.01	2,924	6,118
170.50	2,569	4,718	171.02	2,931	6,147
170.51	2,575	4,743	171.03	2,939	6,176
170.52	2,582	4,769	171.04	2,946	6,206
170.53	2,589	4,795	171.05	2,954	6,235
170.54	2,596	4,821	171.06	2,961	6,265
170.55	2,603	4,847	171.07	2,969	6,295
170.56	2,610	4,873	171.08	2,976	6,324
170.57	2,617	4,899	171.09	2,984	6,354
170.58	2,624	4,925	171.10	2,991	6,384
170.59	2,631	4,952	171.11	2,999	6,414
170.60	2,638	4,978	171.12	3,006	6,444
170.61	2,645	5,004	171.13	3,014	6,474
170.62	2,652	5,031	171.14	3,021	6,504
170.63	2,659	5,057	171.15	3,029	6,534
170.64	2,666	5,084	171.16	3,036	6,565
170.65	2,673	5,111	171.17	3,044	6,595
170.66	2,680	5,137	171.18	3,051	6,626
170.67	2,687	5,164	171.19	3,059	6,656
170.68	2,694	5,191	171.20	3,066	6,687
170.69	2,701	5,218	171.21	3,074	6,718
170.70	2,707	5,245	171.22	3,081	6,748
170.71	2,714	5,272	171.23	3,089	6,779
170.72	2,721	5,299	171.24	3,096	6,810
170.73	2,728	5,327	171.25	3,104	6,841
170.74	2,735	5,354	171.26	3,111	6,872
170.75	2,742	5,381	171.27	3,119	6,903
170.76	2,749	5,409	171.28	3,126	6,935
170.77	2,756	5,436	171.29	3,134	6,966
170.78	2,763	5,464	171.30	3,141	6,997
170.79	2,770	5,492	171.31	3,149	7,029
170.80	2,777	5,519	171.32	3,156	7,060
170.81	2,784	5,547	171.33	3,164	7,092
170.82	2,791	5,575	171.34	3,171	7,123
170.83	2,798	5,603	171.35	3,179	7,155
170.84	2,805	5,631	171.36	3,186	7,187
170.85	2,812	5,659	171.37	3,194	7,219
170.86	2,819	5,687	171.38	3,201	7,251
170.87	2,826	5,715	171.39	3,209	7,283
170.88	2,833	5,744	171.40	3,216	7,315
170.89	2,840	5,772	171.41	3,224	7,347
170.90	2,847	5,801	171.42	3,231	7,380
170.91	2,853	5,829	171.43	3,239	7,412
170.92	2,860	5,858	171.44	3,246	7,444
170.93	2,867	5,886	171.45	3,254	7,477
170.94	2,874	5,915	171.46	3,261	7,509
170.95	2,881	5,944	171.47	3,269	7,542
170.96	2,888	5,973	171.48	3,276	7,575
170.97	2,895	6,001	171.49	3,284	7,608
170.98	2,902	6,030	171.50	3,292	7,641

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
171.51	3,299	7,673	172.03	3,680	9,490
171.52	3,307	7,707	172.04	3,684	9,527
171.53	3,314	7,740	172.05	3,688	9,564
171.54	3,322	7,773	172.06	3,692	9,601
171.55	3,329	7,806	172.07	3,696	9,638
171.56	3,337	7,839	172.08	3,700	9,675
171.57	3,344	7,873	172.09	3,705	9,712
171.58	3,352	7,906	172.10	3,709	9,749
171.59	3,359	7,940	172.11	3,713	9,786
171.60	3,367	7,973	172.12	3,717	9,823
171.61	3,374	8,007	172.13	3,721	9,860
171.62	3,382	8,041	172.14	3,726	9,898
171.63	3,389	8,075	172.15	3,730	9,935
171.64	3,397	8,109	172.16	3,734	9,972
171.65	3,404	8,143	172.17	3,738	10,010
171.66	3,412	8,177	172.18	3,742	10,047
171.67	3,419	8,211	172.19	3,746	10,084
171.68	3,427	8,245	172.20	3,751	10,122
171.69	3,434	8,279	172.21	3,755	10,159
171.70	3,442	8,314	172.22	3,759	10,197
171.71	3,449	8,348	172.23	3,763	10,235
171.72	3,457	8,383	172.24	3,767	10,272
171.73	3,464	8,417	172.25	3,771	10,310
171.74	3,472	8,452	172.26	3,776	10,348
171.75	3,479	8,487	172.27	3,780	10,385
171.76	3,487	8,522	172.28	3,784	10,423
171.77	3,494	8,557	172.29	3,788	10,461
171.78	3,502	8,592	172.30	3,792	10,499
171.79	3,509	8,627	172.31	3,797	10,537
171.80	3,517	8,662	172.32	3,801	10,575
171.81	3,524	8,697	172.33	3,805	10,613
171.82	3,532	8,732	172.34	3,809	10,651
171.83	3,539	8,768	172.35	3,813	10,689
171.84	3,547	8,803	172.36	3,817	10,727
171.85	3,554	8,839	172.37	3,822	10,766
171.86	3,562	8,874	172.38	3,826	10,804
171.87	3,569	8,910	172.39	3,830	10,842
171.88	3,577	8,946	172.40	3,834	10,880
171.89	3,584	8,981	172.41	3,838	10,919
171.90	3,592	9,017	172.42	3,843	10,957
171.91	3,599	9,053	172.43	3,847	10,996
171.92	3,607	9,089	172.44	3,851	11,034
171.93	3,614	9,125	172.45	3,855	11,073
171.94	3,622	9,161	172.46	3,859	11,111
171.95	3,629	9,198	172.47	3,863	11,150
171.96	3,637	9,234	172.48	3,868	11,188
171.97	3,644	9,270	172.49	3,872	11,227
171.98	3,652	9,307	172.50	3,876	11,266
171.99	3,659	9,344	172.51	3,880	11,305
172.00	3,667	9,380	172.52	3,884	11,343
172.01	3,671	9,417	172.53	3,888	11,382
172.02	3,675	9,454	172.54	3,893	11,421

Stage-Area-Storage for Pond B-27: Basin #27 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
172.55	3,897	11,460
172.56	3,901	11,499
172.57	3,905	11,538
172.58	3,909	11,577
172.59	3,914	11,616
172.60	3,918	11,656
172.61	3,922	11,695
172.62	3,926	11,734
172.63	3,930	11,773
172.64	3,934	11,813
172.65	3,939	11,852
172.66	3,943	11,891
172.67	3,947	11,931
172.68	3,951	11,970
172.69	3,955	12,010
172.70	3,960	12,049
172.71	3,964	12,089
172.72	3,968	12,129
172.73	3,972	12,168
172.74	3,976	12,208
172.75	3,980	12,248
172.76	3,985	12,288
172.77	3,989	12,328
172.78	3,993	12,368
172.79	3,997	12,407
172.80	4,001	12,447
172.81	4,005	12,488
172.82	4,010	12,528
172.83	4,014	12,568
172.84	4,018	12,608
172.85	4,022	12,648
172.86	4,026	12,688
172.87	4,031	12,729
172.88	4,035	12,769
172.89	4,039	12,809
172.90	4,043	12,850
172.91	4,047	12,890
172.92	4,051	12,931
172.93	4,056	12,971
172.94	4,060	13,012
172.95	**4,064**	**13,052**

Summary for Pond B-28: Basin #28

Inflow Area = 2.333 ac, 34.85% Impervious, Inflow Depth = 8.97" for Future 100 yr event
Inflow = 21.32 cfs @ 12.17 hrs, Volume= 1.744 af
Outflow = 14.54 cfs @ 12.27 hrs, Volume= 1.665 af, Atten= 32%, Lag= 6.2 min
Primary = 14.54 cfs @ 12.27 hrs, Volume= 1.665 af
Routed to Link PDA-2 : Proposed Drainage Area #2

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 170.35' @ 12.27 hrs Surf.Area= 4,237 sf Storage= 11,673 cf

Plug-Flow detention time= 58.7 min calculated for 1.663 af (95% of inflow)
Center-of-Mass det. time= 32.0 min (812.5 - 780.5)

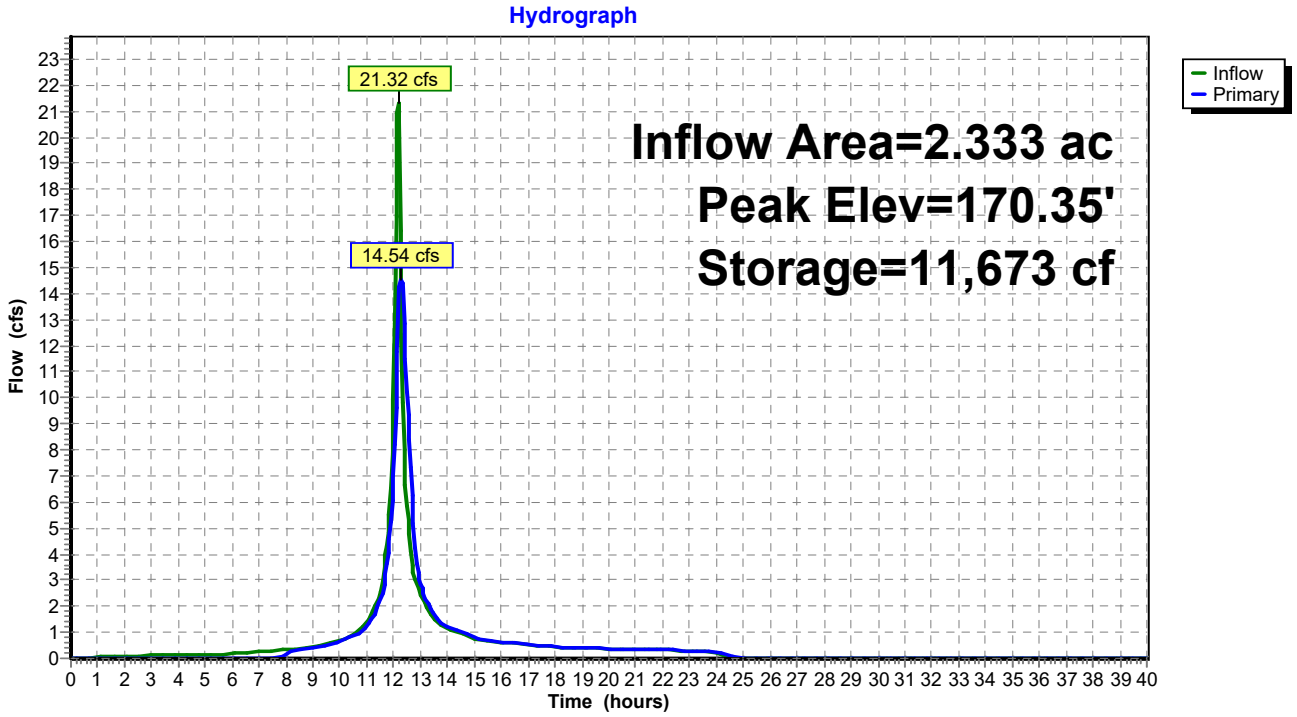
Volume	Invert	Avail.Storage	Storage Description
#1	165.65'	12,318 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.65	0	0	0
166.00	1,145	200	200
167.00	1,778	1,462	1,662
168.00	2,465	2,122	3,783
169.00	3,210	2,838	6,621
170.00	4,012	3,611	10,232
170.50	4,334	2,087	12,318

Device	Routing	Invert	Outlet Devices
#1	Primary	165.65'	**18.0" Round Culvert** L= 186.0' Ke= 0.500 Inlet / Outlet Invert= 165.65' / 163.70' S= 0.0105 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.87'	**30.0" W x 9.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	169.50'	**1.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	170.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	170.49'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.50 cfs @ 12.27 hrs HW=170.33' (Free Discharge)
- **1=Culvert** (Barrel Controls 14.50 cfs @ 8.21 fps)
  - **2=Orifice/Grate** (Passes < 13.01 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 2.05 cfs potential flow)
  - **4=Sharp-Crested Rectangular Weir** (Passes < 2.40 cfs potential flow)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-28: Basin #28



Stage-Discharge for Pond B-28: Basin #28

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.00
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.00
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.00
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.00
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.00
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.00
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.00
165.82	0.00	166.34	0.00	166.86	0.00	167.38	0.00
165.83	0.00	166.35	0.00	166.87	0.00	167.39	0.00
165.84	0.00	166.36	0.00	166.88	0.00	167.40	0.00
165.85	0.00	166.37	0.00	166.89	0.00	167.41	0.00
165.86	0.00	166.38	0.00	166.90	0.00	167.42	0.00
165.87	0.00	166.39	0.00	166.91	0.00	167.43	0.00
165.88	0.00	166.40	0.00	166.92	0.00	167.44	0.00
165.89	0.00	166.41	0.00	166.93	0.00	167.45	0.00
165.90	0.00	166.42	0.00	166.94	0.00	167.46	0.00
165.91	0.00	166.43	0.00	166.95	0.00	167.47	0.00
165.92	0.00	166.44	0.00	166.96	0.00	167.48	0.00
165.93	0.00	166.45	0.00	166.97	0.00	167.49	0.00
165.94	0.00	166.46	0.00	166.98	0.00	167.50	0.00
165.95	0.00	166.47	0.00	166.99	0.00	167.51	0.00
165.96	0.00	166.48	0.00	167.00	0.00	167.52	0.00
165.97	0.00	166.49	0.00	167.01	0.00	167.53	0.00
165.98	0.00	166.50	0.00	167.02	0.00	167.54	0.00
165.99	0.00	166.51	0.00	167.03	0.00	167.55	0.00
166.00	0.00	166.52	0.00	167.04	0.00	167.56	0.00
166.01	0.00	166.53	0.00	167.05	0.00	167.57	0.00
166.02	0.00	166.54	0.00	167.06	0.00	167.58	0.00
166.03	0.00	166.55	0.00	167.07	0.00	167.59	0.00
166.04	0.00	166.56	0.00	167.08	0.00	167.60	0.00
166.05	0.00	166.57	0.00	167.09	0.00	167.61	0.00
166.06	0.00	166.58	0.00	167.10	0.00	167.62	0.00
166.07	0.00	166.59	0.00	167.11	0.00	167.63	0.00
166.08	0.00	166.60	0.00	167.12	0.00	167.64	0.00
166.09	0.00	166.61	0.00	167.13	0.00	167.65	0.00
166.10	0.00	166.62	0.00	167.14	0.00	167.66	0.00
166.11	0.00	166.63	0.00	167.15	0.00	167.67	0.00
166.12	0.00	166.64	0.00	167.16	0.00	167.68	0.00
166.13	0.00	166.65	0.00	167.17	0.00	167.69	0.00
166.14	0.00	166.66	0.00	167.18	0.00	167.70	0.00
166.15	0.00	166.67	0.00	167.19	0.00	167.71	0.00
166.16	0.00	166.68	0.00	167.20	0.00	167.72	0.00

Stage-Discharge for Pond B-28: Basin #28 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.73	0.00	168.25	1.88	168.77	6.39	169.29	9.18
167.74	0.00	168.26	1.95	168.78	6.45	169.30	9.22
167.75	0.00	168.27	2.03	168.79	6.52	169.31	9.27
167.76	0.00	168.28	2.11	168.80	6.58	169.32	9.31
167.77	0.00	168.29	2.18	168.81	6.65	169.33	9.36
167.78	0.00	168.30	2.26	168.82	6.71	169.34	9.40
167.79	0.00	168.31	2.34	168.83	6.78	169.35	9.44
167.80	0.00	168.32	2.42	168.84	6.84	169.36	9.49
167.81	0.00	168.33	2.50	168.85	6.90	169.37	9.53
167.82	0.00	168.34	2.59	168.86	6.96	169.38	9.57
167.83	0.00	168.35	2.67	168.87	7.02	169.39	9.62
167.84	0.00	168.36	2.75	168.88	7.08	169.40	9.66
167.85	0.00	168.37	2.84	168.89	7.14	169.41	9.70
167.86	0.00	168.38	2.92	168.90	7.20	169.42	9.74
167.87	0.00	168.39	3.01	168.91	7.26	169.43	9.79
167.88	0.01	168.40	3.10	168.92	7.32	169.44	9.83
167.89	0.02	168.41	3.18	168.93	7.37	169.45	9.87
167.90	0.04	168.42	3.27	168.94	7.43	169.46	9.91
167.91	0.06	168.43	3.36	168.95	7.49	169.47	9.95
167.92	0.09	168.44	3.45	168.96	7.54	169.48	9.99
167.93	0.12	168.45	3.54	168.97	7.60	169.49	10.03
167.94	0.15	168.46	3.64	168.98	7.65	169.50	10.08
167.95	0.18	168.47	3.73	168.99	7.71	169.51	10.12
167.96	0.22	168.48	3.82	169.00	7.76	169.52	10.17
167.97	0.25	168.49	3.92	169.01	7.81	169.53	10.21
167.98	0.29	168.50	4.01	169.02	7.87	169.54	10.26
167.99	0.33	168.51	4.11	169.03	7.92	169.55	10.31
168.00	0.38	168.52	4.21	169.04	7.97	169.56	10.36
168.01	0.42	168.53	4.30	169.05	8.02	169.57	10.42
168.02	0.47	168.54	4.40	169.06	8.08	169.58	10.47
168.03	0.51	168.55	4.50	169.07	8.13	169.59	10.52
168.04	0.56	168.56	4.60	169.08	8.18	169.60	10.58
168.05	0.61	168.57	4.70	169.09	8.23	169.61	10.63
168.06	0.66	168.58	4.80	169.10	8.28	169.62	10.69
168.07	0.72	168.59	4.90	169.11	8.33	169.63	10.74
168.08	0.77	168.60	5.01	169.12	8.38	169.64	10.80
168.09	0.83	168.61	5.11	169.13	8.43	169.65	10.85
168.10	0.89	168.62	5.21	169.14	8.48	169.66	10.91
168.11	0.94	168.63	5.31	169.15	8.52	169.67	10.97
168.12	1.00	168.64	5.40	169.16	8.57	169.68	11.02
168.13	1.06	168.65	5.49	169.17	8.62	169.69	11.08
168.14	1.13	168.66	5.57	169.18	8.67	169.70	11.14
168.15	1.19	168.67	5.65	169.19	8.72	169.71	11.20
168.16	1.25	168.68	5.73	169.20	8.76	169.72	11.26
168.17	1.32	168.69	5.81	169.21	8.81	169.73	11.32
168.18	1.39	168.70	5.89	169.22	8.86	169.74	11.38
168.19	1.45	168.71	5.96	169.23	8.90	169.75	11.43
168.20	1.52	168.72	6.04	169.24	8.95	169.76	11.49
168.21	1.59	168.73	6.11	169.25	9.00	169.77	11.55
168.22	1.66	168.74	6.18	169.26	9.04	169.78	11.61
168.23	1.73	168.75	6.25	169.27	9.09	169.79	11.67
168.24	1.81	168.76	6.32	169.28	9.13	169.80	11.74

Stage-Discharge for Pond B-28: Basin #28 (continued)

Elevation (feet)	Primary (cfs)
169.81	11.80
169.82	11.86
169.83	11.92
169.84	11.98
169.85	12.04
169.86	12.10
169.87	12.16
169.88	12.23
169.89	12.29
169.90	12.35
169.91	12.41
169.92	12.47
169.93	12.54
169.94	12.60
169.95	12.66
169.96	12.73
169.97	12.79
169.98	12.85
169.99	12.91
170.00	12.98
170.01	13.05
170.02	13.14
170.03	13.24
170.04	13.34
170.05	13.44
170.06	13.55
170.07	13.66
170.08	13.78
170.09	13.90
170.10	14.02
170.11	14.15
170.12	14.21
170.13	14.22
170.14	14.24
170.15	14.25
170.16	14.27
170.17	14.28
170.18	14.29
170.19	14.31
170.20	14.32
170.21	14.34
170.22	14.35
170.23	14.37
170.24	14.38
170.25	14.39
170.26	14.41
170.27	14.42
170.28	14.44
170.29	14.45
170.30	14.47
170.31	14.48
170.32	14.49
170.33	14.51
170.34	14.52
170.35	14.54
170.36	14.55
170.37	14.56
170.38	14.58
170.39	14.59
170.40	14.61
170.41	14.62
170.42	14.63
170.43	14.65
170.44	14.66
170.45	14.68
170.46	14.69
170.47	14.70
170.48	14.72
170.49	14.73
170.50	**14.86**

Stage-Area-Storage for Pond B-28: Basin #28

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.65	0	0	166.17	1,253	404
165.66	33	0	166.18	1,259	417
165.67	65	1	166.19	1,265	429
165.68	98	1	166.20	1,272	442
165.69	131	3	166.21	1,278	455
165.70	164	4	166.22	1,284	468
165.71	196	6	166.23	1,291	480
165.72	229	8	166.24	1,297	493
165.73	262	10	166.25	1,303	506
165.74	294	13	166.26	1,310	519
165.75	327	16	166.27	1,316	533
165.76	360	20	166.28	1,322	546
165.77	393	24	166.29	1,329	559
165.78	425	28	166.30	1,335	572
165.79	458	32	166.31	1,341	586
165.80	491	37	166.32	1,348	599
165.81	523	42	166.33	1,354	613
165.82	556	47	166.34	1,360	626
165.83	589	53	166.35	1,367	640
165.84	622	59	166.36	1,373	654
165.85	654	65	166.37	1,379	667
165.86	687	72	166.38	1,386	681
165.87	720	79	166.39	1,392	695
165.88	752	87	166.40	1,398	709
165.89	785	94	166.41	1,405	723
165.90	818	102	166.42	1,411	737
165.91	851	111	166.43	1,417	751
165.92	883	119	166.44	1,424	765
165.93	916	128	166.45	1,430	780
165.94	949	138	166.46	1,436	794
165.95	981	147	166.47	1,443	808
165.96	1,014	157	166.48	1,449	823
165.97	1,047	167	166.49	1,455	837
165.98	1,080	178	166.50	1,462	852
165.99	1,112	189	166.51	1,468	867
166.00	1,145	200	166.52	1,474	881
166.01	1,151	212	166.53	1,480	896
166.02	1,158	223	166.54	1,487	911
166.03	1,164	235	166.55	1,493	926
166.04	1,170	247	166.56	1,499	941
166.05	1,177	258	166.57	1,506	956
166.06	1,183	270	166.58	1,512	971
166.07	1,189	282	166.59	1,518	986
166.08	1,196	294	166.60	1,525	1,001
166.09	1,202	306	166.61	1,531	1,017
166.10	1,208	318	166.62	1,537	1,032
166.11	1,215	330	166.63	1,544	1,047
166.12	1,221	342	166.64	1,550	1,063
166.13	1,227	355	166.65	1,556	1,078
166.14	1,234	367	166.66	1,563	1,094
166.15	1,240	379	166.67	1,569	1,110
166.16	1,246	392	166.68	1,575	1,125

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.69	1,582	1,141	167.21	1,922	2,050
166.70	1,588	1,157	167.22	1,929	2,070
166.71	1,594	1,173	167.23	1,936	2,089
166.72	1,601	1,189	167.24	1,943	2,108
166.73	1,607	1,205	167.25	1,950	2,128
166.74	1,613	1,221	167.26	1,957	2,147
166.75	1,620	1,237	167.27	1,963	2,167
166.76	1,626	1,253	167.28	1,970	2,187
166.77	1,632	1,270	167.29	1,977	2,206
166.78	1,639	1,286	167.30	1,984	2,226
166.79	1,645	1,302	167.31	1,991	2,246
166.80	1,651	1,319	167.32	1,998	2,266
166.81	1,658	1,335	167.33	2,005	2,286
166.82	1,664	1,352	167.34	2,012	2,306
166.83	1,670	1,369	167.35	2,018	2,326
166.84	1,677	1,385	167.36	2,025	2,346
166.85	1,683	1,402	167.37	2,032	2,367
166.86	1,689	1,419	167.38	2,039	2,387
166.87	1,696	1,436	167.39	2,046	2,408
166.88	1,702	1,453	167.40	2,053	2,428
166.89	1,708	1,470	167.41	2,060	2,449
166.90	1,715	1,487	167.42	2,067	2,469
166.91	1,721	1,504	167.43	2,073	2,490
166.92	1,727	1,522	167.44	2,080	2,511
166.93	1,734	1,539	167.45	2,087	2,532
166.94	1,740	1,556	167.46	2,094	2,552
166.95	1,746	1,574	167.47	2,101	2,573
166.96	1,753	1,591	167.48	2,108	2,594
166.97	1,759	1,609	167.49	2,115	2,616
166.98	1,765	1,626	167.50	2,122	2,637
166.99	1,772	1,644	167.51	2,128	2,658
167.00	1,778	1,662	167.52	2,135	2,679
167.01	1,785	1,680	167.53	2,142	2,701
167.02	1,792	1,698	167.54	2,149	2,722
167.03	1,799	1,716	167.55	2,156	2,744
167.04	1,805	1,734	167.56	2,163	2,765
167.05	1,812	1,752	167.57	2,170	2,787
167.06	1,819	1,770	167.58	2,176	2,809
167.07	1,826	1,788	167.59	2,183	2,830
167.08	1,833	1,806	167.60	2,190	2,852
167.09	1,840	1,825	167.61	2,197	2,874
167.10	1,847	1,843	167.62	2,204	2,896
167.11	1,854	1,862	167.63	2,211	2,918
167.12	1,860	1,880	167.64	2,218	2,940
167.13	1,867	1,899	167.65	2,225	2,963
167.14	1,874	1,918	167.66	2,231	2,985
167.15	1,881	1,936	167.67	2,238	3,007
167.16	1,888	1,955	167.68	2,245	3,030
167.17	1,895	1,974	167.69	2,252	3,052
167.18	1,902	1,993	167.70	2,259	3,075
167.19	1,909	2,012	167.71	2,266	3,097
167.20	1,915	2,031	167.72	2,273	3,120

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.73	2,280	3,143	168.25	2,651	4,423
167.74	2,286	3,166	168.26	2,659	4,449
167.75	2,293	3,189	168.27	2,666	4,476
167.76	2,300	3,212	168.28	2,674	4,503
167.77	2,307	3,235	168.29	2,681	4,530
167.78	2,314	3,258	168.30	2,689	4,556
167.79	2,321	3,281	168.31	2,696	4,583
167.80	2,328	3,304	168.32	2,703	4,610
167.81	2,334	3,327	168.33	2,711	4,637
167.82	2,341	3,351	168.34	2,718	4,665
167.83	2,348	3,374	168.35	2,726	4,692
167.84	2,355	3,398	168.36	2,733	4,719
167.85	2,362	3,421	168.37	2,741	4,746
167.86	2,369	3,445	168.38	2,748	4,774
167.87	2,376	3,469	168.39	2,756	4,801
167.88	2,383	3,493	168.40	2,763	4,829
167.89	2,389	3,516	168.41	2,770	4,857
167.90	2,396	3,540	168.42	2,778	4,884
167.91	2,403	3,564	168.43	2,785	4,912
167.92	2,410	3,588	168.44	2,793	4,940
167.93	2,417	3,613	168.45	2,800	4,968
167.94	2,424	3,637	168.46	2,808	4,996
167.95	2,431	3,661	168.47	2,815	5,024
167.96	2,438	3,685	168.48	2,823	5,052
167.97	2,444	3,710	168.49	2,830	5,081
167.98	2,451	3,734	168.50	2,838	5,109
167.99	2,458	3,759	168.51	2,845	5,137
168.00	2,465	3,783	168.52	2,852	5,166
168.01	2,472	3,808	168.53	2,860	5,194
168.02	2,480	3,833	168.54	2,867	5,223
168.03	2,487	3,858	168.55	2,875	5,252
168.04	2,495	3,883	168.56	2,882	5,281
168.05	2,502	3,908	168.57	2,890	5,309
168.06	2,510	3,933	168.58	2,897	5,338
168.07	2,517	3,958	168.59	2,905	5,367
168.08	2,525	3,983	168.60	2,912	5,396
168.09	2,532	4,008	168.61	2,919	5,426
168.10	2,539	4,034	168.62	2,927	5,455
168.11	2,547	4,059	168.63	2,934	5,484
168.12	2,554	4,085	168.64	2,942	5,514
168.13	2,562	4,110	168.65	2,949	5,543
168.14	2,569	4,136	168.66	2,957	5,573
168.15	2,577	4,162	168.67	2,964	5,602
168.16	2,584	4,187	168.68	2,972	5,632
168.17	2,592	4,213	168.69	2,979	5,662
168.18	2,599	4,239	168.70	2,987	5,691
168.19	2,607	4,265	168.71	2,994	5,721
168.20	2,614	4,291	168.72	3,001	5,751
168.21	2,621	4,317	168.73	3,009	5,781
168.22	2,629	4,344	168.74	3,016	5,811
168.23	2,636	4,370	168.75	3,024	5,842
168.24	2,644	4,396	168.76	3,031	5,872

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.77	3,039	5,902	169.29	3,443	7,585
168.78	3,046	5,933	169.30	3,451	7,620
168.79	3,054	5,963	169.31	3,459	7,655
168.80	3,061	5,994	169.32	3,467	7,689
168.81	3,068	6,024	169.33	3,475	7,724
168.82	3,076	6,055	169.34	3,483	7,759
168.83	3,083	6,086	169.35	3,491	7,793
168.84	3,091	6,117	169.36	3,499	7,828
168.85	3,098	6,148	169.37	3,507	7,863
168.86	3,106	6,179	169.38	3,515	7,899
168.87	3,113	6,210	169.39	3,523	7,934
168.88	3,121	6,241	169.40	3,531	7,969
168.89	3,128	6,272	169.41	3,539	8,004
168.90	3,136	6,304	169.42	3,547	8,040
168.91	3,143	6,335	169.43	3,555	8,075
168.92	3,150	6,366	169.44	3,563	8,111
168.93	3,158	6,398	169.45	3,571	8,147
168.94	3,165	6,430	169.46	3,579	8,182
168.95	3,173	6,461	169.47	3,587	8,218
168.96	3,180	6,493	169.48	3,595	8,254
168.97	3,188	6,525	169.49	3,603	8,290
168.98	3,195	6,557	169.50	3,611	8,326
168.99	3,203	6,589	169.51	3,619	8,362
169.00	3,210	6,621	169.52	3,627	8,399
169.01	3,218	6,653	169.53	3,635	8,435
169.02	3,226	6,685	169.54	3,643	8,471
169.03	3,234	6,718	169.55	3,651	8,508
169.04	3,242	6,750	169.56	3,659	8,544
169.05	3,250	6,782	169.57	3,667	8,581
169.06	3,258	6,815	169.58	3,675	8,618
169.07	3,266	6,848	169.59	3,683	8,654
169.08	3,274	6,880	169.60	3,691	8,691
169.09	3,282	6,913	169.61	3,699	8,728
169.10	3,290	6,946	169.62	3,707	8,765
169.11	3,298	6,979	169.63	3,715	8,802
169.12	3,306	7,012	169.64	3,723	8,840
169.13	3,314	7,045	169.65	3,731	8,877
169.14	3,322	7,078	169.66	3,739	8,914
169.15	3,330	7,111	169.67	3,747	8,952
169.16	3,338	7,145	169.68	3,755	8,989
169.17	3,346	7,178	169.69	3,763	9,027
169.18	3,354	7,212	169.70	3,771	9,064
169.19	3,362	7,245	169.71	3,779	9,102
169.20	3,370	7,279	169.72	3,787	9,140
169.21	3,378	7,313	169.73	3,795	9,178
169.22	3,386	7,346	169.74	3,803	9,216
169.23	3,394	7,380	169.75	3,812	9,254
169.24	3,402	7,414	169.76	3,820	9,292
169.25	3,411	7,448	169.77	3,828	9,330
169.26	3,419	7,483	169.78	3,836	9,369
169.27	3,427	7,517	169.79	3,844	9,407
169.28	3,435	7,551	169.80	3,852	9,446

Stage-Area-Storage for Pond B-28: Basin #28 (continued)

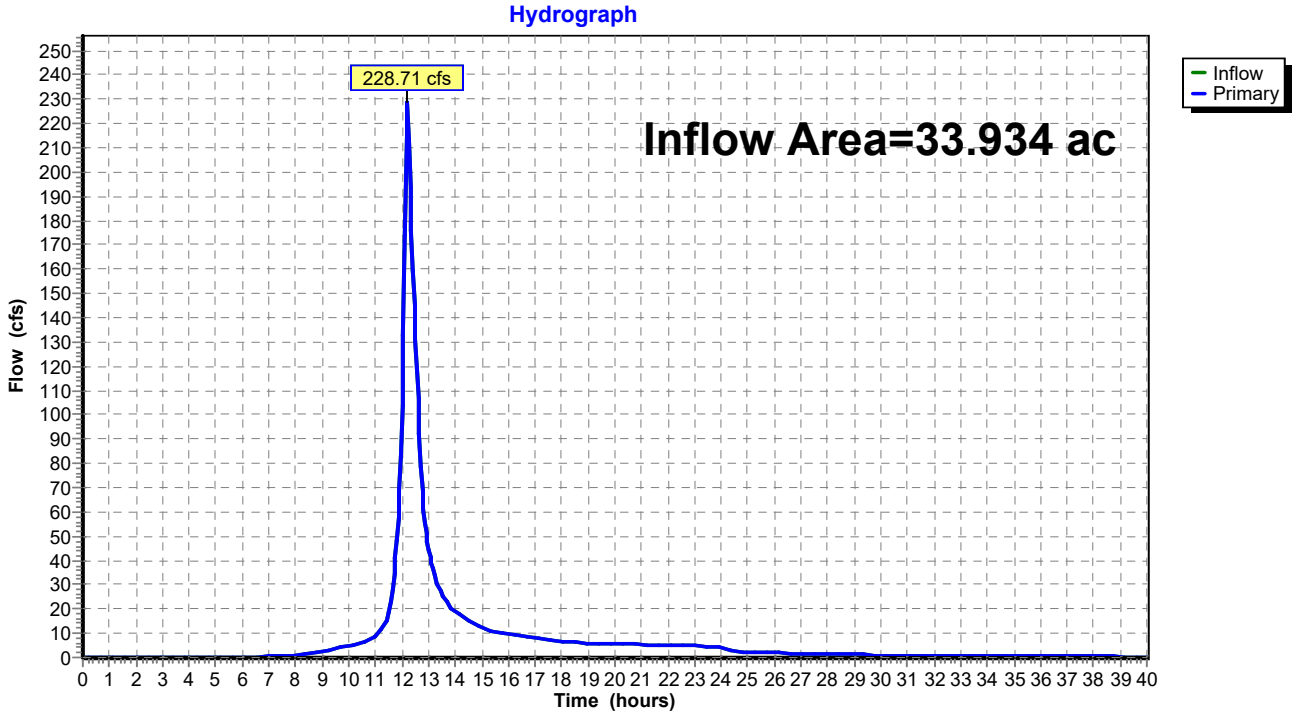
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.81	3,860	9,484
169.82	3,868	9,523
169.83	3,876	9,561
169.84	3,884	9,600
169.85	3,892	9,639
169.86	3,900	9,678
169.87	3,908	9,717
169.88	3,916	9,756
169.89	3,924	9,795
169.90	3,932	9,835
169.91	3,940	9,874
169.92	3,948	9,913
169.93	3,956	9,953
169.94	3,964	9,993
169.95	3,972	10,032
169.96	3,980	10,072
169.97	3,988	10,112
169.98	3,996	10,152
169.99	4,004	10,192
170.00	4,012	10,232
170.01	4,018	10,272
170.02	4,025	10,312
170.03	4,031	10,353
170.04	4,038	10,393
170.05	4,044	10,433
170.06	4,051	10,474
170.07	4,057	10,514
170.08	4,064	10,555
170.09	4,070	10,596
170.10	4,076	10,636
170.11	4,083	10,677
170.12	4,089	10,718
170.13	4,096	10,759
170.14	4,102	10,800
170.15	4,109	10,841
170.16	4,115	10,882
170.17	4,121	10,923
170.18	4,128	10,964
170.19	4,134	11,006
170.20	4,141	11,047
170.21	4,147	11,089
170.22	4,154	11,130
170.23	4,160	11,172
170.24	4,167	11,213
170.25	4,173	11,255
170.26	4,179	11,297
170.27	4,186	11,339
170.28	4,192	11,380
170.29	4,199	11,422
170.30	4,205	11,464
170.31	4,212	11,507
170.32	4,218	11,549
170.33	4,225	11,591
170.34	4,231	11,633
170.35	4,237	11,676
170.36	4,244	11,718
170.37	4,250	11,760
170.38	4,257	11,803
170.39	4,263	11,846
170.40	4,270	11,888
170.41	4,276	11,931
170.42	4,282	11,974
170.43	4,289	12,017
170.44	4,295	12,059
170.45	4,302	12,102
170.46	4,308	12,146
170.47	4,315	12,189
170.48	4,321	12,232
170.49	4,328	12,275
170.50	**4,334**	**12,318**

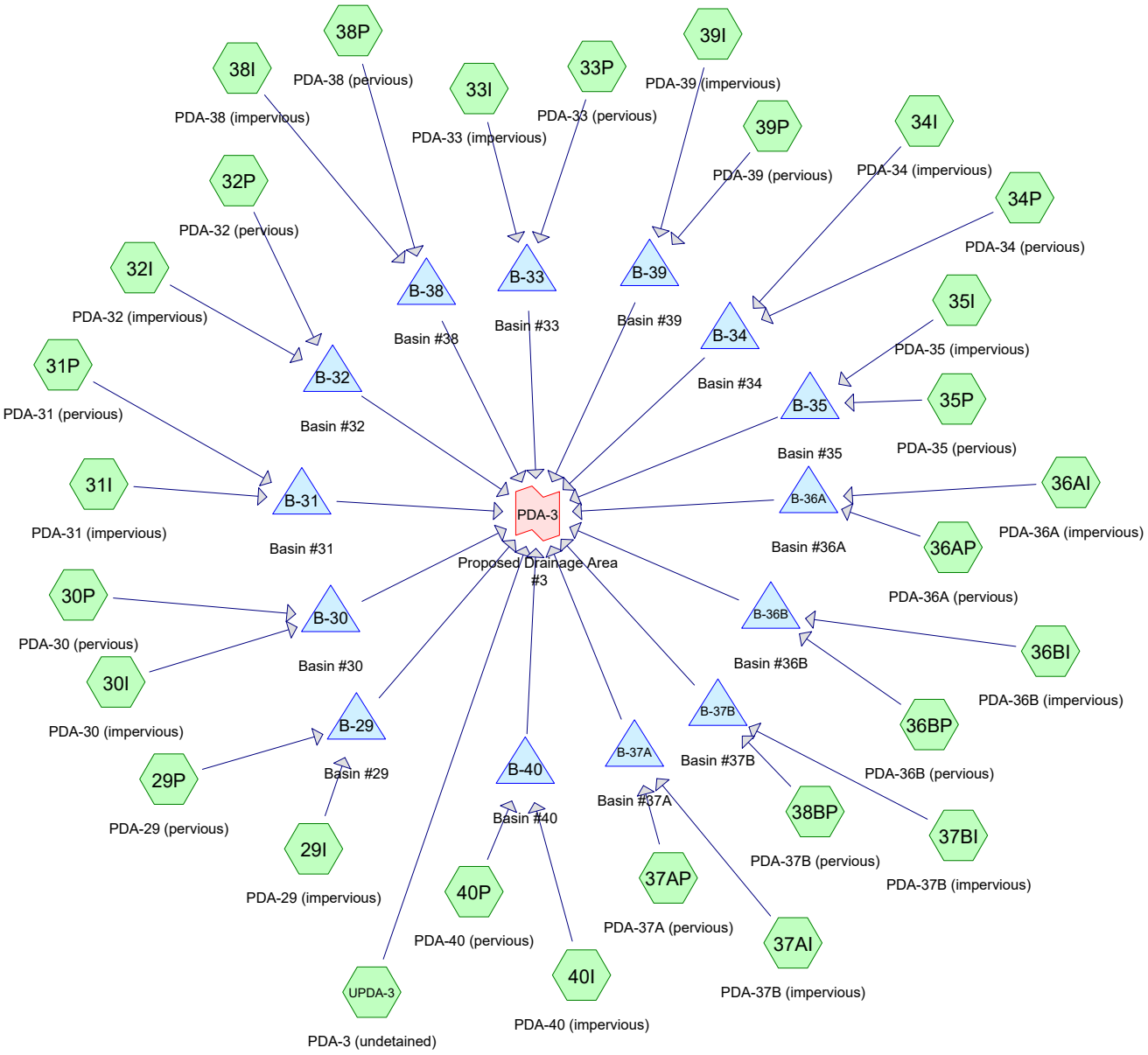
Summary for Link PDA-2: Proposed Drainage Area #2

Inflow Area = 33.934 ac, 26.90% Impervious, Inflow Depth > 8.38" for Future 100 yr event
Inflow = 228.71 cfs @ 12.20 hrs, Volume= 23.699 af
Primary = 228.71 cfs @ 12.20 hrs, Volume= 23.699 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-1

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-2: Proposed Drainage Area #2





Routing Diagram for 2024-12-17 Proposed- 081391_3
Prepared by Bowman Consulting Group, Printed 12/19/2024
HydroCAD® 10.20-5c s/n 09435 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 29l: PDA-29 (impervious)

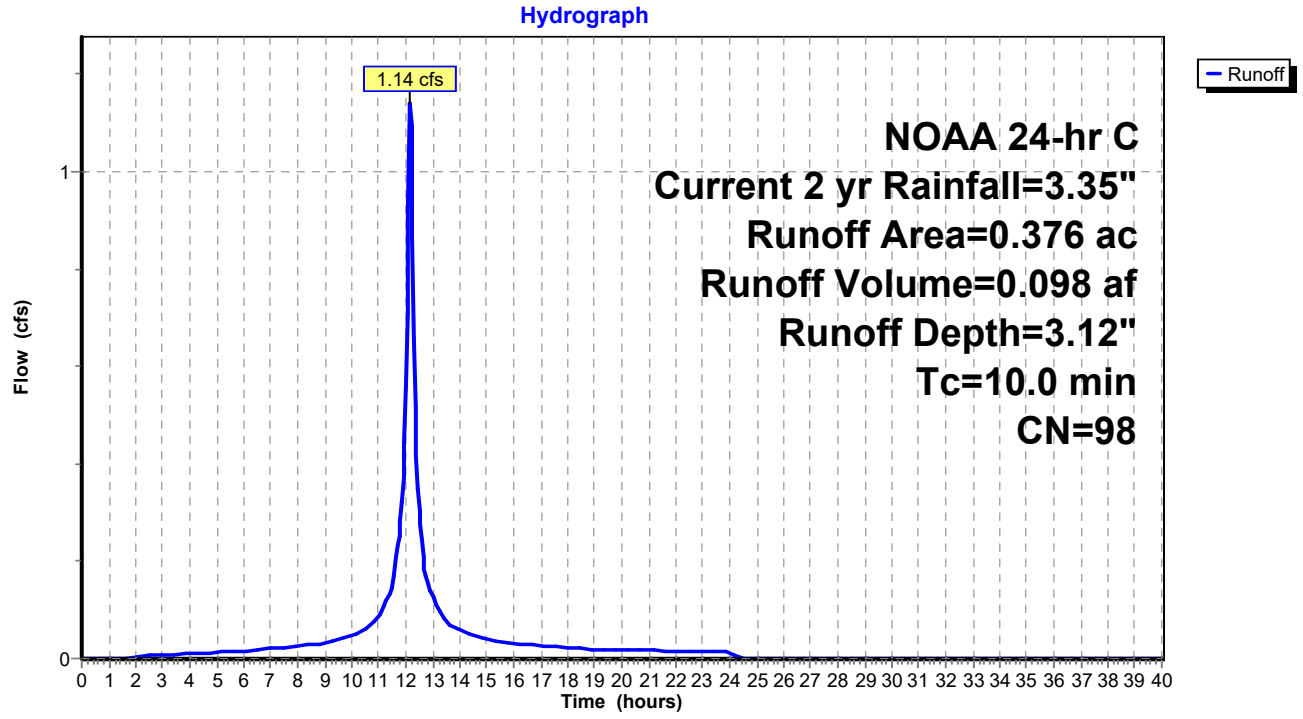
Runoff = 1.14 cfs @ 12.17 hrs, Volume= 0.098 af, Depth= 3.12"
Routed to Pond B-29 : Basin #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.342	98	Pavement, HSG C
*	0.034	98	Concrete, HSC C
	0.376	98	Weighted Average
	0.376		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 29l: PDA-29 (impervious)



Summary for Subcatchment 29P: PDA-29 (pervious)

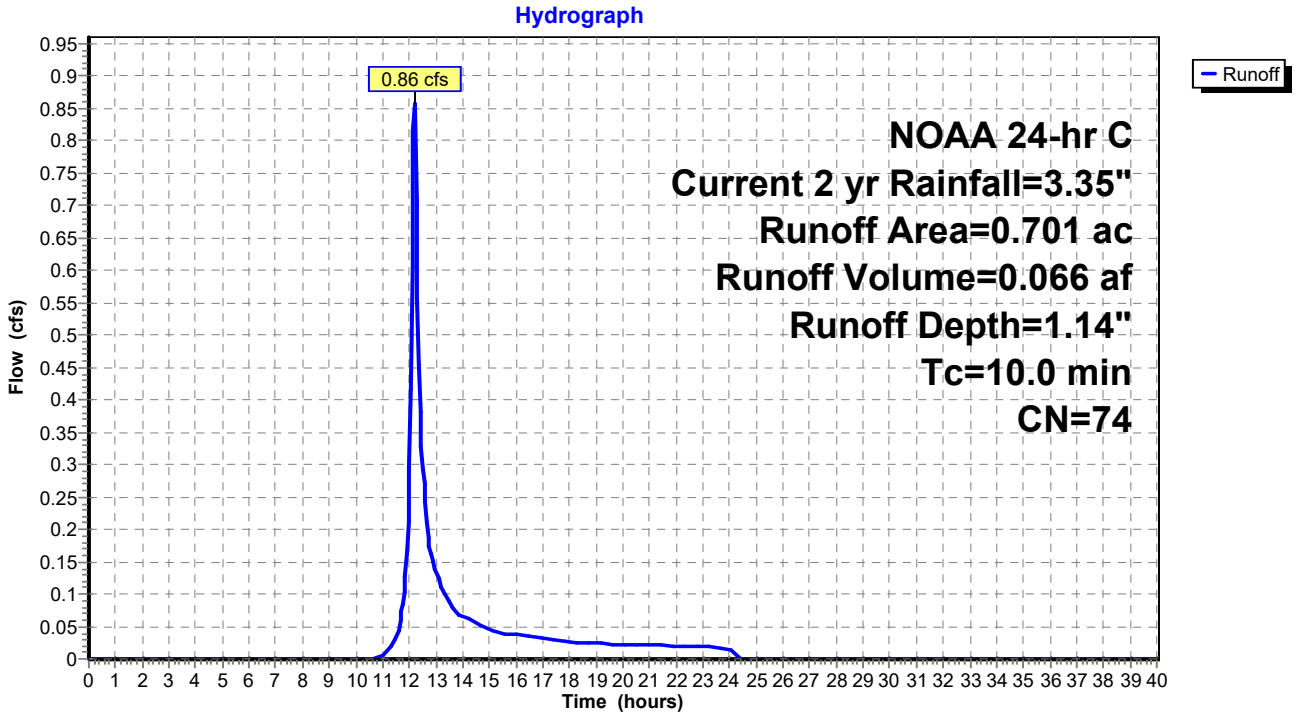
Runoff = 0.86 cfs @ 12.18 hrs, Volume= 0.066 af, Depth= 1.14"
Routed to Pond B-29 : Basin #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.701	74	>75% Grass cover, Good, HSG C
0.701		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 29P: PDA-29 (pervious)



Summary for Subcatchment 30l: PDA-30 (impervious)

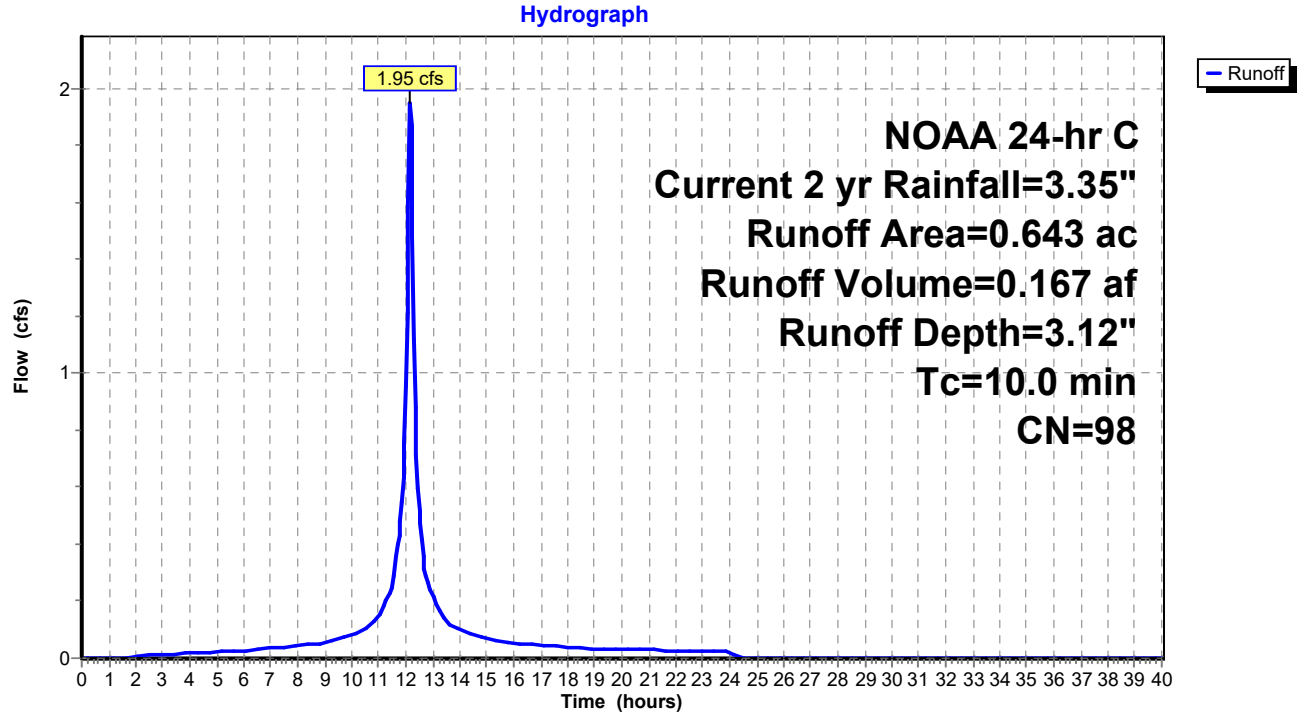
Runoff = 1.95 cfs @ 12.17 hrs, Volume= 0.167 af, Depth= 3.12"
Routed to Pond B-30 : Basin #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.643	98	Weighted Average
	0.643		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 30l: PDA-30 (impervious)



Summary for Subcatchment 30P: PDA-30 (pervious)

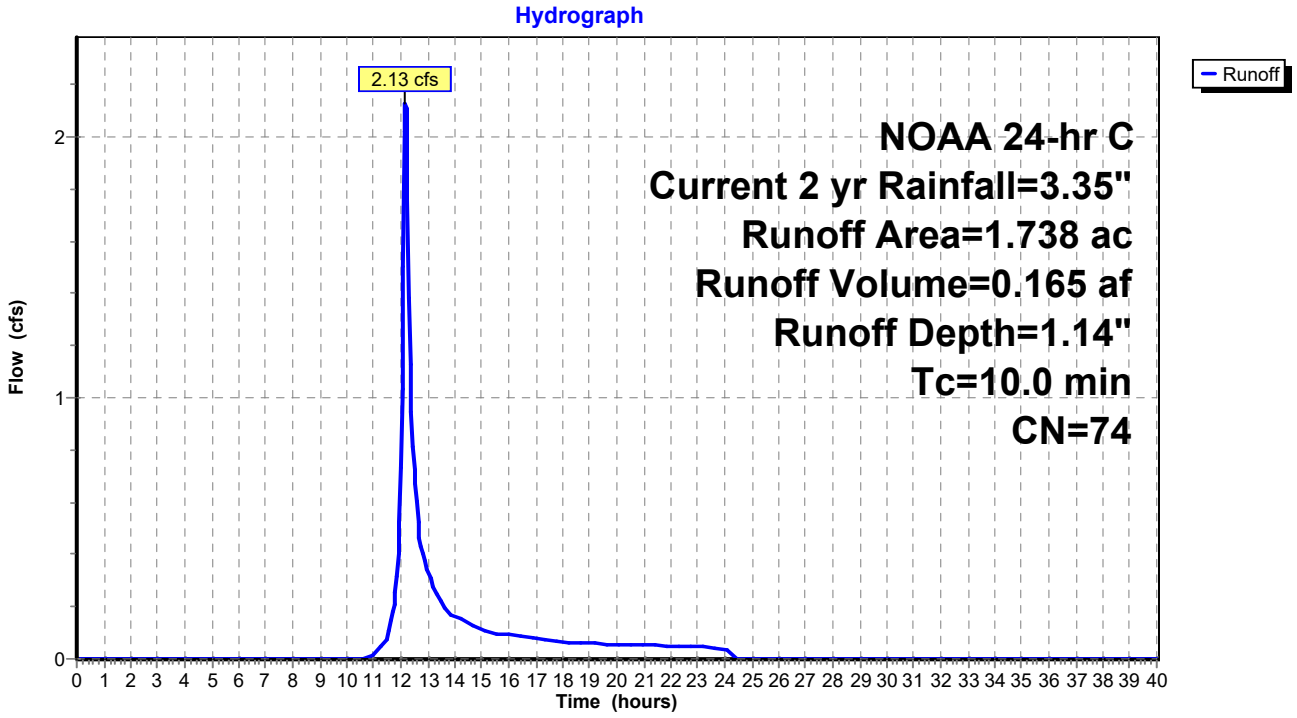
Runoff = 2.13 cfs @ 12.18 hrs, Volume= 0.165 af, Depth= 1.14"
Routed to Pond B-30 : Basin #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.738	74	>75% Grass cover, Good, HSG C
1.738		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 30P: PDA-30 (pervious)



Summary for Subcatchment 31I: PDA-31 (impervious)

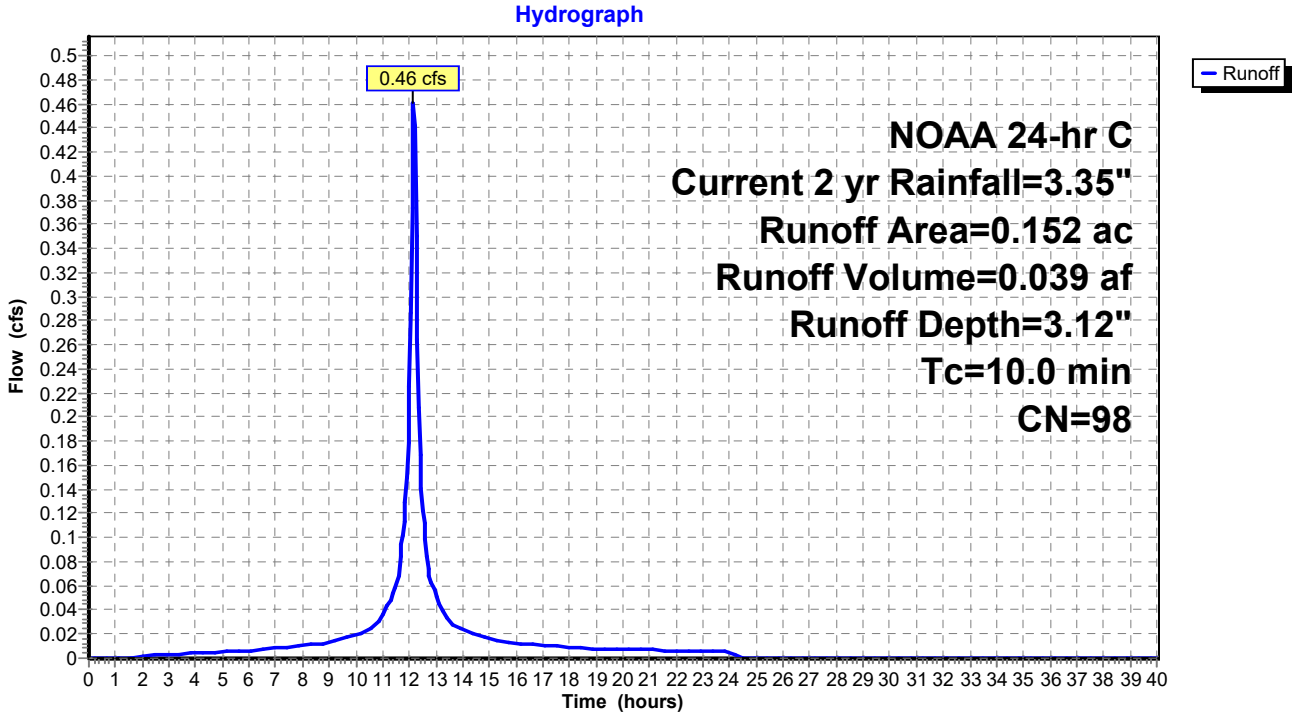
Runoff = 0.46 cfs @ 12.17 hrs, Volume= 0.039 af, Depth= 3.12"
Routed to Pond B-31 : Basin #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.079	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.009	98	Concrete, HSC C
	0.152	98	Weighted Average
	0.152		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 31I: PDA-31 (impervious)



Summary for Subcatchment 31P: PDA-31 (pervious)

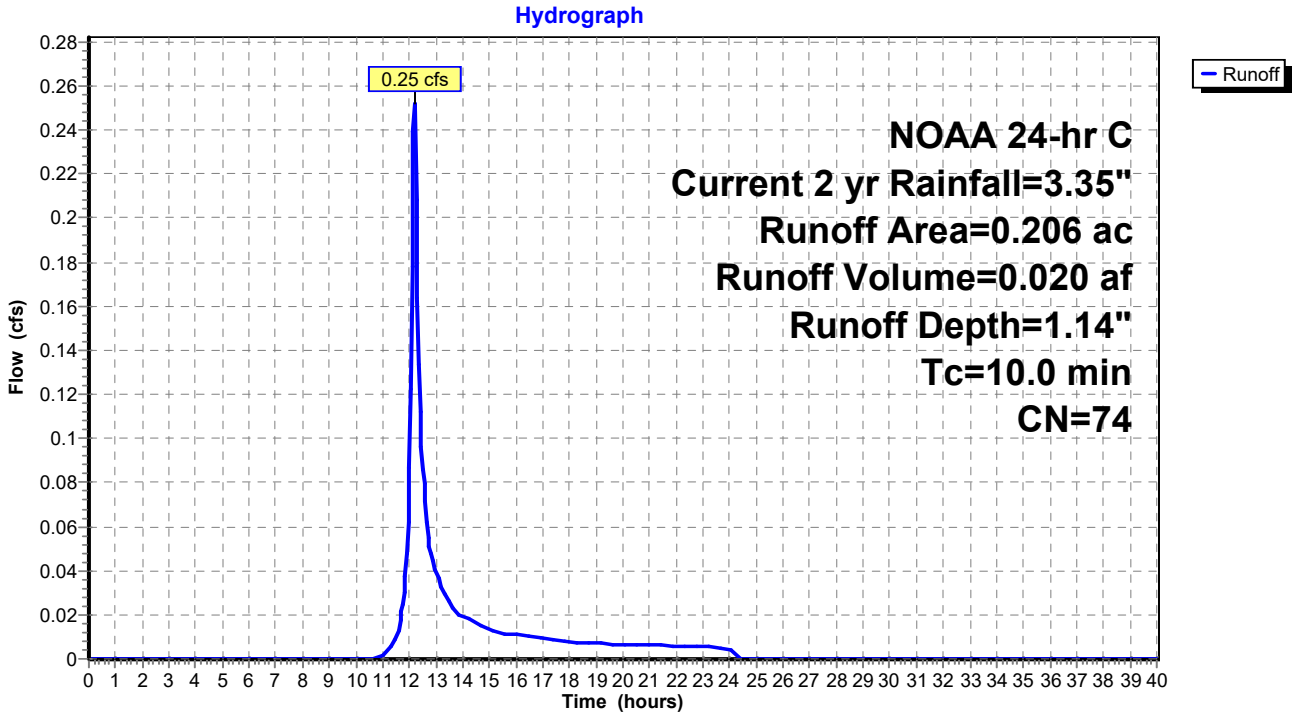
Runoff = 0.25 cfs @ 12.18 hrs, Volume= 0.020 af, Depth= 1.14"
Routed to Pond B-31 : Basin #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.206	74	>75% Grass cover, Good, HSG C
0.206		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 31P: PDA-31 (pervious)



Summary for Subcatchment 32I: PDA-32 (impervious)

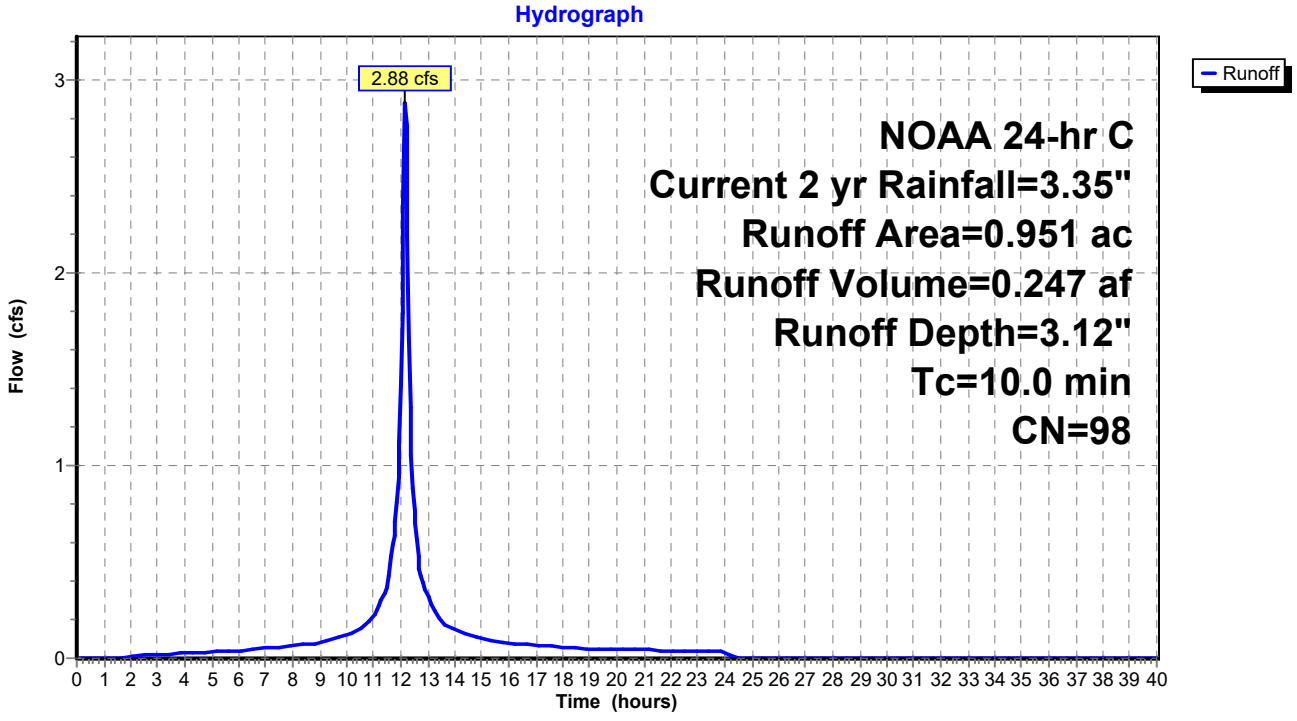
Runoff = 2.88 cfs @ 12.17 hrs, Volume= 0.247 af, Depth= 3.12"
Routed to Pond B-32 : Basin #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.478	98	Pavement, HSG C
*	0.386	98	Roof, HSG C
*	0.087	98	Concrete, HSC C
	0.951	98	Weighted Average
	0.951		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 32I: PDA-32 (impervious)



Summary for Subcatchment 32P: PDA-32 (pervious)

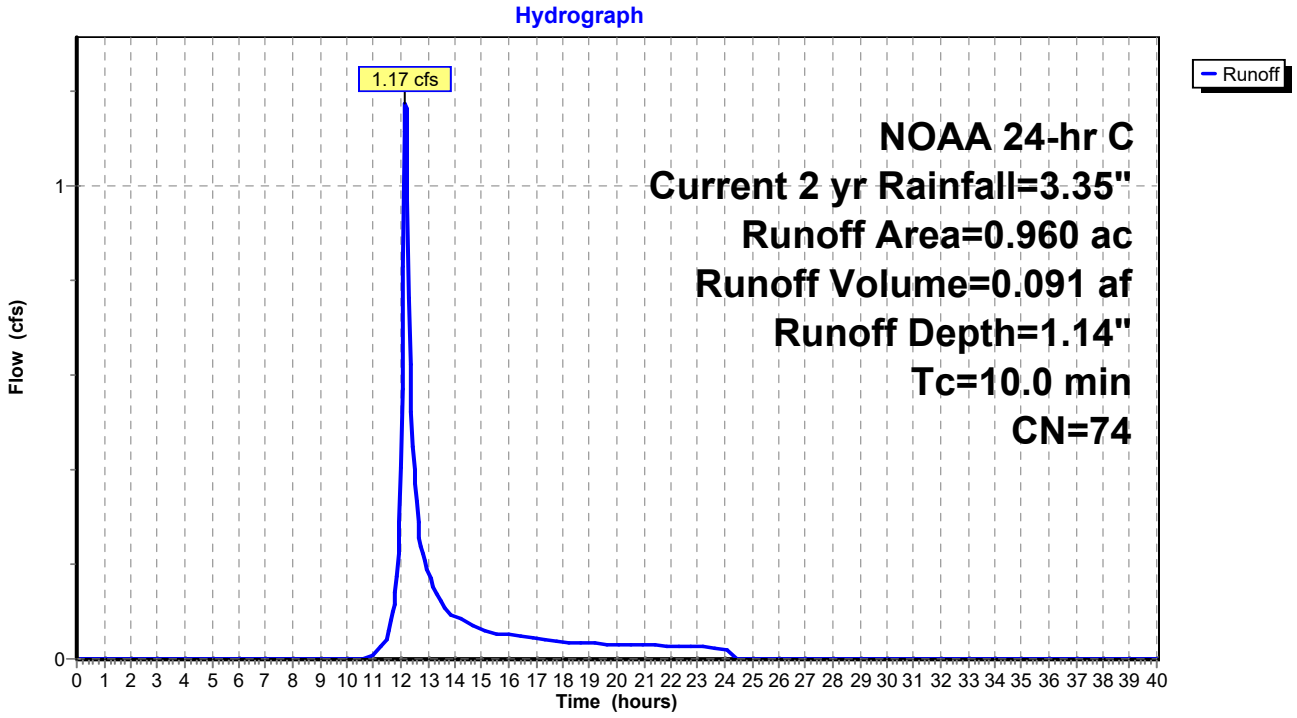
Runoff = 1.17 cfs @ 12.18 hrs, Volume= 0.091 af, Depth= 1.14"
Routed to Pond B-32 : Basin #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.960	74	>75% Grass cover, Good, HSG C
0.960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 32P: PDA-32 (pervious)



Summary for Subcatchment 33I: PDA-33 (impervious)

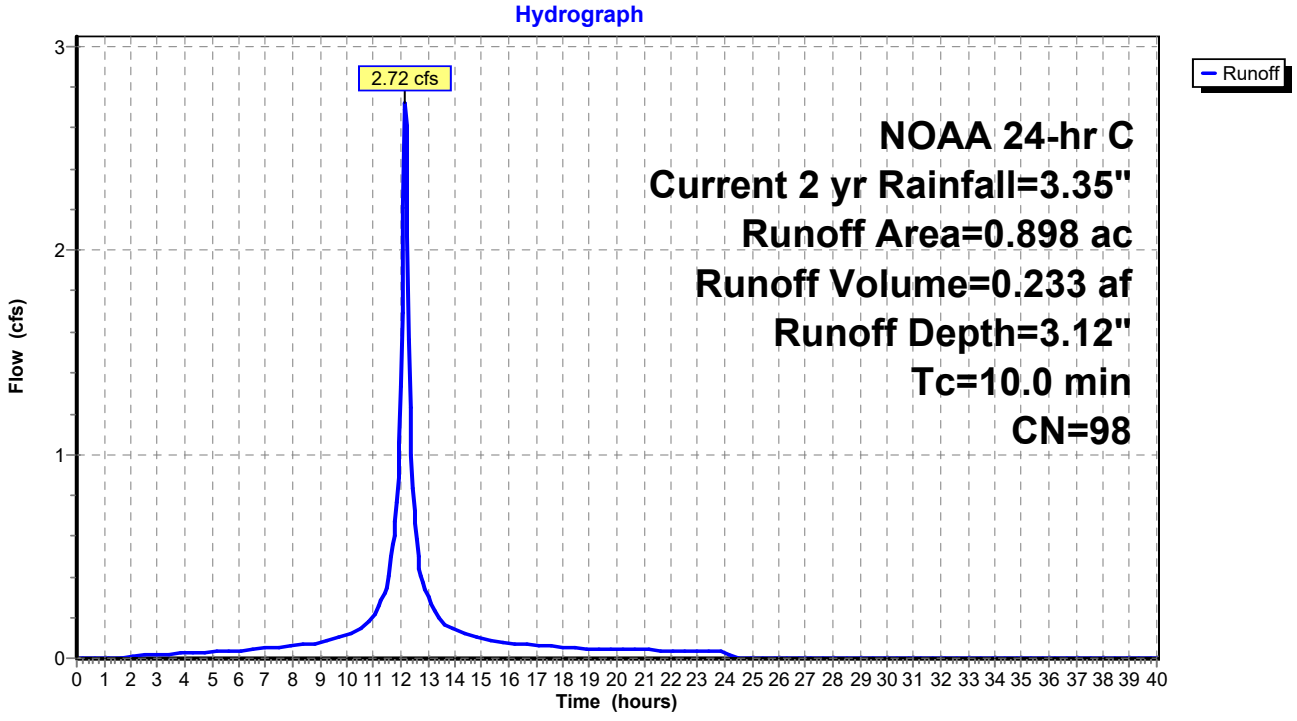
Runoff = 2.72 cfs @ 12.17 hrs, Volume= 0.233 af, Depth= 3.12"
Routed to Pond B-33 : Basin #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.351	98	Pavement, HSG C
*	0.514	98	Roof, HSG C
*	0.033	98	Concrete, HSC C
	0.898	98	Weighted Average
	0.898		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 33I: PDA-33 (impervious)



Summary for Subcatchment 33P: PDA-33 (pervious)

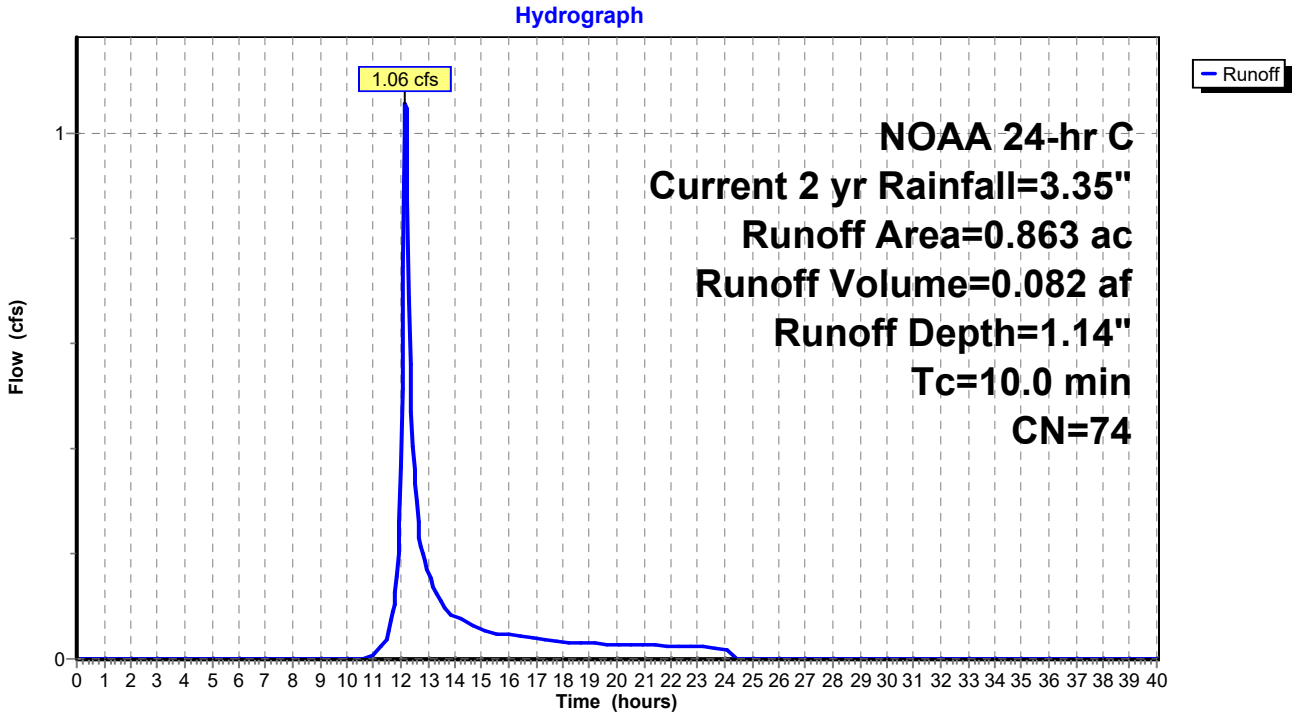
Runoff = 1.06 cfs @ 12.18 hrs, Volume= 0.082 af, Depth= 1.14"
Routed to Pond B-33 : Basin #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.863	74	>75% Grass cover, Good, HSG C
0.863		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 33P: PDA-33 (pervious)



Summary for Subcatchment 34I: PDA-34 (impervious)

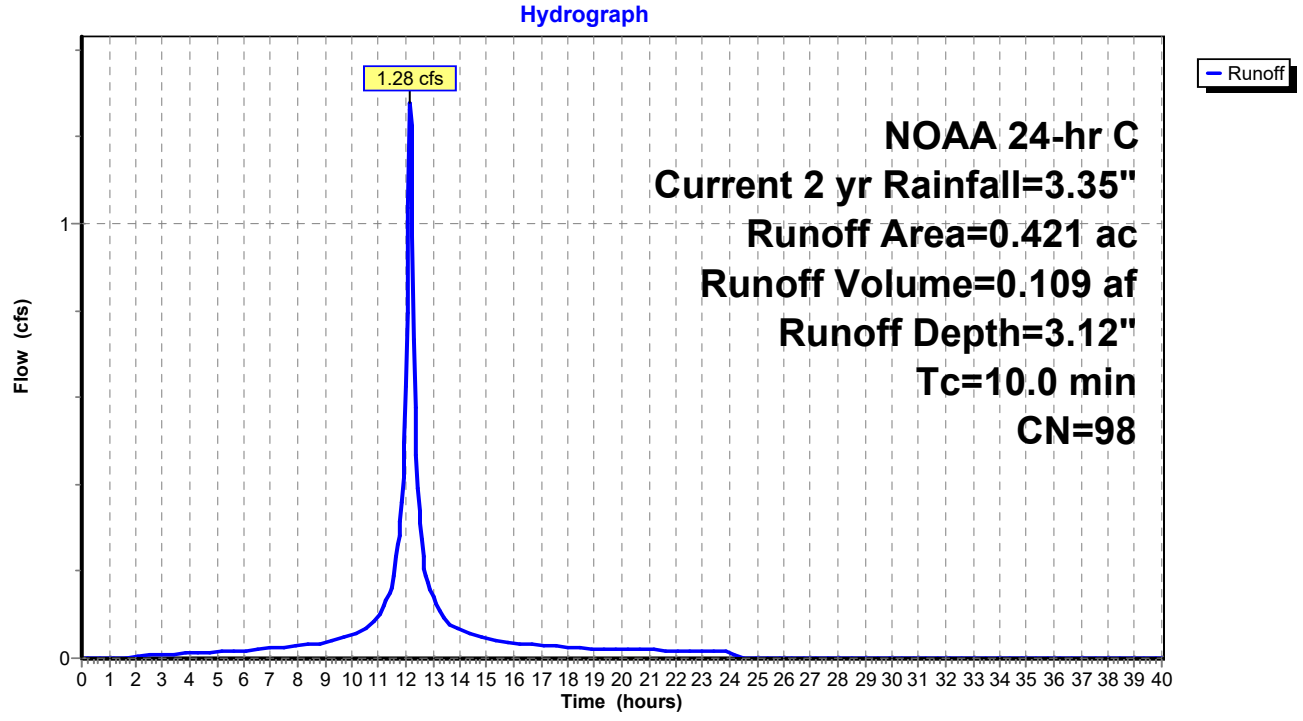
Runoff = 1.28 cfs @ 12.17 hrs, Volume= 0.109 af, Depth= 3.12"
Routed to Pond B-34 : Basin #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.279	98	Roof, HSG C
*	0.142	98	Concrete, HSC C
	0.421	98	Weighted Average
	0.421		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 34I: PDA-34 (impervious)



Summary for Subcatchment 34P: PDA-34 (pervious)

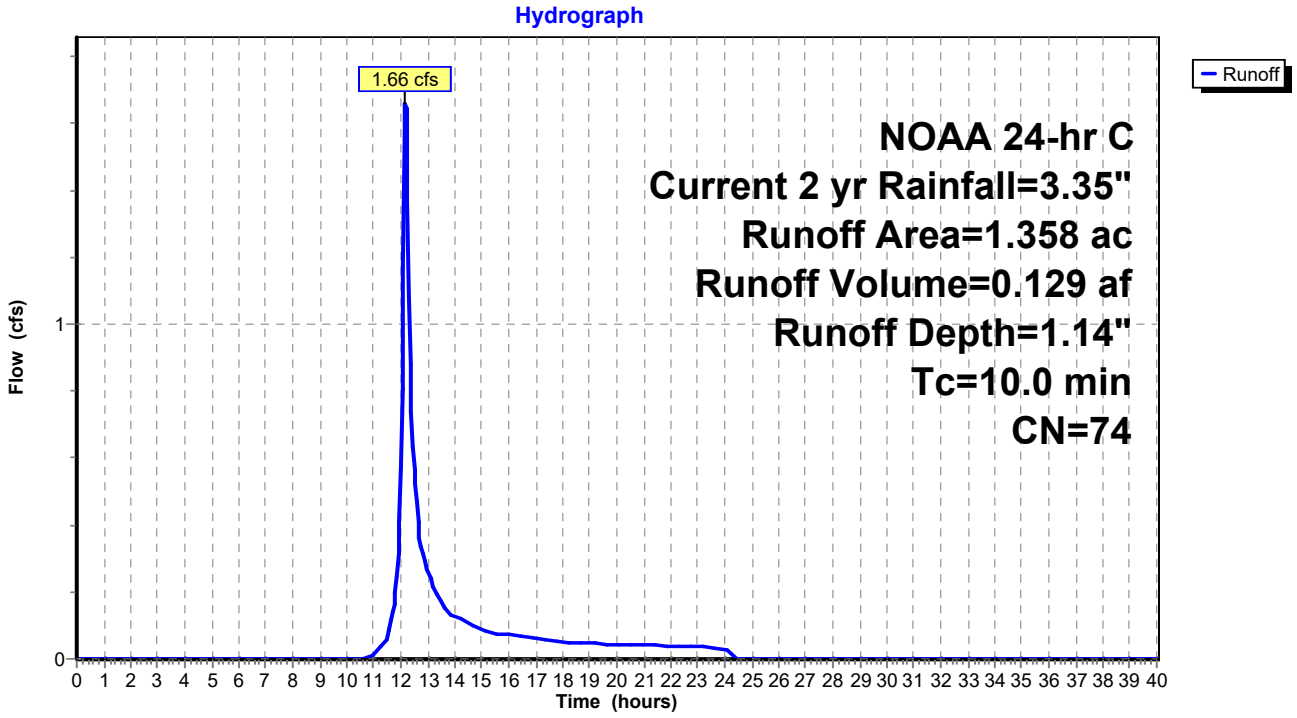
Runoff = 1.66 cfs @ 12.18 hrs, Volume= 0.129 af, Depth= 1.14"
Routed to Pond B-34 : Basin #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.358	74	>75% Grass cover, Good, HSG C
1.358		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 34P: PDA-34 (pervious)



Summary for Subcatchment 35l: PDA-35 (impervious)

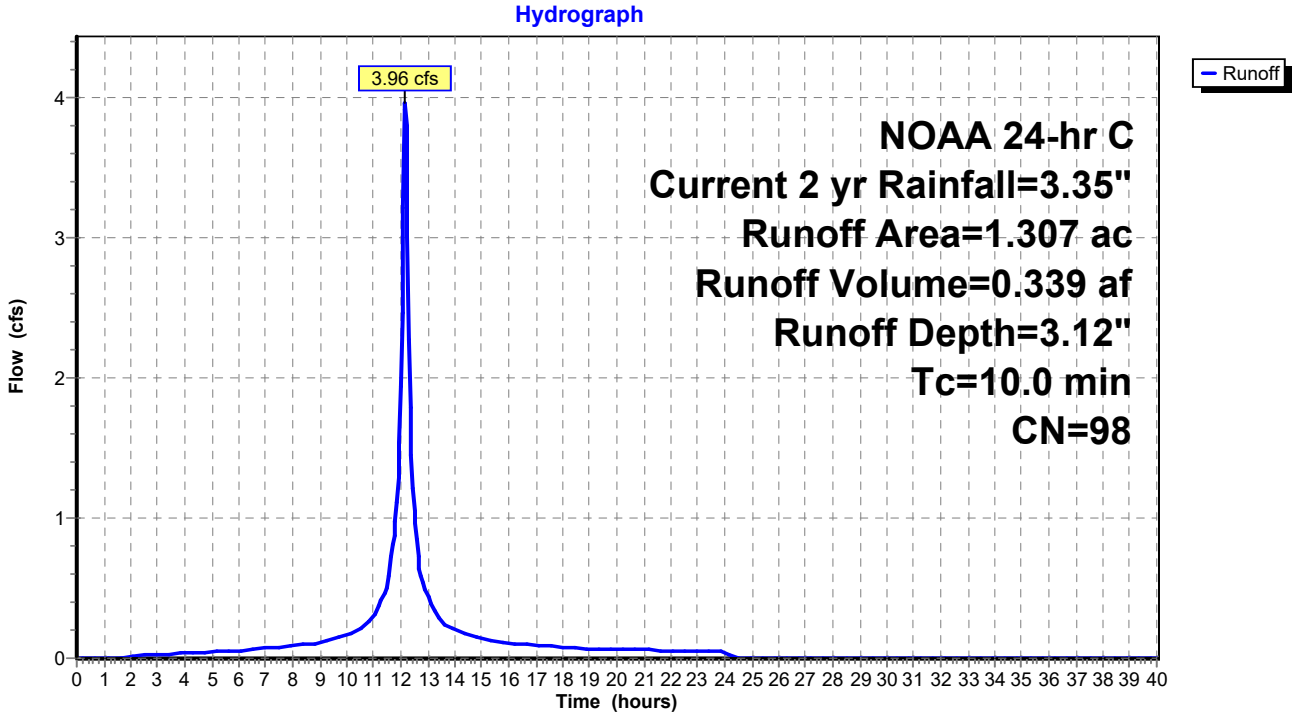
Runoff = 3.96 cfs @ 12.17 hrs, Volume= 0.339 af, Depth= 3.12"
Routed to Pond B-35 : Basin #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	1.003	98	Pavement, HSG C
*	0.139	98	Roof, HSG C
*	0.165	98	Concrete, HSC C
	1.307	98	Weighted Average
	1.307		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 35l: PDA-35 (impervious)



Summary for Subcatchment 35P: PDA-35 (pervious)

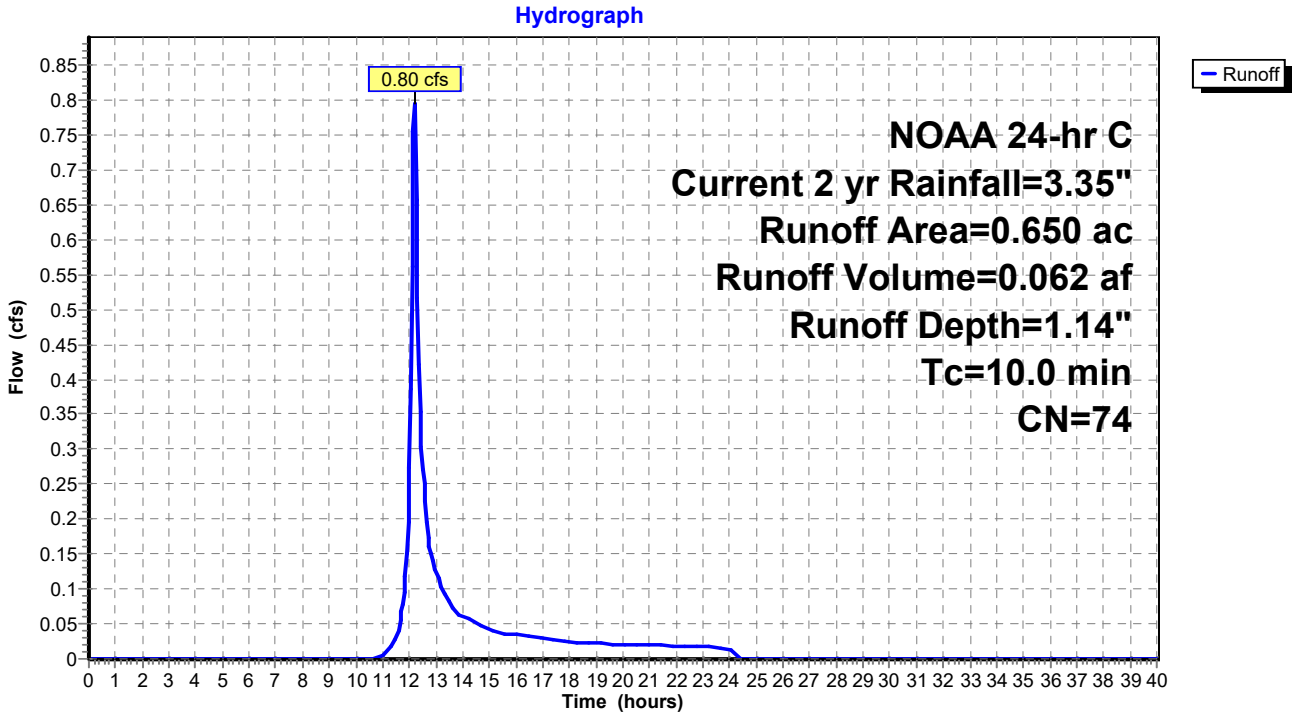
Runoff = 0.80 cfs @ 12.18 hrs, Volume= 0.062 af, Depth= 1.14"
Routed to Pond B-35 : Basin #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.650	74	>75% Grass cover, Good, HSG C
0.650		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 35P: PDA-35 (pervious)



Summary for Subcatchment 36AI: PDA-36A (impervious)

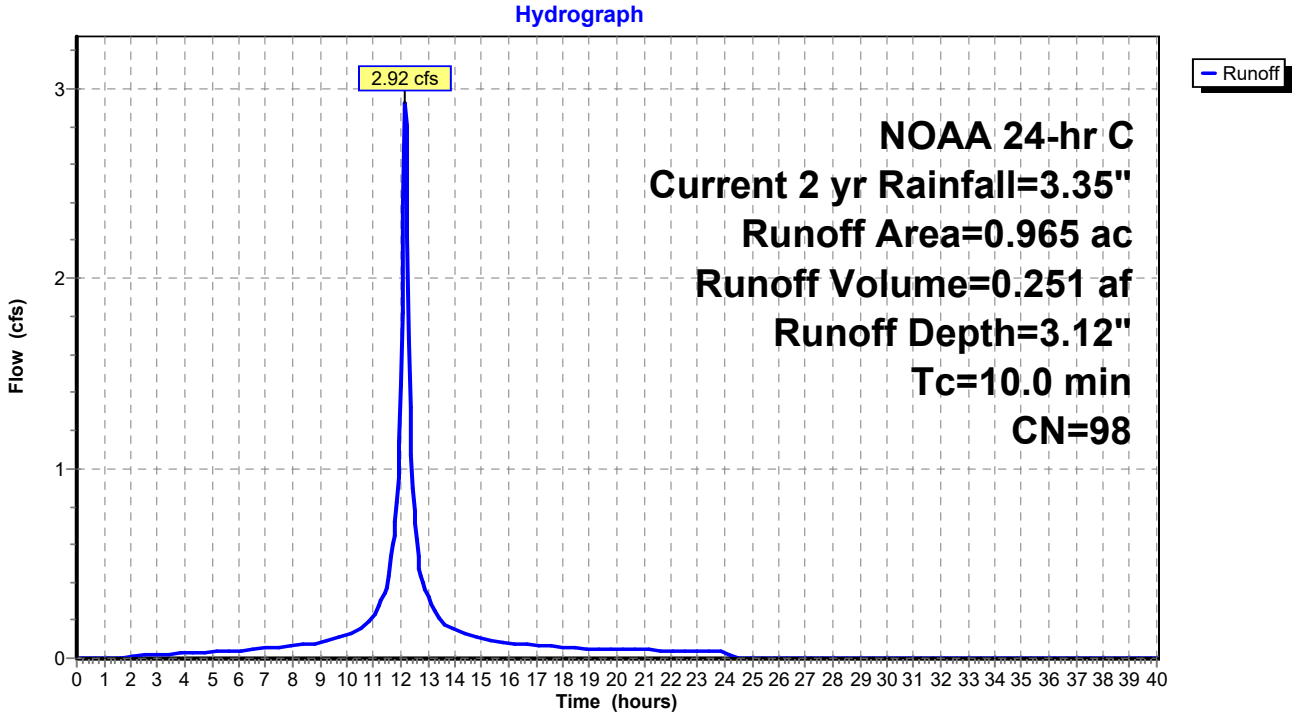
Runoff = 2.92 cfs @ 12.17 hrs, Volume= 0.251 af, Depth= 3.12"
Routed to Pond B-36A : Basin #36A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.415	98	Pavement, HSG C
*	0.418	98	Roof, HSG C
*	0.132	98	Concrete, HSC C
	0.965	98	Weighted Average
	0.965		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36AI: PDA-36A (impervious)



Summary for Subcatchment 36AP: PDA-36A (pervious)

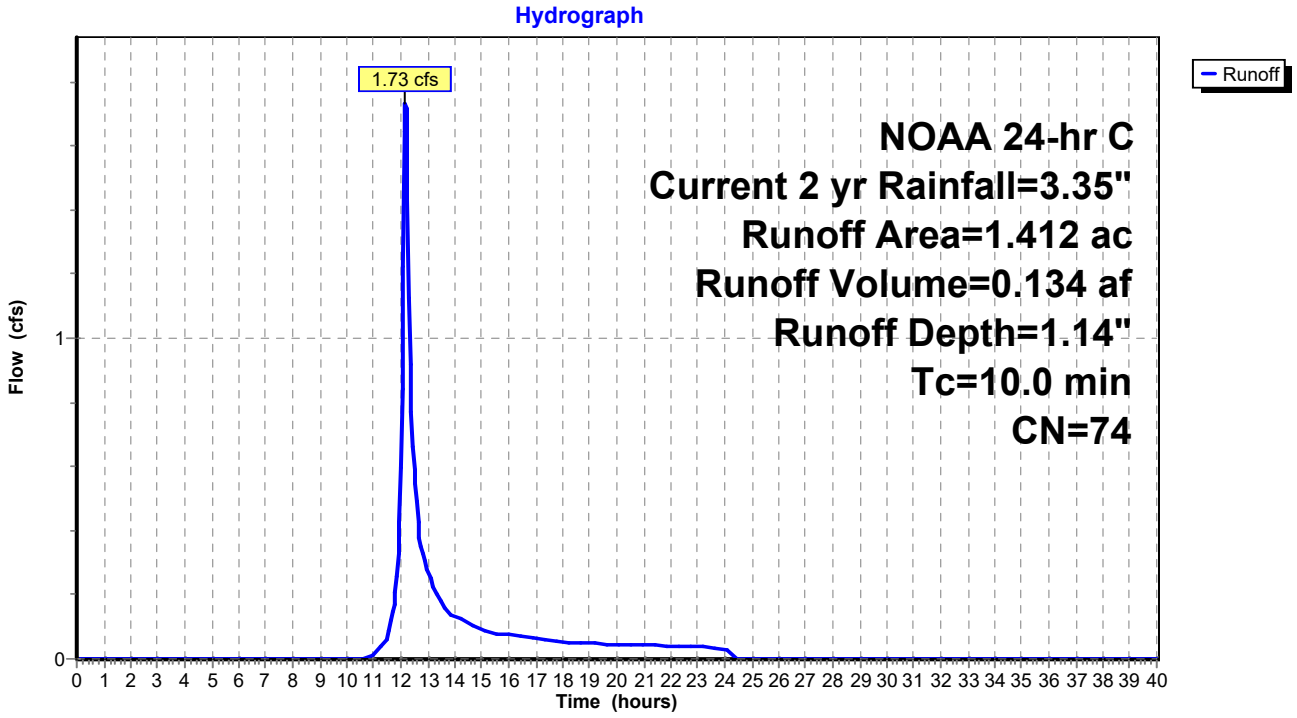
Runoff = 1.73 cfs @ 12.18 hrs, Volume= 0.134 af, Depth= 1.14"
Routed to Pond B-36A : Basin #36A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.412	74	>75% Grass cover, Good, HSG C
1.412		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36AP: PDA-36A (pervious)



Summary for Subcatchment 36BI: PDA-36B (impervious)

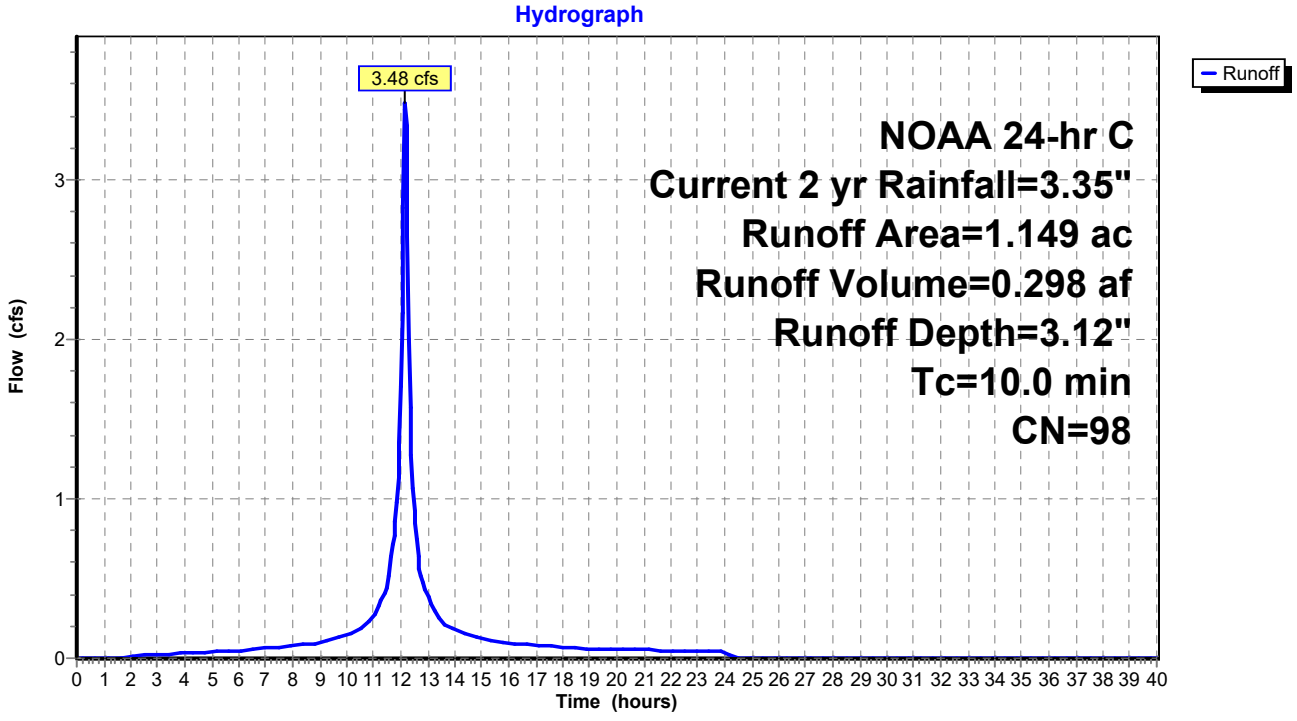
Runoff = 3.48 cfs @ 12.17 hrs, Volume= 0.298 af, Depth= 3.12"
Routed to Pond B-36B : Basin #36B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.501	98	Pavement, HSG C
*	0.579	98	Roof, HSG C
*	0.069	98	Concrete, HSC C
	1.149	98	Weighted Average
	1.149		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36BI: PDA-36B (impervious)



Summary for Subcatchment 36BP: PDA-36B (pervious)

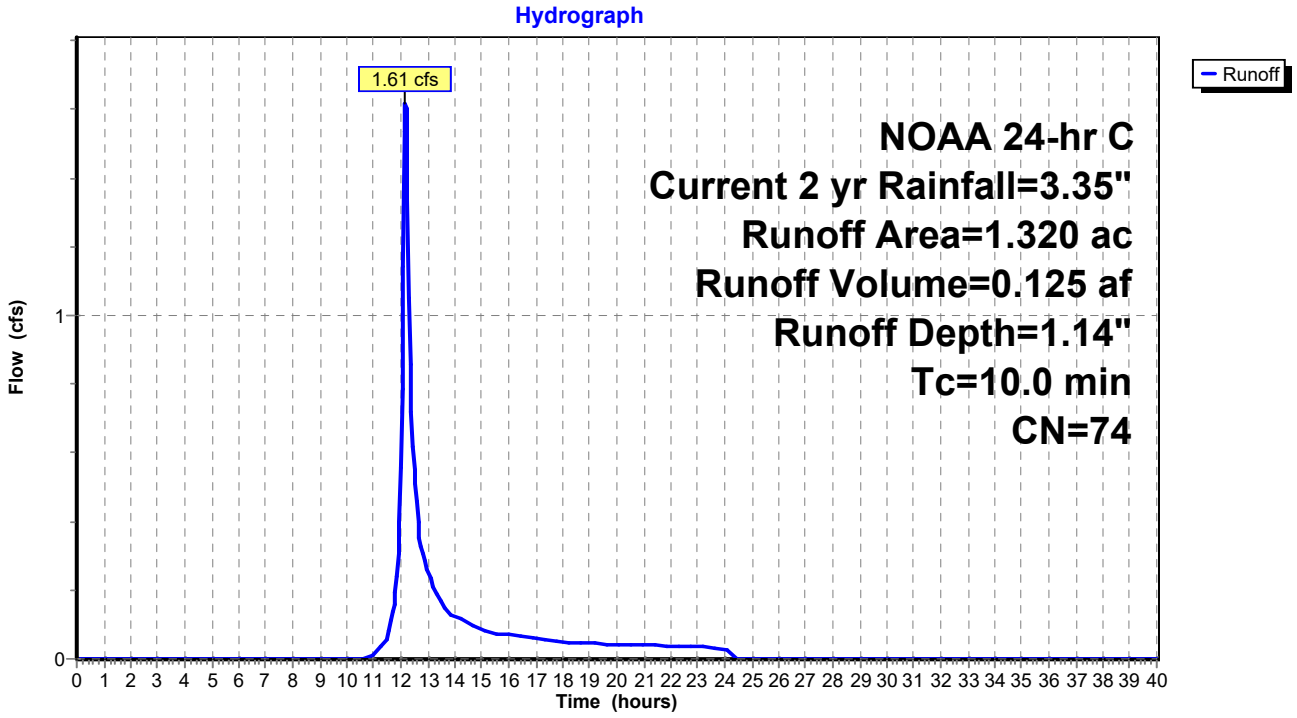
Runoff = 1.61 cfs @ 12.18 hrs, Volume= 0.125 af, Depth= 1.14"
Routed to Pond B-36B : Basin #36B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.320	74	>75% Grass cover, Good, HSG C
1.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36BP: PDA-36B (pervious)



Summary for Subcatchment 37AI: PDA-37B (impervious)

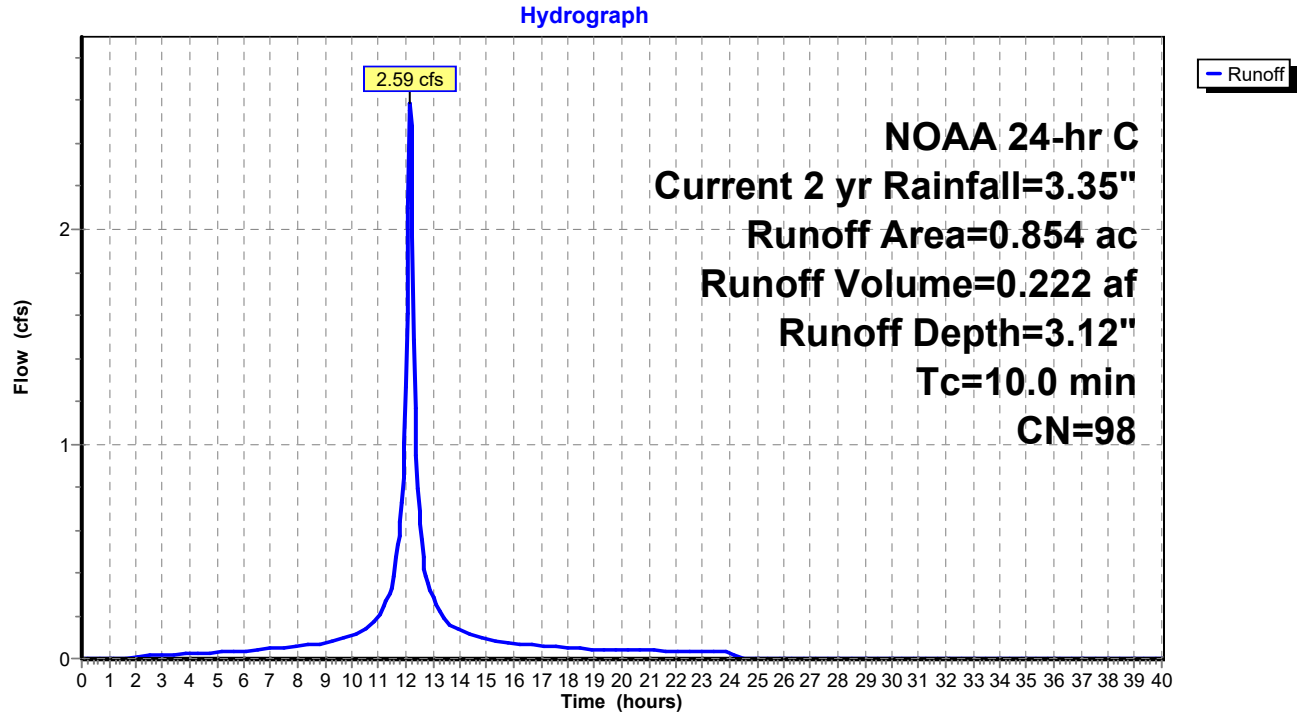
Runoff = 2.59 cfs @ 12.17 hrs, Volume= 0.222 af, Depth= 3.12"
Routed to Pond B-37A : Basin #37A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.673	98	Pavement, HSG C
*	0.181	98	Concrete, HSC C
	0.854	98	Weighted Average
	0.854		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37AI: PDA-37B (impervious)



Summary for Subcatchment 37AP: PDA-37A (pervious)

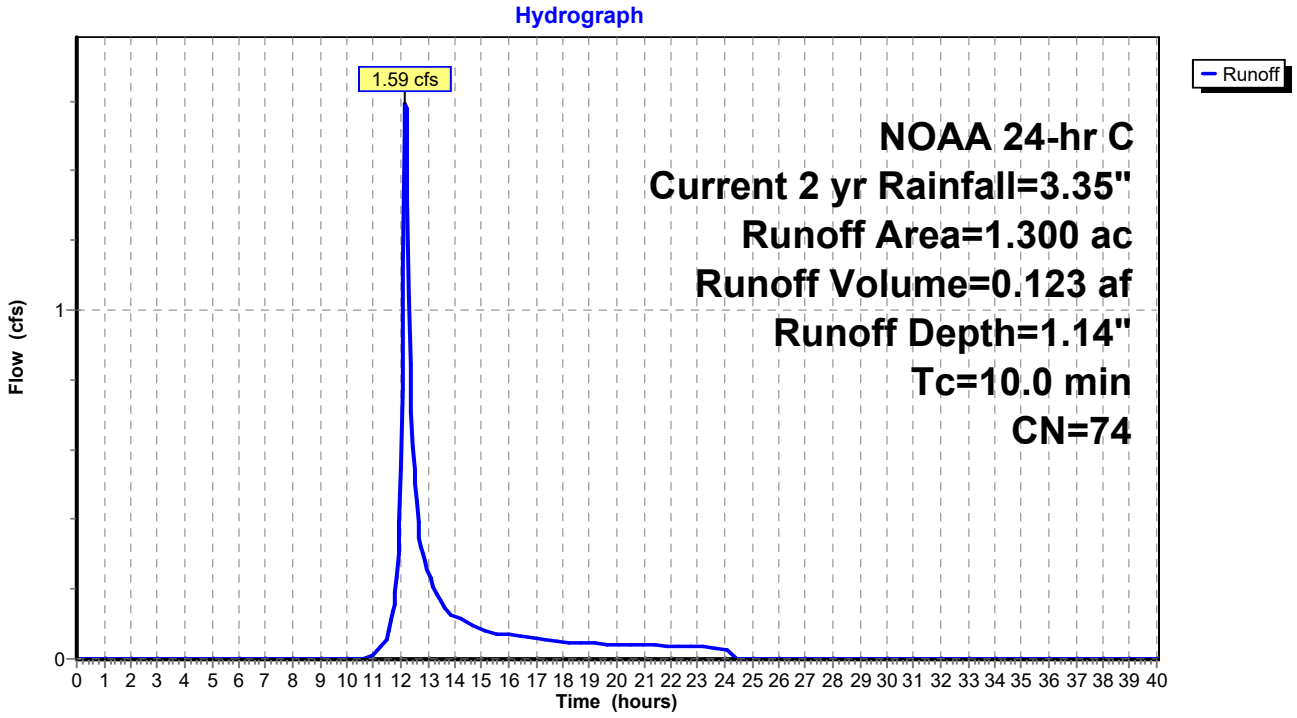
Runoff = 1.59 cfs @ 12.18 hrs, Volume= 0.123 af, Depth= 1.14"
Routed to Pond B-37A : Basin #37A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.300	74	>75% Grass cover, Good, HSG C
1.300		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37AP: PDA-37A (pervious)



Summary for Subcatchment 37BI: PDA-37B (impervious)

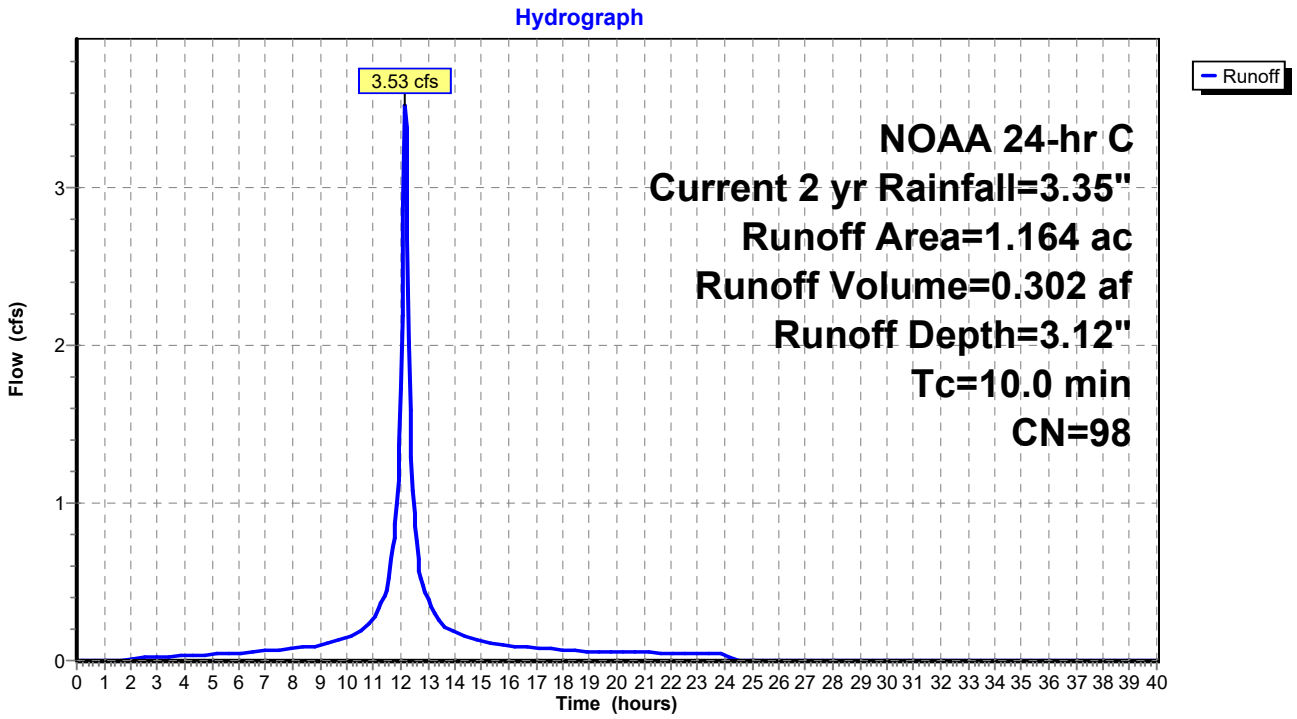
Runoff = 3.53 cfs @ 12.17 hrs, Volume= 0.302 af, Depth= 3.12"
Routed to Pond B-37B : Basin #37B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.806	98	Pavement, HSG C
*	0.079	98	Concrete, HSC C
	0.279	98	Unconnected roofs, HSG C
	1.164	98	Weighted Average
	1.164		100.00% Impervious Area
	0.279		23.97% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37BI: PDA-37B (impervious)



Summary for Subcatchment 38BP: PDA-37B (pervious)

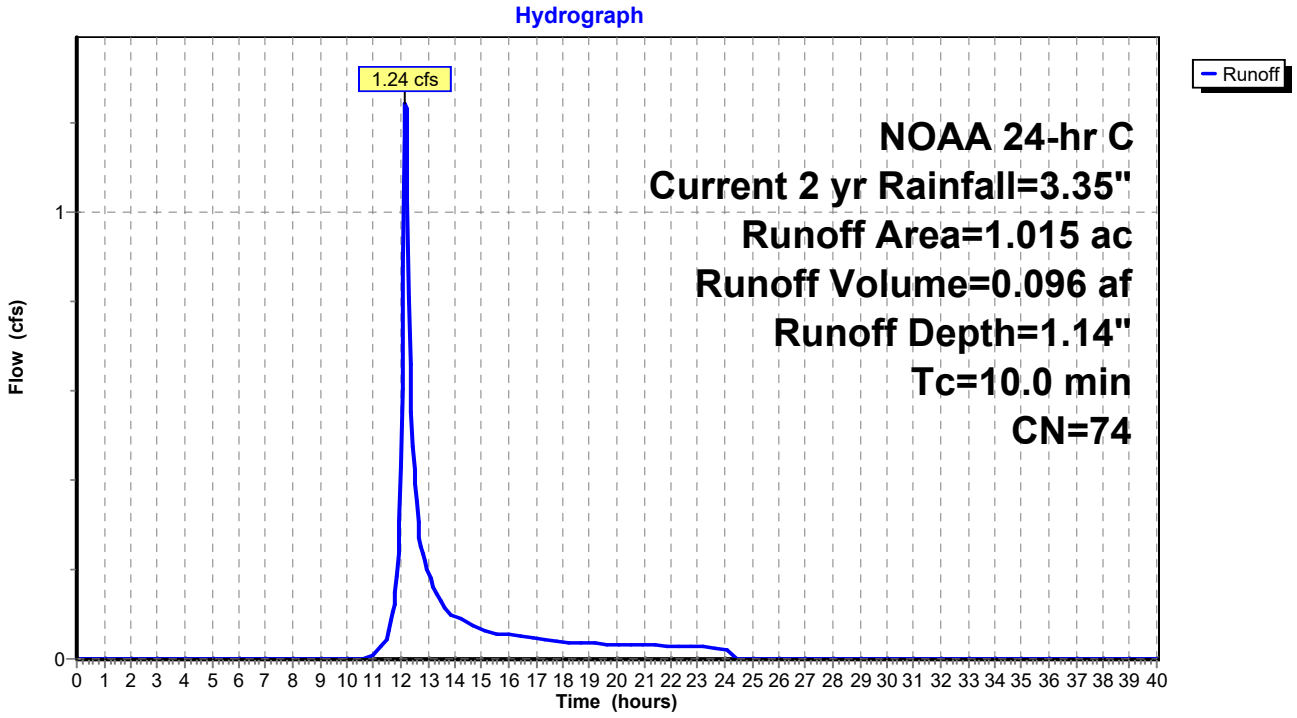
Runoff = 1.24 cfs @ 12.18 hrs, Volume= 0.096 af, Depth= 1.14"
Routed to Pond B-37B : Basin #37B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.015	74	>75% Grass cover, Good, HSG C
1.015		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38BP: PDA-37B (pervious)



Summary for Subcatchment 38I: PDA-38 (impervious)

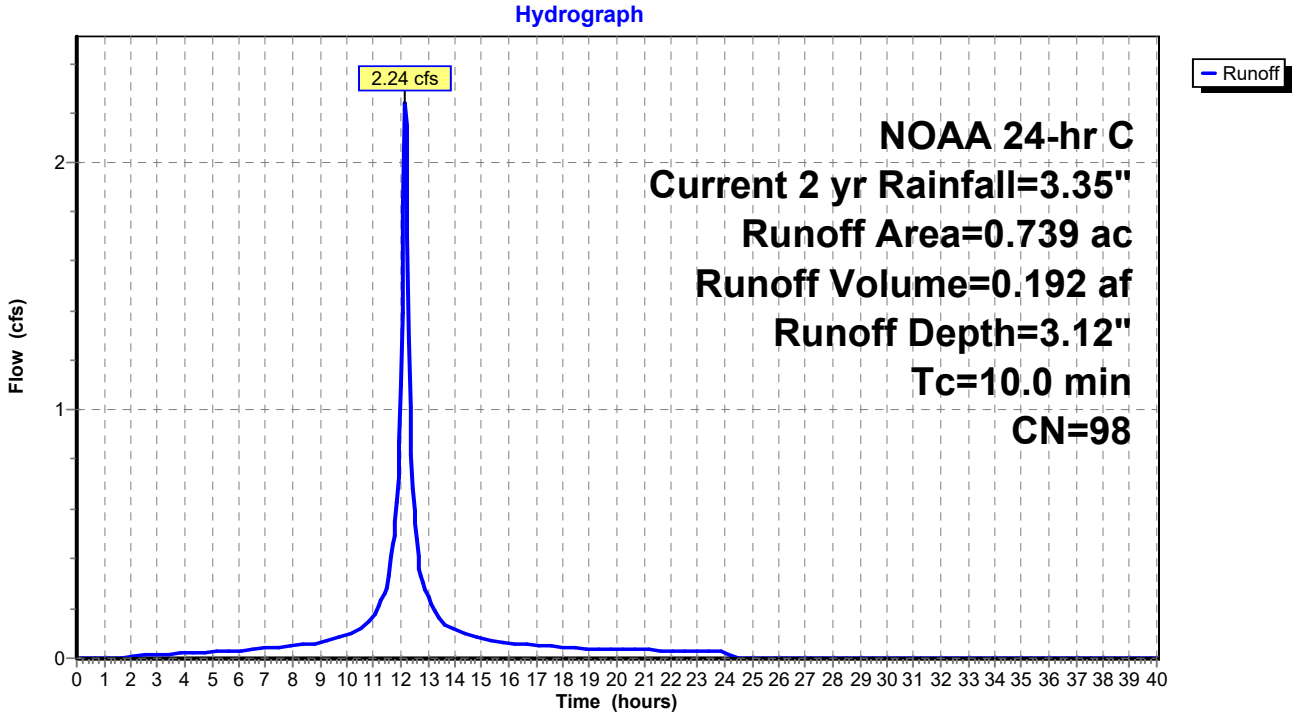
Runoff = 2.24 cfs @ 12.17 hrs, Volume= 0.192 af, Depth= 3.12"
Routed to Pond B-38 : Basin #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.171	98	Concrete, HSC C
	0.000	98	Paved roads w/curbs & sewers, HSG C
	0.739	98	Weighted Average
	0.739		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38I: PDA-38 (impervious)



Summary for Subcatchment 38P: PDA-38 (pervious)

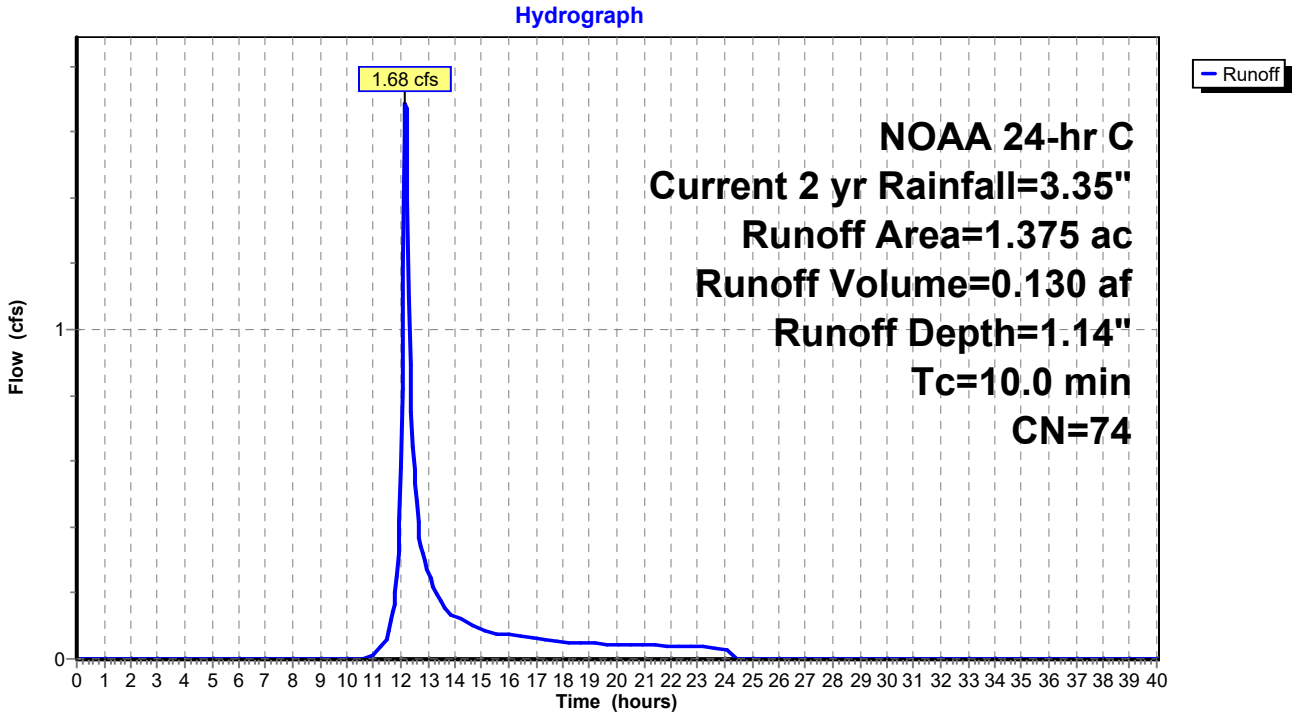
Runoff = 1.68 cfs @ 12.18 hrs, Volume= 0.130 af, Depth= 1.14"
Routed to Pond B-38 : Basin #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.375	74	>75% Grass cover, Good, HSG C
1.375		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38P: PDA-38 (pervious)



Summary for Subcatchment 39l: PDA-39 (impervious)

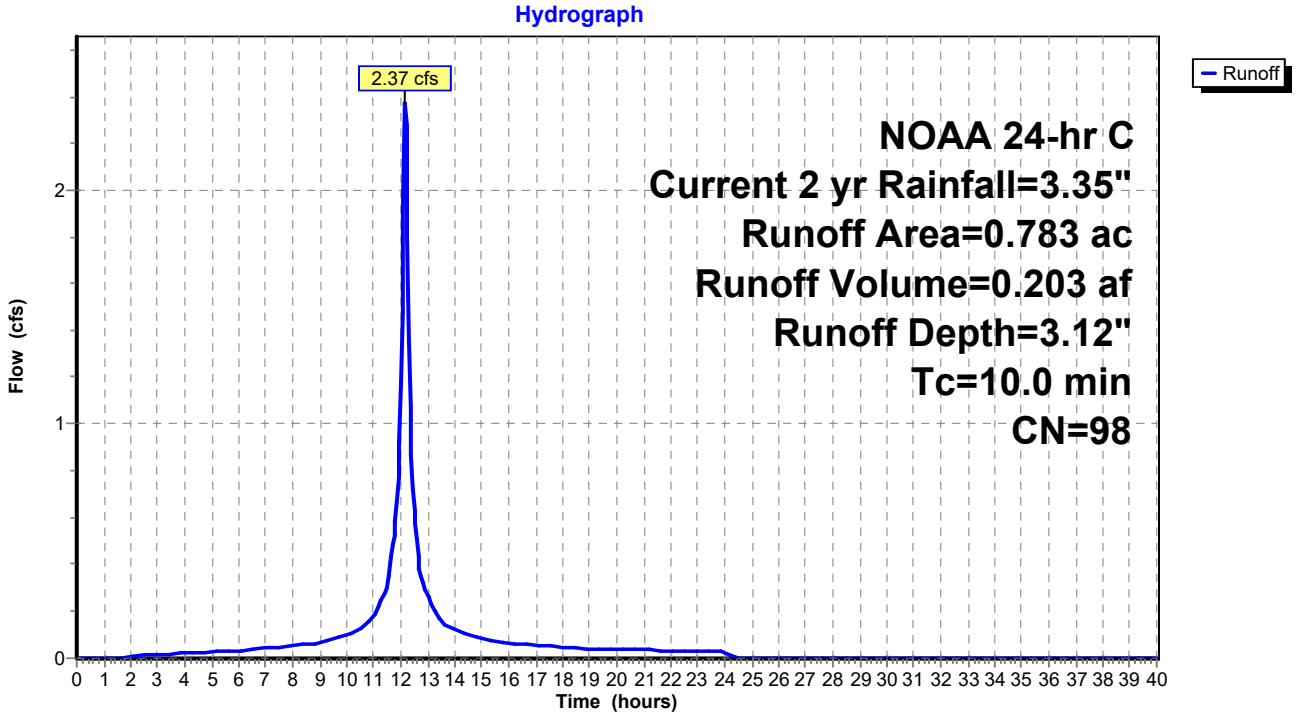
Runoff = 2.37 cfs @ 12.17 hrs, Volume= 0.203 af, Depth= 3.12"
Routed to Pond B-39 : Basin #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.164	98	Concrete, HSC C
	0.051	98	Paved roads w/curbs & sewers, HSG C
	0.783	98	Weighted Average
	0.783		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 39l: PDA-39 (impervious)



Summary for Subcatchment 39P: PDA-39 (pervious)

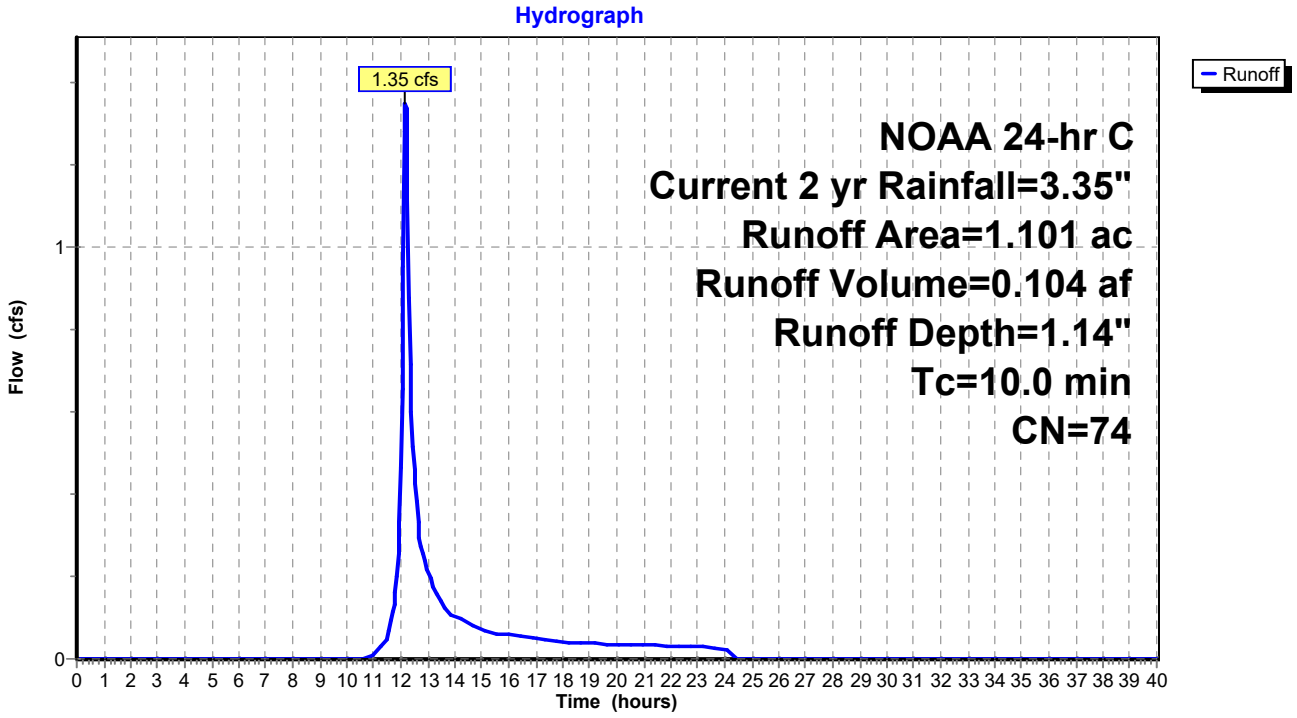
Runoff = 1.35 cfs @ 12.18 hrs, Volume= 0.104 af, Depth= 1.14"
Routed to Pond B-39 : Basin #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.101	74	>75% Grass cover, Good, HSG C
1.101		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 39P: PDA-39 (pervious)



Summary for Subcatchment 40l: PDA-40 (impervious)

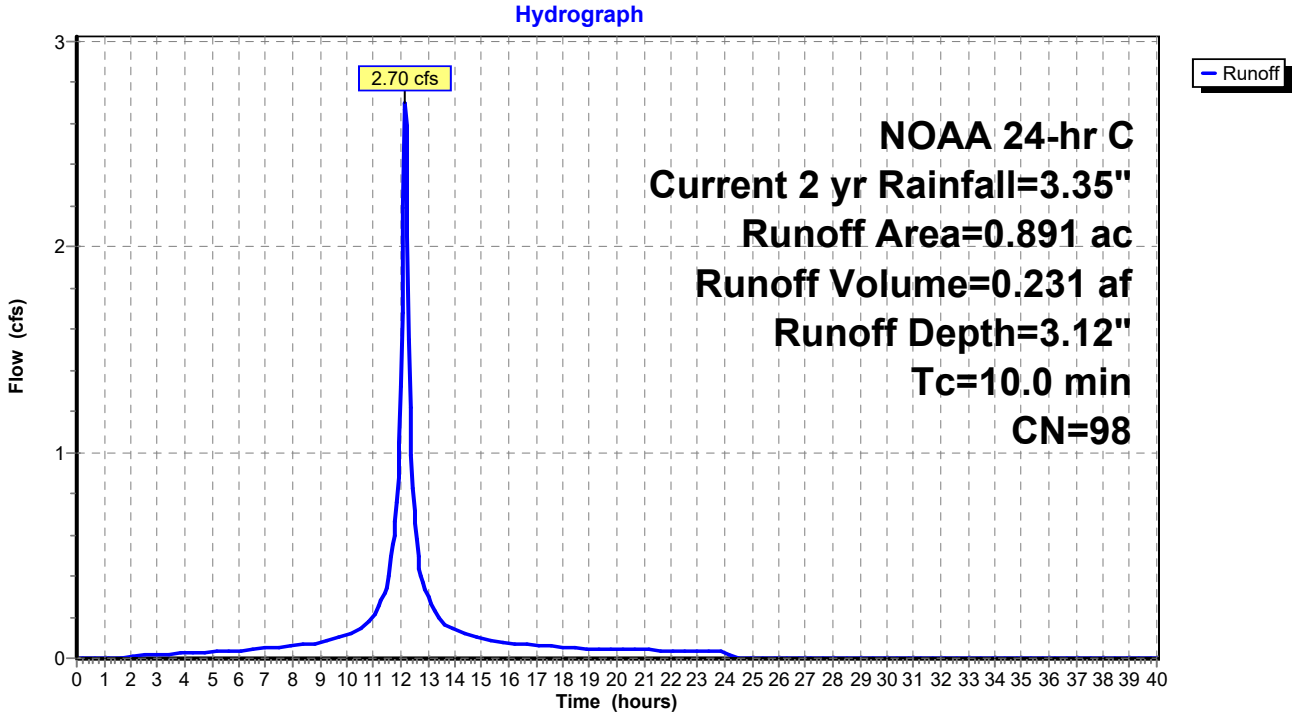
Runoff = 2.70 cfs @ 12.17 hrs, Volume= 0.231 af, Depth= 3.12"
Routed to Pond B-40 : Basin #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.179	98	Concrete, HSC C
	0.144	98	Paved roads w/curbs & sewers, HSG C
	0.891	98	Weighted Average
	0.891		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 40l: PDA-40 (impervious)



Summary for Subcatchment 40P: PDA-40 (pervious)

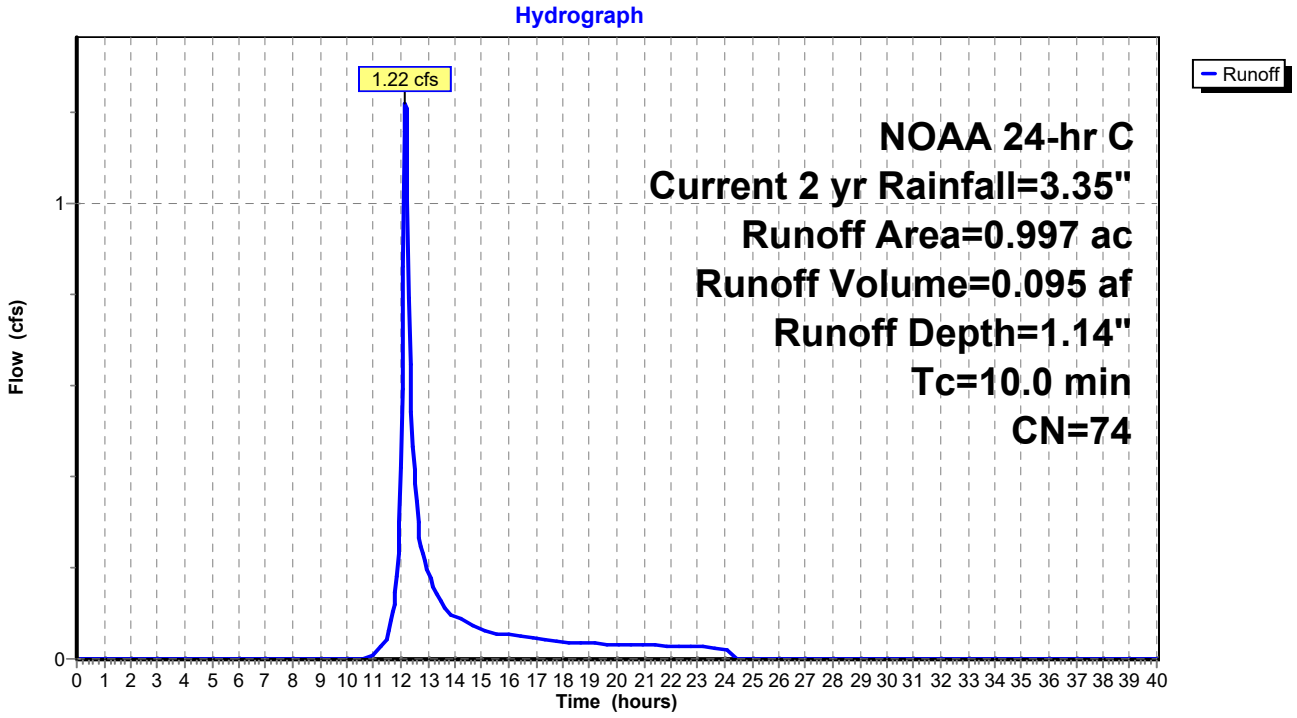
Runoff = 1.22 cfs @ 12.18 hrs, Volume= 0.095 af, Depth= 1.14"
Routed to Pond B-40 : Basin #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.997	74	>75% Grass cover, Good, HSG C
0.997		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 40P: PDA-40 (pervious)



Summary for Subcatchment UPDA-3: PDA-3 (undetained)

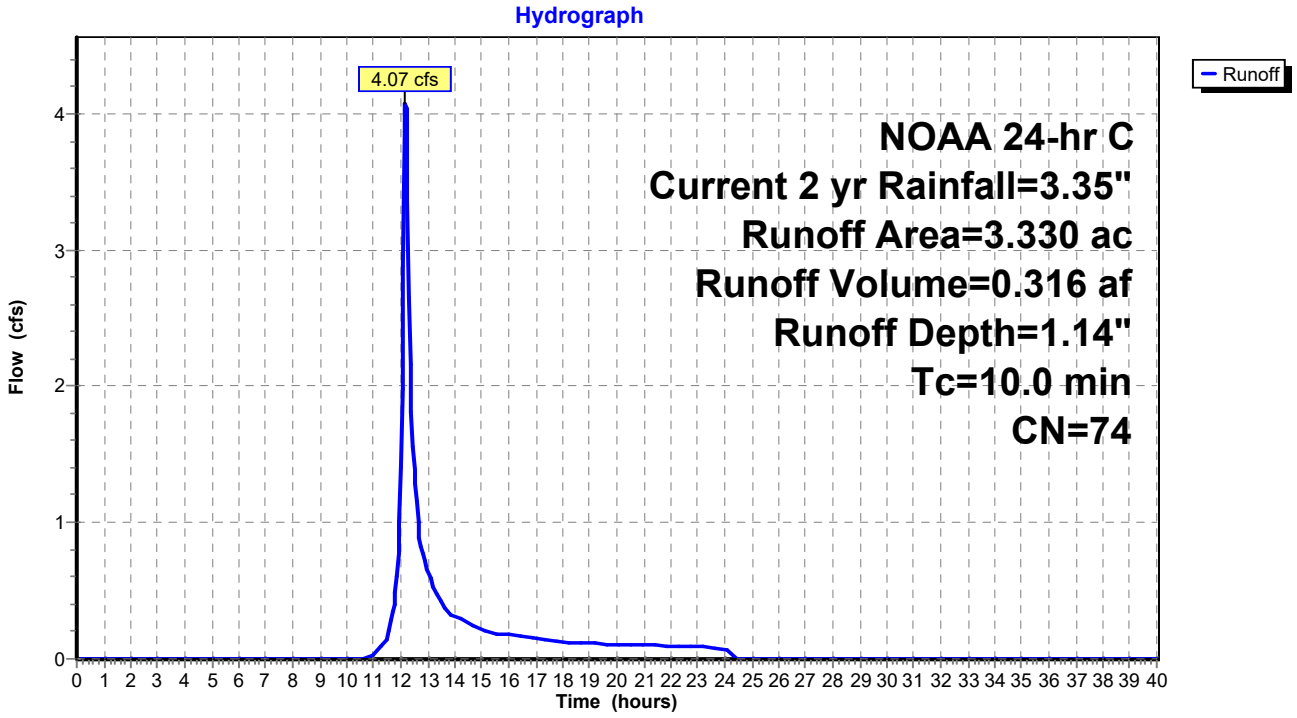
Runoff = 4.07 cfs @ 12.18 hrs, Volume= 0.316 af, Depth= 1.14"
Routed to Link PDA-3 : Proposed Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
3.330	74	>75% Grass cover, Good, HSG C
3.330		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-3: PDA-3 (undetained)



Summary for Pond B-29: Basin #29

Inflow Area = 1.077 ac, 34.91% Impervious, Inflow Depth = 1.83" for Current 2 yr event
Inflow = 1.99 cfs @ 12.18 hrs, Volume= 0.164 af
Outflow = 0.10 cfs @ 14.64 hrs, Volume= 0.121 af, Atten= 95%, Lag= 147.8 min
Primary = 0.10 cfs @ 14.64 hrs, Volume= 0.121 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 187.34' @ 14.64 hrs Surf.Area= 7,024 sf Storage= 4,692 cf

Plug-Flow detention time= 555.5 min calculated for 0.121 af (73% of inflow)
Center-of-Mass det. time= 458.2 min (1,261.5 - 803.3)

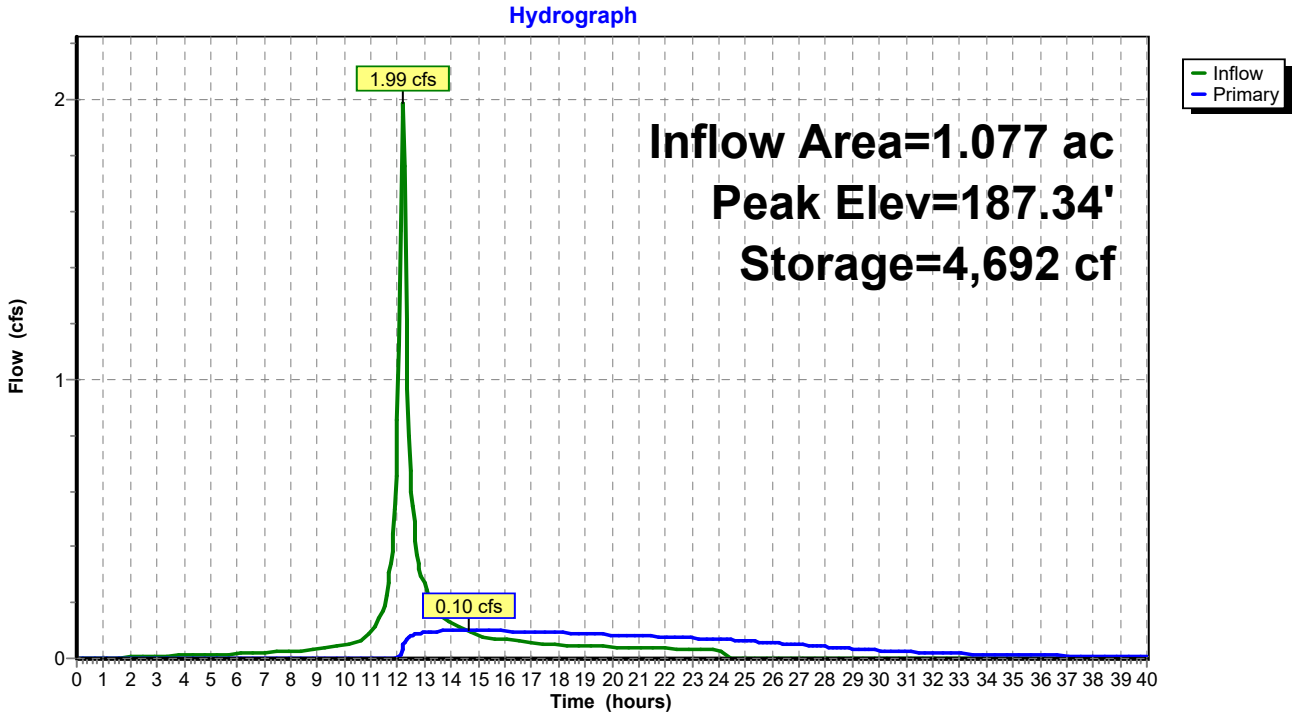
Volume	Invert	Avail.Storage	Storage Description
#1	186.30'	17,435 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.30	0	0	0
187.00	6,769	2,369	2,369
188.00	7,526	7,148	9,517
189.00	8,311	7,919	17,435

Device	Routing	Invert	Outlet Devices
#1	Primary	185.65'	**18.0" Round Culvert** L= 177.0' Ke= 0.500 Inlet / Outlet Invert= 185.65' / 182.00' S= 0.0206 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	186.87'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	187.49'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.17'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.10 cfs @ 14.64 hrs HW=187.34' (Free Discharge)
- **1=Culvert** (Passes 0.10 cfs of 8.24 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.10 cfs @ 2.90 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-29: Basin #29



Stage-Discharge for Pond B-29: Basin #29

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.30	0.00	186.82	0.00	187.34	0.10	187.86	3.04
186.31	0.00	186.83	0.00	187.35	0.10	187.87	3.16
186.32	0.00	186.84	0.00	187.36	0.10	187.88	3.28
186.33	0.00	186.85	0.00	187.37	0.10	187.89	3.40
186.34	0.00	186.86	0.00	187.38	0.10	187.90	3.52
186.35	0.00	186.87	0.00	187.39	0.11	187.91	3.64
186.36	0.00	186.88	0.00	187.40	0.11	187.92	3.77
186.37	0.00	186.89	0.00	187.41	0.11	187.93	3.89
186.38	0.00	186.90	0.00	187.42	0.11	187.94	4.02
186.39	0.00	186.91	0.00	187.43	0.11	187.95	4.15
186.40	0.00	186.92	0.00	187.44	0.11	187.96	4.28
186.41	0.00	186.93	0.01	187.45	0.11	187.97	4.41
186.42	0.00	186.94	0.01	187.46	0.11	187.98	4.54
186.43	0.00	186.95	0.01	187.47	0.12	187.99	4.67
186.44	0.00	186.96	0.01	187.48	0.12	188.00	4.81
186.45	0.00	186.97	0.02	187.49	0.12	188.01	4.94
186.46	0.00	186.98	0.02	187.50	0.13	188.02	5.08
186.47	0.00	186.99	0.02	187.51	0.16	188.03	5.22
186.48	0.00	187.00	0.03	187.52	0.19	188.04	5.36
186.49	0.00	187.01	0.03	187.53	0.23	188.05	5.50
186.50	0.00	187.02	0.03	187.54	0.27	188.06	5.64
186.51	0.00	187.03	0.04	187.55	0.32	188.07	5.78
186.52	0.00	187.04	0.04	187.56	0.37	188.08	5.93
186.53	0.00	187.05	0.05	187.57	0.42	188.09	6.07
186.54	0.00	187.06	0.05	187.58	0.48	188.10	6.22
186.55	0.00	187.07	0.05	187.59	0.54	188.11	6.36
186.56	0.00	187.08	0.05	187.60	0.60	188.12	6.51
186.57	0.00	187.09	0.06	187.61	0.67	188.13	6.66
186.58	0.00	187.10	0.06	187.62	0.74	188.14	6.81
186.59	0.00	187.11	0.06	187.63	0.81	188.15	6.96
186.60	0.00	187.12	0.06	187.64	0.89	188.16	7.11
186.61	0.00	187.13	0.06	187.65	0.97	188.17	7.26
186.62	0.00	187.14	0.07	187.66	1.04	188.18	7.54
186.63	0.00	187.15	0.07	187.67	1.13	188.19	7.90
186.64	0.00	187.16	0.07	187.68	1.21	188.20	8.34
186.65	0.00	187.17	0.07	187.69	1.30	188.21	8.82
186.66	0.00	187.18	0.07	187.70	1.39	188.22	9.35
186.67	0.00	187.19	0.08	187.71	1.48	188.23	9.93
186.68	0.00	187.20	0.08	187.72	1.57	188.24	10.54
186.69	0.00	187.21	0.08	187.73	1.66	188.25	11.18
186.70	0.00	187.22	0.08	187.74	1.76	188.26	11.86
186.71	0.00	187.23	0.08	187.75	1.86	188.27	12.56
186.72	0.00	187.24	0.08	187.76	1.96	188.28	13.30
186.73	0.00	187.25	0.09	187.77	2.06	188.29	14.06
186.74	0.00	187.26	0.09	187.78	2.16	188.30	14.86
186.75	0.00	187.27	0.09	187.79	2.27	188.31	15.67
186.76	0.00	187.28	0.09	187.80	2.37	188.32	16.52
186.77	0.00	187.29	0.09	187.81	2.48	188.33	17.38
186.78	0.00	187.30	0.09	187.82	2.59	188.34	18.27
186.79	0.00	187.31	0.10	187.83	2.70	188.35	19.19
186.80	0.00	187.32	0.10	187.84	2.81	188.36	20.12
186.81	0.00	187.33	0.10	187.85	2.93	188.37	21.08

Stage-Discharge for Pond B-29: Basin #29 (continued)

Elevation (feet)	Primary (cfs)
188.38	22.10
188.39	23.14
188.40	24.22
188.41	25.31
188.42	26.44
188.43	27.59
188.44	28.76
188.45	29.96
188.46	31.19
188.47	32.41
188.48	33.54
188.49	34.69
188.50	35.86
188.51	37.06
188.52	38.29
188.53	39.53
188.54	40.80
188.55	42.10
188.56	43.42
188.57	44.76
188.58	46.16
188.59	47.58
188.60	49.03
188.61	50.50
188.62	52.00
188.63	53.52
188.64	55.07
188.65	56.65
188.66	58.25
188.67	59.88
188.68	61.54
188.69	63.22
188.70	64.93
188.71	66.67
188.72	68.43
188.73	70.22
188.74	72.04
188.75	73.88
188.76	75.75
188.77	77.65
188.78	79.30
188.79	80.97
188.80	82.65
188.81	84.35
188.82	86.06
188.83	87.78
188.84	89.51
188.85	91.26
188.86	93.02
188.87	94.79
188.88	96.58
188.89	98.37
188.90	100.19
188.91	102.01
188.92	103.84
188.93	105.69
188.94	107.55
188.95	109.42
188.96	111.31
188.97	113.21
188.98	115.15
188.99	117.11
189.00	**119.08**

Stage-Area-Storage for Pond B-29: Basin #29

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.30	0	0	186.82	5,028	1,307
186.31	97	0	186.83	5,125	1,358
186.32	193	2	186.84	5,222	1,410
186.33	290	4	186.85	5,319	1,463
186.34	387	8	186.86	5,415	1,516
186.35	484	12	186.87	5,512	1,571
186.36	580	17	186.88	5,609	1,626
186.37	677	24	186.89	5,705	1,683
186.38	774	31	186.90	5,802	1,741
186.39	870	39	186.91	5,899	1,799
186.40	967	48	186.92	5,995	1,859
186.41	1,064	59	186.93	6,092	1,919
186.42	1,160	70	186.94	6,189	1,980
186.43	1,257	82	186.95	6,286	2,043
186.44	1,354	95	186.96	6,382	2,106
186.45	1,451	109	186.97	6,479	2,170
186.46	1,547	124	186.98	6,576	2,236
186.47	1,644	140	186.99	6,672	2,302
186.48	1,741	157	187.00	6,769	2,369
186.49	1,837	175	187.01	6,777	2,437
186.50	1,934	193	187.02	6,784	2,505
186.51	2,031	213	187.03	6,792	2,573
186.52	2,127	234	187.04	6,799	2,641
186.53	2,224	256	187.05	6,807	2,709
186.54	2,321	278	187.06	6,814	2,777
186.55	2,418	302	187.07	6,822	2,845
186.56	2,514	327	187.08	6,830	2,913
186.57	2,611	352	187.09	6,837	2,981
186.58	2,708	379	187.10	6,845	3,050
186.59	2,804	407	187.11	6,852	3,118
186.60	2,901	435	187.12	6,860	3,187
186.61	2,998	465	187.13	6,867	3,256
186.62	3,094	495	187.14	6,875	3,324
186.63	3,191	527	187.15	6,883	3,393
186.64	3,288	559	187.16	6,890	3,462
186.65	3,385	592	187.17	6,898	3,531
186.66	3,481	627	187.18	6,905	3,600
186.67	3,578	662	187.19	6,913	3,669
186.68	3,675	698	187.20	6,920	3,738
186.69	3,771	735	187.21	6,928	3,807
186.70	3,868	774	187.22	6,936	3,877
186.71	3,965	813	187.23	6,943	3,946
186.72	4,061	853	187.24	6,951	4,016
186.73	4,158	894	187.25	6,958	4,085
186.74	4,255	936	187.26	6,966	4,155
186.75	4,351	979	187.27	6,973	4,224
186.76	4,448	1,023	187.28	6,981	4,294
186.77	4,545	1,068	187.29	6,989	4,364
186.78	4,642	1,114	187.30	6,996	4,434
186.79	4,738	1,161	187.31	7,004	4,504
186.80	4,835	1,209	187.32	7,011	4,574
186.81	4,932	1,258	187.33	7,019	4,644

Stage-Area-Storage for Pond B-29: Basin #29 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.34	7,026	4,714	187.86	7,420	8,470
187.35	7,034	4,785	187.87	7,428	8,545
187.36	7,042	4,855	187.88	7,435	8,619
187.37	7,049	4,925	187.89	7,443	8,693
187.38	7,057	4,996	187.90	7,450	8,768
187.39	7,064	5,067	187.91	7,458	8,842
187.40	7,072	5,137	187.92	7,465	8,917
187.41	7,079	5,208	187.93	7,473	8,992
187.42	7,087	5,279	187.94	7,481	9,066
187.43	7,095	5,350	187.95	7,488	9,141
187.44	7,102	5,421	187.96	7,496	9,216
187.45	7,110	5,492	187.97	7,503	9,291
187.46	7,117	5,563	187.98	7,511	9,366
187.47	7,125	5,634	187.99	7,518	9,441
187.48	7,132	5,705	188.00	7,526	9,517
187.49	7,140	5,777	188.01	7,534	9,592
187.50	7,148	5,848	188.02	7,542	9,667
187.51	7,155	5,920	188.03	7,550	9,743
187.52	7,163	5,991	188.04	7,557	9,818
187.53	7,170	6,063	188.05	7,565	9,894
187.54	7,178	6,135	188.06	7,573	9,970
187.55	7,185	6,207	188.07	7,581	10,045
187.56	7,193	6,278	188.08	7,589	10,121
187.57	7,200	6,350	188.09	7,597	10,197
187.58	7,208	6,422	188.10	7,605	10,273
187.59	7,216	6,495	188.11	7,612	10,349
187.60	7,223	6,567	188.12	7,620	10,425
187.61	7,231	6,639	188.13	7,628	10,502
187.62	7,238	6,711	188.14	7,636	10,578
187.63	7,246	6,784	188.15	7,644	10,654
187.64	7,253	6,856	188.16	7,652	10,731
187.65	7,261	6,929	188.17	7,659	10,807
187.66	7,269	7,002	188.18	7,667	10,884
187.67	7,276	7,074	188.19	7,675	10,961
187.68	7,284	7,147	188.20	7,683	11,038
187.69	7,291	7,220	188.21	7,691	11,114
187.70	7,299	7,293	188.22	7,699	11,191
187.71	7,306	7,366	188.23	7,707	11,268
187.72	7,314	7,439	188.24	7,714	11,345
187.73	7,322	7,512	188.25	7,722	11,423
187.74	7,329	7,585	188.26	7,730	11,500
187.75	7,337	7,659	188.27	7,738	11,577
187.76	7,344	7,732	188.28	7,746	11,655
187.77	7,352	7,806	188.29	7,754	11,732
187.78	7,359	7,879	188.30	7,762	11,810
187.79	7,367	7,953	188.31	7,769	11,887
187.80	7,375	8,027	188.32	7,777	11,965
187.81	7,382	8,100	188.33	7,785	12,043
187.82	7,390	8,174	188.34	7,793	12,121
187.83	7,397	8,248	188.35	7,801	12,199
187.84	7,405	8,322	188.36	7,809	12,277
187.85	7,412	8,396	188.37	7,816	12,355

Stage-Area-Storage for Pond B-29: Basin #29 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.38	7,824	12,433
188.39	7,832	12,511
188.40	7,840	12,590
188.41	7,848	12,668
188.42	7,856	12,747
188.43	7,864	12,825
188.44	7,871	12,904
188.45	7,879	12,983
188.46	7,887	13,062
188.47	7,895	13,141
188.48	7,903	13,220
188.49	7,911	13,299
188.50	7,919	13,378
188.51	7,926	13,457
188.52	7,934	13,536
188.53	7,942	13,616
188.54	7,950	13,695
188.55	7,958	13,775
188.56	7,966	13,854
188.57	7,973	13,934
188.58	7,981	14,014
188.59	7,989	14,094
188.60	7,997	14,174
188.61	8,005	14,254
188.62	8,013	14,334
188.63	8,021	14,414
188.64	8,028	14,494
188.65	8,036	14,574
188.66	8,044	14,655
188.67	8,052	14,735
188.68	8,060	14,816
188.69	8,068	14,896
188.70	8,076	14,977
188.71	8,083	15,058
188.72	8,091	15,139
188.73	8,099	15,220
188.74	8,107	15,301
188.75	8,115	15,382
188.76	8,123	15,463
188.77	8,130	15,544
188.78	8,138	15,626
188.79	8,146	15,707
188.80	8,154	15,789
188.81	8,162	15,870
188.82	8,170	15,952
188.83	8,178	16,034
188.84	8,185	16,115
188.85	8,193	16,197
188.86	8,201	16,279
188.87	8,209	16,361
188.88	8,217	16,443
188.89	8,225	16,526
188.90	8,233	16,608
188.91	8,240	16,690
188.92	8,248	16,773
188.93	8,256	16,855
188.94	8,264	16,938
188.95	8,272	17,021
188.96	8,280	17,103
188.97	8,287	17,186
188.98	8,295	17,269
188.99	8,303	17,352
189.00	**8,311**	**17,435**

Summary for Pond B-30: Basin #30

Inflow Area = 2.381 ac, 27.01% Impervious, Inflow Depth = 1.67" for Current 2 yr event
Inflow = 4.06 cfs @ 12.18 hrs, Volume= 0.332 af
Outflow = 0.13 cfs @ 16.90 hrs, Volume= 0.224 af, Atten= 97%, Lag= 283.1 min
Primary = 0.13 cfs @ 16.90 hrs, Volume= 0.224 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 176.62' @ 16.90 hrs Surf.Area= 11,193 sf Storage= 10,215 cf

Plug-Flow detention time= 746.2 min calculated for 0.224 af (68% of inflow)
Center-of-Mass det. time= 636.5 min (1,449.5 - 813.0)

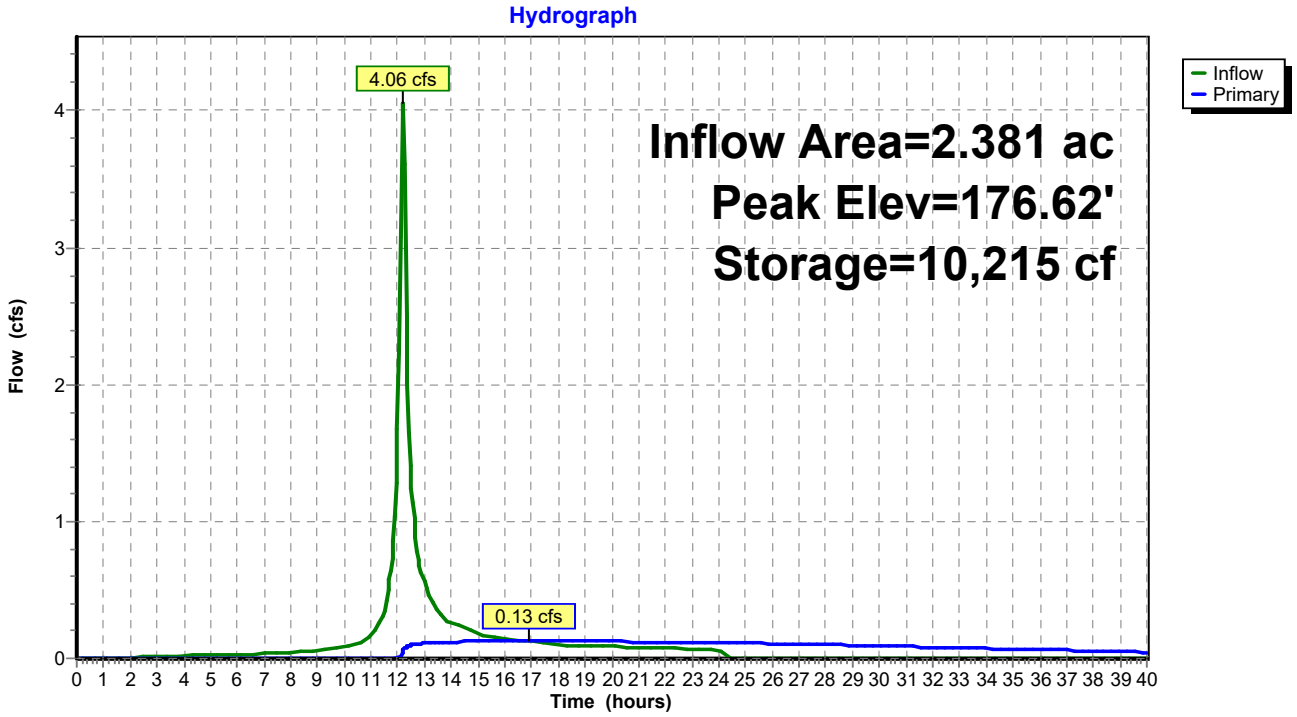
Volume	Invert	Avail.Storage	Storage Description
#1	175.30'	57,146 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
175.30	0	0	0
176.00	10,254	3,589	3,589
177.00	11,773	11,014	14,602
178.00	13,346	12,560	27,162
179.00	14,978	14,162	41,324
180.00	16,667	15,823	57,146

Device	Routing	Invert	Outlet Devices
#1	Primary	174.65'	**18.0" Round Culvert** L= 86.0' Ke= 0.500 Inlet / Outlet Invert= 174.65' / 174.00' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	175.93'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	179.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.13 cfs @ 16.90 hrs HW=176.62' (Free Discharge)
- **1=Culvert** (Passes 0.13 cfs of 8.85 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.68 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-30: Basin #30



Stage-Discharge for Pond B-30: Basin #30

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
175.30	0.00	175.82	0.00	176.34	0.09	176.86	0.15
175.31	0.00	175.83	0.00	176.35	0.09	176.87	0.15
175.32	0.00	175.84	0.00	176.36	0.09	176.88	0.15
175.33	0.00	175.85	0.00	176.37	0.10	176.89	0.15
175.34	0.00	175.86	0.00	176.38	0.10	176.90	0.15
175.35	0.00	175.87	0.00	176.39	0.10	176.91	0.15
175.36	0.00	175.88	0.00	176.40	0.10	176.92	0.15
175.37	0.00	175.89	0.00	176.41	0.10	176.93	0.16
175.38	0.00	175.90	0.00	176.42	0.10	176.94	0.16
175.39	0.00	175.91	0.00	176.43	0.10	176.95	0.16
175.40	0.00	175.92	0.00	176.44	0.10	176.96	0.16
175.41	0.00	175.93	0.00	176.45	0.11	176.97	0.16
175.42	0.00	175.94	0.00	176.46	0.11	176.98	0.16
175.43	0.00	175.95	0.00	176.47	0.11	176.99	0.16
175.44	0.00	175.96	0.00	176.48	0.11	177.00	0.16
175.45	0.00	175.97	0.00	176.49	0.11	177.01	0.16
175.46	0.00	175.98	0.00	176.50	0.11	177.02	0.16
175.47	0.00	175.99	0.01	176.51	0.11	177.03	0.16
175.48	0.00	176.00	0.01	176.52	0.11	177.04	0.16
175.49	0.00	176.01	0.01	176.53	0.12	177.05	0.17
175.50	0.00	176.02	0.01	176.54	0.12	177.06	0.17
175.51	0.00	176.03	0.02	176.55	0.12	177.07	0.17
175.52	0.00	176.04	0.02	176.56	0.12	177.08	0.17
175.53	0.00	176.05	0.02	176.57	0.12	177.09	0.17
175.54	0.00	176.06	0.03	176.58	0.12	177.10	0.17
175.55	0.00	176.07	0.03	176.59	0.12	177.11	0.17
175.56	0.00	176.08	0.03	176.60	0.12	177.12	0.17
175.57	0.00	176.09	0.04	176.61	0.12	177.13	0.17
175.58	0.00	176.10	0.04	176.62	0.13	177.14	0.17
175.59	0.00	176.11	0.05	176.63	0.13	177.15	0.17
175.60	0.00	176.12	0.05	176.64	0.13	177.16	0.17
175.61	0.00	176.13	0.05	176.65	0.13	177.17	0.17
175.62	0.00	176.14	0.05	176.66	0.13	177.18	0.18
175.63	0.00	176.15	0.06	176.67	0.13	177.19	0.18
175.64	0.00	176.16	0.06	176.68	0.13	177.20	0.18
175.65	0.00	176.17	0.06	176.69	0.13	177.21	0.18
175.66	0.00	176.18	0.06	176.70	0.13	177.22	0.18
175.67	0.00	176.19	0.06	176.71	0.13	177.23	0.18
175.68	0.00	176.20	0.07	176.72	0.14	177.24	0.18
175.69	0.00	176.21	0.07	176.73	0.14	177.25	0.18
175.70	0.00	176.22	0.07	176.74	0.14	177.26	0.18
175.71	0.00	176.23	0.07	176.75	0.14	177.27	0.18
175.72	0.00	176.24	0.07	176.76	0.14	177.28	0.18
175.73	0.00	176.25	0.08	176.77	0.14	177.29	0.18
175.74	0.00	176.26	0.08	176.78	0.14	177.30	0.18
175.75	0.00	176.27	0.08	176.79	0.14	177.31	0.19
175.76	0.00	176.28	0.08	176.80	0.14	177.32	0.19
175.77	0.00	176.29	0.08	176.81	0.14	177.33	0.19
175.78	0.00	176.30	0.08	176.82	0.15	177.34	0.19
175.79	0.00	176.31	0.09	176.83	0.15	177.35	0.19
175.80	0.00	176.32	0.09	176.84	0.15	177.36	0.19
175.81	0.00	176.33	0.09	176.85	0.15	177.37	0.19

Stage-Discharge for Pond B-30: Basin #30 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
177.38	0.19	177.90	0.22	178.42	0.25	178.94	0.28
177.39	0.19	177.91	0.22	178.43	0.25	178.95	0.28
177.40	0.19	177.92	0.23	178.44	0.25	178.96	0.28
177.41	0.19	177.93	0.23	178.45	0.26	178.97	0.28
177.42	0.19	177.94	0.23	178.46	0.26	178.98	0.28
177.43	0.19	177.95	0.23	178.47	0.26	178.99	0.28
177.44	0.19	177.96	0.23	178.48	0.26	179.00	0.28
177.45	0.20	177.97	0.23	178.49	0.26	179.01	0.30
177.46	0.20	177.98	0.23	178.50	0.26	179.02	0.32
177.47	0.20	177.99	0.23	178.51	0.26	179.03	0.35
177.48	0.20	178.00	0.23	178.52	0.26	179.04	0.39
177.49	0.20	178.01	0.23	178.53	0.26	179.05	0.43
177.50	0.20	178.02	0.23	178.54	0.26	179.06	0.48
177.51	0.20	178.03	0.23	178.55	0.26	179.07	0.53
177.52	0.20	178.04	0.23	178.56	0.26	179.08	0.58
177.53	0.20	178.05	0.23	178.57	0.26	179.09	0.64
177.54	0.20	178.06	0.23	178.58	0.26	179.10	0.70
177.55	0.20	178.07	0.23	178.59	0.26	179.11	0.76
177.56	0.20	178.08	0.23	178.60	0.26	179.12	0.83
177.57	0.20	178.09	0.24	178.61	0.26	179.13	0.90
177.58	0.20	178.10	0.24	178.62	0.26	179.14	0.97
177.59	0.20	178.11	0.24	178.63	0.26	179.15	1.04
177.60	0.21	178.12	0.24	178.64	0.26	179.16	1.12
177.61	0.21	178.13	0.24	178.65	0.27	179.17	1.20
177.62	0.21	178.14	0.24	178.66	0.27	179.18	1.28
177.63	0.21	178.15	0.24	178.67	0.27	179.19	1.36
177.64	0.21	178.16	0.24	178.68	0.27	179.20	1.45
177.65	0.21	178.17	0.24	178.69	0.27	179.21	1.54
177.66	0.21	178.18	0.24	178.70	0.27	179.22	1.63
177.67	0.21	178.19	0.24	178.71	0.27	179.23	1.72
177.68	0.21	178.20	0.24	178.72	0.27	179.24	1.81
177.69	0.21	178.21	0.24	178.73	0.27	179.25	1.91
177.70	0.21	178.22	0.24	178.74	0.27	179.26	2.01
177.71	0.21	178.23	0.24	178.75	0.27	179.27	2.11
177.72	0.21	178.24	0.24	178.76	0.27	179.28	2.21
177.73	0.21	178.25	0.24	178.77	0.27	179.29	2.31
177.74	0.21	178.26	0.24	178.78	0.27	179.30	2.41
177.75	0.22	178.27	0.25	178.79	0.27	179.31	2.52
177.76	0.22	178.28	0.25	178.80	0.27	179.32	2.63
177.77	0.22	178.29	0.25	178.81	0.27	179.33	2.74
177.78	0.22	178.30	0.25	178.82	0.27	179.34	2.85
177.79	0.22	178.31	0.25	178.83	0.27	179.35	2.96
177.80	0.22	178.32	0.25	178.84	0.27	179.36	3.07
177.81	0.22	178.33	0.25	178.85	0.28	179.37	3.19
177.82	0.22	178.34	0.25	178.86	0.28	179.38	3.31
177.83	0.22	178.35	0.25	178.87	0.28	179.39	3.42
177.84	0.22	178.36	0.25	178.88	0.28	179.40	3.54
177.85	0.22	178.37	0.25	178.89	0.28	179.41	3.67
177.86	0.22	178.38	0.25	178.90	0.28	179.42	3.79
177.87	0.22	178.39	0.25	178.91	0.28	179.43	3.91
177.88	0.22	178.40	0.25	178.92	0.28	179.44	4.04
177.89	0.22	178.41	0.25	178.93	0.28	179.45	4.16

Stage-Discharge for Pond B-30: Basin #30 (continued)

Elevation (feet)	Primary (cfs)
179.46	4.29
179.47	4.42
179.48	4.55
179.49	4.68
179.50	4.81
179.51	5.07
179.52	5.41
179.53	5.83
179.54	6.30
179.55	6.81
179.56	7.36
179.57	7.95
179.58	8.58
179.59	9.23
179.60	9.92
179.61	10.64
179.62	11.39
179.63	12.16
179.64	12.96
179.65	13.79
179.66	14.64
179.67	15.51
179.68	16.41
179.69	17.33
179.70	18.27
179.71	19.27
179.72	20.30
179.73	21.36
179.74	22.44
179.75	23.55
179.76	24.68
179.77	25.84
179.78	27.03
179.79	28.24
179.80	29.47
179.81	30.73
179.82	32.02
179.83	33.33
179.84	34.67
179.85	36.03
179.86	37.42
179.87	38.83
179.88	40.27
179.89	41.73
179.90	43.22
179.91	44.76
179.92	46.32
179.93	47.91
179.94	49.53
179.95	51.18
179.96	52.85
179.97	54.55
179.98	56.28
179.99	58.04
180.00	**59.82**

Stage-Area-Storage for Pond B-30: Basin #30

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
175.30	0	0	175.82	7,617	1,980
175.31	146	1	175.83	7,764	2,057
175.32	293	3	175.84	7,910	2,136
175.33	439	7	175.85	8,057	2,216
175.34	586	12	175.86	8,203	2,297
175.35	732	18	175.87	8,350	2,380
175.36	879	26	175.88	8,496	2,464
175.37	1,025	36	175.89	8,643	2,550
175.38	1,172	47	175.90	8,789	2,637
175.39	1,318	59	175.91	8,936	2,725
175.40	1,465	73	175.92	9,082	2,815
175.41	1,611	89	175.93	9,229	2,907
175.42	1,758	105	175.94	9,375	3,000
175.43	1,904	124	175.95	9,522	3,095
175.44	2,051	144	175.96	9,668	3,190
175.45	2,197	165	175.97	9,815	3,288
175.46	2,344	188	175.98	9,961	3,387
175.47	2,490	212	175.99	10,108	3,487
175.48	2,637	237	176.00	10,254	3,589
175.49	2,783	264	176.01	10,269	3,692
175.50	2,930	293	176.02	10,284	3,794
175.51	3,076	323	176.03	10,300	3,897
175.52	3,223	354	176.04	10,315	4,000
175.53	3,369	387	176.05	10,330	4,103
175.54	3,516	422	176.06	10,345	4,207
175.55	3,662	458	176.07	10,360	4,310
175.56	3,809	495	176.08	10,376	4,414
175.57	3,955	534	176.09	10,391	4,518
175.58	4,102	574	176.10	10,406	4,622
175.59	4,248	616	176.11	10,421	4,726
175.60	4,395	659	176.12	10,436	4,830
175.61	4,541	704	176.13	10,451	4,935
175.62	4,688	750	176.14	10,467	5,039
175.63	4,834	798	176.15	10,482	5,144
175.64	4,981	847	176.16	10,497	5,249
175.65	5,127	897	176.17	10,512	5,354
175.66	5,273	949	176.18	10,527	5,459
175.67	5,420	1,003	176.19	10,543	5,565
175.68	5,566	1,058	176.20	10,558	5,670
175.69	5,713	1,114	176.21	10,573	5,776
175.70	5,859	1,172	176.22	10,588	5,882
175.71	6,006	1,231	176.23	10,603	5,987
175.72	6,152	1,292	176.24	10,619	6,094
175.73	6,299	1,354	176.25	10,634	6,200
175.74	6,445	1,418	176.26	10,649	6,306
175.75	6,592	1,483	176.27	10,664	6,413
175.76	6,738	1,550	176.28	10,679	6,520
175.77	6,885	1,618	176.29	10,695	6,626
175.78	7,031	1,688	176.30	10,710	6,733
175.79	7,178	1,759	176.31	10,725	6,841
175.80	7,324	1,831	176.32	10,740	6,948
175.81	7,471	1,905	176.33	10,755	7,055

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.34	10,770	7,163	176.86	11,560	12,969
176.35	10,786	7,271	176.87	11,576	13,085
176.36	10,801	7,379	176.88	11,591	13,201
176.37	10,816	7,487	176.89	11,606	13,317
176.38	10,831	7,595	176.90	11,621	13,433
176.39	10,846	7,703	176.91	11,636	13,549
176.40	10,862	7,812	176.92	11,651	13,665
176.41	10,877	7,921	176.93	11,667	13,782
176.42	10,892	8,030	176.94	11,682	13,899
176.43	10,907	8,139	176.95	11,697	14,016
176.44	10,922	8,248	176.96	11,712	14,133
176.45	10,938	8,357	176.97	11,727	14,250
176.46	10,953	8,466	176.98	11,743	14,367
176.47	10,968	8,576	176.99	11,758	14,485
176.48	10,983	8,686	177.00	11,773	14,602
176.49	10,998	8,796	177.01	11,789	14,720
176.50	11,014	8,906	177.02	11,804	14,838
176.51	11,029	9,016	177.03	11,820	14,956
176.52	11,044	9,126	177.04	11,836	15,075
176.53	11,059	9,237	177.05	11,852	15,193
176.54	11,074	9,348	177.06	11,867	15,312
176.55	11,089	9,458	177.07	11,883	15,430
176.56	11,105	9,569	177.08	11,899	15,549
176.57	11,120	9,680	177.09	11,915	15,668
176.58	11,135	9,792	177.10	11,930	15,788
176.59	11,150	9,903	177.11	11,946	15,907
176.60	11,165	10,015	177.12	11,962	16,026
176.61	11,181	10,126	177.13	11,977	16,146
176.62	11,196	10,238	177.14	11,993	16,266
176.63	11,211	10,350	177.15	12,009	16,386
176.64	11,226	10,463	177.16	12,025	16,506
176.65	11,241	10,575	177.17	12,040	16,627
176.66	11,257	10,687	177.18	12,056	16,747
176.67	11,272	10,800	177.19	12,072	16,868
176.68	11,287	10,913	177.20	12,088	16,988
176.69	11,302	11,026	177.21	12,103	17,109
176.70	11,317	11,139	177.22	12,119	17,231
176.71	11,332	11,252	177.23	12,135	17,352
176.72	11,348	11,366	177.24	12,151	17,473
176.73	11,363	11,479	177.25	12,166	17,595
176.74	11,378	11,593	177.26	12,182	17,717
176.75	11,393	11,707	177.27	12,198	17,838
176.76	11,408	11,821	177.28	12,213	17,961
176.77	11,424	11,935	177.29	12,229	18,083
176.78	11,439	12,049	177.30	12,245	18,205
176.79	11,454	12,164	177.31	12,261	18,328
176.80	11,469	12,278	177.32	12,276	18,450
176.81	11,484	12,393	177.33	12,292	18,573
176.82	11,500	12,508	177.34	12,308	18,696
176.83	11,515	12,623	177.35	12,324	18,819
176.84	11,530	12,738	177.36	12,339	18,943
176.85	11,545	12,854	177.37	12,355	19,066

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.38	12,371	19,190	177.90	13,189	25,835
177.39	12,386	19,313	177.91	13,204	25,967
177.40	12,402	19,437	177.92	13,220	26,099
177.41	12,418	19,562	177.93	13,236	26,232
177.42	12,434	19,686	177.94	13,252	26,364
177.43	12,449	19,810	177.95	13,267	26,497
177.44	12,465	19,935	177.96	13,283	26,629
177.45	12,481	20,060	177.97	13,299	26,762
177.46	12,497	20,184	177.98	13,315	26,895
177.47	12,512	20,309	177.99	13,330	27,029
177.48	12,528	20,435	178.00	13,346	27,162
177.49	12,544	20,560	178.01	13,362	27,295
177.50	12,560	20,686	178.02	13,379	27,429
177.51	12,575	20,811	178.03	13,395	27,563
177.52	12,591	20,937	178.04	13,411	27,697
177.53	12,607	21,063	178.05	13,428	27,831
177.54	12,622	21,189	178.06	13,444	27,966
177.55	12,638	21,315	178.07	13,460	28,100
177.56	12,654	21,442	178.08	13,477	28,235
177.57	12,670	21,569	178.09	13,493	28,370
177.58	12,685	21,695	178.10	13,509	28,505
177.59	12,701	21,822	178.11	13,526	28,640
177.60	12,717	21,949	178.12	13,542	28,775
177.61	12,733	22,077	178.13	13,558	28,911
177.62	12,748	22,204	178.14	13,574	29,046
177.63	12,764	22,332	178.15	13,591	29,182
177.64	12,780	22,459	178.16	13,607	29,318
177.65	12,795	22,587	178.17	13,623	29,454
177.66	12,811	22,715	178.18	13,640	29,591
177.67	12,827	22,843	178.19	13,656	29,727
177.68	12,843	22,972	178.20	13,672	29,864
177.69	12,858	23,100	178.21	13,689	30,001
177.70	12,874	23,229	178.22	13,705	30,138
177.71	12,890	23,358	178.23	13,721	30,275
177.72	12,906	23,487	178.24	13,738	30,412
177.73	12,921	23,616	178.25	13,754	30,549
177.74	12,937	23,745	178.26	13,770	30,687
177.75	12,953	23,875	178.27	13,787	30,825
177.76	12,968	24,004	178.28	13,803	30,963
177.77	12,984	24,134	178.29	13,819	31,101
177.78	13,000	24,264	178.30	13,836	31,239
177.79	13,016	24,394	178.31	13,852	31,378
177.80	13,031	24,524	178.32	13,868	31,516
177.81	13,047	24,655	178.33	13,885	31,655
177.82	13,063	24,785	178.34	13,901	31,794
177.83	13,079	24,916	178.35	13,917	31,933
177.84	13,094	25,047	178.36	13,934	32,072
177.85	13,110	25,178	178.37	13,950	32,212
177.86	13,126	25,309	178.38	13,966	32,351
177.87	13,142	25,440	178.39	13,982	32,491
177.88	13,157	25,572	178.40	13,999	32,631
177.89	13,173	25,703	178.41	14,015	32,771

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.42	14,031	32,911
178.43	14,048	33,052
178.44	14,064	33,192
178.45	14,080	33,333
178.46	14,097	33,474
178.47	14,113	33,615
178.48	14,129	33,756
178.49	14,146	33,897
178.50	14,162	34,039
178.51	14,178	34,181
178.52	14,195	34,322
178.53	14,211	34,464
178.54	14,227	34,607
178.55	14,244	34,749
178.56	14,260	34,892
178.57	14,276	35,034
178.58	14,293	35,177
178.59	14,309	35,320
178.60	14,325	35,463
178.61	14,342	35,607
178.62	14,358	35,750
178.63	14,374	35,894
178.64	14,390	36,038
178.65	14,407	36,182
178.66	14,423	36,326
178.67	14,439	36,470
178.68	14,456	36,614
178.69	14,472	36,759
178.70	14,488	36,904
178.71	14,505	37,049
178.72	14,521	37,194
178.73	14,537	37,339
178.74	14,554	37,485
178.75	14,570	37,630
178.76	14,586	37,776
178.77	14,603	37,922
178.78	14,619	38,068
178.79	14,635	38,215
178.80	14,652	38,361
178.81	14,668	38,508
178.82	14,684	38,654
178.83	14,701	38,801
178.84	14,717	38,948
178.85	14,733	39,096
178.86	14,750	39,243
178.87	14,766	39,391
178.88	14,782	39,538
178.89	14,798	39,686
178.90	14,815	39,834
178.91	14,831	39,982
178.92	14,847	40,131
178.93	14,864	40,279
178.94	14,880	40,428
178.95	14,896	40,577
178.96	14,913	40,726
178.97	14,929	40,875
178.98	14,945	41,025
178.99	14,962	41,174
179.00	14,978	41,324
179.01	14,995	41,474
179.02	15,012	41,624
179.03	15,029	41,774
179.04	15,046	41,924
179.05	15,062	42,075
179.06	15,079	42,226
179.07	15,096	42,376
179.08	15,113	42,528
179.09	15,130	42,679
179.10	15,147	42,830
179.11	15,164	42,982
179.12	15,181	43,133
179.13	15,198	43,285
179.14	15,214	43,437
179.15	15,231	43,590
179.16	15,248	43,742
179.17	15,265	43,895
179.18	15,282	44,047
179.19	15,299	44,200
179.20	15,316	44,353
179.21	15,333	44,507
179.22	15,350	44,660
179.23	15,366	44,814
179.24	15,383	44,967
179.25	15,400	45,121
179.26	15,417	45,275
179.27	15,434	45,430
179.28	15,451	45,584
179.29	15,468	45,739
179.30	15,485	45,893
179.31	15,502	46,048
179.32	15,518	46,203
179.33	15,535	46,359
179.34	15,552	46,514
179.35	15,569	46,670
179.36	15,586	46,825
179.37	15,603	46,981
179.38	15,620	47,137
179.39	15,637	47,294
179.40	15,654	47,450
179.41	15,670	47,607
179.42	15,687	47,764
179.43	15,704	47,921
179.44	15,721	48,078
179.45	15,738	48,235

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.46	15,755	48,392
179.47	15,772	48,550
179.48	15,789	48,708
179.49	15,806	48,866
179.50	15,823	49,024
179.51	15,839	49,182
179.52	15,856	49,341
179.53	15,873	49,499
179.54	15,890	49,658
179.55	15,907	49,817
179.56	15,924	49,976
179.57	15,941	50,136
179.58	15,958	50,295
179.59	15,975	50,455
179.60	15,991	50,615
179.61	16,008	50,775
179.62	16,025	50,935
179.63	16,042	51,095
179.64	16,059	51,256
179.65	16,076	51,416
179.66	16,093	51,577
179.67	16,110	51,738
179.68	16,127	51,899
179.69	16,143	52,061
179.70	16,160	52,222
179.71	16,177	52,384
179.72	16,194	52,546
179.73	16,211	52,708
179.74	16,228	52,870
179.75	16,245	53,032
179.76	16,262	53,195
179.77	16,279	53,358
179.78	16,295	53,521
179.79	16,312	53,684
179.80	16,329	53,847
179.81	16,346	54,010
179.82	16,363	54,174
179.83	16,380	54,337
179.84	16,397	54,501
179.85	16,414	54,665
179.86	16,431	54,830
179.87	16,447	54,994
179.88	16,464	55,159
179.89	16,481	55,323
179.90	16,498	55,488
179.91	16,515	55,653
179.92	16,532	55,818
179.93	16,549	55,984
179.94	16,566	56,149
179.95	16,583	56,315
179.96	16,599	56,481
179.97	16,616	56,647
179.98	16,633	56,813
179.99	16,650	56,980
180.00	**16,667**	**57,146**

Summary for Pond B-31: Basin #31

Inflow Area = 0.358 ac, 42.46% Impervious, Inflow Depth = 1.98" for Current 2 yr event
Inflow = 0.71 cfs @ 12.17 hrs, Volume= 0.059 af
Outflow = 0.09 cfs @ 13.02 hrs, Volume= 0.044 af, Atten= 87%, Lag= 50.5 min
Primary = 0.09 cfs @ 13.02 hrs, Volume= 0.044 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.37' @ 13.02 hrs Surf.Area= 2,176 sf Storage= 1,450 cf

Plug-Flow detention time= 311.4 min calculated for 0.044 af (75% of inflow)
Center-of-Mass det. time= 216.7 min (1,012.2 - 795.4)

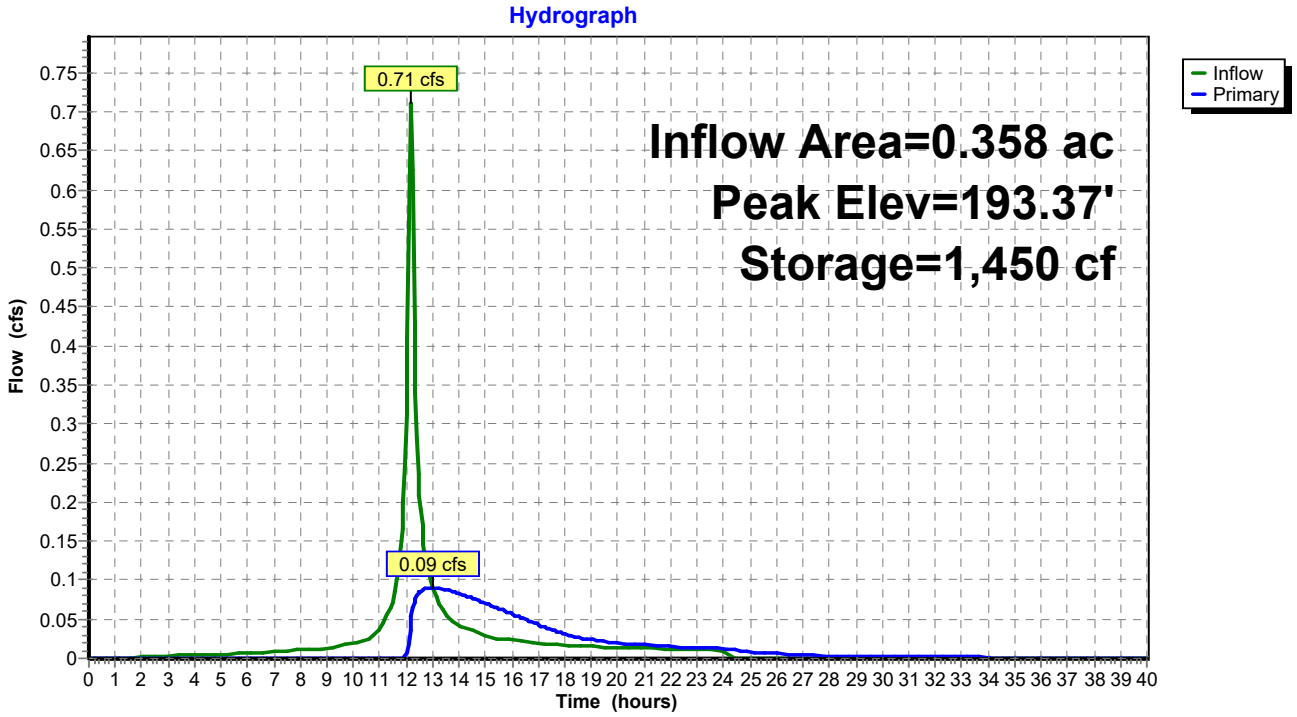
Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	9,453 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	1,944	680	680
194.00	2,566	2,255	2,935
195.00	3,245	2,906	5,841
196.00	3,980	3,613	9,453

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	**18.0" Round Culvert** L= 126.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 188.00' S= 0.0290 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.97'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	195.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.09 cfs @ 13.02 hrs HW=193.37' (Free Discharge)
- **1=Culvert** (Passes 0.09 cfs of 8.40 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.09 cfs @ 2.63 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-31: Basin #31



Stage-Discharge for Pond B-31: Basin #31

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.30	0.00	192.82	0.00	193.34	0.08	193.86	0.15
192.31	0.00	192.83	0.00	193.35	0.09	193.87	0.15
192.32	0.00	192.84	0.00	193.36	0.09	193.88	0.15
192.33	0.00	192.85	0.00	193.37	0.09	193.89	0.15
192.34	0.00	192.86	0.00	193.38	0.09	193.90	0.15
192.35	0.00	192.87	0.00	193.39	0.09	193.91	0.15
192.36	0.00	192.88	0.00	193.40	0.09	193.92	0.15
192.37	0.00	192.89	0.00	193.41	0.10	193.93	0.15
192.38	0.00	192.90	0.00	193.42	0.10	193.94	0.15
192.39	0.00	192.91	0.00	193.43	0.10	193.95	0.15
192.40	0.00	192.92	0.00	193.44	0.10	193.96	0.15
192.41	0.00	192.93	0.00	193.45	0.10	193.97	0.16
192.42	0.00	192.94	0.00	193.46	0.10	193.98	0.16
192.43	0.00	192.95	0.00	193.47	0.10	193.99	0.16
192.44	0.00	192.96	0.00	193.48	0.10	194.00	0.16
192.45	0.00	192.97	0.00	193.49	0.11	194.01	0.16
192.46	0.00	192.98	0.00	193.50	0.11	194.02	0.16
192.47	0.00	192.99	0.00	193.51	0.11	194.03	0.16
192.48	0.00	193.00	0.00	193.52	0.11	194.04	0.16
192.49	0.00	193.01	0.00	193.53	0.11	194.05	0.16
192.50	0.00	193.02	0.00	193.54	0.11	194.06	0.16
192.51	0.00	193.03	0.01	193.55	0.11	194.07	0.16
192.52	0.00	193.04	0.01	193.56	0.11	194.08	0.16
192.53	0.00	193.05	0.01	193.57	0.12	194.09	0.17
192.54	0.00	193.06	0.01	193.58	0.12	194.10	0.17
192.55	0.00	193.07	0.02	193.59	0.12	194.11	0.17
192.56	0.00	193.08	0.02	193.60	0.12	194.12	0.17
192.57	0.00	193.09	0.02	193.61	0.12	194.13	0.17
192.58	0.00	193.10	0.03	193.62	0.12	194.14	0.17
192.59	0.00	193.11	0.03	193.63	0.12	194.15	0.17
192.60	0.00	193.12	0.03	193.64	0.12	194.16	0.17
192.61	0.00	193.13	0.04	193.65	0.12	194.17	0.17
192.62	0.00	193.14	0.04	193.66	0.13	194.18	0.17
192.63	0.00	193.15	0.05	193.67	0.13	194.19	0.17
192.64	0.00	193.16	0.05	193.68	0.13	194.20	0.17
192.65	0.00	193.17	0.05	193.69	0.13	194.21	0.17
192.66	0.00	193.18	0.05	193.70	0.13	194.22	0.18
192.67	0.00	193.19	0.06	193.71	0.13	194.23	0.18
192.68	0.00	193.20	0.06	193.72	0.13	194.24	0.18
192.69	0.00	193.21	0.06	193.73	0.13	194.25	0.18
192.70	0.00	193.22	0.06	193.74	0.13	194.26	0.18
192.71	0.00	193.23	0.06	193.75	0.13	194.27	0.18
192.72	0.00	193.24	0.07	193.76	0.14	194.28	0.18
192.73	0.00	193.25	0.07	193.77	0.14	194.29	0.18
192.74	0.00	193.26	0.07	193.78	0.14	194.30	0.18
192.75	0.00	193.27	0.07	193.79	0.14	194.31	0.18
192.76	0.00	193.28	0.07	193.80	0.14	194.32	0.18
192.77	0.00	193.29	0.08	193.81	0.14	194.33	0.18
192.78	0.00	193.30	0.08	193.82	0.14	194.34	0.18
192.79	0.00	193.31	0.08	193.83	0.14	194.35	0.19
192.80	0.00	193.32	0.08	193.84	0.14	194.36	0.19
192.81	0.00	193.33	0.08	193.85	0.14	194.37	0.19

Stage-Discharge for Pond B-31: Basin #31 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.38	0.19	194.90	0.22	195.42	3.74	195.94	49.49
194.39	0.19	194.91	0.22	195.43	3.86	195.95	51.13
194.40	0.19	194.92	0.22	195.44	3.99	195.96	52.81
194.41	0.19	194.93	0.22	195.45	4.11	195.97	54.51
194.42	0.19	194.94	0.22	195.46	4.24	195.98	56.24
194.43	0.19	194.95	0.22	195.47	4.37	195.99	57.99
194.44	0.19	194.96	0.23	195.48	4.50	196.00	**59.77**
194.45	0.19	194.97	0.23	195.49	4.63		
194.46	0.19	194.98	0.23	195.50	4.76		
194.47	0.19	194.99	0.23	195.51	5.02		
194.48	0.19	195.00	0.23	195.52	5.37		
194.49	0.20	195.01	0.24	195.53	5.78		
194.50	0.20	195.02	0.27	195.54	6.25		
194.51	0.20	195.03	0.30	195.55	6.76		
194.52	0.20	195.04	0.33	195.56	7.31		
194.53	0.20	195.05	0.38	195.57	7.90		
194.54	0.20	195.06	0.42	195.58	8.53		
194.55	0.20	195.07	0.47	195.59	9.19		
194.56	0.20	195.08	0.53	195.60	9.88		
194.57	0.20	195.09	0.58	195.61	10.59		
194.58	0.20	195.10	0.65	195.62	11.34		
194.59	0.20	195.11	0.71	195.63	12.12		
194.60	0.20	195.12	0.78	195.64	12.92		
194.61	0.20	195.13	0.84	195.65	13.74		
194.62	0.20	195.14	0.92	195.66	14.59		
194.63	0.20	195.15	0.99	195.67	15.47		
194.64	0.21	195.16	1.07	195.68	16.36		
194.65	0.21	195.17	1.15	195.69	17.28		
194.66	0.21	195.18	1.23	195.70	18.22		
194.67	0.21	195.19	1.31	195.71	19.23		
194.68	0.21	195.20	1.40	195.72	20.25		
194.69	0.21	195.21	1.49	195.73	21.31		
194.70	0.21	195.22	1.58	195.74	22.39		
194.71	0.21	195.23	1.67	195.75	23.50		
194.72	0.21	195.24	1.76	195.76	24.63		
194.73	0.21	195.25	1.86	195.77	25.79		
194.74	0.21	195.26	1.95	195.78	26.98		
194.75	0.21	195.27	2.05	195.79	28.19		
194.76	0.21	195.28	2.15	195.80	29.42		
194.77	0.21	195.29	2.26	195.81	30.69		
194.78	0.21	195.30	2.36	195.82	31.97		
194.79	0.22	195.31	2.47	195.83	33.29		
194.80	0.22	195.32	2.58	195.84	34.62		
194.81	0.22	195.33	2.69	195.85	35.98		
194.82	0.22	195.34	2.80	195.86	37.37		
194.83	0.22	195.35	2.91	195.87	38.78		
194.84	0.22	195.36	3.02	195.88	40.22		
194.85	0.22	195.37	3.14	195.89	41.68		
194.86	0.22	195.38	3.25	195.90	43.17		
194.87	0.22	195.39	3.37	195.91	44.71		
194.88	0.22	195.40	3.49	195.92	46.28		
194.89	0.22	195.41	3.61	195.93	47.87		

Stage-Area-Storage for Pond B-31: Basin #31

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.30	0	0	192.82	1,444	375
192.31	28	0	192.83	1,472	390
192.32	56	1	192.84	1,500	405
192.33	83	1	192.85	1,527	420
192.34	111	2	192.86	1,555	435
192.35	139	3	192.87	1,583	451
192.36	167	5	192.88	1,611	467
192.37	194	7	192.89	1,639	483
192.38	222	9	192.90	1,666	500
192.39	250	11	192.91	1,694	517
192.40	278	14	192.92	1,722	534
192.41	305	17	192.93	1,750	551
192.42	333	20	192.94	1,777	569
192.43	361	23	192.95	1,805	587
192.44	389	27	192.96	1,833	605
192.45	417	31	192.97	1,861	623
192.46	444	36	192.98	1,888	642
192.47	472	40	192.99	1,916	661
192.48	500	45	193.00	1,944	680
192.49	528	50	193.01	1,950	700
192.50	555	56	193.02	1,956	719
192.51	583	61	193.03	1,963	739
192.52	611	67	193.04	1,969	759
192.53	639	73	193.05	1,975	778
192.54	667	80	193.06	1,981	798
192.55	694	87	193.07	1,988	818
192.56	722	94	193.08	1,994	838
192.57	750	101	193.09	2,000	858
192.58	778	109	193.10	2,006	878
192.59	805	117	193.11	2,012	898
192.60	833	125	193.12	2,019	918
192.61	861	133	193.13	2,025	938
192.62	889	142	193.14	2,031	959
192.63	916	151	193.15	2,037	979
192.64	944	161	193.16	2,044	999
192.65	972	170	193.17	2,050	1,020
192.66	1,000	180	193.18	2,056	1,040
192.67	1,028	190	193.19	2,062	1,061
192.68	1,055	201	193.20	2,068	1,082
192.69	1,083	211	193.21	2,075	1,102
192.70	1,111	222	193.22	2,081	1,123
192.71	1,139	233	193.23	2,087	1,144
192.72	1,166	245	193.24	2,093	1,165
192.73	1,194	257	193.25	2,100	1,186
192.74	1,222	269	193.26	2,106	1,207
192.75	1,250	281	193.27	2,112	1,228
192.76	1,277	294	193.28	2,118	1,249
192.77	1,305	307	193.29	2,124	1,270
192.78	1,333	320	193.30	2,131	1,292
192.79	1,361	333	193.31	2,137	1,313
192.80	1,389	347	193.32	2,143	1,334
192.81	1,416	361	193.33	2,149	1,356

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.34	2,155	1,377	193.86	2,479	2,582
193.35	2,162	1,399	193.87	2,485	2,607
193.36	2,168	1,421	193.88	2,491	2,632
193.37	2,174	1,442	193.89	2,498	2,657
193.38	2,180	1,464	193.90	2,504	2,682
193.39	2,187	1,486	193.91	2,510	2,707
193.40	2,193	1,508	193.92	2,516	2,732
193.41	2,199	1,530	193.93	2,522	2,757
193.42	2,205	1,552	193.94	2,529	2,783
193.43	2,211	1,574	193.95	2,535	2,808
193.44	2,218	1,596	193.96	2,541	2,833
193.45	2,224	1,618	193.97	2,547	2,859
193.46	2,230	1,640	193.98	2,554	2,884
193.47	2,236	1,663	193.99	2,560	2,910
193.48	2,243	1,685	194.00	2,566	2,935
193.49	2,249	1,708	194.01	2,573	2,961
193.50	2,255	1,730	194.02	2,580	2,987
193.51	2,261	1,753	194.03	2,586	3,013
193.52	2,267	1,775	194.04	2,593	3,039
193.53	2,274	1,798	194.05	2,600	3,065
193.54	2,280	1,821	194.06	2,607	3,091
193.55	2,286	1,844	194.07	2,614	3,117
193.56	2,292	1,867	194.08	2,620	3,143
193.57	2,299	1,890	194.09	2,627	3,169
193.58	2,305	1,913	194.10	2,634	3,195
193.59	2,311	1,936	194.11	2,641	3,222
193.60	2,317	1,959	194.12	2,647	3,248
193.61	2,323	1,982	194.13	2,654	3,275
193.62	2,330	2,005	194.14	2,661	3,301
193.63	2,336	2,029	194.15	2,668	3,328
193.64	2,342	2,052	194.16	2,675	3,355
193.65	2,348	2,075	194.17	2,681	3,381
193.66	2,355	2,099	194.18	2,688	3,408
193.67	2,361	2,122	194.19	2,695	3,435
193.68	2,367	2,146	194.20	2,702	3,462
193.69	2,373	2,170	194.21	2,709	3,489
193.70	2,379	2,194	194.22	2,715	3,516
193.71	2,386	2,217	194.23	2,722	3,544
193.72	2,392	2,241	194.24	2,729	3,571
193.73	2,398	2,265	194.25	2,736	3,598
193.74	2,404	2,289	194.26	2,743	3,626
193.75	2,411	2,313	194.27	2,749	3,653
193.76	2,417	2,337	194.28	2,756	3,680
193.77	2,423	2,362	194.29	2,763	3,708
193.78	2,429	2,386	194.30	2,770	3,736
193.79	2,435	2,410	194.31	2,776	3,763
193.80	2,442	2,435	194.32	2,783	3,791
193.81	2,448	2,459	194.33	2,790	3,819
193.82	2,454	2,484	194.34	2,797	3,847
193.83	2,460	2,508	194.35	2,804	3,875
193.84	2,466	2,533	194.36	2,810	3,903
193.85	2,473	2,557	194.37	2,817	3,931

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.38	2,824	3,960
194.39	2,831	3,988
194.40	2,838	4,016
194.41	2,844	4,045
194.42	2,851	4,073
194.43	2,858	4,102
194.44	2,865	4,130
194.45	2,872	4,159
194.46	2,878	4,188
194.47	2,885	4,216
194.48	2,892	4,245
194.49	2,899	4,274
194.50	2,906	4,303
194.51	2,912	4,332
194.52	2,919	4,362
194.53	2,926	4,391
194.54	2,933	4,420
194.55	2,939	4,449
194.56	2,946	4,479
194.57	2,953	4,508
194.58	2,960	4,538
194.59	2,967	4,568
194.60	2,973	4,597
194.61	2,980	4,627
194.62	2,987	4,657
194.63	2,994	4,687
194.64	3,001	4,717
194.65	3,007	4,747
194.66	3,014	4,777
194.67	3,021	4,807
194.68	3,028	4,837
194.69	3,035	4,868
194.70	3,041	4,898
194.71	3,048	4,928
194.72	3,055	4,959
194.73	3,062	4,989
194.74	3,068	5,020
194.75	3,075	5,051
194.76	3,082	5,082
194.77	3,089	5,113
194.78	3,096	5,143
194.79	3,102	5,174
194.80	3,109	5,205
194.81	3,116	5,237
194.82	3,123	5,268
194.83	3,130	5,299
194.84	3,136	5,330
194.85	3,143	5,362
194.86	3,150	5,393
194.87	3,157	5,425
194.88	3,164	5,456
194.89	3,170	5,488
194.90	3,177	5,520
194.91	3,184	5,552
194.92	3,191	5,583
194.93	3,197	5,615
194.94	3,204	5,647
194.95	3,211	5,679
194.96	3,218	5,712
194.97	3,225	5,744
194.98	3,231	5,776
194.99	3,238	5,808
195.00	3,245	5,841
195.01	3,252	5,873
195.02	3,260	5,906
195.03	3,267	5,939
195.04	3,274	5,971
195.05	3,282	6,004
195.06	3,289	6,037
195.07	3,296	6,070
195.08	3,304	6,103
195.09	3,311	6,136
195.10	3,319	6,169
195.11	3,326	6,202
195.12	3,333	6,236
195.13	3,341	6,269
195.14	3,348	6,302
195.15	3,355	6,336
195.16	3,363	6,370
195.17	3,370	6,403
195.18	3,377	6,437
195.19	3,385	6,471
195.20	3,392	6,505
195.21	3,399	6,539
195.22	3,407	6,573
195.23	3,414	6,607
195.24	3,421	6,641
195.25	3,429	6,675
195.26	3,436	6,709
195.27	3,443	6,744
195.28	3,451	6,778
195.29	3,458	6,813
195.30	3,466	6,847
195.31	3,473	6,882
195.32	3,480	6,917
195.33	3,488	6,952
195.34	3,495	6,987
195.35	3,502	7,022
195.36	3,510	7,057
195.37	3,517	7,092
195.38	3,524	7,127
195.39	3,532	7,162
195.40	3,539	7,198
195.41	3,546	7,233

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.42	3,554	7,269
195.43	3,561	7,304
195.44	3,568	7,340
195.45	3,576	7,376
195.46	3,583	7,411
195.47	3,590	7,447
195.48	3,598	7,483
195.49	3,605	7,519
195.50	3,613	7,555
195.51	3,620	7,591
195.52	3,627	7,628
195.53	3,635	7,664
195.54	3,642	7,700
195.55	3,649	7,737
195.56	3,657	7,773
195.57	3,664	7,810
195.58	3,671	7,847
195.59	3,679	7,883
195.60	3,686	7,920
195.61	3,693	7,957
195.62	3,701	7,994
195.63	3,708	8,031
195.64	3,715	8,068
195.65	3,723	8,105
195.66	3,730	8,143
195.67	3,737	8,180
195.68	3,745	8,217
195.69	3,752	8,255
195.70	3,760	8,292
195.71	3,767	8,330
195.72	3,774	8,368
195.73	3,782	8,406
195.74	3,789	8,443
195.75	3,796	8,481
195.76	3,804	8,519
195.77	3,811	8,557
195.78	3,818	8,596
195.79	3,826	8,634
195.80	3,833	8,672
195.81	3,840	8,710
195.82	3,848	8,749
195.83	3,855	8,787
195.84	3,862	8,826
195.85	3,870	8,865
195.86	3,877	8,903
195.87	3,884	8,942
195.88	3,892	8,981
195.89	3,899	9,020
195.90	3,907	9,059
195.91	3,914	9,098
195.92	3,921	9,137
195.93	3,929	9,177
195.94	3,936	9,216
195.95	3,943	9,255
195.96	3,951	9,295
195.97	3,958	9,334
195.98	3,965	9,374
195.99	3,973	9,414
196.00	**3,980**	**9,453**

Summary for Pond B-32: Basin #32

Inflow Area = 1.911 ac, 49.76% Impervious, Inflow Depth = 2.12" for Current 2 yr event
Inflow = 4.05 cfs @ 12.17 hrs, Volume= 0.338 af
Outflow = 3.30 cfs @ 12.25 hrs, Volume= 0.250 af, Atten= 18%, Lag= 4.5 min
Primary = 3.30 cfs @ 12.25 hrs, Volume= 0.250 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.02' @ 12.25 hrs Surf.Area= 2,927 sf Storage= 5,195 cf

Plug-Flow detention time= 176.8 min calculated for 0.250 af (74% of inflow)
Center-of-Mass det. time= 81.7 min (870.6 - 788.9)

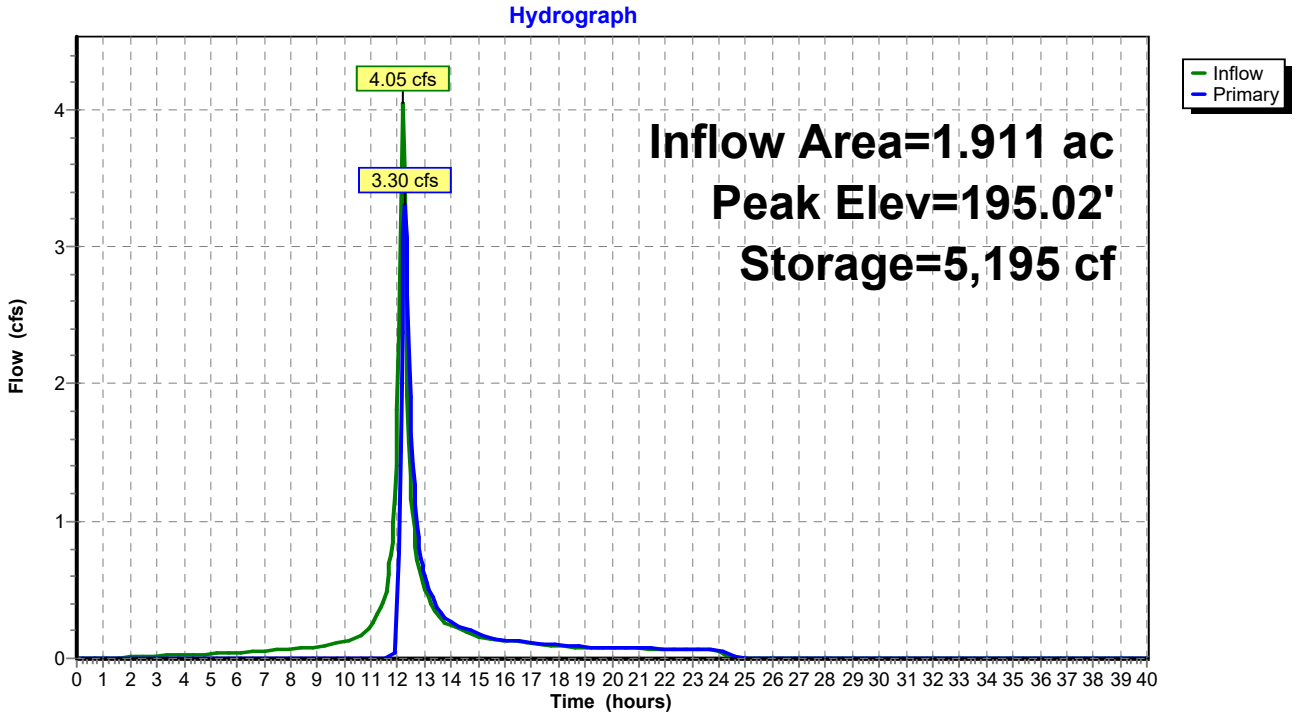
Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	17,202 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	1,675	586	586
194.00	2,256	1,966	2,552
195.00	2,913	2,585	5,136
196.00	3,621	3,267	8,403
197.00	4,385	4,003	12,406
198.00	5,206	4,796	17,202

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 182.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0146 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.53'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	197.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.30 cfs @ 12.25 hrs HW=195.02' (Free Discharge)
- **1=Culvert** (Passes 3.30 cfs of 15.16 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.30 cfs @ 2.25 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-32: Basin #32



Stage-Discharge for Pond B-32: Basin #32

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.30	0.00	192.82	0.00	193.34	0.00	193.86	0.00
192.31	0.00	192.83	0.00	193.35	0.00	193.87	0.00
192.32	0.00	192.84	0.00	193.36	0.00	193.88	0.00
192.33	0.00	192.85	0.00	193.37	0.00	193.89	0.00
192.34	0.00	192.86	0.00	193.38	0.00	193.90	0.00
192.35	0.00	192.87	0.00	193.39	0.00	193.91	0.00
192.36	0.00	192.88	0.00	193.40	0.00	193.92	0.00
192.37	0.00	192.89	0.00	193.41	0.00	193.93	0.00
192.38	0.00	192.90	0.00	193.42	0.00	193.94	0.00
192.39	0.00	192.91	0.00	193.43	0.00	193.95	0.00
192.40	0.00	192.92	0.00	193.44	0.00	193.96	0.00
192.41	0.00	192.93	0.00	193.45	0.00	193.97	0.00
192.42	0.00	192.94	0.00	193.46	0.00	193.98	0.00
192.43	0.00	192.95	0.00	193.47	0.00	193.99	0.00
192.44	0.00	192.96	0.00	193.48	0.00	194.00	0.00
192.45	0.00	192.97	0.00	193.49	0.00	194.01	0.00
192.46	0.00	192.98	0.00	193.50	0.00	194.02	0.00
192.47	0.00	192.99	0.00	193.51	0.00	194.03	0.00
192.48	0.00	193.00	0.00	193.52	0.00	194.04	0.00
192.49	0.00	193.01	0.00	193.53	0.00	194.05	0.00
192.50	0.00	193.02	0.00	193.54	0.00	194.06	0.00
192.51	0.00	193.03	0.00	193.55	0.00	194.07	0.00
192.52	0.00	193.04	0.00	193.56	0.00	194.08	0.00
192.53	0.00	193.05	0.00	193.57	0.00	194.09	0.00
192.54	0.00	193.06	0.00	193.58	0.00	194.10	0.00
192.55	0.00	193.07	0.00	193.59	0.00	194.11	0.00
192.56	0.00	193.08	0.00	193.60	0.00	194.12	0.00
192.57	0.00	193.09	0.00	193.61	0.00	194.13	0.00
192.58	0.00	193.10	0.00	193.62	0.00	194.14	0.00
192.59	0.00	193.11	0.00	193.63	0.00	194.15	0.00
192.60	0.00	193.12	0.00	193.64	0.00	194.16	0.00
192.61	0.00	193.13	0.00	193.65	0.00	194.17	0.00
192.62	0.00	193.14	0.00	193.66	0.00	194.18	0.00
192.63	0.00	193.15	0.00	193.67	0.00	194.19	0.00
192.64	0.00	193.16	0.00	193.68	0.00	194.20	0.00
192.65	0.00	193.17	0.00	193.69	0.00	194.21	0.00
192.66	0.00	193.18	0.00	193.70	0.00	194.22	0.00
192.67	0.00	193.19	0.00	193.71	0.00	194.23	0.00
192.68	0.00	193.20	0.00	193.72	0.00	194.24	0.00
192.69	0.00	193.21	0.00	193.73	0.00	194.25	0.00
192.70	0.00	193.22	0.00	193.74	0.00	194.26	0.00
192.71	0.00	193.23	0.00	193.75	0.00	194.27	0.00
192.72	0.00	193.24	0.00	193.76	0.00	194.28	0.00
192.73	0.00	193.25	0.00	193.77	0.00	194.29	0.00
192.74	0.00	193.26	0.00	193.78	0.00	194.30	0.00
192.75	0.00	193.27	0.00	193.79	0.00	194.31	0.00
192.76	0.00	193.28	0.00	193.80	0.00	194.32	0.00
192.77	0.00	193.29	0.00	193.81	0.00	194.33	0.00
192.78	0.00	193.30	0.00	193.82	0.00	194.34	0.00
192.79	0.00	193.31	0.00	193.83	0.00	194.35	0.00
192.80	0.00	193.32	0.00	193.84	0.00	194.36	0.00
192.81	0.00	193.33	0.00	193.85	0.00	194.37	0.00

Stage-Discharge for Pond B-32: Basin #32 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.38	0.00	194.90	2.17	195.42	5.74	195.94	7.76
194.39	0.00	194.91	2.26	195.43	5.79	195.95	7.80
194.40	0.00	194.92	2.35	195.44	5.83	195.96	7.83
194.41	0.00	194.93	2.44	195.45	5.88	195.97	7.86
194.42	0.00	194.94	2.53	195.46	5.92	195.98	7.90
194.43	0.00	194.95	2.62	195.47	5.97	195.99	7.93
194.44	0.00	194.96	2.72	195.48	6.01	196.00	7.96
194.45	0.00	194.97	2.81	195.49	6.05	196.01	8.00
194.46	0.00	194.98	2.91	195.50	6.10	196.02	8.03
194.47	0.00	194.99	3.00	195.51	6.14	196.03	8.06
194.48	0.00	195.00	3.10	195.52	6.18	196.04	8.09
194.49	0.00	195.01	3.20	195.53	6.23	196.05	8.13
194.50	0.00	195.02	3.30	195.54	6.27	196.06	8.16
194.51	0.00	195.03	3.40	195.55	6.31	196.07	8.19
194.52	0.00	195.04	3.50	195.56	6.35	196.08	8.22
194.53	0.00	195.05	3.58	195.57	6.39	196.09	8.25
194.54	0.01	195.06	3.67	195.58	6.43	196.10	8.29
194.55	0.03	195.07	3.74	195.59	6.47	196.11	8.32
194.56	0.05	195.08	3.82	195.60	6.51	196.12	8.35
194.57	0.08	195.09	3.89	195.61	6.55	196.13	8.38
194.58	0.11	195.10	3.97	195.62	6.59	196.14	8.41
194.59	0.14	195.11	4.04	195.63	6.63	196.15	8.44
194.60	0.18	195.12	4.10	195.64	6.67	196.16	8.47
194.61	0.22	195.13	4.17	195.65	6.71	196.17	8.50
194.62	0.26	195.14	4.24	195.66	6.75	196.18	8.53
194.63	0.30	195.15	4.30	195.67	6.79	196.19	8.56
194.64	0.35	195.16	4.36	195.68	6.83	196.20	8.60
194.65	0.40	195.17	4.43	195.69	6.87	196.21	8.63
194.66	0.45	195.18	4.49	195.70	6.91	196.22	8.66
194.67	0.50	195.19	4.55	195.71	6.94	196.23	8.69
194.68	0.56	195.20	4.61	195.72	6.98	196.24	8.72
194.69	0.62	195.21	4.66	195.73	7.02	196.25	8.75
194.70	0.67	195.22	4.72	195.74	7.06	196.26	8.78
194.71	0.74	195.23	4.78	195.75	7.09	196.27	8.81
194.72	0.80	195.24	4.83	195.76	7.13	196.28	8.84
194.73	0.86	195.25	4.89	195.77	7.17	196.29	8.86
194.74	0.93	195.26	4.94	195.78	7.20	196.30	8.89
194.75	0.99	195.27	5.00	195.79	7.24	196.31	8.92
194.76	1.06	195.28	5.05	195.80	7.28	196.32	8.95
194.77	1.13	195.29	5.10	195.81	7.31	196.33	8.98
194.78	1.20	195.30	5.16	195.82	7.35	196.34	9.01
194.79	1.28	195.31	5.21	195.83	7.38	196.35	9.04
194.80	1.35	195.32	5.26	195.84	7.42	196.36	9.07
194.81	1.43	195.33	5.31	195.85	7.45	196.37	9.10
194.82	1.50	195.34	5.36	195.86	7.49	196.38	9.13
194.83	1.58	195.35	5.41	195.87	7.52	196.39	9.16
194.84	1.66	195.36	5.46	195.88	7.56	196.40	9.18
194.85	1.74	195.37	5.50	195.89	7.59	196.41	9.21
194.86	1.83	195.38	5.55	195.90	7.63	196.42	9.24
194.87	1.91	195.39	5.60	195.91	7.66	196.43	9.27
194.88	1.99	195.40	5.65	195.92	7.70	196.44	9.30
194.89	2.08	195.41	5.69	195.93	7.73	196.45	9.32

Stage-Discharge for Pond B-32: Basin #32 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.46	9.35	196.98	10.71	197.50	16.42
196.47	9.38	196.99	10.73	197.51	16.57
196.48	9.41	197.00	10.76	197.52	16.73
196.49	9.44	197.01	10.79	197.53	16.89
196.50	9.46	197.02	10.84	197.54	17.04
196.51	9.49	197.03	10.90	197.55	17.20
196.52	9.52	197.04	10.96	197.56	17.37
196.53	9.55	197.05	11.02	197.57	17.53
196.54	9.57	197.06	11.09	197.58	17.69
196.55	9.60	197.07	11.17	197.59	17.86
196.56	9.63	197.08	11.24	197.60	18.02
196.57	9.66	197.09	11.32	197.61	18.19
196.58	9.68	197.10	11.41	197.62	18.36
196.59	9.71	197.11	11.49	197.63	18.40
196.60	9.74	197.12	11.58	197.64	18.41
196.61	9.76	197.13	11.68	197.65	18.42
196.62	9.79	197.14	11.77	197.66	18.44
196.63	9.82	197.15	11.87	197.67	18.45
196.64	9.84	197.16	11.97	197.68	18.46
196.65	9.87	197.17	12.07	197.69	18.47
196.66	9.90	197.18	12.17	197.70	18.48
196.67	9.92	197.19	12.28	197.71	18.49
196.68	9.95	197.20	12.39	197.72	18.50
196.69	9.97	197.21	12.50	197.73	18.51
196.70	10.00	197.22	12.61	197.74	18.53
196.71	10.03	197.23	12.73	197.75	18.54
196.72	10.05	197.24	12.84	197.76	18.55
196.73	10.08	197.25	12.96	197.77	18.56
196.74	10.10	197.26	13.08	197.78	18.57
196.75	10.13	197.27	13.20	197.79	18.58
196.76	10.16	197.28	13.33	197.80	18.59
196.77	10.18	197.29	13.45	197.81	18.60
196.78	10.21	197.30	13.58	197.82	18.62
196.79	10.23	197.31	13.71	197.83	18.63
196.80	10.26	197.32	13.84	197.84	18.64
196.81	10.28	197.33	13.97	197.85	18.65
196.82	10.31	197.34	14.10	197.86	18.66
196.83	10.33	197.35	14.23	197.87	18.67
196.84	10.36	197.36	14.37	197.88	18.68
196.85	10.38	197.37	14.51	197.89	18.69
196.86	10.41	197.38	14.65	197.90	18.70
196.87	10.44	197.39	14.79	197.91	18.72
196.88	10.46	197.40	14.93	197.92	18.73
196.89	10.49	197.41	15.07	197.93	18.74
196.90	10.51	197.42	15.22	197.94	18.75
196.91	10.53	197.43	15.36	197.95	18.76
196.92	10.56	197.44	15.51	197.96	18.89
196.93	10.58	197.45	15.66	197.97	19.11
196.94	10.61	197.46	15.81	197.98	19.40
196.95	10.63	197.47	15.96	197.99	19.74
196.96	10.66	197.48	16.11	198.00	**20.13**
196.97	10.68	197.49	16.26		

Stage-Area-Storage for Pond B-32: Basin #32

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.30	0	0	192.82	1,244	324
192.31	24	0	192.83	1,268	336
192.32	48	0	192.84	1,292	349
192.33	72	1	192.85	1,316	362
192.34	96	2	192.86	1,340	375
192.35	120	3	192.87	1,364	389
192.36	144	4	192.88	1,388	402
192.37	167	6	192.89	1,412	416
192.38	191	8	192.90	1,436	431
192.39	215	10	192.91	1,460	445
192.40	239	12	192.92	1,484	460
192.41	263	14	192.93	1,508	475
192.42	287	17	192.94	1,531	490
192.43	311	20	192.95	1,555	505
192.44	335	23	192.96	1,579	521
192.45	359	27	192.97	1,603	537
192.46	383	31	192.98	1,627	553
192.47	407	35	192.99	1,651	570
192.48	431	39	193.00	1,675	586
192.49	455	43	193.01	1,681	603
192.50	479	48	193.02	1,687	620
192.51	503	53	193.03	1,692	637
192.52	526	58	193.04	1,698	654
192.53	550	63	193.05	1,704	671
192.54	574	69	193.06	1,710	688
192.55	598	75	193.07	1,716	705
192.56	622	81	193.08	1,721	722
192.57	646	87	193.09	1,727	739
192.58	670	94	193.10	1,733	757
192.59	694	101	193.11	1,739	774
192.60	718	108	193.12	1,745	791
192.61	742	115	193.13	1,751	809
192.62	766	123	193.14	1,756	826
192.63	790	130	193.15	1,762	844
192.64	814	138	193.16	1,768	862
192.65	838	147	193.17	1,774	879
192.66	861	155	193.18	1,780	897
192.67	885	164	193.19	1,785	915
192.68	909	173	193.20	1,791	933
192.69	933	182	193.21	1,797	951
192.70	957	191	193.22	1,803	969
192.71	981	201	193.23	1,809	987
192.72	1,005	211	193.24	1,814	1,005
192.73	1,029	221	193.25	1,820	1,023
192.74	1,053	232	193.26	1,826	1,041
192.75	1,077	242	193.27	1,832	1,060
192.76	1,101	253	193.28	1,838	1,078
192.77	1,125	264	193.29	1,843	1,096
192.78	1,149	276	193.30	1,849	1,115
192.79	1,173	287	193.31	1,855	1,133
192.80	1,196	299	193.32	1,861	1,152
192.81	1,220	311	193.33	1,867	1,171

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.34	1,873	1,189	193.86	2,175	2,242
193.35	1,878	1,208	193.87	2,180	2,263
193.36	1,884	1,227	193.88	2,186	2,285
193.37	1,890	1,246	193.89	2,192	2,307
193.38	1,896	1,265	193.90	2,198	2,329
193.39	1,902	1,284	193.91	2,204	2,351
193.40	1,907	1,303	193.92	2,210	2,373
193.41	1,913	1,322	193.93	2,215	2,395
193.42	1,919	1,341	193.94	2,221	2,417
193.43	1,925	1,360	193.95	2,227	2,440
193.44	1,931	1,379	193.96	2,233	2,462
193.45	1,936	1,399	193.97	2,239	2,484
193.46	1,942	1,418	193.98	2,244	2,507
193.47	1,948	1,438	193.99	2,250	2,529
193.48	1,954	1,457	194.00	2,256	2,552
193.49	1,960	1,477	194.01	2,263	2,574
193.50	1,966	1,496	194.02	2,269	2,597
193.51	1,971	1,516	194.03	2,276	2,620
193.52	1,977	1,536	194.04	2,282	2,643
193.53	1,983	1,556	194.05	2,289	2,665
193.54	1,989	1,575	194.06	2,295	2,688
193.55	1,995	1,595	194.07	2,302	2,711
193.56	2,000	1,615	194.08	2,309	2,734
193.57	2,006	1,635	194.09	2,315	2,757
193.58	2,012	1,655	194.10	2,322	2,781
193.59	2,018	1,676	194.11	2,328	2,804
193.60	2,024	1,696	194.12	2,335	2,827
193.61	2,029	1,716	194.13	2,341	2,851
193.62	2,035	1,736	194.14	2,348	2,874
193.63	2,041	1,757	194.15	2,355	2,898
193.64	2,047	1,777	194.16	2,361	2,921
193.65	2,053	1,798	194.17	2,368	2,945
193.66	2,058	1,818	194.18	2,374	2,968
193.67	2,064	1,839	194.19	2,381	2,992
193.68	2,070	1,860	194.20	2,387	3,016
193.69	2,076	1,880	194.21	2,394	3,040
193.70	2,082	1,901	194.22	2,401	3,064
193.71	2,088	1,922	194.23	2,407	3,088
193.72	2,093	1,943	194.24	2,414	3,112
193.73	2,099	1,964	194.25	2,420	3,136
193.74	2,105	1,985	194.26	2,427	3,161
193.75	2,111	2,006	194.27	2,433	3,185
193.76	2,117	2,027	194.28	2,440	3,209
193.77	2,122	2,048	194.29	2,447	3,234
193.78	2,128	2,069	194.30	2,453	3,258
193.79	2,134	2,091	194.31	2,460	3,283
193.80	2,140	2,112	194.32	2,466	3,307
193.81	2,146	2,134	194.33	2,473	3,332
193.82	2,151	2,155	194.34	2,479	3,357
193.83	2,157	2,177	194.35	2,486	3,382
193.84	2,163	2,198	194.36	2,493	3,406
193.85	2,169	2,220	194.37	2,499	3,431

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.38	2,506	3,456	194.90	2,847	4,848
194.39	2,512	3,482	194.91	2,854	4,877
194.40	2,519	3,507	194.92	2,860	4,905
194.41	2,525	3,532	194.93	2,867	4,934
194.42	2,532	3,557	194.94	2,874	4,963
194.43	2,539	3,583	194.95	2,880	4,991
194.44	2,545	3,608	194.96	2,887	5,020
194.45	2,552	3,633	194.97	2,893	5,049
194.46	2,558	3,659	194.98	2,900	5,078
194.47	2,565	3,685	194.99	2,906	5,107
194.48	2,571	3,710	195.00	2,913	5,136
194.49	2,578	3,736	195.01	2,920	5,165
194.50	2,585	3,762	195.02	2,927	5,195
194.51	2,591	3,788	195.03	2,934	5,224
194.52	2,598	3,814	195.04	2,941	5,253
194.53	2,604	3,840	195.05	2,948	5,283
194.54	2,611	3,866	195.06	2,955	5,312
194.55	2,617	3,892	195.07	2,963	5,342
194.56	2,624	3,918	195.08	2,970	5,372
194.57	2,630	3,944	195.09	2,977	5,401
194.58	2,637	3,971	195.10	2,984	5,431
194.59	2,644	3,997	195.11	2,991	5,461
194.60	2,650	4,024	195.12	2,998	5,491
194.61	2,657	4,050	195.13	3,005	5,521
194.62	2,663	4,077	195.14	3,012	5,551
194.63	2,670	4,103	195.15	3,019	5,581
194.64	2,676	4,130	195.16	3,026	5,611
194.65	2,683	4,157	195.17	3,033	5,642
194.66	2,690	4,184	195.18	3,040	5,672
194.67	2,696	4,211	195.19	3,048	5,702
194.68	2,703	4,238	195.20	3,055	5,733
194.69	2,709	4,265	195.21	3,062	5,764
194.70	2,716	4,292	195.22	3,069	5,794
194.71	2,722	4,319	195.23	3,076	5,825
194.72	2,729	4,346	195.24	3,083	5,856
194.73	2,736	4,374	195.25	3,090	5,887
194.74	2,742	4,401	195.26	3,097	5,918
194.75	2,749	4,429	195.27	3,104	5,949
194.76	2,755	4,456	195.28	3,111	5,980
194.77	2,762	4,484	195.29	3,118	6,011
194.78	2,768	4,511	195.30	3,125	6,042
194.79	2,775	4,539	195.31	3,132	6,073
194.80	2,782	4,567	195.32	3,140	6,105
194.81	2,788	4,595	195.33	3,147	6,136
194.82	2,795	4,623	195.34	3,154	6,168
194.83	2,801	4,651	195.35	3,161	6,199
194.84	2,808	4,679	195.36	3,168	6,231
194.85	2,814	4,707	195.37	3,175	6,263
194.86	2,821	4,735	195.38	3,182	6,294
194.87	2,828	4,763	195.39	3,189	6,326
194.88	2,834	4,791	195.40	3,196	6,358
194.89	2,841	4,820	195.41	3,203	6,390

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.42	3,210	6,422
195.43	3,217	6,454
195.44	3,225	6,487
195.45	3,232	6,519
195.46	3,239	6,551
195.47	3,246	6,584
195.48	3,253	6,616
195.49	3,260	6,649
195.50	3,267	6,681
195.51	3,274	6,714
195.52	3,281	6,747
195.53	3,288	6,780
195.54	3,295	6,812
195.55	3,302	6,845
195.56	3,309	6,879
195.57	3,317	6,912
195.58	3,324	6,945
195.59	3,331	6,978
195.60	3,338	7,011
195.61	3,345	7,045
195.62	3,352	7,078
195.63	3,359	7,112
195.64	3,366	7,146
195.65	3,373	7,179
195.66	3,380	7,213
195.67	3,387	7,247
195.68	3,394	7,281
195.69	3,402	7,315
195.70	3,409	7,349
195.71	3,416	7,383
195.72	3,423	7,417
195.73	3,430	7,451
195.74	3,437	7,486
195.75	3,444	7,520
195.76	3,451	7,555
195.77	3,458	7,589
195.78	3,465	7,624
195.79	3,472	7,658
195.80	3,479	7,693
195.81	3,486	7,728
195.82	3,494	7,763
195.83	3,501	7,798
195.84	3,508	7,833
195.85	3,515	7,868
195.86	3,522	7,903
195.87	3,529	7,939
195.88	3,536	7,974
195.89	3,543	8,009
195.90	3,550	8,045
195.91	3,557	8,080
195.92	3,564	8,116
195.93	3,571	8,152
195.94	3,579	8,187
195.95	3,586	8,223
195.96	3,593	8,259
195.97	3,600	8,295
195.98	3,607	8,331
195.99	3,614	8,367
196.00	3,621	8,403
196.01	3,629	8,439
196.02	3,636	8,476
196.03	3,644	8,512
196.04	3,652	8,549
196.05	3,659	8,585
196.06	3,667	8,622
196.07	3,674	8,659
196.08	3,682	8,695
196.09	3,690	8,732
196.10	3,697	8,769
196.11	3,705	8,806
196.12	3,713	8,843
196.13	3,720	8,880
196.14	3,728	8,918
196.15	3,736	8,955
196.16	3,743	8,992
196.17	3,751	9,030
196.18	3,759	9,067
196.19	3,766	9,105
196.20	3,774	9,143
196.21	3,781	9,181
196.22	3,789	9,218
196.23	3,797	9,256
196.24	3,804	9,294
196.25	3,812	9,332
196.26	3,820	9,371
196.27	3,827	9,409
196.28	3,835	9,447
196.29	3,843	9,485
196.30	3,850	9,524
196.31	3,858	9,562
196.32	3,865	9,601
196.33	3,873	9,640
196.34	3,881	9,679
196.35	3,888	9,717
196.36	3,896	9,756
196.37	3,904	9,795
196.38	3,911	9,834
196.39	3,919	9,874
196.40	3,927	9,913
196.41	3,934	9,952
196.42	3,942	9,991
196.43	3,950	10,031
196.44	3,957	10,070
196.45	3,965	10,110

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.46	3,972	10,150	196.98	4,370	12,319
196.47	3,980	10,190	196.99	4,377	12,362
196.48	3,988	10,229	197.00	4,385	12,406
196.49	3,995	10,269	197.01	4,393	12,450
196.50	4,003	10,309	197.02	4,401	12,494
196.51	4,011	10,349	197.03	4,410	12,538
196.52	4,018	10,389	197.04	4,418	12,582
196.53	4,026	10,430	197.05	4,426	12,627
196.54	4,034	10,470	197.06	4,434	12,671
196.55	4,041	10,510	197.07	4,442	12,715
196.56	4,049	10,551	197.08	4,451	12,760
196.57	4,056	10,591	197.09	4,459	12,804
196.58	4,064	10,632	197.10	4,467	12,849
196.59	4,072	10,673	197.11	4,475	12,894
196.60	4,079	10,713	197.12	4,484	12,938
196.61	4,087	10,754	197.13	4,492	12,983
196.62	4,095	10,795	197.14	4,500	13,028
196.63	4,102	10,836	197.15	4,508	13,073
196.64	4,110	10,877	197.16	4,516	13,118
196.65	4,118	10,918	197.17	4,525	13,164
196.66	4,125	10,960	197.18	4,533	13,209
196.67	4,133	11,001	197.19	4,541	13,254
196.68	4,141	11,042	197.20	4,549	13,300
196.69	4,148	11,084	197.21	4,557	13,345
196.70	4,156	11,125	197.22	4,566	13,391
196.71	4,163	11,167	197.23	4,574	13,437
196.72	4,171	11,208	197.24	4,582	13,482
196.73	4,179	11,250	197.25	4,590	13,528
196.74	4,186	11,292	197.26	4,598	13,574
196.75	4,194	11,334	197.27	4,607	13,620
196.76	4,202	11,376	197.28	4,615	13,666
196.77	4,209	11,418	197.29	4,623	13,712
196.78	4,217	11,460	197.30	4,631	13,759
196.79	4,225	11,502	197.31	4,640	13,805
196.80	4,232	11,545	197.32	4,648	13,851
196.81	4,240	11,587	197.33	4,656	13,898
196.82	4,247	11,629	197.34	4,664	13,945
196.83	4,255	11,672	197.35	4,672	13,991
196.84	4,263	11,714	197.36	4,681	14,038
196.85	4,270	11,757	197.37	4,689	14,085
196.86	4,278	11,800	197.38	4,697	14,132
196.87	4,286	11,843	197.39	4,705	14,179
196.88	4,293	11,886	197.40	4,713	14,226
196.89	4,301	11,929	197.41	4,722	14,273
196.90	4,309	11,972	197.42	4,730	14,320
196.91	4,316	12,015	197.43	4,738	14,368
196.92	4,324	12,058	197.44	4,746	14,415
196.93	4,332	12,101	197.45	4,754	14,463
196.94	4,339	12,145	197.46	4,763	14,510
196.95	4,347	12,188	197.47	4,771	14,558
196.96	4,354	12,231	197.48	4,779	14,606
196.97	4,362	12,275	197.49	4,787	14,653

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.50	4,796	14,701
197.51	4,804	14,749
197.52	4,812	14,797
197.53	4,820	14,846
197.54	4,828	14,894
197.55	4,837	14,942
197.56	4,845	14,991
197.57	4,853	15,039
197.58	4,861	15,088
197.59	4,869	15,136
197.60	4,878	15,185
197.61	4,886	15,234
197.62	4,894	15,283
197.63	4,902	15,332
197.64	4,910	15,381
197.65	4,919	15,430
197.66	4,927	15,479
197.67	4,935	15,528
197.68	4,943	15,578
197.69	4,951	15,627
197.70	4,960	15,677
197.71	4,968	15,727
197.72	4,976	15,776
197.73	4,984	15,826
197.74	4,993	15,876
197.75	5,001	15,926
197.76	5,009	15,976
197.77	5,017	16,026
197.78	5,025	16,076
197.79	5,034	16,127
197.80	5,042	16,177
197.81	5,050	16,227
197.82	5,058	16,278
197.83	5,066	16,329
197.84	5,075	16,379
197.85	5,083	16,430
197.86	5,091	16,481
197.87	5,099	16,532
197.88	5,107	16,583
197.89	5,116	16,634
197.90	5,124	16,685
197.91	5,132	16,737
197.92	5,140	16,788
197.93	5,149	16,839
197.94	5,157	16,891
197.95	5,165	16,942
197.96	5,173	16,994
197.97	5,181	17,046
197.98	5,190	17,098
197.99	5,198	17,150
198.00	**5,206**	**17,202**

Summary for Pond B-33: Basin #33

Inflow Area = 1.761 ac, 50.99% Impervious, Inflow Depth = 2.15" for Current 2 yr event
Inflow = 3.77 cfs @ 12.17 hrs, Volume= 0.315 af
Outflow = 0.18 cfs @ 14.52 hrs, Volume= 0.228 af, Atten= 95%, Lag= 140.7 min
Primary = 0.18 cfs @ 14.52 hrs, Volume= 0.228 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 189.14' @ 14.52 hrs Surf.Area= 4,803 sf Storage= 9,275 cf

Plug-Flow detention time= 560.9 min calculated for 0.228 af (73% of inflow)
Center-of-Mass det. time= 462.9 min (1,250.8 - 787.9)

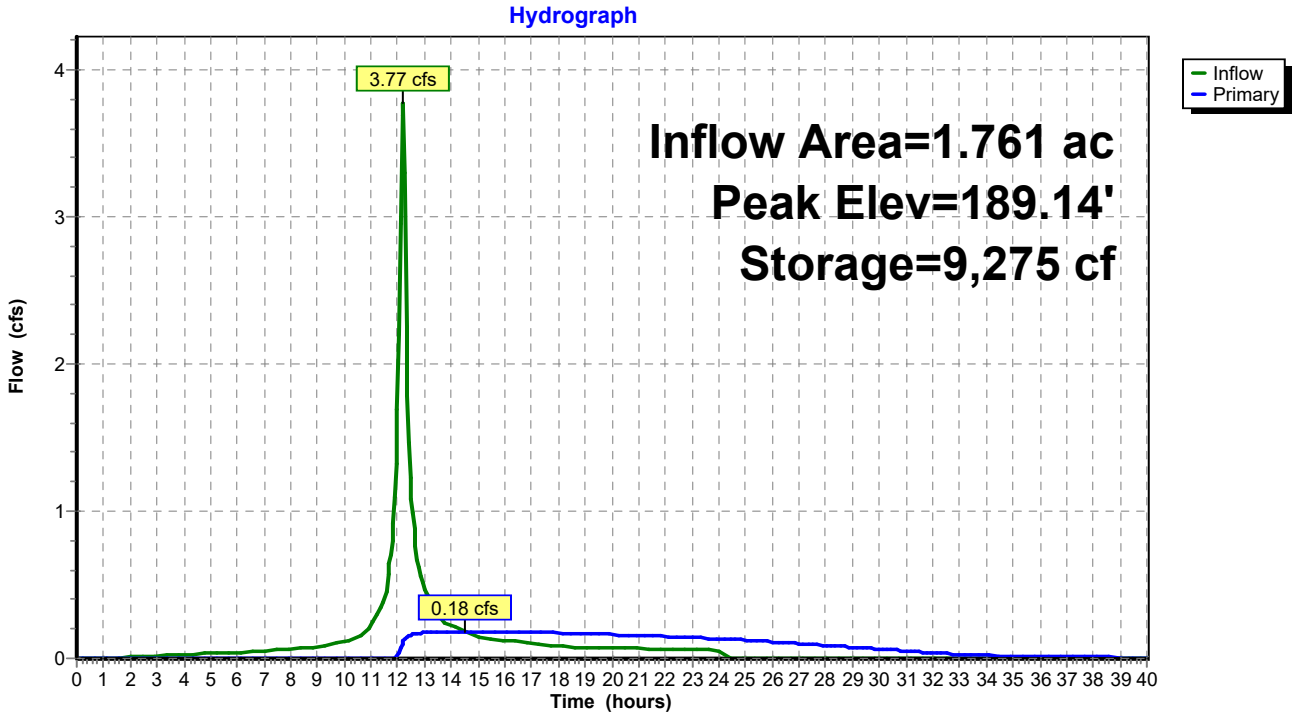
Volume	Invert	Avail.Storage	Storage Description
#1	186.30'	19,860 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.30	0	0	0
187.00	2,936	1,028	1,028
188.00	3,763	3,350	4,377
189.00	4,665	4,214	8,591
190.00	5,621	5,143	13,734
191.00	6,631	6,126	19,860

Device	Routing	Invert	Outlet Devices
#1	Primary	185.65'	**18.0" Round Culvert** L= 91.0' Ke= 0.500 Inlet / Outlet Invert= 185.65' / 185.00' S= 0.0071 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	187.79'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.53'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.75'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.18 cfs @ 14.52 hrs HW=189.14' (Free Discharge)
- **1=Culvert** (Passes 0.18 cfs of 12.96 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.38 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-33: Basin #33



Stage-Discharge for Pond B-33: Basin #33

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.30	0.00	186.82	0.00	187.34	0.00	187.86	0.01
186.31	0.00	186.83	0.00	187.35	0.00	187.87	0.01
186.32	0.00	186.84	0.00	187.36	0.00	187.88	0.01
186.33	0.00	186.85	0.00	187.37	0.00	187.89	0.02
186.34	0.00	186.86	0.00	187.38	0.00	187.90	0.02
186.35	0.00	186.87	0.00	187.39	0.00	187.91	0.02
186.36	0.00	186.88	0.00	187.40	0.00	187.92	0.03
186.37	0.00	186.89	0.00	187.41	0.00	187.93	0.03
186.38	0.00	186.90	0.00	187.42	0.00	187.94	0.03
186.39	0.00	186.91	0.00	187.43	0.00	187.95	0.04
186.40	0.00	186.92	0.00	187.44	0.00	187.96	0.04
186.41	0.00	186.93	0.00	187.45	0.00	187.97	0.05
186.42	0.00	186.94	0.00	187.46	0.00	187.98	0.05
186.43	0.00	186.95	0.00	187.47	0.00	187.99	0.05
186.44	0.00	186.96	0.00	187.48	0.00	188.00	0.05
186.45	0.00	186.97	0.00	187.49	0.00	188.01	0.06
186.46	0.00	186.98	0.00	187.50	0.00	188.02	0.06
186.47	0.00	186.99	0.00	187.51	0.00	188.03	0.06
186.48	0.00	187.00	0.00	187.52	0.00	188.04	0.06
186.49	0.00	187.01	0.00	187.53	0.00	188.05	0.06
186.50	0.00	187.02	0.00	187.54	0.00	188.06	0.07
186.51	0.00	187.03	0.00	187.55	0.00	188.07	0.07
186.52	0.00	187.04	0.00	187.56	0.00	188.08	0.07
186.53	0.00	187.05	0.00	187.57	0.00	188.09	0.07
186.54	0.00	187.06	0.00	187.58	0.00	188.10	0.07
186.55	0.00	187.07	0.00	187.59	0.00	188.11	0.08
186.56	0.00	187.08	0.00	187.60	0.00	188.12	0.08
186.57	0.00	187.09	0.00	187.61	0.00	188.13	0.08
186.58	0.00	187.10	0.00	187.62	0.00	188.14	0.08
186.59	0.00	187.11	0.00	187.63	0.00	188.15	0.08
186.60	0.00	187.12	0.00	187.64	0.00	188.16	0.08
186.61	0.00	187.13	0.00	187.65	0.00	188.17	0.09
186.62	0.00	187.14	0.00	187.66	0.00	188.18	0.09
186.63	0.00	187.15	0.00	187.67	0.00	188.19	0.09
186.64	0.00	187.16	0.00	187.68	0.00	188.20	0.09
186.65	0.00	187.17	0.00	187.69	0.00	188.21	0.09
186.66	0.00	187.18	0.00	187.70	0.00	188.22	0.09
186.67	0.00	187.19	0.00	187.71	0.00	188.23	0.10
186.68	0.00	187.20	0.00	187.72	0.00	188.24	0.10
186.69	0.00	187.21	0.00	187.73	0.00	188.25	0.10
186.70	0.00	187.22	0.00	187.74	0.00	188.26	0.10
186.71	0.00	187.23	0.00	187.75	0.00	188.27	0.10
186.72	0.00	187.24	0.00	187.76	0.00	188.28	0.10
186.73	0.00	187.25	0.00	187.77	0.00	188.29	0.10
186.74	0.00	187.26	0.00	187.78	0.00	188.30	0.10
186.75	0.00	187.27	0.00	187.79	0.00	188.31	0.11
186.76	0.00	187.28	0.00	187.80	0.00	188.32	0.11
186.77	0.00	187.29	0.00	187.81	0.00	188.33	0.11
186.78	0.00	187.30	0.00	187.82	0.00	188.34	0.11
186.79	0.00	187.31	0.00	187.83	0.00	188.35	0.11
186.80	0.00	187.32	0.00	187.84	0.00	188.36	0.11
186.81	0.00	187.33	0.00	187.85	0.01	188.37	0.11

Stage-Discharge for Pond B-33: Basin #33 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.38	0.11	188.90	0.16	189.42	0.20	189.94	3.60
188.39	0.12	188.91	0.17	189.43	0.20	189.95	3.72
188.40	0.12	188.92	0.17	189.44	0.20	189.96	3.84
188.41	0.12	188.93	0.17	189.45	0.20	189.97	3.97
188.42	0.12	188.94	0.17	189.46	0.21	189.98	4.10
188.43	0.12	188.95	0.17	189.47	0.21	189.99	4.22
188.44	0.12	188.96	0.17	189.48	0.21	190.00	4.35
188.45	0.12	188.97	0.17	189.49	0.21	190.01	4.48
188.46	0.12	188.98	0.17	189.50	0.21	190.02	4.62
188.47	0.12	188.99	0.17	189.51	0.21	190.03	4.75
188.48	0.13	189.00	0.17	189.52	0.21	190.04	4.88
188.49	0.13	189.01	0.17	189.53	0.21	190.05	5.02
188.50	0.13	189.02	0.17	189.54	0.22	190.06	5.15
188.51	0.13	189.03	0.17	189.55	0.25	190.07	5.29
188.52	0.13	189.04	0.18	189.56	0.28	190.08	5.43
188.53	0.13	189.05	0.18	189.57	0.32	190.09	5.57
188.54	0.13	189.06	0.18	189.58	0.36	190.10	5.71
188.55	0.13	189.07	0.18	189.59	0.41	190.11	5.85
188.56	0.13	189.08	0.18	189.60	0.46	190.12	6.00
188.57	0.13	189.09	0.18	189.61	0.51	190.13	6.14
188.58	0.14	189.10	0.18	189.62	0.57	190.14	6.29
188.59	0.14	189.11	0.18	189.63	0.63	190.15	6.43
188.60	0.14	189.12	0.18	189.64	0.69	190.16	6.58
188.61	0.14	189.13	0.18	189.65	0.76	190.17	6.73
188.62	0.14	189.14	0.18	189.66	0.83	190.18	6.88
188.63	0.14	189.15	0.18	189.67	0.90	190.19	7.03
188.64	0.14	189.16	0.18	189.68	0.97	190.20	7.18
188.65	0.14	189.17	0.19	189.69	1.05	190.21	7.33
188.66	0.14	189.18	0.19	189.70	1.13	190.22	7.49
188.67	0.14	189.19	0.19	189.71	1.21	190.23	7.64
188.68	0.15	189.20	0.19	189.72	1.29	190.24	7.80
188.69	0.15	189.21	0.19	189.73	1.38	190.25	7.96
188.70	0.15	189.22	0.19	189.74	1.47	190.26	8.11
188.71	0.15	189.23	0.19	189.75	1.56	190.27	8.27
188.72	0.15	189.24	0.19	189.76	1.65	190.28	8.43
188.73	0.15	189.25	0.19	189.77	1.74	190.29	8.59
188.74	0.15	189.26	0.19	189.78	1.84	190.30	8.75
188.75	0.15	189.27	0.19	189.79	1.94	190.31	8.91
188.76	0.15	189.28	0.19	189.80	2.04	190.32	9.08
188.77	0.15	189.29	0.19	189.81	2.14	190.33	9.24
188.78	0.15	189.30	0.19	189.82	2.24	190.34	9.41
188.79	0.16	189.31	0.20	189.83	2.35	190.35	9.57
188.80	0.16	189.32	0.20	189.84	2.45	190.36	9.74
188.81	0.16	189.33	0.20	189.85	2.56	190.37	9.91
188.82	0.16	189.34	0.20	189.86	2.67	190.38	10.07
188.83	0.16	189.35	0.20	189.87	2.78	190.39	10.24
188.84	0.16	189.36	0.20	189.88	2.89	190.40	10.41
188.85	0.16	189.37	0.20	189.89	3.01	190.41	10.58
188.86	0.16	189.38	0.20	189.90	3.12	190.42	10.75
188.87	0.16	189.39	0.20	189.91	3.24	190.43	10.93
188.88	0.16	189.40	0.20	189.92	3.36	190.44	11.10
188.89	0.16	189.41	0.20	189.93	3.48	190.45	11.27

Stage-Discharge for Pond B-33: Basin #33 (continued)

Elevation (feet)	Primary (cfs)
190.46	11.45
190.47	11.62
190.48	11.80
190.49	11.98
190.50	12.15
190.51	12.33
190.52	12.51
190.53	12.69
190.54	12.87
190.55	13.05
190.56	13.24
190.57	13.42
190.58	13.60
190.59	13.79
190.60	13.97
190.61	14.16
190.62	14.34
190.63	14.53
190.64	14.72
190.65	14.91
190.66	15.10
190.67	15.29
190.68	15.48
190.69	15.67
190.70	15.86
190.71	16.05
190.72	16.25
190.73	16.40
190.74	16.42
190.75	16.44
190.76	16.57
190.77	16.81
190.78	17.10
190.79	17.45
190.80	17.84
190.81	18.28
190.82	18.74
190.83	19.25
190.84	19.78
190.85	20.35
190.86	20.94
190.87	21.56
190.88	22.20
190.89	22.87
190.90	23.57
190.91	24.29
190.92	25.03
190.93	25.79
190.94	26.58
190.95	27.38
190.96	28.25
190.97	29.14
190.98	30.06
190.99	31.00
191.00	**31.97**

Stage-Area-Storage for Pond B-33: Basin #33

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.30	0	0	186.82	2,181	567
186.31	42	0	186.83	2,223	589
186.32	84	1	186.84	2,265	612
186.33	126	2	186.85	2,307	634
186.34	168	3	186.86	2,349	658
186.35	210	5	186.87	2,391	681
186.36	252	8	186.88	2,433	705
186.37	294	10	186.89	2,475	730
186.38	336	13	186.90	2,517	755
186.39	377	17	186.91	2,559	780
186.40	419	21	186.92	2,600	806
186.41	461	25	186.93	2,642	832
186.42	503	30	186.94	2,684	859
186.43	545	35	186.95	2,726	886
186.44	587	41	186.96	2,768	914
186.45	629	47	186.97	2,810	941
186.46	671	54	186.98	2,852	970
186.47	713	61	186.99	2,894	998
186.48	755	68	187.00	2,936	1,028
186.49	797	76	187.01	2,944	1,057
186.50	839	84	187.02	2,953	1,086
186.51	881	92	187.03	2,961	1,116
186.52	923	102	187.04	2,969	1,146
186.53	965	111	187.05	2,977	1,175
186.54	1,007	121	187.06	2,986	1,205
186.55	1,049	131	187.07	2,994	1,235
186.56	1,091	142	187.08	3,002	1,265
186.57	1,132	153	187.09	3,010	1,295
186.58	1,174	164	187.10	3,019	1,325
186.59	1,216	176	187.11	3,027	1,356
186.60	1,258	189	187.12	3,035	1,386
186.61	1,300	202	187.13	3,044	1,416
186.62	1,342	215	187.14	3,052	1,447
186.63	1,384	228	187.15	3,060	1,477
186.64	1,426	242	187.16	3,068	1,508
186.65	1,468	257	187.17	3,077	1,539
186.66	1,510	272	187.18	3,085	1,569
186.67	1,552	287	187.19	3,093	1,600
186.68	1,594	303	187.20	3,101	1,631
186.69	1,636	319	187.21	3,110	1,662
186.70	1,678	336	187.22	3,118	1,694
186.71	1,720	353	187.23	3,126	1,725
186.72	1,762	370	187.24	3,134	1,756
186.73	1,804	388	187.25	3,143	1,787
186.74	1,845	406	187.26	3,151	1,819
186.75	1,887	425	187.27	3,159	1,850
186.76	1,929	444	187.28	3,168	1,882
186.77	1,971	463	187.29	3,176	1,914
186.78	2,013	483	187.30	3,184	1,946
186.79	2,055	504	187.31	3,192	1,977
186.80	2,097	524	187.32	3,201	2,009
186.81	2,139	545	187.33	3,209	2,042

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.34	3,217	2,074	187.86	3,647	3,858
187.35	3,225	2,106	187.87	3,655	3,895
187.36	3,234	2,138	187.88	3,664	3,931
187.37	3,242	2,171	187.89	3,672	3,968
187.38	3,250	2,203	187.90	3,680	4,005
187.39	3,259	2,236	187.91	3,689	4,042
187.40	3,267	2,268	187.92	3,697	4,079
187.41	3,275	2,301	187.93	3,705	4,116
187.42	3,283	2,334	187.94	3,713	4,153
187.43	3,292	2,367	187.95	3,722	4,190
187.44	3,300	2,399	187.96	3,730	4,227
187.45	3,308	2,433	187.97	3,738	4,265
187.46	3,316	2,466	187.98	3,746	4,302
187.47	3,325	2,499	187.99	3,755	4,340
187.48	3,333	2,532	188.00	3,763	4,377
187.49	3,341	2,566	188.01	3,772	4,415
187.50	3,350	2,599	188.02	3,781	4,453
187.51	3,358	2,633	188.03	3,790	4,490
187.52	3,366	2,666	188.04	3,799	4,528
187.53	3,374	2,700	188.05	3,808	4,566
187.54	3,383	2,734	188.06	3,817	4,605
187.55	3,391	2,767	188.07	3,826	4,643
187.56	3,399	2,801	188.08	3,835	4,681
187.57	3,407	2,835	188.09	3,844	4,719
187.58	3,416	2,870	188.10	3,853	4,758
187.59	3,424	2,904	188.11	3,862	4,796
187.60	3,432	2,938	188.12	3,871	4,835
187.61	3,440	2,972	188.13	3,880	4,874
187.62	3,449	3,007	188.14	3,889	4,913
187.63	3,457	3,041	188.15	3,898	4,952
187.64	3,465	3,076	188.16	3,907	4,991
187.65	3,474	3,111	188.17	3,916	5,030
187.66	3,482	3,145	188.18	3,925	5,069
187.67	3,490	3,180	188.19	3,934	5,108
187.68	3,498	3,215	188.20	3,943	5,148
187.69	3,507	3,250	188.21	3,952	5,187
187.70	3,515	3,285	188.22	3,961	5,227
187.71	3,523	3,321	188.23	3,970	5,266
187.72	3,531	3,356	188.24	3,979	5,306
187.73	3,540	3,391	188.25	3,989	5,346
187.74	3,548	3,427	188.26	3,998	5,386
187.75	3,556	3,462	188.27	4,007	5,426
187.76	3,565	3,498	188.28	4,016	5,466
187.77	3,573	3,533	188.29	4,025	5,506
187.78	3,581	3,569	188.30	4,034	5,547
187.79	3,589	3,605	188.31	4,043	5,587
187.80	3,598	3,641	188.32	4,052	5,627
187.81	3,606	3,677	188.33	4,061	5,668
187.82	3,614	3,713	188.34	4,070	5,709
187.83	3,622	3,749	188.35	4,079	5,749
187.84	3,631	3,786	188.36	4,088	5,790
187.85	3,639	3,822	188.37	4,097	5,831

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.38	4,106	5,872	188.90	4,575	8,129
188.39	4,115	5,913	188.91	4,584	8,175
188.40	4,124	5,954	188.92	4,593	8,221
188.41	4,133	5,996	188.93	4,602	8,267
188.42	4,142	6,037	188.94	4,611	8,313
188.43	4,151	6,079	188.95	4,620	8,359
188.44	4,160	6,120	188.96	4,629	8,405
188.45	4,169	6,162	188.97	4,638	8,452
188.46	4,178	6,204	188.98	4,647	8,498
188.47	4,187	6,245	188.99	4,656	8,544
188.48	4,196	6,287	189.00	4,665	8,591
188.49	4,205	6,329	189.01	4,675	8,638
188.50	4,214	6,371	189.02	4,684	8,685
188.51	4,223	6,414	189.03	4,694	8,731
188.52	4,232	6,456	189.04	4,703	8,778
188.53	4,241	6,498	189.05	4,713	8,826
188.54	4,250	6,541	189.06	4,722	8,873
188.55	4,259	6,583	189.07	4,732	8,920
188.56	4,268	6,626	189.08	4,741	8,967
188.57	4,277	6,669	189.09	4,751	9,015
188.58	4,286	6,711	189.10	4,761	9,062
188.59	4,295	6,754	189.11	4,770	9,110
188.60	4,304	6,797	189.12	4,780	9,158
188.61	4,313	6,840	189.13	4,789	9,206
188.62	4,322	6,884	189.14	4,799	9,254
188.63	4,331	6,927	189.15	4,808	9,302
188.64	4,340	6,970	189.16	4,818	9,350
188.65	4,349	7,014	189.17	4,828	9,398
188.66	4,358	7,057	189.18	4,837	9,446
188.67	4,367	7,101	189.19	4,847	9,495
188.68	4,376	7,144	189.20	4,856	9,543
188.69	4,385	7,188	189.21	4,866	9,592
188.70	4,394	7,232	189.22	4,875	9,641
188.71	4,403	7,276	189.23	4,885	9,689
188.72	4,412	7,320	189.24	4,894	9,738
188.73	4,421	7,364	189.25	4,904	9,787
188.74	4,430	7,409	189.26	4,914	9,836
188.75	4,440	7,453	189.27	4,923	9,885
188.76	4,449	7,497	189.28	4,933	9,935
188.77	4,458	7,542	189.29	4,942	9,984
188.78	4,467	7,587	189.30	4,952	10,034
188.79	4,476	7,631	189.31	4,961	10,083
188.80	4,485	7,676	189.32	4,971	10,133
188.81	4,494	7,721	189.33	4,980	10,183
188.82	4,503	7,766	189.34	4,990	10,232
188.83	4,512	7,811	189.35	5,000	10,282
188.84	4,521	7,856	189.36	5,009	10,332
188.85	4,530	7,901	189.37	5,019	10,383
188.86	4,539	7,947	189.38	5,028	10,433
188.87	4,548	7,992	189.39	5,038	10,483
188.88	4,557	8,038	189.40	5,047	10,534
188.89	4,566	8,083	189.41	5,057	10,584

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.42	5,067	10,635	189.94	5,564	13,399
189.43	5,076	10,685	189.95	5,573	13,454
189.44	5,086	10,736	189.96	5,583	13,510
189.45	5,095	10,787	189.97	5,592	13,566
189.46	5,105	10,838	189.98	5,602	13,622
189.47	5,114	10,889	189.99	5,611	13,678
189.48	5,124	10,940	190.00	5,621	13,734
189.49	5,133	10,992	190.01	5,631	13,790
189.50	5,143	11,043	190.02	5,641	13,847
189.51	5,153	11,095	190.03	5,651	13,903
189.52	5,162	11,146	190.04	5,661	13,960
189.53	5,172	11,198	190.05	5,672	14,016
189.54	5,181	11,250	190.06	5,682	14,073
189.55	5,191	11,301	190.07	5,692	14,130
189.56	5,200	11,353	190.08	5,702	14,187
189.57	5,210	11,405	190.09	5,712	14,244
189.58	5,219	11,458	190.10	5,722	14,301
189.59	5,229	11,510	190.11	5,732	14,359
189.60	5,239	11,562	190.12	5,742	14,416
189.61	5,248	11,615	190.13	5,752	14,473
189.62	5,258	11,667	190.14	5,762	14,531
189.63	5,267	11,720	190.15	5,773	14,589
189.64	5,277	11,772	190.16	5,783	14,646
189.65	5,286	11,825	190.17	5,793	14,704
189.66	5,296	11,878	190.18	5,803	14,762
189.67	5,306	11,931	190.19	5,813	14,820
189.68	5,315	11,984	190.20	5,823	14,879
189.69	5,325	12,038	190.21	5,833	14,937
189.70	5,334	12,091	190.22	5,843	14,995
189.71	5,344	12,144	190.23	5,853	15,054
189.72	5,353	12,198	190.24	5,863	15,112
189.73	5,363	12,251	190.25	5,874	15,171
189.74	5,372	12,305	190.26	5,884	15,230
189.75	5,382	12,359	190.27	5,894	15,289
189.76	5,392	12,413	190.28	5,904	15,348
189.77	5,401	12,467	190.29	5,914	15,407
189.78	5,411	12,521	190.30	5,924	15,466
189.79	5,420	12,575	190.31	5,934	15,525
189.80	5,430	12,629	190.32	5,944	15,585
189.81	5,439	12,683	190.33	5,954	15,644
189.82	5,449	12,738	190.34	5,964	15,704
189.83	5,458	12,792	190.35	5,975	15,763
189.84	5,468	12,847	190.36	5,985	15,823
189.85	5,478	12,902	190.37	5,995	15,883
189.86	5,487	12,957	190.38	6,005	15,943
189.87	5,497	13,011	190.39	6,015	16,003
189.88	5,506	13,066	190.40	6,025	16,063
189.89	5,516	13,122	190.41	6,035	16,124
189.90	5,525	13,177	190.42	6,045	16,184
189.91	5,535	13,232	190.43	6,055	16,245
189.92	5,545	13,287	190.44	6,065	16,305
189.93	5,554	13,343	190.45	6,076	16,366

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.46	6,086	16,427
190.47	6,096	16,488
190.48	6,106	16,549
190.49	6,116	16,610
190.50	6,126	16,671
190.51	6,136	16,732
190.52	6,146	16,794
190.53	6,156	16,855
190.54	6,166	16,917
190.55	6,177	16,978
190.56	6,187	17,040
190.57	6,197	17,102
190.58	6,207	17,164
190.59	6,217	17,226
190.60	6,227	17,289
190.61	6,237	17,351
190.62	6,247	17,413
190.63	6,257	17,476
190.64	6,267	17,538
190.65	6,278	17,601
190.66	6,288	17,664
190.67	6,298	17,727
190.68	6,308	17,790
190.69	6,318	17,853
190.70	6,328	17,916
190.71	6,338	17,980
190.72	6,348	18,043
190.73	6,358	18,107
190.74	6,368	18,170
190.75	6,379	18,234
190.76	6,389	18,298
190.77	6,399	18,362
190.78	6,409	18,426
190.79	6,419	18,490
190.80	6,429	18,554
190.81	6,439	18,618
190.82	6,449	18,683
190.83	6,459	18,747
190.84	6,469	18,812
190.85	6,480	18,877
190.86	6,490	18,942
190.87	6,500	19,007
190.88	6,510	19,072
190.89	6,520	19,137
190.90	6,530	19,202
190.91	6,540	19,267
190.92	6,550	19,333
190.93	6,560	19,398
190.94	6,570	19,464
190.95	6,581	19,530
190.96	6,591	19,596
190.97	6,601	19,662
190.98	6,611	19,728
190.99	6,621	19,794
191.00	**6,631**	**19,860**

Summary for Pond B-34: Basin #34

Inflow Area = 1.779 ac, 23.66% Impervious, Inflow Depth = 1.61" for Current 2 yr event
Inflow = 2.92 cfs @ 12.18 hrs, Volume= 0.238 af
Outflow = 0.15 cfs @ 14.70 hrs, Volume= 0.188 af, Atten= 95%, Lag= 151.4 min
Primary = 0.15 cfs @ 14.70 hrs, Volume= 0.188 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 192.03' @ 14.70 hrs Surf.Area= 5,370 sf Storage= 6,547 cf

Plug-Flow detention time= 529.2 min calculated for 0.188 af (79% of inflow)
Center-of-Mass det. time= 442.4 min (1,260.1 - 817.7)

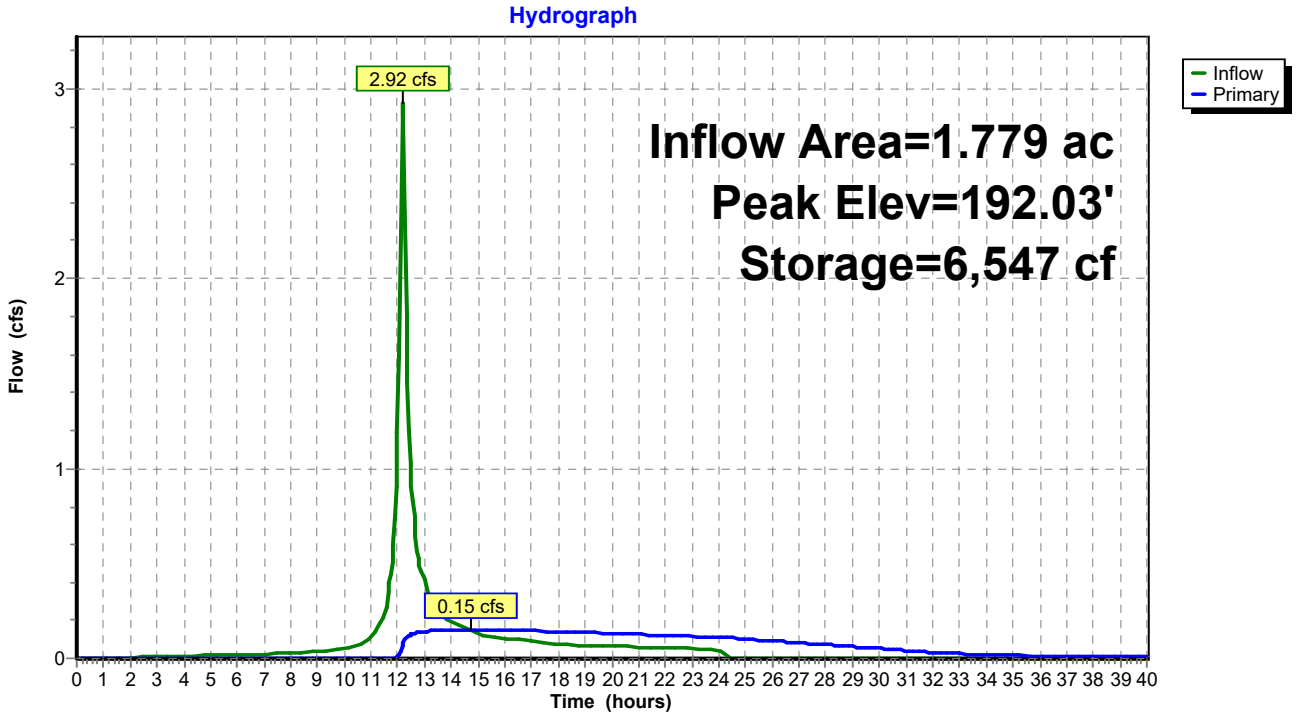
Volume	Invert	Avail.Storage	Storage Description
#1	190.30'	27,449 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.30	0	0	0
191.00	4,390	1,536	1,536
192.00	5,343	4,867	6,403
193.00	6,353	5,848	12,251
194.00	7,419	6,886	19,137
195.00	9,205	8,312	27,449

Device	Routing	Invert	Outlet Devices
#1	Primary	189.65'	**18.0" Round Culvert** L= 100.0' Ke= 0.500 Inlet / Outlet Invert= 189.65' / 189.15' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.09'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	192.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.15 cfs @ 14.70 hrs HW=192.03' (Free Discharge)
- **1=Culvert** (Passes 0.15 cfs of 9.12 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.15 cfs @ 4.39 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-34: Basin #34



Stage-Discharge for Pond B-34: Basin #34

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.30	0.00	190.82	0.00	191.34	0.06	191.86	0.13
190.31	0.00	190.83	0.00	191.35	0.06	191.87	0.13
190.32	0.00	190.84	0.00	191.36	0.07	191.88	0.14
190.33	0.00	190.85	0.00	191.37	0.07	191.89	0.14
190.34	0.00	190.86	0.00	191.38	0.07	191.90	0.14
190.35	0.00	190.87	0.00	191.39	0.07	191.91	0.14
190.36	0.00	190.88	0.00	191.40	0.07	191.92	0.14
190.37	0.00	190.89	0.00	191.41	0.08	191.93	0.14
190.38	0.00	190.90	0.00	191.42	0.08	191.94	0.14
190.39	0.00	190.91	0.00	191.43	0.08	191.95	0.14
190.40	0.00	190.92	0.00	191.44	0.08	191.96	0.14
190.41	0.00	190.93	0.00	191.45	0.08	191.97	0.14
190.42	0.00	190.94	0.00	191.46	0.08	191.98	0.15
190.43	0.00	190.95	0.00	191.47	0.09	191.99	0.15
190.44	0.00	190.96	0.00	191.48	0.09	192.00	0.15
190.45	0.00	190.97	0.00	191.49	0.09	192.01	0.15
190.46	0.00	190.98	0.00	191.50	0.09	192.02	0.15
190.47	0.00	190.99	0.00	191.51	0.09	192.03	0.15
190.48	0.00	191.00	0.00	191.52	0.09	192.04	0.15
190.49	0.00	191.01	0.00	191.53	0.10	192.05	0.15
190.50	0.00	191.02	0.00	191.54	0.10	192.06	0.15
190.51	0.00	191.03	0.00	191.55	0.10	192.07	0.15
190.52	0.00	191.04	0.00	191.56	0.10	192.08	0.15
190.53	0.00	191.05	0.00	191.57	0.10	192.09	0.16
190.54	0.00	191.06	0.00	191.58	0.10	192.10	0.16
190.55	0.00	191.07	0.00	191.59	0.10	192.11	0.16
190.56	0.00	191.08	0.00	191.60	0.10	192.12	0.16
190.57	0.00	191.09	0.00	191.61	0.11	192.13	0.16
190.58	0.00	191.10	0.00	191.62	0.11	192.14	0.16
190.59	0.00	191.11	0.00	191.63	0.11	192.15	0.16
190.60	0.00	191.12	0.00	191.64	0.11	192.16	0.16
190.61	0.00	191.13	0.00	191.65	0.11	192.17	0.16
190.62	0.00	191.14	0.00	191.66	0.11	192.18	0.16
190.63	0.00	191.15	0.01	191.67	0.11	192.19	0.16
190.64	0.00	191.16	0.01	191.68	0.11	192.20	0.16
190.65	0.00	191.17	0.01	191.69	0.12	192.21	0.17
190.66	0.00	191.18	0.01	191.70	0.12	192.22	0.17
190.67	0.00	191.19	0.02	191.71	0.12	192.23	0.17
190.68	0.00	191.20	0.02	191.72	0.12	192.24	0.17
190.69	0.00	191.21	0.02	191.73	0.12	192.25	0.17
190.70	0.00	191.22	0.03	191.74	0.12	192.26	0.17
190.71	0.00	191.23	0.03	191.75	0.12	192.27	0.17
190.72	0.00	191.24	0.03	191.76	0.12	192.28	0.17
190.73	0.00	191.25	0.04	191.77	0.12	192.29	0.17
190.74	0.00	191.26	0.04	191.78	0.13	192.30	0.17
190.75	0.00	191.27	0.05	191.79	0.13	192.31	0.17
190.76	0.00	191.28	0.05	191.80	0.13	192.32	0.17
190.77	0.00	191.29	0.05	191.81	0.13	192.33	0.17
190.78	0.00	191.30	0.05	191.82	0.13	192.34	0.19
190.79	0.00	191.31	0.06	191.83	0.13	192.35	0.21
190.80	0.00	191.32	0.06	191.84	0.13	192.36	0.25
190.81	0.00	191.33	0.06	191.85	0.13	192.37	0.28

Stage-Discharge for Pond B-34: Basin #34 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.38	0.32	192.90	5.68	193.42	12.94	193.94	14.10
192.39	0.37	192.91	5.83	193.43	12.96	193.95	14.12
192.40	0.42	192.92	5.97	193.44	12.98	193.96	14.14
192.41	0.48	192.93	6.11	193.45	13.01	193.97	14.16
192.42	0.53	192.94	6.26	193.46	13.03	193.98	14.18
192.43	0.59	192.95	6.41	193.47	13.05	193.99	14.21
192.44	0.66	192.96	6.55	193.48	13.08	194.00	14.23
192.45	0.72	192.97	6.70	193.49	13.10	194.01	14.25
192.46	0.79	192.98	6.85	193.50	13.12	194.02	14.27
192.47	0.87	192.99	7.00	193.51	13.14	194.03	14.29
192.48	0.94	193.00	7.15	193.52	13.17	194.04	14.31
192.49	1.02	193.01	7.31	193.53	13.19	194.05	14.33
192.50	1.10	193.02	7.46	193.54	13.21	194.06	14.35
192.51	1.18	193.03	7.61	193.55	13.24	194.07	14.37
192.52	1.26	193.04	7.77	193.56	13.26	194.08	14.40
192.53	1.35	193.05	7.93	193.57	13.28	194.09	14.42
192.54	1.44	193.06	8.08	193.58	13.30	194.10	14.44
192.55	1.53	193.07	8.24	193.59	13.33	194.11	14.46
192.56	1.62	193.08	8.40	193.60	13.35	194.12	14.48
192.57	1.71	193.09	8.56	193.61	13.37	194.13	14.50
192.58	1.81	193.10	8.72	193.62	13.40	194.14	14.52
192.59	1.91	193.11	8.89	193.63	13.42	194.15	14.54
192.60	2.00	193.12	9.05	193.64	13.44	194.16	14.56
192.61	2.11	193.13	9.21	193.65	13.46	194.17	14.58
192.62	2.21	193.14	9.38	193.66	13.49	194.18	14.60
192.63	2.31	193.15	9.54	193.67	13.51	194.19	14.62
192.64	2.42	193.16	9.71	193.68	13.53	194.20	14.64
192.65	2.53	193.17	9.88	193.69	13.55	194.21	14.67
192.66	2.64	193.18	10.05	193.70	13.57	194.22	14.69
192.67	2.75	193.19	10.22	193.71	13.60	194.23	14.71
192.68	2.86	193.20	10.38	193.72	13.62	194.24	14.73
192.69	2.98	193.21	10.56	193.73	13.64	194.25	14.75
192.70	3.09	193.22	10.73	193.74	13.66	194.26	14.89
192.71	3.21	193.23	10.90	193.75	13.69	194.27	15.12
192.72	3.33	193.24	11.07	193.76	13.71	194.28	15.42
192.73	3.45	193.25	11.25	193.77	13.73	194.29	15.77
192.74	3.57	193.26	11.42	193.78	13.75	194.30	16.16
192.75	3.69	193.27	11.60	193.79	13.77	194.31	16.59
192.76	3.81	193.28	11.77	193.80	13.80	194.32	17.06
192.77	3.94	193.29	11.95	193.81	13.82	194.33	17.57
192.78	4.07	193.30	12.13	193.82	13.84	194.34	18.10
192.79	4.19	193.31	12.31	193.83	13.86	194.35	18.67
192.80	4.32	193.32	12.49	193.84	13.88	194.36	19.26
192.81	4.45	193.33	12.67	193.85	13.90	194.37	19.88
192.82	4.59	193.34	12.75	193.86	13.93	194.38	20.53
192.83	4.72	193.35	12.77	193.87	13.95	194.39	21.20
192.84	4.85	193.36	12.80	193.88	13.97	194.40	21.90
192.85	4.99	193.37	12.82	193.89	13.99	194.41	22.62
192.86	5.12	193.38	12.84	193.90	14.01	194.42	23.36
192.87	5.26	193.39	12.87	193.91	14.03	194.43	24.12
192.88	5.40	193.40	12.89	193.92	14.06	194.44	24.91
192.89	5.54	193.41	12.91	193.93	14.08	194.45	25.72

Stage-Discharge for Pond B-34: Basin #34 (continued)

Elevation (feet)	Primary (cfs)
194.46	26.58
194.47	27.48
194.48	28.39
194.49	29.34
194.50	30.30
194.51	31.30
194.52	32.32
194.53	33.36
194.54	34.43
194.55	35.52
194.56	36.64
194.57	37.78
194.58	38.94
194.59	40.13
194.60	41.34
194.61	42.58
194.62	43.84
194.63	45.13
194.64	46.44
194.65	47.78
194.66	49.16
194.67	50.57
194.68	52.01
194.69	53.47
194.70	54.96
194.71	56.48
194.72	58.02
194.73	59.59
194.74	61.18
194.75	62.80
194.76	64.45
194.77	66.12
194.78	67.83
194.79	69.55
194.80	71.31
194.81	73.09
194.82	74.89
194.83	76.73
194.84	78.59
194.85	80.48
194.86	82.12
194.87	83.78
194.88	85.46
194.89	87.14
194.90	88.84
194.91	90.56
194.92	92.28
194.93	94.02
194.94	95.77
194.95	97.54
194.96	99.31
194.97	101.10
194.98	102.91
194.99	104.72
195.00	**106.55**

Stage-Area-Storage for Pond B-34: Basin #34

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.30	0	0	190.82	3,261	848
190.31	63	0	190.83	3,324	881
190.32	125	1	190.84	3,387	914
190.33	188	3	190.85	3,449	949
190.34	251	5	190.86	3,512	983
190.35	314	8	190.87	3,575	1,019
190.36	376	11	190.88	3,637	1,055
190.37	439	15	190.89	3,700	1,092
190.38	502	20	190.90	3,763	1,129
190.39	564	25	190.91	3,826	1,167
190.40	627	31	190.92	3,888	1,205
190.41	690	38	190.93	3,951	1,245
190.42	753	45	190.94	4,014	1,284
190.43	815	53	190.95	4,076	1,325
190.44	878	61	190.96	4,139	1,366
190.45	941	71	190.97	4,202	1,408
190.46	1,003	80	190.98	4,265	1,450
190.47	1,066	91	190.99	4,327	1,493
190.48	1,129	102	191.00	4,390	1,536
190.49	1,192	113	191.01	4,400	1,580
190.50	1,254	125	191.02	4,409	1,624
190.51	1,317	138	191.03	4,419	1,669
190.52	1,380	152	191.04	4,428	1,713
190.53	1,442	166	191.05	4,438	1,757
190.54	1,505	181	191.06	4,447	1,802
190.55	1,568	196	191.07	4,457	1,846
190.56	1,631	212	191.08	4,466	1,891
190.57	1,693	229	191.09	4,476	1,935
190.58	1,756	246	191.10	4,485	1,980
190.59	1,819	264	191.11	4,495	2,025
190.60	1,881	282	191.12	4,504	2,070
190.61	1,944	301	191.13	4,514	2,115
190.62	2,007	321	191.14	4,523	2,160
190.63	2,070	341	191.15	4,533	2,206
190.64	2,132	362	191.16	4,542	2,251
190.65	2,195	384	191.17	4,552	2,297
190.66	2,258	406	191.18	4,562	2,342
190.67	2,320	429	191.19	4,571	2,388
190.68	2,383	453	191.20	4,581	2,434
190.69	2,446	477	191.21	4,590	2,479
190.70	2,509	502	191.22	4,600	2,525
190.71	2,571	527	191.23	4,609	2,571
190.72	2,634	553	191.24	4,619	2,618
190.73	2,697	580	191.25	4,628	2,664
190.74	2,759	607	191.26	4,638	2,710
190.75	2,822	635	191.27	4,647	2,757
190.76	2,885	664	191.28	4,657	2,803
190.77	2,948	693	191.29	4,666	2,850
190.78	3,010	722	191.30	4,676	2,896
190.79	3,073	753	191.31	4,685	2,943
190.80	3,136	784	191.32	4,695	2,990
190.81	3,198	816	191.33	4,704	3,037

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.34	4,714	3,084
191.35	4,724	3,131
191.36	4,733	3,179
191.37	4,743	3,226
191.38	4,752	3,274
191.39	4,762	3,321
191.40	4,771	3,369
191.41	4,781	3,416
191.42	4,790	3,464
191.43	4,800	3,512
191.44	4,809	3,560
191.45	4,819	3,608
191.46	4,828	3,657
191.47	4,838	3,705
191.48	4,847	3,753
191.49	4,857	3,802
191.50	4,867	3,851
191.51	4,876	3,899
191.52	4,886	3,948
191.53	4,895	3,997
191.54	4,905	4,046
191.55	4,914	4,095
191.56	4,924	4,144
191.57	4,933	4,194
191.58	4,943	4,243
191.59	4,952	4,292
191.60	4,962	4,342
191.61	4,971	4,392
191.62	4,981	4,441
191.63	4,990	4,491
191.64	5,000	4,541
191.65	5,009	4,591
191.66	5,019	4,641
191.67	5,029	4,692
191.68	5,038	4,742
191.69	5,048	4,792
191.70	5,057	4,843
191.71	5,067	4,894
191.72	5,076	4,944
191.73	5,086	4,995
191.74	5,095	5,046
191.75	5,105	5,097
191.76	5,114	5,148
191.77	5,124	5,199
191.78	5,133	5,251
191.79	5,143	5,302
191.80	5,152	5,353
191.81	5,162	5,405
191.82	5,171	5,457
191.83	5,181	5,508
191.84	5,191	5,560
191.85	5,200	5,612
191.86	5,210	5,664
191.87	5,219	5,716
191.88	5,229	5,769
191.89	5,238	5,821
191.90	5,248	5,873
191.91	5,257	5,926
191.92	5,267	5,979
191.93	5,276	6,031
191.94	5,286	6,084
191.95	5,295	6,137
191.96	5,305	6,190
191.97	5,314	6,243
191.98	5,324	6,296
191.99	5,333	6,350
192.00	5,343	6,403
192.01	5,353	6,456
192.02	5,363	6,510
192.03	5,373	6,564
192.04	5,383	6,618
192.05	5,394	6,671
192.06	5,404	6,725
192.07	5,414	6,779
192.08	5,424	6,834
192.09	5,434	6,888
192.10	5,444	6,942
192.11	5,454	6,997
192.12	5,464	7,051
192.13	5,474	7,106
192.14	5,484	7,161
192.15	5,495	7,216
192.16	5,505	7,271
192.17	5,515	7,326
192.18	5,525	7,381
192.19	5,535	7,436
192.20	5,545	7,492
192.21	5,555	7,547
192.22	5,565	7,603
192.23	5,575	7,659
192.24	5,585	7,714
192.25	5,596	7,770
192.26	5,606	7,826
192.27	5,616	7,882
192.28	5,626	7,939
192.29	5,636	7,995
192.30	5,646	8,051
192.31	5,656	8,108
192.32	5,666	8,164
192.33	5,676	8,221
192.34	5,686	8,278
192.35	5,697	8,335
192.36	5,707	8,392
192.37	5,717	8,449

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.38	5,727	8,506	192.90	6,252	11,621
192.39	5,737	8,564	192.91	6,262	11,683
192.40	5,747	8,621	192.92	6,272	11,746
192.41	5,757	8,679	192.93	6,282	11,809
192.42	5,767	8,736	192.94	6,292	11,872
192.43	5,777	8,794	192.95	6,303	11,935
192.44	5,787	8,852	192.96	6,313	11,998
192.45	5,798	8,910	192.97	6,323	12,061
192.46	5,808	8,968	192.98	6,333	12,124
192.47	5,818	9,026	192.99	6,343	12,188
192.48	5,828	9,084	193.00	6,353	12,251
192.49	5,838	9,142	193.01	6,364	12,315
192.50	5,848	9,201	193.02	6,374	12,378
192.51	5,858	9,259	193.03	6,385	12,442
192.52	5,868	9,318	193.04	6,396	12,506
192.53	5,878	9,377	193.05	6,406	12,570
192.54	5,888	9,435	193.06	6,417	12,634
192.55	5,899	9,494	193.07	6,428	12,698
192.56	5,909	9,553	193.08	6,438	12,763
192.57	5,919	9,613	193.09	6,449	12,827
192.58	5,929	9,672	193.10	6,460	12,892
192.59	5,939	9,731	193.11	6,470	12,956
192.60	5,949	9,791	193.12	6,481	13,021
192.61	5,959	9,850	193.13	6,492	13,086
192.62	5,969	9,910	193.14	6,502	13,151
192.63	5,979	9,970	193.15	6,513	13,216
192.64	5,989	10,029	193.16	6,524	13,281
192.65	6,000	10,089	193.17	6,534	13,346
192.66	6,010	10,149	193.18	6,545	13,412
192.67	6,020	10,210	193.19	6,556	13,477
192.68	6,030	10,270	193.20	6,566	13,543
192.69	6,040	10,330	193.21	6,577	13,609
192.70	6,050	10,391	193.22	6,588	13,674
192.71	6,060	10,451	193.23	6,598	13,740
192.72	6,070	10,512	193.24	6,609	13,806
192.73	6,080	10,573	193.25	6,620	13,873
192.74	6,090	10,633	193.26	6,630	13,939
192.75	6,101	10,694	193.27	6,641	14,005
192.76	6,111	10,755	193.28	6,651	14,072
192.77	6,121	10,817	193.29	6,662	14,138
192.78	6,131	10,878	193.30	6,673	14,205
192.79	6,141	10,939	193.31	6,683	14,272
192.80	6,151	11,001	193.32	6,694	14,339
192.81	6,161	11,062	193.33	6,705	14,406
192.82	6,171	11,124	193.34	6,715	14,473
192.83	6,181	11,186	193.35	6,726	14,540
192.84	6,191	11,247	193.36	6,737	14,607
192.85	6,202	11,309	193.37	6,747	14,675
192.86	6,212	11,371	193.38	6,758	14,742
192.87	6,222	11,434	193.39	6,769	14,810
192.88	6,232	11,496	193.40	6,779	14,877
192.89	6,242	11,558	193.41	6,790	14,945

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.42	6,801	15,013
193.43	6,811	15,081
193.44	6,822	15,150
193.45	6,833	15,218
193.46	6,843	15,286
193.47	6,854	15,355
193.48	6,865	15,423
193.49	6,875	15,492
193.50	6,886	15,561
193.51	6,897	15,630
193.52	6,907	15,699
193.53	6,918	15,768
193.54	6,929	15,837
193.55	6,939	15,906
193.56	6,950	15,976
193.57	6,961	16,045
193.58	6,971	16,115
193.59	6,982	16,185
193.60	6,993	16,255
193.61	7,003	16,325
193.62	7,014	16,395
193.63	7,025	16,465
193.64	7,035	16,535
193.65	7,046	16,606
193.66	7,057	16,676
193.67	7,067	16,747
193.68	7,078	16,817
193.69	7,089	16,888
193.70	7,099	16,959
193.71	7,110	17,030
193.72	7,121	17,101
193.73	7,131	17,173
193.74	7,142	17,244
193.75	7,153	17,316
193.76	7,163	17,387
193.77	7,174	17,459
193.78	7,184	17,531
193.79	7,195	17,603
193.80	7,206	17,675
193.81	7,216	17,747
193.82	7,227	17,819
193.83	7,238	17,891
193.84	7,248	17,964
193.85	7,259	18,036
193.86	7,270	18,109
193.87	7,280	18,182
193.88	7,291	18,254
193.89	7,302	18,327
193.90	7,312	18,400
193.91	7,323	18,474
193.92	7,334	18,547
193.93	7,344	18,620
193.94	7,355	18,694
193.95	7,366	18,767
193.96	7,376	18,841
193.97	7,387	18,915
193.98	7,398	18,989
193.99	7,408	19,063
194.00	7,419	19,137
194.01	7,437	19,211
194.02	7,455	19,286
194.03	7,473	19,360
194.04	7,490	19,435
194.05	7,508	19,510
194.06	7,526	19,585
194.07	7,544	19,661
194.08	7,562	19,736
194.09	7,580	19,812
194.10	7,598	19,888
194.11	7,615	19,964
194.12	7,633	20,040
194.13	7,651	20,117
194.14	7,669	20,193
194.15	7,687	20,270
194.16	7,705	20,347
194.17	7,723	20,424
194.18	7,740	20,501
194.19	7,758	20,579
194.20	7,776	20,657
194.21	7,794	20,734
194.22	7,812	20,812
194.23	7,830	20,891
194.24	7,848	20,969
194.25	7,866	21,048
194.26	7,883	21,126
194.27	7,901	21,205
194.28	7,919	21,284
194.29	7,937	21,364
194.30	7,955	21,443
194.31	7,973	21,523
194.32	7,991	21,603
194.33	8,008	21,683
194.34	8,026	21,763
194.35	8,044	21,843
194.36	8,062	21,924
194.37	8,080	22,004
194.38	8,098	22,085
194.39	8,116	22,166
194.40	8,133	22,247
194.41	8,151	22,329
194.42	8,169	22,411
194.43	8,187	22,492
194.44	8,205	22,574
194.45	8,223	22,656

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.46	8,241	22,739
194.47	8,258	22,821
194.48	8,276	22,904
194.49	8,294	22,987
194.50	8,312	23,070
194.51	8,330	23,153
194.52	8,348	23,236
194.53	8,366	23,320
194.54	8,383	23,404
194.55	8,401	23,488
194.56	8,419	23,572
194.57	8,437	23,656
194.58	8,455	23,740
194.59	8,473	23,825
194.60	8,491	23,910
194.61	8,508	23,995
194.62	8,526	24,080
194.63	8,544	24,165
194.64	8,562	24,251
194.65	8,580	24,337
194.66	8,598	24,423
194.67	8,616	24,509
194.68	8,633	24,595
194.69	8,651	24,681
194.70	8,669	24,768
194.71	8,687	24,855
194.72	8,705	24,942
194.73	8,723	25,029
194.74	8,741	25,116
194.75	8,759	25,204
194.76	8,776	25,291
194.77	8,794	25,379
194.78	8,812	25,467
194.79	8,830	25,555
194.80	8,848	25,644
194.81	8,866	25,732
194.82	8,884	25,821
194.83	8,901	25,910
194.84	8,919	25,999
194.85	8,937	26,088
194.86	8,955	26,178
194.87	8,973	26,267
194.88	8,991	26,357
194.89	9,009	26,447
194.90	9,026	26,537
194.91	9,044	26,628
194.92	9,062	26,718
194.93	9,080	26,809
194.94	9,098	26,900
194.95	9,116	26,991
194.96	9,134	27,082
194.97	9,151	27,174
194.98	9,169	27,265
194.99	9,187	27,357
195.00	**9,205**	**27,449**

Summary for Pond B-35: Basin #35

Inflow Area = 1.957 ac, 66.79% Impervious, Inflow Depth = 2.46" for Current 2 yr event
Inflow = 4.75 cfs @ 12.17 hrs, Volume= 0.401 af
Outflow = 0.44 cfs @ 13.25 hrs, Volume= 0.283 af, Atten= 91%, Lag= 64.6 min
Primary = 0.44 cfs @ 13.25 hrs, Volume= 0.283 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 192.70' @ 13.25 hrs Surf.Area= 5,378 sf Storage= 10,964 cf

Plug-Flow detention time= 354.1 min calculated for 0.282 af (70% of inflow)
Center-of-Mass det. time= 256.7 min (1,033.3 - 776.6)

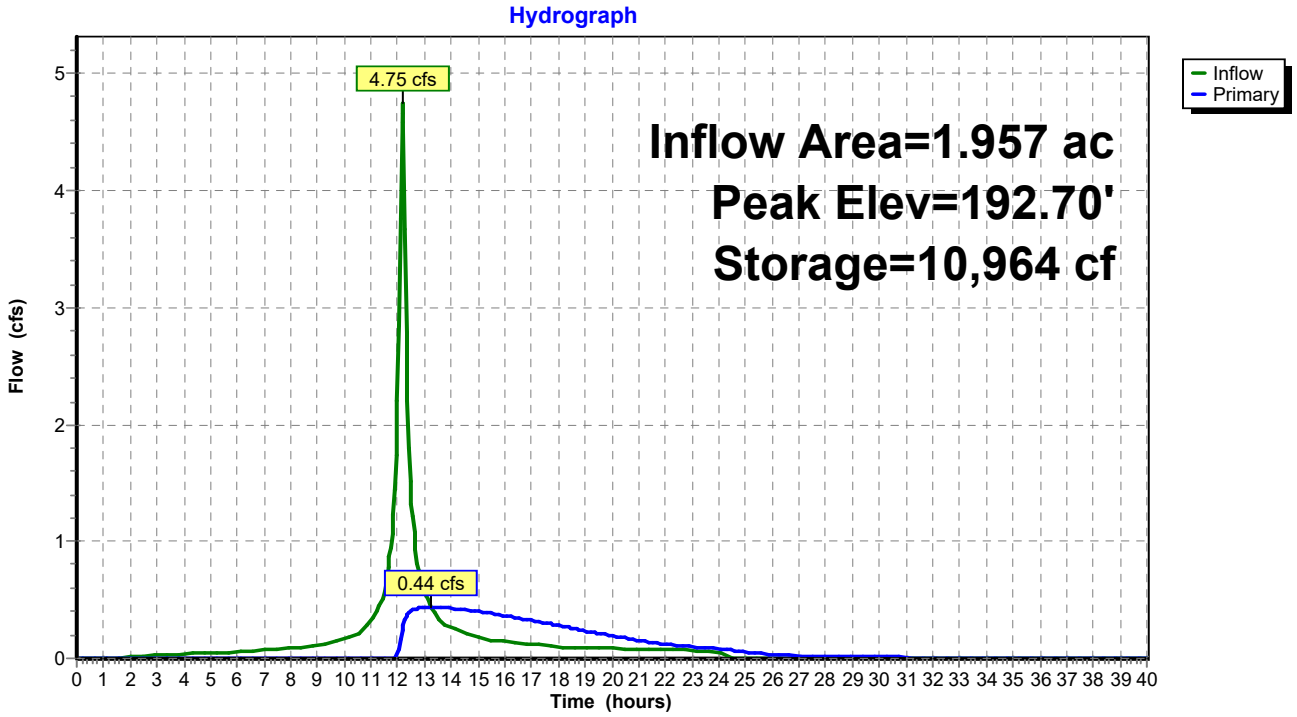
Volume	Invert	Avail.Storage	Storage Description
#1	189.80'	26,431 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
189.80	0	0	0
190.00	2,647	265	265
191.00	3,593	3,120	3,385
192.00	4,618	4,106	7,490
193.00	5,711	5,165	12,655
194.00	6,871	6,291	18,946
195.00	8,099	7,485	26,431

Device	Routing	Invert	Outlet Devices
#1	Primary	189.80'	**18.0" Round Culvert** L= 103.0' Ke= 0.500 Inlet / Outlet Invert= 189.80' / 189.30' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.44'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.05'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.44 cfs @ 13.25 hrs HW=192.70' (Free Discharge)
- **1=Culvert** (Passes 0.44 cfs of 10.61 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.44 cfs @ 5.02 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-35: Basin #35



Stage-Discharge for Pond B-35: Basin #35

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
189.80	0.00	190.32	0.00	190.84	0.00	191.36	0.00
189.81	0.00	190.33	0.00	190.85	0.00	191.37	0.00
189.82	0.00	190.34	0.00	190.86	0.00	191.38	0.00
189.83	0.00	190.35	0.00	190.87	0.00	191.39	0.00
189.84	0.00	190.36	0.00	190.88	0.00	191.40	0.00
189.85	0.00	190.37	0.00	190.89	0.00	191.41	0.00
189.86	0.00	190.38	0.00	190.90	0.00	191.42	0.00
189.87	0.00	190.39	0.00	190.91	0.00	191.43	0.00
189.88	0.00	190.40	0.00	190.92	0.00	191.44	0.00
189.89	0.00	190.41	0.00	190.93	0.00	191.45	0.00
189.90	0.00	190.42	0.00	190.94	0.00	191.46	0.00
189.91	0.00	190.43	0.00	190.95	0.00	191.47	0.00
189.92	0.00	190.44	0.00	190.96	0.00	191.48	0.00
189.93	0.00	190.45	0.00	190.97	0.00	191.49	0.01
189.94	0.00	190.46	0.00	190.98	0.00	191.50	0.01
189.95	0.00	190.47	0.00	190.99	0.00	191.51	0.01
189.96	0.00	190.48	0.00	191.00	0.00	191.52	0.02
189.97	0.00	190.49	0.00	191.01	0.00	191.53	0.02
189.98	0.00	190.50	0.00	191.02	0.00	191.54	0.02
189.99	0.00	190.51	0.00	191.03	0.00	191.55	0.03
190.00	0.00	190.52	0.00	191.04	0.00	191.56	0.03
190.01	0.00	190.53	0.00	191.05	0.00	191.57	0.04
190.02	0.00	190.54	0.00	191.06	0.00	191.58	0.04
190.03	0.00	190.55	0.00	191.07	0.00	191.59	0.05
190.04	0.00	190.56	0.00	191.08	0.00	191.60	0.06
190.05	0.00	190.57	0.00	191.09	0.00	191.61	0.06
190.06	0.00	190.58	0.00	191.10	0.00	191.62	0.07
190.07	0.00	190.59	0.00	191.11	0.00	191.63	0.08
190.08	0.00	190.60	0.00	191.12	0.00	191.64	0.08
190.09	0.00	190.61	0.00	191.13	0.00	191.65	0.09
190.10	0.00	190.62	0.00	191.14	0.00	191.66	0.10
190.11	0.00	190.63	0.00	191.15	0.00	191.67	0.10
190.12	0.00	190.64	0.00	191.16	0.00	191.68	0.11
190.13	0.00	190.65	0.00	191.17	0.00	191.69	0.12
190.14	0.00	190.66	0.00	191.18	0.00	191.70	0.13
190.15	0.00	190.67	0.00	191.19	0.00	191.71	0.13
190.16	0.00	190.68	0.00	191.20	0.00	191.72	0.14
190.17	0.00	190.69	0.00	191.21	0.00	191.73	0.15
190.18	0.00	190.70	0.00	191.22	0.00	191.74	0.15
190.19	0.00	190.71	0.00	191.23	0.00	191.75	0.16
190.20	0.00	190.72	0.00	191.24	0.00	191.76	0.17
190.21	0.00	190.73	0.00	191.25	0.00	191.77	0.17
190.22	0.00	190.74	0.00	191.26	0.00	191.78	0.17
190.23	0.00	190.75	0.00	191.27	0.00	191.79	0.18
190.24	0.00	190.76	0.00	191.28	0.00	191.80	0.18
190.25	0.00	190.77	0.00	191.29	0.00	191.81	0.19
190.26	0.00	190.78	0.00	191.30	0.00	191.82	0.19
190.27	0.00	190.79	0.00	191.31	0.00	191.83	0.20
190.28	0.00	190.80	0.00	191.32	0.00	191.84	0.20
190.29	0.00	190.81	0.00	191.33	0.00	191.85	0.21
190.30	0.00	190.82	0.00	191.34	0.00	191.86	0.21
190.31	0.00	190.83	0.00	191.35	0.00	191.87	0.22

Stage-Discharge for Pond B-35: Basin #35 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.88	0.22	192.40	0.37	192.92	0.48	193.44	3.69
191.89	0.22	192.41	0.38	192.93	0.48	193.45	3.81
191.90	0.23	192.42	0.38	192.94	0.49	193.46	3.94
191.91	0.23	192.43	0.38	192.95	0.49	193.47	4.06
191.92	0.24	192.44	0.38	192.96	0.49	193.48	4.18
191.93	0.24	192.45	0.39	192.97	0.49	193.49	4.31
191.94	0.24	192.46	0.39	192.98	0.49	193.50	4.44
191.95	0.25	192.47	0.39	192.99	0.49	193.51	4.57
191.96	0.25	192.48	0.39	193.00	0.50	193.52	4.70
191.97	0.25	192.49	0.39	193.01	0.50	193.53	4.83
191.98	0.26	192.50	0.40	193.02	0.50	193.54	4.96
191.99	0.26	192.51	0.40	193.03	0.50	193.55	5.09
192.00	0.26	192.52	0.40	193.04	0.50	193.56	5.23
192.01	0.27	192.53	0.40	193.05	0.50	193.57	5.37
192.02	0.27	192.54	0.41	193.06	0.52	193.58	5.50
192.03	0.27	192.55	0.41	193.07	0.55	193.59	5.64
192.04	0.28	192.56	0.41	193.08	0.58	193.60	5.78
192.05	0.28	192.57	0.41	193.09	0.62	193.61	5.92
192.06	0.28	192.58	0.41	193.10	0.66	193.62	6.06
192.07	0.29	192.59	0.42	193.11	0.71	193.63	6.21
192.08	0.29	192.60	0.42	193.12	0.76	193.64	6.35
192.09	0.29	192.61	0.42	193.13	0.81	193.65	6.50
192.10	0.30	192.62	0.42	193.14	0.87	193.66	6.64
192.11	0.30	192.63	0.43	193.15	0.93	193.67	6.79
192.12	0.30	192.64	0.43	193.16	1.00	193.68	6.94
192.13	0.30	192.65	0.43	193.17	1.07	193.69	7.09
192.14	0.31	192.66	0.43	193.18	1.14	193.70	7.24
192.15	0.31	192.67	0.43	193.19	1.21	193.71	7.39
192.16	0.31	192.68	0.44	193.20	1.28	193.72	7.54
192.17	0.32	192.69	0.44	193.21	1.36	193.73	7.70
192.18	0.32	192.70	0.44	193.22	1.44	193.74	7.85
192.19	0.32	192.71	0.44	193.23	1.53	193.75	8.01
192.20	0.32	192.72	0.44	193.24	1.61	193.76	8.16
192.21	0.33	192.73	0.45	193.25	1.70	193.77	8.32
192.22	0.33	192.74	0.45	193.26	1.79	193.78	8.48
192.23	0.33	192.75	0.45	193.27	1.88	193.79	8.64
192.24	0.33	192.76	0.45	193.28	1.97	193.80	8.80
192.25	0.34	192.77	0.45	193.29	2.06	193.81	8.96
192.26	0.34	192.78	0.46	193.30	2.16	193.82	9.12
192.27	0.34	192.79	0.46	193.31	2.26	193.83	9.29
192.28	0.34	192.80	0.46	193.32	2.36	193.84	9.45
192.29	0.35	192.81	0.46	193.33	2.46	193.85	9.61
192.30	0.35	192.82	0.46	193.34	2.57	193.86	9.78
192.31	0.35	192.83	0.46	193.35	2.67	193.87	9.95
192.32	0.35	192.84	0.47	193.36	2.78	193.88	10.11
192.33	0.36	192.85	0.47	193.37	2.89	193.89	10.28
192.34	0.36	192.86	0.47	193.38	3.00	193.90	10.45
192.35	0.36	192.87	0.47	193.39	3.11	193.91	10.62
192.36	0.36	192.88	0.47	193.40	3.22	193.92	10.79
192.37	0.37	192.89	0.48	193.41	3.34	193.93	10.96
192.38	0.37	192.90	0.48	193.42	3.46	193.94	11.14
192.39	0.37	192.91	0.48	193.43	3.57	193.95	11.31

Stage-Discharge for Pond B-35: Basin #35 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.96	11.48	194.48	14.79	195.00	**62.86**
193.97	11.66	194.49	14.81		
193.98	11.83	194.50	14.83		
193.99	12.01	194.51	14.97		
194.00	12.19	194.52	15.20		
194.01	12.36	194.53	15.50		
194.02	12.54	194.54	15.85		
194.03	12.72	194.55	16.24		
194.04	12.90	194.56	16.67		
194.05	13.08	194.57	17.14		
194.06	13.26	194.58	17.65		
194.07	13.45	194.59	18.18		
194.08	13.63	194.60	18.75		
194.09	13.81	194.61	19.34		
194.10	14.00	194.62	19.96		
194.11	14.03	194.63	20.61		
194.12	14.05	194.64	21.28		
194.13	14.07	194.65	21.97		
194.14	14.09	194.66	22.69		
194.15	14.11	194.67	23.43		
194.16	14.13	194.68	24.20		
194.17	14.15	194.69	24.98		
194.18	14.17	194.70	25.79		
194.19	14.19	194.71	26.66		
194.20	14.22	194.72	27.55		
194.21	14.24	194.73	28.47		
194.22	14.26	194.74	29.41		
194.23	14.28	194.75	30.38		
194.24	14.30	194.76	31.37		
194.25	14.32	194.77	32.39		
194.26	14.34	194.78	33.43		
194.27	14.36	194.79	34.50		
194.28	14.38	194.80	35.59		
194.29	14.40	194.81	36.70		
194.30	14.42	194.82	37.84		
194.31	14.44	194.83	39.01		
194.32	14.46	194.84	40.20		
194.33	14.48	194.85	41.41		
194.34	14.51	194.86	42.65		
194.35	14.53	194.87	43.91		
194.36	14.55	194.88	45.20		
194.37	14.57	194.89	46.51		
194.38	14.59	194.90	47.84		
194.39	14.61	194.91	49.23		
194.40	14.63	194.92	50.64		
194.41	14.65	194.93	52.07		
194.42	14.67	194.94	53.54		
194.43	14.69	194.95	55.02		
194.44	14.71	194.96	56.54		
194.45	14.73	194.97	58.08		
194.46	14.75	194.98	59.65		
194.47	14.77	194.99	61.24		

Stage-Area-Storage for Pond B-35: Basin #35

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.80	0	0
189.81	132	1
189.82	265	3
189.83	397	6
189.84	529	11
189.85	662	17
189.86	794	24
189.87	926	32
189.88	1,059	42
189.89	1,191	54
189.90	1,324	66
189.91	1,456	80
189.92	1,588	95
189.93	1,721	112
189.94	1,853	130
189.95	1,985	149
189.96	2,118	169
189.97	2,250	191
189.98	2,382	214
189.99	2,515	239
190.00	2,647	265
190.01	2,656	291
190.02	2,666	318
190.03	2,675	345
190.04	2,685	371
190.05	2,694	398
190.06	2,704	425
190.07	2,713	452
190.08	2,723	479
190.09	2,732	507
190.10	2,742	534
190.11	2,751	562
190.12	2,761	589
190.13	2,770	617
190.14	2,779	645
190.15	2,789	672
190.16	2,798	700
190.17	2,808	728
190.18	2,817	756
190.19	2,827	785
190.20	2,836	813
190.21	2,846	841
190.22	2,855	870
190.23	2,865	899
190.24	2,874	927
190.25	2,884	956
190.26	2,893	985
190.27	2,902	1,014
190.28	2,912	1,043
190.29	2,921	1,072
190.30	2,931	1,101
190.31	2,940	1,131
190.32	2,950	1,160
190.33	2,959	1,190
190.34	2,969	1,219
190.35	2,978	1,249
190.36	2,988	1,279
190.37	2,997	1,309
190.38	3,006	1,339
190.39	3,016	1,369
190.40	3,025	1,399
190.41	3,035	1,429
190.42	3,044	1,460
190.43	3,054	1,490
190.44	3,063	1,521
190.45	3,073	1,552
190.46	3,082	1,582
190.47	3,092	1,613
190.48	3,101	1,644
190.49	3,111	1,675
190.50	3,120	1,706
190.51	3,129	1,738
190.52	3,139	1,769
190.53	3,148	1,800
190.54	3,158	1,832
190.55	3,167	1,864
190.56	3,177	1,895
190.57	3,186	1,927
190.58	3,196	1,959
190.59	3,205	1,991
190.60	3,215	2,023
190.61	3,224	2,055
190.62	3,234	2,088
190.63	3,243	2,120
190.64	3,252	2,153
190.65	3,262	2,185
190.66	3,271	2,218
190.67	3,281	2,251
190.68	3,290	2,283
190.69	3,300	2,316
190.70	3,309	2,349
190.71	3,319	2,383
190.72	3,328	2,416
190.73	3,338	2,449
190.74	3,347	2,482
190.75	3,357	2,516
190.76	3,366	2,550
190.77	3,375	2,583
190.78	3,385	2,617
190.79	3,394	2,651
190.80	3,404	2,685
190.81	3,413	2,719
190.82	3,423	2,753
190.83	3,432	2,788

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.84	3,442	2,822	191.36	3,962	4,745
190.85	3,451	2,856	191.37	3,972	4,784
190.86	3,461	2,891	191.38	3,983	4,824
190.87	3,470	2,926	191.39	3,993	4,864
190.88	3,479	2,960	191.40	4,003	4,904
190.89	3,489	2,995	191.41	4,013	4,944
190.90	3,498	3,030	191.42	4,024	4,984
190.91	3,508	3,065	191.43	4,034	5,024
190.92	3,517	3,100	191.44	4,044	5,065
190.93	3,527	3,136	191.45	4,054	5,105
190.94	3,536	3,171	191.46	4,065	5,146
190.95	3,546	3,206	191.47	4,075	5,187
190.96	3,555	3,242	191.48	4,085	5,227
190.97	3,565	3,277	191.49	4,095	5,268
190.98	3,574	3,313	191.50	4,106	5,309
190.99	3,584	3,349	191.51	4,116	5,350
191.00	3,593	3,385	191.52	4,126	5,392
191.01	3,603	3,421	191.53	4,136	5,433
191.02	3,614	3,457	191.54	4,147	5,474
191.03	3,624	3,493	191.55	4,157	5,516
191.04	3,634	3,529	191.56	4,167	5,557
191.05	3,644	3,566	191.57	4,177	5,599
191.06	3,655	3,602	191.58	4,188	5,641
191.07	3,665	3,639	191.59	4,198	5,683
191.08	3,675	3,675	191.60	4,208	5,725
191.09	3,685	3,712	191.61	4,218	5,767
191.10	3,696	3,749	191.62	4,229	5,809
191.11	3,706	3,786	191.63	4,239	5,852
191.12	3,716	3,823	191.64	4,249	5,894
191.13	3,726	3,860	191.65	4,259	5,937
191.14	3,737	3,898	191.66	4,270	5,979
191.15	3,747	3,935	191.67	4,280	6,022
191.16	3,757	3,973	191.68	4,290	6,065
191.17	3,767	4,010	191.69	4,300	6,108
191.18	3,778	4,048	191.70	4,311	6,151
191.19	3,788	4,086	191.71	4,321	6,194
191.20	3,798	4,124	191.72	4,331	6,237
191.21	3,808	4,162	191.73	4,341	6,281
191.22	3,818	4,200	191.74	4,352	6,324
191.23	3,829	4,238	191.75	4,362	6,368
191.24	3,839	4,277	191.76	4,372	6,411
191.25	3,849	4,315	191.77	4,382	6,455
191.26	3,860	4,354	191.78	4,393	6,499
191.27	3,870	4,392	191.79	4,403	6,543
191.28	3,880	4,431	191.80	4,413	6,587
191.29	3,890	4,470	191.81	4,423	6,631
191.30	3,901	4,509	191.82	4,434	6,676
191.31	3,911	4,548	191.83	4,444	6,720
191.32	3,921	4,587	191.84	4,454	6,764
191.33	3,931	4,626	191.85	4,464	6,809
191.34	3,942	4,666	191.86	4,475	6,854
191.35	3,952	4,705	191.87	4,485	6,899

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.88	4,495	6,943	192.40	5,055	9,425
191.89	4,505	6,988	192.41	5,066	9,475
191.90	4,516	7,034	192.42	5,077	9,526
191.91	4,526	7,079	192.43	5,088	9,577
191.92	4,536	7,124	192.44	5,099	9,628
191.93	4,546	7,169	192.45	5,110	9,679
191.94	4,556	7,215	192.46	5,121	9,730
191.95	4,567	7,261	192.47	5,132	9,781
191.96	4,577	7,306	192.48	5,143	9,833
191.97	4,587	7,352	192.49	5,154	9,884
191.98	4,598	7,398	192.50	5,165	9,936
191.99	4,608	7,444	192.51	5,175	9,988
192.00	4,618	7,490	192.52	5,186	10,039
192.01	4,629	7,536	192.53	5,197	10,091
192.02	4,640	7,583	192.54	5,208	10,143
192.03	4,651	7,629	192.55	5,219	10,195
192.04	4,662	7,676	192.56	5,230	10,248
192.05	4,673	7,722	192.57	5,241	10,300
192.06	4,684	7,769	192.58	5,252	10,352
192.07	4,695	7,816	192.59	5,263	10,405
192.08	4,705	7,863	192.60	5,274	10,458
192.09	4,716	7,910	192.61	5,285	10,511
192.10	4,727	7,957	192.62	5,296	10,563
192.11	4,738	8,005	192.63	5,307	10,616
192.12	4,749	8,052	192.64	5,318	10,670
192.13	4,760	8,100	192.65	5,328	10,723
192.14	4,771	8,147	192.66	5,339	10,776
192.15	4,782	8,195	192.67	5,350	10,830
192.16	4,793	8,243	192.68	5,361	10,883
192.17	4,804	8,291	192.69	5,372	10,937
192.18	4,815	8,339	192.70	5,383	10,991
192.19	4,826	8,387	192.71	5,394	11,044
192.20	4,837	8,436	192.72	5,405	11,098
192.21	4,848	8,484	192.73	5,416	11,153
192.22	4,858	8,533	192.74	5,427	11,207
192.23	4,869	8,581	192.75	5,438	11,261
192.24	4,880	8,630	192.76	5,449	11,316
192.25	4,891	8,679	192.77	5,460	11,370
192.26	4,902	8,728	192.78	5,471	11,425
192.27	4,913	8,777	192.79	5,481	11,479
192.28	4,924	8,826	192.80	5,492	11,534
192.29	4,935	8,875	192.81	5,503	11,589
192.30	4,946	8,925	192.82	5,514	11,644
192.31	4,957	8,974	192.83	5,525	11,700
192.32	4,968	9,024	192.84	5,536	11,755
192.33	4,979	9,074	192.85	5,547	11,810
192.34	4,990	9,123	192.86	5,558	11,866
192.35	5,001	9,173	192.87	5,569	11,922
192.36	5,011	9,224	192.88	5,580	11,977
192.37	5,022	9,274	192.89	5,591	12,033
192.38	5,033	9,324	192.90	5,602	12,089
192.39	5,044	9,374	192.91	5,613	12,145

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.92	5,624	12,201	193.44	6,221	15,280
192.93	5,634	12,258	193.45	6,233	15,342
192.94	5,645	12,314	193.46	6,245	15,404
192.95	5,656	12,371	193.47	6,256	15,467
192.96	5,667	12,427	193.48	6,268	15,530
192.97	5,678	12,484	193.49	6,279	15,592
192.98	5,689	12,541	193.50	6,291	15,655
192.99	5,700	12,598	193.51	6,303	15,718
193.00	5,711	12,655	193.52	6,314	15,781
193.01	5,723	12,712	193.53	6,326	15,844
193.02	5,734	12,769	193.54	6,337	15,908
193.03	5,746	12,827	193.55	6,349	15,971
193.04	5,757	12,884	193.56	6,361	16,035
193.05	5,769	12,942	193.57	6,372	16,098
193.06	5,781	12,999	193.58	6,384	16,162
193.07	5,792	13,057	193.59	6,395	16,226
193.08	5,804	13,115	193.60	6,407	16,290
193.09	5,815	13,173	193.61	6,419	16,354
193.10	5,827	13,232	193.62	6,430	16,418
193.11	5,839	13,290	193.63	6,442	16,483
193.12	5,850	13,348	193.64	6,453	16,547
193.13	5,862	13,407	193.65	6,465	16,612
193.14	5,873	13,466	193.66	6,477	16,677
193.15	5,885	13,524	193.67	6,488	16,741
193.16	5,897	13,583	193.68	6,500	16,806
193.17	5,908	13,642	193.69	6,511	16,871
193.18	5,920	13,701	193.70	6,523	16,937
193.19	5,931	13,761	193.71	6,535	17,002
193.20	5,943	13,820	193.72	6,546	17,067
193.21	5,955	13,880	193.73	6,558	17,133
193.22	5,966	13,939	193.74	6,569	17,198
193.23	5,978	13,999	193.75	6,581	17,264
193.24	5,989	14,059	193.76	6,593	17,330
193.25	6,001	14,119	193.77	6,604	17,396
193.26	6,013	14,179	193.78	6,616	17,462
193.27	6,024	14,239	193.79	6,627	17,528
193.28	6,036	14,299	193.80	6,639	17,595
193.29	6,047	14,360	193.81	6,651	17,661
193.30	6,059	14,420	193.82	6,662	17,728
193.31	6,071	14,481	193.83	6,674	17,794
193.32	6,082	14,542	193.84	6,685	17,861
193.33	6,094	14,602	193.85	6,697	17,928
193.34	6,105	14,663	193.86	6,709	17,995
193.35	6,117	14,725	193.87	6,720	18,062
193.36	6,129	14,786	193.88	6,732	18,130
193.37	6,140	14,847	193.89	6,743	18,197
193.38	6,152	14,909	193.90	6,755	18,264
193.39	6,163	14,970	193.91	6,767	18,332
193.40	6,175	15,032	193.92	6,778	18,400
193.41	6,187	15,094	193.93	6,790	18,468
193.42	6,198	15,156	193.94	6,801	18,536
193.43	6,210	15,218	193.95	6,813	18,604

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.96	6,825	18,672	194.48	7,460	22,385
193.97	6,836	18,740	194.49	7,473	22,460
193.98	6,848	18,809	194.50	7,485	22,535
193.99	6,859	18,877	194.51	7,497	22,610
194.00	6,871	18,946	194.52	7,510	22,685
194.01	6,883	19,014	194.53	7,522	22,760
194.02	6,896	19,083	194.54	7,534	22,835
194.03	6,908	19,152	194.55	7,546	22,910
194.04	6,920	19,222	194.56	7,559	22,986
194.05	6,932	19,291	194.57	7,571	23,062
194.06	6,945	19,360	194.58	7,583	23,137
194.07	6,957	19,430	194.59	7,596	23,213
194.08	6,969	19,499	194.60	7,608	23,289
194.09	6,982	19,569	194.61	7,620	23,365
194.10	6,994	19,639	194.62	7,632	23,442
194.11	7,006	19,709	194.63	7,645	23,518
194.12	7,018	19,779	194.64	7,657	23,595
194.13	7,031	19,849	194.65	7,669	23,671
194.14	7,043	19,920	194.66	7,681	23,748
194.15	7,055	19,990	194.67	7,694	23,825
194.16	7,067	20,061	194.68	7,706	23,902
194.17	7,080	20,132	194.69	7,718	23,979
194.18	7,092	20,202	194.70	7,731	24,056
194.19	7,104	20,273	194.71	7,743	24,134
194.20	7,117	20,344	194.72	7,755	24,211
194.21	7,129	20,416	194.73	7,767	24,289
194.22	7,141	20,487	194.74	7,780	24,366
194.23	7,153	20,559	194.75	7,792	24,444
194.24	7,166	20,630	194.76	7,804	24,522
194.25	7,178	20,702	194.77	7,817	24,600
194.26	7,190	20,774	194.78	7,829	24,679
194.27	7,203	20,846	194.79	7,841	24,757
194.28	7,215	20,918	194.80	7,853	24,835
194.29	7,227	20,990	194.81	7,866	24,914
194.30	7,239	21,062	194.82	7,878	24,993
194.31	7,252	21,135	194.83	7,890	25,072
194.32	7,264	21,207	194.84	7,903	25,151
194.33	7,276	21,280	194.85	7,915	25,230
194.34	7,289	21,353	194.86	7,927	25,309
194.35	7,301	21,426	194.87	7,939	25,388
194.36	7,313	21,499	194.88	7,952	25,468
194.37	7,325	21,572	194.89	7,964	25,547
194.38	7,338	21,645	194.90	7,976	25,627
194.39	7,350	21,719	194.91	7,988	25,707
194.40	7,362	21,792	194.92	8,001	25,787
194.41	7,374	21,866	194.93	8,013	25,867
194.42	7,387	21,940	194.94	8,025	25,947
194.43	7,399	22,014	194.95	8,038	26,027
194.44	7,411	22,088	194.96	8,050	26,108
194.45	7,424	22,162	194.97	8,062	26,188
194.46	7,436	22,236	194.98	8,074	26,269
194.47	7,448	22,311	194.99	8,087	26,350

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.00	**8,099**	**26,431**

Summary for Pond B-36A: Basin #36A

Inflow Area = 2.377 ac, 40.60% Impervious, Inflow Depth = 1.94" for Current 2 yr event
Inflow = 4.64 cfs @ 12.17 hrs, Volume= 0.385 af
Outflow = 0.49 cfs @ 13.19 hrs, Volume= 0.291 af, Atten= 89%, Lag= 60.7 min
Primary = 0.49 cfs @ 13.19 hrs, Volume= 0.291 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.77' @ 13.19 hrs Surf.Area= 4,250 sf Storage= 9,650 cf

Plug-Flow detention time= 306.2 min calculated for 0.291 af (76% of inflow)
Center-of-Mass det. time= 214.0 min (1,011.3 - 797.3)

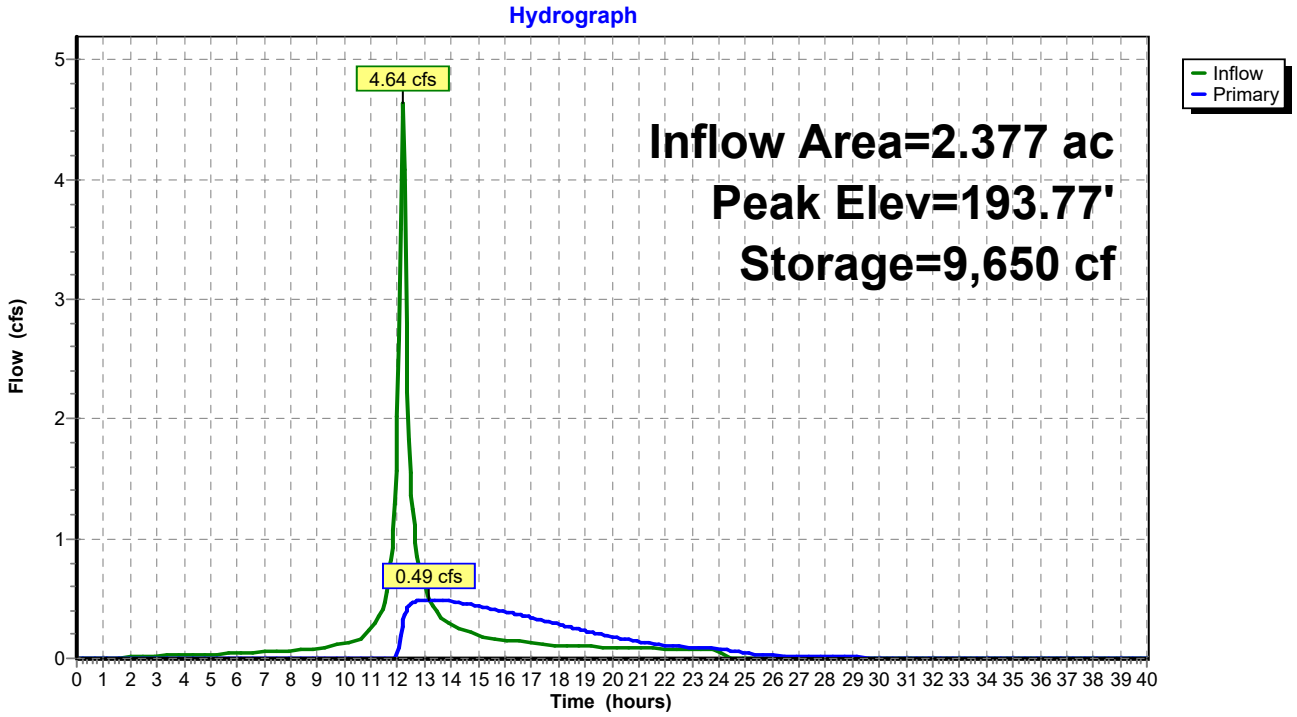
Volume	Invert	Avail.Storage	Storage Description
#1	190.50'	16,844 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.50	0	0	0
191.00	2,366	592	592
192.00	2,995	2,681	3,272
193.00	3,681	3,338	6,610
194.00	4,424	4,053	10,663
195.00	5,223	4,824	15,486
195.25	5,644	1,358	16,844

Device	Routing	Invert	Outlet Devices
#1	Primary	190.50'	**18.0" Round Culvert** L= 82.0' Ke= 0.500 Inlet / Outlet Invert= 190.50' / 190.10' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.24'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	194.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.49 cfs @ 13.19 hrs HW=193.77' (Free Discharge)
- **1=Culvert** (Passes 0.49 cfs of 12.05 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.49 cfs @ 5.61 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-36A: Basin #36A



Stage-Discharge for Pond B-36A: Basin #36A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.50	0.00	191.02	0.00	191.54	0.00	192.06	0.00
190.51	0.00	191.03	0.00	191.55	0.00	192.07	0.00
190.52	0.00	191.04	0.00	191.56	0.00	192.08	0.00
190.53	0.00	191.05	0.00	191.57	0.00	192.09	0.00
190.54	0.00	191.06	0.00	191.58	0.00	192.10	0.00
190.55	0.00	191.07	0.00	191.59	0.00	192.11	0.00
190.56	0.00	191.08	0.00	191.60	0.00	192.12	0.00
190.57	0.00	191.09	0.00	191.61	0.00	192.13	0.00
190.58	0.00	191.10	0.00	191.62	0.00	192.14	0.00
190.59	0.00	191.11	0.00	191.63	0.00	192.15	0.00
190.60	0.00	191.12	0.00	191.64	0.00	192.16	0.00
190.61	0.00	191.13	0.00	191.65	0.00	192.17	0.00
190.62	0.00	191.14	0.00	191.66	0.00	192.18	0.00
190.63	0.00	191.15	0.00	191.67	0.00	192.19	0.00
190.64	0.00	191.16	0.00	191.68	0.00	192.20	0.00
190.65	0.00	191.17	0.00	191.69	0.00	192.21	0.00
190.66	0.00	191.18	0.00	191.70	0.00	192.22	0.00
190.67	0.00	191.19	0.00	191.71	0.00	192.23	0.00
190.68	0.00	191.20	0.00	191.72	0.00	192.24	0.00
190.69	0.00	191.21	0.00	191.73	0.00	192.25	0.00
190.70	0.00	191.22	0.00	191.74	0.00	192.26	0.00
190.71	0.00	191.23	0.00	191.75	0.00	192.27	0.00
190.72	0.00	191.24	0.00	191.76	0.00	192.28	0.00
190.73	0.00	191.25	0.00	191.77	0.00	192.29	0.01
190.74	0.00	191.26	0.00	191.78	0.00	192.30	0.01
190.75	0.00	191.27	0.00	191.79	0.00	192.31	0.01
190.76	0.00	191.28	0.00	191.80	0.00	192.32	0.02
190.77	0.00	191.29	0.00	191.81	0.00	192.33	0.02
190.78	0.00	191.30	0.00	191.82	0.00	192.34	0.02
190.79	0.00	191.31	0.00	191.83	0.00	192.35	0.03
190.80	0.00	191.32	0.00	191.84	0.00	192.36	0.03
190.81	0.00	191.33	0.00	191.85	0.00	192.37	0.04
190.82	0.00	191.34	0.00	191.86	0.00	192.38	0.04
190.83	0.00	191.35	0.00	191.87	0.00	192.39	0.05
190.84	0.00	191.36	0.00	191.88	0.00	192.40	0.06
190.85	0.00	191.37	0.00	191.89	0.00	192.41	0.06
190.86	0.00	191.38	0.00	191.90	0.00	192.42	0.07
190.87	0.00	191.39	0.00	191.91	0.00	192.43	0.08
190.88	0.00	191.40	0.00	191.92	0.00	192.44	0.08
190.89	0.00	191.41	0.00	191.93	0.00	192.45	0.09
190.90	0.00	191.42	0.00	191.94	0.00	192.46	0.10
190.91	0.00	191.43	0.00	191.95	0.00	192.47	0.10
190.92	0.00	191.44	0.00	191.96	0.00	192.48	0.11
190.93	0.00	191.45	0.00	191.97	0.00	192.49	0.12
190.94	0.00	191.46	0.00	191.98	0.00	192.50	0.13
190.95	0.00	191.47	0.00	191.99	0.00	192.51	0.13
190.96	0.00	191.48	0.00	192.00	0.00	192.52	0.14
190.97	0.00	191.49	0.00	192.01	0.00	192.53	0.15
190.98	0.00	191.50	0.00	192.02	0.00	192.54	0.15
190.99	0.00	191.51	0.00	192.03	0.00	192.55	0.16
191.00	0.00	191.52	0.00	192.04	0.00	192.56	0.17
191.01	0.00	191.53	0.00	192.05	0.00	192.57	0.17

Stage-Discharge for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.58	0.17	193.10	0.35	193.62	0.46	194.14	1.23
192.59	0.18	193.11	0.35	193.63	0.46	194.15	1.31
192.60	0.18	193.12	0.35	193.64	0.47	194.16	1.39
192.61	0.19	193.13	0.36	193.65	0.47	194.17	1.47
192.62	0.19	193.14	0.36	193.66	0.47	194.18	1.55
192.63	0.20	193.15	0.36	193.67	0.47	194.19	1.63
192.64	0.20	193.16	0.36	193.68	0.47	194.20	1.72
192.65	0.21	193.17	0.37	193.69	0.48	194.21	1.81
192.66	0.21	193.18	0.37	193.70	0.48	194.22	1.90
192.67	0.22	193.19	0.37	193.71	0.48	194.23	1.99
192.68	0.22	193.20	0.37	193.72	0.48	194.24	2.09
192.69	0.22	193.21	0.38	193.73	0.48	194.25	2.19
192.70	0.23	193.22	0.38	193.74	0.49	194.26	2.28
192.71	0.23	193.23	0.38	193.75	0.49	194.27	2.38
192.72	0.24	193.24	0.38	193.76	0.49	194.28	2.49
192.73	0.24	193.25	0.39	193.77	0.49	194.29	2.59
192.74	0.24	193.26	0.39	193.78	0.49	194.30	2.70
192.75	0.25	193.27	0.39	193.79	0.49	194.31	2.80
192.76	0.25	193.28	0.39	193.80	0.50	194.32	2.91
192.77	0.25	193.29	0.39	193.81	0.50	194.33	3.02
192.78	0.26	193.30	0.40	193.82	0.50	194.34	3.13
192.79	0.26	193.31	0.40	193.83	0.50	194.35	3.25
192.80	0.26	193.32	0.40	193.84	0.50	194.36	3.36
192.81	0.27	193.33	0.40	193.85	0.50	194.37	3.48
192.82	0.27	193.34	0.41	193.86	0.51	194.38	3.60
192.83	0.27	193.35	0.41	193.87	0.51	194.39	3.72
192.84	0.28	193.36	0.41	193.88	0.51	194.40	3.84
192.85	0.28	193.37	0.41	193.89	0.51	194.41	3.96
192.86	0.28	193.38	0.41	193.90	0.51	194.42	4.08
192.87	0.29	193.39	0.42	193.91	0.52	194.43	4.21
192.88	0.29	193.40	0.42	193.92	0.52	194.44	4.33
192.89	0.29	193.41	0.42	193.93	0.52	194.45	4.46
192.90	0.30	193.42	0.42	193.94	0.52	194.46	4.59
192.91	0.30	193.43	0.43	193.95	0.52	194.47	4.72
192.92	0.30	193.44	0.43	193.96	0.52	194.48	4.85
192.93	0.30	193.45	0.43	193.97	0.53	194.49	4.98
192.94	0.31	193.46	0.43	193.98	0.53	194.50	5.12
192.95	0.31	193.47	0.43	193.99	0.53	194.51	5.25
192.96	0.31	193.48	0.44	194.00	0.53	194.52	5.39
192.97	0.32	193.49	0.44	194.01	0.55	194.53	5.53
192.98	0.32	193.50	0.44	194.02	0.57	194.54	5.66
192.99	0.32	193.51	0.44	194.03	0.60	194.55	5.80
193.00	0.32	193.52	0.44	194.04	0.64	194.56	5.94
193.01	0.33	193.53	0.45	194.05	0.68	194.57	6.09
193.02	0.33	193.54	0.45	194.06	0.73	194.58	6.23
193.03	0.33	193.55	0.45	194.07	0.78	194.59	6.37
193.04	0.33	193.56	0.45	194.08	0.84	194.60	6.52
193.05	0.34	193.57	0.45	194.09	0.90	194.61	6.67
193.06	0.34	193.58	0.46	194.10	0.96	194.62	6.81
193.07	0.34	193.59	0.46	194.11	1.02	194.63	6.96
193.08	0.34	193.60	0.46	194.12	1.09	194.64	7.11
193.09	0.35	193.61	0.46	194.13	1.16	194.65	7.26

Stage-Discharge for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Primary (cfs)
194.66	7.41
194.67	7.57
194.68	7.72
194.69	7.87
194.70	8.03
194.71	8.19
194.72	8.34
194.73	8.50
194.74	8.66
194.75	8.82
194.76	8.98
194.77	9.14
194.78	9.31
194.79	9.47
194.80	9.63
194.81	9.80
194.82	9.97
194.83	10.13
194.84	10.30
194.85	10.47
194.86	10.64
194.87	10.81
194.88	10.98
194.89	11.16
194.90	11.33
194.91	11.50
194.92	11.68
194.93	11.85
194.94	12.03
194.95	12.21
194.96	12.50
194.97	12.89
194.98	13.35
194.99	13.86
195.00	14.41
195.01	15.01
195.02	15.64
195.03	16.31
195.04	17.01
195.05	17.74
195.06	18.49
195.07	19.28
195.08	20.09
195.09	20.93
195.10	21.80
195.11	22.68
195.12	23.60
195.13	24.40
195.14	25.18
195.15	25.99
195.16	26.86
195.17	27.75
195.18	28.67
195.19	29.62
195.20	30.59
195.21	31.58
195.22	32.60
195.23	33.65
195.24	34.72
195.25	**35.81**

Stage-Area-Storage for Pond B-36A: Basin #36A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.50	0	0	191.02	2,379	639
190.51	47	0	191.03	2,385	663
190.52	95	1	191.04	2,391	687
190.53	142	2	191.05	2,397	711
190.54	189	4	191.06	2,404	735
190.55	237	6	191.07	2,410	759
190.56	284	9	191.08	2,416	783
190.57	331	12	191.09	2,423	807
190.58	379	15	191.10	2,429	831
190.59	426	19	191.11	2,435	856
190.60	473	24	191.12	2,441	880
190.61	521	29	191.13	2,448	904
190.62	568	34	191.14	2,454	929
190.63	615	40	191.15	2,460	953
190.64	662	46	191.16	2,467	978
190.65	710	53	191.17	2,473	1,003
190.66	757	61	191.18	2,479	1,028
190.67	804	68	191.19	2,486	1,052
190.68	852	77	191.20	2,492	1,077
190.69	899	85	191.21	2,498	1,102
190.70	946	95	191.22	2,504	1,127
190.71	994	104	191.23	2,511	1,152
190.72	1,041	115	191.24	2,517	1,177
190.73	1,088	125	191.25	2,523	1,203
190.74	1,136	136	191.26	2,530	1,228
190.75	1,183	148	191.27	2,536	1,253
190.76	1,230	160	191.28	2,542	1,279
190.77	1,278	172	191.29	2,548	1,304
190.78	1,325	185	191.30	2,555	1,330
190.79	1,372	199	191.31	2,561	1,355
190.80	1,420	213	191.32	2,567	1,381
190.81	1,467	227	191.33	2,574	1,407
190.82	1,514	242	191.34	2,580	1,432
190.83	1,562	258	191.35	2,586	1,458
190.84	1,609	274	191.36	2,592	1,484
190.85	1,656	290	191.37	2,599	1,510
190.86	1,704	307	191.38	2,605	1,536
190.87	1,751	324	191.39	2,611	1,562
190.88	1,798	342	191.40	2,618	1,588
190.89	1,845	360	191.41	2,624	1,614
190.90	1,893	379	191.42	2,630	1,641
190.91	1,940	398	191.43	2,636	1,667
190.92	1,987	417	191.44	2,643	1,693
190.93	2,035	437	191.45	2,649	1,720
190.94	2,082	458	191.46	2,655	1,746
190.95	2,129	479	191.47	2,662	1,773
190.96	2,177	501	191.48	2,668	1,800
190.97	2,224	523	191.49	2,674	1,826
190.98	2,271	545	191.50	2,681	1,853
190.99	2,319	568	191.51	2,687	1,880
191.00	2,366	592	191.52	2,693	1,907
191.01	2,372	615	191.53	2,699	1,934

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.54	2,706	1,961	192.06	3,036	3,453
191.55	2,712	1,988	192.07	3,043	3,483
191.56	2,718	2,015	192.08	3,050	3,514
191.57	2,725	2,042	192.09	3,057	3,544
191.58	2,731	2,070	192.10	3,064	3,575
191.59	2,737	2,097	192.11	3,070	3,606
191.60	2,743	2,124	192.12	3,077	3,636
191.61	2,750	2,152	192.13	3,084	3,667
191.62	2,756	2,179	192.14	3,091	3,698
191.63	2,762	2,207	192.15	3,098	3,729
191.64	2,769	2,235	192.16	3,105	3,760
191.65	2,775	2,262	192.17	3,112	3,791
191.66	2,781	2,290	192.18	3,118	3,822
191.67	2,787	2,318	192.19	3,125	3,853
191.68	2,794	2,346	192.20	3,132	3,885
191.69	2,800	2,374	192.21	3,139	3,916
191.70	2,806	2,402	192.22	3,146	3,948
191.71	2,813	2,430	192.23	3,153	3,979
191.72	2,819	2,458	192.24	3,160	4,011
191.73	2,825	2,486	192.25	3,167	4,042
191.74	2,831	2,515	192.26	3,173	4,074
191.75	2,838	2,543	192.27	3,180	4,106
191.76	2,844	2,571	192.28	3,187	4,137
191.77	2,850	2,600	192.29	3,194	4,169
191.78	2,857	2,628	192.30	3,201	4,201
191.79	2,863	2,657	192.31	3,208	4,233
191.80	2,869	2,686	192.32	3,215	4,266
191.81	2,875	2,714	192.33	3,221	4,298
191.82	2,882	2,743	192.34	3,228	4,330
191.83	2,888	2,772	192.35	3,235	4,362
191.84	2,894	2,801	192.36	3,242	4,395
191.85	2,901	2,830	192.37	3,249	4,427
191.86	2,907	2,859	192.38	3,256	4,460
191.87	2,913	2,888	192.39	3,263	4,492
191.88	2,920	2,917	192.40	3,269	4,525
191.89	2,926	2,946	192.41	3,276	4,558
191.90	2,932	2,976	192.42	3,283	4,590
191.91	2,938	3,005	192.43	3,290	4,623
191.92	2,945	3,034	192.44	3,297	4,656
191.93	2,951	3,064	192.45	3,304	4,689
191.94	2,957	3,093	192.46	3,311	4,722
191.95	2,964	3,123	192.47	3,317	4,755
191.96	2,970	3,153	192.48	3,324	4,789
191.97	2,976	3,182	192.49	3,331	4,822
191.98	2,982	3,212	192.50	3,338	4,855
191.99	2,989	3,242	192.51	3,345	4,889
192.00	2,995	3,272	192.52	3,352	4,922
192.01	3,002	3,302	192.53	3,359	4,956
192.02	3,009	3,332	192.54	3,365	4,989
192.03	3,016	3,362	192.55	3,372	5,023
192.04	3,022	3,392	192.56	3,379	5,057
192.05	3,029	3,423	192.57	3,386	5,091

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.58	3,393	5,124	193.10	3,755	6,982
192.59	3,400	5,158	193.11	3,763	7,019
192.60	3,407	5,192	193.12	3,770	7,057
192.61	3,413	5,227	193.13	3,778	7,095
192.62	3,420	5,261	193.14	3,785	7,133
192.63	3,427	5,295	193.15	3,792	7,171
192.64	3,434	5,329	193.16	3,800	7,208
192.65	3,441	5,364	193.17	3,807	7,247
192.66	3,448	5,398	193.18	3,815	7,285
192.67	3,455	5,433	193.19	3,822	7,323
192.68	3,461	5,467	193.20	3,830	7,361
192.69	3,468	5,502	193.21	3,837	7,399
192.70	3,475	5,537	193.22	3,844	7,438
192.71	3,482	5,571	193.23	3,852	7,476
192.72	3,489	5,606	193.24	3,859	7,515
192.73	3,496	5,641	193.25	3,867	7,553
192.74	3,503	5,676	193.26	3,874	7,592
192.75	3,510	5,711	193.27	3,882	7,631
192.76	3,516	5,746	193.28	3,889	7,670
192.77	3,523	5,782	193.29	3,896	7,709
192.78	3,530	5,817	193.30	3,904	7,748
192.79	3,537	5,852	193.31	3,911	7,787
192.80	3,544	5,888	193.32	3,919	7,826
192.81	3,551	5,923	193.33	3,926	7,865
192.82	3,558	5,959	193.34	3,934	7,904
192.83	3,564	5,994	193.35	3,941	7,944
192.84	3,571	6,030	193.36	3,948	7,983
192.85	3,578	6,066	193.37	3,956	8,023
192.86	3,585	6,101	193.38	3,963	8,062
192.87	3,592	6,137	193.39	3,971	8,102
192.88	3,599	6,173	193.40	3,978	8,142
192.89	3,606	6,209	193.41	3,986	8,182
192.90	3,612	6,245	193.42	3,993	8,222
192.91	3,619	6,281	193.43	4,000	8,262
192.92	3,626	6,318	193.44	4,008	8,302
192.93	3,633	6,354	193.45	4,015	8,342
192.94	3,640	6,390	193.46	4,023	8,382
192.95	3,647	6,427	193.47	4,030	8,422
192.96	3,654	6,463	193.48	4,038	8,462
192.97	3,660	6,500	193.49	4,045	8,503
192.98	3,667	6,537	193.50	4,053	8,543
192.99	3,674	6,573	193.51	4,060	8,584
193.00	3,681	6,610	193.52	4,067	8,625
193.01	3,688	6,647	193.53	4,075	8,665
193.02	3,696	6,684	193.54	4,082	8,706
193.03	3,703	6,721	193.55	4,090	8,747
193.04	3,711	6,758	193.56	4,097	8,788
193.05	3,718	6,795	193.57	4,105	8,829
193.06	3,726	6,832	193.58	4,112	8,870
193.07	3,733	6,869	193.59	4,119	8,911
193.08	3,740	6,907	193.60	4,127	8,952
193.09	3,748	6,944	193.61	4,134	8,994

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.62	4,142	9,035	194.14	4,536	11,290
193.63	4,149	9,076	194.15	4,544	11,335
193.64	4,157	9,118	194.16	4,552	11,381
193.65	4,164	9,160	194.17	4,560	11,426
193.66	4,171	9,201	194.18	4,568	11,472
193.67	4,179	9,243	194.19	4,576	11,517
193.68	4,186	9,285	194.20	4,584	11,563
193.69	4,194	9,327	194.21	4,592	11,609
193.70	4,201	9,369	194.22	4,600	11,655
193.71	4,209	9,411	194.23	4,608	11,701
193.72	4,216	9,453	194.24	4,616	11,747
193.73	4,223	9,495	194.25	4,624	11,793
193.74	4,231	9,537	194.26	4,632	11,840
193.75	4,238	9,580	194.27	4,640	11,886
193.76	4,246	9,622	194.28	4,648	11,933
193.77	4,253	9,665	194.29	4,656	11,979
193.78	4,261	9,707	194.30	4,664	12,026
193.79	4,268	9,750	194.31	4,672	12,072
193.80	4,275	9,793	194.32	4,680	12,119
193.81	4,283	9,835	194.33	4,688	12,166
193.82	4,290	9,878	194.34	4,696	12,213
193.83	4,298	9,921	194.35	4,704	12,260
193.84	4,305	9,964	194.36	4,712	12,307
193.85	4,313	10,007	194.37	4,720	12,354
193.86	4,320	10,050	194.38	4,728	12,401
193.87	4,327	10,094	194.39	4,736	12,449
193.88	4,335	10,137	194.40	4,744	12,496
193.89	4,342	10,180	194.41	4,752	12,543
193.90	4,350	10,224	194.42	4,760	12,591
193.91	4,357	10,267	194.43	4,768	12,639
193.92	4,365	10,311	194.44	4,776	12,686
193.93	4,372	10,355	194.45	4,784	12,734
193.94	4,379	10,398	194.46	4,792	12,782
193.95	4,387	10,442	194.47	4,800	12,830
193.96	4,394	10,486	194.48	4,808	12,878
193.97	4,402	10,530	194.49	4,816	12,926
193.98	4,409	10,574	194.50	4,824	12,974
193.99	4,417	10,618	194.51	4,831	13,023
194.00	4,424	10,663	194.52	4,839	13,071
194.01	4,432	10,707	194.53	4,847	13,119
194.02	4,440	10,751	194.54	4,855	13,168
194.03	4,448	10,796	194.55	4,863	13,217
194.04	4,456	10,840	194.56	4,871	13,265
194.05	4,464	10,885	194.57	4,879	13,314
194.06	4,472	10,929	194.58	4,887	13,363
194.07	4,480	10,974	194.59	4,895	13,412
194.08	4,488	11,019	194.60	4,903	13,461
194.09	4,496	11,064	194.61	4,911	13,510
194.10	4,504	11,109	194.62	4,919	13,559
194.11	4,512	11,154	194.63	4,927	13,608
194.12	4,520	11,199	194.64	4,935	13,657
194.13	4,528	11,244	194.65	4,943	13,707

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.66	4,951	13,756
194.67	4,959	13,806
194.68	4,967	13,856
194.69	4,975	13,905
194.70	4,983	13,955
194.71	4,991	14,005
194.72	4,999	14,055
194.73	5,007	14,105
194.74	5,015	14,155
194.75	5,023	14,205
194.76	5,031	14,255
194.77	5,039	14,306
194.78	5,047	14,356
194.79	5,055	14,407
194.80	5,063	14,457
194.81	5,071	14,508
194.82	5,079	14,559
194.83	5,087	14,610
194.84	5,095	14,661
194.85	5,103	14,712
194.86	5,111	14,763
194.87	5,119	14,814
194.88	5,127	14,865
194.89	5,135	14,916
194.90	5,143	14,968
194.91	5,151	15,019
194.92	5,159	15,071
194.93	5,167	15,122
194.94	5,175	15,174
194.95	5,183	15,226
194.96	5,191	15,278
194.97	5,199	15,330
194.98	5,207	15,382
194.99	5,215	15,434
195.00	5,223	15,486
195.01	5,240	15,538
195.02	5,257	15,591
195.03	5,274	15,643
195.04	5,290	15,696
195.05	5,307	15,749
195.06	5,324	15,802
195.07	5,341	15,856
195.08	5,358	15,909
195.09	5,375	15,963
195.10	5,391	16,017
195.11	5,408	16,071
195.12	5,425	16,125
195.13	5,442	16,179
195.14	5,459	16,234
195.15	5,476	16,288
195.16	5,492	16,343
195.17	5,509	16,398
195.18	5,526	16,453
195.19	5,543	16,509
195.20	5,560	16,564
195.21	5,577	16,620
195.22	5,593	16,676
195.23	5,610	16,732
195.24	5,627	16,788
195.25	**5,644**	**16,844**

Summary for Pond B-36B: Basin #36B

Inflow Area = 2.469 ac, 46.54% Impervious, Inflow Depth = 2.06" for Current 2 yr event
Inflow = 5.09 cfs @ 12.17 hrs, Volume= 0.424 af
Outflow = 2.45 cfs @ 12.35 hrs, Volume= 0.316 af, Atten= 52%, Lag= 10.8 min
Primary = 2.45 cfs @ 12.35 hrs, Volume= 0.316 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.30' @ 12.35 hrs Surf.Area= 3,972 sf Storage= 7,481 cf

Plug-Flow detention time= 181.3 min calculated for 0.316 af (75% of inflow)
Center-of-Mass det. time= 85.9 min (877.6 - 791.7)

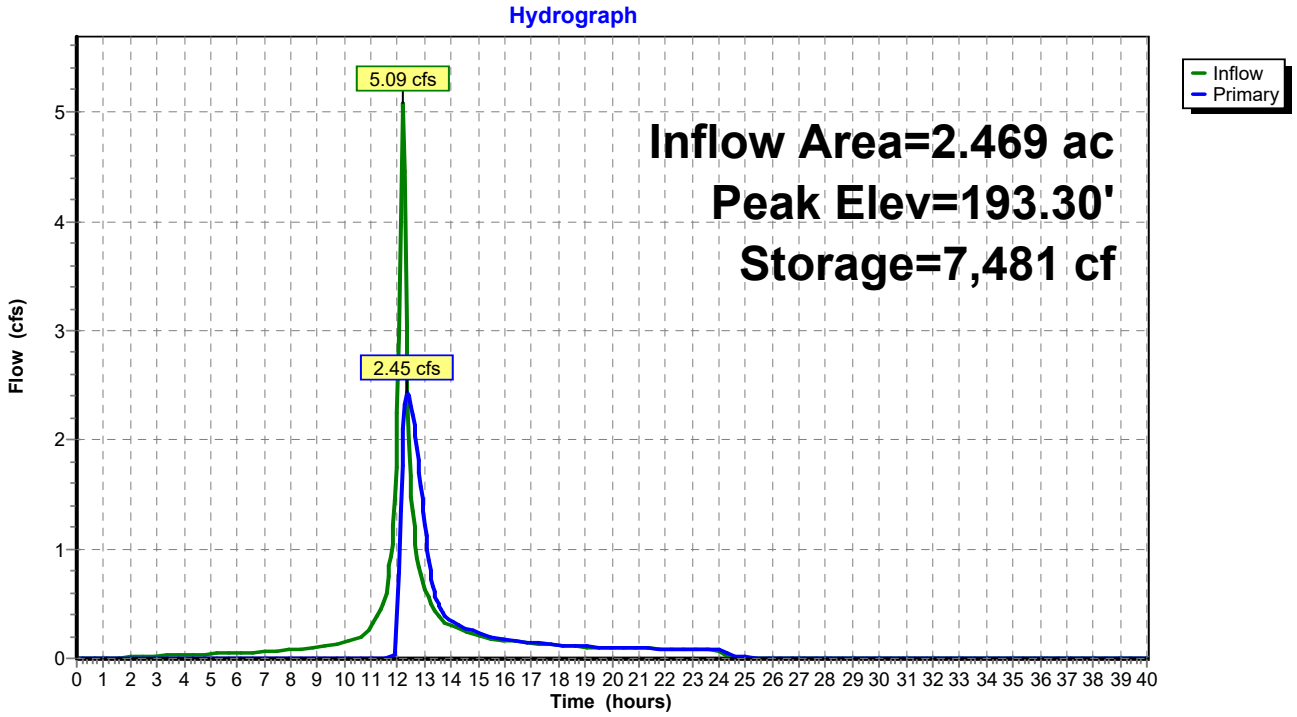
Volume	Invert	Avail.Storage	Storage Description
#1	190.50'	16,864 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.50	0	0	0
191.00	2,110	528	528
192.00	2,893	2,502	3,029
193.00	3,730	3,312	6,341
194.00	4,547	4,139	10,479
195.00	5,356	4,952	15,431
195.25	6,113	1,434	16,864

Device	Routing	Invert	Outlet Devices
#1	Primary	190.50'	**18.0" Round Culvert** L= 82.0' Ke= 0.500 Inlet / Outlet Invert= 190.50' / 190.10' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.53'	**36.0" W x 2.5" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.55'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.44 cfs @ 12.35 hrs HW=193.30' (Free Discharge)
- **1=Culvert** (Passes 2.44 cfs of 10.66 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.44 cfs @ 3.91 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-36B: Basin #36B



Stage-Discharge for Pond B-36B: Basin #36B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.50	0.00	191.02	0.00	191.54	0.00	192.06	0.00
190.51	0.00	191.03	0.00	191.55	0.00	192.07	0.00
190.52	0.00	191.04	0.00	191.56	0.00	192.08	0.00
190.53	0.00	191.05	0.00	191.57	0.00	192.09	0.00
190.54	0.00	191.06	0.00	191.58	0.00	192.10	0.00
190.55	0.00	191.07	0.00	191.59	0.00	192.11	0.00
190.56	0.00	191.08	0.00	191.60	0.00	192.12	0.00
190.57	0.00	191.09	0.00	191.61	0.00	192.13	0.00
190.58	0.00	191.10	0.00	191.62	0.00	192.14	0.00
190.59	0.00	191.11	0.00	191.63	0.00	192.15	0.00
190.60	0.00	191.12	0.00	191.64	0.00	192.16	0.00
190.61	0.00	191.13	0.00	191.65	0.00	192.17	0.00
190.62	0.00	191.14	0.00	191.66	0.00	192.18	0.00
190.63	0.00	191.15	0.00	191.67	0.00	192.19	0.00
190.64	0.00	191.16	0.00	191.68	0.00	192.20	0.00
190.65	0.00	191.17	0.00	191.69	0.00	192.21	0.00
190.66	0.00	191.18	0.00	191.70	0.00	192.22	0.00
190.67	0.00	191.19	0.00	191.71	0.00	192.23	0.00
190.68	0.00	191.20	0.00	191.72	0.00	192.24	0.00
190.69	0.00	191.21	0.00	191.73	0.00	192.25	0.00
190.70	0.00	191.22	0.00	191.74	0.00	192.26	0.00
190.71	0.00	191.23	0.00	191.75	0.00	192.27	0.00
190.72	0.00	191.24	0.00	191.76	0.00	192.28	0.00
190.73	0.00	191.25	0.00	191.77	0.00	192.29	0.00
190.74	0.00	191.26	0.00	191.78	0.00	192.30	0.00
190.75	0.00	191.27	0.00	191.79	0.00	192.31	0.00
190.76	0.00	191.28	0.00	191.80	0.00	192.32	0.00
190.77	0.00	191.29	0.00	191.81	0.00	192.33	0.00
190.78	0.00	191.30	0.00	191.82	0.00	192.34	0.00
190.79	0.00	191.31	0.00	191.83	0.00	192.35	0.00
190.80	0.00	191.32	0.00	191.84	0.00	192.36	0.00
190.81	0.00	191.33	0.00	191.85	0.00	192.37	0.00
190.82	0.00	191.34	0.00	191.86	0.00	192.38	0.00
190.83	0.00	191.35	0.00	191.87	0.00	192.39	0.00
190.84	0.00	191.36	0.00	191.88	0.00	192.40	0.00
190.85	0.00	191.37	0.00	191.89	0.00	192.41	0.00
190.86	0.00	191.38	0.00	191.90	0.00	192.42	0.00
190.87	0.00	191.39	0.00	191.91	0.00	192.43	0.00
190.88	0.00	191.40	0.00	191.92	0.00	192.44	0.00
190.89	0.00	191.41	0.00	191.93	0.00	192.45	0.00
190.90	0.00	191.42	0.00	191.94	0.00	192.46	0.00
190.91	0.00	191.43	0.00	191.95	0.00	192.47	0.00
190.92	0.00	191.44	0.00	191.96	0.00	192.48	0.00
190.93	0.00	191.45	0.00	191.97	0.00	192.49	0.00
190.94	0.00	191.46	0.00	191.98	0.00	192.50	0.00
190.95	0.00	191.47	0.00	191.99	0.00	192.51	0.00
190.96	0.00	191.48	0.00	192.00	0.00	192.52	0.00
190.97	0.00	191.49	0.00	192.01	0.00	192.53	0.00
190.98	0.00	191.50	0.00	192.02	0.00	192.54	0.01
190.99	0.00	191.51	0.00	192.03	0.00	192.55	0.03
191.00	0.00	191.52	0.00	192.04	0.00	192.56	0.05
191.01	0.00	191.53	0.00	192.05	0.00	192.57	0.08

Stage-Discharge for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.58	0.11	193.10	2.05	193.62	3.23	194.14	9.44
192.59	0.14	193.11	2.07	193.63	3.30	194.15	9.60
192.60	0.18	193.12	2.09	193.64	3.37	194.16	9.76
192.61	0.22	193.13	2.12	193.65	3.44	194.17	9.92
192.62	0.26	193.14	2.14	193.66	3.52	194.18	10.08
192.63	0.30	193.15	2.16	193.67	3.60	194.19	10.24
192.64	0.35	193.16	2.18	193.68	3.69	194.20	10.40
192.65	0.40	193.17	2.20	193.69	3.77	194.21	10.56
192.66	0.45	193.18	2.22	193.70	3.86	194.22	10.72
192.67	0.50	193.19	2.24	193.71	3.95	194.23	10.89
192.68	0.56	193.20	2.26	193.72	4.04	194.24	11.05
192.69	0.62	193.21	2.28	193.73	4.14	194.25	11.22
192.70	0.67	193.22	2.30	193.74	4.24	194.26	11.38
192.71	0.74	193.23	2.32	193.75	4.34	194.27	11.55
192.72	0.80	193.24	2.34	193.76	4.44	194.28	11.72
192.73	0.86	193.25	2.36	193.77	4.54	194.29	11.89
192.74	0.93	193.26	2.38	193.78	4.65	194.30	12.06
192.75	0.98	193.27	2.40	193.79	4.75	194.31	12.23
192.76	1.03	193.28	2.42	193.80	4.86	194.32	12.40
192.77	1.08	193.29	2.43	193.81	4.97	194.33	12.58
192.78	1.12	193.30	2.45	193.82	5.09	194.34	12.75
192.79	1.16	193.31	2.47	193.83	5.20	194.35	12.93
192.80	1.20	193.32	2.49	193.84	5.32	194.36	13.10
192.81	1.24	193.33	2.51	193.85	5.43	194.37	13.28
192.82	1.28	193.34	2.53	193.86	5.55	194.38	13.46
192.83	1.32	193.35	2.54	193.87	5.67	194.39	13.63
192.84	1.35	193.36	2.56	193.88	5.80	194.40	13.70
192.85	1.38	193.37	2.58	193.89	5.92	194.41	13.73
192.86	1.42	193.38	2.60	193.90	6.05	194.42	13.75
192.87	1.45	193.39	2.61	193.91	6.17	194.43	13.77
192.88	1.48	193.40	2.63	193.92	6.30	194.44	13.80
192.89	1.51	193.41	2.65	193.93	6.43	194.45	13.82
192.90	1.54	193.42	2.67	193.94	6.56	194.46	13.85
192.91	1.57	193.43	2.68	193.95	6.69	194.47	13.87
192.92	1.60	193.44	2.70	193.96	6.83	194.48	13.90
192.93	1.63	193.45	2.72	193.97	6.96	194.49	13.92
192.94	1.66	193.46	2.73	193.98	7.10	194.50	13.94
192.95	1.68	193.47	2.75	193.99	7.24	194.51	13.97
192.96	1.71	193.48	2.77	194.00	7.38	194.52	13.99
192.97	1.74	193.49	2.78	194.01	7.52	194.53	14.02
192.98	1.76	193.50	2.80	194.02	7.66	194.54	14.04
192.99	1.79	193.51	2.81	194.03	7.80	194.55	14.06
193.00	1.81	193.52	2.83	194.04	7.94	194.56	14.09
193.01	1.84	193.53	2.85	194.05	8.09	194.57	14.11
193.02	1.86	193.54	2.86	194.06	8.24	194.58	14.13
193.03	1.89	193.55	2.88	194.07	8.38	194.59	14.16
193.04	1.91	193.56	2.91	194.08	8.53	194.60	14.18
193.05	1.94	193.57	2.95	194.09	8.68	194.61	14.21
193.06	1.96	193.58	2.99	194.10	8.83	194.62	14.23
193.07	1.98	193.59	3.05	194.11	8.98	194.63	14.25
193.08	2.00	193.60	3.10	194.12	9.14	194.64	14.28
193.09	2.03	193.61	3.16	194.13	9.29	194.65	14.30

Stage-Discharge for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Primary (cfs)
194.66	14.32
194.67	14.35
194.68	14.37
194.69	14.39
194.70	14.42
194.71	14.44
194.72	14.46
194.73	14.49
194.74	14.51
194.75	14.53
194.76	14.56
194.77	14.58
194.78	14.60
194.79	14.62
194.80	14.65
194.81	14.67
194.82	14.69
194.83	14.72
194.84	14.74
194.85	14.76
194.86	14.78
194.87	14.81
194.88	14.83
194.89	14.85
194.90	14.87
194.91	14.90
194.92	14.92
194.93	14.94
194.94	14.96
194.95	14.99
194.96	15.13
194.97	15.36
194.98	15.66
194.99	16.01
195.00	16.41
195.01	16.84
195.02	17.32
195.03	17.82
195.04	18.36
195.05	18.93
195.06	19.52
195.07	20.14
195.08	20.79
195.09	21.47
195.10	22.16
195.11	22.89
195.12	23.63
195.13	24.40
195.14	25.18
195.15	25.99
195.16	26.86
195.17	27.75
195.18	28.67
195.19	29.62
195.20	30.59
195.21	31.58
195.22	32.60
195.23	33.65
195.24	34.72
195.25	**35.81**

Stage-Area-Storage for Pond B-36B: Basin #36B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.50	0	0
190.51	42	0
190.52	84	1
190.53	127	2
190.54	169	3
190.55	211	5
190.56	253	8
190.57	295	10
190.58	338	14
190.59	380	17
190.60	422	21
190.61	464	26
190.62	506	30
190.63	549	36
190.64	591	41
190.65	633	47
190.66	675	54
190.67	717	61
190.68	760	68
190.69	802	76
190.70	844	84
190.71	886	93
190.72	928	102
190.73	971	112
190.74	1,013	122
190.75	1,055	132
190.76	1,097	143
190.77	1,139	154
190.78	1,182	165
190.79	1,224	177
190.80	1,266	190
190.81	1,308	203
190.82	1,350	216
190.83	1,393	230
190.84	1,435	244
190.85	1,477	258
190.86	1,519	273
190.87	1,561	289
190.88	1,604	305
190.89	1,646	321
190.90	1,688	338
190.91	1,730	355
190.92	1,772	372
190.93	1,815	390
190.94	1,857	408
190.95	1,899	427
190.96	1,941	446
190.97	1,983	466
190.98	2,026	486
190.99	2,068	507
191.00	2,110	528
191.01	2,118	549
191.02	2,126	570
191.03	2,133	591
191.04	2,141	613
191.05	2,149	634
191.06	2,157	656
191.07	2,165	677
191.08	2,173	699
191.09	2,180	721
191.10	2,188	742
191.11	2,196	764
191.12	2,204	786
191.13	2,212	808
191.14	2,220	831
191.15	2,227	853
191.16	2,235	875
191.17	2,243	898
191.18	2,251	920
191.19	2,259	943
191.20	2,267	965
191.21	2,274	988
191.22	2,282	1,011
191.23	2,290	1,034
191.24	2,298	1,056
191.25	2,306	1,079
191.26	2,314	1,103
191.27	2,321	1,126
191.28	2,329	1,149
191.29	2,337	1,172
191.30	2,345	1,196
191.31	2,353	1,219
191.32	2,361	1,243
191.33	2,368	1,266
191.34	2,376	1,290
191.35	2,384	1,314
191.36	2,392	1,338
191.37	2,400	1,362
191.38	2,408	1,386
191.39	2,415	1,410
191.40	2,423	1,434
191.41	2,431	1,458
191.42	2,439	1,483
191.43	2,447	1,507
191.44	2,455	1,532
191.45	2,462	1,556
191.46	2,470	1,581
191.47	2,478	1,606
191.48	2,486	1,631
191.49	2,494	1,655
191.50	2,502	1,680
191.51	2,509	1,705
191.52	2,517	1,731
191.53	2,525	1,756

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.54	2,533	1,781
191.55	2,541	1,806
191.56	2,548	1,832
191.57	2,556	1,857
191.58	2,564	1,883
191.59	2,572	1,909
191.60	2,580	1,934
191.61	2,588	1,960
191.62	2,595	1,986
191.63	2,603	2,012
191.64	2,611	2,038
191.65	2,619	2,064
191.66	2,627	2,091
191.67	2,635	2,117
191.68	2,642	2,143
191.69	2,650	2,170
191.70	2,658	2,196
191.71	2,666	2,223
191.72	2,674	2,250
191.73	2,682	2,276
191.74	2,689	2,303
191.75	2,697	2,330
191.76	2,705	2,357
191.77	2,713	2,384
191.78	2,721	2,411
191.79	2,729	2,439
191.80	2,736	2,466
191.81	2,744	2,493
191.82	2,752	2,521
191.83	2,760	2,549
191.84	2,768	2,576
191.85	2,776	2,604
191.86	2,783	2,632
191.87	2,791	2,660
191.88	2,799	2,687
191.89	2,807	2,716
191.90	2,815	2,744
191.91	2,823	2,772
191.92	2,830	2,800
191.93	2,838	2,828
191.94	2,846	2,857
191.95	2,854	2,885
191.96	2,862	2,914
191.97	2,870	2,943
191.98	2,877	2,971
191.99	2,885	3,000
192.00	2,893	3,029
192.01	2,901	3,058
192.02	2,910	3,087
192.03	2,918	3,116
192.04	2,926	3,145
192.05	2,935	3,175
192.06	2,943	3,204
192.07	2,952	3,234
192.08	2,960	3,263
192.09	2,968	3,293
192.10	2,977	3,322
192.11	2,985	3,352
192.12	2,993	3,382
192.13	3,002	3,412
192.14	3,010	3,442
192.15	3,019	3,472
192.16	3,027	3,503
192.17	3,035	3,533
192.18	3,044	3,563
192.19	3,052	3,594
192.20	3,060	3,624
192.21	3,069	3,655
192.22	3,077	3,686
192.23	3,086	3,717
192.24	3,094	3,747
192.25	3,102	3,778
192.26	3,111	3,809
192.27	3,119	3,841
192.28	3,127	3,872
192.29	3,136	3,903
192.30	3,144	3,935
192.31	3,152	3,966
192.32	3,161	3,998
192.33	3,169	4,029
192.34	3,178	4,061
192.35	3,186	4,093
192.36	3,194	4,125
192.37	3,203	4,157
192.38	3,211	4,189
192.39	3,219	4,221
192.40	3,228	4,253
192.41	3,236	4,285
192.42	3,245	4,318
192.43	3,253	4,350
192.44	3,261	4,383
192.45	3,270	4,416
192.46	3,278	4,448
192.47	3,286	4,481
192.48	3,295	4,514
192.49	3,303	4,547
192.50	3,312	4,580
192.51	3,320	4,613
192.52	3,328	4,647
192.53	3,337	4,680
192.54	3,345	4,713
192.55	3,353	4,747
192.56	3,362	4,780
192.57	3,370	4,814

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.58	3,378	4,848	193.10	3,812	6,718
192.59	3,387	4,882	193.11	3,820	6,756
192.60	3,395	4,915	193.12	3,828	6,794
192.61	3,404	4,949	193.13	3,836	6,832
192.62	3,412	4,984	193.14	3,844	6,871
192.63	3,420	5,018	193.15	3,853	6,909
192.64	3,429	5,052	193.16	3,861	6,948
192.65	3,437	5,086	193.17	3,869	6,986
192.66	3,445	5,121	193.18	3,877	7,025
192.67	3,454	5,155	193.19	3,885	7,064
192.68	3,462	5,190	193.20	3,893	7,103
192.69	3,471	5,224	193.21	3,902	7,142
192.70	3,479	5,259	193.22	3,910	7,181
192.71	3,487	5,294	193.23	3,918	7,220
192.72	3,496	5,329	193.24	3,926	7,259
192.73	3,504	5,364	193.25	3,934	7,299
192.74	3,512	5,399	193.26	3,942	7,338
192.75	3,521	5,434	193.27	3,951	7,377
192.76	3,529	5,469	193.28	3,959	7,417
192.77	3,537	5,505	193.29	3,967	7,457
192.78	3,546	5,540	193.30	3,975	7,496
192.79	3,554	5,576	193.31	3,983	7,536
192.80	3,563	5,611	193.32	3,991	7,576
192.81	3,571	5,647	193.33	4,000	7,616
192.82	3,579	5,683	193.34	4,008	7,656
192.83	3,588	5,718	193.35	4,016	7,696
192.84	3,596	5,754	193.36	4,024	7,736
192.85	3,604	5,790	193.37	4,032	7,777
192.86	3,613	5,827	193.38	4,040	7,817
192.87	3,621	5,863	193.39	4,049	7,857
192.88	3,630	5,899	193.40	4,057	7,898
192.89	3,638	5,935	193.41	4,065	7,938
192.90	3,646	5,972	193.42	4,073	7,979
192.91	3,655	6,008	193.43	4,081	8,020
192.92	3,663	6,045	193.44	4,089	8,061
192.93	3,671	6,081	193.45	4,098	8,102
192.94	3,680	6,118	193.46	4,106	8,143
192.95	3,688	6,155	193.47	4,114	8,184
192.96	3,697	6,192	193.48	4,122	8,225
192.97	3,705	6,229	193.49	4,130	8,266
192.98	3,713	6,266	193.50	4,139	8,308
192.99	3,722	6,303	193.51	4,147	8,349
193.00	3,730	6,341	193.52	4,155	8,391
193.01	3,738	6,378	193.53	4,163	8,432
193.02	3,746	6,415	193.54	4,171	8,474
193.03	3,755	6,453	193.55	4,179	8,516
193.04	3,763	6,490	193.56	4,188	8,557
193.05	3,771	6,528	193.57	4,196	8,599
193.06	3,779	6,566	193.58	4,204	8,641
193.07	3,787	6,604	193.59	4,212	8,683
193.08	3,795	6,642	193.60	4,220	8,726
193.09	3,804	6,680	193.61	4,228	8,768

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.62	4,237	8,810	194.14	4,660	11,124
193.63	4,245	8,853	194.15	4,668	11,170
193.64	4,253	8,895	194.16	4,676	11,217
193.65	4,261	8,938	194.17	4,685	11,264
193.66	4,269	8,980	194.18	4,693	11,311
193.67	4,277	9,023	194.19	4,701	11,358
193.68	4,286	9,066	194.20	4,709	11,405
193.69	4,294	9,109	194.21	4,717	11,452
193.70	4,302	9,152	194.22	4,725	11,499
193.71	4,310	9,195	194.23	4,733	11,546
193.72	4,318	9,238	194.24	4,741	11,594
193.73	4,326	9,281	194.25	4,749	11,641
193.74	4,335	9,324	194.26	4,757	11,689
193.75	4,343	9,368	194.27	4,765	11,736
193.76	4,351	9,411	194.28	4,774	11,784
193.77	4,359	9,455	194.29	4,782	11,832
193.78	4,367	9,498	194.30	4,790	11,880
193.79	4,375	9,542	194.31	4,798	11,927
193.80	4,384	9,586	194.32	4,806	11,975
193.81	4,392	9,630	194.33	4,814	12,024
193.82	4,400	9,674	194.34	4,822	12,072
193.83	4,408	9,718	194.35	4,830	12,120
193.84	4,416	9,762	194.36	4,838	12,168
193.85	4,424	9,806	194.37	4,846	12,217
193.86	4,433	9,850	194.38	4,854	12,265
193.87	4,441	9,895	194.39	4,863	12,314
193.88	4,449	9,939	194.40	4,871	12,363
193.89	4,457	9,984	194.41	4,879	12,411
193.90	4,465	10,028	194.42	4,887	12,460
193.91	4,473	10,073	194.43	4,895	12,509
193.92	4,482	10,118	194.44	4,903	12,558
193.93	4,490	10,163	194.45	4,911	12,607
193.94	4,498	10,208	194.46	4,919	12,656
193.95	4,506	10,253	194.47	4,927	12,705
193.96	4,514	10,298	194.48	4,935	12,755
193.97	4,522	10,343	194.49	4,943	12,804
193.98	4,531	10,388	194.50	4,952	12,854
193.99	4,539	10,434	194.51	4,960	12,903
194.00	4,547	10,479	194.52	4,968	12,953
194.01	4,555	10,525	194.53	4,976	13,003
194.02	4,563	10,570	194.54	4,984	13,052
194.03	4,571	10,616	194.55	4,992	13,102
194.04	4,579	10,662	194.56	5,000	13,152
194.05	4,587	10,707	194.57	5,008	13,202
194.06	4,596	10,753	194.58	5,016	13,252
194.07	4,604	10,799	194.59	5,024	13,303
194.08	4,612	10,845	194.60	5,032	13,353
194.09	4,620	10,892	194.61	5,040	13,403
194.10	4,628	10,938	194.62	5,049	13,454
194.11	4,636	10,984	194.63	5,057	13,504
194.12	4,644	11,030	194.64	5,065	13,555
194.13	4,652	11,077	194.65	5,073	13,605

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.66	5,081	13,656
194.67	5,089	13,707
194.68	5,097	13,758
194.69	5,105	13,809
194.70	5,113	13,860
194.71	5,121	13,911
194.72	5,129	13,963
194.73	5,138	14,014
194.74	5,146	14,065
194.75	5,154	14,117
194.76	5,162	14,168
194.77	5,170	14,220
194.78	5,178	14,272
194.79	5,186	14,324
194.80	5,194	14,375
194.81	5,202	14,427
194.82	5,210	14,480
194.83	5,218	14,532
194.84	5,227	14,584
194.85	5,235	14,636
194.86	5,243	14,689
194.87	5,251	14,741
194.88	5,259	14,794
194.89	5,267	14,846
194.90	5,275	14,899
194.91	5,283	14,952
194.92	5,291	15,005
194.93	5,299	15,058
194.94	5,307	15,111
194.95	5,316	15,164
194.96	5,324	15,217
194.97	5,332	15,270
194.98	5,340	15,324
194.99	5,348	15,377
195.00	5,356	15,431
195.01	5,386	15,484
195.02	5,417	15,538
195.03	5,447	15,593
195.04	5,477	15,647
195.05	5,507	15,702
195.06	5,538	15,757
195.07	5,568	15,813
195.08	5,598	15,869
195.09	5,629	15,925
195.10	5,659	15,981
195.11	5,689	16,038
195.12	5,719	16,095
195.13	5,750	16,152
195.14	5,780	16,210
195.15	5,810	16,268
195.16	5,840	16,326
195.17	5,871	16,385
195.18	5,901	16,444
195.19	5,931	16,503
195.20	5,962	16,562
195.21	5,992	16,622
195.22	6,022	16,682
195.23	6,052	16,742
195.24	6,083	16,803
195.25	**6,113**	**16,864**

Summary for Pond B-37A: Basin #37A

Inflow Area = 2.154 ac, 39.65% Impervious, Inflow Depth = 1.92" for Current 2 yr event
Inflow = 4.17 cfs @ 12.17 hrs, Volume= 0.345 af
Outflow = 0.45 cfs @ 13.18 hrs, Volume= 0.262 af, Atten= 89%, Lag= 60.1 min
Primary = 0.45 cfs @ 13.18 hrs, Volume= 0.262 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 196.06' @ 13.18 hrs Surf.Area= 4,381 sf Storage= 8,622 cf

Plug-Flow detention time= 309.6 min calculated for 0.262 af (76% of inflow)
Center-of-Mass det. time= 216.4 min (1,014.7 - 798.2)

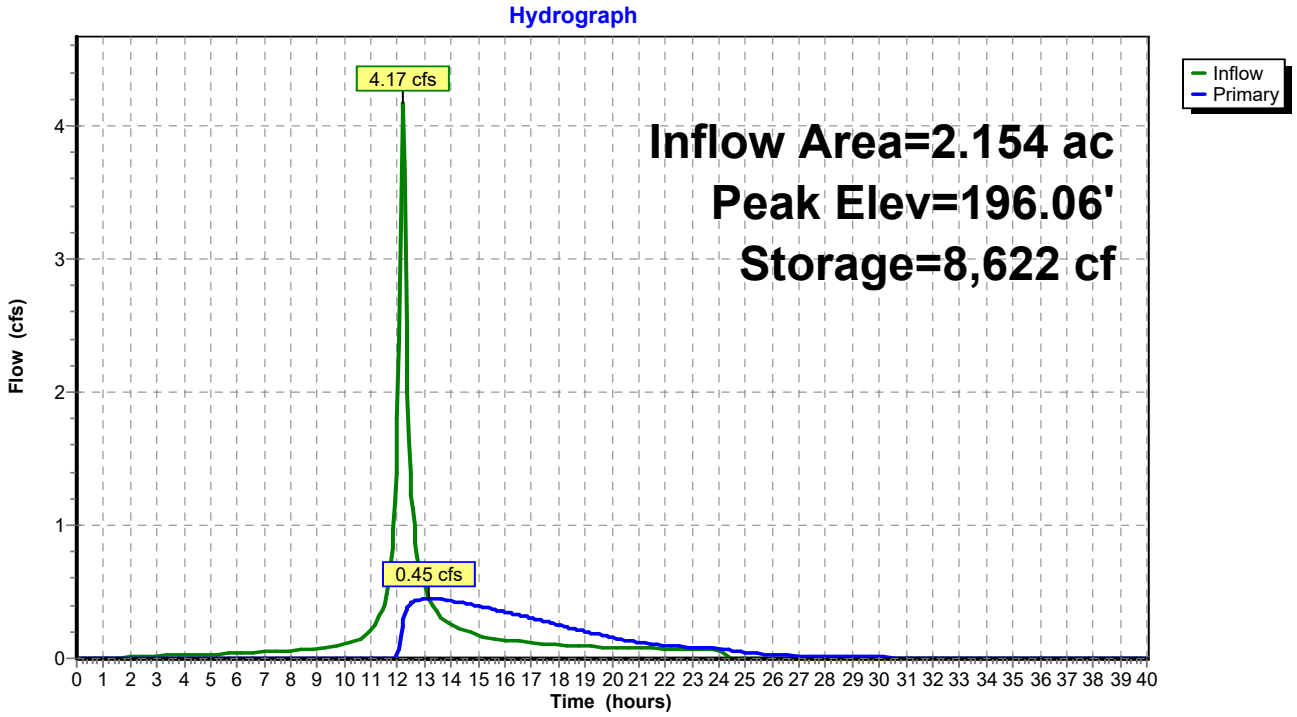
Volume	Invert	Avail.Storage	Storage Description
#1	193.30'	18,546 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.30	0	0	0
194.00	2,990	1,046	1,046
195.00	3,633	3,312	4,358
196.00	4,332	3,983	8,340
197.00	5,089	4,711	13,051
198.00	5,901	5,495	18,546

Device	Routing	Invert	Outlet Devices
#1	Primary	192.65'	**18.0" Round Culvert** L= 265.0' Ke= 0.500 Inlet / Outlet Invert= 192.65' / 191.33' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.77'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	196.48'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.45 cfs @ 13.18 hrs HW=196.06' (Free Discharge)
- **1=Culvert** (Passes 0.45 cfs of 10.12 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.45 cfs @ 5.11 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-37A: Basin #37A



Stage-Discharge for Pond B-37A: Basin #37A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.02
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.02
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.03
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.03
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.04
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.04
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.05
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.06
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.06
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.07
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.08
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.08
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.09
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.10
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.10
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.11
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.12
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.13
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.13
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.14
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.15
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.15
193.52	0.00	194.04	0.00	194.56	0.00	195.08	0.16
193.53	0.00	194.05	0.00	194.57	0.00	195.09	0.17
193.54	0.00	194.06	0.00	194.58	0.00	195.10	0.17
193.55	0.00	194.07	0.00	194.59	0.00	195.11	0.17
193.56	0.00	194.08	0.00	194.60	0.00	195.12	0.18
193.57	0.00	194.09	0.00	194.61	0.00	195.13	0.18
193.58	0.00	194.10	0.00	194.62	0.00	195.14	0.19
193.59	0.00	194.11	0.00	194.63	0.00	195.15	0.19
193.60	0.00	194.12	0.00	194.64	0.00	195.16	0.20
193.61	0.00	194.13	0.00	194.65	0.00	195.17	0.20
193.62	0.00	194.14	0.00	194.66	0.00	195.18	0.21
193.63	0.00	194.15	0.00	194.67	0.00	195.19	0.21
193.64	0.00	194.16	0.00	194.68	0.00	195.20	0.22
193.65	0.00	194.17	0.00	194.69	0.00	195.21	0.22
193.66	0.00	194.18	0.00	194.70	0.00	195.22	0.22
193.67	0.00	194.19	0.00	194.71	0.00	195.23	0.23
193.68	0.00	194.20	0.00	194.72	0.00	195.24	0.23
193.69	0.00	194.21	0.00	194.73	0.00	195.25	0.24
193.70	0.00	194.22	0.00	194.74	0.00	195.26	0.24
193.71	0.00	194.23	0.00	194.75	0.00	195.27	0.24
193.72	0.00	194.24	0.00	194.76	0.00	195.28	0.25
193.73	0.00	194.25	0.00	194.77	0.00	195.29	0.25
193.74	0.00	194.26	0.00	194.78	0.00	195.30	0.25
193.75	0.00	194.27	0.00	194.79	0.00	195.31	0.26
193.76	0.00	194.28	0.00	194.80	0.00	195.32	0.26
193.77	0.00	194.29	0.00	194.81	0.00	195.33	0.26
193.78	0.00	194.30	0.00	194.82	0.01	195.34	0.27
193.79	0.00	194.31	0.00	194.83	0.01	195.35	0.27
193.80	0.00	194.32	0.00	194.84	0.01	195.36	0.27
193.81	0.00	194.33	0.00	194.85	0.02	195.37	0.28

Stage-Discharge for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.38	0.28	195.90	0.41	196.42	0.51	196.94	4.58
195.39	0.28	195.91	0.41	196.43	0.51	196.95	4.71
195.40	0.29	195.92	0.42	196.44	0.52	196.96	4.84
195.41	0.29	195.93	0.42	196.45	0.52	196.97	4.98
195.42	0.29	195.94	0.42	196.46	0.52	196.98	5.11
195.43	0.30	195.95	0.42	196.47	0.52	196.99	5.24
195.44	0.30	195.96	0.43	196.48	0.52	197.00	5.38
195.45	0.30	195.97	0.43	196.49	0.54	197.01	5.52
195.46	0.30	195.98	0.43	196.50	0.56	197.02	5.66
195.47	0.31	195.99	0.43	196.51	0.59	197.03	5.80
195.48	0.31	196.00	0.43	196.52	0.63	197.04	5.94
195.49	0.31	196.01	0.44	196.53	0.68	197.05	6.08
195.50	0.32	196.02	0.44	196.54	0.72	197.06	6.22
195.51	0.32	196.03	0.44	196.55	0.78	197.07	6.37
195.52	0.32	196.04	0.44	196.56	0.83	197.08	6.51
195.53	0.32	196.05	0.44	196.57	0.89	197.09	6.66
195.54	0.33	196.06	0.45	196.58	0.95	197.10	6.81
195.55	0.33	196.07	0.45	196.59	1.01	197.11	6.95
195.56	0.33	196.08	0.45	196.60	1.08	197.12	7.10
195.57	0.33	196.09	0.45	196.61	1.15	197.13	7.25
195.58	0.34	196.10	0.45	196.62	1.23	197.14	7.41
195.59	0.34	196.11	0.46	196.63	1.30	197.15	7.56
195.60	0.34	196.12	0.46	196.64	1.38	197.16	7.71
195.61	0.34	196.13	0.46	196.65	1.46	197.17	7.87
195.62	0.35	196.14	0.46	196.66	1.54	197.18	8.02
195.63	0.35	196.15	0.46	196.67	1.63	197.19	8.18
195.64	0.35	196.16	0.46	196.68	1.71	197.20	8.34
195.65	0.35	196.17	0.47	196.69	1.80	197.21	8.49
195.66	0.36	196.18	0.47	196.70	1.89	197.22	8.65
195.67	0.36	196.19	0.47	196.71	1.99	197.23	8.81
195.68	0.36	196.20	0.47	196.72	2.08	197.24	8.97
195.69	0.36	196.21	0.47	196.73	2.18	197.25	9.14
195.70	0.37	196.22	0.48	196.74	2.28	197.26	9.30
195.71	0.37	196.23	0.48	196.75	2.38	197.27	9.46
195.72	0.37	196.24	0.48	196.76	2.48	197.28	9.63
195.73	0.37	196.25	0.48	196.77	2.58	197.29	9.79
195.74	0.38	196.26	0.48	196.78	2.69	197.30	9.96
195.75	0.38	196.27	0.49	196.79	2.79	197.31	10.13
195.76	0.38	196.28	0.49	196.80	2.90	197.32	10.30
195.77	0.38	196.29	0.49	196.81	3.01	197.33	10.46
195.78	0.39	196.30	0.49	196.82	3.13	197.34	10.63
195.79	0.39	196.31	0.49	196.83	3.24	197.35	10.81
195.80	0.39	196.32	0.49	196.84	3.35	197.36	10.98
195.81	0.39	196.33	0.50	196.85	3.47	197.37	11.15
195.82	0.39	196.34	0.50	196.86	3.59	197.38	11.32
195.83	0.40	196.35	0.50	196.87	3.71	197.39	11.50
195.84	0.40	196.36	0.50	196.88	3.83	197.40	11.67
195.85	0.40	196.37	0.50	196.89	3.95	197.41	11.85
195.86	0.40	196.38	0.50	196.90	4.07	197.42	12.02
195.87	0.41	196.39	0.51	196.91	4.20	197.43	12.07
195.88	0.41	196.40	0.51	196.92	4.33	197.44	12.09
195.89	0.41	196.41	0.51	196.93	4.45	197.45	12.10

Stage-Discharge for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Primary (cfs)
197.46	12.11
197.47	12.13
197.48	12.14
197.49	12.15
197.50	12.17
197.51	12.18
197.52	12.19
197.53	12.20
197.54	12.22
197.55	12.23
197.56	12.24
197.57	12.26
197.58	12.27
197.59	12.28
197.60	12.29
197.61	12.31
197.62	12.32
197.63	12.33
197.64	12.35
197.65	12.36
197.66	12.37
197.67	12.38
197.68	12.40
197.69	12.41
197.70	12.42
197.71	12.44
197.72	12.45
197.73	12.46
197.74	12.47
197.75	12.49
197.76	12.50
197.77	12.51
197.78	12.52
197.79	12.54
197.80	12.55
197.81	12.56
197.82	12.57
197.83	12.59
197.84	12.60
197.85	12.61
197.86	12.63
197.87	12.64
197.88	12.65
197.89	12.66
197.90	12.68
197.91	12.69
197.92	12.70
197.93	12.71
197.94	12.73
197.95	12.74
197.96	12.87
197.97	13.09
197.98	13.38
197.99	13.73
198.00	**14.11**

Stage-Area-Storage for Pond B-37A: Basin #37A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.30	0	0	193.82	2,221	577
193.31	43	0	193.83	2,264	600
193.32	85	1	193.84	2,307	623
193.33	128	2	193.85	2,349	646
193.34	171	3	193.86	2,392	670
193.35	214	5	193.87	2,435	694
193.36	256	8	193.88	2,477	718
193.37	299	10	193.89	2,520	743
193.38	342	14	193.90	2,563	769
193.39	384	17	193.91	2,606	795
193.40	427	21	193.92	2,648	821
193.41	470	26	193.93	2,691	848
193.42	513	31	193.94	2,734	875
193.43	555	36	193.95	2,776	902
193.44	598	42	193.96	2,819	930
193.45	641	48	193.97	2,862	959
193.46	683	55	193.98	2,905	988
193.47	726	62	193.99	2,947	1,017
193.48	769	69	194.00	2,990	1,046
193.49	812	77	194.01	2,996	1,076
193.50	854	85	194.02	3,003	1,106
193.51	897	94	194.03	3,009	1,136
193.52	940	103	194.04	3,016	1,167
193.53	982	113	194.05	3,022	1,197
193.54	1,025	123	194.06	3,029	1,227
193.55	1,068	133	194.07	3,035	1,257
193.56	1,111	144	194.08	3,041	1,288
193.57	1,153	156	194.09	3,048	1,318
193.58	1,196	167	194.10	3,054	1,349
193.59	1,239	180	194.11	3,061	1,379
193.60	1,281	192	194.12	3,067	1,410
193.61	1,324	205	194.13	3,074	1,441
193.62	1,367	219	194.14	3,080	1,471
193.63	1,410	233	194.15	3,086	1,502
193.64	1,452	247	194.16	3,093	1,533
193.65	1,495	262	194.17	3,099	1,564
193.66	1,538	277	194.18	3,106	1,595
193.67	1,580	292	194.19	3,112	1,626
193.68	1,623	308	194.20	3,119	1,657
193.69	1,666	325	194.21	3,125	1,689
193.70	1,709	342	194.22	3,131	1,720
193.71	1,751	359	194.23	3,138	1,751
193.72	1,794	377	194.24	3,144	1,783
193.73	1,837	395	194.25	3,151	1,814
193.74	1,879	413	194.26	3,157	1,846
193.75	1,922	432	194.27	3,164	1,877
193.76	1,965	452	194.28	3,170	1,909
193.77	2,008	472	194.29	3,176	1,941
193.78	2,050	492	194.30	3,183	1,972
193.79	2,093	513	194.31	3,189	2,004
193.80	2,136	534	194.32	3,196	2,036
193.81	2,178	555	194.33	3,202	2,068

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.34	3,209	2,100
194.35	3,215	2,132
194.36	3,221	2,165
194.37	3,228	2,197
194.38	3,234	2,229
194.39	3,241	2,262
194.40	3,247	2,294
194.41	3,254	2,326
194.42	3,260	2,359
194.43	3,266	2,392
194.44	3,273	2,424
194.45	3,279	2,457
194.46	3,286	2,490
194.47	3,292	2,523
194.48	3,299	2,556
194.49	3,305	2,589
194.50	3,312	2,622
194.51	3,318	2,655
194.52	3,324	2,688
194.53	3,331	2,722
194.54	3,337	2,755
194.55	3,344	2,788
194.56	3,350	2,822
194.57	3,357	2,855
194.58	3,363	2,889
194.59	3,369	2,923
194.60	3,376	2,956
194.61	3,382	2,990
194.62	3,389	3,024
194.63	3,395	3,058
194.64	3,402	3,092
194.65	3,408	3,126
194.66	3,414	3,160
194.67	3,421	3,194
194.68	3,427	3,228
194.69	3,434	3,263
194.70	3,440	3,297
194.71	3,447	3,331
194.72	3,453	3,366
194.73	3,459	3,401
194.74	3,466	3,435
194.75	3,472	3,470
194.76	3,479	3,505
194.77	3,485	3,539
194.78	3,492	3,574
194.79	3,498	3,609
194.80	3,504	3,644
194.81	3,511	3,679
194.82	3,517	3,714
194.83	3,524	3,750
194.84	3,530	3,785
194.85	3,537	3,820
194.86	3,543	3,856
194.87	3,549	3,891
194.88	3,556	3,927
194.89	3,562	3,962
194.90	3,569	3,998
194.91	3,575	4,034
194.92	3,582	4,069
194.93	3,588	4,105
194.94	3,594	4,141
194.95	3,601	4,177
194.96	3,607	4,213
194.97	3,614	4,249
194.98	3,620	4,285
194.99	3,627	4,322
195.00	3,633	4,358
195.01	3,640	4,394
195.02	3,647	4,431
195.03	3,654	4,467
195.04	3,661	4,504
195.05	3,668	4,541
195.06	3,675	4,577
195.07	3,682	4,614
195.08	3,689	4,651
195.09	3,696	4,688
195.10	3,703	4,725
195.11	3,710	4,762
195.12	3,717	4,799
195.13	3,724	4,836
195.14	3,731	4,873
195.15	3,738	4,911
195.16	3,745	4,948
195.17	3,752	4,986
195.18	3,759	5,023
195.19	3,766	5,061
195.20	3,773	5,099
195.21	3,780	5,136
195.22	3,787	5,174
195.23	3,794	5,212
195.24	3,801	5,250
195.25	3,808	5,288
195.26	3,815	5,326
195.27	3,822	5,364
195.28	3,829	5,403
195.29	3,836	5,441
195.30	3,843	5,479
195.31	3,850	5,518
195.32	3,857	5,556
195.33	3,864	5,595
195.34	3,871	5,634
195.35	3,878	5,672
195.36	3,885	5,711
195.37	3,892	5,750

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.38	3,899	5,789	195.90	4,262	7,911
195.39	3,906	5,828	195.91	4,269	7,953
195.40	3,913	5,867	195.92	4,276	7,996
195.41	3,920	5,906	195.93	4,283	8,039
195.42	3,927	5,946	195.94	4,290	8,082
195.43	3,934	5,985	195.95	4,297	8,125
195.44	3,941	6,024	195.96	4,304	8,168
195.45	3,948	6,064	195.97	4,311	8,211
195.46	3,955	6,103	195.98	4,318	8,254
195.47	3,962	6,143	195.99	4,325	8,297
195.48	3,969	6,182	196.00	4,332	8,340
195.49	3,976	6,222	196.01	4,340	8,384
195.50	3,983	6,262	196.02	4,347	8,427
195.51	3,989	6,302	196.03	4,355	8,471
195.52	3,996	6,342	196.04	4,362	8,514
195.53	4,003	6,382	196.05	4,370	8,558
195.54	4,010	6,422	196.06	4,377	8,602
195.55	4,017	6,462	196.07	4,385	8,646
195.56	4,024	6,502	196.08	4,393	8,689
195.57	4,031	6,542	196.09	4,400	8,733
195.58	4,038	6,583	196.10	4,408	8,777
195.59	4,045	6,623	196.11	4,415	8,822
195.60	4,052	6,664	196.12	4,423	8,866
195.61	4,059	6,704	196.13	4,430	8,910
195.62	4,066	6,745	196.14	4,438	8,954
195.63	4,073	6,786	196.15	4,446	8,999
195.64	4,080	6,826	196.16	4,453	9,043
195.65	4,087	6,867	196.17	4,461	9,088
195.66	4,094	6,908	196.18	4,468	9,133
195.67	4,101	6,949	196.19	4,476	9,177
195.68	4,108	6,990	196.20	4,483	9,222
195.69	4,115	7,031	196.21	4,491	9,267
195.70	4,122	7,072	196.22	4,499	9,312
195.71	4,129	7,114	196.23	4,506	9,357
195.72	4,136	7,155	196.24	4,514	9,402
195.73	4,143	7,196	196.25	4,521	9,447
195.74	4,150	7,238	196.26	4,529	9,492
195.75	4,157	7,279	196.27	4,536	9,538
195.76	4,164	7,321	196.28	4,544	9,583
195.77	4,171	7,363	196.29	4,552	9,629
195.78	4,178	7,404	196.30	4,559	9,674
195.79	4,185	7,446	196.31	4,567	9,720
195.80	4,192	7,488	196.32	4,574	9,765
195.81	4,199	7,530	196.33	4,582	9,811
195.82	4,206	7,572	196.34	4,589	9,857
195.83	4,213	7,614	196.35	4,597	9,903
195.84	4,220	7,656	196.36	4,605	9,949
195.85	4,227	7,699	196.37	4,612	9,995
195.86	4,234	7,741	196.38	4,620	10,041
195.87	4,241	7,783	196.39	4,627	10,088
195.88	4,248	7,826	196.40	4,635	10,134
195.89	4,255	7,868	196.41	4,642	10,180

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.42	4,650	10,227	196.94	5,044	12,747
196.43	4,658	10,273	196.95	5,051	12,797
196.44	4,665	10,320	196.96	5,059	12,848
196.45	4,673	10,367	196.97	5,066	12,899
196.46	4,680	10,413	196.98	5,074	12,949
196.47	4,688	10,460	196.99	5,081	13,000
196.48	4,695	10,507	197.00	5,089	13,051
196.49	4,703	10,554	197.01	5,097	13,102
196.50	4,711	10,601	197.02	5,105	13,153
196.51	4,718	10,648	197.03	5,113	13,204
196.52	4,726	10,695	197.04	5,121	13,255
196.53	4,733	10,743	197.05	5,130	13,306
196.54	4,741	10,790	197.06	5,138	13,358
196.55	4,748	10,838	197.07	5,146	13,409
196.56	4,756	10,885	197.08	5,154	13,461
196.57	4,763	10,933	197.09	5,162	13,512
196.58	4,771	10,980	197.10	5,170	13,564
196.59	4,779	11,028	197.11	5,178	13,616
196.60	4,786	11,076	197.12	5,186	13,668
196.61	4,794	11,124	197.13	5,195	13,719
196.62	4,801	11,172	197.14	5,203	13,771
196.63	4,809	11,220	197.15	5,211	13,823
196.64	4,816	11,268	197.16	5,219	13,876
196.65	4,824	11,316	197.17	5,227	13,928
196.66	4,832	11,364	197.18	5,235	13,980
196.67	4,839	11,413	197.19	5,243	14,033
196.68	4,847	11,461	197.20	5,251	14,085
196.69	4,854	11,510	197.21	5,260	14,138
196.70	4,862	11,558	197.22	5,268	14,190
196.71	4,869	11,607	197.23	5,276	14,243
196.72	4,877	11,656	197.24	5,284	14,296
196.73	4,885	11,705	197.25	5,292	14,349
196.74	4,892	11,753	197.26	5,300	14,402
196.75	4,900	11,802	197.27	5,308	14,455
196.76	4,907	11,851	197.28	5,316	14,508
196.77	4,915	11,901	197.29	5,324	14,561
196.78	4,922	11,950	197.30	5,333	14,614
196.79	4,930	11,999	197.31	5,341	14,668
196.80	4,938	12,048	197.32	5,349	14,721
196.81	4,945	12,098	197.33	5,357	14,775
196.82	4,953	12,147	197.34	5,365	14,828
196.83	4,960	12,197	197.35	5,373	14,882
196.84	4,968	12,246	197.36	5,381	14,936
196.85	4,975	12,296	197.37	5,389	14,990
196.86	4,983	12,346	197.38	5,398	15,043
196.87	4,991	12,396	197.39	5,406	15,097
196.88	4,998	12,446	197.40	5,414	15,152
196.89	5,006	12,496	197.41	5,422	15,206
196.90	5,013	12,546	197.42	5,430	15,260
196.91	5,021	12,596	197.43	5,438	15,314
196.92	5,028	12,646	197.44	5,446	15,369
196.93	5,036	12,697	197.45	5,454	15,423

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.46	5,463	15,478
197.47	5,471	15,533
197.48	5,479	15,587
197.49	5,487	15,642
197.50	5,495	15,697
197.51	5,503	15,752
197.52	5,511	15,807
197.53	5,519	15,862
197.54	5,527	15,917
197.55	5,536	15,973
197.56	5,544	16,028
197.57	5,552	16,084
197.58	5,560	16,139
197.59	5,568	16,195
197.60	5,576	16,251
197.61	5,584	16,306
197.62	5,592	16,362
197.63	5,601	16,418
197.64	5,609	16,474
197.65	5,617	16,530
197.66	5,625	16,587
197.67	5,633	16,643
197.68	5,641	16,699
197.69	5,649	16,756
197.70	5,657	16,812
197.71	5,666	16,869
197.72	5,674	16,926
197.73	5,682	16,982
197.74	5,690	17,039
197.75	5,698	17,096
197.76	5,706	17,153
197.77	5,714	17,210
197.78	5,722	17,267
197.79	5,730	17,325
197.80	5,739	17,382
197.81	5,747	17,439
197.82	5,755	17,497
197.83	5,763	17,555
197.84	5,771	17,612
197.85	5,779	17,670
197.86	5,787	17,728
197.87	5,795	17,786
197.88	5,804	17,844
197.89	5,812	17,902
197.90	5,820	17,960
197.91	5,828	18,018
197.92	5,836	18,077
197.93	5,844	18,135
197.94	5,852	18,193
197.95	5,860	18,252
197.96	5,869	18,311
197.97	5,877	18,369
197.98	5,885	18,428
197.99	5,893	18,487
198.00	**5,901**	**18,546**

Summary for Pond B-37B: Basin #37B

Inflow Area = 2.179 ac, 53.42% Impervious, Inflow Depth = 2.19" for Current 2 yr event
Inflow = 4.76 cfs @ 12.17 hrs, Volume= 0.399 af
Outflow = 0.19 cfs @ 14.98 hrs, Volume= 0.283 af, Atten= 96%, Lag= 168.5 min
Primary = 0.19 cfs @ 14.98 hrs, Volume= 0.283 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 196.24' @ 14.98 hrs Surf.Area= 6,064 sf Storage= 12,184 cf

Plug-Flow detention time= 660.9 min calculated for 0.283 af (71% of inflow)
Center-of-Mass det. time= 560.7 min (1,346.6 - 785.9)

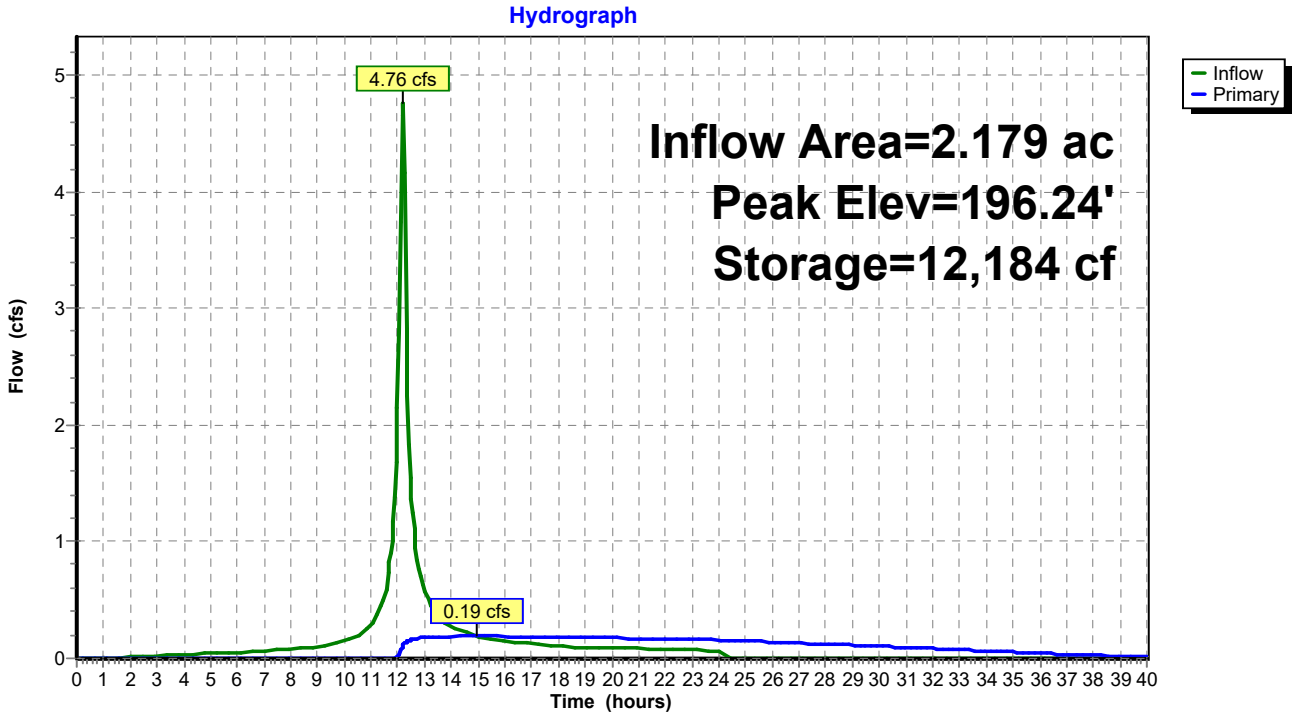
Volume	Invert	Avail.Storage	Storage Description
#1	193.30'	24,651 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.30	0	0	0
194.00	3,709	1,298	1,298
195.00	4,724	4,217	5,515
196.00	5,796	5,260	10,775
197.00	6,924	6,360	17,135
198.00	8,108	7,516	24,651

Device	Routing	Invert	Outlet Devices
#1	Primary	192.65'	**18.0" Round Culvert** L= 265.0' Ke= 0.500 Inlet / Outlet Invert= 192.65' / 191.33' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.81'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	196.63'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.19 cfs @ 14.98 hrs HW=196.24' (Free Discharge)
- **1=Culvert** (Passes 0.19 cfs of 10.39 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.54 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-37B: Basin #37B



Stage-Discharge for Pond B-37B: Basin #37B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.01
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.01
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.01
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.01
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.02
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.02
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.02
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.03
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.03
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.03
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.04
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.04
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.05
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.05
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.05
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.05
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.06
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.06
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.06
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.06
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.06
193.52	0.00	194.04	0.00	194.56	0.00	195.08	0.07
193.53	0.00	194.05	0.00	194.57	0.00	195.09	0.07
193.54	0.00	194.06	0.00	194.58	0.00	195.10	0.07
193.55	0.00	194.07	0.00	194.59	0.00	195.11	0.07
193.56	0.00	194.08	0.00	194.60	0.00	195.12	0.07
193.57	0.00	194.09	0.00	194.61	0.00	195.13	0.08
193.58	0.00	194.10	0.00	194.62	0.00	195.14	0.08
193.59	0.00	194.11	0.00	194.63	0.00	195.15	0.08
193.60	0.00	194.12	0.00	194.64	0.00	195.16	0.08
193.61	0.00	194.13	0.00	194.65	0.00	195.17	0.08
193.62	0.00	194.14	0.00	194.66	0.00	195.18	0.08
193.63	0.00	194.15	0.00	194.67	0.00	195.19	0.09
193.64	0.00	194.16	0.00	194.68	0.00	195.20	0.09
193.65	0.00	194.17	0.00	194.69	0.00	195.21	0.09
193.66	0.00	194.18	0.00	194.70	0.00	195.22	0.09
193.67	0.00	194.19	0.00	194.71	0.00	195.23	0.09
193.68	0.00	194.20	0.00	194.72	0.00	195.24	0.09
193.69	0.00	194.21	0.00	194.73	0.00	195.25	0.10
193.70	0.00	194.22	0.00	194.74	0.00	195.26	0.10
193.71	0.00	194.23	0.00	194.75	0.00	195.27	0.10
193.72	0.00	194.24	0.00	194.76	0.00	195.28	0.10
193.73	0.00	194.25	0.00	194.77	0.00	195.29	0.10
193.74	0.00	194.26	0.00	194.78	0.00	195.30	0.10
193.75	0.00	194.27	0.00	194.79	0.00	195.31	0.10
193.76	0.00	194.28	0.00	194.80	0.00	195.32	0.10
193.77	0.00	194.29	0.00	194.81	0.00	195.33	0.11
193.78	0.00	194.30	0.00	194.82	0.00	195.34	0.11
193.79	0.00	194.31	0.00	194.83	0.00	195.35	0.11
193.80	0.00	194.32	0.00	194.84	0.00	195.36	0.11
193.81	0.00	194.33	0.00	194.85	0.00	195.37	0.11

Stage-Discharge for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.38	0.11	195.90	0.16	196.42	0.20	196.94	2.46
195.39	0.11	195.91	0.16	196.43	0.20	196.95	2.56
195.40	0.11	195.92	0.16	196.44	0.20	196.96	2.67
195.41	0.12	195.93	0.17	196.45	0.20	196.97	2.78
195.42	0.12	195.94	0.17	196.46	0.20	196.98	2.90
195.43	0.12	195.95	0.17	196.47	0.20	196.99	3.01
195.44	0.12	195.96	0.17	196.48	0.21	197.00	3.13
195.45	0.12	195.97	0.17	196.49	0.21	197.01	3.24
195.46	0.12	195.98	0.17	196.50	0.21	197.02	3.36
195.47	0.12	195.99	0.17	196.51	0.21	197.03	3.48
195.48	0.12	196.00	0.17	196.52	0.21	197.04	3.60
195.49	0.12	196.01	0.17	196.53	0.21	197.05	3.73
195.50	0.13	196.02	0.17	196.54	0.21	197.06	3.85
195.51	0.13	196.03	0.17	196.55	0.21	197.07	3.97
195.52	0.13	196.04	0.17	196.56	0.21	197.08	4.10
195.53	0.13	196.05	0.17	196.57	0.21	197.09	4.23
195.54	0.13	196.06	0.18	196.58	0.21	197.10	4.36
195.55	0.13	196.07	0.18	196.59	0.21	197.11	4.49
195.56	0.13	196.08	0.18	196.60	0.21	197.12	4.62
195.57	0.13	196.09	0.18	196.61	0.21	197.13	4.75
195.58	0.13	196.10	0.18	196.62	0.21	197.14	4.89
195.59	0.13	196.11	0.18	196.63	0.22	197.15	5.02
195.60	0.14	196.12	0.18	196.64	0.23	197.16	5.16
195.61	0.14	196.13	0.18	196.65	0.25	197.17	5.30
195.62	0.14	196.14	0.18	196.66	0.28	197.18	5.44
195.63	0.14	196.15	0.18	196.67	0.32	197.19	5.58
195.64	0.14	196.16	0.18	196.68	0.36	197.20	5.72
195.65	0.14	196.17	0.18	196.69	0.41	197.21	5.86
195.66	0.14	196.18	0.18	196.70	0.46	197.22	6.00
195.67	0.14	196.19	0.19	196.71	0.51	197.23	6.15
195.68	0.14	196.20	0.19	196.72	0.57	197.24	6.29
195.69	0.14	196.21	0.19	196.73	0.63	197.25	6.44
195.70	0.15	196.22	0.19	196.74	0.70	197.26	6.59
195.71	0.15	196.23	0.19	196.75	0.76	197.27	6.73
195.72	0.15	196.24	0.19	196.76	0.83	197.28	6.88
195.73	0.15	196.25	0.19	196.77	0.90	197.29	7.03
195.74	0.15	196.26	0.19	196.78	0.98	197.30	7.19
195.75	0.15	196.27	0.19	196.79	1.06	197.31	7.34
195.76	0.15	196.28	0.19	196.80	1.13	197.32	7.49
195.77	0.15	196.29	0.19	196.81	1.22	197.33	7.65
195.78	0.15	196.30	0.19	196.82	1.30	197.34	7.80
195.79	0.15	196.31	0.19	196.83	1.39	197.35	7.96
195.80	0.15	196.32	0.19	196.84	1.47	197.36	8.12
195.81	0.16	196.33	0.20	196.85	1.56	197.37	8.28
195.82	0.16	196.34	0.20	196.86	1.66	197.38	8.43
195.83	0.16	196.35	0.20	196.87	1.75	197.39	8.60
195.84	0.16	196.36	0.20	196.88	1.84	197.40	8.76
195.85	0.16	196.37	0.20	196.89	1.94	197.41	8.92
195.86	0.16	196.38	0.20	196.90	2.04	197.42	9.08
195.87	0.16	196.39	0.20	196.91	2.14	197.43	9.25
195.88	0.16	196.40	0.20	196.92	2.25	197.44	9.41
195.89	0.16	196.41	0.20	196.93	2.35	197.45	9.58

Stage-Discharge for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Primary (cfs)
197.46	9.74
197.47	9.91
197.48	10.08
197.49	10.25
197.50	10.42
197.51	10.59
197.52	10.76
197.53	10.93
197.54	11.10
197.55	11.28
197.56	11.45
197.57	11.63
197.58	11.80
197.59	11.98
197.60	12.16
197.61	12.31
197.62	12.32
197.63	12.33
197.64	12.35
197.65	12.36
197.66	12.37
197.67	12.38
197.68	12.40
197.69	12.41
197.70	12.42
197.71	12.44
197.72	12.45
197.73	12.46
197.74	12.47
197.75	12.49
197.76	12.50
197.77	12.51
197.78	12.52
197.79	12.54
197.80	12.55
197.81	12.56
197.82	12.57
197.83	12.59
197.84	12.60
197.85	12.61
197.86	12.63
197.87	12.64
197.88	12.65
197.89	12.66
197.90	12.68
197.91	12.69
197.92	12.70
197.93	12.71
197.94	12.73
197.95	12.74
197.96	12.87
197.97	13.09
197.98	13.38
197.99	13.73
198.00	**14.11**

Stage-Area-Storage for Pond B-37B: Basin #37B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.30	0	0	193.82	2,755	716
193.31	53	0	193.83	2,808	744
193.32	106	1	193.84	2,861	773
193.33	159	2	193.85	2,914	801
193.34	212	4	193.86	2,967	831
193.35	265	7	193.87	3,020	861
193.36	318	10	193.88	3,073	891
193.37	371	13	193.89	3,126	922
193.38	424	17	193.90	3,179	954
193.39	477	21	193.91	3,232	986
193.40	530	26	193.92	3,285	1,018
193.41	583	32	193.93	3,338	1,052
193.42	636	38	193.94	3,391	1,085
193.43	689	45	193.95	3,444	1,119
193.44	742	52	193.96	3,497	1,154
193.45	795	60	193.97	3,550	1,189
193.46	848	68	193.98	3,603	1,225
193.47	901	77	193.99	3,656	1,261
193.48	954	86	194.00	3,709	1,298
193.49	1,007	96	194.01	3,719	1,335
193.50	1,060	106	194.02	3,729	1,373
193.51	1,113	117	194.03	3,739	1,410
193.52	1,166	128	194.04	3,750	1,447
193.53	1,219	140	194.05	3,760	1,485
193.54	1,272	153	194.06	3,770	1,523
193.55	1,325	166	194.07	3,780	1,560
193.56	1,378	179	194.08	3,790	1,598
193.57	1,431	193	194.09	3,800	1,636
193.58	1,484	208	194.10	3,811	1,674
193.59	1,537	223	194.11	3,821	1,712
193.60	1,590	238	194.12	3,831	1,751
193.61	1,643	255	194.13	3,841	1,789
193.62	1,696	271	194.14	3,851	1,827
193.63	1,749	289	194.15	3,861	1,866
193.64	1,802	306	194.16	3,871	1,905
193.65	1,855	325	194.17	3,882	1,943
193.66	1,907	343	194.18	3,892	1,982
193.67	1,960	363	194.19	3,902	2,021
193.68	2,013	383	194.20	3,912	2,060
193.69	2,066	403	194.21	3,922	2,099
193.70	2,119	424	194.22	3,932	2,139
193.71	2,172	445	194.23	3,942	2,178
193.72	2,225	467	194.24	3,953	2,218
193.73	2,278	490	194.25	3,963	2,257
193.74	2,331	513	194.26	3,973	2,297
193.75	2,384	536	194.27	3,983	2,337
193.76	2,437	561	194.28	3,993	2,376
193.77	2,490	585	194.29	4,003	2,416
193.78	2,543	610	194.30	4,014	2,457
193.79	2,596	636	194.31	4,024	2,497
193.80	2,649	662	194.32	4,034	2,537
193.81	2,702	689	194.33	4,044	2,577

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.34	4,054	2,618
194.35	4,064	2,658
194.36	4,074	2,699
194.37	4,085	2,740
194.38	4,095	2,781
194.39	4,105	2,822
194.40	4,115	2,863
194.41	4,125	2,904
194.42	4,135	2,945
194.43	4,145	2,987
194.44	4,156	3,028
194.45	4,166	3,070
194.46	4,176	3,112
194.47	4,186	3,153
194.48	4,196	3,195
194.49	4,206	3,237
194.50	4,217	3,280
194.51	4,227	3,322
194.52	4,237	3,364
194.53	4,247	3,406
194.54	4,257	3,449
194.55	4,267	3,492
194.56	4,277	3,534
194.57	4,288	3,577
194.58	4,298	3,620
194.59	4,308	3,663
194.60	4,318	3,706
194.61	4,328	3,749
194.62	4,338	3,793
194.63	4,348	3,836
194.64	4,359	3,880
194.65	4,369	3,923
194.66	4,379	3,967
194.67	4,389	4,011
194.68	4,399	4,055
194.69	4,409	4,099
194.70	4,420	4,143
194.71	4,430	4,187
194.72	4,440	4,232
194.73	4,450	4,276
194.74	4,460	4,321
194.75	4,470	4,365
194.76	4,480	4,410
194.77	4,491	4,455
194.78	4,501	4,500
194.79	4,511	4,545
194.80	4,521	4,590
194.81	4,531	4,635
194.82	4,541	4,681
194.83	4,551	4,726
194.84	4,562	4,772
194.85	4,572	4,817
194.86	4,582	4,863
194.87	4,592	4,909
194.88	4,602	4,955
194.89	4,612	5,001
194.90	4,623	5,047
194.91	4,633	5,094
194.92	4,643	5,140
194.93	4,653	5,186
194.94	4,663	5,233
194.95	4,673	5,280
194.96	4,683	5,327
194.97	4,694	5,373
194.98	4,704	5,420
194.99	4,714	5,467
195.00	4,724	5,515
195.01	4,735	5,562
195.02	4,745	5,609
195.03	4,756	5,657
195.04	4,767	5,704
195.05	4,778	5,752
195.06	4,788	5,800
195.07	4,799	5,848
195.08	4,810	5,896
195.09	4,820	5,944
195.10	4,831	5,992
195.11	4,842	6,041
195.12	4,853	6,089
195.13	4,863	6,138
195.14	4,874	6,187
195.15	4,885	6,235
195.16	4,896	6,284
195.17	4,906	6,333
195.18	4,917	6,382
195.19	4,928	6,432
195.20	4,938	6,481
195.21	4,949	6,530
195.22	4,960	6,580
195.23	4,971	6,630
195.24	4,981	6,679
195.25	4,992	6,729
195.26	5,003	6,779
195.27	5,013	6,829
195.28	5,024	6,879
195.29	5,035	6,930
195.30	5,046	6,980
195.31	5,056	7,031
195.32	5,067	7,081
195.33	5,078	7,132
195.34	5,088	7,183
195.35	5,099	7,234
195.36	5,110	7,285
195.37	5,121	7,336

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.38	5,131	7,387	195.90	5,689	10,200
195.39	5,142	7,439	195.91	5,700	10,257
195.40	5,153	7,490	195.92	5,710	10,314
195.41	5,164	7,542	195.93	5,721	10,372
195.42	5,174	7,593	195.94	5,732	10,429
195.43	5,185	7,645	195.95	5,742	10,486
195.44	5,196	7,697	195.96	5,753	10,544
195.45	5,206	7,749	195.97	5,764	10,601
195.46	5,217	7,801	195.98	5,775	10,659
195.47	5,228	7,853	195.99	5,785	10,717
195.48	5,239	7,906	196.00	5,796	10,775
195.49	5,249	7,958	196.01	5,807	10,833
195.50	5,260	8,011	196.02	5,819	10,891
195.51	5,271	8,063	196.03	5,830	10,949
195.52	5,281	8,116	196.04	5,841	11,007
195.53	5,292	8,169	196.05	5,852	11,066
195.54	5,303	8,222	196.06	5,864	11,124
195.55	5,314	8,275	196.07	5,875	11,183
195.56	5,324	8,328	196.08	5,886	11,242
195.57	5,335	8,381	196.09	5,898	11,301
195.58	5,346	8,435	196.10	5,909	11,360
195.59	5,356	8,488	196.11	5,920	11,419
195.60	5,367	8,542	196.12	5,931	11,478
195.61	5,378	8,596	196.13	5,943	11,538
195.62	5,389	8,650	196.14	5,954	11,597
195.63	5,399	8,704	196.15	5,965	11,657
195.64	5,410	8,758	196.16	5,976	11,716
195.65	5,421	8,812	196.17	5,988	11,776
195.66	5,432	8,866	196.18	5,999	11,836
195.67	5,442	8,920	196.19	6,010	11,896
195.68	5,453	8,975	196.20	6,022	11,956
195.69	5,464	9,029	196.21	6,033	12,017
195.70	5,474	9,084	196.22	6,044	12,077
195.71	5,485	9,139	196.23	6,055	12,138
195.72	5,496	9,194	196.24	6,067	12,198
195.73	5,507	9,249	196.25	6,078	12,259
195.74	5,517	9,304	196.26	6,089	12,320
195.75	5,528	9,359	196.27	6,101	12,381
195.76	5,539	9,414	196.28	6,112	12,442
195.77	5,549	9,470	196.29	6,123	12,503
195.78	5,560	9,525	196.30	6,134	12,564
195.79	5,571	9,581	196.31	6,146	12,626
195.80	5,582	9,637	196.32	6,157	12,687
195.81	5,592	9,693	196.33	6,168	12,749
195.82	5,603	9,749	196.34	6,180	12,810
195.83	5,614	9,805	196.35	6,191	12,872
195.84	5,624	9,861	196.36	6,202	12,934
195.85	5,635	9,917	196.37	6,213	12,996
195.86	5,646	9,974	196.38	6,225	13,059
195.87	5,657	10,030	196.39	6,236	13,121
195.88	5,667	10,087	196.40	6,247	13,183
195.89	5,678	10,144	196.41	6,258	13,246

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.42	6,270	13,308
196.43	6,281	13,371
196.44	6,292	13,434
196.45	6,304	13,497
196.46	6,315	13,560
196.47	6,326	13,623
196.48	6,337	13,687
196.49	6,349	13,750
196.50	6,360	13,814
196.51	6,371	13,877
196.52	6,383	13,941
196.53	6,394	14,005
196.54	6,405	14,069
196.55	6,416	14,133
196.56	6,428	14,197
196.57	6,439	14,262
196.58	6,450	14,326
196.59	6,462	14,391
196.60	6,473	14,455
196.61	6,484	14,520
196.62	6,495	14,585
196.63	6,507	14,650
196.64	6,518	14,715
196.65	6,529	14,780
196.66	6,540	14,846
196.67	6,552	14,911
196.68	6,563	14,977
196.69	6,574	15,042
196.70	6,586	15,108
196.71	6,597	15,174
196.72	6,608	15,240
196.73	6,619	15,306
196.74	6,631	15,373
196.75	6,642	15,439
196.76	6,653	15,505
196.77	6,665	15,572
196.78	6,676	15,639
196.79	6,687	15,705
196.80	6,698	15,772
196.81	6,710	15,839
196.82	6,721	15,907
196.83	6,732	15,974
196.84	6,744	16,041
196.85	6,755	16,109
196.86	6,766	16,176
196.87	6,777	16,244
196.88	6,789	16,312
196.89	6,800	16,380
196.90	6,811	16,448
196.91	6,822	16,516
196.92	6,834	16,584
196.93	6,845	16,653
196.94	6,856	16,721
196.95	6,868	16,790
196.96	6,879	16,859
196.97	6,890	16,927
196.98	6,901	16,996
196.99	6,913	17,065
197.00	6,924	17,135
197.01	6,936	17,204
197.02	6,948	17,273
197.03	6,960	17,343
197.04	6,971	17,413
197.05	6,983	17,482
197.06	6,995	17,552
197.07	7,007	17,622
197.08	7,019	17,692
197.09	7,031	17,763
197.10	7,042	17,833
197.11	7,054	17,903
197.12	7,066	17,974
197.13	7,078	18,045
197.14	7,090	18,116
197.15	7,102	18,187
197.16	7,113	18,258
197.17	7,125	18,329
197.18	7,137	18,400
197.19	7,149	18,472
197.20	7,161	18,543
197.21	7,173	18,615
197.22	7,184	18,687
197.23	7,196	18,758
197.24	7,208	18,831
197.25	7,220	18,903
197.26	7,232	18,975
197.27	7,244	19,047
197.28	7,256	19,120
197.29	7,267	19,192
197.30	7,279	19,265
197.31	7,291	19,338
197.32	7,303	19,411
197.33	7,315	19,484
197.34	7,327	19,557
197.35	7,338	19,631
197.36	7,350	19,704
197.37	7,362	19,778
197.38	7,374	19,851
197.39	7,386	19,925
197.40	7,398	19,999
197.41	7,409	20,073
197.42	7,421	20,147
197.43	7,433	20,221
197.44	7,445	20,296
197.45	7,457	20,370

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.46	7,469	20,445
197.47	7,480	20,520
197.48	7,492	20,595
197.49	7,504	20,670
197.50	7,516	20,745
197.51	7,528	20,820
197.52	7,540	20,895
197.53	7,552	20,971
197.54	7,563	21,046
197.55	7,575	21,122
197.56	7,587	21,198
197.57	7,599	21,274
197.58	7,611	21,350
197.59	7,623	21,426
197.60	7,634	21,502
197.61	7,646	21,579
197.62	7,658	21,655
197.63	7,670	21,732
197.64	7,682	21,808
197.65	7,694	21,885
197.66	7,705	21,962
197.67	7,717	22,039
197.68	7,729	22,117
197.69	7,741	22,194
197.70	7,753	22,272
197.71	7,765	22,349
197.72	7,776	22,427
197.73	7,788	22,505
197.74	7,800	22,583
197.75	7,812	22,661
197.76	7,824	22,739
197.77	7,836	22,817
197.78	7,848	22,896
197.79	7,859	22,974
197.80	7,871	23,053
197.81	7,883	23,132
197.82	7,895	23,210
197.83	7,907	23,289
197.84	7,919	23,369
197.85	7,930	23,448
197.86	7,942	23,527
197.87	7,954	23,607
197.88	7,966	23,686
197.89	7,978	23,766
197.90	7,990	23,846
197.91	8,001	23,926
197.92	8,013	24,006
197.93	8,025	24,086
197.94	8,037	24,166
197.95	8,049	24,247
197.96	8,061	24,327
197.97	8,072	24,408
197.98	8,084	24,489
197.99	8,096	24,570
198.00	**8,108**	**24,651**

Summary for Pond B-38: Basin #38

Inflow Area = 2.114 ac, 34.96% Impervious, Inflow Depth = 1.83" for Current 2 yr event
Inflow = 3.90 cfs @ 12.18 hrs, Volume= 0.322 af
Outflow = 0.16 cfs @ 15.03 hrs, Volume= 0.240 af, Atten= 96%, Lag= 171.5 min
Primary = 0.16 cfs @ 15.03 hrs, Volume= 0.240 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 206.35' @ 15.03 hrs Surf.Area= 6,294 sf Storage= 9,482 cf

Plug-Flow detention time= 631.5 min calculated for 0.239 af (74% of inflow)
Center-of-Mass det. time= 535.6 min (1,338.9 - 803.2)

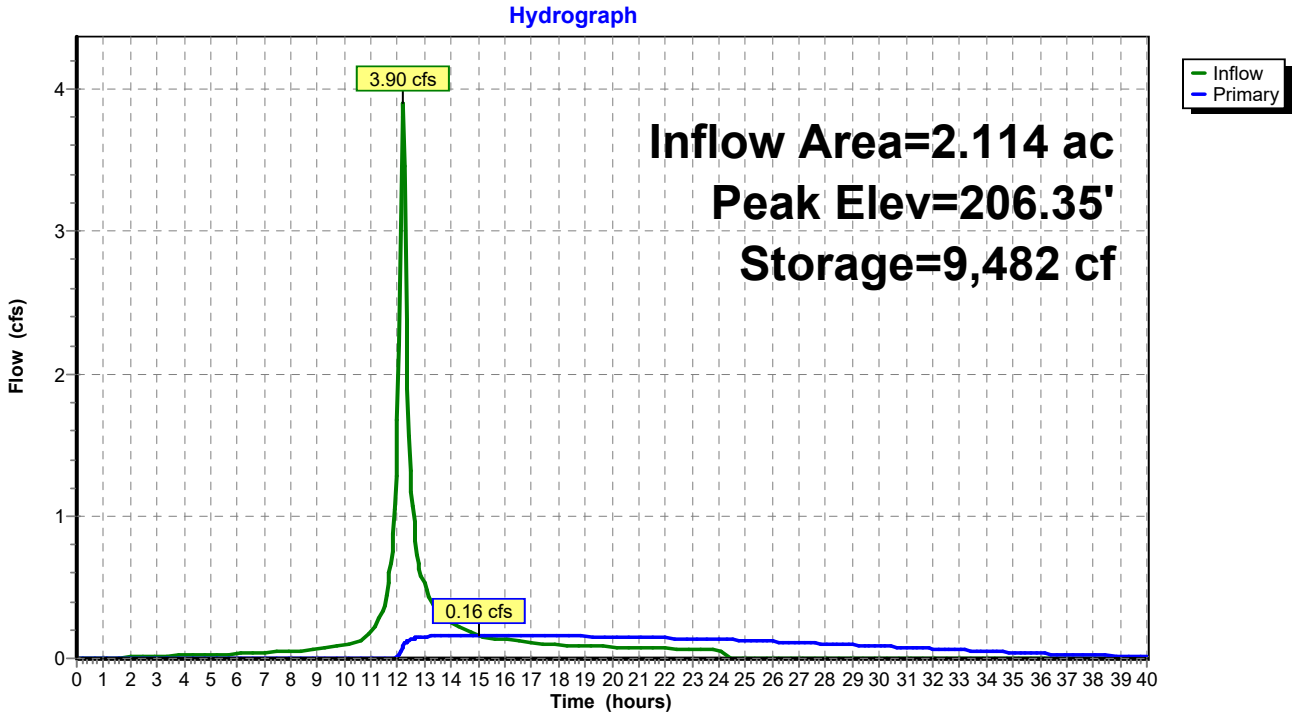
Volume	Invert	Avail.Storage	Storage Description
#1	204.30'	29,525 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
204.30	0	0	0
205.00	5,096	1,784	1,784
206.00	5,966	5,531	7,315
207.00	6,893	6,430	13,744
208.00	7,876	7,385	21,129
209.00	8,916	8,396	29,525

Device	Routing	Invert	Outlet Devices
#1	Primary	204.30'	**18.0" Round Culvert** L= 33.0' Ke= 0.500 Inlet / Outlet Invert= 204.30' / 204.13' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	205.26'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	206.69'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	208.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.16 cfs @ 15.03 hrs HW=206.35' (Free Discharge)
- **1=Culvert** (Passes 0.16 cfs of 8.32 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.16 cfs @ 4.79 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-38: Basin #38



Stage-Discharge for Pond B-38: Basin #38

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
204.30	0.00	204.82	0.00	205.34	0.01	205.86	0.12
204.31	0.00	204.83	0.00	205.35	0.01	205.87	0.12
204.32	0.00	204.84	0.00	205.36	0.02	205.88	0.12
204.33	0.00	204.85	0.00	205.37	0.02	205.89	0.12
204.34	0.00	204.86	0.00	205.38	0.02	205.90	0.12
204.35	0.00	204.87	0.00	205.39	0.03	205.91	0.12
204.36	0.00	204.88	0.00	205.40	0.03	205.92	0.12
204.37	0.00	204.89	0.00	205.41	0.03	205.93	0.12
204.38	0.00	204.90	0.00	205.42	0.04	205.94	0.12
204.39	0.00	204.91	0.00	205.43	0.04	205.95	0.13
204.40	0.00	204.92	0.00	205.44	0.05	205.96	0.13
204.41	0.00	204.93	0.00	205.45	0.05	205.97	0.13
204.42	0.00	204.94	0.00	205.46	0.05	205.98	0.13
204.43	0.00	204.95	0.00	205.47	0.05	205.99	0.13
204.44	0.00	204.96	0.00	205.48	0.06	206.00	0.13
204.45	0.00	204.97	0.00	205.49	0.06	206.01	0.13
204.46	0.00	204.98	0.00	205.50	0.06	206.02	0.13
204.47	0.00	204.99	0.00	205.51	0.06	206.03	0.13
204.48	0.00	205.00	0.00	205.52	0.06	206.04	0.13
204.49	0.00	205.01	0.00	205.53	0.07	206.05	0.14
204.50	0.00	205.02	0.00	205.54	0.07	206.06	0.14
204.51	0.00	205.03	0.00	205.55	0.07	206.07	0.14
204.52	0.00	205.04	0.00	205.56	0.07	206.08	0.14
204.53	0.00	205.05	0.00	205.57	0.07	206.09	0.14
204.54	0.00	205.06	0.00	205.58	0.08	206.10	0.14
204.55	0.00	205.07	0.00	205.59	0.08	206.11	0.14
204.56	0.00	205.08	0.00	205.60	0.08	206.12	0.14
204.57	0.00	205.09	0.00	205.61	0.08	206.13	0.14
204.58	0.00	205.10	0.00	205.62	0.08	206.14	0.14
204.59	0.00	205.11	0.00	205.63	0.08	206.15	0.15
204.60	0.00	205.12	0.00	205.64	0.09	206.16	0.15
204.61	0.00	205.13	0.00	205.65	0.09	206.17	0.15
204.62	0.00	205.14	0.00	205.66	0.09	206.18	0.15
204.63	0.00	205.15	0.00	205.67	0.09	206.19	0.15
204.64	0.00	205.16	0.00	205.68	0.09	206.20	0.15
204.65	0.00	205.17	0.00	205.69	0.09	206.21	0.15
204.66	0.00	205.18	0.00	205.70	0.10	206.22	0.15
204.67	0.00	205.19	0.00	205.71	0.10	206.23	0.15
204.68	0.00	205.20	0.00	205.72	0.10	206.24	0.15
204.69	0.00	205.21	0.00	205.73	0.10	206.25	0.15
204.70	0.00	205.22	0.00	205.74	0.10	206.26	0.16
204.71	0.00	205.23	0.00	205.75	0.10	206.27	0.16
204.72	0.00	205.24	0.00	205.76	0.10	206.28	0.16
204.73	0.00	205.25	0.00	205.77	0.10	206.29	0.16
204.74	0.00	205.26	0.00	205.78	0.11	206.30	0.16
204.75	0.00	205.27	0.00	205.79	0.11	206.31	0.16
204.76	0.00	205.28	0.00	205.80	0.11	206.32	0.16
204.77	0.00	205.29	0.00	205.81	0.11	206.33	0.16
204.78	0.00	205.30	0.00	205.82	0.11	206.34	0.16
204.79	0.00	205.31	0.00	205.83	0.11	206.35	0.16
204.80	0.00	205.32	0.01	205.84	0.11	206.36	0.16
204.81	0.00	205.33	0.01	205.85	0.11	206.37	0.16

Stage-Discharge for Pond B-38: Basin #38 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
206.38	0.17	206.90	1.45	207.42	8.10	207.94	14.46
206.39	0.17	206.91	1.54	207.43	8.25	207.95	14.49
206.40	0.17	206.92	1.63	207.44	8.41	207.96	14.51
206.41	0.17	206.93	1.72	207.45	8.57	207.97	14.54
206.42	0.17	206.94	1.82	207.46	8.74	207.98	14.56
206.43	0.17	206.95	1.92	207.47	8.90	207.99	14.59
206.44	0.17	206.96	2.02	207.48	9.06	208.00	14.61
206.45	0.17	206.97	2.12	207.49	9.22	208.01	14.64
206.46	0.17	206.98	2.22	207.50	9.39	208.02	14.66
206.47	0.17	206.99	2.33	207.51	9.55	208.03	14.69
206.48	0.17	207.00	2.43	207.52	9.72	208.04	14.71
206.49	0.17	207.01	2.54	207.53	9.89	208.05	14.74
206.50	0.17	207.02	2.65	207.54	10.06	208.06	14.76
206.51	0.18	207.03	2.76	207.55	10.23	208.07	14.79
206.52	0.18	207.04	2.87	207.56	10.40	208.08	14.81
206.53	0.18	207.05	2.99	207.57	10.57	208.09	14.84
206.54	0.18	207.06	3.10	207.58	10.74	208.10	14.86
206.55	0.18	207.07	3.22	207.59	10.91	208.11	14.88
206.56	0.18	207.08	3.34	207.60	11.08	208.12	14.91
206.57	0.18	207.09	3.46	207.61	11.26	208.13	14.93
206.58	0.18	207.10	3.58	207.62	11.43	208.14	14.96
206.59	0.18	207.11	3.70	207.63	11.61	208.15	14.98
206.60	0.18	207.12	3.83	207.64	11.78	208.16	15.01
206.61	0.18	207.13	3.95	207.65	11.96	208.17	15.03
206.62	0.18	207.14	4.08	207.66	12.14	208.18	15.05
206.63	0.18	207.15	4.21	207.67	12.32	208.19	15.08
206.64	0.19	207.16	4.34	207.68	12.50	208.20	15.10
206.65	0.19	207.17	4.47	207.69	12.68	208.21	15.13
206.66	0.19	207.18	4.60	207.70	12.86	208.22	15.15
206.67	0.19	207.19	4.73	207.71	13.04	208.23	15.17
206.68	0.19	207.20	4.86	207.72	13.22	208.24	15.20
206.69	0.19	207.21	5.00	207.73	13.40	208.25	15.22
206.70	0.20	207.22	5.14	207.74	13.59	208.26	15.36
206.71	0.23	207.23	5.27	207.75	13.77	208.27	15.60
206.72	0.26	207.24	5.41	207.76	13.96	208.28	15.90
206.73	0.30	207.25	5.55	207.77	14.03	208.29	16.25
206.74	0.34	207.26	5.69	207.78	14.06	208.30	16.65
206.75	0.38	207.27	5.84	207.79	14.08	208.31	17.09
206.76	0.44	207.28	5.98	207.80	14.11	208.32	17.56
206.77	0.49	207.29	6.12	207.81	14.14	208.33	18.07
206.78	0.55	207.30	6.27	207.82	14.16	208.34	18.61
206.79	0.61	207.31	6.42	207.83	14.19	208.35	19.17
206.80	0.67	207.32	6.56	207.84	14.21	208.36	19.77
206.81	0.74	207.33	6.71	207.85	14.24	208.37	20.40
206.82	0.81	207.34	6.86	207.86	14.26	208.38	21.05
206.83	0.88	207.35	7.01	207.87	14.29	208.39	21.72
206.84	0.95	207.36	7.16	207.88	14.31	208.40	22.42
206.85	1.03	207.37	7.32	207.89	14.34	208.41	23.14
206.86	1.11	207.38	7.47	207.90	14.36	208.42	23.89
206.87	1.19	207.39	7.63	207.91	14.39	208.43	24.66
206.88	1.28	207.40	7.78	207.92	14.41	208.44	25.44
206.89	1.36	207.41	7.94	207.93	14.44	208.45	26.25

Stage-Discharge for Pond B-38: Basin #38 (continued)

Elevation (feet)	Primary (cfs)
208.46	27.12
208.47	28.02
208.48	28.94
208.49	29.89
208.50	30.86
208.51	31.85
208.52	32.88
208.53	33.92
208.54	34.99
208.55	36.09
208.56	37.21
208.57	38.35
208.58	39.52
208.59	40.71
208.60	41.93
208.61	43.17
208.62	44.43
208.63	45.72
208.64	47.04
208.65	48.37
208.66	49.76
208.67	51.18
208.68	52.62
208.69	54.08
208.70	55.58
208.71	57.09
208.72	58.64
208.73	60.21
208.74	61.81
208.75	63.43
208.76	65.08
208.77	66.76
208.78	68.46
208.79	70.19
208.80	71.95
208.81	73.73
208.82	75.54
208.83	77.38
208.84	79.24
208.85	81.14
208.86	82.78
208.87	84.45
208.88	86.12
208.89	87.81
208.90	89.51
208.91	91.23
208.92	92.96
208.93	94.70
208.94	96.45
208.95	98.22
208.96	100.00
208.97	101.79
208.98	103.60
208.99	105.42
209.00	**107.25**

Stage-Area-Storage for Pond B-38: Basin #38

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.30	0	0	204.82	3,786	984
204.31	73	0	204.83	3,858	1,022
204.32	146	1	204.84	3,931	1,061
204.33	218	3	204.85	4,004	1,101
204.34	291	6	204.86	4,077	1,142
204.35	364	9	204.87	4,150	1,183
204.36	437	13	204.88	4,222	1,224
204.37	510	18	204.89	4,295	1,267
204.38	582	23	204.90	4,368	1,310
204.39	655	29	204.91	4,441	1,354
204.40	728	36	204.92	4,514	1,399
204.41	801	44	204.93	4,586	1,445
204.42	874	52	204.94	4,659	1,491
204.43	946	62	204.95	4,732	1,538
204.44	1,019	71	204.96	4,805	1,586
204.45	1,092	82	204.97	4,878	1,634
204.46	1,165	93	204.98	4,950	1,683
204.47	1,238	105	204.99	5,023	1,733
204.48	1,310	118	205.00	5,096	1,784
204.49	1,383	131	205.01	5,105	1,835
204.50	1,456	146	205.02	5,113	1,886
204.51	1,529	161	205.03	5,122	1,937
204.52	1,602	176	205.04	5,131	1,988
204.53	1,674	193	205.05	5,140	2,039
204.54	1,747	210	205.06	5,148	2,091
204.55	1,820	228	205.07	5,157	2,142
204.56	1,893	246	205.08	5,166	2,194
204.57	1,966	265	205.09	5,174	2,246
204.58	2,038	285	205.10	5,183	2,298
204.59	2,111	306	205.11	5,192	2,349
204.60	2,184	328	205.12	5,200	2,401
204.61	2,257	350	205.13	5,209	2,453
204.62	2,330	373	205.14	5,218	2,506
204.63	2,402	396	205.15	5,227	2,558
204.64	2,475	421	205.16	5,235	2,610
204.65	2,548	446	205.17	5,244	2,662
204.66	2,621	472	205.18	5,253	2,715
204.67	2,694	498	205.19	5,261	2,768
204.68	2,766	526	205.20	5,270	2,820
204.69	2,839	554	205.21	5,279	2,873
204.70	2,912	582	205.22	5,287	2,926
204.71	2,985	612	205.23	5,296	2,979
204.72	3,058	642	205.24	5,305	3,032
204.73	3,130	673	205.25	5,314	3,085
204.74	3,203	705	205.26	5,322	3,138
204.75	3,276	737	205.27	5,331	3,191
204.76	3,349	770	205.28	5,340	3,245
204.77	3,422	804	205.29	5,348	3,298
204.78	3,494	839	205.30	5,357	3,352
204.79	3,567	874	205.31	5,366	3,405
204.80	3,640	910	205.32	5,374	3,459
204.81	3,713	947	205.33	5,383	3,513

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.34	5,392	3,567	205.86	5,844	6,488
205.35	5,401	3,620	205.87	5,853	6,546
205.36	5,409	3,675	205.88	5,862	6,605
205.37	5,418	3,729	205.89	5,870	6,664
205.38	5,427	3,783	205.90	5,879	6,722
205.39	5,435	3,837	205.91	5,888	6,781
205.40	5,444	3,892	205.92	5,896	6,840
205.41	5,453	3,946	205.93	5,905	6,899
205.42	5,461	4,001	205.94	5,914	6,958
205.43	5,470	4,055	205.95	5,923	7,017
205.44	5,479	4,110	205.96	5,931	7,077
205.45	5,488	4,165	205.97	5,940	7,136
205.46	5,496	4,220	205.98	5,949	7,195
205.47	5,505	4,275	205.99	5,957	7,255
205.48	5,514	4,330	206.00	5,966	7,315
205.49	5,522	4,385	206.01	5,975	7,374
205.50	5,531	4,440	206.02	5,985	7,434
205.51	5,540	4,496	206.03	5,994	7,494
205.52	5,548	4,551	206.04	6,003	7,554
205.53	5,557	4,607	206.05	6,012	7,614
205.54	5,566	4,662	206.06	6,022	7,674
205.55	5,575	4,718	206.07	6,031	7,734
205.56	5,583	4,774	206.08	6,040	7,795
205.57	5,592	4,830	206.09	6,049	7,855
205.58	5,601	4,886	206.10	6,059	7,916
205.59	5,609	4,942	206.11	6,068	7,976
205.60	5,618	4,998	206.12	6,077	8,037
205.61	5,627	5,054	206.13	6,087	8,098
205.62	5,635	5,110	206.14	6,096	8,159
205.63	5,644	5,167	206.15	6,105	8,220
205.64	5,653	5,223	206.16	6,114	8,281
205.65	5,662	5,280	206.17	6,124	8,342
205.66	5,670	5,336	206.18	6,133	8,403
205.67	5,679	5,393	206.19	6,142	8,465
205.68	5,688	5,450	206.20	6,151	8,526
205.69	5,696	5,507	206.21	6,161	8,588
205.70	5,705	5,564	206.22	6,170	8,650
205.71	5,714	5,621	206.23	6,179	8,711
205.72	5,722	5,678	206.24	6,188	8,773
205.73	5,731	5,735	206.25	6,198	8,835
205.74	5,740	5,793	206.26	6,207	8,897
205.75	5,749	5,850	206.27	6,216	8,959
205.76	5,757	5,908	206.28	6,226	9,021
205.77	5,766	5,965	206.29	6,235	9,084
205.78	5,775	6,023	206.30	6,244	9,146
205.79	5,783	6,081	206.31	6,253	9,209
205.80	5,792	6,139	206.32	6,263	9,271
205.81	5,801	6,197	206.33	6,272	9,334
205.82	5,809	6,255	206.34	6,281	9,397
205.83	5,818	6,313	206.35	6,290	9,459
205.84	5,827	6,371	206.36	6,300	9,522
205.85	5,836	6,429	206.37	6,309	9,585

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
206.38	6,318	9,649	206.90	6,800	13,059
206.39	6,328	9,712	206.91	6,810	13,127
206.40	6,337	9,775	206.92	6,819	13,196
206.41	6,346	9,839	206.93	6,828	13,264
206.42	6,355	9,902	206.94	6,837	13,332
206.43	6,365	9,966	206.95	6,847	13,401
206.44	6,374	10,029	206.96	6,856	13,469
206.45	6,383	10,093	206.97	6,865	13,538
206.46	6,392	10,157	206.98	6,874	13,606
206.47	6,402	10,221	206.99	6,884	13,675
206.48	6,411	10,285	207.00	6,893	13,744
206.49	6,420	10,349	207.01	6,903	13,813
206.50	6,430	10,413	207.02	6,913	13,882
206.51	6,439	10,478	207.03	6,922	13,951
206.52	6,448	10,542	207.04	6,932	14,021
206.53	6,457	10,607	207.05	6,942	14,090
206.54	6,467	10,671	207.06	6,952	14,159
206.55	6,476	10,736	207.07	6,962	14,229
206.56	6,485	10,801	207.08	6,972	14,299
206.57	6,494	10,866	207.09	6,981	14,368
206.58	6,504	10,931	207.10	6,991	14,438
206.59	6,513	10,996	207.11	7,001	14,508
206.60	6,522	11,061	207.12	7,011	14,578
206.61	6,531	11,126	207.13	7,021	14,648
206.62	6,541	11,192	207.14	7,031	14,719
206.63	6,550	11,257	207.15	7,040	14,789
206.64	6,559	11,323	207.16	7,050	14,860
206.65	6,569	11,388	207.17	7,060	14,930
206.66	6,578	11,454	207.18	7,070	15,001
206.67	6,587	11,520	207.19	7,080	15,072
206.68	6,596	11,586	207.20	7,090	15,142
206.69	6,606	11,652	207.21	7,099	15,213
206.70	6,615	11,718	207.22	7,109	15,284
206.71	6,624	11,784	207.23	7,119	15,355
206.72	6,633	11,850	207.24	7,129	15,427
206.73	6,643	11,917	207.25	7,139	15,498
206.74	6,652	11,983	207.26	7,149	15,570
206.75	6,661	12,050	207.27	7,158	15,641
206.76	6,671	12,116	207.28	7,168	15,713
206.77	6,680	12,183	207.29	7,178	15,784
206.78	6,689	12,250	207.30	7,188	15,856
206.79	6,698	12,317	207.31	7,198	15,928
206.80	6,708	12,384	207.32	7,208	16,000
206.81	6,717	12,451	207.33	7,217	16,072
206.82	6,726	12,518	207.34	7,227	16,145
206.83	6,735	12,586	207.35	7,237	16,217
206.84	6,745	12,653	207.36	7,247	16,289
206.85	6,754	12,721	207.37	7,257	16,362
206.86	6,763	12,788	207.38	7,267	16,434
206.87	6,772	12,856	207.39	7,276	16,507
206.88	6,782	12,924	207.40	7,286	16,580
206.89	6,791	12,991	207.41	7,296	16,653

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
207.42	7,306	16,726	207.94	7,817	20,658
207.43	7,316	16,799	207.95	7,827	20,736
207.44	7,326	16,872	207.96	7,837	20,814
207.45	7,335	16,945	207.97	7,847	20,893
207.46	7,345	17,019	207.98	7,856	20,971
207.47	7,355	17,092	207.99	7,866	21,050
207.48	7,365	17,166	208.00	7,876	21,129
207.49	7,375	17,240	208.01	7,886	21,207
207.50	7,385	17,313	208.02	7,897	21,286
207.51	7,394	17,387	208.03	7,907	21,365
207.52	7,404	17,461	208.04	7,918	21,444
207.53	7,414	17,535	208.05	7,928	21,524
207.54	7,424	17,610	208.06	7,938	21,603
207.55	7,434	17,684	208.07	7,949	21,682
207.56	7,443	17,758	208.08	7,959	21,762
207.57	7,453	17,833	208.09	7,970	21,842
207.58	7,463	17,907	208.10	7,980	21,921
207.59	7,473	17,982	208.11	7,990	22,001
207.60	7,483	18,057	208.12	8,001	22,081
207.61	7,493	18,132	208.13	8,011	22,161
207.62	7,502	18,207	208.14	8,022	22,241
207.63	7,512	18,282	208.15	8,032	22,322
207.64	7,522	18,357	208.16	8,042	22,402
207.65	7,532	18,432	208.17	8,053	22,483
207.66	7,542	18,508	208.18	8,063	22,563
207.67	7,552	18,583	208.19	8,074	22,644
207.68	7,561	18,659	208.20	8,084	22,725
207.69	7,571	18,734	208.21	8,094	22,805
207.70	7,581	18,810	208.22	8,105	22,886
207.71	7,591	18,886	208.23	8,115	22,968
207.72	7,601	18,962	208.24	8,126	23,049
207.73	7,611	19,038	208.25	8,136	23,130
207.74	7,620	19,114	208.26	8,146	23,212
207.75	7,630	19,190	208.27	8,157	23,293
207.76	7,640	19,267	208.28	8,167	23,375
207.77	7,650	19,343	208.29	8,178	23,456
207.78	7,660	19,420	208.30	8,188	23,538
207.79	7,670	19,496	208.31	8,198	23,620
207.80	7,679	19,573	208.32	8,209	23,702
207.81	7,689	19,650	208.33	8,219	23,784
207.82	7,699	19,727	208.34	8,230	23,867
207.83	7,709	19,804	208.35	8,240	23,949
207.84	7,719	19,881	208.36	8,250	24,031
207.85	7,729	19,958	208.37	8,261	24,114
207.86	7,738	20,036	208.38	8,271	24,197
207.87	7,748	20,113	208.39	8,282	24,279
207.88	7,758	20,191	208.40	8,292	24,362
207.89	7,768	20,268	208.41	8,302	24,445
207.90	7,778	20,346	208.42	8,313	24,528
207.91	7,788	20,424	208.43	8,323	24,611
207.92	7,797	20,502	208.44	8,334	24,695
207.93	7,807	20,580	208.45	8,344	24,778

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
208.46	8,354	24,862
208.47	8,365	24,945
208.48	8,375	25,029
208.49	8,386	25,113
208.50	8,396	25,197
208.51	8,406	25,281
208.52	8,417	25,365
208.53	8,427	25,449
208.54	8,438	25,533
208.55	8,448	25,618
208.56	8,458	25,702
208.57	8,469	25,787
208.58	8,479	25,872
208.59	8,490	25,956
208.60	8,500	26,041
208.61	8,510	26,126
208.62	8,521	26,212
208.63	8,531	26,297
208.64	8,542	26,382
208.65	8,552	26,468
208.66	8,562	26,553
208.67	8,573	26,639
208.68	8,583	26,725
208.69	8,594	26,811
208.70	8,604	26,897
208.71	8,614	26,983
208.72	8,625	27,069
208.73	8,635	27,155
208.74	8,646	27,242
208.75	8,656	27,328
208.76	8,666	27,415
208.77	8,677	27,501
208.78	8,687	27,588
208.79	8,698	27,675
208.80	8,708	27,762
208.81	8,718	27,849
208.82	8,729	27,937
208.83	8,739	28,024
208.84	8,750	28,111
208.85	8,760	28,199
208.86	8,770	28,287
208.87	8,781	28,374
208.88	8,791	28,462
208.89	8,802	28,550
208.90	8,812	28,638
208.91	8,822	28,726
208.92	8,833	28,815
208.93	8,843	28,903
208.94	8,854	28,992
208.95	8,864	29,080
208.96	8,874	29,169
208.97	8,885	29,258
208.98	8,895	29,346
208.99	8,906	29,435
209.00	**8,916**	**29,525**

Summary for Pond B-39: Basin #39

Inflow Area = 1.884 ac, 41.56% Impervious, Inflow Depth = 1.96" for Current 2 yr event
Inflow = 3.71 cfs @ 12.17 hrs, Volume= 0.308 af
Outflow = 0.82 cfs @ 12.63 hrs, Volume= 0.233 af, Atten= 78%, Lag= 27.4 min
Primary = 0.82 cfs @ 12.63 hrs, Volume= 0.233 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 202.70' @ 12.63 hrs Surf.Area= 3,767 sf Storage= 6,721 cf

Plug-Flow detention time= 239.1 min calculated for 0.233 af (76% of inflow)
Center-of-Mass det. time= 145.8 min (942.1 - 796.3)

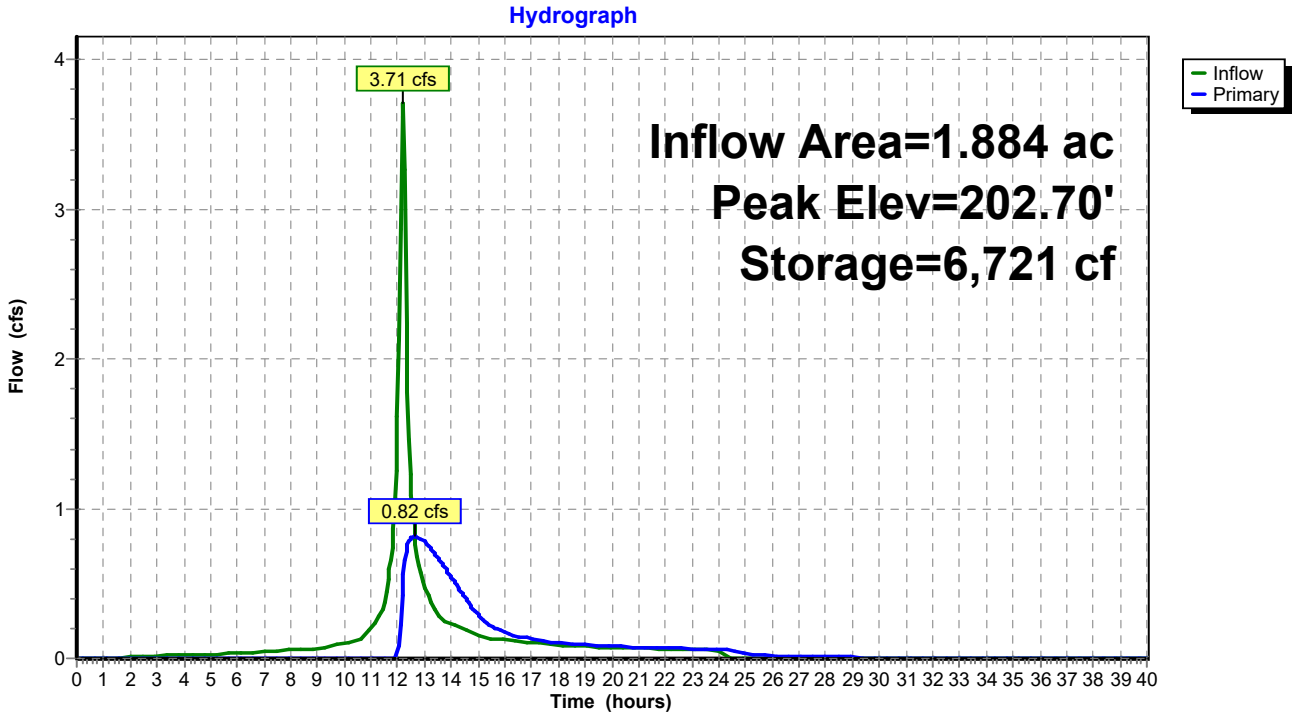
Volume	Invert	Avail.Storage	Storage Description
#1	200.30'	16,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.30	0	0	0
201.00	2,928	1,025	1,025
202.00	3,408	3,168	4,193
203.00	3,917	3,663	7,855
204.00	4,454	4,186	12,041
205.00	5,019	4,737	16,777

Device	Routing	Invert	Outlet Devices
#1	Primary	200.30'	**18.0" Round Culvert** L= 38.0' Ke= 0.500 Inlet / Outlet Invert= 200.30' / 200.11' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.71'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.04'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.82 cfs @ 12.63 hrs HW=202.70' (Free Discharge)
- **1=Culvert** (Passes 0.82 cfs of 10.01 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.82 cfs @ 4.15 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-39: Basin #39



Stage-Discharge for Pond B-39: Basin #39

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.30	0.00	200.82	0.00	201.34	0.00	201.86	0.07
200.31	0.00	200.83	0.00	201.35	0.00	201.87	0.07
200.32	0.00	200.84	0.00	201.36	0.00	201.88	0.08
200.33	0.00	200.85	0.00	201.37	0.00	201.89	0.09
200.34	0.00	200.86	0.00	201.38	0.00	201.90	0.10
200.35	0.00	200.87	0.00	201.39	0.00	201.91	0.11
200.36	0.00	200.88	0.00	201.40	0.00	201.92	0.12
200.37	0.00	200.89	0.00	201.41	0.00	201.93	0.13
200.38	0.00	200.90	0.00	201.42	0.00	201.94	0.14
200.39	0.00	200.91	0.00	201.43	0.00	201.95	0.16
200.40	0.00	200.92	0.00	201.44	0.00	201.96	0.17
200.41	0.00	200.93	0.00	201.45	0.00	201.97	0.18
200.42	0.00	200.94	0.00	201.46	0.00	201.98	0.19
200.43	0.00	200.95	0.00	201.47	0.00	201.99	0.20
200.44	0.00	200.96	0.00	201.48	0.00	202.00	0.22
200.45	0.00	200.97	0.00	201.49	0.00	202.01	0.23
200.46	0.00	200.98	0.00	201.50	0.00	202.02	0.24
200.47	0.00	200.99	0.00	201.51	0.00	202.03	0.26
200.48	0.00	201.00	0.00	201.52	0.00	202.04	0.27
200.49	0.00	201.01	0.00	201.53	0.00	202.05	0.28
200.50	0.00	201.02	0.00	201.54	0.00	202.06	0.30
200.51	0.00	201.03	0.00	201.55	0.00	202.07	0.31
200.52	0.00	201.04	0.00	201.56	0.00	202.08	0.32
200.53	0.00	201.05	0.00	201.57	0.00	202.09	0.34
200.54	0.00	201.06	0.00	201.58	0.00	202.10	0.35
200.55	0.00	201.07	0.00	201.59	0.00	202.11	0.36
200.56	0.00	201.08	0.00	201.60	0.00	202.12	0.38
200.57	0.00	201.09	0.00	201.61	0.00	202.13	0.39
200.58	0.00	201.10	0.00	201.62	0.00	202.14	0.40
200.59	0.00	201.11	0.00	201.63	0.00	202.15	0.41
200.60	0.00	201.12	0.00	201.64	0.00	202.16	0.43
200.61	0.00	201.13	0.00	201.65	0.00	202.17	0.44
200.62	0.00	201.14	0.00	201.66	0.00	202.18	0.45
200.63	0.00	201.15	0.00	201.67	0.00	202.19	0.46
200.64	0.00	201.16	0.00	201.68	0.00	202.20	0.47
200.65	0.00	201.17	0.00	201.69	0.00	202.21	0.47
200.66	0.00	201.18	0.00	201.70	0.00	202.22	0.48
200.67	0.00	201.19	0.00	201.71	0.00	202.23	0.49
200.68	0.00	201.20	0.00	201.72	0.00	202.24	0.50
200.69	0.00	201.21	0.00	201.73	0.00	202.25	0.51
200.70	0.00	201.22	0.00	201.74	0.00	202.26	0.52
200.71	0.00	201.23	0.00	201.75	0.01	202.27	0.53
200.72	0.00	201.24	0.00	201.76	0.01	202.28	0.53
200.73	0.00	201.25	0.00	201.77	0.01	202.29	0.54
200.74	0.00	201.26	0.00	201.78	0.02	202.30	0.55
200.75	0.00	201.27	0.00	201.79	0.02	202.31	0.56
200.76	0.00	201.28	0.00	201.80	0.02	202.32	0.57
200.77	0.00	201.29	0.00	201.81	0.03	202.33	0.58
200.78	0.00	201.30	0.00	201.82	0.04	202.34	0.58
200.79	0.00	201.31	0.00	201.83	0.04	202.35	0.59
200.80	0.00	201.32	0.00	201.84	0.05	202.36	0.60
200.81	0.00	201.33	0.00	201.85	0.06	202.37	0.61

Stage-Discharge for Pond B-39: Basin #39 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
202.38	0.61	202.90	0.92	203.42	4.15	203.94	12.00
202.39	0.62	202.91	0.92	203.43	4.27	203.95	12.17
202.40	0.63	202.92	0.93	203.44	4.39	203.96	12.35
202.41	0.63	202.93	0.93	203.45	4.52	203.97	12.53
202.42	0.64	202.94	0.94	203.46	4.64	203.98	12.70
202.43	0.65	202.95	0.94	203.47	4.77	203.99	12.88
202.44	0.66	202.96	0.95	203.48	4.90	204.00	13.06
202.45	0.66	202.97	0.95	203.49	5.03	204.01	13.24
202.46	0.67	202.98	0.95	203.50	5.16	204.02	13.42
202.47	0.68	202.99	0.96	203.51	5.29	204.03	13.61
202.48	0.68	203.00	0.96	203.52	5.43	204.04	13.79
202.49	0.69	203.01	0.97	203.53	5.56	204.05	13.97
202.50	0.69	203.02	0.97	203.54	5.70	204.06	14.16
202.51	0.70	203.03	0.98	203.55	5.83	204.07	14.34
202.52	0.71	203.04	0.98	203.56	5.97	204.08	14.53
202.53	0.71	203.05	1.00	203.57	6.11	204.09	14.71
202.54	0.72	203.06	1.03	203.58	6.25	204.10	14.86
202.55	0.73	203.07	1.06	203.59	6.40	204.11	14.88
202.56	0.73	203.08	1.10	203.60	6.54	204.12	14.91
202.57	0.74	203.09	1.15	203.61	6.68	204.13	14.93
202.58	0.74	203.10	1.20	203.62	6.83	204.14	14.96
202.59	0.75	203.11	1.26	203.63	6.97	204.15	14.98
202.60	0.76	203.12	1.31	203.64	7.12	204.16	15.01
202.61	0.76	203.13	1.37	203.65	7.27	204.17	15.03
202.62	0.77	203.14	1.44	203.66	7.42	204.18	15.05
202.63	0.77	203.15	1.51	203.67	7.57	204.19	15.08
202.64	0.78	203.16	1.58	203.68	7.72	204.20	15.10
202.65	0.79	203.17	1.65	203.69	7.88	204.21	15.13
202.66	0.79	203.18	1.72	203.70	8.03	204.22	15.15
202.67	0.80	203.19	1.80	203.71	8.18	204.23	15.17
202.68	0.80	203.20	1.88	203.72	8.34	204.24	15.20
202.69	0.81	203.21	1.97	203.73	8.50	204.25	15.22
202.70	0.81	203.22	2.05	203.74	8.65	204.26	15.24
202.71	0.82	203.23	2.14	203.75	8.81	204.27	15.27
202.72	0.82	203.24	2.23	203.76	8.97	204.28	15.29
202.73	0.83	203.25	2.32	203.77	9.13	204.29	15.32
202.74	0.83	203.26	2.41	203.78	9.29	204.30	15.34
202.75	0.84	203.27	2.51	203.79	9.46	204.31	15.36
202.76	0.85	203.28	2.61	203.80	9.62	204.32	15.39
202.77	0.85	203.29	2.70	203.81	9.78	204.33	15.41
202.78	0.86	203.30	2.81	203.82	9.95	204.34	15.43
202.79	0.86	203.31	2.91	203.83	10.11	204.35	15.46
202.80	0.87	203.32	3.01	203.84	10.28	204.36	15.48
202.81	0.87	203.33	3.12	203.85	10.45	204.37	15.50
202.82	0.88	203.34	3.23	203.86	10.62	204.38	15.53
202.83	0.88	203.35	3.34	203.87	10.79	204.39	15.55
202.84	0.89	203.36	3.45	203.88	10.96	204.40	15.57
202.85	0.89	203.37	3.56	203.89	11.13	204.41	15.60
202.86	0.90	203.38	3.68	203.90	11.30	204.42	15.62
202.87	0.90	203.39	3.79	203.91	11.47	204.43	15.64
202.88	0.91	203.40	3.91	203.92	11.65	204.44	15.67
202.89	0.91	203.41	4.03	203.93	11.82	204.45	15.69

Stage-Discharge for Pond B-39: Basin #39 (continued)

Elevation (feet)	Primary (cfs)
204.46	15.71
204.47	15.74
204.48	15.76
204.49	15.78
204.50	15.80
204.51	15.94
204.52	16.18
204.53	16.48
204.54	16.83
204.55	17.23
204.56	17.67
204.57	18.14
204.58	18.64
204.59	19.18
204.60	19.75
204.61	20.35
204.62	20.97
204.63	21.62
204.64	22.29
204.65	22.99
204.66	23.71
204.67	24.46
204.68	25.22
204.69	26.01
204.70	26.82
204.71	27.69
204.72	28.58
204.73	29.50
204.74	30.45
204.75	31.42
204.76	32.42
204.77	33.44
204.78	34.48
204.79	35.55
204.80	36.65
204.81	37.76
204.82	38.91
204.83	40.08
204.84	41.27
204.85	42.48
204.86	43.72
204.87	44.99
204.88	46.28
204.89	47.59
204.90	48.93
204.91	50.31
204.92	51.73
204.93	53.17
204.94	54.63
204.95	56.12
204.96	57.64
204.97	59.19
204.98	60.76
204.99	62.35
205.00	**63.98**

Stage-Area-Storage for Pond B-39: Basin #39

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.30	0	0	200.82	2,175	566
200.31	42	0	200.83	2,217	587
200.32	84	1	200.84	2,259	610
200.33	125	2	200.85	2,301	633
200.34	167	3	200.86	2,342	656
200.35	209	5	200.87	2,384	680
200.36	251	8	200.88	2,426	704
200.37	293	10	200.89	2,468	728
200.38	335	13	200.90	2,510	753
200.39	376	17	200.91	2,552	778
200.40	418	21	200.92	2,593	804
200.41	460	25	200.93	2,635	830
200.42	502	30	200.94	2,677	857
200.43	544	35	200.95	2,719	884
200.44	586	41	200.96	2,761	911
200.45	627	47	200.97	2,803	939
200.46	669	54	200.98	2,844	967
200.47	711	60	200.99	2,886	996
200.48	753	68	201.00	2,928	1,025
200.49	795	76	201.01	2,933	1,054
200.50	837	84	201.02	2,938	1,083
200.51	878	92	201.03	2,942	1,113
200.52	920	101	201.04	2,947	1,142
200.53	962	111	201.05	2,952	1,172
200.54	1,004	120	201.06	2,957	1,201
200.55	1,046	131	201.07	2,962	1,231
200.56	1,088	141	201.08	2,966	1,261
200.57	1,129	152	201.09	2,971	1,290
200.58	1,171	164	201.10	2,976	1,320
200.59	1,213	176	201.11	2,981	1,350
200.60	1,255	188	201.12	2,986	1,380
200.61	1,297	201	201.13	2,990	1,409
200.62	1,339	214	201.14	2,995	1,439
200.63	1,380	228	201.15	3,000	1,469
200.64	1,422	242	201.16	3,005	1,499
200.65	1,464	256	201.17	3,010	1,529
200.66	1,506	271	201.18	3,014	1,560
200.67	1,548	286	201.19	3,019	1,590
200.68	1,589	302	201.20	3,024	1,620
200.69	1,631	318	201.21	3,029	1,650
200.70	1,673	335	201.22	3,034	1,681
200.71	1,715	352	201.23	3,038	1,711
200.72	1,757	369	201.24	3,043	1,741
200.73	1,799	387	201.25	3,048	1,772
200.74	1,840	405	201.26	3,053	1,802
200.75	1,882	424	201.27	3,058	1,833
200.76	1,924	443	201.28	3,062	1,863
200.77	1,966	462	201.29	3,067	1,894
200.78	2,008	482	201.30	3,072	1,925
200.79	2,050	502	201.31	3,077	1,956
200.80	2,091	523	201.32	3,082	1,986
200.81	2,133	544	201.33	3,086	2,017

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.34	3,091	2,048
201.35	3,096	2,079
201.36	3,101	2,110
201.37	3,106	2,141
201.38	3,110	2,172
201.39	3,115	2,203
201.40	3,120	2,234
201.41	3,125	2,266
201.42	3,130	2,297
201.43	3,134	2,328
201.44	3,139	2,360
201.45	3,144	2,391
201.46	3,149	2,422
201.47	3,154	2,454
201.48	3,158	2,486
201.49	3,163	2,517
201.50	3,168	2,549
201.51	3,173	2,581
201.52	3,178	2,612
201.53	3,182	2,644
201.54	3,187	2,676
201.55	3,192	2,708
201.56	3,197	2,740
201.57	3,202	2,772
201.58	3,206	2,804
201.59	3,211	2,836
201.60	3,216	2,868
201.61	3,221	2,900
201.62	3,226	2,932
201.63	3,230	2,965
201.64	3,235	2,997
201.65	3,240	3,029
201.66	3,245	3,062
201.67	3,250	3,094
201.68	3,254	3,127
201.69	3,259	3,159
201.70	3,264	3,192
201.71	3,269	3,225
201.72	3,274	3,257
201.73	3,278	3,290
201.74	3,283	3,323
201.75	3,288	3,356
201.76	3,293	3,389
201.77	3,298	3,422
201.78	3,302	3,455
201.79	3,307	3,488
201.80	3,312	3,521
201.81	3,317	3,554
201.82	3,322	3,587
201.83	3,326	3,620
201.84	3,331	3,654
201.85	3,336	3,687
201.86	3,341	3,720
201.87	3,346	3,754
201.88	3,350	3,787
201.89	3,355	3,821
201.90	3,360	3,854
201.91	3,365	3,888
201.92	3,370	3,922
201.93	3,374	3,955
201.94	3,379	3,989
201.95	3,384	4,023
201.96	3,389	4,057
201.97	3,394	4,091
201.98	3,398	4,125
201.99	3,403	4,159
202.00	3,408	4,193
202.01	3,413	4,227
202.02	3,418	4,261
202.03	3,423	4,295
202.04	3,428	4,330
202.05	3,433	4,364
202.06	3,439	4,398
202.07	3,444	4,433
202.08	3,449	4,467
202.09	3,454	4,502
202.10	3,459	4,536
202.11	3,464	4,571
202.12	3,469	4,605
202.13	3,474	4,640
202.14	3,479	4,675
202.15	3,484	4,710
202.16	3,489	4,745
202.17	3,495	4,780
202.18	3,500	4,814
202.19	3,505	4,850
202.20	3,510	4,885
202.21	3,515	4,920
202.22	3,520	4,955
202.23	3,525	4,990
202.24	3,530	5,025
202.25	3,535	5,061
202.26	3,540	5,096
202.27	3,545	5,132
202.28	3,551	5,167
202.29	3,556	5,203
202.30	3,561	5,238
202.31	3,566	5,274
202.32	3,571	5,309
202.33	3,576	5,345
202.34	3,581	5,381
202.35	3,586	5,417
202.36	3,591	5,453
202.37	3,596	5,489

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.38	3,601	5,525	202.90	3,866	7,466
202.39	3,607	5,561	202.91	3,871	7,505
202.40	3,612	5,597	202.92	3,876	7,544
202.41	3,617	5,633	202.93	3,881	7,582
202.42	3,622	5,669	202.94	3,886	7,621
202.43	3,627	5,705	202.95	3,892	7,660
202.44	3,632	5,742	202.96	3,897	7,699
202.45	3,637	5,778	202.97	3,902	7,738
202.46	3,642	5,814	202.98	3,907	7,777
202.47	3,647	5,851	202.99	3,912	7,816
202.48	3,652	5,887	203.00	3,917	7,855
202.49	3,657	5,924	203.01	3,922	7,894
202.50	3,663	5,960	203.02	3,928	7,934
202.51	3,668	5,997	203.03	3,933	7,973
202.52	3,673	6,034	203.04	3,938	8,012
202.53	3,678	6,071	203.05	3,944	8,052
202.54	3,683	6,107	203.06	3,949	8,091
202.55	3,688	6,144	203.07	3,955	8,131
202.56	3,693	6,181	203.08	3,960	8,170
202.57	3,698	6,218	203.09	3,965	8,210
202.58	3,703	6,255	203.10	3,971	8,250
202.59	3,708	6,292	203.11	3,976	8,289
202.60	3,713	6,329	203.12	3,981	8,329
202.61	3,718	6,366	203.13	3,987	8,369
202.62	3,724	6,404	203.14	3,992	8,409
202.63	3,729	6,441	203.15	3,998	8,449
202.64	3,734	6,478	203.16	4,003	8,489
202.65	3,739	6,516	203.17	4,008	8,529
202.66	3,744	6,553	203.18	4,014	8,569
202.67	3,749	6,590	203.19	4,019	8,609
202.68	3,754	6,628	203.20	4,024	8,649
202.69	3,759	6,665	203.21	4,030	8,690
202.70	3,764	6,703	203.22	4,035	8,730
202.71	3,769	6,741	203.23	4,041	8,770
202.72	3,774	6,778	203.24	4,046	8,811
202.73	3,780	6,816	203.25	4,051	8,851
202.74	3,785	6,854	203.26	4,057	8,892
202.75	3,790	6,892	203.27	4,062	8,932
202.76	3,795	6,930	203.28	4,067	8,973
202.77	3,800	6,968	203.29	4,073	9,014
202.78	3,805	7,006	203.30	4,078	9,055
202.79	3,810	7,044	203.31	4,083	9,095
202.80	3,815	7,082	203.32	4,089	9,136
202.81	3,820	7,120	203.33	4,094	9,177
202.82	3,825	7,158	203.34	4,100	9,218
202.83	3,830	7,197	203.35	4,105	9,259
202.84	3,836	7,235	203.36	4,110	9,300
202.85	3,841	7,273	203.37	4,116	9,341
202.86	3,846	7,312	203.38	4,121	9,383
202.87	3,851	7,350	203.39	4,126	9,424
202.88	3,856	7,389	203.40	4,132	9,465
202.89	3,861	7,428	203.41	4,137	9,506

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.42	4,143	9,548	203.94	4,422	11,775
203.43	4,148	9,589	203.95	4,427	11,819
203.44	4,153	9,631	203.96	4,433	11,863
203.45	4,159	9,672	203.97	4,438	11,907
203.46	4,164	9,714	203.98	4,443	11,952
203.47	4,169	9,756	203.99	4,449	11,996
203.48	4,175	9,797	204.00	4,454	12,041
203.49	4,180	9,839	204.01	4,460	12,085
203.50	4,186	9,881	204.02	4,465	12,130
203.51	4,191	9,923	204.03	4,471	12,175
203.52	4,196	9,965	204.04	4,477	12,219
203.53	4,202	10,007	204.05	4,482	12,264
203.54	4,207	10,049	204.06	4,488	12,309
203.55	4,212	10,091	204.07	4,494	12,354
203.56	4,218	10,133	204.08	4,499	12,399
203.57	4,223	10,175	204.09	4,505	12,444
203.58	4,228	10,217	204.10	4,511	12,489
203.59	4,234	10,260	204.11	4,516	12,534
203.60	4,239	10,302	204.12	4,522	12,579
203.61	4,245	10,345	204.13	4,527	12,625
203.62	4,250	10,387	204.14	4,533	12,670
203.63	4,255	10,430	204.15	4,539	12,715
203.64	4,261	10,472	204.16	4,544	12,761
203.65	4,266	10,515	204.17	4,550	12,806
203.66	4,271	10,557	204.18	4,556	12,852
203.67	4,277	10,600	204.19	4,561	12,897
203.68	4,282	10,643	204.20	4,567	12,943
203.69	4,288	10,686	204.21	4,573	12,989
203.70	4,293	10,729	204.22	4,578	13,034
203.71	4,298	10,772	204.23	4,584	13,080
203.72	4,304	10,815	204.24	4,590	13,126
203.73	4,309	10,858	204.25	4,595	13,172
203.74	4,314	10,901	204.26	4,601	13,218
203.75	4,320	10,944	204.27	4,607	13,264
203.76	4,325	10,987	204.28	4,612	13,310
203.77	4,330	11,031	204.29	4,618	13,356
203.78	4,336	11,074	204.30	4,624	13,402
203.79	4,341	11,117	204.31	4,629	13,449
203.80	4,347	11,161	204.32	4,635	13,495
203.81	4,352	11,204	204.33	4,640	13,541
203.82	4,357	11,248	204.34	4,646	13,588
203.83	4,363	11,291	204.35	4,652	13,634
203.84	4,368	11,335	204.36	4,657	13,681
203.85	4,373	11,379	204.37	4,663	13,727
203.86	4,379	11,423	204.38	4,669	13,774
203.87	4,384	11,466	204.39	4,674	13,821
203.88	4,390	11,510	204.40	4,680	13,868
203.89	4,395	11,554	204.41	4,686	13,914
203.90	4,400	11,598	204.42	4,691	13,961
203.91	4,406	11,642	204.43	4,697	14,008
203.92	4,411	11,686	204.44	4,703	14,055
203.93	4,416	11,730	204.45	4,708	14,102

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.46	4,714	14,149
204.47	4,720	14,197
204.48	4,725	14,244
204.49	4,731	14,291
204.50	4,737	14,338
204.51	4,742	14,386
204.52	4,748	14,433
204.53	4,753	14,481
204.54	4,759	14,528
204.55	4,765	14,576
204.56	4,770	14,624
204.57	4,776	14,671
204.58	4,782	14,719
204.59	4,787	14,767
204.60	4,793	14,815
204.61	4,799	14,863
204.62	4,804	14,911
204.63	4,810	14,959
204.64	4,816	15,007
204.65	4,821	15,055
204.66	4,827	15,103
204.67	4,833	15,152
204.68	4,838	15,200
204.69	4,844	15,249
204.70	4,850	15,297
204.71	4,855	15,346
204.72	4,861	15,394
204.73	4,866	15,443
204.74	4,872	15,491
204.75	4,878	15,540
204.76	4,883	15,589
204.77	4,889	15,638
204.78	4,895	15,687
204.79	4,900	15,736
204.80	4,906	15,785
204.81	4,912	15,834
204.82	4,917	15,883
204.83	4,923	15,932
204.84	4,929	15,981
204.85	4,934	16,031
204.86	4,940	16,080
204.87	4,946	16,130
204.88	4,951	16,179
204.89	4,957	16,229
204.90	4,963	16,278
204.91	4,968	16,328
204.92	4,974	16,378
204.93	4,979	16,427
204.94	4,985	16,477
204.95	4,991	16,527
204.96	4,996	16,577
204.97	5,002	16,627
204.98	5,008	16,677
204.99	5,013	16,727
205.00	**5,019**	**16,777**

Summary for Pond B-40: Basin #40

Inflow Area = 1.888 ac, 47.19% Impervious, Inflow Depth = 2.07" for Current 2 yr event
Inflow = 3.91 cfs @ 12.17 hrs, Volume= 0.326 af
Outflow = 2.42 cfs @ 12.30 hrs, Volume= 0.243 af, Atten= 38%, Lag= 7.7 min
Primary = 2.42 cfs @ 12.30 hrs, Volume= 0.243 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.18' @ 12.30 hrs Surf.Area= 3,953 sf Storage= 5,629 cf

Plug-Flow detention time= 186.5 min calculated for 0.243 af (75% of inflow)
Center-of-Mass det. time= 92.6 min (883.7 - 791.1)

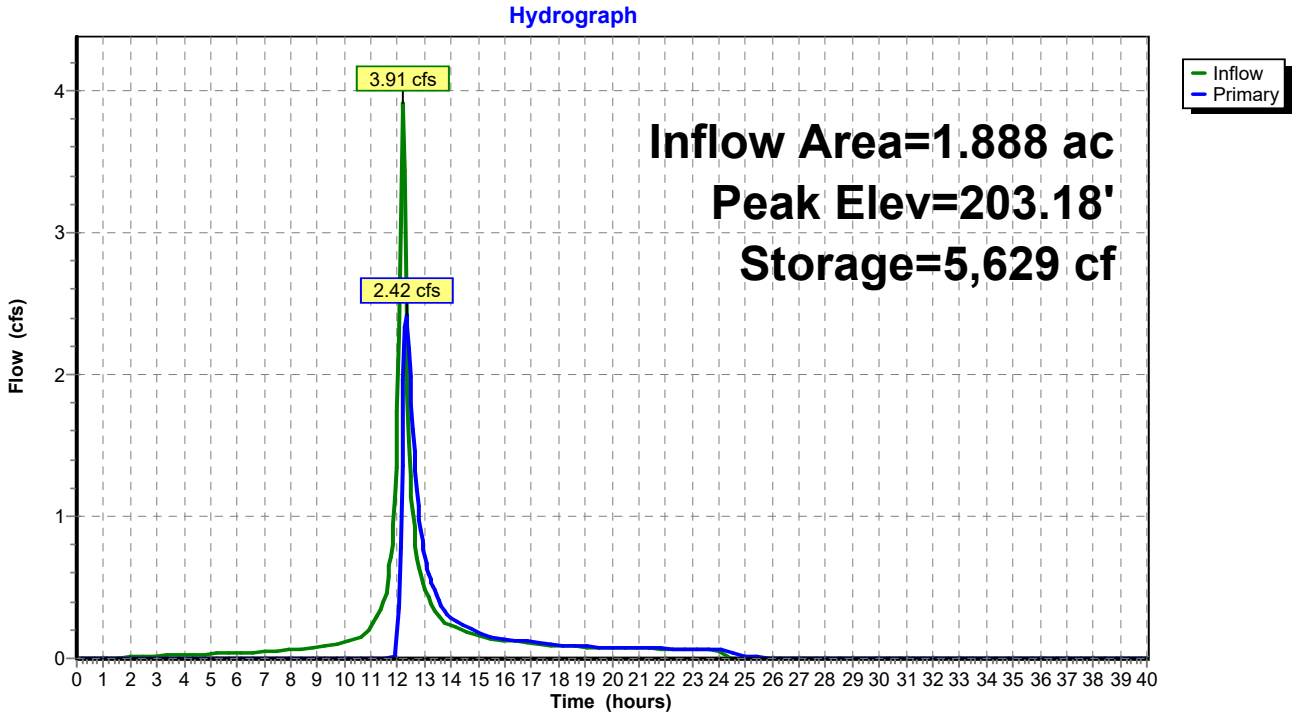
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	18,339 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,521	1,232	1,232
203.00	3,886	3,704	4,936
204.00	4,266	4,076	9,012
205.00	4,660	4,463	13,475
206.00	5,069	4,865	18,339

Device	Routing	Invert	Outlet Devices
#1	Primary	201.30'	**18.0" Round Culvert** L= 38.0' Ke= 0.500 Inlet / Outlet Invert= 201.30' / 201.11' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.65'	**24.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	204.67'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	205.49'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.42 cfs @ 12.30 hrs HW=203.18' (Free Discharge)
- **1=Culvert** (Passes 2.42 cfs of 7.80 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.42 cfs @ 2.42 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-40: Basin #40



Stage-Discharge for Pond B-40: Basin #40

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.62
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.66
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.71
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.75
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.80
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.85
201.36	0.00	201.88	0.00	202.40	0.00	202.92	0.90
201.37	0.00	201.89	0.00	202.41	0.00	202.93	0.95
201.38	0.00	201.90	0.00	202.42	0.00	202.94	1.00
201.39	0.00	201.91	0.00	202.43	0.00	202.95	1.05
201.40	0.00	201.92	0.00	202.44	0.00	202.96	1.11
201.41	0.00	201.93	0.00	202.45	0.00	202.97	1.16
201.42	0.00	201.94	0.00	202.46	0.00	202.98	1.22
201.43	0.00	201.95	0.00	202.47	0.00	202.99	1.27
201.44	0.00	201.96	0.00	202.48	0.00	203.00	1.33
201.45	0.00	201.97	0.00	202.49	0.00	203.01	1.39
201.46	0.00	201.98	0.00	202.50	0.00	203.02	1.44
201.47	0.00	201.99	0.00	202.51	0.00	203.03	1.50
201.48	0.00	202.00	0.00	202.52	0.00	203.04	1.56
201.49	0.00	202.01	0.00	202.53	0.00	203.05	1.62
201.50	0.00	202.02	0.00	202.54	0.00	203.06	1.69
201.51	0.00	202.03	0.00	202.55	0.00	203.07	1.75
201.52	0.00	202.04	0.00	202.56	0.00	203.08	1.81
201.53	0.00	202.05	0.00	202.57	0.00	203.09	1.87
201.54	0.00	202.06	0.00	202.58	0.00	203.10	1.94
201.55	0.00	202.07	0.00	202.59	0.00	203.11	2.00
201.56	0.00	202.08	0.00	202.60	0.00	203.12	2.07
201.57	0.00	202.09	0.00	202.61	0.00	203.13	2.13
201.58	0.00	202.10	0.00	202.62	0.00	203.14	2.20
201.59	0.00	202.11	0.00	202.63	0.00	203.15	2.27
201.60	0.00	202.12	0.00	202.64	0.00	203.16	2.33
201.61	0.00	202.13	0.00	202.65	0.00	203.17	2.39
201.62	0.00	202.14	0.00	202.66	0.01	203.18	2.44
201.63	0.00	202.15	0.00	202.67	0.02	203.19	2.50
201.64	0.00	202.16	0.00	202.68	0.03	203.20	2.55
201.65	0.00	202.17	0.00	202.69	0.05	203.21	2.60
201.66	0.00	202.18	0.00	202.70	0.07	203.22	2.64
201.67	0.00	202.19	0.00	202.71	0.09	203.23	2.69
201.68	0.00	202.20	0.00	202.72	0.12	203.24	2.74
201.69	0.00	202.21	0.00	202.73	0.15	203.25	2.78
201.70	0.00	202.22	0.00	202.74	0.17	203.26	2.82
201.71	0.00	202.23	0.00	202.75	0.20	203.27	2.87
201.72	0.00	202.24	0.00	202.76	0.23	203.28	2.91
201.73	0.00	202.25	0.00	202.77	0.27	203.29	2.95
201.74	0.00	202.26	0.00	202.78	0.30	203.30	2.99
201.75	0.00	202.27	0.00	202.79	0.34	203.31	3.03
201.76	0.00	202.28	0.00	202.80	0.37	203.32	3.07
201.77	0.00	202.29	0.00	202.81	0.41	203.33	3.11
201.78	0.00	202.30	0.00	202.82	0.45	203.34	3.15
201.79	0.00	202.31	0.00	202.83	0.49	203.35	3.19
201.80	0.00	202.32	0.00	202.84	0.53	203.36	3.22
201.81	0.00	202.33	0.00	202.85	0.57	203.37	3.26

Stage-Discharge for Pond B-40: Basin #40 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	3.30	203.90	4.80	204.42	5.93	204.94	8.68
203.39	3.33	203.91	4.83	204.43	5.95	204.95	8.80
203.40	3.37	203.92	4.85	204.44	5.97	204.96	8.92
203.41	3.40	203.93	4.87	204.45	5.99	204.97	9.04
203.42	3.44	203.94	4.90	204.46	6.01	204.98	9.16
203.43	3.47	203.95	4.92	204.47	6.03	204.99	9.29
203.44	3.51	203.96	4.95	204.48	6.05	205.00	9.41
203.45	3.54	203.97	4.97	204.49	6.07	205.01	9.54
203.46	3.57	203.98	4.99	204.50	6.08	205.02	9.67
203.47	3.60	203.99	5.02	204.51	6.10	205.03	9.80
203.48	3.64	204.00	5.04	204.52	6.12	205.04	9.93
203.49	3.67	204.01	5.06	204.53	6.14	205.05	10.06
203.50	3.70	204.02	5.09	204.54	6.16	205.06	10.20
203.51	3.73	204.03	5.11	204.55	6.18	205.07	10.33
203.52	3.76	204.04	5.13	204.56	6.20	205.08	10.47
203.53	3.80	204.05	5.15	204.57	6.22	205.09	10.61
203.54	3.83	204.06	5.18	204.58	6.24	205.10	10.75
203.55	3.86	204.07	5.20	204.59	6.25	205.11	10.89
203.56	3.89	204.08	5.22	204.60	6.27	205.12	11.03
203.57	3.92	204.09	5.24	204.61	6.29	205.13	11.17
203.58	3.95	204.10	5.26	204.62	6.31	205.14	11.32
203.59	3.98	204.11	5.29	204.63	6.33	205.15	11.46
203.60	4.01	204.12	5.31	204.64	6.35	205.16	11.61
203.61	4.04	204.13	5.33	204.65	6.36	205.17	11.76
203.62	4.06	204.14	5.35	204.66	6.38	205.18	11.91
203.63	4.09	204.15	5.37	204.67	6.40	205.19	12.06
203.64	4.12	204.16	5.40	204.68	6.43	205.20	12.21
203.65	4.15	204.17	5.42	204.69	6.47	205.21	12.36
203.66	4.18	204.18	5.44	204.70	6.52	205.22	12.52
203.67	4.21	204.19	5.46	204.71	6.58	205.23	12.67
203.68	4.23	204.20	5.48	204.72	6.64	205.24	12.83
203.69	4.26	204.21	5.50	204.73	6.70	205.25	12.99
203.70	4.29	204.22	5.52	204.74	6.77	205.26	13.15
203.71	4.32	204.23	5.54	204.75	6.84	205.27	13.31
203.72	4.34	204.24	5.57	204.76	6.91	205.28	13.47
203.73	4.37	204.25	5.59	204.77	6.99	205.29	13.63
203.74	4.40	204.26	5.61	204.78	7.07	205.30	13.79
203.75	4.42	204.27	5.63	204.79	7.16	205.31	13.95
203.76	4.45	204.28	5.65	204.80	7.24	205.32	14.12
203.77	4.48	204.29	5.67	204.81	7.33	205.33	14.28
203.78	4.50	204.30	5.69	204.82	7.42	205.34	14.45
203.79	4.53	204.31	5.71	204.83	7.51	205.35	14.62
203.80	4.55	204.32	5.73	204.84	7.61	205.36	14.79
203.81	4.58	204.33	5.75	204.85	7.71	205.37	14.96
203.82	4.60	204.34	5.77	204.86	7.81	205.38	15.13
203.83	4.63	204.35	5.79	204.87	7.91	205.39	15.30
203.84	4.65	204.36	5.81	204.88	8.02	205.40	15.47
203.85	4.68	204.37	5.83	204.89	8.12	205.41	15.60
203.86	4.70	204.38	5.85	204.90	8.23	205.42	15.62
203.87	4.73	204.39	5.87	204.91	8.34	205.43	15.64
203.88	4.75	204.40	5.89	204.92	8.45	205.44	15.67
203.89	4.78	204.41	5.91	204.93	8.57	205.45	15.69

Stage-Discharge for Pond B-40: Basin #40 (continued)

Elevation (feet)	Primary (cfs)
205.46	15.71
205.47	15.74
205.48	15.76
205.49	15.78
205.50	15.92
205.51	16.16
205.52	16.46
205.53	16.81
205.54	17.21
205.55	17.64
205.56	18.12
205.57	18.62
205.58	19.16
205.59	19.73
205.60	20.32
205.61	20.95
205.62	21.60
205.63	22.27
205.64	22.97
205.65	23.69
205.66	24.43
205.67	25.20
205.68	25.99
205.69	26.80
205.70	27.67
205.71	28.56
205.72	29.48
205.73	30.43
205.74	31.40
205.75	32.39
205.76	33.41
205.77	34.46
205.78	35.53
205.79	36.62
205.80	37.74
205.81	38.89
205.82	40.05
205.83	41.25
205.84	42.46
205.85	43.70
205.86	44.97
205.87	46.25
205.88	47.57
205.89	48.90
205.90	50.29
205.91	51.70
205.92	53.14
205.93	54.61
205.94	56.10
205.95	57.62
205.96	59.16
205.97	60.73
205.98	62.33
205.99	63.95
206.00	**65.60**

Stage-Area-Storage for Pond B-40: Basin #40

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0
201.31	50	0
201.32	101	1
201.33	151	2
201.34	201	4
201.35	252	6
201.36	302	9
201.37	352	12
201.38	402	16
201.39	453	20
201.40	503	25
201.41	553	30
201.42	604	36
201.43	654	43
201.44	704	49
201.45	755	57
201.46	805	64
201.47	855	73
201.48	905	81
201.49	956	91
201.50	1,006	101
201.51	1,056	111
201.52	1,107	122
201.53	1,157	133
201.54	1,207	145
201.55	1,258	157
201.56	1,308	170
201.57	1,358	183
201.58	1,408	197
201.59	1,459	212
201.60	1,509	226
201.61	1,559	242
201.62	1,610	258
201.63	1,660	274
201.64	1,710	291
201.65	1,761	308
201.66	1,811	326
201.67	1,861	344
201.68	1,911	363
201.69	1,962	383
201.70	2,012	402
201.71	2,062	423
201.72	2,113	444
201.73	2,163	465
201.74	2,213	487
201.75	2,263	509
201.76	2,314	532
201.77	2,364	556
201.78	2,414	579
201.79	2,465	604
201.80	2,515	629
201.81	2,565	654
201.82	2,616	680
201.83	2,666	706
201.84	2,716	733
201.85	2,767	761
201.86	2,817	789
201.87	2,867	817
201.88	2,917	846
201.89	2,968	875
201.90	3,018	905
201.91	3,068	936
201.92	3,119	967
201.93	3,169	998
201.94	3,219	1,030
201.95	3,270	1,063
201.96	3,320	1,096
201.97	3,370	1,129
201.98	3,420	1,163
201.99	3,471	1,197
202.00	3,521	1,232
202.01	3,525	1,268
202.02	3,528	1,303
202.03	3,532	1,338
202.04	3,536	1,373
202.05	3,539	1,409
202.06	3,543	1,444
202.07	3,547	1,480
202.08	3,550	1,515
202.09	3,554	1,551
202.10	3,558	1,586
202.11	3,561	1,622
202.12	3,565	1,657
202.13	3,568	1,693
202.14	3,572	1,729
202.15	3,576	1,765
202.16	3,579	1,800
202.17	3,583	1,836
202.18	3,587	1,872
202.19	3,590	1,908
202.20	3,594	1,944
202.21	3,598	1,980
202.22	3,601	2,016
202.23	3,605	2,052
202.24	3,609	2,088
202.25	3,612	2,124
202.26	3,616	2,160
202.27	3,620	2,196
202.28	3,623	2,233
202.29	3,627	2,269
202.30	3,631	2,305
202.31	3,634	2,341
202.32	3,638	2,378
202.33	3,641	2,414

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	3,645	2,451	202.86	3,835	4,395
202.35	3,649	2,487	202.87	3,839	4,434
202.36	3,652	2,524	202.88	3,842	4,472
202.37	3,656	2,560	202.89	3,846	4,511
202.38	3,660	2,597	202.90	3,850	4,549
202.39	3,663	2,633	202.91	3,853	4,588
202.40	3,667	2,670	202.92	3,857	4,626
202.41	3,671	2,707	202.93	3,860	4,665
202.42	3,674	2,743	202.94	3,864	4,703
202.43	3,678	2,780	202.95	3,868	4,742
202.44	3,682	2,817	202.96	3,871	4,781
202.45	3,685	2,854	202.97	3,875	4,819
202.46	3,689	2,891	202.98	3,879	4,858
202.47	3,693	2,928	202.99	3,882	4,897
202.48	3,696	2,964	203.00	3,886	4,936
202.49	3,700	3,001	203.01	3,890	4,975
202.50	3,704	3,038	203.02	3,894	5,014
202.51	3,707	3,076	203.03	3,897	5,053
202.52	3,711	3,113	203.04	3,901	5,092
202.53	3,714	3,150	203.05	3,905	5,131
202.54	3,718	3,187	203.06	3,909	5,170
202.55	3,722	3,224	203.07	3,913	5,209
202.56	3,725	3,261	203.08	3,916	5,248
202.57	3,729	3,299	203.09	3,920	5,287
202.58	3,733	3,336	203.10	3,924	5,326
202.59	3,736	3,373	203.11	3,928	5,366
202.60	3,740	3,411	203.12	3,932	5,405
202.61	3,744	3,448	203.13	3,935	5,444
202.62	3,747	3,486	203.14	3,939	5,484
202.63	3,751	3,523	203.15	3,943	5,523
202.64	3,755	3,561	203.16	3,947	5,562
202.65	3,758	3,598	203.17	3,951	5,602
202.66	3,762	3,636	203.18	3,954	5,641
202.67	3,766	3,673	203.19	3,958	5,681
202.68	3,769	3,711	203.20	3,962	5,721
202.69	3,773	3,749	203.21	3,966	5,760
202.70	3,777	3,786	203.22	3,970	5,800
202.71	3,780	3,824	203.23	3,973	5,840
202.72	3,784	3,862	203.24	3,977	5,879
202.73	3,787	3,900	203.25	3,981	5,919
202.74	3,791	3,938	203.26	3,985	5,959
202.75	3,795	3,976	203.27	3,989	5,999
202.76	3,798	4,014	203.28	3,992	6,039
202.77	3,802	4,052	203.29	3,996	6,079
202.78	3,806	4,090	203.30	4,000	6,119
202.79	3,809	4,128	203.31	4,004	6,159
202.80	3,813	4,166	203.32	4,008	6,199
202.81	3,817	4,204	203.33	4,011	6,239
202.82	3,820	4,242	203.34	4,015	6,279
202.83	3,824	4,281	203.35	4,019	6,319
202.84	3,828	4,319	203.36	4,023	6,359
202.85	3,831	4,357	203.37	4,027	6,400

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,030	6,440
203.39	4,034	6,480
203.40	4,038	6,521
203.41	4,042	6,561
203.42	4,046	6,601
203.43	4,049	6,642
203.44	4,053	6,682
203.45	4,057	6,723
203.46	4,061	6,764
203.47	4,065	6,804
203.48	4,068	6,845
203.49	4,072	6,886
203.50	4,076	6,926
203.51	4,080	6,967
203.52	4,084	7,008
203.53	4,087	7,049
203.54	4,091	7,090
203.55	4,095	7,131
203.56	4,099	7,172
203.57	4,103	7,213
203.58	4,106	7,254
203.59	4,110	7,295
203.60	4,114	7,336
203.61	4,118	7,377
203.62	4,122	7,418
203.63	4,125	7,459
203.64	4,129	7,501
203.65	4,133	7,542
203.66	4,137	7,583
203.67	4,141	7,625
203.68	4,144	7,666
203.69	4,148	7,708
203.70	4,152	7,749
203.71	4,156	7,791
203.72	4,160	7,832
203.73	4,163	7,874
203.74	4,167	7,916
203.75	4,171	7,957
203.76	4,175	7,999
203.77	4,179	8,041
203.78	4,182	8,083
203.79	4,186	8,124
203.80	4,190	8,166
203.81	4,194	8,208
203.82	4,198	8,250
203.83	4,201	8,292
203.84	4,205	8,334
203.85	4,209	8,376
203.86	4,213	8,418
203.87	4,217	8,460
203.88	4,220	8,503
203.89	4,224	8,545
203.90	4,228	8,587
203.91	4,232	8,629
203.92	4,236	8,672
203.93	4,239	8,714
203.94	4,243	8,757
203.95	4,247	8,799
203.96	4,251	8,842
203.97	4,255	8,884
203.98	4,258	8,927
203.99	4,262	8,969
204.00	4,266	9,012
204.01	4,270	9,055
204.02	4,274	9,097
204.03	4,278	9,140
204.04	4,282	9,183
204.05	4,286	9,226
204.06	4,290	9,269
204.07	4,294	9,311
204.08	4,298	9,354
204.09	4,301	9,397
204.10	4,305	9,440
204.11	4,309	9,483
204.12	4,313	9,527
204.13	4,317	9,570
204.14	4,321	9,613
204.15	4,325	9,656
204.16	4,329	9,699
204.17	4,333	9,743
204.18	4,337	9,786
204.19	4,341	9,830
204.20	4,345	9,873
204.21	4,349	9,916
204.22	4,353	9,960
204.23	4,357	10,003
204.24	4,361	10,047
204.25	4,365	10,091
204.26	4,368	10,134
204.27	4,372	10,178
204.28	4,376	10,222
204.29	4,380	10,266
204.30	4,384	10,309
204.31	4,388	10,353
204.32	4,392	10,397
204.33	4,396	10,441
204.34	4,400	10,485
204.35	4,404	10,529
204.36	4,408	10,573
204.37	4,412	10,617
204.38	4,416	10,661
204.39	4,420	10,706
204.40	4,424	10,750
204.41	4,428	10,794

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	4,431	10,838	204.94	4,636	13,196
204.43	4,435	10,883	204.95	4,640	13,242
204.44	4,439	10,927	204.96	4,644	13,289
204.45	4,443	10,971	204.97	4,648	13,335
204.46	4,447	11,016	204.98	4,652	13,382
204.47	4,451	11,060	204.99	4,656	13,428
204.48	4,455	11,105	205.00	4,660	13,475
204.49	4,459	11,149	205.01	4,664	13,521
204.50	4,463	11,194	205.02	4,668	13,568
204.51	4,467	11,239	205.03	4,672	13,615
204.52	4,471	11,283	205.04	4,676	13,662
204.53	4,475	11,328	205.05	4,680	13,708
204.54	4,479	11,373	205.06	4,685	13,755
204.55	4,483	11,418	205.07	4,689	13,802
204.56	4,487	11,463	205.08	4,693	13,849
204.57	4,491	11,507	205.09	4,697	13,896
204.58	4,495	11,552	205.10	4,701	13,943
204.59	4,498	11,597	205.11	4,705	13,990
204.60	4,502	11,642	205.12	4,709	14,037
204.61	4,506	11,687	205.13	4,713	14,084
204.62	4,510	11,732	205.14	4,717	14,131
204.63	4,514	11,778	205.15	4,721	14,178
204.64	4,518	11,823	205.16	4,725	14,226
204.65	4,522	11,868	205.17	4,730	14,273
204.66	4,526	11,913	205.18	4,734	14,320
204.67	4,530	11,959	205.19	4,738	14,368
204.68	4,534	12,004	205.20	4,742	14,415
204.69	4,538	12,049	205.21	4,746	14,462
204.70	4,542	12,095	205.22	4,750	14,510
204.71	4,546	12,140	205.23	4,754	14,557
204.72	4,550	12,185	205.24	4,758	14,605
204.73	4,554	12,231	205.25	4,762	14,653
204.74	4,558	12,277	205.26	4,766	14,700
204.75	4,562	12,322	205.27	4,770	14,748
204.76	4,565	12,368	205.28	4,775	14,796
204.77	4,569	12,413	205.29	4,779	14,843
204.78	4,573	12,459	205.30	4,783	14,891
204.79	4,577	12,505	205.31	4,787	14,939
204.80	4,581	12,551	205.32	4,791	14,987
204.81	4,585	12,597	205.33	4,795	15,035
204.82	4,589	12,642	205.34	4,799	15,083
204.83	4,593	12,688	205.35	4,803	15,131
204.84	4,597	12,734	205.36	4,807	15,179
204.85	4,601	12,780	205.37	4,811	15,227
204.86	4,605	12,826	205.38	4,815	15,275
204.87	4,609	12,872	205.39	4,820	15,323
204.88	4,613	12,918	205.40	4,824	15,372
204.89	4,617	12,965	205.41	4,828	15,420
204.90	4,621	13,011	205.42	4,832	15,468
204.91	4,625	13,057	205.43	4,836	15,516
204.92	4,628	13,103	205.44	4,840	15,565
204.93	4,632	13,150	205.45	4,844	15,613

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

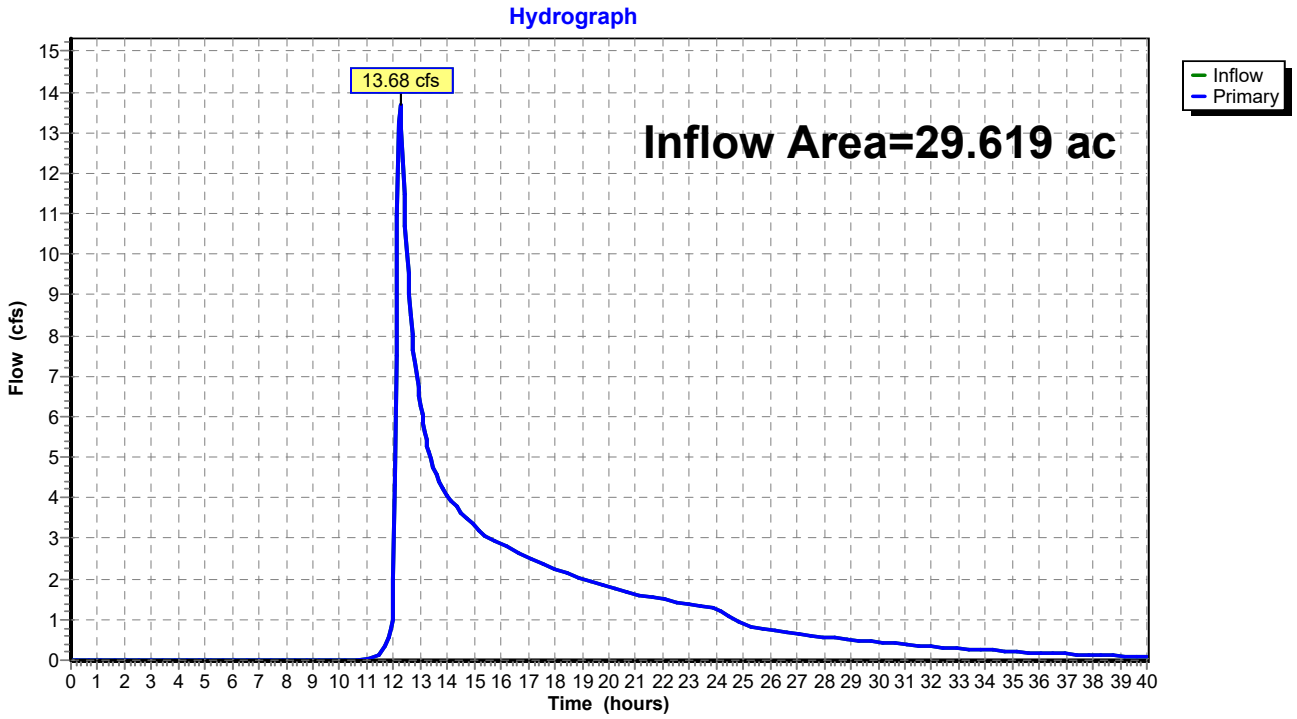
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.46	4,848	15,662
205.47	4,852	15,710
205.48	4,856	15,759
205.49	4,860	15,807
205.50	4,865	15,856
205.51	4,869	15,905
205.52	4,873	15,953
205.53	4,877	16,002
205.54	4,881	16,051
205.55	4,885	16,100
205.56	4,889	16,149
205.57	4,893	16,197
205.58	4,897	16,246
205.59	4,901	16,295
205.60	4,905	16,344
205.61	4,909	16,394
205.62	4,914	16,443
205.63	4,918	16,492
205.64	4,922	16,541
205.65	4,926	16,590
205.66	4,930	16,640
205.67	4,934	16,689
205.68	4,938	16,738
205.69	4,942	16,788
205.70	4,946	16,837
205.71	4,950	16,887
205.72	4,954	16,936
205.73	4,959	16,986
205.74	4,963	17,035
205.75	4,967	17,085
205.76	4,971	17,135
205.77	4,975	17,184
205.78	4,979	17,234
205.79	4,983	17,284
205.80	4,987	17,334
205.81	4,991	17,384
205.82	4,995	17,434
205.83	4,999	17,484
205.84	5,004	17,534
205.85	5,008	17,584
205.86	5,012	17,634
205.87	5,016	17,684
205.88	5,020	17,734
205.89	5,024	17,784
205.90	5,028	17,834
205.91	5,032	17,885
205.92	5,036	17,935
205.93	5,040	17,986
205.94	5,044	18,036
205.95	5,049	18,086
205.96	5,053	18,137
205.97	5,057	18,187
205.98	5,061	18,238
205.99	5,065	18,289
206.00	**5,069**	**18,339**

Summary for Link PDA-3: Proposed Drainage Area #3

Inflow Area = 29.619 ac, 38.13% Impervious, Inflow Depth > 1.43" for Current 2 yr event
Inflow = 13.68 cfs @ 12.25 hrs, Volume= 3.523 af
Primary = 13.68 cfs @ 12.25 hrs, Volume= 3.523 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-3: Proposed Drainage Area #3



Summary for Subcatchment 29l: PDA-29 (impervious)

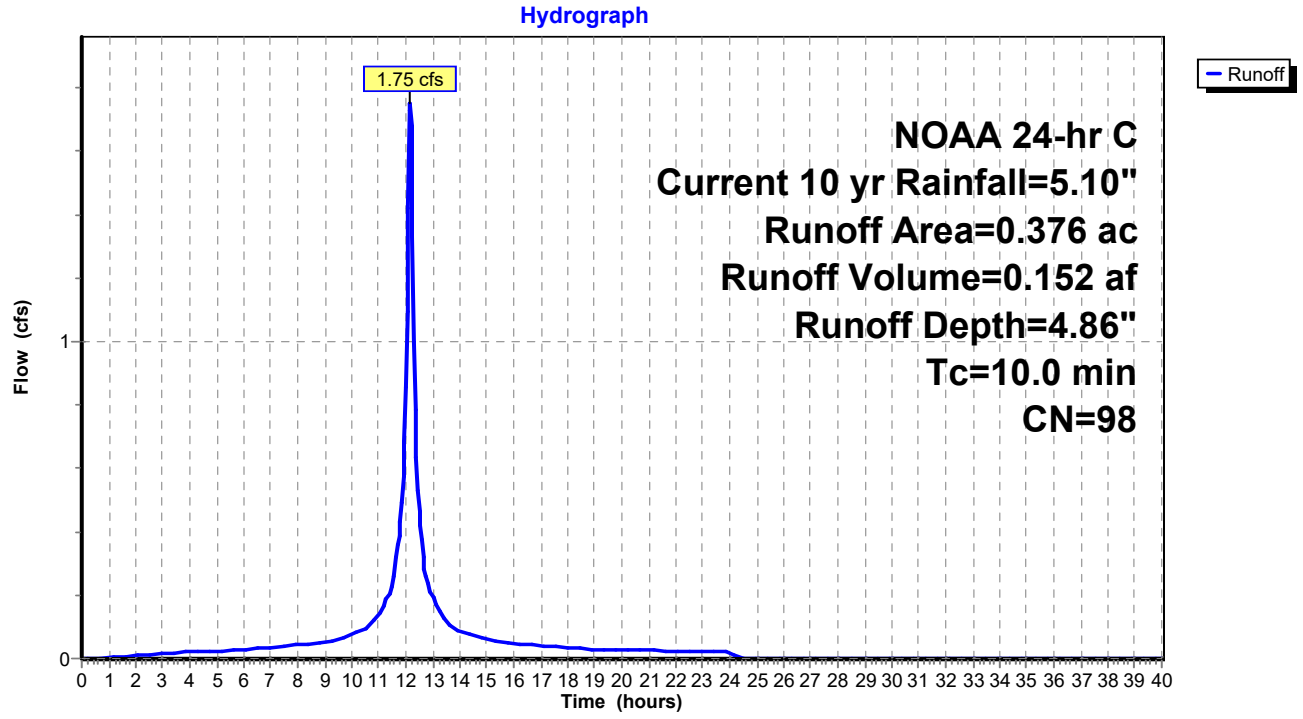
Runoff = 1.75 cfs @ 12.17 hrs, Volume= 0.152 af, Depth= 4.86"
Routed to Pond B-29 : Basin #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.342	98	Pavement, HSG C
*	0.034	98	Concrete, HSC C
	0.376	98	Weighted Average
	0.376		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 29l: PDA-29 (impervious)



Summary for Subcatchment 29P: PDA-29 (pervious)

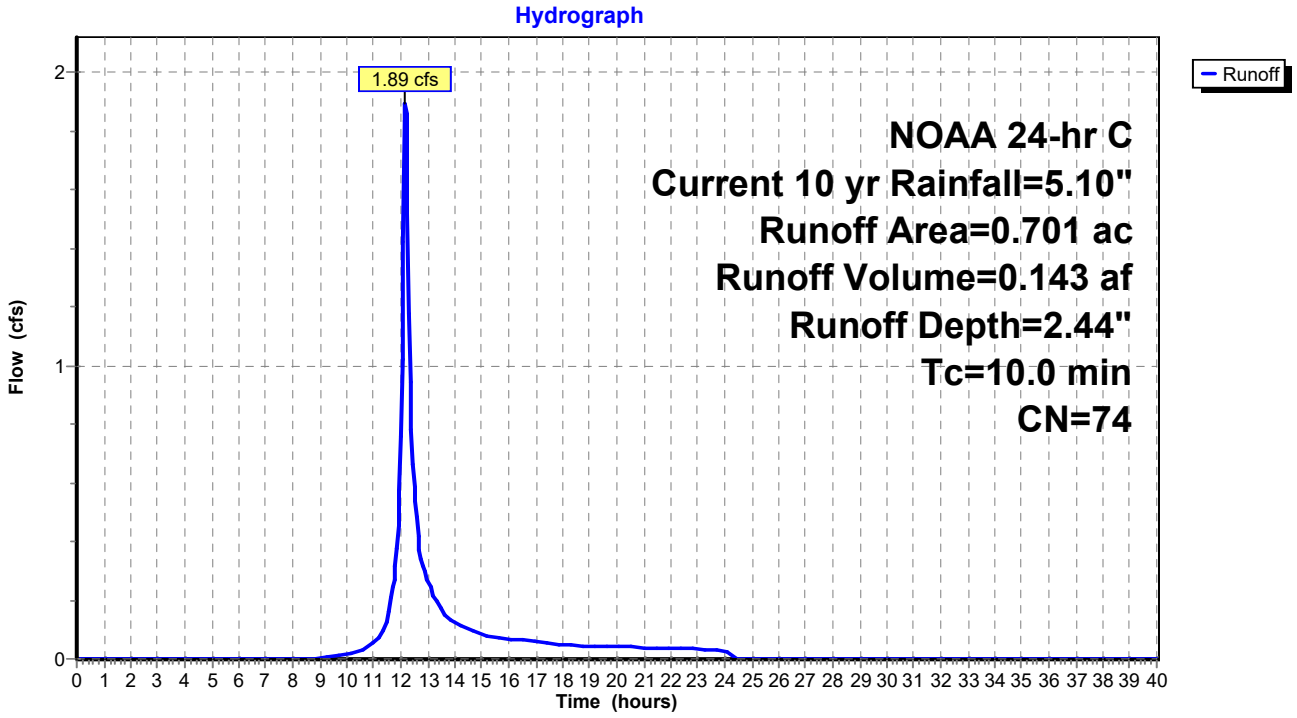
Runoff = 1.89 cfs @ 12.18 hrs, Volume= 0.143 af, Depth= 2.44"
Routed to Pond B-29 : Basin #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.701	74	>75% Grass cover, Good, HSG C
0.701		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 29P: PDA-29 (pervious)



Summary for Subcatchment 30l: PDA-30 (impervious)

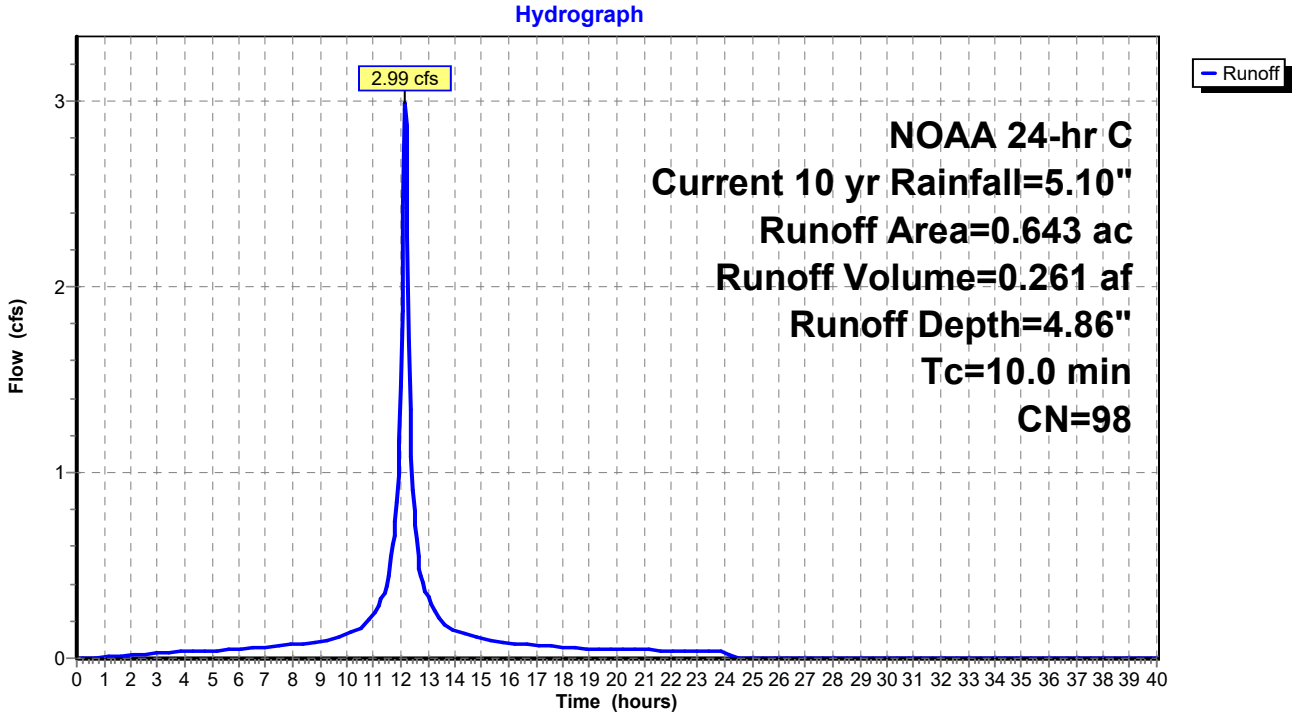
Runoff = 2.99 cfs @ 12.17 hrs, Volume= 0.261 af, Depth= 4.86"
Routed to Pond B-30 : Basin #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.643	98	Weighted Average
	0.643		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 30l: PDA-30 (impervious)



Summary for Subcatchment 30P: PDA-30 (pervious)

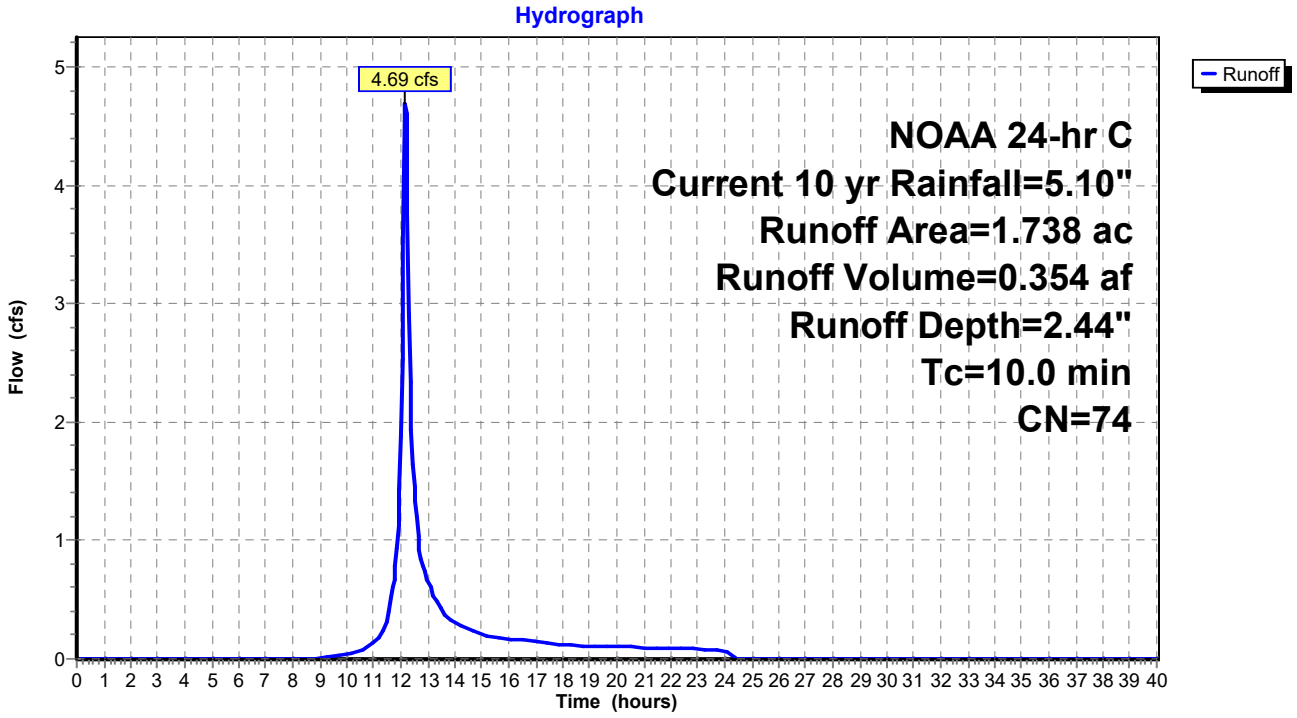
Runoff = 4.69 cfs @ 12.18 hrs, Volume= 0.354 af, Depth= 2.44"
Routed to Pond B-30 : Basin #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.738	74	>75% Grass cover, Good, HSG C
1.738		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 30P: PDA-30 (pervious)



Summary for Subcatchment 31I: PDA-31 (impervious)

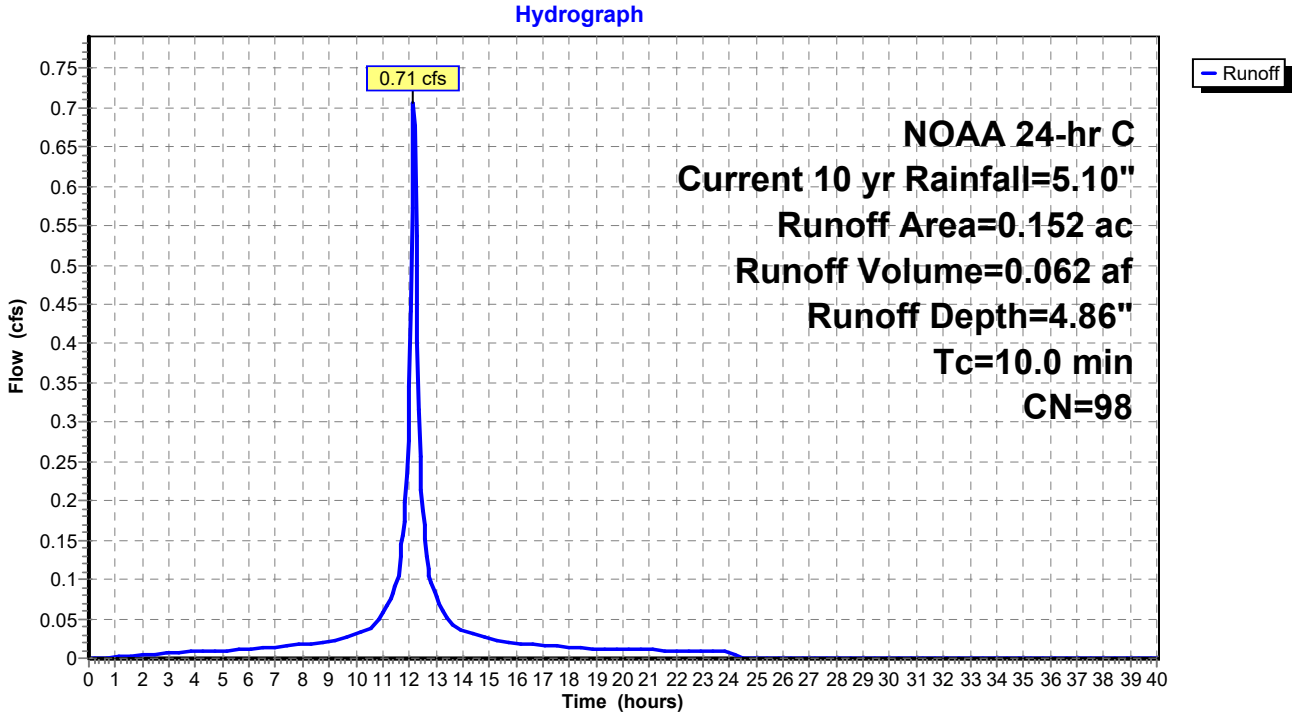
Runoff = 0.71 cfs @ 12.17 hrs, Volume= 0.062 af, Depth= 4.86"
Routed to Pond B-31 : Basin #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.079	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.009	98	Concrete, HSC C
	0.152	98	Weighted Average
	0.152		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 31I: PDA-31 (impervious)



Summary for Subcatchment 31P: PDA-31 (pervious)

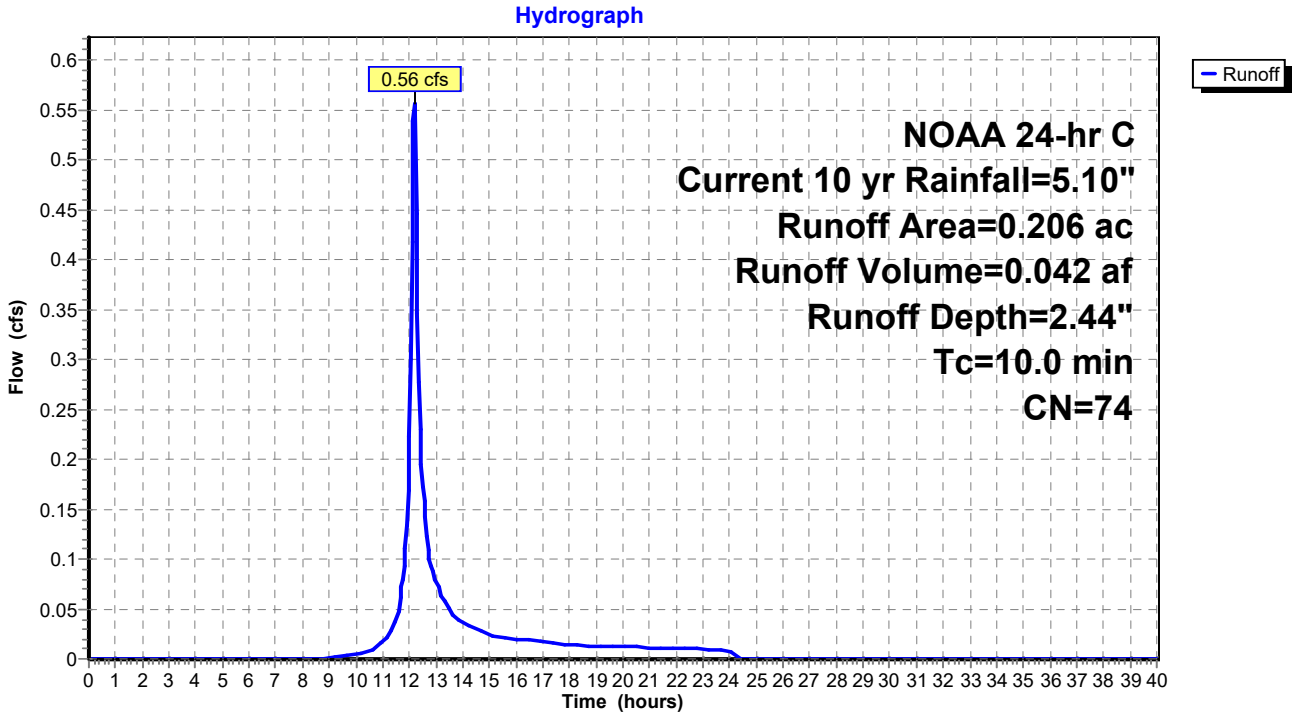
Runoff = 0.56 cfs @ 12.18 hrs, Volume= 0.042 af, Depth= 2.44"
Routed to Pond B-31 : Basin #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.206	74	>75% Grass cover, Good, HSG C
0.206		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 31P: PDA-31 (pervious)



Summary for Subcatchment 32I: PDA-32 (impervious)

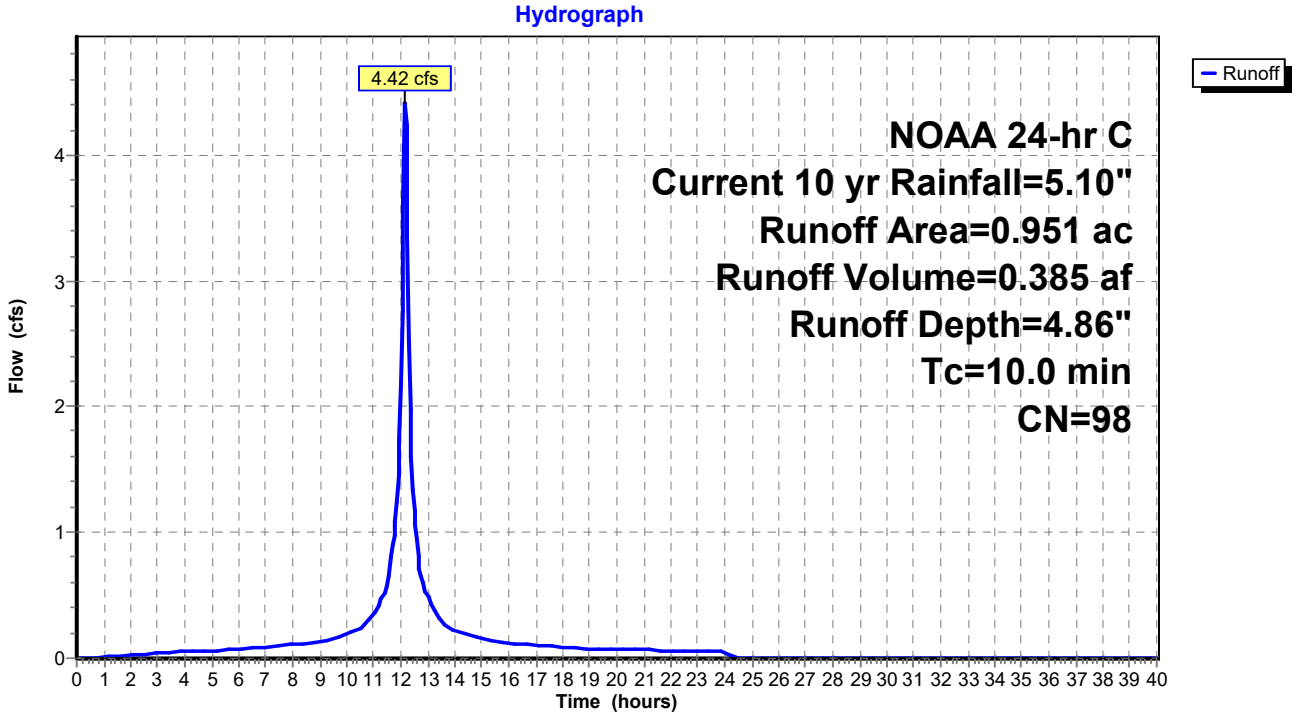
Runoff = 4.42 cfs @ 12.17 hrs, Volume= 0.385 af, Depth= 4.86"
Routed to Pond B-32 : Basin #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.478	98	Pavement, HSG C
*	0.386	98	Roof, HSG C
*	0.087	98	Concrete, HSC C
	0.951	98	Weighted Average
	0.951		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 32I: PDA-32 (impervious)



Summary for Subcatchment 32P: PDA-32 (pervious)

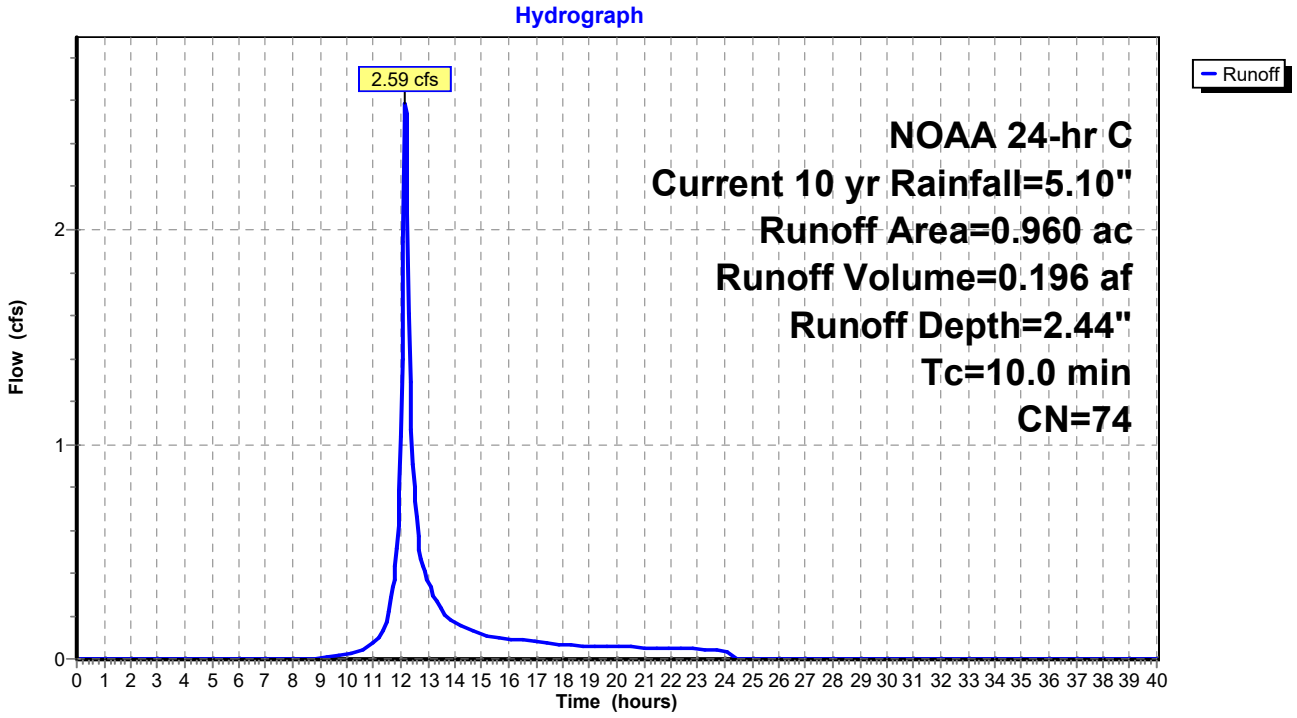
Runoff = 2.59 cfs @ 12.18 hrs, Volume= 0.196 af, Depth= 2.44"
Routed to Pond B-32 : Basin #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.960	74	>75% Grass cover, Good, HSG C
0.960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 32P: PDA-32 (pervious)



Summary for Subcatchment 33l: PDA-33 (impervious)

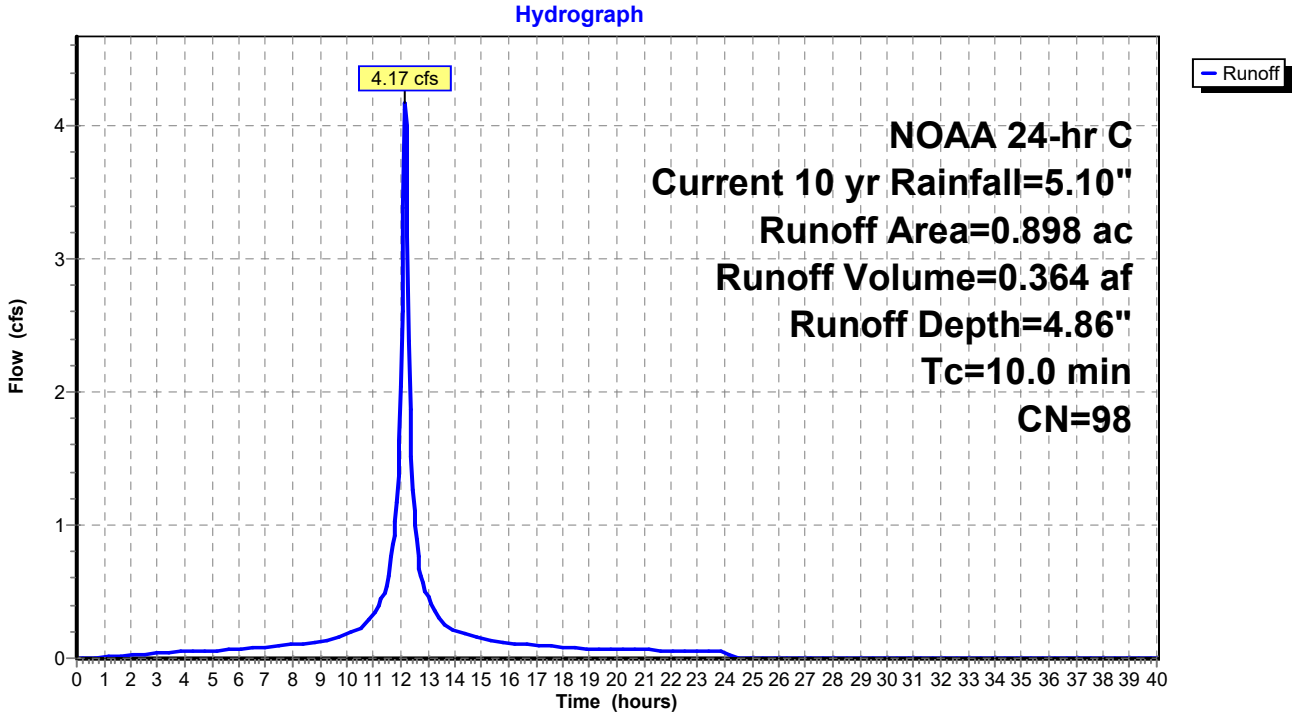
Runoff = 4.17 cfs @ 12.17 hrs, Volume= 0.364 af, Depth= 4.86"
Routed to Pond B-33 : Basin #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.351	98	Pavement, HSG C
*	0.514	98	Roof, HSG C
*	0.033	98	Concrete, HSC C
	0.898	98	Weighted Average
	0.898		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 33l: PDA-33 (impervious)



Summary for Subcatchment 33P: PDA-33 (pervious)

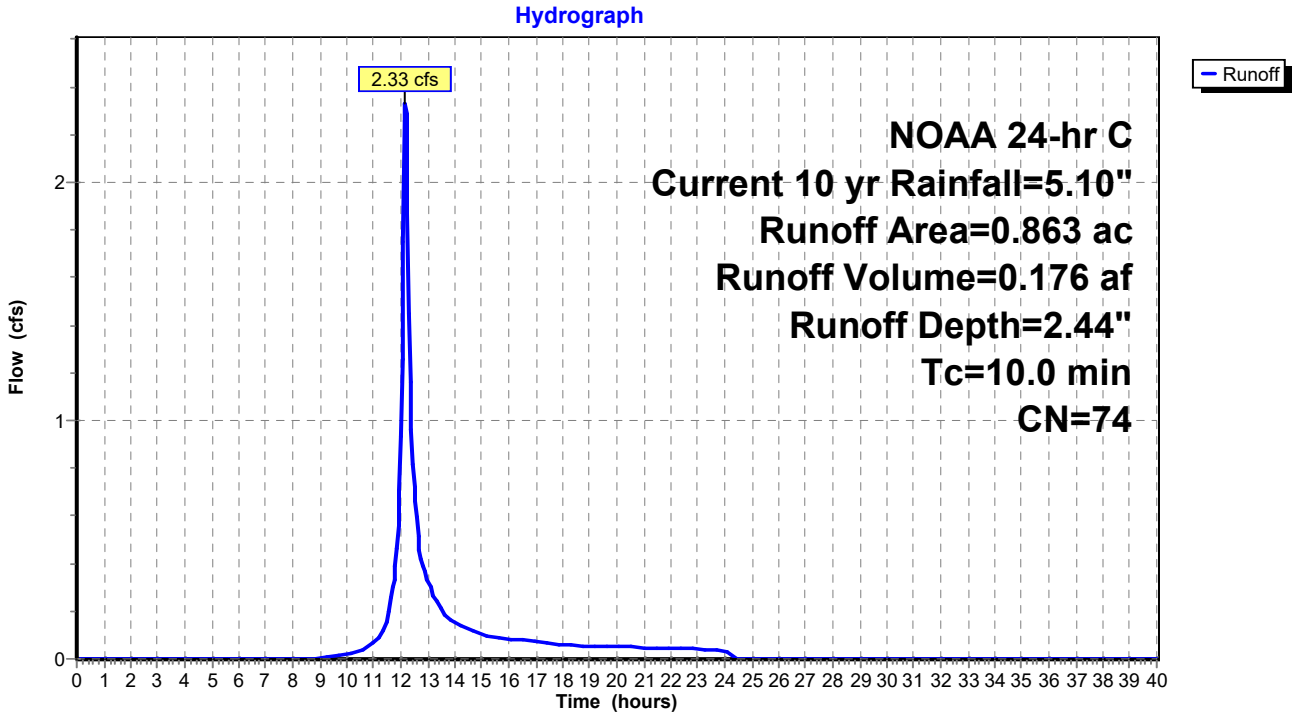
Runoff = 2.33 cfs @ 12.18 hrs, Volume= 0.176 af, Depth= 2.44"
Routed to Pond B-33 : Basin #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.863	74	>75% Grass cover, Good, HSG C
0.863		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 33P: PDA-33 (pervious)



Summary for Subcatchment 34I: PDA-34 (impervious)

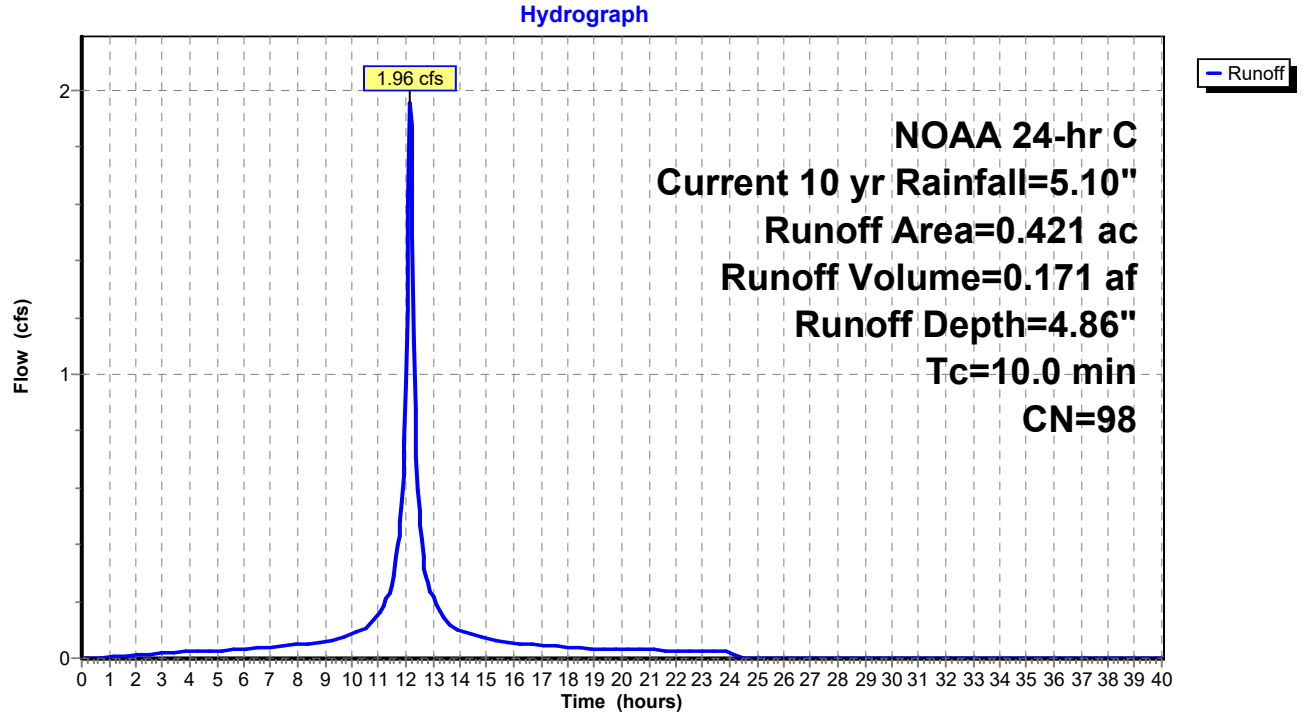
Runoff = 1.96 cfs @ 12.17 hrs, Volume= 0.171 af, Depth= 4.86"
Routed to Pond B-34 : Basin #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.279	98	Roof, HSG C
*	0.142	98	Concrete, HSC C
	0.421	98	Weighted Average
	0.421		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 34I: PDA-34 (impervious)



Summary for Subcatchment 34P: PDA-34 (pervious)

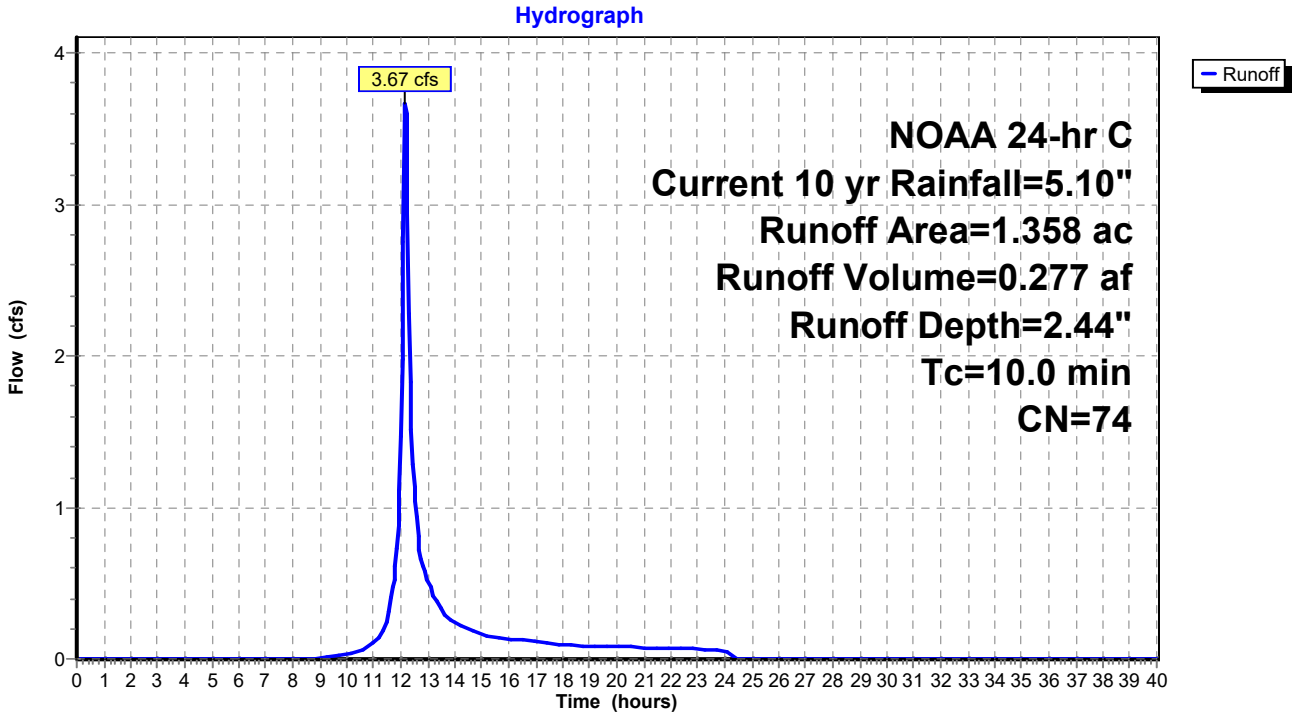
Runoff = 3.67 cfs @ 12.18 hrs, Volume= 0.277 af, Depth= 2.44"
Routed to Pond B-34 : Basin #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.358	74	>75% Grass cover, Good, HSG C
1.358		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 34P: PDA-34 (pervious)



Summary for Subcatchment 35l: PDA-35 (impervious)

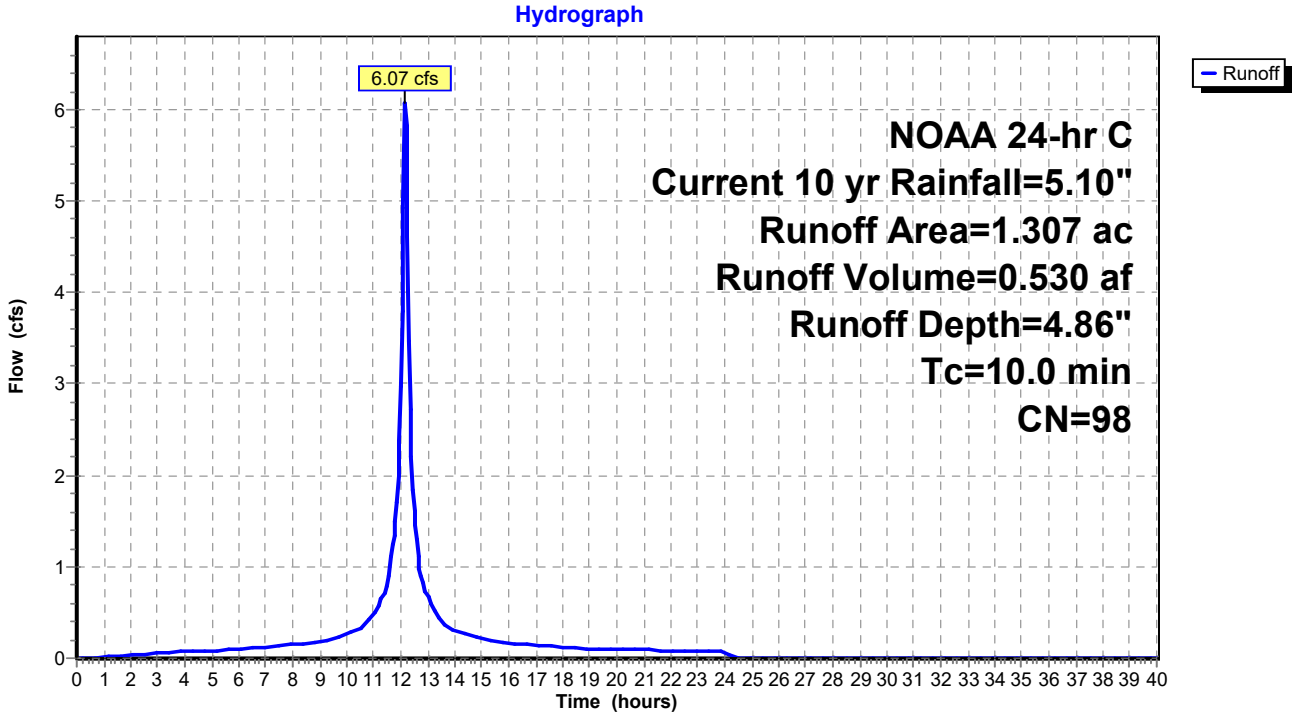
Runoff = 6.07 cfs @ 12.17 hrs, Volume= 0.530 af, Depth= 4.86"
Routed to Pond B-35 : Basin #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	1.003	98	Pavement, HSG C
*	0.139	98	Roof, HSG C
*	0.165	98	Concrete, HSC C
	1.307	98	Weighted Average
	1.307		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 35l: PDA-35 (impervious)



Summary for Subcatchment 35P: PDA-35 (pervious)

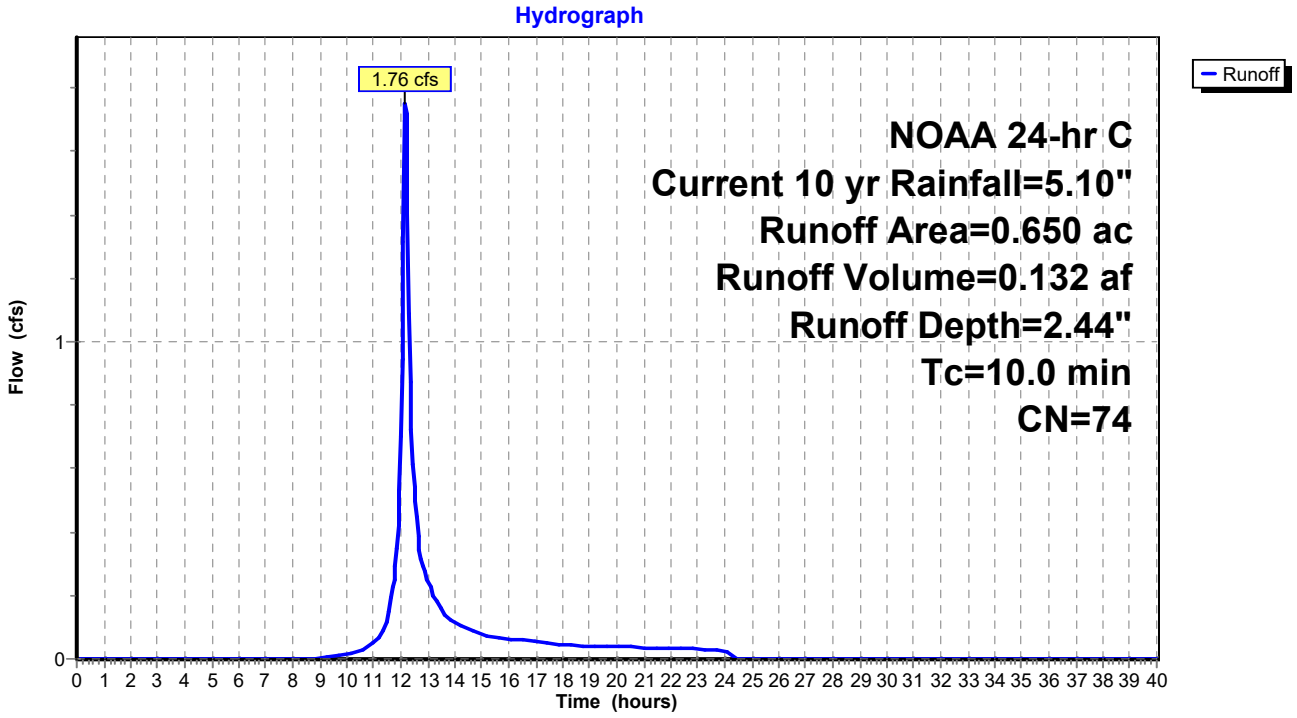
Runoff = 1.76 cfs @ 12.18 hrs, Volume= 0.132 af, Depth= 2.44"
Routed to Pond B-35 : Basin #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.650	74	>75% Grass cover, Good, HSG C
0.650		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 35P: PDA-35 (pervious)



Summary for Subcatchment 36AI: PDA-36A (impervious)

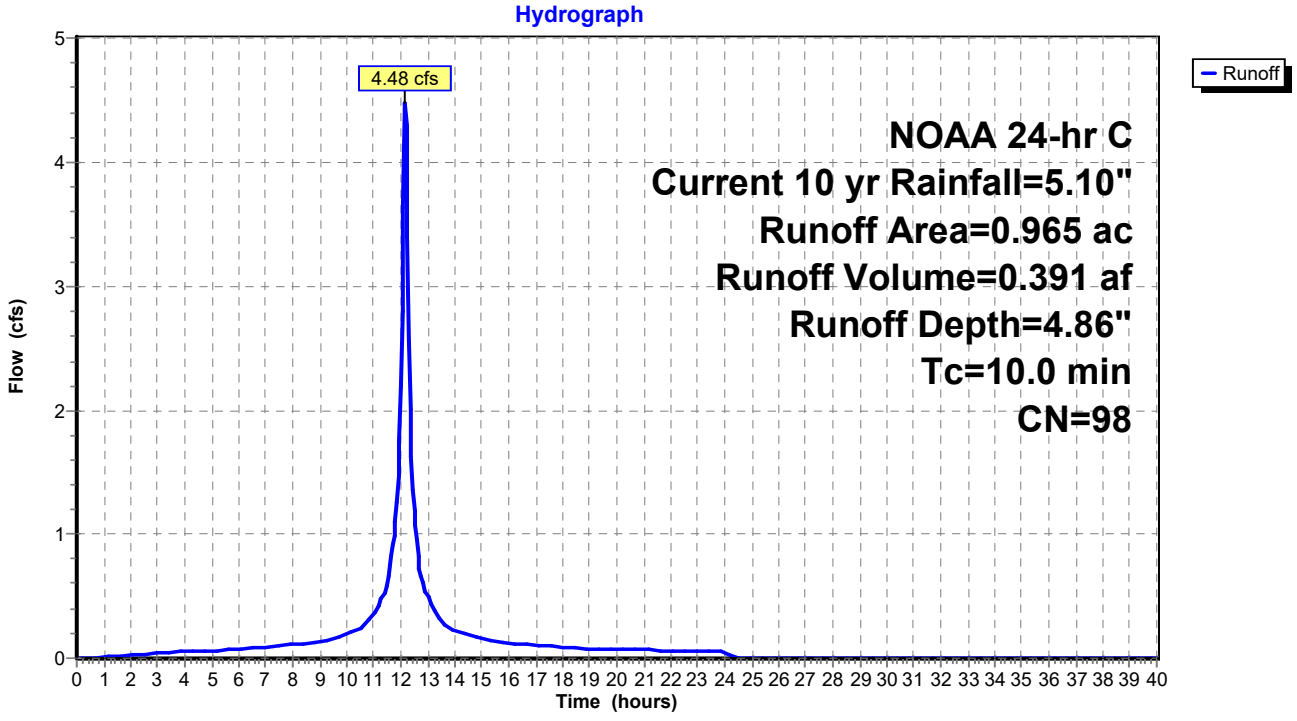
Runoff = 4.48 cfs @ 12.17 hrs, Volume= 0.391 af, Depth= 4.86"
Routed to Pond B-36A : Basin #36A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.415	98	Pavement, HSG C
*	0.418	98	Roof, HSG C
*	0.132	98	Concrete, HSC C
	0.965	98	Weighted Average
	0.965		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36AI: PDA-36A (impervious)



Summary for Subcatchment 36AP: PDA-36A (pervious)

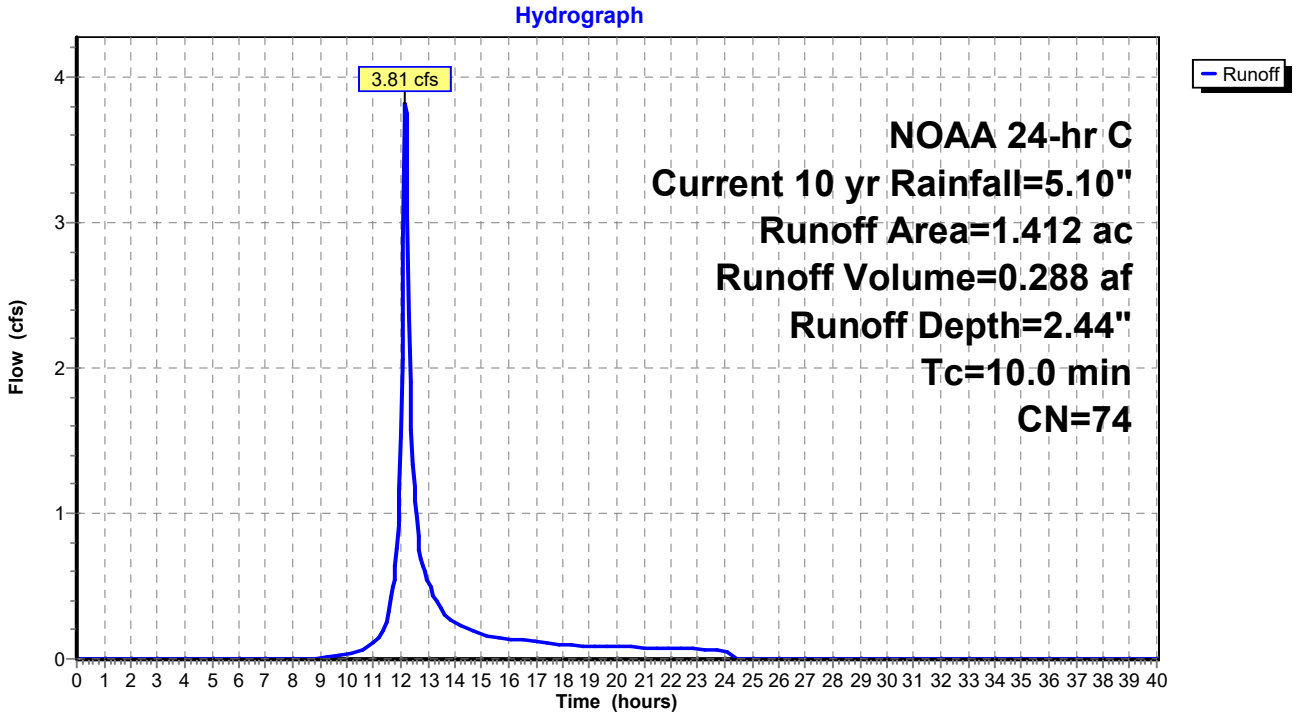
Runoff = 3.81 cfs @ 12.18 hrs, Volume= 0.288 af, Depth= 2.44"
Routed to Pond B-36A : Basin #36A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.412	74	>75% Grass cover, Good, HSG C
1.412		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36AP: PDA-36A (pervious)



Summary for Subcatchment 36BI: PDA-36B (impervious)

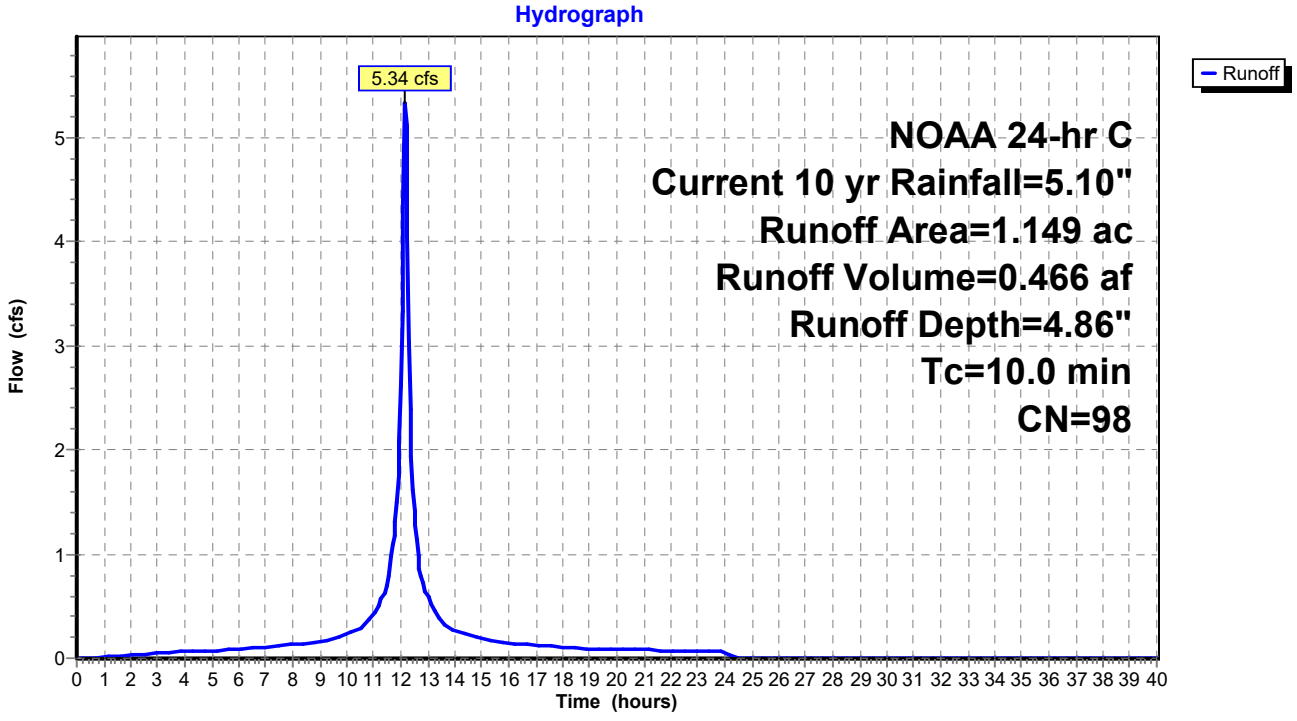
Runoff = 5.34 cfs @ 12.17 hrs, Volume= 0.466 af, Depth= 4.86"
Routed to Pond B-36B : Basin #36B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.501	98	Pavement, HSG C
*	0.579	98	Roof, HSG C
*	0.069	98	Concrete, HSC C
	1.149	98	Weighted Average
	1.149		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36BI: PDA-36B (impervious)



Summary for Subcatchment 36BP: PDA-36B (pervious)

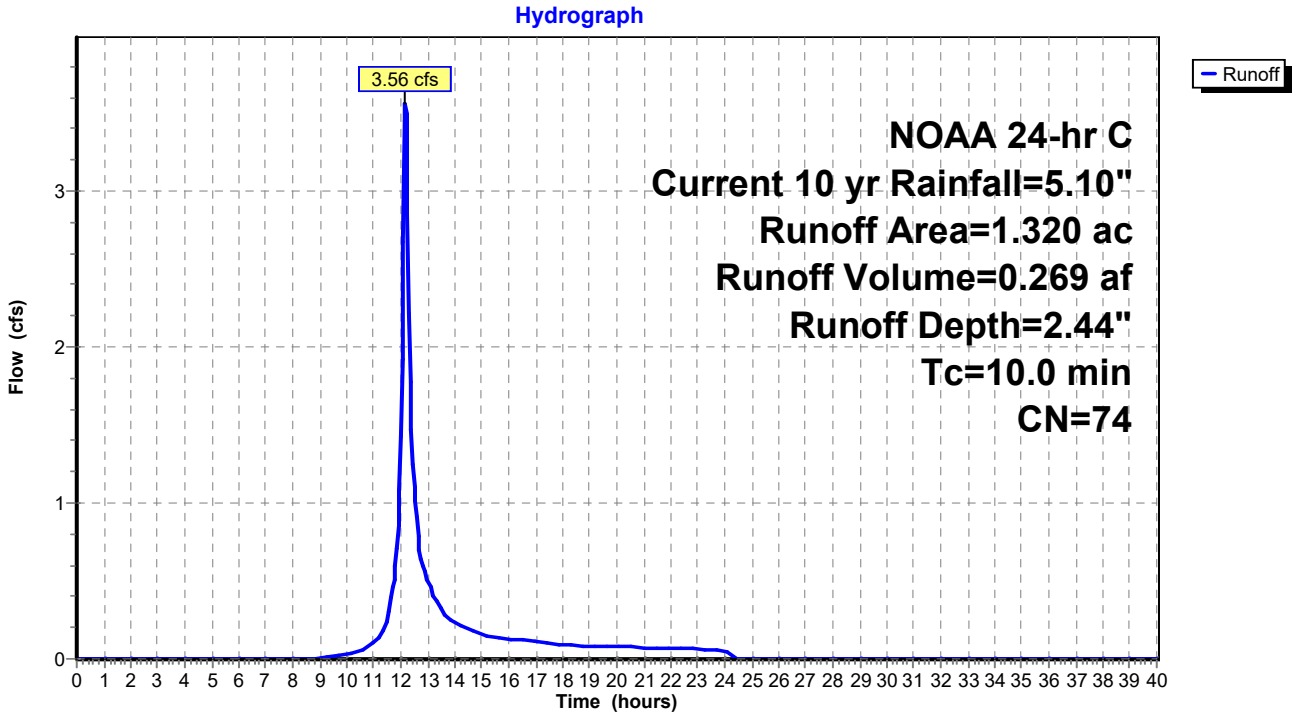
Runoff = 3.56 cfs @ 12.18 hrs, Volume= 0.269 af, Depth= 2.44"
Routed to Pond B-36B : Basin #36B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.320	74	>75% Grass cover, Good, HSG C
1.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36BP: PDA-36B (pervious)



Summary for Subcatchment 37AI: PDA-37B (impervious)

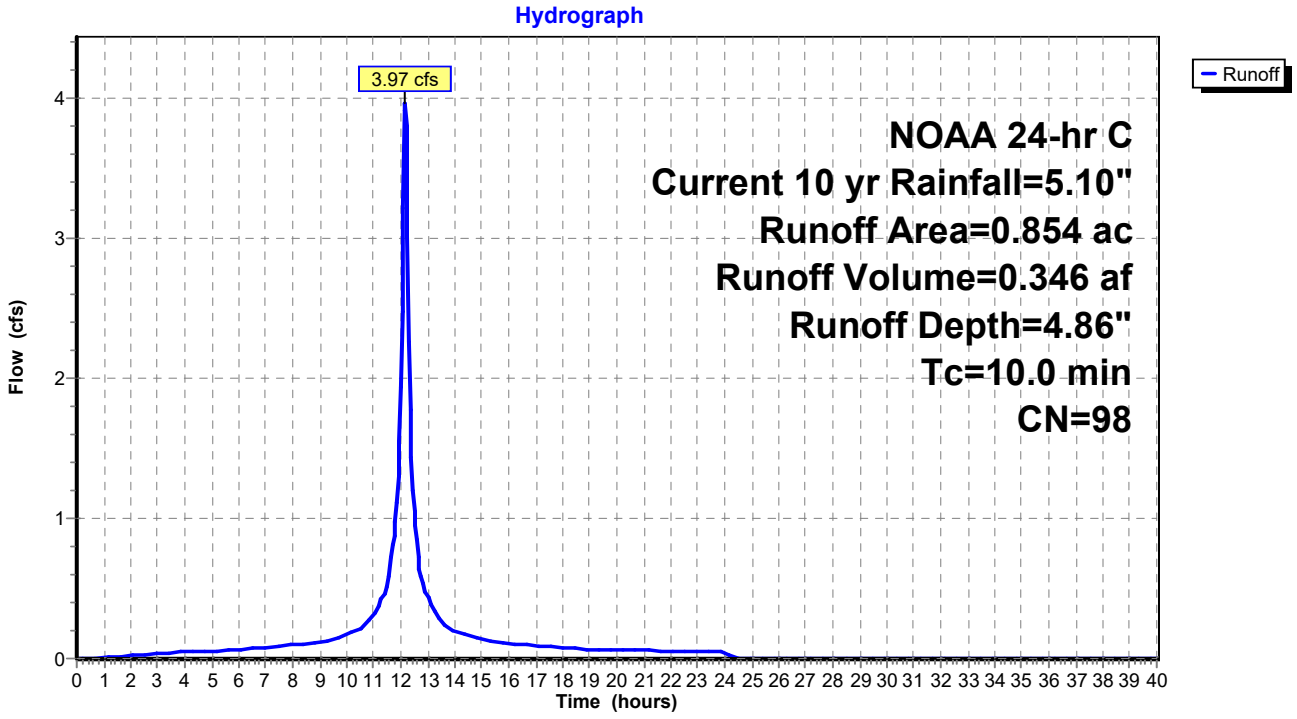
Runoff = 3.97 cfs @ 12.17 hrs, Volume= 0.346 af, Depth= 4.86"
Routed to Pond B-37A : Basin #37A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.673	98	Pavement, HSG C
*	0.181	98	Concrete, HSC C
	0.854	98	Weighted Average
	0.854		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37AI: PDA-37B (impervious)



Summary for Subcatchment 37AP: PDA-37A (pervious)

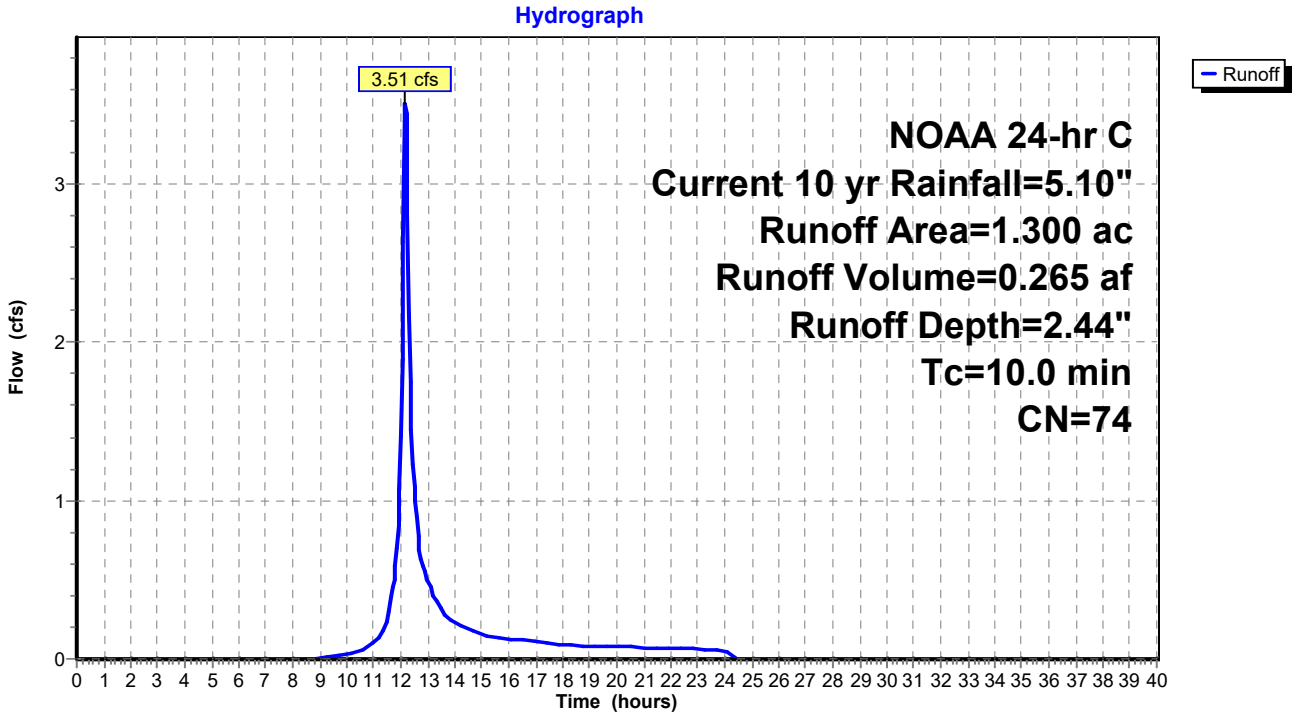
Runoff = 3.51 cfs @ 12.18 hrs, Volume= 0.265 af, Depth= 2.44"
Routed to Pond B-37A : Basin #37A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.300	74	>75% Grass cover, Good, HSG C
1.300		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37AP: PDA-37A (pervious)



Summary for Subcatchment 37BI: PDA-37B (impervious)

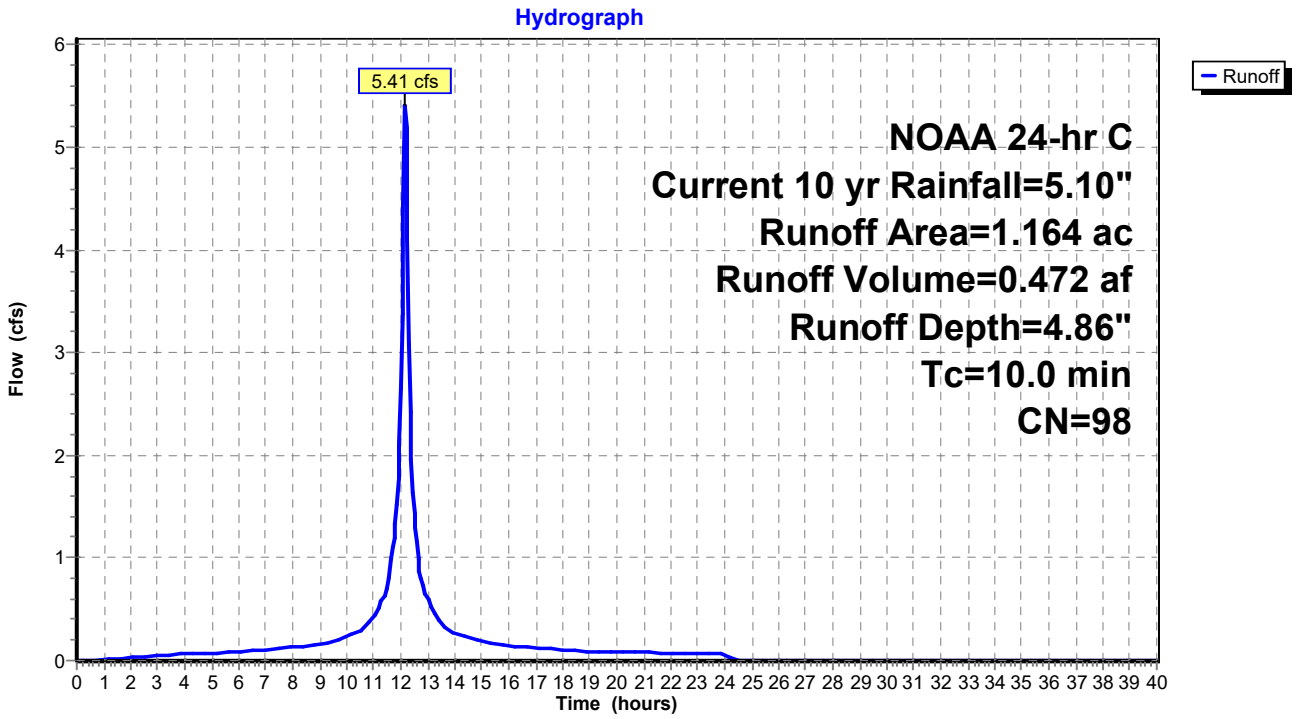
Runoff = 5.41 cfs @ 12.17 hrs, Volume= 0.472 af, Depth= 4.86"
Routed to Pond B-37B : Basin #37B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.806	98	Pavement, HSG C
*	0.079	98	Concrete, HSC C
	0.279	98	Unconnected roofs, HSG C
	1.164	98	Weighted Average
	1.164		100.00% Impervious Area
	0.279		23.97% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37BI: PDA-37B (impervious)



Summary for Subcatchment 38BP: PDA-37B (pervious)

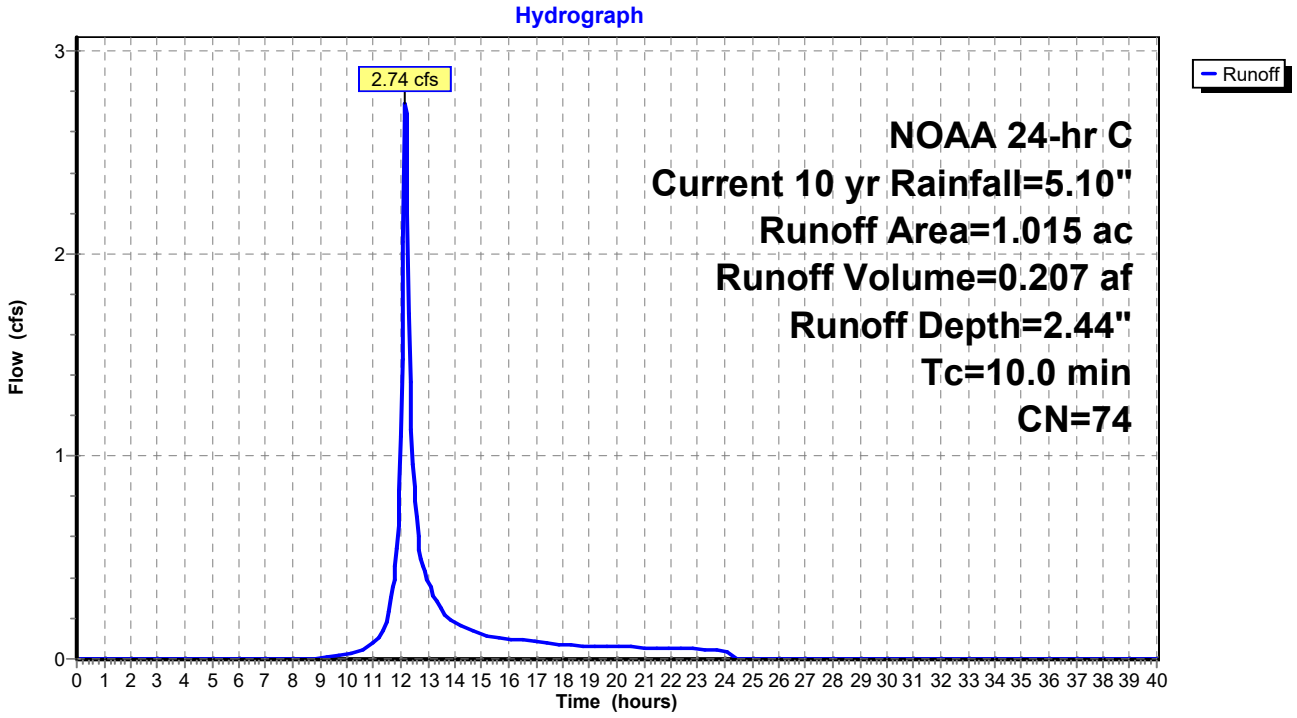
Runoff = 2.74 cfs @ 12.18 hrs, Volume= 0.207 af, Depth= 2.44"
Routed to Pond B-37B : Basin #37B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.015	74	>75% Grass cover, Good, HSG C
1.015		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38BP: PDA-37B (pervious)



Summary for Subcatchment 38I: PDA-38 (impervious)

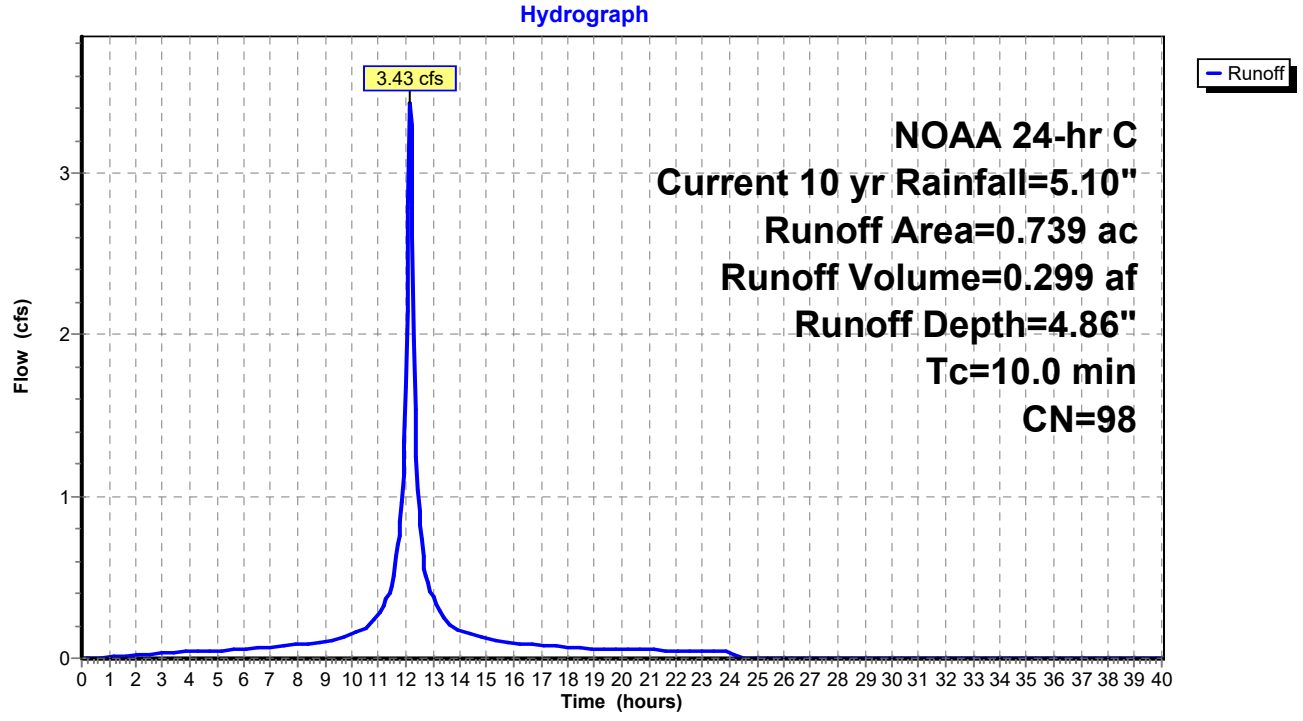
Runoff = 3.43 cfs @ 12.17 hrs, Volume= 0.299 af, Depth= 4.86"
Routed to Pond B-38 : Basin #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.171	98	Concrete, HSC C
	0.000	98	Paved roads w/curbs & sewers, HSG C
	0.739	98	Weighted Average
	0.739		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38I: PDA-38 (impervious)



Summary for Subcatchment 38P: PDA-38 (pervious)

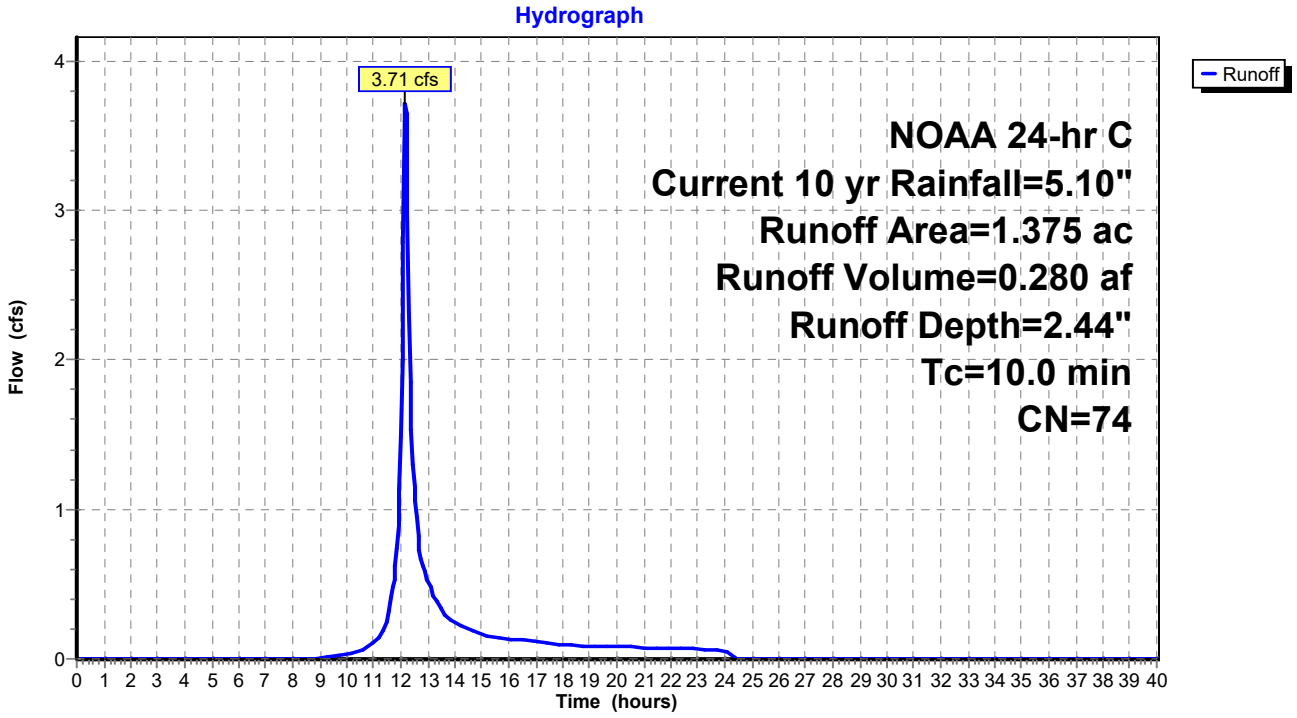
Runoff = 3.71 cfs @ 12.18 hrs, Volume= 0.280 af, Depth= 2.44"
Routed to Pond B-38 : Basin #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.375	74	>75% Grass cover, Good, HSG C
1.375		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38P: PDA-38 (pervious)



Summary for Subcatchment 39l: PDA-39 (impervious)

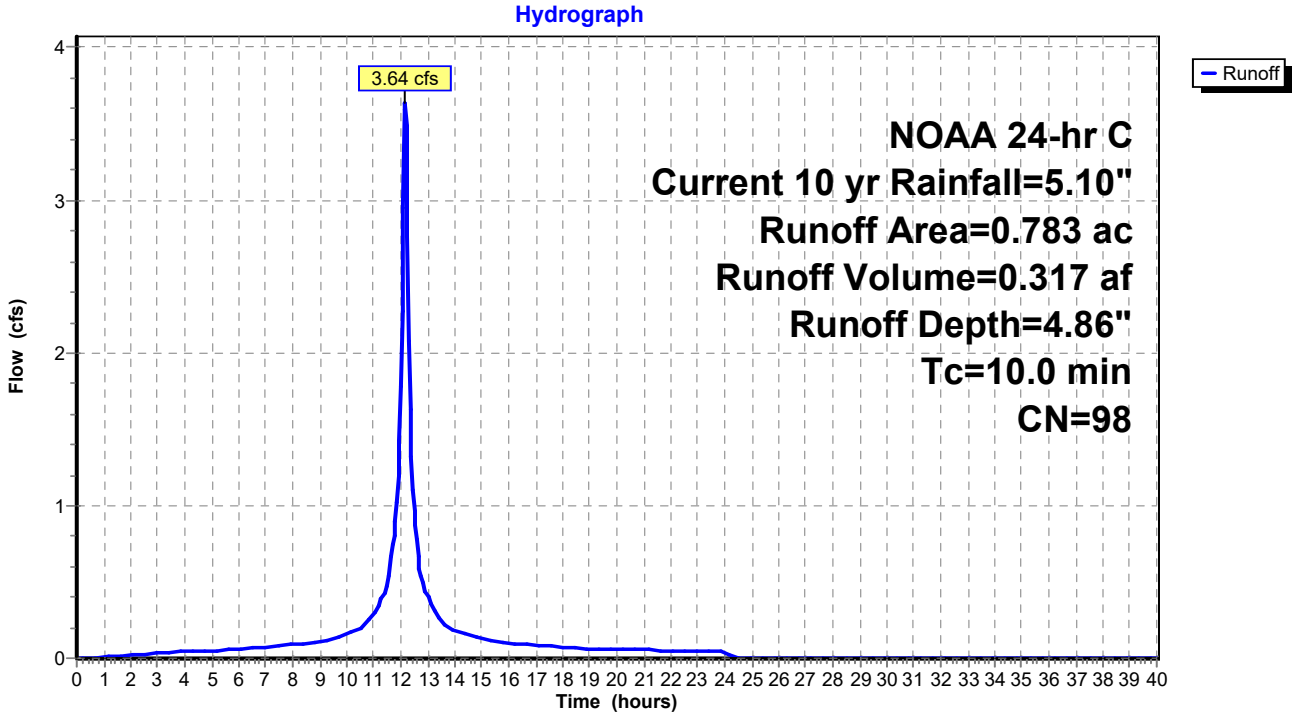
Runoff = 3.64 cfs @ 12.17 hrs, Volume= 0.317 af, Depth= 4.86"
Routed to Pond B-39 : Basin #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.164	98	Concrete, HSC C
	0.051	98	Paved roads w/curbs & sewers, HSG C
	0.783	98	Weighted Average
	0.783		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 39l: PDA-39 (impervious)



Summary for Subcatchment 39P: PDA-39 (pervious)

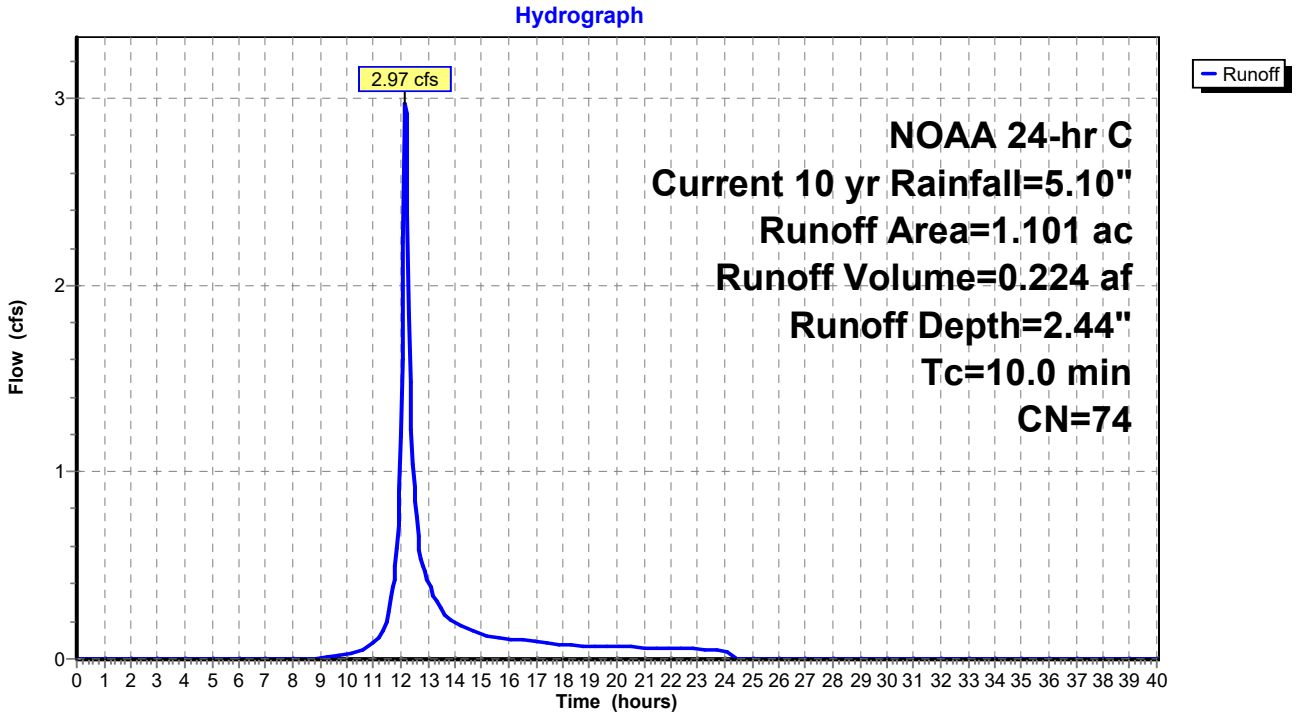
Runoff = 2.97 cfs @ 12.18 hrs, Volume= 0.224 af, Depth= 2.44"
Routed to Pond B-39 : Basin #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.101	74	>75% Grass cover, Good, HSG C
1.101		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 39P: PDA-39 (pervious)



Summary for Subcatchment 40I: PDA-40 (impervious)

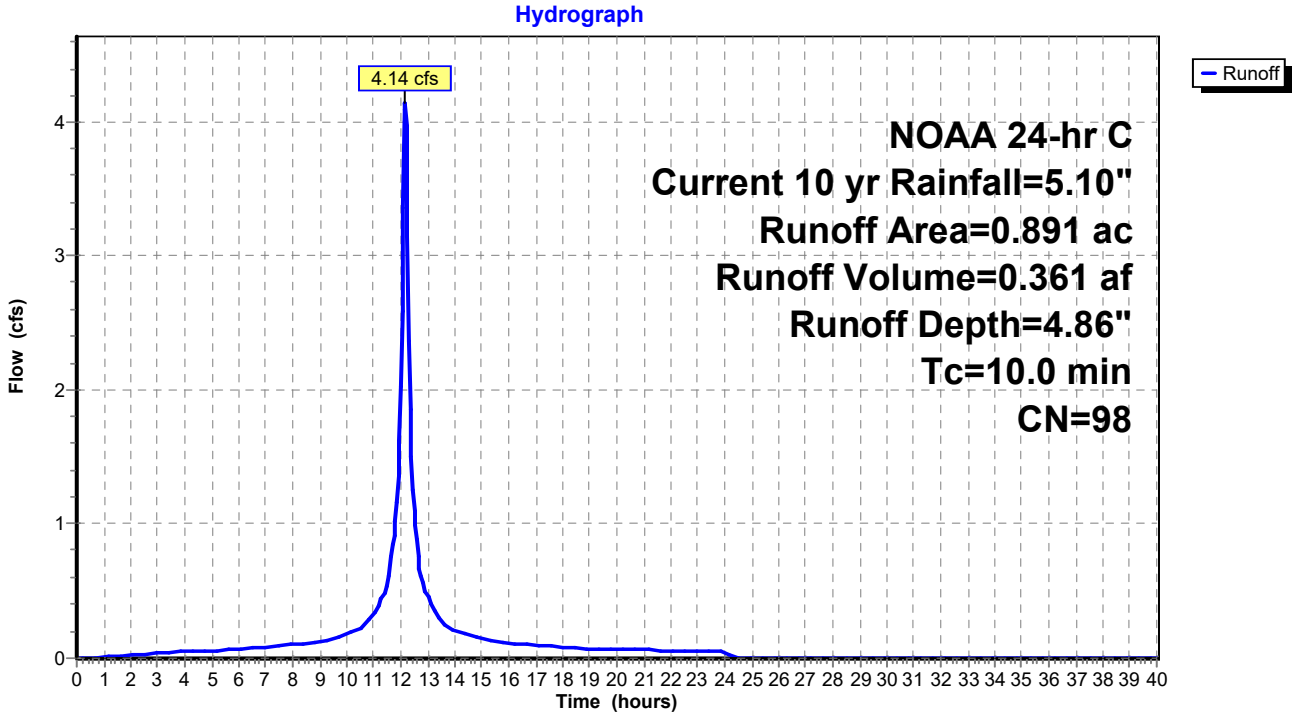
Runoff = 4.14 cfs @ 12.17 hrs, Volume= 0.361 af, Depth= 4.86"
Routed to Pond B-40 : Basin #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.179	98	Concrete, HSC C
	0.144	98	Paved roads w/curbs & sewers, HSG C
	0.891	98	Weighted Average
	0.891		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 40I: PDA-40 (impervious)



Summary for Subcatchment 40P: PDA-40 (pervious)

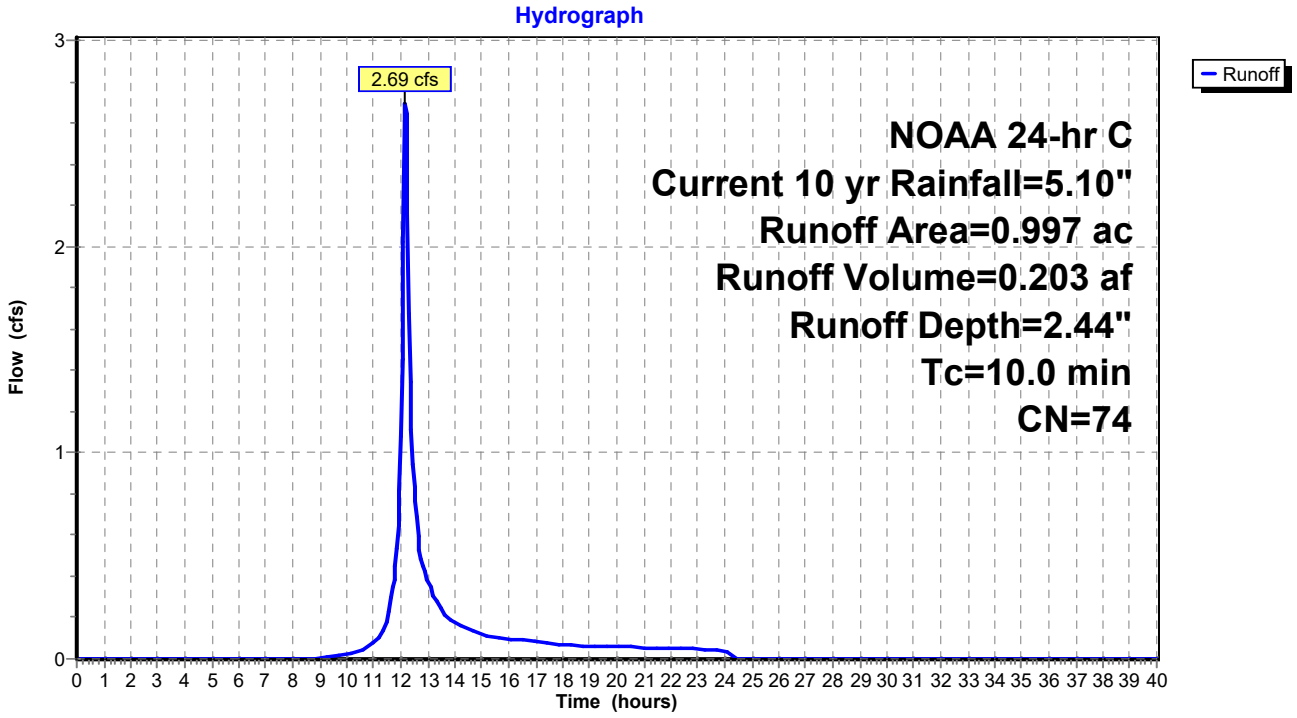
Runoff = 2.69 cfs @ 12.18 hrs, Volume= 0.203 af, Depth= 2.44"
Routed to Pond B-40 : Basin #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.997	74	>75% Grass cover, Good, HSG C
0.997		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 40P: PDA-40 (pervious)



Summary for Subcatchment UPDA-3: PDA-3 (undetained)

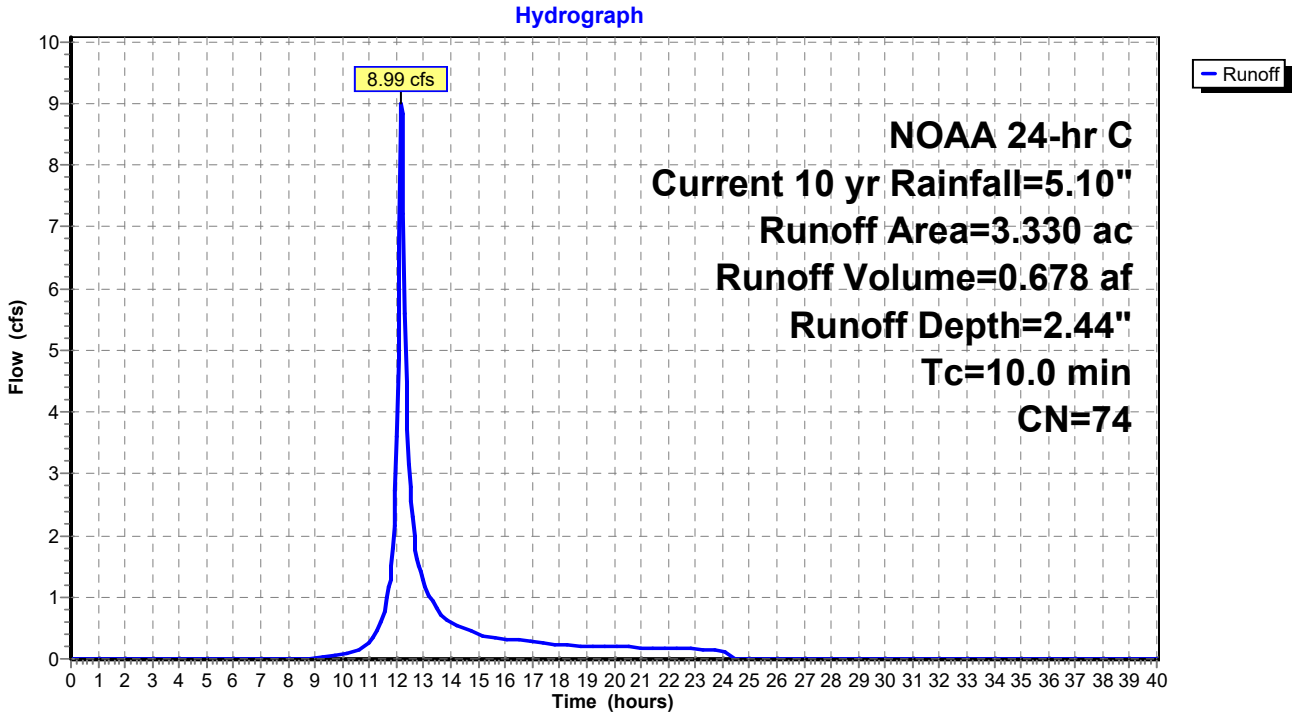
Runoff = 8.99 cfs @ 12.18 hrs, Volume= 0.678 af, Depth= 2.44"
Routed to Link PDA-3 : Proposed Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
3.330	74	>75% Grass cover, Good, HSG C
3.330		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-3: PDA-3 (undetained)



Summary for Pond B-29: Basin #29

Inflow Area = 1.077 ac, 34.91% Impervious, Inflow Depth = 3.29" for Current 10 yr event
Inflow = 3.64 cfs @ 12.17 hrs, Volume= 0.295 af
Outflow = 0.85 cfs @ 12.60 hrs, Volume= 0.249 af, Atten= 77%, Lag= 25.9 min
Primary = 0.85 cfs @ 12.60 hrs, Volume= 0.249 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 187.63' @ 12.60 hrs Surf.Area= 7,249 sf Storage= 6,815 cf

Plug-Flow detention time= 436.4 min calculated for 0.249 af (84% of inflow)
Center-of-Mass det. time= 366.1 min (1,162.5 - 796.4)

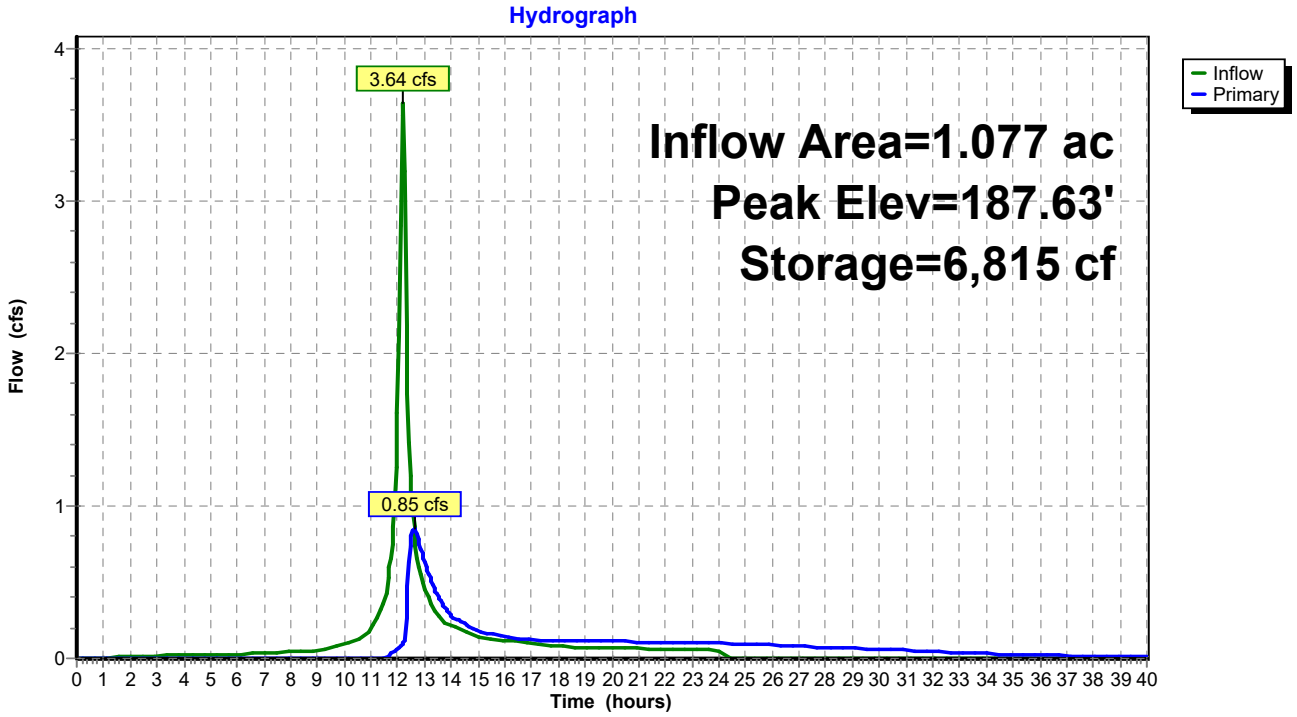
Volume	Invert	Avail.Storage	Storage Description
#1	186.30'	17,435 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.30	0	0	0
187.00	6,769	2,369	2,369
188.00	7,526	7,148	9,517
189.00	8,311	7,919	17,435

Device	Routing	Invert	Outlet Devices
#1	Primary	185.65'	**18.0" Round Culvert** L= 177.0' Ke= 0.500 Inlet / Outlet Invert= 185.65' / 182.00' S= 0.0206 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	186.87'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	187.49'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.17'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.84 cfs @ 12.60 hrs HW=187.63' (Free Discharge)
- **1=Culvert** (Passes 0.84 cfs of 9.45 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.91 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.71 cfs @ 1.24 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-29: Basin #29



Stage-Discharge for Pond B-29: Basin #29

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.30	0.00	186.82	0.00	187.34	0.10	187.86	3.04
186.31	0.00	186.83	0.00	187.35	0.10	187.87	3.16
186.32	0.00	186.84	0.00	187.36	0.10	187.88	3.28
186.33	0.00	186.85	0.00	187.37	0.10	187.89	3.40
186.34	0.00	186.86	0.00	187.38	0.10	187.90	3.52
186.35	0.00	186.87	0.00	187.39	0.11	187.91	3.64
186.36	0.00	186.88	0.00	187.40	0.11	187.92	3.77
186.37	0.00	186.89	0.00	187.41	0.11	187.93	3.89
186.38	0.00	186.90	0.00	187.42	0.11	187.94	4.02
186.39	0.00	186.91	0.00	187.43	0.11	187.95	4.15
186.40	0.00	186.92	0.00	187.44	0.11	187.96	4.28
186.41	0.00	186.93	0.01	187.45	0.11	187.97	4.41
186.42	0.00	186.94	0.01	187.46	0.11	187.98	4.54
186.43	0.00	186.95	0.01	187.47	0.12	187.99	4.67
186.44	0.00	186.96	0.01	187.48	0.12	188.00	4.81
186.45	0.00	186.97	0.02	187.49	0.12	188.01	4.94
186.46	0.00	186.98	0.02	187.50	0.13	188.02	5.08
186.47	0.00	186.99	0.02	187.51	0.16	188.03	5.22
186.48	0.00	187.00	0.03	187.52	0.19	188.04	5.36
186.49	0.00	187.01	0.03	187.53	0.23	188.05	5.50
186.50	0.00	187.02	0.03	187.54	0.27	188.06	5.64
186.51	0.00	187.03	0.04	187.55	0.32	188.07	5.78
186.52	0.00	187.04	0.04	187.56	0.37	188.08	5.93
186.53	0.00	187.05	0.05	187.57	0.42	188.09	6.07
186.54	0.00	187.06	0.05	187.58	0.48	188.10	6.22
186.55	0.00	187.07	0.05	187.59	0.54	188.11	6.36
186.56	0.00	187.08	0.05	187.60	0.60	188.12	6.51
186.57	0.00	187.09	0.06	187.61	0.67	188.13	6.66
186.58	0.00	187.10	0.06	187.62	0.74	188.14	6.81
186.59	0.00	187.11	0.06	187.63	0.81	188.15	6.96
186.60	0.00	187.12	0.06	187.64	0.89	188.16	7.11
186.61	0.00	187.13	0.06	187.65	0.97	188.17	7.26
186.62	0.00	187.14	0.07	187.66	1.04	188.18	7.54
186.63	0.00	187.15	0.07	187.67	1.13	188.19	7.90
186.64	0.00	187.16	0.07	187.68	1.21	188.20	8.34
186.65	0.00	187.17	0.07	187.69	1.30	188.21	8.82
186.66	0.00	187.18	0.07	187.70	1.39	188.22	9.35
186.67	0.00	187.19	0.08	187.71	1.48	188.23	9.93
186.68	0.00	187.20	0.08	187.72	1.57	188.24	10.54
186.69	0.00	187.21	0.08	187.73	1.66	188.25	11.18
186.70	0.00	187.22	0.08	187.74	1.76	188.26	11.86
186.71	0.00	187.23	0.08	187.75	1.86	188.27	12.56
186.72	0.00	187.24	0.08	187.76	1.96	188.28	13.30
186.73	0.00	187.25	0.09	187.77	2.06	188.29	14.06
186.74	0.00	187.26	0.09	187.78	2.16	188.30	14.86
186.75	0.00	187.27	0.09	187.79	2.27	188.31	15.67
186.76	0.00	187.28	0.09	187.80	2.37	188.32	16.52
186.77	0.00	187.29	0.09	187.81	2.48	188.33	17.38
186.78	0.00	187.30	0.09	187.82	2.59	188.34	18.27
186.79	0.00	187.31	0.10	187.83	2.70	188.35	19.19
186.80	0.00	187.32	0.10	187.84	2.81	188.36	20.12
186.81	0.00	187.33	0.10	187.85	2.93	188.37	21.08

Stage-Discharge for Pond B-29: Basin #29 (continued)

Elevation (feet)	Primary (cfs)
188.38	22.10
188.39	23.14
188.40	24.22
188.41	25.31
188.42	26.44
188.43	27.59
188.44	28.76
188.45	29.96
188.46	31.19
188.47	32.41
188.48	33.54
188.49	34.69
188.50	35.86
188.51	37.06
188.52	38.29
188.53	39.53
188.54	40.80
188.55	42.10
188.56	43.42
188.57	44.76
188.58	46.16
188.59	47.58
188.60	49.03
188.61	50.50
188.62	52.00
188.63	53.52
188.64	55.07
188.65	56.65
188.66	58.25
188.67	59.88
188.68	61.54
188.69	63.22
188.70	64.93
188.71	66.67
188.72	68.43
188.73	70.22
188.74	72.04
188.75	73.88
188.76	75.75
188.77	77.65
188.78	79.30
188.79	80.97
188.80	82.65
188.81	84.35
188.82	86.06
188.83	87.78
188.84	89.51
188.85	91.26
188.86	93.02
188.87	94.79
188.88	96.58
188.89	98.37
188.90	100.19
188.91	102.01
188.92	103.84
188.93	105.69
188.94	107.55
188.95	109.42
188.96	111.31
188.97	113.21
188.98	115.15
188.99	117.11
189.00	**119.08**

Stage-Area-Storage for Pond B-29: Basin #29

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.30	0	0	186.82	5,028	1,307
186.31	97	0	186.83	5,125	1,358
186.32	193	2	186.84	5,222	1,410
186.33	290	4	186.85	5,319	1,463
186.34	387	8	186.86	5,415	1,516
186.35	484	12	186.87	5,512	1,571
186.36	580	17	186.88	5,609	1,626
186.37	677	24	186.89	5,705	1,683
186.38	774	31	186.90	5,802	1,741
186.39	870	39	186.91	5,899	1,799
186.40	967	48	186.92	5,995	1,859
186.41	1,064	59	186.93	6,092	1,919
186.42	1,160	70	186.94	6,189	1,980
186.43	1,257	82	186.95	6,286	2,043
186.44	1,354	95	186.96	6,382	2,106
186.45	1,451	109	186.97	6,479	2,170
186.46	1,547	124	186.98	6,576	2,236
186.47	1,644	140	186.99	6,672	2,302
186.48	1,741	157	187.00	6,769	2,369
186.49	1,837	175	187.01	6,777	2,437
186.50	1,934	193	187.02	6,784	2,505
186.51	2,031	213	187.03	6,792	2,573
186.52	2,127	234	187.04	6,799	2,641
186.53	2,224	256	187.05	6,807	2,709
186.54	2,321	278	187.06	6,814	2,777
186.55	2,418	302	187.07	6,822	2,845
186.56	2,514	327	187.08	6,830	2,913
186.57	2,611	352	187.09	6,837	2,981
186.58	2,708	379	187.10	6,845	3,050
186.59	2,804	407	187.11	6,852	3,118
186.60	2,901	435	187.12	6,860	3,187
186.61	2,998	465	187.13	6,867	3,256
186.62	3,094	495	187.14	6,875	3,324
186.63	3,191	527	187.15	6,883	3,393
186.64	3,288	559	187.16	6,890	3,462
186.65	3,385	592	187.17	6,898	3,531
186.66	3,481	627	187.18	6,905	3,600
186.67	3,578	662	187.19	6,913	3,669
186.68	3,675	698	187.20	6,920	3,738
186.69	3,771	735	187.21	6,928	3,807
186.70	3,868	774	187.22	6,936	3,877
186.71	3,965	813	187.23	6,943	3,946
186.72	4,061	853	187.24	6,951	4,016
186.73	4,158	894	187.25	6,958	4,085
186.74	4,255	936	187.26	6,966	4,155
186.75	4,351	979	187.27	6,973	4,224
186.76	4,448	1,023	187.28	6,981	4,294
186.77	4,545	1,068	187.29	6,989	4,364
186.78	4,642	1,114	187.30	6,996	4,434
186.79	4,738	1,161	187.31	7,004	4,504
186.80	4,835	1,209	187.32	7,011	4,574
186.81	4,932	1,258	187.33	7,019	4,644

Stage-Area-Storage for Pond B-29: Basin #29 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.34	7,026	4,714	187.86	7,420	8,470
187.35	7,034	4,785	187.87	7,428	8,545
187.36	7,042	4,855	187.88	7,435	8,619
187.37	7,049	4,925	187.89	7,443	8,693
187.38	7,057	4,996	187.90	7,450	8,768
187.39	7,064	5,067	187.91	7,458	8,842
187.40	7,072	5,137	187.92	7,465	8,917
187.41	7,079	5,208	187.93	7,473	8,992
187.42	7,087	5,279	187.94	7,481	9,066
187.43	7,095	5,350	187.95	7,488	9,141
187.44	7,102	5,421	187.96	7,496	9,216
187.45	7,110	5,492	187.97	7,503	9,291
187.46	7,117	5,563	187.98	7,511	9,366
187.47	7,125	5,634	187.99	7,518	9,441
187.48	7,132	5,705	188.00	7,526	9,517
187.49	7,140	5,777	188.01	7,534	9,592
187.50	7,148	5,848	188.02	7,542	9,667
187.51	7,155	5,920	188.03	7,550	9,743
187.52	7,163	5,991	188.04	7,557	9,818
187.53	7,170	6,063	188.05	7,565	9,894
187.54	7,178	6,135	188.06	7,573	9,970
187.55	7,185	6,207	188.07	7,581	10,045
187.56	7,193	6,278	188.08	7,589	10,121
187.57	7,200	6,350	188.09	7,597	10,197
187.58	7,208	6,422	188.10	7,605	10,273
187.59	7,216	6,495	188.11	7,612	10,349
187.60	7,223	6,567	188.12	7,620	10,425
187.61	7,231	6,639	188.13	7,628	10,502
187.62	7,238	6,711	188.14	7,636	10,578
187.63	7,246	6,784	188.15	7,644	10,654
187.64	7,253	6,856	188.16	7,652	10,731
187.65	7,261	6,929	188.17	7,659	10,807
187.66	7,269	7,002	188.18	7,667	10,884
187.67	7,276	7,074	188.19	7,675	10,961
187.68	7,284	7,147	188.20	7,683	11,038
187.69	7,291	7,220	188.21	7,691	11,114
187.70	7,299	7,293	188.22	7,699	11,191
187.71	7,306	7,366	188.23	7,707	11,268
187.72	7,314	7,439	188.24	7,714	11,345
187.73	7,322	7,512	188.25	7,722	11,423
187.74	7,329	7,585	188.26	7,730	11,500
187.75	7,337	7,659	188.27	7,738	11,577
187.76	7,344	7,732	188.28	7,746	11,655
187.77	7,352	7,806	188.29	7,754	11,732
187.78	7,359	7,879	188.30	7,762	11,810
187.79	7,367	7,953	188.31	7,769	11,887
187.80	7,375	8,027	188.32	7,777	11,965
187.81	7,382	8,100	188.33	7,785	12,043
187.82	7,390	8,174	188.34	7,793	12,121
187.83	7,397	8,248	188.35	7,801	12,199
187.84	7,405	8,322	188.36	7,809	12,277
187.85	7,412	8,396	188.37	7,816	12,355

Stage-Area-Storage for Pond B-29: Basin #29 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.38	7,824	12,433
188.39	7,832	12,511
188.40	7,840	12,590
188.41	7,848	12,668
188.42	7,856	12,747
188.43	7,864	12,825
188.44	7,871	12,904
188.45	7,879	12,983
188.46	7,887	13,062
188.47	7,895	13,141
188.48	7,903	13,220
188.49	7,911	13,299
188.50	7,919	13,378
188.51	7,926	13,457
188.52	7,934	13,536
188.53	7,942	13,616
188.54	7,950	13,695
188.55	7,958	13,775
188.56	7,966	13,854
188.57	7,973	13,934
188.58	7,981	14,014
188.59	7,989	14,094
188.60	7,997	14,174
188.61	8,005	14,254
188.62	8,013	14,334
188.63	8,021	14,414
188.64	8,028	14,494
188.65	8,036	14,574
188.66	8,044	14,655
188.67	8,052	14,735
188.68	8,060	14,816
188.69	8,068	14,896
188.70	8,076	14,977
188.71	8,083	15,058
188.72	8,091	15,139
188.73	8,099	15,220
188.74	8,107	15,301
188.75	8,115	15,382
188.76	8,123	15,463
188.77	8,130	15,544
188.78	8,138	15,626
188.79	8,146	15,707
188.80	8,154	15,789
188.81	8,162	15,870
188.82	8,170	15,952
188.83	8,178	16,034
188.84	8,185	16,115
188.85	8,193	16,197
188.86	8,201	16,279
188.87	8,209	16,361
188.88	8,217	16,443
188.89	8,225	16,526
188.90	8,233	16,608
188.91	8,240	16,690
188.92	8,248	16,773
188.93	8,256	16,855
188.94	8,264	16,938
188.95	8,272	17,021
188.96	8,280	17,103
188.97	8,287	17,186
188.98	8,295	17,269
188.99	8,303	17,352
189.00	**8,311**	**17,435**

Summary for Pond B-30: Basin #30

Inflow Area = 2.381 ac, 27.01% Impervious, Inflow Depth = 3.10" for Current 10 yr event
Inflow = 7.68 cfs @ 12.17 hrs, Volume= 0.615 af
Outflow = 0.19 cfs @ 17.51 hrs, Volume= 0.391 af, Atten= 97%, Lag= 320.1 min
Primary = 0.19 cfs @ 17.51 hrs, Volume= 0.391 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 177.42' @ 17.51 hrs Surf.Area= 12,436 sf Storage= 19,706 cf

Plug-Flow detention time= 808.6 min calculated for 0.391 af (64% of inflow)
Center-of-Mass det. time= 698.0 min (1,502.8 - 804.8)

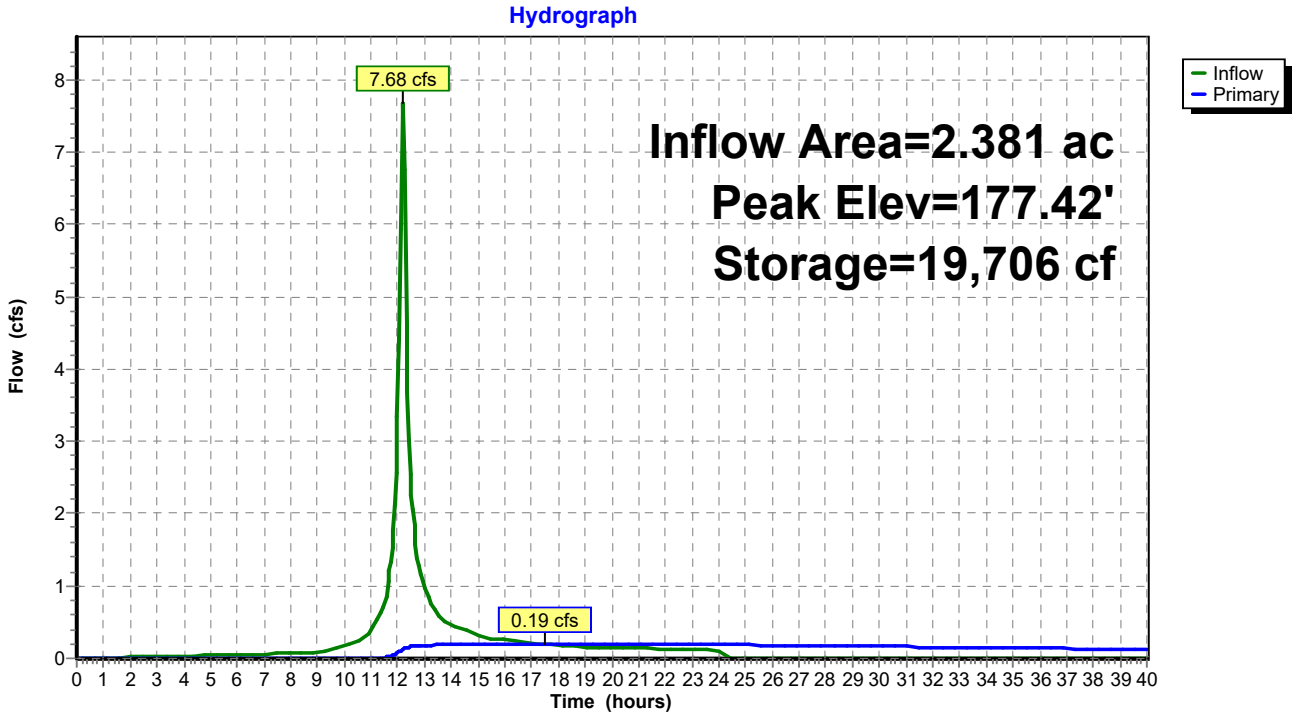
Volume	Invert	Avail.Storage	Storage Description
#1	175.30'	57,146 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
175.30	0	0	0
176.00	10,254	3,589	3,589
177.00	11,773	11,014	14,602
178.00	13,346	12,560	27,162
179.00	14,978	14,162	41,324
180.00	16,667	15,823	57,146

Device	Routing	Invert	Outlet Devices
#1	Primary	174.65'	**18.0" Round Culvert** L= 86.0' Ke= 0.500 Inlet / Outlet Invert= 174.65' / 174.00' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	175.93'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	179.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.19 cfs @ 17.51 hrs HW=177.42' (Free Discharge)
- **1=Culvert** (Passes 0.19 cfs of 11.21 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.67 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-30: Basin #30



Stage-Discharge for Pond B-30: Basin #30

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
175.30	0.00	175.82	0.00	176.34	0.09	176.86	0.15
175.31	0.00	175.83	0.00	176.35	0.09	176.87	0.15
175.32	0.00	175.84	0.00	176.36	0.09	176.88	0.15
175.33	0.00	175.85	0.00	176.37	0.10	176.89	0.15
175.34	0.00	175.86	0.00	176.38	0.10	176.90	0.15
175.35	0.00	175.87	0.00	176.39	0.10	176.91	0.15
175.36	0.00	175.88	0.00	176.40	0.10	176.92	0.15
175.37	0.00	175.89	0.00	176.41	0.10	176.93	0.16
175.38	0.00	175.90	0.00	176.42	0.10	176.94	0.16
175.39	0.00	175.91	0.00	176.43	0.10	176.95	0.16
175.40	0.00	175.92	0.00	176.44	0.10	176.96	0.16
175.41	0.00	175.93	0.00	176.45	0.11	176.97	0.16
175.42	0.00	175.94	0.00	176.46	0.11	176.98	0.16
175.43	0.00	175.95	0.00	176.47	0.11	176.99	0.16
175.44	0.00	175.96	0.00	176.48	0.11	177.00	0.16
175.45	0.00	175.97	0.00	176.49	0.11	177.01	0.16
175.46	0.00	175.98	0.00	176.50	0.11	177.02	0.16
175.47	0.00	175.99	0.01	176.51	0.11	177.03	0.16
175.48	0.00	176.00	0.01	176.52	0.11	177.04	0.16
175.49	0.00	176.01	0.01	176.53	0.12	177.05	0.17
175.50	0.00	176.02	0.01	176.54	0.12	177.06	0.17
175.51	0.00	176.03	0.02	176.55	0.12	177.07	0.17
175.52	0.00	176.04	0.02	176.56	0.12	177.08	0.17
175.53	0.00	176.05	0.02	176.57	0.12	177.09	0.17
175.54	0.00	176.06	0.03	176.58	0.12	177.10	0.17
175.55	0.00	176.07	0.03	176.59	0.12	177.11	0.17
175.56	0.00	176.08	0.03	176.60	0.12	177.12	0.17
175.57	0.00	176.09	0.04	176.61	0.12	177.13	0.17
175.58	0.00	176.10	0.04	176.62	0.13	177.14	0.17
175.59	0.00	176.11	0.05	176.63	0.13	177.15	0.17
175.60	0.00	176.12	0.05	176.64	0.13	177.16	0.17
175.61	0.00	176.13	0.05	176.65	0.13	177.17	0.17
175.62	0.00	176.14	0.05	176.66	0.13	177.18	0.18
175.63	0.00	176.15	0.06	176.67	0.13	177.19	0.18
175.64	0.00	176.16	0.06	176.68	0.13	177.20	0.18
175.65	0.00	176.17	0.06	176.69	0.13	177.21	0.18
175.66	0.00	176.18	0.06	176.70	0.13	177.22	0.18
175.67	0.00	176.19	0.06	176.71	0.13	177.23	0.18
175.68	0.00	176.20	0.07	176.72	0.14	177.24	0.18
175.69	0.00	176.21	0.07	176.73	0.14	177.25	0.18
175.70	0.00	176.22	0.07	176.74	0.14	177.26	0.18
175.71	0.00	176.23	0.07	176.75	0.14	177.27	0.18
175.72	0.00	176.24	0.07	176.76	0.14	177.28	0.18
175.73	0.00	176.25	0.08	176.77	0.14	177.29	0.18
175.74	0.00	176.26	0.08	176.78	0.14	177.30	0.18
175.75	0.00	176.27	0.08	176.79	0.14	177.31	0.19
175.76	0.00	176.28	0.08	176.80	0.14	177.32	0.19
175.77	0.00	176.29	0.08	176.81	0.14	177.33	0.19
175.78	0.00	176.30	0.08	176.82	0.15	177.34	0.19
175.79	0.00	176.31	0.09	176.83	0.15	177.35	0.19
175.80	0.00	176.32	0.09	176.84	0.15	177.36	0.19
175.81	0.00	176.33	0.09	176.85	0.15	177.37	0.19

Stage-Discharge for Pond B-30: Basin #30 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
177.38	0.19	177.90	0.22	178.42	0.25	178.94	0.28
177.39	0.19	177.91	0.22	178.43	0.25	178.95	0.28
177.40	0.19	177.92	0.23	178.44	0.25	178.96	0.28
177.41	0.19	177.93	0.23	178.45	0.26	178.97	0.28
177.42	0.19	177.94	0.23	178.46	0.26	178.98	0.28
177.43	0.19	177.95	0.23	178.47	0.26	178.99	0.28
177.44	0.19	177.96	0.23	178.48	0.26	179.00	0.28
177.45	0.20	177.97	0.23	178.49	0.26	179.01	0.30
177.46	0.20	177.98	0.23	178.50	0.26	179.02	0.32
177.47	0.20	177.99	0.23	178.51	0.26	179.03	0.35
177.48	0.20	178.00	0.23	178.52	0.26	179.04	0.39
177.49	0.20	178.01	0.23	178.53	0.26	179.05	0.43
177.50	0.20	178.02	0.23	178.54	0.26	179.06	0.48
177.51	0.20	178.03	0.23	178.55	0.26	179.07	0.53
177.52	0.20	178.04	0.23	178.56	0.26	179.08	0.58
177.53	0.20	178.05	0.23	178.57	0.26	179.09	0.64
177.54	0.20	178.06	0.23	178.58	0.26	179.10	0.70
177.55	0.20	178.07	0.23	178.59	0.26	179.11	0.76
177.56	0.20	178.08	0.23	178.60	0.26	179.12	0.83
177.57	0.20	178.09	0.24	178.61	0.26	179.13	0.90
177.58	0.20	178.10	0.24	178.62	0.26	179.14	0.97
177.59	0.20	178.11	0.24	178.63	0.26	179.15	1.04
177.60	0.21	178.12	0.24	178.64	0.26	179.16	1.12
177.61	0.21	178.13	0.24	178.65	0.27	179.17	1.20
177.62	0.21	178.14	0.24	178.66	0.27	179.18	1.28
177.63	0.21	178.15	0.24	178.67	0.27	179.19	1.36
177.64	0.21	178.16	0.24	178.68	0.27	179.20	1.45
177.65	0.21	178.17	0.24	178.69	0.27	179.21	1.54
177.66	0.21	178.18	0.24	178.70	0.27	179.22	1.63
177.67	0.21	178.19	0.24	178.71	0.27	179.23	1.72
177.68	0.21	178.20	0.24	178.72	0.27	179.24	1.81
177.69	0.21	178.21	0.24	178.73	0.27	179.25	1.91
177.70	0.21	178.22	0.24	178.74	0.27	179.26	2.01
177.71	0.21	178.23	0.24	178.75	0.27	179.27	2.11
177.72	0.21	178.24	0.24	178.76	0.27	179.28	2.21
177.73	0.21	178.25	0.24	178.77	0.27	179.29	2.31
177.74	0.21	178.26	0.24	178.78	0.27	179.30	2.41
177.75	0.22	178.27	0.25	178.79	0.27	179.31	2.52
177.76	0.22	178.28	0.25	178.80	0.27	179.32	2.63
177.77	0.22	178.29	0.25	178.81	0.27	179.33	2.74
177.78	0.22	178.30	0.25	178.82	0.27	179.34	2.85
177.79	0.22	178.31	0.25	178.83	0.27	179.35	2.96
177.80	0.22	178.32	0.25	178.84	0.27	179.36	3.07
177.81	0.22	178.33	0.25	178.85	0.28	179.37	3.19
177.82	0.22	178.34	0.25	178.86	0.28	179.38	3.31
177.83	0.22	178.35	0.25	178.87	0.28	179.39	3.42
177.84	0.22	178.36	0.25	178.88	0.28	179.40	3.54
177.85	0.22	178.37	0.25	178.89	0.28	179.41	3.67
177.86	0.22	178.38	0.25	178.90	0.28	179.42	3.79
177.87	0.22	178.39	0.25	178.91	0.28	179.43	3.91
177.88	0.22	178.40	0.25	178.92	0.28	179.44	4.04
177.89	0.22	178.41	0.25	178.93	0.28	179.45	4.16

Stage-Discharge for Pond B-30: Basin #30 (continued)

Elevation (feet)	Primary (cfs)
179.46	4.29
179.47	4.42
179.48	4.55
179.49	4.68
179.50	4.81
179.51	5.07
179.52	5.41
179.53	5.83
179.54	6.30
179.55	6.81
179.56	7.36
179.57	7.95
179.58	8.58
179.59	9.23
179.60	9.92
179.61	10.64
179.62	11.39
179.63	12.16
179.64	12.96
179.65	13.79
179.66	14.64
179.67	15.51
179.68	16.41
179.69	17.33
179.70	18.27
179.71	19.27
179.72	20.30
179.73	21.36
179.74	22.44
179.75	23.55
179.76	24.68
179.77	25.84
179.78	27.03
179.79	28.24
179.80	29.47
179.81	30.73
179.82	32.02
179.83	33.33
179.84	34.67
179.85	36.03
179.86	37.42
179.87	38.83
179.88	40.27
179.89	41.73
179.90	43.22
179.91	44.76
179.92	46.32
179.93	47.91
179.94	49.53
179.95	51.18
179.96	52.85
179.97	54.55
179.98	56.28
179.99	58.04
180.00	**59.82**

Stage-Area-Storage for Pond B-30: Basin #30

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
175.30	0	0	175.82	7,617	1,980
175.31	146	1	175.83	7,764	2,057
175.32	293	3	175.84	7,910	2,136
175.33	439	7	175.85	8,057	2,216
175.34	586	12	175.86	8,203	2,297
175.35	732	18	175.87	8,350	2,380
175.36	879	26	175.88	8,496	2,464
175.37	1,025	36	175.89	8,643	2,550
175.38	1,172	47	175.90	8,789	2,637
175.39	1,318	59	175.91	8,936	2,725
175.40	1,465	73	175.92	9,082	2,815
175.41	1,611	89	175.93	9,229	2,907
175.42	1,758	105	175.94	9,375	3,000
175.43	1,904	124	175.95	9,522	3,095
175.44	2,051	144	175.96	9,668	3,190
175.45	2,197	165	175.97	9,815	3,288
175.46	2,344	188	175.98	9,961	3,387
175.47	2,490	212	175.99	10,108	3,487
175.48	2,637	237	176.00	10,254	3,589
175.49	2,783	264	176.01	10,269	3,692
175.50	2,930	293	176.02	10,284	3,794
175.51	3,076	323	176.03	10,300	3,897
175.52	3,223	354	176.04	10,315	4,000
175.53	3,369	387	176.05	10,330	4,103
175.54	3,516	422	176.06	10,345	4,207
175.55	3,662	458	176.07	10,360	4,310
175.56	3,809	495	176.08	10,376	4,414
175.57	3,955	534	176.09	10,391	4,518
175.58	4,102	574	176.10	10,406	4,622
175.59	4,248	616	176.11	10,421	4,726
175.60	4,395	659	176.12	10,436	4,830
175.61	4,541	704	176.13	10,451	4,935
175.62	4,688	750	176.14	10,467	5,039
175.63	4,834	798	176.15	10,482	5,144
175.64	4,981	847	176.16	10,497	5,249
175.65	5,127	897	176.17	10,512	5,354
175.66	5,273	949	176.18	10,527	5,459
175.67	5,420	1,003	176.19	10,543	5,565
175.68	5,566	1,058	176.20	10,558	5,670
175.69	5,713	1,114	176.21	10,573	5,776
175.70	5,859	1,172	176.22	10,588	5,882
175.71	6,006	1,231	176.23	10,603	5,987
175.72	6,152	1,292	176.24	10,619	6,094
175.73	6,299	1,354	176.25	10,634	6,200
175.74	6,445	1,418	176.26	10,649	6,306
175.75	6,592	1,483	176.27	10,664	6,413
175.76	6,738	1,550	176.28	10,679	6,520
175.77	6,885	1,618	176.29	10,695	6,626
175.78	7,031	1,688	176.30	10,710	6,733
175.79	7,178	1,759	176.31	10,725	6,841
175.80	7,324	1,831	176.32	10,740	6,948
175.81	7,471	1,905	176.33	10,755	7,055

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.34	10,770	7,163	176.86	11,560	12,969
176.35	10,786	7,271	176.87	11,576	13,085
176.36	10,801	7,379	176.88	11,591	13,201
176.37	10,816	7,487	176.89	11,606	13,317
176.38	10,831	7,595	176.90	11,621	13,433
176.39	10,846	7,703	176.91	11,636	13,549
176.40	10,862	7,812	176.92	11,651	13,665
176.41	10,877	7,921	176.93	11,667	13,782
176.42	10,892	8,030	176.94	11,682	13,899
176.43	10,907	8,139	176.95	11,697	14,016
176.44	10,922	8,248	176.96	11,712	14,133
176.45	10,938	8,357	176.97	11,727	14,250
176.46	10,953	8,466	176.98	11,743	14,367
176.47	10,968	8,576	176.99	11,758	14,485
176.48	10,983	8,686	177.00	11,773	14,602
176.49	10,998	8,796	177.01	11,789	14,720
176.50	11,014	8,906	177.02	11,804	14,838
176.51	11,029	9,016	177.03	11,820	14,956
176.52	11,044	9,126	177.04	11,836	15,075
176.53	11,059	9,237	177.05	11,852	15,193
176.54	11,074	9,348	177.06	11,867	15,312
176.55	11,089	9,458	177.07	11,883	15,430
176.56	11,105	9,569	177.08	11,899	15,549
176.57	11,120	9,680	177.09	11,915	15,668
176.58	11,135	9,792	177.10	11,930	15,788
176.59	11,150	9,903	177.11	11,946	15,907
176.60	11,165	10,015	177.12	11,962	16,026
176.61	11,181	10,126	177.13	11,977	16,146
176.62	11,196	10,238	177.14	11,993	16,266
176.63	11,211	10,350	177.15	12,009	16,386
176.64	11,226	10,463	177.16	12,025	16,506
176.65	11,241	10,575	177.17	12,040	16,627
176.66	11,257	10,687	177.18	12,056	16,747
176.67	11,272	10,800	177.19	12,072	16,868
176.68	11,287	10,913	177.20	12,088	16,988
176.69	11,302	11,026	177.21	12,103	17,109
176.70	11,317	11,139	177.22	12,119	17,231
176.71	11,332	11,252	177.23	12,135	17,352
176.72	11,348	11,366	177.24	12,151	17,473
176.73	11,363	11,479	177.25	12,166	17,595
176.74	11,378	11,593	177.26	12,182	17,717
176.75	11,393	11,707	177.27	12,198	17,838
176.76	11,408	11,821	177.28	12,213	17,961
176.77	11,424	11,935	177.29	12,229	18,083
176.78	11,439	12,049	177.30	12,245	18,205
176.79	11,454	12,164	177.31	12,261	18,328
176.80	11,469	12,278	177.32	12,276	18,450
176.81	11,484	12,393	177.33	12,292	18,573
176.82	11,500	12,508	177.34	12,308	18,696
176.83	11,515	12,623	177.35	12,324	18,819
176.84	11,530	12,738	177.36	12,339	18,943
176.85	11,545	12,854	177.37	12,355	19,066

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.38	12,371	19,190	177.90	13,189	25,835
177.39	12,386	19,313	177.91	13,204	25,967
177.40	12,402	19,437	177.92	13,220	26,099
177.41	12,418	19,562	177.93	13,236	26,232
177.42	12,434	19,686	177.94	13,252	26,364
177.43	12,449	19,810	177.95	13,267	26,497
177.44	12,465	19,935	177.96	13,283	26,629
177.45	12,481	20,060	177.97	13,299	26,762
177.46	12,497	20,184	177.98	13,315	26,895
177.47	12,512	20,309	177.99	13,330	27,029
177.48	12,528	20,435	178.00	13,346	27,162
177.49	12,544	20,560	178.01	13,362	27,295
177.50	12,560	20,686	178.02	13,379	27,429
177.51	12,575	20,811	178.03	13,395	27,563
177.52	12,591	20,937	178.04	13,411	27,697
177.53	12,607	21,063	178.05	13,428	27,831
177.54	12,622	21,189	178.06	13,444	27,966
177.55	12,638	21,315	178.07	13,460	28,100
177.56	12,654	21,442	178.08	13,477	28,235
177.57	12,670	21,569	178.09	13,493	28,370
177.58	12,685	21,695	178.10	13,509	28,505
177.59	12,701	21,822	178.11	13,526	28,640
177.60	12,717	21,949	178.12	13,542	28,775
177.61	12,733	22,077	178.13	13,558	28,911
177.62	12,748	22,204	178.14	13,574	29,046
177.63	12,764	22,332	178.15	13,591	29,182
177.64	12,780	22,459	178.16	13,607	29,318
177.65	12,795	22,587	178.17	13,623	29,454
177.66	12,811	22,715	178.18	13,640	29,591
177.67	12,827	22,843	178.19	13,656	29,727
177.68	12,843	22,972	178.20	13,672	29,864
177.69	12,858	23,100	178.21	13,689	30,001
177.70	12,874	23,229	178.22	13,705	30,138
177.71	12,890	23,358	178.23	13,721	30,275
177.72	12,906	23,487	178.24	13,738	30,412
177.73	12,921	23,616	178.25	13,754	30,549
177.74	12,937	23,745	178.26	13,770	30,687
177.75	12,953	23,875	178.27	13,787	30,825
177.76	12,968	24,004	178.28	13,803	30,963
177.77	12,984	24,134	178.29	13,819	31,101
177.78	13,000	24,264	178.30	13,836	31,239
177.79	13,016	24,394	178.31	13,852	31,378
177.80	13,031	24,524	178.32	13,868	31,516
177.81	13,047	24,655	178.33	13,885	31,655
177.82	13,063	24,785	178.34	13,901	31,794
177.83	13,079	24,916	178.35	13,917	31,933
177.84	13,094	25,047	178.36	13,934	32,072
177.85	13,110	25,178	178.37	13,950	32,212
177.86	13,126	25,309	178.38	13,966	32,351
177.87	13,142	25,440	178.39	13,982	32,491
177.88	13,157	25,572	178.40	13,999	32,631
177.89	13,173	25,703	178.41	14,015	32,771

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.42	14,031	32,911	178.94	14,880	40,428
178.43	14,048	33,052	178.95	14,896	40,577
178.44	14,064	33,192	178.96	14,913	40,726
178.45	14,080	33,333	178.97	14,929	40,875
178.46	14,097	33,474	178.98	14,945	41,025
178.47	14,113	33,615	178.99	14,962	41,174
178.48	14,129	33,756	179.00	14,978	41,324
178.49	14,146	33,897	179.01	14,995	41,474
178.50	14,162	34,039	179.02	15,012	41,624
178.51	14,178	34,181	179.03	15,029	41,774
178.52	14,195	34,322	179.04	15,046	41,924
178.53	14,211	34,464	179.05	15,062	42,075
178.54	14,227	34,607	179.06	15,079	42,226
178.55	14,244	34,749	179.07	15,096	42,376
178.56	14,260	34,892	179.08	15,113	42,528
178.57	14,276	35,034	179.09	15,130	42,679
178.58	14,293	35,177	179.10	15,147	42,830
178.59	14,309	35,320	179.11	15,164	42,982
178.60	14,325	35,463	179.12	15,181	43,133
178.61	14,342	35,607	179.13	15,198	43,285
178.62	14,358	35,750	179.14	15,214	43,437
178.63	14,374	35,894	179.15	15,231	43,590
178.64	14,390	36,038	179.16	15,248	43,742
178.65	14,407	36,182	179.17	15,265	43,895
178.66	14,423	36,326	179.18	15,282	44,047
178.67	14,439	36,470	179.19	15,299	44,200
178.68	14,456	36,614	179.20	15,316	44,353
178.69	14,472	36,759	179.21	15,333	44,507
178.70	14,488	36,904	179.22	15,350	44,660
178.71	14,505	37,049	179.23	15,366	44,814
178.72	14,521	37,194	179.24	15,383	44,967
178.73	14,537	37,339	179.25	15,400	45,121
178.74	14,554	37,485	179.26	15,417	45,275
178.75	14,570	37,630	179.27	15,434	45,430
178.76	14,586	37,776	179.28	15,451	45,584
178.77	14,603	37,922	179.29	15,468	45,739
178.78	14,619	38,068	179.30	15,485	45,893
178.79	14,635	38,215	179.31	15,502	46,048
178.80	14,652	38,361	179.32	15,518	46,203
178.81	14,668	38,508	179.33	15,535	46,359
178.82	14,684	38,654	179.34	15,552	46,514
178.83	14,701	38,801	179.35	15,569	46,670
178.84	14,717	38,948	179.36	15,586	46,825
178.85	14,733	39,096	179.37	15,603	46,981
178.86	14,750	39,243	179.38	15,620	47,137
178.87	14,766	39,391	179.39	15,637	47,294
178.88	14,782	39,538	179.40	15,654	47,450
178.89	14,798	39,686	179.41	15,670	47,607
178.90	14,815	39,834	179.42	15,687	47,764
178.91	14,831	39,982	179.43	15,704	47,921
178.92	14,847	40,131	179.44	15,721	48,078
178.93	14,864	40,279	179.45	15,738	48,235

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.46	15,755	48,392
179.47	15,772	48,550
179.48	15,789	48,708
179.49	15,806	48,866
179.50	15,823	49,024
179.51	15,839	49,182
179.52	15,856	49,341
179.53	15,873	49,499
179.54	15,890	49,658
179.55	15,907	49,817
179.56	15,924	49,976
179.57	15,941	50,136
179.58	15,958	50,295
179.59	15,975	50,455
179.60	15,991	50,615
179.61	16,008	50,775
179.62	16,025	50,935
179.63	16,042	51,095
179.64	16,059	51,256
179.65	16,076	51,416
179.66	16,093	51,577
179.67	16,110	51,738
179.68	16,127	51,899
179.69	16,143	52,061
179.70	16,160	52,222
179.71	16,177	52,384
179.72	16,194	52,546
179.73	16,211	52,708
179.74	16,228	52,870
179.75	16,245	53,032
179.76	16,262	53,195
179.77	16,279	53,358
179.78	16,295	53,521
179.79	16,312	53,684
179.80	16,329	53,847
179.81	16,346	54,010
179.82	16,363	54,174
179.83	16,380	54,337
179.84	16,397	54,501
179.85	16,414	54,665
179.86	16,431	54,830
179.87	16,447	54,994
179.88	16,464	55,159
179.89	16,481	55,323
179.90	16,498	55,488
179.91	16,515	55,653
179.92	16,532	55,818
179.93	16,549	55,984
179.94	16,566	56,149
179.95	16,583	56,315
179.96	16,599	56,481
179.97	16,616	56,647
179.98	16,633	56,813
179.99	16,650	56,980
180.00	**16,667**	**57,146**

Summary for Pond B-31: Basin #31

Inflow Area = 0.358 ac, 42.46% Impervious, Inflow Depth = 3.47" for Current 10 yr event
Inflow = 1.26 cfs @ 12.17 hrs, Volume= 0.104 af
Outflow = 0.14 cfs @ 13.08 hrs, Volume= 0.089 af, Atten= 89%, Lag= 54.2 min
Primary = 0.14 cfs @ 13.08 hrs, Volume= 0.089 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.84' @ 13.08 hrs Surf.Area= 2,467 sf Storage= 2,537 cf

Plug-Flow detention time= 290.4 min calculated for 0.089 af (86% of inflow)
Center-of-Mass det. time= 223.2 min (1,012.4 - 789.2)

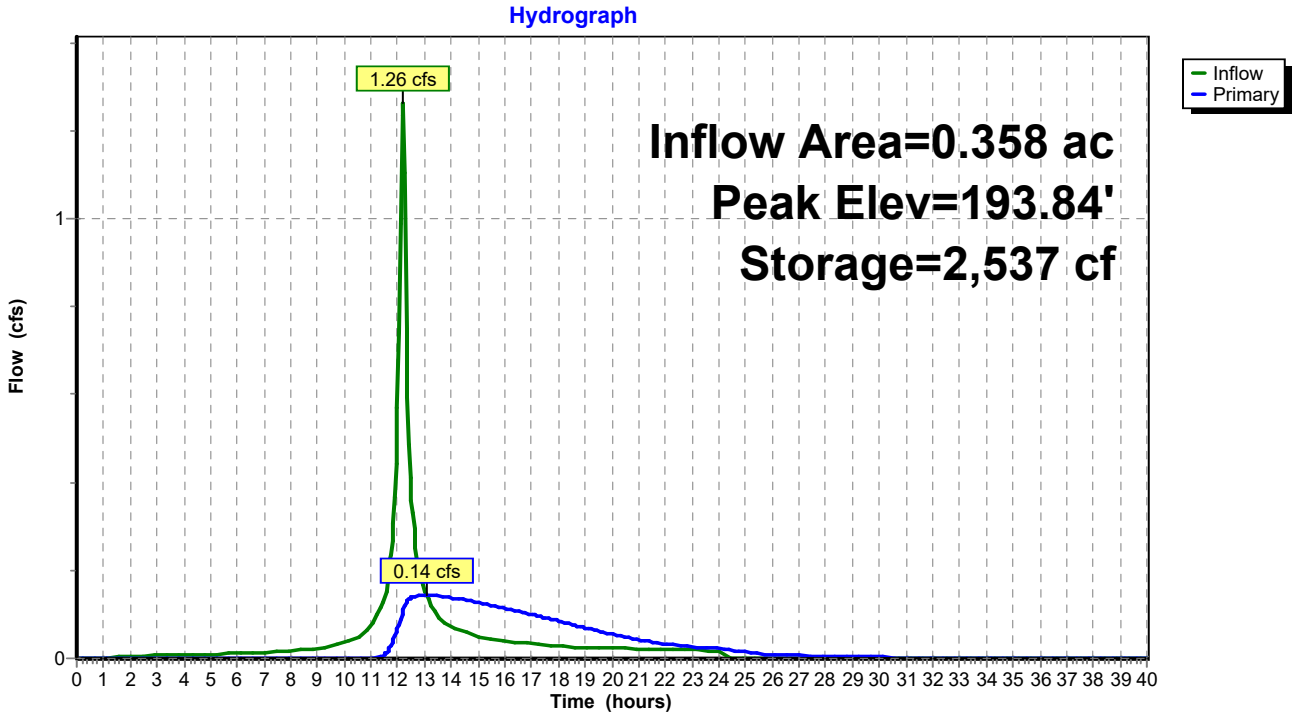
Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	9,453 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	1,944	680	680
194.00	2,566	2,255	2,935
195.00	3,245	2,906	5,841
196.00	3,980	3,613	9,453

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	**18.0" Round Culvert** L= 126.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 188.00' S= 0.0290 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.97'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	195.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.14 cfs @ 13.08 hrs HW=193.84' (Free Discharge)
- **1=Culvert** (Passes 0.14 cfs of 10.22 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.14 cfs @ 4.22 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-31: Basin #31



Stage-Discharge for Pond B-31: Basin #31

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.30	0.00	192.82	0.00	193.34	0.08	193.86	0.15
192.31	0.00	192.83	0.00	193.35	0.09	193.87	0.15
192.32	0.00	192.84	0.00	193.36	0.09	193.88	0.15
192.33	0.00	192.85	0.00	193.37	0.09	193.89	0.15
192.34	0.00	192.86	0.00	193.38	0.09	193.90	0.15
192.35	0.00	192.87	0.00	193.39	0.09	193.91	0.15
192.36	0.00	192.88	0.00	193.40	0.09	193.92	0.15
192.37	0.00	192.89	0.00	193.41	0.10	193.93	0.15
192.38	0.00	192.90	0.00	193.42	0.10	193.94	0.15
192.39	0.00	192.91	0.00	193.43	0.10	193.95	0.15
192.40	0.00	192.92	0.00	193.44	0.10	193.96	0.15
192.41	0.00	192.93	0.00	193.45	0.10	193.97	0.16
192.42	0.00	192.94	0.00	193.46	0.10	193.98	0.16
192.43	0.00	192.95	0.00	193.47	0.10	193.99	0.16
192.44	0.00	192.96	0.00	193.48	0.10	194.00	0.16
192.45	0.00	192.97	0.00	193.49	0.11	194.01	0.16
192.46	0.00	192.98	0.00	193.50	0.11	194.02	0.16
192.47	0.00	192.99	0.00	193.51	0.11	194.03	0.16
192.48	0.00	193.00	0.00	193.52	0.11	194.04	0.16
192.49	0.00	193.01	0.00	193.53	0.11	194.05	0.16
192.50	0.00	193.02	0.00	193.54	0.11	194.06	0.16
192.51	0.00	193.03	0.01	193.55	0.11	194.07	0.16
192.52	0.00	193.04	0.01	193.56	0.11	194.08	0.16
192.53	0.00	193.05	0.01	193.57	0.12	194.09	0.17
192.54	0.00	193.06	0.01	193.58	0.12	194.10	0.17
192.55	0.00	193.07	0.02	193.59	0.12	194.11	0.17
192.56	0.00	193.08	0.02	193.60	0.12	194.12	0.17
192.57	0.00	193.09	0.02	193.61	0.12	194.13	0.17
192.58	0.00	193.10	0.03	193.62	0.12	194.14	0.17
192.59	0.00	193.11	0.03	193.63	0.12	194.15	0.17
192.60	0.00	193.12	0.03	193.64	0.12	194.16	0.17
192.61	0.00	193.13	0.04	193.65	0.12	194.17	0.17
192.62	0.00	193.14	0.04	193.66	0.13	194.18	0.17
192.63	0.00	193.15	0.05	193.67	0.13	194.19	0.17
192.64	0.00	193.16	0.05	193.68	0.13	194.20	0.17
192.65	0.00	193.17	0.05	193.69	0.13	194.21	0.17
192.66	0.00	193.18	0.05	193.70	0.13	194.22	0.18
192.67	0.00	193.19	0.06	193.71	0.13	194.23	0.18
192.68	0.00	193.20	0.06	193.72	0.13	194.24	0.18
192.69	0.00	193.21	0.06	193.73	0.13	194.25	0.18
192.70	0.00	193.22	0.06	193.74	0.13	194.26	0.18
192.71	0.00	193.23	0.06	193.75	0.13	194.27	0.18
192.72	0.00	193.24	0.07	193.76	0.14	194.28	0.18
192.73	0.00	193.25	0.07	193.77	0.14	194.29	0.18
192.74	0.00	193.26	0.07	193.78	0.14	194.30	0.18
192.75	0.00	193.27	0.07	193.79	0.14	194.31	0.18
192.76	0.00	193.28	0.07	193.80	0.14	194.32	0.18
192.77	0.00	193.29	0.08	193.81	0.14	194.33	0.18
192.78	0.00	193.30	0.08	193.82	0.14	194.34	0.18
192.79	0.00	193.31	0.08	193.83	0.14	194.35	0.19
192.80	0.00	193.32	0.08	193.84	0.14	194.36	0.19
192.81	0.00	193.33	0.08	193.85	0.14	194.37	0.19

Stage-Discharge for Pond B-31: Basin #31 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.38	0.19	194.90	0.22	195.42	3.74	195.94	49.49
194.39	0.19	194.91	0.22	195.43	3.86	195.95	51.13
194.40	0.19	194.92	0.22	195.44	3.99	195.96	52.81
194.41	0.19	194.93	0.22	195.45	4.11	195.97	54.51
194.42	0.19	194.94	0.22	195.46	4.24	195.98	56.24
194.43	0.19	194.95	0.22	195.47	4.37	195.99	57.99
194.44	0.19	194.96	0.23	195.48	4.50	196.00	**59.77**
194.45	0.19	194.97	0.23	195.49	4.63		
194.46	0.19	194.98	0.23	195.50	4.76		
194.47	0.19	194.99	0.23	195.51	5.02		
194.48	0.19	195.00	0.23	195.52	5.37		
194.49	0.20	195.01	0.24	195.53	5.78		
194.50	0.20	195.02	0.27	195.54	6.25		
194.51	0.20	195.03	0.30	195.55	6.76		
194.52	0.20	195.04	0.33	195.56	7.31		
194.53	0.20	195.05	0.38	195.57	7.90		
194.54	0.20	195.06	0.42	195.58	8.53		
194.55	0.20	195.07	0.47	195.59	9.19		
194.56	0.20	195.08	0.53	195.60	9.88		
194.57	0.20	195.09	0.58	195.61	10.59		
194.58	0.20	195.10	0.65	195.62	11.34		
194.59	0.20	195.11	0.71	195.63	12.12		
194.60	0.20	195.12	0.78	195.64	12.92		
194.61	0.20	195.13	0.84	195.65	13.74		
194.62	0.20	195.14	0.92	195.66	14.59		
194.63	0.20	195.15	0.99	195.67	15.47		
194.64	0.21	195.16	1.07	195.68	16.36		
194.65	0.21	195.17	1.15	195.69	17.28		
194.66	0.21	195.18	1.23	195.70	18.22		
194.67	0.21	195.19	1.31	195.71	19.23		
194.68	0.21	195.20	1.40	195.72	20.25		
194.69	0.21	195.21	1.49	195.73	21.31		
194.70	0.21	195.22	1.58	195.74	22.39		
194.71	0.21	195.23	1.67	195.75	23.50		
194.72	0.21	195.24	1.76	195.76	24.63		
194.73	0.21	195.25	1.86	195.77	25.79		
194.74	0.21	195.26	1.95	195.78	26.98		
194.75	0.21	195.27	2.05	195.79	28.19		
194.76	0.21	195.28	2.15	195.80	29.42		
194.77	0.21	195.29	2.26	195.81	30.69		
194.78	0.21	195.30	2.36	195.82	31.97		
194.79	0.22	195.31	2.47	195.83	33.29		
194.80	0.22	195.32	2.58	195.84	34.62		
194.81	0.22	195.33	2.69	195.85	35.98		
194.82	0.22	195.34	2.80	195.86	37.37		
194.83	0.22	195.35	2.91	195.87	38.78		
194.84	0.22	195.36	3.02	195.88	40.22		
194.85	0.22	195.37	3.14	195.89	41.68		
194.86	0.22	195.38	3.25	195.90	43.17		
194.87	0.22	195.39	3.37	195.91	44.71		
194.88	0.22	195.40	3.49	195.92	46.28		
194.89	0.22	195.41	3.61	195.93	47.87		

Stage-Area-Storage for Pond B-31: Basin #31

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.30	0	0	192.82	1,444	375
192.31	28	0	192.83	1,472	390
192.32	56	1	192.84	1,500	405
192.33	83	1	192.85	1,527	420
192.34	111	2	192.86	1,555	435
192.35	139	3	192.87	1,583	451
192.36	167	5	192.88	1,611	467
192.37	194	7	192.89	1,639	483
192.38	222	9	192.90	1,666	500
192.39	250	11	192.91	1,694	517
192.40	278	14	192.92	1,722	534
192.41	305	17	192.93	1,750	551
192.42	333	20	192.94	1,777	569
192.43	361	23	192.95	1,805	587
192.44	389	27	192.96	1,833	605
192.45	417	31	192.97	1,861	623
192.46	444	36	192.98	1,888	642
192.47	472	40	192.99	1,916	661
192.48	500	45	193.00	1,944	680
192.49	528	50	193.01	1,950	700
192.50	555	56	193.02	1,956	719
192.51	583	61	193.03	1,963	739
192.52	611	67	193.04	1,969	759
192.53	639	73	193.05	1,975	778
192.54	667	80	193.06	1,981	798
192.55	694	87	193.07	1,988	818
192.56	722	94	193.08	1,994	838
192.57	750	101	193.09	2,000	858
192.58	778	109	193.10	2,006	878
192.59	805	117	193.11	2,012	898
192.60	833	125	193.12	2,019	918
192.61	861	133	193.13	2,025	938
192.62	889	142	193.14	2,031	959
192.63	916	151	193.15	2,037	979
192.64	944	161	193.16	2,044	999
192.65	972	170	193.17	2,050	1,020
192.66	1,000	180	193.18	2,056	1,040
192.67	1,028	190	193.19	2,062	1,061
192.68	1,055	201	193.20	2,068	1,082
192.69	1,083	211	193.21	2,075	1,102
192.70	1,111	222	193.22	2,081	1,123
192.71	1,139	233	193.23	2,087	1,144
192.72	1,166	245	193.24	2,093	1,165
192.73	1,194	257	193.25	2,100	1,186
192.74	1,222	269	193.26	2,106	1,207
192.75	1,250	281	193.27	2,112	1,228
192.76	1,277	294	193.28	2,118	1,249
192.77	1,305	307	193.29	2,124	1,270
192.78	1,333	320	193.30	2,131	1,292
192.79	1,361	333	193.31	2,137	1,313
192.80	1,389	347	193.32	2,143	1,334
192.81	1,416	361	193.33	2,149	1,356

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.34	2,155	1,377	193.86	2,479	2,582
193.35	2,162	1,399	193.87	2,485	2,607
193.36	2,168	1,421	193.88	2,491	2,632
193.37	2,174	1,442	193.89	2,498	2,657
193.38	2,180	1,464	193.90	2,504	2,682
193.39	2,187	1,486	193.91	2,510	2,707
193.40	2,193	1,508	193.92	2,516	2,732
193.41	2,199	1,530	193.93	2,522	2,757
193.42	2,205	1,552	193.94	2,529	2,783
193.43	2,211	1,574	193.95	2,535	2,808
193.44	2,218	1,596	193.96	2,541	2,833
193.45	2,224	1,618	193.97	2,547	2,859
193.46	2,230	1,640	193.98	2,554	2,884
193.47	2,236	1,663	193.99	2,560	2,910
193.48	2,243	1,685	194.00	2,566	2,935
193.49	2,249	1,708	194.01	2,573	2,961
193.50	2,255	1,730	194.02	2,580	2,987
193.51	2,261	1,753	194.03	2,586	3,013
193.52	2,267	1,775	194.04	2,593	3,039
193.53	2,274	1,798	194.05	2,600	3,065
193.54	2,280	1,821	194.06	2,607	3,091
193.55	2,286	1,844	194.07	2,614	3,117
193.56	2,292	1,867	194.08	2,620	3,143
193.57	2,299	1,890	194.09	2,627	3,169
193.58	2,305	1,913	194.10	2,634	3,195
193.59	2,311	1,936	194.11	2,641	3,222
193.60	2,317	1,959	194.12	2,647	3,248
193.61	2,323	1,982	194.13	2,654	3,275
193.62	2,330	2,005	194.14	2,661	3,301
193.63	2,336	2,029	194.15	2,668	3,328
193.64	2,342	2,052	194.16	2,675	3,355
193.65	2,348	2,075	194.17	2,681	3,381
193.66	2,355	2,099	194.18	2,688	3,408
193.67	2,361	2,122	194.19	2,695	3,435
193.68	2,367	2,146	194.20	2,702	3,462
193.69	2,373	2,170	194.21	2,709	3,489
193.70	2,379	2,194	194.22	2,715	3,516
193.71	2,386	2,217	194.23	2,722	3,544
193.72	2,392	2,241	194.24	2,729	3,571
193.73	2,398	2,265	194.25	2,736	3,598
193.74	2,404	2,289	194.26	2,743	3,626
193.75	2,411	2,313	194.27	2,749	3,653
193.76	2,417	2,337	194.28	2,756	3,680
193.77	2,423	2,362	194.29	2,763	3,708
193.78	2,429	2,386	194.30	2,770	3,736
193.79	2,435	2,410	194.31	2,776	3,763
193.80	2,442	2,435	194.32	2,783	3,791
193.81	2,448	2,459	194.33	2,790	3,819
193.82	2,454	2,484	194.34	2,797	3,847
193.83	2,460	2,508	194.35	2,804	3,875
193.84	2,466	2,533	194.36	2,810	3,903
193.85	2,473	2,557	194.37	2,817	3,931

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.38	2,824	3,960
194.39	2,831	3,988
194.40	2,838	4,016
194.41	2,844	4,045
194.42	2,851	4,073
194.43	2,858	4,102
194.44	2,865	4,130
194.45	2,872	4,159
194.46	2,878	4,188
194.47	2,885	4,216
194.48	2,892	4,245
194.49	2,899	4,274
194.50	2,906	4,303
194.51	2,912	4,332
194.52	2,919	4,362
194.53	2,926	4,391
194.54	2,933	4,420
194.55	2,939	4,449
194.56	2,946	4,479
194.57	2,953	4,508
194.58	2,960	4,538
194.59	2,967	4,568
194.60	2,973	4,597
194.61	2,980	4,627
194.62	2,987	4,657
194.63	2,994	4,687
194.64	3,001	4,717
194.65	3,007	4,747
194.66	3,014	4,777
194.67	3,021	4,807
194.68	3,028	4,837
194.69	3,035	4,868
194.70	3,041	4,898
194.71	3,048	4,928
194.72	3,055	4,959
194.73	3,062	4,989
194.74	3,068	5,020
194.75	3,075	5,051
194.76	3,082	5,082
194.77	3,089	5,113
194.78	3,096	5,143
194.79	3,102	5,174
194.80	3,109	5,205
194.81	3,116	5,237
194.82	3,123	5,268
194.83	3,130	5,299
194.84	3,136	5,330
194.85	3,143	5,362
194.86	3,150	5,393
194.87	3,157	5,425
194.88	3,164	5,456
194.89	3,170	5,488
194.90	3,177	5,520
194.91	3,184	5,552
194.92	3,191	5,583
194.93	3,197	5,615
194.94	3,204	5,647
194.95	3,211	5,679
194.96	3,218	5,712
194.97	3,225	5,744
194.98	3,231	5,776
194.99	3,238	5,808
195.00	3,245	5,841
195.01	3,252	5,873
195.02	3,260	5,906
195.03	3,267	5,939
195.04	3,274	5,971
195.05	3,282	6,004
195.06	3,289	6,037
195.07	3,296	6,070
195.08	3,304	6,103
195.09	3,311	6,136
195.10	3,319	6,169
195.11	3,326	6,202
195.12	3,333	6,236
195.13	3,341	6,269
195.14	3,348	6,302
195.15	3,355	6,336
195.16	3,363	6,370
195.17	3,370	6,403
195.18	3,377	6,437
195.19	3,385	6,471
195.20	3,392	6,505
195.21	3,399	6,539
195.22	3,407	6,573
195.23	3,414	6,607
195.24	3,421	6,641
195.25	3,429	6,675
195.26	3,436	6,709
195.27	3,443	6,744
195.28	3,451	6,778
195.29	3,458	6,813
195.30	3,466	6,847
195.31	3,473	6,882
195.32	3,480	6,917
195.33	3,488	6,952
195.34	3,495	6,987
195.35	3,502	7,022
195.36	3,510	7,057
195.37	3,517	7,092
195.38	3,524	7,127
195.39	3,532	7,162
195.40	3,539	7,198
195.41	3,546	7,233

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.42	3,554	7,269
195.43	3,561	7,304
195.44	3,568	7,340
195.45	3,576	7,376
195.46	3,583	7,411
195.47	3,590	7,447
195.48	3,598	7,483
195.49	3,605	7,519
195.50	3,613	7,555
195.51	3,620	7,591
195.52	3,627	7,628
195.53	3,635	7,664
195.54	3,642	7,700
195.55	3,649	7,737
195.56	3,657	7,773
195.57	3,664	7,810
195.58	3,671	7,847
195.59	3,679	7,883
195.60	3,686	7,920
195.61	3,693	7,957
195.62	3,701	7,994
195.63	3,708	8,031
195.64	3,715	8,068
195.65	3,723	8,105
195.66	3,730	8,143
195.67	3,737	8,180
195.68	3,745	8,217
195.69	3,752	8,255
195.70	3,760	8,292
195.71	3,767	8,330
195.72	3,774	8,368
195.73	3,782	8,406
195.74	3,789	8,443
195.75	3,796	8,481
195.76	3,804	8,519
195.77	3,811	8,557
195.78	3,818	8,596
195.79	3,826	8,634
195.80	3,833	8,672
195.81	3,840	8,710
195.82	3,848	8,749
195.83	3,855	8,787
195.84	3,862	8,826
195.85	3,870	8,865
195.86	3,877	8,903
195.87	3,884	8,942
195.88	3,892	8,981
195.89	3,899	9,020
195.90	3,907	9,059
195.91	3,914	9,098
195.92	3,921	9,137
195.93	3,929	9,177
195.94	3,936	9,216
195.95	3,943	9,255
195.96	3,951	9,295
195.97	3,958	9,334
195.98	3,965	9,374
195.99	3,973	9,414
196.00	**3,980**	**9,453**

Summary for Pond B-32: Basin #32

Inflow Area = 1.911 ac, 49.76% Impervious, Inflow Depth = 3.65" for Current 10 yr event
Inflow = 7.01 cfs @ 12.17 hrs, Volume= 0.581 af
Outflow = 5.43 cfs @ 12.25 hrs, Volume= 0.493 af, Atten= 23%, Lag= 5.0 min
Primary = 5.43 cfs @ 12.25 hrs, Volume= 0.493 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.35' @ 12.25 hrs Surf.Area= 3,164 sf Storage= 6,212 cf

Plug-Flow detention time= 131.2 min calculated for 0.493 af (85% of inflow)
Center-of-Mass det. time= 61.1 min (844.0 - 783.0)

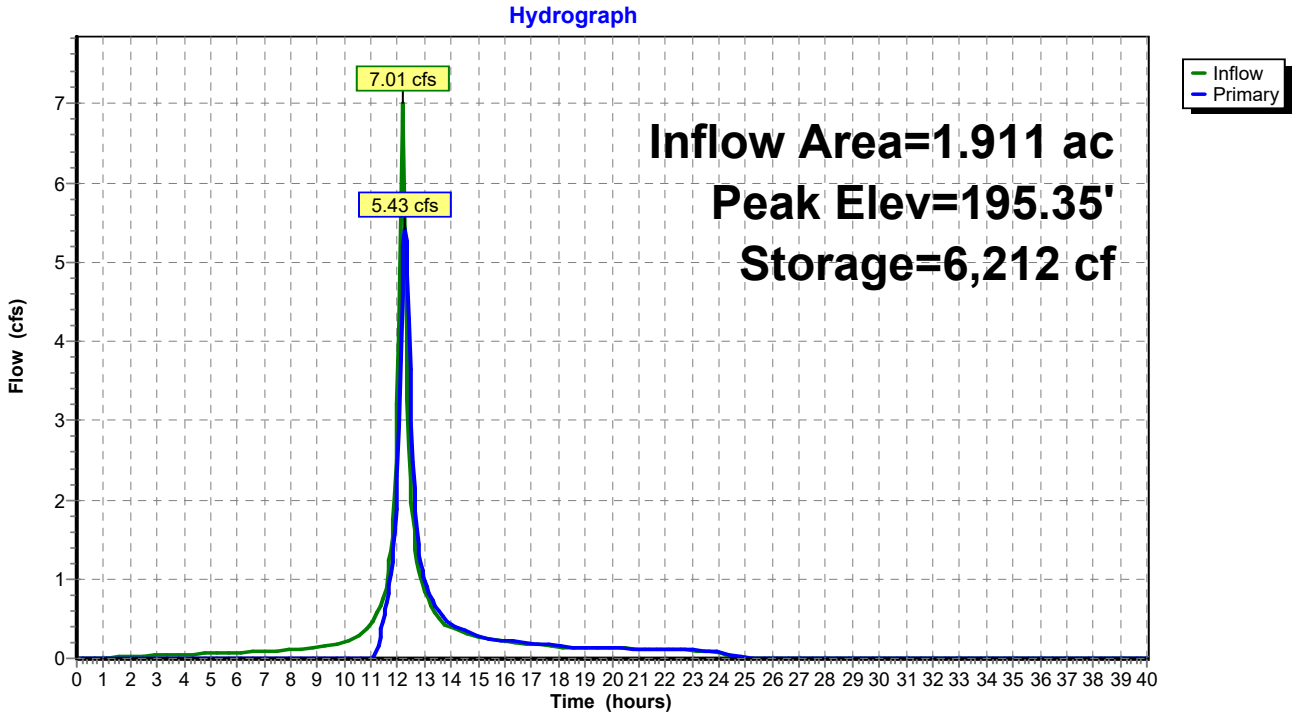
Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	17,202 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	1,675	586	586
194.00	2,256	1,966	2,552
195.00	2,913	2,585	5,136
196.00	3,621	3,267	8,403
197.00	4,385	4,003	12,406
198.00	5,206	4,796	17,202

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 182.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0146 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.53'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	197.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.41 cfs @ 12.25 hrs HW=195.35' (Free Discharge)
- **1=Culvert** (Passes 5.41 cfs of 15.61 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 5.41 cfs @ 3.61 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-32: Basin #32



Stage-Discharge for Pond B-32: Basin #32

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.30	0.00	192.82	0.00	193.34	0.00	193.86	0.00
192.31	0.00	192.83	0.00	193.35	0.00	193.87	0.00
192.32	0.00	192.84	0.00	193.36	0.00	193.88	0.00
192.33	0.00	192.85	0.00	193.37	0.00	193.89	0.00
192.34	0.00	192.86	0.00	193.38	0.00	193.90	0.00
192.35	0.00	192.87	0.00	193.39	0.00	193.91	0.00
192.36	0.00	192.88	0.00	193.40	0.00	193.92	0.00
192.37	0.00	192.89	0.00	193.41	0.00	193.93	0.00
192.38	0.00	192.90	0.00	193.42	0.00	193.94	0.00
192.39	0.00	192.91	0.00	193.43	0.00	193.95	0.00
192.40	0.00	192.92	0.00	193.44	0.00	193.96	0.00
192.41	0.00	192.93	0.00	193.45	0.00	193.97	0.00
192.42	0.00	192.94	0.00	193.46	0.00	193.98	0.00
192.43	0.00	192.95	0.00	193.47	0.00	193.99	0.00
192.44	0.00	192.96	0.00	193.48	0.00	194.00	0.00
192.45	0.00	192.97	0.00	193.49	0.00	194.01	0.00
192.46	0.00	192.98	0.00	193.50	0.00	194.02	0.00
192.47	0.00	192.99	0.00	193.51	0.00	194.03	0.00
192.48	0.00	193.00	0.00	193.52	0.00	194.04	0.00
192.49	0.00	193.01	0.00	193.53	0.00	194.05	0.00
192.50	0.00	193.02	0.00	193.54	0.00	194.06	0.00
192.51	0.00	193.03	0.00	193.55	0.00	194.07	0.00
192.52	0.00	193.04	0.00	193.56	0.00	194.08	0.00
192.53	0.00	193.05	0.00	193.57	0.00	194.09	0.00
192.54	0.00	193.06	0.00	193.58	0.00	194.10	0.00
192.55	0.00	193.07	0.00	193.59	0.00	194.11	0.00
192.56	0.00	193.08	0.00	193.60	0.00	194.12	0.00
192.57	0.00	193.09	0.00	193.61	0.00	194.13	0.00
192.58	0.00	193.10	0.00	193.62	0.00	194.14	0.00
192.59	0.00	193.11	0.00	193.63	0.00	194.15	0.00
192.60	0.00	193.12	0.00	193.64	0.00	194.16	0.00
192.61	0.00	193.13	0.00	193.65	0.00	194.17	0.00
192.62	0.00	193.14	0.00	193.66	0.00	194.18	0.00
192.63	0.00	193.15	0.00	193.67	0.00	194.19	0.00
192.64	0.00	193.16	0.00	193.68	0.00	194.20	0.00
192.65	0.00	193.17	0.00	193.69	0.00	194.21	0.00
192.66	0.00	193.18	0.00	193.70	0.00	194.22	0.00
192.67	0.00	193.19	0.00	193.71	0.00	194.23	0.00
192.68	0.00	193.20	0.00	193.72	0.00	194.24	0.00
192.69	0.00	193.21	0.00	193.73	0.00	194.25	0.00
192.70	0.00	193.22	0.00	193.74	0.00	194.26	0.00
192.71	0.00	193.23	0.00	193.75	0.00	194.27	0.00
192.72	0.00	193.24	0.00	193.76	0.00	194.28	0.00
192.73	0.00	193.25	0.00	193.77	0.00	194.29	0.00
192.74	0.00	193.26	0.00	193.78	0.00	194.30	0.00
192.75	0.00	193.27	0.00	193.79	0.00	194.31	0.00
192.76	0.00	193.28	0.00	193.80	0.00	194.32	0.00
192.77	0.00	193.29	0.00	193.81	0.00	194.33	0.00
192.78	0.00	193.30	0.00	193.82	0.00	194.34	0.00
192.79	0.00	193.31	0.00	193.83	0.00	194.35	0.00
192.80	0.00	193.32	0.00	193.84	0.00	194.36	0.00
192.81	0.00	193.33	0.00	193.85	0.00	194.37	0.00

Stage-Discharge for Pond B-32: Basin #32 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.38	0.00	194.90	2.17	195.42	5.74	195.94	7.76
194.39	0.00	194.91	2.26	195.43	5.79	195.95	7.80
194.40	0.00	194.92	2.35	195.44	5.83	195.96	7.83
194.41	0.00	194.93	2.44	195.45	5.88	195.97	7.86
194.42	0.00	194.94	2.53	195.46	5.92	195.98	7.90
194.43	0.00	194.95	2.62	195.47	5.97	195.99	7.93
194.44	0.00	194.96	2.72	195.48	6.01	196.00	7.96
194.45	0.00	194.97	2.81	195.49	6.05	196.01	8.00
194.46	0.00	194.98	2.91	195.50	6.10	196.02	8.03
194.47	0.00	194.99	3.00	195.51	6.14	196.03	8.06
194.48	0.00	195.00	3.10	195.52	6.18	196.04	8.09
194.49	0.00	195.01	3.20	195.53	6.23	196.05	8.13
194.50	0.00	195.02	3.30	195.54	6.27	196.06	8.16
194.51	0.00	195.03	3.40	195.55	6.31	196.07	8.19
194.52	0.00	195.04	3.50	195.56	6.35	196.08	8.22
194.53	0.00	195.05	3.58	195.57	6.39	196.09	8.25
194.54	0.01	195.06	3.67	195.58	6.43	196.10	8.29
194.55	0.03	195.07	3.74	195.59	6.47	196.11	8.32
194.56	0.05	195.08	3.82	195.60	6.51	196.12	8.35
194.57	0.08	195.09	3.89	195.61	6.55	196.13	8.38
194.58	0.11	195.10	3.97	195.62	6.59	196.14	8.41
194.59	0.14	195.11	4.04	195.63	6.63	196.15	8.44
194.60	0.18	195.12	4.10	195.64	6.67	196.16	8.47
194.61	0.22	195.13	4.17	195.65	6.71	196.17	8.50
194.62	0.26	195.14	4.24	195.66	6.75	196.18	8.53
194.63	0.30	195.15	4.30	195.67	6.79	196.19	8.56
194.64	0.35	195.16	4.36	195.68	6.83	196.20	8.60
194.65	0.40	195.17	4.43	195.69	6.87	196.21	8.63
194.66	0.45	195.18	4.49	195.70	6.91	196.22	8.66
194.67	0.50	195.19	4.55	195.71	6.94	196.23	8.69
194.68	0.56	195.20	4.61	195.72	6.98	196.24	8.72
194.69	0.62	195.21	4.66	195.73	7.02	196.25	8.75
194.70	0.67	195.22	4.72	195.74	7.06	196.26	8.78
194.71	0.74	195.23	4.78	195.75	7.09	196.27	8.81
194.72	0.80	195.24	4.83	195.76	7.13	196.28	8.84
194.73	0.86	195.25	4.89	195.77	7.17	196.29	8.86
194.74	0.93	195.26	4.94	195.78	7.20	196.30	8.89
194.75	0.99	195.27	5.00	195.79	7.24	196.31	8.92
194.76	1.06	195.28	5.05	195.80	7.28	196.32	8.95
194.77	1.13	195.29	5.10	195.81	7.31	196.33	8.98
194.78	1.20	195.30	5.16	195.82	7.35	196.34	9.01
194.79	1.28	195.31	5.21	195.83	7.38	196.35	9.04
194.80	1.35	195.32	5.26	195.84	7.42	196.36	9.07
194.81	1.43	195.33	5.31	195.85	7.45	196.37	9.10
194.82	1.50	195.34	5.36	195.86	7.49	196.38	9.13
194.83	1.58	195.35	5.41	195.87	7.52	196.39	9.16
194.84	1.66	195.36	5.46	195.88	7.56	196.40	9.18
194.85	1.74	195.37	5.50	195.89	7.59	196.41	9.21
194.86	1.83	195.38	5.55	195.90	7.63	196.42	9.24
194.87	1.91	195.39	5.60	195.91	7.66	196.43	9.27
194.88	1.99	195.40	5.65	195.92	7.70	196.44	9.30
194.89	2.08	195.41	5.69	195.93	7.73	196.45	9.32

Stage-Discharge for Pond B-32: Basin #32 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.46	9.35	196.98	10.71	197.50	16.42
196.47	9.38	196.99	10.73	197.51	16.57
196.48	9.41	197.00	10.76	197.52	16.73
196.49	9.44	197.01	10.79	197.53	16.89
196.50	9.46	197.02	10.84	197.54	17.04
196.51	9.49	197.03	10.90	197.55	17.20
196.52	9.52	197.04	10.96	197.56	17.37
196.53	9.55	197.05	11.02	197.57	17.53
196.54	9.57	197.06	11.09	197.58	17.69
196.55	9.60	197.07	11.17	197.59	17.86
196.56	9.63	197.08	11.24	197.60	18.02
196.57	9.66	197.09	11.32	197.61	18.19
196.58	9.68	197.10	11.41	197.62	18.36
196.59	9.71	197.11	11.49	197.63	18.40
196.60	9.74	197.12	11.58	197.64	18.41
196.61	9.76	197.13	11.68	197.65	18.42
196.62	9.79	197.14	11.77	197.66	18.44
196.63	9.82	197.15	11.87	197.67	18.45
196.64	9.84	197.16	11.97	197.68	18.46
196.65	9.87	197.17	12.07	197.69	18.47
196.66	9.90	197.18	12.17	197.70	18.48
196.67	9.92	197.19	12.28	197.71	18.49
196.68	9.95	197.20	12.39	197.72	18.50
196.69	9.97	197.21	12.50	197.73	18.51
196.70	10.00	197.22	12.61	197.74	18.53
196.71	10.03	197.23	12.73	197.75	18.54
196.72	10.05	197.24	12.84	197.76	18.55
196.73	10.08	197.25	12.96	197.77	18.56
196.74	10.10	197.26	13.08	197.78	18.57
196.75	10.13	197.27	13.20	197.79	18.58
196.76	10.16	197.28	13.33	197.80	18.59
196.77	10.18	197.29	13.45	197.81	18.60
196.78	10.21	197.30	13.58	197.82	18.62
196.79	10.23	197.31	13.71	197.83	18.63
196.80	10.26	197.32	13.84	197.84	18.64
196.81	10.28	197.33	13.97	197.85	18.65
196.82	10.31	197.34	14.10	197.86	18.66
196.83	10.33	197.35	14.23	197.87	18.67
196.84	10.36	197.36	14.37	197.88	18.68
196.85	10.38	197.37	14.51	197.89	18.69
196.86	10.41	197.38	14.65	197.90	18.70
196.87	10.44	197.39	14.79	197.91	18.72
196.88	10.46	197.40	14.93	197.92	18.73
196.89	10.49	197.41	15.07	197.93	18.74
196.90	10.51	197.42	15.22	197.94	18.75
196.91	10.53	197.43	15.36	197.95	18.76
196.92	10.56	197.44	15.51	197.96	18.89
196.93	10.58	197.45	15.66	197.97	19.11
196.94	10.61	197.46	15.81	197.98	19.40
196.95	10.63	197.47	15.96	197.99	19.74
196.96	10.66	197.48	16.11	198.00	**20.13**
196.97	10.68	197.49	16.26		

Stage-Area-Storage for Pond B-32: Basin #32

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.30	0	0	192.82	1,244	324
192.31	24	0	192.83	1,268	336
192.32	48	0	192.84	1,292	349
192.33	72	1	192.85	1,316	362
192.34	96	2	192.86	1,340	375
192.35	120	3	192.87	1,364	389
192.36	144	4	192.88	1,388	402
192.37	167	6	192.89	1,412	416
192.38	191	8	192.90	1,436	431
192.39	215	10	192.91	1,460	445
192.40	239	12	192.92	1,484	460
192.41	263	14	192.93	1,508	475
192.42	287	17	192.94	1,531	490
192.43	311	20	192.95	1,555	505
192.44	335	23	192.96	1,579	521
192.45	359	27	192.97	1,603	537
192.46	383	31	192.98	1,627	553
192.47	407	35	192.99	1,651	570
192.48	431	39	193.00	1,675	586
192.49	455	43	193.01	1,681	603
192.50	479	48	193.02	1,687	620
192.51	503	53	193.03	1,692	637
192.52	526	58	193.04	1,698	654
192.53	550	63	193.05	1,704	671
192.54	574	69	193.06	1,710	688
192.55	598	75	193.07	1,716	705
192.56	622	81	193.08	1,721	722
192.57	646	87	193.09	1,727	739
192.58	670	94	193.10	1,733	757
192.59	694	101	193.11	1,739	774
192.60	718	108	193.12	1,745	791
192.61	742	115	193.13	1,751	809
192.62	766	123	193.14	1,756	826
192.63	790	130	193.15	1,762	844
192.64	814	138	193.16	1,768	862
192.65	838	147	193.17	1,774	879
192.66	861	155	193.18	1,780	897
192.67	885	164	193.19	1,785	915
192.68	909	173	193.20	1,791	933
192.69	933	182	193.21	1,797	951
192.70	957	191	193.22	1,803	969
192.71	981	201	193.23	1,809	987
192.72	1,005	211	193.24	1,814	1,005
192.73	1,029	221	193.25	1,820	1,023
192.74	1,053	232	193.26	1,826	1,041
192.75	1,077	242	193.27	1,832	1,060
192.76	1,101	253	193.28	1,838	1,078
192.77	1,125	264	193.29	1,843	1,096
192.78	1,149	276	193.30	1,849	1,115
192.79	1,173	287	193.31	1,855	1,133
192.80	1,196	299	193.32	1,861	1,152
192.81	1,220	311	193.33	1,867	1,171

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.34	1,873	1,189	193.86	2,175	2,242
193.35	1,878	1,208	193.87	2,180	2,263
193.36	1,884	1,227	193.88	2,186	2,285
193.37	1,890	1,246	193.89	2,192	2,307
193.38	1,896	1,265	193.90	2,198	2,329
193.39	1,902	1,284	193.91	2,204	2,351
193.40	1,907	1,303	193.92	2,210	2,373
193.41	1,913	1,322	193.93	2,215	2,395
193.42	1,919	1,341	193.94	2,221	2,417
193.43	1,925	1,360	193.95	2,227	2,440
193.44	1,931	1,379	193.96	2,233	2,462
193.45	1,936	1,399	193.97	2,239	2,484
193.46	1,942	1,418	193.98	2,244	2,507
193.47	1,948	1,438	193.99	2,250	2,529
193.48	1,954	1,457	194.00	2,256	2,552
193.49	1,960	1,477	194.01	2,263	2,574
193.50	1,966	1,496	194.02	2,269	2,597
193.51	1,971	1,516	194.03	2,276	2,620
193.52	1,977	1,536	194.04	2,282	2,643
193.53	1,983	1,556	194.05	2,289	2,665
193.54	1,989	1,575	194.06	2,295	2,688
193.55	1,995	1,595	194.07	2,302	2,711
193.56	2,000	1,615	194.08	2,309	2,734
193.57	2,006	1,635	194.09	2,315	2,757
193.58	2,012	1,655	194.10	2,322	2,781
193.59	2,018	1,676	194.11	2,328	2,804
193.60	2,024	1,696	194.12	2,335	2,827
193.61	2,029	1,716	194.13	2,341	2,851
193.62	2,035	1,736	194.14	2,348	2,874
193.63	2,041	1,757	194.15	2,355	2,898
193.64	2,047	1,777	194.16	2,361	2,921
193.65	2,053	1,798	194.17	2,368	2,945
193.66	2,058	1,818	194.18	2,374	2,968
193.67	2,064	1,839	194.19	2,381	2,992
193.68	2,070	1,860	194.20	2,387	3,016
193.69	2,076	1,880	194.21	2,394	3,040
193.70	2,082	1,901	194.22	2,401	3,064
193.71	2,088	1,922	194.23	2,407	3,088
193.72	2,093	1,943	194.24	2,414	3,112
193.73	2,099	1,964	194.25	2,420	3,136
193.74	2,105	1,985	194.26	2,427	3,161
193.75	2,111	2,006	194.27	2,433	3,185
193.76	2,117	2,027	194.28	2,440	3,209
193.77	2,122	2,048	194.29	2,447	3,234
193.78	2,128	2,069	194.30	2,453	3,258
193.79	2,134	2,091	194.31	2,460	3,283
193.80	2,140	2,112	194.32	2,466	3,307
193.81	2,146	2,134	194.33	2,473	3,332
193.82	2,151	2,155	194.34	2,479	3,357
193.83	2,157	2,177	194.35	2,486	3,382
193.84	2,163	2,198	194.36	2,493	3,406
193.85	2,169	2,220	194.37	2,499	3,431

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.38	2,506	3,456	194.90	2,847	4,848
194.39	2,512	3,482	194.91	2,854	4,877
194.40	2,519	3,507	194.92	2,860	4,905
194.41	2,525	3,532	194.93	2,867	4,934
194.42	2,532	3,557	194.94	2,874	4,963
194.43	2,539	3,583	194.95	2,880	4,991
194.44	2,545	3,608	194.96	2,887	5,020
194.45	2,552	3,633	194.97	2,893	5,049
194.46	2,558	3,659	194.98	2,900	5,078
194.47	2,565	3,685	194.99	2,906	5,107
194.48	2,571	3,710	195.00	2,913	5,136
194.49	2,578	3,736	195.01	2,920	5,165
194.50	2,585	3,762	195.02	2,927	5,195
194.51	2,591	3,788	195.03	2,934	5,224
194.52	2,598	3,814	195.04	2,941	5,253
194.53	2,604	3,840	195.05	2,948	5,283
194.54	2,611	3,866	195.06	2,955	5,312
194.55	2,617	3,892	195.07	2,963	5,342
194.56	2,624	3,918	195.08	2,970	5,372
194.57	2,630	3,944	195.09	2,977	5,401
194.58	2,637	3,971	195.10	2,984	5,431
194.59	2,644	3,997	195.11	2,991	5,461
194.60	2,650	4,024	195.12	2,998	5,491
194.61	2,657	4,050	195.13	3,005	5,521
194.62	2,663	4,077	195.14	3,012	5,551
194.63	2,670	4,103	195.15	3,019	5,581
194.64	2,676	4,130	195.16	3,026	5,611
194.65	2,683	4,157	195.17	3,033	5,642
194.66	2,690	4,184	195.18	3,040	5,672
194.67	2,696	4,211	195.19	3,048	5,702
194.68	2,703	4,238	195.20	3,055	5,733
194.69	2,709	4,265	195.21	3,062	5,764
194.70	2,716	4,292	195.22	3,069	5,794
194.71	2,722	4,319	195.23	3,076	5,825
194.72	2,729	4,346	195.24	3,083	5,856
194.73	2,736	4,374	195.25	3,090	5,887
194.74	2,742	4,401	195.26	3,097	5,918
194.75	2,749	4,429	195.27	3,104	5,949
194.76	2,755	4,456	195.28	3,111	5,980
194.77	2,762	4,484	195.29	3,118	6,011
194.78	2,768	4,511	195.30	3,125	6,042
194.79	2,775	4,539	195.31	3,132	6,073
194.80	2,782	4,567	195.32	3,140	6,105
194.81	2,788	4,595	195.33	3,147	6,136
194.82	2,795	4,623	195.34	3,154	6,168
194.83	2,801	4,651	195.35	3,161	6,199
194.84	2,808	4,679	195.36	3,168	6,231
194.85	2,814	4,707	195.37	3,175	6,263
194.86	2,821	4,735	195.38	3,182	6,294
194.87	2,828	4,763	195.39	3,189	6,326
194.88	2,834	4,791	195.40	3,196	6,358
194.89	2,841	4,820	195.41	3,203	6,390

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.42	3,210	6,422	195.94	3,579	8,187
195.43	3,217	6,454	195.95	3,586	8,223
195.44	3,225	6,487	195.96	3,593	8,259
195.45	3,232	6,519	195.97	3,600	8,295
195.46	3,239	6,551	195.98	3,607	8,331
195.47	3,246	6,584	195.99	3,614	8,367
195.48	3,253	6,616	196.00	3,621	8,403
195.49	3,260	6,649	196.01	3,629	8,439
195.50	3,267	6,681	196.02	3,636	8,476
195.51	3,274	6,714	196.03	3,644	8,512
195.52	3,281	6,747	196.04	3,652	8,549
195.53	3,288	6,780	196.05	3,659	8,585
195.54	3,295	6,812	196.06	3,667	8,622
195.55	3,302	6,845	196.07	3,674	8,659
195.56	3,309	6,879	196.08	3,682	8,695
195.57	3,317	6,912	196.09	3,690	8,732
195.58	3,324	6,945	196.10	3,697	8,769
195.59	3,331	6,978	196.11	3,705	8,806
195.60	3,338	7,011	196.12	3,713	8,843
195.61	3,345	7,045	196.13	3,720	8,880
195.62	3,352	7,078	196.14	3,728	8,918
195.63	3,359	7,112	196.15	3,736	8,955
195.64	3,366	7,146	196.16	3,743	8,992
195.65	3,373	7,179	196.17	3,751	9,030
195.66	3,380	7,213	196.18	3,759	9,067
195.67	3,387	7,247	196.19	3,766	9,105
195.68	3,394	7,281	196.20	3,774	9,143
195.69	3,402	7,315	196.21	3,781	9,181
195.70	3,409	7,349	196.22	3,789	9,218
195.71	3,416	7,383	196.23	3,797	9,256
195.72	3,423	7,417	196.24	3,804	9,294
195.73	3,430	7,451	196.25	3,812	9,332
195.74	3,437	7,486	196.26	3,820	9,371
195.75	3,444	7,520	196.27	3,827	9,409
195.76	3,451	7,555	196.28	3,835	9,447
195.77	3,458	7,589	196.29	3,843	9,485
195.78	3,465	7,624	196.30	3,850	9,524
195.79	3,472	7,658	196.31	3,858	9,562
195.80	3,479	7,693	196.32	3,865	9,601
195.81	3,486	7,728	196.33	3,873	9,640
195.82	3,494	7,763	196.34	3,881	9,679
195.83	3,501	7,798	196.35	3,888	9,717
195.84	3,508	7,833	196.36	3,896	9,756
195.85	3,515	7,868	196.37	3,904	9,795
195.86	3,522	7,903	196.38	3,911	9,834
195.87	3,529	7,939	196.39	3,919	9,874
195.88	3,536	7,974	196.40	3,927	9,913
195.89	3,543	8,009	196.41	3,934	9,952
195.90	3,550	8,045	196.42	3,942	9,991
195.91	3,557	8,080	196.43	3,950	10,031
195.92	3,564	8,116	196.44	3,957	10,070
195.93	3,571	8,152	196.45	3,965	10,110

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.46	3,972	10,150	196.98	4,370	12,319
196.47	3,980	10,190	196.99	4,377	12,362
196.48	3,988	10,229	197.00	4,385	12,406
196.49	3,995	10,269	197.01	4,393	12,450
196.50	4,003	10,309	197.02	4,401	12,494
196.51	4,011	10,349	197.03	4,410	12,538
196.52	4,018	10,389	197.04	4,418	12,582
196.53	4,026	10,430	197.05	4,426	12,627
196.54	4,034	10,470	197.06	4,434	12,671
196.55	4,041	10,510	197.07	4,442	12,715
196.56	4,049	10,551	197.08	4,451	12,760
196.57	4,056	10,591	197.09	4,459	12,804
196.58	4,064	10,632	197.10	4,467	12,849
196.59	4,072	10,673	197.11	4,475	12,894
196.60	4,079	10,713	197.12	4,484	12,938
196.61	4,087	10,754	197.13	4,492	12,983
196.62	4,095	10,795	197.14	4,500	13,028
196.63	4,102	10,836	197.15	4,508	13,073
196.64	4,110	10,877	197.16	4,516	13,118
196.65	4,118	10,918	197.17	4,525	13,164
196.66	4,125	10,960	197.18	4,533	13,209
196.67	4,133	11,001	197.19	4,541	13,254
196.68	4,141	11,042	197.20	4,549	13,300
196.69	4,148	11,084	197.21	4,557	13,345
196.70	4,156	11,125	197.22	4,566	13,391
196.71	4,163	11,167	197.23	4,574	13,437
196.72	4,171	11,208	197.24	4,582	13,482
196.73	4,179	11,250	197.25	4,590	13,528
196.74	4,186	11,292	197.26	4,598	13,574
196.75	4,194	11,334	197.27	4,607	13,620
196.76	4,202	11,376	197.28	4,615	13,666
196.77	4,209	11,418	197.29	4,623	13,712
196.78	4,217	11,460	197.30	4,631	13,759
196.79	4,225	11,502	197.31	4,640	13,805
196.80	4,232	11,545	197.32	4,648	13,851
196.81	4,240	11,587	197.33	4,656	13,898
196.82	4,247	11,629	197.34	4,664	13,945
196.83	4,255	11,672	197.35	4,672	13,991
196.84	4,263	11,714	197.36	4,681	14,038
196.85	4,270	11,757	197.37	4,689	14,085
196.86	4,278	11,800	197.38	4,697	14,132
196.87	4,286	11,843	197.39	4,705	14,179
196.88	4,293	11,886	197.40	4,713	14,226
196.89	4,301	11,929	197.41	4,722	14,273
196.90	4,309	11,972	197.42	4,730	14,320
196.91	4,316	12,015	197.43	4,738	14,368
196.92	4,324	12,058	197.44	4,746	14,415
196.93	4,332	12,101	197.45	4,754	14,463
196.94	4,339	12,145	197.46	4,763	14,510
196.95	4,347	12,188	197.47	4,771	14,558
196.96	4,354	12,231	197.48	4,779	14,606
196.97	4,362	12,275	197.49	4,787	14,653

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.50	4,796	14,701
197.51	4,804	14,749
197.52	4,812	14,797
197.53	4,820	14,846
197.54	4,828	14,894
197.55	4,837	14,942
197.56	4,845	14,991
197.57	4,853	15,039
197.58	4,861	15,088
197.59	4,869	15,136
197.60	4,878	15,185
197.61	4,886	15,234
197.62	4,894	15,283
197.63	4,902	15,332
197.64	4,910	15,381
197.65	4,919	15,430
197.66	4,927	15,479
197.67	4,935	15,528
197.68	4,943	15,578
197.69	4,951	15,627
197.70	4,960	15,677
197.71	4,968	15,727
197.72	4,976	15,776
197.73	4,984	15,826
197.74	4,993	15,876
197.75	5,001	15,926
197.76	5,009	15,976
197.77	5,017	16,026
197.78	5,025	16,076
197.79	5,034	16,127
197.80	5,042	16,177
197.81	5,050	16,227
197.82	5,058	16,278
197.83	5,066	16,329
197.84	5,075	16,379
197.85	5,083	16,430
197.86	5,091	16,481
197.87	5,099	16,532
197.88	5,107	16,583
197.89	5,116	16,634
197.90	5,124	16,685
197.91	5,132	16,737
197.92	5,140	16,788
197.93	5,149	16,839
197.94	5,157	16,891
197.95	5,165	16,942
197.96	5,173	16,994
197.97	5,181	17,046
197.98	5,190	17,098
197.99	5,198	17,150
198.00	**5,206**	**17,202**

Summary for Pond B-33: Basin #33

Inflow Area = 1.761 ac, 50.99% Impervious, Inflow Depth = 3.68" for Current 10 yr event
Inflow = 6.50 cfs @ 12.17 hrs, Volume= 0.540 af
Outflow = 1.91 cfs @ 12.49 hrs, Volume= 0.450 af, Atten= 71%, Lag= 19.1 min
Primary = 1.91 cfs @ 12.49 hrs, Volume= 0.450 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 189.79' @ 12.49 hrs Surf.Area= 5,417 sf Storage= 12,556 cf

Plug-Flow detention time= 463.4 min calculated for 0.450 af (83% of inflow)
Center-of-Mass det. time= 389.7 min (1,171.7 - 782.0)

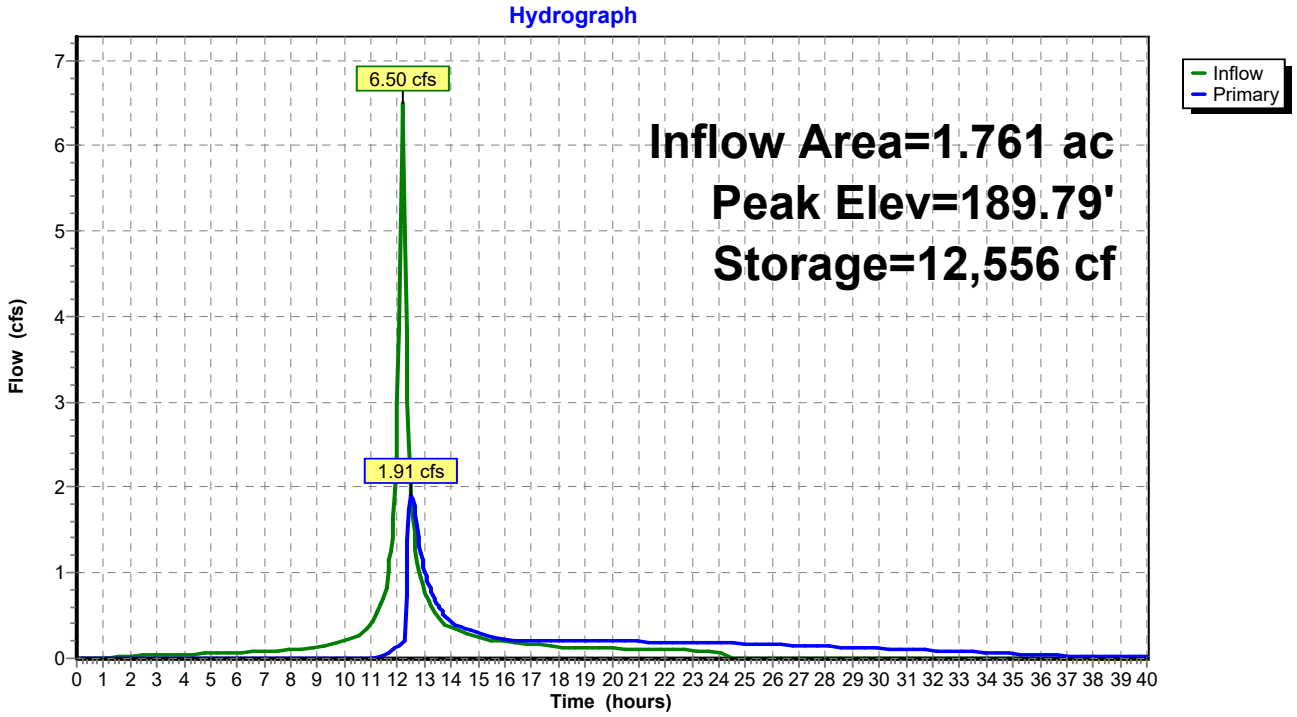
Volume	Invert	Avail.Storage	Storage Description
#1	186.30'	19,860 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.30	0	0	0
187.00	2,936	1,028	1,028
188.00	3,763	3,350	4,377
189.00	4,665	4,214	8,591
190.00	5,621	5,143	13,734
191.00	6,631	6,126	19,860

Device	Routing	Invert	Outlet Devices
#1	Primary	185.65'	**18.0" Round Culvert** L= 91.0' Ke= 0.500 Inlet / Outlet Invert= 185.65' / 185.00' S= 0.0071 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	187.79'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.53'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.75'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.90 cfs @ 12.49 hrs HW=189.79' (Free Discharge)
- **1=Culvert** (Passes 1.90 cfs of 14.45 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.62 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.67 cfs @ 1.65 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-33: Basin #33



Stage-Discharge for Pond B-33: Basin #33

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.30	0.00	186.82	0.00	187.34	0.00	187.86	0.01
186.31	0.00	186.83	0.00	187.35	0.00	187.87	0.01
186.32	0.00	186.84	0.00	187.36	0.00	187.88	0.01
186.33	0.00	186.85	0.00	187.37	0.00	187.89	0.02
186.34	0.00	186.86	0.00	187.38	0.00	187.90	0.02
186.35	0.00	186.87	0.00	187.39	0.00	187.91	0.02
186.36	0.00	186.88	0.00	187.40	0.00	187.92	0.03
186.37	0.00	186.89	0.00	187.41	0.00	187.93	0.03
186.38	0.00	186.90	0.00	187.42	0.00	187.94	0.03
186.39	0.00	186.91	0.00	187.43	0.00	187.95	0.04
186.40	0.00	186.92	0.00	187.44	0.00	187.96	0.04
186.41	0.00	186.93	0.00	187.45	0.00	187.97	0.05
186.42	0.00	186.94	0.00	187.46	0.00	187.98	0.05
186.43	0.00	186.95	0.00	187.47	0.00	187.99	0.05
186.44	0.00	186.96	0.00	187.48	0.00	188.00	0.05
186.45	0.00	186.97	0.00	187.49	0.00	188.01	0.06
186.46	0.00	186.98	0.00	187.50	0.00	188.02	0.06
186.47	0.00	186.99	0.00	187.51	0.00	188.03	0.06
186.48	0.00	187.00	0.00	187.52	0.00	188.04	0.06
186.49	0.00	187.01	0.00	187.53	0.00	188.05	0.06
186.50	0.00	187.02	0.00	187.54	0.00	188.06	0.07
186.51	0.00	187.03	0.00	187.55	0.00	188.07	0.07
186.52	0.00	187.04	0.00	187.56	0.00	188.08	0.07
186.53	0.00	187.05	0.00	187.57	0.00	188.09	0.07
186.54	0.00	187.06	0.00	187.58	0.00	188.10	0.07
186.55	0.00	187.07	0.00	187.59	0.00	188.11	0.08
186.56	0.00	187.08	0.00	187.60	0.00	188.12	0.08
186.57	0.00	187.09	0.00	187.61	0.00	188.13	0.08
186.58	0.00	187.10	0.00	187.62	0.00	188.14	0.08
186.59	0.00	187.11	0.00	187.63	0.00	188.15	0.08
186.60	0.00	187.12	0.00	187.64	0.00	188.16	0.08
186.61	0.00	187.13	0.00	187.65	0.00	188.17	0.09
186.62	0.00	187.14	0.00	187.66	0.00	188.18	0.09
186.63	0.00	187.15	0.00	187.67	0.00	188.19	0.09
186.64	0.00	187.16	0.00	187.68	0.00	188.20	0.09
186.65	0.00	187.17	0.00	187.69	0.00	188.21	0.09
186.66	0.00	187.18	0.00	187.70	0.00	188.22	0.09
186.67	0.00	187.19	0.00	187.71	0.00	188.23	0.10
186.68	0.00	187.20	0.00	187.72	0.00	188.24	0.10
186.69	0.00	187.21	0.00	187.73	0.00	188.25	0.10
186.70	0.00	187.22	0.00	187.74	0.00	188.26	0.10
186.71	0.00	187.23	0.00	187.75	0.00	188.27	0.10
186.72	0.00	187.24	0.00	187.76	0.00	188.28	0.10
186.73	0.00	187.25	0.00	187.77	0.00	188.29	0.10
186.74	0.00	187.26	0.00	187.78	0.00	188.30	0.10
186.75	0.00	187.27	0.00	187.79	0.00	188.31	0.11
186.76	0.00	187.28	0.00	187.80	0.00	188.32	0.11
186.77	0.00	187.29	0.00	187.81	0.00	188.33	0.11
186.78	0.00	187.30	0.00	187.82	0.00	188.34	0.11
186.79	0.00	187.31	0.00	187.83	0.00	188.35	0.11
186.80	0.00	187.32	0.00	187.84	0.00	188.36	0.11
186.81	0.00	187.33	0.00	187.85	0.01	188.37	0.11

Stage-Discharge for Pond B-33: Basin #33 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.38	0.11	188.90	0.16	189.42	0.20	189.94	3.60
188.39	0.12	188.91	0.17	189.43	0.20	189.95	3.72
188.40	0.12	188.92	0.17	189.44	0.20	189.96	3.84
188.41	0.12	188.93	0.17	189.45	0.20	189.97	3.97
188.42	0.12	188.94	0.17	189.46	0.21	189.98	4.10
188.43	0.12	188.95	0.17	189.47	0.21	189.99	4.22
188.44	0.12	188.96	0.17	189.48	0.21	190.00	4.35
188.45	0.12	188.97	0.17	189.49	0.21	190.01	4.48
188.46	0.12	188.98	0.17	189.50	0.21	190.02	4.62
188.47	0.12	188.99	0.17	189.51	0.21	190.03	4.75
188.48	0.13	189.00	0.17	189.52	0.21	190.04	4.88
188.49	0.13	189.01	0.17	189.53	0.21	190.05	5.02
188.50	0.13	189.02	0.17	189.54	0.22	190.06	5.15
188.51	0.13	189.03	0.17	189.55	0.25	190.07	5.29
188.52	0.13	189.04	0.18	189.56	0.28	190.08	5.43
188.53	0.13	189.05	0.18	189.57	0.32	190.09	5.57
188.54	0.13	189.06	0.18	189.58	0.36	190.10	5.71
188.55	0.13	189.07	0.18	189.59	0.41	190.11	5.85
188.56	0.13	189.08	0.18	189.60	0.46	190.12	6.00
188.57	0.13	189.09	0.18	189.61	0.51	190.13	6.14
188.58	0.14	189.10	0.18	189.62	0.57	190.14	6.29
188.59	0.14	189.11	0.18	189.63	0.63	190.15	6.43
188.60	0.14	189.12	0.18	189.64	0.69	190.16	6.58
188.61	0.14	189.13	0.18	189.65	0.76	190.17	6.73
188.62	0.14	189.14	0.18	189.66	0.83	190.18	6.88
188.63	0.14	189.15	0.18	189.67	0.90	190.19	7.03
188.64	0.14	189.16	0.18	189.68	0.97	190.20	7.18
188.65	0.14	189.17	0.19	189.69	1.05	190.21	7.33
188.66	0.14	189.18	0.19	189.70	1.13	190.22	7.49
188.67	0.14	189.19	0.19	189.71	1.21	190.23	7.64
188.68	0.15	189.20	0.19	189.72	1.29	190.24	7.80
188.69	0.15	189.21	0.19	189.73	1.38	190.25	7.96
188.70	0.15	189.22	0.19	189.74	1.47	190.26	8.11
188.71	0.15	189.23	0.19	189.75	1.56	190.27	8.27
188.72	0.15	189.24	0.19	189.76	1.65	190.28	8.43
188.73	0.15	189.25	0.19	189.77	1.74	190.29	8.59
188.74	0.15	189.26	0.19	189.78	1.84	190.30	8.75
188.75	0.15	189.27	0.19	189.79	1.94	190.31	8.91
188.76	0.15	189.28	0.19	189.80	2.04	190.32	9.08
188.77	0.15	189.29	0.19	189.81	2.14	190.33	9.24
188.78	0.15	189.30	0.19	189.82	2.24	190.34	9.41
188.79	0.16	189.31	0.20	189.83	2.35	190.35	9.57
188.80	0.16	189.32	0.20	189.84	2.45	190.36	9.74
188.81	0.16	189.33	0.20	189.85	2.56	190.37	9.91
188.82	0.16	189.34	0.20	189.86	2.67	190.38	10.07
188.83	0.16	189.35	0.20	189.87	2.78	190.39	10.24
188.84	0.16	189.36	0.20	189.88	2.89	190.40	10.41
188.85	0.16	189.37	0.20	189.89	3.01	190.41	10.58
188.86	0.16	189.38	0.20	189.90	3.12	190.42	10.75
188.87	0.16	189.39	0.20	189.91	3.24	190.43	10.93
188.88	0.16	189.40	0.20	189.92	3.36	190.44	11.10
188.89	0.16	189.41	0.20	189.93	3.48	190.45	11.27

Stage-Discharge for Pond B-33: Basin #33 (continued)

Elevation (feet)	Primary (cfs)
190.46	11.45
190.47	11.62
190.48	11.80
190.49	11.98
190.50	12.15
190.51	12.33
190.52	12.51
190.53	12.69
190.54	12.87
190.55	13.05
190.56	13.24
190.57	13.42
190.58	13.60
190.59	13.79
190.60	13.97
190.61	14.16
190.62	14.34
190.63	14.53
190.64	14.72
190.65	14.91
190.66	15.10
190.67	15.29
190.68	15.48
190.69	15.67
190.70	15.86
190.71	16.05
190.72	16.25
190.73	16.40
190.74	16.42
190.75	16.44
190.76	16.57
190.77	16.81
190.78	17.10
190.79	17.45
190.80	17.84
190.81	18.28
190.82	18.74
190.83	19.25
190.84	19.78
190.85	20.35
190.86	20.94
190.87	21.56
190.88	22.20
190.89	22.87
190.90	23.57
190.91	24.29
190.92	25.03
190.93	25.79
190.94	26.58
190.95	27.38
190.96	28.25
190.97	29.14
190.98	30.06
190.99	31.00
191.00	**31.97**

Stage-Area-Storage for Pond B-33: Basin #33

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.30	0	0	186.82	2,181	567
186.31	42	0	186.83	2,223	589
186.32	84	1	186.84	2,265	612
186.33	126	2	186.85	2,307	634
186.34	168	3	186.86	2,349	658
186.35	210	5	186.87	2,391	681
186.36	252	8	186.88	2,433	705
186.37	294	10	186.89	2,475	730
186.38	336	13	186.90	2,517	755
186.39	377	17	186.91	2,559	780
186.40	419	21	186.92	2,600	806
186.41	461	25	186.93	2,642	832
186.42	503	30	186.94	2,684	859
186.43	545	35	186.95	2,726	886
186.44	587	41	186.96	2,768	914
186.45	629	47	186.97	2,810	941
186.46	671	54	186.98	2,852	970
186.47	713	61	186.99	2,894	998
186.48	755	68	187.00	2,936	1,028
186.49	797	76	187.01	2,944	1,057
186.50	839	84	187.02	2,953	1,086
186.51	881	92	187.03	2,961	1,116
186.52	923	102	187.04	2,969	1,146
186.53	965	111	187.05	2,977	1,175
186.54	1,007	121	187.06	2,986	1,205
186.55	1,049	131	187.07	2,994	1,235
186.56	1,091	142	187.08	3,002	1,265
186.57	1,132	153	187.09	3,010	1,295
186.58	1,174	164	187.10	3,019	1,325
186.59	1,216	176	187.11	3,027	1,356
186.60	1,258	189	187.12	3,035	1,386
186.61	1,300	202	187.13	3,044	1,416
186.62	1,342	215	187.14	3,052	1,447
186.63	1,384	228	187.15	3,060	1,477
186.64	1,426	242	187.16	3,068	1,508
186.65	1,468	257	187.17	3,077	1,539
186.66	1,510	272	187.18	3,085	1,569
186.67	1,552	287	187.19	3,093	1,600
186.68	1,594	303	187.20	3,101	1,631
186.69	1,636	319	187.21	3,110	1,662
186.70	1,678	336	187.22	3,118	1,694
186.71	1,720	353	187.23	3,126	1,725
186.72	1,762	370	187.24	3,134	1,756
186.73	1,804	388	187.25	3,143	1,787
186.74	1,845	406	187.26	3,151	1,819
186.75	1,887	425	187.27	3,159	1,850
186.76	1,929	444	187.28	3,168	1,882
186.77	1,971	463	187.29	3,176	1,914
186.78	2,013	483	187.30	3,184	1,946
186.79	2,055	504	187.31	3,192	1,977
186.80	2,097	524	187.32	3,201	2,009
186.81	2,139	545	187.33	3,209	2,042

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.34	3,217	2,074	187.86	3,647	3,858
187.35	3,225	2,106	187.87	3,655	3,895
187.36	3,234	2,138	187.88	3,664	3,931
187.37	3,242	2,171	187.89	3,672	3,968
187.38	3,250	2,203	187.90	3,680	4,005
187.39	3,259	2,236	187.91	3,689	4,042
187.40	3,267	2,268	187.92	3,697	4,079
187.41	3,275	2,301	187.93	3,705	4,116
187.42	3,283	2,334	187.94	3,713	4,153
187.43	3,292	2,367	187.95	3,722	4,190
187.44	3,300	2,399	187.96	3,730	4,227
187.45	3,308	2,433	187.97	3,738	4,265
187.46	3,316	2,466	187.98	3,746	4,302
187.47	3,325	2,499	187.99	3,755	4,340
187.48	3,333	2,532	188.00	3,763	4,377
187.49	3,341	2,566	188.01	3,772	4,415
187.50	3,350	2,599	188.02	3,781	4,453
187.51	3,358	2,633	188.03	3,790	4,490
187.52	3,366	2,666	188.04	3,799	4,528
187.53	3,374	2,700	188.05	3,808	4,566
187.54	3,383	2,734	188.06	3,817	4,605
187.55	3,391	2,767	188.07	3,826	4,643
187.56	3,399	2,801	188.08	3,835	4,681
187.57	3,407	2,835	188.09	3,844	4,719
187.58	3,416	2,870	188.10	3,853	4,758
187.59	3,424	2,904	188.11	3,862	4,796
187.60	3,432	2,938	188.12	3,871	4,835
187.61	3,440	2,972	188.13	3,880	4,874
187.62	3,449	3,007	188.14	3,889	4,913
187.63	3,457	3,041	188.15	3,898	4,952
187.64	3,465	3,076	188.16	3,907	4,991
187.65	3,474	3,111	188.17	3,916	5,030
187.66	3,482	3,145	188.18	3,925	5,069
187.67	3,490	3,180	188.19	3,934	5,108
187.68	3,498	3,215	188.20	3,943	5,148
187.69	3,507	3,250	188.21	3,952	5,187
187.70	3,515	3,285	188.22	3,961	5,227
187.71	3,523	3,321	188.23	3,970	5,266
187.72	3,531	3,356	188.24	3,979	5,306
187.73	3,540	3,391	188.25	3,989	5,346
187.74	3,548	3,427	188.26	3,998	5,386
187.75	3,556	3,462	188.27	4,007	5,426
187.76	3,565	3,498	188.28	4,016	5,466
187.77	3,573	3,533	188.29	4,025	5,506
187.78	3,581	3,569	188.30	4,034	5,547
187.79	3,589	3,605	188.31	4,043	5,587
187.80	3,598	3,641	188.32	4,052	5,627
187.81	3,606	3,677	188.33	4,061	5,668
187.82	3,614	3,713	188.34	4,070	5,709
187.83	3,622	3,749	188.35	4,079	5,749
187.84	3,631	3,786	188.36	4,088	5,790
187.85	3,639	3,822	188.37	4,097	5,831

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.38	4,106	5,872	188.90	4,575	8,129
188.39	4,115	5,913	188.91	4,584	8,175
188.40	4,124	5,954	188.92	4,593	8,221
188.41	4,133	5,996	188.93	4,602	8,267
188.42	4,142	6,037	188.94	4,611	8,313
188.43	4,151	6,079	188.95	4,620	8,359
188.44	4,160	6,120	188.96	4,629	8,405
188.45	4,169	6,162	188.97	4,638	8,452
188.46	4,178	6,204	188.98	4,647	8,498
188.47	4,187	6,245	188.99	4,656	8,544
188.48	4,196	6,287	189.00	4,665	8,591
188.49	4,205	6,329	189.01	4,675	8,638
188.50	4,214	6,371	189.02	4,684	8,685
188.51	4,223	6,414	189.03	4,694	8,731
188.52	4,232	6,456	189.04	4,703	8,778
188.53	4,241	6,498	189.05	4,713	8,826
188.54	4,250	6,541	189.06	4,722	8,873
188.55	4,259	6,583	189.07	4,732	8,920
188.56	4,268	6,626	189.08	4,741	8,967
188.57	4,277	6,669	189.09	4,751	9,015
188.58	4,286	6,711	189.10	4,761	9,062
188.59	4,295	6,754	189.11	4,770	9,110
188.60	4,304	6,797	189.12	4,780	9,158
188.61	4,313	6,840	189.13	4,789	9,206
188.62	4,322	6,884	189.14	4,799	9,254
188.63	4,331	6,927	189.15	4,808	9,302
188.64	4,340	6,970	189.16	4,818	9,350
188.65	4,349	7,014	189.17	4,828	9,398
188.66	4,358	7,057	189.18	4,837	9,446
188.67	4,367	7,101	189.19	4,847	9,495
188.68	4,376	7,144	189.20	4,856	9,543
188.69	4,385	7,188	189.21	4,866	9,592
188.70	4,394	7,232	189.22	4,875	9,641
188.71	4,403	7,276	189.23	4,885	9,689
188.72	4,412	7,320	189.24	4,894	9,738
188.73	4,421	7,364	189.25	4,904	9,787
188.74	4,430	7,409	189.26	4,914	9,836
188.75	4,440	7,453	189.27	4,923	9,885
188.76	4,449	7,497	189.28	4,933	9,935
188.77	4,458	7,542	189.29	4,942	9,984
188.78	4,467	7,587	189.30	4,952	10,034
188.79	4,476	7,631	189.31	4,961	10,083
188.80	4,485	7,676	189.32	4,971	10,133
188.81	4,494	7,721	189.33	4,980	10,183
188.82	4,503	7,766	189.34	4,990	10,232
188.83	4,512	7,811	189.35	5,000	10,282
188.84	4,521	7,856	189.36	5,009	10,332
188.85	4,530	7,901	189.37	5,019	10,383
188.86	4,539	7,947	189.38	5,028	10,433
188.87	4,548	7,992	189.39	5,038	10,483
188.88	4,557	8,038	189.40	5,047	10,534
188.89	4,566	8,083	189.41	5,057	10,584

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.42	5,067	10,635	189.94	5,564	13,399
189.43	5,076	10,685	189.95	5,573	13,454
189.44	5,086	10,736	189.96	5,583	13,510
189.45	5,095	10,787	189.97	5,592	13,566
189.46	5,105	10,838	189.98	5,602	13,622
189.47	5,114	10,889	189.99	5,611	13,678
189.48	5,124	10,940	190.00	5,621	13,734
189.49	5,133	10,992	190.01	5,631	13,790
189.50	5,143	11,043	190.02	5,641	13,847
189.51	5,153	11,095	190.03	5,651	13,903
189.52	5,162	11,146	190.04	5,661	13,960
189.53	5,172	11,198	190.05	5,672	14,016
189.54	5,181	11,250	190.06	5,682	14,073
189.55	5,191	11,301	190.07	5,692	14,130
189.56	5,200	11,353	190.08	5,702	14,187
189.57	5,210	11,405	190.09	5,712	14,244
189.58	5,219	11,458	190.10	5,722	14,301
189.59	5,229	11,510	190.11	5,732	14,359
189.60	5,239	11,562	190.12	5,742	14,416
189.61	5,248	11,615	190.13	5,752	14,473
189.62	5,258	11,667	190.14	5,762	14,531
189.63	5,267	11,720	190.15	5,773	14,589
189.64	5,277	11,772	190.16	5,783	14,646
189.65	5,286	11,825	190.17	5,793	14,704
189.66	5,296	11,878	190.18	5,803	14,762
189.67	5,306	11,931	190.19	5,813	14,820
189.68	5,315	11,984	190.20	5,823	14,879
189.69	5,325	12,038	190.21	5,833	14,937
189.70	5,334	12,091	190.22	5,843	14,995
189.71	5,344	12,144	190.23	5,853	15,054
189.72	5,353	12,198	190.24	5,863	15,112
189.73	5,363	12,251	190.25	5,874	15,171
189.74	5,372	12,305	190.26	5,884	15,230
189.75	5,382	12,359	190.27	5,894	15,289
189.76	5,392	12,413	190.28	5,904	15,348
189.77	5,401	12,467	190.29	5,914	15,407
189.78	5,411	12,521	190.30	5,924	15,466
189.79	5,420	12,575	190.31	5,934	15,525
189.80	5,430	12,629	190.32	5,944	15,585
189.81	5,439	12,683	190.33	5,954	15,644
189.82	5,449	12,738	190.34	5,964	15,704
189.83	5,458	12,792	190.35	5,975	15,763
189.84	5,468	12,847	190.36	5,985	15,823
189.85	5,478	12,902	190.37	5,995	15,883
189.86	5,487	12,957	190.38	6,005	15,943
189.87	5,497	13,011	190.39	6,015	16,003
189.88	5,506	13,066	190.40	6,025	16,063
189.89	5,516	13,122	190.41	6,035	16,124
189.90	5,525	13,177	190.42	6,045	16,184
189.91	5,535	13,232	190.43	6,055	16,245
189.92	5,545	13,287	190.44	6,065	16,305
189.93	5,554	13,343	190.45	6,076	16,366

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.46	6,086	16,427
190.47	6,096	16,488
190.48	6,106	16,549
190.49	6,116	16,610
190.50	6,126	16,671
190.51	6,136	16,732
190.52	6,146	16,794
190.53	6,156	16,855
190.54	6,166	16,917
190.55	6,177	16,978
190.56	6,187	17,040
190.57	6,197	17,102
190.58	6,207	17,164
190.59	6,217	17,226
190.60	6,227	17,289
190.61	6,237	17,351
190.62	6,247	17,413
190.63	6,257	17,476
190.64	6,267	17,538
190.65	6,278	17,601
190.66	6,288	17,664
190.67	6,298	17,727
190.68	6,308	17,790
190.69	6,318	17,853
190.70	6,328	17,916
190.71	6,338	17,980
190.72	6,348	18,043
190.73	6,358	18,107
190.74	6,368	18,170
190.75	6,379	18,234
190.76	6,389	18,298
190.77	6,399	18,362
190.78	6,409	18,426
190.79	6,419	18,490
190.80	6,429	18,554
190.81	6,439	18,618
190.82	6,449	18,683
190.83	6,459	18,747
190.84	6,469	18,812
190.85	6,480	18,877
190.86	6,490	18,942
190.87	6,500	19,007
190.88	6,510	19,072
190.89	6,520	19,137
190.90	6,530	19,202
190.91	6,540	19,267
190.92	6,550	19,333
190.93	6,560	19,398
190.94	6,570	19,464
190.95	6,581	19,530
190.96	6,591	19,596
190.97	6,601	19,662
190.98	6,611	19,728
190.99	6,621	19,794
191.00	**6,631**	**19,860**

Summary for Pond B-34: Basin #34

Inflow Area = 1.779 ac, 23.66% Impervious, Inflow Depth = 3.02" for Current 10 yr event
Inflow = 5.62 cfs @ 12.17 hrs, Volume= 0.447 af
Outflow = 1.58 cfs @ 12.53 hrs, Volume= 0.394 af, Atten= 72%, Lag= 21.2 min
Primary = 1.58 cfs @ 12.53 hrs, Volume= 0.394 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 192.56' @ 12.53 hrs Surf.Area= 5,905 sf Storage= 9,530 cf

Plug-Flow detention time= 417.9 min calculated for 0.394 af (88% of inflow)
Center-of-Mass det. time= 359.0 min (1,167.7 - 808.7)

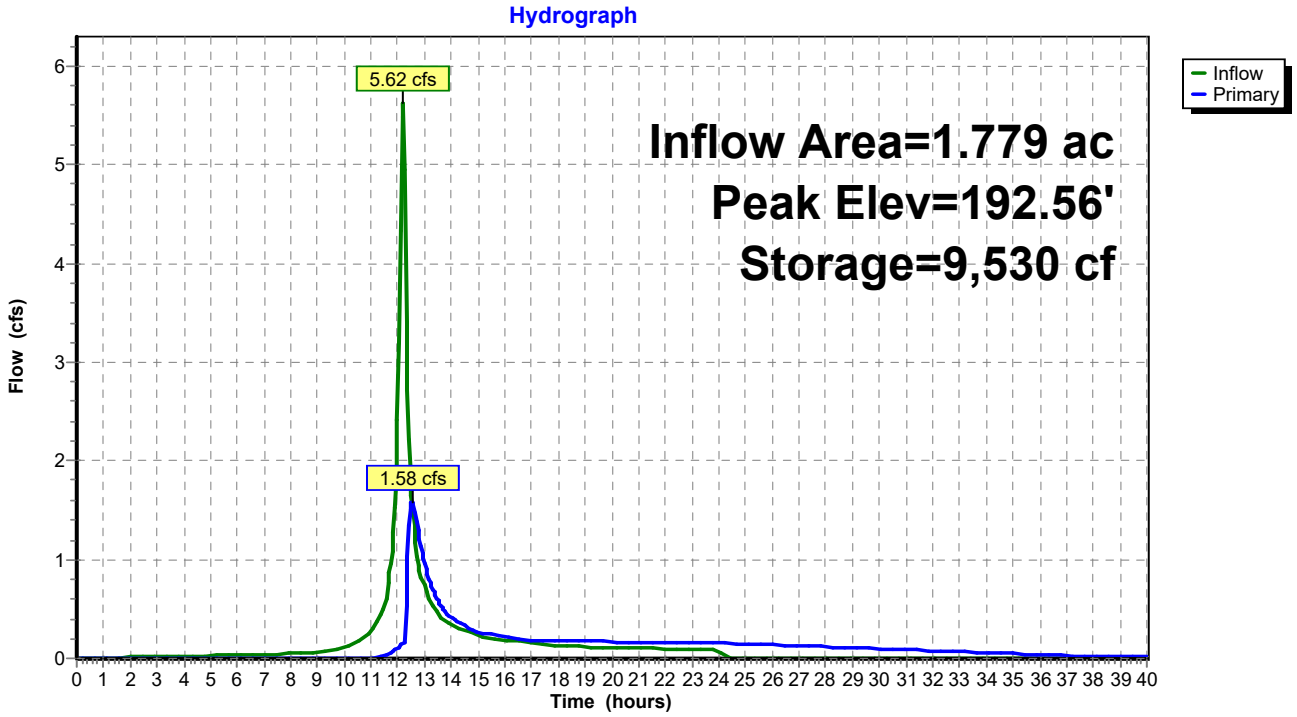
Volume	Invert	Avail.Storage	Storage Description
#1	190.30'	27,449 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.30	0	0	0
191.00	4,390	1,536	1,536
192.00	5,343	4,867	6,403
193.00	6,353	5,848	12,251
194.00	7,419	6,886	19,137
195.00	9,205	8,312	27,449

Device	Routing	Invert	Outlet Devices
#1	Primary	189.65'	**18.0" Round Culvert** L= 100.0' Ke= 0.500 Inlet / Outlet Invert= 189.65' / 189.15' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.09'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	192.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.58 cfs @ 12.53 hrs HW=192.56' (Free Discharge)
- **1=Culvert** (Passes 1.58 cfs of 10.73 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.62 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.39 cfs @ 1.55 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-34: Basin #34



Stage-Discharge for Pond B-34: Basin #34

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.30	0.00	190.82	0.00	191.34	0.06	191.86	0.13
190.31	0.00	190.83	0.00	191.35	0.06	191.87	0.13
190.32	0.00	190.84	0.00	191.36	0.07	191.88	0.14
190.33	0.00	190.85	0.00	191.37	0.07	191.89	0.14
190.34	0.00	190.86	0.00	191.38	0.07	191.90	0.14
190.35	0.00	190.87	0.00	191.39	0.07	191.91	0.14
190.36	0.00	190.88	0.00	191.40	0.07	191.92	0.14
190.37	0.00	190.89	0.00	191.41	0.08	191.93	0.14
190.38	0.00	190.90	0.00	191.42	0.08	191.94	0.14
190.39	0.00	190.91	0.00	191.43	0.08	191.95	0.14
190.40	0.00	190.92	0.00	191.44	0.08	191.96	0.14
190.41	0.00	190.93	0.00	191.45	0.08	191.97	0.14
190.42	0.00	190.94	0.00	191.46	0.08	191.98	0.15
190.43	0.00	190.95	0.00	191.47	0.09	191.99	0.15
190.44	0.00	190.96	0.00	191.48	0.09	192.00	0.15
190.45	0.00	190.97	0.00	191.49	0.09	192.01	0.15
190.46	0.00	190.98	0.00	191.50	0.09	192.02	0.15
190.47	0.00	190.99	0.00	191.51	0.09	192.03	0.15
190.48	0.00	191.00	0.00	191.52	0.09	192.04	0.15
190.49	0.00	191.01	0.00	191.53	0.10	192.05	0.15
190.50	0.00	191.02	0.00	191.54	0.10	192.06	0.15
190.51	0.00	191.03	0.00	191.55	0.10	192.07	0.15
190.52	0.00	191.04	0.00	191.56	0.10	192.08	0.15
190.53	0.00	191.05	0.00	191.57	0.10	192.09	0.16
190.54	0.00	191.06	0.00	191.58	0.10	192.10	0.16
190.55	0.00	191.07	0.00	191.59	0.10	192.11	0.16
190.56	0.00	191.08	0.00	191.60	0.10	192.12	0.16
190.57	0.00	191.09	0.00	191.61	0.11	192.13	0.16
190.58	0.00	191.10	0.00	191.62	0.11	192.14	0.16
190.59	0.00	191.11	0.00	191.63	0.11	192.15	0.16
190.60	0.00	191.12	0.00	191.64	0.11	192.16	0.16
190.61	0.00	191.13	0.00	191.65	0.11	192.17	0.16
190.62	0.00	191.14	0.00	191.66	0.11	192.18	0.16
190.63	0.00	191.15	0.01	191.67	0.11	192.19	0.16
190.64	0.00	191.16	0.01	191.68	0.11	192.20	0.16
190.65	0.00	191.17	0.01	191.69	0.12	192.21	0.17
190.66	0.00	191.18	0.01	191.70	0.12	192.22	0.17
190.67	0.00	191.19	0.02	191.71	0.12	192.23	0.17
190.68	0.00	191.20	0.02	191.72	0.12	192.24	0.17
190.69	0.00	191.21	0.02	191.73	0.12	192.25	0.17
190.70	0.00	191.22	0.03	191.74	0.12	192.26	0.17
190.71	0.00	191.23	0.03	191.75	0.12	192.27	0.17
190.72	0.00	191.24	0.03	191.76	0.12	192.28	0.17
190.73	0.00	191.25	0.04	191.77	0.12	192.29	0.17
190.74	0.00	191.26	0.04	191.78	0.13	192.30	0.17
190.75	0.00	191.27	0.05	191.79	0.13	192.31	0.17
190.76	0.00	191.28	0.05	191.80	0.13	192.32	0.17
190.77	0.00	191.29	0.05	191.81	0.13	192.33	0.17
190.78	0.00	191.30	0.05	191.82	0.13	192.34	0.19
190.79	0.00	191.31	0.06	191.83	0.13	192.35	0.21
190.80	0.00	191.32	0.06	191.84	0.13	192.36	0.25
190.81	0.00	191.33	0.06	191.85	0.13	192.37	0.28

Stage-Discharge for Pond B-34: Basin #34 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.38	0.32	192.90	5.68	193.42	12.94	193.94	14.10
192.39	0.37	192.91	5.83	193.43	12.96	193.95	14.12
192.40	0.42	192.92	5.97	193.44	12.98	193.96	14.14
192.41	0.48	192.93	6.11	193.45	13.01	193.97	14.16
192.42	0.53	192.94	6.26	193.46	13.03	193.98	14.18
192.43	0.59	192.95	6.41	193.47	13.05	193.99	14.21
192.44	0.66	192.96	6.55	193.48	13.08	194.00	14.23
192.45	0.72	192.97	6.70	193.49	13.10	194.01	14.25
192.46	0.79	192.98	6.85	193.50	13.12	194.02	14.27
192.47	0.87	192.99	7.00	193.51	13.14	194.03	14.29
192.48	0.94	193.00	7.15	193.52	13.17	194.04	14.31
192.49	1.02	193.01	7.31	193.53	13.19	194.05	14.33
192.50	1.10	193.02	7.46	193.54	13.21	194.06	14.35
192.51	1.18	193.03	7.61	193.55	13.24	194.07	14.37
192.52	1.26	193.04	7.77	193.56	13.26	194.08	14.40
192.53	1.35	193.05	7.93	193.57	13.28	194.09	14.42
192.54	1.44	193.06	8.08	193.58	13.30	194.10	14.44
192.55	1.53	193.07	8.24	193.59	13.33	194.11	14.46
192.56	1.62	193.08	8.40	193.60	13.35	194.12	14.48
192.57	1.71	193.09	8.56	193.61	13.37	194.13	14.50
192.58	1.81	193.10	8.72	193.62	13.40	194.14	14.52
192.59	1.91	193.11	8.89	193.63	13.42	194.15	14.54
192.60	2.00	193.12	9.05	193.64	13.44	194.16	14.56
192.61	2.11	193.13	9.21	193.65	13.46	194.17	14.58
192.62	2.21	193.14	9.38	193.66	13.49	194.18	14.60
192.63	2.31	193.15	9.54	193.67	13.51	194.19	14.62
192.64	2.42	193.16	9.71	193.68	13.53	194.20	14.64
192.65	2.53	193.17	9.88	193.69	13.55	194.21	14.67
192.66	2.64	193.18	10.05	193.70	13.57	194.22	14.69
192.67	2.75	193.19	10.22	193.71	13.60	194.23	14.71
192.68	2.86	193.20	10.38	193.72	13.62	194.24	14.73
192.69	2.98	193.21	10.56	193.73	13.64	194.25	14.75
192.70	3.09	193.22	10.73	193.74	13.66	194.26	14.89
192.71	3.21	193.23	10.90	193.75	13.69	194.27	15.12
192.72	3.33	193.24	11.07	193.76	13.71	194.28	15.42
192.73	3.45	193.25	11.25	193.77	13.73	194.29	15.77
192.74	3.57	193.26	11.42	193.78	13.75	194.30	16.16
192.75	3.69	193.27	11.60	193.79	13.77	194.31	16.59
192.76	3.81	193.28	11.77	193.80	13.80	194.32	17.06
192.77	3.94	193.29	11.95	193.81	13.82	194.33	17.57
192.78	4.07	193.30	12.13	193.82	13.84	194.34	18.10
192.79	4.19	193.31	12.31	193.83	13.86	194.35	18.67
192.80	4.32	193.32	12.49	193.84	13.88	194.36	19.26
192.81	4.45	193.33	12.67	193.85	13.90	194.37	19.88
192.82	4.59	193.34	12.75	193.86	13.93	194.38	20.53
192.83	4.72	193.35	12.77	193.87	13.95	194.39	21.20
192.84	4.85	193.36	12.80	193.88	13.97	194.40	21.90
192.85	4.99	193.37	12.82	193.89	13.99	194.41	22.62
192.86	5.12	193.38	12.84	193.90	14.01	194.42	23.36
192.87	5.26	193.39	12.87	193.91	14.03	194.43	24.12
192.88	5.40	193.40	12.89	193.92	14.06	194.44	24.91
192.89	5.54	193.41	12.91	193.93	14.08	194.45	25.72

Stage-Discharge for Pond B-34: Basin #34 (continued)

Elevation (feet)	Primary (cfs)
194.46	26.58
194.47	27.48
194.48	28.39
194.49	29.34
194.50	30.30
194.51	31.30
194.52	32.32
194.53	33.36
194.54	34.43
194.55	35.52
194.56	36.64
194.57	37.78
194.58	38.94
194.59	40.13
194.60	41.34
194.61	42.58
194.62	43.84
194.63	45.13
194.64	46.44
194.65	47.78
194.66	49.16
194.67	50.57
194.68	52.01
194.69	53.47
194.70	54.96
194.71	56.48
194.72	58.02
194.73	59.59
194.74	61.18
194.75	62.80
194.76	64.45
194.77	66.12
194.78	67.83
194.79	69.55
194.80	71.31
194.81	73.09
194.82	74.89
194.83	76.73
194.84	78.59
194.85	80.48
194.86	82.12
194.87	83.78
194.88	85.46
194.89	87.14
194.90	88.84
194.91	90.56
194.92	92.28
194.93	94.02
194.94	95.77
194.95	97.54
194.96	99.31
194.97	101.10
194.98	102.91
194.99	104.72
195.00	**106.55**

Stage-Area-Storage for Pond B-34: Basin #34

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.30	0	0	190.82	3,261	848
190.31	63	0	190.83	3,324	881
190.32	125	1	190.84	3,387	914
190.33	188	3	190.85	3,449	949
190.34	251	5	190.86	3,512	983
190.35	314	8	190.87	3,575	1,019
190.36	376	11	190.88	3,637	1,055
190.37	439	15	190.89	3,700	1,092
190.38	502	20	190.90	3,763	1,129
190.39	564	25	190.91	3,826	1,167
190.40	627	31	190.92	3,888	1,205
190.41	690	38	190.93	3,951	1,245
190.42	753	45	190.94	4,014	1,284
190.43	815	53	190.95	4,076	1,325
190.44	878	61	190.96	4,139	1,366
190.45	941	71	190.97	4,202	1,408
190.46	1,003	80	190.98	4,265	1,450
190.47	1,066	91	190.99	4,327	1,493
190.48	1,129	102	191.00	4,390	1,536
190.49	1,192	113	191.01	4,400	1,580
190.50	1,254	125	191.02	4,409	1,624
190.51	1,317	138	191.03	4,419	1,669
190.52	1,380	152	191.04	4,428	1,713
190.53	1,442	166	191.05	4,438	1,757
190.54	1,505	181	191.06	4,447	1,802
190.55	1,568	196	191.07	4,457	1,846
190.56	1,631	212	191.08	4,466	1,891
190.57	1,693	229	191.09	4,476	1,935
190.58	1,756	246	191.10	4,485	1,980
190.59	1,819	264	191.11	4,495	2,025
190.60	1,881	282	191.12	4,504	2,070
190.61	1,944	301	191.13	4,514	2,115
190.62	2,007	321	191.14	4,523	2,160
190.63	2,070	341	191.15	4,533	2,206
190.64	2,132	362	191.16	4,542	2,251
190.65	2,195	384	191.17	4,552	2,297
190.66	2,258	406	191.18	4,562	2,342
190.67	2,320	429	191.19	4,571	2,388
190.68	2,383	453	191.20	4,581	2,434
190.69	2,446	477	191.21	4,590	2,479
190.70	2,509	502	191.22	4,600	2,525
190.71	2,571	527	191.23	4,609	2,571
190.72	2,634	553	191.24	4,619	2,618
190.73	2,697	580	191.25	4,628	2,664
190.74	2,759	607	191.26	4,638	2,710
190.75	2,822	635	191.27	4,647	2,757
190.76	2,885	664	191.28	4,657	2,803
190.77	2,948	693	191.29	4,666	2,850
190.78	3,010	722	191.30	4,676	2,896
190.79	3,073	753	191.31	4,685	2,943
190.80	3,136	784	191.32	4,695	2,990
190.81	3,198	816	191.33	4,704	3,037

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.34	4,714	3,084	191.86	5,210	5,664
191.35	4,724	3,131	191.87	5,219	5,716
191.36	4,733	3,179	191.88	5,229	5,769
191.37	4,743	3,226	191.89	5,238	5,821
191.38	4,752	3,274	191.90	5,248	5,873
191.39	4,762	3,321	191.91	5,257	5,926
191.40	4,771	3,369	191.92	5,267	5,979
191.41	4,781	3,416	191.93	5,276	6,031
191.42	4,790	3,464	191.94	5,286	6,084
191.43	4,800	3,512	191.95	5,295	6,137
191.44	4,809	3,560	191.96	5,305	6,190
191.45	4,819	3,608	191.97	5,314	6,243
191.46	4,828	3,657	191.98	5,324	6,296
191.47	4,838	3,705	191.99	5,333	6,350
191.48	4,847	3,753	192.00	5,343	6,403
191.49	4,857	3,802	192.01	5,353	6,456
191.50	4,867	3,851	192.02	5,363	6,510
191.51	4,876	3,899	192.03	5,373	6,564
191.52	4,886	3,948	192.04	5,383	6,618
191.53	4,895	3,997	192.05	5,394	6,671
191.54	4,905	4,046	192.06	5,404	6,725
191.55	4,914	4,095	192.07	5,414	6,779
191.56	4,924	4,144	192.08	5,424	6,834
191.57	4,933	4,194	192.09	5,434	6,888
191.58	4,943	4,243	192.10	5,444	6,942
191.59	4,952	4,292	192.11	5,454	6,997
191.60	4,962	4,342	192.12	5,464	7,051
191.61	4,971	4,392	192.13	5,474	7,106
191.62	4,981	4,441	192.14	5,484	7,161
191.63	4,990	4,491	192.15	5,495	7,216
191.64	5,000	4,541	192.16	5,505	7,271
191.65	5,009	4,591	192.17	5,515	7,326
191.66	5,019	4,641	192.18	5,525	7,381
191.67	5,029	4,692	192.19	5,535	7,436
191.68	5,038	4,742	192.20	5,545	7,492
191.69	5,048	4,792	192.21	5,555	7,547
191.70	5,057	4,843	192.22	5,565	7,603
191.71	5,067	4,894	192.23	5,575	7,659
191.72	5,076	4,944	192.24	5,585	7,714
191.73	5,086	4,995	192.25	5,596	7,770
191.74	5,095	5,046	192.26	5,606	7,826
191.75	5,105	5,097	192.27	5,616	7,882
191.76	5,114	5,148	192.28	5,626	7,939
191.77	5,124	5,199	192.29	5,636	7,995
191.78	5,133	5,251	192.30	5,646	8,051
191.79	5,143	5,302	192.31	5,656	8,108
191.80	5,152	5,353	192.32	5,666	8,164
191.81	5,162	5,405	192.33	5,676	8,221
191.82	5,171	5,457	192.34	5,686	8,278
191.83	5,181	5,508	192.35	5,697	8,335
191.84	5,191	5,560	192.36	5,707	8,392
191.85	5,200	5,612	192.37	5,717	8,449

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.38	5,727	8,506	192.90	6,252	11,621
192.39	5,737	8,564	192.91	6,262	11,683
192.40	5,747	8,621	192.92	6,272	11,746
192.41	5,757	8,679	192.93	6,282	11,809
192.42	5,767	8,736	192.94	6,292	11,872
192.43	5,777	8,794	192.95	6,303	11,935
192.44	5,787	8,852	192.96	6,313	11,998
192.45	5,798	8,910	192.97	6,323	12,061
192.46	5,808	8,968	192.98	6,333	12,124
192.47	5,818	9,026	192.99	6,343	12,188
192.48	5,828	9,084	193.00	6,353	12,251
192.49	5,838	9,142	193.01	6,364	12,315
192.50	5,848	9,201	193.02	6,374	12,378
192.51	5,858	9,259	193.03	6,385	12,442
192.52	5,868	9,318	193.04	6,396	12,506
192.53	5,878	9,377	193.05	6,406	12,570
192.54	5,888	9,435	193.06	6,417	12,634
192.55	5,899	9,494	193.07	6,428	12,698
192.56	5,909	9,553	193.08	6,438	12,763
192.57	5,919	9,613	193.09	6,449	12,827
192.58	5,929	9,672	193.10	6,460	12,892
192.59	5,939	9,731	193.11	6,470	12,956
192.60	5,949	9,791	193.12	6,481	13,021
192.61	5,959	9,850	193.13	6,492	13,086
192.62	5,969	9,910	193.14	6,502	13,151
192.63	5,979	9,970	193.15	6,513	13,216
192.64	5,989	10,029	193.16	6,524	13,281
192.65	6,000	10,089	193.17	6,534	13,346
192.66	6,010	10,149	193.18	6,545	13,412
192.67	6,020	10,210	193.19	6,556	13,477
192.68	6,030	10,270	193.20	6,566	13,543
192.69	6,040	10,330	193.21	6,577	13,609
192.70	6,050	10,391	193.22	6,588	13,674
192.71	6,060	10,451	193.23	6,598	13,740
192.72	6,070	10,512	193.24	6,609	13,806
192.73	6,080	10,573	193.25	6,620	13,873
192.74	6,090	10,633	193.26	6,630	13,939
192.75	6,101	10,694	193.27	6,641	14,005
192.76	6,111	10,755	193.28	6,651	14,072
192.77	6,121	10,817	193.29	6,662	14,138
192.78	6,131	10,878	193.30	6,673	14,205
192.79	6,141	10,939	193.31	6,683	14,272
192.80	6,151	11,001	193.32	6,694	14,339
192.81	6,161	11,062	193.33	6,705	14,406
192.82	6,171	11,124	193.34	6,715	14,473
192.83	6,181	11,186	193.35	6,726	14,540
192.84	6,191	11,247	193.36	6,737	14,607
192.85	6,202	11,309	193.37	6,747	14,675
192.86	6,212	11,371	193.38	6,758	14,742
192.87	6,222	11,434	193.39	6,769	14,810
192.88	6,232	11,496	193.40	6,779	14,877
192.89	6,242	11,558	193.41	6,790	14,945

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.42	6,801	15,013	193.94	7,355	18,694
193.43	6,811	15,081	193.95	7,366	18,767
193.44	6,822	15,150	193.96	7,376	18,841
193.45	6,833	15,218	193.97	7,387	18,915
193.46	6,843	15,286	193.98	7,398	18,989
193.47	6,854	15,355	193.99	7,408	19,063
193.48	6,865	15,423	194.00	7,419	19,137
193.49	6,875	15,492	194.01	7,437	19,211
193.50	6,886	15,561	194.02	7,455	19,286
193.51	6,897	15,630	194.03	7,473	19,360
193.52	6,907	15,699	194.04	7,490	19,435
193.53	6,918	15,768	194.05	7,508	19,510
193.54	6,929	15,837	194.06	7,526	19,585
193.55	6,939	15,906	194.07	7,544	19,661
193.56	6,950	15,976	194.08	7,562	19,736
193.57	6,961	16,045	194.09	7,580	19,812
193.58	6,971	16,115	194.10	7,598	19,888
193.59	6,982	16,185	194.11	7,615	19,964
193.60	6,993	16,255	194.12	7,633	20,040
193.61	7,003	16,325	194.13	7,651	20,117
193.62	7,014	16,395	194.14	7,669	20,193
193.63	7,025	16,465	194.15	7,687	20,270
193.64	7,035	16,535	194.16	7,705	20,347
193.65	7,046	16,606	194.17	7,723	20,424
193.66	7,057	16,676	194.18	7,740	20,501
193.67	7,067	16,747	194.19	7,758	20,579
193.68	7,078	16,817	194.20	7,776	20,657
193.69	7,089	16,888	194.21	7,794	20,734
193.70	7,099	16,959	194.22	7,812	20,812
193.71	7,110	17,030	194.23	7,830	20,891
193.72	7,121	17,101	194.24	7,848	20,969
193.73	7,131	17,173	194.25	7,866	21,048
193.74	7,142	17,244	194.26	7,883	21,126
193.75	7,153	17,316	194.27	7,901	21,205
193.76	7,163	17,387	194.28	7,919	21,284
193.77	7,174	17,459	194.29	7,937	21,364
193.78	7,184	17,531	194.30	7,955	21,443
193.79	7,195	17,603	194.31	7,973	21,523
193.80	7,206	17,675	194.32	7,991	21,603
193.81	7,216	17,747	194.33	8,008	21,683
193.82	7,227	17,819	194.34	8,026	21,763
193.83	7,238	17,891	194.35	8,044	21,843
193.84	7,248	17,964	194.36	8,062	21,924
193.85	7,259	18,036	194.37	8,080	22,004
193.86	7,270	18,109	194.38	8,098	22,085
193.87	7,280	18,182	194.39	8,116	22,166
193.88	7,291	18,254	194.40	8,133	22,247
193.89	7,302	18,327	194.41	8,151	22,329
193.90	7,312	18,400	194.42	8,169	22,411
193.91	7,323	18,474	194.43	8,187	22,492
193.92	7,334	18,547	194.44	8,205	22,574
193.93	7,344	18,620	194.45	8,223	22,656

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.46	8,241	22,739
194.47	8,258	22,821
194.48	8,276	22,904
194.49	8,294	22,987
194.50	8,312	23,070
194.51	8,330	23,153
194.52	8,348	23,236
194.53	8,366	23,320
194.54	8,383	23,404
194.55	8,401	23,488
194.56	8,419	23,572
194.57	8,437	23,656
194.58	8,455	23,740
194.59	8,473	23,825
194.60	8,491	23,910
194.61	8,508	23,995
194.62	8,526	24,080
194.63	8,544	24,165
194.64	8,562	24,251
194.65	8,580	24,337
194.66	8,598	24,423
194.67	8,616	24,509
194.68	8,633	24,595
194.69	8,651	24,681
194.70	8,669	24,768
194.71	8,687	24,855
194.72	8,705	24,942
194.73	8,723	25,029
194.74	8,741	25,116
194.75	8,759	25,204
194.76	8,776	25,291
194.77	8,794	25,379
194.78	8,812	25,467
194.79	8,830	25,555
194.80	8,848	25,644
194.81	8,866	25,732
194.82	8,884	25,821
194.83	8,901	25,910
194.84	8,919	25,999
194.85	8,937	26,088
194.86	8,955	26,178
194.87	8,973	26,267
194.88	8,991	26,357
194.89	9,009	26,447
194.90	9,026	26,537
194.91	9,044	26,628
194.92	9,062	26,718
194.93	9,080	26,809
194.94	9,098	26,900
194.95	9,116	26,991
194.96	9,134	27,082
194.97	9,151	27,174
194.98	9,169	27,265
194.99	9,187	27,357
195.00	**9,205**	**27,449**

Summary for Pond B-35: Basin #35

Inflow Area = 1.957 ac, 66.79% Impervious, Inflow Depth = 4.06" for Current 10 yr event
Inflow = 7.82 cfs @ 12.17 hrs, Volume= 0.662 af
Outflow = 2.90 cfs @ 12.41 hrs, Volume= 0.544 af, Atten= 63%, Lag= 14.4 min
Primary = 2.90 cfs @ 12.41 hrs, Volume= 0.544 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.37' @ 12.41 hrs Surf.Area= 6,141 sf Storage= 14,853 cf

Plug-Flow detention time= 296.6 min calculated for 0.543 af (82% of inflow)
Center-of-Mass det. time= 221.2 min (991.7 - 770.5)

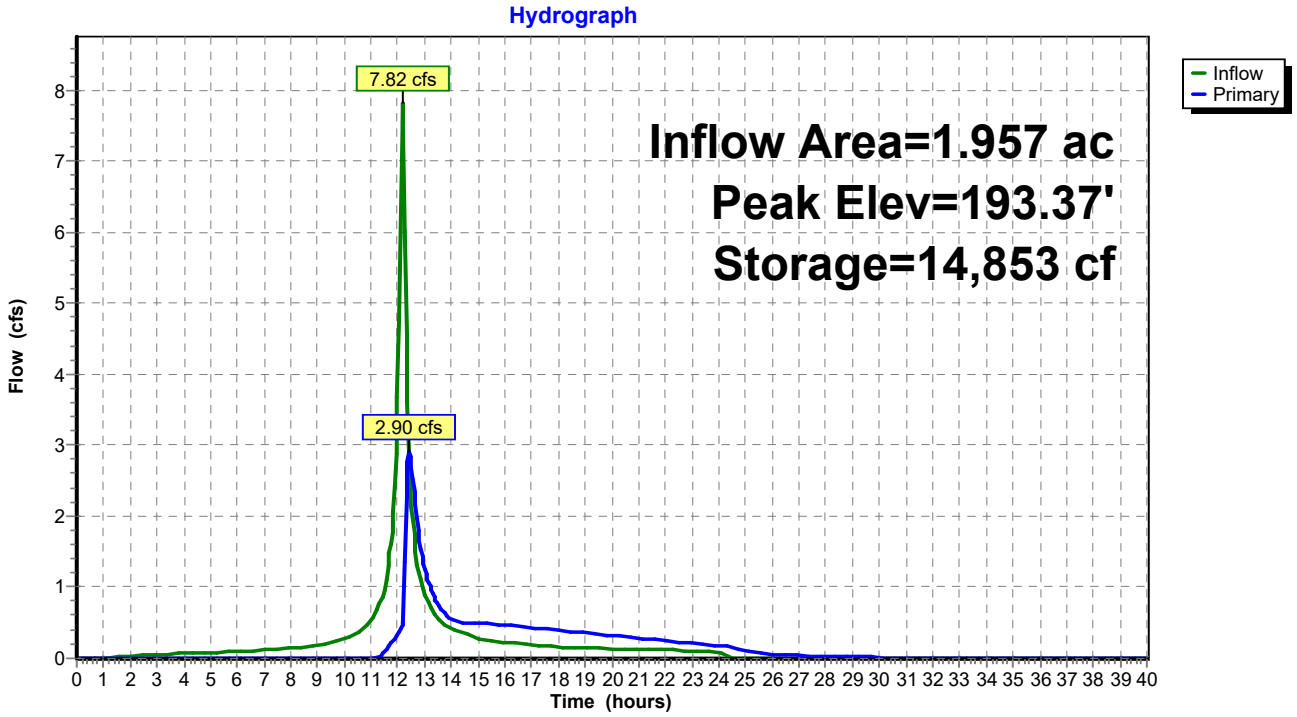
Volume	Invert	Avail.Storage	Storage Description
#1	189.80'	26,431 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
189.80	0	0	0
190.00	2,647	265	265
191.00	3,593	3,120	3,385
192.00	4,618	4,106	7,490
193.00	5,711	5,165	12,655
194.00	6,871	6,291	18,946
195.00	8,099	7,485	26,431

Device	Routing	Invert	Outlet Devices
#1	Primary	189.80'	**18.0" Round Culvert** L= 103.0' Ke= 0.500 Inlet / Outlet Invert= 189.80' / 189.30' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.44'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.05'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.88 cfs @ 12.41 hrs HW=193.37' (Free Discharge)
- **1=Culvert** (Passes 2.88 cfs of 12.36 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.56 cfs @ 6.39 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.32 cfs @ 1.85 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-35: Basin #35



Stage-Discharge for Pond B-35: Basin #35

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
189.80	0.00	190.32	0.00	190.84	0.00	191.36	0.00
189.81	0.00	190.33	0.00	190.85	0.00	191.37	0.00
189.82	0.00	190.34	0.00	190.86	0.00	191.38	0.00
189.83	0.00	190.35	0.00	190.87	0.00	191.39	0.00
189.84	0.00	190.36	0.00	190.88	0.00	191.40	0.00
189.85	0.00	190.37	0.00	190.89	0.00	191.41	0.00
189.86	0.00	190.38	0.00	190.90	0.00	191.42	0.00
189.87	0.00	190.39	0.00	190.91	0.00	191.43	0.00
189.88	0.00	190.40	0.00	190.92	0.00	191.44	0.00
189.89	0.00	190.41	0.00	190.93	0.00	191.45	0.00
189.90	0.00	190.42	0.00	190.94	0.00	191.46	0.00
189.91	0.00	190.43	0.00	190.95	0.00	191.47	0.00
189.92	0.00	190.44	0.00	190.96	0.00	191.48	0.00
189.93	0.00	190.45	0.00	190.97	0.00	191.49	0.01
189.94	0.00	190.46	0.00	190.98	0.00	191.50	0.01
189.95	0.00	190.47	0.00	190.99	0.00	191.51	0.01
189.96	0.00	190.48	0.00	191.00	0.00	191.52	0.02
189.97	0.00	190.49	0.00	191.01	0.00	191.53	0.02
189.98	0.00	190.50	0.00	191.02	0.00	191.54	0.02
189.99	0.00	190.51	0.00	191.03	0.00	191.55	0.03
190.00	0.00	190.52	0.00	191.04	0.00	191.56	0.03
190.01	0.00	190.53	0.00	191.05	0.00	191.57	0.04
190.02	0.00	190.54	0.00	191.06	0.00	191.58	0.04
190.03	0.00	190.55	0.00	191.07	0.00	191.59	0.05
190.04	0.00	190.56	0.00	191.08	0.00	191.60	0.06
190.05	0.00	190.57	0.00	191.09	0.00	191.61	0.06
190.06	0.00	190.58	0.00	191.10	0.00	191.62	0.07
190.07	0.00	190.59	0.00	191.11	0.00	191.63	0.08
190.08	0.00	190.60	0.00	191.12	0.00	191.64	0.08
190.09	0.00	190.61	0.00	191.13	0.00	191.65	0.09
190.10	0.00	190.62	0.00	191.14	0.00	191.66	0.10
190.11	0.00	190.63	0.00	191.15	0.00	191.67	0.10
190.12	0.00	190.64	0.00	191.16	0.00	191.68	0.11
190.13	0.00	190.65	0.00	191.17	0.00	191.69	0.12
190.14	0.00	190.66	0.00	191.18	0.00	191.70	0.13
190.15	0.00	190.67	0.00	191.19	0.00	191.71	0.13
190.16	0.00	190.68	0.00	191.20	0.00	191.72	0.14
190.17	0.00	190.69	0.00	191.21	0.00	191.73	0.15
190.18	0.00	190.70	0.00	191.22	0.00	191.74	0.15
190.19	0.00	190.71	0.00	191.23	0.00	191.75	0.16
190.20	0.00	190.72	0.00	191.24	0.00	191.76	0.17
190.21	0.00	190.73	0.00	191.25	0.00	191.77	0.17
190.22	0.00	190.74	0.00	191.26	0.00	191.78	0.17
190.23	0.00	190.75	0.00	191.27	0.00	191.79	0.18
190.24	0.00	190.76	0.00	191.28	0.00	191.80	0.18
190.25	0.00	190.77	0.00	191.29	0.00	191.81	0.19
190.26	0.00	190.78	0.00	191.30	0.00	191.82	0.19
190.27	0.00	190.79	0.00	191.31	0.00	191.83	0.20
190.28	0.00	190.80	0.00	191.32	0.00	191.84	0.20
190.29	0.00	190.81	0.00	191.33	0.00	191.85	0.21
190.30	0.00	190.82	0.00	191.34	0.00	191.86	0.21
190.31	0.00	190.83	0.00	191.35	0.00	191.87	0.22

Stage-Discharge for Pond B-35: Basin #35 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.88	0.22	192.40	0.37	192.92	0.48	193.44	3.69
191.89	0.22	192.41	0.38	192.93	0.48	193.45	3.81
191.90	0.23	192.42	0.38	192.94	0.49	193.46	3.94
191.91	0.23	192.43	0.38	192.95	0.49	193.47	4.06
191.92	0.24	192.44	0.38	192.96	0.49	193.48	4.18
191.93	0.24	192.45	0.39	192.97	0.49	193.49	4.31
191.94	0.24	192.46	0.39	192.98	0.49	193.50	4.44
191.95	0.25	192.47	0.39	192.99	0.49	193.51	4.57
191.96	0.25	192.48	0.39	193.00	0.50	193.52	4.70
191.97	0.25	192.49	0.39	193.01	0.50	193.53	4.83
191.98	0.26	192.50	0.40	193.02	0.50	193.54	4.96
191.99	0.26	192.51	0.40	193.03	0.50	193.55	5.09
192.00	0.26	192.52	0.40	193.04	0.50	193.56	5.23
192.01	0.27	192.53	0.40	193.05	0.50	193.57	5.37
192.02	0.27	192.54	0.41	193.06	0.52	193.58	5.50
192.03	0.27	192.55	0.41	193.07	0.55	193.59	5.64
192.04	0.28	192.56	0.41	193.08	0.58	193.60	5.78
192.05	0.28	192.57	0.41	193.09	0.62	193.61	5.92
192.06	0.28	192.58	0.41	193.10	0.66	193.62	6.06
192.07	0.29	192.59	0.42	193.11	0.71	193.63	6.21
192.08	0.29	192.60	0.42	193.12	0.76	193.64	6.35
192.09	0.29	192.61	0.42	193.13	0.81	193.65	6.50
192.10	0.30	192.62	0.42	193.14	0.87	193.66	6.64
192.11	0.30	192.63	0.43	193.15	0.93	193.67	6.79
192.12	0.30	192.64	0.43	193.16	1.00	193.68	6.94
192.13	0.30	192.65	0.43	193.17	1.07	193.69	7.09
192.14	0.31	192.66	0.43	193.18	1.14	193.70	7.24
192.15	0.31	192.67	0.43	193.19	1.21	193.71	7.39
192.16	0.31	192.68	0.44	193.20	1.28	193.72	7.54
192.17	0.32	192.69	0.44	193.21	1.36	193.73	7.70
192.18	0.32	192.70	0.44	193.22	1.44	193.74	7.85
192.19	0.32	192.71	0.44	193.23	1.53	193.75	8.01
192.20	0.32	192.72	0.44	193.24	1.61	193.76	8.16
192.21	0.33	192.73	0.45	193.25	1.70	193.77	8.32
192.22	0.33	192.74	0.45	193.26	1.79	193.78	8.48
192.23	0.33	192.75	0.45	193.27	1.88	193.79	8.64
192.24	0.33	192.76	0.45	193.28	1.97	193.80	8.80
192.25	0.34	192.77	0.45	193.29	2.06	193.81	8.96
192.26	0.34	192.78	0.46	193.30	2.16	193.82	9.12
192.27	0.34	192.79	0.46	193.31	2.26	193.83	9.29
192.28	0.34	192.80	0.46	193.32	2.36	193.84	9.45
192.29	0.35	192.81	0.46	193.33	2.46	193.85	9.61
192.30	0.35	192.82	0.46	193.34	2.57	193.86	9.78
192.31	0.35	192.83	0.46	193.35	2.67	193.87	9.95
192.32	0.35	192.84	0.47	193.36	2.78	193.88	10.11
192.33	0.36	192.85	0.47	193.37	2.89	193.89	10.28
192.34	0.36	192.86	0.47	193.38	3.00	193.90	10.45
192.35	0.36	192.87	0.47	193.39	3.11	193.91	10.62
192.36	0.36	192.88	0.47	193.40	3.22	193.92	10.79
192.37	0.37	192.89	0.48	193.41	3.34	193.93	10.96
192.38	0.37	192.90	0.48	193.42	3.46	193.94	11.14
192.39	0.37	192.91	0.48	193.43	3.57	193.95	11.31

Stage-Discharge for Pond B-35: Basin #35 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.96	11.48	194.48	14.79	195.00	**62.86**
193.97	11.66	194.49	14.81		
193.98	11.83	194.50	14.83		
193.99	12.01	194.51	14.97		
194.00	12.19	194.52	15.20		
194.01	12.36	194.53	15.50		
194.02	12.54	194.54	15.85		
194.03	12.72	194.55	16.24		
194.04	12.90	194.56	16.67		
194.05	13.08	194.57	17.14		
194.06	13.26	194.58	17.65		
194.07	13.45	194.59	18.18		
194.08	13.63	194.60	18.75		
194.09	13.81	194.61	19.34		
194.10	14.00	194.62	19.96		
194.11	14.03	194.63	20.61		
194.12	14.05	194.64	21.28		
194.13	14.07	194.65	21.97		
194.14	14.09	194.66	22.69		
194.15	14.11	194.67	23.43		
194.16	14.13	194.68	24.20		
194.17	14.15	194.69	24.98		
194.18	14.17	194.70	25.79		
194.19	14.19	194.71	26.66		
194.20	14.22	194.72	27.55		
194.21	14.24	194.73	28.47		
194.22	14.26	194.74	29.41		
194.23	14.28	194.75	30.38		
194.24	14.30	194.76	31.37		
194.25	14.32	194.77	32.39		
194.26	14.34	194.78	33.43		
194.27	14.36	194.79	34.50		
194.28	14.38	194.80	35.59		
194.29	14.40	194.81	36.70		
194.30	14.42	194.82	37.84		
194.31	14.44	194.83	39.01		
194.32	14.46	194.84	40.20		
194.33	14.48	194.85	41.41		
194.34	14.51	194.86	42.65		
194.35	14.53	194.87	43.91		
194.36	14.55	194.88	45.20		
194.37	14.57	194.89	46.51		
194.38	14.59	194.90	47.84		
194.39	14.61	194.91	49.23		
194.40	14.63	194.92	50.64		
194.41	14.65	194.93	52.07		
194.42	14.67	194.94	53.54		
194.43	14.69	194.95	55.02		
194.44	14.71	194.96	56.54		
194.45	14.73	194.97	58.08		
194.46	14.75	194.98	59.65		
194.47	14.77	194.99	61.24		

Stage-Area-Storage for Pond B-35: Basin #35

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.80	0	0
189.81	132	1
189.82	265	3
189.83	397	6
189.84	529	11
189.85	662	17
189.86	794	24
189.87	926	32
189.88	1,059	42
189.89	1,191	54
189.90	1,324	66
189.91	1,456	80
189.92	1,588	95
189.93	1,721	112
189.94	1,853	130
189.95	1,985	149
189.96	2,118	169
189.97	2,250	191
189.98	2,382	214
189.99	2,515	239
190.00	2,647	265
190.01	2,656	291
190.02	2,666	318
190.03	2,675	345
190.04	2,685	371
190.05	2,694	398
190.06	2,704	425
190.07	2,713	452
190.08	2,723	479
190.09	2,732	507
190.10	2,742	534
190.11	2,751	562
190.12	2,761	589
190.13	2,770	617
190.14	2,779	645
190.15	2,789	672
190.16	2,798	700
190.17	2,808	728
190.18	2,817	756
190.19	2,827	785
190.20	2,836	813
190.21	2,846	841
190.22	2,855	870
190.23	2,865	899
190.24	2,874	927
190.25	2,884	956
190.26	2,893	985
190.27	2,902	1,014
190.28	2,912	1,043
190.29	2,921	1,072
190.30	2,931	1,101
190.31	2,940	1,131
190.32	2,950	1,160
190.33	2,959	1,190
190.34	2,969	1,219
190.35	2,978	1,249
190.36	2,988	1,279
190.37	2,997	1,309
190.38	3,006	1,339
190.39	3,016	1,369
190.40	3,025	1,399
190.41	3,035	1,429
190.42	3,044	1,460
190.43	3,054	1,490
190.44	3,063	1,521
190.45	3,073	1,552
190.46	3,082	1,582
190.47	3,092	1,613
190.48	3,101	1,644
190.49	3,111	1,675
190.50	3,120	1,706
190.51	3,129	1,738
190.52	3,139	1,769
190.53	3,148	1,800
190.54	3,158	1,832
190.55	3,167	1,864
190.56	3,177	1,895
190.57	3,186	1,927
190.58	3,196	1,959
190.59	3,205	1,991
190.60	3,215	2,023
190.61	3,224	2,055
190.62	3,234	2,088
190.63	3,243	2,120
190.64	3,252	2,153
190.65	3,262	2,185
190.66	3,271	2,218
190.67	3,281	2,251
190.68	3,290	2,283
190.69	3,300	2,316
190.70	3,309	2,349
190.71	3,319	2,383
190.72	3,328	2,416
190.73	3,338	2,449
190.74	3,347	2,482
190.75	3,357	2,516
190.76	3,366	2,550
190.77	3,375	2,583
190.78	3,385	2,617
190.79	3,394	2,651
190.80	3,404	2,685
190.81	3,413	2,719
190.82	3,423	2,753
190.83	3,432	2,788

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.84	3,442	2,822	191.36	3,962	4,745
190.85	3,451	2,856	191.37	3,972	4,784
190.86	3,461	2,891	191.38	3,983	4,824
190.87	3,470	2,926	191.39	3,993	4,864
190.88	3,479	2,960	191.40	4,003	4,904
190.89	3,489	2,995	191.41	4,013	4,944
190.90	3,498	3,030	191.42	4,024	4,984
190.91	3,508	3,065	191.43	4,034	5,024
190.92	3,517	3,100	191.44	4,044	5,065
190.93	3,527	3,136	191.45	4,054	5,105
190.94	3,536	3,171	191.46	4,065	5,146
190.95	3,546	3,206	191.47	4,075	5,187
190.96	3,555	3,242	191.48	4,085	5,227
190.97	3,565	3,277	191.49	4,095	5,268
190.98	3,574	3,313	191.50	4,106	5,309
190.99	3,584	3,349	191.51	4,116	5,350
191.00	3,593	3,385	191.52	4,126	5,392
191.01	3,603	3,421	191.53	4,136	5,433
191.02	3,614	3,457	191.54	4,147	5,474
191.03	3,624	3,493	191.55	4,157	5,516
191.04	3,634	3,529	191.56	4,167	5,557
191.05	3,644	3,566	191.57	4,177	5,599
191.06	3,655	3,602	191.58	4,188	5,641
191.07	3,665	3,639	191.59	4,198	5,683
191.08	3,675	3,675	191.60	4,208	5,725
191.09	3,685	3,712	191.61	4,218	5,767
191.10	3,696	3,749	191.62	4,229	5,809
191.11	3,706	3,786	191.63	4,239	5,852
191.12	3,716	3,823	191.64	4,249	5,894
191.13	3,726	3,860	191.65	4,259	5,937
191.14	3,737	3,898	191.66	4,270	5,979
191.15	3,747	3,935	191.67	4,280	6,022
191.16	3,757	3,973	191.68	4,290	6,065
191.17	3,767	4,010	191.69	4,300	6,108
191.18	3,778	4,048	191.70	4,311	6,151
191.19	3,788	4,086	191.71	4,321	6,194
191.20	3,798	4,124	191.72	4,331	6,237
191.21	3,808	4,162	191.73	4,341	6,281
191.22	3,818	4,200	191.74	4,352	6,324
191.23	3,829	4,238	191.75	4,362	6,368
191.24	3,839	4,277	191.76	4,372	6,411
191.25	3,849	4,315	191.77	4,382	6,455
191.26	3,860	4,354	191.78	4,393	6,499
191.27	3,870	4,392	191.79	4,403	6,543
191.28	3,880	4,431	191.80	4,413	6,587
191.29	3,890	4,470	191.81	4,423	6,631
191.30	3,901	4,509	191.82	4,434	6,676
191.31	3,911	4,548	191.83	4,444	6,720
191.32	3,921	4,587	191.84	4,454	6,764
191.33	3,931	4,626	191.85	4,464	6,809
191.34	3,942	4,666	191.86	4,475	6,854
191.35	3,952	4,705	191.87	4,485	6,899

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.88	4,495	6,943	192.40	5,055	9,425
191.89	4,505	6,988	192.41	5,066	9,475
191.90	4,516	7,034	192.42	5,077	9,526
191.91	4,526	7,079	192.43	5,088	9,577
191.92	4,536	7,124	192.44	5,099	9,628
191.93	4,546	7,169	192.45	5,110	9,679
191.94	4,556	7,215	192.46	5,121	9,730
191.95	4,567	7,261	192.47	5,132	9,781
191.96	4,577	7,306	192.48	5,143	9,833
191.97	4,587	7,352	192.49	5,154	9,884
191.98	4,598	7,398	192.50	5,165	9,936
191.99	4,608	7,444	192.51	5,175	9,988
192.00	4,618	7,490	192.52	5,186	10,039
192.01	4,629	7,536	192.53	5,197	10,091
192.02	4,640	7,583	192.54	5,208	10,143
192.03	4,651	7,629	192.55	5,219	10,195
192.04	4,662	7,676	192.56	5,230	10,248
192.05	4,673	7,722	192.57	5,241	10,300
192.06	4,684	7,769	192.58	5,252	10,352
192.07	4,695	7,816	192.59	5,263	10,405
192.08	4,705	7,863	192.60	5,274	10,458
192.09	4,716	7,910	192.61	5,285	10,511
192.10	4,727	7,957	192.62	5,296	10,563
192.11	4,738	8,005	192.63	5,307	10,616
192.12	4,749	8,052	192.64	5,318	10,670
192.13	4,760	8,100	192.65	5,328	10,723
192.14	4,771	8,147	192.66	5,339	10,776
192.15	4,782	8,195	192.67	5,350	10,830
192.16	4,793	8,243	192.68	5,361	10,883
192.17	4,804	8,291	192.69	5,372	10,937
192.18	4,815	8,339	192.70	5,383	10,991
192.19	4,826	8,387	192.71	5,394	11,044
192.20	4,837	8,436	192.72	5,405	11,098
192.21	4,848	8,484	192.73	5,416	11,153
192.22	4,858	8,533	192.74	5,427	11,207
192.23	4,869	8,581	192.75	5,438	11,261
192.24	4,880	8,630	192.76	5,449	11,316
192.25	4,891	8,679	192.77	5,460	11,370
192.26	4,902	8,728	192.78	5,471	11,425
192.27	4,913	8,777	192.79	5,481	11,479
192.28	4,924	8,826	192.80	5,492	11,534
192.29	4,935	8,875	192.81	5,503	11,589
192.30	4,946	8,925	192.82	5,514	11,644
192.31	4,957	8,974	192.83	5,525	11,700
192.32	4,968	9,024	192.84	5,536	11,755
192.33	4,979	9,074	192.85	5,547	11,810
192.34	4,990	9,123	192.86	5,558	11,866
192.35	5,001	9,173	192.87	5,569	11,922
192.36	5,011	9,224	192.88	5,580	11,977
192.37	5,022	9,274	192.89	5,591	12,033
192.38	5,033	9,324	192.90	5,602	12,089
192.39	5,044	9,374	192.91	5,613	12,145

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.92	5,624	12,201	193.44	6,221	15,280
192.93	5,634	12,258	193.45	6,233	15,342
192.94	5,645	12,314	193.46	6,245	15,404
192.95	5,656	12,371	193.47	6,256	15,467
192.96	5,667	12,427	193.48	6,268	15,530
192.97	5,678	12,484	193.49	6,279	15,592
192.98	5,689	12,541	193.50	6,291	15,655
192.99	5,700	12,598	193.51	6,303	15,718
193.00	5,711	12,655	193.52	6,314	15,781
193.01	5,723	12,712	193.53	6,326	15,844
193.02	5,734	12,769	193.54	6,337	15,908
193.03	5,746	12,827	193.55	6,349	15,971
193.04	5,757	12,884	193.56	6,361	16,035
193.05	5,769	12,942	193.57	6,372	16,098
193.06	5,781	12,999	193.58	6,384	16,162
193.07	5,792	13,057	193.59	6,395	16,226
193.08	5,804	13,115	193.60	6,407	16,290
193.09	5,815	13,173	193.61	6,419	16,354
193.10	5,827	13,232	193.62	6,430	16,418
193.11	5,839	13,290	193.63	6,442	16,483
193.12	5,850	13,348	193.64	6,453	16,547
193.13	5,862	13,407	193.65	6,465	16,612
193.14	5,873	13,466	193.66	6,477	16,677
193.15	5,885	13,524	193.67	6,488	16,741
193.16	5,897	13,583	193.68	6,500	16,806
193.17	5,908	13,642	193.69	6,511	16,871
193.18	5,920	13,701	193.70	6,523	16,937
193.19	5,931	13,761	193.71	6,535	17,002
193.20	5,943	13,820	193.72	6,546	17,067
193.21	5,955	13,880	193.73	6,558	17,133
193.22	5,966	13,939	193.74	6,569	17,198
193.23	5,978	13,999	193.75	6,581	17,264
193.24	5,989	14,059	193.76	6,593	17,330
193.25	6,001	14,119	193.77	6,604	17,396
193.26	6,013	14,179	193.78	6,616	17,462
193.27	6,024	14,239	193.79	6,627	17,528
193.28	6,036	14,299	193.80	6,639	17,595
193.29	6,047	14,360	193.81	6,651	17,661
193.30	6,059	14,420	193.82	6,662	17,728
193.31	6,071	14,481	193.83	6,674	17,794
193.32	6,082	14,542	193.84	6,685	17,861
193.33	6,094	14,602	193.85	6,697	17,928
193.34	6,105	14,663	193.86	6,709	17,995
193.35	6,117	14,725	193.87	6,720	18,062
193.36	6,129	14,786	193.88	6,732	18,130
193.37	6,140	14,847	193.89	6,743	18,197
193.38	6,152	14,909	193.90	6,755	18,264
193.39	6,163	14,970	193.91	6,767	18,332
193.40	6,175	15,032	193.92	6,778	18,400
193.41	6,187	15,094	193.93	6,790	18,468
193.42	6,198	15,156	193.94	6,801	18,536
193.43	6,210	15,218	193.95	6,813	18,604

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.96	6,825	18,672	194.48	7,460	22,385
193.97	6,836	18,740	194.49	7,473	22,460
193.98	6,848	18,809	194.50	7,485	22,535
193.99	6,859	18,877	194.51	7,497	22,610
194.00	6,871	18,946	194.52	7,510	22,685
194.01	6,883	19,014	194.53	7,522	22,760
194.02	6,896	19,083	194.54	7,534	22,835
194.03	6,908	19,152	194.55	7,546	22,910
194.04	6,920	19,222	194.56	7,559	22,986
194.05	6,932	19,291	194.57	7,571	23,062
194.06	6,945	19,360	194.58	7,583	23,137
194.07	6,957	19,430	194.59	7,596	23,213
194.08	6,969	19,499	194.60	7,608	23,289
194.09	6,982	19,569	194.61	7,620	23,365
194.10	6,994	19,639	194.62	7,632	23,442
194.11	7,006	19,709	194.63	7,645	23,518
194.12	7,018	19,779	194.64	7,657	23,595
194.13	7,031	19,849	194.65	7,669	23,671
194.14	7,043	19,920	194.66	7,681	23,748
194.15	7,055	19,990	194.67	7,694	23,825
194.16	7,067	20,061	194.68	7,706	23,902
194.17	7,080	20,132	194.69	7,718	23,979
194.18	7,092	20,202	194.70	7,731	24,056
194.19	7,104	20,273	194.71	7,743	24,134
194.20	7,117	20,344	194.72	7,755	24,211
194.21	7,129	20,416	194.73	7,767	24,289
194.22	7,141	20,487	194.74	7,780	24,366
194.23	7,153	20,559	194.75	7,792	24,444
194.24	7,166	20,630	194.76	7,804	24,522
194.25	7,178	20,702	194.77	7,817	24,600
194.26	7,190	20,774	194.78	7,829	24,679
194.27	7,203	20,846	194.79	7,841	24,757
194.28	7,215	20,918	194.80	7,853	24,835
194.29	7,227	20,990	194.81	7,866	24,914
194.30	7,239	21,062	194.82	7,878	24,993
194.31	7,252	21,135	194.83	7,890	25,072
194.32	7,264	21,207	194.84	7,903	25,151
194.33	7,276	21,280	194.85	7,915	25,230
194.34	7,289	21,353	194.86	7,927	25,309
194.35	7,301	21,426	194.87	7,939	25,388
194.36	7,313	21,499	194.88	7,952	25,468
194.37	7,325	21,572	194.89	7,964	25,547
194.38	7,338	21,645	194.90	7,976	25,627
194.39	7,350	21,719	194.91	7,988	25,707
194.40	7,362	21,792	194.92	8,001	25,787
194.41	7,374	21,866	194.93	8,013	25,867
194.42	7,387	21,940	194.94	8,025	25,947
194.43	7,399	22,014	194.95	8,038	26,027
194.44	7,411	22,088	194.96	8,050	26,108
194.45	7,424	22,162	194.97	8,062	26,188
194.46	7,436	22,236	194.98	8,074	26,269
194.47	7,448	22,311	194.99	8,087	26,350

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.00	**8,099**	**26,431**

Summary for Pond B-36A: Basin #36A

Inflow Area = 2.377 ac, 40.60% Impervious, Inflow Depth = 3.43" for Current 10 yr event
Inflow = 8.29 cfs @ 12.17 hrs, Volume= 0.679 af
Outflow = 4.44 cfs @ 12.33 hrs, Volume= 0.585 af, Atten= 46%, Lag= 9.3 min
Primary = 4.44 cfs @ 12.33 hrs, Volume= 0.585 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.45' @ 12.33 hrs Surf.Area= 4,782 sf Storage= 12,727 cf

Plug-Flow detention time= 230.9 min calculated for 0.585 af (86% of inflow)
Center-of-Mass det. time= 166.6 min (957.5 - 790.9)

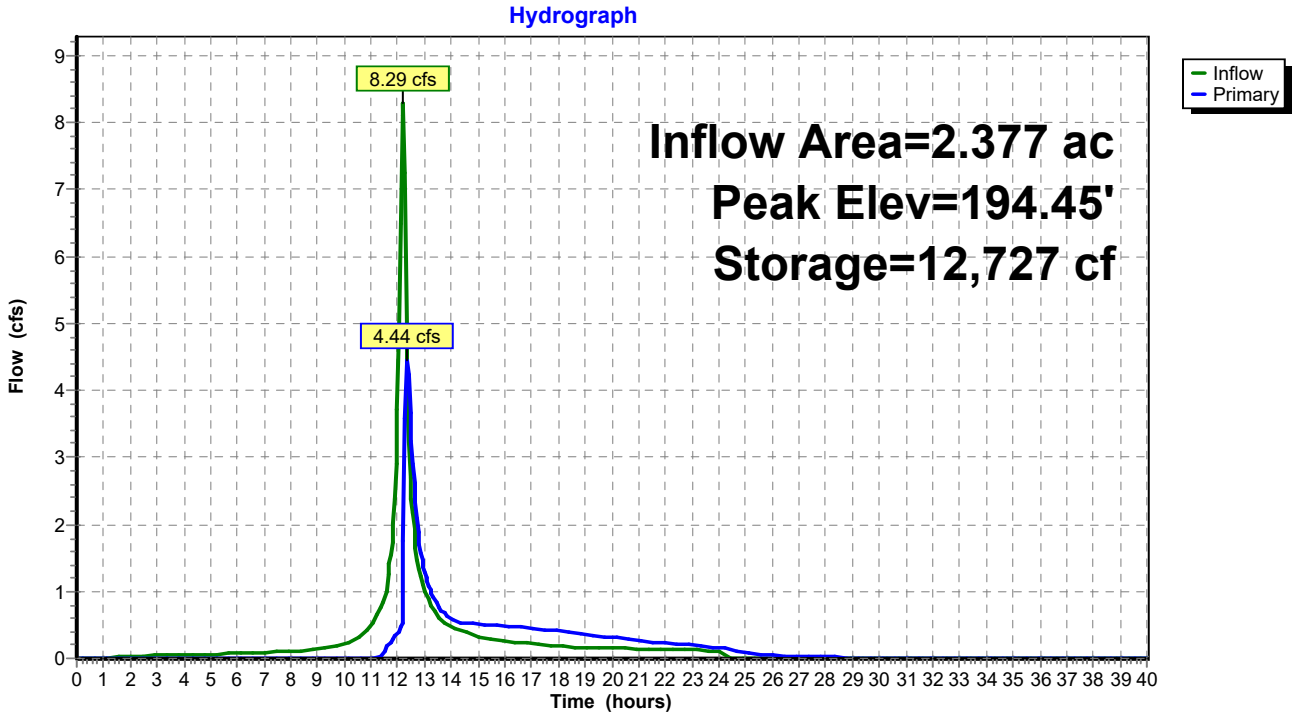
Volume	Invert	Avail.Storage	Storage Description
#1	190.50'	16,844 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.50	0	0	0
191.00	2,366	592	592
192.00	2,995	2,681	3,272
193.00	3,681	3,338	6,610
194.00	4,424	4,053	10,663
195.00	5,223	4,824	15,486
195.25	5,644	1,358	16,844

Device	Routing	Invert	Outlet Devices
#1	Primary	190.50'	**18.0" Round Culvert** L= 82.0' Ke= 0.500 Inlet / Outlet Invert= 190.50' / 190.10' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.24'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	194.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.40 cfs @ 12.33 hrs HW=194.45' (Free Discharge)
- **1=Culvert** (Passes 4.40 cfs of 13.81 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.60 cfs @ 6.87 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.80 cfs @ 2.18 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-36A: Basin #36A



Stage-Discharge for Pond B-36A: Basin #36A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.50	0.00	191.02	0.00	191.54	0.00	192.06	0.00
190.51	0.00	191.03	0.00	191.55	0.00	192.07	0.00
190.52	0.00	191.04	0.00	191.56	0.00	192.08	0.00
190.53	0.00	191.05	0.00	191.57	0.00	192.09	0.00
190.54	0.00	191.06	0.00	191.58	0.00	192.10	0.00
190.55	0.00	191.07	0.00	191.59	0.00	192.11	0.00
190.56	0.00	191.08	0.00	191.60	0.00	192.12	0.00
190.57	0.00	191.09	0.00	191.61	0.00	192.13	0.00
190.58	0.00	191.10	0.00	191.62	0.00	192.14	0.00
190.59	0.00	191.11	0.00	191.63	0.00	192.15	0.00
190.60	0.00	191.12	0.00	191.64	0.00	192.16	0.00
190.61	0.00	191.13	0.00	191.65	0.00	192.17	0.00
190.62	0.00	191.14	0.00	191.66	0.00	192.18	0.00
190.63	0.00	191.15	0.00	191.67	0.00	192.19	0.00
190.64	0.00	191.16	0.00	191.68	0.00	192.20	0.00
190.65	0.00	191.17	0.00	191.69	0.00	192.21	0.00
190.66	0.00	191.18	0.00	191.70	0.00	192.22	0.00
190.67	0.00	191.19	0.00	191.71	0.00	192.23	0.00
190.68	0.00	191.20	0.00	191.72	0.00	192.24	0.00
190.69	0.00	191.21	0.00	191.73	0.00	192.25	0.00
190.70	0.00	191.22	0.00	191.74	0.00	192.26	0.00
190.71	0.00	191.23	0.00	191.75	0.00	192.27	0.00
190.72	0.00	191.24	0.00	191.76	0.00	192.28	0.00
190.73	0.00	191.25	0.00	191.77	0.00	192.29	0.01
190.74	0.00	191.26	0.00	191.78	0.00	192.30	0.01
190.75	0.00	191.27	0.00	191.79	0.00	192.31	0.01
190.76	0.00	191.28	0.00	191.80	0.00	192.32	0.02
190.77	0.00	191.29	0.00	191.81	0.00	192.33	0.02
190.78	0.00	191.30	0.00	191.82	0.00	192.34	0.02
190.79	0.00	191.31	0.00	191.83	0.00	192.35	0.03
190.80	0.00	191.32	0.00	191.84	0.00	192.36	0.03
190.81	0.00	191.33	0.00	191.85	0.00	192.37	0.04
190.82	0.00	191.34	0.00	191.86	0.00	192.38	0.04
190.83	0.00	191.35	0.00	191.87	0.00	192.39	0.05
190.84	0.00	191.36	0.00	191.88	0.00	192.40	0.06
190.85	0.00	191.37	0.00	191.89	0.00	192.41	0.06
190.86	0.00	191.38	0.00	191.90	0.00	192.42	0.07
190.87	0.00	191.39	0.00	191.91	0.00	192.43	0.08
190.88	0.00	191.40	0.00	191.92	0.00	192.44	0.08
190.89	0.00	191.41	0.00	191.93	0.00	192.45	0.09
190.90	0.00	191.42	0.00	191.94	0.00	192.46	0.10
190.91	0.00	191.43	0.00	191.95	0.00	192.47	0.10
190.92	0.00	191.44	0.00	191.96	0.00	192.48	0.11
190.93	0.00	191.45	0.00	191.97	0.00	192.49	0.12
190.94	0.00	191.46	0.00	191.98	0.00	192.50	0.13
190.95	0.00	191.47	0.00	191.99	0.00	192.51	0.13
190.96	0.00	191.48	0.00	192.00	0.00	192.52	0.14
190.97	0.00	191.49	0.00	192.01	0.00	192.53	0.15
190.98	0.00	191.50	0.00	192.02	0.00	192.54	0.15
190.99	0.00	191.51	0.00	192.03	0.00	192.55	0.16
191.00	0.00	191.52	0.00	192.04	0.00	192.56	0.17
191.01	0.00	191.53	0.00	192.05	0.00	192.57	0.17

Stage-Discharge for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.58	0.17	193.10	0.35	193.62	0.46	194.14	1.23
192.59	0.18	193.11	0.35	193.63	0.46	194.15	1.31
192.60	0.18	193.12	0.35	193.64	0.47	194.16	1.39
192.61	0.19	193.13	0.36	193.65	0.47	194.17	1.47
192.62	0.19	193.14	0.36	193.66	0.47	194.18	1.55
192.63	0.20	193.15	0.36	193.67	0.47	194.19	1.63
192.64	0.20	193.16	0.36	193.68	0.47	194.20	1.72
192.65	0.21	193.17	0.37	193.69	0.48	194.21	1.81
192.66	0.21	193.18	0.37	193.70	0.48	194.22	1.90
192.67	0.22	193.19	0.37	193.71	0.48	194.23	1.99
192.68	0.22	193.20	0.37	193.72	0.48	194.24	2.09
192.69	0.22	193.21	0.38	193.73	0.48	194.25	2.19
192.70	0.23	193.22	0.38	193.74	0.49	194.26	2.28
192.71	0.23	193.23	0.38	193.75	0.49	194.27	2.38
192.72	0.24	193.24	0.38	193.76	0.49	194.28	2.49
192.73	0.24	193.25	0.39	193.77	0.49	194.29	2.59
192.74	0.24	193.26	0.39	193.78	0.49	194.30	2.70
192.75	0.25	193.27	0.39	193.79	0.49	194.31	2.80
192.76	0.25	193.28	0.39	193.80	0.50	194.32	2.91
192.77	0.25	193.29	0.39	193.81	0.50	194.33	3.02
192.78	0.26	193.30	0.40	193.82	0.50	194.34	3.13
192.79	0.26	193.31	0.40	193.83	0.50	194.35	3.25
192.80	0.26	193.32	0.40	193.84	0.50	194.36	3.36
192.81	0.27	193.33	0.40	193.85	0.50	194.37	3.48
192.82	0.27	193.34	0.41	193.86	0.51	194.38	3.60
192.83	0.27	193.35	0.41	193.87	0.51	194.39	3.72
192.84	0.28	193.36	0.41	193.88	0.51	194.40	3.84
192.85	0.28	193.37	0.41	193.89	0.51	194.41	3.96
192.86	0.28	193.38	0.41	193.90	0.51	194.42	4.08
192.87	0.29	193.39	0.42	193.91	0.52	194.43	4.21
192.88	0.29	193.40	0.42	193.92	0.52	194.44	4.33
192.89	0.29	193.41	0.42	193.93	0.52	194.45	4.46
192.90	0.30	193.42	0.42	193.94	0.52	194.46	4.59
192.91	0.30	193.43	0.43	193.95	0.52	194.47	4.72
192.92	0.30	193.44	0.43	193.96	0.52	194.48	4.85
192.93	0.30	193.45	0.43	193.97	0.53	194.49	4.98
192.94	0.31	193.46	0.43	193.98	0.53	194.50	5.12
192.95	0.31	193.47	0.43	193.99	0.53	194.51	5.25
192.96	0.31	193.48	0.44	194.00	0.53	194.52	5.39
192.97	0.32	193.49	0.44	194.01	0.55	194.53	5.53
192.98	0.32	193.50	0.44	194.02	0.57	194.54	5.66
192.99	0.32	193.51	0.44	194.03	0.60	194.55	5.80
193.00	0.32	193.52	0.44	194.04	0.64	194.56	5.94
193.01	0.33	193.53	0.45	194.05	0.68	194.57	6.09
193.02	0.33	193.54	0.45	194.06	0.73	194.58	6.23
193.03	0.33	193.55	0.45	194.07	0.78	194.59	6.37
193.04	0.33	193.56	0.45	194.08	0.84	194.60	6.52
193.05	0.34	193.57	0.45	194.09	0.90	194.61	6.67
193.06	0.34	193.58	0.46	194.10	0.96	194.62	6.81
193.07	0.34	193.59	0.46	194.11	1.02	194.63	6.96
193.08	0.34	193.60	0.46	194.12	1.09	194.64	7.11
193.09	0.35	193.61	0.46	194.13	1.16	194.65	7.26

Stage-Discharge for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Primary (cfs)
194.66	7.41
194.67	7.57
194.68	7.72
194.69	7.87
194.70	8.03
194.71	8.19
194.72	8.34
194.73	8.50
194.74	8.66
194.75	8.82
194.76	8.98
194.77	9.14
194.78	9.31
194.79	9.47
194.80	9.63
194.81	9.80
194.82	9.97
194.83	10.13
194.84	10.30
194.85	10.47
194.86	10.64
194.87	10.81
194.88	10.98
194.89	11.16
194.90	11.33
194.91	11.50
194.92	11.68
194.93	11.85
194.94	12.03
194.95	12.21
194.96	12.50
194.97	12.89
194.98	13.35
194.99	13.86
195.00	14.41
195.01	15.01
195.02	15.64
195.03	16.31
195.04	17.01
195.05	17.74
195.06	18.49
195.07	19.28
195.08	20.09
195.09	20.93
195.10	21.80
195.11	22.68
195.12	23.60
195.13	24.40
195.14	25.18
195.15	25.99
195.16	26.86
195.17	27.75
195.18	28.67
195.19	29.62
195.20	30.59
195.21	31.58
195.22	32.60
195.23	33.65
195.24	34.72
195.25	**35.81**

Stage-Area-Storage for Pond B-36A: Basin #36A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.50	0	0
190.51	47	0
190.52	95	1
190.53	142	2
190.54	189	4
190.55	237	6
190.56	284	9
190.57	331	12
190.58	379	15
190.59	426	19
190.60	473	24
190.61	521	29
190.62	568	34
190.63	615	40
190.64	662	46
190.65	710	53
190.66	757	61
190.67	804	68
190.68	852	77
190.69	899	85
190.70	946	95
190.71	994	104
190.72	1,041	115
190.73	1,088	125
190.74	1,136	136
190.75	1,183	148
190.76	1,230	160
190.77	1,278	172
190.78	1,325	185
190.79	1,372	199
190.80	1,420	213
190.81	1,467	227
190.82	1,514	242
190.83	1,562	258
190.84	1,609	274
190.85	1,656	290
190.86	1,704	307
190.87	1,751	324
190.88	1,798	342
190.89	1,845	360
190.90	1,893	379
190.91	1,940	398
190.92	1,987	417
190.93	2,035	437
190.94	2,082	458
190.95	2,129	479
190.96	2,177	501
190.97	2,224	523
190.98	2,271	545
190.99	2,319	568
191.00	2,366	592
191.01	2,372	615
191.02	2,379	639
191.03	2,385	663
191.04	2,391	687
191.05	2,397	711
191.06	2,404	735
191.07	2,410	759
191.08	2,416	783
191.09	2,423	807
191.10	2,429	831
191.11	2,435	856
191.12	2,441	880
191.13	2,448	904
191.14	2,454	929
191.15	2,460	953
191.16	2,467	978
191.17	2,473	1,003
191.18	2,479	1,028
191.19	2,486	1,052
191.20	2,492	1,077
191.21	2,498	1,102
191.22	2,504	1,127
191.23	2,511	1,152
191.24	2,517	1,177
191.25	2,523	1,203
191.26	2,530	1,228
191.27	2,536	1,253
191.28	2,542	1,279
191.29	2,548	1,304
191.30	2,555	1,330
191.31	2,561	1,355
191.32	2,567	1,381
191.33	2,574	1,407
191.34	2,580	1,432
191.35	2,586	1,458
191.36	2,592	1,484
191.37	2,599	1,510
191.38	2,605	1,536
191.39	2,611	1,562
191.40	2,618	1,588
191.41	2,624	1,614
191.42	2,630	1,641
191.43	2,636	1,667
191.44	2,643	1,693
191.45	2,649	1,720
191.46	2,655	1,746
191.47	2,662	1,773
191.48	2,668	1,800
191.49	2,674	1,826
191.50	2,681	1,853
191.51	2,687	1,880
191.52	2,693	1,907
191.53	2,699	1,934

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.54	2,706	1,961
191.55	2,712	1,988
191.56	2,718	2,015
191.57	2,725	2,042
191.58	2,731	2,070
191.59	2,737	2,097
191.60	2,743	2,124
191.61	2,750	2,152
191.62	2,756	2,179
191.63	2,762	2,207
191.64	2,769	2,235
191.65	2,775	2,262
191.66	2,781	2,290
191.67	2,787	2,318
191.68	2,794	2,346
191.69	2,800	2,374
191.70	2,806	2,402
191.71	2,813	2,430
191.72	2,819	2,458
191.73	2,825	2,486
191.74	2,831	2,515
191.75	2,838	2,543
191.76	2,844	2,571
191.77	2,850	2,600
191.78	2,857	2,628
191.79	2,863	2,657
191.80	2,869	2,686
191.81	2,875	2,714
191.82	2,882	2,743
191.83	2,888	2,772
191.84	2,894	2,801
191.85	2,901	2,830
191.86	2,907	2,859
191.87	2,913	2,888
191.88	2,920	2,917
191.89	2,926	2,946
191.90	2,932	2,976
191.91	2,938	3,005
191.92	2,945	3,034
191.93	2,951	3,064
191.94	2,957	3,093
191.95	2,964	3,123
191.96	2,970	3,153
191.97	2,976	3,182
191.98	2,982	3,212
191.99	2,989	3,242
192.00	2,995	3,272
192.01	3,002	3,302
192.02	3,009	3,332
192.03	3,016	3,362
192.04	3,022	3,392
192.05	3,029	3,423
192.06	3,036	3,453
192.07	3,043	3,483
192.08	3,050	3,514
192.09	3,057	3,544
192.10	3,064	3,575
192.11	3,070	3,606
192.12	3,077	3,636
192.13	3,084	3,667
192.14	3,091	3,698
192.15	3,098	3,729
192.16	3,105	3,760
192.17	3,112	3,791
192.18	3,118	3,822
192.19	3,125	3,853
192.20	3,132	3,885
192.21	3,139	3,916
192.22	3,146	3,948
192.23	3,153	3,979
192.24	3,160	4,011
192.25	3,167	4,042
192.26	3,173	4,074
192.27	3,180	4,106
192.28	3,187	4,137
192.29	3,194	4,169
192.30	3,201	4,201
192.31	3,208	4,233
192.32	3,215	4,266
192.33	3,221	4,298
192.34	3,228	4,330
192.35	3,235	4,362
192.36	3,242	4,395
192.37	3,249	4,427
192.38	3,256	4,460
192.39	3,263	4,492
192.40	3,269	4,525
192.41	3,276	4,558
192.42	3,283	4,590
192.43	3,290	4,623
192.44	3,297	4,656
192.45	3,304	4,689
192.46	3,311	4,722
192.47	3,317	4,755
192.48	3,324	4,789
192.49	3,331	4,822
192.50	3,338	4,855
192.51	3,345	4,889
192.52	3,352	4,922
192.53	3,359	4,956
192.54	3,365	4,989
192.55	3,372	5,023
192.56	3,379	5,057
192.57	3,386	5,091

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.58	3,393	5,124	193.10	3,755	6,982
192.59	3,400	5,158	193.11	3,763	7,019
192.60	3,407	5,192	193.12	3,770	7,057
192.61	3,413	5,227	193.13	3,778	7,095
192.62	3,420	5,261	193.14	3,785	7,133
192.63	3,427	5,295	193.15	3,792	7,171
192.64	3,434	5,329	193.16	3,800	7,208
192.65	3,441	5,364	193.17	3,807	7,247
192.66	3,448	5,398	193.18	3,815	7,285
192.67	3,455	5,433	193.19	3,822	7,323
192.68	3,461	5,467	193.20	3,830	7,361
192.69	3,468	5,502	193.21	3,837	7,399
192.70	3,475	5,537	193.22	3,844	7,438
192.71	3,482	5,571	193.23	3,852	7,476
192.72	3,489	5,606	193.24	3,859	7,515
192.73	3,496	5,641	193.25	3,867	7,553
192.74	3,503	5,676	193.26	3,874	7,592
192.75	3,510	5,711	193.27	3,882	7,631
192.76	3,516	5,746	193.28	3,889	7,670
192.77	3,523	5,782	193.29	3,896	7,709
192.78	3,530	5,817	193.30	3,904	7,748
192.79	3,537	5,852	193.31	3,911	7,787
192.80	3,544	5,888	193.32	3,919	7,826
192.81	3,551	5,923	193.33	3,926	7,865
192.82	3,558	5,959	193.34	3,934	7,904
192.83	3,564	5,994	193.35	3,941	7,944
192.84	3,571	6,030	193.36	3,948	7,983
192.85	3,578	6,066	193.37	3,956	8,023
192.86	3,585	6,101	193.38	3,963	8,062
192.87	3,592	6,137	193.39	3,971	8,102
192.88	3,599	6,173	193.40	3,978	8,142
192.89	3,606	6,209	193.41	3,986	8,182
192.90	3,612	6,245	193.42	3,993	8,222
192.91	3,619	6,281	193.43	4,000	8,262
192.92	3,626	6,318	193.44	4,008	8,302
192.93	3,633	6,354	193.45	4,015	8,342
192.94	3,640	6,390	193.46	4,023	8,382
192.95	3,647	6,427	193.47	4,030	8,422
192.96	3,654	6,463	193.48	4,038	8,462
192.97	3,660	6,500	193.49	4,045	8,503
192.98	3,667	6,537	193.50	4,053	8,543
192.99	3,674	6,573	193.51	4,060	8,584
193.00	3,681	6,610	193.52	4,067	8,625
193.01	3,688	6,647	193.53	4,075	8,665
193.02	3,696	6,684	193.54	4,082	8,706
193.03	3,703	6,721	193.55	4,090	8,747
193.04	3,711	6,758	193.56	4,097	8,788
193.05	3,718	6,795	193.57	4,105	8,829
193.06	3,726	6,832	193.58	4,112	8,870
193.07	3,733	6,869	193.59	4,119	8,911
193.08	3,740	6,907	193.60	4,127	8,952
193.09	3,748	6,944	193.61	4,134	8,994

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.62	4,142	9,035	194.14	4,536	11,290
193.63	4,149	9,076	194.15	4,544	11,335
193.64	4,157	9,118	194.16	4,552	11,381
193.65	4,164	9,160	194.17	4,560	11,426
193.66	4,171	9,201	194.18	4,568	11,472
193.67	4,179	9,243	194.19	4,576	11,517
193.68	4,186	9,285	194.20	4,584	11,563
193.69	4,194	9,327	194.21	4,592	11,609
193.70	4,201	9,369	194.22	4,600	11,655
193.71	4,209	9,411	194.23	4,608	11,701
193.72	4,216	9,453	194.24	4,616	11,747
193.73	4,223	9,495	194.25	4,624	11,793
193.74	4,231	9,537	194.26	4,632	11,840
193.75	4,238	9,580	194.27	4,640	11,886
193.76	4,246	9,622	194.28	4,648	11,933
193.77	4,253	9,665	194.29	4,656	11,979
193.78	4,261	9,707	194.30	4,664	12,026
193.79	4,268	9,750	194.31	4,672	12,072
193.80	4,275	9,793	194.32	4,680	12,119
193.81	4,283	9,835	194.33	4,688	12,166
193.82	4,290	9,878	194.34	4,696	12,213
193.83	4,298	9,921	194.35	4,704	12,260
193.84	4,305	9,964	194.36	4,712	12,307
193.85	4,313	10,007	194.37	4,720	12,354
193.86	4,320	10,050	194.38	4,728	12,401
193.87	4,327	10,094	194.39	4,736	12,449
193.88	4,335	10,137	194.40	4,744	12,496
193.89	4,342	10,180	194.41	4,752	12,543
193.90	4,350	10,224	194.42	4,760	12,591
193.91	4,357	10,267	194.43	4,768	12,639
193.92	4,365	10,311	194.44	4,776	12,686
193.93	4,372	10,355	194.45	4,784	12,734
193.94	4,379	10,398	194.46	4,792	12,782
193.95	4,387	10,442	194.47	4,800	12,830
193.96	4,394	10,486	194.48	4,808	12,878
193.97	4,402	10,530	194.49	4,816	12,926
193.98	4,409	10,574	194.50	4,824	12,974
193.99	4,417	10,618	194.51	4,831	13,023
194.00	4,424	10,663	194.52	4,839	13,071
194.01	4,432	10,707	194.53	4,847	13,119
194.02	4,440	10,751	194.54	4,855	13,168
194.03	4,448	10,796	194.55	4,863	13,217
194.04	4,456	10,840	194.56	4,871	13,265
194.05	4,464	10,885	194.57	4,879	13,314
194.06	4,472	10,929	194.58	4,887	13,363
194.07	4,480	10,974	194.59	4,895	13,412
194.08	4,488	11,019	194.60	4,903	13,461
194.09	4,496	11,064	194.61	4,911	13,510
194.10	4,504	11,109	194.62	4,919	13,559
194.11	4,512	11,154	194.63	4,927	13,608
194.12	4,520	11,199	194.64	4,935	13,657
194.13	4,528	11,244	194.65	4,943	13,707

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.66	4,951	13,756
194.67	4,959	13,806
194.68	4,967	13,856
194.69	4,975	13,905
194.70	4,983	13,955
194.71	4,991	14,005
194.72	4,999	14,055
194.73	5,007	14,105
194.74	5,015	14,155
194.75	5,023	14,205
194.76	5,031	14,255
194.77	5,039	14,306
194.78	5,047	14,356
194.79	5,055	14,407
194.80	5,063	14,457
194.81	5,071	14,508
194.82	5,079	14,559
194.83	5,087	14,610
194.84	5,095	14,661
194.85	5,103	14,712
194.86	5,111	14,763
194.87	5,119	14,814
194.88	5,127	14,865
194.89	5,135	14,916
194.90	5,143	14,968
194.91	5,151	15,019
194.92	5,159	15,071
194.93	5,167	15,122
194.94	5,175	15,174
194.95	5,183	15,226
194.96	5,191	15,278
194.97	5,199	15,330
194.98	5,207	15,382
194.99	5,215	15,434
195.00	5,223	15,486
195.01	5,240	15,538
195.02	5,257	15,591
195.03	5,274	15,643
195.04	5,290	15,696
195.05	5,307	15,749
195.06	5,324	15,802
195.07	5,341	15,856
195.08	5,358	15,909
195.09	5,375	15,963
195.10	5,391	16,017
195.11	5,408	16,071
195.12	5,425	16,125
195.13	5,442	16,179
195.14	5,459	16,234
195.15	5,476	16,288
195.16	5,492	16,343
195.17	5,509	16,398
195.18	5,526	16,453
195.19	5,543	16,509
195.20	5,560	16,564
195.21	5,577	16,620
195.22	5,593	16,676
195.23	5,610	16,732
195.24	5,627	16,788
195.25	**5,644**	**16,844**

Summary for Pond B-36B: Basin #36B

Inflow Area = 2.469 ac, 46.54% Impervious, Inflow Depth = 3.57" for Current 10 yr event
Inflow = 8.90 cfs @ 12.17 hrs, Volume= 0.735 af
Outflow = 5.94 cfs @ 12.29 hrs, Volume= 0.627 af, Atten= 33%, Lag= 6.8 min
Primary = 5.94 cfs @ 12.29 hrs, Volume= 0.627 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.89' @ 12.29 hrs Surf.Area= 4,458 sf Storage= 9,989 cf

Plug-Flow detention time= 135.1 min calculated for 0.627 af (85% of inflow)
Center-of-Mass det. time= 66.4 min (852.0 - 785.6)

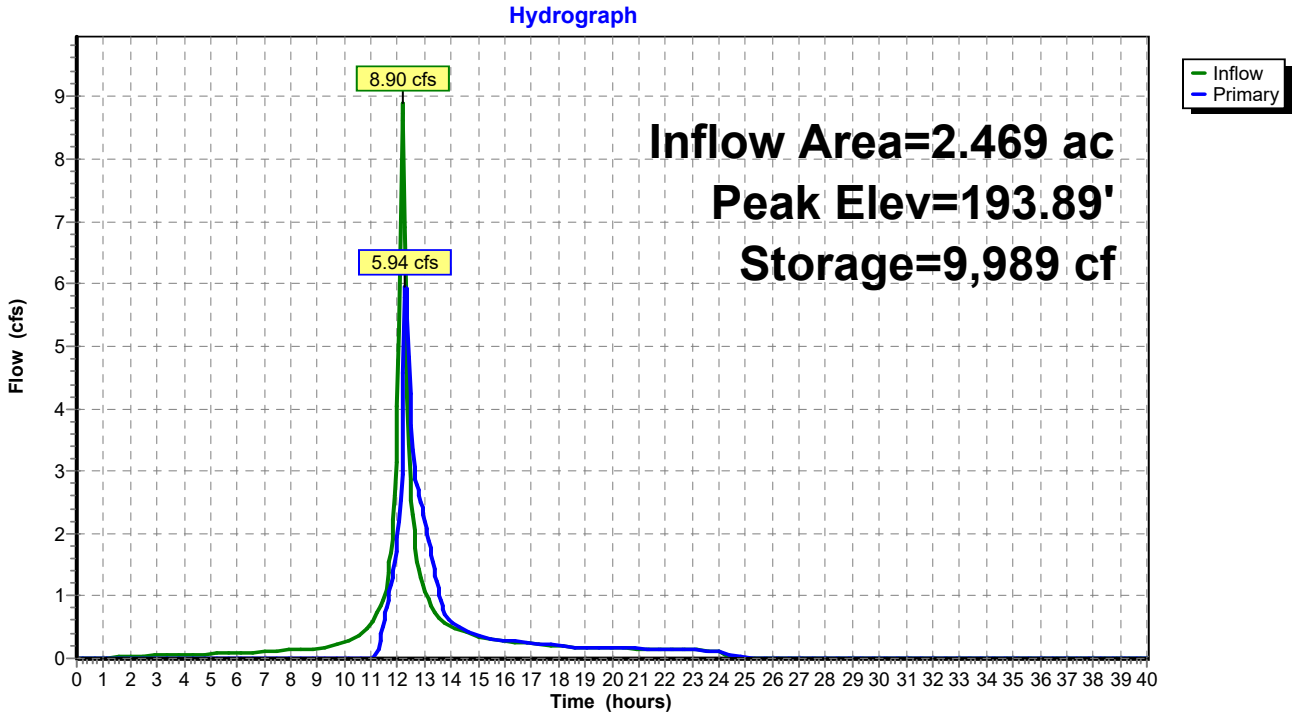
Volume	Invert	Avail.Storage	Storage Description
#1	190.50'	16,864 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.50	0	0	0
191.00	2,110	528	528
192.00	2,893	2,502	3,029
193.00	3,730	3,312	6,341
194.00	4,547	4,139	10,479
195.00	5,356	4,952	15,431
195.25	6,113	1,434	16,864

Device	Routing	Invert	Outlet Devices
#1	Primary	190.50'	**18.0" Round Culvert** L= 82.0' Ke= 0.500 Inlet / Outlet Invert= 190.50' / 190.10' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.53'	**36.0" W x 2.5" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.55'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.87 cfs @ 12.29 hrs HW=193.89' (Free Discharge)
- **1=Culvert** (Passes 5.87 cfs of 12.38 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.37 cfs @ 5.39 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.51 cfs @ 1.90 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-36B: Basin #36B



Stage-Discharge for Pond B-36B: Basin #36B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.50	0.00	191.02	0.00	191.54	0.00	192.06	0.00
190.51	0.00	191.03	0.00	191.55	0.00	192.07	0.00
190.52	0.00	191.04	0.00	191.56	0.00	192.08	0.00
190.53	0.00	191.05	0.00	191.57	0.00	192.09	0.00
190.54	0.00	191.06	0.00	191.58	0.00	192.10	0.00
190.55	0.00	191.07	0.00	191.59	0.00	192.11	0.00
190.56	0.00	191.08	0.00	191.60	0.00	192.12	0.00
190.57	0.00	191.09	0.00	191.61	0.00	192.13	0.00
190.58	0.00	191.10	0.00	191.62	0.00	192.14	0.00
190.59	0.00	191.11	0.00	191.63	0.00	192.15	0.00
190.60	0.00	191.12	0.00	191.64	0.00	192.16	0.00
190.61	0.00	191.13	0.00	191.65	0.00	192.17	0.00
190.62	0.00	191.14	0.00	191.66	0.00	192.18	0.00
190.63	0.00	191.15	0.00	191.67	0.00	192.19	0.00
190.64	0.00	191.16	0.00	191.68	0.00	192.20	0.00
190.65	0.00	191.17	0.00	191.69	0.00	192.21	0.00
190.66	0.00	191.18	0.00	191.70	0.00	192.22	0.00
190.67	0.00	191.19	0.00	191.71	0.00	192.23	0.00
190.68	0.00	191.20	0.00	191.72	0.00	192.24	0.00
190.69	0.00	191.21	0.00	191.73	0.00	192.25	0.00
190.70	0.00	191.22	0.00	191.74	0.00	192.26	0.00
190.71	0.00	191.23	0.00	191.75	0.00	192.27	0.00
190.72	0.00	191.24	0.00	191.76	0.00	192.28	0.00
190.73	0.00	191.25	0.00	191.77	0.00	192.29	0.00
190.74	0.00	191.26	0.00	191.78	0.00	192.30	0.00
190.75	0.00	191.27	0.00	191.79	0.00	192.31	0.00
190.76	0.00	191.28	0.00	191.80	0.00	192.32	0.00
190.77	0.00	191.29	0.00	191.81	0.00	192.33	0.00
190.78	0.00	191.30	0.00	191.82	0.00	192.34	0.00
190.79	0.00	191.31	0.00	191.83	0.00	192.35	0.00
190.80	0.00	191.32	0.00	191.84	0.00	192.36	0.00
190.81	0.00	191.33	0.00	191.85	0.00	192.37	0.00
190.82	0.00	191.34	0.00	191.86	0.00	192.38	0.00
190.83	0.00	191.35	0.00	191.87	0.00	192.39	0.00
190.84	0.00	191.36	0.00	191.88	0.00	192.40	0.00
190.85	0.00	191.37	0.00	191.89	0.00	192.41	0.00
190.86	0.00	191.38	0.00	191.90	0.00	192.42	0.00
190.87	0.00	191.39	0.00	191.91	0.00	192.43	0.00
190.88	0.00	191.40	0.00	191.92	0.00	192.44	0.00
190.89	0.00	191.41	0.00	191.93	0.00	192.45	0.00
190.90	0.00	191.42	0.00	191.94	0.00	192.46	0.00
190.91	0.00	191.43	0.00	191.95	0.00	192.47	0.00
190.92	0.00	191.44	0.00	191.96	0.00	192.48	0.00
190.93	0.00	191.45	0.00	191.97	0.00	192.49	0.00
190.94	0.00	191.46	0.00	191.98	0.00	192.50	0.00
190.95	0.00	191.47	0.00	191.99	0.00	192.51	0.00
190.96	0.00	191.48	0.00	192.00	0.00	192.52	0.00
190.97	0.00	191.49	0.00	192.01	0.00	192.53	0.00
190.98	0.00	191.50	0.00	192.02	0.00	192.54	0.01
190.99	0.00	191.51	0.00	192.03	0.00	192.55	0.03
191.00	0.00	191.52	0.00	192.04	0.00	192.56	0.05
191.01	0.00	191.53	0.00	192.05	0.00	192.57	0.08

Stage-Discharge for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.58	0.11	193.10	2.05	193.62	3.23	194.14	9.44
192.59	0.14	193.11	2.07	193.63	3.30	194.15	9.60
192.60	0.18	193.12	2.09	193.64	3.37	194.16	9.76
192.61	0.22	193.13	2.12	193.65	3.44	194.17	9.92
192.62	0.26	193.14	2.14	193.66	3.52	194.18	10.08
192.63	0.30	193.15	2.16	193.67	3.60	194.19	10.24
192.64	0.35	193.16	2.18	193.68	3.69	194.20	10.40
192.65	0.40	193.17	2.20	193.69	3.77	194.21	10.56
192.66	0.45	193.18	2.22	193.70	3.86	194.22	10.72
192.67	0.50	193.19	2.24	193.71	3.95	194.23	10.89
192.68	0.56	193.20	2.26	193.72	4.04	194.24	11.05
192.69	0.62	193.21	2.28	193.73	4.14	194.25	11.22
192.70	0.67	193.22	2.30	193.74	4.24	194.26	11.38
192.71	0.74	193.23	2.32	193.75	4.34	194.27	11.55
192.72	0.80	193.24	2.34	193.76	4.44	194.28	11.72
192.73	0.86	193.25	2.36	193.77	4.54	194.29	11.89
192.74	0.93	193.26	2.38	193.78	4.65	194.30	12.06
192.75	0.98	193.27	2.40	193.79	4.75	194.31	12.23
192.76	1.03	193.28	2.42	193.80	4.86	194.32	12.40
192.77	1.08	193.29	2.43	193.81	4.97	194.33	12.58
192.78	1.12	193.30	2.45	193.82	5.09	194.34	12.75
192.79	1.16	193.31	2.47	193.83	5.20	194.35	12.93
192.80	1.20	193.32	2.49	193.84	5.32	194.36	13.10
192.81	1.24	193.33	2.51	193.85	5.43	194.37	13.28
192.82	1.28	193.34	2.53	193.86	5.55	194.38	13.46
192.83	1.32	193.35	2.54	193.87	5.67	194.39	13.63
192.84	1.35	193.36	2.56	193.88	5.80	194.40	13.70
192.85	1.38	193.37	2.58	193.89	5.92	194.41	13.73
192.86	1.42	193.38	2.60	193.90	6.05	194.42	13.75
192.87	1.45	193.39	2.61	193.91	6.17	194.43	13.77
192.88	1.48	193.40	2.63	193.92	6.30	194.44	13.80
192.89	1.51	193.41	2.65	193.93	6.43	194.45	13.82
192.90	1.54	193.42	2.67	193.94	6.56	194.46	13.85
192.91	1.57	193.43	2.68	193.95	6.69	194.47	13.87
192.92	1.60	193.44	2.70	193.96	6.83	194.48	13.90
192.93	1.63	193.45	2.72	193.97	6.96	194.49	13.92
192.94	1.66	193.46	2.73	193.98	7.10	194.50	13.94
192.95	1.68	193.47	2.75	193.99	7.24	194.51	13.97
192.96	1.71	193.48	2.77	194.00	7.38	194.52	13.99
192.97	1.74	193.49	2.78	194.01	7.52	194.53	14.02
192.98	1.76	193.50	2.80	194.02	7.66	194.54	14.04
192.99	1.79	193.51	2.81	194.03	7.80	194.55	14.06
193.00	1.81	193.52	2.83	194.04	7.94	194.56	14.09
193.01	1.84	193.53	2.85	194.05	8.09	194.57	14.11
193.02	1.86	193.54	2.86	194.06	8.24	194.58	14.13
193.03	1.89	193.55	2.88	194.07	8.38	194.59	14.16
193.04	1.91	193.56	2.91	194.08	8.53	194.60	14.18
193.05	1.94	193.57	2.95	194.09	8.68	194.61	14.21
193.06	1.96	193.58	2.99	194.10	8.83	194.62	14.23
193.07	1.98	193.59	3.05	194.11	8.98	194.63	14.25
193.08	2.00	193.60	3.10	194.12	9.14	194.64	14.28
193.09	2.03	193.61	3.16	194.13	9.29	194.65	14.30

Stage-Discharge for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Primary (cfs)
194.66	14.32
194.67	14.35
194.68	14.37
194.69	14.39
194.70	14.42
194.71	14.44
194.72	14.46
194.73	14.49
194.74	14.51
194.75	14.53
194.76	14.56
194.77	14.58
194.78	14.60
194.79	14.62
194.80	14.65
194.81	14.67
194.82	14.69
194.83	14.72
194.84	14.74
194.85	14.76
194.86	14.78
194.87	14.81
194.88	14.83
194.89	14.85
194.90	14.87
194.91	14.90
194.92	14.92
194.93	14.94
194.94	14.96
194.95	14.99
194.96	15.13
194.97	15.36
194.98	15.66
194.99	16.01
195.00	16.41
195.01	16.84
195.02	17.32
195.03	17.82
195.04	18.36
195.05	18.93
195.06	19.52
195.07	20.14
195.08	20.79
195.09	21.47
195.10	22.16
195.11	22.89
195.12	23.63
195.13	24.40
195.14	25.18
195.15	25.99
195.16	26.86
195.17	27.75
195.18	28.67
195.19	29.62
195.20	30.59
195.21	31.58
195.22	32.60
195.23	33.65
195.24	34.72
195.25	**35.81**

Stage-Area-Storage for Pond B-36B: Basin #36B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.50	0	0
190.51	42	0
190.52	84	1
190.53	127	2
190.54	169	3
190.55	211	5
190.56	253	8
190.57	295	10
190.58	338	14
190.59	380	17
190.60	422	21
190.61	464	26
190.62	506	30
190.63	549	36
190.64	591	41
190.65	633	47
190.66	675	54
190.67	717	61
190.68	760	68
190.69	802	76
190.70	844	84
190.71	886	93
190.72	928	102
190.73	971	112
190.74	1,013	122
190.75	1,055	132
190.76	1,097	143
190.77	1,139	154
190.78	1,182	165
190.79	1,224	177
190.80	1,266	190
190.81	1,308	203
190.82	1,350	216
190.83	1,393	230
190.84	1,435	244
190.85	1,477	258
190.86	1,519	273
190.87	1,561	289
190.88	1,604	305
190.89	1,646	321
190.90	1,688	338
190.91	1,730	355
190.92	1,772	372
190.93	1,815	390
190.94	1,857	408
190.95	1,899	427
190.96	1,941	446
190.97	1,983	466
190.98	2,026	486
190.99	2,068	507
191.00	2,110	528
191.01	2,118	549
191.02	2,126	570
191.03	2,133	591
191.04	2,141	613
191.05	2,149	634
191.06	2,157	656
191.07	2,165	677
191.08	2,173	699
191.09	2,180	721
191.10	2,188	742
191.11	2,196	764
191.12	2,204	786
191.13	2,212	808
191.14	2,220	831
191.15	2,227	853
191.16	2,235	875
191.17	2,243	898
191.18	2,251	920
191.19	2,259	943
191.20	2,267	965
191.21	2,274	988
191.22	2,282	1,011
191.23	2,290	1,034
191.24	2,298	1,056
191.25	2,306	1,079
191.26	2,314	1,103
191.27	2,321	1,126
191.28	2,329	1,149
191.29	2,337	1,172
191.30	2,345	1,196
191.31	2,353	1,219
191.32	2,361	1,243
191.33	2,368	1,266
191.34	2,376	1,290
191.35	2,384	1,314
191.36	2,392	1,338
191.37	2,400	1,362
191.38	2,408	1,386
191.39	2,415	1,410
191.40	2,423	1,434
191.41	2,431	1,458
191.42	2,439	1,483
191.43	2,447	1,507
191.44	2,455	1,532
191.45	2,462	1,556
191.46	2,470	1,581
191.47	2,478	1,606
191.48	2,486	1,631
191.49	2,494	1,655
191.50	2,502	1,680
191.51	2,509	1,705
191.52	2,517	1,731
191.53	2,525	1,756

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.54	2,533	1,781
191.55	2,541	1,806
191.56	2,548	1,832
191.57	2,556	1,857
191.58	2,564	1,883
191.59	2,572	1,909
191.60	2,580	1,934
191.61	2,588	1,960
191.62	2,595	1,986
191.63	2,603	2,012
191.64	2,611	2,038
191.65	2,619	2,064
191.66	2,627	2,091
191.67	2,635	2,117
191.68	2,642	2,143
191.69	2,650	2,170
191.70	2,658	2,196
191.71	2,666	2,223
191.72	2,674	2,250
191.73	2,682	2,276
191.74	2,689	2,303
191.75	2,697	2,330
191.76	2,705	2,357
191.77	2,713	2,384
191.78	2,721	2,411
191.79	2,729	2,439
191.80	2,736	2,466
191.81	2,744	2,493
191.82	2,752	2,521
191.83	2,760	2,549
191.84	2,768	2,576
191.85	2,776	2,604
191.86	2,783	2,632
191.87	2,791	2,660
191.88	2,799	2,687
191.89	2,807	2,716
191.90	2,815	2,744
191.91	2,823	2,772
191.92	2,830	2,800
191.93	2,838	2,828
191.94	2,846	2,857
191.95	2,854	2,885
191.96	2,862	2,914
191.97	2,870	2,943
191.98	2,877	2,971
191.99	2,885	3,000
192.00	2,893	3,029
192.01	2,901	3,058
192.02	2,910	3,087
192.03	2,918	3,116
192.04	2,926	3,145
192.05	2,935	3,175
192.06	2,943	3,204
192.07	2,952	3,234
192.08	2,960	3,263
192.09	2,968	3,293
192.10	2,977	3,322
192.11	2,985	3,352
192.12	2,993	3,382
192.13	3,002	3,412
192.14	3,010	3,442
192.15	3,019	3,472
192.16	3,027	3,503
192.17	3,035	3,533
192.18	3,044	3,563
192.19	3,052	3,594
192.20	3,060	3,624
192.21	3,069	3,655
192.22	3,077	3,686
192.23	3,086	3,717
192.24	3,094	3,747
192.25	3,102	3,778
192.26	3,111	3,809
192.27	3,119	3,841
192.28	3,127	3,872
192.29	3,136	3,903
192.30	3,144	3,935
192.31	3,152	3,966
192.32	3,161	3,998
192.33	3,169	4,029
192.34	3,178	4,061
192.35	3,186	4,093
192.36	3,194	4,125
192.37	3,203	4,157
192.38	3,211	4,189
192.39	3,219	4,221
192.40	3,228	4,253
192.41	3,236	4,285
192.42	3,245	4,318
192.43	3,253	4,350
192.44	3,261	4,383
192.45	3,270	4,416
192.46	3,278	4,448
192.47	3,286	4,481
192.48	3,295	4,514
192.49	3,303	4,547
192.50	3,312	4,580
192.51	3,320	4,613
192.52	3,328	4,647
192.53	3,337	4,680
192.54	3,345	4,713
192.55	3,353	4,747
192.56	3,362	4,780
192.57	3,370	4,814

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.58	3,378	4,848	193.10	3,812	6,718
192.59	3,387	4,882	193.11	3,820	6,756
192.60	3,395	4,915	193.12	3,828	6,794
192.61	3,404	4,949	193.13	3,836	6,832
192.62	3,412	4,984	193.14	3,844	6,871
192.63	3,420	5,018	193.15	3,853	6,909
192.64	3,429	5,052	193.16	3,861	6,948
192.65	3,437	5,086	193.17	3,869	6,986
192.66	3,445	5,121	193.18	3,877	7,025
192.67	3,454	5,155	193.19	3,885	7,064
192.68	3,462	5,190	193.20	3,893	7,103
192.69	3,471	5,224	193.21	3,902	7,142
192.70	3,479	5,259	193.22	3,910	7,181
192.71	3,487	5,294	193.23	3,918	7,220
192.72	3,496	5,329	193.24	3,926	7,259
192.73	3,504	5,364	193.25	3,934	7,299
192.74	3,512	5,399	193.26	3,942	7,338
192.75	3,521	5,434	193.27	3,951	7,377
192.76	3,529	5,469	193.28	3,959	7,417
192.77	3,537	5,505	193.29	3,967	7,457
192.78	3,546	5,540	193.30	3,975	7,496
192.79	3,554	5,576	193.31	3,983	7,536
192.80	3,563	5,611	193.32	3,991	7,576
192.81	3,571	5,647	193.33	4,000	7,616
192.82	3,579	5,683	193.34	4,008	7,656
192.83	3,588	5,718	193.35	4,016	7,696
192.84	3,596	5,754	193.36	4,024	7,736
192.85	3,604	5,790	193.37	4,032	7,777
192.86	3,613	5,827	193.38	4,040	7,817
192.87	3,621	5,863	193.39	4,049	7,857
192.88	3,630	5,899	193.40	4,057	7,898
192.89	3,638	5,935	193.41	4,065	7,938
192.90	3,646	5,972	193.42	4,073	7,979
192.91	3,655	6,008	193.43	4,081	8,020
192.92	3,663	6,045	193.44	4,089	8,061
192.93	3,671	6,081	193.45	4,098	8,102
192.94	3,680	6,118	193.46	4,106	8,143
192.95	3,688	6,155	193.47	4,114	8,184
192.96	3,697	6,192	193.48	4,122	8,225
192.97	3,705	6,229	193.49	4,130	8,266
192.98	3,713	6,266	193.50	4,139	8,308
192.99	3,722	6,303	193.51	4,147	8,349
193.00	3,730	6,341	193.52	4,155	8,391
193.01	3,738	6,378	193.53	4,163	8,432
193.02	3,746	6,415	193.54	4,171	8,474
193.03	3,755	6,453	193.55	4,179	8,516
193.04	3,763	6,490	193.56	4,188	8,557
193.05	3,771	6,528	193.57	4,196	8,599
193.06	3,779	6,566	193.58	4,204	8,641
193.07	3,787	6,604	193.59	4,212	8,683
193.08	3,795	6,642	193.60	4,220	8,726
193.09	3,804	6,680	193.61	4,228	8,768

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.62	4,237	8,810	194.14	4,660	11,124
193.63	4,245	8,853	194.15	4,668	11,170
193.64	4,253	8,895	194.16	4,676	11,217
193.65	4,261	8,938	194.17	4,685	11,264
193.66	4,269	8,980	194.18	4,693	11,311
193.67	4,277	9,023	194.19	4,701	11,358
193.68	4,286	9,066	194.20	4,709	11,405
193.69	4,294	9,109	194.21	4,717	11,452
193.70	4,302	9,152	194.22	4,725	11,499
193.71	4,310	9,195	194.23	4,733	11,546
193.72	4,318	9,238	194.24	4,741	11,594
193.73	4,326	9,281	194.25	4,749	11,641
193.74	4,335	9,324	194.26	4,757	11,689
193.75	4,343	9,368	194.27	4,765	11,736
193.76	4,351	9,411	194.28	4,774	11,784
193.77	4,359	9,455	194.29	4,782	11,832
193.78	4,367	9,498	194.30	4,790	11,880
193.79	4,375	9,542	194.31	4,798	11,927
193.80	4,384	9,586	194.32	4,806	11,975
193.81	4,392	9,630	194.33	4,814	12,024
193.82	4,400	9,674	194.34	4,822	12,072
193.83	4,408	9,718	194.35	4,830	12,120
193.84	4,416	9,762	194.36	4,838	12,168
193.85	4,424	9,806	194.37	4,846	12,217
193.86	4,433	9,850	194.38	4,854	12,265
193.87	4,441	9,895	194.39	4,863	12,314
193.88	4,449	9,939	194.40	4,871	12,363
193.89	4,457	9,984	194.41	4,879	12,411
193.90	4,465	10,028	194.42	4,887	12,460
193.91	4,473	10,073	194.43	4,895	12,509
193.92	4,482	10,118	194.44	4,903	12,558
193.93	4,490	10,163	194.45	4,911	12,607
193.94	4,498	10,208	194.46	4,919	12,656
193.95	4,506	10,253	194.47	4,927	12,705
193.96	4,514	10,298	194.48	4,935	12,755
193.97	4,522	10,343	194.49	4,943	12,804
193.98	4,531	10,388	194.50	4,952	12,854
193.99	4,539	10,434	194.51	4,960	12,903
194.00	4,547	10,479	194.52	4,968	12,953
194.01	4,555	10,525	194.53	4,976	13,003
194.02	4,563	10,570	194.54	4,984	13,052
194.03	4,571	10,616	194.55	4,992	13,102
194.04	4,579	10,662	194.56	5,000	13,152
194.05	4,587	10,707	194.57	5,008	13,202
194.06	4,596	10,753	194.58	5,016	13,252
194.07	4,604	10,799	194.59	5,024	13,303
194.08	4,612	10,845	194.60	5,032	13,353
194.09	4,620	10,892	194.61	5,040	13,403
194.10	4,628	10,938	194.62	5,049	13,454
194.11	4,636	10,984	194.63	5,057	13,504
194.12	4,644	11,030	194.64	5,065	13,555
194.13	4,652	11,077	194.65	5,073	13,605

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.66	5,081	13,656
194.67	5,089	13,707
194.68	5,097	13,758
194.69	5,105	13,809
194.70	5,113	13,860
194.71	5,121	13,911
194.72	5,129	13,963
194.73	5,138	14,014
194.74	5,146	14,065
194.75	5,154	14,117
194.76	5,162	14,168
194.77	5,170	14,220
194.78	5,178	14,272
194.79	5,186	14,324
194.80	5,194	14,375
194.81	5,202	14,427
194.82	5,210	14,480
194.83	5,218	14,532
194.84	5,227	14,584
194.85	5,235	14,636
194.86	5,243	14,689
194.87	5,251	14,741
194.88	5,259	14,794
194.89	5,267	14,846
194.90	5,275	14,899
194.91	5,283	14,952
194.92	5,291	15,005
194.93	5,299	15,058
194.94	5,307	15,111
194.95	5,316	15,164
194.96	5,324	15,217
194.97	5,332	15,270
194.98	5,340	15,324
194.99	5,348	15,377
195.00	5,356	15,431
195.01	5,386	15,484
195.02	5,417	15,538
195.03	5,447	15,593
195.04	5,477	15,647
195.05	5,507	15,702
195.06	5,538	15,757
195.07	5,568	15,813
195.08	5,598	15,869
195.09	5,629	15,925
195.10	5,659	15,981
195.11	5,689	16,038
195.12	5,719	16,095
195.13	5,750	16,152
195.14	5,780	16,210
195.15	5,810	16,268
195.16	5,840	16,326
195.17	5,871	16,385
195.18	5,901	16,444
195.19	5,931	16,503
195.20	5,962	16,562
195.21	5,992	16,622
195.22	6,022	16,682
195.23	6,052	16,742
195.24	6,083	16,803
195.25	**6,113**	**16,864**

Summary for Pond B-37A: Basin #37A

Inflow Area = 2.154 ac, 39.65% Impervious, Inflow Depth = 3.40" for Current 10 yr event
Inflow = 7.48 cfs @ 12.17 hrs, Volume= 0.611 af
Outflow = 3.20 cfs @ 12.38 hrs, Volume= 0.528 af, Atten= 57%, Lag= 12.4 min
Primary = 3.20 cfs @ 12.38 hrs, Volume= 0.528 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 196.83' @ 12.38 hrs Surf.Area= 4,958 sf Storage= 12,179 cf

Plug-Flow detention time= 247.4 min calculated for 0.528 af (86% of inflow)
Center-of-Mass det. time= 182.4 min (974.2 - 791.8)

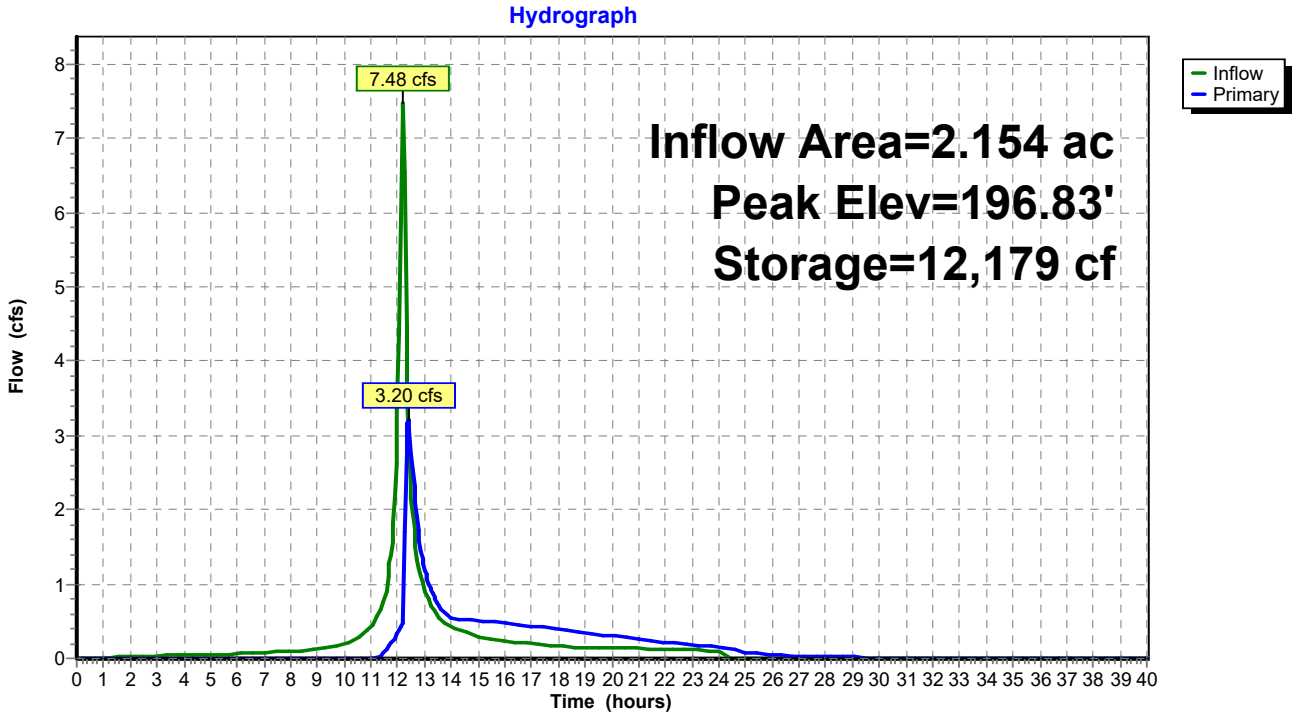
Volume	Invert	Avail.Storage	Storage Description
#1	193.30'	18,546 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.30	0	0	0
194.00	2,990	1,046	1,046
195.00	3,633	3,312	4,358
196.00	4,332	3,983	8,340
197.00	5,089	4,711	13,051
198.00	5,901	5,495	18,546

Device	Routing	Invert	Outlet Devices
#1	Primary	192.65'	**18.0" Round Culvert** L= 265.0' Ke= 0.500 Inlet / Outlet Invert= 192.65' / 191.33' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.77'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	196.48'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.17 cfs @ 12.38 hrs HW=196.82' (Free Discharge)
- **1=Culvert** (Passes 3.17 cfs of 11.25 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.58 cfs @ 6.62 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.60 cfs @ 1.92 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-37A: Basin #37A



Stage-Discharge for Pond B-37A: Basin #37A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.02
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.02
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.03
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.03
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.04
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.04
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.05
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.06
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.06
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.07
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.08
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.08
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.09
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.10
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.10
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.11
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.12
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.13
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.13
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.14
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.15
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.15
193.52	0.00	194.04	0.00	194.56	0.00	195.08	0.16
193.53	0.00	194.05	0.00	194.57	0.00	195.09	0.17
193.54	0.00	194.06	0.00	194.58	0.00	195.10	0.17
193.55	0.00	194.07	0.00	194.59	0.00	195.11	0.17
193.56	0.00	194.08	0.00	194.60	0.00	195.12	0.18
193.57	0.00	194.09	0.00	194.61	0.00	195.13	0.18
193.58	0.00	194.10	0.00	194.62	0.00	195.14	0.19
193.59	0.00	194.11	0.00	194.63	0.00	195.15	0.19
193.60	0.00	194.12	0.00	194.64	0.00	195.16	0.20
193.61	0.00	194.13	0.00	194.65	0.00	195.17	0.20
193.62	0.00	194.14	0.00	194.66	0.00	195.18	0.21
193.63	0.00	194.15	0.00	194.67	0.00	195.19	0.21
193.64	0.00	194.16	0.00	194.68	0.00	195.20	0.22
193.65	0.00	194.17	0.00	194.69	0.00	195.21	0.22
193.66	0.00	194.18	0.00	194.70	0.00	195.22	0.22
193.67	0.00	194.19	0.00	194.71	0.00	195.23	0.23
193.68	0.00	194.20	0.00	194.72	0.00	195.24	0.23
193.69	0.00	194.21	0.00	194.73	0.00	195.25	0.24
193.70	0.00	194.22	0.00	194.74	0.00	195.26	0.24
193.71	0.00	194.23	0.00	194.75	0.00	195.27	0.24
193.72	0.00	194.24	0.00	194.76	0.00	195.28	0.25
193.73	0.00	194.25	0.00	194.77	0.00	195.29	0.25
193.74	0.00	194.26	0.00	194.78	0.00	195.30	0.25
193.75	0.00	194.27	0.00	194.79	0.00	195.31	0.26
193.76	0.00	194.28	0.00	194.80	0.00	195.32	0.26
193.77	0.00	194.29	0.00	194.81	0.00	195.33	0.26
193.78	0.00	194.30	0.00	194.82	0.01	195.34	0.27
193.79	0.00	194.31	0.00	194.83	0.01	195.35	0.27
193.80	0.00	194.32	0.00	194.84	0.01	195.36	0.27
193.81	0.00	194.33	0.00	194.85	0.02	195.37	0.28

Stage-Discharge for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.38	0.28	195.90	0.41	196.42	0.51	196.94	4.58
195.39	0.28	195.91	0.41	196.43	0.51	196.95	4.71
195.40	0.29	195.92	0.42	196.44	0.52	196.96	4.84
195.41	0.29	195.93	0.42	196.45	0.52	196.97	4.98
195.42	0.29	195.94	0.42	196.46	0.52	196.98	5.11
195.43	0.30	195.95	0.42	196.47	0.52	196.99	5.24
195.44	0.30	195.96	0.43	196.48	0.52	197.00	5.38
195.45	0.30	195.97	0.43	196.49	0.54	197.01	5.52
195.46	0.30	195.98	0.43	196.50	0.56	197.02	5.66
195.47	0.31	195.99	0.43	196.51	0.59	197.03	5.80
195.48	0.31	196.00	0.43	196.52	0.63	197.04	5.94
195.49	0.31	196.01	0.44	196.53	0.68	197.05	6.08
195.50	0.32	196.02	0.44	196.54	0.72	197.06	6.22
195.51	0.32	196.03	0.44	196.55	0.78	197.07	6.37
195.52	0.32	196.04	0.44	196.56	0.83	197.08	6.51
195.53	0.32	196.05	0.44	196.57	0.89	197.09	6.66
195.54	0.33	196.06	0.45	196.58	0.95	197.10	6.81
195.55	0.33	196.07	0.45	196.59	1.01	197.11	6.95
195.56	0.33	196.08	0.45	196.60	1.08	197.12	7.10
195.57	0.33	196.09	0.45	196.61	1.15	197.13	7.25
195.58	0.34	196.10	0.45	196.62	1.23	197.14	7.41
195.59	0.34	196.11	0.46	196.63	1.30	197.15	7.56
195.60	0.34	196.12	0.46	196.64	1.38	197.16	7.71
195.61	0.34	196.13	0.46	196.65	1.46	197.17	7.87
195.62	0.35	196.14	0.46	196.66	1.54	197.18	8.02
195.63	0.35	196.15	0.46	196.67	1.63	197.19	8.18
195.64	0.35	196.16	0.46	196.68	1.71	197.20	8.34
195.65	0.35	196.17	0.47	196.69	1.80	197.21	8.49
195.66	0.36	196.18	0.47	196.70	1.89	197.22	8.65
195.67	0.36	196.19	0.47	196.71	1.99	197.23	8.81
195.68	0.36	196.20	0.47	196.72	2.08	197.24	8.97
195.69	0.36	196.21	0.47	196.73	2.18	197.25	9.14
195.70	0.37	196.22	0.48	196.74	2.28	197.26	9.30
195.71	0.37	196.23	0.48	196.75	2.38	197.27	9.46
195.72	0.37	196.24	0.48	196.76	2.48	197.28	9.63
195.73	0.37	196.25	0.48	196.77	2.58	197.29	9.79
195.74	0.38	196.26	0.48	196.78	2.69	197.30	9.96
195.75	0.38	196.27	0.49	196.79	2.79	197.31	10.13
195.76	0.38	196.28	0.49	196.80	2.90	197.32	10.30
195.77	0.38	196.29	0.49	196.81	3.01	197.33	10.46
195.78	0.39	196.30	0.49	196.82	3.13	197.34	10.63
195.79	0.39	196.31	0.49	196.83	3.24	197.35	10.81
195.80	0.39	196.32	0.49	196.84	3.35	197.36	10.98
195.81	0.39	196.33	0.50	196.85	3.47	197.37	11.15
195.82	0.39	196.34	0.50	196.86	3.59	197.38	11.32
195.83	0.40	196.35	0.50	196.87	3.71	197.39	11.50
195.84	0.40	196.36	0.50	196.88	3.83	197.40	11.67
195.85	0.40	196.37	0.50	196.89	3.95	197.41	11.85
195.86	0.40	196.38	0.50	196.90	4.07	197.42	12.02
195.87	0.41	196.39	0.51	196.91	4.20	197.43	12.07
195.88	0.41	196.40	0.51	196.92	4.33	197.44	12.09
195.89	0.41	196.41	0.51	196.93	4.45	197.45	12.10

Stage-Discharge for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Primary (cfs)
197.46	12.11
197.47	12.13
197.48	12.14
197.49	12.15
197.50	12.17
197.51	12.18
197.52	12.19
197.53	12.20
197.54	12.22
197.55	12.23
197.56	12.24
197.57	12.26
197.58	12.27
197.59	12.28
197.60	12.29
197.61	12.31
197.62	12.32
197.63	12.33
197.64	12.35
197.65	12.36
197.66	12.37
197.67	12.38
197.68	12.40
197.69	12.41
197.70	12.42
197.71	12.44
197.72	12.45
197.73	12.46
197.74	12.47
197.75	12.49
197.76	12.50
197.77	12.51
197.78	12.52
197.79	12.54
197.80	12.55
197.81	12.56
197.82	12.57
197.83	12.59
197.84	12.60
197.85	12.61
197.86	12.63
197.87	12.64
197.88	12.65
197.89	12.66
197.90	12.68
197.91	12.69
197.92	12.70
197.93	12.71
197.94	12.73
197.95	12.74
197.96	12.87
197.97	13.09
197.98	13.38
197.99	13.73
198.00	**14.11**

Stage-Area-Storage for Pond B-37A: Basin #37A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.30	0	0
193.31	43	0
193.32	85	1
193.33	128	2
193.34	171	3
193.35	214	5
193.36	256	8
193.37	299	10
193.38	342	14
193.39	384	17
193.40	427	21
193.41	470	26
193.42	513	31
193.43	555	36
193.44	598	42
193.45	641	48
193.46	683	55
193.47	726	62
193.48	769	69
193.49	812	77
193.50	854	85
193.51	897	94
193.52	940	103
193.53	982	113
193.54	1,025	123
193.55	1,068	133
193.56	1,111	144
193.57	1,153	156
193.58	1,196	167
193.59	1,239	180
193.60	1,281	192
193.61	1,324	205
193.62	1,367	219
193.63	1,410	233
193.64	1,452	247
193.65	1,495	262
193.66	1,538	277
193.67	1,580	292
193.68	1,623	308
193.69	1,666	325
193.70	1,709	342
193.71	1,751	359
193.72	1,794	377
193.73	1,837	395
193.74	1,879	413
193.75	1,922	432
193.76	1,965	452
193.77	2,008	472
193.78	2,050	492
193.79	2,093	513
193.80	2,136	534
193.81	2,178	555
193.82	2,221	577
193.83	2,264	600
193.84	2,307	623
193.85	2,349	646
193.86	2,392	670
193.87	2,435	694
193.88	2,477	718
193.89	2,520	743
193.90	2,563	769
193.91	2,606	795
193.92	2,648	821
193.93	2,691	848
193.94	2,734	875
193.95	2,776	902
193.96	2,819	930
193.97	2,862	959
193.98	2,905	988
193.99	2,947	1,017
194.00	2,990	1,046
194.01	2,996	1,076
194.02	3,003	1,106
194.03	3,009	1,136
194.04	3,016	1,167
194.05	3,022	1,197
194.06	3,029	1,227
194.07	3,035	1,257
194.08	3,041	1,288
194.09	3,048	1,318
194.10	3,054	1,349
194.11	3,061	1,379
194.12	3,067	1,410
194.13	3,074	1,441
194.14	3,080	1,471
194.15	3,086	1,502
194.16	3,093	1,533
194.17	3,099	1,564
194.18	3,106	1,595
194.19	3,112	1,626
194.20	3,119	1,657
194.21	3,125	1,689
194.22	3,131	1,720
194.23	3,138	1,751
194.24	3,144	1,783
194.25	3,151	1,814
194.26	3,157	1,846
194.27	3,164	1,877
194.28	3,170	1,909
194.29	3,176	1,941
194.30	3,183	1,972
194.31	3,189	2,004
194.32	3,196	2,036
194.33	3,202	2,068

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.34	3,209	2,100
194.35	3,215	2,132
194.36	3,221	2,165
194.37	3,228	2,197
194.38	3,234	2,229
194.39	3,241	2,262
194.40	3,247	2,294
194.41	3,254	2,326
194.42	3,260	2,359
194.43	3,266	2,392
194.44	3,273	2,424
194.45	3,279	2,457
194.46	3,286	2,490
194.47	3,292	2,523
194.48	3,299	2,556
194.49	3,305	2,589
194.50	3,312	2,622
194.51	3,318	2,655
194.52	3,324	2,688
194.53	3,331	2,722
194.54	3,337	2,755
194.55	3,344	2,788
194.56	3,350	2,822
194.57	3,357	2,855
194.58	3,363	2,889
194.59	3,369	2,923
194.60	3,376	2,956
194.61	3,382	2,990
194.62	3,389	3,024
194.63	3,395	3,058
194.64	3,402	3,092
194.65	3,408	3,126
194.66	3,414	3,160
194.67	3,421	3,194
194.68	3,427	3,228
194.69	3,434	3,263
194.70	3,440	3,297
194.71	3,447	3,331
194.72	3,453	3,366
194.73	3,459	3,401
194.74	3,466	3,435
194.75	3,472	3,470
194.76	3,479	3,505
194.77	3,485	3,539
194.78	3,492	3,574
194.79	3,498	3,609
194.80	3,504	3,644
194.81	3,511	3,679
194.82	3,517	3,714
194.83	3,524	3,750
194.84	3,530	3,785
194.85	3,537	3,820
194.86	3,543	3,856
194.87	3,549	3,891
194.88	3,556	3,927
194.89	3,562	3,962
194.90	3,569	3,998
194.91	3,575	4,034
194.92	3,582	4,069
194.93	3,588	4,105
194.94	3,594	4,141
194.95	3,601	4,177
194.96	3,607	4,213
194.97	3,614	4,249
194.98	3,620	4,285
194.99	3,627	4,322
195.00	3,633	4,358
195.01	3,640	4,394
195.02	3,647	4,431
195.03	3,654	4,467
195.04	3,661	4,504
195.05	3,668	4,541
195.06	3,675	4,577
195.07	3,682	4,614
195.08	3,689	4,651
195.09	3,696	4,688
195.10	3,703	4,725
195.11	3,710	4,762
195.12	3,717	4,799
195.13	3,724	4,836
195.14	3,731	4,873
195.15	3,738	4,911
195.16	3,745	4,948
195.17	3,752	4,986
195.18	3,759	5,023
195.19	3,766	5,061
195.20	3,773	5,099
195.21	3,780	5,136
195.22	3,787	5,174
195.23	3,794	5,212
195.24	3,801	5,250
195.25	3,808	5,288
195.26	3,815	5,326
195.27	3,822	5,364
195.28	3,829	5,403
195.29	3,836	5,441
195.30	3,843	5,479
195.31	3,850	5,518
195.32	3,857	5,556
195.33	3,864	5,595
195.34	3,871	5,634
195.35	3,878	5,672
195.36	3,885	5,711
195.37	3,892	5,750

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.38	3,899	5,789	195.90	4,262	7,911
195.39	3,906	5,828	195.91	4,269	7,953
195.40	3,913	5,867	195.92	4,276	7,996
195.41	3,920	5,906	195.93	4,283	8,039
195.42	3,927	5,946	195.94	4,290	8,082
195.43	3,934	5,985	195.95	4,297	8,125
195.44	3,941	6,024	195.96	4,304	8,168
195.45	3,948	6,064	195.97	4,311	8,211
195.46	3,955	6,103	195.98	4,318	8,254
195.47	3,962	6,143	195.99	4,325	8,297
195.48	3,969	6,182	196.00	4,332	8,340
195.49	3,976	6,222	196.01	4,340	8,384
195.50	3,983	6,262	196.02	4,347	8,427
195.51	3,989	6,302	196.03	4,355	8,471
195.52	3,996	6,342	196.04	4,362	8,514
195.53	4,003	6,382	196.05	4,370	8,558
195.54	4,010	6,422	196.06	4,377	8,602
195.55	4,017	6,462	196.07	4,385	8,646
195.56	4,024	6,502	196.08	4,393	8,689
195.57	4,031	6,542	196.09	4,400	8,733
195.58	4,038	6,583	196.10	4,408	8,777
195.59	4,045	6,623	196.11	4,415	8,822
195.60	4,052	6,664	196.12	4,423	8,866
195.61	4,059	6,704	196.13	4,430	8,910
195.62	4,066	6,745	196.14	4,438	8,954
195.63	4,073	6,786	196.15	4,446	8,999
195.64	4,080	6,826	196.16	4,453	9,043
195.65	4,087	6,867	196.17	4,461	9,088
195.66	4,094	6,908	196.18	4,468	9,133
195.67	4,101	6,949	196.19	4,476	9,177
195.68	4,108	6,990	196.20	4,483	9,222
195.69	4,115	7,031	196.21	4,491	9,267
195.70	4,122	7,072	196.22	4,499	9,312
195.71	4,129	7,114	196.23	4,506	9,357
195.72	4,136	7,155	196.24	4,514	9,402
195.73	4,143	7,196	196.25	4,521	9,447
195.74	4,150	7,238	196.26	4,529	9,492
195.75	4,157	7,279	196.27	4,536	9,538
195.76	4,164	7,321	196.28	4,544	9,583
195.77	4,171	7,363	196.29	4,552	9,629
195.78	4,178	7,404	196.30	4,559	9,674
195.79	4,185	7,446	196.31	4,567	9,720
195.80	4,192	7,488	196.32	4,574	9,765
195.81	4,199	7,530	196.33	4,582	9,811
195.82	4,206	7,572	196.34	4,589	9,857
195.83	4,213	7,614	196.35	4,597	9,903
195.84	4,220	7,656	196.36	4,605	9,949
195.85	4,227	7,699	196.37	4,612	9,995
195.86	4,234	7,741	196.38	4,620	10,041
195.87	4,241	7,783	196.39	4,627	10,088
195.88	4,248	7,826	196.40	4,635	10,134
195.89	4,255	7,868	196.41	4,642	10,180

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.42	4,650	10,227	196.94	5,044	12,747
196.43	4,658	10,273	196.95	5,051	12,797
196.44	4,665	10,320	196.96	5,059	12,848
196.45	4,673	10,367	196.97	5,066	12,899
196.46	4,680	10,413	196.98	5,074	12,949
196.47	4,688	10,460	196.99	5,081	13,000
196.48	4,695	10,507	197.00	5,089	13,051
196.49	4,703	10,554	197.01	5,097	13,102
196.50	4,711	10,601	197.02	5,105	13,153
196.51	4,718	10,648	197.03	5,113	13,204
196.52	4,726	10,695	197.04	5,121	13,255
196.53	4,733	10,743	197.05	5,130	13,306
196.54	4,741	10,790	197.06	5,138	13,358
196.55	4,748	10,838	197.07	5,146	13,409
196.56	4,756	10,885	197.08	5,154	13,461
196.57	4,763	10,933	197.09	5,162	13,512
196.58	4,771	10,980	197.10	5,170	13,564
196.59	4,779	11,028	197.11	5,178	13,616
196.60	4,786	11,076	197.12	5,186	13,668
196.61	4,794	11,124	197.13	5,195	13,719
196.62	4,801	11,172	197.14	5,203	13,771
196.63	4,809	11,220	197.15	5,211	13,823
196.64	4,816	11,268	197.16	5,219	13,876
196.65	4,824	11,316	197.17	5,227	13,928
196.66	4,832	11,364	197.18	5,235	13,980
196.67	4,839	11,413	197.19	5,243	14,033
196.68	4,847	11,461	197.20	5,251	14,085
196.69	4,854	11,510	197.21	5,260	14,138
196.70	4,862	11,558	197.22	5,268	14,190
196.71	4,869	11,607	197.23	5,276	14,243
196.72	4,877	11,656	197.24	5,284	14,296
196.73	4,885	11,705	197.25	5,292	14,349
196.74	4,892	11,753	197.26	5,300	14,402
196.75	4,900	11,802	197.27	5,308	14,455
196.76	4,907	11,851	197.28	5,316	14,508
196.77	4,915	11,901	197.29	5,324	14,561
196.78	4,922	11,950	197.30	5,333	14,614
196.79	4,930	11,999	197.31	5,341	14,668
196.80	4,938	12,048	197.32	5,349	14,721
196.81	4,945	12,098	197.33	5,357	14,775
196.82	4,953	12,147	197.34	5,365	14,828
196.83	4,960	12,197	197.35	5,373	14,882
196.84	4,968	12,246	197.36	5,381	14,936
196.85	4,975	12,296	197.37	5,389	14,990
196.86	4,983	12,346	197.38	5,398	15,043
196.87	4,991	12,396	197.39	5,406	15,097
196.88	4,998	12,446	197.40	5,414	15,152
196.89	5,006	12,496	197.41	5,422	15,206
196.90	5,013	12,546	197.42	5,430	15,260
196.91	5,021	12,596	197.43	5,438	15,314
196.92	5,028	12,646	197.44	5,446	15,369
196.93	5,036	12,697	197.45	5,454	15,423

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.46	5,463	15,478
197.47	5,471	15,533
197.48	5,479	15,587
197.49	5,487	15,642
197.50	5,495	15,697
197.51	5,503	15,752
197.52	5,511	15,807
197.53	5,519	15,862
197.54	5,527	15,917
197.55	5,536	15,973
197.56	5,544	16,028
197.57	5,552	16,084
197.58	5,560	16,139
197.59	5,568	16,195
197.60	5,576	16,251
197.61	5,584	16,306
197.62	5,592	16,362
197.63	5,601	16,418
197.64	5,609	16,474
197.65	5,617	16,530
197.66	5,625	16,587
197.67	5,633	16,643
197.68	5,641	16,699
197.69	5,649	16,756
197.70	5,657	16,812
197.71	5,666	16,869
197.72	5,674	16,926
197.73	5,682	16,982
197.74	5,690	17,039
197.75	5,698	17,096
197.76	5,706	17,153
197.77	5,714	17,210
197.78	5,722	17,267
197.79	5,730	17,325
197.80	5,739	17,382
197.81	5,747	17,439
197.82	5,755	17,497
197.83	5,763	17,555
197.84	5,771	17,612
197.85	5,779	17,670
197.86	5,787	17,728
197.87	5,795	17,786
197.88	5,804	17,844
197.89	5,812	17,902
197.90	5,820	17,960
197.91	5,828	18,018
197.92	5,836	18,077
197.93	5,844	18,135
197.94	5,852	18,193
197.95	5,860	18,252
197.96	5,869	18,311
197.97	5,877	18,369
197.98	5,885	18,428
197.99	5,893	18,487
198.00	**5,901**	**18,546**

Summary for Pond B-37B: Basin #37B

Inflow Area = 2.179 ac, 53.42% Impervious, Inflow Depth = 3.74" for Current 10 yr event
Inflow = 8.14 cfs @ 12.17 hrs, Volume= 0.678 af
Outflow = 2.04 cfs @ 12.56 hrs, Volume= 0.550 af, Atten= 75%, Lag= 23.4 min
Primary = 2.04 cfs @ 12.56 hrs, Volume= 0.550 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 196.90' @ 12.56 hrs Surf.Area= 6,810 sf Storage= 16,442 cf

Plug-Flow detention time= 526.4 min calculated for 0.550 af (81% of inflow)
Center-of-Mass det. time= 446.5 min (1,226.5 - 780.0)

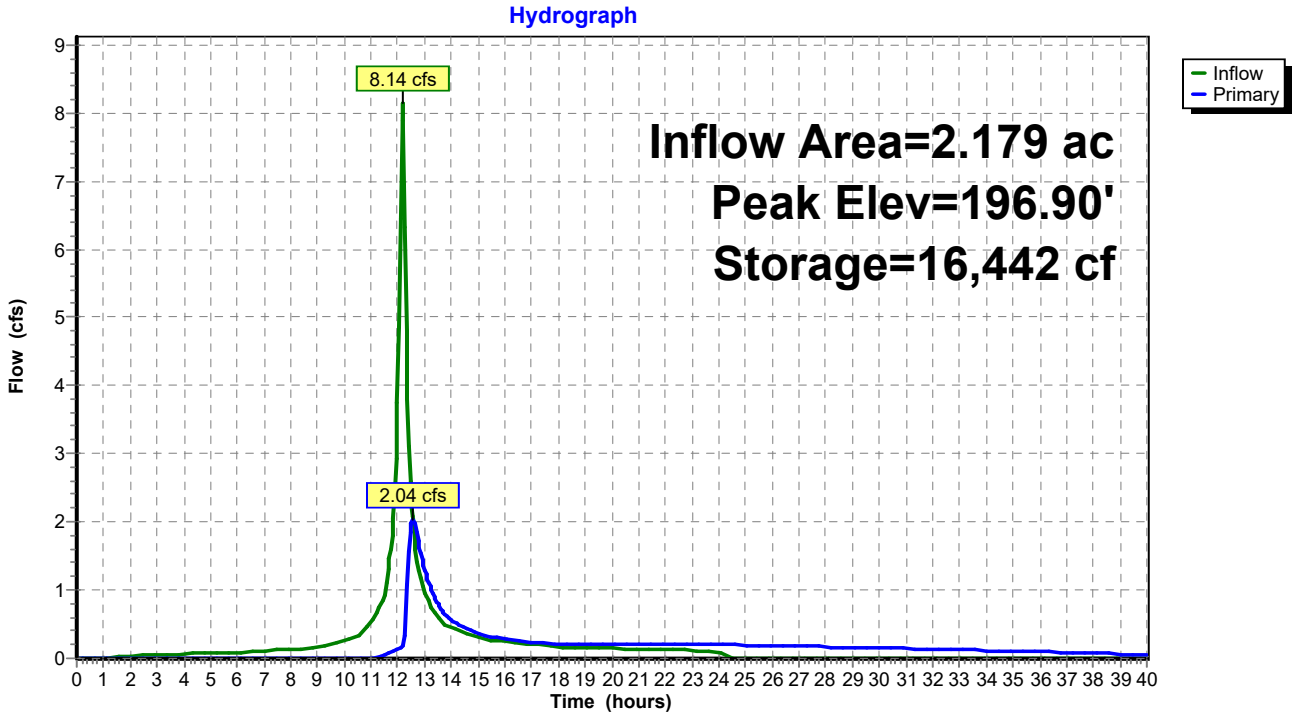
Volume	Invert	Avail.Storage	Storage Description
#1	193.30'	24,651 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.30	0	0	0
194.00	3,709	1,298	1,298
195.00	4,724	4,217	5,515
196.00	5,796	5,260	10,775
197.00	6,924	6,360	17,135
198.00	8,108	7,516	24,651

Device	Routing	Invert	Outlet Devices
#1	Primary	192.65'	**18.0" Round Culvert** L= 265.0' Ke= 0.500 Inlet / Outlet Invert= 192.65' / 191.33' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.81'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	196.63'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.03 cfs @ 12.56 hrs HW=196.90' (Free Discharge)
- **1=Culvert** (Passes 2.03 cfs of 11.35 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.78 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.80 cfs @ 1.69 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-37B: Basin #37B



Stage-Discharge for Pond B-37B: Basin #37B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.01
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.01
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.01
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.01
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.02
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.02
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.02
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.03
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.03
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.03
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.04
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.04
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.05
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.05
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.05
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.05
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.06
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.06
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.06
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.06
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.06
193.52	0.00	194.04	0.00	194.56	0.00	195.08	0.07
193.53	0.00	194.05	0.00	194.57	0.00	195.09	0.07
193.54	0.00	194.06	0.00	194.58	0.00	195.10	0.07
193.55	0.00	194.07	0.00	194.59	0.00	195.11	0.07
193.56	0.00	194.08	0.00	194.60	0.00	195.12	0.07
193.57	0.00	194.09	0.00	194.61	0.00	195.13	0.08
193.58	0.00	194.10	0.00	194.62	0.00	195.14	0.08
193.59	0.00	194.11	0.00	194.63	0.00	195.15	0.08
193.60	0.00	194.12	0.00	194.64	0.00	195.16	0.08
193.61	0.00	194.13	0.00	194.65	0.00	195.17	0.08
193.62	0.00	194.14	0.00	194.66	0.00	195.18	0.08
193.63	0.00	194.15	0.00	194.67	0.00	195.19	0.09
193.64	0.00	194.16	0.00	194.68	0.00	195.20	0.09
193.65	0.00	194.17	0.00	194.69	0.00	195.21	0.09
193.66	0.00	194.18	0.00	194.70	0.00	195.22	0.09
193.67	0.00	194.19	0.00	194.71	0.00	195.23	0.09
193.68	0.00	194.20	0.00	194.72	0.00	195.24	0.09
193.69	0.00	194.21	0.00	194.73	0.00	195.25	0.10
193.70	0.00	194.22	0.00	194.74	0.00	195.26	0.10
193.71	0.00	194.23	0.00	194.75	0.00	195.27	0.10
193.72	0.00	194.24	0.00	194.76	0.00	195.28	0.10
193.73	0.00	194.25	0.00	194.77	0.00	195.29	0.10
193.74	0.00	194.26	0.00	194.78	0.00	195.30	0.10
193.75	0.00	194.27	0.00	194.79	0.00	195.31	0.10
193.76	0.00	194.28	0.00	194.80	0.00	195.32	0.10
193.77	0.00	194.29	0.00	194.81	0.00	195.33	0.11
193.78	0.00	194.30	0.00	194.82	0.00	195.34	0.11
193.79	0.00	194.31	0.00	194.83	0.00	195.35	0.11
193.80	0.00	194.32	0.00	194.84	0.00	195.36	0.11
193.81	0.00	194.33	0.00	194.85	0.00	195.37	0.11

Stage-Discharge for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.38	0.11	195.90	0.16	196.42	0.20	196.94	2.46
195.39	0.11	195.91	0.16	196.43	0.20	196.95	2.56
195.40	0.11	195.92	0.16	196.44	0.20	196.96	2.67
195.41	0.12	195.93	0.17	196.45	0.20	196.97	2.78
195.42	0.12	195.94	0.17	196.46	0.20	196.98	2.90
195.43	0.12	195.95	0.17	196.47	0.20	196.99	3.01
195.44	0.12	195.96	0.17	196.48	0.21	197.00	3.13
195.45	0.12	195.97	0.17	196.49	0.21	197.01	3.24
195.46	0.12	195.98	0.17	196.50	0.21	197.02	3.36
195.47	0.12	195.99	0.17	196.51	0.21	197.03	3.48
195.48	0.12	196.00	0.17	196.52	0.21	197.04	3.60
195.49	0.12	196.01	0.17	196.53	0.21	197.05	3.73
195.50	0.13	196.02	0.17	196.54	0.21	197.06	3.85
195.51	0.13	196.03	0.17	196.55	0.21	197.07	3.97
195.52	0.13	196.04	0.17	196.56	0.21	197.08	4.10
195.53	0.13	196.05	0.17	196.57	0.21	197.09	4.23
195.54	0.13	196.06	0.18	196.58	0.21	197.10	4.36
195.55	0.13	196.07	0.18	196.59	0.21	197.11	4.49
195.56	0.13	196.08	0.18	196.60	0.21	197.12	4.62
195.57	0.13	196.09	0.18	196.61	0.21	197.13	4.75
195.58	0.13	196.10	0.18	196.62	0.21	197.14	4.89
195.59	0.13	196.11	0.18	196.63	0.22	197.15	5.02
195.60	0.14	196.12	0.18	196.64	0.23	197.16	5.16
195.61	0.14	196.13	0.18	196.65	0.25	197.17	5.30
195.62	0.14	196.14	0.18	196.66	0.28	197.18	5.44
195.63	0.14	196.15	0.18	196.67	0.32	197.19	5.58
195.64	0.14	196.16	0.18	196.68	0.36	197.20	5.72
195.65	0.14	196.17	0.18	196.69	0.41	197.21	5.86
195.66	0.14	196.18	0.18	196.70	0.46	197.22	6.00
195.67	0.14	196.19	0.19	196.71	0.51	197.23	6.15
195.68	0.14	196.20	0.19	196.72	0.57	197.24	6.29
195.69	0.14	196.21	0.19	196.73	0.63	197.25	6.44
195.70	0.15	196.22	0.19	196.74	0.70	197.26	6.59
195.71	0.15	196.23	0.19	196.75	0.76	197.27	6.73
195.72	0.15	196.24	0.19	196.76	0.83	197.28	6.88
195.73	0.15	196.25	0.19	196.77	0.90	197.29	7.03
195.74	0.15	196.26	0.19	196.78	0.98	197.30	7.19
195.75	0.15	196.27	0.19	196.79	1.06	197.31	7.34
195.76	0.15	196.28	0.19	196.80	1.13	197.32	7.49
195.77	0.15	196.29	0.19	196.81	1.22	197.33	7.65
195.78	0.15	196.30	0.19	196.82	1.30	197.34	7.80
195.79	0.15	196.31	0.19	196.83	1.39	197.35	7.96
195.80	0.15	196.32	0.19	196.84	1.47	197.36	8.12
195.81	0.16	196.33	0.20	196.85	1.56	197.37	8.28
195.82	0.16	196.34	0.20	196.86	1.66	197.38	8.43
195.83	0.16	196.35	0.20	196.87	1.75	197.39	8.60
195.84	0.16	196.36	0.20	196.88	1.84	197.40	8.76
195.85	0.16	196.37	0.20	196.89	1.94	197.41	8.92
195.86	0.16	196.38	0.20	196.90	2.04	197.42	9.08
195.87	0.16	196.39	0.20	196.91	2.14	197.43	9.25
195.88	0.16	196.40	0.20	196.92	2.25	197.44	9.41
195.89	0.16	196.41	0.20	196.93	2.35	197.45	9.58

Stage-Discharge for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Primary (cfs)
197.46	9.74
197.47	9.91
197.48	10.08
197.49	10.25
197.50	10.42
197.51	10.59
197.52	10.76
197.53	10.93
197.54	11.10
197.55	11.28
197.56	11.45
197.57	11.63
197.58	11.80
197.59	11.98
197.60	12.16
197.61	12.31
197.62	12.32
197.63	12.33
197.64	12.35
197.65	12.36
197.66	12.37
197.67	12.38
197.68	12.40
197.69	12.41
197.70	12.42
197.71	12.44
197.72	12.45
197.73	12.46
197.74	12.47
197.75	12.49
197.76	12.50
197.77	12.51
197.78	12.52
197.79	12.54
197.80	12.55
197.81	12.56
197.82	12.57
197.83	12.59
197.84	12.60
197.85	12.61
197.86	12.63
197.87	12.64
197.88	12.65
197.89	12.66
197.90	12.68
197.91	12.69
197.92	12.70
197.93	12.71
197.94	12.73
197.95	12.74
197.96	12.87
197.97	13.09
197.98	13.38
197.99	13.73
198.00	**14.11**

Stage-Area-Storage for Pond B-37B: Basin #37B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.30	0	0
193.31	53	0
193.32	106	1
193.33	159	2
193.34	212	4
193.35	265	7
193.36	318	10
193.37	371	13
193.38	424	17
193.39	477	21
193.40	530	26
193.41	583	32
193.42	636	38
193.43	689	45
193.44	742	52
193.45	795	60
193.46	848	68
193.47	901	77
193.48	954	86
193.49	1,007	96
193.50	1,060	106
193.51	1,113	117
193.52	1,166	128
193.53	1,219	140
193.54	1,272	153
193.55	1,325	166
193.56	1,378	179
193.57	1,431	193
193.58	1,484	208
193.59	1,537	223
193.60	1,590	238
193.61	1,643	255
193.62	1,696	271
193.63	1,749	289
193.64	1,802	306
193.65	1,855	325
193.66	1,907	343
193.67	1,960	363
193.68	2,013	383
193.69	2,066	403
193.70	2,119	424
193.71	2,172	445
193.72	2,225	467
193.73	2,278	490
193.74	2,331	513
193.75	2,384	536
193.76	2,437	561
193.77	2,490	585
193.78	2,543	610
193.79	2,596	636
193.80	2,649	662
193.81	2,702	689
193.82	2,755	716
193.83	2,808	744
193.84	2,861	773
193.85	2,914	801
193.86	2,967	831
193.87	3,020	861
193.88	3,073	891
193.89	3,126	922
193.90	3,179	954
193.91	3,232	986
193.92	3,285	1,018
193.93	3,338	1,052
193.94	3,391	1,085
193.95	3,444	1,119
193.96	3,497	1,154
193.97	3,550	1,189
193.98	3,603	1,225
193.99	3,656	1,261
194.00	3,709	1,298
194.01	3,719	1,335
194.02	3,729	1,373
194.03	3,739	1,410
194.04	3,750	1,447
194.05	3,760	1,485
194.06	3,770	1,523
194.07	3,780	1,560
194.08	3,790	1,598
194.09	3,800	1,636
194.10	3,811	1,674
194.11	3,821	1,712
194.12	3,831	1,751
194.13	3,841	1,789
194.14	3,851	1,827
194.15	3,861	1,866
194.16	3,871	1,905
194.17	3,882	1,943
194.18	3,892	1,982
194.19	3,902	2,021
194.20	3,912	2,060
194.21	3,922	2,099
194.22	3,932	2,139
194.23	3,942	2,178
194.24	3,953	2,218
194.25	3,963	2,257
194.26	3,973	2,297
194.27	3,983	2,337
194.28	3,993	2,376
194.29	4,003	2,416
194.30	4,014	2,457
194.31	4,024	2,497
194.32	4,034	2,537
194.33	4,044	2,577

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.34	4,054	2,618
194.35	4,064	2,658
194.36	4,074	2,699
194.37	4,085	2,740
194.38	4,095	2,781
194.39	4,105	2,822
194.40	4,115	2,863
194.41	4,125	2,904
194.42	4,135	2,945
194.43	4,145	2,987
194.44	4,156	3,028
194.45	4,166	3,070
194.46	4,176	3,112
194.47	4,186	3,153
194.48	4,196	3,195
194.49	4,206	3,237
194.50	4,217	3,280
194.51	4,227	3,322
194.52	4,237	3,364
194.53	4,247	3,406
194.54	4,257	3,449
194.55	4,267	3,492
194.56	4,277	3,534
194.57	4,288	3,577
194.58	4,298	3,620
194.59	4,308	3,663
194.60	4,318	3,706
194.61	4,328	3,749
194.62	4,338	3,793
194.63	4,348	3,836
194.64	4,359	3,880
194.65	4,369	3,923
194.66	4,379	3,967
194.67	4,389	4,011
194.68	4,399	4,055
194.69	4,409	4,099
194.70	4,420	4,143
194.71	4,430	4,187
194.72	4,440	4,232
194.73	4,450	4,276
194.74	4,460	4,321
194.75	4,470	4,365
194.76	4,480	4,410
194.77	4,491	4,455
194.78	4,501	4,500
194.79	4,511	4,545
194.80	4,521	4,590
194.81	4,531	4,635
194.82	4,541	4,681
194.83	4,551	4,726
194.84	4,562	4,772
194.85	4,572	4,817
194.86	4,582	4,863
194.87	4,592	4,909
194.88	4,602	4,955
194.89	4,612	5,001
194.90	4,623	5,047
194.91	4,633	5,094
194.92	4,643	5,140
194.93	4,653	5,186
194.94	4,663	5,233
194.95	4,673	5,280
194.96	4,683	5,327
194.97	4,694	5,373
194.98	4,704	5,420
194.99	4,714	5,467
195.00	4,724	5,515
195.01	4,735	5,562
195.02	4,745	5,609
195.03	4,756	5,657
195.04	4,767	5,704
195.05	4,778	5,752
195.06	4,788	5,800
195.07	4,799	5,848
195.08	4,810	5,896
195.09	4,820	5,944
195.10	4,831	5,992
195.11	4,842	6,041
195.12	4,853	6,089
195.13	4,863	6,138
195.14	4,874	6,187
195.15	4,885	6,235
195.16	4,896	6,284
195.17	4,906	6,333
195.18	4,917	6,382
195.19	4,928	6,432
195.20	4,938	6,481
195.21	4,949	6,530
195.22	4,960	6,580
195.23	4,971	6,630
195.24	4,981	6,679
195.25	4,992	6,729
195.26	5,003	6,779
195.27	5,013	6,829
195.28	5,024	6,879
195.29	5,035	6,930
195.30	5,046	6,980
195.31	5,056	7,031
195.32	5,067	7,081
195.33	5,078	7,132
195.34	5,088	7,183
195.35	5,099	7,234
195.36	5,110	7,285
195.37	5,121	7,336

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.38	5,131	7,387
195.39	5,142	7,439
195.40	5,153	7,490
195.41	5,164	7,542
195.42	5,174	7,593
195.43	5,185	7,645
195.44	5,196	7,697
195.45	5,206	7,749
195.46	5,217	7,801
195.47	5,228	7,853
195.48	5,239	7,906
195.49	5,249	7,958
195.50	5,260	8,011
195.51	5,271	8,063
195.52	5,281	8,116
195.53	5,292	8,169
195.54	5,303	8,222
195.55	5,314	8,275
195.56	5,324	8,328
195.57	5,335	8,381
195.58	5,346	8,435
195.59	5,356	8,488
195.60	5,367	8,542
195.61	5,378	8,596
195.62	5,389	8,650
195.63	5,399	8,704
195.64	5,410	8,758
195.65	5,421	8,812
195.66	5,432	8,866
195.67	5,442	8,920
195.68	5,453	8,975
195.69	5,464	9,029
195.70	5,474	9,084
195.71	5,485	9,139
195.72	5,496	9,194
195.73	5,507	9,249
195.74	5,517	9,304
195.75	5,528	9,359
195.76	5,539	9,414
195.77	5,549	9,470
195.78	5,560	9,525
195.79	5,571	9,581
195.80	5,582	9,637
195.81	5,592	9,693
195.82	5,603	9,749
195.83	5,614	9,805
195.84	5,624	9,861
195.85	5,635	9,917
195.86	5,646	9,974
195.87	5,657	10,030
195.88	5,667	10,087
195.89	5,678	10,144
195.90	5,689	10,200
195.91	5,700	10,257
195.92	5,710	10,314
195.93	5,721	10,372
195.94	5,732	10,429
195.95	5,742	10,486
195.96	5,753	10,544
195.97	5,764	10,601
195.98	5,775	10,659
195.99	5,785	10,717
196.00	5,796	10,775
196.01	5,807	10,833
196.02	5,819	10,891
196.03	5,830	10,949
196.04	5,841	11,007
196.05	5,852	11,066
196.06	5,864	11,124
196.07	5,875	11,183
196.08	5,886	11,242
196.09	5,898	11,301
196.10	5,909	11,360
196.11	5,920	11,419
196.12	5,931	11,478
196.13	5,943	11,538
196.14	5,954	11,597
196.15	5,965	11,657
196.16	5,976	11,716
196.17	5,988	11,776
196.18	5,999	11,836
196.19	6,010	11,896
196.20	6,022	11,956
196.21	6,033	12,017
196.22	6,044	12,077
196.23	6,055	12,138
196.24	6,067	12,198
196.25	6,078	12,259
196.26	6,089	12,320
196.27	6,101	12,381
196.28	6,112	12,442
196.29	6,123	12,503
196.30	6,134	12,564
196.31	6,146	12,626
196.32	6,157	12,687
196.33	6,168	12,749
196.34	6,180	12,810
196.35	6,191	12,872
196.36	6,202	12,934
196.37	6,213	12,996
196.38	6,225	13,059
196.39	6,236	13,121
196.40	6,247	13,183
196.41	6,258	13,246

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.42	6,270	13,308	196.94	6,856	16,721
196.43	6,281	13,371	196.95	6,868	16,790
196.44	6,292	13,434	196.96	6,879	16,859
196.45	6,304	13,497	196.97	6,890	16,927
196.46	6,315	13,560	196.98	6,901	16,996
196.47	6,326	13,623	196.99	6,913	17,065
196.48	6,337	13,687	197.00	6,924	17,135
196.49	6,349	13,750	197.01	6,936	17,204
196.50	6,360	13,814	197.02	6,948	17,273
196.51	6,371	13,877	197.03	6,960	17,343
196.52	6,383	13,941	197.04	6,971	17,413
196.53	6,394	14,005	197.05	6,983	17,482
196.54	6,405	14,069	197.06	6,995	17,552
196.55	6,416	14,133	197.07	7,007	17,622
196.56	6,428	14,197	197.08	7,019	17,692
196.57	6,439	14,262	197.09	7,031	17,763
196.58	6,450	14,326	197.10	7,042	17,833
196.59	6,462	14,391	197.11	7,054	17,903
196.60	6,473	14,455	197.12	7,066	17,974
196.61	6,484	14,520	197.13	7,078	18,045
196.62	6,495	14,585	197.14	7,090	18,116
196.63	6,507	14,650	197.15	7,102	18,187
196.64	6,518	14,715	197.16	7,113	18,258
196.65	6,529	14,780	197.17	7,125	18,329
196.66	6,540	14,846	197.18	7,137	18,400
196.67	6,552	14,911	197.19	7,149	18,472
196.68	6,563	14,977	197.20	7,161	18,543
196.69	6,574	15,042	197.21	7,173	18,615
196.70	6,586	15,108	197.22	7,184	18,687
196.71	6,597	15,174	197.23	7,196	18,758
196.72	6,608	15,240	197.24	7,208	18,831
196.73	6,619	15,306	197.25	7,220	18,903
196.74	6,631	15,373	197.26	7,232	18,975
196.75	6,642	15,439	197.27	7,244	19,047
196.76	6,653	15,505	197.28	7,256	19,120
196.77	6,665	15,572	197.29	7,267	19,192
196.78	6,676	15,639	197.30	7,279	19,265
196.79	6,687	15,705	197.31	7,291	19,338
196.80	6,698	15,772	197.32	7,303	19,411
196.81	6,710	15,839	197.33	7,315	19,484
196.82	6,721	15,907	197.34	7,327	19,557
196.83	6,732	15,974	197.35	7,338	19,631
196.84	6,744	16,041	197.36	7,350	19,704
196.85	6,755	16,109	197.37	7,362	19,778
196.86	6,766	16,176	197.38	7,374	19,851
196.87	6,777	16,244	197.39	7,386	19,925
196.88	6,789	16,312	197.40	7,398	19,999
196.89	6,800	16,380	197.41	7,409	20,073
196.90	6,811	16,448	197.42	7,421	20,147
196.91	6,822	16,516	197.43	7,433	20,221
196.92	6,834	16,584	197.44	7,445	20,296
196.93	6,845	16,653	197.45	7,457	20,370

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.46	7,469	20,445
197.47	7,480	20,520
197.48	7,492	20,595
197.49	7,504	20,670
197.50	7,516	20,745
197.51	7,528	20,820
197.52	7,540	20,895
197.53	7,552	20,971
197.54	7,563	21,046
197.55	7,575	21,122
197.56	7,587	21,198
197.57	7,599	21,274
197.58	7,611	21,350
197.59	7,623	21,426
197.60	7,634	21,502
197.61	7,646	21,579
197.62	7,658	21,655
197.63	7,670	21,732
197.64	7,682	21,808
197.65	7,694	21,885
197.66	7,705	21,962
197.67	7,717	22,039
197.68	7,729	22,117
197.69	7,741	22,194
197.70	7,753	22,272
197.71	7,765	22,349
197.72	7,776	22,427
197.73	7,788	22,505
197.74	7,800	22,583
197.75	7,812	22,661
197.76	7,824	22,739
197.77	7,836	22,817
197.78	7,848	22,896
197.79	7,859	22,974
197.80	7,871	23,053
197.81	7,883	23,132
197.82	7,895	23,210
197.83	7,907	23,289
197.84	7,919	23,369
197.85	7,930	23,448
197.86	7,942	23,527
197.87	7,954	23,607
197.88	7,966	23,686
197.89	7,978	23,766
197.90	7,990	23,846
197.91	8,001	23,926
197.92	8,013	24,006
197.93	8,025	24,086
197.94	8,037	24,166
197.95	8,049	24,247
197.96	8,061	24,327
197.97	8,072	24,408
197.98	8,084	24,489
197.99	8,096	24,570
198.00	**8,108**	**24,651**

Summary for Pond B-38: Basin #38

Inflow Area = 2.114 ac, 34.96% Impervious, Inflow Depth = 3.29" for Current 10 yr event
Inflow = 7.14 cfs @ 12.17 hrs, Volume= 0.580 af
Outflow = 1.79 cfs @ 12.57 hrs, Volume= 0.486 af, Atten= 75%, Lag= 24.1 min
Primary = 1.79 cfs @ 12.57 hrs, Volume= 0.486 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 206.94' @ 12.57 hrs Surf.Area= 6,835 sf Storage= 13,311 cf

Plug-Flow detention time= 489.8 min calculated for 0.486 af (84% of inflow)
Center-of-Mass det. time= 418.2 min (1,214.5 - 796.3)

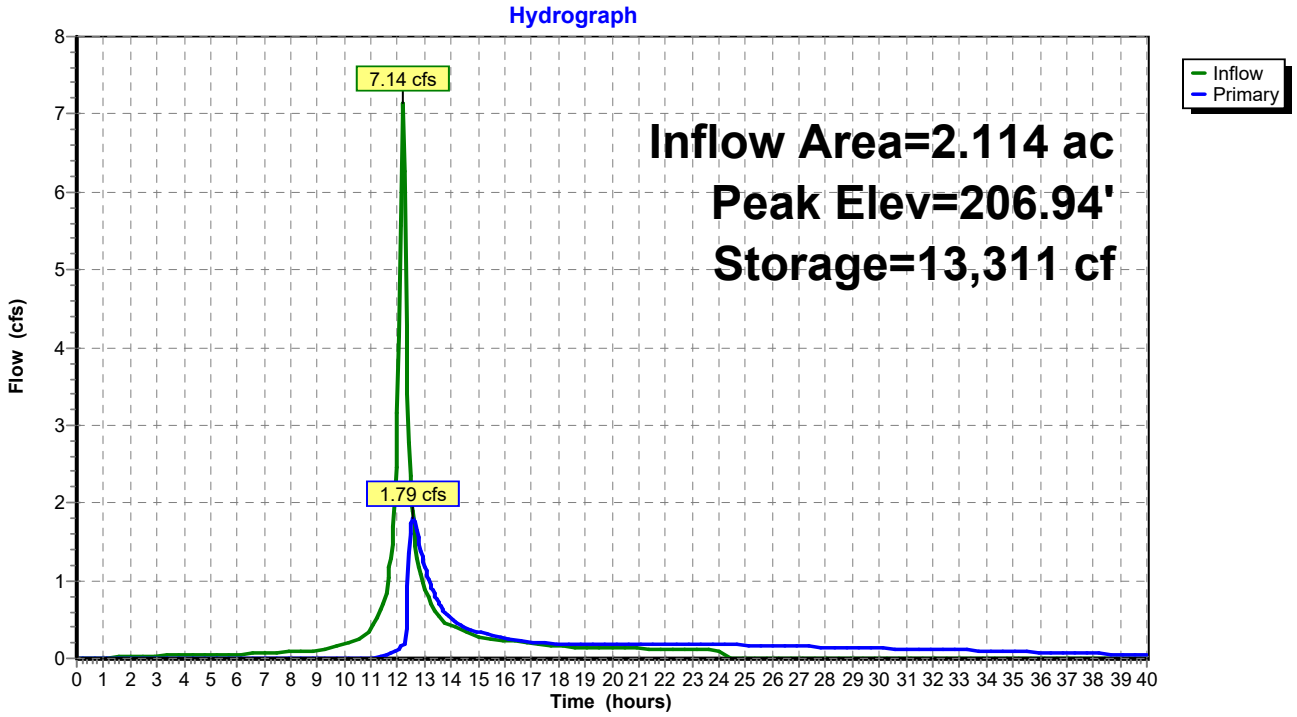
Volume	Invert	Avail.Storage	Storage Description
#1	204.30'	29,525 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
204.30	0	0	0
205.00	5,096	1,784	1,784
206.00	5,966	5,531	7,315
207.00	6,893	6,430	13,744
208.00	7,876	7,385	21,129
209.00	8,916	8,396	29,525

Device	Routing	Invert	Outlet Devices
#1	Primary	204.30'	**18.0" Round Culvert** L= 33.0' Ke= 0.500 Inlet / Outlet Invert= 204.30' / 204.13' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	205.26'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	206.69'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	208.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.78 cfs @ 12.57 hrs HW=206.94' (Free Discharge)
- **1=Culvert** (Passes 1.78 cfs of 11.18 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.21 cfs @ 6.04 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.58 cfs @ 1.62 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-38: Basin #38



Stage-Discharge for Pond B-38: Basin #38

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
204.30	0.00	204.82	0.00	205.34	0.01	205.86	0.12
204.31	0.00	204.83	0.00	205.35	0.01	205.87	0.12
204.32	0.00	204.84	0.00	205.36	0.02	205.88	0.12
204.33	0.00	204.85	0.00	205.37	0.02	205.89	0.12
204.34	0.00	204.86	0.00	205.38	0.02	205.90	0.12
204.35	0.00	204.87	0.00	205.39	0.03	205.91	0.12
204.36	0.00	204.88	0.00	205.40	0.03	205.92	0.12
204.37	0.00	204.89	0.00	205.41	0.03	205.93	0.12
204.38	0.00	204.90	0.00	205.42	0.04	205.94	0.12
204.39	0.00	204.91	0.00	205.43	0.04	205.95	0.13
204.40	0.00	204.92	0.00	205.44	0.05	205.96	0.13
204.41	0.00	204.93	0.00	205.45	0.05	205.97	0.13
204.42	0.00	204.94	0.00	205.46	0.05	205.98	0.13
204.43	0.00	204.95	0.00	205.47	0.05	205.99	0.13
204.44	0.00	204.96	0.00	205.48	0.06	206.00	0.13
204.45	0.00	204.97	0.00	205.49	0.06	206.01	0.13
204.46	0.00	204.98	0.00	205.50	0.06	206.02	0.13
204.47	0.00	204.99	0.00	205.51	0.06	206.03	0.13
204.48	0.00	205.00	0.00	205.52	0.06	206.04	0.13
204.49	0.00	205.01	0.00	205.53	0.07	206.05	0.14
204.50	0.00	205.02	0.00	205.54	0.07	206.06	0.14
204.51	0.00	205.03	0.00	205.55	0.07	206.07	0.14
204.52	0.00	205.04	0.00	205.56	0.07	206.08	0.14
204.53	0.00	205.05	0.00	205.57	0.07	206.09	0.14
204.54	0.00	205.06	0.00	205.58	0.08	206.10	0.14
204.55	0.00	205.07	0.00	205.59	0.08	206.11	0.14
204.56	0.00	205.08	0.00	205.60	0.08	206.12	0.14
204.57	0.00	205.09	0.00	205.61	0.08	206.13	0.14
204.58	0.00	205.10	0.00	205.62	0.08	206.14	0.14
204.59	0.00	205.11	0.00	205.63	0.08	206.15	0.15
204.60	0.00	205.12	0.00	205.64	0.09	206.16	0.15
204.61	0.00	205.13	0.00	205.65	0.09	206.17	0.15
204.62	0.00	205.14	0.00	205.66	0.09	206.18	0.15
204.63	0.00	205.15	0.00	205.67	0.09	206.19	0.15
204.64	0.00	205.16	0.00	205.68	0.09	206.20	0.15
204.65	0.00	205.17	0.00	205.69	0.09	206.21	0.15
204.66	0.00	205.18	0.00	205.70	0.10	206.22	0.15
204.67	0.00	205.19	0.00	205.71	0.10	206.23	0.15
204.68	0.00	205.20	0.00	205.72	0.10	206.24	0.15
204.69	0.00	205.21	0.00	205.73	0.10	206.25	0.15
204.70	0.00	205.22	0.00	205.74	0.10	206.26	0.16
204.71	0.00	205.23	0.00	205.75	0.10	206.27	0.16
204.72	0.00	205.24	0.00	205.76	0.10	206.28	0.16
204.73	0.00	205.25	0.00	205.77	0.10	206.29	0.16
204.74	0.00	205.26	0.00	205.78	0.11	206.30	0.16
204.75	0.00	205.27	0.00	205.79	0.11	206.31	0.16
204.76	0.00	205.28	0.00	205.80	0.11	206.32	0.16
204.77	0.00	205.29	0.00	205.81	0.11	206.33	0.16
204.78	0.00	205.30	0.00	205.82	0.11	206.34	0.16
204.79	0.00	205.31	0.00	205.83	0.11	206.35	0.16
204.80	0.00	205.32	0.01	205.84	0.11	206.36	0.16
204.81	0.00	205.33	0.01	205.85	0.11	206.37	0.16

Stage-Discharge for Pond B-38: Basin #38 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
206.38	0.17	206.90	1.45	207.42	8.10	207.94	14.46
206.39	0.17	206.91	1.54	207.43	8.25	207.95	14.49
206.40	0.17	206.92	1.63	207.44	8.41	207.96	14.51
206.41	0.17	206.93	1.72	207.45	8.57	207.97	14.54
206.42	0.17	206.94	1.82	207.46	8.74	207.98	14.56
206.43	0.17	206.95	1.92	207.47	8.90	207.99	14.59
206.44	0.17	206.96	2.02	207.48	9.06	208.00	14.61
206.45	0.17	206.97	2.12	207.49	9.22	208.01	14.64
206.46	0.17	206.98	2.22	207.50	9.39	208.02	14.66
206.47	0.17	206.99	2.33	207.51	9.55	208.03	14.69
206.48	0.17	207.00	2.43	207.52	9.72	208.04	14.71
206.49	0.17	207.01	2.54	207.53	9.89	208.05	14.74
206.50	0.17	207.02	2.65	207.54	10.06	208.06	14.76
206.51	0.18	207.03	2.76	207.55	10.23	208.07	14.79
206.52	0.18	207.04	2.87	207.56	10.40	208.08	14.81
206.53	0.18	207.05	2.99	207.57	10.57	208.09	14.84
206.54	0.18	207.06	3.10	207.58	10.74	208.10	14.86
206.55	0.18	207.07	3.22	207.59	10.91	208.11	14.88
206.56	0.18	207.08	3.34	207.60	11.08	208.12	14.91
206.57	0.18	207.09	3.46	207.61	11.26	208.13	14.93
206.58	0.18	207.10	3.58	207.62	11.43	208.14	14.96
206.59	0.18	207.11	3.70	207.63	11.61	208.15	14.98
206.60	0.18	207.12	3.83	207.64	11.78	208.16	15.01
206.61	0.18	207.13	3.95	207.65	11.96	208.17	15.03
206.62	0.18	207.14	4.08	207.66	12.14	208.18	15.05
206.63	0.18	207.15	4.21	207.67	12.32	208.19	15.08
206.64	0.19	207.16	4.34	207.68	12.50	208.20	15.10
206.65	0.19	207.17	4.47	207.69	12.68	208.21	15.13
206.66	0.19	207.18	4.60	207.70	12.86	208.22	15.15
206.67	0.19	207.19	4.73	207.71	13.04	208.23	15.17
206.68	0.19	207.20	4.86	207.72	13.22	208.24	15.20
206.69	0.19	207.21	5.00	207.73	13.40	208.25	15.22
206.70	0.20	207.22	5.14	207.74	13.59	208.26	15.36
206.71	0.23	207.23	5.27	207.75	13.77	208.27	15.60
206.72	0.26	207.24	5.41	207.76	13.96	208.28	15.90
206.73	0.30	207.25	5.55	207.77	14.03	208.29	16.25
206.74	0.34	207.26	5.69	207.78	14.06	208.30	16.65
206.75	0.38	207.27	5.84	207.79	14.08	208.31	17.09
206.76	0.44	207.28	5.98	207.80	14.11	208.32	17.56
206.77	0.49	207.29	6.12	207.81	14.14	208.33	18.07
206.78	0.55	207.30	6.27	207.82	14.16	208.34	18.61
206.79	0.61	207.31	6.42	207.83	14.19	208.35	19.17
206.80	0.67	207.32	6.56	207.84	14.21	208.36	19.77
206.81	0.74	207.33	6.71	207.85	14.24	208.37	20.40
206.82	0.81	207.34	6.86	207.86	14.26	208.38	21.05
206.83	0.88	207.35	7.01	207.87	14.29	208.39	21.72
206.84	0.95	207.36	7.16	207.88	14.31	208.40	22.42
206.85	1.03	207.37	7.32	207.89	14.34	208.41	23.14
206.86	1.11	207.38	7.47	207.90	14.36	208.42	23.89
206.87	1.19	207.39	7.63	207.91	14.39	208.43	24.66
206.88	1.28	207.40	7.78	207.92	14.41	208.44	25.44
206.89	1.36	207.41	7.94	207.93	14.44	208.45	26.25

Stage-Discharge for Pond B-38: Basin #38 (continued)

Elevation (feet)	Primary (cfs)
208.46	27.12
208.47	28.02
208.48	28.94
208.49	29.89
208.50	30.86
208.51	31.85
208.52	32.88
208.53	33.92
208.54	34.99
208.55	36.09
208.56	37.21
208.57	38.35
208.58	39.52
208.59	40.71
208.60	41.93
208.61	43.17
208.62	44.43
208.63	45.72
208.64	47.04
208.65	48.37
208.66	49.76
208.67	51.18
208.68	52.62
208.69	54.08
208.70	55.58
208.71	57.09
208.72	58.64
208.73	60.21
208.74	61.81
208.75	63.43
208.76	65.08
208.77	66.76
208.78	68.46
208.79	70.19
208.80	71.95
208.81	73.73
208.82	75.54
208.83	77.38
208.84	79.24
208.85	81.14
208.86	82.78
208.87	84.45
208.88	86.12
208.89	87.81
208.90	89.51
208.91	91.23
208.92	92.96
208.93	94.70
208.94	96.45
208.95	98.22
208.96	100.00
208.97	101.79
208.98	103.60
208.99	105.42
209.00	**107.25**

Stage-Area-Storage for Pond B-38: Basin #38

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.30	0	0	204.82	3,786	984
204.31	73	0	204.83	3,858	1,022
204.32	146	1	204.84	3,931	1,061
204.33	218	3	204.85	4,004	1,101
204.34	291	6	204.86	4,077	1,142
204.35	364	9	204.87	4,150	1,183
204.36	437	13	204.88	4,222	1,224
204.37	510	18	204.89	4,295	1,267
204.38	582	23	204.90	4,368	1,310
204.39	655	29	204.91	4,441	1,354
204.40	728	36	204.92	4,514	1,399
204.41	801	44	204.93	4,586	1,445
204.42	874	52	204.94	4,659	1,491
204.43	946	62	204.95	4,732	1,538
204.44	1,019	71	204.96	4,805	1,586
204.45	1,092	82	204.97	4,878	1,634
204.46	1,165	93	204.98	4,950	1,683
204.47	1,238	105	204.99	5,023	1,733
204.48	1,310	118	205.00	5,096	1,784
204.49	1,383	131	205.01	5,105	1,835
204.50	1,456	146	205.02	5,113	1,886
204.51	1,529	161	205.03	5,122	1,937
204.52	1,602	176	205.04	5,131	1,988
204.53	1,674	193	205.05	5,140	2,039
204.54	1,747	210	205.06	5,148	2,091
204.55	1,820	228	205.07	5,157	2,142
204.56	1,893	246	205.08	5,166	2,194
204.57	1,966	265	205.09	5,174	2,246
204.58	2,038	285	205.10	5,183	2,298
204.59	2,111	306	205.11	5,192	2,349
204.60	2,184	328	205.12	5,200	2,401
204.61	2,257	350	205.13	5,209	2,453
204.62	2,330	373	205.14	5,218	2,506
204.63	2,402	396	205.15	5,227	2,558
204.64	2,475	421	205.16	5,235	2,610
204.65	2,548	446	205.17	5,244	2,662
204.66	2,621	472	205.18	5,253	2,715
204.67	2,694	498	205.19	5,261	2,768
204.68	2,766	526	205.20	5,270	2,820
204.69	2,839	554	205.21	5,279	2,873
204.70	2,912	582	205.22	5,287	2,926
204.71	2,985	612	205.23	5,296	2,979
204.72	3,058	642	205.24	5,305	3,032
204.73	3,130	673	205.25	5,314	3,085
204.74	3,203	705	205.26	5,322	3,138
204.75	3,276	737	205.27	5,331	3,191
204.76	3,349	770	205.28	5,340	3,245
204.77	3,422	804	205.29	5,348	3,298
204.78	3,494	839	205.30	5,357	3,352
204.79	3,567	874	205.31	5,366	3,405
204.80	3,640	910	205.32	5,374	3,459
204.81	3,713	947	205.33	5,383	3,513

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.34	5,392	3,567	205.86	5,844	6,488
205.35	5,401	3,620	205.87	5,853	6,546
205.36	5,409	3,675	205.88	5,862	6,605
205.37	5,418	3,729	205.89	5,870	6,664
205.38	5,427	3,783	205.90	5,879	6,722
205.39	5,435	3,837	205.91	5,888	6,781
205.40	5,444	3,892	205.92	5,896	6,840
205.41	5,453	3,946	205.93	5,905	6,899
205.42	5,461	4,001	205.94	5,914	6,958
205.43	5,470	4,055	205.95	5,923	7,017
205.44	5,479	4,110	205.96	5,931	7,077
205.45	5,488	4,165	205.97	5,940	7,136
205.46	5,496	4,220	205.98	5,949	7,195
205.47	5,505	4,275	205.99	5,957	7,255
205.48	5,514	4,330	206.00	5,966	7,315
205.49	5,522	4,385	206.01	5,975	7,374
205.50	5,531	4,440	206.02	5,985	7,434
205.51	5,540	4,496	206.03	5,994	7,494
205.52	5,548	4,551	206.04	6,003	7,554
205.53	5,557	4,607	206.05	6,012	7,614
205.54	5,566	4,662	206.06	6,022	7,674
205.55	5,575	4,718	206.07	6,031	7,734
205.56	5,583	4,774	206.08	6,040	7,795
205.57	5,592	4,830	206.09	6,049	7,855
205.58	5,601	4,886	206.10	6,059	7,916
205.59	5,609	4,942	206.11	6,068	7,976
205.60	5,618	4,998	206.12	6,077	8,037
205.61	5,627	5,054	206.13	6,087	8,098
205.62	5,635	5,110	206.14	6,096	8,159
205.63	5,644	5,167	206.15	6,105	8,220
205.64	5,653	5,223	206.16	6,114	8,281
205.65	5,662	5,280	206.17	6,124	8,342
205.66	5,670	5,336	206.18	6,133	8,403
205.67	5,679	5,393	206.19	6,142	8,465
205.68	5,688	5,450	206.20	6,151	8,526
205.69	5,696	5,507	206.21	6,161	8,588
205.70	5,705	5,564	206.22	6,170	8,650
205.71	5,714	5,621	206.23	6,179	8,711
205.72	5,722	5,678	206.24	6,188	8,773
205.73	5,731	5,735	206.25	6,198	8,835
205.74	5,740	5,793	206.26	6,207	8,897
205.75	5,749	5,850	206.27	6,216	8,959
205.76	5,757	5,908	206.28	6,226	9,021
205.77	5,766	5,965	206.29	6,235	9,084
205.78	5,775	6,023	206.30	6,244	9,146
205.79	5,783	6,081	206.31	6,253	9,209
205.80	5,792	6,139	206.32	6,263	9,271
205.81	5,801	6,197	206.33	6,272	9,334
205.82	5,809	6,255	206.34	6,281	9,397
205.83	5,818	6,313	206.35	6,290	9,459
205.84	5,827	6,371	206.36	6,300	9,522
205.85	5,836	6,429	206.37	6,309	9,585

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
206.38	6,318	9,649	206.90	6,800	13,059
206.39	6,328	9,712	206.91	6,810	13,127
206.40	6,337	9,775	206.92	6,819	13,196
206.41	6,346	9,839	206.93	6,828	13,264
206.42	6,355	9,902	206.94	6,837	13,332
206.43	6,365	9,966	206.95	6,847	13,401
206.44	6,374	10,029	206.96	6,856	13,469
206.45	6,383	10,093	206.97	6,865	13,538
206.46	6,392	10,157	206.98	6,874	13,606
206.47	6,402	10,221	206.99	6,884	13,675
206.48	6,411	10,285	207.00	6,893	13,744
206.49	6,420	10,349	207.01	6,903	13,813
206.50	6,430	10,413	207.02	6,913	13,882
206.51	6,439	10,478	207.03	6,922	13,951
206.52	6,448	10,542	207.04	6,932	14,021
206.53	6,457	10,607	207.05	6,942	14,090
206.54	6,467	10,671	207.06	6,952	14,159
206.55	6,476	10,736	207.07	6,962	14,229
206.56	6,485	10,801	207.08	6,972	14,299
206.57	6,494	10,866	207.09	6,981	14,368
206.58	6,504	10,931	207.10	6,991	14,438
206.59	6,513	10,996	207.11	7,001	14,508
206.60	6,522	11,061	207.12	7,011	14,578
206.61	6,531	11,126	207.13	7,021	14,648
206.62	6,541	11,192	207.14	7,031	14,719
206.63	6,550	11,257	207.15	7,040	14,789
206.64	6,559	11,323	207.16	7,050	14,860
206.65	6,569	11,388	207.17	7,060	14,930
206.66	6,578	11,454	207.18	7,070	15,001
206.67	6,587	11,520	207.19	7,080	15,072
206.68	6,596	11,586	207.20	7,090	15,142
206.69	6,606	11,652	207.21	7,099	15,213
206.70	6,615	11,718	207.22	7,109	15,284
206.71	6,624	11,784	207.23	7,119	15,355
206.72	6,633	11,850	207.24	7,129	15,427
206.73	6,643	11,917	207.25	7,139	15,498
206.74	6,652	11,983	207.26	7,149	15,570
206.75	6,661	12,050	207.27	7,158	15,641
206.76	6,671	12,116	207.28	7,168	15,713
206.77	6,680	12,183	207.29	7,178	15,784
206.78	6,689	12,250	207.30	7,188	15,856
206.79	6,698	12,317	207.31	7,198	15,928
206.80	6,708	12,384	207.32	7,208	16,000
206.81	6,717	12,451	207.33	7,217	16,072
206.82	6,726	12,518	207.34	7,227	16,145
206.83	6,735	12,586	207.35	7,237	16,217
206.84	6,745	12,653	207.36	7,247	16,289
206.85	6,754	12,721	207.37	7,257	16,362
206.86	6,763	12,788	207.38	7,267	16,434
206.87	6,772	12,856	207.39	7,276	16,507
206.88	6,782	12,924	207.40	7,286	16,580
206.89	6,791	12,991	207.41	7,296	16,653

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
207.42	7,306	16,726	207.94	7,817	20,658
207.43	7,316	16,799	207.95	7,827	20,736
207.44	7,326	16,872	207.96	7,837	20,814
207.45	7,335	16,945	207.97	7,847	20,893
207.46	7,345	17,019	207.98	7,856	20,971
207.47	7,355	17,092	207.99	7,866	21,050
207.48	7,365	17,166	208.00	7,876	21,129
207.49	7,375	17,240	208.01	7,886	21,207
207.50	7,385	17,313	208.02	7,897	21,286
207.51	7,394	17,387	208.03	7,907	21,365
207.52	7,404	17,461	208.04	7,918	21,444
207.53	7,414	17,535	208.05	7,928	21,524
207.54	7,424	17,610	208.06	7,938	21,603
207.55	7,434	17,684	208.07	7,949	21,682
207.56	7,443	17,758	208.08	7,959	21,762
207.57	7,453	17,833	208.09	7,970	21,842
207.58	7,463	17,907	208.10	7,980	21,921
207.59	7,473	17,982	208.11	7,990	22,001
207.60	7,483	18,057	208.12	8,001	22,081
207.61	7,493	18,132	208.13	8,011	22,161
207.62	7,502	18,207	208.14	8,022	22,241
207.63	7,512	18,282	208.15	8,032	22,322
207.64	7,522	18,357	208.16	8,042	22,402
207.65	7,532	18,432	208.17	8,053	22,483
207.66	7,542	18,508	208.18	8,063	22,563
207.67	7,552	18,583	208.19	8,074	22,644
207.68	7,561	18,659	208.20	8,084	22,725
207.69	7,571	18,734	208.21	8,094	22,805
207.70	7,581	18,810	208.22	8,105	22,886
207.71	7,591	18,886	208.23	8,115	22,968
207.72	7,601	18,962	208.24	8,126	23,049
207.73	7,611	19,038	208.25	8,136	23,130
207.74	7,620	19,114	208.26	8,146	23,212
207.75	7,630	19,190	208.27	8,157	23,293
207.76	7,640	19,267	208.28	8,167	23,375
207.77	7,650	19,343	208.29	8,178	23,456
207.78	7,660	19,420	208.30	8,188	23,538
207.79	7,670	19,496	208.31	8,198	23,620
207.80	7,679	19,573	208.32	8,209	23,702
207.81	7,689	19,650	208.33	8,219	23,784
207.82	7,699	19,727	208.34	8,230	23,867
207.83	7,709	19,804	208.35	8,240	23,949
207.84	7,719	19,881	208.36	8,250	24,031
207.85	7,729	19,958	208.37	8,261	24,114
207.86	7,738	20,036	208.38	8,271	24,197
207.87	7,748	20,113	208.39	8,282	24,279
207.88	7,758	20,191	208.40	8,292	24,362
207.89	7,768	20,268	208.41	8,302	24,445
207.90	7,778	20,346	208.42	8,313	24,528
207.91	7,788	20,424	208.43	8,323	24,611
207.92	7,797	20,502	208.44	8,334	24,695
207.93	7,807	20,580	208.45	8,344	24,778

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
208.46	8,354	24,862
208.47	8,365	24,945
208.48	8,375	25,029
208.49	8,386	25,113
208.50	8,396	25,197
208.51	8,406	25,281
208.52	8,417	25,365
208.53	8,427	25,449
208.54	8,438	25,533
208.55	8,448	25,618
208.56	8,458	25,702
208.57	8,469	25,787
208.58	8,479	25,872
208.59	8,490	25,956
208.60	8,500	26,041
208.61	8,510	26,126
208.62	8,521	26,212
208.63	8,531	26,297
208.64	8,542	26,382
208.65	8,552	26,468
208.66	8,562	26,553
208.67	8,573	26,639
208.68	8,583	26,725
208.69	8,594	26,811
208.70	8,604	26,897
208.71	8,614	26,983
208.72	8,625	27,069
208.73	8,635	27,155
208.74	8,646	27,242
208.75	8,656	27,328
208.76	8,666	27,415
208.77	8,677	27,501
208.78	8,687	27,588
208.79	8,698	27,675
208.80	8,708	27,762
208.81	8,718	27,849
208.82	8,729	27,937
208.83	8,739	28,024
208.84	8,750	28,111
208.85	8,760	28,199
208.86	8,770	28,287
208.87	8,781	28,374
208.88	8,791	28,462
208.89	8,802	28,550
208.90	8,812	28,638
208.91	8,822	28,726
208.92	8,833	28,815
208.93	8,843	28,903
208.94	8,854	28,992
208.95	8,864	29,080
208.96	8,874	29,169
208.97	8,885	29,258
208.98	8,895	29,346
208.99	8,906	29,435
209.00	**8,916**	**29,525**

Summary for Pond B-39: Basin #39

Inflow Area = 1.884 ac, 41.56% Impervious, Inflow Depth = 3.45" for Current 10 yr event
Inflow = 6.61 cfs @ 12.17 hrs, Volume= 0.542 af
Outflow = 3.82 cfs @ 12.32 hrs, Volume= 0.467 af, Atten= 42%, Lag= 8.6 min
Primary = 3.82 cfs @ 12.32 hrs, Volume= 0.467 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.39' @ 12.32 hrs Surf.Area= 4,128 sf Storage= 9,434 cf

Plug-Flow detention time= 177.2 min calculated for 0.467 af (86% of inflow)
Center-of-Mass det. time= 111.6 min (901.6 - 790.0)

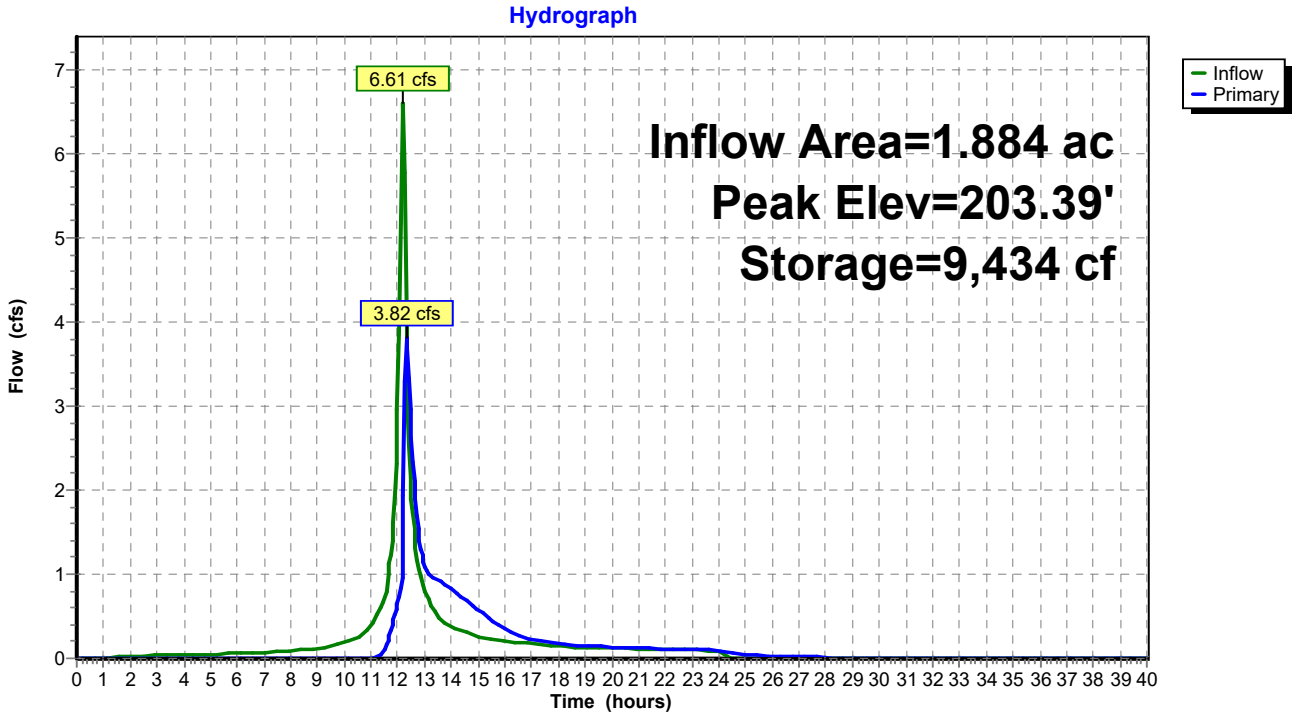
Volume	Invert	Avail.Storage	Storage Description
#1	200.30'	16,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.30	0	0	0
201.00	2,928	1,025	1,025
202.00	3,408	3,168	4,193
203.00	3,917	3,663	7,855
204.00	4,454	4,186	12,041
205.00	5,019	4,737	16,777

Device	Routing	Invert	Outlet Devices
#1	Primary	200.30'	**18.0" Round Culvert** L= 38.0' Ke= 0.500 Inlet / Outlet Invert= 200.30' / 200.11' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.71'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.04'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.75 cfs @ 12.32 hrs HW=203.39' (Free Discharge)
- **1=Culvert** (Passes 3.75 cfs of 12.76 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.13 cfs @ 5.75 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.62 cfs @ 1.93 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-39: Basin #39



Stage-Discharge for Pond B-39: Basin #39

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.30	0.00	200.82	0.00	201.34	0.00	201.86	0.07
200.31	0.00	200.83	0.00	201.35	0.00	201.87	0.07
200.32	0.00	200.84	0.00	201.36	0.00	201.88	0.08
200.33	0.00	200.85	0.00	201.37	0.00	201.89	0.09
200.34	0.00	200.86	0.00	201.38	0.00	201.90	0.10
200.35	0.00	200.87	0.00	201.39	0.00	201.91	0.11
200.36	0.00	200.88	0.00	201.40	0.00	201.92	0.12
200.37	0.00	200.89	0.00	201.41	0.00	201.93	0.13
200.38	0.00	200.90	0.00	201.42	0.00	201.94	0.14
200.39	0.00	200.91	0.00	201.43	0.00	201.95	0.16
200.40	0.00	200.92	0.00	201.44	0.00	201.96	0.17
200.41	0.00	200.93	0.00	201.45	0.00	201.97	0.18
200.42	0.00	200.94	0.00	201.46	0.00	201.98	0.19
200.43	0.00	200.95	0.00	201.47	0.00	201.99	0.20
200.44	0.00	200.96	0.00	201.48	0.00	202.00	0.22
200.45	0.00	200.97	0.00	201.49	0.00	202.01	0.23
200.46	0.00	200.98	0.00	201.50	0.00	202.02	0.24
200.47	0.00	200.99	0.00	201.51	0.00	202.03	0.26
200.48	0.00	201.00	0.00	201.52	0.00	202.04	0.27
200.49	0.00	201.01	0.00	201.53	0.00	202.05	0.28
200.50	0.00	201.02	0.00	201.54	0.00	202.06	0.30
200.51	0.00	201.03	0.00	201.55	0.00	202.07	0.31
200.52	0.00	201.04	0.00	201.56	0.00	202.08	0.32
200.53	0.00	201.05	0.00	201.57	0.00	202.09	0.34
200.54	0.00	201.06	0.00	201.58	0.00	202.10	0.35
200.55	0.00	201.07	0.00	201.59	0.00	202.11	0.36
200.56	0.00	201.08	0.00	201.60	0.00	202.12	0.38
200.57	0.00	201.09	0.00	201.61	0.00	202.13	0.39
200.58	0.00	201.10	0.00	201.62	0.00	202.14	0.40
200.59	0.00	201.11	0.00	201.63	0.00	202.15	0.41
200.60	0.00	201.12	0.00	201.64	0.00	202.16	0.43
200.61	0.00	201.13	0.00	201.65	0.00	202.17	0.44
200.62	0.00	201.14	0.00	201.66	0.00	202.18	0.45
200.63	0.00	201.15	0.00	201.67	0.00	202.19	0.46
200.64	0.00	201.16	0.00	201.68	0.00	202.20	0.47
200.65	0.00	201.17	0.00	201.69	0.00	202.21	0.47
200.66	0.00	201.18	0.00	201.70	0.00	202.22	0.48
200.67	0.00	201.19	0.00	201.71	0.00	202.23	0.49
200.68	0.00	201.20	0.00	201.72	0.00	202.24	0.50
200.69	0.00	201.21	0.00	201.73	0.00	202.25	0.51
200.70	0.00	201.22	0.00	201.74	0.00	202.26	0.52
200.71	0.00	201.23	0.00	201.75	0.01	202.27	0.53
200.72	0.00	201.24	0.00	201.76	0.01	202.28	0.53
200.73	0.00	201.25	0.00	201.77	0.01	202.29	0.54
200.74	0.00	201.26	0.00	201.78	0.02	202.30	0.55
200.75	0.00	201.27	0.00	201.79	0.02	202.31	0.56
200.76	0.00	201.28	0.00	201.80	0.02	202.32	0.57
200.77	0.00	201.29	0.00	201.81	0.03	202.33	0.58
200.78	0.00	201.30	0.00	201.82	0.04	202.34	0.58
200.79	0.00	201.31	0.00	201.83	0.04	202.35	0.59
200.80	0.00	201.32	0.00	201.84	0.05	202.36	0.60
200.81	0.00	201.33	0.00	201.85	0.06	202.37	0.61

Stage-Discharge for Pond B-39: Basin #39 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
202.38	0.61	202.90	0.92	203.42	4.15	203.94	12.00
202.39	0.62	202.91	0.92	203.43	4.27	203.95	12.17
202.40	0.63	202.92	0.93	203.44	4.39	203.96	12.35
202.41	0.63	202.93	0.93	203.45	4.52	203.97	12.53
202.42	0.64	202.94	0.94	203.46	4.64	203.98	12.70
202.43	0.65	202.95	0.94	203.47	4.77	203.99	12.88
202.44	0.66	202.96	0.95	203.48	4.90	204.00	13.06
202.45	0.66	202.97	0.95	203.49	5.03	204.01	13.24
202.46	0.67	202.98	0.95	203.50	5.16	204.02	13.42
202.47	0.68	202.99	0.96	203.51	5.29	204.03	13.61
202.48	0.68	203.00	0.96	203.52	5.43	204.04	13.79
202.49	0.69	203.01	0.97	203.53	5.56	204.05	13.97
202.50	0.69	203.02	0.97	203.54	5.70	204.06	14.16
202.51	0.70	203.03	0.98	203.55	5.83	204.07	14.34
202.52	0.71	203.04	0.98	203.56	5.97	204.08	14.53
202.53	0.71	203.05	1.00	203.57	6.11	204.09	14.71
202.54	0.72	203.06	1.03	203.58	6.25	204.10	14.86
202.55	0.73	203.07	1.06	203.59	6.40	204.11	14.88
202.56	0.73	203.08	1.10	203.60	6.54	204.12	14.91
202.57	0.74	203.09	1.15	203.61	6.68	204.13	14.93
202.58	0.74	203.10	1.20	203.62	6.83	204.14	14.96
202.59	0.75	203.11	1.26	203.63	6.97	204.15	14.98
202.60	0.76	203.12	1.31	203.64	7.12	204.16	15.01
202.61	0.76	203.13	1.37	203.65	7.27	204.17	15.03
202.62	0.77	203.14	1.44	203.66	7.42	204.18	15.05
202.63	0.77	203.15	1.51	203.67	7.57	204.19	15.08
202.64	0.78	203.16	1.58	203.68	7.72	204.20	15.10
202.65	0.79	203.17	1.65	203.69	7.88	204.21	15.13
202.66	0.79	203.18	1.72	203.70	8.03	204.22	15.15
202.67	0.80	203.19	1.80	203.71	8.18	204.23	15.17
202.68	0.80	203.20	1.88	203.72	8.34	204.24	15.20
202.69	0.81	203.21	1.97	203.73	8.50	204.25	15.22
202.70	0.81	203.22	2.05	203.74	8.65	204.26	15.24
202.71	0.82	203.23	2.14	203.75	8.81	204.27	15.27
202.72	0.82	203.24	2.23	203.76	8.97	204.28	15.29
202.73	0.83	203.25	2.32	203.77	9.13	204.29	15.32
202.74	0.83	203.26	2.41	203.78	9.29	204.30	15.34
202.75	0.84	203.27	2.51	203.79	9.46	204.31	15.36
202.76	0.85	203.28	2.61	203.80	9.62	204.32	15.39
202.77	0.85	203.29	2.70	203.81	9.78	204.33	15.41
202.78	0.86	203.30	2.81	203.82	9.95	204.34	15.43
202.79	0.86	203.31	2.91	203.83	10.11	204.35	15.46
202.80	0.87	203.32	3.01	203.84	10.28	204.36	15.48
202.81	0.87	203.33	3.12	203.85	10.45	204.37	15.50
202.82	0.88	203.34	3.23	203.86	10.62	204.38	15.53
202.83	0.88	203.35	3.34	203.87	10.79	204.39	15.55
202.84	0.89	203.36	3.45	203.88	10.96	204.40	15.57
202.85	0.89	203.37	3.56	203.89	11.13	204.41	15.60
202.86	0.90	203.38	3.68	203.90	11.30	204.42	15.62
202.87	0.90	203.39	3.79	203.91	11.47	204.43	15.64
202.88	0.91	203.40	3.91	203.92	11.65	204.44	15.67
202.89	0.91	203.41	4.03	203.93	11.82	204.45	15.69

Stage-Discharge for Pond B-39: Basin #39 (continued)

Elevation (feet)	Primary (cfs)
204.46	15.71
204.47	15.74
204.48	15.76
204.49	15.78
204.50	15.80
204.51	15.94
204.52	16.18
204.53	16.48
204.54	16.83
204.55	17.23
204.56	17.67
204.57	18.14
204.58	18.64
204.59	19.18
204.60	19.75
204.61	20.35
204.62	20.97
204.63	21.62
204.64	22.29
204.65	22.99
204.66	23.71
204.67	24.46
204.68	25.22
204.69	26.01
204.70	26.82
204.71	27.69
204.72	28.58
204.73	29.50
204.74	30.45
204.75	31.42
204.76	32.42
204.77	33.44
204.78	34.48
204.79	35.55
204.80	36.65
204.81	37.76
204.82	38.91
204.83	40.08
204.84	41.27
204.85	42.48
204.86	43.72
204.87	44.99
204.88	46.28
204.89	47.59
204.90	48.93
204.91	50.31
204.92	51.73
204.93	53.17
204.94	54.63
204.95	56.12
204.96	57.64
204.97	59.19
204.98	60.76
204.99	62.35
205.00	**63.98**

Stage-Area-Storage for Pond B-39: Basin #39

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.30	0	0
200.31	42	0
200.32	84	1
200.33	125	2
200.34	167	3
200.35	209	5
200.36	251	8
200.37	293	10
200.38	335	13
200.39	376	17
200.40	418	21
200.41	460	25
200.42	502	30
200.43	544	35
200.44	586	41
200.45	627	47
200.46	669	54
200.47	711	60
200.48	753	68
200.49	795	76
200.50	837	84
200.51	878	92
200.52	920	101
200.53	962	111
200.54	1,004	120
200.55	1,046	131
200.56	1,088	141
200.57	1,129	152
200.58	1,171	164
200.59	1,213	176
200.60	1,255	188
200.61	1,297	201
200.62	1,339	214
200.63	1,380	228
200.64	1,422	242
200.65	1,464	256
200.66	1,506	271
200.67	1,548	286
200.68	1,589	302
200.69	1,631	318
200.70	1,673	335
200.71	1,715	352
200.72	1,757	369
200.73	1,799	387
200.74	1,840	405
200.75	1,882	424
200.76	1,924	443
200.77	1,966	462
200.78	2,008	482
200.79	2,050	502
200.80	2,091	523
200.81	2,133	544
200.82	2,175	566
200.83	2,217	587
200.84	2,259	610
200.85	2,301	633
200.86	2,342	656
200.87	2,384	680
200.88	2,426	704
200.89	2,468	728
200.90	2,510	753
200.91	2,552	778
200.92	2,593	804
200.93	2,635	830
200.94	2,677	857
200.95	2,719	884
200.96	2,761	911
200.97	2,803	939
200.98	2,844	967
200.99	2,886	996
201.00	2,928	1,025
201.01	2,933	1,054
201.02	2,938	1,083
201.03	2,942	1,113
201.04	2,947	1,142
201.05	2,952	1,172
201.06	2,957	1,201
201.07	2,962	1,231
201.08	2,966	1,261
201.09	2,971	1,290
201.10	2,976	1,320
201.11	2,981	1,350
201.12	2,986	1,380
201.13	2,990	1,409
201.14	2,995	1,439
201.15	3,000	1,469
201.16	3,005	1,499
201.17	3,010	1,529
201.18	3,014	1,560
201.19	3,019	1,590
201.20	3,024	1,620
201.21	3,029	1,650
201.22	3,034	1,681
201.23	3,038	1,711
201.24	3,043	1,741
201.25	3,048	1,772
201.26	3,053	1,802
201.27	3,058	1,833
201.28	3,062	1,863
201.29	3,067	1,894
201.30	3,072	1,925
201.31	3,077	1,956
201.32	3,082	1,986
201.33	3,086	2,017

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.34	3,091	2,048
201.35	3,096	2,079
201.36	3,101	2,110
201.37	3,106	2,141
201.38	3,110	2,172
201.39	3,115	2,203
201.40	3,120	2,234
201.41	3,125	2,266
201.42	3,130	2,297
201.43	3,134	2,328
201.44	3,139	2,360
201.45	3,144	2,391
201.46	3,149	2,422
201.47	3,154	2,454
201.48	3,158	2,486
201.49	3,163	2,517
201.50	3,168	2,549
201.51	3,173	2,581
201.52	3,178	2,612
201.53	3,182	2,644
201.54	3,187	2,676
201.55	3,192	2,708
201.56	3,197	2,740
201.57	3,202	2,772
201.58	3,206	2,804
201.59	3,211	2,836
201.60	3,216	2,868
201.61	3,221	2,900
201.62	3,226	2,932
201.63	3,230	2,965
201.64	3,235	2,997
201.65	3,240	3,029
201.66	3,245	3,062
201.67	3,250	3,094
201.68	3,254	3,127
201.69	3,259	3,159
201.70	3,264	3,192
201.71	3,269	3,225
201.72	3,274	3,257
201.73	3,278	3,290
201.74	3,283	3,323
201.75	3,288	3,356
201.76	3,293	3,389
201.77	3,298	3,422
201.78	3,302	3,455
201.79	3,307	3,488
201.80	3,312	3,521
201.81	3,317	3,554
201.82	3,322	3,587
201.83	3,326	3,620
201.84	3,331	3,654
201.85	3,336	3,687
201.86	3,341	3,720
201.87	3,346	3,754
201.88	3,350	3,787
201.89	3,355	3,821
201.90	3,360	3,854
201.91	3,365	3,888
201.92	3,370	3,922
201.93	3,374	3,955
201.94	3,379	3,989
201.95	3,384	4,023
201.96	3,389	4,057
201.97	3,394	4,091
201.98	3,398	4,125
201.99	3,403	4,159
202.00	3,408	4,193
202.01	3,413	4,227
202.02	3,418	4,261
202.03	3,423	4,295
202.04	3,428	4,330
202.05	3,433	4,364
202.06	3,439	4,398
202.07	3,444	4,433
202.08	3,449	4,467
202.09	3,454	4,502
202.10	3,459	4,536
202.11	3,464	4,571
202.12	3,469	4,605
202.13	3,474	4,640
202.14	3,479	4,675
202.15	3,484	4,710
202.16	3,489	4,745
202.17	3,495	4,780
202.18	3,500	4,814
202.19	3,505	4,850
202.20	3,510	4,885
202.21	3,515	4,920
202.22	3,520	4,955
202.23	3,525	4,990
202.24	3,530	5,025
202.25	3,535	5,061
202.26	3,540	5,096
202.27	3,545	5,132
202.28	3,551	5,167
202.29	3,556	5,203
202.30	3,561	5,238
202.31	3,566	5,274
202.32	3,571	5,309
202.33	3,576	5,345
202.34	3,581	5,381
202.35	3,586	5,417
202.36	3,591	5,453
202.37	3,596	5,489

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.38	3,601	5,525	202.90	3,866	7,466
202.39	3,607	5,561	202.91	3,871	7,505
202.40	3,612	5,597	202.92	3,876	7,544
202.41	3,617	5,633	202.93	3,881	7,582
202.42	3,622	5,669	202.94	3,886	7,621
202.43	3,627	5,705	202.95	3,892	7,660
202.44	3,632	5,742	202.96	3,897	7,699
202.45	3,637	5,778	202.97	3,902	7,738
202.46	3,642	5,814	202.98	3,907	7,777
202.47	3,647	5,851	202.99	3,912	7,816
202.48	3,652	5,887	203.00	3,917	7,855
202.49	3,657	5,924	203.01	3,922	7,894
202.50	3,663	5,960	203.02	3,928	7,934
202.51	3,668	5,997	203.03	3,933	7,973
202.52	3,673	6,034	203.04	3,938	8,012
202.53	3,678	6,071	203.05	3,944	8,052
202.54	3,683	6,107	203.06	3,949	8,091
202.55	3,688	6,144	203.07	3,955	8,131
202.56	3,693	6,181	203.08	3,960	8,170
202.57	3,698	6,218	203.09	3,965	8,210
202.58	3,703	6,255	203.10	3,971	8,250
202.59	3,708	6,292	203.11	3,976	8,289
202.60	3,713	6,329	203.12	3,981	8,329
202.61	3,718	6,366	203.13	3,987	8,369
202.62	3,724	6,404	203.14	3,992	8,409
202.63	3,729	6,441	203.15	3,998	8,449
202.64	3,734	6,478	203.16	4,003	8,489
202.65	3,739	6,516	203.17	4,008	8,529
202.66	3,744	6,553	203.18	4,014	8,569
202.67	3,749	6,590	203.19	4,019	8,609
202.68	3,754	6,628	203.20	4,024	8,649
202.69	3,759	6,665	203.21	4,030	8,690
202.70	3,764	6,703	203.22	4,035	8,730
202.71	3,769	6,741	203.23	4,041	8,770
202.72	3,774	6,778	203.24	4,046	8,811
202.73	3,780	6,816	203.25	4,051	8,851
202.74	3,785	6,854	203.26	4,057	8,892
202.75	3,790	6,892	203.27	4,062	8,932
202.76	3,795	6,930	203.28	4,067	8,973
202.77	3,800	6,968	203.29	4,073	9,014
202.78	3,805	7,006	203.30	4,078	9,055
202.79	3,810	7,044	203.31	4,083	9,095
202.80	3,815	7,082	203.32	4,089	9,136
202.81	3,820	7,120	203.33	4,094	9,177
202.82	3,825	7,158	203.34	4,100	9,218
202.83	3,830	7,197	203.35	4,105	9,259
202.84	3,836	7,235	203.36	4,110	9,300
202.85	3,841	7,273	203.37	4,116	9,341
202.86	3,846	7,312	203.38	4,121	9,383
202.87	3,851	7,350	203.39	4,126	9,424
202.88	3,856	7,389	203.40	4,132	9,465
202.89	3,861	7,428	203.41	4,137	9,506

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.42	4,143	9,548	203.94	4,422	11,775
203.43	4,148	9,589	203.95	4,427	11,819
203.44	4,153	9,631	203.96	4,433	11,863
203.45	4,159	9,672	203.97	4,438	11,907
203.46	4,164	9,714	203.98	4,443	11,952
203.47	4,169	9,756	203.99	4,449	11,996
203.48	4,175	9,797	204.00	4,454	12,041
203.49	4,180	9,839	204.01	4,460	12,085
203.50	4,186	9,881	204.02	4,465	12,130
203.51	4,191	9,923	204.03	4,471	12,175
203.52	4,196	9,965	204.04	4,477	12,219
203.53	4,202	10,007	204.05	4,482	12,264
203.54	4,207	10,049	204.06	4,488	12,309
203.55	4,212	10,091	204.07	4,494	12,354
203.56	4,218	10,133	204.08	4,499	12,399
203.57	4,223	10,175	204.09	4,505	12,444
203.58	4,228	10,217	204.10	4,511	12,489
203.59	4,234	10,260	204.11	4,516	12,534
203.60	4,239	10,302	204.12	4,522	12,579
203.61	4,245	10,345	204.13	4,527	12,625
203.62	4,250	10,387	204.14	4,533	12,670
203.63	4,255	10,430	204.15	4,539	12,715
203.64	4,261	10,472	204.16	4,544	12,761
203.65	4,266	10,515	204.17	4,550	12,806
203.66	4,271	10,557	204.18	4,556	12,852
203.67	4,277	10,600	204.19	4,561	12,897
203.68	4,282	10,643	204.20	4,567	12,943
203.69	4,288	10,686	204.21	4,573	12,989
203.70	4,293	10,729	204.22	4,578	13,034
203.71	4,298	10,772	204.23	4,584	13,080
203.72	4,304	10,815	204.24	4,590	13,126
203.73	4,309	10,858	204.25	4,595	13,172
203.74	4,314	10,901	204.26	4,601	13,218
203.75	4,320	10,944	204.27	4,607	13,264
203.76	4,325	10,987	204.28	4,612	13,310
203.77	4,330	11,031	204.29	4,618	13,356
203.78	4,336	11,074	204.30	4,624	13,402
203.79	4,341	11,117	204.31	4,629	13,449
203.80	4,347	11,161	204.32	4,635	13,495
203.81	4,352	11,204	204.33	4,640	13,541
203.82	4,357	11,248	204.34	4,646	13,588
203.83	4,363	11,291	204.35	4,652	13,634
203.84	4,368	11,335	204.36	4,657	13,681
203.85	4,373	11,379	204.37	4,663	13,727
203.86	4,379	11,423	204.38	4,669	13,774
203.87	4,384	11,466	204.39	4,674	13,821
203.88	4,390	11,510	204.40	4,680	13,868
203.89	4,395	11,554	204.41	4,686	13,914
203.90	4,400	11,598	204.42	4,691	13,961
203.91	4,406	11,642	204.43	4,697	14,008
203.92	4,411	11,686	204.44	4,703	14,055
203.93	4,416	11,730	204.45	4,708	14,102

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.46	4,714	14,149
204.47	4,720	14,197
204.48	4,725	14,244
204.49	4,731	14,291
204.50	4,737	14,338
204.51	4,742	14,386
204.52	4,748	14,433
204.53	4,753	14,481
204.54	4,759	14,528
204.55	4,765	14,576
204.56	4,770	14,624
204.57	4,776	14,671
204.58	4,782	14,719
204.59	4,787	14,767
204.60	4,793	14,815
204.61	4,799	14,863
204.62	4,804	14,911
204.63	4,810	14,959
204.64	4,816	15,007
204.65	4,821	15,055
204.66	4,827	15,103
204.67	4,833	15,152
204.68	4,838	15,200
204.69	4,844	15,249
204.70	4,850	15,297
204.71	4,855	15,346
204.72	4,861	15,394
204.73	4,866	15,443
204.74	4,872	15,491
204.75	4,878	15,540
204.76	4,883	15,589
204.77	4,889	15,638
204.78	4,895	15,687
204.79	4,900	15,736
204.80	4,906	15,785
204.81	4,912	15,834
204.82	4,917	15,883
204.83	4,923	15,932
204.84	4,929	15,981
204.85	4,934	16,031
204.86	4,940	16,080
204.87	4,946	16,130
204.88	4,951	16,179
204.89	4,957	16,229
204.90	4,963	16,278
204.91	4,968	16,328
204.92	4,974	16,378
204.93	4,979	16,427
204.94	4,985	16,477
204.95	4,991	16,527
204.96	4,996	16,577
204.97	5,002	16,627
204.98	5,008	16,677
204.99	5,013	16,727
205.00	**5,019**	**16,777**

Summary for Pond B-40: Basin #40

Inflow Area = 1.888 ac, 47.19% Impervious, Inflow Depth = 3.59" for Current 10 yr event
Inflow = 6.83 cfs @ 12.17 hrs, Volume= 0.564 af
Outflow = 4.11 cfs @ 12.30 hrs, Volume= 0.482 af, Atten= 40%, Lag= 7.9 min
Primary = 4.11 cfs @ 12.30 hrs, Volume= 0.482 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.64' @ 12.30 hrs Surf.Area= 4,128 sf Storage= 7,487 cf

Plug-Flow detention time= 138.7 min calculated for 0.482 af (85% of inflow)
Center-of-Mass det. time= 70.0 min (855.1 - 785.1)

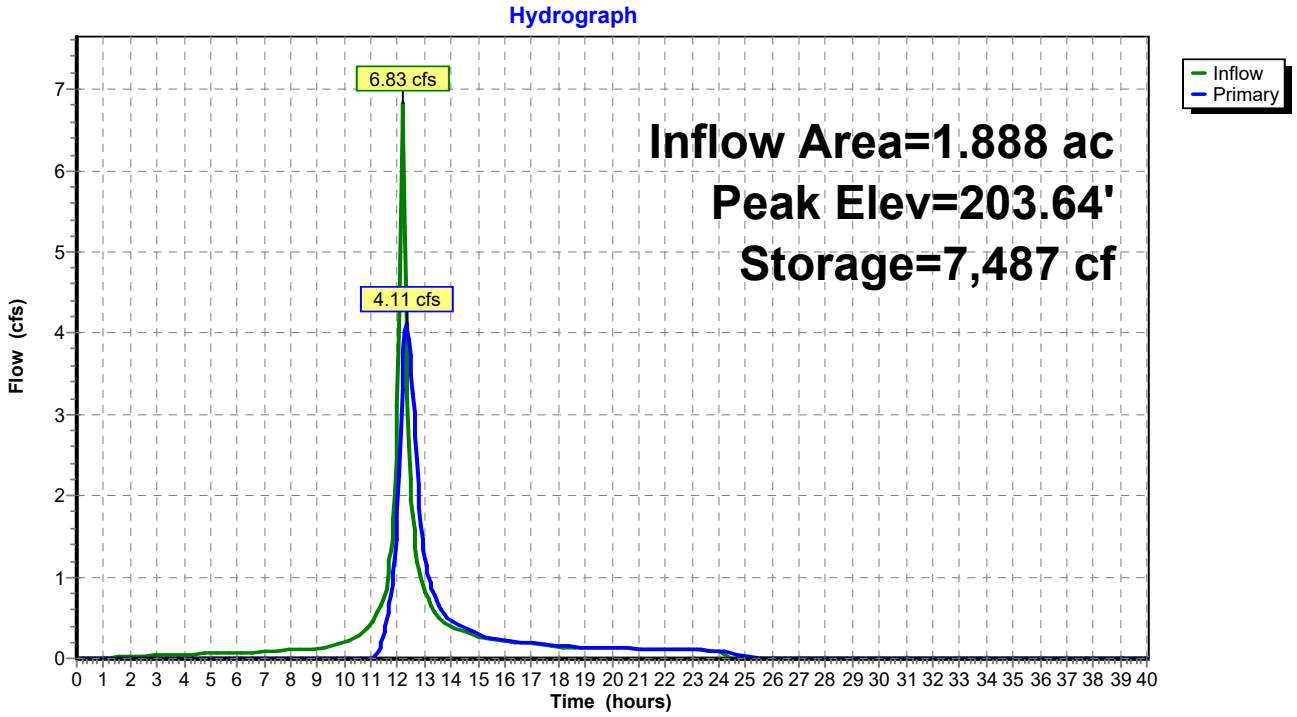
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	18,339 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,521	1,232	1,232
203.00	3,886	3,704	4,936
204.00	4,266	4,076	9,012
205.00	4,660	4,463	13,475
206.00	5,069	4,865	18,339

Device	Routing	Invert	Outlet Devices
#1	Primary	201.30'	**18.0" Round Culvert** L= 38.0' Ke= 0.500 Inlet / Outlet Invert= 201.30' / 201.11' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.65'	**24.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	204.67'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	205.49'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.11 cfs @ 12.30 hrs HW=203.64' (Free Discharge)
- **1=Culvert** (Passes 4.11 cfs of 9.69 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 4.11 cfs @ 4.11 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-40: Basin #40



Stage-Discharge for Pond B-40: Basin #40

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.62
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.66
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.71
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.75
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.80
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.85
201.36	0.00	201.88	0.00	202.40	0.00	202.92	0.90
201.37	0.00	201.89	0.00	202.41	0.00	202.93	0.95
201.38	0.00	201.90	0.00	202.42	0.00	202.94	1.00
201.39	0.00	201.91	0.00	202.43	0.00	202.95	1.05
201.40	0.00	201.92	0.00	202.44	0.00	202.96	1.11
201.41	0.00	201.93	0.00	202.45	0.00	202.97	1.16
201.42	0.00	201.94	0.00	202.46	0.00	202.98	1.22
201.43	0.00	201.95	0.00	202.47	0.00	202.99	1.27
201.44	0.00	201.96	0.00	202.48	0.00	203.00	1.33
201.45	0.00	201.97	0.00	202.49	0.00	203.01	1.39
201.46	0.00	201.98	0.00	202.50	0.00	203.02	1.44
201.47	0.00	201.99	0.00	202.51	0.00	203.03	1.50
201.48	0.00	202.00	0.00	202.52	0.00	203.04	1.56
201.49	0.00	202.01	0.00	202.53	0.00	203.05	1.62
201.50	0.00	202.02	0.00	202.54	0.00	203.06	1.69
201.51	0.00	202.03	0.00	202.55	0.00	203.07	1.75
201.52	0.00	202.04	0.00	202.56	0.00	203.08	1.81
201.53	0.00	202.05	0.00	202.57	0.00	203.09	1.87
201.54	0.00	202.06	0.00	202.58	0.00	203.10	1.94
201.55	0.00	202.07	0.00	202.59	0.00	203.11	2.00
201.56	0.00	202.08	0.00	202.60	0.00	203.12	2.07
201.57	0.00	202.09	0.00	202.61	0.00	203.13	2.13
201.58	0.00	202.10	0.00	202.62	0.00	203.14	2.20
201.59	0.00	202.11	0.00	202.63	0.00	203.15	2.27
201.60	0.00	202.12	0.00	202.64	0.00	203.16	2.33
201.61	0.00	202.13	0.00	202.65	0.00	203.17	2.39
201.62	0.00	202.14	0.00	202.66	0.01	203.18	2.44
201.63	0.00	202.15	0.00	202.67	0.02	203.19	2.50
201.64	0.00	202.16	0.00	202.68	0.03	203.20	2.55
201.65	0.00	202.17	0.00	202.69	0.05	203.21	2.60
201.66	0.00	202.18	0.00	202.70	0.07	203.22	2.64
201.67	0.00	202.19	0.00	202.71	0.09	203.23	2.69
201.68	0.00	202.20	0.00	202.72	0.12	203.24	2.74
201.69	0.00	202.21	0.00	202.73	0.15	203.25	2.78
201.70	0.00	202.22	0.00	202.74	0.17	203.26	2.82
201.71	0.00	202.23	0.00	202.75	0.20	203.27	2.87
201.72	0.00	202.24	0.00	202.76	0.23	203.28	2.91
201.73	0.00	202.25	0.00	202.77	0.27	203.29	2.95
201.74	0.00	202.26	0.00	202.78	0.30	203.30	2.99
201.75	0.00	202.27	0.00	202.79	0.34	203.31	3.03
201.76	0.00	202.28	0.00	202.80	0.37	203.32	3.07
201.77	0.00	202.29	0.00	202.81	0.41	203.33	3.11
201.78	0.00	202.30	0.00	202.82	0.45	203.34	3.15
201.79	0.00	202.31	0.00	202.83	0.49	203.35	3.19
201.80	0.00	202.32	0.00	202.84	0.53	203.36	3.22
201.81	0.00	202.33	0.00	202.85	0.57	203.37	3.26

Stage-Discharge for Pond B-40: Basin #40 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	3.30	203.90	4.80	204.42	5.93	204.94	8.68
203.39	3.33	203.91	4.83	204.43	5.95	204.95	8.80
203.40	3.37	203.92	4.85	204.44	5.97	204.96	8.92
203.41	3.40	203.93	4.87	204.45	5.99	204.97	9.04
203.42	3.44	203.94	4.90	204.46	6.01	204.98	9.16
203.43	3.47	203.95	4.92	204.47	6.03	204.99	9.29
203.44	3.51	203.96	4.95	204.48	6.05	205.00	9.41
203.45	3.54	203.97	4.97	204.49	6.07	205.01	9.54
203.46	3.57	203.98	4.99	204.50	6.08	205.02	9.67
203.47	3.60	203.99	5.02	204.51	6.10	205.03	9.80
203.48	3.64	204.00	5.04	204.52	6.12	205.04	9.93
203.49	3.67	204.01	5.06	204.53	6.14	205.05	10.06
203.50	3.70	204.02	5.09	204.54	6.16	205.06	10.20
203.51	3.73	204.03	5.11	204.55	6.18	205.07	10.33
203.52	3.76	204.04	5.13	204.56	6.20	205.08	10.47
203.53	3.80	204.05	5.15	204.57	6.22	205.09	10.61
203.54	3.83	204.06	5.18	204.58	6.24	205.10	10.75
203.55	3.86	204.07	5.20	204.59	6.25	205.11	10.89
203.56	3.89	204.08	5.22	204.60	6.27	205.12	11.03
203.57	3.92	204.09	5.24	204.61	6.29	205.13	11.17
203.58	3.95	204.10	5.26	204.62	6.31	205.14	11.32
203.59	3.98	204.11	5.29	204.63	6.33	205.15	11.46
203.60	4.01	204.12	5.31	204.64	6.35	205.16	11.61
203.61	4.04	204.13	5.33	204.65	6.36	205.17	11.76
203.62	4.06	204.14	5.35	204.66	6.38	205.18	11.91
203.63	4.09	204.15	5.37	204.67	6.40	205.19	12.06
203.64	4.12	204.16	5.40	204.68	6.43	205.20	12.21
203.65	4.15	204.17	5.42	204.69	6.47	205.21	12.36
203.66	4.18	204.18	5.44	204.70	6.52	205.22	12.52
203.67	4.21	204.19	5.46	204.71	6.58	205.23	12.67
203.68	4.23	204.20	5.48	204.72	6.64	205.24	12.83
203.69	4.26	204.21	5.50	204.73	6.70	205.25	12.99
203.70	4.29	204.22	5.52	204.74	6.77	205.26	13.15
203.71	4.32	204.23	5.54	204.75	6.84	205.27	13.31
203.72	4.34	204.24	5.57	204.76	6.91	205.28	13.47
203.73	4.37	204.25	5.59	204.77	6.99	205.29	13.63
203.74	4.40	204.26	5.61	204.78	7.07	205.30	13.79
203.75	4.42	204.27	5.63	204.79	7.16	205.31	13.95
203.76	4.45	204.28	5.65	204.80	7.24	205.32	14.12
203.77	4.48	204.29	5.67	204.81	7.33	205.33	14.28
203.78	4.50	204.30	5.69	204.82	7.42	205.34	14.45
203.79	4.53	204.31	5.71	204.83	7.51	205.35	14.62
203.80	4.55	204.32	5.73	204.84	7.61	205.36	14.79
203.81	4.58	204.33	5.75	204.85	7.71	205.37	14.96
203.82	4.60	204.34	5.77	204.86	7.81	205.38	15.13
203.83	4.63	204.35	5.79	204.87	7.91	205.39	15.30
203.84	4.65	204.36	5.81	204.88	8.02	205.40	15.47
203.85	4.68	204.37	5.83	204.89	8.12	205.41	15.60
203.86	4.70	204.38	5.85	204.90	8.23	205.42	15.62
203.87	4.73	204.39	5.87	204.91	8.34	205.43	15.64
203.88	4.75	204.40	5.89	204.92	8.45	205.44	15.67
203.89	4.78	204.41	5.91	204.93	8.57	205.45	15.69

Stage-Discharge for Pond B-40: Basin #40 (continued)

Elevation (feet)	Primary (cfs)
205.46	15.71
205.47	15.74
205.48	15.76
205.49	15.78
205.50	15.92
205.51	16.16
205.52	16.46
205.53	16.81
205.54	17.21
205.55	17.64
205.56	18.12
205.57	18.62
205.58	19.16
205.59	19.73
205.60	20.32
205.61	20.95
205.62	21.60
205.63	22.27
205.64	22.97
205.65	23.69
205.66	24.43
205.67	25.20
205.68	25.99
205.69	26.80
205.70	27.67
205.71	28.56
205.72	29.48
205.73	30.43
205.74	31.40
205.75	32.39
205.76	33.41
205.77	34.46
205.78	35.53
205.79	36.62
205.80	37.74
205.81	38.89
205.82	40.05
205.83	41.25
205.84	42.46
205.85	43.70
205.86	44.97
205.87	46.25
205.88	47.57
205.89	48.90
205.90	50.29
205.91	51.70
205.92	53.14
205.93	54.61
205.94	56.10
205.95	57.62
205.96	59.16
205.97	60.73
205.98	62.33
205.99	63.95
206.00	**65.60**

Stage-Area-Storage for Pond B-40: Basin #40

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0
201.31	50	0
201.32	101	1
201.33	151	2
201.34	201	4
201.35	252	6
201.36	302	9
201.37	352	12
201.38	402	16
201.39	453	20
201.40	503	25
201.41	553	30
201.42	604	36
201.43	654	43
201.44	704	49
201.45	755	57
201.46	805	64
201.47	855	73
201.48	905	81
201.49	956	91
201.50	1,006	101
201.51	1,056	111
201.52	1,107	122
201.53	1,157	133
201.54	1,207	145
201.55	1,258	157
201.56	1,308	170
201.57	1,358	183
201.58	1,408	197
201.59	1,459	212
201.60	1,509	226
201.61	1,559	242
201.62	1,610	258
201.63	1,660	274
201.64	1,710	291
201.65	1,761	308
201.66	1,811	326
201.67	1,861	344
201.68	1,911	363
201.69	1,962	383
201.70	2,012	402
201.71	2,062	423
201.72	2,113	444
201.73	2,163	465
201.74	2,213	487
201.75	2,263	509
201.76	2,314	532
201.77	2,364	556
201.78	2,414	579
201.79	2,465	604
201.80	2,515	629
201.81	2,565	654
201.82	2,616	680
201.83	2,666	706
201.84	2,716	733
201.85	2,767	761
201.86	2,817	789
201.87	2,867	817
201.88	2,917	846
201.89	2,968	875
201.90	3,018	905
201.91	3,068	936
201.92	3,119	967
201.93	3,169	998
201.94	3,219	1,030
201.95	3,270	1,063
201.96	3,320	1,096
201.97	3,370	1,129
201.98	3,420	1,163
201.99	3,471	1,197
202.00	3,521	1,232
202.01	3,525	1,268
202.02	3,528	1,303
202.03	3,532	1,338
202.04	3,536	1,373
202.05	3,539	1,409
202.06	3,543	1,444
202.07	3,547	1,480
202.08	3,550	1,515
202.09	3,554	1,551
202.10	3,558	1,586
202.11	3,561	1,622
202.12	3,565	1,657
202.13	3,568	1,693
202.14	3,572	1,729
202.15	3,576	1,765
202.16	3,579	1,800
202.17	3,583	1,836
202.18	3,587	1,872
202.19	3,590	1,908
202.20	3,594	1,944
202.21	3,598	1,980
202.22	3,601	2,016
202.23	3,605	2,052
202.24	3,609	2,088
202.25	3,612	2,124
202.26	3,616	2,160
202.27	3,620	2,196
202.28	3,623	2,233
202.29	3,627	2,269
202.30	3,631	2,305
202.31	3,634	2,341
202.32	3,638	2,378
202.33	3,641	2,414

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	3,645	2,451
202.35	3,649	2,487
202.36	3,652	2,524
202.37	3,656	2,560
202.38	3,660	2,597
202.39	3,663	2,633
202.40	3,667	2,670
202.41	3,671	2,707
202.42	3,674	2,743
202.43	3,678	2,780
202.44	3,682	2,817
202.45	3,685	2,854
202.46	3,689	2,891
202.47	3,693	2,928
202.48	3,696	2,964
202.49	3,700	3,001
202.50	3,704	3,038
202.51	3,707	3,076
202.52	3,711	3,113
202.53	3,714	3,150
202.54	3,718	3,187
202.55	3,722	3,224
202.56	3,725	3,261
202.57	3,729	3,299
202.58	3,733	3,336
202.59	3,736	3,373
202.60	3,740	3,411
202.61	3,744	3,448
202.62	3,747	3,486
202.63	3,751	3,523
202.64	3,755	3,561
202.65	3,758	3,598
202.66	3,762	3,636
202.67	3,766	3,673
202.68	3,769	3,711
202.69	3,773	3,749
202.70	3,777	3,786
202.71	3,780	3,824
202.72	3,784	3,862
202.73	3,787	3,900
202.74	3,791	3,938
202.75	3,795	3,976
202.76	3,798	4,014
202.77	3,802	4,052
202.78	3,806	4,090
202.79	3,809	4,128
202.80	3,813	4,166
202.81	3,817	4,204
202.82	3,820	4,242
202.83	3,824	4,281
202.84	3,828	4,319
202.85	3,831	4,357
202.86	3,835	4,395
202.87	3,839	4,434
202.88	3,842	4,472
202.89	3,846	4,511
202.90	3,850	4,549
202.91	3,853	4,588
202.92	3,857	4,626
202.93	3,860	4,665
202.94	3,864	4,703
202.95	3,868	4,742
202.96	3,871	4,781
202.97	3,875	4,819
202.98	3,879	4,858
202.99	3,882	4,897
203.00	3,886	4,936
203.01	3,890	4,975
203.02	3,894	5,014
203.03	3,897	5,053
203.04	3,901	5,092
203.05	3,905	5,131
203.06	3,909	5,170
203.07	3,913	5,209
203.08	3,916	5,248
203.09	3,920	5,287
203.10	3,924	5,326
203.11	3,928	5,366
203.12	3,932	5,405
203.13	3,935	5,444
203.14	3,939	5,484
203.15	3,943	5,523
203.16	3,947	5,562
203.17	3,951	5,602
203.18	3,954	5,641
203.19	3,958	5,681
203.20	3,962	5,721
203.21	3,966	5,760
203.22	3,970	5,800
203.23	3,973	5,840
203.24	3,977	5,879
203.25	3,981	5,919
203.26	3,985	5,959
203.27	3,989	5,999
203.28	3,992	6,039
203.29	3,996	6,079
203.30	4,000	6,119
203.31	4,004	6,159
203.32	4,008	6,199
203.33	4,011	6,239
203.34	4,015	6,279
203.35	4,019	6,319
203.36	4,023	6,359
203.37	4,027	6,400

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,030	6,440
203.39	4,034	6,480
203.40	4,038	6,521
203.41	4,042	6,561
203.42	4,046	6,601
203.43	4,049	6,642
203.44	4,053	6,682
203.45	4,057	6,723
203.46	4,061	6,764
203.47	4,065	6,804
203.48	4,068	6,845
203.49	4,072	6,886
203.50	4,076	6,926
203.51	4,080	6,967
203.52	4,084	7,008
203.53	4,087	7,049
203.54	4,091	7,090
203.55	4,095	7,131
203.56	4,099	7,172
203.57	4,103	7,213
203.58	4,106	7,254
203.59	4,110	7,295
203.60	4,114	7,336
203.61	4,118	7,377
203.62	4,122	7,418
203.63	4,125	7,459
203.64	4,129	7,501
203.65	4,133	7,542
203.66	4,137	7,583
203.67	4,141	7,625
203.68	4,144	7,666
203.69	4,148	7,708
203.70	4,152	7,749
203.71	4,156	7,791
203.72	4,160	7,832
203.73	4,163	7,874
203.74	4,167	7,916
203.75	4,171	7,957
203.76	4,175	7,999
203.77	4,179	8,041
203.78	4,182	8,083
203.79	4,186	8,124
203.80	4,190	8,166
203.81	4,194	8,208
203.82	4,198	8,250
203.83	4,201	8,292
203.84	4,205	8,334
203.85	4,209	8,376
203.86	4,213	8,418
203.87	4,217	8,460
203.88	4,220	8,503
203.89	4,224	8,545
203.90	4,228	8,587
203.91	4,232	8,629
203.92	4,236	8,672
203.93	4,239	8,714
203.94	4,243	8,757
203.95	4,247	8,799
203.96	4,251	8,842
203.97	4,255	8,884
203.98	4,258	8,927
203.99	4,262	8,969
204.00	4,266	9,012
204.01	4,270	9,055
204.02	4,274	9,097
204.03	4,278	9,140
204.04	4,282	9,183
204.05	4,286	9,226
204.06	4,290	9,269
204.07	4,294	9,311
204.08	4,298	9,354
204.09	4,301	9,397
204.10	4,305	9,440
204.11	4,309	9,483
204.12	4,313	9,527
204.13	4,317	9,570
204.14	4,321	9,613
204.15	4,325	9,656
204.16	4,329	9,699
204.17	4,333	9,743
204.18	4,337	9,786
204.19	4,341	9,830
204.20	4,345	9,873
204.21	4,349	9,916
204.22	4,353	9,960
204.23	4,357	10,003
204.24	4,361	10,047
204.25	4,365	10,091
204.26	4,368	10,134
204.27	4,372	10,178
204.28	4,376	10,222
204.29	4,380	10,266
204.30	4,384	10,309
204.31	4,388	10,353
204.32	4,392	10,397
204.33	4,396	10,441
204.34	4,400	10,485
204.35	4,404	10,529
204.36	4,408	10,573
204.37	4,412	10,617
204.38	4,416	10,661
204.39	4,420	10,706
204.40	4,424	10,750
204.41	4,428	10,794

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	4,431	10,838	204.94	4,636	13,196
204.43	4,435	10,883	204.95	4,640	13,242
204.44	4,439	10,927	204.96	4,644	13,289
204.45	4,443	10,971	204.97	4,648	13,335
204.46	4,447	11,016	204.98	4,652	13,382
204.47	4,451	11,060	204.99	4,656	13,428
204.48	4,455	11,105	205.00	4,660	13,475
204.49	4,459	11,149	205.01	4,664	13,521
204.50	4,463	11,194	205.02	4,668	13,568
204.51	4,467	11,239	205.03	4,672	13,615
204.52	4,471	11,283	205.04	4,676	13,662
204.53	4,475	11,328	205.05	4,680	13,708
204.54	4,479	11,373	205.06	4,685	13,755
204.55	4,483	11,418	205.07	4,689	13,802
204.56	4,487	11,463	205.08	4,693	13,849
204.57	4,491	11,507	205.09	4,697	13,896
204.58	4,495	11,552	205.10	4,701	13,943
204.59	4,498	11,597	205.11	4,705	13,990
204.60	4,502	11,642	205.12	4,709	14,037
204.61	4,506	11,687	205.13	4,713	14,084
204.62	4,510	11,732	205.14	4,717	14,131
204.63	4,514	11,778	205.15	4,721	14,178
204.64	4,518	11,823	205.16	4,725	14,226
204.65	4,522	11,868	205.17	4,730	14,273
204.66	4,526	11,913	205.18	4,734	14,320
204.67	4,530	11,959	205.19	4,738	14,368
204.68	4,534	12,004	205.20	4,742	14,415
204.69	4,538	12,049	205.21	4,746	14,462
204.70	4,542	12,095	205.22	4,750	14,510
204.71	4,546	12,140	205.23	4,754	14,557
204.72	4,550	12,185	205.24	4,758	14,605
204.73	4,554	12,231	205.25	4,762	14,653
204.74	4,558	12,277	205.26	4,766	14,700
204.75	4,562	12,322	205.27	4,770	14,748
204.76	4,565	12,368	205.28	4,775	14,796
204.77	4,569	12,413	205.29	4,779	14,843
204.78	4,573	12,459	205.30	4,783	14,891
204.79	4,577	12,505	205.31	4,787	14,939
204.80	4,581	12,551	205.32	4,791	14,987
204.81	4,585	12,597	205.33	4,795	15,035
204.82	4,589	12,642	205.34	4,799	15,083
204.83	4,593	12,688	205.35	4,803	15,131
204.84	4,597	12,734	205.36	4,807	15,179
204.85	4,601	12,780	205.37	4,811	15,227
204.86	4,605	12,826	205.38	4,815	15,275
204.87	4,609	12,872	205.39	4,820	15,323
204.88	4,613	12,918	205.40	4,824	15,372
204.89	4,617	12,965	205.41	4,828	15,420
204.90	4,621	13,011	205.42	4,832	15,468
204.91	4,625	13,057	205.43	4,836	15,516
204.92	4,628	13,103	205.44	4,840	15,565
204.93	4,632	13,150	205.45	4,844	15,613

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

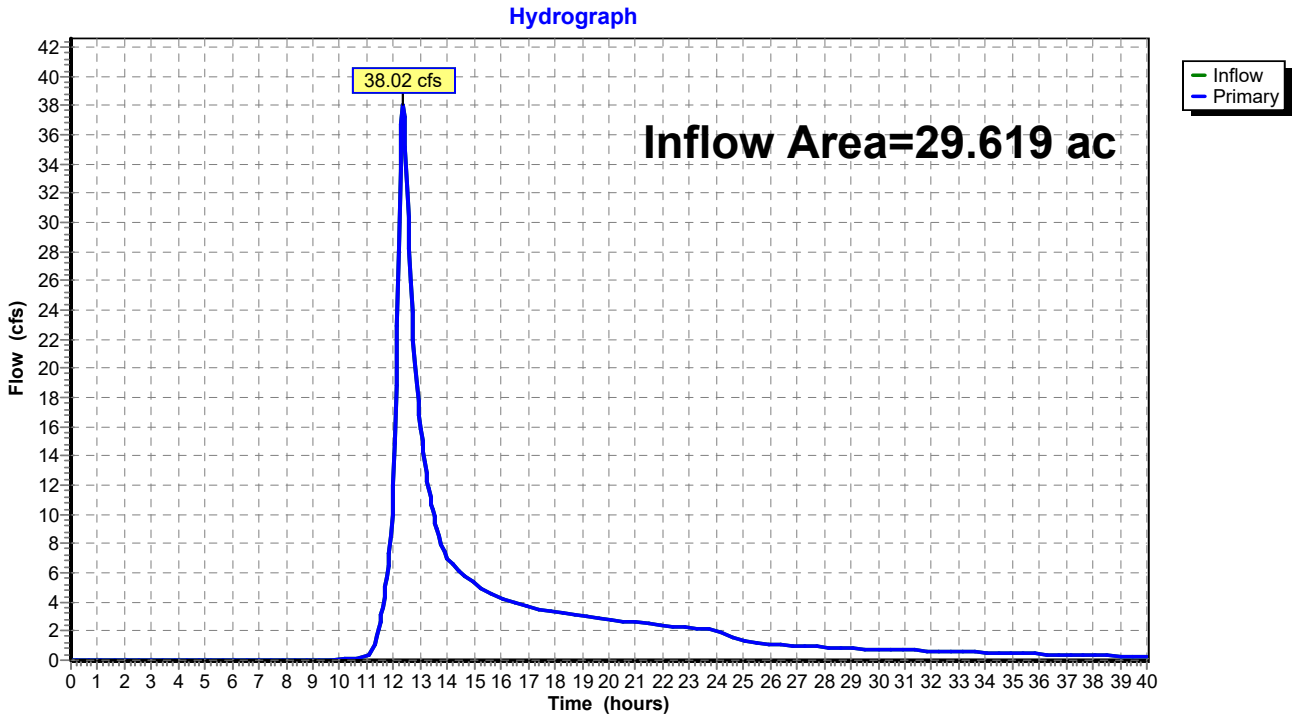
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.46	4,848	15,662
205.47	4,852	15,710
205.48	4,856	15,759
205.49	4,860	15,807
205.50	4,865	15,856
205.51	4,869	15,905
205.52	4,873	15,953
205.53	4,877	16,002
205.54	4,881	16,051
205.55	4,885	16,100
205.56	4,889	16,149
205.57	4,893	16,197
205.58	4,897	16,246
205.59	4,901	16,295
205.60	4,905	16,344
205.61	4,909	16,394
205.62	4,914	16,443
205.63	4,918	16,492
205.64	4,922	16,541
205.65	4,926	16,590
205.66	4,930	16,640
205.67	4,934	16,689
205.68	4,938	16,738
205.69	4,942	16,788
205.70	4,946	16,837
205.71	4,950	16,887
205.72	4,954	16,936
205.73	4,959	16,986
205.74	4,963	17,035
205.75	4,967	17,085
205.76	4,971	17,135
205.77	4,975	17,184
205.78	4,979	17,234
205.79	4,983	17,284
205.80	4,987	17,334
205.81	4,991	17,384
205.82	4,995	17,434
205.83	4,999	17,484
205.84	5,004	17,534
205.85	5,008	17,584
205.86	5,012	17,634
205.87	5,016	17,684
205.88	5,020	17,734
205.89	5,024	17,784
205.90	5,028	17,834
205.91	5,032	17,885
205.92	5,036	17,935
205.93	5,040	17,986
205.94	5,044	18,036
205.95	5,049	18,086
205.96	5,053	18,137
205.97	5,057	18,187
205.98	5,061	18,238
205.99	5,065	18,289
206.00	**5,069**	**18,339**

Summary for Link PDA-3: Proposed Drainage Area #3

Inflow Area = 29.619 ac, 38.13% Impervious, Inflow Depth > 2.84" for Current 10 yr event
Inflow = 38.02 cfs @ 12.35 hrs, Volume= 7.013 af
Primary = 38.02 cfs @ 12.35 hrs, Volume= 7.013 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-3: Proposed Drainage Area #3



Summary for Subcatchment 29l: PDA-29 (impervious)

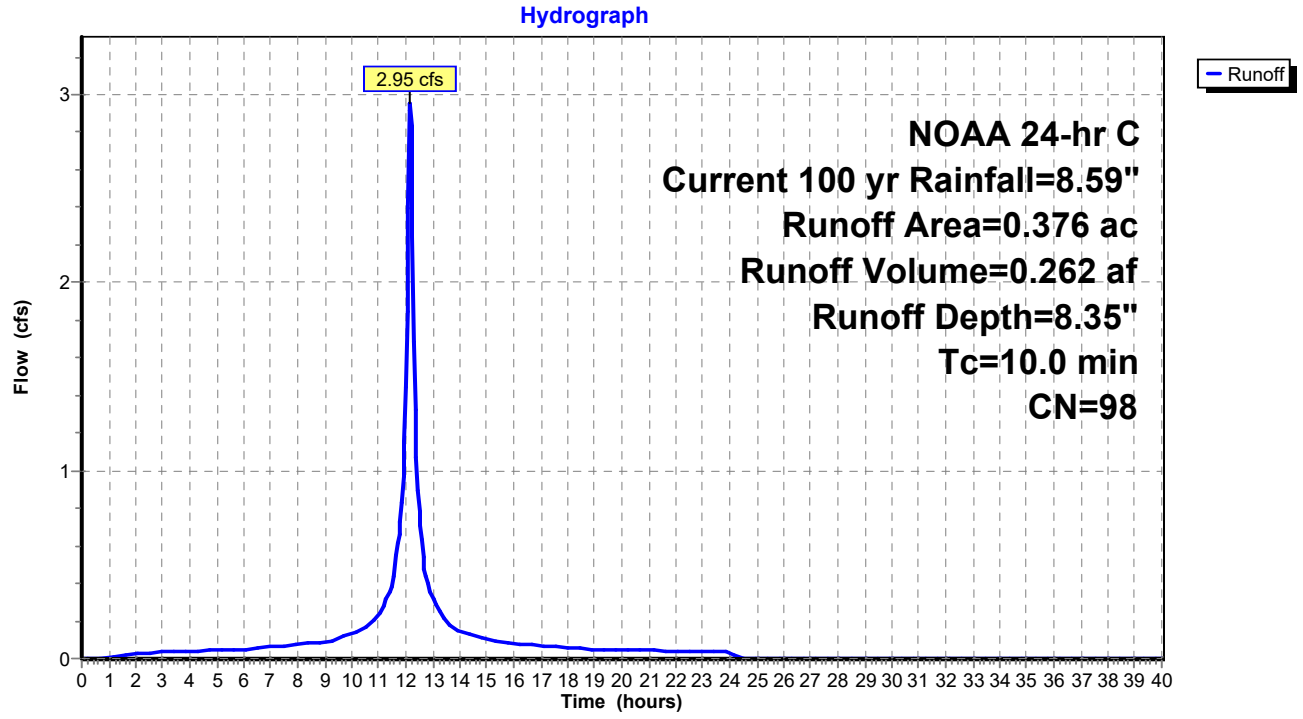
Runoff = 2.95 cfs @ 12.17 hrs, Volume= 0.262 af, Depth= 8.35"
Routed to Pond B-29 : Basin #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.342	98	Pavement, HSG C
*	0.034	98	Concrete, HSC C
	0.376	98	Weighted Average
	0.376		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 29l: PDA-29 (impervious)



Summary for Subcatchment 29P: PDA-29 (pervious)

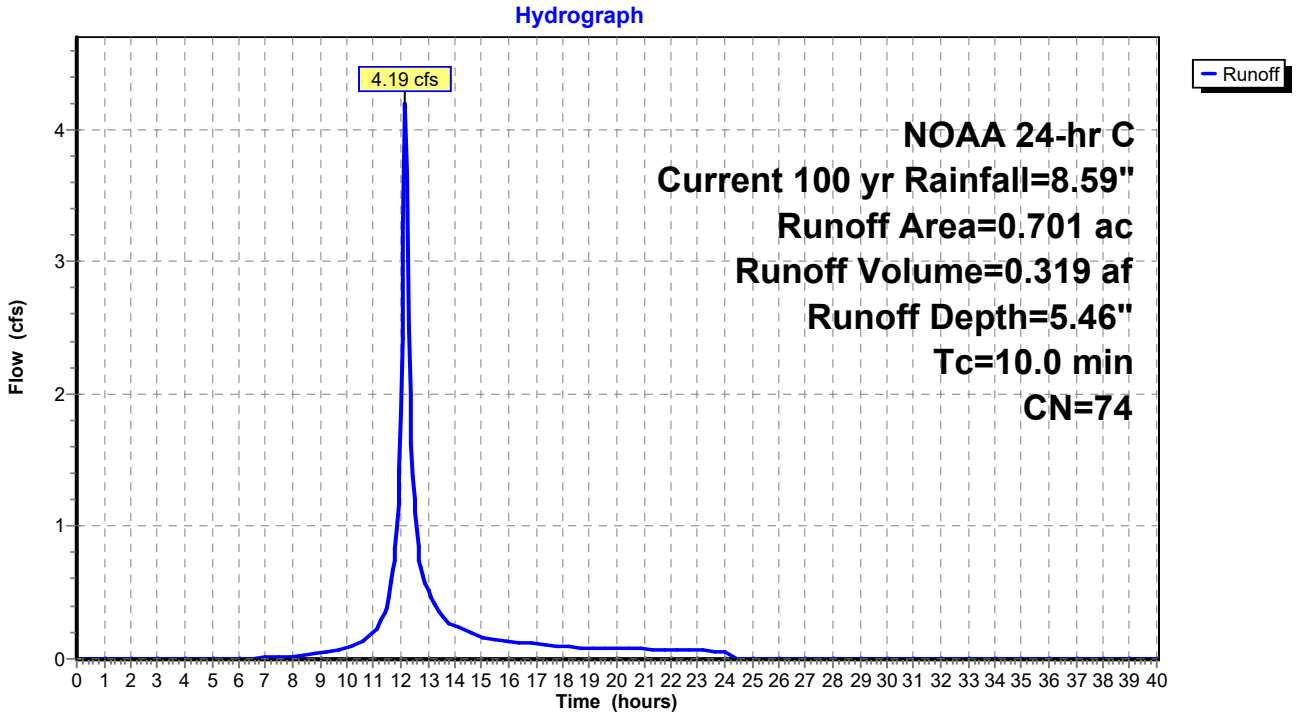
Runoff = 4.19 cfs @ 12.17 hrs, Volume= 0.319 af, Depth= 5.46"
Routed to Pond B-29 : Basin #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.701	74	>75% Grass cover, Good, HSG C
0.701		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 29P: PDA-29 (pervious)



Summary for Subcatchment 30l: PDA-30 (impervious)

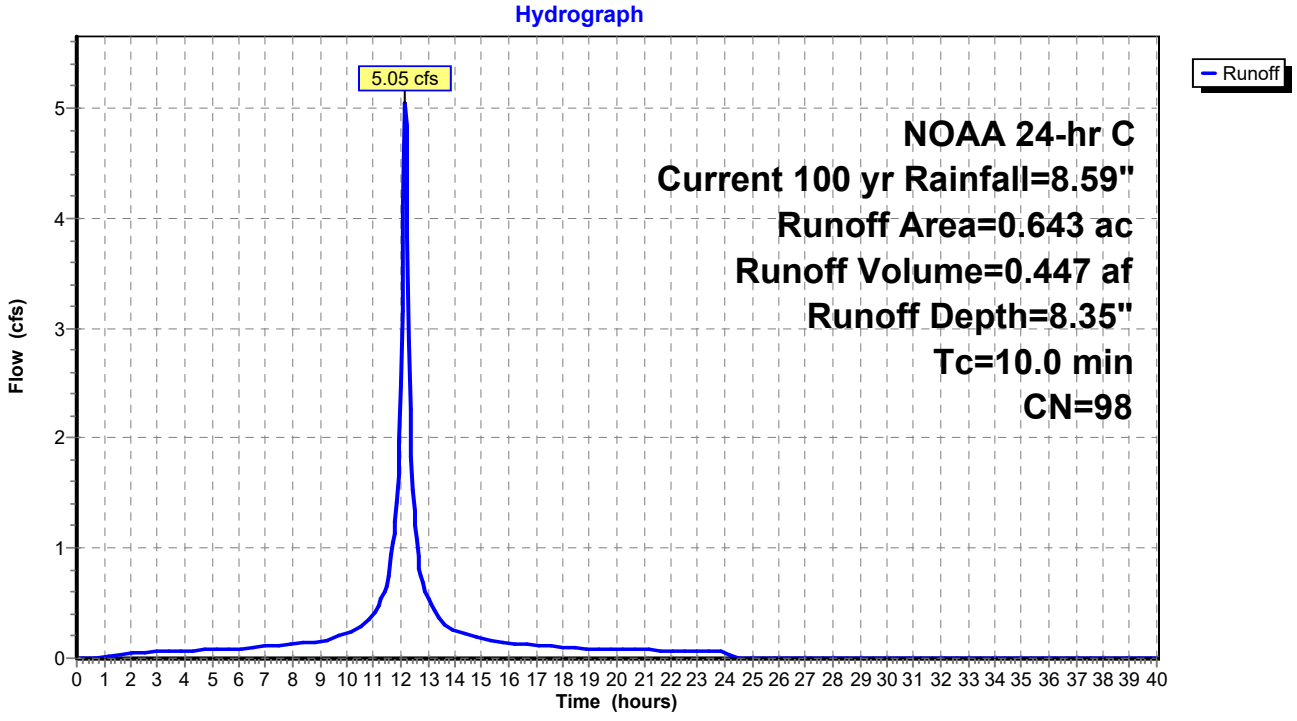
Runoff = 5.05 cfs @ 12.17 hrs, Volume= 0.447 af, Depth= 8.35"
Routed to Pond B-30 : Basin #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.643	98	Weighted Average
	0.643		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 30l: PDA-30 (impervious)



Summary for Subcatchment 30P: PDA-30 (pervious)

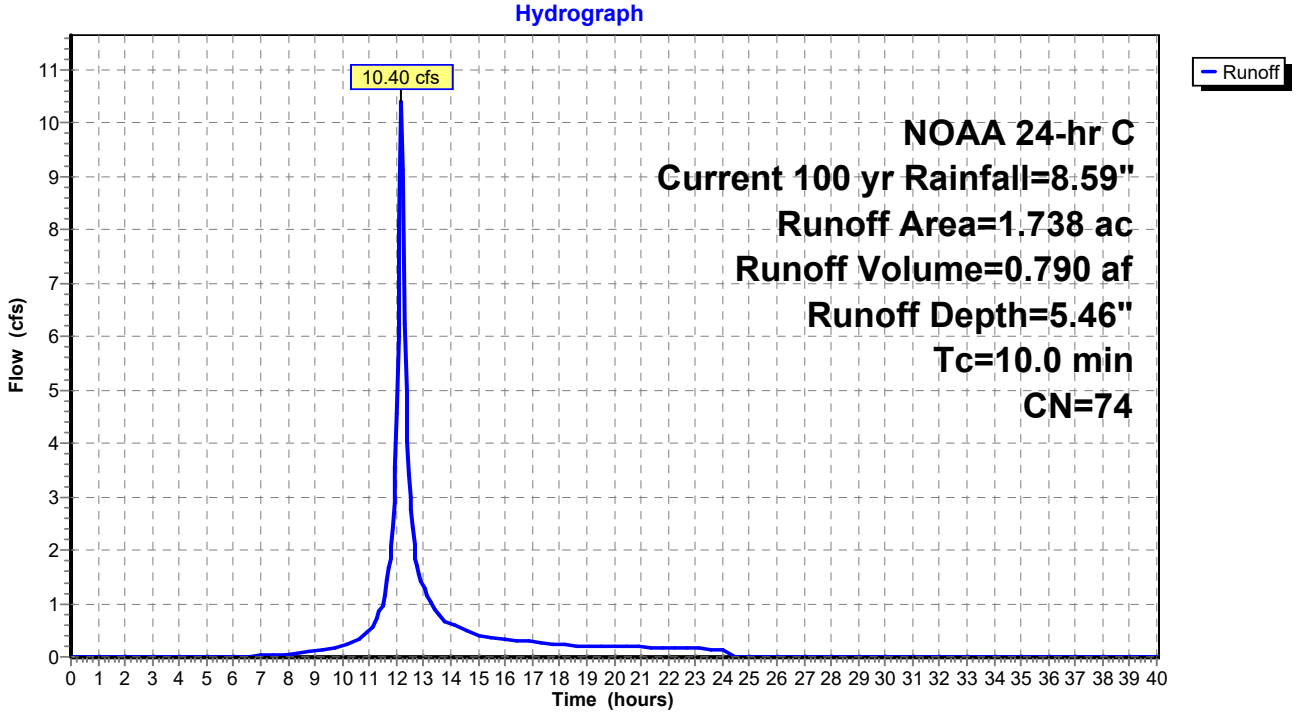
Runoff = 10.40 cfs @ 12.17 hrs, Volume= 0.790 af, Depth= 5.46"
Routed to Pond B-30 : Basin #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.738	74	>75% Grass cover, Good, HSG C
1.738		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 30P: PDA-30 (pervious)



Summary for Subcatchment 31I: PDA-31 (impervious)

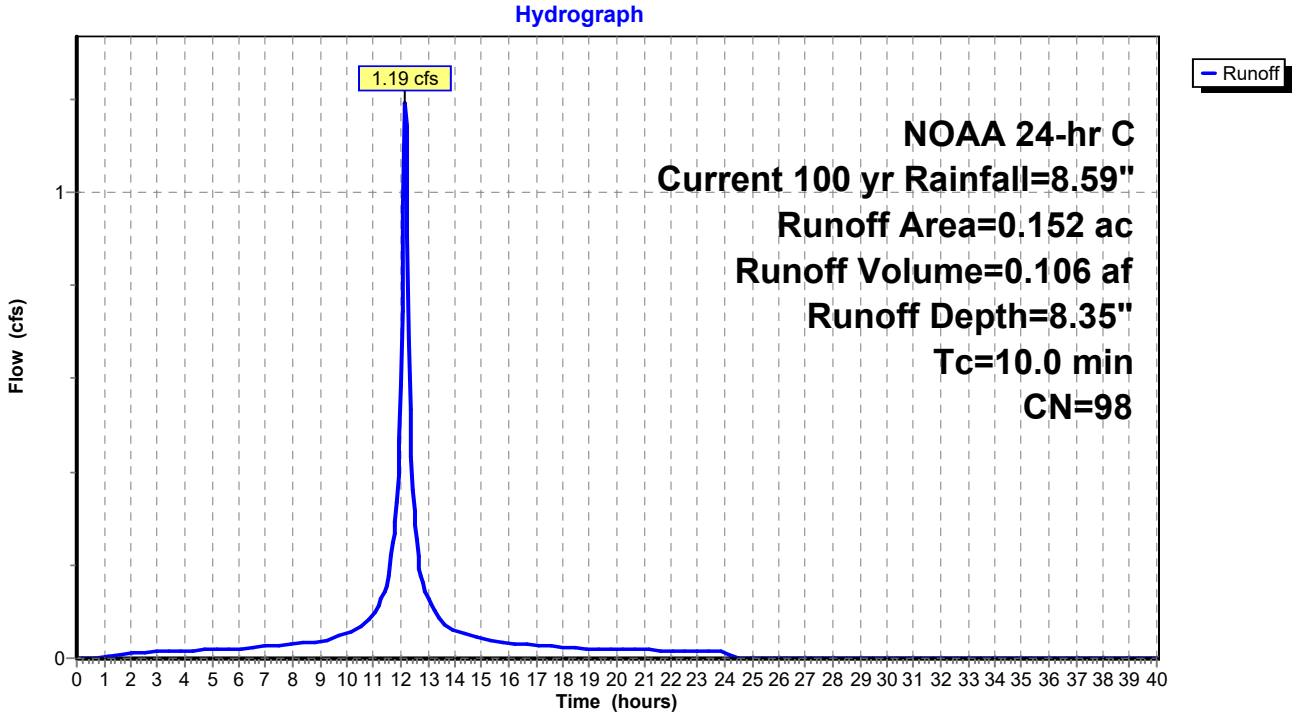
Runoff = 1.19 cfs @ 12.17 hrs, Volume= 0.106 af, Depth= 8.35"
Routed to Pond B-31 : Basin #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.079	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.009	98	Concrete, HSC C
	0.152	98	Weighted Average
	0.152		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 31I: PDA-31 (impervious)



Summary for Subcatchment 31P: PDA-31 (pervious)

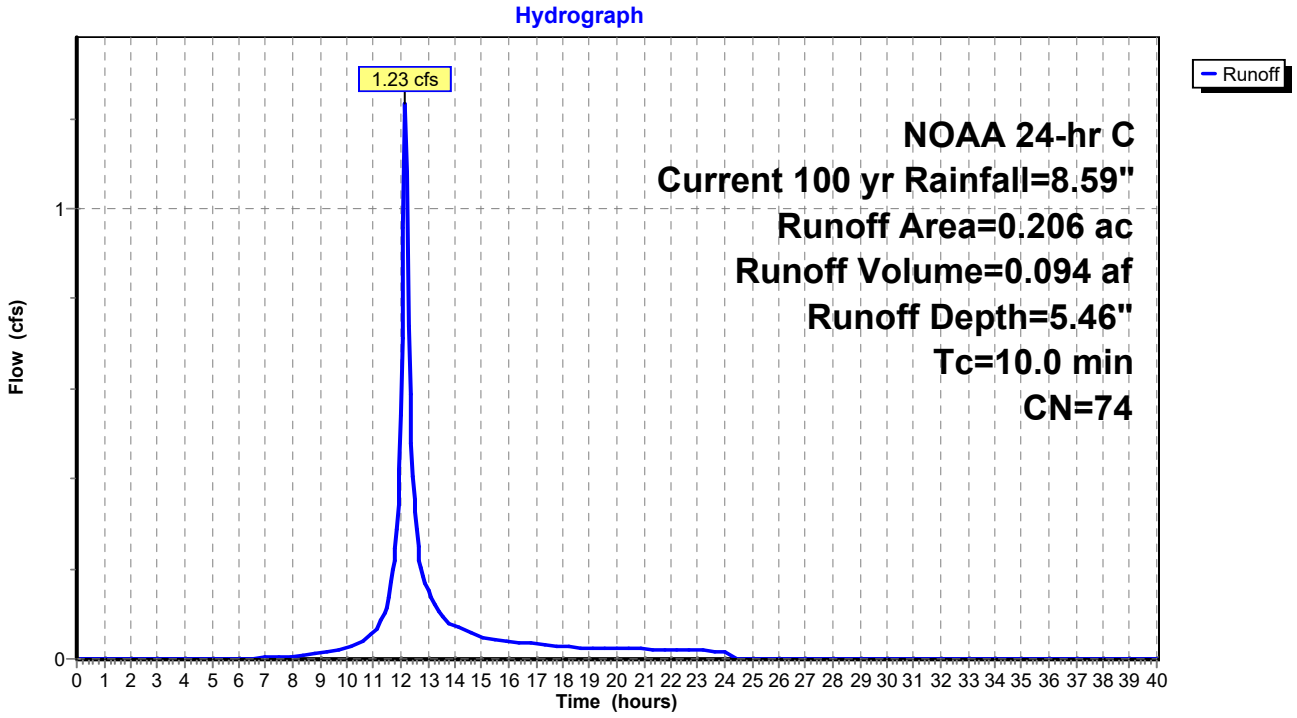
Runoff = 1.23 cfs @ 12.17 hrs, Volume= 0.094 af, Depth= 5.46"
Routed to Pond B-31 : Basin #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.206	74	>75% Grass cover, Good, HSG C
0.206		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 31P: PDA-31 (pervious)



Summary for Subcatchment 32l: PDA-32 (impervious)

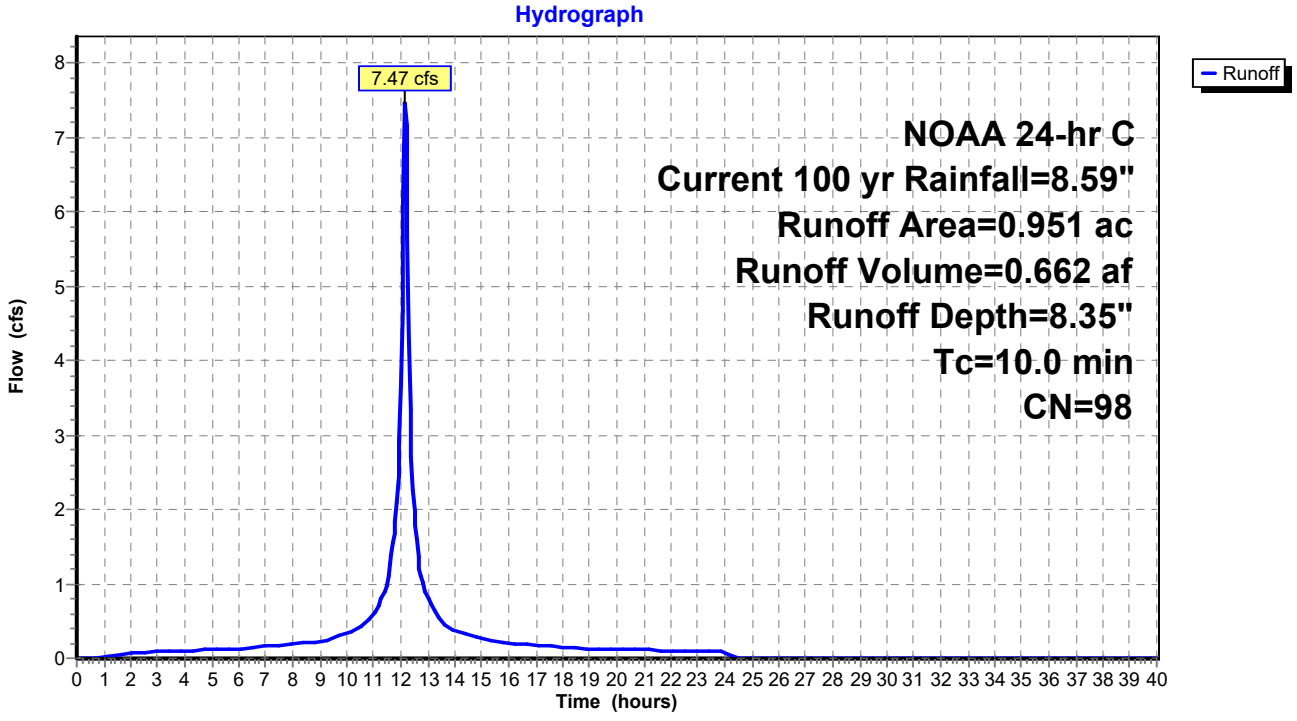
Runoff = 7.47 cfs @ 12.17 hrs, Volume= 0.662 af, Depth= 8.35"
Routed to Pond B-32 : Basin #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.478	98	Pavement, HSG C
*	0.386	98	Roof, HSG C
*	0.087	98	Concrete, HSC C
	0.951	98	Weighted Average
	0.951		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 32l: PDA-32 (impervious)



Summary for Subcatchment 32P: PDA-32 (pervious)

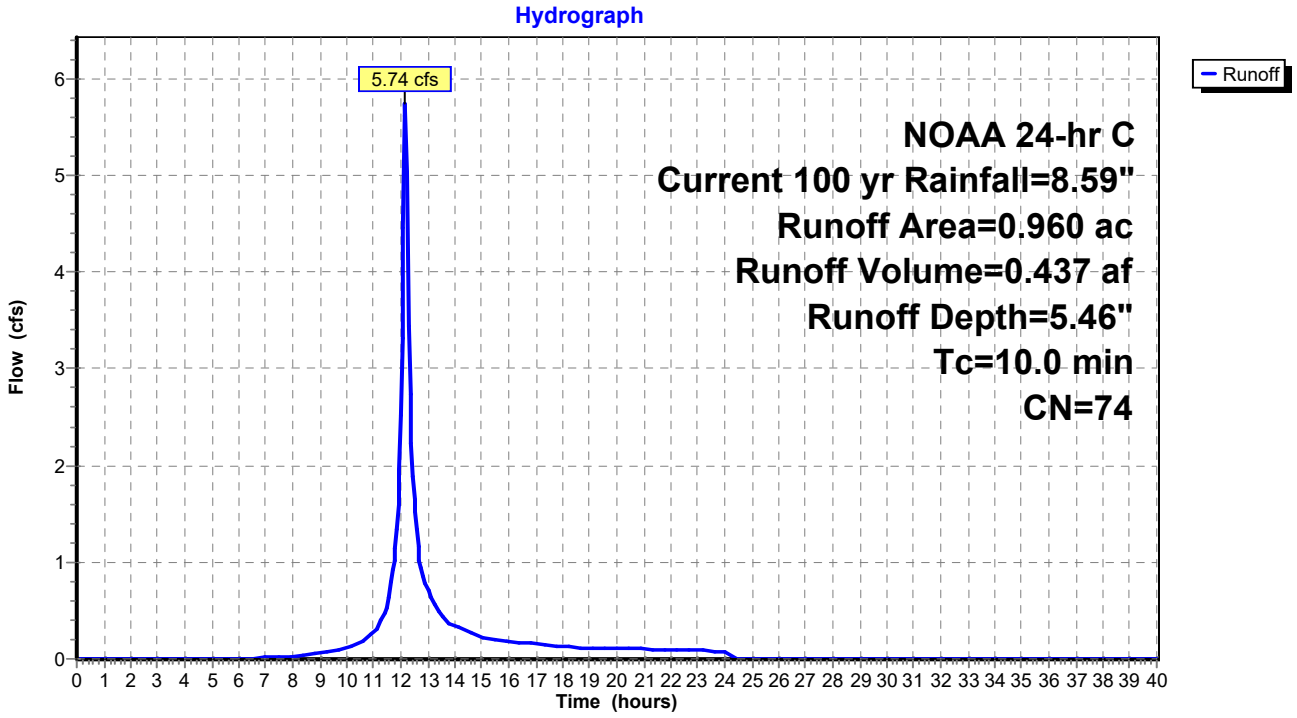
Runoff = 5.74 cfs @ 12.17 hrs, Volume= 0.437 af, Depth= 5.46"
Routed to Pond B-32 : Basin #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.960	74	>75% Grass cover, Good, HSG C
0.960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 32P: PDA-32 (pervious)



Summary for Subcatchment 33I: PDA-33 (impervious)

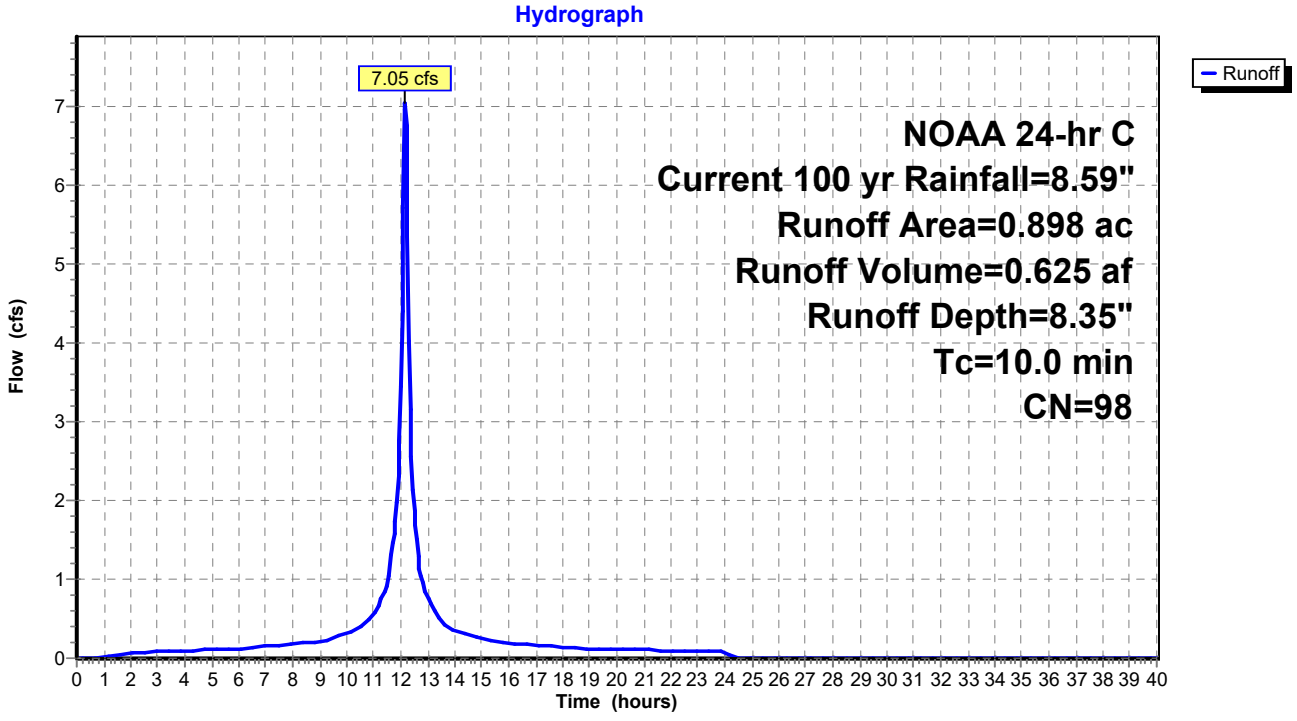
Runoff = 7.05 cfs @ 12.17 hrs, Volume= 0.625 af, Depth= 8.35"
Routed to Pond B-33 : Basin #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.351	98	Pavement, HSG C
*	0.514	98	Roof, HSG C
*	0.033	98	Concrete, HSC C
	0.898	98	Weighted Average
	0.898		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 33I: PDA-33 (impervious)



Summary for Subcatchment 33P: PDA-33 (pervious)

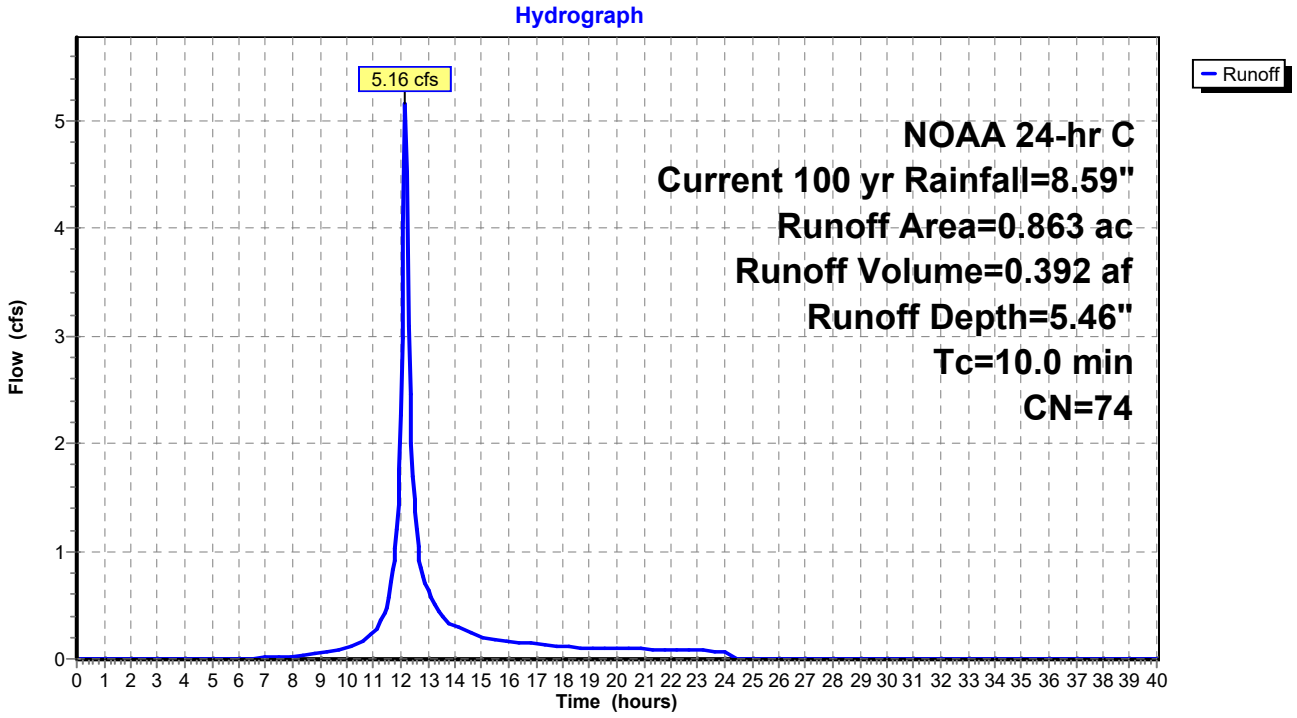
Runoff = 5.16 cfs @ 12.17 hrs, Volume= 0.392 af, Depth= 5.46"
Routed to Pond B-33 : Basin #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.863	74	>75% Grass cover, Good, HSG C
0.863		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 33P: PDA-33 (pervious)



Summary for Subcatchment 34I: PDA-34 (impervious)

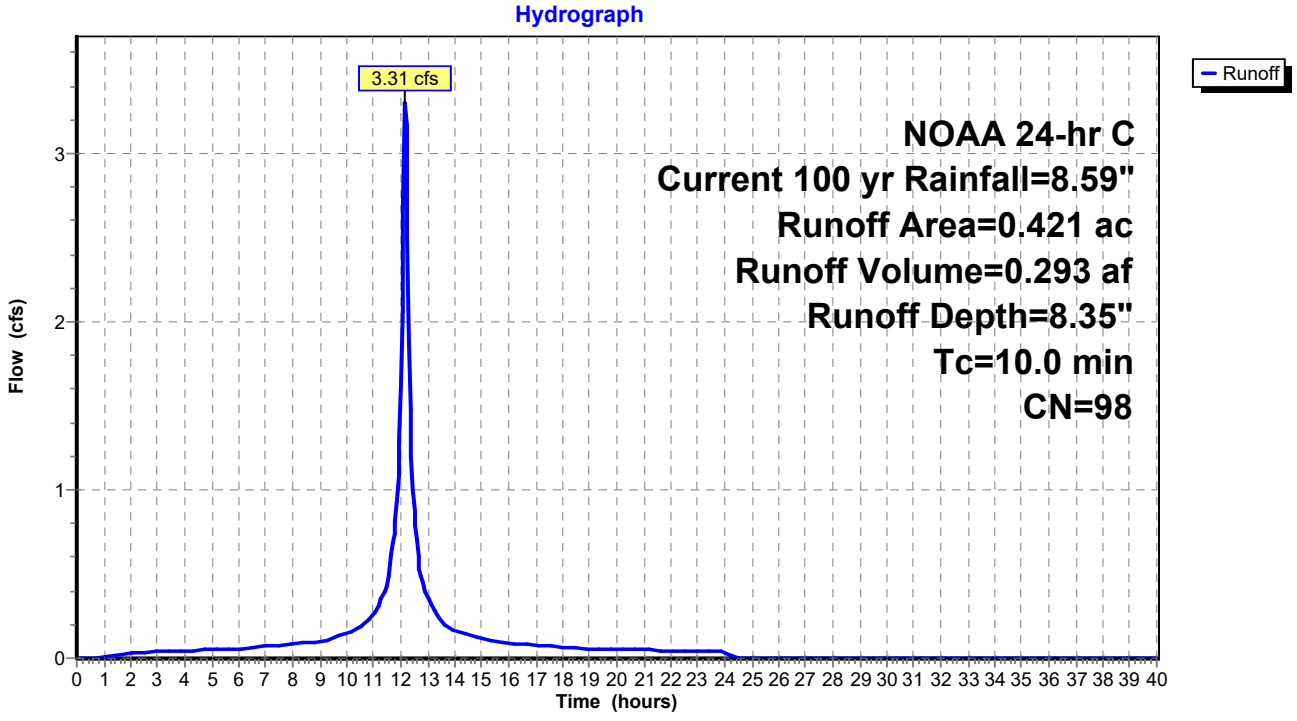
Runoff = 3.31 cfs @ 12.17 hrs, Volume= 0.293 af, Depth= 8.35"
Routed to Pond B-34 : Basin #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.279	98	Roof, HSG C
*	0.142	98	Concrete, HSC C
	0.421	98	Weighted Average
	0.421		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 34I: PDA-34 (impervious)



Summary for Subcatchment 34P: PDA-34 (pervious)

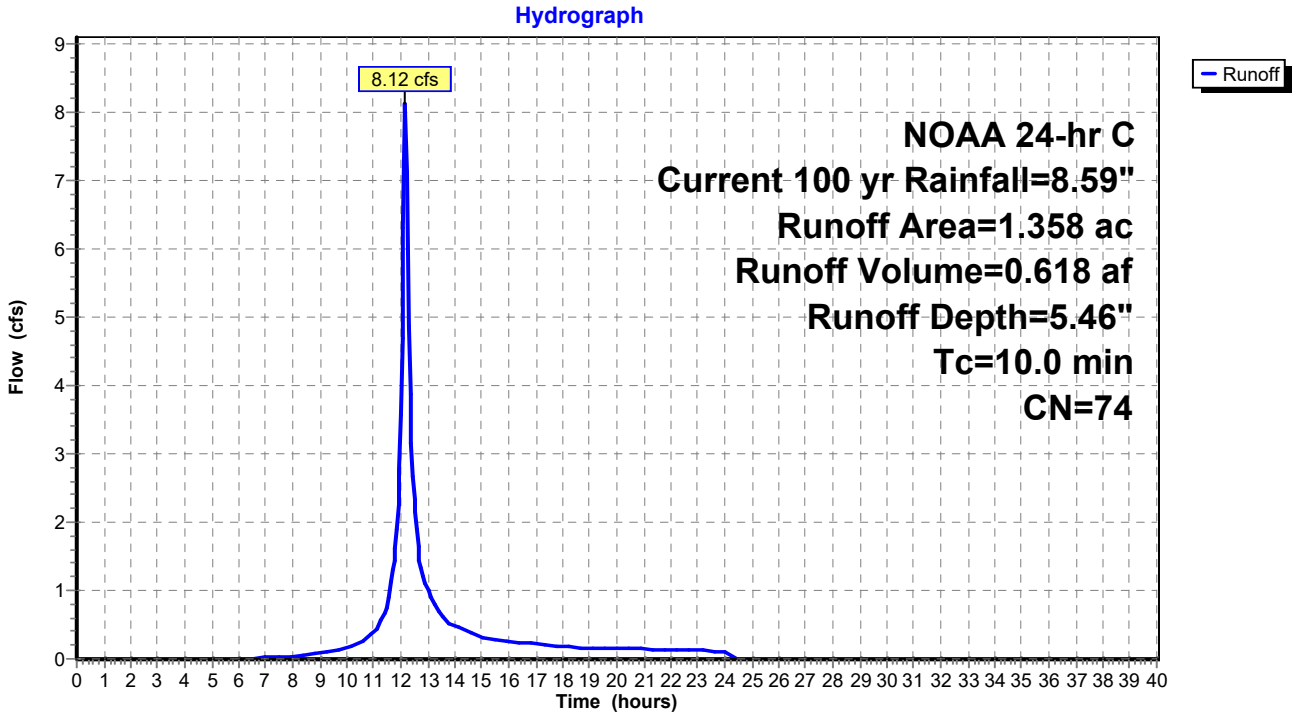
Runoff = 8.12 cfs @ 12.17 hrs, Volume= 0.618 af, Depth= 5.46"
Routed to Pond B-34 : Basin #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.358	74	>75% Grass cover, Good, HSG C
1.358		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 34P: PDA-34 (pervious)



Summary for Subcatchment 35l: PDA-35 (impervious)

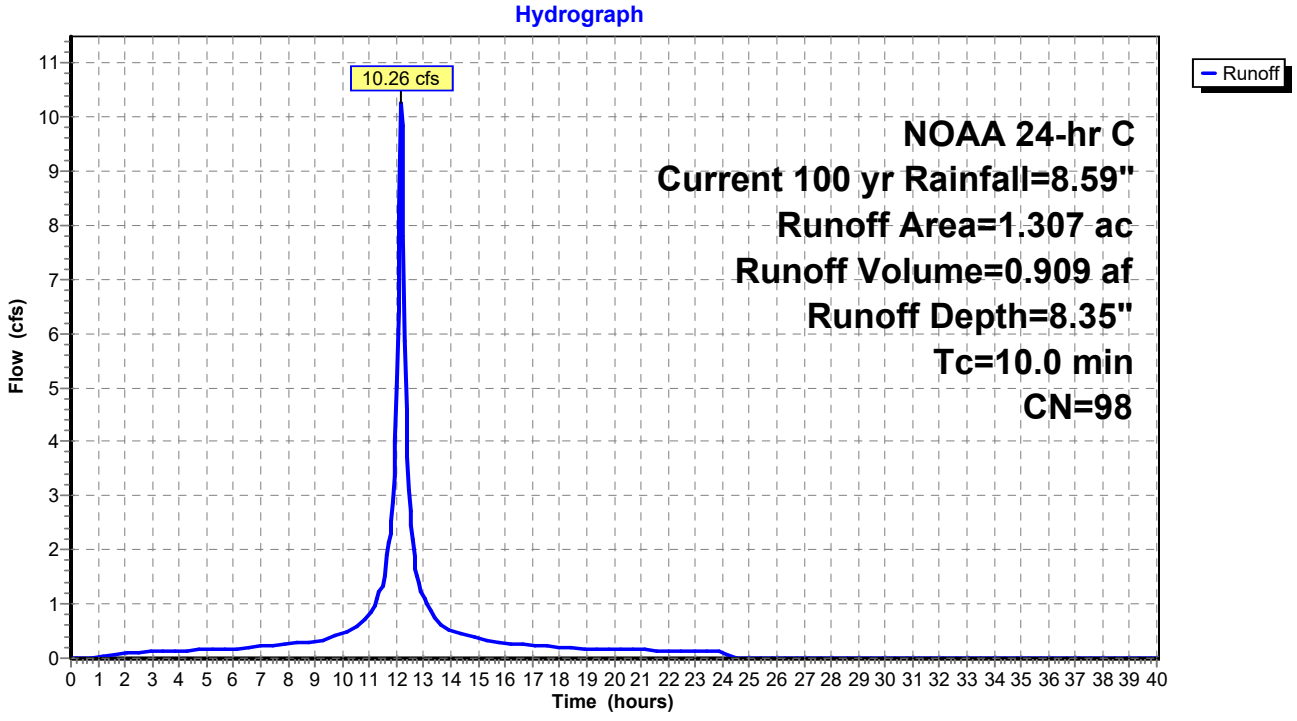
Runoff = 10.26 cfs @ 12.17 hrs, Volume= 0.909 af, Depth= 8.35"
Routed to Pond B-35 : Basin #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	1.003	98	Pavement, HSG C
*	0.139	98	Roof, HSG C
*	0.165	98	Concrete, HSC C
	1.307	98	Weighted Average
	1.307		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 35l: PDA-35 (impervious)



Summary for Subcatchment 35P: PDA-35 (pervious)

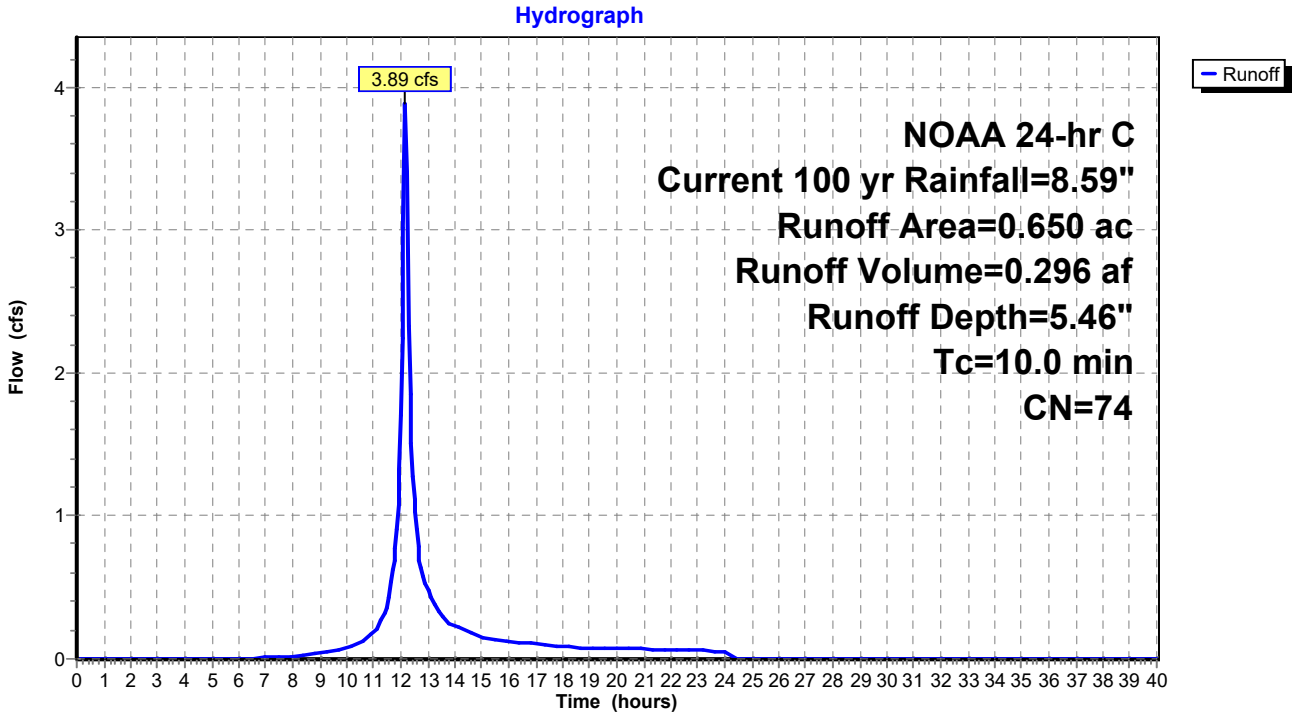
Runoff = 3.89 cfs @ 12.17 hrs, Volume= 0.296 af, Depth= 5.46"
Routed to Pond B-35 : Basin #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.650	74	>75% Grass cover, Good, HSG C
0.650		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 35P: PDA-35 (pervious)



Summary for Subcatchment 36AI: PDA-36A (impervious)

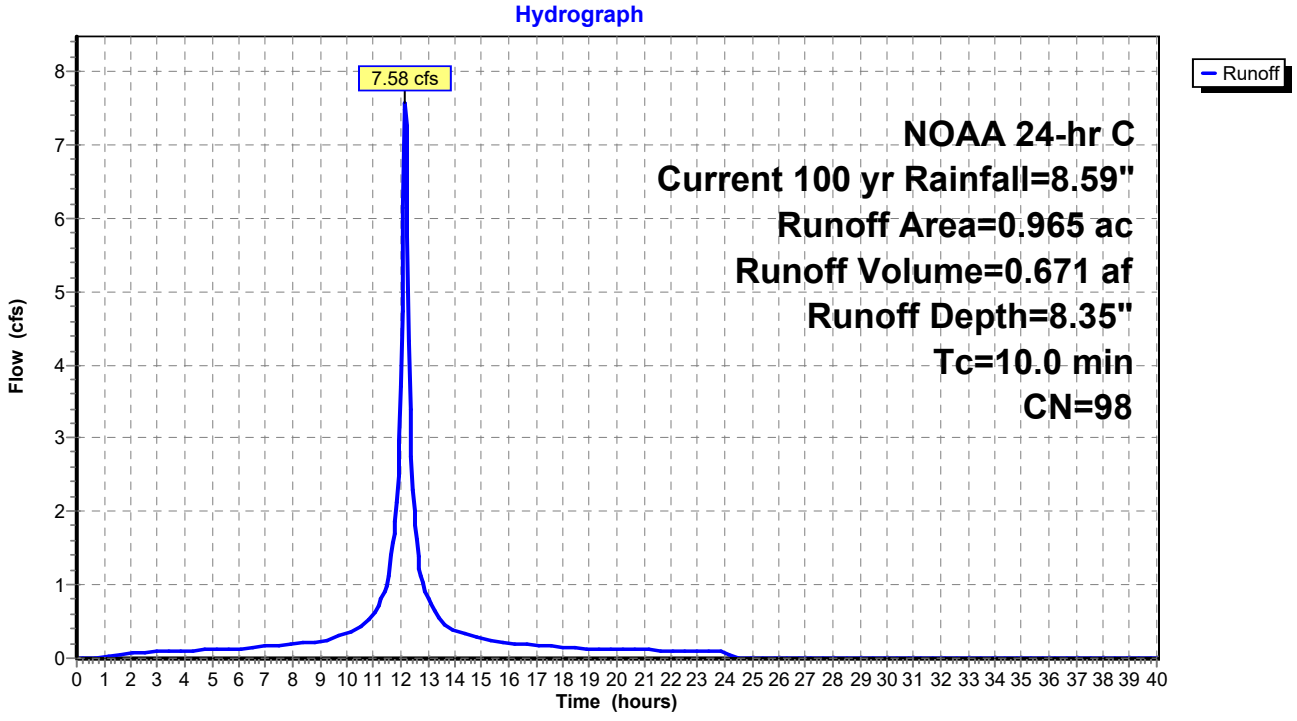
Runoff = 7.58 cfs @ 12.17 hrs, Volume= 0.671 af, Depth= 8.35"
Routed to Pond B-36A : Basin #36A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.415	98	Pavement, HSG C
*	0.418	98	Roof, HSG C
*	0.132	98	Concrete, HSC C
	0.965	98	Weighted Average
	0.965		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36AI: PDA-36A (impervious)



Summary for Subcatchment 36AP: PDA-36A (pervious)

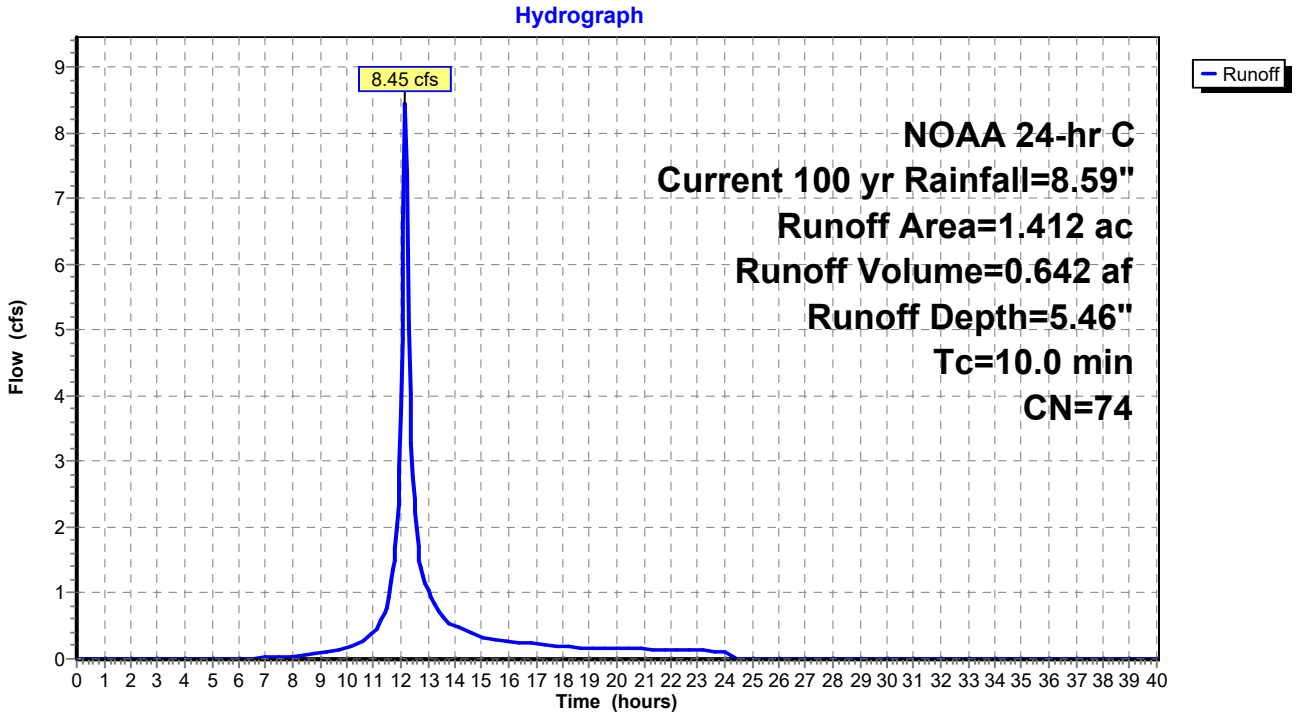
Runoff = 8.45 cfs @ 12.17 hrs, Volume= 0.642 af, Depth= 5.46"
Routed to Pond B-36A : Basin #36A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.412	74	>75% Grass cover, Good, HSG C
1.412		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36AP: PDA-36A (pervious)



Summary for Subcatchment 36BI: PDA-36B (impervious)

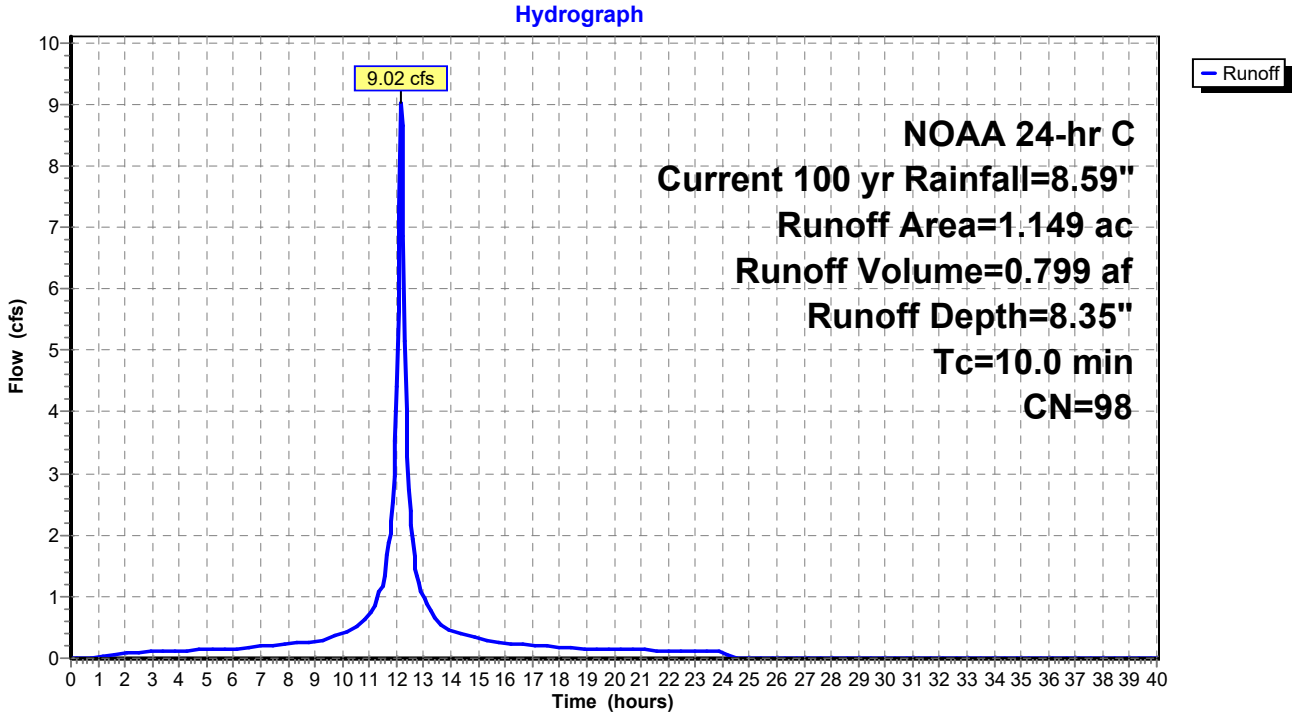
Runoff = 9.02 cfs @ 12.17 hrs, Volume= 0.799 af, Depth= 8.35"
Routed to Pond B-36B : Basin #36B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.501	98	Pavement, HSG C
*	0.579	98	Roof, HSG C
*	0.069	98	Concrete, HSC C
	1.149	98	Weighted Average
	1.149		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36BI: PDA-36B (impervious)



Summary for Subcatchment 36BP: PDA-36B (pervious)

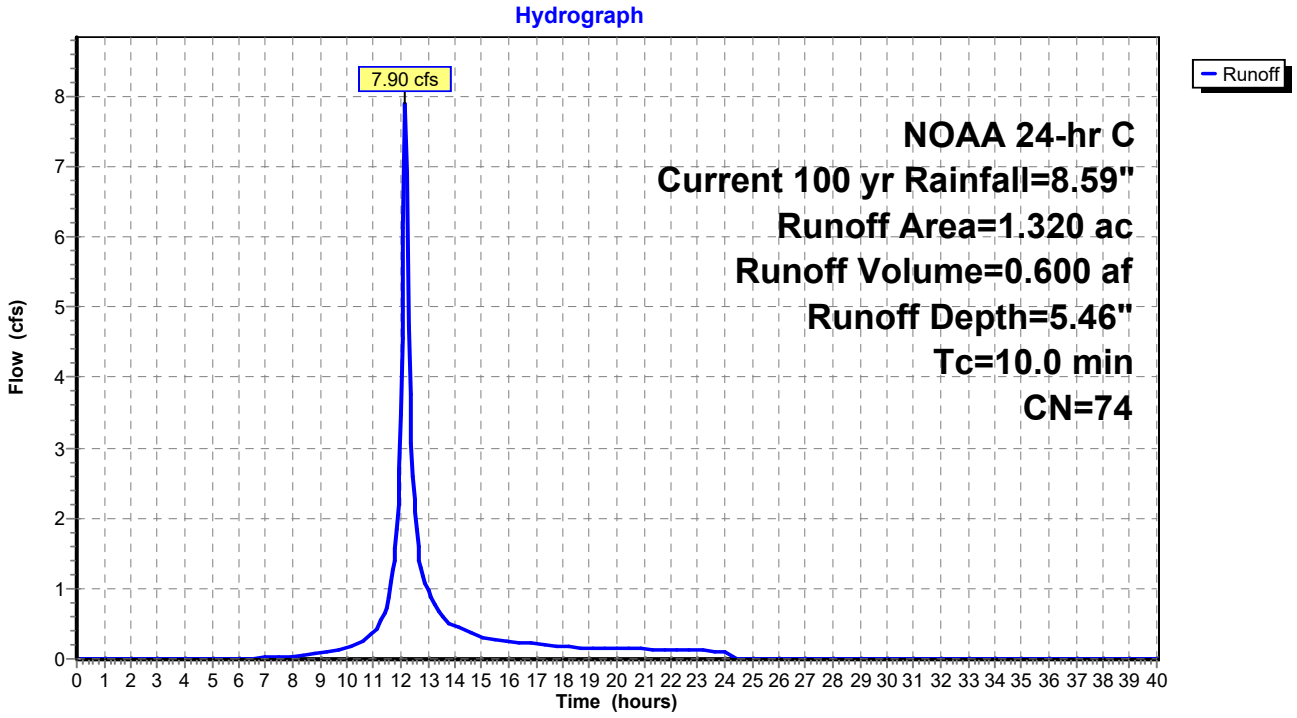
Runoff = 7.90 cfs @ 12.17 hrs, Volume= 0.600 af, Depth= 5.46"
Routed to Pond B-36B : Basin #36B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.320	74	>75% Grass cover, Good, HSG C
1.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36BP: PDA-36B (pervious)



Summary for Subcatchment 37AI: PDA-37B (impervious)

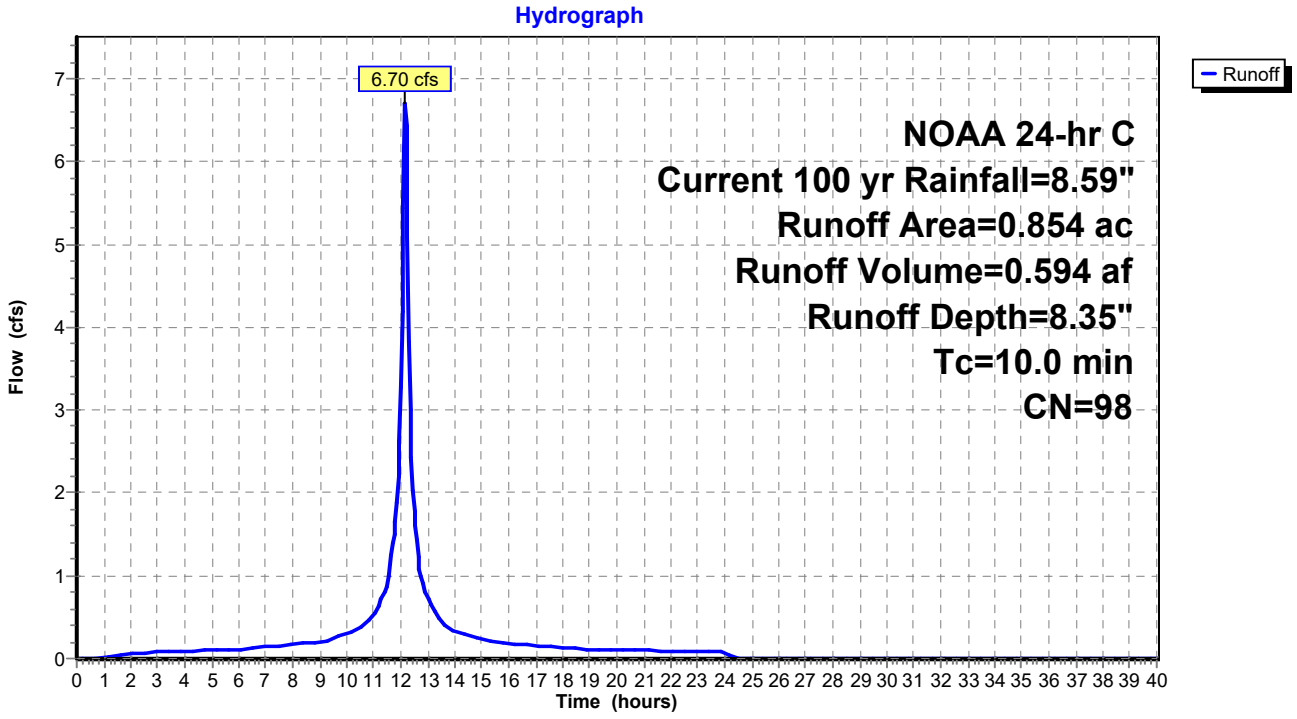
Runoff = 6.70 cfs @ 12.17 hrs, Volume= 0.594 af, Depth= 8.35"
Routed to Pond B-37A : Basin #37A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.673	98	Pavement, HSG C
*	0.181	98	Concrete, HSC C
	0.854	98	Weighted Average
	0.854		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37AI: PDA-37B (impervious)



Summary for Subcatchment 37AP: PDA-37A (pervious)

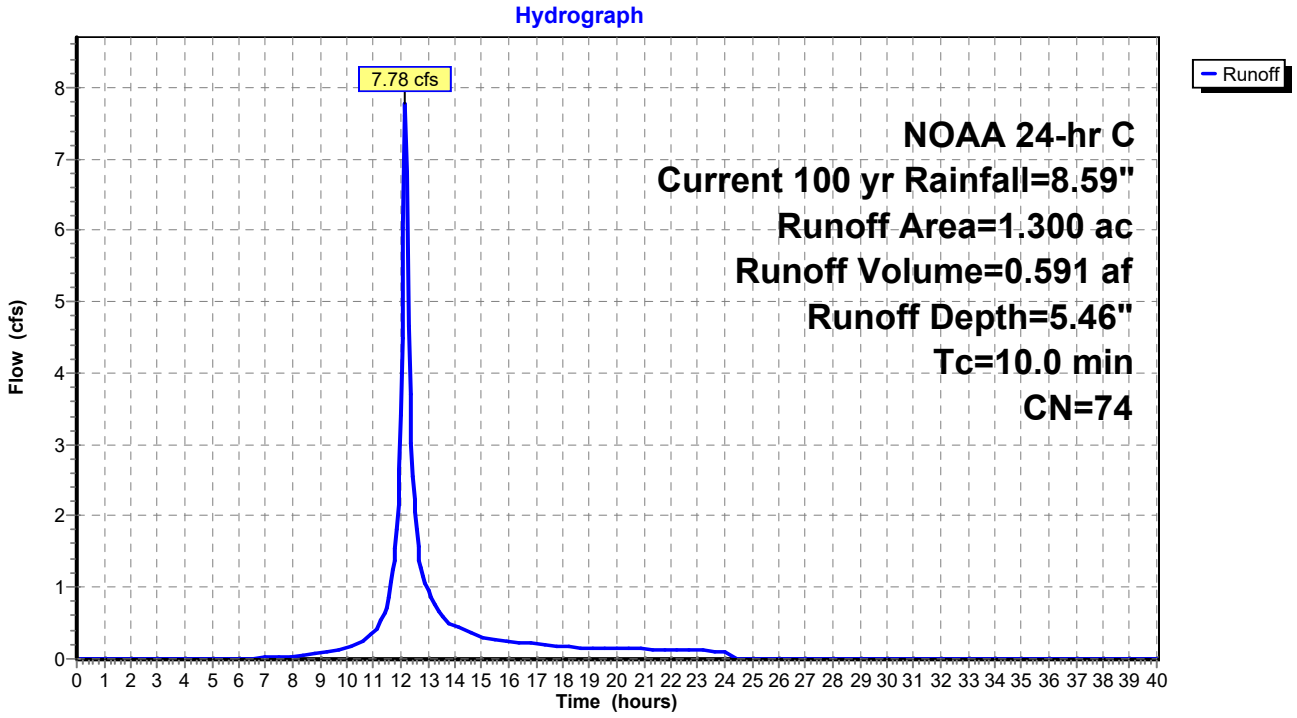
Runoff = 7.78 cfs @ 12.17 hrs, Volume= 0.591 af, Depth= 5.46"
Routed to Pond B-37A : Basin #37A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.300	74	>75% Grass cover, Good, HSG C
1.300		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37AP: PDA-37A (pervious)



Summary for Subcatchment 37BI: PDA-37B (impervious)

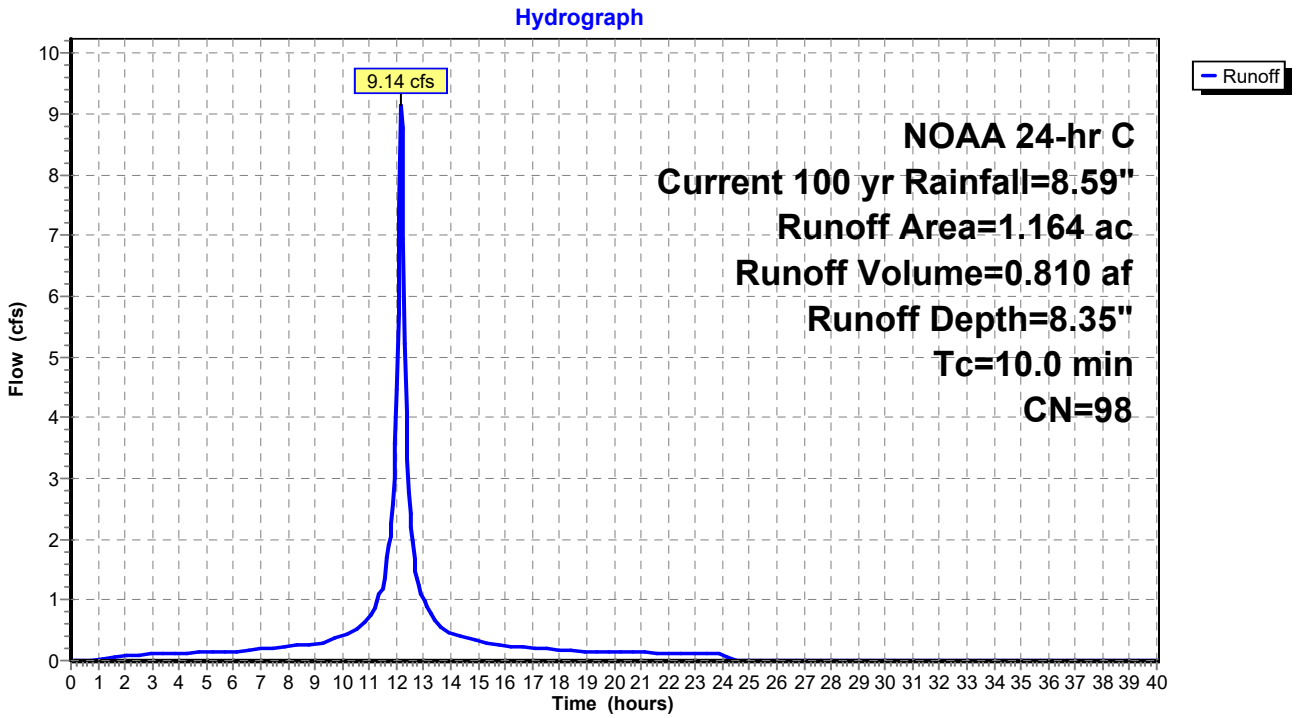
Runoff = 9.14 cfs @ 12.17 hrs, Volume= 0.810 af, Depth= 8.35"
Routed to Pond B-37B : Basin #37B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.806	98	Pavement, HSG C
*	0.079	98	Concrete, HSC C
	0.279	98	Unconnected roofs, HSG C
	1.164	98	Weighted Average
	1.164		100.00% Impervious Area
	0.279		23.97% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37BI: PDA-37B (impervious)



Summary for Subcatchment 38BP: PDA-37B (pervious)

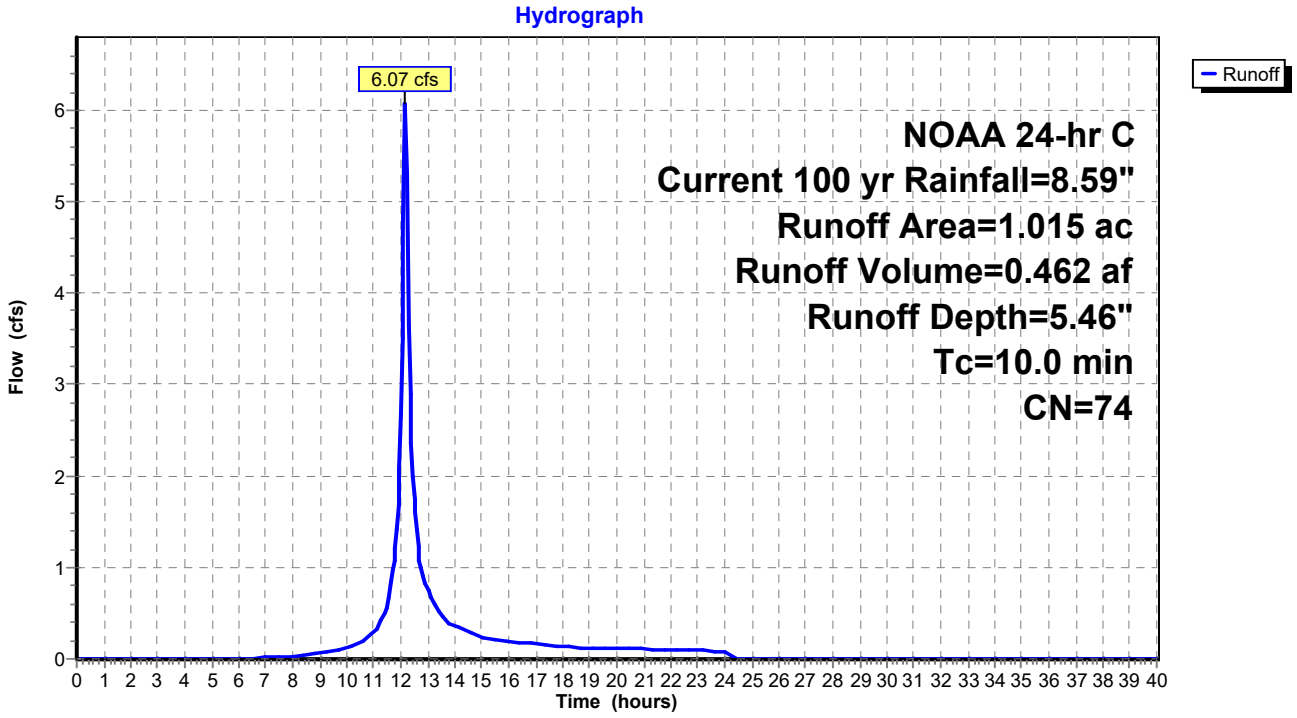
Runoff = 6.07 cfs @ 12.17 hrs, Volume= 0.462 af, Depth= 5.46"
Routed to Pond B-37B : Basin #37B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.015	74	>75% Grass cover, Good, HSG C
1.015		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38BP: PDA-37B (pervious)



Summary for Subcatchment 38I: PDA-38 (impervious)

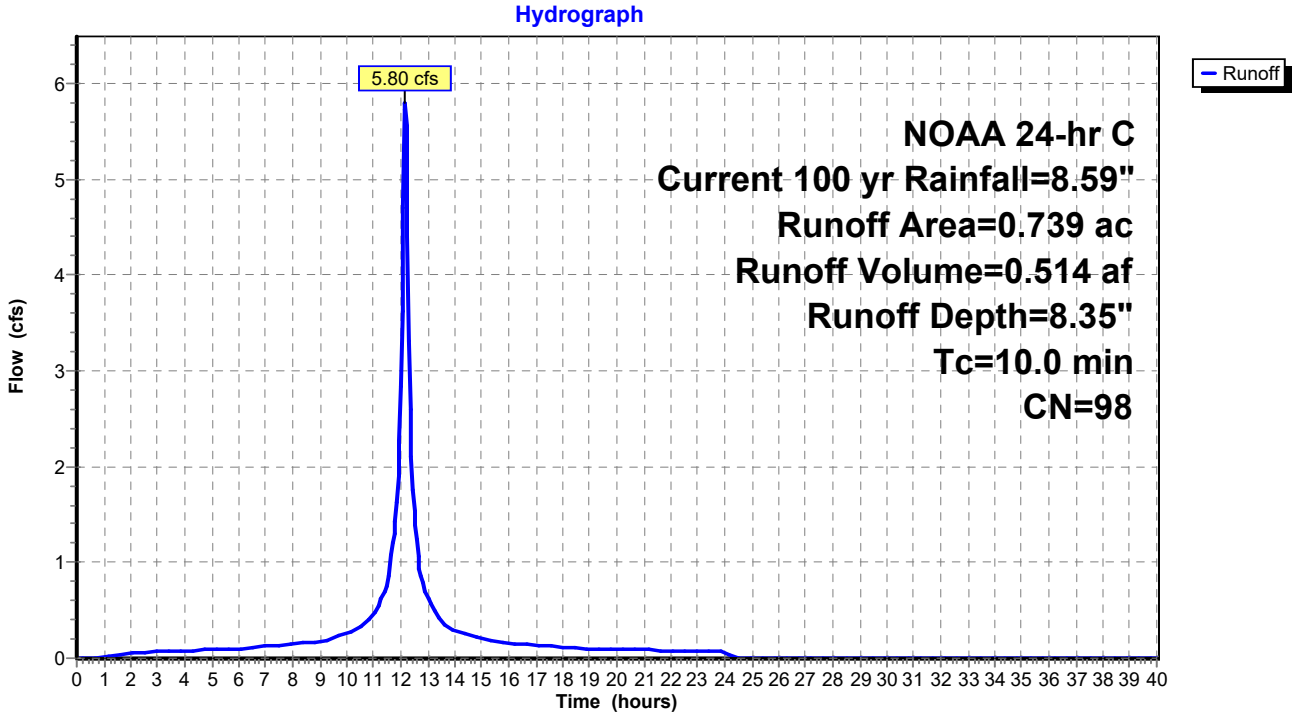
Runoff = 5.80 cfs @ 12.17 hrs, Volume= 0.514 af, Depth= 8.35"
Routed to Pond B-38 : Basin #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.171	98	Concrete, HSC C
	0.000	98	Paved roads w/curbs & sewers, HSG C
	0.739	98	Weighted Average
	0.739		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38I: PDA-38 (impervious)



Summary for Subcatchment 38P: PDA-38 (pervious)

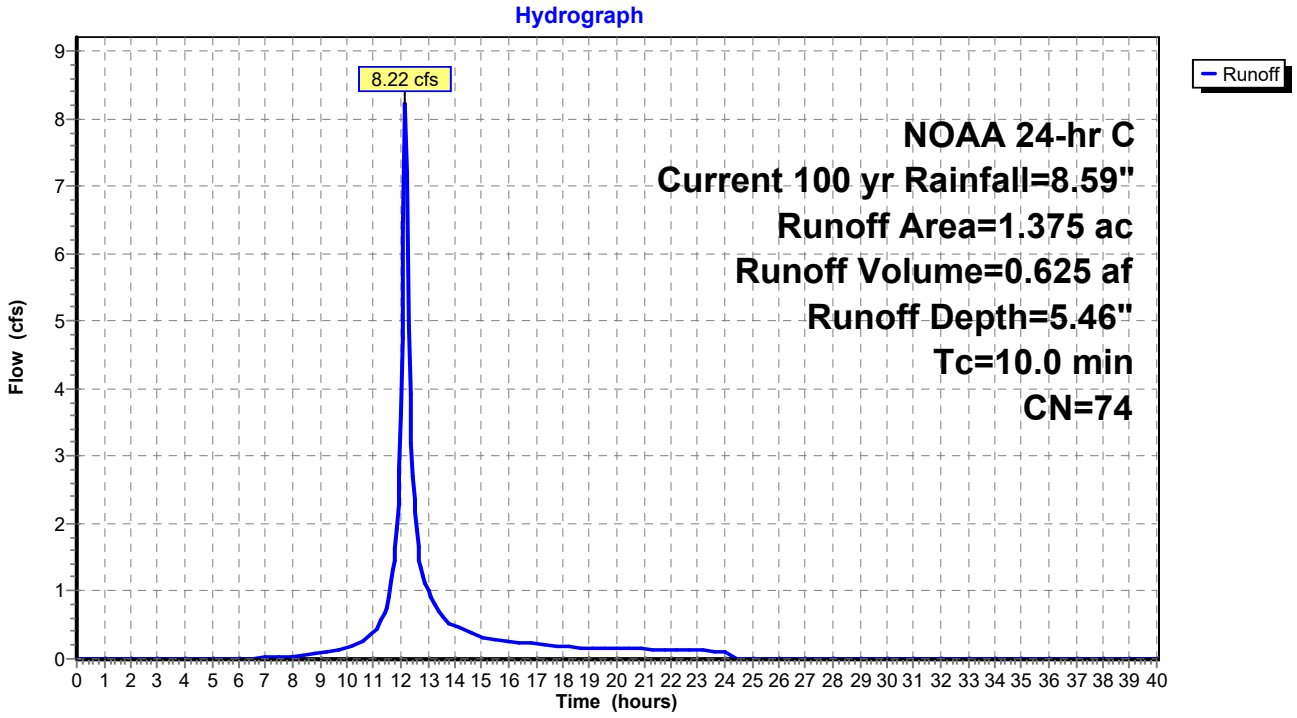
Runoff = 8.22 cfs @ 12.17 hrs, Volume= 0.625 af, Depth= 5.46"
Routed to Pond B-38 : Basin #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.375	74	>75% Grass cover, Good, HSG C
1.375		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38P: PDA-38 (pervious)



Summary for Subcatchment 39l: PDA-39 (impervious)

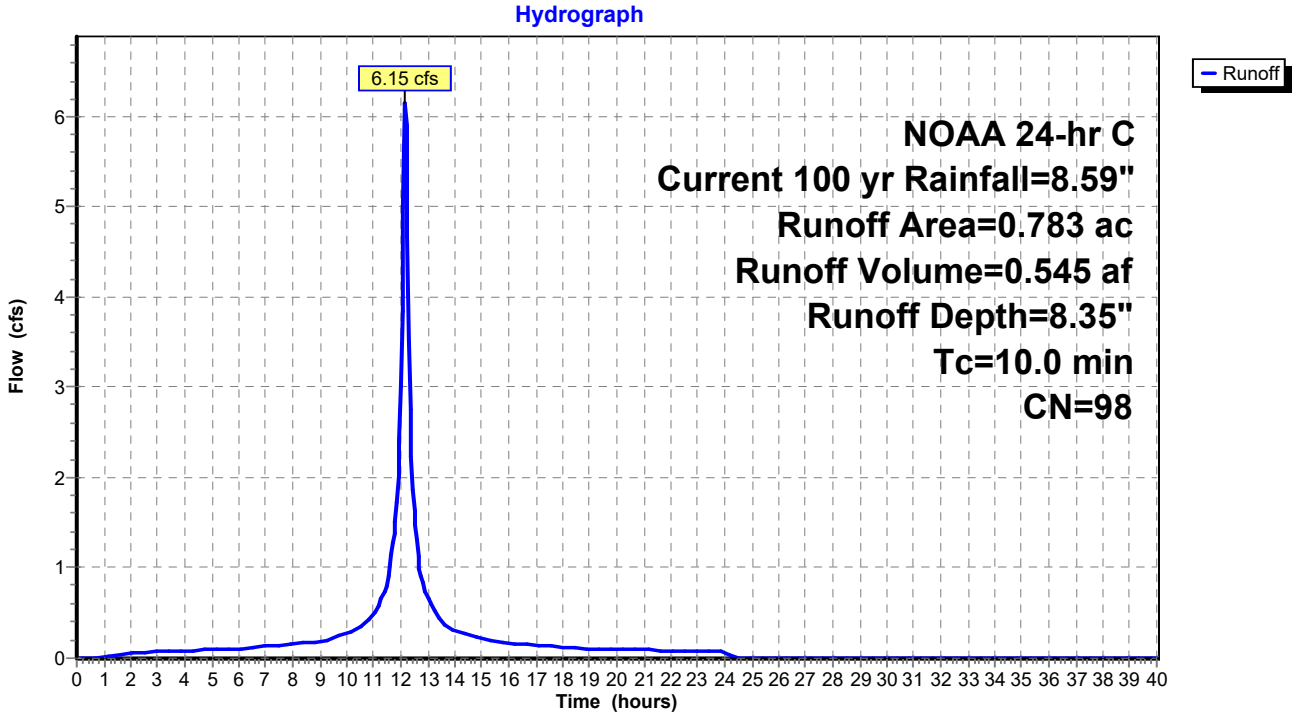
Runoff = 6.15 cfs @ 12.17 hrs, Volume= 0.545 af, Depth= 8.35"
Routed to Pond B-39 : Basin #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.164	98	Concrete, HSC C
	0.051	98	Paved roads w/curbs & sewers, HSG C
	0.783	98	Weighted Average
	0.783		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 39l: PDA-39 (impervious)



Summary for Subcatchment 39P: PDA-39 (pervious)

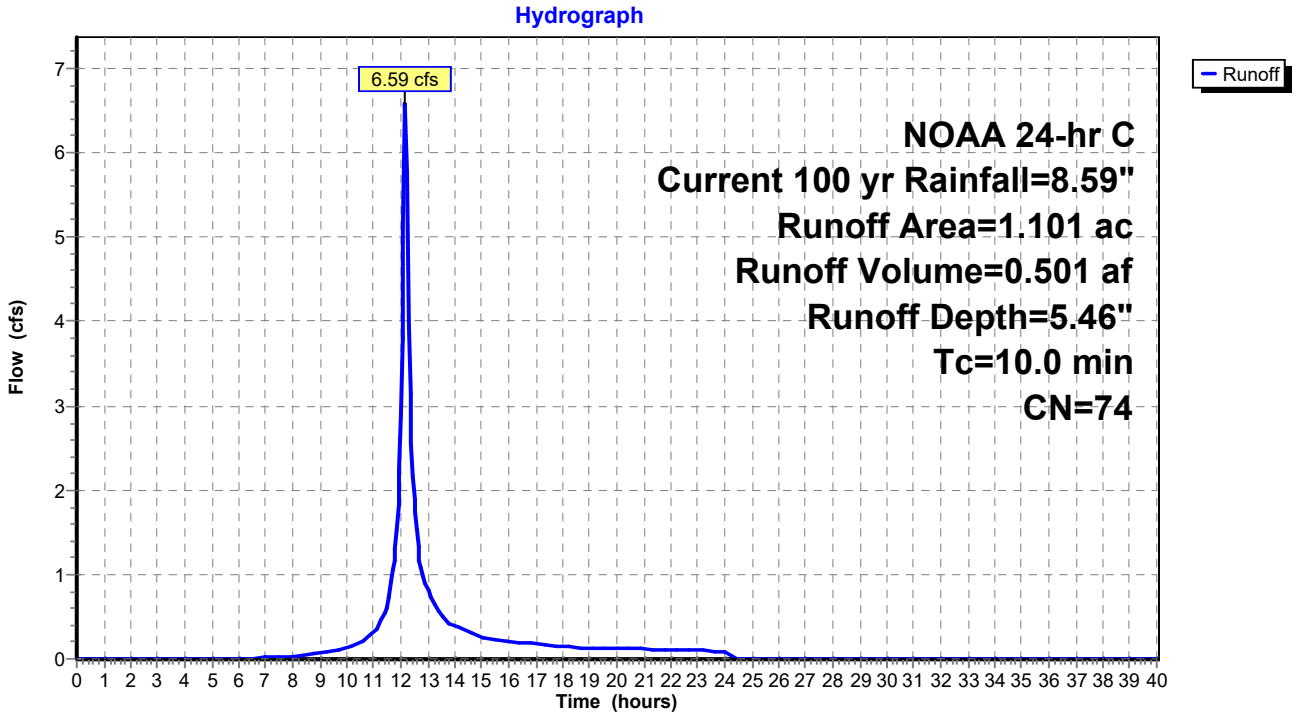
Runoff = 6.59 cfs @ 12.17 hrs, Volume= 0.501 af, Depth= 5.46"
Routed to Pond B-39 : Basin #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.101	74	>75% Grass cover, Good, HSG C
1.101		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 39P: PDA-39 (pervious)



Summary for Subcatchment 40l: PDA-40 (impervious)

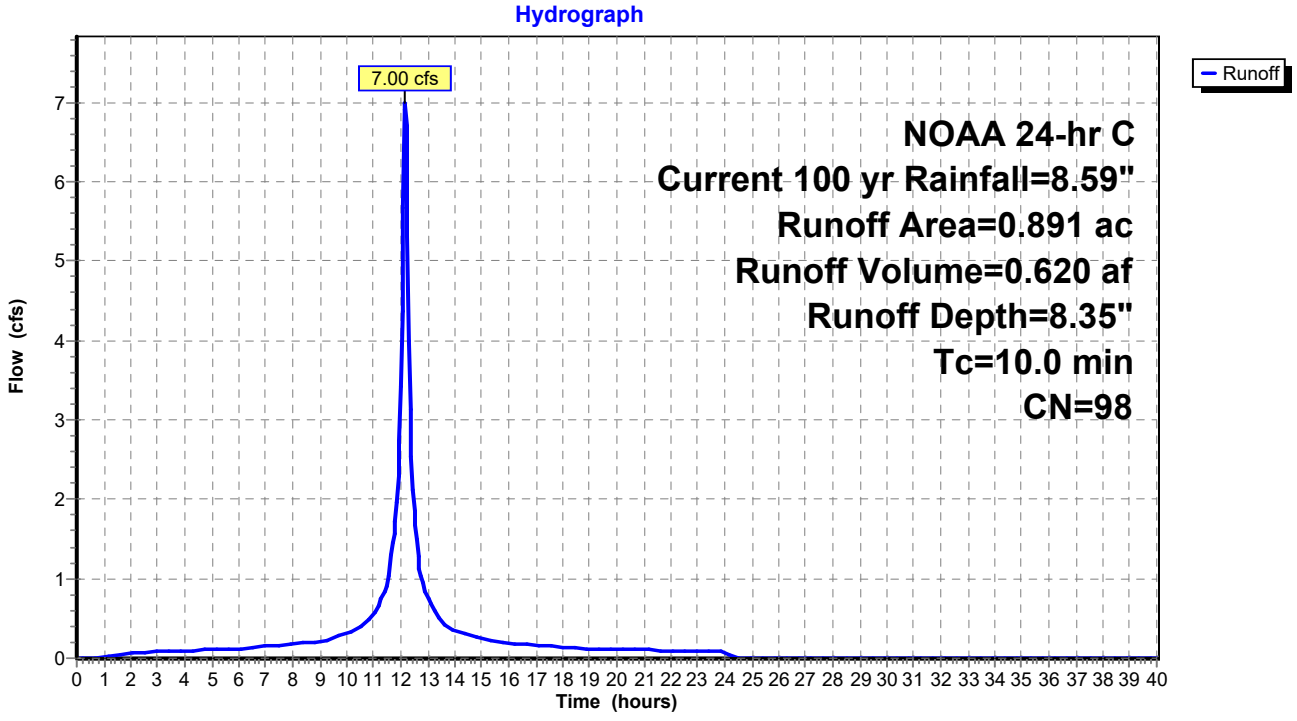
Runoff = 7.00 cfs @ 12.17 hrs, Volume= 0.620 af, Depth= 8.35"
Routed to Pond B-40 : Basin #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.179	98	Concrete, HSC C
	0.144	98	Paved roads w/curbs & sewers, HSG C
	0.891	98	Weighted Average
	0.891		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 40l: PDA-40 (impervious)



Summary for Subcatchment 40P: PDA-40 (pervious)

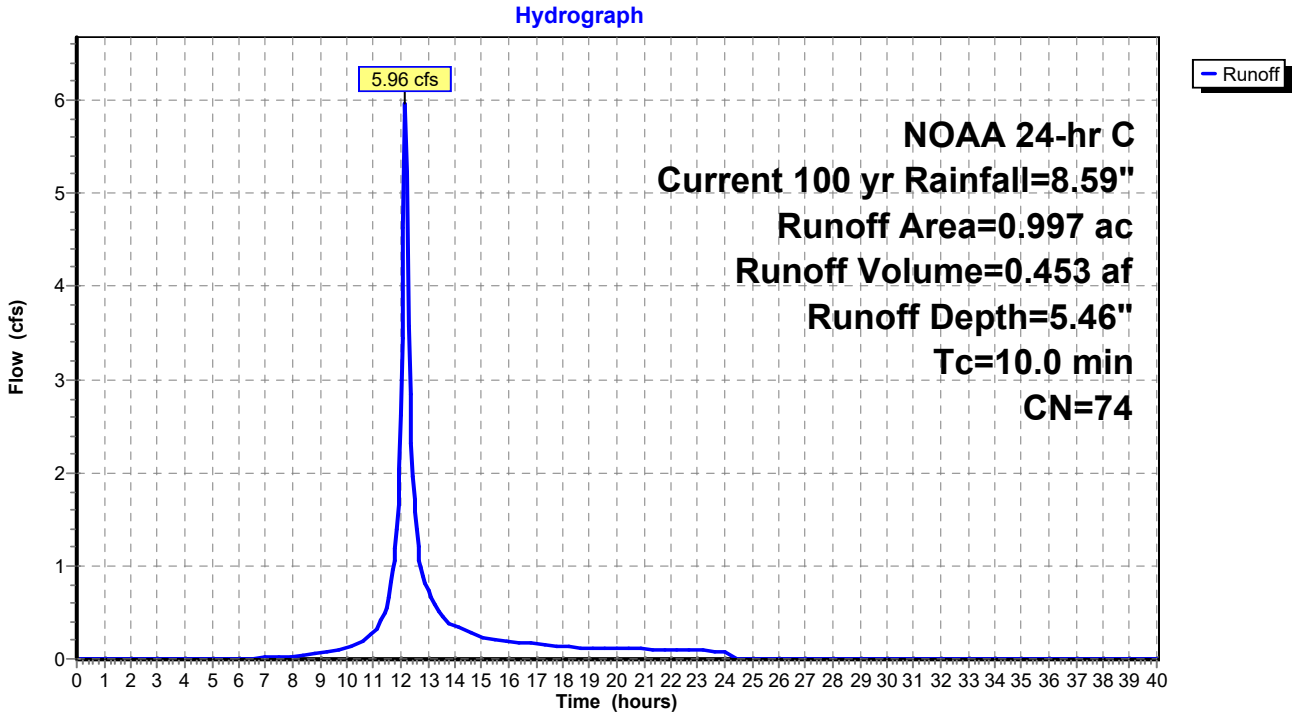
Runoff = 5.96 cfs @ 12.17 hrs, Volume= 0.453 af, Depth= 5.46"
Routed to Pond B-40 : Basin #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.997	74	>75% Grass cover, Good, HSG C
0.997		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 40P: PDA-40 (pervious)



Summary for Subcatchment UPDA-3: PDA-3 (undetained)

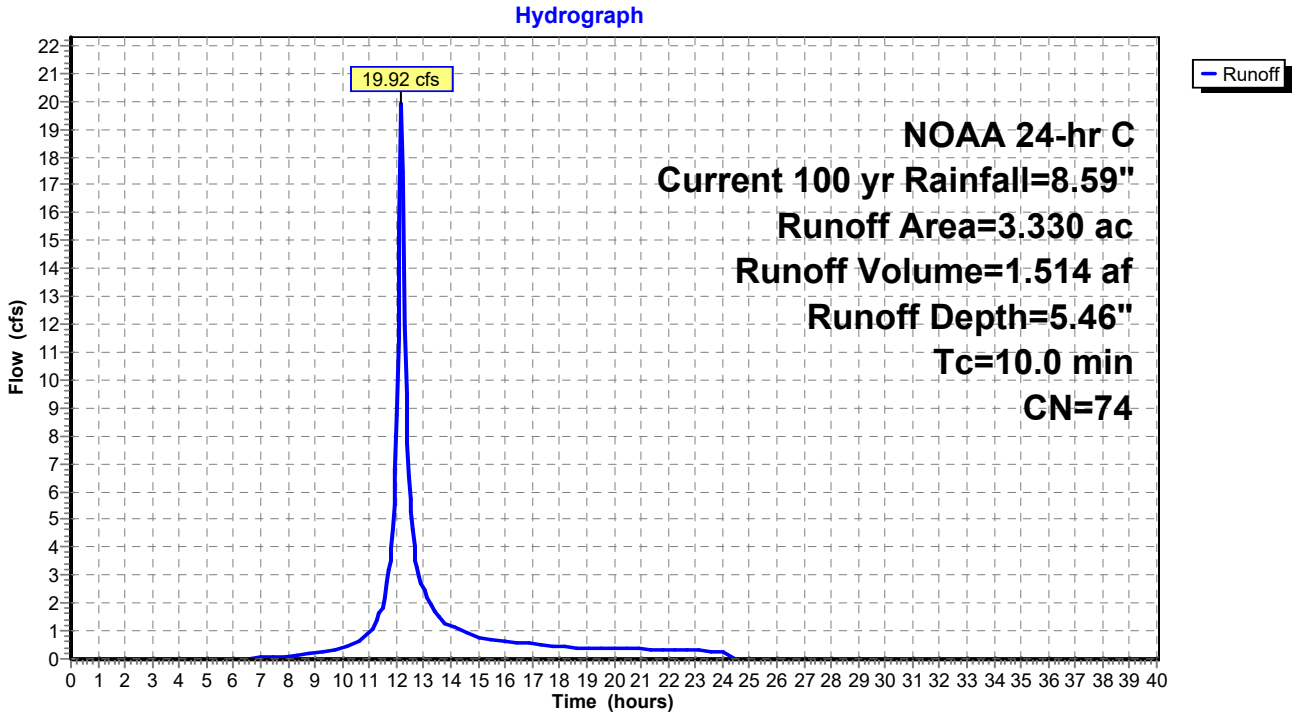
Runoff = 19.92 cfs @ 12.17 hrs, Volume= 1.514 af, Depth= 5.46"
Routed to Link PDA-3 : Proposed Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
3.330	74	>75% Grass cover, Good, HSG C
3.330		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-3: PDA-3 (undetained)



Summary for Pond B-29: Basin #29

Inflow Area = 1.077 ac, 34.91% Impervious, Inflow Depth = 6.47" for Current 100 yr event
Inflow = 7.14 cfs @ 12.17 hrs, Volume= 0.580 af
Outflow = 4.68 cfs @ 12.29 hrs, Volume= 0.531 af, Atten= 35%, Lag= 6.9 min
Primary = 4.68 cfs @ 12.29 hrs, Volume= 0.531 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 187.99' @ 12.29 hrs Surf.Area= 7,518 sf Storage= 9,442 cf

Plug-Flow detention time= 263.5 min calculated for 0.531 af (92% of inflow)
Center-of-Mass det. time= 218.3 min (1,004.4 - 786.1)

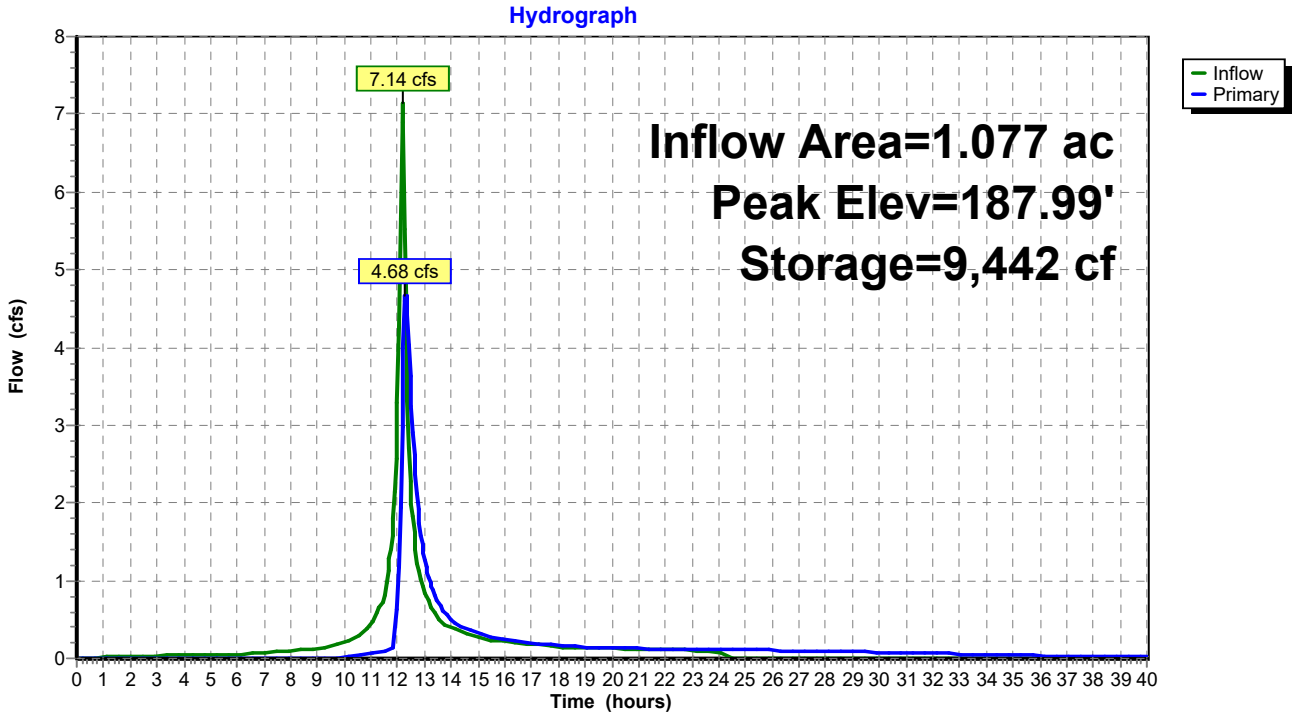
Volume	Invert	Avail.Storage	Storage Description
#1	186.30'	17,435 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.30	0	0	0
187.00	6,769	2,369	2,369
188.00	7,526	7,148	9,517
189.00	8,311	7,919	17,435

Device	Routing	Invert	Outlet Devices
#1	Primary	185.65'	**18.0" Round Culvert** L= 177.0' Ke= 0.500 Inlet / Outlet Invert= 185.65' / 182.00' S= 0.0206 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	186.87'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	187.49'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.17'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.64 cfs @ 12.29 hrs HW=187.99' (Free Discharge)
- **1=Culvert** (Passes 4.64 cfs of 10.72 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 4.85 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.48 cfs @ 2.31 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-29: Basin #29



Stage-Discharge for Pond B-29: Basin #29

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.30	0.00	186.82	0.00	187.34	0.10	187.86	3.04
186.31	0.00	186.83	0.00	187.35	0.10	187.87	3.16
186.32	0.00	186.84	0.00	187.36	0.10	187.88	3.28
186.33	0.00	186.85	0.00	187.37	0.10	187.89	3.40
186.34	0.00	186.86	0.00	187.38	0.10	187.90	3.52
186.35	0.00	186.87	0.00	187.39	0.11	187.91	3.64
186.36	0.00	186.88	0.00	187.40	0.11	187.92	3.77
186.37	0.00	186.89	0.00	187.41	0.11	187.93	3.89
186.38	0.00	186.90	0.00	187.42	0.11	187.94	4.02
186.39	0.00	186.91	0.00	187.43	0.11	187.95	4.15
186.40	0.00	186.92	0.00	187.44	0.11	187.96	4.28
186.41	0.00	186.93	0.01	187.45	0.11	187.97	4.41
186.42	0.00	186.94	0.01	187.46	0.11	187.98	4.54
186.43	0.00	186.95	0.01	187.47	0.12	187.99	4.67
186.44	0.00	186.96	0.01	187.48	0.12	188.00	4.81
186.45	0.00	186.97	0.02	187.49	0.12	188.01	4.94
186.46	0.00	186.98	0.02	187.50	0.13	188.02	5.08
186.47	0.00	186.99	0.02	187.51	0.16	188.03	5.22
186.48	0.00	187.00	0.03	187.52	0.19	188.04	5.36
186.49	0.00	187.01	0.03	187.53	0.23	188.05	5.50
186.50	0.00	187.02	0.03	187.54	0.27	188.06	5.64
186.51	0.00	187.03	0.04	187.55	0.32	188.07	5.78
186.52	0.00	187.04	0.04	187.56	0.37	188.08	5.93
186.53	0.00	187.05	0.05	187.57	0.42	188.09	6.07
186.54	0.00	187.06	0.05	187.58	0.48	188.10	6.22
186.55	0.00	187.07	0.05	187.59	0.54	188.11	6.36
186.56	0.00	187.08	0.05	187.60	0.60	188.12	6.51
186.57	0.00	187.09	0.06	187.61	0.67	188.13	6.66
186.58	0.00	187.10	0.06	187.62	0.74	188.14	6.81
186.59	0.00	187.11	0.06	187.63	0.81	188.15	6.96
186.60	0.00	187.12	0.06	187.64	0.89	188.16	7.11
186.61	0.00	187.13	0.06	187.65	0.97	188.17	7.26
186.62	0.00	187.14	0.07	187.66	1.04	188.18	7.54
186.63	0.00	187.15	0.07	187.67	1.13	188.19	7.90
186.64	0.00	187.16	0.07	187.68	1.21	188.20	8.34
186.65	0.00	187.17	0.07	187.69	1.30	188.21	8.82
186.66	0.00	187.18	0.07	187.70	1.39	188.22	9.35
186.67	0.00	187.19	0.08	187.71	1.48	188.23	9.93
186.68	0.00	187.20	0.08	187.72	1.57	188.24	10.54
186.69	0.00	187.21	0.08	187.73	1.66	188.25	11.18
186.70	0.00	187.22	0.08	187.74	1.76	188.26	11.86
186.71	0.00	187.23	0.08	187.75	1.86	188.27	12.56
186.72	0.00	187.24	0.08	187.76	1.96	188.28	13.30
186.73	0.00	187.25	0.09	187.77	2.06	188.29	14.06
186.74	0.00	187.26	0.09	187.78	2.16	188.30	14.86
186.75	0.00	187.27	0.09	187.79	2.27	188.31	15.67
186.76	0.00	187.28	0.09	187.80	2.37	188.32	16.52
186.77	0.00	187.29	0.09	187.81	2.48	188.33	17.38
186.78	0.00	187.30	0.09	187.82	2.59	188.34	18.27
186.79	0.00	187.31	0.10	187.83	2.70	188.35	19.19
186.80	0.00	187.32	0.10	187.84	2.81	188.36	20.12
186.81	0.00	187.33	0.10	187.85	2.93	188.37	21.08

Stage-Discharge for Pond B-29: Basin #29 (continued)

Elevation (feet)	Primary (cfs)
188.38	22.10
188.39	23.14
188.40	24.22
188.41	25.31
188.42	26.44
188.43	27.59
188.44	28.76
188.45	29.96
188.46	31.19
188.47	32.41
188.48	33.54
188.49	34.69
188.50	35.86
188.51	37.06
188.52	38.29
188.53	39.53
188.54	40.80
188.55	42.10
188.56	43.42
188.57	44.76
188.58	46.16
188.59	47.58
188.60	49.03
188.61	50.50
188.62	52.00
188.63	53.52
188.64	55.07
188.65	56.65
188.66	58.25
188.67	59.88
188.68	61.54
188.69	63.22
188.70	64.93
188.71	66.67
188.72	68.43
188.73	70.22
188.74	72.04
188.75	73.88
188.76	75.75
188.77	77.65
188.78	79.30
188.79	80.97
188.80	82.65
188.81	84.35
188.82	86.06
188.83	87.78
188.84	89.51
188.85	91.26
188.86	93.02
188.87	94.79
188.88	96.58
188.89	98.37
188.90	100.19
188.91	102.01
188.92	103.84
188.93	105.69
188.94	107.55
188.95	109.42
188.96	111.31
188.97	113.21
188.98	115.15
188.99	117.11
189.00	**119.08**

Stage-Area-Storage for Pond B-29: Basin #29

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.30	0	0	186.82	5,028	1,307
186.31	97	0	186.83	5,125	1,358
186.32	193	2	186.84	5,222	1,410
186.33	290	4	186.85	5,319	1,463
186.34	387	8	186.86	5,415	1,516
186.35	484	12	186.87	5,512	1,571
186.36	580	17	186.88	5,609	1,626
186.37	677	24	186.89	5,705	1,683
186.38	774	31	186.90	5,802	1,741
186.39	870	39	186.91	5,899	1,799
186.40	967	48	186.92	5,995	1,859
186.41	1,064	59	186.93	6,092	1,919
186.42	1,160	70	186.94	6,189	1,980
186.43	1,257	82	186.95	6,286	2,043
186.44	1,354	95	186.96	6,382	2,106
186.45	1,451	109	186.97	6,479	2,170
186.46	1,547	124	186.98	6,576	2,236
186.47	1,644	140	186.99	6,672	2,302
186.48	1,741	157	187.00	6,769	2,369
186.49	1,837	175	187.01	6,777	2,437
186.50	1,934	193	187.02	6,784	2,505
186.51	2,031	213	187.03	6,792	2,573
186.52	2,127	234	187.04	6,799	2,641
186.53	2,224	256	187.05	6,807	2,709
186.54	2,321	278	187.06	6,814	2,777
186.55	2,418	302	187.07	6,822	2,845
186.56	2,514	327	187.08	6,830	2,913
186.57	2,611	352	187.09	6,837	2,981
186.58	2,708	379	187.10	6,845	3,050
186.59	2,804	407	187.11	6,852	3,118
186.60	2,901	435	187.12	6,860	3,187
186.61	2,998	465	187.13	6,867	3,256
186.62	3,094	495	187.14	6,875	3,324
186.63	3,191	527	187.15	6,883	3,393
186.64	3,288	559	187.16	6,890	3,462
186.65	3,385	592	187.17	6,898	3,531
186.66	3,481	627	187.18	6,905	3,600
186.67	3,578	662	187.19	6,913	3,669
186.68	3,675	698	187.20	6,920	3,738
186.69	3,771	735	187.21	6,928	3,807
186.70	3,868	774	187.22	6,936	3,877
186.71	3,965	813	187.23	6,943	3,946
186.72	4,061	853	187.24	6,951	4,016
186.73	4,158	894	187.25	6,958	4,085
186.74	4,255	936	187.26	6,966	4,155
186.75	4,351	979	187.27	6,973	4,224
186.76	4,448	1,023	187.28	6,981	4,294
186.77	4,545	1,068	187.29	6,989	4,364
186.78	4,642	1,114	187.30	6,996	4,434
186.79	4,738	1,161	187.31	7,004	4,504
186.80	4,835	1,209	187.32	7,011	4,574
186.81	4,932	1,258	187.33	7,019	4,644

Stage-Area-Storage for Pond B-29: Basin #29 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.34	7,026	4,714	187.86	7,420	8,470
187.35	7,034	4,785	187.87	7,428	8,545
187.36	7,042	4,855	187.88	7,435	8,619
187.37	7,049	4,925	187.89	7,443	8,693
187.38	7,057	4,996	187.90	7,450	8,768
187.39	7,064	5,067	187.91	7,458	8,842
187.40	7,072	5,137	187.92	7,465	8,917
187.41	7,079	5,208	187.93	7,473	8,992
187.42	7,087	5,279	187.94	7,481	9,066
187.43	7,095	5,350	187.95	7,488	9,141
187.44	7,102	5,421	187.96	7,496	9,216
187.45	7,110	5,492	187.97	7,503	9,291
187.46	7,117	5,563	187.98	7,511	9,366
187.47	7,125	5,634	187.99	7,518	9,441
187.48	7,132	5,705	188.00	7,526	9,517
187.49	7,140	5,777	188.01	7,534	9,592
187.50	7,148	5,848	188.02	7,542	9,667
187.51	7,155	5,920	188.03	7,550	9,743
187.52	7,163	5,991	188.04	7,557	9,818
187.53	7,170	6,063	188.05	7,565	9,894
187.54	7,178	6,135	188.06	7,573	9,970
187.55	7,185	6,207	188.07	7,581	10,045
187.56	7,193	6,278	188.08	7,589	10,121
187.57	7,200	6,350	188.09	7,597	10,197
187.58	7,208	6,422	188.10	7,605	10,273
187.59	7,216	6,495	188.11	7,612	10,349
187.60	7,223	6,567	188.12	7,620	10,425
187.61	7,231	6,639	188.13	7,628	10,502
187.62	7,238	6,711	188.14	7,636	10,578
187.63	7,246	6,784	188.15	7,644	10,654
187.64	7,253	6,856	188.16	7,652	10,731
187.65	7,261	6,929	188.17	7,659	10,807
187.66	7,269	7,002	188.18	7,667	10,884
187.67	7,276	7,074	188.19	7,675	10,961
187.68	7,284	7,147	188.20	7,683	11,038
187.69	7,291	7,220	188.21	7,691	11,114
187.70	7,299	7,293	188.22	7,699	11,191
187.71	7,306	7,366	188.23	7,707	11,268
187.72	7,314	7,439	188.24	7,714	11,345
187.73	7,322	7,512	188.25	7,722	11,423
187.74	7,329	7,585	188.26	7,730	11,500
187.75	7,337	7,659	188.27	7,738	11,577
187.76	7,344	7,732	188.28	7,746	11,655
187.77	7,352	7,806	188.29	7,754	11,732
187.78	7,359	7,879	188.30	7,762	11,810
187.79	7,367	7,953	188.31	7,769	11,887
187.80	7,375	8,027	188.32	7,777	11,965
187.81	7,382	8,100	188.33	7,785	12,043
187.82	7,390	8,174	188.34	7,793	12,121
187.83	7,397	8,248	188.35	7,801	12,199
187.84	7,405	8,322	188.36	7,809	12,277
187.85	7,412	8,396	188.37	7,816	12,355

Stage-Area-Storage for Pond B-29: Basin #29 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.38	7,824	12,433
188.39	7,832	12,511
188.40	7,840	12,590
188.41	7,848	12,668
188.42	7,856	12,747
188.43	7,864	12,825
188.44	7,871	12,904
188.45	7,879	12,983
188.46	7,887	13,062
188.47	7,895	13,141
188.48	7,903	13,220
188.49	7,911	13,299
188.50	7,919	13,378
188.51	7,926	13,457
188.52	7,934	13,536
188.53	7,942	13,616
188.54	7,950	13,695
188.55	7,958	13,775
188.56	7,966	13,854
188.57	7,973	13,934
188.58	7,981	14,014
188.59	7,989	14,094
188.60	7,997	14,174
188.61	8,005	14,254
188.62	8,013	14,334
188.63	8,021	14,414
188.64	8,028	14,494
188.65	8,036	14,574
188.66	8,044	14,655
188.67	8,052	14,735
188.68	8,060	14,816
188.69	8,068	14,896
188.70	8,076	14,977
188.71	8,083	15,058
188.72	8,091	15,139
188.73	8,099	15,220
188.74	8,107	15,301
188.75	8,115	15,382
188.76	8,123	15,463
188.77	8,130	15,544
188.78	8,138	15,626
188.79	8,146	15,707
188.80	8,154	15,789
188.81	8,162	15,870
188.82	8,170	15,952
188.83	8,178	16,034
188.84	8,185	16,115
188.85	8,193	16,197
188.86	8,201	16,279
188.87	8,209	16,361
188.88	8,217	16,443
188.89	8,225	16,526
188.90	8,233	16,608
188.91	8,240	16,690
188.92	8,248	16,773
188.93	8,256	16,855
188.94	8,264	16,938
188.95	8,272	17,021
188.96	8,280	17,103
188.97	8,287	17,186
188.98	8,295	17,269
188.99	8,303	17,352
189.00	**8,311**	**17,435**

Summary for Pond B-30: Basin #30

Inflow Area = 2.381 ac, 27.01% Impervious, Inflow Depth = 6.24" for Current 100 yr event
Inflow = 15.44 cfs @ 12.17 hrs, Volume= 1.238 af
Outflow = 0.34 cfs @ 17.76 hrs, Volume= 0.635 af, Atten= 98%, Lag= 335.1 min
Primary = 0.34 cfs @ 17.76 hrs, Volume= 0.635 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.02' @ 17.76 hrs Surf.Area= 15,017 sf Storage= 41,668 cf

Plug-Flow detention time= 839.8 min calculated for 0.635 af (51% of inflow)
Center-of-Mass det. time= 718.3 min (1,511.1 - 792.8)

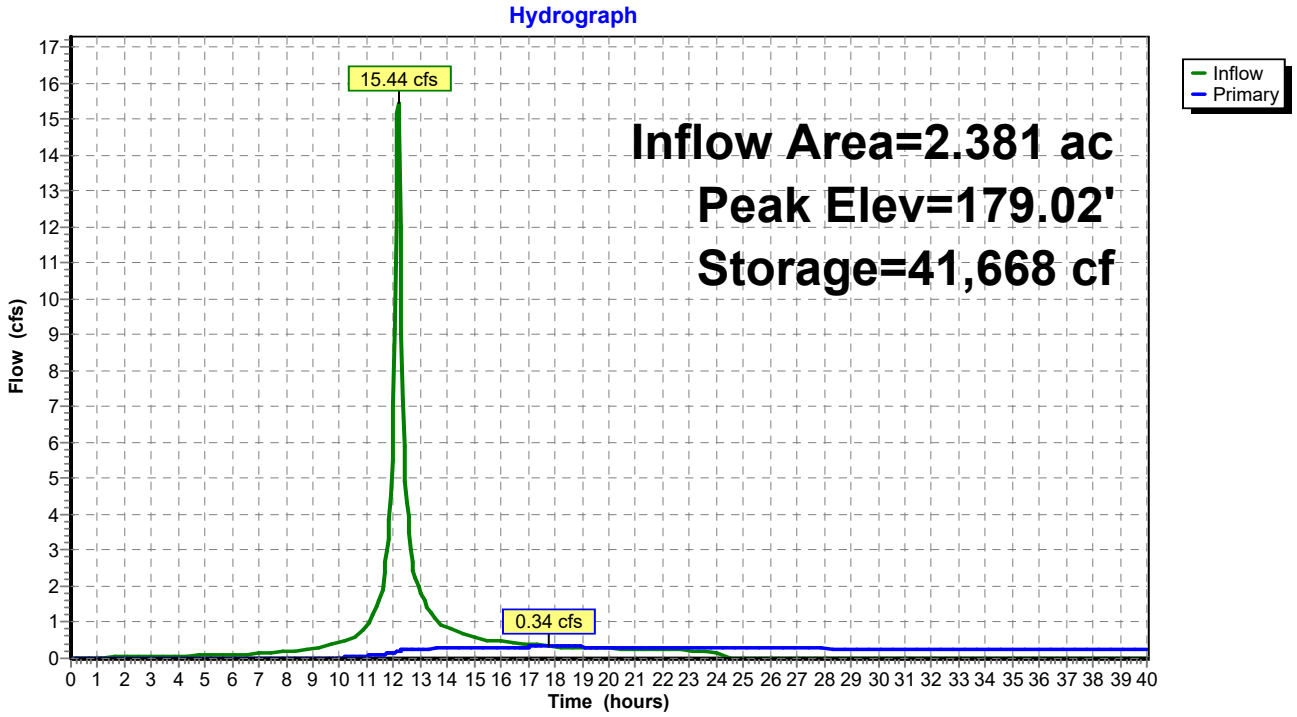
Volume	Invert	Avail.Storage	Storage Description
#1	175.30'	57,146 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
175.30	0	0	0
176.00	10,254	3,589	3,589
177.00	11,773	11,014	14,602
178.00	13,346	12,560	27,162
179.00	14,978	14,162	41,324
180.00	16,667	15,823	57,146

Device	Routing	Invert	Outlet Devices
#1	Primary	174.65'	**18.0" Round Culvert** L= 86.0' Ke= 0.500 Inlet / Outlet Invert= 174.65' / 174.00' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	175.93'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	179.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.33 cfs @ 17.76 hrs HW=179.02' (Free Discharge)
- **1=Culvert** (Passes 0.33 cfs of 15.18 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.28 cfs @ 8.32 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.05 cfs @ 0.50 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-30: Basin #30



Stage-Discharge for Pond B-30: Basin #30

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
175.30	0.00	175.82	0.00	176.34	0.09	176.86	0.15
175.31	0.00	175.83	0.00	176.35	0.09	176.87	0.15
175.32	0.00	175.84	0.00	176.36	0.09	176.88	0.15
175.33	0.00	175.85	0.00	176.37	0.10	176.89	0.15
175.34	0.00	175.86	0.00	176.38	0.10	176.90	0.15
175.35	0.00	175.87	0.00	176.39	0.10	176.91	0.15
175.36	0.00	175.88	0.00	176.40	0.10	176.92	0.15
175.37	0.00	175.89	0.00	176.41	0.10	176.93	0.16
175.38	0.00	175.90	0.00	176.42	0.10	176.94	0.16
175.39	0.00	175.91	0.00	176.43	0.10	176.95	0.16
175.40	0.00	175.92	0.00	176.44	0.10	176.96	0.16
175.41	0.00	175.93	0.00	176.45	0.11	176.97	0.16
175.42	0.00	175.94	0.00	176.46	0.11	176.98	0.16
175.43	0.00	175.95	0.00	176.47	0.11	176.99	0.16
175.44	0.00	175.96	0.00	176.48	0.11	177.00	0.16
175.45	0.00	175.97	0.00	176.49	0.11	177.01	0.16
175.46	0.00	175.98	0.00	176.50	0.11	177.02	0.16
175.47	0.00	175.99	0.01	176.51	0.11	177.03	0.16
175.48	0.00	176.00	0.01	176.52	0.11	177.04	0.16
175.49	0.00	176.01	0.01	176.53	0.12	177.05	0.17
175.50	0.00	176.02	0.01	176.54	0.12	177.06	0.17
175.51	0.00	176.03	0.02	176.55	0.12	177.07	0.17
175.52	0.00	176.04	0.02	176.56	0.12	177.08	0.17
175.53	0.00	176.05	0.02	176.57	0.12	177.09	0.17
175.54	0.00	176.06	0.03	176.58	0.12	177.10	0.17
175.55	0.00	176.07	0.03	176.59	0.12	177.11	0.17
175.56	0.00	176.08	0.03	176.60	0.12	177.12	0.17
175.57	0.00	176.09	0.04	176.61	0.12	177.13	0.17
175.58	0.00	176.10	0.04	176.62	0.13	177.14	0.17
175.59	0.00	176.11	0.05	176.63	0.13	177.15	0.17
175.60	0.00	176.12	0.05	176.64	0.13	177.16	0.17
175.61	0.00	176.13	0.05	176.65	0.13	177.17	0.17
175.62	0.00	176.14	0.05	176.66	0.13	177.18	0.18
175.63	0.00	176.15	0.06	176.67	0.13	177.19	0.18
175.64	0.00	176.16	0.06	176.68	0.13	177.20	0.18
175.65	0.00	176.17	0.06	176.69	0.13	177.21	0.18
175.66	0.00	176.18	0.06	176.70	0.13	177.22	0.18
175.67	0.00	176.19	0.06	176.71	0.13	177.23	0.18
175.68	0.00	176.20	0.07	176.72	0.14	177.24	0.18
175.69	0.00	176.21	0.07	176.73	0.14	177.25	0.18
175.70	0.00	176.22	0.07	176.74	0.14	177.26	0.18
175.71	0.00	176.23	0.07	176.75	0.14	177.27	0.18
175.72	0.00	176.24	0.07	176.76	0.14	177.28	0.18
175.73	0.00	176.25	0.08	176.77	0.14	177.29	0.18
175.74	0.00	176.26	0.08	176.78	0.14	177.30	0.18
175.75	0.00	176.27	0.08	176.79	0.14	177.31	0.19
175.76	0.00	176.28	0.08	176.80	0.14	177.32	0.19
175.77	0.00	176.29	0.08	176.81	0.14	177.33	0.19
175.78	0.00	176.30	0.08	176.82	0.15	177.34	0.19
175.79	0.00	176.31	0.09	176.83	0.15	177.35	0.19
175.80	0.00	176.32	0.09	176.84	0.15	177.36	0.19
175.81	0.00	176.33	0.09	176.85	0.15	177.37	0.19

Stage-Discharge for Pond B-30: Basin #30 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
177.38	0.19	177.90	0.22	178.42	0.25	178.94	0.28
177.39	0.19	177.91	0.22	178.43	0.25	178.95	0.28
177.40	0.19	177.92	0.23	178.44	0.25	178.96	0.28
177.41	0.19	177.93	0.23	178.45	0.26	178.97	0.28
177.42	0.19	177.94	0.23	178.46	0.26	178.98	0.28
177.43	0.19	177.95	0.23	178.47	0.26	178.99	0.28
177.44	0.19	177.96	0.23	178.48	0.26	179.00	0.28
177.45	0.20	177.97	0.23	178.49	0.26	179.01	0.30
177.46	0.20	177.98	0.23	178.50	0.26	179.02	0.32
177.47	0.20	177.99	0.23	178.51	0.26	179.03	0.35
177.48	0.20	178.00	0.23	178.52	0.26	179.04	0.39
177.49	0.20	178.01	0.23	178.53	0.26	179.05	0.43
177.50	0.20	178.02	0.23	178.54	0.26	179.06	0.48
177.51	0.20	178.03	0.23	178.55	0.26	179.07	0.53
177.52	0.20	178.04	0.23	178.56	0.26	179.08	0.58
177.53	0.20	178.05	0.23	178.57	0.26	179.09	0.64
177.54	0.20	178.06	0.23	178.58	0.26	179.10	0.70
177.55	0.20	178.07	0.23	178.59	0.26	179.11	0.76
177.56	0.20	178.08	0.23	178.60	0.26	179.12	0.83
177.57	0.20	178.09	0.24	178.61	0.26	179.13	0.90
177.58	0.20	178.10	0.24	178.62	0.26	179.14	0.97
177.59	0.20	178.11	0.24	178.63	0.26	179.15	1.04
177.60	0.21	178.12	0.24	178.64	0.26	179.16	1.12
177.61	0.21	178.13	0.24	178.65	0.27	179.17	1.20
177.62	0.21	178.14	0.24	178.66	0.27	179.18	1.28
177.63	0.21	178.15	0.24	178.67	0.27	179.19	1.36
177.64	0.21	178.16	0.24	178.68	0.27	179.20	1.45
177.65	0.21	178.17	0.24	178.69	0.27	179.21	1.54
177.66	0.21	178.18	0.24	178.70	0.27	179.22	1.63
177.67	0.21	178.19	0.24	178.71	0.27	179.23	1.72
177.68	0.21	178.20	0.24	178.72	0.27	179.24	1.81
177.69	0.21	178.21	0.24	178.73	0.27	179.25	1.91
177.70	0.21	178.22	0.24	178.74	0.27	179.26	2.01
177.71	0.21	178.23	0.24	178.75	0.27	179.27	2.11
177.72	0.21	178.24	0.24	178.76	0.27	179.28	2.21
177.73	0.21	178.25	0.24	178.77	0.27	179.29	2.31
177.74	0.21	178.26	0.24	178.78	0.27	179.30	2.41
177.75	0.22	178.27	0.25	178.79	0.27	179.31	2.52
177.76	0.22	178.28	0.25	178.80	0.27	179.32	2.63
177.77	0.22	178.29	0.25	178.81	0.27	179.33	2.74
177.78	0.22	178.30	0.25	178.82	0.27	179.34	2.85
177.79	0.22	178.31	0.25	178.83	0.27	179.35	2.96
177.80	0.22	178.32	0.25	178.84	0.27	179.36	3.07
177.81	0.22	178.33	0.25	178.85	0.28	179.37	3.19
177.82	0.22	178.34	0.25	178.86	0.28	179.38	3.31
177.83	0.22	178.35	0.25	178.87	0.28	179.39	3.42
177.84	0.22	178.36	0.25	178.88	0.28	179.40	3.54
177.85	0.22	178.37	0.25	178.89	0.28	179.41	3.67
177.86	0.22	178.38	0.25	178.90	0.28	179.42	3.79
177.87	0.22	178.39	0.25	178.91	0.28	179.43	3.91
177.88	0.22	178.40	0.25	178.92	0.28	179.44	4.04
177.89	0.22	178.41	0.25	178.93	0.28	179.45	4.16

Stage-Discharge for Pond B-30: Basin #30 (continued)

Elevation (feet)	Primary (cfs)
179.46	4.29
179.47	4.42
179.48	4.55
179.49	4.68
179.50	4.81
179.51	5.07
179.52	5.41
179.53	5.83
179.54	6.30
179.55	6.81
179.56	7.36
179.57	7.95
179.58	8.58
179.59	9.23
179.60	9.92
179.61	10.64
179.62	11.39
179.63	12.16
179.64	12.96
179.65	13.79
179.66	14.64
179.67	15.51
179.68	16.41
179.69	17.33
179.70	18.27
179.71	19.27
179.72	20.30
179.73	21.36
179.74	22.44
179.75	23.55
179.76	24.68
179.77	25.84
179.78	27.03
179.79	28.24
179.80	29.47
179.81	30.73
179.82	32.02
179.83	33.33
179.84	34.67
179.85	36.03
179.86	37.42
179.87	38.83
179.88	40.27
179.89	41.73
179.90	43.22
179.91	44.76
179.92	46.32
179.93	47.91
179.94	49.53
179.95	51.18
179.96	52.85
179.97	54.55
179.98	56.28
179.99	58.04
180.00	**59.82**

Stage-Area-Storage for Pond B-30: Basin #30

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
175.30	0	0	175.82	7,617	1,980
175.31	146	1	175.83	7,764	2,057
175.32	293	3	175.84	7,910	2,136
175.33	439	7	175.85	8,057	2,216
175.34	586	12	175.86	8,203	2,297
175.35	732	18	175.87	8,350	2,380
175.36	879	26	175.88	8,496	2,464
175.37	1,025	36	175.89	8,643	2,550
175.38	1,172	47	175.90	8,789	2,637
175.39	1,318	59	175.91	8,936	2,725
175.40	1,465	73	175.92	9,082	2,815
175.41	1,611	89	175.93	9,229	2,907
175.42	1,758	105	175.94	9,375	3,000
175.43	1,904	124	175.95	9,522	3,095
175.44	2,051	144	175.96	9,668	3,190
175.45	2,197	165	175.97	9,815	3,288
175.46	2,344	188	175.98	9,961	3,387
175.47	2,490	212	175.99	10,108	3,487
175.48	2,637	237	176.00	10,254	3,589
175.49	2,783	264	176.01	10,269	3,692
175.50	2,930	293	176.02	10,284	3,794
175.51	3,076	323	176.03	10,300	3,897
175.52	3,223	354	176.04	10,315	4,000
175.53	3,369	387	176.05	10,330	4,103
175.54	3,516	422	176.06	10,345	4,207
175.55	3,662	458	176.07	10,360	4,310
175.56	3,809	495	176.08	10,376	4,414
175.57	3,955	534	176.09	10,391	4,518
175.58	4,102	574	176.10	10,406	4,622
175.59	4,248	616	176.11	10,421	4,726
175.60	4,395	659	176.12	10,436	4,830
175.61	4,541	704	176.13	10,451	4,935
175.62	4,688	750	176.14	10,467	5,039
175.63	4,834	798	176.15	10,482	5,144
175.64	4,981	847	176.16	10,497	5,249
175.65	5,127	897	176.17	10,512	5,354
175.66	5,273	949	176.18	10,527	5,459
175.67	5,420	1,003	176.19	10,543	5,565
175.68	5,566	1,058	176.20	10,558	5,670
175.69	5,713	1,114	176.21	10,573	5,776
175.70	5,859	1,172	176.22	10,588	5,882
175.71	6,006	1,231	176.23	10,603	5,987
175.72	6,152	1,292	176.24	10,619	6,094
175.73	6,299	1,354	176.25	10,634	6,200
175.74	6,445	1,418	176.26	10,649	6,306
175.75	6,592	1,483	176.27	10,664	6,413
175.76	6,738	1,550	176.28	10,679	6,520
175.77	6,885	1,618	176.29	10,695	6,626
175.78	7,031	1,688	176.30	10,710	6,733
175.79	7,178	1,759	176.31	10,725	6,841
175.80	7,324	1,831	176.32	10,740	6,948
175.81	7,471	1,905	176.33	10,755	7,055

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.34	10,770	7,163	176.86	11,560	12,969
176.35	10,786	7,271	176.87	11,576	13,085
176.36	10,801	7,379	176.88	11,591	13,201
176.37	10,816	7,487	176.89	11,606	13,317
176.38	10,831	7,595	176.90	11,621	13,433
176.39	10,846	7,703	176.91	11,636	13,549
176.40	10,862	7,812	176.92	11,651	13,665
176.41	10,877	7,921	176.93	11,667	13,782
176.42	10,892	8,030	176.94	11,682	13,899
176.43	10,907	8,139	176.95	11,697	14,016
176.44	10,922	8,248	176.96	11,712	14,133
176.45	10,938	8,357	176.97	11,727	14,250
176.46	10,953	8,466	176.98	11,743	14,367
176.47	10,968	8,576	176.99	11,758	14,485
176.48	10,983	8,686	177.00	11,773	14,602
176.49	10,998	8,796	177.01	11,789	14,720
176.50	11,014	8,906	177.02	11,804	14,838
176.51	11,029	9,016	177.03	11,820	14,956
176.52	11,044	9,126	177.04	11,836	15,075
176.53	11,059	9,237	177.05	11,852	15,193
176.54	11,074	9,348	177.06	11,867	15,312
176.55	11,089	9,458	177.07	11,883	15,430
176.56	11,105	9,569	177.08	11,899	15,549
176.57	11,120	9,680	177.09	11,915	15,668
176.58	11,135	9,792	177.10	11,930	15,788
176.59	11,150	9,903	177.11	11,946	15,907
176.60	11,165	10,015	177.12	11,962	16,026
176.61	11,181	10,126	177.13	11,977	16,146
176.62	11,196	10,238	177.14	11,993	16,266
176.63	11,211	10,350	177.15	12,009	16,386
176.64	11,226	10,463	177.16	12,025	16,506
176.65	11,241	10,575	177.17	12,040	16,627
176.66	11,257	10,687	177.18	12,056	16,747
176.67	11,272	10,800	177.19	12,072	16,868
176.68	11,287	10,913	177.20	12,088	16,988
176.69	11,302	11,026	177.21	12,103	17,109
176.70	11,317	11,139	177.22	12,119	17,231
176.71	11,332	11,252	177.23	12,135	17,352
176.72	11,348	11,366	177.24	12,151	17,473
176.73	11,363	11,479	177.25	12,166	17,595
176.74	11,378	11,593	177.26	12,182	17,717
176.75	11,393	11,707	177.27	12,198	17,838
176.76	11,408	11,821	177.28	12,213	17,961
176.77	11,424	11,935	177.29	12,229	18,083
176.78	11,439	12,049	177.30	12,245	18,205
176.79	11,454	12,164	177.31	12,261	18,328
176.80	11,469	12,278	177.32	12,276	18,450
176.81	11,484	12,393	177.33	12,292	18,573
176.82	11,500	12,508	177.34	12,308	18,696
176.83	11,515	12,623	177.35	12,324	18,819
176.84	11,530	12,738	177.36	12,339	18,943
176.85	11,545	12,854	177.37	12,355	19,066

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.38	12,371	19,190	177.90	13,189	25,835
177.39	12,386	19,313	177.91	13,204	25,967
177.40	12,402	19,437	177.92	13,220	26,099
177.41	12,418	19,562	177.93	13,236	26,232
177.42	12,434	19,686	177.94	13,252	26,364
177.43	12,449	19,810	177.95	13,267	26,497
177.44	12,465	19,935	177.96	13,283	26,629
177.45	12,481	20,060	177.97	13,299	26,762
177.46	12,497	20,184	177.98	13,315	26,895
177.47	12,512	20,309	177.99	13,330	27,029
177.48	12,528	20,435	178.00	13,346	27,162
177.49	12,544	20,560	178.01	13,362	27,295
177.50	12,560	20,686	178.02	13,379	27,429
177.51	12,575	20,811	178.03	13,395	27,563
177.52	12,591	20,937	178.04	13,411	27,697
177.53	12,607	21,063	178.05	13,428	27,831
177.54	12,622	21,189	178.06	13,444	27,966
177.55	12,638	21,315	178.07	13,460	28,100
177.56	12,654	21,442	178.08	13,477	28,235
177.57	12,670	21,569	178.09	13,493	28,370
177.58	12,685	21,695	178.10	13,509	28,505
177.59	12,701	21,822	178.11	13,526	28,640
177.60	12,717	21,949	178.12	13,542	28,775
177.61	12,733	22,077	178.13	13,558	28,911
177.62	12,748	22,204	178.14	13,574	29,046
177.63	12,764	22,332	178.15	13,591	29,182
177.64	12,780	22,459	178.16	13,607	29,318
177.65	12,795	22,587	178.17	13,623	29,454
177.66	12,811	22,715	178.18	13,640	29,591
177.67	12,827	22,843	178.19	13,656	29,727
177.68	12,843	22,972	178.20	13,672	29,864
177.69	12,858	23,100	178.21	13,689	30,001
177.70	12,874	23,229	178.22	13,705	30,138
177.71	12,890	23,358	178.23	13,721	30,275
177.72	12,906	23,487	178.24	13,738	30,412
177.73	12,921	23,616	178.25	13,754	30,549
177.74	12,937	23,745	178.26	13,770	30,687
177.75	12,953	23,875	178.27	13,787	30,825
177.76	12,968	24,004	178.28	13,803	30,963
177.77	12,984	24,134	178.29	13,819	31,101
177.78	13,000	24,264	178.30	13,836	31,239
177.79	13,016	24,394	178.31	13,852	31,378
177.80	13,031	24,524	178.32	13,868	31,516
177.81	13,047	24,655	178.33	13,885	31,655
177.82	13,063	24,785	178.34	13,901	31,794
177.83	13,079	24,916	178.35	13,917	31,933
177.84	13,094	25,047	178.36	13,934	32,072
177.85	13,110	25,178	178.37	13,950	32,212
177.86	13,126	25,309	178.38	13,966	32,351
177.87	13,142	25,440	178.39	13,982	32,491
177.88	13,157	25,572	178.40	13,999	32,631
177.89	13,173	25,703	178.41	14,015	32,771

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.42	14,031	32,911
178.43	14,048	33,052
178.44	14,064	33,192
178.45	14,080	33,333
178.46	14,097	33,474
178.47	14,113	33,615
178.48	14,129	33,756
178.49	14,146	33,897
178.50	14,162	34,039
178.51	14,178	34,181
178.52	14,195	34,322
178.53	14,211	34,464
178.54	14,227	34,607
178.55	14,244	34,749
178.56	14,260	34,892
178.57	14,276	35,034
178.58	14,293	35,177
178.59	14,309	35,320
178.60	14,325	35,463
178.61	14,342	35,607
178.62	14,358	35,750
178.63	14,374	35,894
178.64	14,390	36,038
178.65	14,407	36,182
178.66	14,423	36,326
178.67	14,439	36,470
178.68	14,456	36,614
178.69	14,472	36,759
178.70	14,488	36,904
178.71	14,505	37,049
178.72	14,521	37,194
178.73	14,537	37,339
178.74	14,554	37,485
178.75	14,570	37,630
178.76	14,586	37,776
178.77	14,603	37,922
178.78	14,619	38,068
178.79	14,635	38,215
178.80	14,652	38,361
178.81	14,668	38,508
178.82	14,684	38,654
178.83	14,701	38,801
178.84	14,717	38,948
178.85	14,733	39,096
178.86	14,750	39,243
178.87	14,766	39,391
178.88	14,782	39,538
178.89	14,798	39,686
178.90	14,815	39,834
178.91	14,831	39,982
178.92	14,847	40,131
178.93	14,864	40,279
178.94	14,880	40,428
178.95	14,896	40,577
178.96	14,913	40,726
178.97	14,929	40,875
178.98	14,945	41,025
178.99	14,962	41,174
179.00	14,978	41,324
179.01	14,995	41,474
179.02	15,012	41,624
179.03	15,029	41,774
179.04	15,046	41,924
179.05	15,062	42,075
179.06	15,079	42,226
179.07	15,096	42,376
179.08	15,113	42,528
179.09	15,130	42,679
179.10	15,147	42,830
179.11	15,164	42,982
179.12	15,181	43,133
179.13	15,198	43,285
179.14	15,214	43,437
179.15	15,231	43,590
179.16	15,248	43,742
179.17	15,265	43,895
179.18	15,282	44,047
179.19	15,299	44,200
179.20	15,316	44,353
179.21	15,333	44,507
179.22	15,350	44,660
179.23	15,366	44,814
179.24	15,383	44,967
179.25	15,400	45,121
179.26	15,417	45,275
179.27	15,434	45,430
179.28	15,451	45,584
179.29	15,468	45,739
179.30	15,485	45,893
179.31	15,502	46,048
179.32	15,518	46,203
179.33	15,535	46,359
179.34	15,552	46,514
179.35	15,569	46,670
179.36	15,586	46,825
179.37	15,603	46,981
179.38	15,620	47,137
179.39	15,637	47,294
179.40	15,654	47,450
179.41	15,670	47,607
179.42	15,687	47,764
179.43	15,704	47,921
179.44	15,721	48,078
179.45	15,738	48,235

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.46	15,755	48,392
179.47	15,772	48,550
179.48	15,789	48,708
179.49	15,806	48,866
179.50	15,823	49,024
179.51	15,839	49,182
179.52	15,856	49,341
179.53	15,873	49,499
179.54	15,890	49,658
179.55	15,907	49,817
179.56	15,924	49,976
179.57	15,941	50,136
179.58	15,958	50,295
179.59	15,975	50,455
179.60	15,991	50,615
179.61	16,008	50,775
179.62	16,025	50,935
179.63	16,042	51,095
179.64	16,059	51,256
179.65	16,076	51,416
179.66	16,093	51,577
179.67	16,110	51,738
179.68	16,127	51,899
179.69	16,143	52,061
179.70	16,160	52,222
179.71	16,177	52,384
179.72	16,194	52,546
179.73	16,211	52,708
179.74	16,228	52,870
179.75	16,245	53,032
179.76	16,262	53,195
179.77	16,279	53,358
179.78	16,295	53,521
179.79	16,312	53,684
179.80	16,329	53,847
179.81	16,346	54,010
179.82	16,363	54,174
179.83	16,380	54,337
179.84	16,397	54,501
179.85	16,414	54,665
179.86	16,431	54,830
179.87	16,447	54,994
179.88	16,464	55,159
179.89	16,481	55,323
179.90	16,498	55,488
179.91	16,515	55,653
179.92	16,532	55,818
179.93	16,549	55,984
179.94	16,566	56,149
179.95	16,583	56,315
179.96	16,599	56,481
179.97	16,616	56,647
179.98	16,633	56,813
179.99	16,650	56,980
180.00	**16,667**	**57,146**

Summary for Pond B-31: Basin #31

Inflow Area = 0.358 ac, 42.46% Impervious, Inflow Depth = 6.69" for Current 100 yr event
Inflow = 2.42 cfs @ 12.17 hrs, Volume= 0.199 af
Outflow = 0.21 cfs @ 13.31 hrs, Volume= 0.184 af, Atten= 91%, Lag= 68.1 min
Primary = 0.21 cfs @ 13.31 hrs, Volume= 0.184 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.72' @ 13.31 hrs Surf.Area= 3,052 sf Storage= 4,946 cf

Plug-Flow detention time= 322.3 min calculated for 0.184 af (93% of inflow)
Center-of-Mass det. time= 281.0 min (1,061.1 - 780.1)

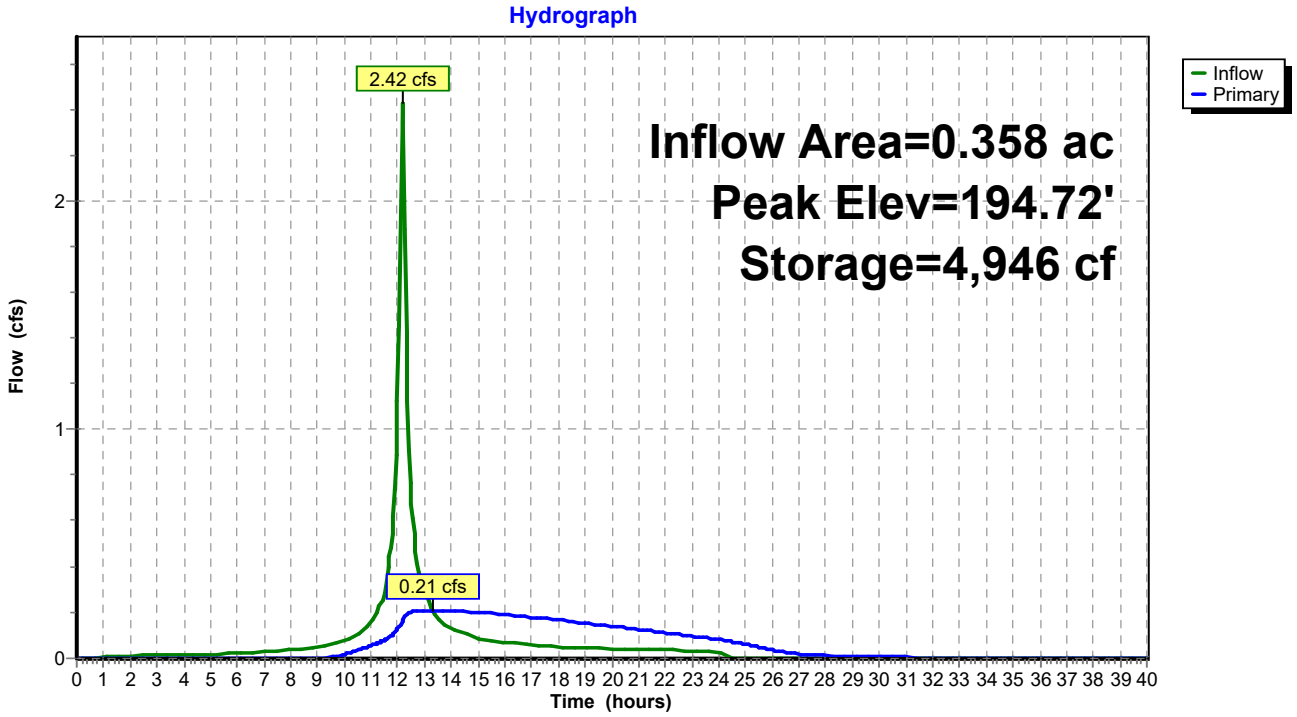
Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	9,453 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	1,944	680	680
194.00	2,566	2,255	2,935
195.00	3,245	2,906	5,841
196.00	3,980	3,613	9,453

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	**18.0" Round Culvert** L= 126.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 188.00' S= 0.0290 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.97'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	195.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.21 cfs @ 13.31 hrs HW=194.72' (Free Discharge)
- **1=Culvert** (Passes 0.21 cfs of 12.95 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.21 cfs @ 6.17 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-31: Basin #31



Stage-Discharge for Pond B-31: Basin #31

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.30	0.00	192.82	0.00	193.34	0.08	193.86	0.15
192.31	0.00	192.83	0.00	193.35	0.09	193.87	0.15
192.32	0.00	192.84	0.00	193.36	0.09	193.88	0.15
192.33	0.00	192.85	0.00	193.37	0.09	193.89	0.15
192.34	0.00	192.86	0.00	193.38	0.09	193.90	0.15
192.35	0.00	192.87	0.00	193.39	0.09	193.91	0.15
192.36	0.00	192.88	0.00	193.40	0.09	193.92	0.15
192.37	0.00	192.89	0.00	193.41	0.10	193.93	0.15
192.38	0.00	192.90	0.00	193.42	0.10	193.94	0.15
192.39	0.00	192.91	0.00	193.43	0.10	193.95	0.15
192.40	0.00	192.92	0.00	193.44	0.10	193.96	0.15
192.41	0.00	192.93	0.00	193.45	0.10	193.97	0.16
192.42	0.00	192.94	0.00	193.46	0.10	193.98	0.16
192.43	0.00	192.95	0.00	193.47	0.10	193.99	0.16
192.44	0.00	192.96	0.00	193.48	0.10	194.00	0.16
192.45	0.00	192.97	0.00	193.49	0.11	194.01	0.16
192.46	0.00	192.98	0.00	193.50	0.11	194.02	0.16
192.47	0.00	192.99	0.00	193.51	0.11	194.03	0.16
192.48	0.00	193.00	0.00	193.52	0.11	194.04	0.16
192.49	0.00	193.01	0.00	193.53	0.11	194.05	0.16
192.50	0.00	193.02	0.00	193.54	0.11	194.06	0.16
192.51	0.00	193.03	0.01	193.55	0.11	194.07	0.16
192.52	0.00	193.04	0.01	193.56	0.11	194.08	0.16
192.53	0.00	193.05	0.01	193.57	0.12	194.09	0.17
192.54	0.00	193.06	0.01	193.58	0.12	194.10	0.17
192.55	0.00	193.07	0.02	193.59	0.12	194.11	0.17
192.56	0.00	193.08	0.02	193.60	0.12	194.12	0.17
192.57	0.00	193.09	0.02	193.61	0.12	194.13	0.17
192.58	0.00	193.10	0.03	193.62	0.12	194.14	0.17
192.59	0.00	193.11	0.03	193.63	0.12	194.15	0.17
192.60	0.00	193.12	0.03	193.64	0.12	194.16	0.17
192.61	0.00	193.13	0.04	193.65	0.12	194.17	0.17
192.62	0.00	193.14	0.04	193.66	0.13	194.18	0.17
192.63	0.00	193.15	0.05	193.67	0.13	194.19	0.17
192.64	0.00	193.16	0.05	193.68	0.13	194.20	0.17
192.65	0.00	193.17	0.05	193.69	0.13	194.21	0.17
192.66	0.00	193.18	0.05	193.70	0.13	194.22	0.18
192.67	0.00	193.19	0.06	193.71	0.13	194.23	0.18
192.68	0.00	193.20	0.06	193.72	0.13	194.24	0.18
192.69	0.00	193.21	0.06	193.73	0.13	194.25	0.18
192.70	0.00	193.22	0.06	193.74	0.13	194.26	0.18
192.71	0.00	193.23	0.06	193.75	0.13	194.27	0.18
192.72	0.00	193.24	0.07	193.76	0.14	194.28	0.18
192.73	0.00	193.25	0.07	193.77	0.14	194.29	0.18
192.74	0.00	193.26	0.07	193.78	0.14	194.30	0.18
192.75	0.00	193.27	0.07	193.79	0.14	194.31	0.18
192.76	0.00	193.28	0.07	193.80	0.14	194.32	0.18
192.77	0.00	193.29	0.08	193.81	0.14	194.33	0.18
192.78	0.00	193.30	0.08	193.82	0.14	194.34	0.18
192.79	0.00	193.31	0.08	193.83	0.14	194.35	0.19
192.80	0.00	193.32	0.08	193.84	0.14	194.36	0.19
192.81	0.00	193.33	0.08	193.85	0.14	194.37	0.19

Stage-Discharge for Pond B-31: Basin #31 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.38	0.19	194.90	0.22	195.42	3.74	195.94	49.49
194.39	0.19	194.91	0.22	195.43	3.86	195.95	51.13
194.40	0.19	194.92	0.22	195.44	3.99	195.96	52.81
194.41	0.19	194.93	0.22	195.45	4.11	195.97	54.51
194.42	0.19	194.94	0.22	195.46	4.24	195.98	56.24
194.43	0.19	194.95	0.22	195.47	4.37	195.99	57.99
194.44	0.19	194.96	0.23	195.48	4.50	196.00	**59.77**
194.45	0.19	194.97	0.23	195.49	4.63		
194.46	0.19	194.98	0.23	195.50	4.76		
194.47	0.19	194.99	0.23	195.51	5.02		
194.48	0.19	195.00	0.23	195.52	5.37		
194.49	0.20	195.01	0.24	195.53	5.78		
194.50	0.20	195.02	0.27	195.54	6.25		
194.51	0.20	195.03	0.30	195.55	6.76		
194.52	0.20	195.04	0.33	195.56	7.31		
194.53	0.20	195.05	0.38	195.57	7.90		
194.54	0.20	195.06	0.42	195.58	8.53		
194.55	0.20	195.07	0.47	195.59	9.19		
194.56	0.20	195.08	0.53	195.60	9.88		
194.57	0.20	195.09	0.58	195.61	10.59		
194.58	0.20	195.10	0.65	195.62	11.34		
194.59	0.20	195.11	0.71	195.63	12.12		
194.60	0.20	195.12	0.78	195.64	12.92		
194.61	0.20	195.13	0.84	195.65	13.74		
194.62	0.20	195.14	0.92	195.66	14.59		
194.63	0.20	195.15	0.99	195.67	15.47		
194.64	0.21	195.16	1.07	195.68	16.36		
194.65	0.21	195.17	1.15	195.69	17.28		
194.66	0.21	195.18	1.23	195.70	18.22		
194.67	0.21	195.19	1.31	195.71	19.23		
194.68	0.21	195.20	1.40	195.72	20.25		
194.69	0.21	195.21	1.49	195.73	21.31		
194.70	0.21	195.22	1.58	195.74	22.39		
194.71	0.21	195.23	1.67	195.75	23.50		
194.72	0.21	195.24	1.76	195.76	24.63		
194.73	0.21	195.25	1.86	195.77	25.79		
194.74	0.21	195.26	1.95	195.78	26.98		
194.75	0.21	195.27	2.05	195.79	28.19		
194.76	0.21	195.28	2.15	195.80	29.42		
194.77	0.21	195.29	2.26	195.81	30.69		
194.78	0.21	195.30	2.36	195.82	31.97		
194.79	0.22	195.31	2.47	195.83	33.29		
194.80	0.22	195.32	2.58	195.84	34.62		
194.81	0.22	195.33	2.69	195.85	35.98		
194.82	0.22	195.34	2.80	195.86	37.37		
194.83	0.22	195.35	2.91	195.87	38.78		
194.84	0.22	195.36	3.02	195.88	40.22		
194.85	0.22	195.37	3.14	195.89	41.68		
194.86	0.22	195.38	3.25	195.90	43.17		
194.87	0.22	195.39	3.37	195.91	44.71		
194.88	0.22	195.40	3.49	195.92	46.28		
194.89	0.22	195.41	3.61	195.93	47.87		

Stage-Area-Storage for Pond B-31: Basin #31

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.30	0	0	192.82	1,444	375
192.31	28	0	192.83	1,472	390
192.32	56	1	192.84	1,500	405
192.33	83	1	192.85	1,527	420
192.34	111	2	192.86	1,555	435
192.35	139	3	192.87	1,583	451
192.36	167	5	192.88	1,611	467
192.37	194	7	192.89	1,639	483
192.38	222	9	192.90	1,666	500
192.39	250	11	192.91	1,694	517
192.40	278	14	192.92	1,722	534
192.41	305	17	192.93	1,750	551
192.42	333	20	192.94	1,777	569
192.43	361	23	192.95	1,805	587
192.44	389	27	192.96	1,833	605
192.45	417	31	192.97	1,861	623
192.46	444	36	192.98	1,888	642
192.47	472	40	192.99	1,916	661
192.48	500	45	193.00	1,944	680
192.49	528	50	193.01	1,950	700
192.50	555	56	193.02	1,956	719
192.51	583	61	193.03	1,963	739
192.52	611	67	193.04	1,969	759
192.53	639	73	193.05	1,975	778
192.54	667	80	193.06	1,981	798
192.55	694	87	193.07	1,988	818
192.56	722	94	193.08	1,994	838
192.57	750	101	193.09	2,000	858
192.58	778	109	193.10	2,006	878
192.59	805	117	193.11	2,012	898
192.60	833	125	193.12	2,019	918
192.61	861	133	193.13	2,025	938
192.62	889	142	193.14	2,031	959
192.63	916	151	193.15	2,037	979
192.64	944	161	193.16	2,044	999
192.65	972	170	193.17	2,050	1,020
192.66	1,000	180	193.18	2,056	1,040
192.67	1,028	190	193.19	2,062	1,061
192.68	1,055	201	193.20	2,068	1,082
192.69	1,083	211	193.21	2,075	1,102
192.70	1,111	222	193.22	2,081	1,123
192.71	1,139	233	193.23	2,087	1,144
192.72	1,166	245	193.24	2,093	1,165
192.73	1,194	257	193.25	2,100	1,186
192.74	1,222	269	193.26	2,106	1,207
192.75	1,250	281	193.27	2,112	1,228
192.76	1,277	294	193.28	2,118	1,249
192.77	1,305	307	193.29	2,124	1,270
192.78	1,333	320	193.30	2,131	1,292
192.79	1,361	333	193.31	2,137	1,313
192.80	1,389	347	193.32	2,143	1,334
192.81	1,416	361	193.33	2,149	1,356

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.34	2,155	1,377	193.86	2,479	2,582
193.35	2,162	1,399	193.87	2,485	2,607
193.36	2,168	1,421	193.88	2,491	2,632
193.37	2,174	1,442	193.89	2,498	2,657
193.38	2,180	1,464	193.90	2,504	2,682
193.39	2,187	1,486	193.91	2,510	2,707
193.40	2,193	1,508	193.92	2,516	2,732
193.41	2,199	1,530	193.93	2,522	2,757
193.42	2,205	1,552	193.94	2,529	2,783
193.43	2,211	1,574	193.95	2,535	2,808
193.44	2,218	1,596	193.96	2,541	2,833
193.45	2,224	1,618	193.97	2,547	2,859
193.46	2,230	1,640	193.98	2,554	2,884
193.47	2,236	1,663	193.99	2,560	2,910
193.48	2,243	1,685	194.00	2,566	2,935
193.49	2,249	1,708	194.01	2,573	2,961
193.50	2,255	1,730	194.02	2,580	2,987
193.51	2,261	1,753	194.03	2,586	3,013
193.52	2,267	1,775	194.04	2,593	3,039
193.53	2,274	1,798	194.05	2,600	3,065
193.54	2,280	1,821	194.06	2,607	3,091
193.55	2,286	1,844	194.07	2,614	3,117
193.56	2,292	1,867	194.08	2,620	3,143
193.57	2,299	1,890	194.09	2,627	3,169
193.58	2,305	1,913	194.10	2,634	3,195
193.59	2,311	1,936	194.11	2,641	3,222
193.60	2,317	1,959	194.12	2,647	3,248
193.61	2,323	1,982	194.13	2,654	3,275
193.62	2,330	2,005	194.14	2,661	3,301
193.63	2,336	2,029	194.15	2,668	3,328
193.64	2,342	2,052	194.16	2,675	3,355
193.65	2,348	2,075	194.17	2,681	3,381
193.66	2,355	2,099	194.18	2,688	3,408
193.67	2,361	2,122	194.19	2,695	3,435
193.68	2,367	2,146	194.20	2,702	3,462
193.69	2,373	2,170	194.21	2,709	3,489
193.70	2,379	2,194	194.22	2,715	3,516
193.71	2,386	2,217	194.23	2,722	3,544
193.72	2,392	2,241	194.24	2,729	3,571
193.73	2,398	2,265	194.25	2,736	3,598
193.74	2,404	2,289	194.26	2,743	3,626
193.75	2,411	2,313	194.27	2,749	3,653
193.76	2,417	2,337	194.28	2,756	3,680
193.77	2,423	2,362	194.29	2,763	3,708
193.78	2,429	2,386	194.30	2,770	3,736
193.79	2,435	2,410	194.31	2,776	3,763
193.80	2,442	2,435	194.32	2,783	3,791
193.81	2,448	2,459	194.33	2,790	3,819
193.82	2,454	2,484	194.34	2,797	3,847
193.83	2,460	2,508	194.35	2,804	3,875
193.84	2,466	2,533	194.36	2,810	3,903
193.85	2,473	2,557	194.37	2,817	3,931

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.38	2,824	3,960
194.39	2,831	3,988
194.40	2,838	4,016
194.41	2,844	4,045
194.42	2,851	4,073
194.43	2,858	4,102
194.44	2,865	4,130
194.45	2,872	4,159
194.46	2,878	4,188
194.47	2,885	4,216
194.48	2,892	4,245
194.49	2,899	4,274
194.50	2,906	4,303
194.51	2,912	4,332
194.52	2,919	4,362
194.53	2,926	4,391
194.54	2,933	4,420
194.55	2,939	4,449
194.56	2,946	4,479
194.57	2,953	4,508
194.58	2,960	4,538
194.59	2,967	4,568
194.60	2,973	4,597
194.61	2,980	4,627
194.62	2,987	4,657
194.63	2,994	4,687
194.64	3,001	4,717
194.65	3,007	4,747
194.66	3,014	4,777
194.67	3,021	4,807
194.68	3,028	4,837
194.69	3,035	4,868
194.70	3,041	4,898
194.71	3,048	4,928
194.72	3,055	4,959
194.73	3,062	4,989
194.74	3,068	5,020
194.75	3,075	5,051
194.76	3,082	5,082
194.77	3,089	5,113
194.78	3,096	5,143
194.79	3,102	5,174
194.80	3,109	5,205
194.81	3,116	5,237
194.82	3,123	5,268
194.83	3,130	5,299
194.84	3,136	5,330
194.85	3,143	5,362
194.86	3,150	5,393
194.87	3,157	5,425
194.88	3,164	5,456
194.89	3,170	5,488
194.90	3,177	5,520
194.91	3,184	5,552
194.92	3,191	5,583
194.93	3,197	5,615
194.94	3,204	5,647
194.95	3,211	5,679
194.96	3,218	5,712
194.97	3,225	5,744
194.98	3,231	5,776
194.99	3,238	5,808
195.00	3,245	5,841
195.01	3,252	5,873
195.02	3,260	5,906
195.03	3,267	5,939
195.04	3,274	5,971
195.05	3,282	6,004
195.06	3,289	6,037
195.07	3,296	6,070
195.08	3,304	6,103
195.09	3,311	6,136
195.10	3,319	6,169
195.11	3,326	6,202
195.12	3,333	6,236
195.13	3,341	6,269
195.14	3,348	6,302
195.15	3,355	6,336
195.16	3,363	6,370
195.17	3,370	6,403
195.18	3,377	6,437
195.19	3,385	6,471
195.20	3,392	6,505
195.21	3,399	6,539
195.22	3,407	6,573
195.23	3,414	6,607
195.24	3,421	6,641
195.25	3,429	6,675
195.26	3,436	6,709
195.27	3,443	6,744
195.28	3,451	6,778
195.29	3,458	6,813
195.30	3,466	6,847
195.31	3,473	6,882
195.32	3,480	6,917
195.33	3,488	6,952
195.34	3,495	6,987
195.35	3,502	7,022
195.36	3,510	7,057
195.37	3,517	7,092
195.38	3,524	7,127
195.39	3,532	7,162
195.40	3,539	7,198
195.41	3,546	7,233

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.42	3,554	7,269
195.43	3,561	7,304
195.44	3,568	7,340
195.45	3,576	7,376
195.46	3,583	7,411
195.47	3,590	7,447
195.48	3,598	7,483
195.49	3,605	7,519
195.50	3,613	7,555
195.51	3,620	7,591
195.52	3,627	7,628
195.53	3,635	7,664
195.54	3,642	7,700
195.55	3,649	7,737
195.56	3,657	7,773
195.57	3,664	7,810
195.58	3,671	7,847
195.59	3,679	7,883
195.60	3,686	7,920
195.61	3,693	7,957
195.62	3,701	7,994
195.63	3,708	8,031
195.64	3,715	8,068
195.65	3,723	8,105
195.66	3,730	8,143
195.67	3,737	8,180
195.68	3,745	8,217
195.69	3,752	8,255
195.70	3,760	8,292
195.71	3,767	8,330
195.72	3,774	8,368
195.73	3,782	8,406
195.74	3,789	8,443
195.75	3,796	8,481
195.76	3,804	8,519
195.77	3,811	8,557
195.78	3,818	8,596
195.79	3,826	8,634
195.80	3,833	8,672
195.81	3,840	8,710
195.82	3,848	8,749
195.83	3,855	8,787
195.84	3,862	8,826
195.85	3,870	8,865
195.86	3,877	8,903
195.87	3,884	8,942
195.88	3,892	8,981
195.89	3,899	9,020
195.90	3,907	9,059
195.91	3,914	9,098
195.92	3,921	9,137
195.93	3,929	9,177
195.94	3,936	9,216
195.95	3,943	9,255
195.96	3,951	9,295
195.97	3,958	9,334
195.98	3,965	9,374
195.99	3,973	9,414
196.00	**3,980**	**9,453**

Summary for Pond B-32: Basin #32

Inflow Area = 1.911 ac, 49.76% Impervious, Inflow Depth = 6.90" for Current 100 yr event
Inflow = 13.20 cfs @ 12.17 hrs, Volume= 1.098 af
Outflow = 8.63 cfs @ 12.28 hrs, Volume= 1.010 af, Atten= 35%, Lag= 6.8 min
Primary = 8.63 cfs @ 12.28 hrs, Volume= 1.010 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 196.21' @ 12.28 hrs Surf.Area= 3,783 sf Storage= 9,188 cf

Plug-Flow detention time= 89.1 min calculated for 1.009 af (92% of inflow)
Center-of-Mass det. time= 45.6 min (820.3 - 774.6)

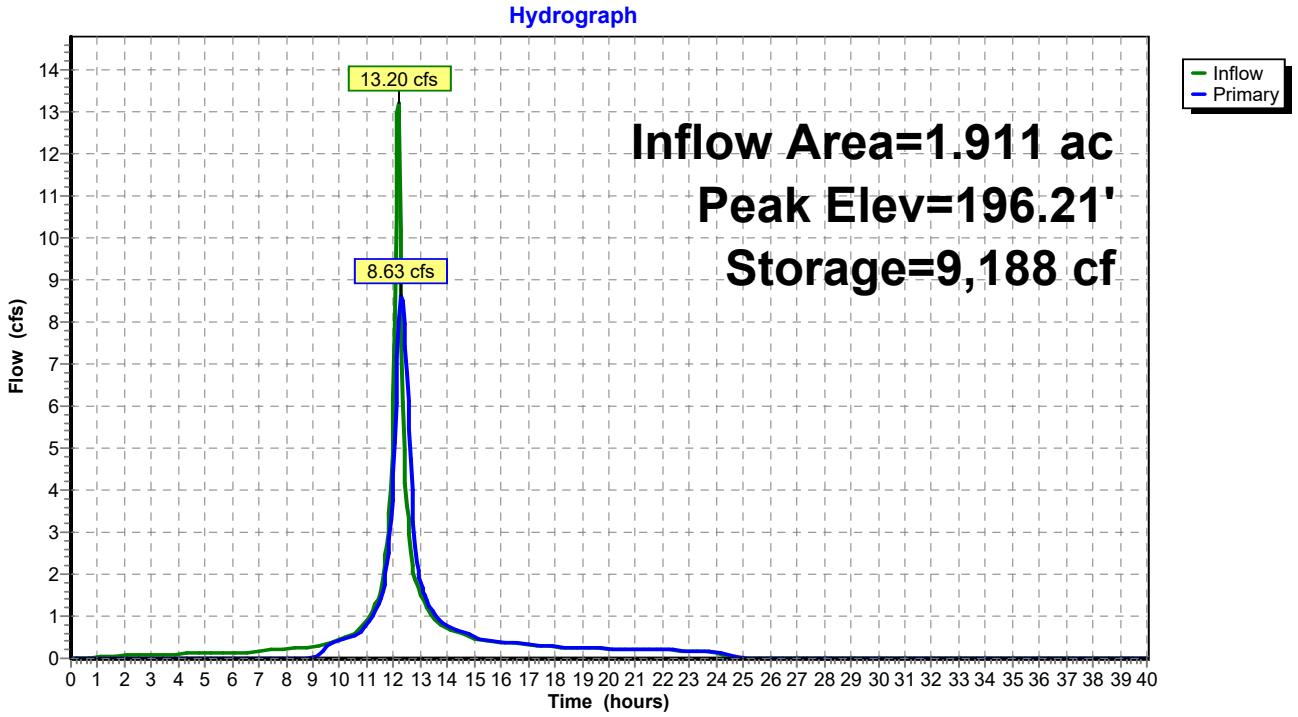
Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	17,202 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	1,675	586	586
194.00	2,256	1,966	2,552
195.00	2,913	2,585	5,136
196.00	3,621	3,267	8,403
197.00	4,385	4,003	12,406
198.00	5,206	4,796	17,202

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 182.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0146 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.53'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	197.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.60 cfs @ 12.28 hrs HW=196.20' (Free Discharge)
- **1=Culvert** (Passes 8.60 cfs of 16.71 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 8.60 cfs @ 5.73 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-32: Basin #32



Stage-Discharge for Pond B-32: Basin #32

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.30	0.00	192.82	0.00	193.34	0.00	193.86	0.00
192.31	0.00	192.83	0.00	193.35	0.00	193.87	0.00
192.32	0.00	192.84	0.00	193.36	0.00	193.88	0.00
192.33	0.00	192.85	0.00	193.37	0.00	193.89	0.00
192.34	0.00	192.86	0.00	193.38	0.00	193.90	0.00
192.35	0.00	192.87	0.00	193.39	0.00	193.91	0.00
192.36	0.00	192.88	0.00	193.40	0.00	193.92	0.00
192.37	0.00	192.89	0.00	193.41	0.00	193.93	0.00
192.38	0.00	192.90	0.00	193.42	0.00	193.94	0.00
192.39	0.00	192.91	0.00	193.43	0.00	193.95	0.00
192.40	0.00	192.92	0.00	193.44	0.00	193.96	0.00
192.41	0.00	192.93	0.00	193.45	0.00	193.97	0.00
192.42	0.00	192.94	0.00	193.46	0.00	193.98	0.00
192.43	0.00	192.95	0.00	193.47	0.00	193.99	0.00
192.44	0.00	192.96	0.00	193.48	0.00	194.00	0.00
192.45	0.00	192.97	0.00	193.49	0.00	194.01	0.00
192.46	0.00	192.98	0.00	193.50	0.00	194.02	0.00
192.47	0.00	192.99	0.00	193.51	0.00	194.03	0.00
192.48	0.00	193.00	0.00	193.52	0.00	194.04	0.00
192.49	0.00	193.01	0.00	193.53	0.00	194.05	0.00
192.50	0.00	193.02	0.00	193.54	0.00	194.06	0.00
192.51	0.00	193.03	0.00	193.55	0.00	194.07	0.00
192.52	0.00	193.04	0.00	193.56	0.00	194.08	0.00
192.53	0.00	193.05	0.00	193.57	0.00	194.09	0.00
192.54	0.00	193.06	0.00	193.58	0.00	194.10	0.00
192.55	0.00	193.07	0.00	193.59	0.00	194.11	0.00
192.56	0.00	193.08	0.00	193.60	0.00	194.12	0.00
192.57	0.00	193.09	0.00	193.61	0.00	194.13	0.00
192.58	0.00	193.10	0.00	193.62	0.00	194.14	0.00
192.59	0.00	193.11	0.00	193.63	0.00	194.15	0.00
192.60	0.00	193.12	0.00	193.64	0.00	194.16	0.00
192.61	0.00	193.13	0.00	193.65	0.00	194.17	0.00
192.62	0.00	193.14	0.00	193.66	0.00	194.18	0.00
192.63	0.00	193.15	0.00	193.67	0.00	194.19	0.00
192.64	0.00	193.16	0.00	193.68	0.00	194.20	0.00
192.65	0.00	193.17	0.00	193.69	0.00	194.21	0.00
192.66	0.00	193.18	0.00	193.70	0.00	194.22	0.00
192.67	0.00	193.19	0.00	193.71	0.00	194.23	0.00
192.68	0.00	193.20	0.00	193.72	0.00	194.24	0.00
192.69	0.00	193.21	0.00	193.73	0.00	194.25	0.00
192.70	0.00	193.22	0.00	193.74	0.00	194.26	0.00
192.71	0.00	193.23	0.00	193.75	0.00	194.27	0.00
192.72	0.00	193.24	0.00	193.76	0.00	194.28	0.00
192.73	0.00	193.25	0.00	193.77	0.00	194.29	0.00
192.74	0.00	193.26	0.00	193.78	0.00	194.30	0.00
192.75	0.00	193.27	0.00	193.79	0.00	194.31	0.00
192.76	0.00	193.28	0.00	193.80	0.00	194.32	0.00
192.77	0.00	193.29	0.00	193.81	0.00	194.33	0.00
192.78	0.00	193.30	0.00	193.82	0.00	194.34	0.00
192.79	0.00	193.31	0.00	193.83	0.00	194.35	0.00
192.80	0.00	193.32	0.00	193.84	0.00	194.36	0.00
192.81	0.00	193.33	0.00	193.85	0.00	194.37	0.00

Stage-Discharge for Pond B-32: Basin #32 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.38	0.00	194.90	2.17	195.42	5.74	195.94	7.76
194.39	0.00	194.91	2.26	195.43	5.79	195.95	7.80
194.40	0.00	194.92	2.35	195.44	5.83	195.96	7.83
194.41	0.00	194.93	2.44	195.45	5.88	195.97	7.86
194.42	0.00	194.94	2.53	195.46	5.92	195.98	7.90
194.43	0.00	194.95	2.62	195.47	5.97	195.99	7.93
194.44	0.00	194.96	2.72	195.48	6.01	196.00	7.96
194.45	0.00	194.97	2.81	195.49	6.05	196.01	8.00
194.46	0.00	194.98	2.91	195.50	6.10	196.02	8.03
194.47	0.00	194.99	3.00	195.51	6.14	196.03	8.06
194.48	0.00	195.00	3.10	195.52	6.18	196.04	8.09
194.49	0.00	195.01	3.20	195.53	6.23	196.05	8.13
194.50	0.00	195.02	3.30	195.54	6.27	196.06	8.16
194.51	0.00	195.03	3.40	195.55	6.31	196.07	8.19
194.52	0.00	195.04	3.50	195.56	6.35	196.08	8.22
194.53	0.00	195.05	3.58	195.57	6.39	196.09	8.25
194.54	0.01	195.06	3.67	195.58	6.43	196.10	8.29
194.55	0.03	195.07	3.74	195.59	6.47	196.11	8.32
194.56	0.05	195.08	3.82	195.60	6.51	196.12	8.35
194.57	0.08	195.09	3.89	195.61	6.55	196.13	8.38
194.58	0.11	195.10	3.97	195.62	6.59	196.14	8.41
194.59	0.14	195.11	4.04	195.63	6.63	196.15	8.44
194.60	0.18	195.12	4.10	195.64	6.67	196.16	8.47
194.61	0.22	195.13	4.17	195.65	6.71	196.17	8.50
194.62	0.26	195.14	4.24	195.66	6.75	196.18	8.53
194.63	0.30	195.15	4.30	195.67	6.79	196.19	8.56
194.64	0.35	195.16	4.36	195.68	6.83	196.20	8.60
194.65	0.40	195.17	4.43	195.69	6.87	196.21	8.63
194.66	0.45	195.18	4.49	195.70	6.91	196.22	8.66
194.67	0.50	195.19	4.55	195.71	6.94	196.23	8.69
194.68	0.56	195.20	4.61	195.72	6.98	196.24	8.72
194.69	0.62	195.21	4.66	195.73	7.02	196.25	8.75
194.70	0.67	195.22	4.72	195.74	7.06	196.26	8.78
194.71	0.74	195.23	4.78	195.75	7.09	196.27	8.81
194.72	0.80	195.24	4.83	195.76	7.13	196.28	8.84
194.73	0.86	195.25	4.89	195.77	7.17	196.29	8.86
194.74	0.93	195.26	4.94	195.78	7.20	196.30	8.89
194.75	0.99	195.27	5.00	195.79	7.24	196.31	8.92
194.76	1.06	195.28	5.05	195.80	7.28	196.32	8.95
194.77	1.13	195.29	5.10	195.81	7.31	196.33	8.98
194.78	1.20	195.30	5.16	195.82	7.35	196.34	9.01
194.79	1.28	195.31	5.21	195.83	7.38	196.35	9.04
194.80	1.35	195.32	5.26	195.84	7.42	196.36	9.07
194.81	1.43	195.33	5.31	195.85	7.45	196.37	9.10
194.82	1.50	195.34	5.36	195.86	7.49	196.38	9.13
194.83	1.58	195.35	5.41	195.87	7.52	196.39	9.16
194.84	1.66	195.36	5.46	195.88	7.56	196.40	9.18
194.85	1.74	195.37	5.50	195.89	7.59	196.41	9.21
194.86	1.83	195.38	5.55	195.90	7.63	196.42	9.24
194.87	1.91	195.39	5.60	195.91	7.66	196.43	9.27
194.88	1.99	195.40	5.65	195.92	7.70	196.44	9.30
194.89	2.08	195.41	5.69	195.93	7.73	196.45	9.32

Stage-Discharge for Pond B-32: Basin #32 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.46	9.35	196.98	10.71	197.50	16.42
196.47	9.38	196.99	10.73	197.51	16.57
196.48	9.41	197.00	10.76	197.52	16.73
196.49	9.44	197.01	10.79	197.53	16.89
196.50	9.46	197.02	10.84	197.54	17.04
196.51	9.49	197.03	10.90	197.55	17.20
196.52	9.52	197.04	10.96	197.56	17.37
196.53	9.55	197.05	11.02	197.57	17.53
196.54	9.57	197.06	11.09	197.58	17.69
196.55	9.60	197.07	11.17	197.59	17.86
196.56	9.63	197.08	11.24	197.60	18.02
196.57	9.66	197.09	11.32	197.61	18.19
196.58	9.68	197.10	11.41	197.62	18.36
196.59	9.71	197.11	11.49	197.63	18.40
196.60	9.74	197.12	11.58	197.64	18.41
196.61	9.76	197.13	11.68	197.65	18.42
196.62	9.79	197.14	11.77	197.66	18.44
196.63	9.82	197.15	11.87	197.67	18.45
196.64	9.84	197.16	11.97	197.68	18.46
196.65	9.87	197.17	12.07	197.69	18.47
196.66	9.90	197.18	12.17	197.70	18.48
196.67	9.92	197.19	12.28	197.71	18.49
196.68	9.95	197.20	12.39	197.72	18.50
196.69	9.97	197.21	12.50	197.73	18.51
196.70	10.00	197.22	12.61	197.74	18.53
196.71	10.03	197.23	12.73	197.75	18.54
196.72	10.05	197.24	12.84	197.76	18.55
196.73	10.08	197.25	12.96	197.77	18.56
196.74	10.10	197.26	13.08	197.78	18.57
196.75	10.13	197.27	13.20	197.79	18.58
196.76	10.16	197.28	13.33	197.80	18.59
196.77	10.18	197.29	13.45	197.81	18.60
196.78	10.21	197.30	13.58	197.82	18.62
196.79	10.23	197.31	13.71	197.83	18.63
196.80	10.26	197.32	13.84	197.84	18.64
196.81	10.28	197.33	13.97	197.85	18.65
196.82	10.31	197.34	14.10	197.86	18.66
196.83	10.33	197.35	14.23	197.87	18.67
196.84	10.36	197.36	14.37	197.88	18.68
196.85	10.38	197.37	14.51	197.89	18.69
196.86	10.41	197.38	14.65	197.90	18.70
196.87	10.44	197.39	14.79	197.91	18.72
196.88	10.46	197.40	14.93	197.92	18.73
196.89	10.49	197.41	15.07	197.93	18.74
196.90	10.51	197.42	15.22	197.94	18.75
196.91	10.53	197.43	15.36	197.95	18.76
196.92	10.56	197.44	15.51	197.96	18.89
196.93	10.58	197.45	15.66	197.97	19.11
196.94	10.61	197.46	15.81	197.98	19.40
196.95	10.63	197.47	15.96	197.99	19.74
196.96	10.66	197.48	16.11	198.00	**20.13**
196.97	10.68	197.49	16.26		

Stage-Area-Storage for Pond B-32: Basin #32

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.30	0	0	192.82	1,244	324
192.31	24	0	192.83	1,268	336
192.32	48	0	192.84	1,292	349
192.33	72	1	192.85	1,316	362
192.34	96	2	192.86	1,340	375
192.35	120	3	192.87	1,364	389
192.36	144	4	192.88	1,388	402
192.37	167	6	192.89	1,412	416
192.38	191	8	192.90	1,436	431
192.39	215	10	192.91	1,460	445
192.40	239	12	192.92	1,484	460
192.41	263	14	192.93	1,508	475
192.42	287	17	192.94	1,531	490
192.43	311	20	192.95	1,555	505
192.44	335	23	192.96	1,579	521
192.45	359	27	192.97	1,603	537
192.46	383	31	192.98	1,627	553
192.47	407	35	192.99	1,651	570
192.48	431	39	193.00	1,675	586
192.49	455	43	193.01	1,681	603
192.50	479	48	193.02	1,687	620
192.51	503	53	193.03	1,692	637
192.52	526	58	193.04	1,698	654
192.53	550	63	193.05	1,704	671
192.54	574	69	193.06	1,710	688
192.55	598	75	193.07	1,716	705
192.56	622	81	193.08	1,721	722
192.57	646	87	193.09	1,727	739
192.58	670	94	193.10	1,733	757
192.59	694	101	193.11	1,739	774
192.60	718	108	193.12	1,745	791
192.61	742	115	193.13	1,751	809
192.62	766	123	193.14	1,756	826
192.63	790	130	193.15	1,762	844
192.64	814	138	193.16	1,768	862
192.65	838	147	193.17	1,774	879
192.66	861	155	193.18	1,780	897
192.67	885	164	193.19	1,785	915
192.68	909	173	193.20	1,791	933
192.69	933	182	193.21	1,797	951
192.70	957	191	193.22	1,803	969
192.71	981	201	193.23	1,809	987
192.72	1,005	211	193.24	1,814	1,005
192.73	1,029	221	193.25	1,820	1,023
192.74	1,053	232	193.26	1,826	1,041
192.75	1,077	242	193.27	1,832	1,060
192.76	1,101	253	193.28	1,838	1,078
192.77	1,125	264	193.29	1,843	1,096
192.78	1,149	276	193.30	1,849	1,115
192.79	1,173	287	193.31	1,855	1,133
192.80	1,196	299	193.32	1,861	1,152
192.81	1,220	311	193.33	1,867	1,171

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.34	1,873	1,189	193.86	2,175	2,242
193.35	1,878	1,208	193.87	2,180	2,263
193.36	1,884	1,227	193.88	2,186	2,285
193.37	1,890	1,246	193.89	2,192	2,307
193.38	1,896	1,265	193.90	2,198	2,329
193.39	1,902	1,284	193.91	2,204	2,351
193.40	1,907	1,303	193.92	2,210	2,373
193.41	1,913	1,322	193.93	2,215	2,395
193.42	1,919	1,341	193.94	2,221	2,417
193.43	1,925	1,360	193.95	2,227	2,440
193.44	1,931	1,379	193.96	2,233	2,462
193.45	1,936	1,399	193.97	2,239	2,484
193.46	1,942	1,418	193.98	2,244	2,507
193.47	1,948	1,438	193.99	2,250	2,529
193.48	1,954	1,457	194.00	2,256	2,552
193.49	1,960	1,477	194.01	2,263	2,574
193.50	1,966	1,496	194.02	2,269	2,597
193.51	1,971	1,516	194.03	2,276	2,620
193.52	1,977	1,536	194.04	2,282	2,643
193.53	1,983	1,556	194.05	2,289	2,665
193.54	1,989	1,575	194.06	2,295	2,688
193.55	1,995	1,595	194.07	2,302	2,711
193.56	2,000	1,615	194.08	2,309	2,734
193.57	2,006	1,635	194.09	2,315	2,757
193.58	2,012	1,655	194.10	2,322	2,781
193.59	2,018	1,676	194.11	2,328	2,804
193.60	2,024	1,696	194.12	2,335	2,827
193.61	2,029	1,716	194.13	2,341	2,851
193.62	2,035	1,736	194.14	2,348	2,874
193.63	2,041	1,757	194.15	2,355	2,898
193.64	2,047	1,777	194.16	2,361	2,921
193.65	2,053	1,798	194.17	2,368	2,945
193.66	2,058	1,818	194.18	2,374	2,968
193.67	2,064	1,839	194.19	2,381	2,992
193.68	2,070	1,860	194.20	2,387	3,016
193.69	2,076	1,880	194.21	2,394	3,040
193.70	2,082	1,901	194.22	2,401	3,064
193.71	2,088	1,922	194.23	2,407	3,088
193.72	2,093	1,943	194.24	2,414	3,112
193.73	2,099	1,964	194.25	2,420	3,136
193.74	2,105	1,985	194.26	2,427	3,161
193.75	2,111	2,006	194.27	2,433	3,185
193.76	2,117	2,027	194.28	2,440	3,209
193.77	2,122	2,048	194.29	2,447	3,234
193.78	2,128	2,069	194.30	2,453	3,258
193.79	2,134	2,091	194.31	2,460	3,283
193.80	2,140	2,112	194.32	2,466	3,307
193.81	2,146	2,134	194.33	2,473	3,332
193.82	2,151	2,155	194.34	2,479	3,357
193.83	2,157	2,177	194.35	2,486	3,382
193.84	2,163	2,198	194.36	2,493	3,406
193.85	2,169	2,220	194.37	2,499	3,431

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.38	2,506	3,456	194.90	2,847	4,848
194.39	2,512	3,482	194.91	2,854	4,877
194.40	2,519	3,507	194.92	2,860	4,905
194.41	2,525	3,532	194.93	2,867	4,934
194.42	2,532	3,557	194.94	2,874	4,963
194.43	2,539	3,583	194.95	2,880	4,991
194.44	2,545	3,608	194.96	2,887	5,020
194.45	2,552	3,633	194.97	2,893	5,049
194.46	2,558	3,659	194.98	2,900	5,078
194.47	2,565	3,685	194.99	2,906	5,107
194.48	2,571	3,710	195.00	2,913	5,136
194.49	2,578	3,736	195.01	2,920	5,165
194.50	2,585	3,762	195.02	2,927	5,195
194.51	2,591	3,788	195.03	2,934	5,224
194.52	2,598	3,814	195.04	2,941	5,253
194.53	2,604	3,840	195.05	2,948	5,283
194.54	2,611	3,866	195.06	2,955	5,312
194.55	2,617	3,892	195.07	2,963	5,342
194.56	2,624	3,918	195.08	2,970	5,372
194.57	2,630	3,944	195.09	2,977	5,401
194.58	2,637	3,971	195.10	2,984	5,431
194.59	2,644	3,997	195.11	2,991	5,461
194.60	2,650	4,024	195.12	2,998	5,491
194.61	2,657	4,050	195.13	3,005	5,521
194.62	2,663	4,077	195.14	3,012	5,551
194.63	2,670	4,103	195.15	3,019	5,581
194.64	2,676	4,130	195.16	3,026	5,611
194.65	2,683	4,157	195.17	3,033	5,642
194.66	2,690	4,184	195.18	3,040	5,672
194.67	2,696	4,211	195.19	3,048	5,702
194.68	2,703	4,238	195.20	3,055	5,733
194.69	2,709	4,265	195.21	3,062	5,764
194.70	2,716	4,292	195.22	3,069	5,794
194.71	2,722	4,319	195.23	3,076	5,825
194.72	2,729	4,346	195.24	3,083	5,856
194.73	2,736	4,374	195.25	3,090	5,887
194.74	2,742	4,401	195.26	3,097	5,918
194.75	2,749	4,429	195.27	3,104	5,949
194.76	2,755	4,456	195.28	3,111	5,980
194.77	2,762	4,484	195.29	3,118	6,011
194.78	2,768	4,511	195.30	3,125	6,042
194.79	2,775	4,539	195.31	3,132	6,073
194.80	2,782	4,567	195.32	3,140	6,105
194.81	2,788	4,595	195.33	3,147	6,136
194.82	2,795	4,623	195.34	3,154	6,168
194.83	2,801	4,651	195.35	3,161	6,199
194.84	2,808	4,679	195.36	3,168	6,231
194.85	2,814	4,707	195.37	3,175	6,263
194.86	2,821	4,735	195.38	3,182	6,294
194.87	2,828	4,763	195.39	3,189	6,326
194.88	2,834	4,791	195.40	3,196	6,358
194.89	2,841	4,820	195.41	3,203	6,390

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.42	3,210	6,422
195.43	3,217	6,454
195.44	3,225	6,487
195.45	3,232	6,519
195.46	3,239	6,551
195.47	3,246	6,584
195.48	3,253	6,616
195.49	3,260	6,649
195.50	3,267	6,681
195.51	3,274	6,714
195.52	3,281	6,747
195.53	3,288	6,780
195.54	3,295	6,812
195.55	3,302	6,845
195.56	3,309	6,879
195.57	3,317	6,912
195.58	3,324	6,945
195.59	3,331	6,978
195.60	3,338	7,011
195.61	3,345	7,045
195.62	3,352	7,078
195.63	3,359	7,112
195.64	3,366	7,146
195.65	3,373	7,179
195.66	3,380	7,213
195.67	3,387	7,247
195.68	3,394	7,281
195.69	3,402	7,315
195.70	3,409	7,349
195.71	3,416	7,383
195.72	3,423	7,417
195.73	3,430	7,451
195.74	3,437	7,486
195.75	3,444	7,520
195.76	3,451	7,555
195.77	3,458	7,589
195.78	3,465	7,624
195.79	3,472	7,658
195.80	3,479	7,693
195.81	3,486	7,728
195.82	3,494	7,763
195.83	3,501	7,798
195.84	3,508	7,833
195.85	3,515	7,868
195.86	3,522	7,903
195.87	3,529	7,939
195.88	3,536	7,974
195.89	3,543	8,009
195.90	3,550	8,045
195.91	3,557	8,080
195.92	3,564	8,116
195.93	3,571	8,152
195.94	3,579	8,187
195.95	3,586	8,223
195.96	3,593	8,259
195.97	3,600	8,295
195.98	3,607	8,331
195.99	3,614	8,367
196.00	3,621	8,403
196.01	3,629	8,439
196.02	3,636	8,476
196.03	3,644	8,512
196.04	3,652	8,549
196.05	3,659	8,585
196.06	3,667	8,622
196.07	3,674	8,659
196.08	3,682	8,695
196.09	3,690	8,732
196.10	3,697	8,769
196.11	3,705	8,806
196.12	3,713	8,843
196.13	3,720	8,880
196.14	3,728	8,918
196.15	3,736	8,955
196.16	3,743	8,992
196.17	3,751	9,030
196.18	3,759	9,067
196.19	3,766	9,105
196.20	3,774	9,143
196.21	3,781	9,181
196.22	3,789	9,218
196.23	3,797	9,256
196.24	3,804	9,294
196.25	3,812	9,332
196.26	3,820	9,371
196.27	3,827	9,409
196.28	3,835	9,447
196.29	3,843	9,485
196.30	3,850	9,524
196.31	3,858	9,562
196.32	3,865	9,601
196.33	3,873	9,640
196.34	3,881	9,679
196.35	3,888	9,717
196.36	3,896	9,756
196.37	3,904	9,795
196.38	3,911	9,834
196.39	3,919	9,874
196.40	3,927	9,913
196.41	3,934	9,952
196.42	3,942	9,991
196.43	3,950	10,031
196.44	3,957	10,070
196.45	3,965	10,110

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.46	3,972	10,150
196.47	3,980	10,190
196.48	3,988	10,229
196.49	3,995	10,269
196.50	4,003	10,309
196.51	4,011	10,349
196.52	4,018	10,389
196.53	4,026	10,430
196.54	4,034	10,470
196.55	4,041	10,510
196.56	4,049	10,551
196.57	4,056	10,591
196.58	4,064	10,632
196.59	4,072	10,673
196.60	4,079	10,713
196.61	4,087	10,754
196.62	4,095	10,795
196.63	4,102	10,836
196.64	4,110	10,877
196.65	4,118	10,918
196.66	4,125	10,960
196.67	4,133	11,001
196.68	4,141	11,042
196.69	4,148	11,084
196.70	4,156	11,125
196.71	4,163	11,167
196.72	4,171	11,208
196.73	4,179	11,250
196.74	4,186	11,292
196.75	4,194	11,334
196.76	4,202	11,376
196.77	4,209	11,418
196.78	4,217	11,460
196.79	4,225	11,502
196.80	4,232	11,545
196.81	4,240	11,587
196.82	4,247	11,629
196.83	4,255	11,672
196.84	4,263	11,714
196.85	4,270	11,757
196.86	4,278	11,800
196.87	4,286	11,843
196.88	4,293	11,886
196.89	4,301	11,929
196.90	4,309	11,972
196.91	4,316	12,015
196.92	4,324	12,058
196.93	4,332	12,101
196.94	4,339	12,145
196.95	4,347	12,188
196.96	4,354	12,231
196.97	4,362	12,275
196.98	4,370	12,319
196.99	4,377	12,362
197.00	4,385	12,406
197.01	4,393	12,450
197.02	4,401	12,494
197.03	4,410	12,538
197.04	4,418	12,582
197.05	4,426	12,627
197.06	4,434	12,671
197.07	4,442	12,715
197.08	4,451	12,760
197.09	4,459	12,804
197.10	4,467	12,849
197.11	4,475	12,894
197.12	4,484	12,938
197.13	4,492	12,983
197.14	4,500	13,028
197.15	4,508	13,073
197.16	4,516	13,118
197.17	4,525	13,164
197.18	4,533	13,209
197.19	4,541	13,254
197.20	4,549	13,300
197.21	4,557	13,345
197.22	4,566	13,391
197.23	4,574	13,437
197.24	4,582	13,482
197.25	4,590	13,528
197.26	4,598	13,574
197.27	4,607	13,620
197.28	4,615	13,666
197.29	4,623	13,712
197.30	4,631	13,759
197.31	4,640	13,805
197.32	4,648	13,851
197.33	4,656	13,898
197.34	4,664	13,945
197.35	4,672	13,991
197.36	4,681	14,038
197.37	4,689	14,085
197.38	4,697	14,132
197.39	4,705	14,179
197.40	4,713	14,226
197.41	4,722	14,273
197.42	4,730	14,320
197.43	4,738	14,368
197.44	4,746	14,415
197.45	4,754	14,463
197.46	4,763	14,510
197.47	4,771	14,558
197.48	4,779	14,606
197.49	4,787	14,653

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.50	4,796	14,701
197.51	4,804	14,749
197.52	4,812	14,797
197.53	4,820	14,846
197.54	4,828	14,894
197.55	4,837	14,942
197.56	4,845	14,991
197.57	4,853	15,039
197.58	4,861	15,088
197.59	4,869	15,136
197.60	4,878	15,185
197.61	4,886	15,234
197.62	4,894	15,283
197.63	4,902	15,332
197.64	4,910	15,381
197.65	4,919	15,430
197.66	4,927	15,479
197.67	4,935	15,528
197.68	4,943	15,578
197.69	4,951	15,627
197.70	4,960	15,677
197.71	4,968	15,727
197.72	4,976	15,776
197.73	4,984	15,826
197.74	4,993	15,876
197.75	5,001	15,926
197.76	5,009	15,976
197.77	5,017	16,026
197.78	5,025	16,076
197.79	5,034	16,127
197.80	5,042	16,177
197.81	5,050	16,227
197.82	5,058	16,278
197.83	5,066	16,329
197.84	5,075	16,379
197.85	5,083	16,430
197.86	5,091	16,481
197.87	5,099	16,532
197.88	5,107	16,583
197.89	5,116	16,634
197.90	5,124	16,685
197.91	5,132	16,737
197.92	5,140	16,788
197.93	5,149	16,839
197.94	5,157	16,891
197.95	5,165	16,942
197.96	5,173	16,994
197.97	5,181	17,046
197.98	5,190	17,098
197.99	5,198	17,150
198.00	**5,206**	**17,202**

Summary for Pond B-33: Basin #33

Inflow Area = 1.761 ac, 50.99% Impervious, Inflow Depth = 6.93" for Current 100 yr event
Inflow = 12.21 cfs @ 12.17 hrs, Volume= 1.017 af
Outflow = 9.62 cfs @ 12.25 hrs, Volume= 0.924 af, Atten= 21%, Lag= 4.9 min
Primary = 9.62 cfs @ 12.25 hrs, Volume= 0.924 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 190.35' @ 12.25 hrs Surf.Area= 5,977 sf Storage= 15,781 cf

Plug-Flow detention time= 290.6 min calculated for 0.924 af (91% of inflow)
Center-of-Mass det. time= 242.1 min (1,015.9 - 773.8)

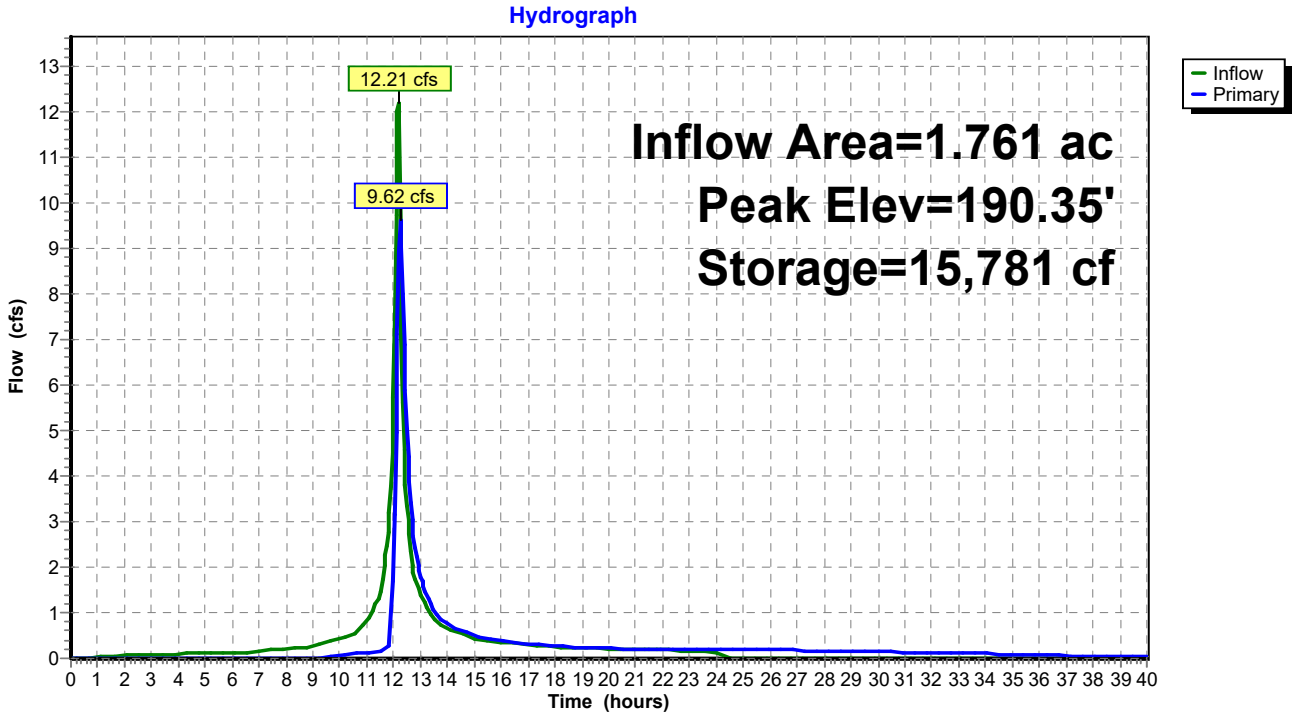
Volume	Invert	Avail.Storage	Storage Description
#1	186.30'	19,860 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.30	0	0	0
187.00	2,936	1,028	1,028
188.00	3,763	3,350	4,377
189.00	4,665	4,214	8,591
190.00	5,621	5,143	13,734
191.00	6,631	6,126	19,860

Device	Routing	Invert	Outlet Devices
#1	Primary	185.65'	**18.0" Round Culvert** L= 91.0' Ke= 0.500 Inlet / Outlet Invert= 185.65' / 185.00' S= 0.0071 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	187.79'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.53'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.75'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=9.60 cfs @ 12.25 hrs HW=190.35' (Free Discharge)
- **1=Culvert** (Passes 9.60 cfs of 15.65 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.26 cfs @ 7.55 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 9.34 cfs @ 2.96 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-33: Basin #33



Stage-Discharge for Pond B-33: Basin #33

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.30	0.00	186.82	0.00	187.34	0.00	187.86	0.01
186.31	0.00	186.83	0.00	187.35	0.00	187.87	0.01
186.32	0.00	186.84	0.00	187.36	0.00	187.88	0.01
186.33	0.00	186.85	0.00	187.37	0.00	187.89	0.02
186.34	0.00	186.86	0.00	187.38	0.00	187.90	0.02
186.35	0.00	186.87	0.00	187.39	0.00	187.91	0.02
186.36	0.00	186.88	0.00	187.40	0.00	187.92	0.03
186.37	0.00	186.89	0.00	187.41	0.00	187.93	0.03
186.38	0.00	186.90	0.00	187.42	0.00	187.94	0.03
186.39	0.00	186.91	0.00	187.43	0.00	187.95	0.04
186.40	0.00	186.92	0.00	187.44	0.00	187.96	0.04
186.41	0.00	186.93	0.00	187.45	0.00	187.97	0.05
186.42	0.00	186.94	0.00	187.46	0.00	187.98	0.05
186.43	0.00	186.95	0.00	187.47	0.00	187.99	0.05
186.44	0.00	186.96	0.00	187.48	0.00	188.00	0.05
186.45	0.00	186.97	0.00	187.49	0.00	188.01	0.06
186.46	0.00	186.98	0.00	187.50	0.00	188.02	0.06
186.47	0.00	186.99	0.00	187.51	0.00	188.03	0.06
186.48	0.00	187.00	0.00	187.52	0.00	188.04	0.06
186.49	0.00	187.01	0.00	187.53	0.00	188.05	0.06
186.50	0.00	187.02	0.00	187.54	0.00	188.06	0.07
186.51	0.00	187.03	0.00	187.55	0.00	188.07	0.07
186.52	0.00	187.04	0.00	187.56	0.00	188.08	0.07
186.53	0.00	187.05	0.00	187.57	0.00	188.09	0.07
186.54	0.00	187.06	0.00	187.58	0.00	188.10	0.07
186.55	0.00	187.07	0.00	187.59	0.00	188.11	0.08
186.56	0.00	187.08	0.00	187.60	0.00	188.12	0.08
186.57	0.00	187.09	0.00	187.61	0.00	188.13	0.08
186.58	0.00	187.10	0.00	187.62	0.00	188.14	0.08
186.59	0.00	187.11	0.00	187.63	0.00	188.15	0.08
186.60	0.00	187.12	0.00	187.64	0.00	188.16	0.08
186.61	0.00	187.13	0.00	187.65	0.00	188.17	0.09
186.62	0.00	187.14	0.00	187.66	0.00	188.18	0.09
186.63	0.00	187.15	0.00	187.67	0.00	188.19	0.09
186.64	0.00	187.16	0.00	187.68	0.00	188.20	0.09
186.65	0.00	187.17	0.00	187.69	0.00	188.21	0.09
186.66	0.00	187.18	0.00	187.70	0.00	188.22	0.09
186.67	0.00	187.19	0.00	187.71	0.00	188.23	0.10
186.68	0.00	187.20	0.00	187.72	0.00	188.24	0.10
186.69	0.00	187.21	0.00	187.73	0.00	188.25	0.10
186.70	0.00	187.22	0.00	187.74	0.00	188.26	0.10
186.71	0.00	187.23	0.00	187.75	0.00	188.27	0.10
186.72	0.00	187.24	0.00	187.76	0.00	188.28	0.10
186.73	0.00	187.25	0.00	187.77	0.00	188.29	0.10
186.74	0.00	187.26	0.00	187.78	0.00	188.30	0.10
186.75	0.00	187.27	0.00	187.79	0.00	188.31	0.11
186.76	0.00	187.28	0.00	187.80	0.00	188.32	0.11
186.77	0.00	187.29	0.00	187.81	0.00	188.33	0.11
186.78	0.00	187.30	0.00	187.82	0.00	188.34	0.11
186.79	0.00	187.31	0.00	187.83	0.00	188.35	0.11
186.80	0.00	187.32	0.00	187.84	0.00	188.36	0.11
186.81	0.00	187.33	0.00	187.85	0.01	188.37	0.11

Stage-Discharge for Pond B-33: Basin #33 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.38	0.11	188.90	0.16	189.42	0.20	189.94	3.60
188.39	0.12	188.91	0.17	189.43	0.20	189.95	3.72
188.40	0.12	188.92	0.17	189.44	0.20	189.96	3.84
188.41	0.12	188.93	0.17	189.45	0.20	189.97	3.97
188.42	0.12	188.94	0.17	189.46	0.21	189.98	4.10
188.43	0.12	188.95	0.17	189.47	0.21	189.99	4.22
188.44	0.12	188.96	0.17	189.48	0.21	190.00	4.35
188.45	0.12	188.97	0.17	189.49	0.21	190.01	4.48
188.46	0.12	188.98	0.17	189.50	0.21	190.02	4.62
188.47	0.12	188.99	0.17	189.51	0.21	190.03	4.75
188.48	0.13	189.00	0.17	189.52	0.21	190.04	4.88
188.49	0.13	189.01	0.17	189.53	0.21	190.05	5.02
188.50	0.13	189.02	0.17	189.54	0.22	190.06	5.15
188.51	0.13	189.03	0.17	189.55	0.25	190.07	5.29
188.52	0.13	189.04	0.18	189.56	0.28	190.08	5.43
188.53	0.13	189.05	0.18	189.57	0.32	190.09	5.57
188.54	0.13	189.06	0.18	189.58	0.36	190.10	5.71
188.55	0.13	189.07	0.18	189.59	0.41	190.11	5.85
188.56	0.13	189.08	0.18	189.60	0.46	190.12	6.00
188.57	0.13	189.09	0.18	189.61	0.51	190.13	6.14
188.58	0.14	189.10	0.18	189.62	0.57	190.14	6.29
188.59	0.14	189.11	0.18	189.63	0.63	190.15	6.43
188.60	0.14	189.12	0.18	189.64	0.69	190.16	6.58
188.61	0.14	189.13	0.18	189.65	0.76	190.17	6.73
188.62	0.14	189.14	0.18	189.66	0.83	190.18	6.88
188.63	0.14	189.15	0.18	189.67	0.90	190.19	7.03
188.64	0.14	189.16	0.18	189.68	0.97	190.20	7.18
188.65	0.14	189.17	0.19	189.69	1.05	190.21	7.33
188.66	0.14	189.18	0.19	189.70	1.13	190.22	7.49
188.67	0.14	189.19	0.19	189.71	1.21	190.23	7.64
188.68	0.15	189.20	0.19	189.72	1.29	190.24	7.80
188.69	0.15	189.21	0.19	189.73	1.38	190.25	7.96
188.70	0.15	189.22	0.19	189.74	1.47	190.26	8.11
188.71	0.15	189.23	0.19	189.75	1.56	190.27	8.27
188.72	0.15	189.24	0.19	189.76	1.65	190.28	8.43
188.73	0.15	189.25	0.19	189.77	1.74	190.29	8.59
188.74	0.15	189.26	0.19	189.78	1.84	190.30	8.75
188.75	0.15	189.27	0.19	189.79	1.94	190.31	8.91
188.76	0.15	189.28	0.19	189.80	2.04	190.32	9.08
188.77	0.15	189.29	0.19	189.81	2.14	190.33	9.24
188.78	0.15	189.30	0.19	189.82	2.24	190.34	9.41
188.79	0.16	189.31	0.20	189.83	2.35	190.35	9.57
188.80	0.16	189.32	0.20	189.84	2.45	190.36	9.74
188.81	0.16	189.33	0.20	189.85	2.56	190.37	9.91
188.82	0.16	189.34	0.20	189.86	2.67	190.38	10.07
188.83	0.16	189.35	0.20	189.87	2.78	190.39	10.24
188.84	0.16	189.36	0.20	189.88	2.89	190.40	10.41
188.85	0.16	189.37	0.20	189.89	3.01	190.41	10.58
188.86	0.16	189.38	0.20	189.90	3.12	190.42	10.75
188.87	0.16	189.39	0.20	189.91	3.24	190.43	10.93
188.88	0.16	189.40	0.20	189.92	3.36	190.44	11.10
188.89	0.16	189.41	0.20	189.93	3.48	190.45	11.27

Stage-Discharge for Pond B-33: Basin #33 (continued)

Elevation (feet)	Primary (cfs)
190.46	11.45
190.47	11.62
190.48	11.80
190.49	11.98
190.50	12.15
190.51	12.33
190.52	12.51
190.53	12.69
190.54	12.87
190.55	13.05
190.56	13.24
190.57	13.42
190.58	13.60
190.59	13.79
190.60	13.97
190.61	14.16
190.62	14.34
190.63	14.53
190.64	14.72
190.65	14.91
190.66	15.10
190.67	15.29
190.68	15.48
190.69	15.67
190.70	15.86
190.71	16.05
190.72	16.25
190.73	16.40
190.74	16.42
190.75	16.44
190.76	16.57
190.77	16.81
190.78	17.10
190.79	17.45
190.80	17.84
190.81	18.28
190.82	18.74
190.83	19.25
190.84	19.78
190.85	20.35
190.86	20.94
190.87	21.56
190.88	22.20
190.89	22.87
190.90	23.57
190.91	24.29
190.92	25.03
190.93	25.79
190.94	26.58
190.95	27.38
190.96	28.25
190.97	29.14
190.98	30.06
190.99	31.00
191.00	**31.97**

Stage-Area-Storage for Pond B-33: Basin #33

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.30	0	0	186.82	2,181	567
186.31	42	0	186.83	2,223	589
186.32	84	1	186.84	2,265	612
186.33	126	2	186.85	2,307	634
186.34	168	3	186.86	2,349	658
186.35	210	5	186.87	2,391	681
186.36	252	8	186.88	2,433	705
186.37	294	10	186.89	2,475	730
186.38	336	13	186.90	2,517	755
186.39	377	17	186.91	2,559	780
186.40	419	21	186.92	2,600	806
186.41	461	25	186.93	2,642	832
186.42	503	30	186.94	2,684	859
186.43	545	35	186.95	2,726	886
186.44	587	41	186.96	2,768	914
186.45	629	47	186.97	2,810	941
186.46	671	54	186.98	2,852	970
186.47	713	61	186.99	2,894	998
186.48	755	68	187.00	2,936	1,028
186.49	797	76	187.01	2,944	1,057
186.50	839	84	187.02	2,953	1,086
186.51	881	92	187.03	2,961	1,116
186.52	923	102	187.04	2,969	1,146
186.53	965	111	187.05	2,977	1,175
186.54	1,007	121	187.06	2,986	1,205
186.55	1,049	131	187.07	2,994	1,235
186.56	1,091	142	187.08	3,002	1,265
186.57	1,132	153	187.09	3,010	1,295
186.58	1,174	164	187.10	3,019	1,325
186.59	1,216	176	187.11	3,027	1,356
186.60	1,258	189	187.12	3,035	1,386
186.61	1,300	202	187.13	3,044	1,416
186.62	1,342	215	187.14	3,052	1,447
186.63	1,384	228	187.15	3,060	1,477
186.64	1,426	242	187.16	3,068	1,508
186.65	1,468	257	187.17	3,077	1,539
186.66	1,510	272	187.18	3,085	1,569
186.67	1,552	287	187.19	3,093	1,600
186.68	1,594	303	187.20	3,101	1,631
186.69	1,636	319	187.21	3,110	1,662
186.70	1,678	336	187.22	3,118	1,694
186.71	1,720	353	187.23	3,126	1,725
186.72	1,762	370	187.24	3,134	1,756
186.73	1,804	388	187.25	3,143	1,787
186.74	1,845	406	187.26	3,151	1,819
186.75	1,887	425	187.27	3,159	1,850
186.76	1,929	444	187.28	3,168	1,882
186.77	1,971	463	187.29	3,176	1,914
186.78	2,013	483	187.30	3,184	1,946
186.79	2,055	504	187.31	3,192	1,977
186.80	2,097	524	187.32	3,201	2,009
186.81	2,139	545	187.33	3,209	2,042

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.34	3,217	2,074	187.86	3,647	3,858
187.35	3,225	2,106	187.87	3,655	3,895
187.36	3,234	2,138	187.88	3,664	3,931
187.37	3,242	2,171	187.89	3,672	3,968
187.38	3,250	2,203	187.90	3,680	4,005
187.39	3,259	2,236	187.91	3,689	4,042
187.40	3,267	2,268	187.92	3,697	4,079
187.41	3,275	2,301	187.93	3,705	4,116
187.42	3,283	2,334	187.94	3,713	4,153
187.43	3,292	2,367	187.95	3,722	4,190
187.44	3,300	2,399	187.96	3,730	4,227
187.45	3,308	2,433	187.97	3,738	4,265
187.46	3,316	2,466	187.98	3,746	4,302
187.47	3,325	2,499	187.99	3,755	4,340
187.48	3,333	2,532	188.00	3,763	4,377
187.49	3,341	2,566	188.01	3,772	4,415
187.50	3,350	2,599	188.02	3,781	4,453
187.51	3,358	2,633	188.03	3,790	4,490
187.52	3,366	2,666	188.04	3,799	4,528
187.53	3,374	2,700	188.05	3,808	4,566
187.54	3,383	2,734	188.06	3,817	4,605
187.55	3,391	2,767	188.07	3,826	4,643
187.56	3,399	2,801	188.08	3,835	4,681
187.57	3,407	2,835	188.09	3,844	4,719
187.58	3,416	2,870	188.10	3,853	4,758
187.59	3,424	2,904	188.11	3,862	4,796
187.60	3,432	2,938	188.12	3,871	4,835
187.61	3,440	2,972	188.13	3,880	4,874
187.62	3,449	3,007	188.14	3,889	4,913
187.63	3,457	3,041	188.15	3,898	4,952
187.64	3,465	3,076	188.16	3,907	4,991
187.65	3,474	3,111	188.17	3,916	5,030
187.66	3,482	3,145	188.18	3,925	5,069
187.67	3,490	3,180	188.19	3,934	5,108
187.68	3,498	3,215	188.20	3,943	5,148
187.69	3,507	3,250	188.21	3,952	5,187
187.70	3,515	3,285	188.22	3,961	5,227
187.71	3,523	3,321	188.23	3,970	5,266
187.72	3,531	3,356	188.24	3,979	5,306
187.73	3,540	3,391	188.25	3,989	5,346
187.74	3,548	3,427	188.26	3,998	5,386
187.75	3,556	3,462	188.27	4,007	5,426
187.76	3,565	3,498	188.28	4,016	5,466
187.77	3,573	3,533	188.29	4,025	5,506
187.78	3,581	3,569	188.30	4,034	5,547
187.79	3,589	3,605	188.31	4,043	5,587
187.80	3,598	3,641	188.32	4,052	5,627
187.81	3,606	3,677	188.33	4,061	5,668
187.82	3,614	3,713	188.34	4,070	5,709
187.83	3,622	3,749	188.35	4,079	5,749
187.84	3,631	3,786	188.36	4,088	5,790
187.85	3,639	3,822	188.37	4,097	5,831

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.38	4,106	5,872	188.90	4,575	8,129
188.39	4,115	5,913	188.91	4,584	8,175
188.40	4,124	5,954	188.92	4,593	8,221
188.41	4,133	5,996	188.93	4,602	8,267
188.42	4,142	6,037	188.94	4,611	8,313
188.43	4,151	6,079	188.95	4,620	8,359
188.44	4,160	6,120	188.96	4,629	8,405
188.45	4,169	6,162	188.97	4,638	8,452
188.46	4,178	6,204	188.98	4,647	8,498
188.47	4,187	6,245	188.99	4,656	8,544
188.48	4,196	6,287	189.00	4,665	8,591
188.49	4,205	6,329	189.01	4,675	8,638
188.50	4,214	6,371	189.02	4,684	8,685
188.51	4,223	6,414	189.03	4,694	8,731
188.52	4,232	6,456	189.04	4,703	8,778
188.53	4,241	6,498	189.05	4,713	8,826
188.54	4,250	6,541	189.06	4,722	8,873
188.55	4,259	6,583	189.07	4,732	8,920
188.56	4,268	6,626	189.08	4,741	8,967
188.57	4,277	6,669	189.09	4,751	9,015
188.58	4,286	6,711	189.10	4,761	9,062
188.59	4,295	6,754	189.11	4,770	9,110
188.60	4,304	6,797	189.12	4,780	9,158
188.61	4,313	6,840	189.13	4,789	9,206
188.62	4,322	6,884	189.14	4,799	9,254
188.63	4,331	6,927	189.15	4,808	9,302
188.64	4,340	6,970	189.16	4,818	9,350
188.65	4,349	7,014	189.17	4,828	9,398
188.66	4,358	7,057	189.18	4,837	9,446
188.67	4,367	7,101	189.19	4,847	9,495
188.68	4,376	7,144	189.20	4,856	9,543
188.69	4,385	7,188	189.21	4,866	9,592
188.70	4,394	7,232	189.22	4,875	9,641
188.71	4,403	7,276	189.23	4,885	9,689
188.72	4,412	7,320	189.24	4,894	9,738
188.73	4,421	7,364	189.25	4,904	9,787
188.74	4,430	7,409	189.26	4,914	9,836
188.75	4,440	7,453	189.27	4,923	9,885
188.76	4,449	7,497	189.28	4,933	9,935
188.77	4,458	7,542	189.29	4,942	9,984
188.78	4,467	7,587	189.30	4,952	10,034
188.79	4,476	7,631	189.31	4,961	10,083
188.80	4,485	7,676	189.32	4,971	10,133
188.81	4,494	7,721	189.33	4,980	10,183
188.82	4,503	7,766	189.34	4,990	10,232
188.83	4,512	7,811	189.35	5,000	10,282
188.84	4,521	7,856	189.36	5,009	10,332
188.85	4,530	7,901	189.37	5,019	10,383
188.86	4,539	7,947	189.38	5,028	10,433
188.87	4,548	7,992	189.39	5,038	10,483
188.88	4,557	8,038	189.40	5,047	10,534
188.89	4,566	8,083	189.41	5,057	10,584

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.42	5,067	10,635	189.94	5,564	13,399
189.43	5,076	10,685	189.95	5,573	13,454
189.44	5,086	10,736	189.96	5,583	13,510
189.45	5,095	10,787	189.97	5,592	13,566
189.46	5,105	10,838	189.98	5,602	13,622
189.47	5,114	10,889	189.99	5,611	13,678
189.48	5,124	10,940	190.00	5,621	13,734
189.49	5,133	10,992	190.01	5,631	13,790
189.50	5,143	11,043	190.02	5,641	13,847
189.51	5,153	11,095	190.03	5,651	13,903
189.52	5,162	11,146	190.04	5,661	13,960
189.53	5,172	11,198	190.05	5,672	14,016
189.54	5,181	11,250	190.06	5,682	14,073
189.55	5,191	11,301	190.07	5,692	14,130
189.56	5,200	11,353	190.08	5,702	14,187
189.57	5,210	11,405	190.09	5,712	14,244
189.58	5,219	11,458	190.10	5,722	14,301
189.59	5,229	11,510	190.11	5,732	14,359
189.60	5,239	11,562	190.12	5,742	14,416
189.61	5,248	11,615	190.13	5,752	14,473
189.62	5,258	11,667	190.14	5,762	14,531
189.63	5,267	11,720	190.15	5,773	14,589
189.64	5,277	11,772	190.16	5,783	14,646
189.65	5,286	11,825	190.17	5,793	14,704
189.66	5,296	11,878	190.18	5,803	14,762
189.67	5,306	11,931	190.19	5,813	14,820
189.68	5,315	11,984	190.20	5,823	14,879
189.69	5,325	12,038	190.21	5,833	14,937
189.70	5,334	12,091	190.22	5,843	14,995
189.71	5,344	12,144	190.23	5,853	15,054
189.72	5,353	12,198	190.24	5,863	15,112
189.73	5,363	12,251	190.25	5,874	15,171
189.74	5,372	12,305	190.26	5,884	15,230
189.75	5,382	12,359	190.27	5,894	15,289
189.76	5,392	12,413	190.28	5,904	15,348
189.77	5,401	12,467	190.29	5,914	15,407
189.78	5,411	12,521	190.30	5,924	15,466
189.79	5,420	12,575	190.31	5,934	15,525
189.80	5,430	12,629	190.32	5,944	15,585
189.81	5,439	12,683	190.33	5,954	15,644
189.82	5,449	12,738	190.34	5,964	15,704
189.83	5,458	12,792	190.35	5,975	15,763
189.84	5,468	12,847	190.36	5,985	15,823
189.85	5,478	12,902	190.37	5,995	15,883
189.86	5,487	12,957	190.38	6,005	15,943
189.87	5,497	13,011	190.39	6,015	16,003
189.88	5,506	13,066	190.40	6,025	16,063
189.89	5,516	13,122	190.41	6,035	16,124
189.90	5,525	13,177	190.42	6,045	16,184
189.91	5,535	13,232	190.43	6,055	16,245
189.92	5,545	13,287	190.44	6,065	16,305
189.93	5,554	13,343	190.45	6,076	16,366

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.46	6,086	16,427
190.47	6,096	16,488
190.48	6,106	16,549
190.49	6,116	16,610
190.50	6,126	16,671
190.51	6,136	16,732
190.52	6,146	16,794
190.53	6,156	16,855
190.54	6,166	16,917
190.55	6,177	16,978
190.56	6,187	17,040
190.57	6,197	17,102
190.58	6,207	17,164
190.59	6,217	17,226
190.60	6,227	17,289
190.61	6,237	17,351
190.62	6,247	17,413
190.63	6,257	17,476
190.64	6,267	17,538
190.65	6,278	17,601
190.66	6,288	17,664
190.67	6,298	17,727
190.68	6,308	17,790
190.69	6,318	17,853
190.70	6,328	17,916
190.71	6,338	17,980
190.72	6,348	18,043
190.73	6,358	18,107
190.74	6,368	18,170
190.75	6,379	18,234
190.76	6,389	18,298
190.77	6,399	18,362
190.78	6,409	18,426
190.79	6,419	18,490
190.80	6,429	18,554
190.81	6,439	18,618
190.82	6,449	18,683
190.83	6,459	18,747
190.84	6,469	18,812
190.85	6,480	18,877
190.86	6,490	18,942
190.87	6,500	19,007
190.88	6,510	19,072
190.89	6,520	19,137
190.90	6,530	19,202
190.91	6,540	19,267
190.92	6,550	19,333
190.93	6,560	19,398
190.94	6,570	19,464
190.95	6,581	19,530
190.96	6,591	19,596
190.97	6,601	19,662
190.98	6,611	19,728
190.99	6,621	19,794
191.00	**6,631**	**19,860**

Summary for Pond B-34: Basin #34

Inflow Area = 1.779 ac, 23.66% Impervious, Inflow Depth = 6.14" for Current 100 yr event
Inflow = 11.43 cfs @ 12.17 hrs, Volume= 0.910 af
Outflow = 8.67 cfs @ 12.26 hrs, Volume= 0.854 af, Atten= 24%, Lag= 5.3 min
Primary = 8.67 cfs @ 12.26 hrs, Volume= 0.854 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.10' @ 12.26 hrs Surf.Area= 6,456 sf Storage= 12,871 cf

Plug-Flow detention time= 241.7 min calculated for 0.854 af (94% of inflow)
Center-of-Mass det. time= 206.9 min (1,002.8 - 795.8)

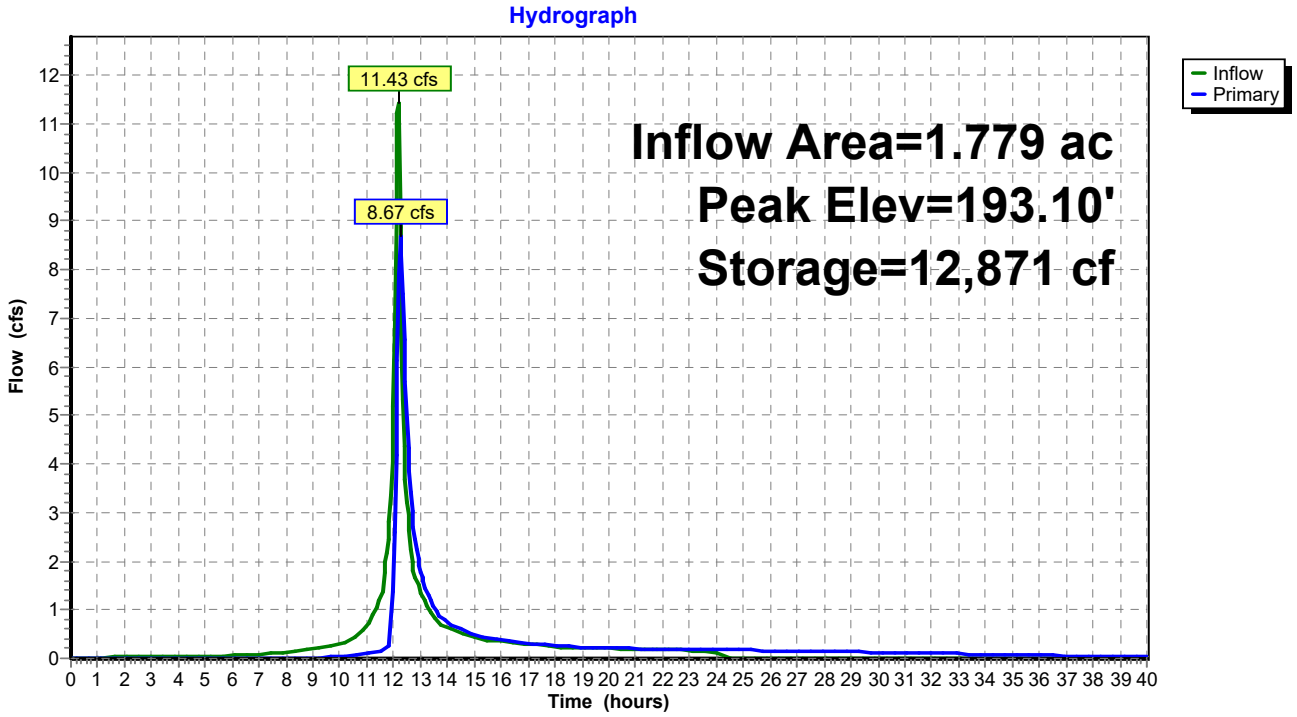
Volume	Invert	Avail.Storage	Storage Description
#1	190.30'	27,449 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.30	0	0	0
191.00	4,390	1,536	1,536
192.00	5,343	4,867	6,403
193.00	6,353	5,848	12,251
194.00	7,419	6,886	19,137
195.00	9,205	8,312	27,449

Device	Routing	Invert	Outlet Devices
#1	Primary	189.65'	**18.0" Round Culvert** L= 100.0' Ke= 0.500 Inlet / Outlet Invert= 189.65' / 189.15' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.09'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	192.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.58 cfs @ 12.26 hrs HW=193.09' (Free Discharge)
- **1=Culvert** (Passes 8.58 cfs of 12.14 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.63 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 8.36 cfs @ 2.85 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-34: Basin #34



Stage-Discharge for Pond B-34: Basin #34

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.30	0.00	190.82	0.00	191.34	0.06	191.86	0.13
190.31	0.00	190.83	0.00	191.35	0.06	191.87	0.13
190.32	0.00	190.84	0.00	191.36	0.07	191.88	0.14
190.33	0.00	190.85	0.00	191.37	0.07	191.89	0.14
190.34	0.00	190.86	0.00	191.38	0.07	191.90	0.14
190.35	0.00	190.87	0.00	191.39	0.07	191.91	0.14
190.36	0.00	190.88	0.00	191.40	0.07	191.92	0.14
190.37	0.00	190.89	0.00	191.41	0.08	191.93	0.14
190.38	0.00	190.90	0.00	191.42	0.08	191.94	0.14
190.39	0.00	190.91	0.00	191.43	0.08	191.95	0.14
190.40	0.00	190.92	0.00	191.44	0.08	191.96	0.14
190.41	0.00	190.93	0.00	191.45	0.08	191.97	0.14
190.42	0.00	190.94	0.00	191.46	0.08	191.98	0.15
190.43	0.00	190.95	0.00	191.47	0.09	191.99	0.15
190.44	0.00	190.96	0.00	191.48	0.09	192.00	0.15
190.45	0.00	190.97	0.00	191.49	0.09	192.01	0.15
190.46	0.00	190.98	0.00	191.50	0.09	192.02	0.15
190.47	0.00	190.99	0.00	191.51	0.09	192.03	0.15
190.48	0.00	191.00	0.00	191.52	0.09	192.04	0.15
190.49	0.00	191.01	0.00	191.53	0.10	192.05	0.15
190.50	0.00	191.02	0.00	191.54	0.10	192.06	0.15
190.51	0.00	191.03	0.00	191.55	0.10	192.07	0.15
190.52	0.00	191.04	0.00	191.56	0.10	192.08	0.15
190.53	0.00	191.05	0.00	191.57	0.10	192.09	0.16
190.54	0.00	191.06	0.00	191.58	0.10	192.10	0.16
190.55	0.00	191.07	0.00	191.59	0.10	192.11	0.16
190.56	0.00	191.08	0.00	191.60	0.10	192.12	0.16
190.57	0.00	191.09	0.00	191.61	0.11	192.13	0.16
190.58	0.00	191.10	0.00	191.62	0.11	192.14	0.16
190.59	0.00	191.11	0.00	191.63	0.11	192.15	0.16
190.60	0.00	191.12	0.00	191.64	0.11	192.16	0.16
190.61	0.00	191.13	0.00	191.65	0.11	192.17	0.16
190.62	0.00	191.14	0.00	191.66	0.11	192.18	0.16
190.63	0.00	191.15	0.01	191.67	0.11	192.19	0.16
190.64	0.00	191.16	0.01	191.68	0.11	192.20	0.16
190.65	0.00	191.17	0.01	191.69	0.12	192.21	0.17
190.66	0.00	191.18	0.01	191.70	0.12	192.22	0.17
190.67	0.00	191.19	0.02	191.71	0.12	192.23	0.17
190.68	0.00	191.20	0.02	191.72	0.12	192.24	0.17
190.69	0.00	191.21	0.02	191.73	0.12	192.25	0.17
190.70	0.00	191.22	0.03	191.74	0.12	192.26	0.17
190.71	0.00	191.23	0.03	191.75	0.12	192.27	0.17
190.72	0.00	191.24	0.03	191.76	0.12	192.28	0.17
190.73	0.00	191.25	0.04	191.77	0.12	192.29	0.17
190.74	0.00	191.26	0.04	191.78	0.13	192.30	0.17
190.75	0.00	191.27	0.05	191.79	0.13	192.31	0.17
190.76	0.00	191.28	0.05	191.80	0.13	192.32	0.17
190.77	0.00	191.29	0.05	191.81	0.13	192.33	0.17
190.78	0.00	191.30	0.05	191.82	0.13	192.34	0.19
190.79	0.00	191.31	0.06	191.83	0.13	192.35	0.21
190.80	0.00	191.32	0.06	191.84	0.13	192.36	0.25
190.81	0.00	191.33	0.06	191.85	0.13	192.37	0.28

Stage-Discharge for Pond B-34: Basin #34 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.38	0.32	192.90	5.68	193.42	12.94	193.94	14.10
192.39	0.37	192.91	5.83	193.43	12.96	193.95	14.12
192.40	0.42	192.92	5.97	193.44	12.98	193.96	14.14
192.41	0.48	192.93	6.11	193.45	13.01	193.97	14.16
192.42	0.53	192.94	6.26	193.46	13.03	193.98	14.18
192.43	0.59	192.95	6.41	193.47	13.05	193.99	14.21
192.44	0.66	192.96	6.55	193.48	13.08	194.00	14.23
192.45	0.72	192.97	6.70	193.49	13.10	194.01	14.25
192.46	0.79	192.98	6.85	193.50	13.12	194.02	14.27
192.47	0.87	192.99	7.00	193.51	13.14	194.03	14.29
192.48	0.94	193.00	7.15	193.52	13.17	194.04	14.31
192.49	1.02	193.01	7.31	193.53	13.19	194.05	14.33
192.50	1.10	193.02	7.46	193.54	13.21	194.06	14.35
192.51	1.18	193.03	7.61	193.55	13.24	194.07	14.37
192.52	1.26	193.04	7.77	193.56	13.26	194.08	14.40
192.53	1.35	193.05	7.93	193.57	13.28	194.09	14.42
192.54	1.44	193.06	8.08	193.58	13.30	194.10	14.44
192.55	1.53	193.07	8.24	193.59	13.33	194.11	14.46
192.56	1.62	193.08	8.40	193.60	13.35	194.12	14.48
192.57	1.71	193.09	8.56	193.61	13.37	194.13	14.50
192.58	1.81	193.10	8.72	193.62	13.40	194.14	14.52
192.59	1.91	193.11	8.89	193.63	13.42	194.15	14.54
192.60	2.00	193.12	9.05	193.64	13.44	194.16	14.56
192.61	2.11	193.13	9.21	193.65	13.46	194.17	14.58
192.62	2.21	193.14	9.38	193.66	13.49	194.18	14.60
192.63	2.31	193.15	9.54	193.67	13.51	194.19	14.62
192.64	2.42	193.16	9.71	193.68	13.53	194.20	14.64
192.65	2.53	193.17	9.88	193.69	13.55	194.21	14.67
192.66	2.64	193.18	10.05	193.70	13.57	194.22	14.69
192.67	2.75	193.19	10.22	193.71	13.60	194.23	14.71
192.68	2.86	193.20	10.38	193.72	13.62	194.24	14.73
192.69	2.98	193.21	10.56	193.73	13.64	194.25	14.75
192.70	3.09	193.22	10.73	193.74	13.66	194.26	14.89
192.71	3.21	193.23	10.90	193.75	13.69	194.27	15.12
192.72	3.33	193.24	11.07	193.76	13.71	194.28	15.42
192.73	3.45	193.25	11.25	193.77	13.73	194.29	15.77
192.74	3.57	193.26	11.42	193.78	13.75	194.30	16.16
192.75	3.69	193.27	11.60	193.79	13.77	194.31	16.59
192.76	3.81	193.28	11.77	193.80	13.80	194.32	17.06
192.77	3.94	193.29	11.95	193.81	13.82	194.33	17.57
192.78	4.07	193.30	12.13	193.82	13.84	194.34	18.10
192.79	4.19	193.31	12.31	193.83	13.86	194.35	18.67
192.80	4.32	193.32	12.49	193.84	13.88	194.36	19.26
192.81	4.45	193.33	12.67	193.85	13.90	194.37	19.88
192.82	4.59	193.34	12.75	193.86	13.93	194.38	20.53
192.83	4.72	193.35	12.77	193.87	13.95	194.39	21.20
192.84	4.85	193.36	12.80	193.88	13.97	194.40	21.90
192.85	4.99	193.37	12.82	193.89	13.99	194.41	22.62
192.86	5.12	193.38	12.84	193.90	14.01	194.42	23.36
192.87	5.26	193.39	12.87	193.91	14.03	194.43	24.12
192.88	5.40	193.40	12.89	193.92	14.06	194.44	24.91
192.89	5.54	193.41	12.91	193.93	14.08	194.45	25.72

Stage-Discharge for Pond B-34: Basin #34 (continued)

Elevation (feet)	Primary (cfs)
194.46	26.58
194.47	27.48
194.48	28.39
194.49	29.34
194.50	30.30
194.51	31.30
194.52	32.32
194.53	33.36
194.54	34.43
194.55	35.52
194.56	36.64
194.57	37.78
194.58	38.94
194.59	40.13
194.60	41.34
194.61	42.58
194.62	43.84
194.63	45.13
194.64	46.44
194.65	47.78
194.66	49.16
194.67	50.57
194.68	52.01
194.69	53.47
194.70	54.96
194.71	56.48
194.72	58.02
194.73	59.59
194.74	61.18
194.75	62.80
194.76	64.45
194.77	66.12
194.78	67.83
194.79	69.55
194.80	71.31
194.81	73.09
194.82	74.89
194.83	76.73
194.84	78.59
194.85	80.48
194.86	82.12
194.87	83.78
194.88	85.46
194.89	87.14
194.90	88.84
194.91	90.56
194.92	92.28
194.93	94.02
194.94	95.77
194.95	97.54
194.96	99.31
194.97	101.10
194.98	102.91
194.99	104.72
195.00	**106.55**

Stage-Area-Storage for Pond B-34: Basin #34

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.30	0	0	190.82	3,261	848
190.31	63	0	190.83	3,324	881
190.32	125	1	190.84	3,387	914
190.33	188	3	190.85	3,449	949
190.34	251	5	190.86	3,512	983
190.35	314	8	190.87	3,575	1,019
190.36	376	11	190.88	3,637	1,055
190.37	439	15	190.89	3,700	1,092
190.38	502	20	190.90	3,763	1,129
190.39	564	25	190.91	3,826	1,167
190.40	627	31	190.92	3,888	1,205
190.41	690	38	190.93	3,951	1,245
190.42	753	45	190.94	4,014	1,284
190.43	815	53	190.95	4,076	1,325
190.44	878	61	190.96	4,139	1,366
190.45	941	71	190.97	4,202	1,408
190.46	1,003	80	190.98	4,265	1,450
190.47	1,066	91	190.99	4,327	1,493
190.48	1,129	102	191.00	4,390	1,536
190.49	1,192	113	191.01	4,400	1,580
190.50	1,254	125	191.02	4,409	1,624
190.51	1,317	138	191.03	4,419	1,669
190.52	1,380	152	191.04	4,428	1,713
190.53	1,442	166	191.05	4,438	1,757
190.54	1,505	181	191.06	4,447	1,802
190.55	1,568	196	191.07	4,457	1,846
190.56	1,631	212	191.08	4,466	1,891
190.57	1,693	229	191.09	4,476	1,935
190.58	1,756	246	191.10	4,485	1,980
190.59	1,819	264	191.11	4,495	2,025
190.60	1,881	282	191.12	4,504	2,070
190.61	1,944	301	191.13	4,514	2,115
190.62	2,007	321	191.14	4,523	2,160
190.63	2,070	341	191.15	4,533	2,206
190.64	2,132	362	191.16	4,542	2,251
190.65	2,195	384	191.17	4,552	2,297
190.66	2,258	406	191.18	4,562	2,342
190.67	2,320	429	191.19	4,571	2,388
190.68	2,383	453	191.20	4,581	2,434
190.69	2,446	477	191.21	4,590	2,479
190.70	2,509	502	191.22	4,600	2,525
190.71	2,571	527	191.23	4,609	2,571
190.72	2,634	553	191.24	4,619	2,618
190.73	2,697	580	191.25	4,628	2,664
190.74	2,759	607	191.26	4,638	2,710
190.75	2,822	635	191.27	4,647	2,757
190.76	2,885	664	191.28	4,657	2,803
190.77	2,948	693	191.29	4,666	2,850
190.78	3,010	722	191.30	4,676	2,896
190.79	3,073	753	191.31	4,685	2,943
190.80	3,136	784	191.32	4,695	2,990
190.81	3,198	816	191.33	4,704	3,037

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.34	4,714	3,084	191.86	5,210	5,664
191.35	4,724	3,131	191.87	5,219	5,716
191.36	4,733	3,179	191.88	5,229	5,769
191.37	4,743	3,226	191.89	5,238	5,821
191.38	4,752	3,274	191.90	5,248	5,873
191.39	4,762	3,321	191.91	5,257	5,926
191.40	4,771	3,369	191.92	5,267	5,979
191.41	4,781	3,416	191.93	5,276	6,031
191.42	4,790	3,464	191.94	5,286	6,084
191.43	4,800	3,512	191.95	5,295	6,137
191.44	4,809	3,560	191.96	5,305	6,190
191.45	4,819	3,608	191.97	5,314	6,243
191.46	4,828	3,657	191.98	5,324	6,296
191.47	4,838	3,705	191.99	5,333	6,350
191.48	4,847	3,753	192.00	5,343	6,403
191.49	4,857	3,802	192.01	5,353	6,456
191.50	4,867	3,851	192.02	5,363	6,510
191.51	4,876	3,899	192.03	5,373	6,564
191.52	4,886	3,948	192.04	5,383	6,618
191.53	4,895	3,997	192.05	5,394	6,671
191.54	4,905	4,046	192.06	5,404	6,725
191.55	4,914	4,095	192.07	5,414	6,779
191.56	4,924	4,144	192.08	5,424	6,834
191.57	4,933	4,194	192.09	5,434	6,888
191.58	4,943	4,243	192.10	5,444	6,942
191.59	4,952	4,292	192.11	5,454	6,997
191.60	4,962	4,342	192.12	5,464	7,051
191.61	4,971	4,392	192.13	5,474	7,106
191.62	4,981	4,441	192.14	5,484	7,161
191.63	4,990	4,491	192.15	5,495	7,216
191.64	5,000	4,541	192.16	5,505	7,271
191.65	5,009	4,591	192.17	5,515	7,326
191.66	5,019	4,641	192.18	5,525	7,381
191.67	5,029	4,692	192.19	5,535	7,436
191.68	5,038	4,742	192.20	5,545	7,492
191.69	5,048	4,792	192.21	5,555	7,547
191.70	5,057	4,843	192.22	5,565	7,603
191.71	5,067	4,894	192.23	5,575	7,659
191.72	5,076	4,944	192.24	5,585	7,714
191.73	5,086	4,995	192.25	5,596	7,770
191.74	5,095	5,046	192.26	5,606	7,826
191.75	5,105	5,097	192.27	5,616	7,882
191.76	5,114	5,148	192.28	5,626	7,939
191.77	5,124	5,199	192.29	5,636	7,995
191.78	5,133	5,251	192.30	5,646	8,051
191.79	5,143	5,302	192.31	5,656	8,108
191.80	5,152	5,353	192.32	5,666	8,164
191.81	5,162	5,405	192.33	5,676	8,221
191.82	5,171	5,457	192.34	5,686	8,278
191.83	5,181	5,508	192.35	5,697	8,335
191.84	5,191	5,560	192.36	5,707	8,392
191.85	5,200	5,612	192.37	5,717	8,449

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.38	5,727	8,506	192.90	6,252	11,621
192.39	5,737	8,564	192.91	6,262	11,683
192.40	5,747	8,621	192.92	6,272	11,746
192.41	5,757	8,679	192.93	6,282	11,809
192.42	5,767	8,736	192.94	6,292	11,872
192.43	5,777	8,794	192.95	6,303	11,935
192.44	5,787	8,852	192.96	6,313	11,998
192.45	5,798	8,910	192.97	6,323	12,061
192.46	5,808	8,968	192.98	6,333	12,124
192.47	5,818	9,026	192.99	6,343	12,188
192.48	5,828	9,084	193.00	6,353	12,251
192.49	5,838	9,142	193.01	6,364	12,315
192.50	5,848	9,201	193.02	6,374	12,378
192.51	5,858	9,259	193.03	6,385	12,442
192.52	5,868	9,318	193.04	6,396	12,506
192.53	5,878	9,377	193.05	6,406	12,570
192.54	5,888	9,435	193.06	6,417	12,634
192.55	5,899	9,494	193.07	6,428	12,698
192.56	5,909	9,553	193.08	6,438	12,763
192.57	5,919	9,613	193.09	6,449	12,827
192.58	5,929	9,672	193.10	6,460	12,892
192.59	5,939	9,731	193.11	6,470	12,956
192.60	5,949	9,791	193.12	6,481	13,021
192.61	5,959	9,850	193.13	6,492	13,086
192.62	5,969	9,910	193.14	6,502	13,151
192.63	5,979	9,970	193.15	6,513	13,216
192.64	5,989	10,029	193.16	6,524	13,281
192.65	6,000	10,089	193.17	6,534	13,346
192.66	6,010	10,149	193.18	6,545	13,412
192.67	6,020	10,210	193.19	6,556	13,477
192.68	6,030	10,270	193.20	6,566	13,543
192.69	6,040	10,330	193.21	6,577	13,609
192.70	6,050	10,391	193.22	6,588	13,674
192.71	6,060	10,451	193.23	6,598	13,740
192.72	6,070	10,512	193.24	6,609	13,806
192.73	6,080	10,573	193.25	6,620	13,873
192.74	6,090	10,633	193.26	6,630	13,939
192.75	6,101	10,694	193.27	6,641	14,005
192.76	6,111	10,755	193.28	6,651	14,072
192.77	6,121	10,817	193.29	6,662	14,138
192.78	6,131	10,878	193.30	6,673	14,205
192.79	6,141	10,939	193.31	6,683	14,272
192.80	6,151	11,001	193.32	6,694	14,339
192.81	6,161	11,062	193.33	6,705	14,406
192.82	6,171	11,124	193.34	6,715	14,473
192.83	6,181	11,186	193.35	6,726	14,540
192.84	6,191	11,247	193.36	6,737	14,607
192.85	6,202	11,309	193.37	6,747	14,675
192.86	6,212	11,371	193.38	6,758	14,742
192.87	6,222	11,434	193.39	6,769	14,810
192.88	6,232	11,496	193.40	6,779	14,877
192.89	6,242	11,558	193.41	6,790	14,945

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.42	6,801	15,013	193.94	7,355	18,694
193.43	6,811	15,081	193.95	7,366	18,767
193.44	6,822	15,150	193.96	7,376	18,841
193.45	6,833	15,218	193.97	7,387	18,915
193.46	6,843	15,286	193.98	7,398	18,989
193.47	6,854	15,355	193.99	7,408	19,063
193.48	6,865	15,423	194.00	7,419	19,137
193.49	6,875	15,492	194.01	7,437	19,211
193.50	6,886	15,561	194.02	7,455	19,286
193.51	6,897	15,630	194.03	7,473	19,360
193.52	6,907	15,699	194.04	7,490	19,435
193.53	6,918	15,768	194.05	7,508	19,510
193.54	6,929	15,837	194.06	7,526	19,585
193.55	6,939	15,906	194.07	7,544	19,661
193.56	6,950	15,976	194.08	7,562	19,736
193.57	6,961	16,045	194.09	7,580	19,812
193.58	6,971	16,115	194.10	7,598	19,888
193.59	6,982	16,185	194.11	7,615	19,964
193.60	6,993	16,255	194.12	7,633	20,040
193.61	7,003	16,325	194.13	7,651	20,117
193.62	7,014	16,395	194.14	7,669	20,193
193.63	7,025	16,465	194.15	7,687	20,270
193.64	7,035	16,535	194.16	7,705	20,347
193.65	7,046	16,606	194.17	7,723	20,424
193.66	7,057	16,676	194.18	7,740	20,501
193.67	7,067	16,747	194.19	7,758	20,579
193.68	7,078	16,817	194.20	7,776	20,657
193.69	7,089	16,888	194.21	7,794	20,734
193.70	7,099	16,959	194.22	7,812	20,812
193.71	7,110	17,030	194.23	7,830	20,891
193.72	7,121	17,101	194.24	7,848	20,969
193.73	7,131	17,173	194.25	7,866	21,048
193.74	7,142	17,244	194.26	7,883	21,126
193.75	7,153	17,316	194.27	7,901	21,205
193.76	7,163	17,387	194.28	7,919	21,284
193.77	7,174	17,459	194.29	7,937	21,364
193.78	7,184	17,531	194.30	7,955	21,443
193.79	7,195	17,603	194.31	7,973	21,523
193.80	7,206	17,675	194.32	7,991	21,603
193.81	7,216	17,747	194.33	8,008	21,683
193.82	7,227	17,819	194.34	8,026	21,763
193.83	7,238	17,891	194.35	8,044	21,843
193.84	7,248	17,964	194.36	8,062	21,924
193.85	7,259	18,036	194.37	8,080	22,004
193.86	7,270	18,109	194.38	8,098	22,085
193.87	7,280	18,182	194.39	8,116	22,166
193.88	7,291	18,254	194.40	8,133	22,247
193.89	7,302	18,327	194.41	8,151	22,329
193.90	7,312	18,400	194.42	8,169	22,411
193.91	7,323	18,474	194.43	8,187	22,492
193.92	7,334	18,547	194.44	8,205	22,574
193.93	7,344	18,620	194.45	8,223	22,656

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.46	8,241	22,739
194.47	8,258	22,821
194.48	8,276	22,904
194.49	8,294	22,987
194.50	8,312	23,070
194.51	8,330	23,153
194.52	8,348	23,236
194.53	8,366	23,320
194.54	8,383	23,404
194.55	8,401	23,488
194.56	8,419	23,572
194.57	8,437	23,656
194.58	8,455	23,740
194.59	8,473	23,825
194.60	8,491	23,910
194.61	8,508	23,995
194.62	8,526	24,080
194.63	8,544	24,165
194.64	8,562	24,251
194.65	8,580	24,337
194.66	8,598	24,423
194.67	8,616	24,509
194.68	8,633	24,595
194.69	8,651	24,681
194.70	8,669	24,768
194.71	8,687	24,855
194.72	8,705	24,942
194.73	8,723	25,029
194.74	8,741	25,116
194.75	8,759	25,204
194.76	8,776	25,291
194.77	8,794	25,379
194.78	8,812	25,467
194.79	8,830	25,555
194.80	8,848	25,644
194.81	8,866	25,732
194.82	8,884	25,821
194.83	8,901	25,910
194.84	8,919	25,999
194.85	8,937	26,088
194.86	8,955	26,178
194.87	8,973	26,267
194.88	8,991	26,357
194.89	9,009	26,447
194.90	9,026	26,537
194.91	9,044	26,628
194.92	9,062	26,718
194.93	9,080	26,809
194.94	9,098	26,900
194.95	9,116	26,991
194.96	9,134	27,082
194.97	9,151	27,174
194.98	9,169	27,265
194.99	9,187	27,357
195.00	**9,205**	**27,449**

Summary for Pond B-35: Basin #35

Inflow Area = 1.957 ac, 66.79% Impervious, Inflow Depth = 7.39" for Current 100 yr event
Inflow = 14.15 cfs @ 12.17 hrs, Volume= 1.205 af
Outflow = 10.95 cfs @ 12.25 hrs, Volume= 1.086 af, Atten= 23%, Lag= 5.1 min
Primary = 10.95 cfs @ 12.25 hrs, Volume= 1.086 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.93' @ 12.25 hrs Surf.Area= 6,789 sf Storage= 18,463 cf

Plug-Flow detention time= 212.7 min calculated for 1.086 af (90% of inflow)
Center-of-Mass det. time= 160.9 min (924.1 - 763.1)

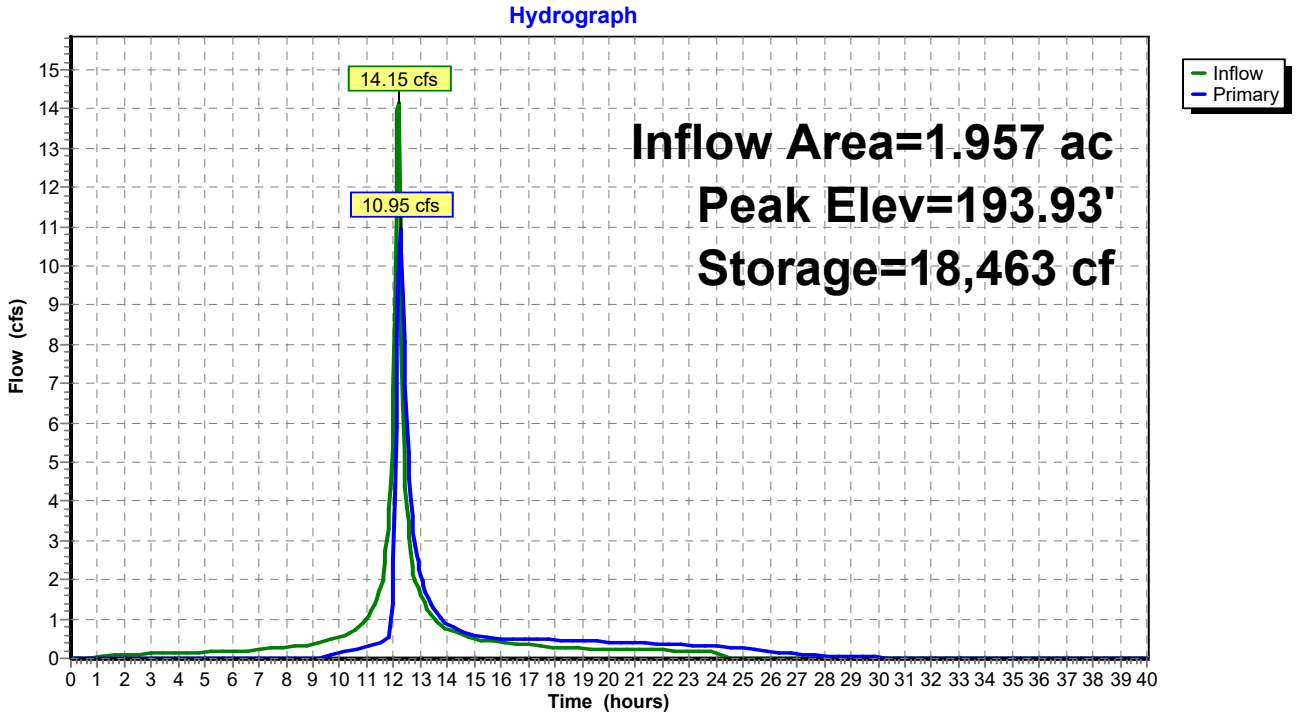
Volume	Invert	Avail.Storage	Storage Description
#1	189.80'	26,431 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
189.80	0	0	0
190.00	2,647	265	265
191.00	3,593	3,120	3,385
192.00	4,618	4,106	7,490
193.00	5,711	5,165	12,655
194.00	6,871	6,291	18,946
195.00	8,099	7,485	26,431

Device	Routing	Invert	Outlet Devices
#1	Primary	189.80'	**18.0" Round Culvert** L= 103.0' Ke= 0.500 Inlet / Outlet Invert= 189.80' / 189.30' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.44'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.05'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.90 cfs @ 12.25 hrs HW=193.93' (Free Discharge)
- **1=Culvert** (Passes 10.90 cfs of 13.63 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.64 cfs @ 7.33 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 10.26 cfs @ 3.06 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-35: Basin #35



Stage-Discharge for Pond B-35: Basin #35

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
189.80	0.00	190.32	0.00	190.84	0.00	191.36	0.00
189.81	0.00	190.33	0.00	190.85	0.00	191.37	0.00
189.82	0.00	190.34	0.00	190.86	0.00	191.38	0.00
189.83	0.00	190.35	0.00	190.87	0.00	191.39	0.00
189.84	0.00	190.36	0.00	190.88	0.00	191.40	0.00
189.85	0.00	190.37	0.00	190.89	0.00	191.41	0.00
189.86	0.00	190.38	0.00	190.90	0.00	191.42	0.00
189.87	0.00	190.39	0.00	190.91	0.00	191.43	0.00
189.88	0.00	190.40	0.00	190.92	0.00	191.44	0.00
189.89	0.00	190.41	0.00	190.93	0.00	191.45	0.00
189.90	0.00	190.42	0.00	190.94	0.00	191.46	0.00
189.91	0.00	190.43	0.00	190.95	0.00	191.47	0.00
189.92	0.00	190.44	0.00	190.96	0.00	191.48	0.00
189.93	0.00	190.45	0.00	190.97	0.00	191.49	0.01
189.94	0.00	190.46	0.00	190.98	0.00	191.50	0.01
189.95	0.00	190.47	0.00	190.99	0.00	191.51	0.01
189.96	0.00	190.48	0.00	191.00	0.00	191.52	0.02
189.97	0.00	190.49	0.00	191.01	0.00	191.53	0.02
189.98	0.00	190.50	0.00	191.02	0.00	191.54	0.02
189.99	0.00	190.51	0.00	191.03	0.00	191.55	0.03
190.00	0.00	190.52	0.00	191.04	0.00	191.56	0.03
190.01	0.00	190.53	0.00	191.05	0.00	191.57	0.04
190.02	0.00	190.54	0.00	191.06	0.00	191.58	0.04
190.03	0.00	190.55	0.00	191.07	0.00	191.59	0.05
190.04	0.00	190.56	0.00	191.08	0.00	191.60	0.06
190.05	0.00	190.57	0.00	191.09	0.00	191.61	0.06
190.06	0.00	190.58	0.00	191.10	0.00	191.62	0.07
190.07	0.00	190.59	0.00	191.11	0.00	191.63	0.08
190.08	0.00	190.60	0.00	191.12	0.00	191.64	0.08
190.09	0.00	190.61	0.00	191.13	0.00	191.65	0.09
190.10	0.00	190.62	0.00	191.14	0.00	191.66	0.10
190.11	0.00	190.63	0.00	191.15	0.00	191.67	0.10
190.12	0.00	190.64	0.00	191.16	0.00	191.68	0.11
190.13	0.00	190.65	0.00	191.17	0.00	191.69	0.12
190.14	0.00	190.66	0.00	191.18	0.00	191.70	0.13
190.15	0.00	190.67	0.00	191.19	0.00	191.71	0.13
190.16	0.00	190.68	0.00	191.20	0.00	191.72	0.14
190.17	0.00	190.69	0.00	191.21	0.00	191.73	0.15
190.18	0.00	190.70	0.00	191.22	0.00	191.74	0.15
190.19	0.00	190.71	0.00	191.23	0.00	191.75	0.16
190.20	0.00	190.72	0.00	191.24	0.00	191.76	0.17
190.21	0.00	190.73	0.00	191.25	0.00	191.77	0.17
190.22	0.00	190.74	0.00	191.26	0.00	191.78	0.17
190.23	0.00	190.75	0.00	191.27	0.00	191.79	0.18
190.24	0.00	190.76	0.00	191.28	0.00	191.80	0.18
190.25	0.00	190.77	0.00	191.29	0.00	191.81	0.19
190.26	0.00	190.78	0.00	191.30	0.00	191.82	0.19
190.27	0.00	190.79	0.00	191.31	0.00	191.83	0.20
190.28	0.00	190.80	0.00	191.32	0.00	191.84	0.20
190.29	0.00	190.81	0.00	191.33	0.00	191.85	0.21
190.30	0.00	190.82	0.00	191.34	0.00	191.86	0.21
190.31	0.00	190.83	0.00	191.35	0.00	191.87	0.22

Stage-Discharge for Pond B-35: Basin #35 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.88	0.22	192.40	0.37	192.92	0.48	193.44	3.69
191.89	0.22	192.41	0.38	192.93	0.48	193.45	3.81
191.90	0.23	192.42	0.38	192.94	0.49	193.46	3.94
191.91	0.23	192.43	0.38	192.95	0.49	193.47	4.06
191.92	0.24	192.44	0.38	192.96	0.49	193.48	4.18
191.93	0.24	192.45	0.39	192.97	0.49	193.49	4.31
191.94	0.24	192.46	0.39	192.98	0.49	193.50	4.44
191.95	0.25	192.47	0.39	192.99	0.49	193.51	4.57
191.96	0.25	192.48	0.39	193.00	0.50	193.52	4.70
191.97	0.25	192.49	0.39	193.01	0.50	193.53	4.83
191.98	0.26	192.50	0.40	193.02	0.50	193.54	4.96
191.99	0.26	192.51	0.40	193.03	0.50	193.55	5.09
192.00	0.26	192.52	0.40	193.04	0.50	193.56	5.23
192.01	0.27	192.53	0.40	193.05	0.50	193.57	5.37
192.02	0.27	192.54	0.41	193.06	0.52	193.58	5.50
192.03	0.27	192.55	0.41	193.07	0.55	193.59	5.64
192.04	0.28	192.56	0.41	193.08	0.58	193.60	5.78
192.05	0.28	192.57	0.41	193.09	0.62	193.61	5.92
192.06	0.28	192.58	0.41	193.10	0.66	193.62	6.06
192.07	0.29	192.59	0.42	193.11	0.71	193.63	6.21
192.08	0.29	192.60	0.42	193.12	0.76	193.64	6.35
192.09	0.29	192.61	0.42	193.13	0.81	193.65	6.50
192.10	0.30	192.62	0.42	193.14	0.87	193.66	6.64
192.11	0.30	192.63	0.43	193.15	0.93	193.67	6.79
192.12	0.30	192.64	0.43	193.16	1.00	193.68	6.94
192.13	0.30	192.65	0.43	193.17	1.07	193.69	7.09
192.14	0.31	192.66	0.43	193.18	1.14	193.70	7.24
192.15	0.31	192.67	0.43	193.19	1.21	193.71	7.39
192.16	0.31	192.68	0.44	193.20	1.28	193.72	7.54
192.17	0.32	192.69	0.44	193.21	1.36	193.73	7.70
192.18	0.32	192.70	0.44	193.22	1.44	193.74	7.85
192.19	0.32	192.71	0.44	193.23	1.53	193.75	8.01
192.20	0.32	192.72	0.44	193.24	1.61	193.76	8.16
192.21	0.33	192.73	0.45	193.25	1.70	193.77	8.32
192.22	0.33	192.74	0.45	193.26	1.79	193.78	8.48
192.23	0.33	192.75	0.45	193.27	1.88	193.79	8.64
192.24	0.33	192.76	0.45	193.28	1.97	193.80	8.80
192.25	0.34	192.77	0.45	193.29	2.06	193.81	8.96
192.26	0.34	192.78	0.46	193.30	2.16	193.82	9.12
192.27	0.34	192.79	0.46	193.31	2.26	193.83	9.29
192.28	0.34	192.80	0.46	193.32	2.36	193.84	9.45
192.29	0.35	192.81	0.46	193.33	2.46	193.85	9.61
192.30	0.35	192.82	0.46	193.34	2.57	193.86	9.78
192.31	0.35	192.83	0.46	193.35	2.67	193.87	9.95
192.32	0.35	192.84	0.47	193.36	2.78	193.88	10.11
192.33	0.36	192.85	0.47	193.37	2.89	193.89	10.28
192.34	0.36	192.86	0.47	193.38	3.00	193.90	10.45
192.35	0.36	192.87	0.47	193.39	3.11	193.91	10.62
192.36	0.36	192.88	0.47	193.40	3.22	193.92	10.79
192.37	0.37	192.89	0.48	193.41	3.34	193.93	10.96
192.38	0.37	192.90	0.48	193.42	3.46	193.94	11.14
192.39	0.37	192.91	0.48	193.43	3.57	193.95	11.31

Stage-Discharge for Pond B-35: Basin #35 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.96	11.48	194.48	14.79	195.00	**62.86**
193.97	11.66	194.49	14.81		
193.98	11.83	194.50	14.83		
193.99	12.01	194.51	14.97		
194.00	12.19	194.52	15.20		
194.01	12.36	194.53	15.50		
194.02	12.54	194.54	15.85		
194.03	12.72	194.55	16.24		
194.04	12.90	194.56	16.67		
194.05	13.08	194.57	17.14		
194.06	13.26	194.58	17.65		
194.07	13.45	194.59	18.18		
194.08	13.63	194.60	18.75		
194.09	13.81	194.61	19.34		
194.10	14.00	194.62	19.96		
194.11	14.03	194.63	20.61		
194.12	14.05	194.64	21.28		
194.13	14.07	194.65	21.97		
194.14	14.09	194.66	22.69		
194.15	14.11	194.67	23.43		
194.16	14.13	194.68	24.20		
194.17	14.15	194.69	24.98		
194.18	14.17	194.70	25.79		
194.19	14.19	194.71	26.66		
194.20	14.22	194.72	27.55		
194.21	14.24	194.73	28.47		
194.22	14.26	194.74	29.41		
194.23	14.28	194.75	30.38		
194.24	14.30	194.76	31.37		
194.25	14.32	194.77	32.39		
194.26	14.34	194.78	33.43		
194.27	14.36	194.79	34.50		
194.28	14.38	194.80	35.59		
194.29	14.40	194.81	36.70		
194.30	14.42	194.82	37.84		
194.31	14.44	194.83	39.01		
194.32	14.46	194.84	40.20		
194.33	14.48	194.85	41.41		
194.34	14.51	194.86	42.65		
194.35	14.53	194.87	43.91		
194.36	14.55	194.88	45.20		
194.37	14.57	194.89	46.51		
194.38	14.59	194.90	47.84		
194.39	14.61	194.91	49.23		
194.40	14.63	194.92	50.64		
194.41	14.65	194.93	52.07		
194.42	14.67	194.94	53.54		
194.43	14.69	194.95	55.02		
194.44	14.71	194.96	56.54		
194.45	14.73	194.97	58.08		
194.46	14.75	194.98	59.65		
194.47	14.77	194.99	61.24		

Stage-Area-Storage for Pond B-35: Basin #35

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.80	0	0
189.81	132	1
189.82	265	3
189.83	397	6
189.84	529	11
189.85	662	17
189.86	794	24
189.87	926	32
189.88	1,059	42
189.89	1,191	54
189.90	1,324	66
189.91	1,456	80
189.92	1,588	95
189.93	1,721	112
189.94	1,853	130
189.95	1,985	149
189.96	2,118	169
189.97	2,250	191
189.98	2,382	214
189.99	2,515	239
190.00	2,647	265
190.01	2,656	291
190.02	2,666	318
190.03	2,675	345
190.04	2,685	371
190.05	2,694	398
190.06	2,704	425
190.07	2,713	452
190.08	2,723	479
190.09	2,732	507
190.10	2,742	534
190.11	2,751	562
190.12	2,761	589
190.13	2,770	617
190.14	2,779	645
190.15	2,789	672
190.16	2,798	700
190.17	2,808	728
190.18	2,817	756
190.19	2,827	785
190.20	2,836	813
190.21	2,846	841
190.22	2,855	870
190.23	2,865	899
190.24	2,874	927
190.25	2,884	956
190.26	2,893	985
190.27	2,902	1,014
190.28	2,912	1,043
190.29	2,921	1,072
190.30	2,931	1,101
190.31	2,940	1,131
190.32	2,950	1,160
190.33	2,959	1,190
190.34	2,969	1,219
190.35	2,978	1,249
190.36	2,988	1,279
190.37	2,997	1,309
190.38	3,006	1,339
190.39	3,016	1,369
190.40	3,025	1,399
190.41	3,035	1,429
190.42	3,044	1,460
190.43	3,054	1,490
190.44	3,063	1,521
190.45	3,073	1,552
190.46	3,082	1,582
190.47	3,092	1,613
190.48	3,101	1,644
190.49	3,111	1,675
190.50	3,120	1,706
190.51	3,129	1,738
190.52	3,139	1,769
190.53	3,148	1,800
190.54	3,158	1,832
190.55	3,167	1,864
190.56	3,177	1,895
190.57	3,186	1,927
190.58	3,196	1,959
190.59	3,205	1,991
190.60	3,215	2,023
190.61	3,224	2,055
190.62	3,234	2,088
190.63	3,243	2,120
190.64	3,252	2,153
190.65	3,262	2,185
190.66	3,271	2,218
190.67	3,281	2,251
190.68	3,290	2,283
190.69	3,300	2,316
190.70	3,309	2,349
190.71	3,319	2,383
190.72	3,328	2,416
190.73	3,338	2,449
190.74	3,347	2,482
190.75	3,357	2,516
190.76	3,366	2,550
190.77	3,375	2,583
190.78	3,385	2,617
190.79	3,394	2,651
190.80	3,404	2,685
190.81	3,413	2,719
190.82	3,423	2,753
190.83	3,432	2,788

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.84	3,442	2,822	191.36	3,962	4,745
190.85	3,451	2,856	191.37	3,972	4,784
190.86	3,461	2,891	191.38	3,983	4,824
190.87	3,470	2,926	191.39	3,993	4,864
190.88	3,479	2,960	191.40	4,003	4,904
190.89	3,489	2,995	191.41	4,013	4,944
190.90	3,498	3,030	191.42	4,024	4,984
190.91	3,508	3,065	191.43	4,034	5,024
190.92	3,517	3,100	191.44	4,044	5,065
190.93	3,527	3,136	191.45	4,054	5,105
190.94	3,536	3,171	191.46	4,065	5,146
190.95	3,546	3,206	191.47	4,075	5,187
190.96	3,555	3,242	191.48	4,085	5,227
190.97	3,565	3,277	191.49	4,095	5,268
190.98	3,574	3,313	191.50	4,106	5,309
190.99	3,584	3,349	191.51	4,116	5,350
191.00	3,593	3,385	191.52	4,126	5,392
191.01	3,603	3,421	191.53	4,136	5,433
191.02	3,614	3,457	191.54	4,147	5,474
191.03	3,624	3,493	191.55	4,157	5,516
191.04	3,634	3,529	191.56	4,167	5,557
191.05	3,644	3,566	191.57	4,177	5,599
191.06	3,655	3,602	191.58	4,188	5,641
191.07	3,665	3,639	191.59	4,198	5,683
191.08	3,675	3,675	191.60	4,208	5,725
191.09	3,685	3,712	191.61	4,218	5,767
191.10	3,696	3,749	191.62	4,229	5,809
191.11	3,706	3,786	191.63	4,239	5,852
191.12	3,716	3,823	191.64	4,249	5,894
191.13	3,726	3,860	191.65	4,259	5,937
191.14	3,737	3,898	191.66	4,270	5,979
191.15	3,747	3,935	191.67	4,280	6,022
191.16	3,757	3,973	191.68	4,290	6,065
191.17	3,767	4,010	191.69	4,300	6,108
191.18	3,778	4,048	191.70	4,311	6,151
191.19	3,788	4,086	191.71	4,321	6,194
191.20	3,798	4,124	191.72	4,331	6,237
191.21	3,808	4,162	191.73	4,341	6,281
191.22	3,818	4,200	191.74	4,352	6,324
191.23	3,829	4,238	191.75	4,362	6,368
191.24	3,839	4,277	191.76	4,372	6,411
191.25	3,849	4,315	191.77	4,382	6,455
191.26	3,860	4,354	191.78	4,393	6,499
191.27	3,870	4,392	191.79	4,403	6,543
191.28	3,880	4,431	191.80	4,413	6,587
191.29	3,890	4,470	191.81	4,423	6,631
191.30	3,901	4,509	191.82	4,434	6,676
191.31	3,911	4,548	191.83	4,444	6,720
191.32	3,921	4,587	191.84	4,454	6,764
191.33	3,931	4,626	191.85	4,464	6,809
191.34	3,942	4,666	191.86	4,475	6,854
191.35	3,952	4,705	191.87	4,485	6,899

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.88	4,495	6,943	192.40	5,055	9,425
191.89	4,505	6,988	192.41	5,066	9,475
191.90	4,516	7,034	192.42	5,077	9,526
191.91	4,526	7,079	192.43	5,088	9,577
191.92	4,536	7,124	192.44	5,099	9,628
191.93	4,546	7,169	192.45	5,110	9,679
191.94	4,556	7,215	192.46	5,121	9,730
191.95	4,567	7,261	192.47	5,132	9,781
191.96	4,577	7,306	192.48	5,143	9,833
191.97	4,587	7,352	192.49	5,154	9,884
191.98	4,598	7,398	192.50	5,165	9,936
191.99	4,608	7,444	192.51	5,175	9,988
192.00	4,618	7,490	192.52	5,186	10,039
192.01	4,629	7,536	192.53	5,197	10,091
192.02	4,640	7,583	192.54	5,208	10,143
192.03	4,651	7,629	192.55	5,219	10,195
192.04	4,662	7,676	192.56	5,230	10,248
192.05	4,673	7,722	192.57	5,241	10,300
192.06	4,684	7,769	192.58	5,252	10,352
192.07	4,695	7,816	192.59	5,263	10,405
192.08	4,705	7,863	192.60	5,274	10,458
192.09	4,716	7,910	192.61	5,285	10,511
192.10	4,727	7,957	192.62	5,296	10,563
192.11	4,738	8,005	192.63	5,307	10,616
192.12	4,749	8,052	192.64	5,318	10,670
192.13	4,760	8,100	192.65	5,328	10,723
192.14	4,771	8,147	192.66	5,339	10,776
192.15	4,782	8,195	192.67	5,350	10,830
192.16	4,793	8,243	192.68	5,361	10,883
192.17	4,804	8,291	192.69	5,372	10,937
192.18	4,815	8,339	192.70	5,383	10,991
192.19	4,826	8,387	192.71	5,394	11,044
192.20	4,837	8,436	192.72	5,405	11,098
192.21	4,848	8,484	192.73	5,416	11,153
192.22	4,858	8,533	192.74	5,427	11,207
192.23	4,869	8,581	192.75	5,438	11,261
192.24	4,880	8,630	192.76	5,449	11,316
192.25	4,891	8,679	192.77	5,460	11,370
192.26	4,902	8,728	192.78	5,471	11,425
192.27	4,913	8,777	192.79	5,481	11,479
192.28	4,924	8,826	192.80	5,492	11,534
192.29	4,935	8,875	192.81	5,503	11,589
192.30	4,946	8,925	192.82	5,514	11,644
192.31	4,957	8,974	192.83	5,525	11,700
192.32	4,968	9,024	192.84	5,536	11,755
192.33	4,979	9,074	192.85	5,547	11,810
192.34	4,990	9,123	192.86	5,558	11,866
192.35	5,001	9,173	192.87	5,569	11,922
192.36	5,011	9,224	192.88	5,580	11,977
192.37	5,022	9,274	192.89	5,591	12,033
192.38	5,033	9,324	192.90	5,602	12,089
192.39	5,044	9,374	192.91	5,613	12,145

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.92	5,624	12,201	193.44	6,221	15,280
192.93	5,634	12,258	193.45	6,233	15,342
192.94	5,645	12,314	193.46	6,245	15,404
192.95	5,656	12,371	193.47	6,256	15,467
192.96	5,667	12,427	193.48	6,268	15,530
192.97	5,678	12,484	193.49	6,279	15,592
192.98	5,689	12,541	193.50	6,291	15,655
192.99	5,700	12,598	193.51	6,303	15,718
193.00	5,711	12,655	193.52	6,314	15,781
193.01	5,723	12,712	193.53	6,326	15,844
193.02	5,734	12,769	193.54	6,337	15,908
193.03	5,746	12,827	193.55	6,349	15,971
193.04	5,757	12,884	193.56	6,361	16,035
193.05	5,769	12,942	193.57	6,372	16,098
193.06	5,781	12,999	193.58	6,384	16,162
193.07	5,792	13,057	193.59	6,395	16,226
193.08	5,804	13,115	193.60	6,407	16,290
193.09	5,815	13,173	193.61	6,419	16,354
193.10	5,827	13,232	193.62	6,430	16,418
193.11	5,839	13,290	193.63	6,442	16,483
193.12	5,850	13,348	193.64	6,453	16,547
193.13	5,862	13,407	193.65	6,465	16,612
193.14	5,873	13,466	193.66	6,477	16,677
193.15	5,885	13,524	193.67	6,488	16,741
193.16	5,897	13,583	193.68	6,500	16,806
193.17	5,908	13,642	193.69	6,511	16,871
193.18	5,920	13,701	193.70	6,523	16,937
193.19	5,931	13,761	193.71	6,535	17,002
193.20	5,943	13,820	193.72	6,546	17,067
193.21	5,955	13,880	193.73	6,558	17,133
193.22	5,966	13,939	193.74	6,569	17,198
193.23	5,978	13,999	193.75	6,581	17,264
193.24	5,989	14,059	193.76	6,593	17,330
193.25	6,001	14,119	193.77	6,604	17,396
193.26	6,013	14,179	193.78	6,616	17,462
193.27	6,024	14,239	193.79	6,627	17,528
193.28	6,036	14,299	193.80	6,639	17,595
193.29	6,047	14,360	193.81	6,651	17,661
193.30	6,059	14,420	193.82	6,662	17,728
193.31	6,071	14,481	193.83	6,674	17,794
193.32	6,082	14,542	193.84	6,685	17,861
193.33	6,094	14,602	193.85	6,697	17,928
193.34	6,105	14,663	193.86	6,709	17,995
193.35	6,117	14,725	193.87	6,720	18,062
193.36	6,129	14,786	193.88	6,732	18,130
193.37	6,140	14,847	193.89	6,743	18,197
193.38	6,152	14,909	193.90	6,755	18,264
193.39	6,163	14,970	193.91	6,767	18,332
193.40	6,175	15,032	193.92	6,778	18,400
193.41	6,187	15,094	193.93	6,790	18,468
193.42	6,198	15,156	193.94	6,801	18,536
193.43	6,210	15,218	193.95	6,813	18,604

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.96	6,825	18,672	194.48	7,460	22,385
193.97	6,836	18,740	194.49	7,473	22,460
193.98	6,848	18,809	194.50	7,485	22,535
193.99	6,859	18,877	194.51	7,497	22,610
194.00	6,871	18,946	194.52	7,510	22,685
194.01	6,883	19,014	194.53	7,522	22,760
194.02	6,896	19,083	194.54	7,534	22,835
194.03	6,908	19,152	194.55	7,546	22,910
194.04	6,920	19,222	194.56	7,559	22,986
194.05	6,932	19,291	194.57	7,571	23,062
194.06	6,945	19,360	194.58	7,583	23,137
194.07	6,957	19,430	194.59	7,596	23,213
194.08	6,969	19,499	194.60	7,608	23,289
194.09	6,982	19,569	194.61	7,620	23,365
194.10	6,994	19,639	194.62	7,632	23,442
194.11	7,006	19,709	194.63	7,645	23,518
194.12	7,018	19,779	194.64	7,657	23,595
194.13	7,031	19,849	194.65	7,669	23,671
194.14	7,043	19,920	194.66	7,681	23,748
194.15	7,055	19,990	194.67	7,694	23,825
194.16	7,067	20,061	194.68	7,706	23,902
194.17	7,080	20,132	194.69	7,718	23,979
194.18	7,092	20,202	194.70	7,731	24,056
194.19	7,104	20,273	194.71	7,743	24,134
194.20	7,117	20,344	194.72	7,755	24,211
194.21	7,129	20,416	194.73	7,767	24,289
194.22	7,141	20,487	194.74	7,780	24,366
194.23	7,153	20,559	194.75	7,792	24,444
194.24	7,166	20,630	194.76	7,804	24,522
194.25	7,178	20,702	194.77	7,817	24,600
194.26	7,190	20,774	194.78	7,829	24,679
194.27	7,203	20,846	194.79	7,841	24,757
194.28	7,215	20,918	194.80	7,853	24,835
194.29	7,227	20,990	194.81	7,866	24,914
194.30	7,239	21,062	194.82	7,878	24,993
194.31	7,252	21,135	194.83	7,890	25,072
194.32	7,264	21,207	194.84	7,903	25,151
194.33	7,276	21,280	194.85	7,915	25,230
194.34	7,289	21,353	194.86	7,927	25,309
194.35	7,301	21,426	194.87	7,939	25,388
194.36	7,313	21,499	194.88	7,952	25,468
194.37	7,325	21,572	194.89	7,964	25,547
194.38	7,338	21,645	194.90	7,976	25,627
194.39	7,350	21,719	194.91	7,988	25,707
194.40	7,362	21,792	194.92	8,001	25,787
194.41	7,374	21,866	194.93	8,013	25,867
194.42	7,387	21,940	194.94	8,025	25,947
194.43	7,399	22,014	194.95	8,038	26,027
194.44	7,411	22,088	194.96	8,050	26,108
194.45	7,424	22,162	194.97	8,062	26,188
194.46	7,436	22,236	194.98	8,074	26,269
194.47	7,448	22,311	194.99	8,087	26,350

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.00	**8,099**	**26,431**

Summary for Pond B-36A: Basin #36A

Inflow Area = 2.377 ac, 40.60% Impervious, Inflow Depth = 6.63" for Current 100 yr event
Inflow = 16.02 cfs @ 12.17 hrs, Volume= 1.314 af
Outflow = 14.18 cfs @ 12.23 hrs, Volume= 1.220 af, Atten= 11%, Lag= 3.3 min
Primary = 14.18 cfs @ 12.23 hrs, Volume= 1.220 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.00' @ 12.23 hrs Surf.Area= 5,222 sf Storage= 15,477 cf

Plug-Flow detention time= 158.7 min calculated for 1.219 af (93% of inflow)
Center-of-Mass det. time= 120.2 min (901.7 - 781.5)

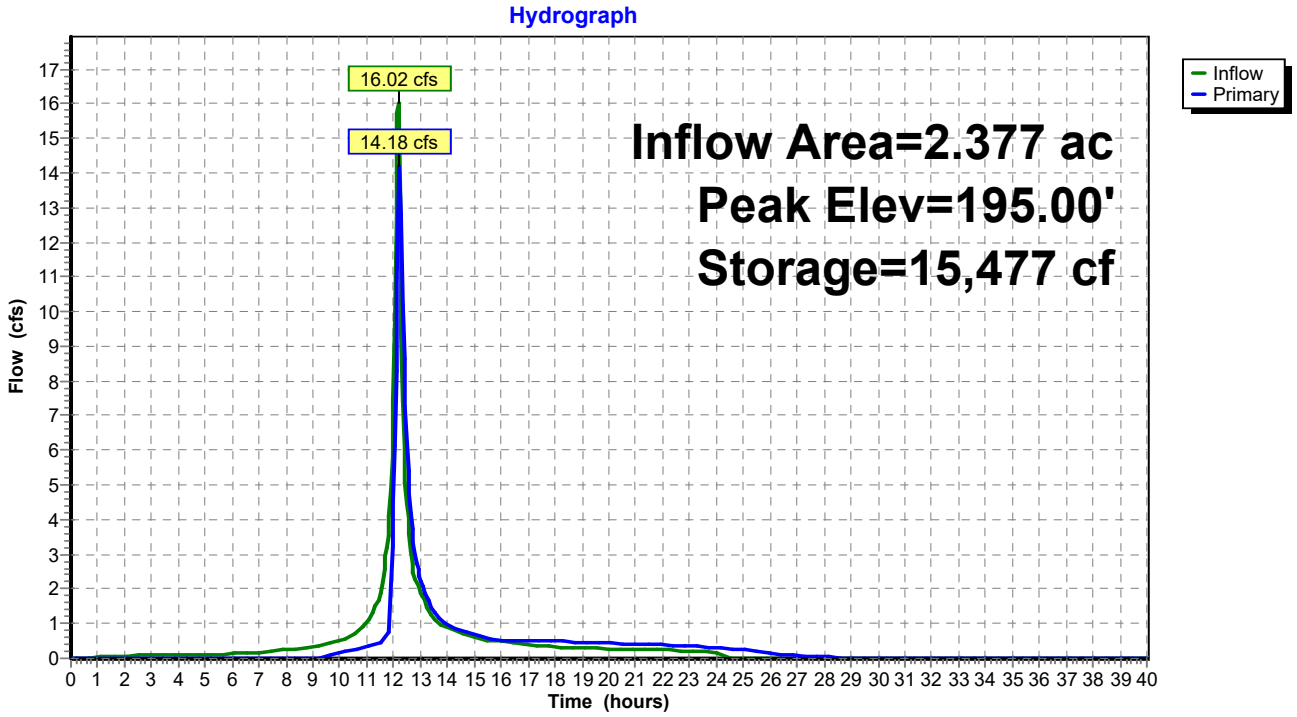
Volume	Invert	Avail.Storage	Storage Description
#1	190.50'	16,844 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.50	0	0	0
191.00	2,366	592	592
192.00	2,995	2,681	3,272
193.00	3,681	3,338	6,610
194.00	4,424	4,053	10,663
195.00	5,223	4,824	15,486
195.25	5,644	1,358	16,844

Device	Routing	Invert	Outlet Devices
#1	Primary	190.50'	**18.0" Round Culvert** L= 82.0' Ke= 0.500 Inlet / Outlet Invert= 190.50' / 190.10' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.24'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	194.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.84 cfs @ 12.23 hrs HW=194.99' (Free Discharge)
- **1=Culvert** (Passes 12.92 cfs of 15.08 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.68 cfs @ 7.74 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 12.24 cfs @ 3.25 fps)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 0.93 cfs @ 0.47 fps)

Pond B-36A: Basin #36A



Stage-Discharge for Pond B-36A: Basin #36A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.50	0.00	191.02	0.00	191.54	0.00	192.06	0.00
190.51	0.00	191.03	0.00	191.55	0.00	192.07	0.00
190.52	0.00	191.04	0.00	191.56	0.00	192.08	0.00
190.53	0.00	191.05	0.00	191.57	0.00	192.09	0.00
190.54	0.00	191.06	0.00	191.58	0.00	192.10	0.00
190.55	0.00	191.07	0.00	191.59	0.00	192.11	0.00
190.56	0.00	191.08	0.00	191.60	0.00	192.12	0.00
190.57	0.00	191.09	0.00	191.61	0.00	192.13	0.00
190.58	0.00	191.10	0.00	191.62	0.00	192.14	0.00
190.59	0.00	191.11	0.00	191.63	0.00	192.15	0.00
190.60	0.00	191.12	0.00	191.64	0.00	192.16	0.00
190.61	0.00	191.13	0.00	191.65	0.00	192.17	0.00
190.62	0.00	191.14	0.00	191.66	0.00	192.18	0.00
190.63	0.00	191.15	0.00	191.67	0.00	192.19	0.00
190.64	0.00	191.16	0.00	191.68	0.00	192.20	0.00
190.65	0.00	191.17	0.00	191.69	0.00	192.21	0.00
190.66	0.00	191.18	0.00	191.70	0.00	192.22	0.00
190.67	0.00	191.19	0.00	191.71	0.00	192.23	0.00
190.68	0.00	191.20	0.00	191.72	0.00	192.24	0.00
190.69	0.00	191.21	0.00	191.73	0.00	192.25	0.00
190.70	0.00	191.22	0.00	191.74	0.00	192.26	0.00
190.71	0.00	191.23	0.00	191.75	0.00	192.27	0.00
190.72	0.00	191.24	0.00	191.76	0.00	192.28	0.00
190.73	0.00	191.25	0.00	191.77	0.00	192.29	0.01
190.74	0.00	191.26	0.00	191.78	0.00	192.30	0.01
190.75	0.00	191.27	0.00	191.79	0.00	192.31	0.01
190.76	0.00	191.28	0.00	191.80	0.00	192.32	0.02
190.77	0.00	191.29	0.00	191.81	0.00	192.33	0.02
190.78	0.00	191.30	0.00	191.82	0.00	192.34	0.02
190.79	0.00	191.31	0.00	191.83	0.00	192.35	0.03
190.80	0.00	191.32	0.00	191.84	0.00	192.36	0.03
190.81	0.00	191.33	0.00	191.85	0.00	192.37	0.04
190.82	0.00	191.34	0.00	191.86	0.00	192.38	0.04
190.83	0.00	191.35	0.00	191.87	0.00	192.39	0.05
190.84	0.00	191.36	0.00	191.88	0.00	192.40	0.06
190.85	0.00	191.37	0.00	191.89	0.00	192.41	0.06
190.86	0.00	191.38	0.00	191.90	0.00	192.42	0.07
190.87	0.00	191.39	0.00	191.91	0.00	192.43	0.08
190.88	0.00	191.40	0.00	191.92	0.00	192.44	0.08
190.89	0.00	191.41	0.00	191.93	0.00	192.45	0.09
190.90	0.00	191.42	0.00	191.94	0.00	192.46	0.10
190.91	0.00	191.43	0.00	191.95	0.00	192.47	0.10
190.92	0.00	191.44	0.00	191.96	0.00	192.48	0.11
190.93	0.00	191.45	0.00	191.97	0.00	192.49	0.12
190.94	0.00	191.46	0.00	191.98	0.00	192.50	0.13
190.95	0.00	191.47	0.00	191.99	0.00	192.51	0.13
190.96	0.00	191.48	0.00	192.00	0.00	192.52	0.14
190.97	0.00	191.49	0.00	192.01	0.00	192.53	0.15
190.98	0.00	191.50	0.00	192.02	0.00	192.54	0.15
190.99	0.00	191.51	0.00	192.03	0.00	192.55	0.16
191.00	0.00	191.52	0.00	192.04	0.00	192.56	0.17
191.01	0.00	191.53	0.00	192.05	0.00	192.57	0.17

Stage-Discharge for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.58	0.17	193.10	0.35	193.62	0.46	194.14	1.23
192.59	0.18	193.11	0.35	193.63	0.46	194.15	1.31
192.60	0.18	193.12	0.35	193.64	0.47	194.16	1.39
192.61	0.19	193.13	0.36	193.65	0.47	194.17	1.47
192.62	0.19	193.14	0.36	193.66	0.47	194.18	1.55
192.63	0.20	193.15	0.36	193.67	0.47	194.19	1.63
192.64	0.20	193.16	0.36	193.68	0.47	194.20	1.72
192.65	0.21	193.17	0.37	193.69	0.48	194.21	1.81
192.66	0.21	193.18	0.37	193.70	0.48	194.22	1.90
192.67	0.22	193.19	0.37	193.71	0.48	194.23	1.99
192.68	0.22	193.20	0.37	193.72	0.48	194.24	2.09
192.69	0.22	193.21	0.38	193.73	0.48	194.25	2.19
192.70	0.23	193.22	0.38	193.74	0.49	194.26	2.28
192.71	0.23	193.23	0.38	193.75	0.49	194.27	2.38
192.72	0.24	193.24	0.38	193.76	0.49	194.28	2.49
192.73	0.24	193.25	0.39	193.77	0.49	194.29	2.59
192.74	0.24	193.26	0.39	193.78	0.49	194.30	2.70
192.75	0.25	193.27	0.39	193.79	0.49	194.31	2.80
192.76	0.25	193.28	0.39	193.80	0.50	194.32	2.91
192.77	0.25	193.29	0.39	193.81	0.50	194.33	3.02
192.78	0.26	193.30	0.40	193.82	0.50	194.34	3.13
192.79	0.26	193.31	0.40	193.83	0.50	194.35	3.25
192.80	0.26	193.32	0.40	193.84	0.50	194.36	3.36
192.81	0.27	193.33	0.40	193.85	0.50	194.37	3.48
192.82	0.27	193.34	0.41	193.86	0.51	194.38	3.60
192.83	0.27	193.35	0.41	193.87	0.51	194.39	3.72
192.84	0.28	193.36	0.41	193.88	0.51	194.40	3.84
192.85	0.28	193.37	0.41	193.89	0.51	194.41	3.96
192.86	0.28	193.38	0.41	193.90	0.51	194.42	4.08
192.87	0.29	193.39	0.42	193.91	0.52	194.43	4.21
192.88	0.29	193.40	0.42	193.92	0.52	194.44	4.33
192.89	0.29	193.41	0.42	193.93	0.52	194.45	4.46
192.90	0.30	193.42	0.42	193.94	0.52	194.46	4.59
192.91	0.30	193.43	0.43	193.95	0.52	194.47	4.72
192.92	0.30	193.44	0.43	193.96	0.52	194.48	4.85
192.93	0.30	193.45	0.43	193.97	0.53	194.49	4.98
192.94	0.31	193.46	0.43	193.98	0.53	194.50	5.12
192.95	0.31	193.47	0.43	193.99	0.53	194.51	5.25
192.96	0.31	193.48	0.44	194.00	0.53	194.52	5.39
192.97	0.32	193.49	0.44	194.01	0.55	194.53	5.53
192.98	0.32	193.50	0.44	194.02	0.57	194.54	5.66
192.99	0.32	193.51	0.44	194.03	0.60	194.55	5.80
193.00	0.32	193.52	0.44	194.04	0.64	194.56	5.94
193.01	0.33	193.53	0.45	194.05	0.68	194.57	6.09
193.02	0.33	193.54	0.45	194.06	0.73	194.58	6.23
193.03	0.33	193.55	0.45	194.07	0.78	194.59	6.37
193.04	0.33	193.56	0.45	194.08	0.84	194.60	6.52
193.05	0.34	193.57	0.45	194.09	0.90	194.61	6.67
193.06	0.34	193.58	0.46	194.10	0.96	194.62	6.81
193.07	0.34	193.59	0.46	194.11	1.02	194.63	6.96
193.08	0.34	193.60	0.46	194.12	1.09	194.64	7.11
193.09	0.35	193.61	0.46	194.13	1.16	194.65	7.26

Stage-Discharge for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Primary (cfs)
194.66	7.41
194.67	7.57
194.68	7.72
194.69	7.87
194.70	8.03
194.71	8.19
194.72	8.34
194.73	8.50
194.74	8.66
194.75	8.82
194.76	8.98
194.77	9.14
194.78	9.31
194.79	9.47
194.80	9.63
194.81	9.80
194.82	9.97
194.83	10.13
194.84	10.30
194.85	10.47
194.86	10.64
194.87	10.81
194.88	10.98
194.89	11.16
194.90	11.33
194.91	11.50
194.92	11.68
194.93	11.85
194.94	12.03
194.95	12.21
194.96	12.50
194.97	12.89
194.98	13.35
194.99	13.86
195.00	14.41
195.01	15.01
195.02	15.64
195.03	16.31
195.04	17.01
195.05	17.74
195.06	18.49
195.07	19.28
195.08	20.09
195.09	20.93
195.10	21.80
195.11	22.68
195.12	23.60
195.13	24.40
195.14	25.18
195.15	25.99
195.16	26.86
195.17	27.75
195.18	28.67
195.19	29.62
195.20	30.59
195.21	31.58
195.22	32.60
195.23	33.65
195.24	34.72
195.25	**35.81**

Stage-Area-Storage for Pond B-36A: Basin #36A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.50	0	0
190.51	47	0
190.52	95	1
190.53	142	2
190.54	189	4
190.55	237	6
190.56	284	9
190.57	331	12
190.58	379	15
190.59	426	19
190.60	473	24
190.61	521	29
190.62	568	34
190.63	615	40
190.64	662	46
190.65	710	53
190.66	757	61
190.67	804	68
190.68	852	77
190.69	899	85
190.70	946	95
190.71	994	104
190.72	1,041	115
190.73	1,088	125
190.74	1,136	136
190.75	1,183	148
190.76	1,230	160
190.77	1,278	172
190.78	1,325	185
190.79	1,372	199
190.80	1,420	213
190.81	1,467	227
190.82	1,514	242
190.83	1,562	258
190.84	1,609	274
190.85	1,656	290
190.86	1,704	307
190.87	1,751	324
190.88	1,798	342
190.89	1,845	360
190.90	1,893	379
190.91	1,940	398
190.92	1,987	417
190.93	2,035	437
190.94	2,082	458
190.95	2,129	479
190.96	2,177	501
190.97	2,224	523
190.98	2,271	545
190.99	2,319	568
191.00	2,366	592
191.01	2,372	615
191.02	2,379	639
191.03	2,385	663
191.04	2,391	687
191.05	2,397	711
191.06	2,404	735
191.07	2,410	759
191.08	2,416	783
191.09	2,423	807
191.10	2,429	831
191.11	2,435	856
191.12	2,441	880
191.13	2,448	904
191.14	2,454	929
191.15	2,460	953
191.16	2,467	978
191.17	2,473	1,003
191.18	2,479	1,028
191.19	2,486	1,052
191.20	2,492	1,077
191.21	2,498	1,102
191.22	2,504	1,127
191.23	2,511	1,152
191.24	2,517	1,177
191.25	2,523	1,203
191.26	2,530	1,228
191.27	2,536	1,253
191.28	2,542	1,279
191.29	2,548	1,304
191.30	2,555	1,330
191.31	2,561	1,355
191.32	2,567	1,381
191.33	2,574	1,407
191.34	2,580	1,432
191.35	2,586	1,458
191.36	2,592	1,484
191.37	2,599	1,510
191.38	2,605	1,536
191.39	2,611	1,562
191.40	2,618	1,588
191.41	2,624	1,614
191.42	2,630	1,641
191.43	2,636	1,667
191.44	2,643	1,693
191.45	2,649	1,720
191.46	2,655	1,746
191.47	2,662	1,773
191.48	2,668	1,800
191.49	2,674	1,826
191.50	2,681	1,853
191.51	2,687	1,880
191.52	2,693	1,907
191.53	2,699	1,934

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.54	2,706	1,961
191.55	2,712	1,988
191.56	2,718	2,015
191.57	2,725	2,042
191.58	2,731	2,070
191.59	2,737	2,097
191.60	2,743	2,124
191.61	2,750	2,152
191.62	2,756	2,179
191.63	2,762	2,207
191.64	2,769	2,235
191.65	2,775	2,262
191.66	2,781	2,290
191.67	2,787	2,318
191.68	2,794	2,346
191.69	2,800	2,374
191.70	2,806	2,402
191.71	2,813	2,430
191.72	2,819	2,458
191.73	2,825	2,486
191.74	2,831	2,515
191.75	2,838	2,543
191.76	2,844	2,571
191.77	2,850	2,600
191.78	2,857	2,628
191.79	2,863	2,657
191.80	2,869	2,686
191.81	2,875	2,714
191.82	2,882	2,743
191.83	2,888	2,772
191.84	2,894	2,801
191.85	2,901	2,830
191.86	2,907	2,859
191.87	2,913	2,888
191.88	2,920	2,917
191.89	2,926	2,946
191.90	2,932	2,976
191.91	2,938	3,005
191.92	2,945	3,034
191.93	2,951	3,064
191.94	2,957	3,093
191.95	2,964	3,123
191.96	2,970	3,153
191.97	2,976	3,182
191.98	2,982	3,212
191.99	2,989	3,242
192.00	2,995	3,272
192.01	3,002	3,302
192.02	3,009	3,332
192.03	3,016	3,362
192.04	3,022	3,392
192.05	3,029	3,423
192.06	3,036	3,453
192.07	3,043	3,483
192.08	3,050	3,514
192.09	3,057	3,544
192.10	3,064	3,575
192.11	3,070	3,606
192.12	3,077	3,636
192.13	3,084	3,667
192.14	3,091	3,698
192.15	3,098	3,729
192.16	3,105	3,760
192.17	3,112	3,791
192.18	3,118	3,822
192.19	3,125	3,853
192.20	3,132	3,885
192.21	3,139	3,916
192.22	3,146	3,948
192.23	3,153	3,979
192.24	3,160	4,011
192.25	3,167	4,042
192.26	3,173	4,074
192.27	3,180	4,106
192.28	3,187	4,137
192.29	3,194	4,169
192.30	3,201	4,201
192.31	3,208	4,233
192.32	3,215	4,266
192.33	3,221	4,298
192.34	3,228	4,330
192.35	3,235	4,362
192.36	3,242	4,395
192.37	3,249	4,427
192.38	3,256	4,460
192.39	3,263	4,492
192.40	3,269	4,525
192.41	3,276	4,558
192.42	3,283	4,590
192.43	3,290	4,623
192.44	3,297	4,656
192.45	3,304	4,689
192.46	3,311	4,722
192.47	3,317	4,755
192.48	3,324	4,789
192.49	3,331	4,822
192.50	3,338	4,855
192.51	3,345	4,889
192.52	3,352	4,922
192.53	3,359	4,956
192.54	3,365	4,989
192.55	3,372	5,023
192.56	3,379	5,057
192.57	3,386	5,091

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.58	3,393	5,124
192.59	3,400	5,158
192.60	3,407	5,192
192.61	3,413	5,227
192.62	3,420	5,261
192.63	3,427	5,295
192.64	3,434	5,329
192.65	3,441	5,364
192.66	3,448	5,398
192.67	3,455	5,433
192.68	3,461	5,467
192.69	3,468	5,502
192.70	3,475	5,537
192.71	3,482	5,571
192.72	3,489	5,606
192.73	3,496	5,641
192.74	3,503	5,676
192.75	3,510	5,711
192.76	3,516	5,746
192.77	3,523	5,782
192.78	3,530	5,817
192.79	3,537	5,852
192.80	3,544	5,888
192.81	3,551	5,923
192.82	3,558	5,959
192.83	3,564	5,994
192.84	3,571	6,030
192.85	3,578	6,066
192.86	3,585	6,101
192.87	3,592	6,137
192.88	3,599	6,173
192.89	3,606	6,209
192.90	3,612	6,245
192.91	3,619	6,281
192.92	3,626	6,318
192.93	3,633	6,354
192.94	3,640	6,390
192.95	3,647	6,427
192.96	3,654	6,463
192.97	3,660	6,500
192.98	3,667	6,537
192.99	3,674	6,573
193.00	3,681	6,610
193.01	3,688	6,647
193.02	3,696	6,684
193.03	3,703	6,721
193.04	3,711	6,758
193.05	3,718	6,795
193.06	3,726	6,832
193.07	3,733	6,869
193.08	3,740	6,907
193.09	3,748	6,944
193.10	3,755	6,982
193.11	3,763	7,019
193.12	3,770	7,057
193.13	3,778	7,095
193.14	3,785	7,133
193.15	3,792	7,171
193.16	3,800	7,208
193.17	3,807	7,247
193.18	3,815	7,285
193.19	3,822	7,323
193.20	3,830	7,361
193.21	3,837	7,399
193.22	3,844	7,438
193.23	3,852	7,476
193.24	3,859	7,515
193.25	3,867	7,553
193.26	3,874	7,592
193.27	3,882	7,631
193.28	3,889	7,670
193.29	3,896	7,709
193.30	3,904	7,748
193.31	3,911	7,787
193.32	3,919	7,826
193.33	3,926	7,865
193.34	3,934	7,904
193.35	3,941	7,944
193.36	3,948	7,983
193.37	3,956	8,023
193.38	3,963	8,062
193.39	3,971	8,102
193.40	3,978	8,142
193.41	3,986	8,182
193.42	3,993	8,222
193.43	4,000	8,262
193.44	4,008	8,302
193.45	4,015	8,342
193.46	4,023	8,382
193.47	4,030	8,422
193.48	4,038	8,462
193.49	4,045	8,503
193.50	4,053	8,543
193.51	4,060	8,584
193.52	4,067	8,625
193.53	4,075	8,665
193.54	4,082	8,706
193.55	4,090	8,747
193.56	4,097	8,788
193.57	4,105	8,829
193.58	4,112	8,870
193.59	4,119	8,911
193.60	4,127	8,952
193.61	4,134	8,994

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.62	4,142	9,035	194.14	4,536	11,290
193.63	4,149	9,076	194.15	4,544	11,335
193.64	4,157	9,118	194.16	4,552	11,381
193.65	4,164	9,160	194.17	4,560	11,426
193.66	4,171	9,201	194.18	4,568	11,472
193.67	4,179	9,243	194.19	4,576	11,517
193.68	4,186	9,285	194.20	4,584	11,563
193.69	4,194	9,327	194.21	4,592	11,609
193.70	4,201	9,369	194.22	4,600	11,655
193.71	4,209	9,411	194.23	4,608	11,701
193.72	4,216	9,453	194.24	4,616	11,747
193.73	4,223	9,495	194.25	4,624	11,793
193.74	4,231	9,537	194.26	4,632	11,840
193.75	4,238	9,580	194.27	4,640	11,886
193.76	4,246	9,622	194.28	4,648	11,933
193.77	4,253	9,665	194.29	4,656	11,979
193.78	4,261	9,707	194.30	4,664	12,026
193.79	4,268	9,750	194.31	4,672	12,072
193.80	4,275	9,793	194.32	4,680	12,119
193.81	4,283	9,835	194.33	4,688	12,166
193.82	4,290	9,878	194.34	4,696	12,213
193.83	4,298	9,921	194.35	4,704	12,260
193.84	4,305	9,964	194.36	4,712	12,307
193.85	4,313	10,007	194.37	4,720	12,354
193.86	4,320	10,050	194.38	4,728	12,401
193.87	4,327	10,094	194.39	4,736	12,449
193.88	4,335	10,137	194.40	4,744	12,496
193.89	4,342	10,180	194.41	4,752	12,543
193.90	4,350	10,224	194.42	4,760	12,591
193.91	4,357	10,267	194.43	4,768	12,639
193.92	4,365	10,311	194.44	4,776	12,686
193.93	4,372	10,355	194.45	4,784	12,734
193.94	4,379	10,398	194.46	4,792	12,782
193.95	4,387	10,442	194.47	4,800	12,830
193.96	4,394	10,486	194.48	4,808	12,878
193.97	4,402	10,530	194.49	4,816	12,926
193.98	4,409	10,574	194.50	4,824	12,974
193.99	4,417	10,618	194.51	4,831	13,023
194.00	4,424	10,663	194.52	4,839	13,071
194.01	4,432	10,707	194.53	4,847	13,119
194.02	4,440	10,751	194.54	4,855	13,168
194.03	4,448	10,796	194.55	4,863	13,217
194.04	4,456	10,840	194.56	4,871	13,265
194.05	4,464	10,885	194.57	4,879	13,314
194.06	4,472	10,929	194.58	4,887	13,363
194.07	4,480	10,974	194.59	4,895	13,412
194.08	4,488	11,019	194.60	4,903	13,461
194.09	4,496	11,064	194.61	4,911	13,510
194.10	4,504	11,109	194.62	4,919	13,559
194.11	4,512	11,154	194.63	4,927	13,608
194.12	4,520	11,199	194.64	4,935	13,657
194.13	4,528	11,244	194.65	4,943	13,707

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.66	4,951	13,756
194.67	4,959	13,806
194.68	4,967	13,856
194.69	4,975	13,905
194.70	4,983	13,955
194.71	4,991	14,005
194.72	4,999	14,055
194.73	5,007	14,105
194.74	5,015	14,155
194.75	5,023	14,205
194.76	5,031	14,255
194.77	5,039	14,306
194.78	5,047	14,356
194.79	5,055	14,407
194.80	5,063	14,457
194.81	5,071	14,508
194.82	5,079	14,559
194.83	5,087	14,610
194.84	5,095	14,661
194.85	5,103	14,712
194.86	5,111	14,763
194.87	5,119	14,814
194.88	5,127	14,865
194.89	5,135	14,916
194.90	5,143	14,968
194.91	5,151	15,019
194.92	5,159	15,071
194.93	5,167	15,122
194.94	5,175	15,174
194.95	5,183	15,226
194.96	5,191	15,278
194.97	5,199	15,330
194.98	5,207	15,382
194.99	5,215	15,434
195.00	5,223	15,486
195.01	5,240	15,538
195.02	5,257	15,591
195.03	5,274	15,643
195.04	5,290	15,696
195.05	5,307	15,749
195.06	5,324	15,802
195.07	5,341	15,856
195.08	5,358	15,909
195.09	5,375	15,963
195.10	5,391	16,017
195.11	5,408	16,071
195.12	5,425	16,125
195.13	5,442	16,179
195.14	5,459	16,234
195.15	5,476	16,288
195.16	5,492	16,343
195.17	5,509	16,398
195.18	5,526	16,453
195.19	5,543	16,509
195.20	5,560	16,564
195.21	5,577	16,620
195.22	5,593	16,676
195.23	5,610	16,732
195.24	5,627	16,788
195.25	**5,644**	**16,844**

Summary for Pond B-36B: Basin #36B

Inflow Area = 2.469 ac, 46.54% Impervious, Inflow Depth = 6.80" for Current 100 yr event
Inflow = 16.91 cfs @ 12.17 hrs, Volume= 1.400 af
Outflow = 13.85 cfs @ 12.23 hrs, Volume= 1.292 af, Atten= 18%, Lag= 3.6 min
Primary = 13.85 cfs @ 12.23 hrs, Volume= 1.292 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.44' @ 12.24 hrs Surf.Area= 4,903 sf Storage= 12,555 cf

Plug-Flow detention time= 90.8 min calculated for 1.291 af (92% of inflow)
Center-of-Mass det. time= 48.9 min (825.9 - 777.0)

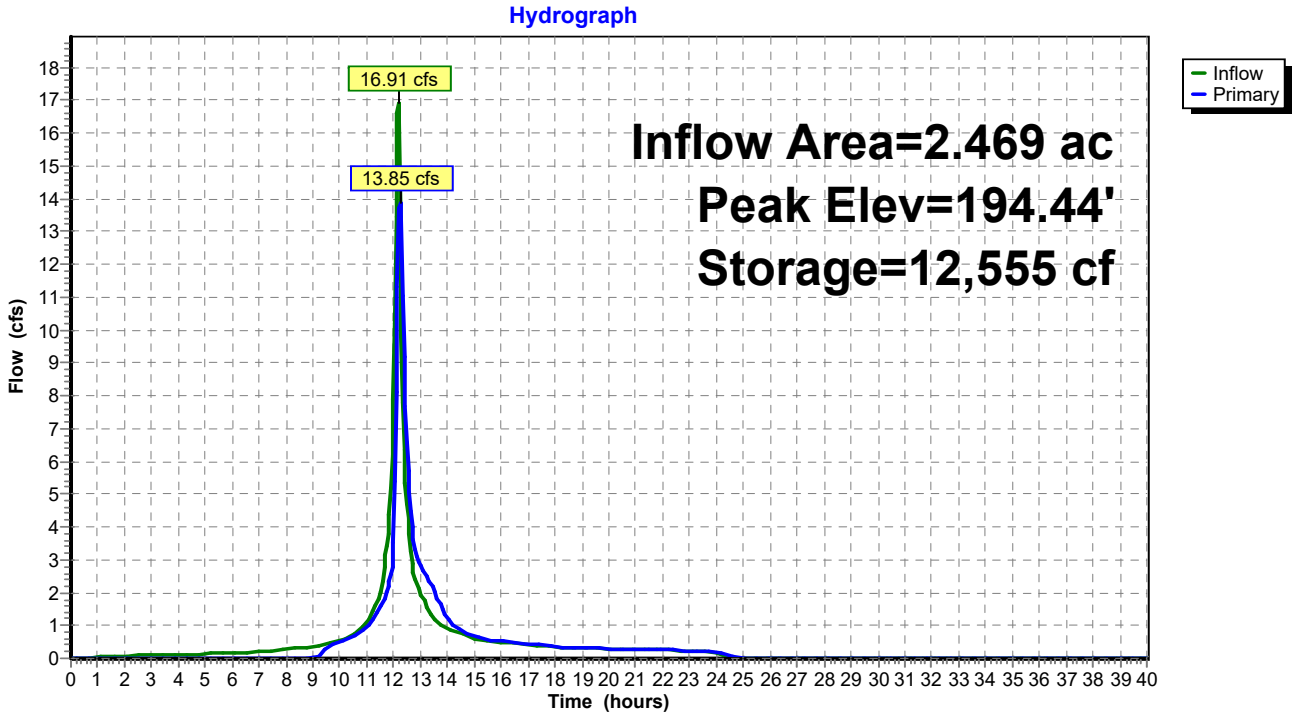
Volume	Invert	Avail.Storage	Storage Description
#1	190.50'	16,864 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.50	0	0	0
191.00	2,110	528	528
192.00	2,893	2,502	3,029
193.00	3,730	3,312	6,341
194.00	4,547	4,139	10,479
195.00	5,356	4,952	15,431
195.25	6,113	1,434	16,864

Device	Routing	Invert	Outlet Devices
#1	Primary	190.50'	**18.0" Round Culvert** L= 82.0' Ke= 0.500 Inlet / Outlet Invert= 190.50' / 190.10' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.53'	**36.0" W x 2.5" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.55'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.76 cfs @ 12.23 hrs HW=194.42' (Free Discharge)
- **1=Culvert** (Barrel Controls 13.76 cfs @ 7.79 fps)
  - **2=Orifice/Grate** (Passes < 4.03 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 10.23 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-36B: Basin #36B



Stage-Discharge for Pond B-36B: Basin #36B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.50	0.00	191.02	0.00	191.54	0.00	192.06	0.00
190.51	0.00	191.03	0.00	191.55	0.00	192.07	0.00
190.52	0.00	191.04	0.00	191.56	0.00	192.08	0.00
190.53	0.00	191.05	0.00	191.57	0.00	192.09	0.00
190.54	0.00	191.06	0.00	191.58	0.00	192.10	0.00
190.55	0.00	191.07	0.00	191.59	0.00	192.11	0.00
190.56	0.00	191.08	0.00	191.60	0.00	192.12	0.00
190.57	0.00	191.09	0.00	191.61	0.00	192.13	0.00
190.58	0.00	191.10	0.00	191.62	0.00	192.14	0.00
190.59	0.00	191.11	0.00	191.63	0.00	192.15	0.00
190.60	0.00	191.12	0.00	191.64	0.00	192.16	0.00
190.61	0.00	191.13	0.00	191.65	0.00	192.17	0.00
190.62	0.00	191.14	0.00	191.66	0.00	192.18	0.00
190.63	0.00	191.15	0.00	191.67	0.00	192.19	0.00
190.64	0.00	191.16	0.00	191.68	0.00	192.20	0.00
190.65	0.00	191.17	0.00	191.69	0.00	192.21	0.00
190.66	0.00	191.18	0.00	191.70	0.00	192.22	0.00
190.67	0.00	191.19	0.00	191.71	0.00	192.23	0.00
190.68	0.00	191.20	0.00	191.72	0.00	192.24	0.00
190.69	0.00	191.21	0.00	191.73	0.00	192.25	0.00
190.70	0.00	191.22	0.00	191.74	0.00	192.26	0.00
190.71	0.00	191.23	0.00	191.75	0.00	192.27	0.00
190.72	0.00	191.24	0.00	191.76	0.00	192.28	0.00
190.73	0.00	191.25	0.00	191.77	0.00	192.29	0.00
190.74	0.00	191.26	0.00	191.78	0.00	192.30	0.00
190.75	0.00	191.27	0.00	191.79	0.00	192.31	0.00
190.76	0.00	191.28	0.00	191.80	0.00	192.32	0.00
190.77	0.00	191.29	0.00	191.81	0.00	192.33	0.00
190.78	0.00	191.30	0.00	191.82	0.00	192.34	0.00
190.79	0.00	191.31	0.00	191.83	0.00	192.35	0.00
190.80	0.00	191.32	0.00	191.84	0.00	192.36	0.00
190.81	0.00	191.33	0.00	191.85	0.00	192.37	0.00
190.82	0.00	191.34	0.00	191.86	0.00	192.38	0.00
190.83	0.00	191.35	0.00	191.87	0.00	192.39	0.00
190.84	0.00	191.36	0.00	191.88	0.00	192.40	0.00
190.85	0.00	191.37	0.00	191.89	0.00	192.41	0.00
190.86	0.00	191.38	0.00	191.90	0.00	192.42	0.00
190.87	0.00	191.39	0.00	191.91	0.00	192.43	0.00
190.88	0.00	191.40	0.00	191.92	0.00	192.44	0.00
190.89	0.00	191.41	0.00	191.93	0.00	192.45	0.00
190.90	0.00	191.42	0.00	191.94	0.00	192.46	0.00
190.91	0.00	191.43	0.00	191.95	0.00	192.47	0.00
190.92	0.00	191.44	0.00	191.96	0.00	192.48	0.00
190.93	0.00	191.45	0.00	191.97	0.00	192.49	0.00
190.94	0.00	191.46	0.00	191.98	0.00	192.50	0.00
190.95	0.00	191.47	0.00	191.99	0.00	192.51	0.00
190.96	0.00	191.48	0.00	192.00	0.00	192.52	0.00
190.97	0.00	191.49	0.00	192.01	0.00	192.53	0.00
190.98	0.00	191.50	0.00	192.02	0.00	192.54	0.01
190.99	0.00	191.51	0.00	192.03	0.00	192.55	0.03
191.00	0.00	191.52	0.00	192.04	0.00	192.56	0.05
191.01	0.00	191.53	0.00	192.05	0.00	192.57	0.08

Stage-Discharge for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.58	0.11	193.10	2.05	193.62	3.23	194.14	9.44
192.59	0.14	193.11	2.07	193.63	3.30	194.15	9.60
192.60	0.18	193.12	2.09	193.64	3.37	194.16	9.76
192.61	0.22	193.13	2.12	193.65	3.44	194.17	9.92
192.62	0.26	193.14	2.14	193.66	3.52	194.18	10.08
192.63	0.30	193.15	2.16	193.67	3.60	194.19	10.24
192.64	0.35	193.16	2.18	193.68	3.69	194.20	10.40
192.65	0.40	193.17	2.20	193.69	3.77	194.21	10.56
192.66	0.45	193.18	2.22	193.70	3.86	194.22	10.72
192.67	0.50	193.19	2.24	193.71	3.95	194.23	10.89
192.68	0.56	193.20	2.26	193.72	4.04	194.24	11.05
192.69	0.62	193.21	2.28	193.73	4.14	194.25	11.22
192.70	0.67	193.22	2.30	193.74	4.24	194.26	11.38
192.71	0.74	193.23	2.32	193.75	4.34	194.27	11.55
192.72	0.80	193.24	2.34	193.76	4.44	194.28	11.72
192.73	0.86	193.25	2.36	193.77	4.54	194.29	11.89
192.74	0.93	193.26	2.38	193.78	4.65	194.30	12.06
192.75	0.98	193.27	2.40	193.79	4.75	194.31	12.23
192.76	1.03	193.28	2.42	193.80	4.86	194.32	12.40
192.77	1.08	193.29	2.43	193.81	4.97	194.33	12.58
192.78	1.12	193.30	2.45	193.82	5.09	194.34	12.75
192.79	1.16	193.31	2.47	193.83	5.20	194.35	12.93
192.80	1.20	193.32	2.49	193.84	5.32	194.36	13.10
192.81	1.24	193.33	2.51	193.85	5.43	194.37	13.28
192.82	1.28	193.34	2.53	193.86	5.55	194.38	13.46
192.83	1.32	193.35	2.54	193.87	5.67	194.39	13.63
192.84	1.35	193.36	2.56	193.88	5.80	194.40	13.70
192.85	1.38	193.37	2.58	193.89	5.92	194.41	13.73
192.86	1.42	193.38	2.60	193.90	6.05	194.42	13.75
192.87	1.45	193.39	2.61	193.91	6.17	194.43	13.77
192.88	1.48	193.40	2.63	193.92	6.30	194.44	13.80
192.89	1.51	193.41	2.65	193.93	6.43	194.45	13.82
192.90	1.54	193.42	2.67	193.94	6.56	194.46	13.85
192.91	1.57	193.43	2.68	193.95	6.69	194.47	13.87
192.92	1.60	193.44	2.70	193.96	6.83	194.48	13.90
192.93	1.63	193.45	2.72	193.97	6.96	194.49	13.92
192.94	1.66	193.46	2.73	193.98	7.10	194.50	13.94
192.95	1.68	193.47	2.75	193.99	7.24	194.51	13.97
192.96	1.71	193.48	2.77	194.00	7.38	194.52	13.99
192.97	1.74	193.49	2.78	194.01	7.52	194.53	14.02
192.98	1.76	193.50	2.80	194.02	7.66	194.54	14.04
192.99	1.79	193.51	2.81	194.03	7.80	194.55	14.06
193.00	1.81	193.52	2.83	194.04	7.94	194.56	14.09
193.01	1.84	193.53	2.85	194.05	8.09	194.57	14.11
193.02	1.86	193.54	2.86	194.06	8.24	194.58	14.13
193.03	1.89	193.55	2.88	194.07	8.38	194.59	14.16
193.04	1.91	193.56	2.91	194.08	8.53	194.60	14.18
193.05	1.94	193.57	2.95	194.09	8.68	194.61	14.21
193.06	1.96	193.58	2.99	194.10	8.83	194.62	14.23
193.07	1.98	193.59	3.05	194.11	8.98	194.63	14.25
193.08	2.00	193.60	3.10	194.12	9.14	194.64	14.28
193.09	2.03	193.61	3.16	194.13	9.29	194.65	14.30

Stage-Discharge for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Primary (cfs)
194.66	14.32
194.67	14.35
194.68	14.37
194.69	14.39
194.70	14.42
194.71	14.44
194.72	14.46
194.73	14.49
194.74	14.51
194.75	14.53
194.76	14.56
194.77	14.58
194.78	14.60
194.79	14.62
194.80	14.65
194.81	14.67
194.82	14.69
194.83	14.72
194.84	14.74
194.85	14.76
194.86	14.78
194.87	14.81
194.88	14.83
194.89	14.85
194.90	14.87
194.91	14.90
194.92	14.92
194.93	14.94
194.94	14.96
194.95	14.99
194.96	15.13
194.97	15.36
194.98	15.66
194.99	16.01
195.00	16.41
195.01	16.84
195.02	17.32
195.03	17.82
195.04	18.36
195.05	18.93
195.06	19.52
195.07	20.14
195.08	20.79
195.09	21.47
195.10	22.16
195.11	22.89
195.12	23.63
195.13	24.40
195.14	25.18
195.15	25.99
195.16	26.86
195.17	27.75
195.18	28.67
195.19	29.62
195.20	30.59
195.21	31.58
195.22	32.60
195.23	33.65
195.24	34.72
195.25	**35.81**

Stage-Area-Storage for Pond B-36B: Basin #36B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.50	0	0	191.02	2,126	570
190.51	42	0	191.03	2,133	591
190.52	84	1	191.04	2,141	613
190.53	127	2	191.05	2,149	634
190.54	169	3	191.06	2,157	656
190.55	211	5	191.07	2,165	677
190.56	253	8	191.08	2,173	699
190.57	295	10	191.09	2,180	721
190.58	338	14	191.10	2,188	742
190.59	380	17	191.11	2,196	764
190.60	422	21	191.12	2,204	786
190.61	464	26	191.13	2,212	808
190.62	506	30	191.14	2,220	831
190.63	549	36	191.15	2,227	853
190.64	591	41	191.16	2,235	875
190.65	633	47	191.17	2,243	898
190.66	675	54	191.18	2,251	920
190.67	717	61	191.19	2,259	943
190.68	760	68	191.20	2,267	965
190.69	802	76	191.21	2,274	988
190.70	844	84	191.22	2,282	1,011
190.71	886	93	191.23	2,290	1,034
190.72	928	102	191.24	2,298	1,056
190.73	971	112	191.25	2,306	1,079
190.74	1,013	122	191.26	2,314	1,103
190.75	1,055	132	191.27	2,321	1,126
190.76	1,097	143	191.28	2,329	1,149
190.77	1,139	154	191.29	2,337	1,172
190.78	1,182	165	191.30	2,345	1,196
190.79	1,224	177	191.31	2,353	1,219
190.80	1,266	190	191.32	2,361	1,243
190.81	1,308	203	191.33	2,368	1,266
190.82	1,350	216	191.34	2,376	1,290
190.83	1,393	230	191.35	2,384	1,314
190.84	1,435	244	191.36	2,392	1,338
190.85	1,477	258	191.37	2,400	1,362
190.86	1,519	273	191.38	2,408	1,386
190.87	1,561	289	191.39	2,415	1,410
190.88	1,604	305	191.40	2,423	1,434
190.89	1,646	321	191.41	2,431	1,458
190.90	1,688	338	191.42	2,439	1,483
190.91	1,730	355	191.43	2,447	1,507
190.92	1,772	372	191.44	2,455	1,532
190.93	1,815	390	191.45	2,462	1,556
190.94	1,857	408	191.46	2,470	1,581
190.95	1,899	427	191.47	2,478	1,606
190.96	1,941	446	191.48	2,486	1,631
190.97	1,983	466	191.49	2,494	1,655
190.98	2,026	486	191.50	2,502	1,680
190.99	2,068	507	191.51	2,509	1,705
191.00	2,110	528	191.52	2,517	1,731
191.01	2,118	549	191.53	2,525	1,756

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.54	2,533	1,781
191.55	2,541	1,806
191.56	2,548	1,832
191.57	2,556	1,857
191.58	2,564	1,883
191.59	2,572	1,909
191.60	2,580	1,934
191.61	2,588	1,960
191.62	2,595	1,986
191.63	2,603	2,012
191.64	2,611	2,038
191.65	2,619	2,064
191.66	2,627	2,091
191.67	2,635	2,117
191.68	2,642	2,143
191.69	2,650	2,170
191.70	2,658	2,196
191.71	2,666	2,223
191.72	2,674	2,250
191.73	2,682	2,276
191.74	2,689	2,303
191.75	2,697	2,330
191.76	2,705	2,357
191.77	2,713	2,384
191.78	2,721	2,411
191.79	2,729	2,439
191.80	2,736	2,466
191.81	2,744	2,493
191.82	2,752	2,521
191.83	2,760	2,549
191.84	2,768	2,576
191.85	2,776	2,604
191.86	2,783	2,632
191.87	2,791	2,660
191.88	2,799	2,687
191.89	2,807	2,716
191.90	2,815	2,744
191.91	2,823	2,772
191.92	2,830	2,800
191.93	2,838	2,828
191.94	2,846	2,857
191.95	2,854	2,885
191.96	2,862	2,914
191.97	2,870	2,943
191.98	2,877	2,971
191.99	2,885	3,000
192.00	2,893	3,029
192.01	2,901	3,058
192.02	2,910	3,087
192.03	2,918	3,116
192.04	2,926	3,145
192.05	2,935	3,175
192.06	2,943	3,204
192.07	2,952	3,234
192.08	2,960	3,263
192.09	2,968	3,293
192.10	2,977	3,322
192.11	2,985	3,352
192.12	2,993	3,382
192.13	3,002	3,412
192.14	3,010	3,442
192.15	3,019	3,472
192.16	3,027	3,503
192.17	3,035	3,533
192.18	3,044	3,563
192.19	3,052	3,594
192.20	3,060	3,624
192.21	3,069	3,655
192.22	3,077	3,686
192.23	3,086	3,717
192.24	3,094	3,747
192.25	3,102	3,778
192.26	3,111	3,809
192.27	3,119	3,841
192.28	3,127	3,872
192.29	3,136	3,903
192.30	3,144	3,935
192.31	3,152	3,966
192.32	3,161	3,998
192.33	3,169	4,029
192.34	3,178	4,061
192.35	3,186	4,093
192.36	3,194	4,125
192.37	3,203	4,157
192.38	3,211	4,189
192.39	3,219	4,221
192.40	3,228	4,253
192.41	3,236	4,285
192.42	3,245	4,318
192.43	3,253	4,350
192.44	3,261	4,383
192.45	3,270	4,416
192.46	3,278	4,448
192.47	3,286	4,481
192.48	3,295	4,514
192.49	3,303	4,547
192.50	3,312	4,580
192.51	3,320	4,613
192.52	3,328	4,647
192.53	3,337	4,680
192.54	3,345	4,713
192.55	3,353	4,747
192.56	3,362	4,780
192.57	3,370	4,814

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.58	3,378	4,848	193.10	3,812	6,718
192.59	3,387	4,882	193.11	3,820	6,756
192.60	3,395	4,915	193.12	3,828	6,794
192.61	3,404	4,949	193.13	3,836	6,832
192.62	3,412	4,984	193.14	3,844	6,871
192.63	3,420	5,018	193.15	3,853	6,909
192.64	3,429	5,052	193.16	3,861	6,948
192.65	3,437	5,086	193.17	3,869	6,986
192.66	3,445	5,121	193.18	3,877	7,025
192.67	3,454	5,155	193.19	3,885	7,064
192.68	3,462	5,190	193.20	3,893	7,103
192.69	3,471	5,224	193.21	3,902	7,142
192.70	3,479	5,259	193.22	3,910	7,181
192.71	3,487	5,294	193.23	3,918	7,220
192.72	3,496	5,329	193.24	3,926	7,259
192.73	3,504	5,364	193.25	3,934	7,299
192.74	3,512	5,399	193.26	3,942	7,338
192.75	3,521	5,434	193.27	3,951	7,377
192.76	3,529	5,469	193.28	3,959	7,417
192.77	3,537	5,505	193.29	3,967	7,457
192.78	3,546	5,540	193.30	3,975	7,496
192.79	3,554	5,576	193.31	3,983	7,536
192.80	3,563	5,611	193.32	3,991	7,576
192.81	3,571	5,647	193.33	4,000	7,616
192.82	3,579	5,683	193.34	4,008	7,656
192.83	3,588	5,718	193.35	4,016	7,696
192.84	3,596	5,754	193.36	4,024	7,736
192.85	3,604	5,790	193.37	4,032	7,777
192.86	3,613	5,827	193.38	4,040	7,817
192.87	3,621	5,863	193.39	4,049	7,857
192.88	3,630	5,899	193.40	4,057	7,898
192.89	3,638	5,935	193.41	4,065	7,938
192.90	3,646	5,972	193.42	4,073	7,979
192.91	3,655	6,008	193.43	4,081	8,020
192.92	3,663	6,045	193.44	4,089	8,061
192.93	3,671	6,081	193.45	4,098	8,102
192.94	3,680	6,118	193.46	4,106	8,143
192.95	3,688	6,155	193.47	4,114	8,184
192.96	3,697	6,192	193.48	4,122	8,225
192.97	3,705	6,229	193.49	4,130	8,266
192.98	3,713	6,266	193.50	4,139	8,308
192.99	3,722	6,303	193.51	4,147	8,349
193.00	3,730	6,341	193.52	4,155	8,391
193.01	3,738	6,378	193.53	4,163	8,432
193.02	3,746	6,415	193.54	4,171	8,474
193.03	3,755	6,453	193.55	4,179	8,516
193.04	3,763	6,490	193.56	4,188	8,557
193.05	3,771	6,528	193.57	4,196	8,599
193.06	3,779	6,566	193.58	4,204	8,641
193.07	3,787	6,604	193.59	4,212	8,683
193.08	3,795	6,642	193.60	4,220	8,726
193.09	3,804	6,680	193.61	4,228	8,768

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.62	4,237	8,810	194.14	4,660	11,124
193.63	4,245	8,853	194.15	4,668	11,170
193.64	4,253	8,895	194.16	4,676	11,217
193.65	4,261	8,938	194.17	4,685	11,264
193.66	4,269	8,980	194.18	4,693	11,311
193.67	4,277	9,023	194.19	4,701	11,358
193.68	4,286	9,066	194.20	4,709	11,405
193.69	4,294	9,109	194.21	4,717	11,452
193.70	4,302	9,152	194.22	4,725	11,499
193.71	4,310	9,195	194.23	4,733	11,546
193.72	4,318	9,238	194.24	4,741	11,594
193.73	4,326	9,281	194.25	4,749	11,641
193.74	4,335	9,324	194.26	4,757	11,689
193.75	4,343	9,368	194.27	4,765	11,736
193.76	4,351	9,411	194.28	4,774	11,784
193.77	4,359	9,455	194.29	4,782	11,832
193.78	4,367	9,498	194.30	4,790	11,880
193.79	4,375	9,542	194.31	4,798	11,927
193.80	4,384	9,586	194.32	4,806	11,975
193.81	4,392	9,630	194.33	4,814	12,024
193.82	4,400	9,674	194.34	4,822	12,072
193.83	4,408	9,718	194.35	4,830	12,120
193.84	4,416	9,762	194.36	4,838	12,168
193.85	4,424	9,806	194.37	4,846	12,217
193.86	4,433	9,850	194.38	4,854	12,265
193.87	4,441	9,895	194.39	4,863	12,314
193.88	4,449	9,939	194.40	4,871	12,363
193.89	4,457	9,984	194.41	4,879	12,411
193.90	4,465	10,028	194.42	4,887	12,460
193.91	4,473	10,073	194.43	4,895	12,509
193.92	4,482	10,118	194.44	4,903	12,558
193.93	4,490	10,163	194.45	4,911	12,607
193.94	4,498	10,208	194.46	4,919	12,656
193.95	4,506	10,253	194.47	4,927	12,705
193.96	4,514	10,298	194.48	4,935	12,755
193.97	4,522	10,343	194.49	4,943	12,804
193.98	4,531	10,388	194.50	4,952	12,854
193.99	4,539	10,434	194.51	4,960	12,903
194.00	4,547	10,479	194.52	4,968	12,953
194.01	4,555	10,525	194.53	4,976	13,003
194.02	4,563	10,570	194.54	4,984	13,052
194.03	4,571	10,616	194.55	4,992	13,102
194.04	4,579	10,662	194.56	5,000	13,152
194.05	4,587	10,707	194.57	5,008	13,202
194.06	4,596	10,753	194.58	5,016	13,252
194.07	4,604	10,799	194.59	5,024	13,303
194.08	4,612	10,845	194.60	5,032	13,353
194.09	4,620	10,892	194.61	5,040	13,403
194.10	4,628	10,938	194.62	5,049	13,454
194.11	4,636	10,984	194.63	5,057	13,504
194.12	4,644	11,030	194.64	5,065	13,555
194.13	4,652	11,077	194.65	5,073	13,605

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.66	5,081	13,656
194.67	5,089	13,707
194.68	5,097	13,758
194.69	5,105	13,809
194.70	5,113	13,860
194.71	5,121	13,911
194.72	5,129	13,963
194.73	5,138	14,014
194.74	5,146	14,065
194.75	5,154	14,117
194.76	5,162	14,168
194.77	5,170	14,220
194.78	5,178	14,272
194.79	5,186	14,324
194.80	5,194	14,375
194.81	5,202	14,427
194.82	5,210	14,480
194.83	5,218	14,532
194.84	5,227	14,584
194.85	5,235	14,636
194.86	5,243	14,689
194.87	5,251	14,741
194.88	5,259	14,794
194.89	5,267	14,846
194.90	5,275	14,899
194.91	5,283	14,952
194.92	5,291	15,005
194.93	5,299	15,058
194.94	5,307	15,111
194.95	5,316	15,164
194.96	5,324	15,217
194.97	5,332	15,270
194.98	5,340	15,324
194.99	5,348	15,377
195.00	5,356	15,431
195.01	5,386	15,484
195.02	5,417	15,538
195.03	5,447	15,593
195.04	5,477	15,647
195.05	5,507	15,702
195.06	5,538	15,757
195.07	5,568	15,813
195.08	5,598	15,869
195.09	5,629	15,925
195.10	5,659	15,981
195.11	5,689	16,038
195.12	5,719	16,095
195.13	5,750	16,152
195.14	5,780	16,210
195.15	5,810	16,268
195.16	5,840	16,326
195.17	5,871	16,385
195.18	5,901	16,444
195.19	5,931	16,503
195.20	5,962	16,562
195.21	5,992	16,622
195.22	6,022	16,682
195.23	6,052	16,742
195.24	6,083	16,803
195.25	**6,113**	**16,864**

Summary for Pond B-37A: Basin #37A

Inflow Area = 2.154 ac, 39.65% Impervious, Inflow Depth = 6.60" for Current 100 yr event
Inflow = 14.48 cfs @ 12.17 hrs, Volume= 1.185 af
Outflow = 11.87 cfs @ 12.24 hrs, Volume= 1.102 af, Atten= 18%, Lag= 4.2 min
Primary = 11.87 cfs @ 12.24 hrs, Volume= 1.102 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 197.42' @ 12.24 hrs Surf.Area= 5,429 sf Storage= 15,256 cf

Plug-Flow detention time= 167.9 min calculated for 1.101 af (93% of inflow)
Center-of-Mass det. time= 129.9 min (912.2 - 782.3)

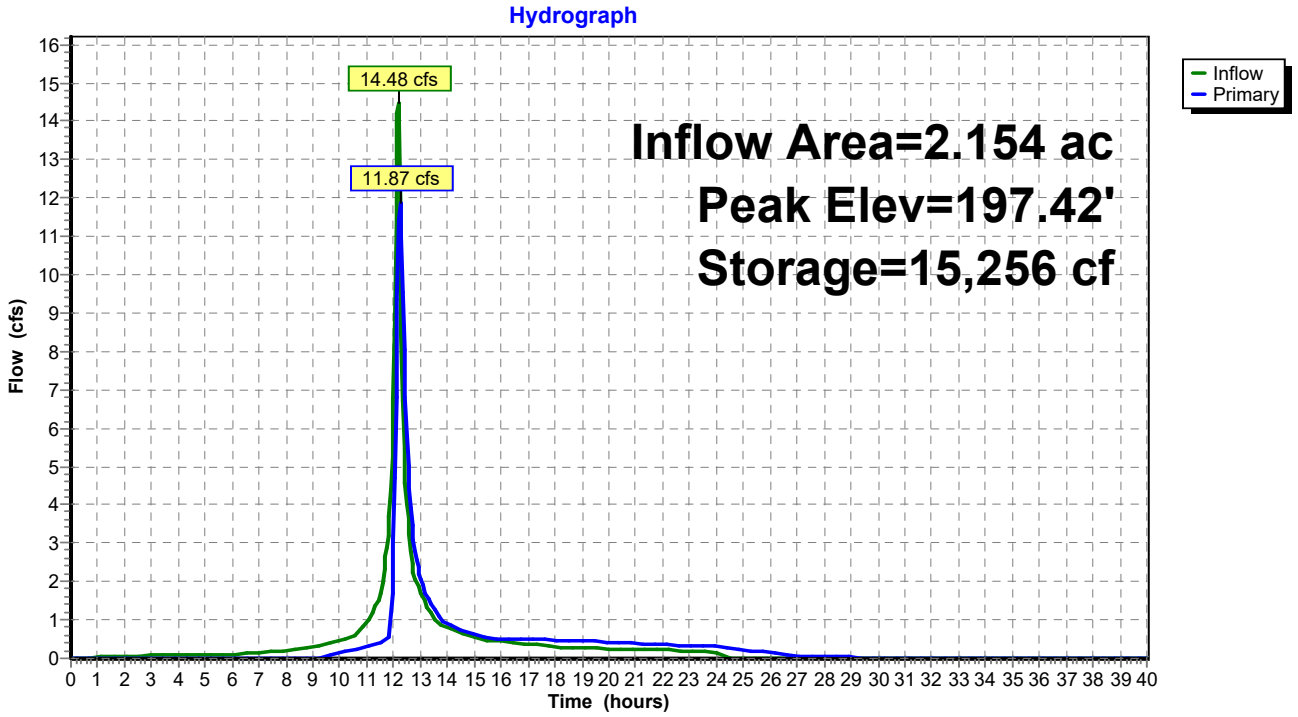
Volume	Invert	Avail.Storage	Storage Description
#1	193.30'	18,546 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.30	0	0	0
194.00	2,990	1,046	1,046
195.00	3,633	3,312	4,358
196.00	4,332	3,983	8,340
197.00	5,089	4,711	13,051
198.00	5,901	5,495	18,546

Device	Routing	Invert	Outlet Devices
#1	Primary	192.65'	**18.0" Round Culvert** L= 265.0' Ke= 0.500 Inlet / Outlet Invert= 192.65' / 191.33' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.77'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	196.48'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.90 cfs @ 12.24 hrs HW=197.41' (Free Discharge)
- **1=Culvert** (Passes 11.90 cfs of 12.05 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.66 cfs @ 7.58 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 11.24 cfs @ 3.16 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-37A: Basin #37A



Stage-Discharge for Pond B-37A: Basin #37A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.02
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.02
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.03
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.03
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.04
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.04
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.05
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.06
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.06
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.07
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.08
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.08
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.09
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.10
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.10
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.11
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.12
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.13
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.13
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.14
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.15
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.15
193.52	0.00	194.04	0.00	194.56	0.00	195.08	0.16
193.53	0.00	194.05	0.00	194.57	0.00	195.09	0.17
193.54	0.00	194.06	0.00	194.58	0.00	195.10	0.17
193.55	0.00	194.07	0.00	194.59	0.00	195.11	0.17
193.56	0.00	194.08	0.00	194.60	0.00	195.12	0.18
193.57	0.00	194.09	0.00	194.61	0.00	195.13	0.18
193.58	0.00	194.10	0.00	194.62	0.00	195.14	0.19
193.59	0.00	194.11	0.00	194.63	0.00	195.15	0.19
193.60	0.00	194.12	0.00	194.64	0.00	195.16	0.20
193.61	0.00	194.13	0.00	194.65	0.00	195.17	0.20
193.62	0.00	194.14	0.00	194.66	0.00	195.18	0.21
193.63	0.00	194.15	0.00	194.67	0.00	195.19	0.21
193.64	0.00	194.16	0.00	194.68	0.00	195.20	0.22
193.65	0.00	194.17	0.00	194.69	0.00	195.21	0.22
193.66	0.00	194.18	0.00	194.70	0.00	195.22	0.22
193.67	0.00	194.19	0.00	194.71	0.00	195.23	0.23
193.68	0.00	194.20	0.00	194.72	0.00	195.24	0.23
193.69	0.00	194.21	0.00	194.73	0.00	195.25	0.24
193.70	0.00	194.22	0.00	194.74	0.00	195.26	0.24
193.71	0.00	194.23	0.00	194.75	0.00	195.27	0.24
193.72	0.00	194.24	0.00	194.76	0.00	195.28	0.25
193.73	0.00	194.25	0.00	194.77	0.00	195.29	0.25
193.74	0.00	194.26	0.00	194.78	0.00	195.30	0.25
193.75	0.00	194.27	0.00	194.79	0.00	195.31	0.26
193.76	0.00	194.28	0.00	194.80	0.00	195.32	0.26
193.77	0.00	194.29	0.00	194.81	0.00	195.33	0.26
193.78	0.00	194.30	0.00	194.82	0.01	195.34	0.27
193.79	0.00	194.31	0.00	194.83	0.01	195.35	0.27
193.80	0.00	194.32	0.00	194.84	0.01	195.36	0.27
193.81	0.00	194.33	0.00	194.85	0.02	195.37	0.28

Stage-Discharge for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.38	0.28	195.90	0.41	196.42	0.51	196.94	4.58
195.39	0.28	195.91	0.41	196.43	0.51	196.95	4.71
195.40	0.29	195.92	0.42	196.44	0.52	196.96	4.84
195.41	0.29	195.93	0.42	196.45	0.52	196.97	4.98
195.42	0.29	195.94	0.42	196.46	0.52	196.98	5.11
195.43	0.30	195.95	0.42	196.47	0.52	196.99	5.24
195.44	0.30	195.96	0.43	196.48	0.52	197.00	5.38
195.45	0.30	195.97	0.43	196.49	0.54	197.01	5.52
195.46	0.30	195.98	0.43	196.50	0.56	197.02	5.66
195.47	0.31	195.99	0.43	196.51	0.59	197.03	5.80
195.48	0.31	196.00	0.43	196.52	0.63	197.04	5.94
195.49	0.31	196.01	0.44	196.53	0.68	197.05	6.08
195.50	0.32	196.02	0.44	196.54	0.72	197.06	6.22
195.51	0.32	196.03	0.44	196.55	0.78	197.07	6.37
195.52	0.32	196.04	0.44	196.56	0.83	197.08	6.51
195.53	0.32	196.05	0.44	196.57	0.89	197.09	6.66
195.54	0.33	196.06	0.45	196.58	0.95	197.10	6.81
195.55	0.33	196.07	0.45	196.59	1.01	197.11	6.95
195.56	0.33	196.08	0.45	196.60	1.08	197.12	7.10
195.57	0.33	196.09	0.45	196.61	1.15	197.13	7.25
195.58	0.34	196.10	0.45	196.62	1.23	197.14	7.41
195.59	0.34	196.11	0.46	196.63	1.30	197.15	7.56
195.60	0.34	196.12	0.46	196.64	1.38	197.16	7.71
195.61	0.34	196.13	0.46	196.65	1.46	197.17	7.87
195.62	0.35	196.14	0.46	196.66	1.54	197.18	8.02
195.63	0.35	196.15	0.46	196.67	1.63	197.19	8.18
195.64	0.35	196.16	0.46	196.68	1.71	197.20	8.34
195.65	0.35	196.17	0.47	196.69	1.80	197.21	8.49
195.66	0.36	196.18	0.47	196.70	1.89	197.22	8.65
195.67	0.36	196.19	0.47	196.71	1.99	197.23	8.81
195.68	0.36	196.20	0.47	196.72	2.08	197.24	8.97
195.69	0.36	196.21	0.47	196.73	2.18	197.25	9.14
195.70	0.37	196.22	0.48	196.74	2.28	197.26	9.30
195.71	0.37	196.23	0.48	196.75	2.38	197.27	9.46
195.72	0.37	196.24	0.48	196.76	2.48	197.28	9.63
195.73	0.37	196.25	0.48	196.77	2.58	197.29	9.79
195.74	0.38	196.26	0.48	196.78	2.69	197.30	9.96
195.75	0.38	196.27	0.49	196.79	2.79	197.31	10.13
195.76	0.38	196.28	0.49	196.80	2.90	197.32	10.30
195.77	0.38	196.29	0.49	196.81	3.01	197.33	10.46
195.78	0.39	196.30	0.49	196.82	3.13	197.34	10.63
195.79	0.39	196.31	0.49	196.83	3.24	197.35	10.81
195.80	0.39	196.32	0.49	196.84	3.35	197.36	10.98
195.81	0.39	196.33	0.50	196.85	3.47	197.37	11.15
195.82	0.39	196.34	0.50	196.86	3.59	197.38	11.32
195.83	0.40	196.35	0.50	196.87	3.71	197.39	11.50
195.84	0.40	196.36	0.50	196.88	3.83	197.40	11.67
195.85	0.40	196.37	0.50	196.89	3.95	197.41	11.85
195.86	0.40	196.38	0.50	196.90	4.07	197.42	12.02
195.87	0.41	196.39	0.51	196.91	4.20	197.43	12.07
195.88	0.41	196.40	0.51	196.92	4.33	197.44	12.09
195.89	0.41	196.41	0.51	196.93	4.45	197.45	12.10

Stage-Discharge for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Primary (cfs)
197.46	12.11
197.47	12.13
197.48	12.14
197.49	12.15
197.50	12.17
197.51	12.18
197.52	12.19
197.53	12.20
197.54	12.22
197.55	12.23
197.56	12.24
197.57	12.26
197.58	12.27
197.59	12.28
197.60	12.29
197.61	12.31
197.62	12.32
197.63	12.33
197.64	12.35
197.65	12.36
197.66	12.37
197.67	12.38
197.68	12.40
197.69	12.41
197.70	12.42
197.71	12.44
197.72	12.45
197.73	12.46
197.74	12.47
197.75	12.49
197.76	12.50
197.77	12.51
197.78	12.52
197.79	12.54
197.80	12.55
197.81	12.56
197.82	12.57
197.83	12.59
197.84	12.60
197.85	12.61
197.86	12.63
197.87	12.64
197.88	12.65
197.89	12.66
197.90	12.68
197.91	12.69
197.92	12.70
197.93	12.71
197.94	12.73
197.95	12.74
197.96	12.87
197.97	13.09
197.98	13.38
197.99	13.73
198.00	**14.11**

Stage-Area-Storage for Pond B-37A: Basin #37A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.30	0	0	193.82	2,221	577
193.31	43	0	193.83	2,264	600
193.32	85	1	193.84	2,307	623
193.33	128	2	193.85	2,349	646
193.34	171	3	193.86	2,392	670
193.35	214	5	193.87	2,435	694
193.36	256	8	193.88	2,477	718
193.37	299	10	193.89	2,520	743
193.38	342	14	193.90	2,563	769
193.39	384	17	193.91	2,606	795
193.40	427	21	193.92	2,648	821
193.41	470	26	193.93	2,691	848
193.42	513	31	193.94	2,734	875
193.43	555	36	193.95	2,776	902
193.44	598	42	193.96	2,819	930
193.45	641	48	193.97	2,862	959
193.46	683	55	193.98	2,905	988
193.47	726	62	193.99	2,947	1,017
193.48	769	69	194.00	2,990	1,046
193.49	812	77	194.01	2,996	1,076
193.50	854	85	194.02	3,003	1,106
193.51	897	94	194.03	3,009	1,136
193.52	940	103	194.04	3,016	1,167
193.53	982	113	194.05	3,022	1,197
193.54	1,025	123	194.06	3,029	1,227
193.55	1,068	133	194.07	3,035	1,257
193.56	1,111	144	194.08	3,041	1,288
193.57	1,153	156	194.09	3,048	1,318
193.58	1,196	167	194.10	3,054	1,349
193.59	1,239	180	194.11	3,061	1,379
193.60	1,281	192	194.12	3,067	1,410
193.61	1,324	205	194.13	3,074	1,441
193.62	1,367	219	194.14	3,080	1,471
193.63	1,410	233	194.15	3,086	1,502
193.64	1,452	247	194.16	3,093	1,533
193.65	1,495	262	194.17	3,099	1,564
193.66	1,538	277	194.18	3,106	1,595
193.67	1,580	292	194.19	3,112	1,626
193.68	1,623	308	194.20	3,119	1,657
193.69	1,666	325	194.21	3,125	1,689
193.70	1,709	342	194.22	3,131	1,720
193.71	1,751	359	194.23	3,138	1,751
193.72	1,794	377	194.24	3,144	1,783
193.73	1,837	395	194.25	3,151	1,814
193.74	1,879	413	194.26	3,157	1,846
193.75	1,922	432	194.27	3,164	1,877
193.76	1,965	452	194.28	3,170	1,909
193.77	2,008	472	194.29	3,176	1,941
193.78	2,050	492	194.30	3,183	1,972
193.79	2,093	513	194.31	3,189	2,004
193.80	2,136	534	194.32	3,196	2,036
193.81	2,178	555	194.33	3,202	2,068

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.34	3,209	2,100
194.35	3,215	2,132
194.36	3,221	2,165
194.37	3,228	2,197
194.38	3,234	2,229
194.39	3,241	2,262
194.40	3,247	2,294
194.41	3,254	2,326
194.42	3,260	2,359
194.43	3,266	2,392
194.44	3,273	2,424
194.45	3,279	2,457
194.46	3,286	2,490
194.47	3,292	2,523
194.48	3,299	2,556
194.49	3,305	2,589
194.50	3,312	2,622
194.51	3,318	2,655
194.52	3,324	2,688
194.53	3,331	2,722
194.54	3,337	2,755
194.55	3,344	2,788
194.56	3,350	2,822
194.57	3,357	2,855
194.58	3,363	2,889
194.59	3,369	2,923
194.60	3,376	2,956
194.61	3,382	2,990
194.62	3,389	3,024
194.63	3,395	3,058
194.64	3,402	3,092
194.65	3,408	3,126
194.66	3,414	3,160
194.67	3,421	3,194
194.68	3,427	3,228
194.69	3,434	3,263
194.70	3,440	3,297
194.71	3,447	3,331
194.72	3,453	3,366
194.73	3,459	3,401
194.74	3,466	3,435
194.75	3,472	3,470
194.76	3,479	3,505
194.77	3,485	3,539
194.78	3,492	3,574
194.79	3,498	3,609
194.80	3,504	3,644
194.81	3,511	3,679
194.82	3,517	3,714
194.83	3,524	3,750
194.84	3,530	3,785
194.85	3,537	3,820
194.86	3,543	3,856
194.87	3,549	3,891
194.88	3,556	3,927
194.89	3,562	3,962
194.90	3,569	3,998
194.91	3,575	4,034
194.92	3,582	4,069
194.93	3,588	4,105
194.94	3,594	4,141
194.95	3,601	4,177
194.96	3,607	4,213
194.97	3,614	4,249
194.98	3,620	4,285
194.99	3,627	4,322
195.00	3,633	4,358
195.01	3,640	4,394
195.02	3,647	4,431
195.03	3,654	4,467
195.04	3,661	4,504
195.05	3,668	4,541
195.06	3,675	4,577
195.07	3,682	4,614
195.08	3,689	4,651
195.09	3,696	4,688
195.10	3,703	4,725
195.11	3,710	4,762
195.12	3,717	4,799
195.13	3,724	4,836
195.14	3,731	4,873
195.15	3,738	4,911
195.16	3,745	4,948
195.17	3,752	4,986
195.18	3,759	5,023
195.19	3,766	5,061
195.20	3,773	5,099
195.21	3,780	5,136
195.22	3,787	5,174
195.23	3,794	5,212
195.24	3,801	5,250
195.25	3,808	5,288
195.26	3,815	5,326
195.27	3,822	5,364
195.28	3,829	5,403
195.29	3,836	5,441
195.30	3,843	5,479
195.31	3,850	5,518
195.32	3,857	5,556
195.33	3,864	5,595
195.34	3,871	5,634
195.35	3,878	5,672
195.36	3,885	5,711
195.37	3,892	5,750

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.38	3,899	5,789	195.90	4,262	7,911
195.39	3,906	5,828	195.91	4,269	7,953
195.40	3,913	5,867	195.92	4,276	7,996
195.41	3,920	5,906	195.93	4,283	8,039
195.42	3,927	5,946	195.94	4,290	8,082
195.43	3,934	5,985	195.95	4,297	8,125
195.44	3,941	6,024	195.96	4,304	8,168
195.45	3,948	6,064	195.97	4,311	8,211
195.46	3,955	6,103	195.98	4,318	8,254
195.47	3,962	6,143	195.99	4,325	8,297
195.48	3,969	6,182	196.00	4,332	8,340
195.49	3,976	6,222	196.01	4,340	8,384
195.50	3,983	6,262	196.02	4,347	8,427
195.51	3,989	6,302	196.03	4,355	8,471
195.52	3,996	6,342	196.04	4,362	8,514
195.53	4,003	6,382	196.05	4,370	8,558
195.54	4,010	6,422	196.06	4,377	8,602
195.55	4,017	6,462	196.07	4,385	8,646
195.56	4,024	6,502	196.08	4,393	8,689
195.57	4,031	6,542	196.09	4,400	8,733
195.58	4,038	6,583	196.10	4,408	8,777
195.59	4,045	6,623	196.11	4,415	8,822
195.60	4,052	6,664	196.12	4,423	8,866
195.61	4,059	6,704	196.13	4,430	8,910
195.62	4,066	6,745	196.14	4,438	8,954
195.63	4,073	6,786	196.15	4,446	8,999
195.64	4,080	6,826	196.16	4,453	9,043
195.65	4,087	6,867	196.17	4,461	9,088
195.66	4,094	6,908	196.18	4,468	9,133
195.67	4,101	6,949	196.19	4,476	9,177
195.68	4,108	6,990	196.20	4,483	9,222
195.69	4,115	7,031	196.21	4,491	9,267
195.70	4,122	7,072	196.22	4,499	9,312
195.71	4,129	7,114	196.23	4,506	9,357
195.72	4,136	7,155	196.24	4,514	9,402
195.73	4,143	7,196	196.25	4,521	9,447
195.74	4,150	7,238	196.26	4,529	9,492
195.75	4,157	7,279	196.27	4,536	9,538
195.76	4,164	7,321	196.28	4,544	9,583
195.77	4,171	7,363	196.29	4,552	9,629
195.78	4,178	7,404	196.30	4,559	9,674
195.79	4,185	7,446	196.31	4,567	9,720
195.80	4,192	7,488	196.32	4,574	9,765
195.81	4,199	7,530	196.33	4,582	9,811
195.82	4,206	7,572	196.34	4,589	9,857
195.83	4,213	7,614	196.35	4,597	9,903
195.84	4,220	7,656	196.36	4,605	9,949
195.85	4,227	7,699	196.37	4,612	9,995
195.86	4,234	7,741	196.38	4,620	10,041
195.87	4,241	7,783	196.39	4,627	10,088
195.88	4,248	7,826	196.40	4,635	10,134
195.89	4,255	7,868	196.41	4,642	10,180

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.42	4,650	10,227	196.94	5,044	12,747
196.43	4,658	10,273	196.95	5,051	12,797
196.44	4,665	10,320	196.96	5,059	12,848
196.45	4,673	10,367	196.97	5,066	12,899
196.46	4,680	10,413	196.98	5,074	12,949
196.47	4,688	10,460	196.99	5,081	13,000
196.48	4,695	10,507	197.00	5,089	13,051
196.49	4,703	10,554	197.01	5,097	13,102
196.50	4,711	10,601	197.02	5,105	13,153
196.51	4,718	10,648	197.03	5,113	13,204
196.52	4,726	10,695	197.04	5,121	13,255
196.53	4,733	10,743	197.05	5,130	13,306
196.54	4,741	10,790	197.06	5,138	13,358
196.55	4,748	10,838	197.07	5,146	13,409
196.56	4,756	10,885	197.08	5,154	13,461
196.57	4,763	10,933	197.09	5,162	13,512
196.58	4,771	10,980	197.10	5,170	13,564
196.59	4,779	11,028	197.11	5,178	13,616
196.60	4,786	11,076	197.12	5,186	13,668
196.61	4,794	11,124	197.13	5,195	13,719
196.62	4,801	11,172	197.14	5,203	13,771
196.63	4,809	11,220	197.15	5,211	13,823
196.64	4,816	11,268	197.16	5,219	13,876
196.65	4,824	11,316	197.17	5,227	13,928
196.66	4,832	11,364	197.18	5,235	13,980
196.67	4,839	11,413	197.19	5,243	14,033
196.68	4,847	11,461	197.20	5,251	14,085
196.69	4,854	11,510	197.21	5,260	14,138
196.70	4,862	11,558	197.22	5,268	14,190
196.71	4,869	11,607	197.23	5,276	14,243
196.72	4,877	11,656	197.24	5,284	14,296
196.73	4,885	11,705	197.25	5,292	14,349
196.74	4,892	11,753	197.26	5,300	14,402
196.75	4,900	11,802	197.27	5,308	14,455
196.76	4,907	11,851	197.28	5,316	14,508
196.77	4,915	11,901	197.29	5,324	14,561
196.78	4,922	11,950	197.30	5,333	14,614
196.79	4,930	11,999	197.31	5,341	14,668
196.80	4,938	12,048	197.32	5,349	14,721
196.81	4,945	12,098	197.33	5,357	14,775
196.82	4,953	12,147	197.34	5,365	14,828
196.83	4,960	12,197	197.35	5,373	14,882
196.84	4,968	12,246	197.36	5,381	14,936
196.85	4,975	12,296	197.37	5,389	14,990
196.86	4,983	12,346	197.38	5,398	15,043
196.87	4,991	12,396	197.39	5,406	15,097
196.88	4,998	12,446	197.40	5,414	15,152
196.89	5,006	12,496	197.41	5,422	15,206
196.90	5,013	12,546	197.42	5,430	15,260
196.91	5,021	12,596	197.43	5,438	15,314
196.92	5,028	12,646	197.44	5,446	15,369
196.93	5,036	12,697	197.45	5,454	15,423

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.46	5,463	15,478
197.47	5,471	15,533
197.48	5,479	15,587
197.49	5,487	15,642
197.50	5,495	15,697
197.51	5,503	15,752
197.52	5,511	15,807
197.53	5,519	15,862
197.54	5,527	15,917
197.55	5,536	15,973
197.56	5,544	16,028
197.57	5,552	16,084
197.58	5,560	16,139
197.59	5,568	16,195
197.60	5,576	16,251
197.61	5,584	16,306
197.62	5,592	16,362
197.63	5,601	16,418
197.64	5,609	16,474
197.65	5,617	16,530
197.66	5,625	16,587
197.67	5,633	16,643
197.68	5,641	16,699
197.69	5,649	16,756
197.70	5,657	16,812
197.71	5,666	16,869
197.72	5,674	16,926
197.73	5,682	16,982
197.74	5,690	17,039
197.75	5,698	17,096
197.76	5,706	17,153
197.77	5,714	17,210
197.78	5,722	17,267
197.79	5,730	17,325
197.80	5,739	17,382
197.81	5,747	17,439
197.82	5,755	17,497
197.83	5,763	17,555
197.84	5,771	17,612
197.85	5,779	17,670
197.86	5,787	17,728
197.87	5,795	17,786
197.88	5,804	17,844
197.89	5,812	17,902
197.90	5,820	17,960
197.91	5,828	18,018
197.92	5,836	18,077
197.93	5,844	18,135
197.94	5,852	18,193
197.95	5,860	18,252
197.96	5,869	18,311
197.97	5,877	18,369
197.98	5,885	18,428
197.99	5,893	18,487
198.00	**5,901**	**18,546**

Summary for Pond B-37B: Basin #37B

Inflow Area = 2.179 ac, 53.42% Impervious, Inflow Depth = 7.00" for Current 100 yr event
Inflow = 15.21 cfs @ 12.17 hrs, Volume= 1.271 af
Outflow = 11.21 cfs @ 12.26 hrs, Volume= 1.131 af, Atten= 26%, Lag= 5.6 min
Primary = 11.21 cfs @ 12.26 hrs, Volume= 1.131 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 197.55' @ 12.26 hrs Surf.Area= 7,571 sf Storage= 21,094 cf

Plug-Flow detention time= 311.6 min calculated for 1.131 af (89% of inflow)
Center-of-Mass det. time= 255.6 min (1,027.7 - 772.0)

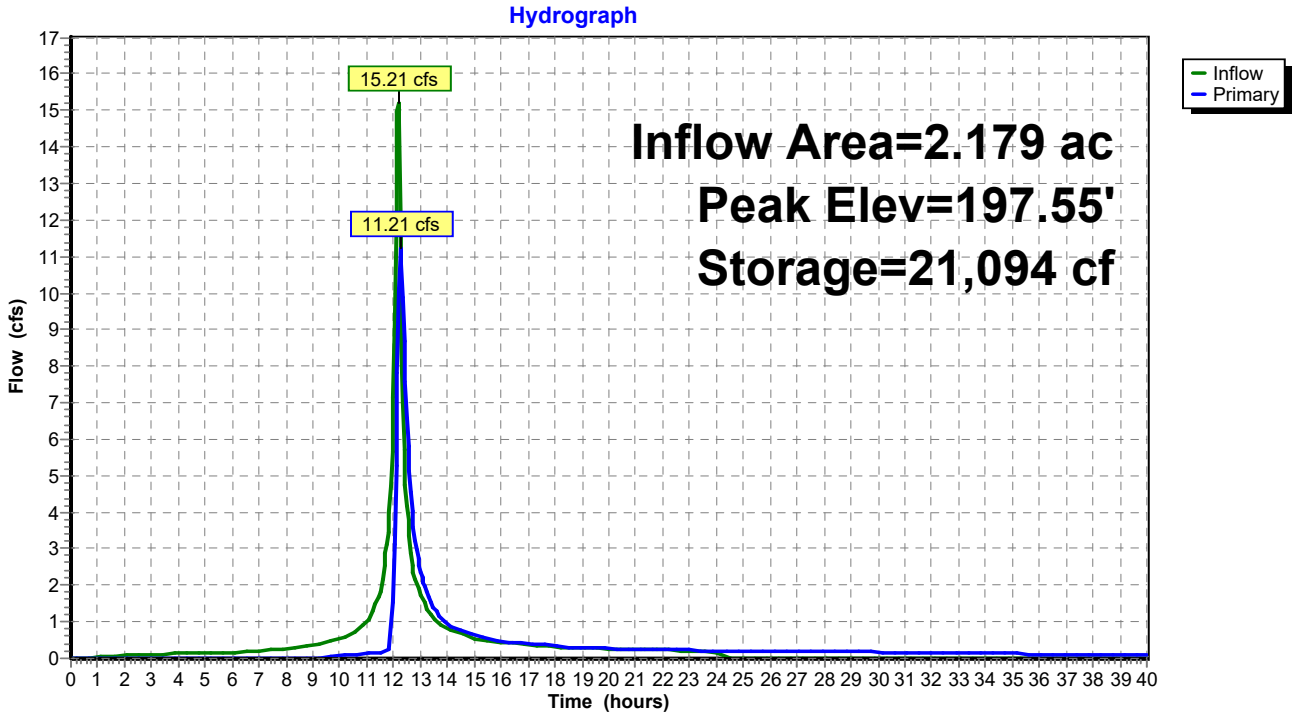
Volume	Invert	Avail.Storage	Storage Description
#1	193.30'	24,651 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.30	0	0	0
194.00	3,709	1,298	1,298
195.00	4,724	4,217	5,515
196.00	5,796	5,260	10,775
197.00	6,924	6,360	17,135
198.00	8,108	7,516	24,651

Device	Routing	Invert	Outlet Devices
#1	Primary	192.65'	**18.0" Round Culvert** L= 265.0' Ke= 0.500 Inlet / Outlet Invert= 192.65' / 191.33' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.81'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	196.63'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.08 cfs @ 12.26 hrs HW=197.54' (Free Discharge)
- **1=Culvert** (Passes 11.08 cfs of 12.22 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.27 cfs @ 7.80 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 10.81 cfs @ 3.12 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-37B: Basin #37B



Stage-Discharge for Pond B-37B: Basin #37B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.01
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.01
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.01
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.01
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.02
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.02
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.02
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.03
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.03
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.03
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.04
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.04
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.05
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.05
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.05
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.05
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.06
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.06
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.06
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.06
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.06
193.52	0.00	194.04	0.00	194.56	0.00	195.08	0.07
193.53	0.00	194.05	0.00	194.57	0.00	195.09	0.07
193.54	0.00	194.06	0.00	194.58	0.00	195.10	0.07
193.55	0.00	194.07	0.00	194.59	0.00	195.11	0.07
193.56	0.00	194.08	0.00	194.60	0.00	195.12	0.07
193.57	0.00	194.09	0.00	194.61	0.00	195.13	0.08
193.58	0.00	194.10	0.00	194.62	0.00	195.14	0.08
193.59	0.00	194.11	0.00	194.63	0.00	195.15	0.08
193.60	0.00	194.12	0.00	194.64	0.00	195.16	0.08
193.61	0.00	194.13	0.00	194.65	0.00	195.17	0.08
193.62	0.00	194.14	0.00	194.66	0.00	195.18	0.08
193.63	0.00	194.15	0.00	194.67	0.00	195.19	0.09
193.64	0.00	194.16	0.00	194.68	0.00	195.20	0.09
193.65	0.00	194.17	0.00	194.69	0.00	195.21	0.09
193.66	0.00	194.18	0.00	194.70	0.00	195.22	0.09
193.67	0.00	194.19	0.00	194.71	0.00	195.23	0.09
193.68	0.00	194.20	0.00	194.72	0.00	195.24	0.09
193.69	0.00	194.21	0.00	194.73	0.00	195.25	0.10
193.70	0.00	194.22	0.00	194.74	0.00	195.26	0.10
193.71	0.00	194.23	0.00	194.75	0.00	195.27	0.10
193.72	0.00	194.24	0.00	194.76	0.00	195.28	0.10
193.73	0.00	194.25	0.00	194.77	0.00	195.29	0.10
193.74	0.00	194.26	0.00	194.78	0.00	195.30	0.10
193.75	0.00	194.27	0.00	194.79	0.00	195.31	0.10
193.76	0.00	194.28	0.00	194.80	0.00	195.32	0.10
193.77	0.00	194.29	0.00	194.81	0.00	195.33	0.11
193.78	0.00	194.30	0.00	194.82	0.00	195.34	0.11
193.79	0.00	194.31	0.00	194.83	0.00	195.35	0.11
193.80	0.00	194.32	0.00	194.84	0.00	195.36	0.11
193.81	0.00	194.33	0.00	194.85	0.00	195.37	0.11

Stage-Discharge for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.38	0.11	195.90	0.16	196.42	0.20	196.94	2.46
195.39	0.11	195.91	0.16	196.43	0.20	196.95	2.56
195.40	0.11	195.92	0.16	196.44	0.20	196.96	2.67
195.41	0.12	195.93	0.17	196.45	0.20	196.97	2.78
195.42	0.12	195.94	0.17	196.46	0.20	196.98	2.90
195.43	0.12	195.95	0.17	196.47	0.20	196.99	3.01
195.44	0.12	195.96	0.17	196.48	0.21	197.00	3.13
195.45	0.12	195.97	0.17	196.49	0.21	197.01	3.24
195.46	0.12	195.98	0.17	196.50	0.21	197.02	3.36
195.47	0.12	195.99	0.17	196.51	0.21	197.03	3.48
195.48	0.12	196.00	0.17	196.52	0.21	197.04	3.60
195.49	0.12	196.01	0.17	196.53	0.21	197.05	3.73
195.50	0.13	196.02	0.17	196.54	0.21	197.06	3.85
195.51	0.13	196.03	0.17	196.55	0.21	197.07	3.97
195.52	0.13	196.04	0.17	196.56	0.21	197.08	4.10
195.53	0.13	196.05	0.17	196.57	0.21	197.09	4.23
195.54	0.13	196.06	0.18	196.58	0.21	197.10	4.36
195.55	0.13	196.07	0.18	196.59	0.21	197.11	4.49
195.56	0.13	196.08	0.18	196.60	0.21	197.12	4.62
195.57	0.13	196.09	0.18	196.61	0.21	197.13	4.75
195.58	0.13	196.10	0.18	196.62	0.21	197.14	4.89
195.59	0.13	196.11	0.18	196.63	0.22	197.15	5.02
195.60	0.14	196.12	0.18	196.64	0.23	197.16	5.16
195.61	0.14	196.13	0.18	196.65	0.25	197.17	5.30
195.62	0.14	196.14	0.18	196.66	0.28	197.18	5.44
195.63	0.14	196.15	0.18	196.67	0.32	197.19	5.58
195.64	0.14	196.16	0.18	196.68	0.36	197.20	5.72
195.65	0.14	196.17	0.18	196.69	0.41	197.21	5.86
195.66	0.14	196.18	0.18	196.70	0.46	197.22	6.00
195.67	0.14	196.19	0.19	196.71	0.51	197.23	6.15
195.68	0.14	196.20	0.19	196.72	0.57	197.24	6.29
195.69	0.14	196.21	0.19	196.73	0.63	197.25	6.44
195.70	0.15	196.22	0.19	196.74	0.70	197.26	6.59
195.71	0.15	196.23	0.19	196.75	0.76	197.27	6.73
195.72	0.15	196.24	0.19	196.76	0.83	197.28	6.88
195.73	0.15	196.25	0.19	196.77	0.90	197.29	7.03
195.74	0.15	196.26	0.19	196.78	0.98	197.30	7.19
195.75	0.15	196.27	0.19	196.79	1.06	197.31	7.34
195.76	0.15	196.28	0.19	196.80	1.13	197.32	7.49
195.77	0.15	196.29	0.19	196.81	1.22	197.33	7.65
195.78	0.15	196.30	0.19	196.82	1.30	197.34	7.80
195.79	0.15	196.31	0.19	196.83	1.39	197.35	7.96
195.80	0.15	196.32	0.19	196.84	1.47	197.36	8.12
195.81	0.16	196.33	0.20	196.85	1.56	197.37	8.28
195.82	0.16	196.34	0.20	196.86	1.66	197.38	8.43
195.83	0.16	196.35	0.20	196.87	1.75	197.39	8.60
195.84	0.16	196.36	0.20	196.88	1.84	197.40	8.76
195.85	0.16	196.37	0.20	196.89	1.94	197.41	8.92
195.86	0.16	196.38	0.20	196.90	2.04	197.42	9.08
195.87	0.16	196.39	0.20	196.91	2.14	197.43	9.25
195.88	0.16	196.40	0.20	196.92	2.25	197.44	9.41
195.89	0.16	196.41	0.20	196.93	2.35	197.45	9.58

Stage-Discharge for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Primary (cfs)
197.46	9.74
197.47	9.91
197.48	10.08
197.49	10.25
197.50	10.42
197.51	10.59
197.52	10.76
197.53	10.93
197.54	11.10
197.55	11.28
197.56	11.45
197.57	11.63
197.58	11.80
197.59	11.98
197.60	12.16
197.61	12.31
197.62	12.32
197.63	12.33
197.64	12.35
197.65	12.36
197.66	12.37
197.67	12.38
197.68	12.40
197.69	12.41
197.70	12.42
197.71	12.44
197.72	12.45
197.73	12.46
197.74	12.47
197.75	12.49
197.76	12.50
197.77	12.51
197.78	12.52
197.79	12.54
197.80	12.55
197.81	12.56
197.82	12.57
197.83	12.59
197.84	12.60
197.85	12.61
197.86	12.63
197.87	12.64
197.88	12.65
197.89	12.66
197.90	12.68
197.91	12.69
197.92	12.70
197.93	12.71
197.94	12.73
197.95	12.74
197.96	12.87
197.97	13.09
197.98	13.38
197.99	13.73
198.00	**14.11**

Stage-Area-Storage for Pond B-37B: Basin #37B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.30	0	0
193.31	53	0
193.32	106	1
193.33	159	2
193.34	212	4
193.35	265	7
193.36	318	10
193.37	371	13
193.38	424	17
193.39	477	21
193.40	530	26
193.41	583	32
193.42	636	38
193.43	689	45
193.44	742	52
193.45	795	60
193.46	848	68
193.47	901	77
193.48	954	86
193.49	1,007	96
193.50	1,060	106
193.51	1,113	117
193.52	1,166	128
193.53	1,219	140
193.54	1,272	153
193.55	1,325	166
193.56	1,378	179
193.57	1,431	193
193.58	1,484	208
193.59	1,537	223
193.60	1,590	238
193.61	1,643	255
193.62	1,696	271
193.63	1,749	289
193.64	1,802	306
193.65	1,855	325
193.66	1,907	343
193.67	1,960	363
193.68	2,013	383
193.69	2,066	403
193.70	2,119	424
193.71	2,172	445
193.72	2,225	467
193.73	2,278	490
193.74	2,331	513
193.75	2,384	536
193.76	2,437	561
193.77	2,490	585
193.78	2,543	610
193.79	2,596	636
193.80	2,649	662
193.81	2,702	689
193.82	2,755	716
193.83	2,808	744
193.84	2,861	773
193.85	2,914	801
193.86	2,967	831
193.87	3,020	861
193.88	3,073	891
193.89	3,126	922
193.90	3,179	954
193.91	3,232	986
193.92	3,285	1,018
193.93	3,338	1,052
193.94	3,391	1,085
193.95	3,444	1,119
193.96	3,497	1,154
193.97	3,550	1,189
193.98	3,603	1,225
193.99	3,656	1,261
194.00	3,709	1,298
194.01	3,719	1,335
194.02	3,729	1,373
194.03	3,739	1,410
194.04	3,750	1,447
194.05	3,760	1,485
194.06	3,770	1,523
194.07	3,780	1,560
194.08	3,790	1,598
194.09	3,800	1,636
194.10	3,811	1,674
194.11	3,821	1,712
194.12	3,831	1,751
194.13	3,841	1,789
194.14	3,851	1,827
194.15	3,861	1,866
194.16	3,871	1,905
194.17	3,882	1,943
194.18	3,892	1,982
194.19	3,902	2,021
194.20	3,912	2,060
194.21	3,922	2,099
194.22	3,932	2,139
194.23	3,942	2,178
194.24	3,953	2,218
194.25	3,963	2,257
194.26	3,973	2,297
194.27	3,983	2,337
194.28	3,993	2,376
194.29	4,003	2,416
194.30	4,014	2,457
194.31	4,024	2,497
194.32	4,034	2,537
194.33	4,044	2,577

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.34	4,054	2,618
194.35	4,064	2,658
194.36	4,074	2,699
194.37	4,085	2,740
194.38	4,095	2,781
194.39	4,105	2,822
194.40	4,115	2,863
194.41	4,125	2,904
194.42	4,135	2,945
194.43	4,145	2,987
194.44	4,156	3,028
194.45	4,166	3,070
194.46	4,176	3,112
194.47	4,186	3,153
194.48	4,196	3,195
194.49	4,206	3,237
194.50	4,217	3,280
194.51	4,227	3,322
194.52	4,237	3,364
194.53	4,247	3,406
194.54	4,257	3,449
194.55	4,267	3,492
194.56	4,277	3,534
194.57	4,288	3,577
194.58	4,298	3,620
194.59	4,308	3,663
194.60	4,318	3,706
194.61	4,328	3,749
194.62	4,338	3,793
194.63	4,348	3,836
194.64	4,359	3,880
194.65	4,369	3,923
194.66	4,379	3,967
194.67	4,389	4,011
194.68	4,399	4,055
194.69	4,409	4,099
194.70	4,420	4,143
194.71	4,430	4,187
194.72	4,440	4,232
194.73	4,450	4,276
194.74	4,460	4,321
194.75	4,470	4,365
194.76	4,480	4,410
194.77	4,491	4,455
194.78	4,501	4,500
194.79	4,511	4,545
194.80	4,521	4,590
194.81	4,531	4,635
194.82	4,541	4,681
194.83	4,551	4,726
194.84	4,562	4,772
194.85	4,572	4,817
194.86	4,582	4,863
194.87	4,592	4,909
194.88	4,602	4,955
194.89	4,612	5,001
194.90	4,623	5,047
194.91	4,633	5,094
194.92	4,643	5,140
194.93	4,653	5,186
194.94	4,663	5,233
194.95	4,673	5,280
194.96	4,683	5,327
194.97	4,694	5,373
194.98	4,704	5,420
194.99	4,714	5,467
195.00	4,724	5,515
195.01	4,735	5,562
195.02	4,745	5,609
195.03	4,756	5,657
195.04	4,767	5,704
195.05	4,778	5,752
195.06	4,788	5,800
195.07	4,799	5,848
195.08	4,810	5,896
195.09	4,820	5,944
195.10	4,831	5,992
195.11	4,842	6,041
195.12	4,853	6,089
195.13	4,863	6,138
195.14	4,874	6,187
195.15	4,885	6,235
195.16	4,896	6,284
195.17	4,906	6,333
195.18	4,917	6,382
195.19	4,928	6,432
195.20	4,938	6,481
195.21	4,949	6,530
195.22	4,960	6,580
195.23	4,971	6,630
195.24	4,981	6,679
195.25	4,992	6,729
195.26	5,003	6,779
195.27	5,013	6,829
195.28	5,024	6,879
195.29	5,035	6,930
195.30	5,046	6,980
195.31	5,056	7,031
195.32	5,067	7,081
195.33	5,078	7,132
195.34	5,088	7,183
195.35	5,099	7,234
195.36	5,110	7,285
195.37	5,121	7,336

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.38	5,131	7,387
195.39	5,142	7,439
195.40	5,153	7,490
195.41	5,164	7,542
195.42	5,174	7,593
195.43	5,185	7,645
195.44	5,196	7,697
195.45	5,206	7,749
195.46	5,217	7,801
195.47	5,228	7,853
195.48	5,239	7,906
195.49	5,249	7,958
195.50	5,260	8,011
195.51	5,271	8,063
195.52	5,281	8,116
195.53	5,292	8,169
195.54	5,303	8,222
195.55	5,314	8,275
195.56	5,324	8,328
195.57	5,335	8,381
195.58	5,346	8,435
195.59	5,356	8,488
195.60	5,367	8,542
195.61	5,378	8,596
195.62	5,389	8,650
195.63	5,399	8,704
195.64	5,410	8,758
195.65	5,421	8,812
195.66	5,432	8,866
195.67	5,442	8,920
195.68	5,453	8,975
195.69	5,464	9,029
195.70	5,474	9,084
195.71	5,485	9,139
195.72	5,496	9,194
195.73	5,507	9,249
195.74	5,517	9,304
195.75	5,528	9,359
195.76	5,539	9,414
195.77	5,549	9,470
195.78	5,560	9,525
195.79	5,571	9,581
195.80	5,582	9,637
195.81	5,592	9,693
195.82	5,603	9,749
195.83	5,614	9,805
195.84	5,624	9,861
195.85	5,635	9,917
195.86	5,646	9,974
195.87	5,657	10,030
195.88	5,667	10,087
195.89	5,678	10,144
195.90	5,689	10,200
195.91	5,700	10,257
195.92	5,710	10,314
195.93	5,721	10,372
195.94	5,732	10,429
195.95	5,742	10,486
195.96	5,753	10,544
195.97	5,764	10,601
195.98	5,775	10,659
195.99	5,785	10,717
196.00	5,796	10,775
196.01	5,807	10,833
196.02	5,819	10,891
196.03	5,830	10,949
196.04	5,841	11,007
196.05	5,852	11,066
196.06	5,864	11,124
196.07	5,875	11,183
196.08	5,886	11,242
196.09	5,898	11,301
196.10	5,909	11,360
196.11	5,920	11,419
196.12	5,931	11,478
196.13	5,943	11,538
196.14	5,954	11,597
196.15	5,965	11,657
196.16	5,976	11,716
196.17	5,988	11,776
196.18	5,999	11,836
196.19	6,010	11,896
196.20	6,022	11,956
196.21	6,033	12,017
196.22	6,044	12,077
196.23	6,055	12,138
196.24	6,067	12,198
196.25	6,078	12,259
196.26	6,089	12,320
196.27	6,101	12,381
196.28	6,112	12,442
196.29	6,123	12,503
196.30	6,134	12,564
196.31	6,146	12,626
196.32	6,157	12,687
196.33	6,168	12,749
196.34	6,180	12,810
196.35	6,191	12,872
196.36	6,202	12,934
196.37	6,213	12,996
196.38	6,225	13,059
196.39	6,236	13,121
196.40	6,247	13,183
196.41	6,258	13,246

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.42	6,270	13,308	196.94	6,856	16,721
196.43	6,281	13,371	196.95	6,868	16,790
196.44	6,292	13,434	196.96	6,879	16,859
196.45	6,304	13,497	196.97	6,890	16,927
196.46	6,315	13,560	196.98	6,901	16,996
196.47	6,326	13,623	196.99	6,913	17,065
196.48	6,337	13,687	197.00	6,924	17,135
196.49	6,349	13,750	197.01	6,936	17,204
196.50	6,360	13,814	197.02	6,948	17,273
196.51	6,371	13,877	197.03	6,960	17,343
196.52	6,383	13,941	197.04	6,971	17,413
196.53	6,394	14,005	197.05	6,983	17,482
196.54	6,405	14,069	197.06	6,995	17,552
196.55	6,416	14,133	197.07	7,007	17,622
196.56	6,428	14,197	197.08	7,019	17,692
196.57	6,439	14,262	197.09	7,031	17,763
196.58	6,450	14,326	197.10	7,042	17,833
196.59	6,462	14,391	197.11	7,054	17,903
196.60	6,473	14,455	197.12	7,066	17,974
196.61	6,484	14,520	197.13	7,078	18,045
196.62	6,495	14,585	197.14	7,090	18,116
196.63	6,507	14,650	197.15	7,102	18,187
196.64	6,518	14,715	197.16	7,113	18,258
196.65	6,529	14,780	197.17	7,125	18,329
196.66	6,540	14,846	197.18	7,137	18,400
196.67	6,552	14,911	197.19	7,149	18,472
196.68	6,563	14,977	197.20	7,161	18,543
196.69	6,574	15,042	197.21	7,173	18,615
196.70	6,586	15,108	197.22	7,184	18,687
196.71	6,597	15,174	197.23	7,196	18,758
196.72	6,608	15,240	197.24	7,208	18,831
196.73	6,619	15,306	197.25	7,220	18,903
196.74	6,631	15,373	197.26	7,232	18,975
196.75	6,642	15,439	197.27	7,244	19,047
196.76	6,653	15,505	197.28	7,256	19,120
196.77	6,665	15,572	197.29	7,267	19,192
196.78	6,676	15,639	197.30	7,279	19,265
196.79	6,687	15,705	197.31	7,291	19,338
196.80	6,698	15,772	197.32	7,303	19,411
196.81	6,710	15,839	197.33	7,315	19,484
196.82	6,721	15,907	197.34	7,327	19,557
196.83	6,732	15,974	197.35	7,338	19,631
196.84	6,744	16,041	197.36	7,350	19,704
196.85	6,755	16,109	197.37	7,362	19,778
196.86	6,766	16,176	197.38	7,374	19,851
196.87	6,777	16,244	197.39	7,386	19,925
196.88	6,789	16,312	197.40	7,398	19,999
196.89	6,800	16,380	197.41	7,409	20,073
196.90	6,811	16,448	197.42	7,421	20,147
196.91	6,822	16,516	197.43	7,433	20,221
196.92	6,834	16,584	197.44	7,445	20,296
196.93	6,845	16,653	197.45	7,457	20,370

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.46	7,469	20,445
197.47	7,480	20,520
197.48	7,492	20,595
197.49	7,504	20,670
197.50	7,516	20,745
197.51	7,528	20,820
197.52	7,540	20,895
197.53	7,552	20,971
197.54	7,563	21,046
197.55	7,575	21,122
197.56	7,587	21,198
197.57	7,599	21,274
197.58	7,611	21,350
197.59	7,623	21,426
197.60	7,634	21,502
197.61	7,646	21,579
197.62	7,658	21,655
197.63	7,670	21,732
197.64	7,682	21,808
197.65	7,694	21,885
197.66	7,705	21,962
197.67	7,717	22,039
197.68	7,729	22,117
197.69	7,741	22,194
197.70	7,753	22,272
197.71	7,765	22,349
197.72	7,776	22,427
197.73	7,788	22,505
197.74	7,800	22,583
197.75	7,812	22,661
197.76	7,824	22,739
197.77	7,836	22,817
197.78	7,848	22,896
197.79	7,859	22,974
197.80	7,871	23,053
197.81	7,883	23,132
197.82	7,895	23,210
197.83	7,907	23,289
197.84	7,919	23,369
197.85	7,930	23,448
197.86	7,942	23,527
197.87	7,954	23,607
197.88	7,966	23,686
197.89	7,978	23,766
197.90	7,990	23,846
197.91	8,001	23,926
197.92	8,013	24,006
197.93	8,025	24,086
197.94	8,037	24,166
197.95	8,049	24,247
197.96	8,061	24,327
197.97	8,072	24,408
197.98	8,084	24,489
197.99	8,096	24,570
198.00	**8,108**	**24,651**

Summary for Pond B-38: Basin #38

Inflow Area = 2.114 ac, 34.96% Impervious, Inflow Depth = 6.47" for Current 100 yr event
Inflow = 14.02 cfs @ 12.17 hrs, Volume= 1.139 af
Outflow = 10.27 cfs @ 12.27 hrs, Volume= 1.038 af, Atten= 27%, Lag= 5.7 min
Primary = 10.27 cfs @ 12.27 hrs, Volume= 1.038 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 207.55' @ 12.27 hrs Surf.Area= 7,436 sf Storage= 17,701 cf

Plug-Flow detention time= 276.6 min calculated for 1.036 af (91% of inflow)
Center-of-Mass det. time= 230.5 min (1,016.6 - 786.1)

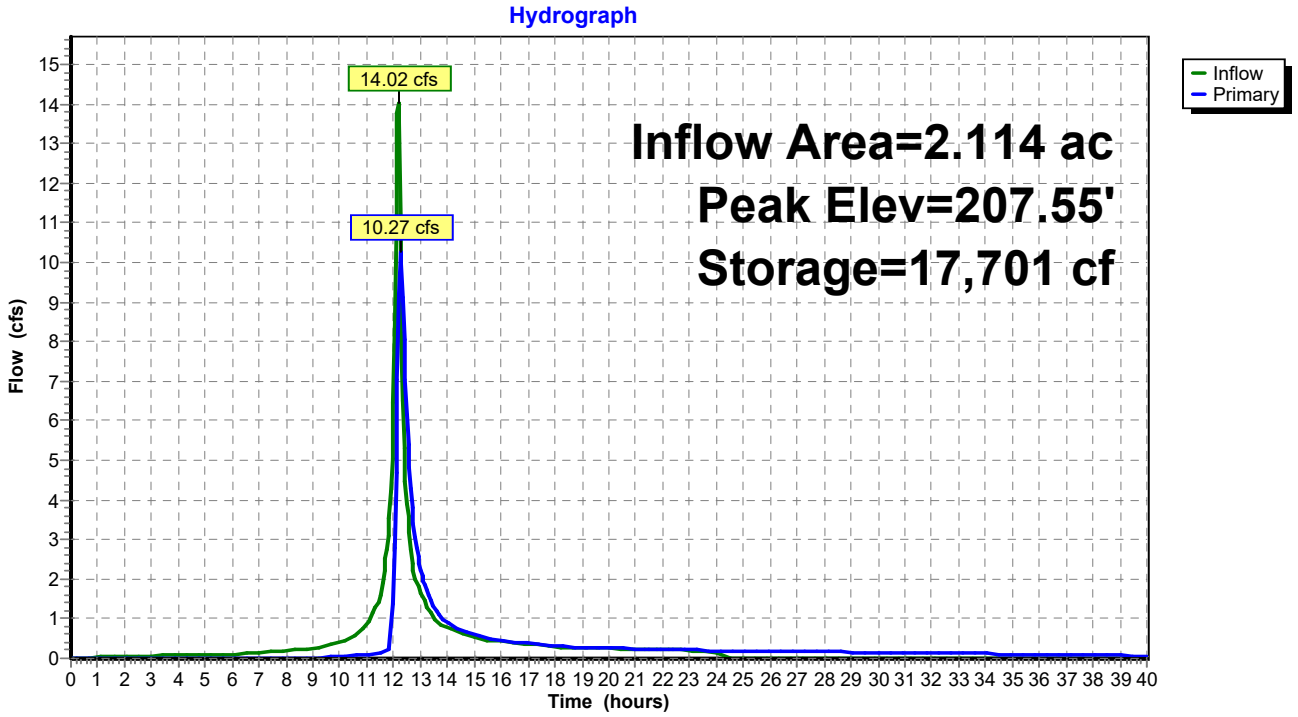
Volume	Invert	Avail.Storage	Storage Description
#1	204.30'	29,525 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
204.30	0	0	0
205.00	5,096	1,784	1,784
206.00	5,966	5,531	7,315
207.00	6,893	6,430	13,744
208.00	7,876	7,385	21,129
209.00	8,916	8,396	29,525

Device	Routing	Invert	Outlet Devices
#1	Primary	204.30'	**18.0" Round Culvert** L= 33.0' Ke= 0.500 Inlet / Outlet Invert= 204.30' / 204.13' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	205.26'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	206.69'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	208.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.13 cfs @ 12.27 hrs HW=207.54' (Free Discharge)
- **1=Culvert** (Passes 10.13 cfs of 13.44 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.24 cfs @ 7.11 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 9.89 cfs @ 3.02 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-38: Basin #38



Stage-Discharge for Pond B-38: Basin #38

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
204.30	0.00	204.82	0.00	205.34	0.01	205.86	0.12
204.31	0.00	204.83	0.00	205.35	0.01	205.87	0.12
204.32	0.00	204.84	0.00	205.36	0.02	205.88	0.12
204.33	0.00	204.85	0.00	205.37	0.02	205.89	0.12
204.34	0.00	204.86	0.00	205.38	0.02	205.90	0.12
204.35	0.00	204.87	0.00	205.39	0.03	205.91	0.12
204.36	0.00	204.88	0.00	205.40	0.03	205.92	0.12
204.37	0.00	204.89	0.00	205.41	0.03	205.93	0.12
204.38	0.00	204.90	0.00	205.42	0.04	205.94	0.12
204.39	0.00	204.91	0.00	205.43	0.04	205.95	0.13
204.40	0.00	204.92	0.00	205.44	0.05	205.96	0.13
204.41	0.00	204.93	0.00	205.45	0.05	205.97	0.13
204.42	0.00	204.94	0.00	205.46	0.05	205.98	0.13
204.43	0.00	204.95	0.00	205.47	0.05	205.99	0.13
204.44	0.00	204.96	0.00	205.48	0.06	206.00	0.13
204.45	0.00	204.97	0.00	205.49	0.06	206.01	0.13
204.46	0.00	204.98	0.00	205.50	0.06	206.02	0.13
204.47	0.00	204.99	0.00	205.51	0.06	206.03	0.13
204.48	0.00	205.00	0.00	205.52	0.06	206.04	0.13
204.49	0.00	205.01	0.00	205.53	0.07	206.05	0.14
204.50	0.00	205.02	0.00	205.54	0.07	206.06	0.14
204.51	0.00	205.03	0.00	205.55	0.07	206.07	0.14
204.52	0.00	205.04	0.00	205.56	0.07	206.08	0.14
204.53	0.00	205.05	0.00	205.57	0.07	206.09	0.14
204.54	0.00	205.06	0.00	205.58	0.08	206.10	0.14
204.55	0.00	205.07	0.00	205.59	0.08	206.11	0.14
204.56	0.00	205.08	0.00	205.60	0.08	206.12	0.14
204.57	0.00	205.09	0.00	205.61	0.08	206.13	0.14
204.58	0.00	205.10	0.00	205.62	0.08	206.14	0.14
204.59	0.00	205.11	0.00	205.63	0.08	206.15	0.15
204.60	0.00	205.12	0.00	205.64	0.09	206.16	0.15
204.61	0.00	205.13	0.00	205.65	0.09	206.17	0.15
204.62	0.00	205.14	0.00	205.66	0.09	206.18	0.15
204.63	0.00	205.15	0.00	205.67	0.09	206.19	0.15
204.64	0.00	205.16	0.00	205.68	0.09	206.20	0.15
204.65	0.00	205.17	0.00	205.69	0.09	206.21	0.15
204.66	0.00	205.18	0.00	205.70	0.10	206.22	0.15
204.67	0.00	205.19	0.00	205.71	0.10	206.23	0.15
204.68	0.00	205.20	0.00	205.72	0.10	206.24	0.15
204.69	0.00	205.21	0.00	205.73	0.10	206.25	0.15
204.70	0.00	205.22	0.00	205.74	0.10	206.26	0.16
204.71	0.00	205.23	0.00	205.75	0.10	206.27	0.16
204.72	0.00	205.24	0.00	205.76	0.10	206.28	0.16
204.73	0.00	205.25	0.00	205.77	0.10	206.29	0.16
204.74	0.00	205.26	0.00	205.78	0.11	206.30	0.16
204.75	0.00	205.27	0.00	205.79	0.11	206.31	0.16
204.76	0.00	205.28	0.00	205.80	0.11	206.32	0.16
204.77	0.00	205.29	0.00	205.81	0.11	206.33	0.16
204.78	0.00	205.30	0.00	205.82	0.11	206.34	0.16
204.79	0.00	205.31	0.00	205.83	0.11	206.35	0.16
204.80	0.00	205.32	0.01	205.84	0.11	206.36	0.16
204.81	0.00	205.33	0.01	205.85	0.11	206.37	0.16

Stage-Discharge for Pond B-38: Basin #38 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
206.38	0.17	206.90	1.45	207.42	8.10	207.94	14.46
206.39	0.17	206.91	1.54	207.43	8.25	207.95	14.49
206.40	0.17	206.92	1.63	207.44	8.41	207.96	14.51
206.41	0.17	206.93	1.72	207.45	8.57	207.97	14.54
206.42	0.17	206.94	1.82	207.46	8.74	207.98	14.56
206.43	0.17	206.95	1.92	207.47	8.90	207.99	14.59
206.44	0.17	206.96	2.02	207.48	9.06	208.00	14.61
206.45	0.17	206.97	2.12	207.49	9.22	208.01	14.64
206.46	0.17	206.98	2.22	207.50	9.39	208.02	14.66
206.47	0.17	206.99	2.33	207.51	9.55	208.03	14.69
206.48	0.17	207.00	2.43	207.52	9.72	208.04	14.71
206.49	0.17	207.01	2.54	207.53	9.89	208.05	14.74
206.50	0.17	207.02	2.65	207.54	10.06	208.06	14.76
206.51	0.18	207.03	2.76	207.55	10.23	208.07	14.79
206.52	0.18	207.04	2.87	207.56	10.40	208.08	14.81
206.53	0.18	207.05	2.99	207.57	10.57	208.09	14.84
206.54	0.18	207.06	3.10	207.58	10.74	208.10	14.86
206.55	0.18	207.07	3.22	207.59	10.91	208.11	14.88
206.56	0.18	207.08	3.34	207.60	11.08	208.12	14.91
206.57	0.18	207.09	3.46	207.61	11.26	208.13	14.93
206.58	0.18	207.10	3.58	207.62	11.43	208.14	14.96
206.59	0.18	207.11	3.70	207.63	11.61	208.15	14.98
206.60	0.18	207.12	3.83	207.64	11.78	208.16	15.01
206.61	0.18	207.13	3.95	207.65	11.96	208.17	15.03
206.62	0.18	207.14	4.08	207.66	12.14	208.18	15.05
206.63	0.18	207.15	4.21	207.67	12.32	208.19	15.08
206.64	0.19	207.16	4.34	207.68	12.50	208.20	15.10
206.65	0.19	207.17	4.47	207.69	12.68	208.21	15.13
206.66	0.19	207.18	4.60	207.70	12.86	208.22	15.15
206.67	0.19	207.19	4.73	207.71	13.04	208.23	15.17
206.68	0.19	207.20	4.86	207.72	13.22	208.24	15.20
206.69	0.19	207.21	5.00	207.73	13.40	208.25	15.22
206.70	0.20	207.22	5.14	207.74	13.59	208.26	15.36
206.71	0.23	207.23	5.27	207.75	13.77	208.27	15.60
206.72	0.26	207.24	5.41	207.76	13.96	208.28	15.90
206.73	0.30	207.25	5.55	207.77	14.03	208.29	16.25
206.74	0.34	207.26	5.69	207.78	14.06	208.30	16.65
206.75	0.38	207.27	5.84	207.79	14.08	208.31	17.09
206.76	0.44	207.28	5.98	207.80	14.11	208.32	17.56
206.77	0.49	207.29	6.12	207.81	14.14	208.33	18.07
206.78	0.55	207.30	6.27	207.82	14.16	208.34	18.61
206.79	0.61	207.31	6.42	207.83	14.19	208.35	19.17
206.80	0.67	207.32	6.56	207.84	14.21	208.36	19.77
206.81	0.74	207.33	6.71	207.85	14.24	208.37	20.40
206.82	0.81	207.34	6.86	207.86	14.26	208.38	21.05
206.83	0.88	207.35	7.01	207.87	14.29	208.39	21.72
206.84	0.95	207.36	7.16	207.88	14.31	208.40	22.42
206.85	1.03	207.37	7.32	207.89	14.34	208.41	23.14
206.86	1.11	207.38	7.47	207.90	14.36	208.42	23.89
206.87	1.19	207.39	7.63	207.91	14.39	208.43	24.66
206.88	1.28	207.40	7.78	207.92	14.41	208.44	25.44
206.89	1.36	207.41	7.94	207.93	14.44	208.45	26.25

Stage-Discharge for Pond B-38: Basin #38 (continued)

Elevation (feet)	Primary (cfs)
208.46	27.12
208.47	28.02
208.48	28.94
208.49	29.89
208.50	30.86
208.51	31.85
208.52	32.88
208.53	33.92
208.54	34.99
208.55	36.09
208.56	37.21
208.57	38.35
208.58	39.52
208.59	40.71
208.60	41.93
208.61	43.17
208.62	44.43
208.63	45.72
208.64	47.04
208.65	48.37
208.66	49.76
208.67	51.18
208.68	52.62
208.69	54.08
208.70	55.58
208.71	57.09
208.72	58.64
208.73	60.21
208.74	61.81
208.75	63.43
208.76	65.08
208.77	66.76
208.78	68.46
208.79	70.19
208.80	71.95
208.81	73.73
208.82	75.54
208.83	77.38
208.84	79.24
208.85	81.14
208.86	82.78
208.87	84.45
208.88	86.12
208.89	87.81
208.90	89.51
208.91	91.23
208.92	92.96
208.93	94.70
208.94	96.45
208.95	98.22
208.96	100.00
208.97	101.79
208.98	103.60
208.99	105.42
209.00	**107.25**

Stage-Area-Storage for Pond B-38: Basin #38

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.30	0	0	204.82	3,786	984
204.31	73	0	204.83	3,858	1,022
204.32	146	1	204.84	3,931	1,061
204.33	218	3	204.85	4,004	1,101
204.34	291	6	204.86	4,077	1,142
204.35	364	9	204.87	4,150	1,183
204.36	437	13	204.88	4,222	1,224
204.37	510	18	204.89	4,295	1,267
204.38	582	23	204.90	4,368	1,310
204.39	655	29	204.91	4,441	1,354
204.40	728	36	204.92	4,514	1,399
204.41	801	44	204.93	4,586	1,445
204.42	874	52	204.94	4,659	1,491
204.43	946	62	204.95	4,732	1,538
204.44	1,019	71	204.96	4,805	1,586
204.45	1,092	82	204.97	4,878	1,634
204.46	1,165	93	204.98	4,950	1,683
204.47	1,238	105	204.99	5,023	1,733
204.48	1,310	118	205.00	5,096	1,784
204.49	1,383	131	205.01	5,105	1,835
204.50	1,456	146	205.02	5,113	1,886
204.51	1,529	161	205.03	5,122	1,937
204.52	1,602	176	205.04	5,131	1,988
204.53	1,674	193	205.05	5,140	2,039
204.54	1,747	210	205.06	5,148	2,091
204.55	1,820	228	205.07	5,157	2,142
204.56	1,893	246	205.08	5,166	2,194
204.57	1,966	265	205.09	5,174	2,246
204.58	2,038	285	205.10	5,183	2,298
204.59	2,111	306	205.11	5,192	2,349
204.60	2,184	328	205.12	5,200	2,401
204.61	2,257	350	205.13	5,209	2,453
204.62	2,330	373	205.14	5,218	2,506
204.63	2,402	396	205.15	5,227	2,558
204.64	2,475	421	205.16	5,235	2,610
204.65	2,548	446	205.17	5,244	2,662
204.66	2,621	472	205.18	5,253	2,715
204.67	2,694	498	205.19	5,261	2,768
204.68	2,766	526	205.20	5,270	2,820
204.69	2,839	554	205.21	5,279	2,873
204.70	2,912	582	205.22	5,287	2,926
204.71	2,985	612	205.23	5,296	2,979
204.72	3,058	642	205.24	5,305	3,032
204.73	3,130	673	205.25	5,314	3,085
204.74	3,203	705	205.26	5,322	3,138
204.75	3,276	737	205.27	5,331	3,191
204.76	3,349	770	205.28	5,340	3,245
204.77	3,422	804	205.29	5,348	3,298
204.78	3,494	839	205.30	5,357	3,352
204.79	3,567	874	205.31	5,366	3,405
204.80	3,640	910	205.32	5,374	3,459
204.81	3,713	947	205.33	5,383	3,513

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.34	5,392	3,567
205.35	5,401	3,620
205.36	5,409	3,675
205.37	5,418	3,729
205.38	5,427	3,783
205.39	5,435	3,837
205.40	5,444	3,892
205.41	5,453	3,946
205.42	5,461	4,001
205.43	5,470	4,055
205.44	5,479	4,110
205.45	5,488	4,165
205.46	5,496	4,220
205.47	5,505	4,275
205.48	5,514	4,330
205.49	5,522	4,385
205.50	5,531	4,440
205.51	5,540	4,496
205.52	5,548	4,551
205.53	5,557	4,607
205.54	5,566	4,662
205.55	5,575	4,718
205.56	5,583	4,774
205.57	5,592	4,830
205.58	5,601	4,886
205.59	5,609	4,942
205.60	5,618	4,998
205.61	5,627	5,054
205.62	5,635	5,110
205.63	5,644	5,167
205.64	5,653	5,223
205.65	5,662	5,280
205.66	5,670	5,336
205.67	5,679	5,393
205.68	5,688	5,450
205.69	5,696	5,507
205.70	5,705	5,564
205.71	5,714	5,621
205.72	5,722	5,678
205.73	5,731	5,735
205.74	5,740	5,793
205.75	5,749	5,850
205.76	5,757	5,908
205.77	5,766	5,965
205.78	5,775	6,023
205.79	5,783	6,081
205.80	5,792	6,139
205.81	5,801	6,197
205.82	5,809	6,255
205.83	5,818	6,313
205.84	5,827	6,371
205.85	5,836	6,429
205.86	5,844	6,488
205.87	5,853	6,546
205.88	5,862	6,605
205.89	5,870	6,664
205.90	5,879	6,722
205.91	5,888	6,781
205.92	5,896	6,840
205.93	5,905	6,899
205.94	5,914	6,958
205.95	5,923	7,017
205.96	5,931	7,077
205.97	5,940	7,136
205.98	5,949	7,195
205.99	5,957	7,255
206.00	5,966	7,315
206.01	5,975	7,374
206.02	5,985	7,434
206.03	5,994	7,494
206.04	6,003	7,554
206.05	6,012	7,614
206.06	6,022	7,674
206.07	6,031	7,734
206.08	6,040	7,795
206.09	6,049	7,855
206.10	6,059	7,916
206.11	6,068	7,976
206.12	6,077	8,037
206.13	6,087	8,098
206.14	6,096	8,159
206.15	6,105	8,220
206.16	6,114	8,281
206.17	6,124	8,342
206.18	6,133	8,403
206.19	6,142	8,465
206.20	6,151	8,526
206.21	6,161	8,588
206.22	6,170	8,650
206.23	6,179	8,711
206.24	6,188	8,773
206.25	6,198	8,835
206.26	6,207	8,897
206.27	6,216	8,959
206.28	6,226	9,021
206.29	6,235	9,084
206.30	6,244	9,146
206.31	6,253	9,209
206.32	6,263	9,271
206.33	6,272	9,334
206.34	6,281	9,397
206.35	6,290	9,459
206.36	6,300	9,522
206.37	6,309	9,585

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
206.38	6,318	9,649
206.39	6,328	9,712
206.40	6,337	9,775
206.41	6,346	9,839
206.42	6,355	9,902
206.43	6,365	9,966
206.44	6,374	10,029
206.45	6,383	10,093
206.46	6,392	10,157
206.47	6,402	10,221
206.48	6,411	10,285
206.49	6,420	10,349
206.50	6,430	10,413
206.51	6,439	10,478
206.52	6,448	10,542
206.53	6,457	10,607
206.54	6,467	10,671
206.55	6,476	10,736
206.56	6,485	10,801
206.57	6,494	10,866
206.58	6,504	10,931
206.59	6,513	10,996
206.60	6,522	11,061
206.61	6,531	11,126
206.62	6,541	11,192
206.63	6,550	11,257
206.64	6,559	11,323
206.65	6,569	11,388
206.66	6,578	11,454
206.67	6,587	11,520
206.68	6,596	11,586
206.69	6,606	11,652
206.70	6,615	11,718
206.71	6,624	11,784
206.72	6,633	11,850
206.73	6,643	11,917
206.74	6,652	11,983
206.75	6,661	12,050
206.76	6,671	12,116
206.77	6,680	12,183
206.78	6,689	12,250
206.79	6,698	12,317
206.80	6,708	12,384
206.81	6,717	12,451
206.82	6,726	12,518
206.83	6,735	12,586
206.84	6,745	12,653
206.85	6,754	12,721
206.86	6,763	12,788
206.87	6,772	12,856
206.88	6,782	12,924
206.89	6,791	12,991
206.90	6,800	13,059
206.91	6,810	13,127
206.92	6,819	13,196
206.93	6,828	13,264
206.94	6,837	13,332
206.95	6,847	13,401
206.96	6,856	13,469
206.97	6,865	13,538
206.98	6,874	13,606
206.99	6,884	13,675
207.00	6,893	13,744
207.01	6,903	13,813
207.02	6,913	13,882
207.03	6,922	13,951
207.04	6,932	14,021
207.05	6,942	14,090
207.06	6,952	14,159
207.07	6,962	14,229
207.08	6,972	14,299
207.09	6,981	14,368
207.10	6,991	14,438
207.11	7,001	14,508
207.12	7,011	14,578
207.13	7,021	14,648
207.14	7,031	14,719
207.15	7,040	14,789
207.16	7,050	14,860
207.17	7,060	14,930
207.18	7,070	15,001
207.19	7,080	15,072
207.20	7,090	15,142
207.21	7,099	15,213
207.22	7,109	15,284
207.23	7,119	15,355
207.24	7,129	15,427
207.25	7,139	15,498
207.26	7,149	15,570
207.27	7,158	15,641
207.28	7,168	15,713
207.29	7,178	15,784
207.30	7,188	15,856
207.31	7,198	15,928
207.32	7,208	16,000
207.33	7,217	16,072
207.34	7,227	16,145
207.35	7,237	16,217
207.36	7,247	16,289
207.37	7,257	16,362
207.38	7,267	16,434
207.39	7,276	16,507
207.40	7,286	16,580
207.41	7,296	16,653

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
207.42	7,306	16,726	207.94	7,817	20,658
207.43	7,316	16,799	207.95	7,827	20,736
207.44	7,326	16,872	207.96	7,837	20,814
207.45	7,335	16,945	207.97	7,847	20,893
207.46	7,345	17,019	207.98	7,856	20,971
207.47	7,355	17,092	207.99	7,866	21,050
207.48	7,365	17,166	208.00	7,876	21,129
207.49	7,375	17,240	208.01	7,886	21,207
207.50	7,385	17,313	208.02	7,897	21,286
207.51	7,394	17,387	208.03	7,907	21,365
207.52	7,404	17,461	208.04	7,918	21,444
207.53	7,414	17,535	208.05	7,928	21,524
207.54	7,424	17,610	208.06	7,938	21,603
207.55	7,434	17,684	208.07	7,949	21,682
207.56	7,443	17,758	208.08	7,959	21,762
207.57	7,453	17,833	208.09	7,970	21,842
207.58	7,463	17,907	208.10	7,980	21,921
207.59	7,473	17,982	208.11	7,990	22,001
207.60	7,483	18,057	208.12	8,001	22,081
207.61	7,493	18,132	208.13	8,011	22,161
207.62	7,502	18,207	208.14	8,022	22,241
207.63	7,512	18,282	208.15	8,032	22,322
207.64	7,522	18,357	208.16	8,042	22,402
207.65	7,532	18,432	208.17	8,053	22,483
207.66	7,542	18,508	208.18	8,063	22,563
207.67	7,552	18,583	208.19	8,074	22,644
207.68	7,561	18,659	208.20	8,084	22,725
207.69	7,571	18,734	208.21	8,094	22,805
207.70	7,581	18,810	208.22	8,105	22,886
207.71	7,591	18,886	208.23	8,115	22,968
207.72	7,601	18,962	208.24	8,126	23,049
207.73	7,611	19,038	208.25	8,136	23,130
207.74	7,620	19,114	208.26	8,146	23,212
207.75	7,630	19,190	208.27	8,157	23,293
207.76	7,640	19,267	208.28	8,167	23,375
207.77	7,650	19,343	208.29	8,178	23,456
207.78	7,660	19,420	208.30	8,188	23,538
207.79	7,670	19,496	208.31	8,198	23,620
207.80	7,679	19,573	208.32	8,209	23,702
207.81	7,689	19,650	208.33	8,219	23,784
207.82	7,699	19,727	208.34	8,230	23,867
207.83	7,709	19,804	208.35	8,240	23,949
207.84	7,719	19,881	208.36	8,250	24,031
207.85	7,729	19,958	208.37	8,261	24,114
207.86	7,738	20,036	208.38	8,271	24,197
207.87	7,748	20,113	208.39	8,282	24,279
207.88	7,758	20,191	208.40	8,292	24,362
207.89	7,768	20,268	208.41	8,302	24,445
207.90	7,778	20,346	208.42	8,313	24,528
207.91	7,788	20,424	208.43	8,323	24,611
207.92	7,797	20,502	208.44	8,334	24,695
207.93	7,807	20,580	208.45	8,344	24,778

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
208.46	8,354	24,862
208.47	8,365	24,945
208.48	8,375	25,029
208.49	8,386	25,113
208.50	8,396	25,197
208.51	8,406	25,281
208.52	8,417	25,365
208.53	8,427	25,449
208.54	8,438	25,533
208.55	8,448	25,618
208.56	8,458	25,702
208.57	8,469	25,787
208.58	8,479	25,872
208.59	8,490	25,956
208.60	8,500	26,041
208.61	8,510	26,126
208.62	8,521	26,212
208.63	8,531	26,297
208.64	8,542	26,382
208.65	8,552	26,468
208.66	8,562	26,553
208.67	8,573	26,639
208.68	8,583	26,725
208.69	8,594	26,811
208.70	8,604	26,897
208.71	8,614	26,983
208.72	8,625	27,069
208.73	8,635	27,155
208.74	8,646	27,242
208.75	8,656	27,328
208.76	8,666	27,415
208.77	8,677	27,501
208.78	8,687	27,588
208.79	8,698	27,675
208.80	8,708	27,762
208.81	8,718	27,849
208.82	8,729	27,937
208.83	8,739	28,024
208.84	8,750	28,111
208.85	8,760	28,199
208.86	8,770	28,287
208.87	8,781	28,374
208.88	8,791	28,462
208.89	8,802	28,550
208.90	8,812	28,638
208.91	8,822	28,726
208.92	8,833	28,815
208.93	8,843	28,903
208.94	8,854	28,992
208.95	8,864	29,080
208.96	8,874	29,169
208.97	8,885	29,258
208.98	8,895	29,346
208.99	8,906	29,435
209.00	**8,916**	**29,525**

Summary for Pond B-39: Basin #39

Inflow Area = 1.884 ac, 41.56% Impervious, Inflow Depth = 6.66" for Current 100 yr event
Inflow = 12.73 cfs @ 12.17 hrs, Volume= 1.045 af
Outflow = 10.92 cfs @ 12.23 hrs, Volume= 0.971 af, Atten= 14%, Lag= 3.7 min
Primary = 10.92 cfs @ 12.23 hrs, Volume= 0.971 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.88' @ 12.23 hrs Surf.Area= 4,389 sf Storage= 11,502 cf

Plug-Flow detention time= 119.6 min calculated for 0.971 af (93% of inflow)
Center-of-Mass det. time= 79.9 min (860.7 - 780.8)

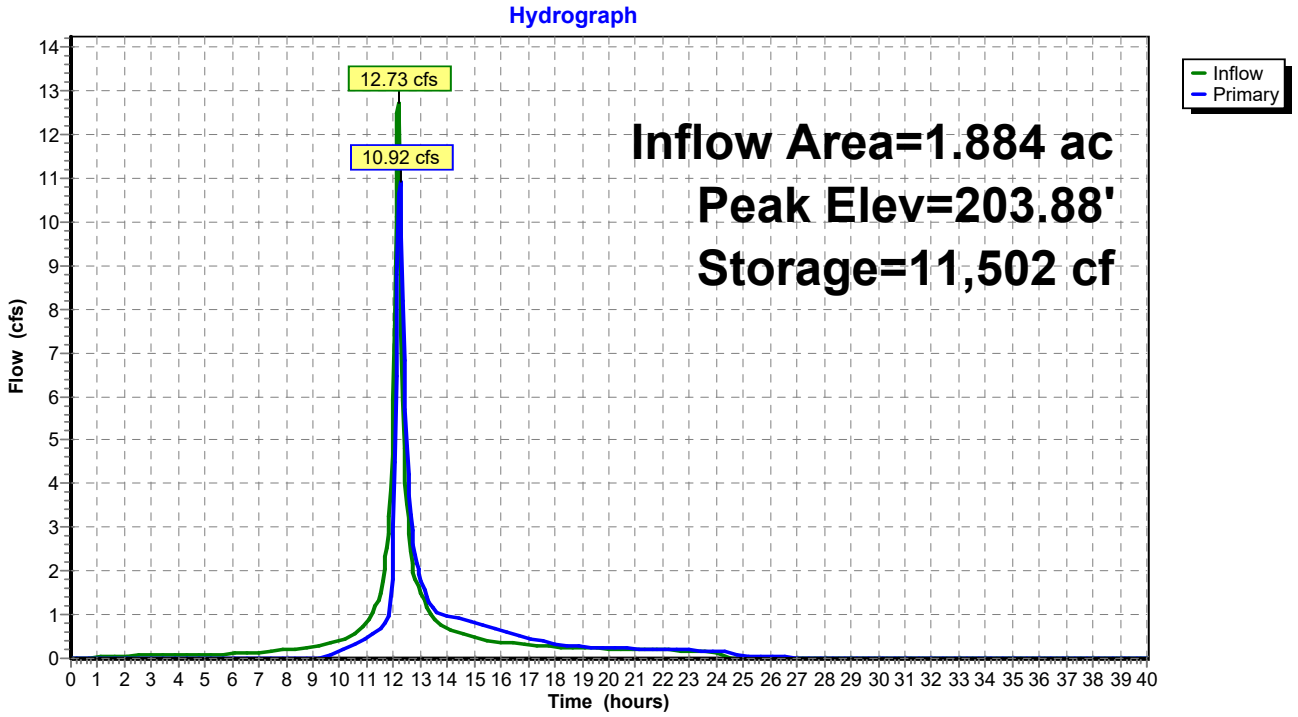
Volume	Invert	Avail.Storage	Storage Description
#1	200.30'	16,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.30	0	0	0
201.00	2,928	1,025	1,025
202.00	3,408	3,168	4,193
203.00	3,917	3,663	7,855
204.00	4,454	4,186	12,041
205.00	5,019	4,737	16,777

Device	Routing	Invert	Outlet Devices
#1	Primary	200.30'	**18.0" Round Culvert** L= 38.0' Ke= 0.500 Inlet / Outlet Invert= 200.30' / 200.11' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.71'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.04'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.77 cfs @ 12.23 hrs HW=203.87' (Free Discharge)
- **1=Culvert** (Passes 10.77 cfs of 14.29 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.31 cfs @ 6.65 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 9.46 cfs @ 2.98 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-39: Basin #39



Stage-Discharge for Pond B-39: Basin #39

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.30	0.00	200.82	0.00	201.34	0.00	201.86	0.07
200.31	0.00	200.83	0.00	201.35	0.00	201.87	0.07
200.32	0.00	200.84	0.00	201.36	0.00	201.88	0.08
200.33	0.00	200.85	0.00	201.37	0.00	201.89	0.09
200.34	0.00	200.86	0.00	201.38	0.00	201.90	0.10
200.35	0.00	200.87	0.00	201.39	0.00	201.91	0.11
200.36	0.00	200.88	0.00	201.40	0.00	201.92	0.12
200.37	0.00	200.89	0.00	201.41	0.00	201.93	0.13
200.38	0.00	200.90	0.00	201.42	0.00	201.94	0.14
200.39	0.00	200.91	0.00	201.43	0.00	201.95	0.16
200.40	0.00	200.92	0.00	201.44	0.00	201.96	0.17
200.41	0.00	200.93	0.00	201.45	0.00	201.97	0.18
200.42	0.00	200.94	0.00	201.46	0.00	201.98	0.19
200.43	0.00	200.95	0.00	201.47	0.00	201.99	0.20
200.44	0.00	200.96	0.00	201.48	0.00	202.00	0.22
200.45	0.00	200.97	0.00	201.49	0.00	202.01	0.23
200.46	0.00	200.98	0.00	201.50	0.00	202.02	0.24
200.47	0.00	200.99	0.00	201.51	0.00	202.03	0.26
200.48	0.00	201.00	0.00	201.52	0.00	202.04	0.27
200.49	0.00	201.01	0.00	201.53	0.00	202.05	0.28
200.50	0.00	201.02	0.00	201.54	0.00	202.06	0.30
200.51	0.00	201.03	0.00	201.55	0.00	202.07	0.31
200.52	0.00	201.04	0.00	201.56	0.00	202.08	0.32
200.53	0.00	201.05	0.00	201.57	0.00	202.09	0.34
200.54	0.00	201.06	0.00	201.58	0.00	202.10	0.35
200.55	0.00	201.07	0.00	201.59	0.00	202.11	0.36
200.56	0.00	201.08	0.00	201.60	0.00	202.12	0.38
200.57	0.00	201.09	0.00	201.61	0.00	202.13	0.39
200.58	0.00	201.10	0.00	201.62	0.00	202.14	0.40
200.59	0.00	201.11	0.00	201.63	0.00	202.15	0.41
200.60	0.00	201.12	0.00	201.64	0.00	202.16	0.43
200.61	0.00	201.13	0.00	201.65	0.00	202.17	0.44
200.62	0.00	201.14	0.00	201.66	0.00	202.18	0.45
200.63	0.00	201.15	0.00	201.67	0.00	202.19	0.46
200.64	0.00	201.16	0.00	201.68	0.00	202.20	0.47
200.65	0.00	201.17	0.00	201.69	0.00	202.21	0.47
200.66	0.00	201.18	0.00	201.70	0.00	202.22	0.48
200.67	0.00	201.19	0.00	201.71	0.00	202.23	0.49
200.68	0.00	201.20	0.00	201.72	0.00	202.24	0.50
200.69	0.00	201.21	0.00	201.73	0.00	202.25	0.51
200.70	0.00	201.22	0.00	201.74	0.00	202.26	0.52
200.71	0.00	201.23	0.00	201.75	0.01	202.27	0.53
200.72	0.00	201.24	0.00	201.76	0.01	202.28	0.53
200.73	0.00	201.25	0.00	201.77	0.01	202.29	0.54
200.74	0.00	201.26	0.00	201.78	0.02	202.30	0.55
200.75	0.00	201.27	0.00	201.79	0.02	202.31	0.56
200.76	0.00	201.28	0.00	201.80	0.02	202.32	0.57
200.77	0.00	201.29	0.00	201.81	0.03	202.33	0.58
200.78	0.00	201.30	0.00	201.82	0.04	202.34	0.58
200.79	0.00	201.31	0.00	201.83	0.04	202.35	0.59
200.80	0.00	201.32	0.00	201.84	0.05	202.36	0.60
200.81	0.00	201.33	0.00	201.85	0.06	202.37	0.61

Stage-Discharge for Pond B-39: Basin #39 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
202.38	0.61	202.90	0.92	203.42	4.15	203.94	12.00
202.39	0.62	202.91	0.92	203.43	4.27	203.95	12.17
202.40	0.63	202.92	0.93	203.44	4.39	203.96	12.35
202.41	0.63	202.93	0.93	203.45	4.52	203.97	12.53
202.42	0.64	202.94	0.94	203.46	4.64	203.98	12.70
202.43	0.65	202.95	0.94	203.47	4.77	203.99	12.88
202.44	0.66	202.96	0.95	203.48	4.90	204.00	13.06
202.45	0.66	202.97	0.95	203.49	5.03	204.01	13.24
202.46	0.67	202.98	0.95	203.50	5.16	204.02	13.42
202.47	0.68	202.99	0.96	203.51	5.29	204.03	13.61
202.48	0.68	203.00	0.96	203.52	5.43	204.04	13.79
202.49	0.69	203.01	0.97	203.53	5.56	204.05	13.97
202.50	0.69	203.02	0.97	203.54	5.70	204.06	14.16
202.51	0.70	203.03	0.98	203.55	5.83	204.07	14.34
202.52	0.71	203.04	0.98	203.56	5.97	204.08	14.53
202.53	0.71	203.05	1.00	203.57	6.11	204.09	14.71
202.54	0.72	203.06	1.03	203.58	6.25	204.10	14.86
202.55	0.73	203.07	1.06	203.59	6.40	204.11	14.88
202.56	0.73	203.08	1.10	203.60	6.54	204.12	14.91
202.57	0.74	203.09	1.15	203.61	6.68	204.13	14.93
202.58	0.74	203.10	1.20	203.62	6.83	204.14	14.96
202.59	0.75	203.11	1.26	203.63	6.97	204.15	14.98
202.60	0.76	203.12	1.31	203.64	7.12	204.16	15.01
202.61	0.76	203.13	1.37	203.65	7.27	204.17	15.03
202.62	0.77	203.14	1.44	203.66	7.42	204.18	15.05
202.63	0.77	203.15	1.51	203.67	7.57	204.19	15.08
202.64	0.78	203.16	1.58	203.68	7.72	204.20	15.10
202.65	0.79	203.17	1.65	203.69	7.88	204.21	15.13
202.66	0.79	203.18	1.72	203.70	8.03	204.22	15.15
202.67	0.80	203.19	1.80	203.71	8.18	204.23	15.17
202.68	0.80	203.20	1.88	203.72	8.34	204.24	15.20
202.69	0.81	203.21	1.97	203.73	8.50	204.25	15.22
202.70	0.81	203.22	2.05	203.74	8.65	204.26	15.24
202.71	0.82	203.23	2.14	203.75	8.81	204.27	15.27
202.72	0.82	203.24	2.23	203.76	8.97	204.28	15.29
202.73	0.83	203.25	2.32	203.77	9.13	204.29	15.32
202.74	0.83	203.26	2.41	203.78	9.29	204.30	15.34
202.75	0.84	203.27	2.51	203.79	9.46	204.31	15.36
202.76	0.85	203.28	2.61	203.80	9.62	204.32	15.39
202.77	0.85	203.29	2.70	203.81	9.78	204.33	15.41
202.78	0.86	203.30	2.81	203.82	9.95	204.34	15.43
202.79	0.86	203.31	2.91	203.83	10.11	204.35	15.46
202.80	0.87	203.32	3.01	203.84	10.28	204.36	15.48
202.81	0.87	203.33	3.12	203.85	10.45	204.37	15.50
202.82	0.88	203.34	3.23	203.86	10.62	204.38	15.53
202.83	0.88	203.35	3.34	203.87	10.79	204.39	15.55
202.84	0.89	203.36	3.45	203.88	10.96	204.40	15.57
202.85	0.89	203.37	3.56	203.89	11.13	204.41	15.60
202.86	0.90	203.38	3.68	203.90	11.30	204.42	15.62
202.87	0.90	203.39	3.79	203.91	11.47	204.43	15.64
202.88	0.91	203.40	3.91	203.92	11.65	204.44	15.67
202.89	0.91	203.41	4.03	203.93	11.82	204.45	15.69

Stage-Discharge for Pond B-39: Basin #39 (continued)

Elevation (feet)	Primary (cfs)
204.46	15.71
204.47	15.74
204.48	15.76
204.49	15.78
204.50	15.80
204.51	15.94
204.52	16.18
204.53	16.48
204.54	16.83
204.55	17.23
204.56	17.67
204.57	18.14
204.58	18.64
204.59	19.18
204.60	19.75
204.61	20.35
204.62	20.97
204.63	21.62
204.64	22.29
204.65	22.99
204.66	23.71
204.67	24.46
204.68	25.22
204.69	26.01
204.70	26.82
204.71	27.69
204.72	28.58
204.73	29.50
204.74	30.45
204.75	31.42
204.76	32.42
204.77	33.44
204.78	34.48
204.79	35.55
204.80	36.65
204.81	37.76
204.82	38.91
204.83	40.08
204.84	41.27
204.85	42.48
204.86	43.72
204.87	44.99
204.88	46.28
204.89	47.59
204.90	48.93
204.91	50.31
204.92	51.73
204.93	53.17
204.94	54.63
204.95	56.12
204.96	57.64
204.97	59.19
204.98	60.76
204.99	62.35
205.00	**63.98**

Stage-Area-Storage for Pond B-39: Basin #39

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.30	0	0
200.31	42	0
200.32	84	1
200.33	125	2
200.34	167	3
200.35	209	5
200.36	251	8
200.37	293	10
200.38	335	13
200.39	376	17
200.40	418	21
200.41	460	25
200.42	502	30
200.43	544	35
200.44	586	41
200.45	627	47
200.46	669	54
200.47	711	60
200.48	753	68
200.49	795	76
200.50	837	84
200.51	878	92
200.52	920	101
200.53	962	111
200.54	1,004	120
200.55	1,046	131
200.56	1,088	141
200.57	1,129	152
200.58	1,171	164
200.59	1,213	176
200.60	1,255	188
200.61	1,297	201
200.62	1,339	214
200.63	1,380	228
200.64	1,422	242
200.65	1,464	256
200.66	1,506	271
200.67	1,548	286
200.68	1,589	302
200.69	1,631	318
200.70	1,673	335
200.71	1,715	352
200.72	1,757	369
200.73	1,799	387
200.74	1,840	405
200.75	1,882	424
200.76	1,924	443
200.77	1,966	462
200.78	2,008	482
200.79	2,050	502
200.80	2,091	523
200.81	2,133	544
200.82	2,175	566
200.83	2,217	587
200.84	2,259	610
200.85	2,301	633
200.86	2,342	656
200.87	2,384	680
200.88	2,426	704
200.89	2,468	728
200.90	2,510	753
200.91	2,552	778
200.92	2,593	804
200.93	2,635	830
200.94	2,677	857
200.95	2,719	884
200.96	2,761	911
200.97	2,803	939
200.98	2,844	967
200.99	2,886	996
201.00	2,928	1,025
201.01	2,933	1,054
201.02	2,938	1,083
201.03	2,942	1,113
201.04	2,947	1,142
201.05	2,952	1,172
201.06	2,957	1,201
201.07	2,962	1,231
201.08	2,966	1,261
201.09	2,971	1,290
201.10	2,976	1,320
201.11	2,981	1,350
201.12	2,986	1,380
201.13	2,990	1,409
201.14	2,995	1,439
201.15	3,000	1,469
201.16	3,005	1,499
201.17	3,010	1,529
201.18	3,014	1,560
201.19	3,019	1,590
201.20	3,024	1,620
201.21	3,029	1,650
201.22	3,034	1,681
201.23	3,038	1,711
201.24	3,043	1,741
201.25	3,048	1,772
201.26	3,053	1,802
201.27	3,058	1,833
201.28	3,062	1,863
201.29	3,067	1,894
201.30	3,072	1,925
201.31	3,077	1,956
201.32	3,082	1,986
201.33	3,086	2,017

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.34	3,091	2,048
201.35	3,096	2,079
201.36	3,101	2,110
201.37	3,106	2,141
201.38	3,110	2,172
201.39	3,115	2,203
201.40	3,120	2,234
201.41	3,125	2,266
201.42	3,130	2,297
201.43	3,134	2,328
201.44	3,139	2,360
201.45	3,144	2,391
201.46	3,149	2,422
201.47	3,154	2,454
201.48	3,158	2,486
201.49	3,163	2,517
201.50	3,168	2,549
201.51	3,173	2,581
201.52	3,178	2,612
201.53	3,182	2,644
201.54	3,187	2,676
201.55	3,192	2,708
201.56	3,197	2,740
201.57	3,202	2,772
201.58	3,206	2,804
201.59	3,211	2,836
201.60	3,216	2,868
201.61	3,221	2,900
201.62	3,226	2,932
201.63	3,230	2,965
201.64	3,235	2,997
201.65	3,240	3,029
201.66	3,245	3,062
201.67	3,250	3,094
201.68	3,254	3,127
201.69	3,259	3,159
201.70	3,264	3,192
201.71	3,269	3,225
201.72	3,274	3,257
201.73	3,278	3,290
201.74	3,283	3,323
201.75	3,288	3,356
201.76	3,293	3,389
201.77	3,298	3,422
201.78	3,302	3,455
201.79	3,307	3,488
201.80	3,312	3,521
201.81	3,317	3,554
201.82	3,322	3,587
201.83	3,326	3,620
201.84	3,331	3,654
201.85	3,336	3,687
201.86	3,341	3,720
201.87	3,346	3,754
201.88	3,350	3,787
201.89	3,355	3,821
201.90	3,360	3,854
201.91	3,365	3,888
201.92	3,370	3,922
201.93	3,374	3,955
201.94	3,379	3,989
201.95	3,384	4,023
201.96	3,389	4,057
201.97	3,394	4,091
201.98	3,398	4,125
201.99	3,403	4,159
202.00	3,408	4,193
202.01	3,413	4,227
202.02	3,418	4,261
202.03	3,423	4,295
202.04	3,428	4,330
202.05	3,433	4,364
202.06	3,439	4,398
202.07	3,444	4,433
202.08	3,449	4,467
202.09	3,454	4,502
202.10	3,459	4,536
202.11	3,464	4,571
202.12	3,469	4,605
202.13	3,474	4,640
202.14	3,479	4,675
202.15	3,484	4,710
202.16	3,489	4,745
202.17	3,495	4,780
202.18	3,500	4,814
202.19	3,505	4,850
202.20	3,510	4,885
202.21	3,515	4,920
202.22	3,520	4,955
202.23	3,525	4,990
202.24	3,530	5,025
202.25	3,535	5,061
202.26	3,540	5,096
202.27	3,545	5,132
202.28	3,551	5,167
202.29	3,556	5,203
202.30	3,561	5,238
202.31	3,566	5,274
202.32	3,571	5,309
202.33	3,576	5,345
202.34	3,581	5,381
202.35	3,586	5,417
202.36	3,591	5,453
202.37	3,596	5,489

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.38	3,601	5,525	202.90	3,866	7,466
202.39	3,607	5,561	202.91	3,871	7,505
202.40	3,612	5,597	202.92	3,876	7,544
202.41	3,617	5,633	202.93	3,881	7,582
202.42	3,622	5,669	202.94	3,886	7,621
202.43	3,627	5,705	202.95	3,892	7,660
202.44	3,632	5,742	202.96	3,897	7,699
202.45	3,637	5,778	202.97	3,902	7,738
202.46	3,642	5,814	202.98	3,907	7,777
202.47	3,647	5,851	202.99	3,912	7,816
202.48	3,652	5,887	203.00	3,917	7,855
202.49	3,657	5,924	203.01	3,922	7,894
202.50	3,663	5,960	203.02	3,928	7,934
202.51	3,668	5,997	203.03	3,933	7,973
202.52	3,673	6,034	203.04	3,938	8,012
202.53	3,678	6,071	203.05	3,944	8,052
202.54	3,683	6,107	203.06	3,949	8,091
202.55	3,688	6,144	203.07	3,955	8,131
202.56	3,693	6,181	203.08	3,960	8,170
202.57	3,698	6,218	203.09	3,965	8,210
202.58	3,703	6,255	203.10	3,971	8,250
202.59	3,708	6,292	203.11	3,976	8,289
202.60	3,713	6,329	203.12	3,981	8,329
202.61	3,718	6,366	203.13	3,987	8,369
202.62	3,724	6,404	203.14	3,992	8,409
202.63	3,729	6,441	203.15	3,998	8,449
202.64	3,734	6,478	203.16	4,003	8,489
202.65	3,739	6,516	203.17	4,008	8,529
202.66	3,744	6,553	203.18	4,014	8,569
202.67	3,749	6,590	203.19	4,019	8,609
202.68	3,754	6,628	203.20	4,024	8,649
202.69	3,759	6,665	203.21	4,030	8,690
202.70	3,764	6,703	203.22	4,035	8,730
202.71	3,769	6,741	203.23	4,041	8,770
202.72	3,774	6,778	203.24	4,046	8,811
202.73	3,780	6,816	203.25	4,051	8,851
202.74	3,785	6,854	203.26	4,057	8,892
202.75	3,790	6,892	203.27	4,062	8,932
202.76	3,795	6,930	203.28	4,067	8,973
202.77	3,800	6,968	203.29	4,073	9,014
202.78	3,805	7,006	203.30	4,078	9,055
202.79	3,810	7,044	203.31	4,083	9,095
202.80	3,815	7,082	203.32	4,089	9,136
202.81	3,820	7,120	203.33	4,094	9,177
202.82	3,825	7,158	203.34	4,100	9,218
202.83	3,830	7,197	203.35	4,105	9,259
202.84	3,836	7,235	203.36	4,110	9,300
202.85	3,841	7,273	203.37	4,116	9,341
202.86	3,846	7,312	203.38	4,121	9,383
202.87	3,851	7,350	203.39	4,126	9,424
202.88	3,856	7,389	203.40	4,132	9,465
202.89	3,861	7,428	203.41	4,137	9,506

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.42	4,143	9,548	203.94	4,422	11,775
203.43	4,148	9,589	203.95	4,427	11,819
203.44	4,153	9,631	203.96	4,433	11,863
203.45	4,159	9,672	203.97	4,438	11,907
203.46	4,164	9,714	203.98	4,443	11,952
203.47	4,169	9,756	203.99	4,449	11,996
203.48	4,175	9,797	204.00	4,454	12,041
203.49	4,180	9,839	204.01	4,460	12,085
203.50	4,186	9,881	204.02	4,465	12,130
203.51	4,191	9,923	204.03	4,471	12,175
203.52	4,196	9,965	204.04	4,477	12,219
203.53	4,202	10,007	204.05	4,482	12,264
203.54	4,207	10,049	204.06	4,488	12,309
203.55	4,212	10,091	204.07	4,494	12,354
203.56	4,218	10,133	204.08	4,499	12,399
203.57	4,223	10,175	204.09	4,505	12,444
203.58	4,228	10,217	204.10	4,511	12,489
203.59	4,234	10,260	204.11	4,516	12,534
203.60	4,239	10,302	204.12	4,522	12,579
203.61	4,245	10,345	204.13	4,527	12,625
203.62	4,250	10,387	204.14	4,533	12,670
203.63	4,255	10,430	204.15	4,539	12,715
203.64	4,261	10,472	204.16	4,544	12,761
203.65	4,266	10,515	204.17	4,550	12,806
203.66	4,271	10,557	204.18	4,556	12,852
203.67	4,277	10,600	204.19	4,561	12,897
203.68	4,282	10,643	204.20	4,567	12,943
203.69	4,288	10,686	204.21	4,573	12,989
203.70	4,293	10,729	204.22	4,578	13,034
203.71	4,298	10,772	204.23	4,584	13,080
203.72	4,304	10,815	204.24	4,590	13,126
203.73	4,309	10,858	204.25	4,595	13,172
203.74	4,314	10,901	204.26	4,601	13,218
203.75	4,320	10,944	204.27	4,607	13,264
203.76	4,325	10,987	204.28	4,612	13,310
203.77	4,330	11,031	204.29	4,618	13,356
203.78	4,336	11,074	204.30	4,624	13,402
203.79	4,341	11,117	204.31	4,629	13,449
203.80	4,347	11,161	204.32	4,635	13,495
203.81	4,352	11,204	204.33	4,640	13,541
203.82	4,357	11,248	204.34	4,646	13,588
203.83	4,363	11,291	204.35	4,652	13,634
203.84	4,368	11,335	204.36	4,657	13,681
203.85	4,373	11,379	204.37	4,663	13,727
203.86	4,379	11,423	204.38	4,669	13,774
203.87	4,384	11,466	204.39	4,674	13,821
203.88	4,390	11,510	204.40	4,680	13,868
203.89	4,395	11,554	204.41	4,686	13,914
203.90	4,400	11,598	204.42	4,691	13,961
203.91	4,406	11,642	204.43	4,697	14,008
203.92	4,411	11,686	204.44	4,703	14,055
203.93	4,416	11,730	204.45	4,708	14,102

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.46	4,714	14,149
204.47	4,720	14,197
204.48	4,725	14,244
204.49	4,731	14,291
204.50	4,737	14,338
204.51	4,742	14,386
204.52	4,748	14,433
204.53	4,753	14,481
204.54	4,759	14,528
204.55	4,765	14,576
204.56	4,770	14,624
204.57	4,776	14,671
204.58	4,782	14,719
204.59	4,787	14,767
204.60	4,793	14,815
204.61	4,799	14,863
204.62	4,804	14,911
204.63	4,810	14,959
204.64	4,816	15,007
204.65	4,821	15,055
204.66	4,827	15,103
204.67	4,833	15,152
204.68	4,838	15,200
204.69	4,844	15,249
204.70	4,850	15,297
204.71	4,855	15,346
204.72	4,861	15,394
204.73	4,866	15,443
204.74	4,872	15,491
204.75	4,878	15,540
204.76	4,883	15,589
204.77	4,889	15,638
204.78	4,895	15,687
204.79	4,900	15,736
204.80	4,906	15,785
204.81	4,912	15,834
204.82	4,917	15,883
204.83	4,923	15,932
204.84	4,929	15,981
204.85	4,934	16,031
204.86	4,940	16,080
204.87	4,946	16,130
204.88	4,951	16,179
204.89	4,957	16,229
204.90	4,963	16,278
204.91	4,968	16,328
204.92	4,974	16,378
204.93	4,979	16,427
204.94	4,985	16,477
204.95	4,991	16,527
204.96	4,996	16,577
204.97	5,002	16,627
204.98	5,008	16,677
204.99	5,013	16,727
205.00	**5,019**	**16,777**

Summary for Pond B-40: Basin #40

Inflow Area = 1.888 ac, 47.19% Impervious, Inflow Depth = 6.82" for Current 100 yr event
Inflow = 12.96 cfs @ 12.17 hrs, Volume= 1.073 af
Outflow = 6.40 cfs @ 12.34 hrs, Volume= 0.991 af, Atten= 51%, Lag= 10.1 min
Primary = 6.40 cfs @ 12.34 hrs, Volume= 0.991 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 204.67' @ 12.34 hrs Surf.Area= 4,530 sf Storage= 11,955 cf

Plug-Flow detention time= 97.4 min calculated for 0.991 af (92% of inflow)
Center-of-Mass det. time= 54.7 min (831.2 - 776.5)

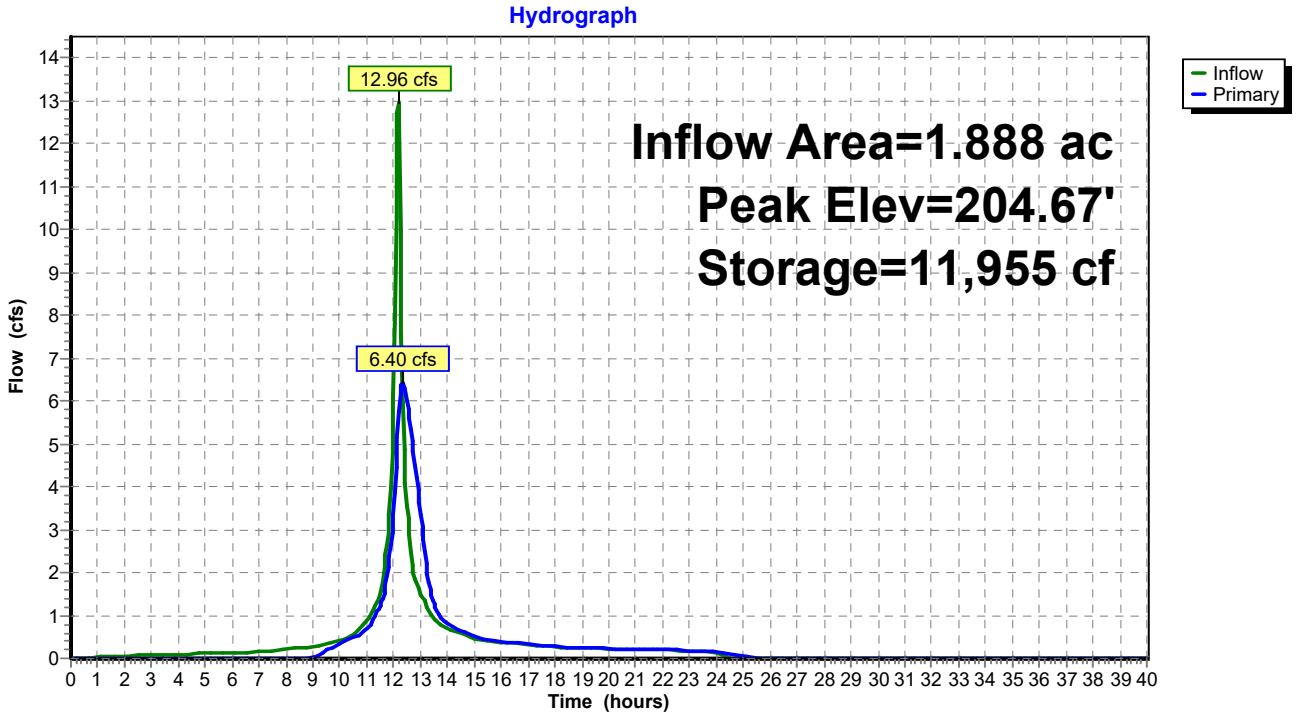
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	18,339 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,521	1,232	1,232
203.00	3,886	3,704	4,936
204.00	4,266	4,076	9,012
205.00	4,660	4,463	13,475
206.00	5,069	4,865	18,339

Device	Routing	Invert	Outlet Devices
#1	Primary	201.30'	**18.0" Round Culvert** L= 38.0' Ke= 0.500 Inlet / Outlet Invert= 201.30' / 201.11' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.65'	**24.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	204.67'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	205.49'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.39 cfs @ 12.34 hrs HW=204.66' (Free Discharge)
- **1=Culvert** (Passes 6.39 cfs of 13.72 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 6.39 cfs @ 6.39 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-40: Basin #40



Stage-Discharge for Pond B-40: Basin #40

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.62
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.66
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.71
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.75
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.80
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.85
201.36	0.00	201.88	0.00	202.40	0.00	202.92	0.90
201.37	0.00	201.89	0.00	202.41	0.00	202.93	0.95
201.38	0.00	201.90	0.00	202.42	0.00	202.94	1.00
201.39	0.00	201.91	0.00	202.43	0.00	202.95	1.05
201.40	0.00	201.92	0.00	202.44	0.00	202.96	1.11
201.41	0.00	201.93	0.00	202.45	0.00	202.97	1.16
201.42	0.00	201.94	0.00	202.46	0.00	202.98	1.22
201.43	0.00	201.95	0.00	202.47	0.00	202.99	1.27
201.44	0.00	201.96	0.00	202.48	0.00	203.00	1.33
201.45	0.00	201.97	0.00	202.49	0.00	203.01	1.39
201.46	0.00	201.98	0.00	202.50	0.00	203.02	1.44
201.47	0.00	201.99	0.00	202.51	0.00	203.03	1.50
201.48	0.00	202.00	0.00	202.52	0.00	203.04	1.56
201.49	0.00	202.01	0.00	202.53	0.00	203.05	1.62
201.50	0.00	202.02	0.00	202.54	0.00	203.06	1.69
201.51	0.00	202.03	0.00	202.55	0.00	203.07	1.75
201.52	0.00	202.04	0.00	202.56	0.00	203.08	1.81
201.53	0.00	202.05	0.00	202.57	0.00	203.09	1.87
201.54	0.00	202.06	0.00	202.58	0.00	203.10	1.94
201.55	0.00	202.07	0.00	202.59	0.00	203.11	2.00
201.56	0.00	202.08	0.00	202.60	0.00	203.12	2.07
201.57	0.00	202.09	0.00	202.61	0.00	203.13	2.13
201.58	0.00	202.10	0.00	202.62	0.00	203.14	2.20
201.59	0.00	202.11	0.00	202.63	0.00	203.15	2.27
201.60	0.00	202.12	0.00	202.64	0.00	203.16	2.33
201.61	0.00	202.13	0.00	202.65	0.00	203.17	2.39
201.62	0.00	202.14	0.00	202.66	0.01	203.18	2.44
201.63	0.00	202.15	0.00	202.67	0.02	203.19	2.50
201.64	0.00	202.16	0.00	202.68	0.03	203.20	2.55
201.65	0.00	202.17	0.00	202.69	0.05	203.21	2.60
201.66	0.00	202.18	0.00	202.70	0.07	203.22	2.64
201.67	0.00	202.19	0.00	202.71	0.09	203.23	2.69
201.68	0.00	202.20	0.00	202.72	0.12	203.24	2.74
201.69	0.00	202.21	0.00	202.73	0.15	203.25	2.78
201.70	0.00	202.22	0.00	202.74	0.17	203.26	2.82
201.71	0.00	202.23	0.00	202.75	0.20	203.27	2.87
201.72	0.00	202.24	0.00	202.76	0.23	203.28	2.91
201.73	0.00	202.25	0.00	202.77	0.27	203.29	2.95
201.74	0.00	202.26	0.00	202.78	0.30	203.30	2.99
201.75	0.00	202.27	0.00	202.79	0.34	203.31	3.03
201.76	0.00	202.28	0.00	202.80	0.37	203.32	3.07
201.77	0.00	202.29	0.00	202.81	0.41	203.33	3.11
201.78	0.00	202.30	0.00	202.82	0.45	203.34	3.15
201.79	0.00	202.31	0.00	202.83	0.49	203.35	3.19
201.80	0.00	202.32	0.00	202.84	0.53	203.36	3.22
201.81	0.00	202.33	0.00	202.85	0.57	203.37	3.26

Stage-Discharge for Pond B-40: Basin #40 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	3.30	203.90	4.80	204.42	5.93	204.94	8.68
203.39	3.33	203.91	4.83	204.43	5.95	204.95	8.80
203.40	3.37	203.92	4.85	204.44	5.97	204.96	8.92
203.41	3.40	203.93	4.87	204.45	5.99	204.97	9.04
203.42	3.44	203.94	4.90	204.46	6.01	204.98	9.16
203.43	3.47	203.95	4.92	204.47	6.03	204.99	9.29
203.44	3.51	203.96	4.95	204.48	6.05	205.00	9.41
203.45	3.54	203.97	4.97	204.49	6.07	205.01	9.54
203.46	3.57	203.98	4.99	204.50	6.08	205.02	9.67
203.47	3.60	203.99	5.02	204.51	6.10	205.03	9.80
203.48	3.64	204.00	5.04	204.52	6.12	205.04	9.93
203.49	3.67	204.01	5.06	204.53	6.14	205.05	10.06
203.50	3.70	204.02	5.09	204.54	6.16	205.06	10.20
203.51	3.73	204.03	5.11	204.55	6.18	205.07	10.33
203.52	3.76	204.04	5.13	204.56	6.20	205.08	10.47
203.53	3.80	204.05	5.15	204.57	6.22	205.09	10.61
203.54	3.83	204.06	5.18	204.58	6.24	205.10	10.75
203.55	3.86	204.07	5.20	204.59	6.25	205.11	10.89
203.56	3.89	204.08	5.22	204.60	6.27	205.12	11.03
203.57	3.92	204.09	5.24	204.61	6.29	205.13	11.17
203.58	3.95	204.10	5.26	204.62	6.31	205.14	11.32
203.59	3.98	204.11	5.29	204.63	6.33	205.15	11.46
203.60	4.01	204.12	5.31	204.64	6.35	205.16	11.61
203.61	4.04	204.13	5.33	204.65	6.36	205.17	11.76
203.62	4.06	204.14	5.35	204.66	6.38	205.18	11.91
203.63	4.09	204.15	5.37	204.67	6.40	205.19	12.06
203.64	4.12	204.16	5.40	204.68	6.43	205.20	12.21
203.65	4.15	204.17	5.42	204.69	6.47	205.21	12.36
203.66	4.18	204.18	5.44	204.70	6.52	205.22	12.52
203.67	4.21	204.19	5.46	204.71	6.58	205.23	12.67
203.68	4.23	204.20	5.48	204.72	6.64	205.24	12.83
203.69	4.26	204.21	5.50	204.73	6.70	205.25	12.99
203.70	4.29	204.22	5.52	204.74	6.77	205.26	13.15
203.71	4.32	204.23	5.54	204.75	6.84	205.27	13.31
203.72	4.34	204.24	5.57	204.76	6.91	205.28	13.47
203.73	4.37	204.25	5.59	204.77	6.99	205.29	13.63
203.74	4.40	204.26	5.61	204.78	7.07	205.30	13.79
203.75	4.42	204.27	5.63	204.79	7.16	205.31	13.95
203.76	4.45	204.28	5.65	204.80	7.24	205.32	14.12
203.77	4.48	204.29	5.67	204.81	7.33	205.33	14.28
203.78	4.50	204.30	5.69	204.82	7.42	205.34	14.45
203.79	4.53	204.31	5.71	204.83	7.51	205.35	14.62
203.80	4.55	204.32	5.73	204.84	7.61	205.36	14.79
203.81	4.58	204.33	5.75	204.85	7.71	205.37	14.96
203.82	4.60	204.34	5.77	204.86	7.81	205.38	15.13
203.83	4.63	204.35	5.79	204.87	7.91	205.39	15.30
203.84	4.65	204.36	5.81	204.88	8.02	205.40	15.47
203.85	4.68	204.37	5.83	204.89	8.12	205.41	15.60
203.86	4.70	204.38	5.85	204.90	8.23	205.42	15.62
203.87	4.73	204.39	5.87	204.91	8.34	205.43	15.64
203.88	4.75	204.40	5.89	204.92	8.45	205.44	15.67
203.89	4.78	204.41	5.91	204.93	8.57	205.45	15.69

Stage-Discharge for Pond B-40: Basin #40 (continued)

Elevation (feet)	Primary (cfs)
205.46	15.71
205.47	15.74
205.48	15.76
205.49	15.78
205.50	15.92
205.51	16.16
205.52	16.46
205.53	16.81
205.54	17.21
205.55	17.64
205.56	18.12
205.57	18.62
205.58	19.16
205.59	19.73
205.60	20.32
205.61	20.95
205.62	21.60
205.63	22.27
205.64	22.97
205.65	23.69
205.66	24.43
205.67	25.20
205.68	25.99
205.69	26.80
205.70	27.67
205.71	28.56
205.72	29.48
205.73	30.43
205.74	31.40
205.75	32.39
205.76	33.41
205.77	34.46
205.78	35.53
205.79	36.62
205.80	37.74
205.81	38.89
205.82	40.05
205.83	41.25
205.84	42.46
205.85	43.70
205.86	44.97
205.87	46.25
205.88	47.57
205.89	48.90
205.90	50.29
205.91	51.70
205.92	53.14
205.93	54.61
205.94	56.10
205.95	57.62
205.96	59.16
205.97	60.73
205.98	62.33
205.99	63.95
206.00	**65.60**

Stage-Area-Storage for Pond B-40: Basin #40

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0
201.31	50	0
201.32	101	1
201.33	151	2
201.34	201	4
201.35	252	6
201.36	302	9
201.37	352	12
201.38	402	16
201.39	453	20
201.40	503	25
201.41	553	30
201.42	604	36
201.43	654	43
201.44	704	49
201.45	755	57
201.46	805	64
201.47	855	73
201.48	905	81
201.49	956	91
201.50	1,006	101
201.51	1,056	111
201.52	1,107	122
201.53	1,157	133
201.54	1,207	145
201.55	1,258	157
201.56	1,308	170
201.57	1,358	183
201.58	1,408	197
201.59	1,459	212
201.60	1,509	226
201.61	1,559	242
201.62	1,610	258
201.63	1,660	274
201.64	1,710	291
201.65	1,761	308
201.66	1,811	326
201.67	1,861	344
201.68	1,911	363
201.69	1,962	383
201.70	2,012	402
201.71	2,062	423
201.72	2,113	444
201.73	2,163	465
201.74	2,213	487
201.75	2,263	509
201.76	2,314	532
201.77	2,364	556
201.78	2,414	579
201.79	2,465	604
201.80	2,515	629
201.81	2,565	654
201.82	2,616	680
201.83	2,666	706
201.84	2,716	733
201.85	2,767	761
201.86	2,817	789
201.87	2,867	817
201.88	2,917	846
201.89	2,968	875
201.90	3,018	905
201.91	3,068	936
201.92	3,119	967
201.93	3,169	998
201.94	3,219	1,030
201.95	3,270	1,063
201.96	3,320	1,096
201.97	3,370	1,129
201.98	3,420	1,163
201.99	3,471	1,197
202.00	3,521	1,232
202.01	3,525	1,268
202.02	3,528	1,303
202.03	3,532	1,338
202.04	3,536	1,373
202.05	3,539	1,409
202.06	3,543	1,444
202.07	3,547	1,480
202.08	3,550	1,515
202.09	3,554	1,551
202.10	3,558	1,586
202.11	3,561	1,622
202.12	3,565	1,657
202.13	3,568	1,693
202.14	3,572	1,729
202.15	3,576	1,765
202.16	3,579	1,800
202.17	3,583	1,836
202.18	3,587	1,872
202.19	3,590	1,908
202.20	3,594	1,944
202.21	3,598	1,980
202.22	3,601	2,016
202.23	3,605	2,052
202.24	3,609	2,088
202.25	3,612	2,124
202.26	3,616	2,160
202.27	3,620	2,196
202.28	3,623	2,233
202.29	3,627	2,269
202.30	3,631	2,305
202.31	3,634	2,341
202.32	3,638	2,378
202.33	3,641	2,414

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	3,645	2,451
202.35	3,649	2,487
202.36	3,652	2,524
202.37	3,656	2,560
202.38	3,660	2,597
202.39	3,663	2,633
202.40	3,667	2,670
202.41	3,671	2,707
202.42	3,674	2,743
202.43	3,678	2,780
202.44	3,682	2,817
202.45	3,685	2,854
202.46	3,689	2,891
202.47	3,693	2,928
202.48	3,696	2,964
202.49	3,700	3,001
202.50	3,704	3,038
202.51	3,707	3,076
202.52	3,711	3,113
202.53	3,714	3,150
202.54	3,718	3,187
202.55	3,722	3,224
202.56	3,725	3,261
202.57	3,729	3,299
202.58	3,733	3,336
202.59	3,736	3,373
202.60	3,740	3,411
202.61	3,744	3,448
202.62	3,747	3,486
202.63	3,751	3,523
202.64	3,755	3,561
202.65	3,758	3,598
202.66	3,762	3,636
202.67	3,766	3,673
202.68	3,769	3,711
202.69	3,773	3,749
202.70	3,777	3,786
202.71	3,780	3,824
202.72	3,784	3,862
202.73	3,787	3,900
202.74	3,791	3,938
202.75	3,795	3,976
202.76	3,798	4,014
202.77	3,802	4,052
202.78	3,806	4,090
202.79	3,809	4,128
202.80	3,813	4,166
202.81	3,817	4,204
202.82	3,820	4,242
202.83	3,824	4,281
202.84	3,828	4,319
202.85	3,831	4,357
202.86	3,835	4,395
202.87	3,839	4,434
202.88	3,842	4,472
202.89	3,846	4,511
202.90	3,850	4,549
202.91	3,853	4,588
202.92	3,857	4,626
202.93	3,860	4,665
202.94	3,864	4,703
202.95	3,868	4,742
202.96	3,871	4,781
202.97	3,875	4,819
202.98	3,879	4,858
202.99	3,882	4,897
203.00	3,886	4,936
203.01	3,890	4,975
203.02	3,894	5,014
203.03	3,897	5,053
203.04	3,901	5,092
203.05	3,905	5,131
203.06	3,909	5,170
203.07	3,913	5,209
203.08	3,916	5,248
203.09	3,920	5,287
203.10	3,924	5,326
203.11	3,928	5,366
203.12	3,932	5,405
203.13	3,935	5,444
203.14	3,939	5,484
203.15	3,943	5,523
203.16	3,947	5,562
203.17	3,951	5,602
203.18	3,954	5,641
203.19	3,958	5,681
203.20	3,962	5,721
203.21	3,966	5,760
203.22	3,970	5,800
203.23	3,973	5,840
203.24	3,977	5,879
203.25	3,981	5,919
203.26	3,985	5,959
203.27	3,989	5,999
203.28	3,992	6,039
203.29	3,996	6,079
203.30	4,000	6,119
203.31	4,004	6,159
203.32	4,008	6,199
203.33	4,011	6,239
203.34	4,015	6,279
203.35	4,019	6,319
203.36	4,023	6,359
203.37	4,027	6,400

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,030	6,440
203.39	4,034	6,480
203.40	4,038	6,521
203.41	4,042	6,561
203.42	4,046	6,601
203.43	4,049	6,642
203.44	4,053	6,682
203.45	4,057	6,723
203.46	4,061	6,764
203.47	4,065	6,804
203.48	4,068	6,845
203.49	4,072	6,886
203.50	4,076	6,926
203.51	4,080	6,967
203.52	4,084	7,008
203.53	4,087	7,049
203.54	4,091	7,090
203.55	4,095	7,131
203.56	4,099	7,172
203.57	4,103	7,213
203.58	4,106	7,254
203.59	4,110	7,295
203.60	4,114	7,336
203.61	4,118	7,377
203.62	4,122	7,418
203.63	4,125	7,459
203.64	4,129	7,501
203.65	4,133	7,542
203.66	4,137	7,583
203.67	4,141	7,625
203.68	4,144	7,666
203.69	4,148	7,708
203.70	4,152	7,749
203.71	4,156	7,791
203.72	4,160	7,832
203.73	4,163	7,874
203.74	4,167	7,916
203.75	4,171	7,957
203.76	4,175	7,999
203.77	4,179	8,041
203.78	4,182	8,083
203.79	4,186	8,124
203.80	4,190	8,166
203.81	4,194	8,208
203.82	4,198	8,250
203.83	4,201	8,292
203.84	4,205	8,334
203.85	4,209	8,376
203.86	4,213	8,418
203.87	4,217	8,460
203.88	4,220	8,503
203.89	4,224	8,545
203.90	4,228	8,587
203.91	4,232	8,629
203.92	4,236	8,672
203.93	4,239	8,714
203.94	4,243	8,757
203.95	4,247	8,799
203.96	4,251	8,842
203.97	4,255	8,884
203.98	4,258	8,927
203.99	4,262	8,969
204.00	4,266	9,012
204.01	4,270	9,055
204.02	4,274	9,097
204.03	4,278	9,140
204.04	4,282	9,183
204.05	4,286	9,226
204.06	4,290	9,269
204.07	4,294	9,311
204.08	4,298	9,354
204.09	4,301	9,397
204.10	4,305	9,440
204.11	4,309	9,483
204.12	4,313	9,527
204.13	4,317	9,570
204.14	4,321	9,613
204.15	4,325	9,656
204.16	4,329	9,699
204.17	4,333	9,743
204.18	4,337	9,786
204.19	4,341	9,830
204.20	4,345	9,873
204.21	4,349	9,916
204.22	4,353	9,960
204.23	4,357	10,003
204.24	4,361	10,047
204.25	4,365	10,091
204.26	4,368	10,134
204.27	4,372	10,178
204.28	4,376	10,222
204.29	4,380	10,266
204.30	4,384	10,309
204.31	4,388	10,353
204.32	4,392	10,397
204.33	4,396	10,441
204.34	4,400	10,485
204.35	4,404	10,529
204.36	4,408	10,573
204.37	4,412	10,617
204.38	4,416	10,661
204.39	4,420	10,706
204.40	4,424	10,750
204.41	4,428	10,794

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	4,431	10,838	204.94	4,636	13,196
204.43	4,435	10,883	204.95	4,640	13,242
204.44	4,439	10,927	204.96	4,644	13,289
204.45	4,443	10,971	204.97	4,648	13,335
204.46	4,447	11,016	204.98	4,652	13,382
204.47	4,451	11,060	204.99	4,656	13,428
204.48	4,455	11,105	205.00	4,660	13,475
204.49	4,459	11,149	205.01	4,664	13,521
204.50	4,463	11,194	205.02	4,668	13,568
204.51	4,467	11,239	205.03	4,672	13,615
204.52	4,471	11,283	205.04	4,676	13,662
204.53	4,475	11,328	205.05	4,680	13,708
204.54	4,479	11,373	205.06	4,685	13,755
204.55	4,483	11,418	205.07	4,689	13,802
204.56	4,487	11,463	205.08	4,693	13,849
204.57	4,491	11,507	205.09	4,697	13,896
204.58	4,495	11,552	205.10	4,701	13,943
204.59	4,498	11,597	205.11	4,705	13,990
204.60	4,502	11,642	205.12	4,709	14,037
204.61	4,506	11,687	205.13	4,713	14,084
204.62	4,510	11,732	205.14	4,717	14,131
204.63	4,514	11,778	205.15	4,721	14,178
204.64	4,518	11,823	205.16	4,725	14,226
204.65	4,522	11,868	205.17	4,730	14,273
204.66	4,526	11,913	205.18	4,734	14,320
204.67	4,530	11,959	205.19	4,738	14,368
204.68	4,534	12,004	205.20	4,742	14,415
204.69	4,538	12,049	205.21	4,746	14,462
204.70	4,542	12,095	205.22	4,750	14,510
204.71	4,546	12,140	205.23	4,754	14,557
204.72	4,550	12,185	205.24	4,758	14,605
204.73	4,554	12,231	205.25	4,762	14,653
204.74	4,558	12,277	205.26	4,766	14,700
204.75	4,562	12,322	205.27	4,770	14,748
204.76	4,565	12,368	205.28	4,775	14,796
204.77	4,569	12,413	205.29	4,779	14,843
204.78	4,573	12,459	205.30	4,783	14,891
204.79	4,577	12,505	205.31	4,787	14,939
204.80	4,581	12,551	205.32	4,791	14,987
204.81	4,585	12,597	205.33	4,795	15,035
204.82	4,589	12,642	205.34	4,799	15,083
204.83	4,593	12,688	205.35	4,803	15,131
204.84	4,597	12,734	205.36	4,807	15,179
204.85	4,601	12,780	205.37	4,811	15,227
204.86	4,605	12,826	205.38	4,815	15,275
204.87	4,609	12,872	205.39	4,820	15,323
204.88	4,613	12,918	205.40	4,824	15,372
204.89	4,617	12,965	205.41	4,828	15,420
204.90	4,621	13,011	205.42	4,832	15,468
204.91	4,625	13,057	205.43	4,836	15,516
204.92	4,628	13,103	205.44	4,840	15,565
204.93	4,632	13,150	205.45	4,844	15,613

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

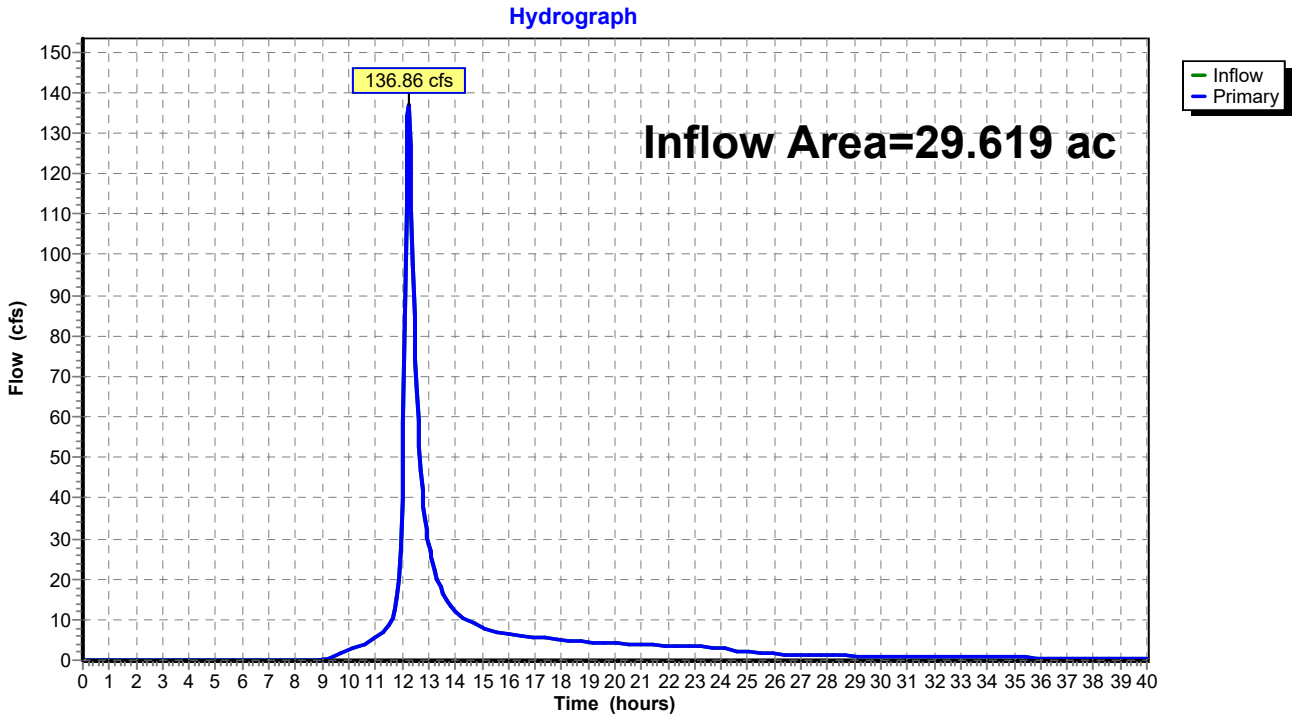
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.46	4,848	15,662
205.47	4,852	15,710
205.48	4,856	15,759
205.49	4,860	15,807
205.50	4,865	15,856
205.51	4,869	15,905
205.52	4,873	15,953
205.53	4,877	16,002
205.54	4,881	16,051
205.55	4,885	16,100
205.56	4,889	16,149
205.57	4,893	16,197
205.58	4,897	16,246
205.59	4,901	16,295
205.60	4,905	16,344
205.61	4,909	16,394
205.62	4,914	16,443
205.63	4,918	16,492
205.64	4,922	16,541
205.65	4,926	16,590
205.66	4,930	16,640
205.67	4,934	16,689
205.68	4,938	16,738
205.69	4,942	16,788
205.70	4,946	16,837
205.71	4,950	16,887
205.72	4,954	16,936
205.73	4,959	16,986
205.74	4,963	17,035
205.75	4,967	17,085
205.76	4,971	17,135
205.77	4,975	17,184
205.78	4,979	17,234
205.79	4,983	17,284
205.80	4,987	17,334
205.81	4,991	17,384
205.82	4,995	17,434
205.83	4,999	17,484
205.84	5,004	17,534
205.85	5,008	17,584
205.86	5,012	17,634
205.87	5,016	17,684
205.88	5,020	17,734
205.89	5,024	17,784
205.90	5,028	17,834
205.91	5,032	17,885
205.92	5,036	17,935
205.93	5,040	17,986
205.94	5,044	18,036
205.95	5,049	18,086
205.96	5,053	18,137
205.97	5,057	18,187
205.98	5,061	18,238
205.99	5,065	18,289
206.00	**5,069**	**18,339**

Summary for Link PDA-3: Proposed Drainage Area #3

Inflow Area = 29.619 ac, 38.13% Impervious, Inflow Depth > 5.87" for Current 100 yr event
Inflow = 136.86 cfs @ 12.24 hrs, Volume= 14.485 af
Primary = 136.86 cfs @ 12.24 hrs, Volume= 14.485 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-3: Proposed Drainage Area #3



Summary for Subcatchment 29l: PDA-29 (impervious)

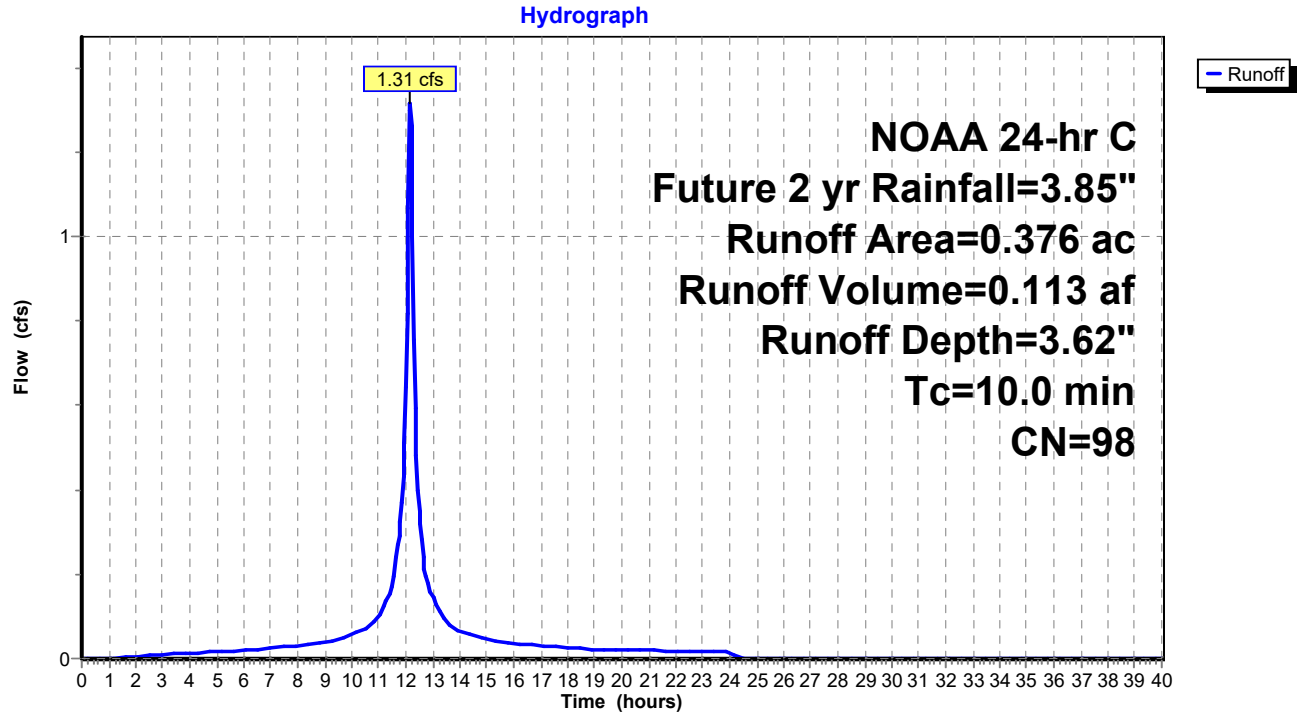
Runoff = 1.31 cfs @ 12.17 hrs, Volume= 0.113 af, Depth= 3.62"
Routed to Pond B-29 : Basin #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.342	98	Pavement, HSG C
*	0.034	98	Concrete, HSC C
	0.376	98	Weighted Average
	0.376		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 29l: PDA-29 (impervious)



Summary for Subcatchment 29P: PDA-29 (pervious)

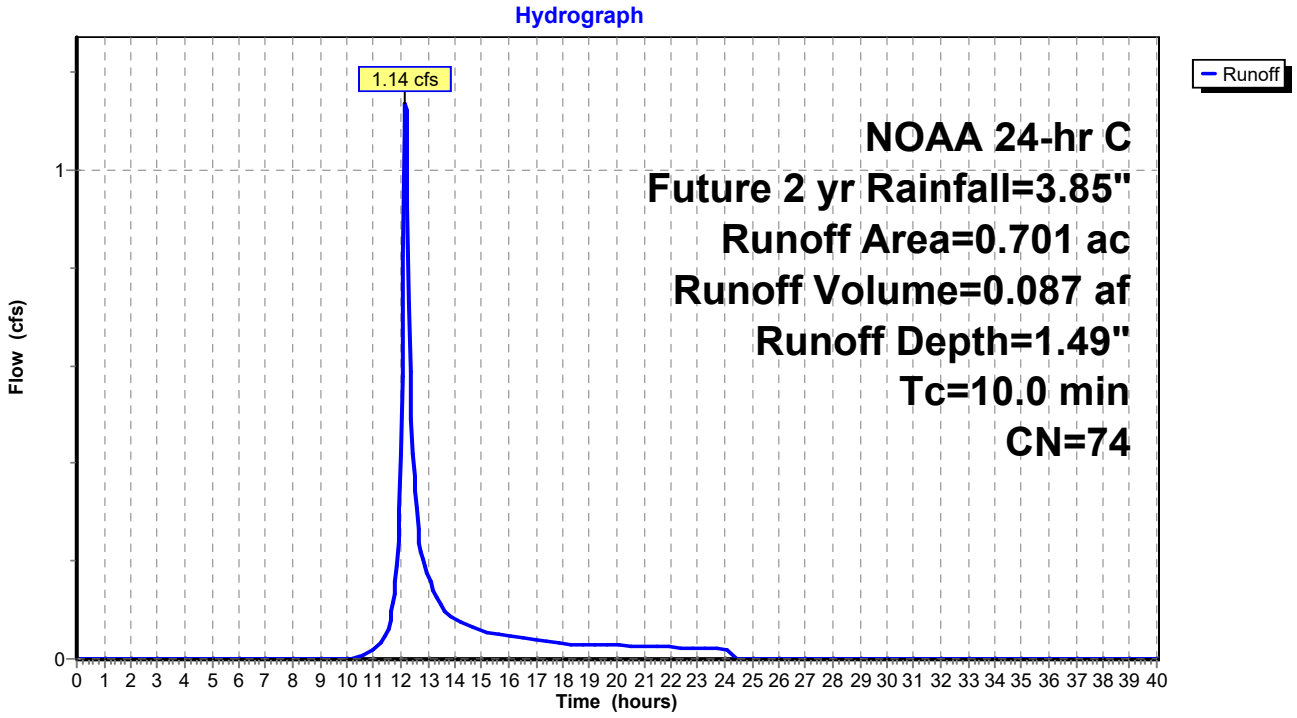
Runoff = 1.14 cfs @ 12.18 hrs, Volume= 0.087 af, Depth= 1.49"
Routed to Pond B-29 : Basin #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.701	74	>75% Grass cover, Good, HSG C
0.701		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 29P: PDA-29 (pervious)



Summary for Subcatchment 30l: PDA-30 (impervious)

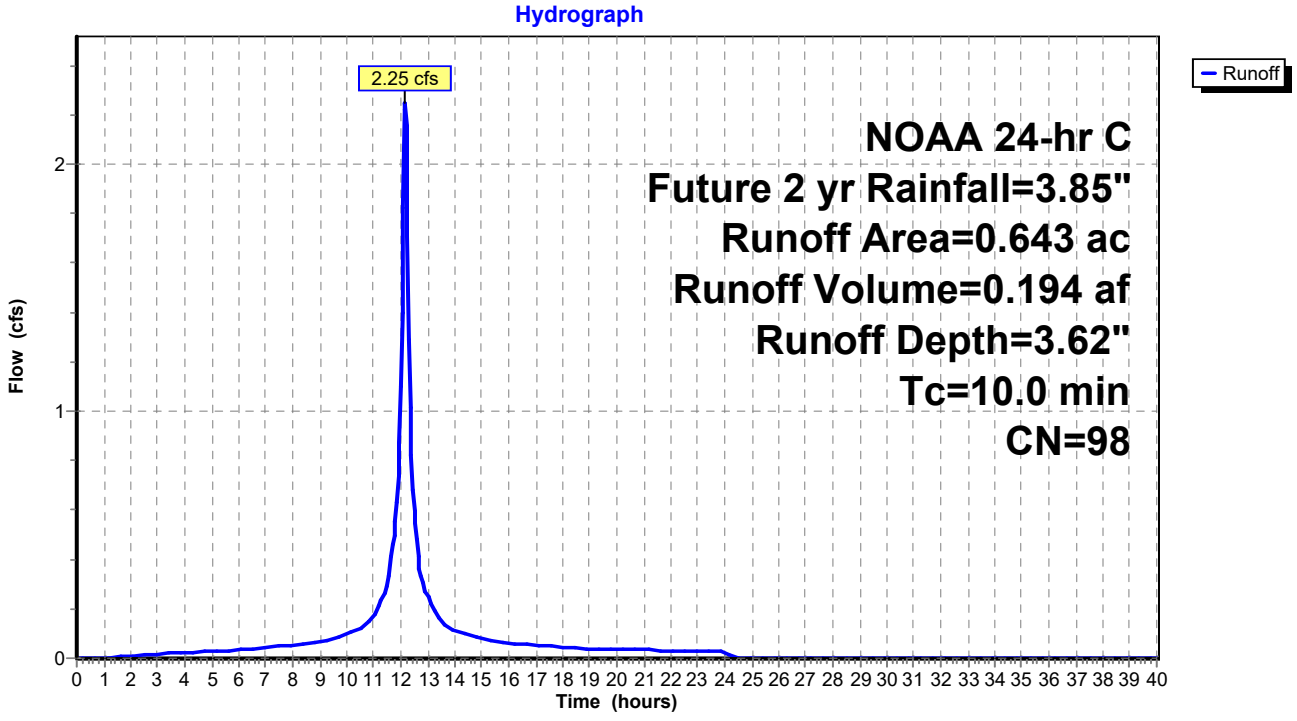
Runoff = 2.25 cfs @ 12.17 hrs, Volume= 0.194 af, Depth= 3.62"
Routed to Pond B-30 : Basin #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.643	98	Weighted Average
	0.643		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 30l: PDA-30 (impervious)



Summary for Subcatchment 30P: PDA-30 (pervious)

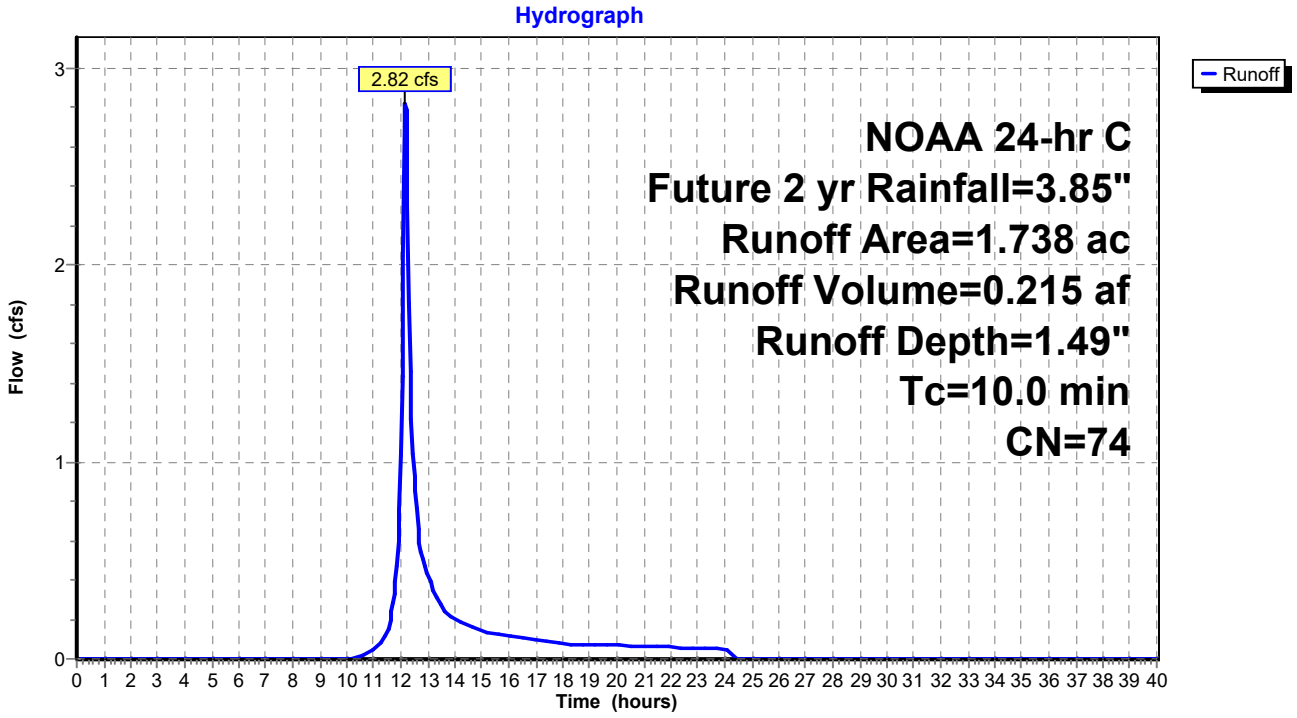
Runoff = 2.82 cfs @ 12.18 hrs, Volume= 0.215 af, Depth= 1.49"
Routed to Pond B-30 : Basin #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.738	74	>75% Grass cover, Good, HSG C
1.738		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 30P: PDA-30 (pervious)



Summary for Subcatchment 31I: PDA-31 (impervious)

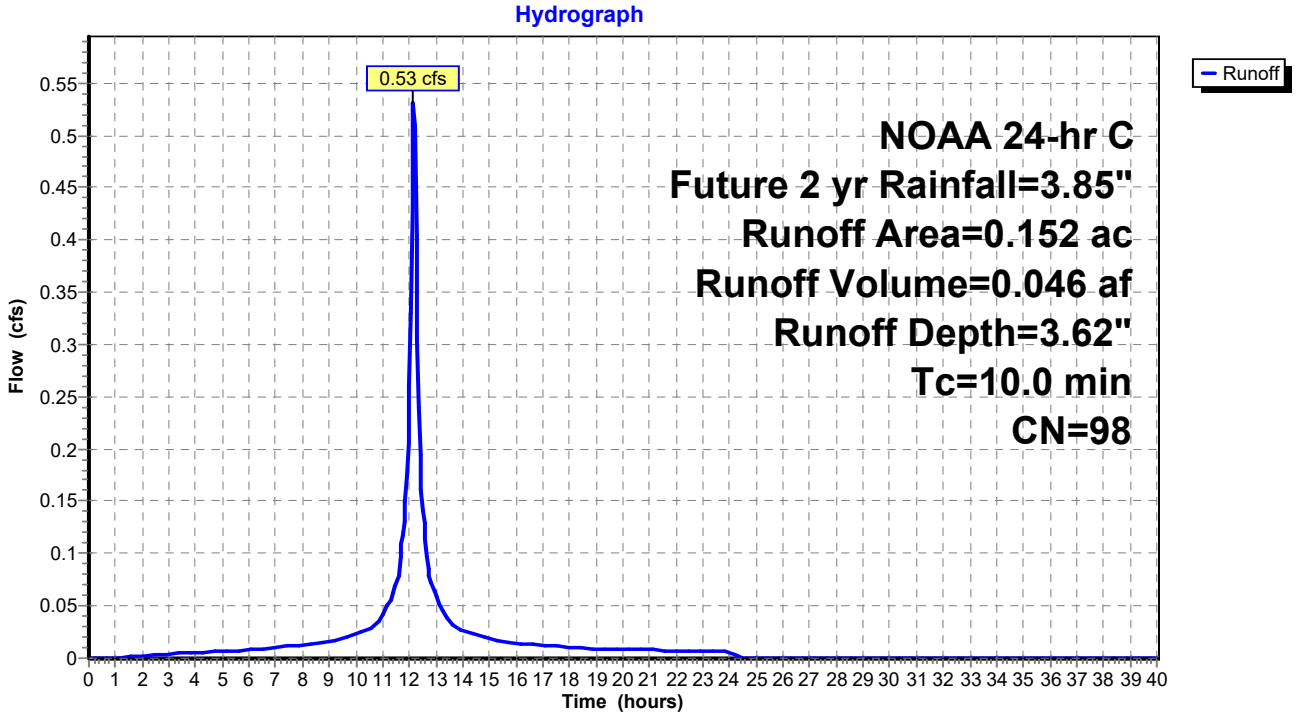
Runoff = 0.53 cfs @ 12.17 hrs, Volume= 0.046 af, Depth= 3.62"
Routed to Pond B-31 : Basin #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.079	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.009	98	Concrete, HSC C
	0.152	98	Weighted Average
	0.152		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 31I: PDA-31 (impervious)



Summary for Subcatchment 31P: PDA-31 (pervious)

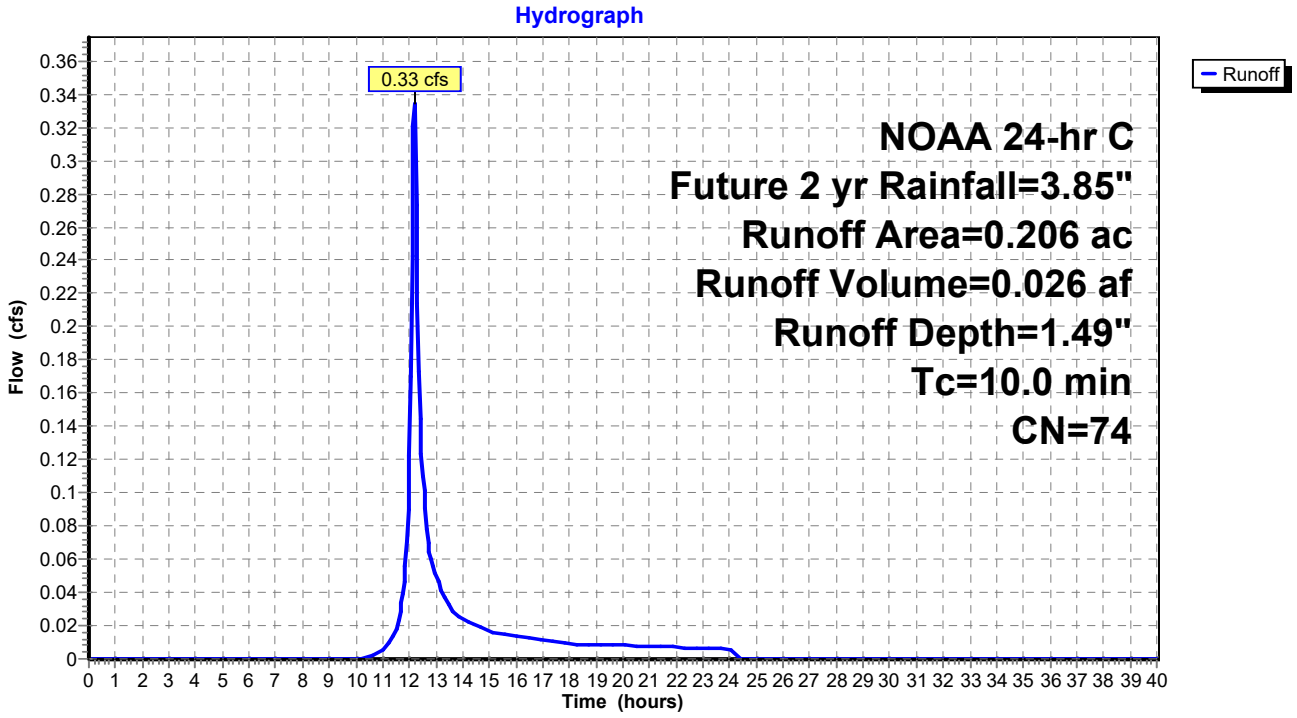
Runoff = 0.33 cfs @ 12.18 hrs, Volume= 0.026 af, Depth= 1.49"
Routed to Pond B-31 : Basin #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.206	74	>75% Grass cover, Good, HSG C
0.206		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 31P: PDA-31 (pervious)



Summary for Subcatchment 32I: PDA-32 (impervious)

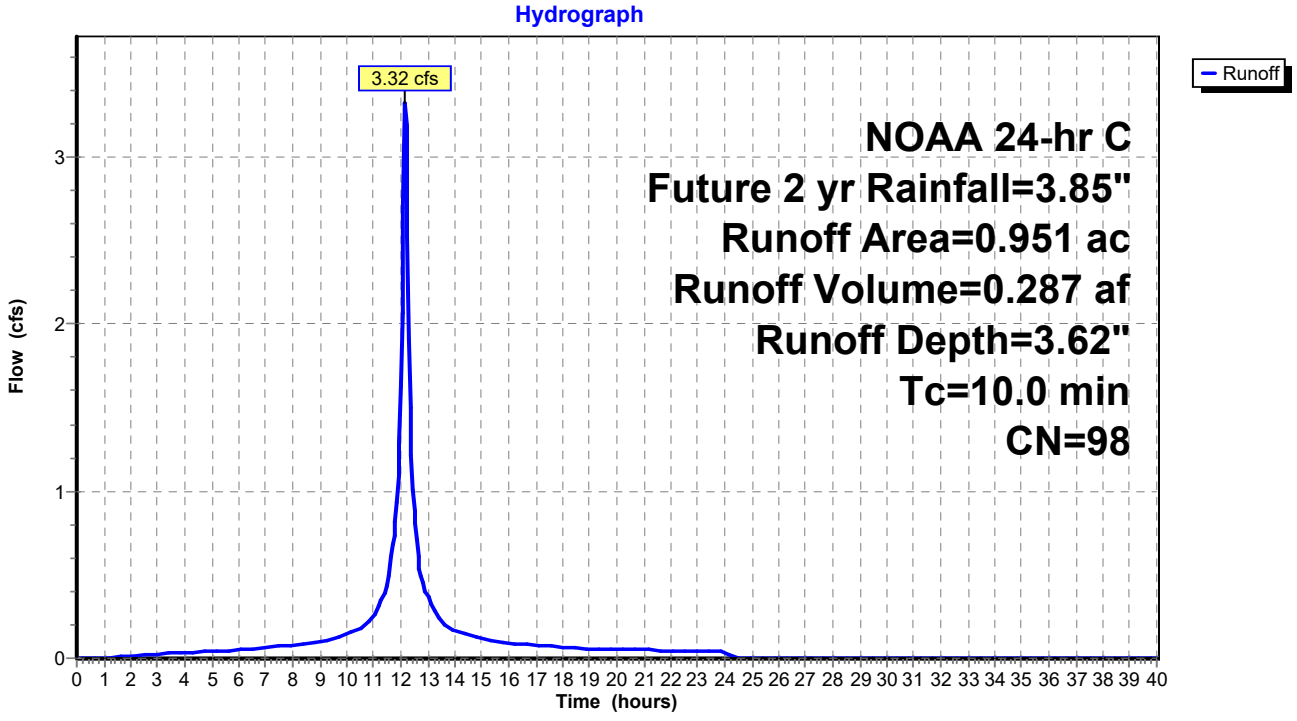
Runoff = 3.32 cfs @ 12.17 hrs, Volume= 0.287 af, Depth= 3.62"
Routed to Pond B-32 : Basin #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.478	98	Pavement, HSG C
*	0.386	98	Roof, HSG C
*	0.087	98	Concrete, HSC C
	0.951	98	Weighted Average
	0.951		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 32I: PDA-32 (impervious)



Summary for Subcatchment 32P: PDA-32 (pervious)

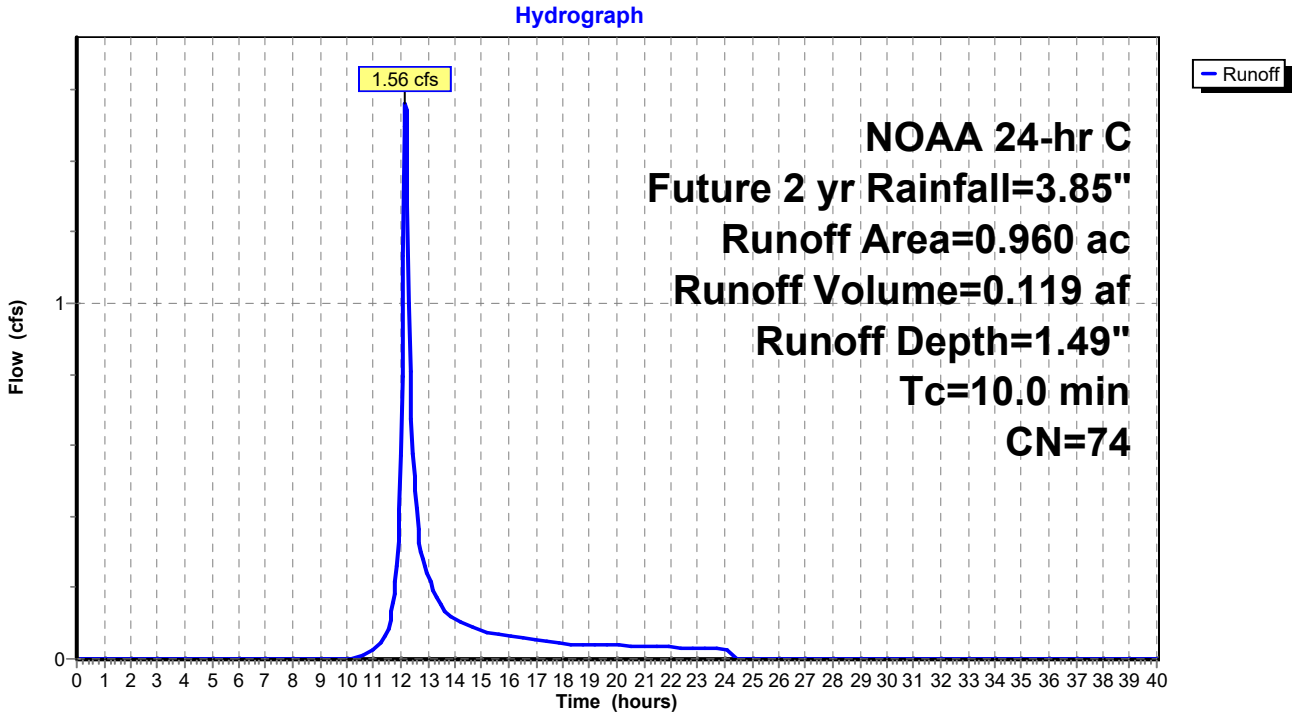
Runoff = 1.56 cfs @ 12.18 hrs, Volume= 0.119 af, Depth= 1.49"
Routed to Pond B-32 : Basin #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.960	74	>75% Grass cover, Good, HSG C
0.960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 32P: PDA-32 (pervious)



Summary for Subcatchment 33l: PDA-33 (impervious)

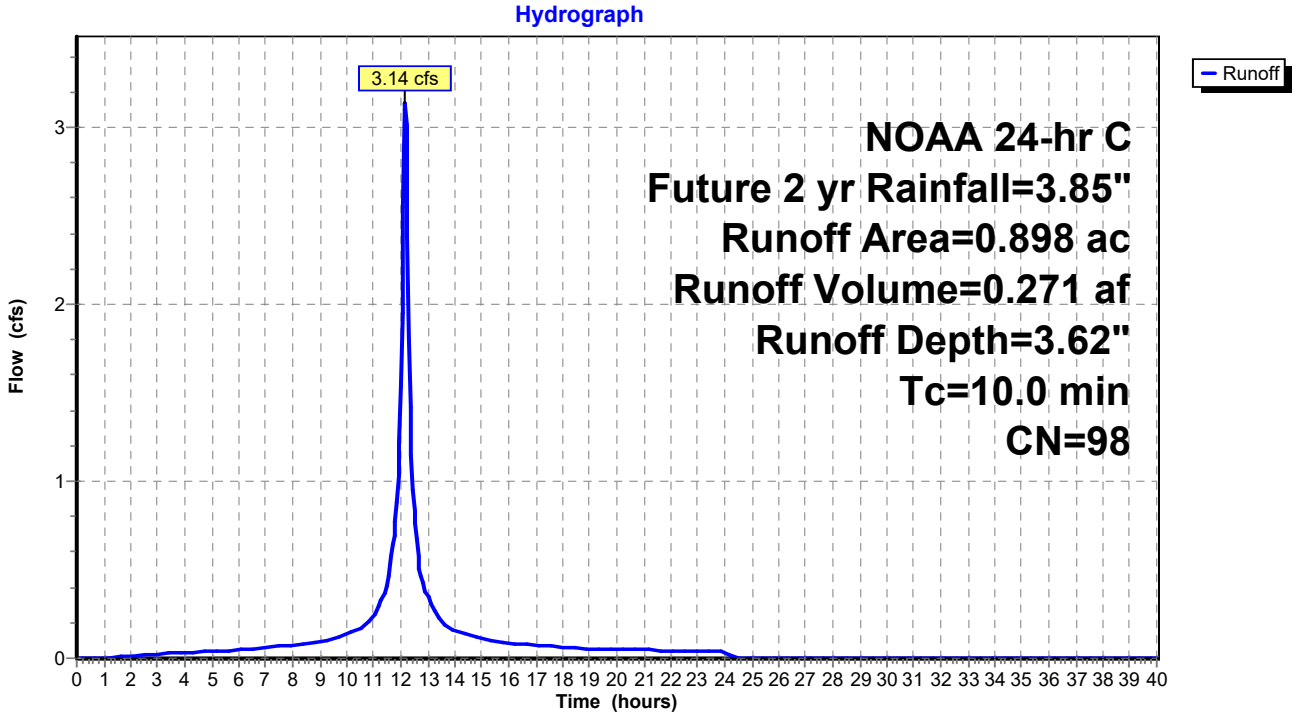
Runoff = 3.14 cfs @ 12.17 hrs, Volume= 0.271 af, Depth= 3.62"
Routed to Pond B-33 : Basin #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.351	98	Pavement, HSG C
*	0.514	98	Roof, HSG C
*	0.033	98	Concrete, HSC C
	0.898	98	Weighted Average
	0.898		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 33l: PDA-33 (impervious)



Summary for Subcatchment 33P: PDA-33 (pervious)

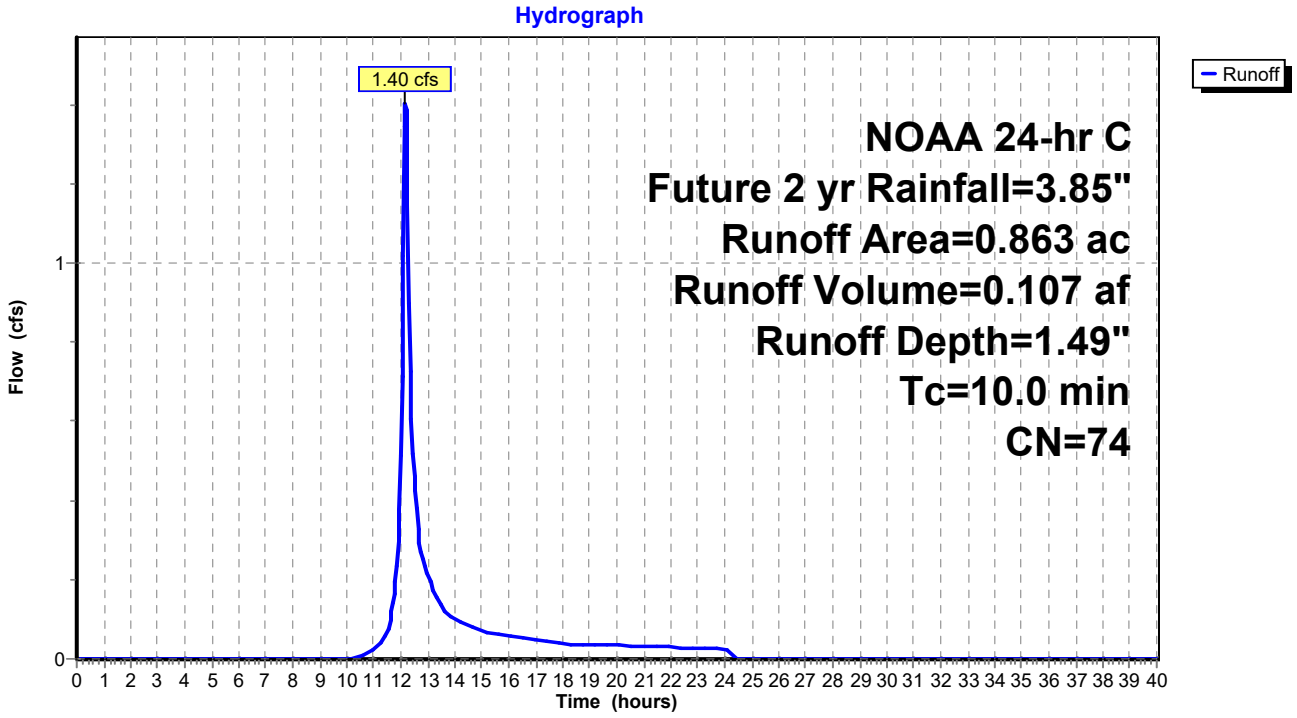
Runoff = 1.40 cfs @ 12.18 hrs, Volume= 0.107 af, Depth= 1.49"
Routed to Pond B-33 : Basin #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.863	74	>75% Grass cover, Good, HSG C
0.863		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 33P: PDA-33 (pervious)



Summary for Subcatchment 34l: PDA-34 (impervious)

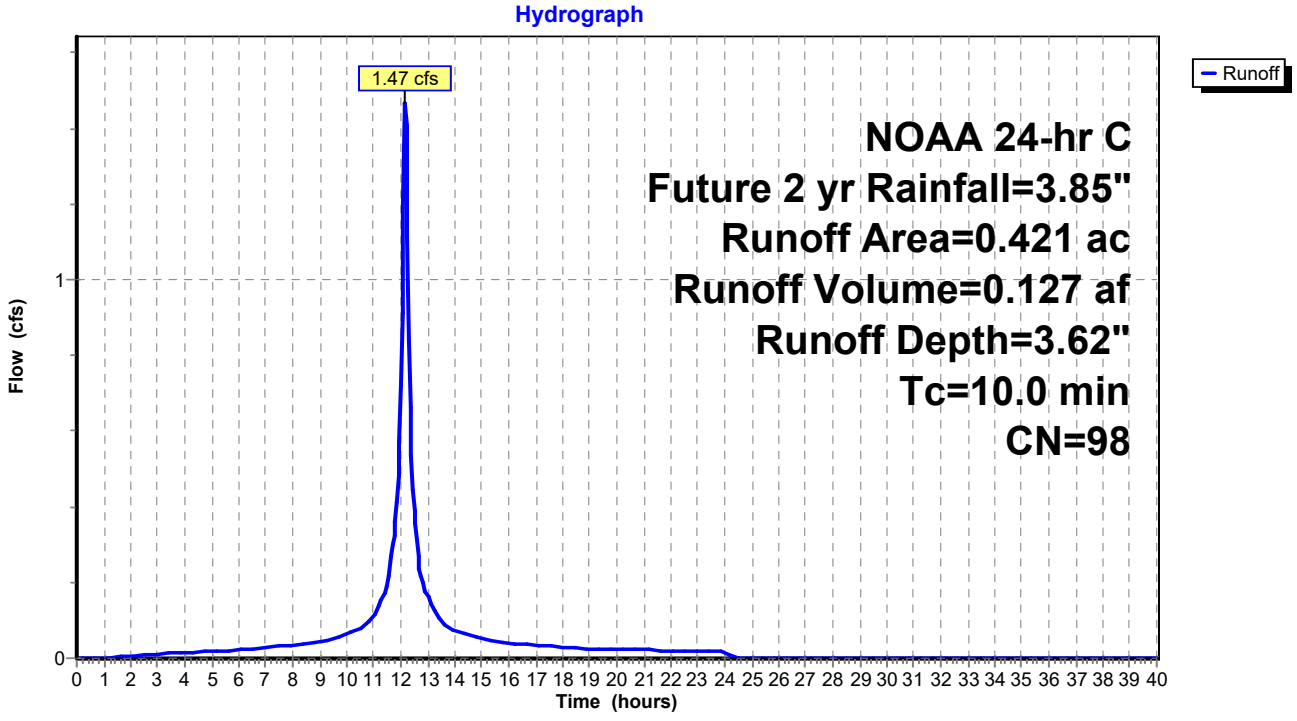
Runoff = 1.47 cfs @ 12.17 hrs, Volume= 0.127 af, Depth= 3.62"
Routed to Pond B-34 : Basin #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.279	98	Roof, HSG C
*	0.142	98	Concrete, HSC C
	0.421	98	Weighted Average
	0.421		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 34l: PDA-34 (impervious)



Summary for Subcatchment 34P: PDA-34 (pervious)

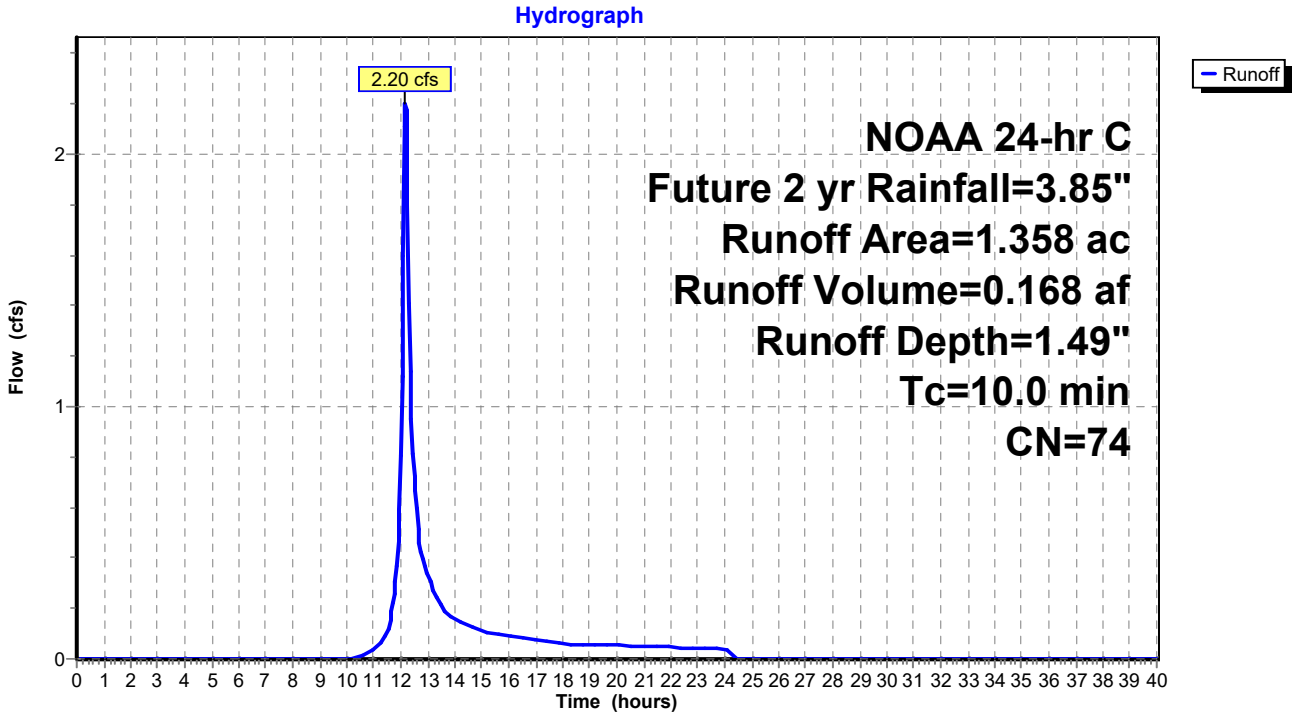
Runoff = 2.20 cfs @ 12.18 hrs, Volume= 0.168 af, Depth= 1.49"
Routed to Pond B-34 : Basin #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.358	74	>75% Grass cover, Good, HSG C
1.358		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 34P: PDA-34 (pervious)



Summary for Subcatchment 35l: PDA-35 (impervious)

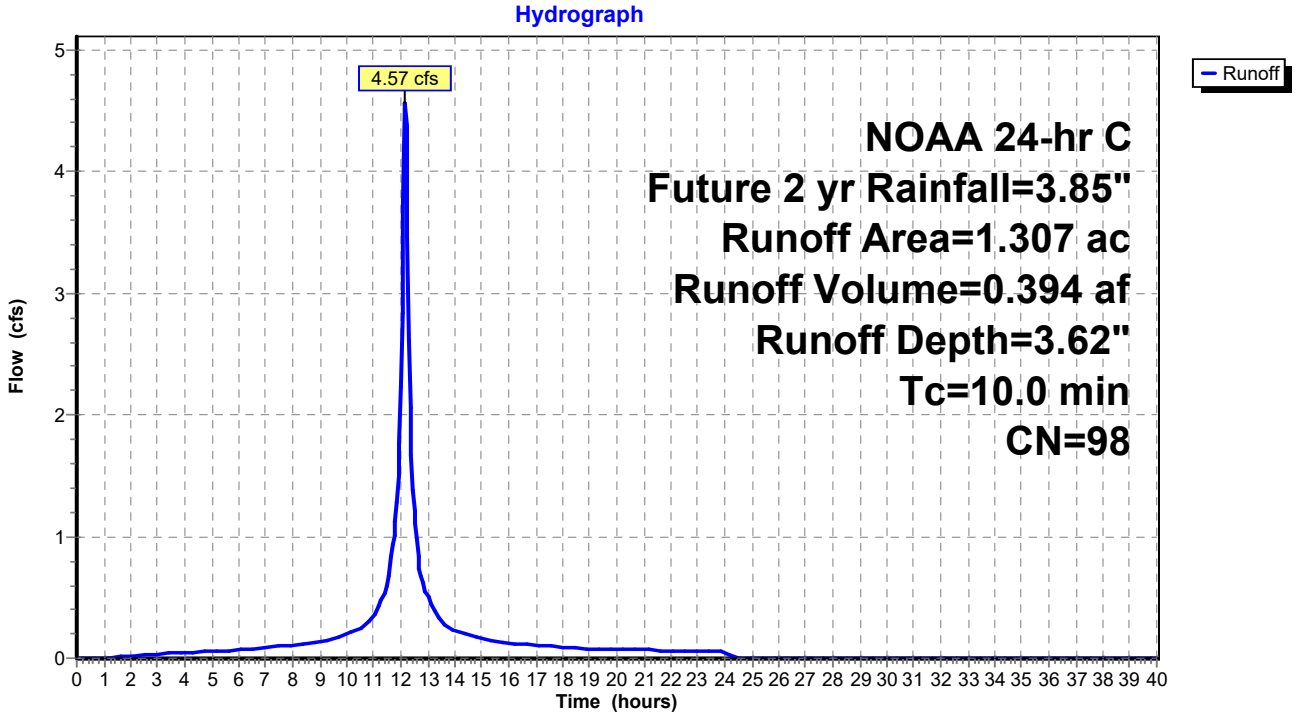
Runoff = 4.57 cfs @ 12.17 hrs, Volume= 0.394 af, Depth= 3.62"
Routed to Pond B-35 : Basin #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	1.003	98	Pavement, HSG C
*	0.139	98	Roof, HSG C
*	0.165	98	Concrete, HSC C
	1.307	98	Weighted Average
	1.307		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 35l: PDA-35 (impervious)



Summary for Subcatchment 35P: PDA-35 (pervious)

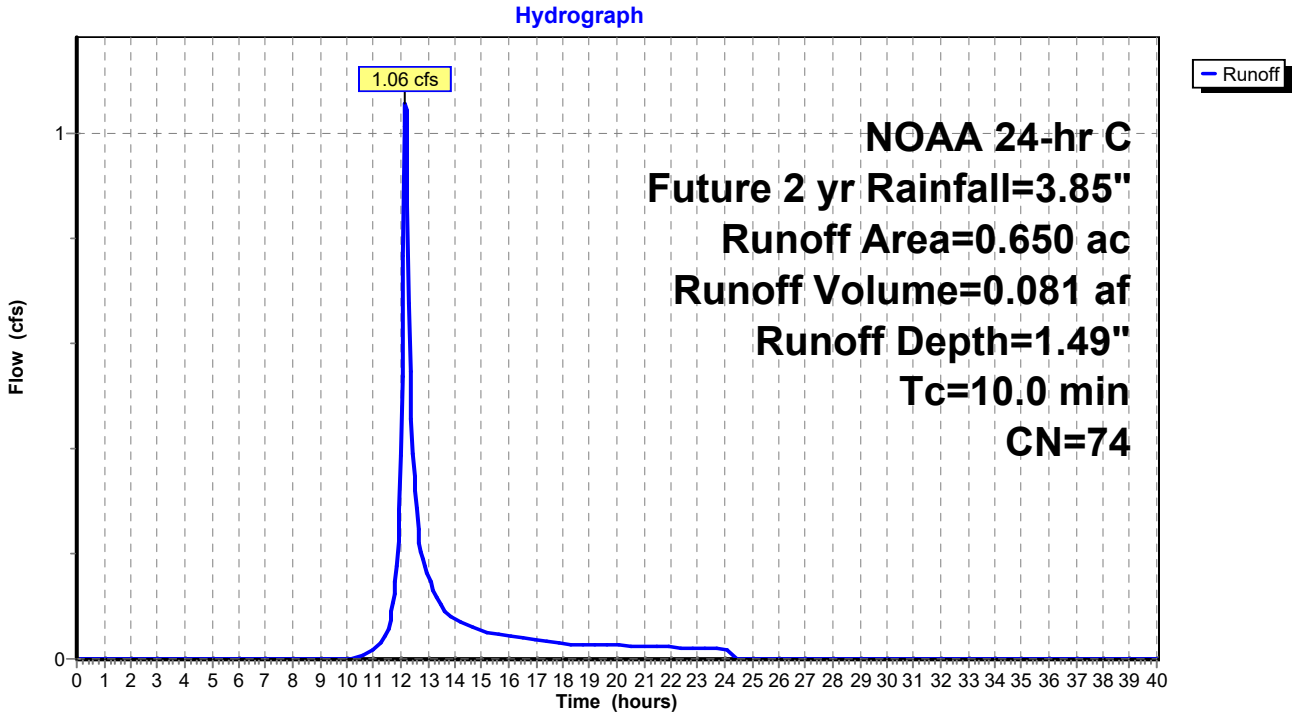
Runoff = 1.06 cfs @ 12.18 hrs, Volume= 0.081 af, Depth= 1.49"
Routed to Pond B-35 : Basin #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.650	74	>75% Grass cover, Good, HSG C
0.650		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 35P: PDA-35 (pervious)



Summary for Subcatchment 36AI: PDA-36A (impervious)

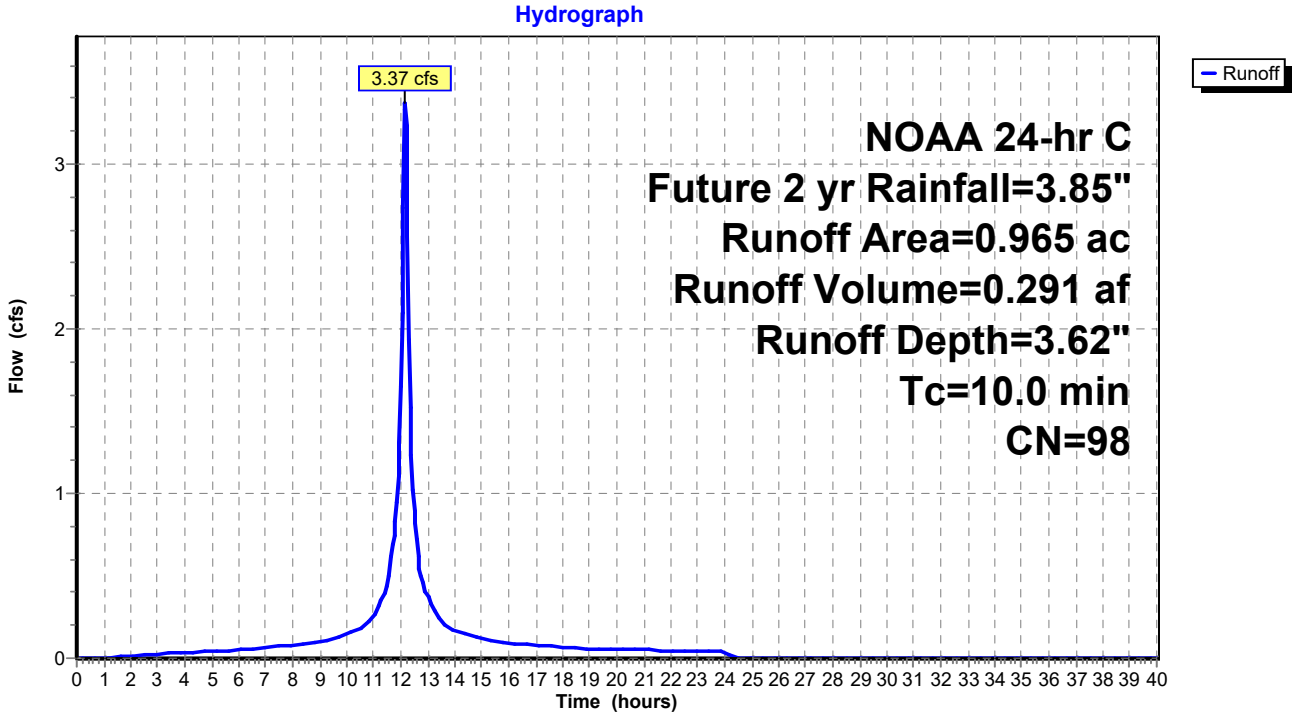
Runoff = 3.37 cfs @ 12.17 hrs, Volume= 0.291 af, Depth= 3.62"
Routed to Pond B-36A : Basin #36A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.415	98	Pavement, HSG C
*	0.418	98	Roof, HSG C
*	0.132	98	Concrete, HSC C
	0.965	98	Weighted Average
	0.965		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36AI: PDA-36A (impervious)



Summary for Subcatchment 36AP: PDA-36A (pervious)

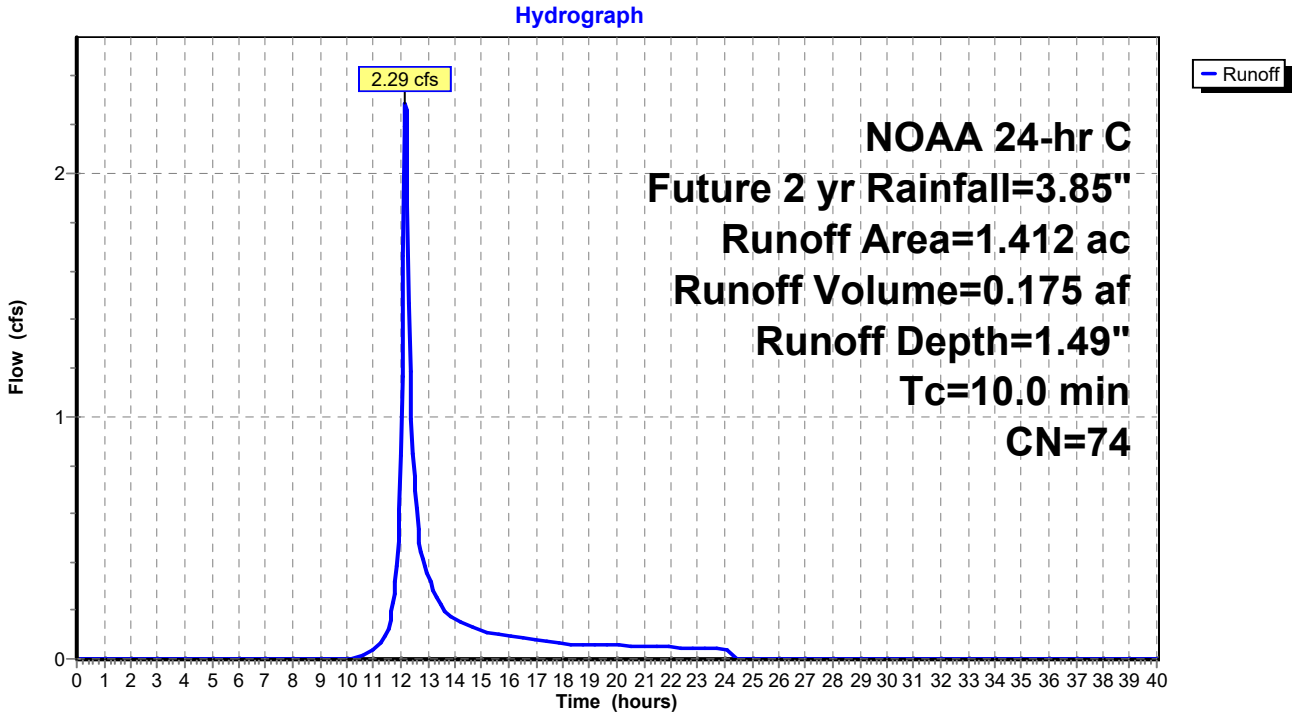
Runoff = 2.29 cfs @ 12.18 hrs, Volume= 0.175 af, Depth= 1.49"
Routed to Pond B-36A : Basin #36A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.412	74	>75% Grass cover, Good, HSG C
1.412		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36AP: PDA-36A (pervious)



Summary for Subcatchment 36BI: PDA-36B (impervious)

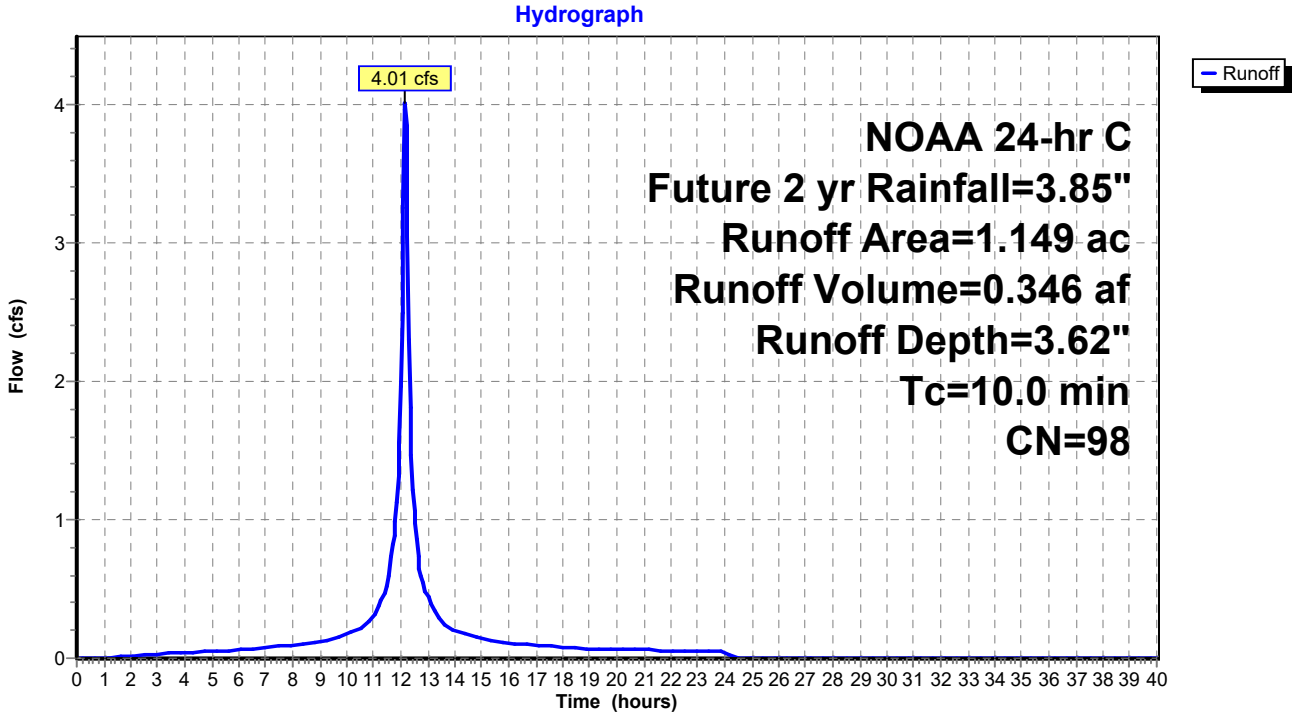
Runoff = 4.01 cfs @ 12.17 hrs, Volume= 0.346 af, Depth= 3.62"
Routed to Pond B-36B : Basin #36B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.501	98	Pavement, HSG C
*	0.579	98	Roof, HSG C
*	0.069	98	Concrete, HSC C
	1.149	98	Weighted Average
	1.149		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36BI: PDA-36B (impervious)



Summary for Subcatchment 36BP: PDA-36B (pervious)

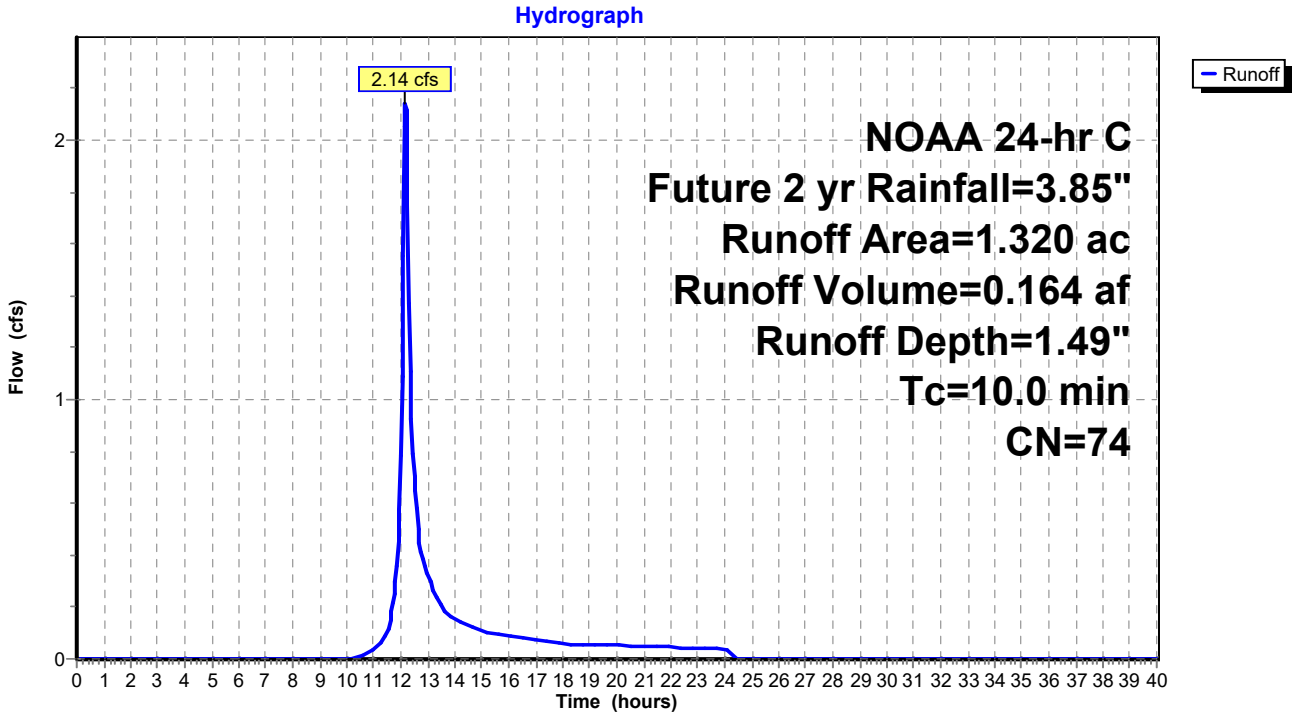
Runoff = 2.14 cfs @ 12.18 hrs, Volume= 0.164 af, Depth= 1.49"
Routed to Pond B-36B : Basin #36B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.320	74	>75% Grass cover, Good, HSG C
1.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36BP: PDA-36B (pervious)



Summary for Subcatchment 37AI: PDA-37B (impervious)

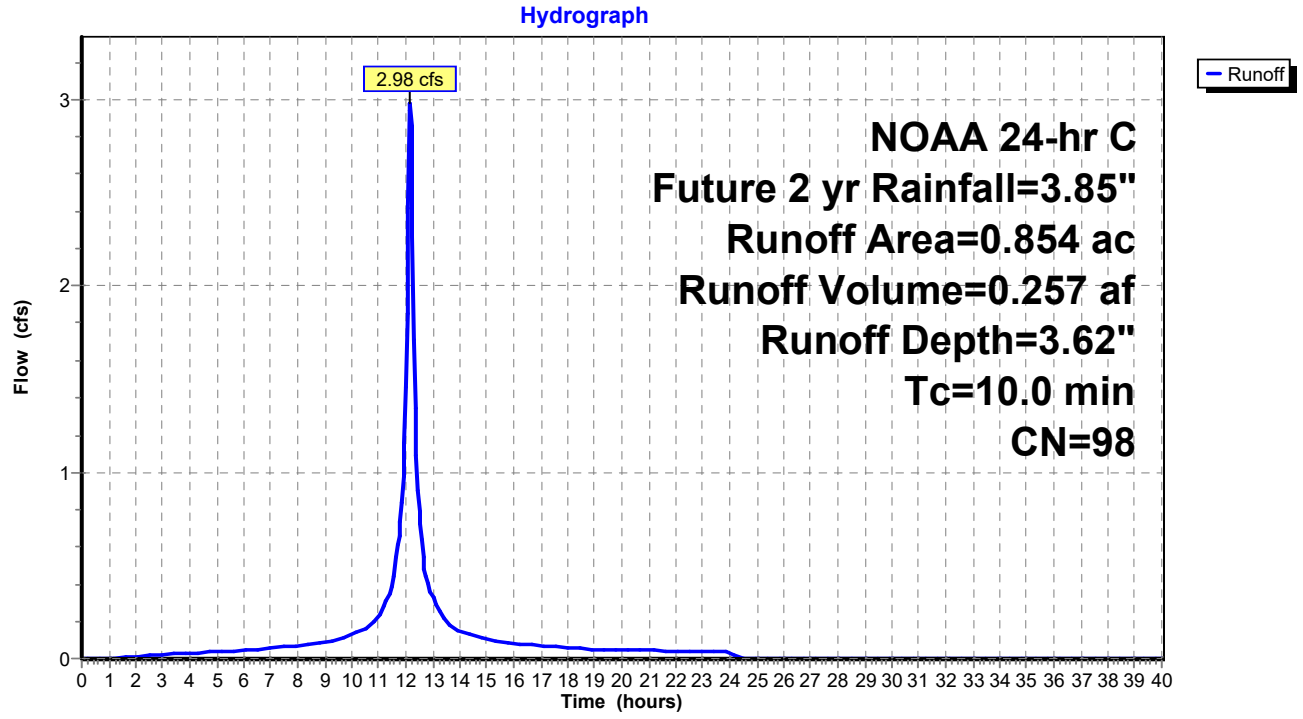
Runoff = 2.98 cfs @ 12.17 hrs, Volume= 0.257 af, Depth= 3.62"
Routed to Pond B-37A : Basin #37A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.673	98	Pavement, HSG C
*	0.181	98	Concrete, HSC C
	0.854	98	Weighted Average
	0.854		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37AI: PDA-37B (impervious)



Summary for Subcatchment 37AP: PDA-37A (pervious)

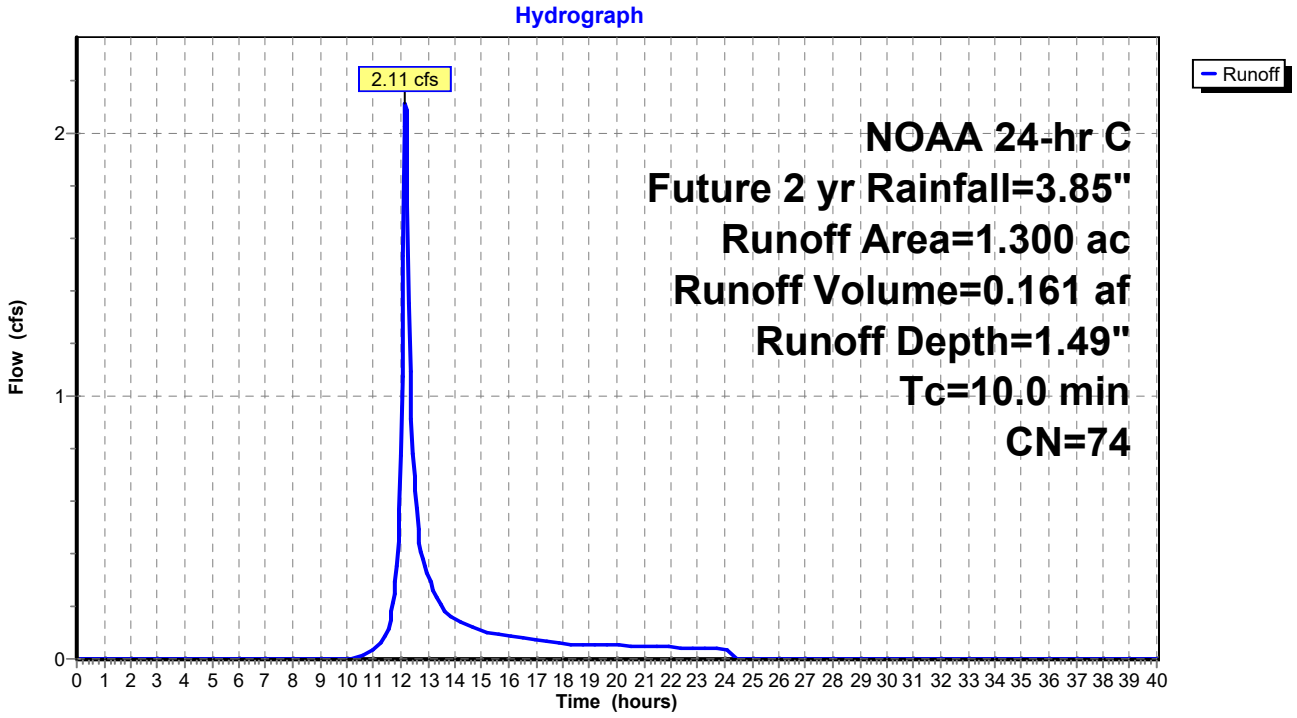
Runoff = 2.11 cfs @ 12.18 hrs, Volume= 0.161 af, Depth= 1.49"
Routed to Pond B-37A : Basin #37A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.300	74	>75% Grass cover, Good, HSG C
1.300		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37AP: PDA-37A (pervious)



Summary for Subcatchment 37BI: PDA-37B (impervious)

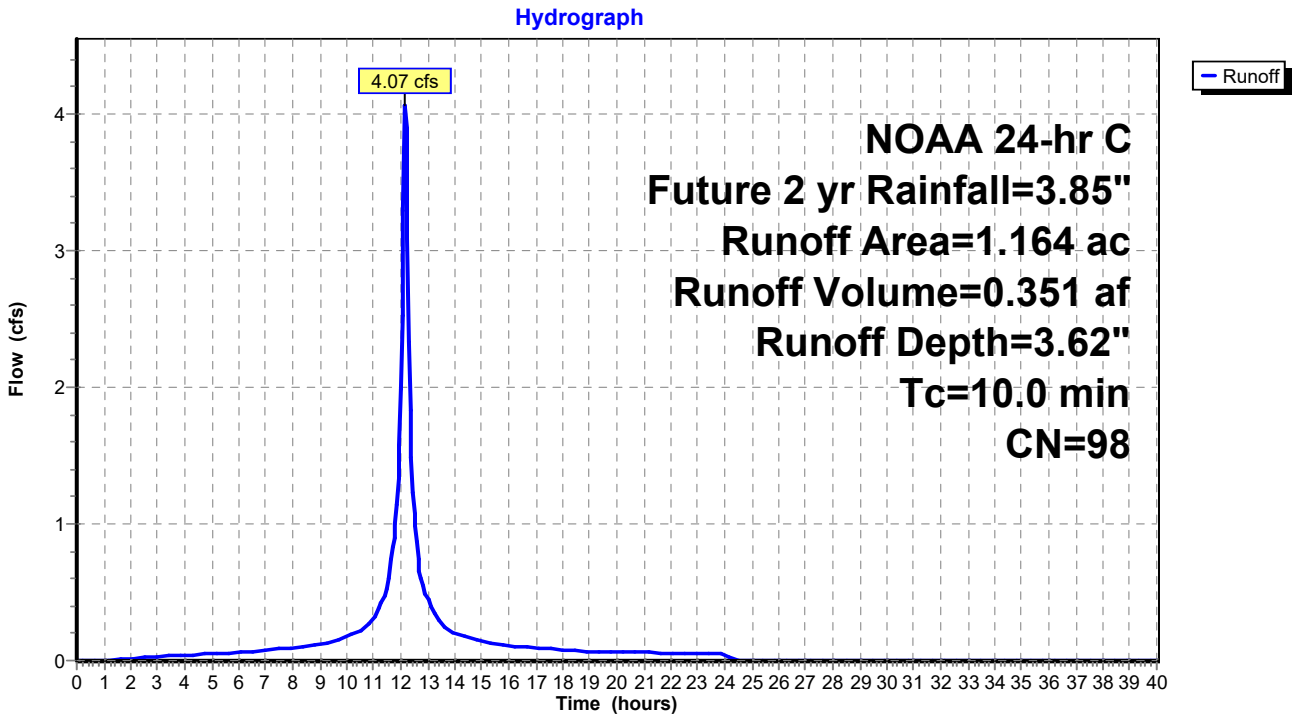
Runoff = 4.07 cfs @ 12.17 hrs, Volume= 0.351 af, Depth= 3.62"
Routed to Pond B-37B : Basin #37B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.806	98	Pavement, HSG C
*	0.079	98	Concrete, HSC C
	0.279	98	Unconnected roofs, HSG C
	1.164	98	Weighted Average
	1.164		100.00% Impervious Area
	0.279		23.97% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37BI: PDA-37B (impervious)



Summary for Subcatchment 38BP: PDA-37B (pervious)

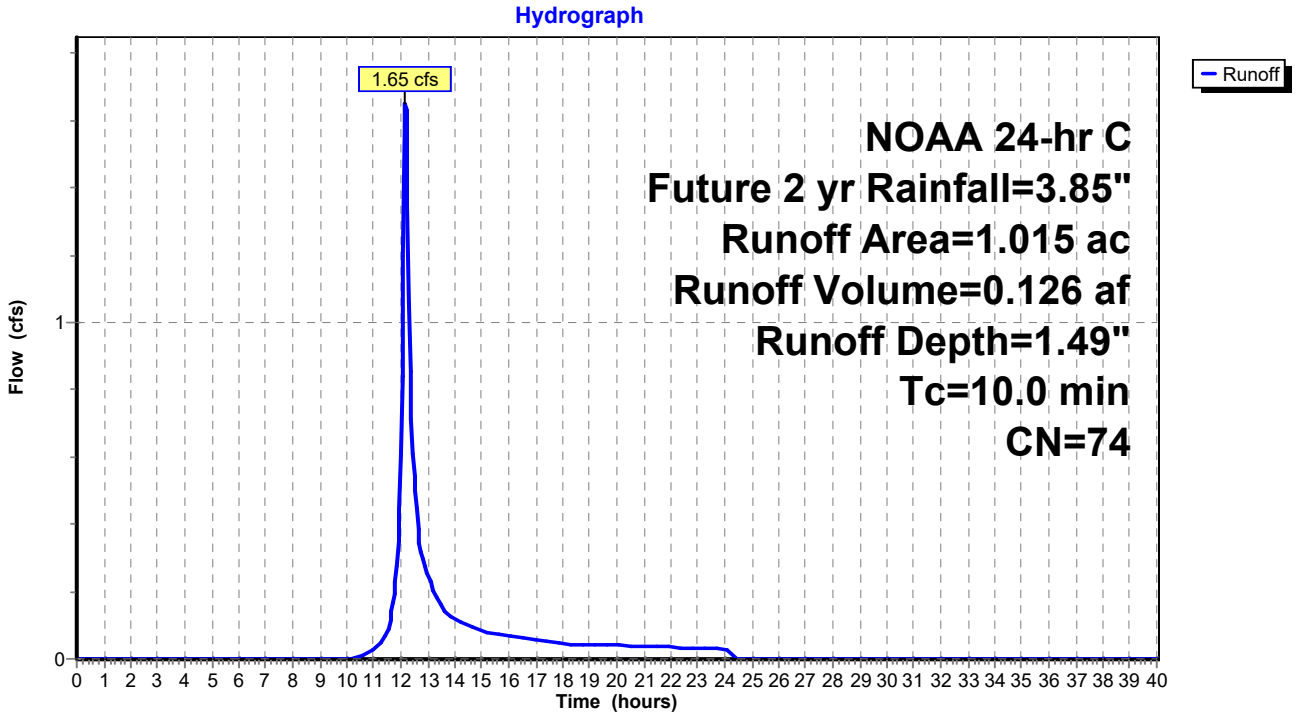
Runoff = 1.65 cfs @ 12.18 hrs, Volume= 0.126 af, Depth= 1.49"
Routed to Pond B-37B : Basin #37B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.015	74	>75% Grass cover, Good, HSG C
1.015		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38BP: PDA-37B (pervious)



Summary for Subcatchment 38I: PDA-38 (impervious)

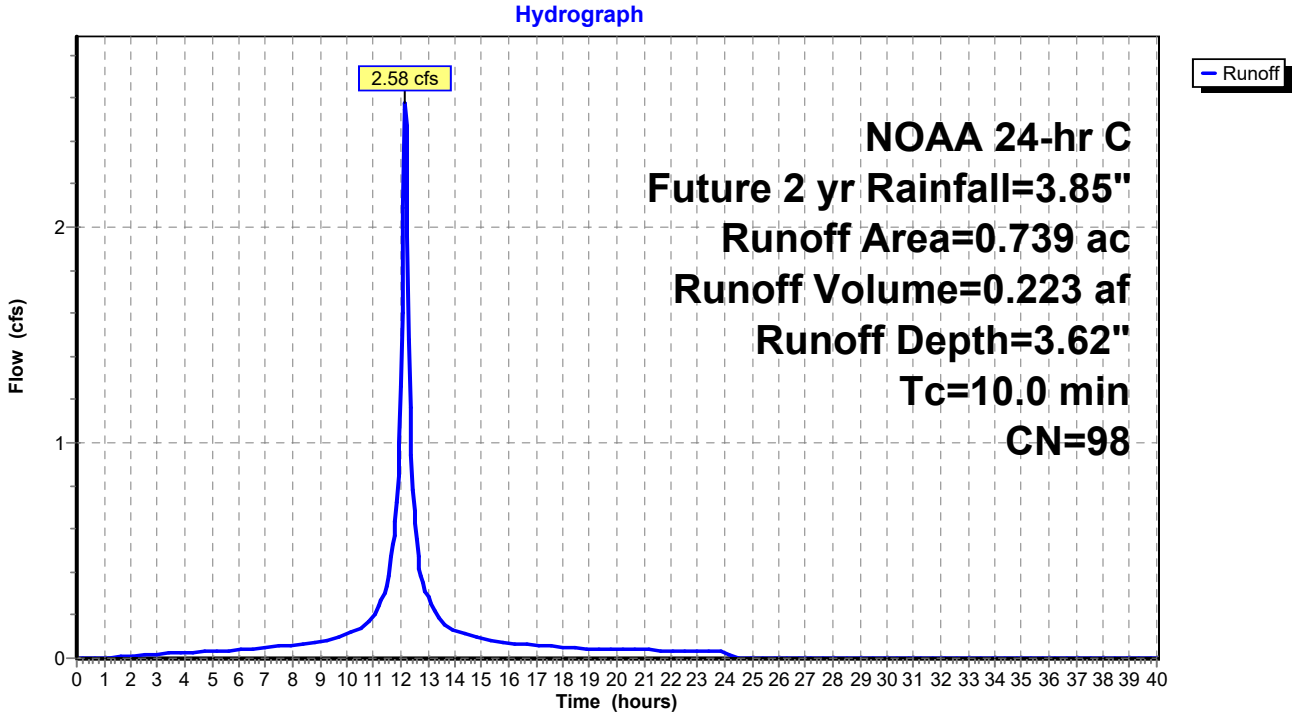
Runoff = 2.58 cfs @ 12.17 hrs, Volume= 0.223 af, Depth= 3.62"
Routed to Pond B-38 : Basin #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.171	98	Concrete, HSC C
	0.000	98	Paved roads w/curbs & sewers, HSG C
	0.739	98	Weighted Average
	0.739		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38I: PDA-38 (impervious)



Summary for Subcatchment 38P: PDA-38 (pervious)

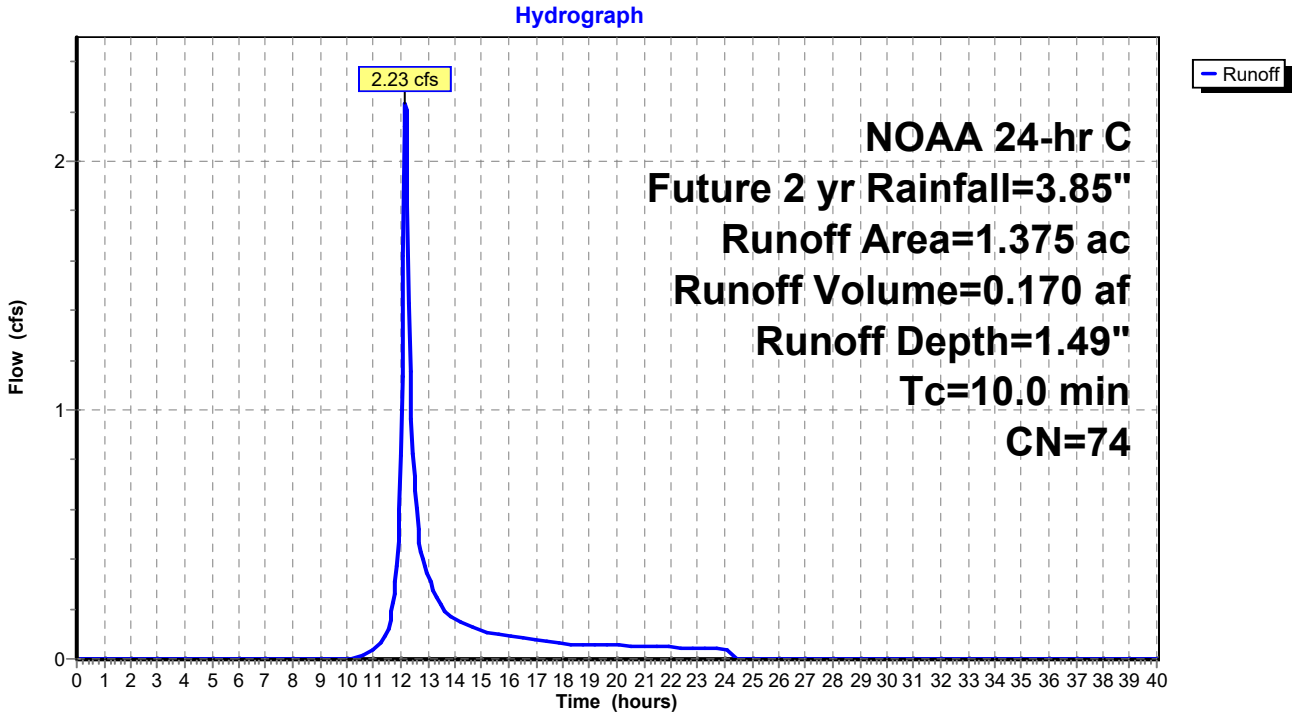
Runoff = 2.23 cfs @ 12.18 hrs, Volume= 0.170 af, Depth= 1.49"
Routed to Pond B-38 : Basin #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.375	74	>75% Grass cover, Good, HSG C
1.375		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38P: PDA-38 (pervious)



Summary for Subcatchment 39l: PDA-39 (impervious)

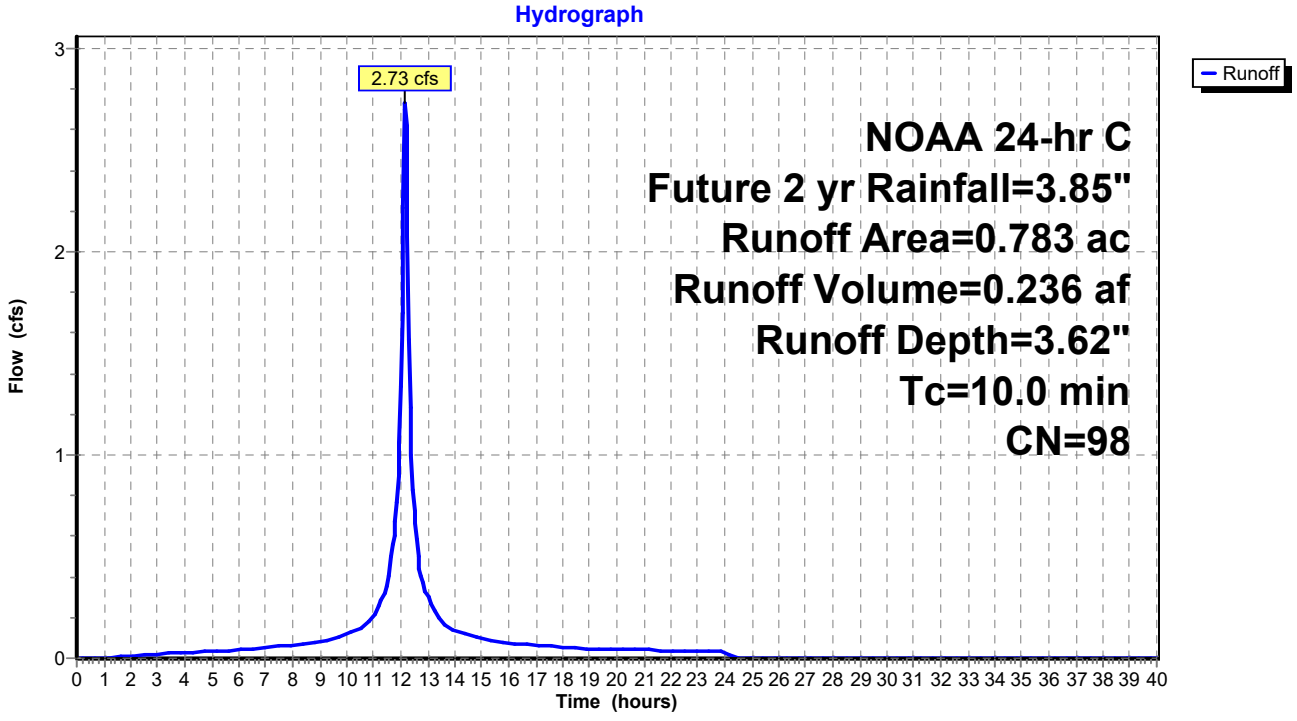
Runoff = 2.73 cfs @ 12.17 hrs, Volume= 0.236 af, Depth= 3.62"
Routed to Pond B-39 : Basin #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.164	98	Concrete, HSC C
	0.051	98	Paved roads w/curbs & sewers, HSG C
	0.783	98	Weighted Average
	0.783		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 39l: PDA-39 (impervious)



Summary for Subcatchment 39P: PDA-39 (pervious)

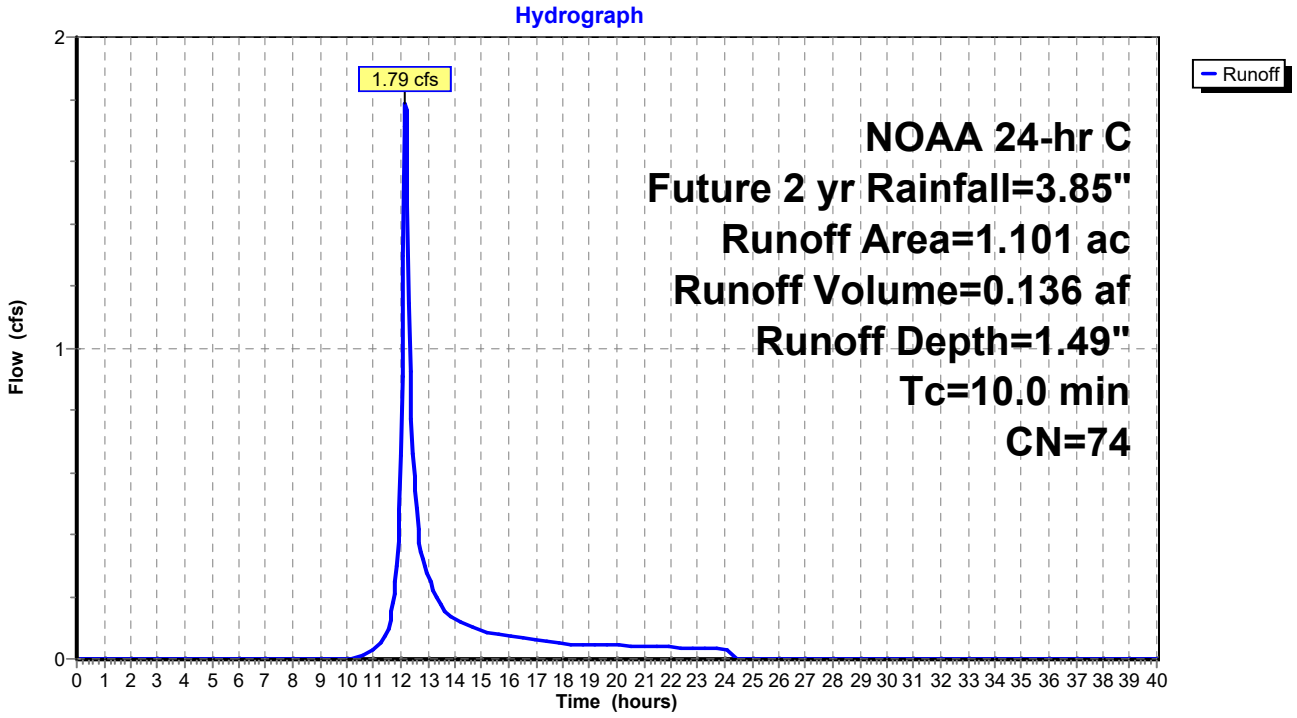
Runoff = 1.79 cfs @ 12.18 hrs, Volume= 0.136 af, Depth= 1.49"
Routed to Pond B-39 : Basin #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.101	74	>75% Grass cover, Good, HSG C
1.101		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 39P: PDA-39 (pervious)



Summary for Subcatchment 40l: PDA-40 (impervious)

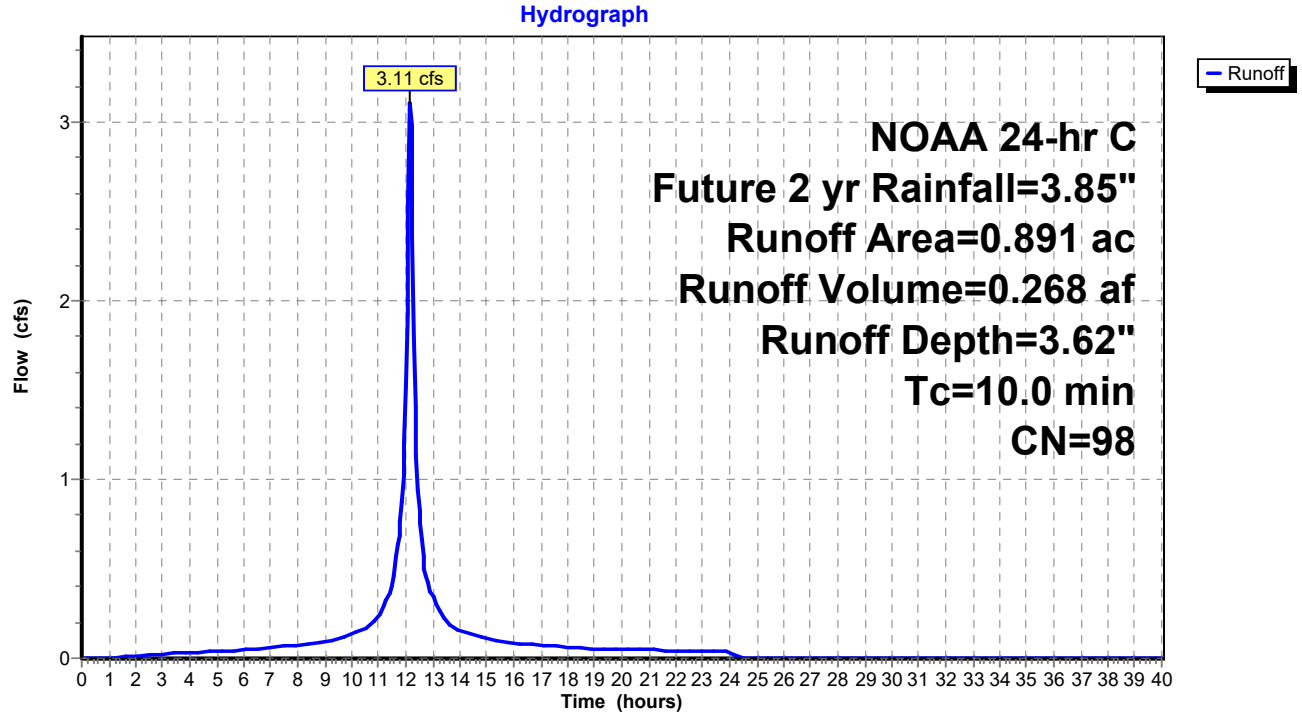
Runoff = 3.11 cfs @ 12.17 hrs, Volume= 0.268 af, Depth= 3.62"
Routed to Pond B-40 : Basin #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.179	98	Concrete, HSC C
	0.144	98	Paved roads w/curbs & sewers, HSG C
	0.891	98	Weighted Average
	0.891		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 40l: PDA-40 (impervious)



Summary for Subcatchment 40P: PDA-40 (pervious)

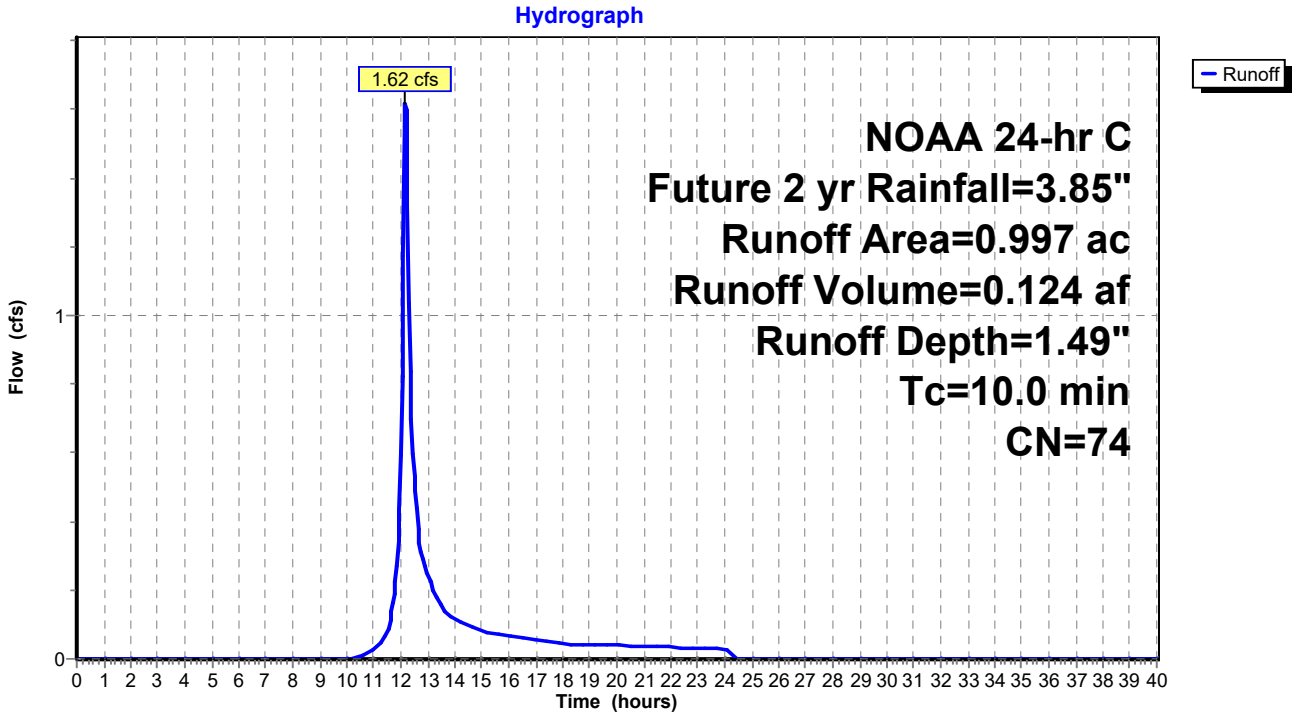
Runoff = 1.62 cfs @ 12.18 hrs, Volume= 0.124 af, Depth= 1.49"
Routed to Pond B-40 : Basin #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.997	74	>75% Grass cover, Good, HSG C
0.997		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 40P: PDA-40 (pervious)



Summary for Subcatchment UPDA-3: PDA-3 (undetained)

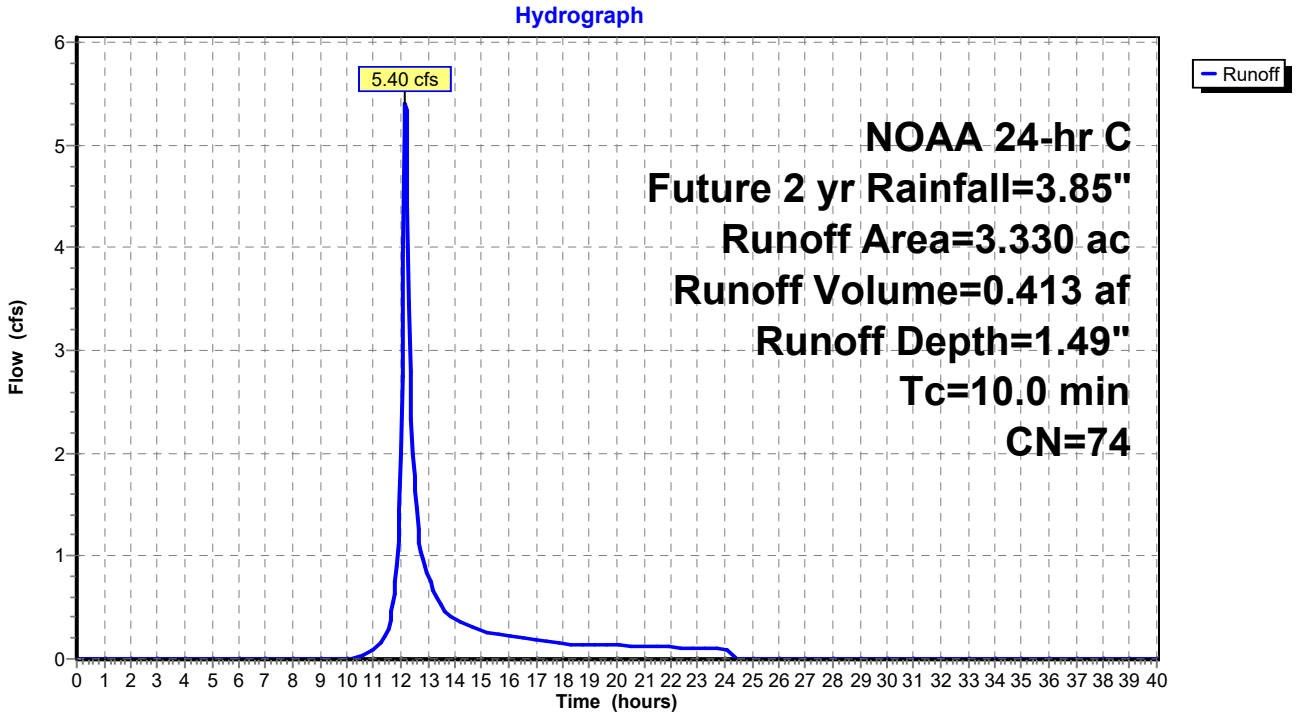
Runoff = 5.40 cfs @ 12.18 hrs, Volume= 0.413 af, Depth= 1.49"
Routed to Link PDA-3 : Proposed Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
3.330	74	>75% Grass cover, Good, HSG C
3.330		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-3: PDA-3 (undetained)



Summary for Pond B-29: Basin #29

Inflow Area = 1.077 ac, 34.91% Impervious, Inflow Depth = 2.23" for Future 2 yr event
Inflow = 2.45 cfs @ 12.17 hrs, Volume= 0.200 af
Outflow = 0.12 cfs @ 14.67 hrs, Volume= 0.155 af, Atten= 95%, Lag= 149.5 min
Primary = 0.12 cfs @ 14.67 hrs, Volume= 0.155 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 187.49' @ 14.67 hrs Surf.Area= 7,137 sf Storage= 5,754 cf

Plug-Flow detention time= 578.8 min calculated for 0.155 af (77% of inflow)
Center-of-Mass det. time= 490.1 min (1,291.3 - 801.2)

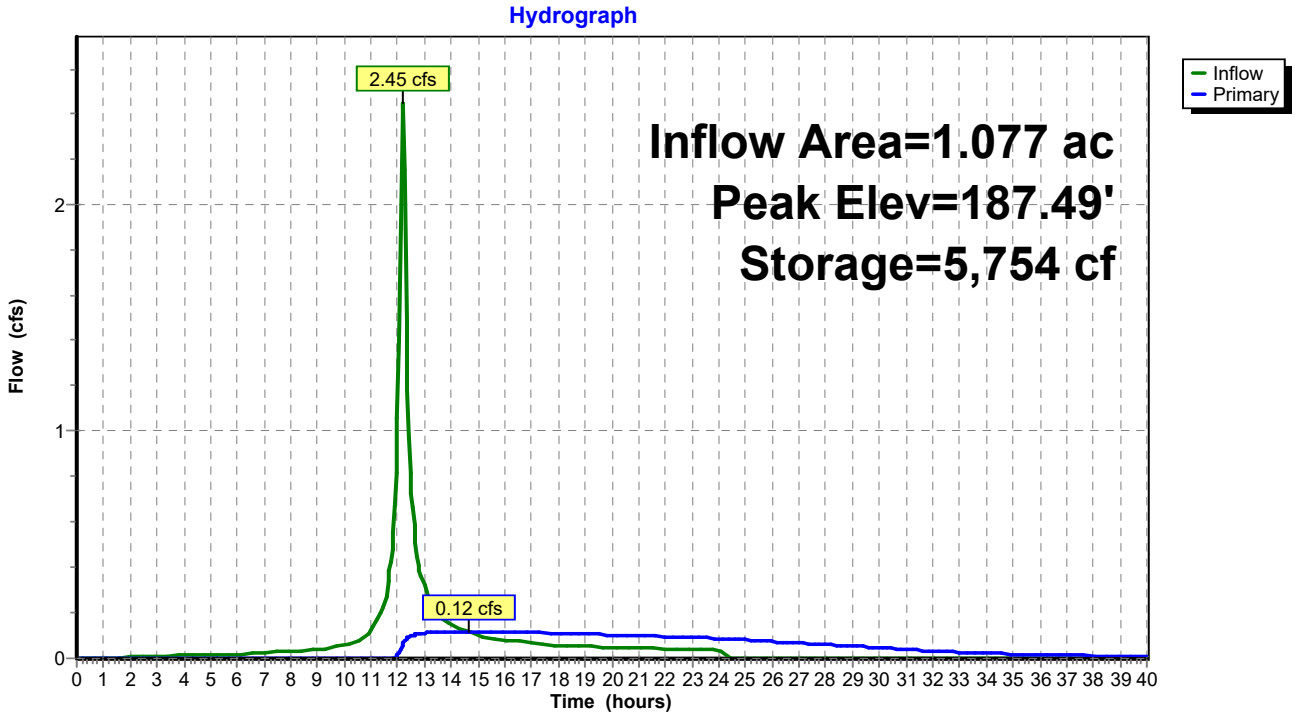
Volume	Invert	Avail.Storage	Storage Description
#1	186.30'	17,435 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.30	0	0	0
187.00	6,769	2,369	2,369
188.00	7,526	7,148	9,517
189.00	8,311	7,919	17,435

Device	Routing	Invert	Outlet Devices
#1	Primary	185.65'	**18.0" Round Culvert** L= 177.0' Ke= 0.500 Inlet / Outlet Invert= 185.65' / 182.00' S= 0.0206 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	186.87'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	187.49'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.17'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.12 cfs @ 14.67 hrs HW=187.49' (Free Discharge)
- **1=Culvert** (Passes 0.12 cfs of 8.87 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.12 cfs @ 3.45 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-29: Basin #29



Stage-Discharge for Pond B-29: Basin #29

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.30	0.00	186.82	0.00	187.34	0.10	187.86	3.04
186.31	0.00	186.83	0.00	187.35	0.10	187.87	3.16
186.32	0.00	186.84	0.00	187.36	0.10	187.88	3.28
186.33	0.00	186.85	0.00	187.37	0.10	187.89	3.40
186.34	0.00	186.86	0.00	187.38	0.10	187.90	3.52
186.35	0.00	186.87	0.00	187.39	0.11	187.91	3.64
186.36	0.00	186.88	0.00	187.40	0.11	187.92	3.77
186.37	0.00	186.89	0.00	187.41	0.11	187.93	3.89
186.38	0.00	186.90	0.00	187.42	0.11	187.94	4.02
186.39	0.00	186.91	0.00	187.43	0.11	187.95	4.15
186.40	0.00	186.92	0.00	187.44	0.11	187.96	4.28
186.41	0.00	186.93	0.01	187.45	0.11	187.97	4.41
186.42	0.00	186.94	0.01	187.46	0.11	187.98	4.54
186.43	0.00	186.95	0.01	187.47	0.12	187.99	4.67
186.44	0.00	186.96	0.01	187.48	0.12	188.00	4.81
186.45	0.00	186.97	0.02	187.49	0.12	188.01	4.94
186.46	0.00	186.98	0.02	187.50	0.13	188.02	5.08
186.47	0.00	186.99	0.02	187.51	0.16	188.03	5.22
186.48	0.00	187.00	0.03	187.52	0.19	188.04	5.36
186.49	0.00	187.01	0.03	187.53	0.23	188.05	5.50
186.50	0.00	187.02	0.03	187.54	0.27	188.06	5.64
186.51	0.00	187.03	0.04	187.55	0.32	188.07	5.78
186.52	0.00	187.04	0.04	187.56	0.37	188.08	5.93
186.53	0.00	187.05	0.05	187.57	0.42	188.09	6.07
186.54	0.00	187.06	0.05	187.58	0.48	188.10	6.22
186.55	0.00	187.07	0.05	187.59	0.54	188.11	6.36
186.56	0.00	187.08	0.05	187.60	0.60	188.12	6.51
186.57	0.00	187.09	0.06	187.61	0.67	188.13	6.66
186.58	0.00	187.10	0.06	187.62	0.74	188.14	6.81
186.59	0.00	187.11	0.06	187.63	0.81	188.15	6.96
186.60	0.00	187.12	0.06	187.64	0.89	188.16	7.11
186.61	0.00	187.13	0.06	187.65	0.97	188.17	7.26
186.62	0.00	187.14	0.07	187.66	1.04	188.18	7.54
186.63	0.00	187.15	0.07	187.67	1.13	188.19	7.90
186.64	0.00	187.16	0.07	187.68	1.21	188.20	8.34
186.65	0.00	187.17	0.07	187.69	1.30	188.21	8.82
186.66	0.00	187.18	0.07	187.70	1.39	188.22	9.35
186.67	0.00	187.19	0.08	187.71	1.48	188.23	9.93
186.68	0.00	187.20	0.08	187.72	1.57	188.24	10.54
186.69	0.00	187.21	0.08	187.73	1.66	188.25	11.18
186.70	0.00	187.22	0.08	187.74	1.76	188.26	11.86
186.71	0.00	187.23	0.08	187.75	1.86	188.27	12.56
186.72	0.00	187.24	0.08	187.76	1.96	188.28	13.30
186.73	0.00	187.25	0.09	187.77	2.06	188.29	14.06
186.74	0.00	187.26	0.09	187.78	2.16	188.30	14.86
186.75	0.00	187.27	0.09	187.79	2.27	188.31	15.67
186.76	0.00	187.28	0.09	187.80	2.37	188.32	16.52
186.77	0.00	187.29	0.09	187.81	2.48	188.33	17.38
186.78	0.00	187.30	0.09	187.82	2.59	188.34	18.27
186.79	0.00	187.31	0.10	187.83	2.70	188.35	19.19
186.80	0.00	187.32	0.10	187.84	2.81	188.36	20.12
186.81	0.00	187.33	0.10	187.85	2.93	188.37	21.08

Stage-Discharge for Pond B-29: Basin #29 (continued)

Elevation (feet)	Primary (cfs)
188.38	22.10
188.39	23.14
188.40	24.22
188.41	25.31
188.42	26.44
188.43	27.59
188.44	28.76
188.45	29.96
188.46	31.19
188.47	32.41
188.48	33.54
188.49	34.69
188.50	35.86
188.51	37.06
188.52	38.29
188.53	39.53
188.54	40.80
188.55	42.10
188.56	43.42
188.57	44.76
188.58	46.16
188.59	47.58
188.60	49.03
188.61	50.50
188.62	52.00
188.63	53.52
188.64	55.07
188.65	56.65
188.66	58.25
188.67	59.88
188.68	61.54
188.69	63.22
188.70	64.93
188.71	66.67
188.72	68.43
188.73	70.22
188.74	72.04
188.75	73.88
188.76	75.75
188.77	77.65
188.78	79.30
188.79	80.97
188.80	82.65
188.81	84.35
188.82	86.06
188.83	87.78
188.84	89.51
188.85	91.26
188.86	93.02
188.87	94.79
188.88	96.58
188.89	98.37
188.90	100.19
188.91	102.01
188.92	103.84
188.93	105.69
188.94	107.55
188.95	109.42
188.96	111.31
188.97	113.21
188.98	115.15
188.99	117.11
189.00	**119.08**

Stage-Area-Storage for Pond B-29: Basin #29

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.30	0	0	186.82	5,028	1,307
186.31	97	0	186.83	5,125	1,358
186.32	193	2	186.84	5,222	1,410
186.33	290	4	186.85	5,319	1,463
186.34	387	8	186.86	5,415	1,516
186.35	484	12	186.87	5,512	1,571
186.36	580	17	186.88	5,609	1,626
186.37	677	24	186.89	5,705	1,683
186.38	774	31	186.90	5,802	1,741
186.39	870	39	186.91	5,899	1,799
186.40	967	48	186.92	5,995	1,859
186.41	1,064	59	186.93	6,092	1,919
186.42	1,160	70	186.94	6,189	1,980
186.43	1,257	82	186.95	6,286	2,043
186.44	1,354	95	186.96	6,382	2,106
186.45	1,451	109	186.97	6,479	2,170
186.46	1,547	124	186.98	6,576	2,236
186.47	1,644	140	186.99	6,672	2,302
186.48	1,741	157	187.00	6,769	2,369
186.49	1,837	175	187.01	6,777	2,437
186.50	1,934	193	187.02	6,784	2,505
186.51	2,031	213	187.03	6,792	2,573
186.52	2,127	234	187.04	6,799	2,641
186.53	2,224	256	187.05	6,807	2,709
186.54	2,321	278	187.06	6,814	2,777
186.55	2,418	302	187.07	6,822	2,845
186.56	2,514	327	187.08	6,830	2,913
186.57	2,611	352	187.09	6,837	2,981
186.58	2,708	379	187.10	6,845	3,050
186.59	2,804	407	187.11	6,852	3,118
186.60	2,901	435	187.12	6,860	3,187
186.61	2,998	465	187.13	6,867	3,256
186.62	3,094	495	187.14	6,875	3,324
186.63	3,191	527	187.15	6,883	3,393
186.64	3,288	559	187.16	6,890	3,462
186.65	3,385	592	187.17	6,898	3,531
186.66	3,481	627	187.18	6,905	3,600
186.67	3,578	662	187.19	6,913	3,669
186.68	3,675	698	187.20	6,920	3,738
186.69	3,771	735	187.21	6,928	3,807
186.70	3,868	774	187.22	6,936	3,877
186.71	3,965	813	187.23	6,943	3,946
186.72	4,061	853	187.24	6,951	4,016
186.73	4,158	894	187.25	6,958	4,085
186.74	4,255	936	187.26	6,966	4,155
186.75	4,351	979	187.27	6,973	4,224
186.76	4,448	1,023	187.28	6,981	4,294
186.77	4,545	1,068	187.29	6,989	4,364
186.78	4,642	1,114	187.30	6,996	4,434
186.79	4,738	1,161	187.31	7,004	4,504
186.80	4,835	1,209	187.32	7,011	4,574
186.81	4,932	1,258	187.33	7,019	4,644

Stage-Area-Storage for Pond B-29: Basin #29 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.34	7,026	4,714	187.86	7,420	8,470
187.35	7,034	4,785	187.87	7,428	8,545
187.36	7,042	4,855	187.88	7,435	8,619
187.37	7,049	4,925	187.89	7,443	8,693
187.38	7,057	4,996	187.90	7,450	8,768
187.39	7,064	5,067	187.91	7,458	8,842
187.40	7,072	5,137	187.92	7,465	8,917
187.41	7,079	5,208	187.93	7,473	8,992
187.42	7,087	5,279	187.94	7,481	9,066
187.43	7,095	5,350	187.95	7,488	9,141
187.44	7,102	5,421	187.96	7,496	9,216
187.45	7,110	5,492	187.97	7,503	9,291
187.46	7,117	5,563	187.98	7,511	9,366
187.47	7,125	5,634	187.99	7,518	9,441
187.48	7,132	5,705	188.00	7,526	9,517
187.49	7,140	5,777	188.01	7,534	9,592
187.50	7,148	5,848	188.02	7,542	9,667
187.51	7,155	5,920	188.03	7,550	9,743
187.52	7,163	5,991	188.04	7,557	9,818
187.53	7,170	6,063	188.05	7,565	9,894
187.54	7,178	6,135	188.06	7,573	9,970
187.55	7,185	6,207	188.07	7,581	10,045
187.56	7,193	6,278	188.08	7,589	10,121
187.57	7,200	6,350	188.09	7,597	10,197
187.58	7,208	6,422	188.10	7,605	10,273
187.59	7,216	6,495	188.11	7,612	10,349
187.60	7,223	6,567	188.12	7,620	10,425
187.61	7,231	6,639	188.13	7,628	10,502
187.62	7,238	6,711	188.14	7,636	10,578
187.63	7,246	6,784	188.15	7,644	10,654
187.64	7,253	6,856	188.16	7,652	10,731
187.65	7,261	6,929	188.17	7,659	10,807
187.66	7,269	7,002	188.18	7,667	10,884
187.67	7,276	7,074	188.19	7,675	10,961
187.68	7,284	7,147	188.20	7,683	11,038
187.69	7,291	7,220	188.21	7,691	11,114
187.70	7,299	7,293	188.22	7,699	11,191
187.71	7,306	7,366	188.23	7,707	11,268
187.72	7,314	7,439	188.24	7,714	11,345
187.73	7,322	7,512	188.25	7,722	11,423
187.74	7,329	7,585	188.26	7,730	11,500
187.75	7,337	7,659	188.27	7,738	11,577
187.76	7,344	7,732	188.28	7,746	11,655
187.77	7,352	7,806	188.29	7,754	11,732
187.78	7,359	7,879	188.30	7,762	11,810
187.79	7,367	7,953	188.31	7,769	11,887
187.80	7,375	8,027	188.32	7,777	11,965
187.81	7,382	8,100	188.33	7,785	12,043
187.82	7,390	8,174	188.34	7,793	12,121
187.83	7,397	8,248	188.35	7,801	12,199
187.84	7,405	8,322	188.36	7,809	12,277
187.85	7,412	8,396	188.37	7,816	12,355

Stage-Area-Storage for Pond B-29: Basin #29 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.38	7,824	12,433
188.39	7,832	12,511
188.40	7,840	12,590
188.41	7,848	12,668
188.42	7,856	12,747
188.43	7,864	12,825
188.44	7,871	12,904
188.45	7,879	12,983
188.46	7,887	13,062
188.47	7,895	13,141
188.48	7,903	13,220
188.49	7,911	13,299
188.50	7,919	13,378
188.51	7,926	13,457
188.52	7,934	13,536
188.53	7,942	13,616
188.54	7,950	13,695
188.55	7,958	13,775
188.56	7,966	13,854
188.57	7,973	13,934
188.58	7,981	14,014
188.59	7,989	14,094
188.60	7,997	14,174
188.61	8,005	14,254
188.62	8,013	14,334
188.63	8,021	14,414
188.64	8,028	14,494
188.65	8,036	14,574
188.66	8,044	14,655
188.67	8,052	14,735
188.68	8,060	14,816
188.69	8,068	14,896
188.70	8,076	14,977
188.71	8,083	15,058
188.72	8,091	15,139
188.73	8,099	15,220
188.74	8,107	15,301
188.75	8,115	15,382
188.76	8,123	15,463
188.77	8,130	15,544
188.78	8,138	15,626
188.79	8,146	15,707
188.80	8,154	15,789
188.81	8,162	15,870
188.82	8,170	15,952
188.83	8,178	16,034
188.84	8,185	16,115
188.85	8,193	16,197
188.86	8,201	16,279
188.87	8,209	16,361
188.88	8,217	16,443
188.89	8,225	16,526
188.90	8,233	16,608
188.91	8,240	16,690
188.92	8,248	16,773
188.93	8,256	16,855
188.94	8,264	16,938
188.95	8,272	17,021
188.96	8,280	17,103
188.97	8,287	17,186
188.98	8,295	17,269
188.99	8,303	17,352
189.00	**8,311**	**17,435**

Summary for Pond B-30: Basin #30

Inflow Area = 2.381 ac, 27.01% Impervious, Inflow Depth = 2.06" for Future 2 yr event
Inflow = 5.05 cfs @ 12.18 hrs, Volume= 0.409 af
Outflow = 0.15 cfs @ 17.06 hrs, Volume= 0.277 af, Atten= 97%, Lag= 292.8 min
Primary = 0.15 cfs @ 17.06 hrs, Volume= 0.277 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 176.84' @ 17.06 hrs Surf.Area= 11,530 sf Storage= 12,739 cf

Plug-Flow detention time= 771.2 min calculated for 0.277 af (68% of inflow)
Center-of-Mass det. time= 663.3 min (1,473.8 - 810.5)

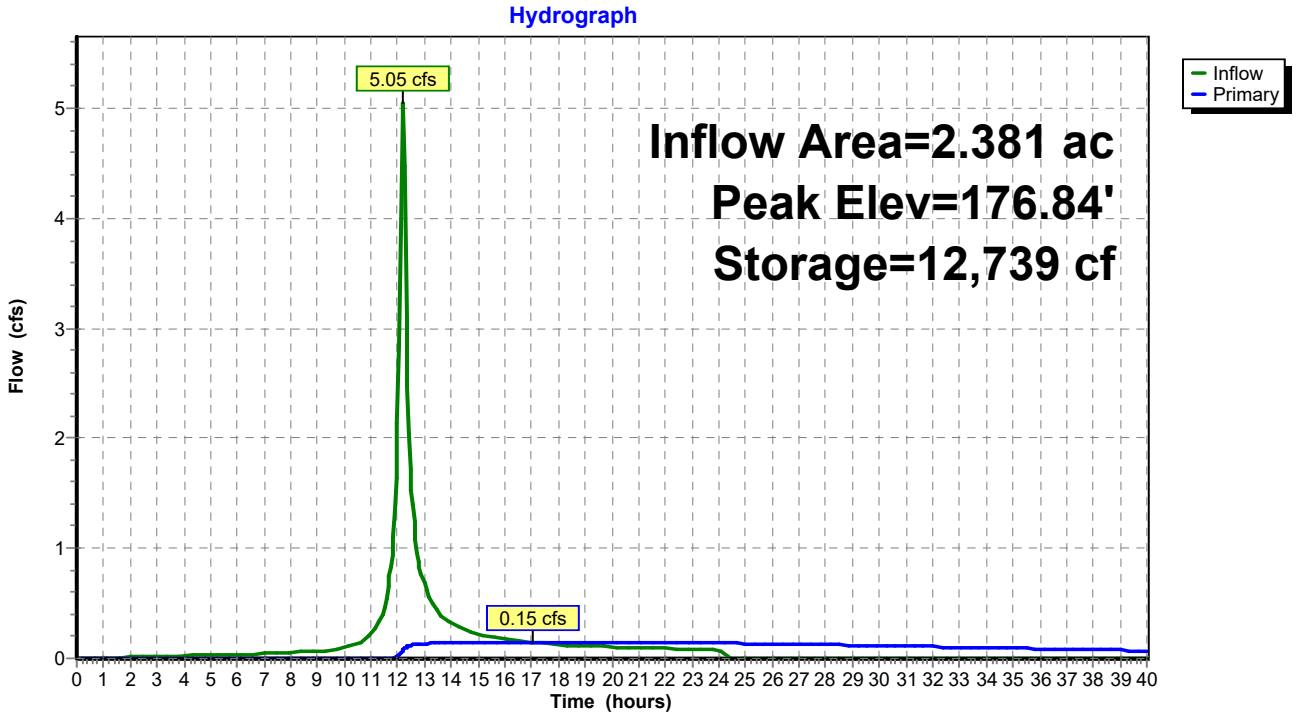
Volume	Invert	Avail.Storage	Storage Description
#1	175.30'	57,146 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
175.30	0	0	0
176.00	10,254	3,589	3,589
177.00	11,773	11,014	14,602
178.00	13,346	12,560	27,162
179.00	14,978	14,162	41,324
180.00	16,667	15,823	57,146

Device	Routing	Invert	Outlet Devices
#1	Primary	174.65'	**18.0" Round Culvert** L= 86.0' Ke= 0.500 Inlet / Outlet Invert= 174.65' / 174.00' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	175.93'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	179.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.15 cfs @ 17.06 hrs HW=176.84' (Free Discharge)
- **1=Culvert** (Passes 0.15 cfs of 9.37 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.15 cfs @ 4.32 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-30: Basin #30



Stage-Discharge for Pond B-30: Basin #30

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
175.30	0.00	175.82	0.00	176.34	0.09	176.86	0.15
175.31	0.00	175.83	0.00	176.35	0.09	176.87	0.15
175.32	0.00	175.84	0.00	176.36	0.09	176.88	0.15
175.33	0.00	175.85	0.00	176.37	0.10	176.89	0.15
175.34	0.00	175.86	0.00	176.38	0.10	176.90	0.15
175.35	0.00	175.87	0.00	176.39	0.10	176.91	0.15
175.36	0.00	175.88	0.00	176.40	0.10	176.92	0.15
175.37	0.00	175.89	0.00	176.41	0.10	176.93	0.16
175.38	0.00	175.90	0.00	176.42	0.10	176.94	0.16
175.39	0.00	175.91	0.00	176.43	0.10	176.95	0.16
175.40	0.00	175.92	0.00	176.44	0.10	176.96	0.16
175.41	0.00	175.93	0.00	176.45	0.11	176.97	0.16
175.42	0.00	175.94	0.00	176.46	0.11	176.98	0.16
175.43	0.00	175.95	0.00	176.47	0.11	176.99	0.16
175.44	0.00	175.96	0.00	176.48	0.11	177.00	0.16
175.45	0.00	175.97	0.00	176.49	0.11	177.01	0.16
175.46	0.00	175.98	0.00	176.50	0.11	177.02	0.16
175.47	0.00	175.99	0.01	176.51	0.11	177.03	0.16
175.48	0.00	176.00	0.01	176.52	0.11	177.04	0.16
175.49	0.00	176.01	0.01	176.53	0.12	177.05	0.17
175.50	0.00	176.02	0.01	176.54	0.12	177.06	0.17
175.51	0.00	176.03	0.02	176.55	0.12	177.07	0.17
175.52	0.00	176.04	0.02	176.56	0.12	177.08	0.17
175.53	0.00	176.05	0.02	176.57	0.12	177.09	0.17
175.54	0.00	176.06	0.03	176.58	0.12	177.10	0.17
175.55	0.00	176.07	0.03	176.59	0.12	177.11	0.17
175.56	0.00	176.08	0.03	176.60	0.12	177.12	0.17
175.57	0.00	176.09	0.04	176.61	0.12	177.13	0.17
175.58	0.00	176.10	0.04	176.62	0.13	177.14	0.17
175.59	0.00	176.11	0.05	176.63	0.13	177.15	0.17
175.60	0.00	176.12	0.05	176.64	0.13	177.16	0.17
175.61	0.00	176.13	0.05	176.65	0.13	177.17	0.17
175.62	0.00	176.14	0.05	176.66	0.13	177.18	0.18
175.63	0.00	176.15	0.06	176.67	0.13	177.19	0.18
175.64	0.00	176.16	0.06	176.68	0.13	177.20	0.18
175.65	0.00	176.17	0.06	176.69	0.13	177.21	0.18
175.66	0.00	176.18	0.06	176.70	0.13	177.22	0.18
175.67	0.00	176.19	0.06	176.71	0.13	177.23	0.18
175.68	0.00	176.20	0.07	176.72	0.14	177.24	0.18
175.69	0.00	176.21	0.07	176.73	0.14	177.25	0.18
175.70	0.00	176.22	0.07	176.74	0.14	177.26	0.18
175.71	0.00	176.23	0.07	176.75	0.14	177.27	0.18
175.72	0.00	176.24	0.07	176.76	0.14	177.28	0.18
175.73	0.00	176.25	0.08	176.77	0.14	177.29	0.18
175.74	0.00	176.26	0.08	176.78	0.14	177.30	0.18
175.75	0.00	176.27	0.08	176.79	0.14	177.31	0.19
175.76	0.00	176.28	0.08	176.80	0.14	177.32	0.19
175.77	0.00	176.29	0.08	176.81	0.14	177.33	0.19
175.78	0.00	176.30	0.08	176.82	0.15	177.34	0.19
175.79	0.00	176.31	0.09	176.83	0.15	177.35	0.19
175.80	0.00	176.32	0.09	176.84	0.15	177.36	0.19
175.81	0.00	176.33	0.09	176.85	0.15	177.37	0.19

Stage-Discharge for Pond B-30: Basin #30 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
177.38	0.19	177.90	0.22	178.42	0.25	178.94	0.28
177.39	0.19	177.91	0.22	178.43	0.25	178.95	0.28
177.40	0.19	177.92	0.23	178.44	0.25	178.96	0.28
177.41	0.19	177.93	0.23	178.45	0.26	178.97	0.28
177.42	0.19	177.94	0.23	178.46	0.26	178.98	0.28
177.43	0.19	177.95	0.23	178.47	0.26	178.99	0.28
177.44	0.19	177.96	0.23	178.48	0.26	179.00	0.28
177.45	0.20	177.97	0.23	178.49	0.26	179.01	0.30
177.46	0.20	177.98	0.23	178.50	0.26	179.02	0.32
177.47	0.20	177.99	0.23	178.51	0.26	179.03	0.35
177.48	0.20	178.00	0.23	178.52	0.26	179.04	0.39
177.49	0.20	178.01	0.23	178.53	0.26	179.05	0.43
177.50	0.20	178.02	0.23	178.54	0.26	179.06	0.48
177.51	0.20	178.03	0.23	178.55	0.26	179.07	0.53
177.52	0.20	178.04	0.23	178.56	0.26	179.08	0.58
177.53	0.20	178.05	0.23	178.57	0.26	179.09	0.64
177.54	0.20	178.06	0.23	178.58	0.26	179.10	0.70
177.55	0.20	178.07	0.23	178.59	0.26	179.11	0.76
177.56	0.20	178.08	0.23	178.60	0.26	179.12	0.83
177.57	0.20	178.09	0.24	178.61	0.26	179.13	0.90
177.58	0.20	178.10	0.24	178.62	0.26	179.14	0.97
177.59	0.20	178.11	0.24	178.63	0.26	179.15	1.04
177.60	0.21	178.12	0.24	178.64	0.26	179.16	1.12
177.61	0.21	178.13	0.24	178.65	0.27	179.17	1.20
177.62	0.21	178.14	0.24	178.66	0.27	179.18	1.28
177.63	0.21	178.15	0.24	178.67	0.27	179.19	1.36
177.64	0.21	178.16	0.24	178.68	0.27	179.20	1.45
177.65	0.21	178.17	0.24	178.69	0.27	179.21	1.54
177.66	0.21	178.18	0.24	178.70	0.27	179.22	1.63
177.67	0.21	178.19	0.24	178.71	0.27	179.23	1.72
177.68	0.21	178.20	0.24	178.72	0.27	179.24	1.81
177.69	0.21	178.21	0.24	178.73	0.27	179.25	1.91
177.70	0.21	178.22	0.24	178.74	0.27	179.26	2.01
177.71	0.21	178.23	0.24	178.75	0.27	179.27	2.11
177.72	0.21	178.24	0.24	178.76	0.27	179.28	2.21
177.73	0.21	178.25	0.24	178.77	0.27	179.29	2.31
177.74	0.21	178.26	0.24	178.78	0.27	179.30	2.41
177.75	0.22	178.27	0.25	178.79	0.27	179.31	2.52
177.76	0.22	178.28	0.25	178.80	0.27	179.32	2.63
177.77	0.22	178.29	0.25	178.81	0.27	179.33	2.74
177.78	0.22	178.30	0.25	178.82	0.27	179.34	2.85
177.79	0.22	178.31	0.25	178.83	0.27	179.35	2.96
177.80	0.22	178.32	0.25	178.84	0.27	179.36	3.07
177.81	0.22	178.33	0.25	178.85	0.28	179.37	3.19
177.82	0.22	178.34	0.25	178.86	0.28	179.38	3.31
177.83	0.22	178.35	0.25	178.87	0.28	179.39	3.42
177.84	0.22	178.36	0.25	178.88	0.28	179.40	3.54
177.85	0.22	178.37	0.25	178.89	0.28	179.41	3.67
177.86	0.22	178.38	0.25	178.90	0.28	179.42	3.79
177.87	0.22	178.39	0.25	178.91	0.28	179.43	3.91
177.88	0.22	178.40	0.25	178.92	0.28	179.44	4.04
177.89	0.22	178.41	0.25	178.93	0.28	179.45	4.16

Stage-Discharge for Pond B-30: Basin #30 (continued)

Elevation (feet)	Primary (cfs)
179.46	4.29
179.47	4.42
179.48	4.55
179.49	4.68
179.50	4.81
179.51	5.07
179.52	5.41
179.53	5.83
179.54	6.30
179.55	6.81
179.56	7.36
179.57	7.95
179.58	8.58
179.59	9.23
179.60	9.92
179.61	10.64
179.62	11.39
179.63	12.16
179.64	12.96
179.65	13.79
179.66	14.64
179.67	15.51
179.68	16.41
179.69	17.33
179.70	18.27
179.71	19.27
179.72	20.30
179.73	21.36
179.74	22.44
179.75	23.55
179.76	24.68
179.77	25.84
179.78	27.03
179.79	28.24
179.80	29.47
179.81	30.73
179.82	32.02
179.83	33.33
179.84	34.67
179.85	36.03
179.86	37.42
179.87	38.83
179.88	40.27
179.89	41.73
179.90	43.22
179.91	44.76
179.92	46.32
179.93	47.91
179.94	49.53
179.95	51.18
179.96	52.85
179.97	54.55
179.98	56.28
179.99	58.04
180.00	**59.82**

Stage-Area-Storage for Pond B-30: Basin #30

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
175.30	0	0	175.82	7,617	1,980
175.31	146	1	175.83	7,764	2,057
175.32	293	3	175.84	7,910	2,136
175.33	439	7	175.85	8,057	2,216
175.34	586	12	175.86	8,203	2,297
175.35	732	18	175.87	8,350	2,380
175.36	879	26	175.88	8,496	2,464
175.37	1,025	36	175.89	8,643	2,550
175.38	1,172	47	175.90	8,789	2,637
175.39	1,318	59	175.91	8,936	2,725
175.40	1,465	73	175.92	9,082	2,815
175.41	1,611	89	175.93	9,229	2,907
175.42	1,758	105	175.94	9,375	3,000
175.43	1,904	124	175.95	9,522	3,095
175.44	2,051	144	175.96	9,668	3,190
175.45	2,197	165	175.97	9,815	3,288
175.46	2,344	188	175.98	9,961	3,387
175.47	2,490	212	175.99	10,108	3,487
175.48	2,637	237	176.00	10,254	3,589
175.49	2,783	264	176.01	10,269	3,692
175.50	2,930	293	176.02	10,284	3,794
175.51	3,076	323	176.03	10,300	3,897
175.52	3,223	354	176.04	10,315	4,000
175.53	3,369	387	176.05	10,330	4,103
175.54	3,516	422	176.06	10,345	4,207
175.55	3,662	458	176.07	10,360	4,310
175.56	3,809	495	176.08	10,376	4,414
175.57	3,955	534	176.09	10,391	4,518
175.58	4,102	574	176.10	10,406	4,622
175.59	4,248	616	176.11	10,421	4,726
175.60	4,395	659	176.12	10,436	4,830
175.61	4,541	704	176.13	10,451	4,935
175.62	4,688	750	176.14	10,467	5,039
175.63	4,834	798	176.15	10,482	5,144
175.64	4,981	847	176.16	10,497	5,249
175.65	5,127	897	176.17	10,512	5,354
175.66	5,273	949	176.18	10,527	5,459
175.67	5,420	1,003	176.19	10,543	5,565
175.68	5,566	1,058	176.20	10,558	5,670
175.69	5,713	1,114	176.21	10,573	5,776
175.70	5,859	1,172	176.22	10,588	5,882
175.71	6,006	1,231	176.23	10,603	5,987
175.72	6,152	1,292	176.24	10,619	6,094
175.73	6,299	1,354	176.25	10,634	6,200
175.74	6,445	1,418	176.26	10,649	6,306
175.75	6,592	1,483	176.27	10,664	6,413
175.76	6,738	1,550	176.28	10,679	6,520
175.77	6,885	1,618	176.29	10,695	6,626
175.78	7,031	1,688	176.30	10,710	6,733
175.79	7,178	1,759	176.31	10,725	6,841
175.80	7,324	1,831	176.32	10,740	6,948
175.81	7,471	1,905	176.33	10,755	7,055

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.34	10,770	7,163	176.86	11,560	12,969
176.35	10,786	7,271	176.87	11,576	13,085
176.36	10,801	7,379	176.88	11,591	13,201
176.37	10,816	7,487	176.89	11,606	13,317
176.38	10,831	7,595	176.90	11,621	13,433
176.39	10,846	7,703	176.91	11,636	13,549
176.40	10,862	7,812	176.92	11,651	13,665
176.41	10,877	7,921	176.93	11,667	13,782
176.42	10,892	8,030	176.94	11,682	13,899
176.43	10,907	8,139	176.95	11,697	14,016
176.44	10,922	8,248	176.96	11,712	14,133
176.45	10,938	8,357	176.97	11,727	14,250
176.46	10,953	8,466	176.98	11,743	14,367
176.47	10,968	8,576	176.99	11,758	14,485
176.48	10,983	8,686	177.00	11,773	14,602
176.49	10,998	8,796	177.01	11,789	14,720
176.50	11,014	8,906	177.02	11,804	14,838
176.51	11,029	9,016	177.03	11,820	14,956
176.52	11,044	9,126	177.04	11,836	15,075
176.53	11,059	9,237	177.05	11,852	15,193
176.54	11,074	9,348	177.06	11,867	15,312
176.55	11,089	9,458	177.07	11,883	15,430
176.56	11,105	9,569	177.08	11,899	15,549
176.57	11,120	9,680	177.09	11,915	15,668
176.58	11,135	9,792	177.10	11,930	15,788
176.59	11,150	9,903	177.11	11,946	15,907
176.60	11,165	10,015	177.12	11,962	16,026
176.61	11,181	10,126	177.13	11,977	16,146
176.62	11,196	10,238	177.14	11,993	16,266
176.63	11,211	10,350	177.15	12,009	16,386
176.64	11,226	10,463	177.16	12,025	16,506
176.65	11,241	10,575	177.17	12,040	16,627
176.66	11,257	10,687	177.18	12,056	16,747
176.67	11,272	10,800	177.19	12,072	16,868
176.68	11,287	10,913	177.20	12,088	16,988
176.69	11,302	11,026	177.21	12,103	17,109
176.70	11,317	11,139	177.22	12,119	17,231
176.71	11,332	11,252	177.23	12,135	17,352
176.72	11,348	11,366	177.24	12,151	17,473
176.73	11,363	11,479	177.25	12,166	17,595
176.74	11,378	11,593	177.26	12,182	17,717
176.75	11,393	11,707	177.27	12,198	17,838
176.76	11,408	11,821	177.28	12,213	17,961
176.77	11,424	11,935	177.29	12,229	18,083
176.78	11,439	12,049	177.30	12,245	18,205
176.79	11,454	12,164	177.31	12,261	18,328
176.80	11,469	12,278	177.32	12,276	18,450
176.81	11,484	12,393	177.33	12,292	18,573
176.82	11,500	12,508	177.34	12,308	18,696
176.83	11,515	12,623	177.35	12,324	18,819
176.84	11,530	12,738	177.36	12,339	18,943
176.85	11,545	12,854	177.37	12,355	19,066

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.38	12,371	19,190	177.90	13,189	25,835
177.39	12,386	19,313	177.91	13,204	25,967
177.40	12,402	19,437	177.92	13,220	26,099
177.41	12,418	19,562	177.93	13,236	26,232
177.42	12,434	19,686	177.94	13,252	26,364
177.43	12,449	19,810	177.95	13,267	26,497
177.44	12,465	19,935	177.96	13,283	26,629
177.45	12,481	20,060	177.97	13,299	26,762
177.46	12,497	20,184	177.98	13,315	26,895
177.47	12,512	20,309	177.99	13,330	27,029
177.48	12,528	20,435	178.00	13,346	27,162
177.49	12,544	20,560	178.01	13,362	27,295
177.50	12,560	20,686	178.02	13,379	27,429
177.51	12,575	20,811	178.03	13,395	27,563
177.52	12,591	20,937	178.04	13,411	27,697
177.53	12,607	21,063	178.05	13,428	27,831
177.54	12,622	21,189	178.06	13,444	27,966
177.55	12,638	21,315	178.07	13,460	28,100
177.56	12,654	21,442	178.08	13,477	28,235
177.57	12,670	21,569	178.09	13,493	28,370
177.58	12,685	21,695	178.10	13,509	28,505
177.59	12,701	21,822	178.11	13,526	28,640
177.60	12,717	21,949	178.12	13,542	28,775
177.61	12,733	22,077	178.13	13,558	28,911
177.62	12,748	22,204	178.14	13,574	29,046
177.63	12,764	22,332	178.15	13,591	29,182
177.64	12,780	22,459	178.16	13,607	29,318
177.65	12,795	22,587	178.17	13,623	29,454
177.66	12,811	22,715	178.18	13,640	29,591
177.67	12,827	22,843	178.19	13,656	29,727
177.68	12,843	22,972	178.20	13,672	29,864
177.69	12,858	23,100	178.21	13,689	30,001
177.70	12,874	23,229	178.22	13,705	30,138
177.71	12,890	23,358	178.23	13,721	30,275
177.72	12,906	23,487	178.24	13,738	30,412
177.73	12,921	23,616	178.25	13,754	30,549
177.74	12,937	23,745	178.26	13,770	30,687
177.75	12,953	23,875	178.27	13,787	30,825
177.76	12,968	24,004	178.28	13,803	30,963
177.77	12,984	24,134	178.29	13,819	31,101
177.78	13,000	24,264	178.30	13,836	31,239
177.79	13,016	24,394	178.31	13,852	31,378
177.80	13,031	24,524	178.32	13,868	31,516
177.81	13,047	24,655	178.33	13,885	31,655
177.82	13,063	24,785	178.34	13,901	31,794
177.83	13,079	24,916	178.35	13,917	31,933
177.84	13,094	25,047	178.36	13,934	32,072
177.85	13,110	25,178	178.37	13,950	32,212
177.86	13,126	25,309	178.38	13,966	32,351
177.87	13,142	25,440	178.39	13,982	32,491
177.88	13,157	25,572	178.40	13,999	32,631
177.89	13,173	25,703	178.41	14,015	32,771

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.42	14,031	32,911	178.94	14,880	40,428
178.43	14,048	33,052	178.95	14,896	40,577
178.44	14,064	33,192	178.96	14,913	40,726
178.45	14,080	33,333	178.97	14,929	40,875
178.46	14,097	33,474	178.98	14,945	41,025
178.47	14,113	33,615	178.99	14,962	41,174
178.48	14,129	33,756	179.00	14,978	41,324
178.49	14,146	33,897	179.01	14,995	41,474
178.50	14,162	34,039	179.02	15,012	41,624
178.51	14,178	34,181	179.03	15,029	41,774
178.52	14,195	34,322	179.04	15,046	41,924
178.53	14,211	34,464	179.05	15,062	42,075
178.54	14,227	34,607	179.06	15,079	42,226
178.55	14,244	34,749	179.07	15,096	42,376
178.56	14,260	34,892	179.08	15,113	42,528
178.57	14,276	35,034	179.09	15,130	42,679
178.58	14,293	35,177	179.10	15,147	42,830
178.59	14,309	35,320	179.11	15,164	42,982
178.60	14,325	35,463	179.12	15,181	43,133
178.61	14,342	35,607	179.13	15,198	43,285
178.62	14,358	35,750	179.14	15,214	43,437
178.63	14,374	35,894	179.15	15,231	43,590
178.64	14,390	36,038	179.16	15,248	43,742
178.65	14,407	36,182	179.17	15,265	43,895
178.66	14,423	36,326	179.18	15,282	44,047
178.67	14,439	36,470	179.19	15,299	44,200
178.68	14,456	36,614	179.20	15,316	44,353
178.69	14,472	36,759	179.21	15,333	44,507
178.70	14,488	36,904	179.22	15,350	44,660
178.71	14,505	37,049	179.23	15,366	44,814
178.72	14,521	37,194	179.24	15,383	44,967
178.73	14,537	37,339	179.25	15,400	45,121
178.74	14,554	37,485	179.26	15,417	45,275
178.75	14,570	37,630	179.27	15,434	45,430
178.76	14,586	37,776	179.28	15,451	45,584
178.77	14,603	37,922	179.29	15,468	45,739
178.78	14,619	38,068	179.30	15,485	45,893
178.79	14,635	38,215	179.31	15,502	46,048
178.80	14,652	38,361	179.32	15,518	46,203
178.81	14,668	38,508	179.33	15,535	46,359
178.82	14,684	38,654	179.34	15,552	46,514
178.83	14,701	38,801	179.35	15,569	46,670
178.84	14,717	38,948	179.36	15,586	46,825
178.85	14,733	39,096	179.37	15,603	46,981
178.86	14,750	39,243	179.38	15,620	47,137
178.87	14,766	39,391	179.39	15,637	47,294
178.88	14,782	39,538	179.40	15,654	47,450
178.89	14,798	39,686	179.41	15,670	47,607
178.90	14,815	39,834	179.42	15,687	47,764
178.91	14,831	39,982	179.43	15,704	47,921
178.92	14,847	40,131	179.44	15,721	48,078
178.93	14,864	40,279	179.45	15,738	48,235

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.46	15,755	48,392
179.47	15,772	48,550
179.48	15,789	48,708
179.49	15,806	48,866
179.50	15,823	49,024
179.51	15,839	49,182
179.52	15,856	49,341
179.53	15,873	49,499
179.54	15,890	49,658
179.55	15,907	49,817
179.56	15,924	49,976
179.57	15,941	50,136
179.58	15,958	50,295
179.59	15,975	50,455
179.60	15,991	50,615
179.61	16,008	50,775
179.62	16,025	50,935
179.63	16,042	51,095
179.64	16,059	51,256
179.65	16,076	51,416
179.66	16,093	51,577
179.67	16,110	51,738
179.68	16,127	51,899
179.69	16,143	52,061
179.70	16,160	52,222
179.71	16,177	52,384
179.72	16,194	52,546
179.73	16,211	52,708
179.74	16,228	52,870
179.75	16,245	53,032
179.76	16,262	53,195
179.77	16,279	53,358
179.78	16,295	53,521
179.79	16,312	53,684
179.80	16,329	53,847
179.81	16,346	54,010
179.82	16,363	54,174
179.83	16,380	54,337
179.84	16,397	54,501
179.85	16,414	54,665
179.86	16,431	54,830
179.87	16,447	54,994
179.88	16,464	55,159
179.89	16,481	55,323
179.90	16,498	55,488
179.91	16,515	55,653
179.92	16,532	55,818
179.93	16,549	55,984
179.94	16,566	56,149
179.95	16,583	56,315
179.96	16,599	56,481
179.97	16,616	56,647
179.98	16,633	56,813
179.99	16,650	56,980
180.00	**16,667**	**57,146**

Summary for Pond B-31: Basin #31

Inflow Area = 0.358 ac, 42.46% Impervious, Inflow Depth = 2.39" for Future 2 yr event
Inflow = 0.86 cfs @ 12.17 hrs, Volume= 0.071 af
Outflow = 0.11 cfs @ 13.01 hrs, Volume= 0.057 af, Atten= 88%, Lag= 50.4 min
Primary = 0.11 cfs @ 13.01 hrs, Volume= 0.057 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.51' @ 13.01 hrs Surf.Area= 2,259 sf Storage= 1,744 cf

Plug-Flow detention time= 298.5 min calculated for 0.057 af (79% of inflow)
Center-of-Mass det. time= 213.3 min (1,006.8 - 793.5)

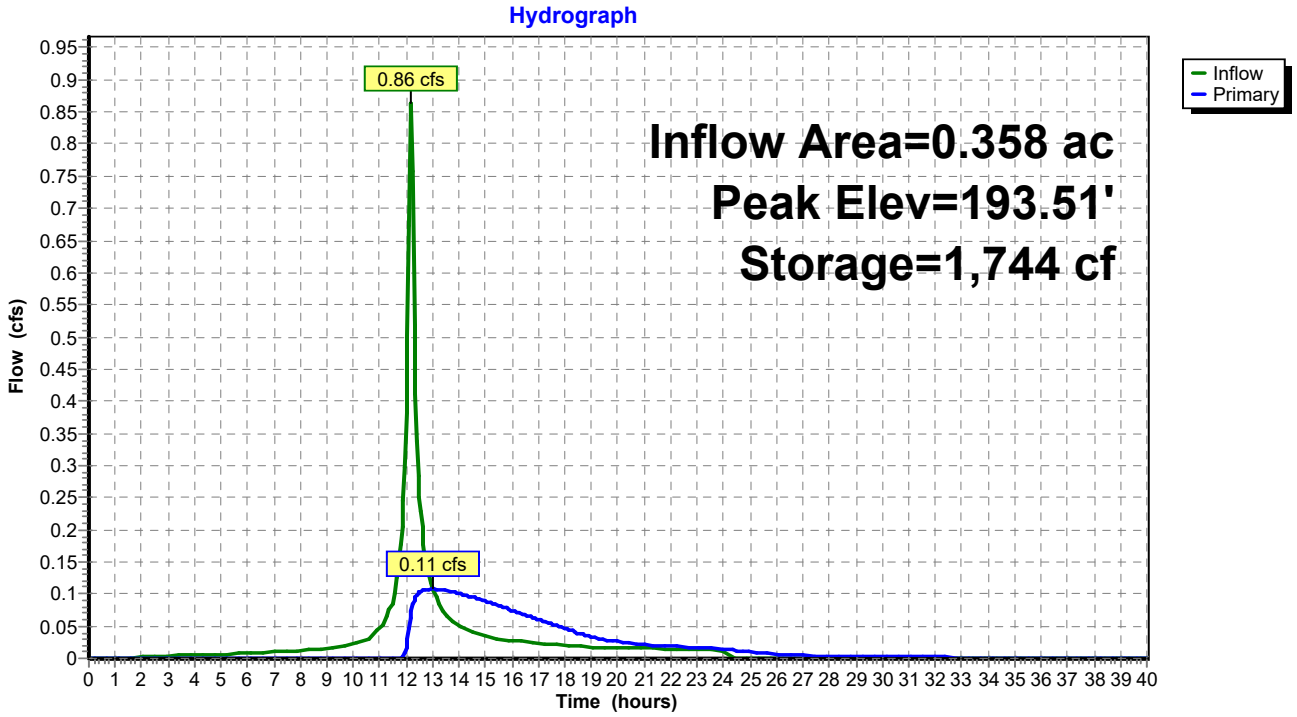
Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	9,453 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	1,944	680	680
194.00	2,566	2,255	2,935
195.00	3,245	2,906	5,841
196.00	3,980	3,613	9,453

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	**18.0" Round Culvert** L= 126.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 188.00' S= 0.0290 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.97'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	195.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.11 cfs @ 13.01 hrs HW=193.51' (Free Discharge)
- **1=Culvert** (Passes 0.11 cfs of 8.95 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.11 cfs @ 3.17 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-31: Basin #31



Stage-Discharge for Pond B-31: Basin #31

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.30	0.00	192.82	0.00	193.34	0.08	193.86	0.15
192.31	0.00	192.83	0.00	193.35	0.09	193.87	0.15
192.32	0.00	192.84	0.00	193.36	0.09	193.88	0.15
192.33	0.00	192.85	0.00	193.37	0.09	193.89	0.15
192.34	0.00	192.86	0.00	193.38	0.09	193.90	0.15
192.35	0.00	192.87	0.00	193.39	0.09	193.91	0.15
192.36	0.00	192.88	0.00	193.40	0.09	193.92	0.15
192.37	0.00	192.89	0.00	193.41	0.10	193.93	0.15
192.38	0.00	192.90	0.00	193.42	0.10	193.94	0.15
192.39	0.00	192.91	0.00	193.43	0.10	193.95	0.15
192.40	0.00	192.92	0.00	193.44	0.10	193.96	0.15
192.41	0.00	192.93	0.00	193.45	0.10	193.97	0.16
192.42	0.00	192.94	0.00	193.46	0.10	193.98	0.16
192.43	0.00	192.95	0.00	193.47	0.10	193.99	0.16
192.44	0.00	192.96	0.00	193.48	0.10	194.00	0.16
192.45	0.00	192.97	0.00	193.49	0.11	194.01	0.16
192.46	0.00	192.98	0.00	193.50	0.11	194.02	0.16
192.47	0.00	192.99	0.00	193.51	0.11	194.03	0.16
192.48	0.00	193.00	0.00	193.52	0.11	194.04	0.16
192.49	0.00	193.01	0.00	193.53	0.11	194.05	0.16
192.50	0.00	193.02	0.00	193.54	0.11	194.06	0.16
192.51	0.00	193.03	0.01	193.55	0.11	194.07	0.16
192.52	0.00	193.04	0.01	193.56	0.11	194.08	0.16
192.53	0.00	193.05	0.01	193.57	0.12	194.09	0.17
192.54	0.00	193.06	0.01	193.58	0.12	194.10	0.17
192.55	0.00	193.07	0.02	193.59	0.12	194.11	0.17
192.56	0.00	193.08	0.02	193.60	0.12	194.12	0.17
192.57	0.00	193.09	0.02	193.61	0.12	194.13	0.17
192.58	0.00	193.10	0.03	193.62	0.12	194.14	0.17
192.59	0.00	193.11	0.03	193.63	0.12	194.15	0.17
192.60	0.00	193.12	0.03	193.64	0.12	194.16	0.17
192.61	0.00	193.13	0.04	193.65	0.12	194.17	0.17
192.62	0.00	193.14	0.04	193.66	0.13	194.18	0.17
192.63	0.00	193.15	0.05	193.67	0.13	194.19	0.17
192.64	0.00	193.16	0.05	193.68	0.13	194.20	0.17
192.65	0.00	193.17	0.05	193.69	0.13	194.21	0.17
192.66	0.00	193.18	0.05	193.70	0.13	194.22	0.18
192.67	0.00	193.19	0.06	193.71	0.13	194.23	0.18
192.68	0.00	193.20	0.06	193.72	0.13	194.24	0.18
192.69	0.00	193.21	0.06	193.73	0.13	194.25	0.18
192.70	0.00	193.22	0.06	193.74	0.13	194.26	0.18
192.71	0.00	193.23	0.06	193.75	0.13	194.27	0.18
192.72	0.00	193.24	0.07	193.76	0.14	194.28	0.18
192.73	0.00	193.25	0.07	193.77	0.14	194.29	0.18
192.74	0.00	193.26	0.07	193.78	0.14	194.30	0.18
192.75	0.00	193.27	0.07	193.79	0.14	194.31	0.18
192.76	0.00	193.28	0.07	193.80	0.14	194.32	0.18
192.77	0.00	193.29	0.08	193.81	0.14	194.33	0.18
192.78	0.00	193.30	0.08	193.82	0.14	194.34	0.18
192.79	0.00	193.31	0.08	193.83	0.14	194.35	0.19
192.80	0.00	193.32	0.08	193.84	0.14	194.36	0.19
192.81	0.00	193.33	0.08	193.85	0.14	194.37	0.19

Stage-Discharge for Pond B-31: Basin #31 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.38	0.19	194.90	0.22	195.42	3.74	195.94	49.49
194.39	0.19	194.91	0.22	195.43	3.86	195.95	51.13
194.40	0.19	194.92	0.22	195.44	3.99	195.96	52.81
194.41	0.19	194.93	0.22	195.45	4.11	195.97	54.51
194.42	0.19	194.94	0.22	195.46	4.24	195.98	56.24
194.43	0.19	194.95	0.22	195.47	4.37	195.99	57.99
194.44	0.19	194.96	0.23	195.48	4.50	196.00	**59.77**
194.45	0.19	194.97	0.23	195.49	4.63		
194.46	0.19	194.98	0.23	195.50	4.76		
194.47	0.19	194.99	0.23	195.51	5.02		
194.48	0.19	195.00	0.23	195.52	5.37		
194.49	0.20	195.01	0.24	195.53	5.78		
194.50	0.20	195.02	0.27	195.54	6.25		
194.51	0.20	195.03	0.30	195.55	6.76		
194.52	0.20	195.04	0.33	195.56	7.31		
194.53	0.20	195.05	0.38	195.57	7.90		
194.54	0.20	195.06	0.42	195.58	8.53		
194.55	0.20	195.07	0.47	195.59	9.19		
194.56	0.20	195.08	0.53	195.60	9.88		
194.57	0.20	195.09	0.58	195.61	10.59		
194.58	0.20	195.10	0.65	195.62	11.34		
194.59	0.20	195.11	0.71	195.63	12.12		
194.60	0.20	195.12	0.78	195.64	12.92		
194.61	0.20	195.13	0.84	195.65	13.74		
194.62	0.20	195.14	0.92	195.66	14.59		
194.63	0.20	195.15	0.99	195.67	15.47		
194.64	0.21	195.16	1.07	195.68	16.36		
194.65	0.21	195.17	1.15	195.69	17.28		
194.66	0.21	195.18	1.23	195.70	18.22		
194.67	0.21	195.19	1.31	195.71	19.23		
194.68	0.21	195.20	1.40	195.72	20.25		
194.69	0.21	195.21	1.49	195.73	21.31		
194.70	0.21	195.22	1.58	195.74	22.39		
194.71	0.21	195.23	1.67	195.75	23.50		
194.72	0.21	195.24	1.76	195.76	24.63		
194.73	0.21	195.25	1.86	195.77	25.79		
194.74	0.21	195.26	1.95	195.78	26.98		
194.75	0.21	195.27	2.05	195.79	28.19		
194.76	0.21	195.28	2.15	195.80	29.42		
194.77	0.21	195.29	2.26	195.81	30.69		
194.78	0.21	195.30	2.36	195.82	31.97		
194.79	0.22	195.31	2.47	195.83	33.29		
194.80	0.22	195.32	2.58	195.84	34.62		
194.81	0.22	195.33	2.69	195.85	35.98		
194.82	0.22	195.34	2.80	195.86	37.37		
194.83	0.22	195.35	2.91	195.87	38.78		
194.84	0.22	195.36	3.02	195.88	40.22		
194.85	0.22	195.37	3.14	195.89	41.68		
194.86	0.22	195.38	3.25	195.90	43.17		
194.87	0.22	195.39	3.37	195.91	44.71		
194.88	0.22	195.40	3.49	195.92	46.28		
194.89	0.22	195.41	3.61	195.93	47.87		

Stage-Area-Storage for Pond B-31: Basin #31

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.30	0	0	192.82	1,444	375
192.31	28	0	192.83	1,472	390
192.32	56	1	192.84	1,500	405
192.33	83	1	192.85	1,527	420
192.34	111	2	192.86	1,555	435
192.35	139	3	192.87	1,583	451
192.36	167	5	192.88	1,611	467
192.37	194	7	192.89	1,639	483
192.38	222	9	192.90	1,666	500
192.39	250	11	192.91	1,694	517
192.40	278	14	192.92	1,722	534
192.41	305	17	192.93	1,750	551
192.42	333	20	192.94	1,777	569
192.43	361	23	192.95	1,805	587
192.44	389	27	192.96	1,833	605
192.45	417	31	192.97	1,861	623
192.46	444	36	192.98	1,888	642
192.47	472	40	192.99	1,916	661
192.48	500	45	193.00	1,944	680
192.49	528	50	193.01	1,950	700
192.50	555	56	193.02	1,956	719
192.51	583	61	193.03	1,963	739
192.52	611	67	193.04	1,969	759
192.53	639	73	193.05	1,975	778
192.54	667	80	193.06	1,981	798
192.55	694	87	193.07	1,988	818
192.56	722	94	193.08	1,994	838
192.57	750	101	193.09	2,000	858
192.58	778	109	193.10	2,006	878
192.59	805	117	193.11	2,012	898
192.60	833	125	193.12	2,019	918
192.61	861	133	193.13	2,025	938
192.62	889	142	193.14	2,031	959
192.63	916	151	193.15	2,037	979
192.64	944	161	193.16	2,044	999
192.65	972	170	193.17	2,050	1,020
192.66	1,000	180	193.18	2,056	1,040
192.67	1,028	190	193.19	2,062	1,061
192.68	1,055	201	193.20	2,068	1,082
192.69	1,083	211	193.21	2,075	1,102
192.70	1,111	222	193.22	2,081	1,123
192.71	1,139	233	193.23	2,087	1,144
192.72	1,166	245	193.24	2,093	1,165
192.73	1,194	257	193.25	2,100	1,186
192.74	1,222	269	193.26	2,106	1,207
192.75	1,250	281	193.27	2,112	1,228
192.76	1,277	294	193.28	2,118	1,249
192.77	1,305	307	193.29	2,124	1,270
192.78	1,333	320	193.30	2,131	1,292
192.79	1,361	333	193.31	2,137	1,313
192.80	1,389	347	193.32	2,143	1,334
192.81	1,416	361	193.33	2,149	1,356

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.34	2,155	1,377	193.86	2,479	2,582
193.35	2,162	1,399	193.87	2,485	2,607
193.36	2,168	1,421	193.88	2,491	2,632
193.37	2,174	1,442	193.89	2,498	2,657
193.38	2,180	1,464	193.90	2,504	2,682
193.39	2,187	1,486	193.91	2,510	2,707
193.40	2,193	1,508	193.92	2,516	2,732
193.41	2,199	1,530	193.93	2,522	2,757
193.42	2,205	1,552	193.94	2,529	2,783
193.43	2,211	1,574	193.95	2,535	2,808
193.44	2,218	1,596	193.96	2,541	2,833
193.45	2,224	1,618	193.97	2,547	2,859
193.46	2,230	1,640	193.98	2,554	2,884
193.47	2,236	1,663	193.99	2,560	2,910
193.48	2,243	1,685	194.00	2,566	2,935
193.49	2,249	1,708	194.01	2,573	2,961
193.50	2,255	1,730	194.02	2,580	2,987
193.51	2,261	1,753	194.03	2,586	3,013
193.52	2,267	1,775	194.04	2,593	3,039
193.53	2,274	1,798	194.05	2,600	3,065
193.54	2,280	1,821	194.06	2,607	3,091
193.55	2,286	1,844	194.07	2,614	3,117
193.56	2,292	1,867	194.08	2,620	3,143
193.57	2,299	1,890	194.09	2,627	3,169
193.58	2,305	1,913	194.10	2,634	3,195
193.59	2,311	1,936	194.11	2,641	3,222
193.60	2,317	1,959	194.12	2,647	3,248
193.61	2,323	1,982	194.13	2,654	3,275
193.62	2,330	2,005	194.14	2,661	3,301
193.63	2,336	2,029	194.15	2,668	3,328
193.64	2,342	2,052	194.16	2,675	3,355
193.65	2,348	2,075	194.17	2,681	3,381
193.66	2,355	2,099	194.18	2,688	3,408
193.67	2,361	2,122	194.19	2,695	3,435
193.68	2,367	2,146	194.20	2,702	3,462
193.69	2,373	2,170	194.21	2,709	3,489
193.70	2,379	2,194	194.22	2,715	3,516
193.71	2,386	2,217	194.23	2,722	3,544
193.72	2,392	2,241	194.24	2,729	3,571
193.73	2,398	2,265	194.25	2,736	3,598
193.74	2,404	2,289	194.26	2,743	3,626
193.75	2,411	2,313	194.27	2,749	3,653
193.76	2,417	2,337	194.28	2,756	3,680
193.77	2,423	2,362	194.29	2,763	3,708
193.78	2,429	2,386	194.30	2,770	3,736
193.79	2,435	2,410	194.31	2,776	3,763
193.80	2,442	2,435	194.32	2,783	3,791
193.81	2,448	2,459	194.33	2,790	3,819
193.82	2,454	2,484	194.34	2,797	3,847
193.83	2,460	2,508	194.35	2,804	3,875
193.84	2,466	2,533	194.36	2,810	3,903
193.85	2,473	2,557	194.37	2,817	3,931

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.38	2,824	3,960
194.39	2,831	3,988
194.40	2,838	4,016
194.41	2,844	4,045
194.42	2,851	4,073
194.43	2,858	4,102
194.44	2,865	4,130
194.45	2,872	4,159
194.46	2,878	4,188
194.47	2,885	4,216
194.48	2,892	4,245
194.49	2,899	4,274
194.50	2,906	4,303
194.51	2,912	4,332
194.52	2,919	4,362
194.53	2,926	4,391
194.54	2,933	4,420
194.55	2,939	4,449
194.56	2,946	4,479
194.57	2,953	4,508
194.58	2,960	4,538
194.59	2,967	4,568
194.60	2,973	4,597
194.61	2,980	4,627
194.62	2,987	4,657
194.63	2,994	4,687
194.64	3,001	4,717
194.65	3,007	4,747
194.66	3,014	4,777
194.67	3,021	4,807
194.68	3,028	4,837
194.69	3,035	4,868
194.70	3,041	4,898
194.71	3,048	4,928
194.72	3,055	4,959
194.73	3,062	4,989
194.74	3,068	5,020
194.75	3,075	5,051
194.76	3,082	5,082
194.77	3,089	5,113
194.78	3,096	5,143
194.79	3,102	5,174
194.80	3,109	5,205
194.81	3,116	5,237
194.82	3,123	5,268
194.83	3,130	5,299
194.84	3,136	5,330
194.85	3,143	5,362
194.86	3,150	5,393
194.87	3,157	5,425
194.88	3,164	5,456
194.89	3,170	5,488
194.90	3,177	5,520
194.91	3,184	5,552
194.92	3,191	5,583
194.93	3,197	5,615
194.94	3,204	5,647
194.95	3,211	5,679
194.96	3,218	5,712
194.97	3,225	5,744
194.98	3,231	5,776
194.99	3,238	5,808
195.00	3,245	5,841
195.01	3,252	5,873
195.02	3,260	5,906
195.03	3,267	5,939
195.04	3,274	5,971
195.05	3,282	6,004
195.06	3,289	6,037
195.07	3,296	6,070
195.08	3,304	6,103
195.09	3,311	6,136
195.10	3,319	6,169
195.11	3,326	6,202
195.12	3,333	6,236
195.13	3,341	6,269
195.14	3,348	6,302
195.15	3,355	6,336
195.16	3,363	6,370
195.17	3,370	6,403
195.18	3,377	6,437
195.19	3,385	6,471
195.20	3,392	6,505
195.21	3,399	6,539
195.22	3,407	6,573
195.23	3,414	6,607
195.24	3,421	6,641
195.25	3,429	6,675
195.26	3,436	6,709
195.27	3,443	6,744
195.28	3,451	6,778
195.29	3,458	6,813
195.30	3,466	6,847
195.31	3,473	6,882
195.32	3,480	6,917
195.33	3,488	6,952
195.34	3,495	6,987
195.35	3,502	7,022
195.36	3,510	7,057
195.37	3,517	7,092
195.38	3,524	7,127
195.39	3,532	7,162
195.40	3,539	7,198
195.41	3,546	7,233

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.42	3,554	7,269
195.43	3,561	7,304
195.44	3,568	7,340
195.45	3,576	7,376
195.46	3,583	7,411
195.47	3,590	7,447
195.48	3,598	7,483
195.49	3,605	7,519
195.50	3,613	7,555
195.51	3,620	7,591
195.52	3,627	7,628
195.53	3,635	7,664
195.54	3,642	7,700
195.55	3,649	7,737
195.56	3,657	7,773
195.57	3,664	7,810
195.58	3,671	7,847
195.59	3,679	7,883
195.60	3,686	7,920
195.61	3,693	7,957
195.62	3,701	7,994
195.63	3,708	8,031
195.64	3,715	8,068
195.65	3,723	8,105
195.66	3,730	8,143
195.67	3,737	8,180
195.68	3,745	8,217
195.69	3,752	8,255
195.70	3,760	8,292
195.71	3,767	8,330
195.72	3,774	8,368
195.73	3,782	8,406
195.74	3,789	8,443
195.75	3,796	8,481
195.76	3,804	8,519
195.77	3,811	8,557
195.78	3,818	8,596
195.79	3,826	8,634
195.80	3,833	8,672
195.81	3,840	8,710
195.82	3,848	8,749
195.83	3,855	8,787
195.84	3,862	8,826
195.85	3,870	8,865
195.86	3,877	8,903
195.87	3,884	8,942
195.88	3,892	8,981
195.89	3,899	9,020
195.90	3,907	9,059
195.91	3,914	9,098
195.92	3,921	9,137
195.93	3,929	9,177
195.94	3,936	9,216
195.95	3,943	9,255
195.96	3,951	9,295
195.97	3,958	9,334
195.98	3,965	9,374
195.99	3,973	9,414
196.00	**3,980**	**9,453**

Summary for Pond B-32: Basin #32

Inflow Area = 1.911 ac, 49.76% Impervious, Inflow Depth = 2.55" for Future 2 yr event
Inflow = 4.87 cfs @ 12.17 hrs, Volume= 0.405 af
Outflow = 4.02 cfs @ 12.24 hrs, Volume= 0.317 af, Atten= 17%, Lag= 4.2 min
Primary = 4.02 cfs @ 12.24 hrs, Volume= 0.317 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.11' @ 12.24 hrs Surf.Area= 2,990 sf Storage= 5,457 cf

Plug-Flow detention time= 159.6 min calculated for 0.317 af (78% of inflow)
Center-of-Mass det. time= 73.3 min (860.3 - 787.0)

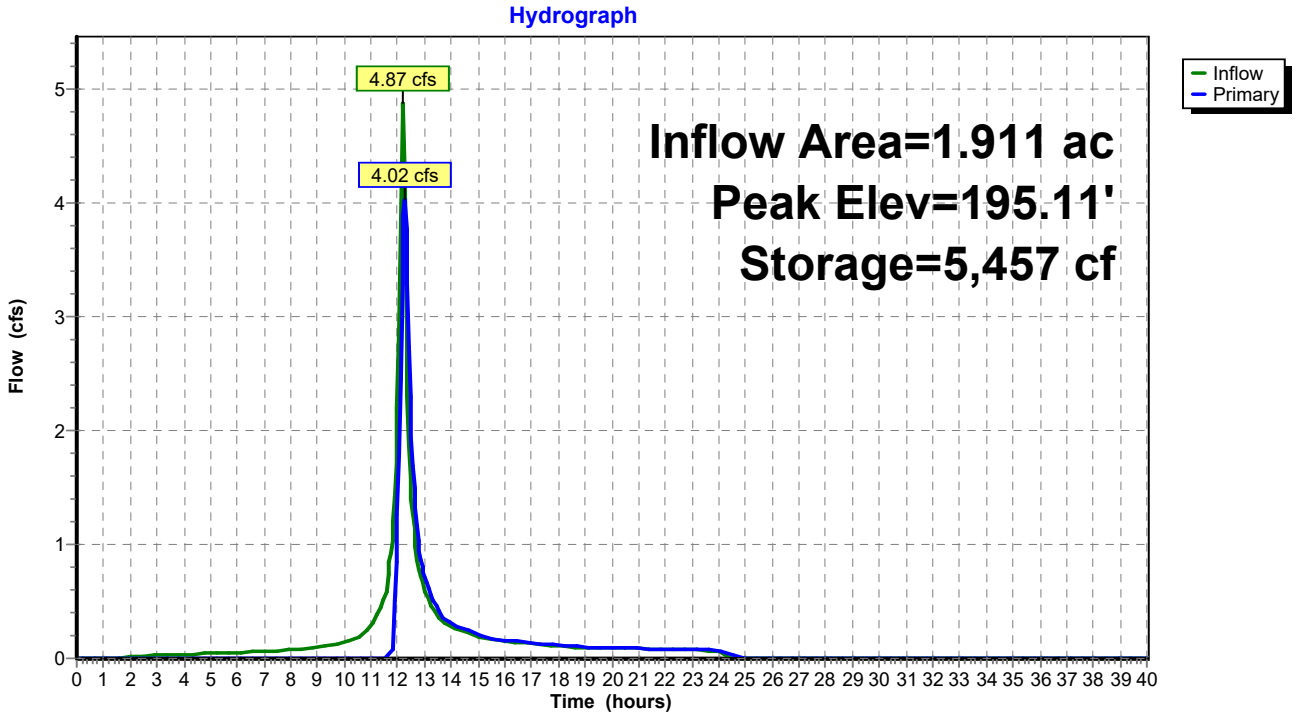
Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	17,202 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	1,675	586	586
194.00	2,256	1,966	2,552
195.00	2,913	2,585	5,136
196.00	3,621	3,267	8,403
197.00	4,385	4,003	12,406
198.00	5,206	4,796	17,202

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 182.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0146 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.53'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	197.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.00 cfs @ 12.24 hrs HW=195.11' (Free Discharge)
- **1=Culvert** (Passes 4.00 cfs of 15.28 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 4.00 cfs @ 2.67 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-32: Basin #32



Stage-Discharge for Pond B-32: Basin #32

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.30	0.00	192.82	0.00	193.34	0.00	193.86	0.00
192.31	0.00	192.83	0.00	193.35	0.00	193.87	0.00
192.32	0.00	192.84	0.00	193.36	0.00	193.88	0.00
192.33	0.00	192.85	0.00	193.37	0.00	193.89	0.00
192.34	0.00	192.86	0.00	193.38	0.00	193.90	0.00
192.35	0.00	192.87	0.00	193.39	0.00	193.91	0.00
192.36	0.00	192.88	0.00	193.40	0.00	193.92	0.00
192.37	0.00	192.89	0.00	193.41	0.00	193.93	0.00
192.38	0.00	192.90	0.00	193.42	0.00	193.94	0.00
192.39	0.00	192.91	0.00	193.43	0.00	193.95	0.00
192.40	0.00	192.92	0.00	193.44	0.00	193.96	0.00
192.41	0.00	192.93	0.00	193.45	0.00	193.97	0.00
192.42	0.00	192.94	0.00	193.46	0.00	193.98	0.00
192.43	0.00	192.95	0.00	193.47	0.00	193.99	0.00
192.44	0.00	192.96	0.00	193.48	0.00	194.00	0.00
192.45	0.00	192.97	0.00	193.49	0.00	194.01	0.00
192.46	0.00	192.98	0.00	193.50	0.00	194.02	0.00
192.47	0.00	192.99	0.00	193.51	0.00	194.03	0.00
192.48	0.00	193.00	0.00	193.52	0.00	194.04	0.00
192.49	0.00	193.01	0.00	193.53	0.00	194.05	0.00
192.50	0.00	193.02	0.00	193.54	0.00	194.06	0.00
192.51	0.00	193.03	0.00	193.55	0.00	194.07	0.00
192.52	0.00	193.04	0.00	193.56	0.00	194.08	0.00
192.53	0.00	193.05	0.00	193.57	0.00	194.09	0.00
192.54	0.00	193.06	0.00	193.58	0.00	194.10	0.00
192.55	0.00	193.07	0.00	193.59	0.00	194.11	0.00
192.56	0.00	193.08	0.00	193.60	0.00	194.12	0.00
192.57	0.00	193.09	0.00	193.61	0.00	194.13	0.00
192.58	0.00	193.10	0.00	193.62	0.00	194.14	0.00
192.59	0.00	193.11	0.00	193.63	0.00	194.15	0.00
192.60	0.00	193.12	0.00	193.64	0.00	194.16	0.00
192.61	0.00	193.13	0.00	193.65	0.00	194.17	0.00
192.62	0.00	193.14	0.00	193.66	0.00	194.18	0.00
192.63	0.00	193.15	0.00	193.67	0.00	194.19	0.00
192.64	0.00	193.16	0.00	193.68	0.00	194.20	0.00
192.65	0.00	193.17	0.00	193.69	0.00	194.21	0.00
192.66	0.00	193.18	0.00	193.70	0.00	194.22	0.00
192.67	0.00	193.19	0.00	193.71	0.00	194.23	0.00
192.68	0.00	193.20	0.00	193.72	0.00	194.24	0.00
192.69	0.00	193.21	0.00	193.73	0.00	194.25	0.00
192.70	0.00	193.22	0.00	193.74	0.00	194.26	0.00
192.71	0.00	193.23	0.00	193.75	0.00	194.27	0.00
192.72	0.00	193.24	0.00	193.76	0.00	194.28	0.00
192.73	0.00	193.25	0.00	193.77	0.00	194.29	0.00
192.74	0.00	193.26	0.00	193.78	0.00	194.30	0.00
192.75	0.00	193.27	0.00	193.79	0.00	194.31	0.00
192.76	0.00	193.28	0.00	193.80	0.00	194.32	0.00
192.77	0.00	193.29	0.00	193.81	0.00	194.33	0.00
192.78	0.00	193.30	0.00	193.82	0.00	194.34	0.00
192.79	0.00	193.31	0.00	193.83	0.00	194.35	0.00
192.80	0.00	193.32	0.00	193.84	0.00	194.36	0.00
192.81	0.00	193.33	0.00	193.85	0.00	194.37	0.00

Stage-Discharge for Pond B-32: Basin #32 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.38	0.00	194.90	2.17	195.42	5.74	195.94	7.76
194.39	0.00	194.91	2.26	195.43	5.79	195.95	7.80
194.40	0.00	194.92	2.35	195.44	5.83	195.96	7.83
194.41	0.00	194.93	2.44	195.45	5.88	195.97	7.86
194.42	0.00	194.94	2.53	195.46	5.92	195.98	7.90
194.43	0.00	194.95	2.62	195.47	5.97	195.99	7.93
194.44	0.00	194.96	2.72	195.48	6.01	196.00	7.96
194.45	0.00	194.97	2.81	195.49	6.05	196.01	8.00
194.46	0.00	194.98	2.91	195.50	6.10	196.02	8.03
194.47	0.00	194.99	3.00	195.51	6.14	196.03	8.06
194.48	0.00	195.00	3.10	195.52	6.18	196.04	8.09
194.49	0.00	195.01	3.20	195.53	6.23	196.05	8.13
194.50	0.00	195.02	3.30	195.54	6.27	196.06	8.16
194.51	0.00	195.03	3.40	195.55	6.31	196.07	8.19
194.52	0.00	195.04	3.50	195.56	6.35	196.08	8.22
194.53	0.00	195.05	3.58	195.57	6.39	196.09	8.25
194.54	0.01	195.06	3.67	195.58	6.43	196.10	8.29
194.55	0.03	195.07	3.74	195.59	6.47	196.11	8.32
194.56	0.05	195.08	3.82	195.60	6.51	196.12	8.35
194.57	0.08	195.09	3.89	195.61	6.55	196.13	8.38
194.58	0.11	195.10	3.97	195.62	6.59	196.14	8.41
194.59	0.14	195.11	4.04	195.63	6.63	196.15	8.44
194.60	0.18	195.12	4.10	195.64	6.67	196.16	8.47
194.61	0.22	195.13	4.17	195.65	6.71	196.17	8.50
194.62	0.26	195.14	4.24	195.66	6.75	196.18	8.53
194.63	0.30	195.15	4.30	195.67	6.79	196.19	8.56
194.64	0.35	195.16	4.36	195.68	6.83	196.20	8.60
194.65	0.40	195.17	4.43	195.69	6.87	196.21	8.63
194.66	0.45	195.18	4.49	195.70	6.91	196.22	8.66
194.67	0.50	195.19	4.55	195.71	6.94	196.23	8.69
194.68	0.56	195.20	4.61	195.72	6.98	196.24	8.72
194.69	0.62	195.21	4.66	195.73	7.02	196.25	8.75
194.70	0.67	195.22	4.72	195.74	7.06	196.26	8.78
194.71	0.74	195.23	4.78	195.75	7.09	196.27	8.81
194.72	0.80	195.24	4.83	195.76	7.13	196.28	8.84
194.73	0.86	195.25	4.89	195.77	7.17	196.29	8.86
194.74	0.93	195.26	4.94	195.78	7.20	196.30	8.89
194.75	0.99	195.27	5.00	195.79	7.24	196.31	8.92
194.76	1.06	195.28	5.05	195.80	7.28	196.32	8.95
194.77	1.13	195.29	5.10	195.81	7.31	196.33	8.98
194.78	1.20	195.30	5.16	195.82	7.35	196.34	9.01
194.79	1.28	195.31	5.21	195.83	7.38	196.35	9.04
194.80	1.35	195.32	5.26	195.84	7.42	196.36	9.07
194.81	1.43	195.33	5.31	195.85	7.45	196.37	9.10
194.82	1.50	195.34	5.36	195.86	7.49	196.38	9.13
194.83	1.58	195.35	5.41	195.87	7.52	196.39	9.16
194.84	1.66	195.36	5.46	195.88	7.56	196.40	9.18
194.85	1.74	195.37	5.50	195.89	7.59	196.41	9.21
194.86	1.83	195.38	5.55	195.90	7.63	196.42	9.24
194.87	1.91	195.39	5.60	195.91	7.66	196.43	9.27
194.88	1.99	195.40	5.65	195.92	7.70	196.44	9.30
194.89	2.08	195.41	5.69	195.93	7.73	196.45	9.32

Stage-Discharge for Pond B-32: Basin #32 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.46	9.35	196.98	10.71	197.50	16.42
196.47	9.38	196.99	10.73	197.51	16.57
196.48	9.41	197.00	10.76	197.52	16.73
196.49	9.44	197.01	10.79	197.53	16.89
196.50	9.46	197.02	10.84	197.54	17.04
196.51	9.49	197.03	10.90	197.55	17.20
196.52	9.52	197.04	10.96	197.56	17.37
196.53	9.55	197.05	11.02	197.57	17.53
196.54	9.57	197.06	11.09	197.58	17.69
196.55	9.60	197.07	11.17	197.59	17.86
196.56	9.63	197.08	11.24	197.60	18.02
196.57	9.66	197.09	11.32	197.61	18.19
196.58	9.68	197.10	11.41	197.62	18.36
196.59	9.71	197.11	11.49	197.63	18.40
196.60	9.74	197.12	11.58	197.64	18.41
196.61	9.76	197.13	11.68	197.65	18.42
196.62	9.79	197.14	11.77	197.66	18.44
196.63	9.82	197.15	11.87	197.67	18.45
196.64	9.84	197.16	11.97	197.68	18.46
196.65	9.87	197.17	12.07	197.69	18.47
196.66	9.90	197.18	12.17	197.70	18.48
196.67	9.92	197.19	12.28	197.71	18.49
196.68	9.95	197.20	12.39	197.72	18.50
196.69	9.97	197.21	12.50	197.73	18.51
196.70	10.00	197.22	12.61	197.74	18.53
196.71	10.03	197.23	12.73	197.75	18.54
196.72	10.05	197.24	12.84	197.76	18.55
196.73	10.08	197.25	12.96	197.77	18.56
196.74	10.10	197.26	13.08	197.78	18.57
196.75	10.13	197.27	13.20	197.79	18.58
196.76	10.16	197.28	13.33	197.80	18.59
196.77	10.18	197.29	13.45	197.81	18.60
196.78	10.21	197.30	13.58	197.82	18.62
196.79	10.23	197.31	13.71	197.83	18.63
196.80	10.26	197.32	13.84	197.84	18.64
196.81	10.28	197.33	13.97	197.85	18.65
196.82	10.31	197.34	14.10	197.86	18.66
196.83	10.33	197.35	14.23	197.87	18.67
196.84	10.36	197.36	14.37	197.88	18.68
196.85	10.38	197.37	14.51	197.89	18.69
196.86	10.41	197.38	14.65	197.90	18.70
196.87	10.44	197.39	14.79	197.91	18.72
196.88	10.46	197.40	14.93	197.92	18.73
196.89	10.49	197.41	15.07	197.93	18.74
196.90	10.51	197.42	15.22	197.94	18.75
196.91	10.53	197.43	15.36	197.95	18.76
196.92	10.56	197.44	15.51	197.96	18.89
196.93	10.58	197.45	15.66	197.97	19.11
196.94	10.61	197.46	15.81	197.98	19.40
196.95	10.63	197.47	15.96	197.99	19.74
196.96	10.66	197.48	16.11	198.00	**20.13**
196.97	10.68	197.49	16.26		

Stage-Area-Storage for Pond B-32: Basin #32

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.30	0	0	192.82	1,244	324
192.31	24	0	192.83	1,268	336
192.32	48	0	192.84	1,292	349
192.33	72	1	192.85	1,316	362
192.34	96	2	192.86	1,340	375
192.35	120	3	192.87	1,364	389
192.36	144	4	192.88	1,388	402
192.37	167	6	192.89	1,412	416
192.38	191	8	192.90	1,436	431
192.39	215	10	192.91	1,460	445
192.40	239	12	192.92	1,484	460
192.41	263	14	192.93	1,508	475
192.42	287	17	192.94	1,531	490
192.43	311	20	192.95	1,555	505
192.44	335	23	192.96	1,579	521
192.45	359	27	192.97	1,603	537
192.46	383	31	192.98	1,627	553
192.47	407	35	192.99	1,651	570
192.48	431	39	193.00	1,675	586
192.49	455	43	193.01	1,681	603
192.50	479	48	193.02	1,687	620
192.51	503	53	193.03	1,692	637
192.52	526	58	193.04	1,698	654
192.53	550	63	193.05	1,704	671
192.54	574	69	193.06	1,710	688
192.55	598	75	193.07	1,716	705
192.56	622	81	193.08	1,721	722
192.57	646	87	193.09	1,727	739
192.58	670	94	193.10	1,733	757
192.59	694	101	193.11	1,739	774
192.60	718	108	193.12	1,745	791
192.61	742	115	193.13	1,751	809
192.62	766	123	193.14	1,756	826
192.63	790	130	193.15	1,762	844
192.64	814	138	193.16	1,768	862
192.65	838	147	193.17	1,774	879
192.66	861	155	193.18	1,780	897
192.67	885	164	193.19	1,785	915
192.68	909	173	193.20	1,791	933
192.69	933	182	193.21	1,797	951
192.70	957	191	193.22	1,803	969
192.71	981	201	193.23	1,809	987
192.72	1,005	211	193.24	1,814	1,005
192.73	1,029	221	193.25	1,820	1,023
192.74	1,053	232	193.26	1,826	1,041
192.75	1,077	242	193.27	1,832	1,060
192.76	1,101	253	193.28	1,838	1,078
192.77	1,125	264	193.29	1,843	1,096
192.78	1,149	276	193.30	1,849	1,115
192.79	1,173	287	193.31	1,855	1,133
192.80	1,196	299	193.32	1,861	1,152
192.81	1,220	311	193.33	1,867	1,171

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.34	1,873	1,189	193.86	2,175	2,242
193.35	1,878	1,208	193.87	2,180	2,263
193.36	1,884	1,227	193.88	2,186	2,285
193.37	1,890	1,246	193.89	2,192	2,307
193.38	1,896	1,265	193.90	2,198	2,329
193.39	1,902	1,284	193.91	2,204	2,351
193.40	1,907	1,303	193.92	2,210	2,373
193.41	1,913	1,322	193.93	2,215	2,395
193.42	1,919	1,341	193.94	2,221	2,417
193.43	1,925	1,360	193.95	2,227	2,440
193.44	1,931	1,379	193.96	2,233	2,462
193.45	1,936	1,399	193.97	2,239	2,484
193.46	1,942	1,418	193.98	2,244	2,507
193.47	1,948	1,438	193.99	2,250	2,529
193.48	1,954	1,457	194.00	2,256	2,552
193.49	1,960	1,477	194.01	2,263	2,574
193.50	1,966	1,496	194.02	2,269	2,597
193.51	1,971	1,516	194.03	2,276	2,620
193.52	1,977	1,536	194.04	2,282	2,643
193.53	1,983	1,556	194.05	2,289	2,665
193.54	1,989	1,575	194.06	2,295	2,688
193.55	1,995	1,595	194.07	2,302	2,711
193.56	2,000	1,615	194.08	2,309	2,734
193.57	2,006	1,635	194.09	2,315	2,757
193.58	2,012	1,655	194.10	2,322	2,781
193.59	2,018	1,676	194.11	2,328	2,804
193.60	2,024	1,696	194.12	2,335	2,827
193.61	2,029	1,716	194.13	2,341	2,851
193.62	2,035	1,736	194.14	2,348	2,874
193.63	2,041	1,757	194.15	2,355	2,898
193.64	2,047	1,777	194.16	2,361	2,921
193.65	2,053	1,798	194.17	2,368	2,945
193.66	2,058	1,818	194.18	2,374	2,968
193.67	2,064	1,839	194.19	2,381	2,992
193.68	2,070	1,860	194.20	2,387	3,016
193.69	2,076	1,880	194.21	2,394	3,040
193.70	2,082	1,901	194.22	2,401	3,064
193.71	2,088	1,922	194.23	2,407	3,088
193.72	2,093	1,943	194.24	2,414	3,112
193.73	2,099	1,964	194.25	2,420	3,136
193.74	2,105	1,985	194.26	2,427	3,161
193.75	2,111	2,006	194.27	2,433	3,185
193.76	2,117	2,027	194.28	2,440	3,209
193.77	2,122	2,048	194.29	2,447	3,234
193.78	2,128	2,069	194.30	2,453	3,258
193.79	2,134	2,091	194.31	2,460	3,283
193.80	2,140	2,112	194.32	2,466	3,307
193.81	2,146	2,134	194.33	2,473	3,332
193.82	2,151	2,155	194.34	2,479	3,357
193.83	2,157	2,177	194.35	2,486	3,382
193.84	2,163	2,198	194.36	2,493	3,406
193.85	2,169	2,220	194.37	2,499	3,431

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.38	2,506	3,456	194.90	2,847	4,848
194.39	2,512	3,482	194.91	2,854	4,877
194.40	2,519	3,507	194.92	2,860	4,905
194.41	2,525	3,532	194.93	2,867	4,934
194.42	2,532	3,557	194.94	2,874	4,963
194.43	2,539	3,583	194.95	2,880	4,991
194.44	2,545	3,608	194.96	2,887	5,020
194.45	2,552	3,633	194.97	2,893	5,049
194.46	2,558	3,659	194.98	2,900	5,078
194.47	2,565	3,685	194.99	2,906	5,107
194.48	2,571	3,710	195.00	2,913	5,136
194.49	2,578	3,736	195.01	2,920	5,165
194.50	2,585	3,762	195.02	2,927	5,195
194.51	2,591	3,788	195.03	2,934	5,224
194.52	2,598	3,814	195.04	2,941	5,253
194.53	2,604	3,840	195.05	2,948	5,283
194.54	2,611	3,866	195.06	2,955	5,312
194.55	2,617	3,892	195.07	2,963	5,342
194.56	2,624	3,918	195.08	2,970	5,372
194.57	2,630	3,944	195.09	2,977	5,401
194.58	2,637	3,971	195.10	2,984	5,431
194.59	2,644	3,997	195.11	2,991	5,461
194.60	2,650	4,024	195.12	2,998	5,491
194.61	2,657	4,050	195.13	3,005	5,521
194.62	2,663	4,077	195.14	3,012	5,551
194.63	2,670	4,103	195.15	3,019	5,581
194.64	2,676	4,130	195.16	3,026	5,611
194.65	2,683	4,157	195.17	3,033	5,642
194.66	2,690	4,184	195.18	3,040	5,672
194.67	2,696	4,211	195.19	3,048	5,702
194.68	2,703	4,238	195.20	3,055	5,733
194.69	2,709	4,265	195.21	3,062	5,764
194.70	2,716	4,292	195.22	3,069	5,794
194.71	2,722	4,319	195.23	3,076	5,825
194.72	2,729	4,346	195.24	3,083	5,856
194.73	2,736	4,374	195.25	3,090	5,887
194.74	2,742	4,401	195.26	3,097	5,918
194.75	2,749	4,429	195.27	3,104	5,949
194.76	2,755	4,456	195.28	3,111	5,980
194.77	2,762	4,484	195.29	3,118	6,011
194.78	2,768	4,511	195.30	3,125	6,042
194.79	2,775	4,539	195.31	3,132	6,073
194.80	2,782	4,567	195.32	3,140	6,105
194.81	2,788	4,595	195.33	3,147	6,136
194.82	2,795	4,623	195.34	3,154	6,168
194.83	2,801	4,651	195.35	3,161	6,199
194.84	2,808	4,679	195.36	3,168	6,231
194.85	2,814	4,707	195.37	3,175	6,263
194.86	2,821	4,735	195.38	3,182	6,294
194.87	2,828	4,763	195.39	3,189	6,326
194.88	2,834	4,791	195.40	3,196	6,358
194.89	2,841	4,820	195.41	3,203	6,390

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.42	3,210	6,422	195.94	3,579	8,187
195.43	3,217	6,454	195.95	3,586	8,223
195.44	3,225	6,487	195.96	3,593	8,259
195.45	3,232	6,519	195.97	3,600	8,295
195.46	3,239	6,551	195.98	3,607	8,331
195.47	3,246	6,584	195.99	3,614	8,367
195.48	3,253	6,616	196.00	3,621	8,403
195.49	3,260	6,649	196.01	3,629	8,439
195.50	3,267	6,681	196.02	3,636	8,476
195.51	3,274	6,714	196.03	3,644	8,512
195.52	3,281	6,747	196.04	3,652	8,549
195.53	3,288	6,780	196.05	3,659	8,585
195.54	3,295	6,812	196.06	3,667	8,622
195.55	3,302	6,845	196.07	3,674	8,659
195.56	3,309	6,879	196.08	3,682	8,695
195.57	3,317	6,912	196.09	3,690	8,732
195.58	3,324	6,945	196.10	3,697	8,769
195.59	3,331	6,978	196.11	3,705	8,806
195.60	3,338	7,011	196.12	3,713	8,843
195.61	3,345	7,045	196.13	3,720	8,880
195.62	3,352	7,078	196.14	3,728	8,918
195.63	3,359	7,112	196.15	3,736	8,955
195.64	3,366	7,146	196.16	3,743	8,992
195.65	3,373	7,179	196.17	3,751	9,030
195.66	3,380	7,213	196.18	3,759	9,067
195.67	3,387	7,247	196.19	3,766	9,105
195.68	3,394	7,281	196.20	3,774	9,143
195.69	3,402	7,315	196.21	3,781	9,181
195.70	3,409	7,349	196.22	3,789	9,218
195.71	3,416	7,383	196.23	3,797	9,256
195.72	3,423	7,417	196.24	3,804	9,294
195.73	3,430	7,451	196.25	3,812	9,332
195.74	3,437	7,486	196.26	3,820	9,371
195.75	3,444	7,520	196.27	3,827	9,409
195.76	3,451	7,555	196.28	3,835	9,447
195.77	3,458	7,589	196.29	3,843	9,485
195.78	3,465	7,624	196.30	3,850	9,524
195.79	3,472	7,658	196.31	3,858	9,562
195.80	3,479	7,693	196.32	3,865	9,601
195.81	3,486	7,728	196.33	3,873	9,640
195.82	3,494	7,763	196.34	3,881	9,679
195.83	3,501	7,798	196.35	3,888	9,717
195.84	3,508	7,833	196.36	3,896	9,756
195.85	3,515	7,868	196.37	3,904	9,795
195.86	3,522	7,903	196.38	3,911	9,834
195.87	3,529	7,939	196.39	3,919	9,874
195.88	3,536	7,974	196.40	3,927	9,913
195.89	3,543	8,009	196.41	3,934	9,952
195.90	3,550	8,045	196.42	3,942	9,991
195.91	3,557	8,080	196.43	3,950	10,031
195.92	3,564	8,116	196.44	3,957	10,070
195.93	3,571	8,152	196.45	3,965	10,110

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.46	3,972	10,150	196.98	4,370	12,319
196.47	3,980	10,190	196.99	4,377	12,362
196.48	3,988	10,229	197.00	4,385	12,406
196.49	3,995	10,269	197.01	4,393	12,450
196.50	4,003	10,309	197.02	4,401	12,494
196.51	4,011	10,349	197.03	4,410	12,538
196.52	4,018	10,389	197.04	4,418	12,582
196.53	4,026	10,430	197.05	4,426	12,627
196.54	4,034	10,470	197.06	4,434	12,671
196.55	4,041	10,510	197.07	4,442	12,715
196.56	4,049	10,551	197.08	4,451	12,760
196.57	4,056	10,591	197.09	4,459	12,804
196.58	4,064	10,632	197.10	4,467	12,849
196.59	4,072	10,673	197.11	4,475	12,894
196.60	4,079	10,713	197.12	4,484	12,938
196.61	4,087	10,754	197.13	4,492	12,983
196.62	4,095	10,795	197.14	4,500	13,028
196.63	4,102	10,836	197.15	4,508	13,073
196.64	4,110	10,877	197.16	4,516	13,118
196.65	4,118	10,918	197.17	4,525	13,164
196.66	4,125	10,960	197.18	4,533	13,209
196.67	4,133	11,001	197.19	4,541	13,254
196.68	4,141	11,042	197.20	4,549	13,300
196.69	4,148	11,084	197.21	4,557	13,345
196.70	4,156	11,125	197.22	4,566	13,391
196.71	4,163	11,167	197.23	4,574	13,437
196.72	4,171	11,208	197.24	4,582	13,482
196.73	4,179	11,250	197.25	4,590	13,528
196.74	4,186	11,292	197.26	4,598	13,574
196.75	4,194	11,334	197.27	4,607	13,620
196.76	4,202	11,376	197.28	4,615	13,666
196.77	4,209	11,418	197.29	4,623	13,712
196.78	4,217	11,460	197.30	4,631	13,759
196.79	4,225	11,502	197.31	4,640	13,805
196.80	4,232	11,545	197.32	4,648	13,851
196.81	4,240	11,587	197.33	4,656	13,898
196.82	4,247	11,629	197.34	4,664	13,945
196.83	4,255	11,672	197.35	4,672	13,991
196.84	4,263	11,714	197.36	4,681	14,038
196.85	4,270	11,757	197.37	4,689	14,085
196.86	4,278	11,800	197.38	4,697	14,132
196.87	4,286	11,843	197.39	4,705	14,179
196.88	4,293	11,886	197.40	4,713	14,226
196.89	4,301	11,929	197.41	4,722	14,273
196.90	4,309	11,972	197.42	4,730	14,320
196.91	4,316	12,015	197.43	4,738	14,368
196.92	4,324	12,058	197.44	4,746	14,415
196.93	4,332	12,101	197.45	4,754	14,463
196.94	4,339	12,145	197.46	4,763	14,510
196.95	4,347	12,188	197.47	4,771	14,558
196.96	4,354	12,231	197.48	4,779	14,606
196.97	4,362	12,275	197.49	4,787	14,653

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.50	4,796	14,701
197.51	4,804	14,749
197.52	4,812	14,797
197.53	4,820	14,846
197.54	4,828	14,894
197.55	4,837	14,942
197.56	4,845	14,991
197.57	4,853	15,039
197.58	4,861	15,088
197.59	4,869	15,136
197.60	4,878	15,185
197.61	4,886	15,234
197.62	4,894	15,283
197.63	4,902	15,332
197.64	4,910	15,381
197.65	4,919	15,430
197.66	4,927	15,479
197.67	4,935	15,528
197.68	4,943	15,578
197.69	4,951	15,627
197.70	4,960	15,677
197.71	4,968	15,727
197.72	4,976	15,776
197.73	4,984	15,826
197.74	4,993	15,876
197.75	5,001	15,926
197.76	5,009	15,976
197.77	5,017	16,026
197.78	5,025	16,076
197.79	5,034	16,127
197.80	5,042	16,177
197.81	5,050	16,227
197.82	5,058	16,278
197.83	5,066	16,329
197.84	5,075	16,379
197.85	5,083	16,430
197.86	5,091	16,481
197.87	5,099	16,532
197.88	5,107	16,583
197.89	5,116	16,634
197.90	5,124	16,685
197.91	5,132	16,737
197.92	5,140	16,788
197.93	5,149	16,839
197.94	5,157	16,891
197.95	5,165	16,942
197.96	5,173	16,994
197.97	5,181	17,046
197.98	5,190	17,098
197.99	5,198	17,150
198.00	**5,206**	**17,202**

Summary for Pond B-33: Basin #33

Inflow Area = 1.761 ac, 50.99% Impervious, Inflow Depth = 2.57" for Future 2 yr event
Inflow = 4.53 cfs @ 12.17 hrs, Volume= 0.378 af
Outflow = 0.21 cfs @ 14.61 hrs, Volume= 0.289 af, Atten= 95%, Lag= 146.5 min
Primary = 0.21 cfs @ 14.61 hrs, Volume= 0.289 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 189.53' @ 14.61 hrs Surf.Area= 5,170 sf Storage= 11,187 cf

Plug-Flow detention time= 600.7 min calculated for 0.289 af (77% of inflow)
Center-of-Mass det. time= 511.9 min (1,297.8 - 786.0)

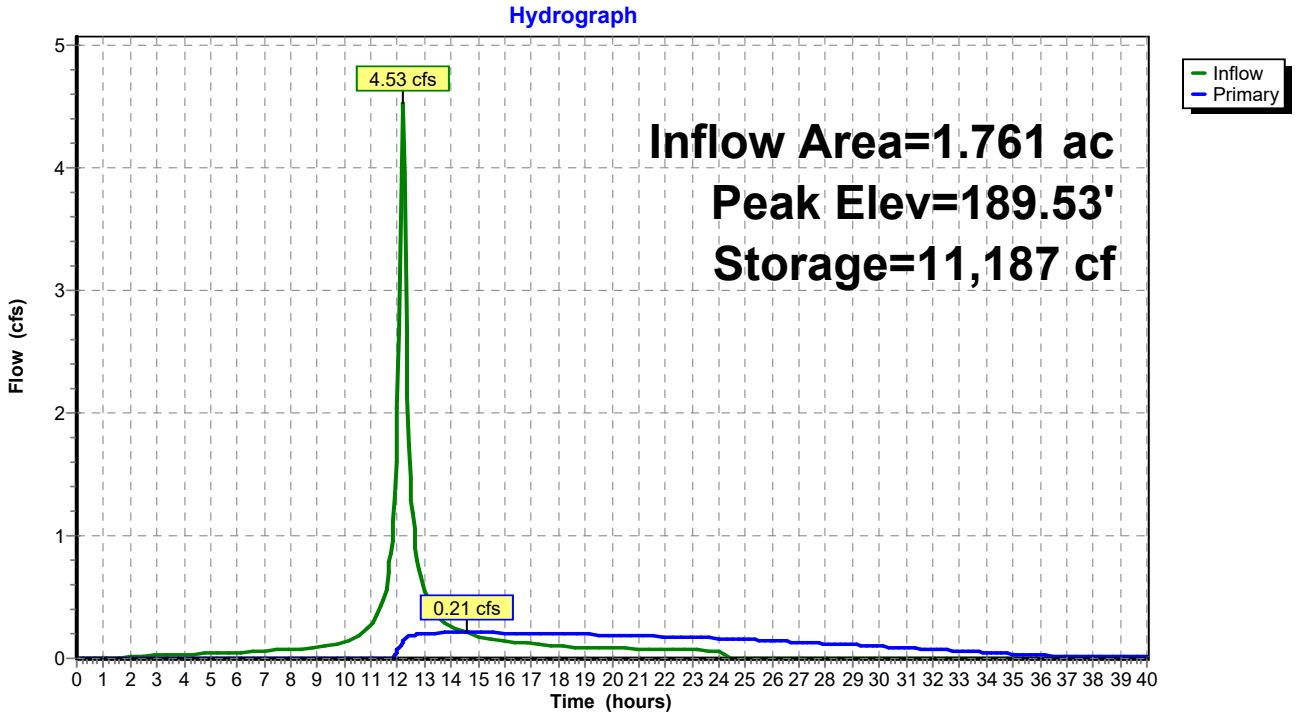
Volume	Invert	Avail.Storage	Storage Description
#1	186.30'	19,860 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.30	0	0	0
187.00	2,936	1,028	1,028
188.00	3,763	3,350	4,377
189.00	4,665	4,214	8,591
190.00	5,621	5,143	13,734
191.00	6,631	6,126	19,860

Device	Routing	Invert	Outlet Devices
#1	Primary	185.65'	**18.0" Round Culvert** L= 91.0' Ke= 0.500 Inlet / Outlet Invert= 185.65' / 185.00' S= 0.0071 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	187.79'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.53'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.75'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.21 cfs @ 14.61 hrs HW=189.53' (Free Discharge)
- **1=Culvert** (Passes 0.21 cfs of 13.87 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.21 cfs @ 6.15 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-33: Basin #33



Stage-Discharge for Pond B-33: Basin #33

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.30	0.00	186.82	0.00	187.34	0.00	187.86	0.01
186.31	0.00	186.83	0.00	187.35	0.00	187.87	0.01
186.32	0.00	186.84	0.00	187.36	0.00	187.88	0.01
186.33	0.00	186.85	0.00	187.37	0.00	187.89	0.02
186.34	0.00	186.86	0.00	187.38	0.00	187.90	0.02
186.35	0.00	186.87	0.00	187.39	0.00	187.91	0.02
186.36	0.00	186.88	0.00	187.40	0.00	187.92	0.03
186.37	0.00	186.89	0.00	187.41	0.00	187.93	0.03
186.38	0.00	186.90	0.00	187.42	0.00	187.94	0.03
186.39	0.00	186.91	0.00	187.43	0.00	187.95	0.04
186.40	0.00	186.92	0.00	187.44	0.00	187.96	0.04
186.41	0.00	186.93	0.00	187.45	0.00	187.97	0.05
186.42	0.00	186.94	0.00	187.46	0.00	187.98	0.05
186.43	0.00	186.95	0.00	187.47	0.00	187.99	0.05
186.44	0.00	186.96	0.00	187.48	0.00	188.00	0.05
186.45	0.00	186.97	0.00	187.49	0.00	188.01	0.06
186.46	0.00	186.98	0.00	187.50	0.00	188.02	0.06
186.47	0.00	186.99	0.00	187.51	0.00	188.03	0.06
186.48	0.00	187.00	0.00	187.52	0.00	188.04	0.06
186.49	0.00	187.01	0.00	187.53	0.00	188.05	0.06
186.50	0.00	187.02	0.00	187.54	0.00	188.06	0.07
186.51	0.00	187.03	0.00	187.55	0.00	188.07	0.07
186.52	0.00	187.04	0.00	187.56	0.00	188.08	0.07
186.53	0.00	187.05	0.00	187.57	0.00	188.09	0.07
186.54	0.00	187.06	0.00	187.58	0.00	188.10	0.07
186.55	0.00	187.07	0.00	187.59	0.00	188.11	0.08
186.56	0.00	187.08	0.00	187.60	0.00	188.12	0.08
186.57	0.00	187.09	0.00	187.61	0.00	188.13	0.08
186.58	0.00	187.10	0.00	187.62	0.00	188.14	0.08
186.59	0.00	187.11	0.00	187.63	0.00	188.15	0.08
186.60	0.00	187.12	0.00	187.64	0.00	188.16	0.08
186.61	0.00	187.13	0.00	187.65	0.00	188.17	0.09
186.62	0.00	187.14	0.00	187.66	0.00	188.18	0.09
186.63	0.00	187.15	0.00	187.67	0.00	188.19	0.09
186.64	0.00	187.16	0.00	187.68	0.00	188.20	0.09
186.65	0.00	187.17	0.00	187.69	0.00	188.21	0.09
186.66	0.00	187.18	0.00	187.70	0.00	188.22	0.09
186.67	0.00	187.19	0.00	187.71	0.00	188.23	0.10
186.68	0.00	187.20	0.00	187.72	0.00	188.24	0.10
186.69	0.00	187.21	0.00	187.73	0.00	188.25	0.10
186.70	0.00	187.22	0.00	187.74	0.00	188.26	0.10
186.71	0.00	187.23	0.00	187.75	0.00	188.27	0.10
186.72	0.00	187.24	0.00	187.76	0.00	188.28	0.10
186.73	0.00	187.25	0.00	187.77	0.00	188.29	0.10
186.74	0.00	187.26	0.00	187.78	0.00	188.30	0.10
186.75	0.00	187.27	0.00	187.79	0.00	188.31	0.11
186.76	0.00	187.28	0.00	187.80	0.00	188.32	0.11
186.77	0.00	187.29	0.00	187.81	0.00	188.33	0.11
186.78	0.00	187.30	0.00	187.82	0.00	188.34	0.11
186.79	0.00	187.31	0.00	187.83	0.00	188.35	0.11
186.80	0.00	187.32	0.00	187.84	0.00	188.36	0.11
186.81	0.00	187.33	0.00	187.85	0.01	188.37	0.11

Stage-Discharge for Pond B-33: Basin #33 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.38	0.11	188.90	0.16	189.42	0.20	189.94	3.60
188.39	0.12	188.91	0.17	189.43	0.20	189.95	3.72
188.40	0.12	188.92	0.17	189.44	0.20	189.96	3.84
188.41	0.12	188.93	0.17	189.45	0.20	189.97	3.97
188.42	0.12	188.94	0.17	189.46	0.21	189.98	4.10
188.43	0.12	188.95	0.17	189.47	0.21	189.99	4.22
188.44	0.12	188.96	0.17	189.48	0.21	190.00	4.35
188.45	0.12	188.97	0.17	189.49	0.21	190.01	4.48
188.46	0.12	188.98	0.17	189.50	0.21	190.02	4.62
188.47	0.12	188.99	0.17	189.51	0.21	190.03	4.75
188.48	0.13	189.00	0.17	189.52	0.21	190.04	4.88
188.49	0.13	189.01	0.17	189.53	0.21	190.05	5.02
188.50	0.13	189.02	0.17	189.54	0.22	190.06	5.15
188.51	0.13	189.03	0.17	189.55	0.25	190.07	5.29
188.52	0.13	189.04	0.18	189.56	0.28	190.08	5.43
188.53	0.13	189.05	0.18	189.57	0.32	190.09	5.57
188.54	0.13	189.06	0.18	189.58	0.36	190.10	5.71
188.55	0.13	189.07	0.18	189.59	0.41	190.11	5.85
188.56	0.13	189.08	0.18	189.60	0.46	190.12	6.00
188.57	0.13	189.09	0.18	189.61	0.51	190.13	6.14
188.58	0.14	189.10	0.18	189.62	0.57	190.14	6.29
188.59	0.14	189.11	0.18	189.63	0.63	190.15	6.43
188.60	0.14	189.12	0.18	189.64	0.69	190.16	6.58
188.61	0.14	189.13	0.18	189.65	0.76	190.17	6.73
188.62	0.14	189.14	0.18	189.66	0.83	190.18	6.88
188.63	0.14	189.15	0.18	189.67	0.90	190.19	7.03
188.64	0.14	189.16	0.18	189.68	0.97	190.20	7.18
188.65	0.14	189.17	0.19	189.69	1.05	190.21	7.33
188.66	0.14	189.18	0.19	189.70	1.13	190.22	7.49
188.67	0.14	189.19	0.19	189.71	1.21	190.23	7.64
188.68	0.15	189.20	0.19	189.72	1.29	190.24	7.80
188.69	0.15	189.21	0.19	189.73	1.38	190.25	7.96
188.70	0.15	189.22	0.19	189.74	1.47	190.26	8.11
188.71	0.15	189.23	0.19	189.75	1.56	190.27	8.27
188.72	0.15	189.24	0.19	189.76	1.65	190.28	8.43
188.73	0.15	189.25	0.19	189.77	1.74	190.29	8.59
188.74	0.15	189.26	0.19	189.78	1.84	190.30	8.75
188.75	0.15	189.27	0.19	189.79	1.94	190.31	8.91
188.76	0.15	189.28	0.19	189.80	2.04	190.32	9.08
188.77	0.15	189.29	0.19	189.81	2.14	190.33	9.24
188.78	0.15	189.30	0.19	189.82	2.24	190.34	9.41
188.79	0.16	189.31	0.20	189.83	2.35	190.35	9.57
188.80	0.16	189.32	0.20	189.84	2.45	190.36	9.74
188.81	0.16	189.33	0.20	189.85	2.56	190.37	9.91
188.82	0.16	189.34	0.20	189.86	2.67	190.38	10.07
188.83	0.16	189.35	0.20	189.87	2.78	190.39	10.24
188.84	0.16	189.36	0.20	189.88	2.89	190.40	10.41
188.85	0.16	189.37	0.20	189.89	3.01	190.41	10.58
188.86	0.16	189.38	0.20	189.90	3.12	190.42	10.75
188.87	0.16	189.39	0.20	189.91	3.24	190.43	10.93
188.88	0.16	189.40	0.20	189.92	3.36	190.44	11.10
188.89	0.16	189.41	0.20	189.93	3.48	190.45	11.27

Stage-Discharge for Pond B-33: Basin #33 (continued)

Elevation (feet)	Primary (cfs)
190.46	11.45
190.47	11.62
190.48	11.80
190.49	11.98
190.50	12.15
190.51	12.33
190.52	12.51
190.53	12.69
190.54	12.87
190.55	13.05
190.56	13.24
190.57	13.42
190.58	13.60
190.59	13.79
190.60	13.97
190.61	14.16
190.62	14.34
190.63	14.53
190.64	14.72
190.65	14.91
190.66	15.10
190.67	15.29
190.68	15.48
190.69	15.67
190.70	15.86
190.71	16.05
190.72	16.25
190.73	16.40
190.74	16.42
190.75	16.44
190.76	16.57
190.77	16.81
190.78	17.10
190.79	17.45
190.80	17.84
190.81	18.28
190.82	18.74
190.83	19.25
190.84	19.78
190.85	20.35
190.86	20.94
190.87	21.56
190.88	22.20
190.89	22.87
190.90	23.57
190.91	24.29
190.92	25.03
190.93	25.79
190.94	26.58
190.95	27.38
190.96	28.25
190.97	29.14
190.98	30.06
190.99	31.00
191.00	**31.97**

Stage-Area-Storage for Pond B-33: Basin #33

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.30	0	0	186.82	2,181	567
186.31	42	0	186.83	2,223	589
186.32	84	1	186.84	2,265	612
186.33	126	2	186.85	2,307	634
186.34	168	3	186.86	2,349	658
186.35	210	5	186.87	2,391	681
186.36	252	8	186.88	2,433	705
186.37	294	10	186.89	2,475	730
186.38	336	13	186.90	2,517	755
186.39	377	17	186.91	2,559	780
186.40	419	21	186.92	2,600	806
186.41	461	25	186.93	2,642	832
186.42	503	30	186.94	2,684	859
186.43	545	35	186.95	2,726	886
186.44	587	41	186.96	2,768	914
186.45	629	47	186.97	2,810	941
186.46	671	54	186.98	2,852	970
186.47	713	61	186.99	2,894	998
186.48	755	68	187.00	2,936	1,028
186.49	797	76	187.01	2,944	1,057
186.50	839	84	187.02	2,953	1,086
186.51	881	92	187.03	2,961	1,116
186.52	923	102	187.04	2,969	1,146
186.53	965	111	187.05	2,977	1,175
186.54	1,007	121	187.06	2,986	1,205
186.55	1,049	131	187.07	2,994	1,235
186.56	1,091	142	187.08	3,002	1,265
186.57	1,132	153	187.09	3,010	1,295
186.58	1,174	164	187.10	3,019	1,325
186.59	1,216	176	187.11	3,027	1,356
186.60	1,258	189	187.12	3,035	1,386
186.61	1,300	202	187.13	3,044	1,416
186.62	1,342	215	187.14	3,052	1,447
186.63	1,384	228	187.15	3,060	1,477
186.64	1,426	242	187.16	3,068	1,508
186.65	1,468	257	187.17	3,077	1,539
186.66	1,510	272	187.18	3,085	1,569
186.67	1,552	287	187.19	3,093	1,600
186.68	1,594	303	187.20	3,101	1,631
186.69	1,636	319	187.21	3,110	1,662
186.70	1,678	336	187.22	3,118	1,694
186.71	1,720	353	187.23	3,126	1,725
186.72	1,762	370	187.24	3,134	1,756
186.73	1,804	388	187.25	3,143	1,787
186.74	1,845	406	187.26	3,151	1,819
186.75	1,887	425	187.27	3,159	1,850
186.76	1,929	444	187.28	3,168	1,882
186.77	1,971	463	187.29	3,176	1,914
186.78	2,013	483	187.30	3,184	1,946
186.79	2,055	504	187.31	3,192	1,977
186.80	2,097	524	187.32	3,201	2,009
186.81	2,139	545	187.33	3,209	2,042

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.34	3,217	2,074	187.86	3,647	3,858
187.35	3,225	2,106	187.87	3,655	3,895
187.36	3,234	2,138	187.88	3,664	3,931
187.37	3,242	2,171	187.89	3,672	3,968
187.38	3,250	2,203	187.90	3,680	4,005
187.39	3,259	2,236	187.91	3,689	4,042
187.40	3,267	2,268	187.92	3,697	4,079
187.41	3,275	2,301	187.93	3,705	4,116
187.42	3,283	2,334	187.94	3,713	4,153
187.43	3,292	2,367	187.95	3,722	4,190
187.44	3,300	2,399	187.96	3,730	4,227
187.45	3,308	2,433	187.97	3,738	4,265
187.46	3,316	2,466	187.98	3,746	4,302
187.47	3,325	2,499	187.99	3,755	4,340
187.48	3,333	2,532	188.00	3,763	4,377
187.49	3,341	2,566	188.01	3,772	4,415
187.50	3,350	2,599	188.02	3,781	4,453
187.51	3,358	2,633	188.03	3,790	4,490
187.52	3,366	2,666	188.04	3,799	4,528
187.53	3,374	2,700	188.05	3,808	4,566
187.54	3,383	2,734	188.06	3,817	4,605
187.55	3,391	2,767	188.07	3,826	4,643
187.56	3,399	2,801	188.08	3,835	4,681
187.57	3,407	2,835	188.09	3,844	4,719
187.58	3,416	2,870	188.10	3,853	4,758
187.59	3,424	2,904	188.11	3,862	4,796
187.60	3,432	2,938	188.12	3,871	4,835
187.61	3,440	2,972	188.13	3,880	4,874
187.62	3,449	3,007	188.14	3,889	4,913
187.63	3,457	3,041	188.15	3,898	4,952
187.64	3,465	3,076	188.16	3,907	4,991
187.65	3,474	3,111	188.17	3,916	5,030
187.66	3,482	3,145	188.18	3,925	5,069
187.67	3,490	3,180	188.19	3,934	5,108
187.68	3,498	3,215	188.20	3,943	5,148
187.69	3,507	3,250	188.21	3,952	5,187
187.70	3,515	3,285	188.22	3,961	5,227
187.71	3,523	3,321	188.23	3,970	5,266
187.72	3,531	3,356	188.24	3,979	5,306
187.73	3,540	3,391	188.25	3,989	5,346
187.74	3,548	3,427	188.26	3,998	5,386
187.75	3,556	3,462	188.27	4,007	5,426
187.76	3,565	3,498	188.28	4,016	5,466
187.77	3,573	3,533	188.29	4,025	5,506
187.78	3,581	3,569	188.30	4,034	5,547
187.79	3,589	3,605	188.31	4,043	5,587
187.80	3,598	3,641	188.32	4,052	5,627
187.81	3,606	3,677	188.33	4,061	5,668
187.82	3,614	3,713	188.34	4,070	5,709
187.83	3,622	3,749	188.35	4,079	5,749
187.84	3,631	3,786	188.36	4,088	5,790
187.85	3,639	3,822	188.37	4,097	5,831

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.38	4,106	5,872	188.90	4,575	8,129
188.39	4,115	5,913	188.91	4,584	8,175
188.40	4,124	5,954	188.92	4,593	8,221
188.41	4,133	5,996	188.93	4,602	8,267
188.42	4,142	6,037	188.94	4,611	8,313
188.43	4,151	6,079	188.95	4,620	8,359
188.44	4,160	6,120	188.96	4,629	8,405
188.45	4,169	6,162	188.97	4,638	8,452
188.46	4,178	6,204	188.98	4,647	8,498
188.47	4,187	6,245	188.99	4,656	8,544
188.48	4,196	6,287	189.00	4,665	8,591
188.49	4,205	6,329	189.01	4,675	8,638
188.50	4,214	6,371	189.02	4,684	8,685
188.51	4,223	6,414	189.03	4,694	8,731
188.52	4,232	6,456	189.04	4,703	8,778
188.53	4,241	6,498	189.05	4,713	8,826
188.54	4,250	6,541	189.06	4,722	8,873
188.55	4,259	6,583	189.07	4,732	8,920
188.56	4,268	6,626	189.08	4,741	8,967
188.57	4,277	6,669	189.09	4,751	9,015
188.58	4,286	6,711	189.10	4,761	9,062
188.59	4,295	6,754	189.11	4,770	9,110
188.60	4,304	6,797	189.12	4,780	9,158
188.61	4,313	6,840	189.13	4,789	9,206
188.62	4,322	6,884	189.14	4,799	9,254
188.63	4,331	6,927	189.15	4,808	9,302
188.64	4,340	6,970	189.16	4,818	9,350
188.65	4,349	7,014	189.17	4,828	9,398
188.66	4,358	7,057	189.18	4,837	9,446
188.67	4,367	7,101	189.19	4,847	9,495
188.68	4,376	7,144	189.20	4,856	9,543
188.69	4,385	7,188	189.21	4,866	9,592
188.70	4,394	7,232	189.22	4,875	9,641
188.71	4,403	7,276	189.23	4,885	9,689
188.72	4,412	7,320	189.24	4,894	9,738
188.73	4,421	7,364	189.25	4,904	9,787
188.74	4,430	7,409	189.26	4,914	9,836
188.75	4,440	7,453	189.27	4,923	9,885
188.76	4,449	7,497	189.28	4,933	9,935
188.77	4,458	7,542	189.29	4,942	9,984
188.78	4,467	7,587	189.30	4,952	10,034
188.79	4,476	7,631	189.31	4,961	10,083
188.80	4,485	7,676	189.32	4,971	10,133
188.81	4,494	7,721	189.33	4,980	10,183
188.82	4,503	7,766	189.34	4,990	10,232
188.83	4,512	7,811	189.35	5,000	10,282
188.84	4,521	7,856	189.36	5,009	10,332
188.85	4,530	7,901	189.37	5,019	10,383
188.86	4,539	7,947	189.38	5,028	10,433
188.87	4,548	7,992	189.39	5,038	10,483
188.88	4,557	8,038	189.40	5,047	10,534
188.89	4,566	8,083	189.41	5,057	10,584

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.42	5,067	10,635	189.94	5,564	13,399
189.43	5,076	10,685	189.95	5,573	13,454
189.44	5,086	10,736	189.96	5,583	13,510
189.45	5,095	10,787	189.97	5,592	13,566
189.46	5,105	10,838	189.98	5,602	13,622
189.47	5,114	10,889	189.99	5,611	13,678
189.48	5,124	10,940	190.00	5,621	13,734
189.49	5,133	10,992	190.01	5,631	13,790
189.50	5,143	11,043	190.02	5,641	13,847
189.51	5,153	11,095	190.03	5,651	13,903
189.52	5,162	11,146	190.04	5,661	13,960
189.53	5,172	11,198	190.05	5,672	14,016
189.54	5,181	11,250	190.06	5,682	14,073
189.55	5,191	11,301	190.07	5,692	14,130
189.56	5,200	11,353	190.08	5,702	14,187
189.57	5,210	11,405	190.09	5,712	14,244
189.58	5,219	11,458	190.10	5,722	14,301
189.59	5,229	11,510	190.11	5,732	14,359
189.60	5,239	11,562	190.12	5,742	14,416
189.61	5,248	11,615	190.13	5,752	14,473
189.62	5,258	11,667	190.14	5,762	14,531
189.63	5,267	11,720	190.15	5,773	14,589
189.64	5,277	11,772	190.16	5,783	14,646
189.65	5,286	11,825	190.17	5,793	14,704
189.66	5,296	11,878	190.18	5,803	14,762
189.67	5,306	11,931	190.19	5,813	14,820
189.68	5,315	11,984	190.20	5,823	14,879
189.69	5,325	12,038	190.21	5,833	14,937
189.70	5,334	12,091	190.22	5,843	14,995
189.71	5,344	12,144	190.23	5,853	15,054
189.72	5,353	12,198	190.24	5,863	15,112
189.73	5,363	12,251	190.25	5,874	15,171
189.74	5,372	12,305	190.26	5,884	15,230
189.75	5,382	12,359	190.27	5,894	15,289
189.76	5,392	12,413	190.28	5,904	15,348
189.77	5,401	12,467	190.29	5,914	15,407
189.78	5,411	12,521	190.30	5,924	15,466
189.79	5,420	12,575	190.31	5,934	15,525
189.80	5,430	12,629	190.32	5,944	15,585
189.81	5,439	12,683	190.33	5,954	15,644
189.82	5,449	12,738	190.34	5,964	15,704
189.83	5,458	12,792	190.35	5,975	15,763
189.84	5,468	12,847	190.36	5,985	15,823
189.85	5,478	12,902	190.37	5,995	15,883
189.86	5,487	12,957	190.38	6,005	15,943
189.87	5,497	13,011	190.39	6,015	16,003
189.88	5,506	13,066	190.40	6,025	16,063
189.89	5,516	13,122	190.41	6,035	16,124
189.90	5,525	13,177	190.42	6,045	16,184
189.91	5,535	13,232	190.43	6,055	16,245
189.92	5,545	13,287	190.44	6,065	16,305
189.93	5,554	13,343	190.45	6,076	16,366

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.46	6,086	16,427
190.47	6,096	16,488
190.48	6,106	16,549
190.49	6,116	16,610
190.50	6,126	16,671
190.51	6,136	16,732
190.52	6,146	16,794
190.53	6,156	16,855
190.54	6,166	16,917
190.55	6,177	16,978
190.56	6,187	17,040
190.57	6,197	17,102
190.58	6,207	17,164
190.59	6,217	17,226
190.60	6,227	17,289
190.61	6,237	17,351
190.62	6,247	17,413
190.63	6,257	17,476
190.64	6,267	17,538
190.65	6,278	17,601
190.66	6,288	17,664
190.67	6,298	17,727
190.68	6,308	17,790
190.69	6,318	17,853
190.70	6,328	17,916
190.71	6,338	17,980
190.72	6,348	18,043
190.73	6,358	18,107
190.74	6,368	18,170
190.75	6,379	18,234
190.76	6,389	18,298
190.77	6,399	18,362
190.78	6,409	18,426
190.79	6,419	18,490
190.80	6,429	18,554
190.81	6,439	18,618
190.82	6,449	18,683
190.83	6,459	18,747
190.84	6,469	18,812
190.85	6,480	18,877
190.86	6,490	18,942
190.87	6,500	19,007
190.88	6,510	19,072
190.89	6,520	19,137
190.90	6,530	19,202
190.91	6,540	19,267
190.92	6,550	19,333
190.93	6,560	19,398
190.94	6,570	19,464
190.95	6,581	19,530
190.96	6,591	19,596
190.97	6,601	19,662
190.98	6,611	19,728
190.99	6,621	19,794
191.00	**6,631**	**19,860**

Summary for Pond B-34: Basin #34

Inflow Area = 1.779 ac, 23.66% Impervious, Inflow Depth = 1.99" for Future 2 yr event
Inflow = 3.66 cfs @ 12.18 hrs, Volume= 0.295 af
Outflow = 0.18 cfs @ 14.70 hrs, Volume= 0.244 af, Atten= 95%, Lag= 151.6 min
Primary = 0.18 cfs @ 14.70 hrs, Volume= 0.244 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 192.33' @ 14.70 hrs Surf.Area= 5,679 sf Storage= 8,236 cf

Plug-Flow detention time= 568.0 min calculated for 0.244 af (83% of inflow)
Center-of-Mass det. time= 490.1 min (1,305.0 - 814.9)

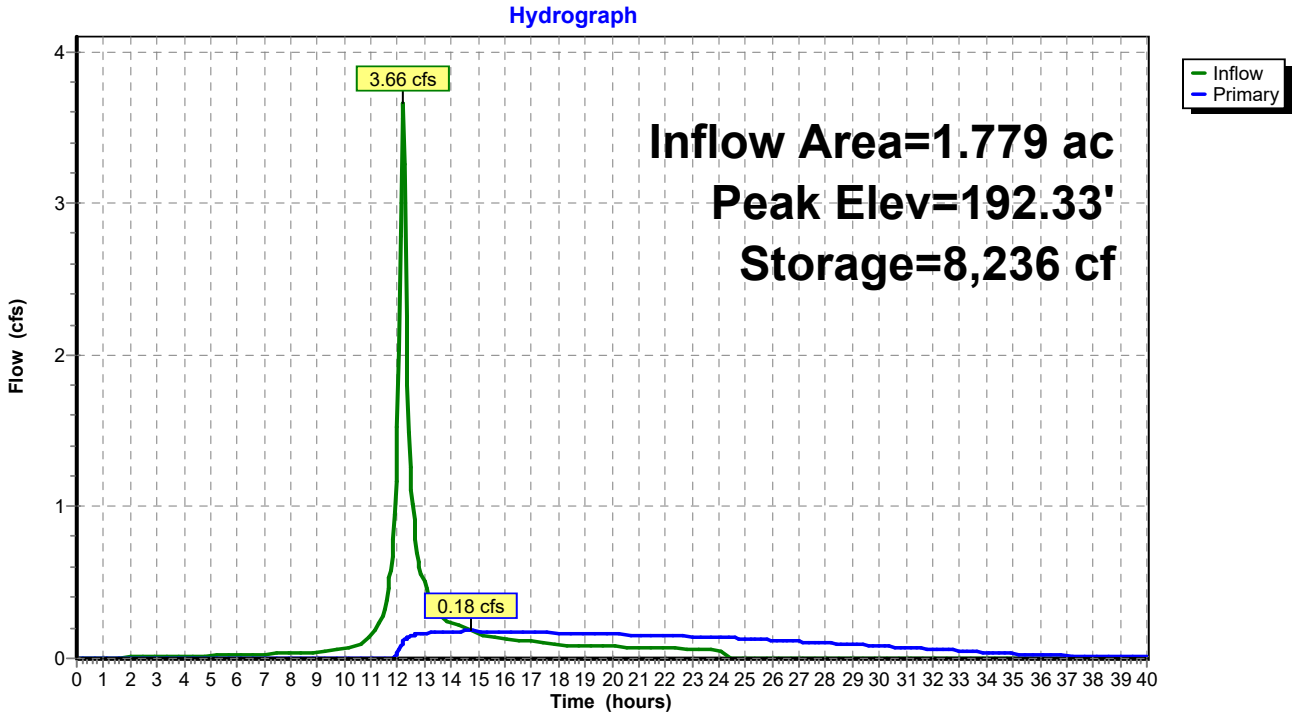
Volume	Invert	Avail.Storage	Storage Description
#1	190.30'	27,449 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.30	0	0	0
191.00	4,390	1,536	1,536
192.00	5,343	4,867	6,403
193.00	6,353	5,848	12,251
194.00	7,419	6,886	19,137
195.00	9,205	8,312	27,449

Device	Routing	Invert	Outlet Devices
#1	Primary	189.65'	**18.0" Round Culvert** L= 100.0' Ke= 0.500 Inlet / Outlet Invert= 189.65' / 189.15' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.09'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	192.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.18 cfs @ 14.70 hrs HW=192.33' (Free Discharge)
- **1=Culvert** (Passes 0.18 cfs of 10.08 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.14 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.17 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-34: Basin #34



Stage-Discharge for Pond B-34: Basin #34

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.30	0.00	190.82	0.00	191.34	0.06	191.86	0.13
190.31	0.00	190.83	0.00	191.35	0.06	191.87	0.13
190.32	0.00	190.84	0.00	191.36	0.07	191.88	0.14
190.33	0.00	190.85	0.00	191.37	0.07	191.89	0.14
190.34	0.00	190.86	0.00	191.38	0.07	191.90	0.14
190.35	0.00	190.87	0.00	191.39	0.07	191.91	0.14
190.36	0.00	190.88	0.00	191.40	0.07	191.92	0.14
190.37	0.00	190.89	0.00	191.41	0.08	191.93	0.14
190.38	0.00	190.90	0.00	191.42	0.08	191.94	0.14
190.39	0.00	190.91	0.00	191.43	0.08	191.95	0.14
190.40	0.00	190.92	0.00	191.44	0.08	191.96	0.14
190.41	0.00	190.93	0.00	191.45	0.08	191.97	0.14
190.42	0.00	190.94	0.00	191.46	0.08	191.98	0.15
190.43	0.00	190.95	0.00	191.47	0.09	191.99	0.15
190.44	0.00	190.96	0.00	191.48	0.09	192.00	0.15
190.45	0.00	190.97	0.00	191.49	0.09	192.01	0.15
190.46	0.00	190.98	0.00	191.50	0.09	192.02	0.15
190.47	0.00	190.99	0.00	191.51	0.09	192.03	0.15
190.48	0.00	191.00	0.00	191.52	0.09	192.04	0.15
190.49	0.00	191.01	0.00	191.53	0.10	192.05	0.15
190.50	0.00	191.02	0.00	191.54	0.10	192.06	0.15
190.51	0.00	191.03	0.00	191.55	0.10	192.07	0.15
190.52	0.00	191.04	0.00	191.56	0.10	192.08	0.15
190.53	0.00	191.05	0.00	191.57	0.10	192.09	0.16
190.54	0.00	191.06	0.00	191.58	0.10	192.10	0.16
190.55	0.00	191.07	0.00	191.59	0.10	192.11	0.16
190.56	0.00	191.08	0.00	191.60	0.10	192.12	0.16
190.57	0.00	191.09	0.00	191.61	0.11	192.13	0.16
190.58	0.00	191.10	0.00	191.62	0.11	192.14	0.16
190.59	0.00	191.11	0.00	191.63	0.11	192.15	0.16
190.60	0.00	191.12	0.00	191.64	0.11	192.16	0.16
190.61	0.00	191.13	0.00	191.65	0.11	192.17	0.16
190.62	0.00	191.14	0.00	191.66	0.11	192.18	0.16
190.63	0.00	191.15	0.01	191.67	0.11	192.19	0.16
190.64	0.00	191.16	0.01	191.68	0.11	192.20	0.16
190.65	0.00	191.17	0.01	191.69	0.12	192.21	0.17
190.66	0.00	191.18	0.01	191.70	0.12	192.22	0.17
190.67	0.00	191.19	0.02	191.71	0.12	192.23	0.17
190.68	0.00	191.20	0.02	191.72	0.12	192.24	0.17
190.69	0.00	191.21	0.02	191.73	0.12	192.25	0.17
190.70	0.00	191.22	0.03	191.74	0.12	192.26	0.17
190.71	0.00	191.23	0.03	191.75	0.12	192.27	0.17
190.72	0.00	191.24	0.03	191.76	0.12	192.28	0.17
190.73	0.00	191.25	0.04	191.77	0.12	192.29	0.17
190.74	0.00	191.26	0.04	191.78	0.13	192.30	0.17
190.75	0.00	191.27	0.05	191.79	0.13	192.31	0.17
190.76	0.00	191.28	0.05	191.80	0.13	192.32	0.17
190.77	0.00	191.29	0.05	191.81	0.13	192.33	0.17
190.78	0.00	191.30	0.05	191.82	0.13	192.34	0.19
190.79	0.00	191.31	0.06	191.83	0.13	192.35	0.21
190.80	0.00	191.32	0.06	191.84	0.13	192.36	0.25
190.81	0.00	191.33	0.06	191.85	0.13	192.37	0.28

Stage-Discharge for Pond B-34: Basin #34 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.38	0.32	192.90	5.68	193.42	12.94	193.94	14.10
192.39	0.37	192.91	5.83	193.43	12.96	193.95	14.12
192.40	0.42	192.92	5.97	193.44	12.98	193.96	14.14
192.41	0.48	192.93	6.11	193.45	13.01	193.97	14.16
192.42	0.53	192.94	6.26	193.46	13.03	193.98	14.18
192.43	0.59	192.95	6.41	193.47	13.05	193.99	14.21
192.44	0.66	192.96	6.55	193.48	13.08	194.00	14.23
192.45	0.72	192.97	6.70	193.49	13.10	194.01	14.25
192.46	0.79	192.98	6.85	193.50	13.12	194.02	14.27
192.47	0.87	192.99	7.00	193.51	13.14	194.03	14.29
192.48	0.94	193.00	7.15	193.52	13.17	194.04	14.31
192.49	1.02	193.01	7.31	193.53	13.19	194.05	14.33
192.50	1.10	193.02	7.46	193.54	13.21	194.06	14.35
192.51	1.18	193.03	7.61	193.55	13.24	194.07	14.37
192.52	1.26	193.04	7.77	193.56	13.26	194.08	14.40
192.53	1.35	193.05	7.93	193.57	13.28	194.09	14.42
192.54	1.44	193.06	8.08	193.58	13.30	194.10	14.44
192.55	1.53	193.07	8.24	193.59	13.33	194.11	14.46
192.56	1.62	193.08	8.40	193.60	13.35	194.12	14.48
192.57	1.71	193.09	8.56	193.61	13.37	194.13	14.50
192.58	1.81	193.10	8.72	193.62	13.40	194.14	14.52
192.59	1.91	193.11	8.89	193.63	13.42	194.15	14.54
192.60	2.00	193.12	9.05	193.64	13.44	194.16	14.56
192.61	2.11	193.13	9.21	193.65	13.46	194.17	14.58
192.62	2.21	193.14	9.38	193.66	13.49	194.18	14.60
192.63	2.31	193.15	9.54	193.67	13.51	194.19	14.62
192.64	2.42	193.16	9.71	193.68	13.53	194.20	14.64
192.65	2.53	193.17	9.88	193.69	13.55	194.21	14.67
192.66	2.64	193.18	10.05	193.70	13.57	194.22	14.69
192.67	2.75	193.19	10.22	193.71	13.60	194.23	14.71
192.68	2.86	193.20	10.38	193.72	13.62	194.24	14.73
192.69	2.98	193.21	10.56	193.73	13.64	194.25	14.75
192.70	3.09	193.22	10.73	193.74	13.66	194.26	14.89
192.71	3.21	193.23	10.90	193.75	13.69	194.27	15.12
192.72	3.33	193.24	11.07	193.76	13.71	194.28	15.42
192.73	3.45	193.25	11.25	193.77	13.73	194.29	15.77
192.74	3.57	193.26	11.42	193.78	13.75	194.30	16.16
192.75	3.69	193.27	11.60	193.79	13.77	194.31	16.59
192.76	3.81	193.28	11.77	193.80	13.80	194.32	17.06
192.77	3.94	193.29	11.95	193.81	13.82	194.33	17.57
192.78	4.07	193.30	12.13	193.82	13.84	194.34	18.10
192.79	4.19	193.31	12.31	193.83	13.86	194.35	18.67
192.80	4.32	193.32	12.49	193.84	13.88	194.36	19.26
192.81	4.45	193.33	12.67	193.85	13.90	194.37	19.88
192.82	4.59	193.34	12.75	193.86	13.93	194.38	20.53
192.83	4.72	193.35	12.77	193.87	13.95	194.39	21.20
192.84	4.85	193.36	12.80	193.88	13.97	194.40	21.90
192.85	4.99	193.37	12.82	193.89	13.99	194.41	22.62
192.86	5.12	193.38	12.84	193.90	14.01	194.42	23.36
192.87	5.26	193.39	12.87	193.91	14.03	194.43	24.12
192.88	5.40	193.40	12.89	193.92	14.06	194.44	24.91
192.89	5.54	193.41	12.91	193.93	14.08	194.45	25.72

Stage-Discharge for Pond B-34: Basin #34 (continued)

Elevation (feet)	Primary (cfs)
194.46	26.58
194.47	27.48
194.48	28.39
194.49	29.34
194.50	30.30
194.51	31.30
194.52	32.32
194.53	33.36
194.54	34.43
194.55	35.52
194.56	36.64
194.57	37.78
194.58	38.94
194.59	40.13
194.60	41.34
194.61	42.58
194.62	43.84
194.63	45.13
194.64	46.44
194.65	47.78
194.66	49.16
194.67	50.57
194.68	52.01
194.69	53.47
194.70	54.96
194.71	56.48
194.72	58.02
194.73	59.59
194.74	61.18
194.75	62.80
194.76	64.45
194.77	66.12
194.78	67.83
194.79	69.55
194.80	71.31
194.81	73.09
194.82	74.89
194.83	76.73
194.84	78.59
194.85	80.48
194.86	82.12
194.87	83.78
194.88	85.46
194.89	87.14
194.90	88.84
194.91	90.56
194.92	92.28
194.93	94.02
194.94	95.77
194.95	97.54
194.96	99.31
194.97	101.10
194.98	102.91
194.99	104.72
195.00	**106.55**

Stage-Area-Storage for Pond B-34: Basin #34

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.30	0	0	190.82	3,261	848
190.31	63	0	190.83	3,324	881
190.32	125	1	190.84	3,387	914
190.33	188	3	190.85	3,449	949
190.34	251	5	190.86	3,512	983
190.35	314	8	190.87	3,575	1,019
190.36	376	11	190.88	3,637	1,055
190.37	439	15	190.89	3,700	1,092
190.38	502	20	190.90	3,763	1,129
190.39	564	25	190.91	3,826	1,167
190.40	627	31	190.92	3,888	1,205
190.41	690	38	190.93	3,951	1,245
190.42	753	45	190.94	4,014	1,284
190.43	815	53	190.95	4,076	1,325
190.44	878	61	190.96	4,139	1,366
190.45	941	71	190.97	4,202	1,408
190.46	1,003	80	190.98	4,265	1,450
190.47	1,066	91	190.99	4,327	1,493
190.48	1,129	102	191.00	4,390	1,536
190.49	1,192	113	191.01	4,400	1,580
190.50	1,254	125	191.02	4,409	1,624
190.51	1,317	138	191.03	4,419	1,669
190.52	1,380	152	191.04	4,428	1,713
190.53	1,442	166	191.05	4,438	1,757
190.54	1,505	181	191.06	4,447	1,802
190.55	1,568	196	191.07	4,457	1,846
190.56	1,631	212	191.08	4,466	1,891
190.57	1,693	229	191.09	4,476	1,935
190.58	1,756	246	191.10	4,485	1,980
190.59	1,819	264	191.11	4,495	2,025
190.60	1,881	282	191.12	4,504	2,070
190.61	1,944	301	191.13	4,514	2,115
190.62	2,007	321	191.14	4,523	2,160
190.63	2,070	341	191.15	4,533	2,206
190.64	2,132	362	191.16	4,542	2,251
190.65	2,195	384	191.17	4,552	2,297
190.66	2,258	406	191.18	4,562	2,342
190.67	2,320	429	191.19	4,571	2,388
190.68	2,383	453	191.20	4,581	2,434
190.69	2,446	477	191.21	4,590	2,479
190.70	2,509	502	191.22	4,600	2,525
190.71	2,571	527	191.23	4,609	2,571
190.72	2,634	553	191.24	4,619	2,618
190.73	2,697	580	191.25	4,628	2,664
190.74	2,759	607	191.26	4,638	2,710
190.75	2,822	635	191.27	4,647	2,757
190.76	2,885	664	191.28	4,657	2,803
190.77	2,948	693	191.29	4,666	2,850
190.78	3,010	722	191.30	4,676	2,896
190.79	3,073	753	191.31	4,685	2,943
190.80	3,136	784	191.32	4,695	2,990
190.81	3,198	816	191.33	4,704	3,037

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.34	4,714	3,084	191.86	5,210	5,664
191.35	4,724	3,131	191.87	5,219	5,716
191.36	4,733	3,179	191.88	5,229	5,769
191.37	4,743	3,226	191.89	5,238	5,821
191.38	4,752	3,274	191.90	5,248	5,873
191.39	4,762	3,321	191.91	5,257	5,926
191.40	4,771	3,369	191.92	5,267	5,979
191.41	4,781	3,416	191.93	5,276	6,031
191.42	4,790	3,464	191.94	5,286	6,084
191.43	4,800	3,512	191.95	5,295	6,137
191.44	4,809	3,560	191.96	5,305	6,190
191.45	4,819	3,608	191.97	5,314	6,243
191.46	4,828	3,657	191.98	5,324	6,296
191.47	4,838	3,705	191.99	5,333	6,350
191.48	4,847	3,753	192.00	5,343	6,403
191.49	4,857	3,802	192.01	5,353	6,456
191.50	4,867	3,851	192.02	5,363	6,510
191.51	4,876	3,899	192.03	5,373	6,564
191.52	4,886	3,948	192.04	5,383	6,618
191.53	4,895	3,997	192.05	5,394	6,671
191.54	4,905	4,046	192.06	5,404	6,725
191.55	4,914	4,095	192.07	5,414	6,779
191.56	4,924	4,144	192.08	5,424	6,834
191.57	4,933	4,194	192.09	5,434	6,888
191.58	4,943	4,243	192.10	5,444	6,942
191.59	4,952	4,292	192.11	5,454	6,997
191.60	4,962	4,342	192.12	5,464	7,051
191.61	4,971	4,392	192.13	5,474	7,106
191.62	4,981	4,441	192.14	5,484	7,161
191.63	4,990	4,491	192.15	5,495	7,216
191.64	5,000	4,541	192.16	5,505	7,271
191.65	5,009	4,591	192.17	5,515	7,326
191.66	5,019	4,641	192.18	5,525	7,381
191.67	5,029	4,692	192.19	5,535	7,436
191.68	5,038	4,742	192.20	5,545	7,492
191.69	5,048	4,792	192.21	5,555	7,547
191.70	5,057	4,843	192.22	5,565	7,603
191.71	5,067	4,894	192.23	5,575	7,659
191.72	5,076	4,944	192.24	5,585	7,714
191.73	5,086	4,995	192.25	5,596	7,770
191.74	5,095	5,046	192.26	5,606	7,826
191.75	5,105	5,097	192.27	5,616	7,882
191.76	5,114	5,148	192.28	5,626	7,939
191.77	5,124	5,199	192.29	5,636	7,995
191.78	5,133	5,251	192.30	5,646	8,051
191.79	5,143	5,302	192.31	5,656	8,108
191.80	5,152	5,353	192.32	5,666	8,164
191.81	5,162	5,405	192.33	5,676	8,221
191.82	5,171	5,457	192.34	5,686	8,278
191.83	5,181	5,508	192.35	5,697	8,335
191.84	5,191	5,560	192.36	5,707	8,392
191.85	5,200	5,612	192.37	5,717	8,449

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.38	5,727	8,506	192.90	6,252	11,621
192.39	5,737	8,564	192.91	6,262	11,683
192.40	5,747	8,621	192.92	6,272	11,746
192.41	5,757	8,679	192.93	6,282	11,809
192.42	5,767	8,736	192.94	6,292	11,872
192.43	5,777	8,794	192.95	6,303	11,935
192.44	5,787	8,852	192.96	6,313	11,998
192.45	5,798	8,910	192.97	6,323	12,061
192.46	5,808	8,968	192.98	6,333	12,124
192.47	5,818	9,026	192.99	6,343	12,188
192.48	5,828	9,084	193.00	6,353	12,251
192.49	5,838	9,142	193.01	6,364	12,315
192.50	5,848	9,201	193.02	6,374	12,378
192.51	5,858	9,259	193.03	6,385	12,442
192.52	5,868	9,318	193.04	6,396	12,506
192.53	5,878	9,377	193.05	6,406	12,570
192.54	5,888	9,435	193.06	6,417	12,634
192.55	5,899	9,494	193.07	6,428	12,698
192.56	5,909	9,553	193.08	6,438	12,763
192.57	5,919	9,613	193.09	6,449	12,827
192.58	5,929	9,672	193.10	6,460	12,892
192.59	5,939	9,731	193.11	6,470	12,956
192.60	5,949	9,791	193.12	6,481	13,021
192.61	5,959	9,850	193.13	6,492	13,086
192.62	5,969	9,910	193.14	6,502	13,151
192.63	5,979	9,970	193.15	6,513	13,216
192.64	5,989	10,029	193.16	6,524	13,281
192.65	6,000	10,089	193.17	6,534	13,346
192.66	6,010	10,149	193.18	6,545	13,412
192.67	6,020	10,210	193.19	6,556	13,477
192.68	6,030	10,270	193.20	6,566	13,543
192.69	6,040	10,330	193.21	6,577	13,609
192.70	6,050	10,391	193.22	6,588	13,674
192.71	6,060	10,451	193.23	6,598	13,740
192.72	6,070	10,512	193.24	6,609	13,806
192.73	6,080	10,573	193.25	6,620	13,873
192.74	6,090	10,633	193.26	6,630	13,939
192.75	6,101	10,694	193.27	6,641	14,005
192.76	6,111	10,755	193.28	6,651	14,072
192.77	6,121	10,817	193.29	6,662	14,138
192.78	6,131	10,878	193.30	6,673	14,205
192.79	6,141	10,939	193.31	6,683	14,272
192.80	6,151	11,001	193.32	6,694	14,339
192.81	6,161	11,062	193.33	6,705	14,406
192.82	6,171	11,124	193.34	6,715	14,473
192.83	6,181	11,186	193.35	6,726	14,540
192.84	6,191	11,247	193.36	6,737	14,607
192.85	6,202	11,309	193.37	6,747	14,675
192.86	6,212	11,371	193.38	6,758	14,742
192.87	6,222	11,434	193.39	6,769	14,810
192.88	6,232	11,496	193.40	6,779	14,877
192.89	6,242	11,558	193.41	6,790	14,945

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.42	6,801	15,013
193.43	6,811	15,081
193.44	6,822	15,150
193.45	6,833	15,218
193.46	6,843	15,286
193.47	6,854	15,355
193.48	6,865	15,423
193.49	6,875	15,492
193.50	6,886	15,561
193.51	6,897	15,630
193.52	6,907	15,699
193.53	6,918	15,768
193.54	6,929	15,837
193.55	6,939	15,906
193.56	6,950	15,976
193.57	6,961	16,045
193.58	6,971	16,115
193.59	6,982	16,185
193.60	6,993	16,255
193.61	7,003	16,325
193.62	7,014	16,395
193.63	7,025	16,465
193.64	7,035	16,535
193.65	7,046	16,606
193.66	7,057	16,676
193.67	7,067	16,747
193.68	7,078	16,817
193.69	7,089	16,888
193.70	7,099	16,959
193.71	7,110	17,030
193.72	7,121	17,101
193.73	7,131	17,173
193.74	7,142	17,244
193.75	7,153	17,316
193.76	7,163	17,387
193.77	7,174	17,459
193.78	7,184	17,531
193.79	7,195	17,603
193.80	7,206	17,675
193.81	7,216	17,747
193.82	7,227	17,819
193.83	7,238	17,891
193.84	7,248	17,964
193.85	7,259	18,036
193.86	7,270	18,109
193.87	7,280	18,182
193.88	7,291	18,254
193.89	7,302	18,327
193.90	7,312	18,400
193.91	7,323	18,474
193.92	7,334	18,547
193.93	7,344	18,620
193.94	7,355	18,694
193.95	7,366	18,767
193.96	7,376	18,841
193.97	7,387	18,915
193.98	7,398	18,989
193.99	7,408	19,063
194.00	7,419	19,137
194.01	7,437	19,211
194.02	7,455	19,286
194.03	7,473	19,360
194.04	7,490	19,435
194.05	7,508	19,510
194.06	7,526	19,585
194.07	7,544	19,661
194.08	7,562	19,736
194.09	7,580	19,812
194.10	7,598	19,888
194.11	7,615	19,964
194.12	7,633	20,040
194.13	7,651	20,117
194.14	7,669	20,193
194.15	7,687	20,270
194.16	7,705	20,347
194.17	7,723	20,424
194.18	7,740	20,501
194.19	7,758	20,579
194.20	7,776	20,657
194.21	7,794	20,734
194.22	7,812	20,812
194.23	7,830	20,891
194.24	7,848	20,969
194.25	7,866	21,048
194.26	7,883	21,126
194.27	7,901	21,205
194.28	7,919	21,284
194.29	7,937	21,364
194.30	7,955	21,443
194.31	7,973	21,523
194.32	7,991	21,603
194.33	8,008	21,683
194.34	8,026	21,763
194.35	8,044	21,843
194.36	8,062	21,924
194.37	8,080	22,004
194.38	8,098	22,085
194.39	8,116	22,166
194.40	8,133	22,247
194.41	8,151	22,329
194.42	8,169	22,411
194.43	8,187	22,492
194.44	8,205	22,574
194.45	8,223	22,656

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.46	8,241	22,739
194.47	8,258	22,821
194.48	8,276	22,904
194.49	8,294	22,987
194.50	8,312	23,070
194.51	8,330	23,153
194.52	8,348	23,236
194.53	8,366	23,320
194.54	8,383	23,404
194.55	8,401	23,488
194.56	8,419	23,572
194.57	8,437	23,656
194.58	8,455	23,740
194.59	8,473	23,825
194.60	8,491	23,910
194.61	8,508	23,995
194.62	8,526	24,080
194.63	8,544	24,165
194.64	8,562	24,251
194.65	8,580	24,337
194.66	8,598	24,423
194.67	8,616	24,509
194.68	8,633	24,595
194.69	8,651	24,681
194.70	8,669	24,768
194.71	8,687	24,855
194.72	8,705	24,942
194.73	8,723	25,029
194.74	8,741	25,116
194.75	8,759	25,204
194.76	8,776	25,291
194.77	8,794	25,379
194.78	8,812	25,467
194.79	8,830	25,555
194.80	8,848	25,644
194.81	8,866	25,732
194.82	8,884	25,821
194.83	8,901	25,910
194.84	8,919	25,999
194.85	8,937	26,088
194.86	8,955	26,178
194.87	8,973	26,267
194.88	8,991	26,357
194.89	9,009	26,447
194.90	9,026	26,537
194.91	9,044	26,628
194.92	9,062	26,718
194.93	9,080	26,809
194.94	9,098	26,900
194.95	9,116	26,991
194.96	9,134	27,082
194.97	9,151	27,174
194.98	9,169	27,265
194.99	9,187	27,357
195.00	**9,205**	**27,449**

Summary for Pond B-35: Basin #35

Inflow Area = 1.957 ac, 66.79% Impervious, Inflow Depth = 2.91" for Future 2 yr event
Inflow = 5.61 cfs @ 12.17 hrs, Volume= 0.474 af
Outflow = 0.51 cfs @ 13.27 hrs, Volume= 0.356 af, Atten= 91%, Lag= 65.7 min
Primary = 0.51 cfs @ 13.27 hrs, Volume= 0.356 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.05' @ 13.27 hrs Surf.Area= 5,770 sf Storage= 12,944 cf

Plug-Flow detention time= 361.7 min calculated for 0.356 af (75% of inflow)
Center-of-Mass det. time= 270.2 min (1,044.7 - 774.5)

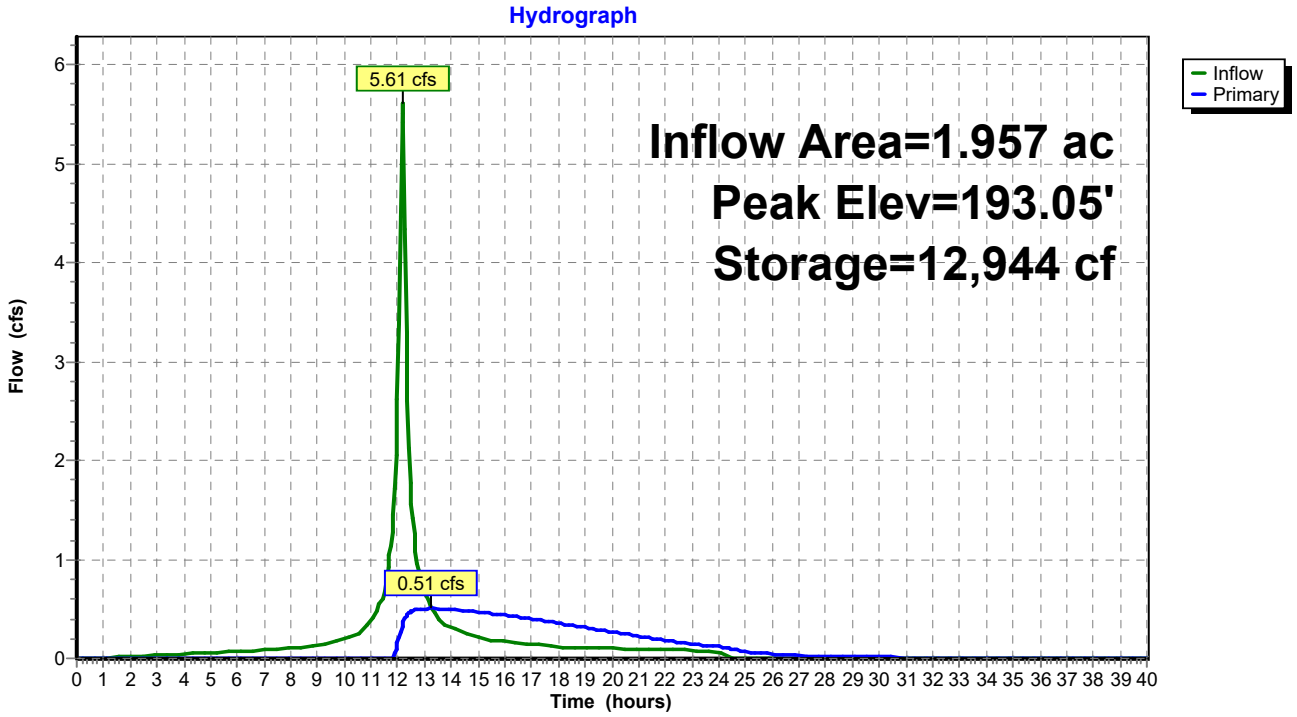
Volume	Invert	Avail.Storage	Storage Description
#1	189.80'	26,431 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
189.80	0	0	0
190.00	2,647	265	265
191.00	3,593	3,120	3,385
192.00	4,618	4,106	7,490
193.00	5,711	5,165	12,655
194.00	6,871	6,291	18,946
195.00	8,099	7,485	26,431

Device	Routing	Invert	Outlet Devices
#1	Primary	189.80'	**18.0" Round Culvert** L= 103.0' Ke= 0.500 Inlet / Outlet Invert= 189.80' / 189.30' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.44'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.05'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.50 cfs @ 13.27 hrs HW=193.05' (Free Discharge)
- **1=Culvert** (Passes 0.50 cfs of 11.57 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.50 cfs @ 5.79 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.06 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-35: Basin #35



Stage-Discharge for Pond B-35: Basin #35

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
189.80	0.00	190.32	0.00	190.84	0.00	191.36	0.00
189.81	0.00	190.33	0.00	190.85	0.00	191.37	0.00
189.82	0.00	190.34	0.00	190.86	0.00	191.38	0.00
189.83	0.00	190.35	0.00	190.87	0.00	191.39	0.00
189.84	0.00	190.36	0.00	190.88	0.00	191.40	0.00
189.85	0.00	190.37	0.00	190.89	0.00	191.41	0.00
189.86	0.00	190.38	0.00	190.90	0.00	191.42	0.00
189.87	0.00	190.39	0.00	190.91	0.00	191.43	0.00
189.88	0.00	190.40	0.00	190.92	0.00	191.44	0.00
189.89	0.00	190.41	0.00	190.93	0.00	191.45	0.00
189.90	0.00	190.42	0.00	190.94	0.00	191.46	0.00
189.91	0.00	190.43	0.00	190.95	0.00	191.47	0.00
189.92	0.00	190.44	0.00	190.96	0.00	191.48	0.00
189.93	0.00	190.45	0.00	190.97	0.00	191.49	0.01
189.94	0.00	190.46	0.00	190.98	0.00	191.50	0.01
189.95	0.00	190.47	0.00	190.99	0.00	191.51	0.01
189.96	0.00	190.48	0.00	191.00	0.00	191.52	0.02
189.97	0.00	190.49	0.00	191.01	0.00	191.53	0.02
189.98	0.00	190.50	0.00	191.02	0.00	191.54	0.02
189.99	0.00	190.51	0.00	191.03	0.00	191.55	0.03
190.00	0.00	190.52	0.00	191.04	0.00	191.56	0.03
190.01	0.00	190.53	0.00	191.05	0.00	191.57	0.04
190.02	0.00	190.54	0.00	191.06	0.00	191.58	0.04
190.03	0.00	190.55	0.00	191.07	0.00	191.59	0.05
190.04	0.00	190.56	0.00	191.08	0.00	191.60	0.06
190.05	0.00	190.57	0.00	191.09	0.00	191.61	0.06
190.06	0.00	190.58	0.00	191.10	0.00	191.62	0.07
190.07	0.00	190.59	0.00	191.11	0.00	191.63	0.08
190.08	0.00	190.60	0.00	191.12	0.00	191.64	0.08
190.09	0.00	190.61	0.00	191.13	0.00	191.65	0.09
190.10	0.00	190.62	0.00	191.14	0.00	191.66	0.10
190.11	0.00	190.63	0.00	191.15	0.00	191.67	0.10
190.12	0.00	190.64	0.00	191.16	0.00	191.68	0.11
190.13	0.00	190.65	0.00	191.17	0.00	191.69	0.12
190.14	0.00	190.66	0.00	191.18	0.00	191.70	0.13
190.15	0.00	190.67	0.00	191.19	0.00	191.71	0.13
190.16	0.00	190.68	0.00	191.20	0.00	191.72	0.14
190.17	0.00	190.69	0.00	191.21	0.00	191.73	0.15
190.18	0.00	190.70	0.00	191.22	0.00	191.74	0.15
190.19	0.00	190.71	0.00	191.23	0.00	191.75	0.16
190.20	0.00	190.72	0.00	191.24	0.00	191.76	0.17
190.21	0.00	190.73	0.00	191.25	0.00	191.77	0.17
190.22	0.00	190.74	0.00	191.26	0.00	191.78	0.17
190.23	0.00	190.75	0.00	191.27	0.00	191.79	0.18
190.24	0.00	190.76	0.00	191.28	0.00	191.80	0.18
190.25	0.00	190.77	0.00	191.29	0.00	191.81	0.19
190.26	0.00	190.78	0.00	191.30	0.00	191.82	0.19
190.27	0.00	190.79	0.00	191.31	0.00	191.83	0.20
190.28	0.00	190.80	0.00	191.32	0.00	191.84	0.20
190.29	0.00	190.81	0.00	191.33	0.00	191.85	0.21
190.30	0.00	190.82	0.00	191.34	0.00	191.86	0.21
190.31	0.00	190.83	0.00	191.35	0.00	191.87	0.22

Stage-Discharge for Pond B-35: Basin #35 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.88	0.22	192.40	0.37	192.92	0.48	193.44	3.69
191.89	0.22	192.41	0.38	192.93	0.48	193.45	3.81
191.90	0.23	192.42	0.38	192.94	0.49	193.46	3.94
191.91	0.23	192.43	0.38	192.95	0.49	193.47	4.06
191.92	0.24	192.44	0.38	192.96	0.49	193.48	4.18
191.93	0.24	192.45	0.39	192.97	0.49	193.49	4.31
191.94	0.24	192.46	0.39	192.98	0.49	193.50	4.44
191.95	0.25	192.47	0.39	192.99	0.49	193.51	4.57
191.96	0.25	192.48	0.39	193.00	0.50	193.52	4.70
191.97	0.25	192.49	0.39	193.01	0.50	193.53	4.83
191.98	0.26	192.50	0.40	193.02	0.50	193.54	4.96
191.99	0.26	192.51	0.40	193.03	0.50	193.55	5.09
192.00	0.26	192.52	0.40	193.04	0.50	193.56	5.23
192.01	0.27	192.53	0.40	193.05	0.50	193.57	5.37
192.02	0.27	192.54	0.41	193.06	0.52	193.58	5.50
192.03	0.27	192.55	0.41	193.07	0.55	193.59	5.64
192.04	0.28	192.56	0.41	193.08	0.58	193.60	5.78
192.05	0.28	192.57	0.41	193.09	0.62	193.61	5.92
192.06	0.28	192.58	0.41	193.10	0.66	193.62	6.06
192.07	0.29	192.59	0.42	193.11	0.71	193.63	6.21
192.08	0.29	192.60	0.42	193.12	0.76	193.64	6.35
192.09	0.29	192.61	0.42	193.13	0.81	193.65	6.50
192.10	0.30	192.62	0.42	193.14	0.87	193.66	6.64
192.11	0.30	192.63	0.43	193.15	0.93	193.67	6.79
192.12	0.30	192.64	0.43	193.16	1.00	193.68	6.94
192.13	0.30	192.65	0.43	193.17	1.07	193.69	7.09
192.14	0.31	192.66	0.43	193.18	1.14	193.70	7.24
192.15	0.31	192.67	0.43	193.19	1.21	193.71	7.39
192.16	0.31	192.68	0.44	193.20	1.28	193.72	7.54
192.17	0.32	192.69	0.44	193.21	1.36	193.73	7.70
192.18	0.32	192.70	0.44	193.22	1.44	193.74	7.85
192.19	0.32	192.71	0.44	193.23	1.53	193.75	8.01
192.20	0.32	192.72	0.44	193.24	1.61	193.76	8.16
192.21	0.33	192.73	0.45	193.25	1.70	193.77	8.32
192.22	0.33	192.74	0.45	193.26	1.79	193.78	8.48
192.23	0.33	192.75	0.45	193.27	1.88	193.79	8.64
192.24	0.33	192.76	0.45	193.28	1.97	193.80	8.80
192.25	0.34	192.77	0.45	193.29	2.06	193.81	8.96
192.26	0.34	192.78	0.46	193.30	2.16	193.82	9.12
192.27	0.34	192.79	0.46	193.31	2.26	193.83	9.29
192.28	0.34	192.80	0.46	193.32	2.36	193.84	9.45
192.29	0.35	192.81	0.46	193.33	2.46	193.85	9.61
192.30	0.35	192.82	0.46	193.34	2.57	193.86	9.78
192.31	0.35	192.83	0.46	193.35	2.67	193.87	9.95
192.32	0.35	192.84	0.47	193.36	2.78	193.88	10.11
192.33	0.36	192.85	0.47	193.37	2.89	193.89	10.28
192.34	0.36	192.86	0.47	193.38	3.00	193.90	10.45
192.35	0.36	192.87	0.47	193.39	3.11	193.91	10.62
192.36	0.36	192.88	0.47	193.40	3.22	193.92	10.79
192.37	0.37	192.89	0.48	193.41	3.34	193.93	10.96
192.38	0.37	192.90	0.48	193.42	3.46	193.94	11.14
192.39	0.37	192.91	0.48	193.43	3.57	193.95	11.31

Stage-Discharge for Pond B-35: Basin #35 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.96	11.48	194.48	14.79	195.00	**62.86**
193.97	11.66	194.49	14.81		
193.98	11.83	194.50	14.83		
193.99	12.01	194.51	14.97		
194.00	12.19	194.52	15.20		
194.01	12.36	194.53	15.50		
194.02	12.54	194.54	15.85		
194.03	12.72	194.55	16.24		
194.04	12.90	194.56	16.67		
194.05	13.08	194.57	17.14		
194.06	13.26	194.58	17.65		
194.07	13.45	194.59	18.18		
194.08	13.63	194.60	18.75		
194.09	13.81	194.61	19.34		
194.10	14.00	194.62	19.96		
194.11	14.03	194.63	20.61		
194.12	14.05	194.64	21.28		
194.13	14.07	194.65	21.97		
194.14	14.09	194.66	22.69		
194.15	14.11	194.67	23.43		
194.16	14.13	194.68	24.20		
194.17	14.15	194.69	24.98		
194.18	14.17	194.70	25.79		
194.19	14.19	194.71	26.66		
194.20	14.22	194.72	27.55		
194.21	14.24	194.73	28.47		
194.22	14.26	194.74	29.41		
194.23	14.28	194.75	30.38		
194.24	14.30	194.76	31.37		
194.25	14.32	194.77	32.39		
194.26	14.34	194.78	33.43		
194.27	14.36	194.79	34.50		
194.28	14.38	194.80	35.59		
194.29	14.40	194.81	36.70		
194.30	14.42	194.82	37.84		
194.31	14.44	194.83	39.01		
194.32	14.46	194.84	40.20		
194.33	14.48	194.85	41.41		
194.34	14.51	194.86	42.65		
194.35	14.53	194.87	43.91		
194.36	14.55	194.88	45.20		
194.37	14.57	194.89	46.51		
194.38	14.59	194.90	47.84		
194.39	14.61	194.91	49.23		
194.40	14.63	194.92	50.64		
194.41	14.65	194.93	52.07		
194.42	14.67	194.94	53.54		
194.43	14.69	194.95	55.02		
194.44	14.71	194.96	56.54		
194.45	14.73	194.97	58.08		
194.46	14.75	194.98	59.65		
194.47	14.77	194.99	61.24		

Stage-Area-Storage for Pond B-35: Basin #35

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.80	0	0	190.32	2,950	1,160
189.81	132	1	190.33	2,959	1,190
189.82	265	3	190.34	2,969	1,219
189.83	397	6	190.35	2,978	1,249
189.84	529	11	190.36	2,988	1,279
189.85	662	17	190.37	2,997	1,309
189.86	794	24	190.38	3,006	1,339
189.87	926	32	190.39	3,016	1,369
189.88	1,059	42	190.40	3,025	1,399
189.89	1,191	54	190.41	3,035	1,429
189.90	1,324	66	190.42	3,044	1,460
189.91	1,456	80	190.43	3,054	1,490
189.92	1,588	95	190.44	3,063	1,521
189.93	1,721	112	190.45	3,073	1,552
189.94	1,853	130	190.46	3,082	1,582
189.95	1,985	149	190.47	3,092	1,613
189.96	2,118	169	190.48	3,101	1,644
189.97	2,250	191	190.49	3,111	1,675
189.98	2,382	214	190.50	3,120	1,706
189.99	2,515	239	190.51	3,129	1,738
190.00	2,647	265	190.52	3,139	1,769
190.01	2,656	291	190.53	3,148	1,800
190.02	2,666	318	190.54	3,158	1,832
190.03	2,675	345	190.55	3,167	1,864
190.04	2,685	371	190.56	3,177	1,895
190.05	2,694	398	190.57	3,186	1,927
190.06	2,704	425	190.58	3,196	1,959
190.07	2,713	452	190.59	3,205	1,991
190.08	2,723	479	190.60	3,215	2,023
190.09	2,732	507	190.61	3,224	2,055
190.10	2,742	534	190.62	3,234	2,088
190.11	2,751	562	190.63	3,243	2,120
190.12	2,761	589	190.64	3,252	2,153
190.13	2,770	617	190.65	3,262	2,185
190.14	2,779	645	190.66	3,271	2,218
190.15	2,789	672	190.67	3,281	2,251
190.16	2,798	700	190.68	3,290	2,283
190.17	2,808	728	190.69	3,300	2,316
190.18	2,817	756	190.70	3,309	2,349
190.19	2,827	785	190.71	3,319	2,383
190.20	2,836	813	190.72	3,328	2,416
190.21	2,846	841	190.73	3,338	2,449
190.22	2,855	870	190.74	3,347	2,482
190.23	2,865	899	190.75	3,357	2,516
190.24	2,874	927	190.76	3,366	2,550
190.25	2,884	956	190.77	3,375	2,583
190.26	2,893	985	190.78	3,385	2,617
190.27	2,902	1,014	190.79	3,394	2,651
190.28	2,912	1,043	190.80	3,404	2,685
190.29	2,921	1,072	190.81	3,413	2,719
190.30	2,931	1,101	190.82	3,423	2,753
190.31	2,940	1,131	190.83	3,432	2,788

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.84	3,442	2,822	191.36	3,962	4,745
190.85	3,451	2,856	191.37	3,972	4,784
190.86	3,461	2,891	191.38	3,983	4,824
190.87	3,470	2,926	191.39	3,993	4,864
190.88	3,479	2,960	191.40	4,003	4,904
190.89	3,489	2,995	191.41	4,013	4,944
190.90	3,498	3,030	191.42	4,024	4,984
190.91	3,508	3,065	191.43	4,034	5,024
190.92	3,517	3,100	191.44	4,044	5,065
190.93	3,527	3,136	191.45	4,054	5,105
190.94	3,536	3,171	191.46	4,065	5,146
190.95	3,546	3,206	191.47	4,075	5,187
190.96	3,555	3,242	191.48	4,085	5,227
190.97	3,565	3,277	191.49	4,095	5,268
190.98	3,574	3,313	191.50	4,106	5,309
190.99	3,584	3,349	191.51	4,116	5,350
191.00	3,593	3,385	191.52	4,126	5,392
191.01	3,603	3,421	191.53	4,136	5,433
191.02	3,614	3,457	191.54	4,147	5,474
191.03	3,624	3,493	191.55	4,157	5,516
191.04	3,634	3,529	191.56	4,167	5,557
191.05	3,644	3,566	191.57	4,177	5,599
191.06	3,655	3,602	191.58	4,188	5,641
191.07	3,665	3,639	191.59	4,198	5,683
191.08	3,675	3,675	191.60	4,208	5,725
191.09	3,685	3,712	191.61	4,218	5,767
191.10	3,696	3,749	191.62	4,229	5,809
191.11	3,706	3,786	191.63	4,239	5,852
191.12	3,716	3,823	191.64	4,249	5,894
191.13	3,726	3,860	191.65	4,259	5,937
191.14	3,737	3,898	191.66	4,270	5,979
191.15	3,747	3,935	191.67	4,280	6,022
191.16	3,757	3,973	191.68	4,290	6,065
191.17	3,767	4,010	191.69	4,300	6,108
191.18	3,778	4,048	191.70	4,311	6,151
191.19	3,788	4,086	191.71	4,321	6,194
191.20	3,798	4,124	191.72	4,331	6,237
191.21	3,808	4,162	191.73	4,341	6,281
191.22	3,818	4,200	191.74	4,352	6,324
191.23	3,829	4,238	191.75	4,362	6,368
191.24	3,839	4,277	191.76	4,372	6,411
191.25	3,849	4,315	191.77	4,382	6,455
191.26	3,860	4,354	191.78	4,393	6,499
191.27	3,870	4,392	191.79	4,403	6,543
191.28	3,880	4,431	191.80	4,413	6,587
191.29	3,890	4,470	191.81	4,423	6,631
191.30	3,901	4,509	191.82	4,434	6,676
191.31	3,911	4,548	191.83	4,444	6,720
191.32	3,921	4,587	191.84	4,454	6,764
191.33	3,931	4,626	191.85	4,464	6,809
191.34	3,942	4,666	191.86	4,475	6,854
191.35	3,952	4,705	191.87	4,485	6,899

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.88	4,495	6,943	192.40	5,055	9,425
191.89	4,505	6,988	192.41	5,066	9,475
191.90	4,516	7,034	192.42	5,077	9,526
191.91	4,526	7,079	192.43	5,088	9,577
191.92	4,536	7,124	192.44	5,099	9,628
191.93	4,546	7,169	192.45	5,110	9,679
191.94	4,556	7,215	192.46	5,121	9,730
191.95	4,567	7,261	192.47	5,132	9,781
191.96	4,577	7,306	192.48	5,143	9,833
191.97	4,587	7,352	192.49	5,154	9,884
191.98	4,598	7,398	192.50	5,165	9,936
191.99	4,608	7,444	192.51	5,175	9,988
192.00	4,618	7,490	192.52	5,186	10,039
192.01	4,629	7,536	192.53	5,197	10,091
192.02	4,640	7,583	192.54	5,208	10,143
192.03	4,651	7,629	192.55	5,219	10,195
192.04	4,662	7,676	192.56	5,230	10,248
192.05	4,673	7,722	192.57	5,241	10,300
192.06	4,684	7,769	192.58	5,252	10,352
192.07	4,695	7,816	192.59	5,263	10,405
192.08	4,705	7,863	192.60	5,274	10,458
192.09	4,716	7,910	192.61	5,285	10,511
192.10	4,727	7,957	192.62	5,296	10,563
192.11	4,738	8,005	192.63	5,307	10,616
192.12	4,749	8,052	192.64	5,318	10,670
192.13	4,760	8,100	192.65	5,328	10,723
192.14	4,771	8,147	192.66	5,339	10,776
192.15	4,782	8,195	192.67	5,350	10,830
192.16	4,793	8,243	192.68	5,361	10,883
192.17	4,804	8,291	192.69	5,372	10,937
192.18	4,815	8,339	192.70	5,383	10,991
192.19	4,826	8,387	192.71	5,394	11,044
192.20	4,837	8,436	192.72	5,405	11,098
192.21	4,848	8,484	192.73	5,416	11,153
192.22	4,858	8,533	192.74	5,427	11,207
192.23	4,869	8,581	192.75	5,438	11,261
192.24	4,880	8,630	192.76	5,449	11,316
192.25	4,891	8,679	192.77	5,460	11,370
192.26	4,902	8,728	192.78	5,471	11,425
192.27	4,913	8,777	192.79	5,481	11,479
192.28	4,924	8,826	192.80	5,492	11,534
192.29	4,935	8,875	192.81	5,503	11,589
192.30	4,946	8,925	192.82	5,514	11,644
192.31	4,957	8,974	192.83	5,525	11,700
192.32	4,968	9,024	192.84	5,536	11,755
192.33	4,979	9,074	192.85	5,547	11,810
192.34	4,990	9,123	192.86	5,558	11,866
192.35	5,001	9,173	192.87	5,569	11,922
192.36	5,011	9,224	192.88	5,580	11,977
192.37	5,022	9,274	192.89	5,591	12,033
192.38	5,033	9,324	192.90	5,602	12,089
192.39	5,044	9,374	192.91	5,613	12,145

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.92	5,624	12,201	193.44	6,221	15,280
192.93	5,634	12,258	193.45	6,233	15,342
192.94	5,645	12,314	193.46	6,245	15,404
192.95	5,656	12,371	193.47	6,256	15,467
192.96	5,667	12,427	193.48	6,268	15,530
192.97	5,678	12,484	193.49	6,279	15,592
192.98	5,689	12,541	193.50	6,291	15,655
192.99	5,700	12,598	193.51	6,303	15,718
193.00	5,711	12,655	193.52	6,314	15,781
193.01	5,723	12,712	193.53	6,326	15,844
193.02	5,734	12,769	193.54	6,337	15,908
193.03	5,746	12,827	193.55	6,349	15,971
193.04	5,757	12,884	193.56	6,361	16,035
193.05	5,769	12,942	193.57	6,372	16,098
193.06	5,781	12,999	193.58	6,384	16,162
193.07	5,792	13,057	193.59	6,395	16,226
193.08	5,804	13,115	193.60	6,407	16,290
193.09	5,815	13,173	193.61	6,419	16,354
193.10	5,827	13,232	193.62	6,430	16,418
193.11	5,839	13,290	193.63	6,442	16,483
193.12	5,850	13,348	193.64	6,453	16,547
193.13	5,862	13,407	193.65	6,465	16,612
193.14	5,873	13,466	193.66	6,477	16,677
193.15	5,885	13,524	193.67	6,488	16,741
193.16	5,897	13,583	193.68	6,500	16,806
193.17	5,908	13,642	193.69	6,511	16,871
193.18	5,920	13,701	193.70	6,523	16,937
193.19	5,931	13,761	193.71	6,535	17,002
193.20	5,943	13,820	193.72	6,546	17,067
193.21	5,955	13,880	193.73	6,558	17,133
193.22	5,966	13,939	193.74	6,569	17,198
193.23	5,978	13,999	193.75	6,581	17,264
193.24	5,989	14,059	193.76	6,593	17,330
193.25	6,001	14,119	193.77	6,604	17,396
193.26	6,013	14,179	193.78	6,616	17,462
193.27	6,024	14,239	193.79	6,627	17,528
193.28	6,036	14,299	193.80	6,639	17,595
193.29	6,047	14,360	193.81	6,651	17,661
193.30	6,059	14,420	193.82	6,662	17,728
193.31	6,071	14,481	193.83	6,674	17,794
193.32	6,082	14,542	193.84	6,685	17,861
193.33	6,094	14,602	193.85	6,697	17,928
193.34	6,105	14,663	193.86	6,709	17,995
193.35	6,117	14,725	193.87	6,720	18,062
193.36	6,129	14,786	193.88	6,732	18,130
193.37	6,140	14,847	193.89	6,743	18,197
193.38	6,152	14,909	193.90	6,755	18,264
193.39	6,163	14,970	193.91	6,767	18,332
193.40	6,175	15,032	193.92	6,778	18,400
193.41	6,187	15,094	193.93	6,790	18,468
193.42	6,198	15,156	193.94	6,801	18,536
193.43	6,210	15,218	193.95	6,813	18,604

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.96	6,825	18,672	194.48	7,460	22,385
193.97	6,836	18,740	194.49	7,473	22,460
193.98	6,848	18,809	194.50	7,485	22,535
193.99	6,859	18,877	194.51	7,497	22,610
194.00	6,871	18,946	194.52	7,510	22,685
194.01	6,883	19,014	194.53	7,522	22,760
194.02	6,896	19,083	194.54	7,534	22,835
194.03	6,908	19,152	194.55	7,546	22,910
194.04	6,920	19,222	194.56	7,559	22,986
194.05	6,932	19,291	194.57	7,571	23,062
194.06	6,945	19,360	194.58	7,583	23,137
194.07	6,957	19,430	194.59	7,596	23,213
194.08	6,969	19,499	194.60	7,608	23,289
194.09	6,982	19,569	194.61	7,620	23,365
194.10	6,994	19,639	194.62	7,632	23,442
194.11	7,006	19,709	194.63	7,645	23,518
194.12	7,018	19,779	194.64	7,657	23,595
194.13	7,031	19,849	194.65	7,669	23,671
194.14	7,043	19,920	194.66	7,681	23,748
194.15	7,055	19,990	194.67	7,694	23,825
194.16	7,067	20,061	194.68	7,706	23,902
194.17	7,080	20,132	194.69	7,718	23,979
194.18	7,092	20,202	194.70	7,731	24,056
194.19	7,104	20,273	194.71	7,743	24,134
194.20	7,117	20,344	194.72	7,755	24,211
194.21	7,129	20,416	194.73	7,767	24,289
194.22	7,141	20,487	194.74	7,780	24,366
194.23	7,153	20,559	194.75	7,792	24,444
194.24	7,166	20,630	194.76	7,804	24,522
194.25	7,178	20,702	194.77	7,817	24,600
194.26	7,190	20,774	194.78	7,829	24,679
194.27	7,203	20,846	194.79	7,841	24,757
194.28	7,215	20,918	194.80	7,853	24,835
194.29	7,227	20,990	194.81	7,866	24,914
194.30	7,239	21,062	194.82	7,878	24,993
194.31	7,252	21,135	194.83	7,890	25,072
194.32	7,264	21,207	194.84	7,903	25,151
194.33	7,276	21,280	194.85	7,915	25,230
194.34	7,289	21,353	194.86	7,927	25,309
194.35	7,301	21,426	194.87	7,939	25,388
194.36	7,313	21,499	194.88	7,952	25,468
194.37	7,325	21,572	194.89	7,964	25,547
194.38	7,338	21,645	194.90	7,976	25,627
194.39	7,350	21,719	194.91	7,988	25,707
194.40	7,362	21,792	194.92	8,001	25,787
194.41	7,374	21,866	194.93	8,013	25,867
194.42	7,387	21,940	194.94	8,025	25,947
194.43	7,399	22,014	194.95	8,038	26,027
194.44	7,411	22,088	194.96	8,050	26,108
194.45	7,424	22,162	194.97	8,062	26,188
194.46	7,436	22,236	194.98	8,074	26,269
194.47	7,448	22,311	194.99	8,087	26,350

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.00	**8,099**	**26,431**

Summary for Pond B-36A: Basin #36A

Inflow Area = 2.377 ac, 40.60% Impervious, Inflow Depth = 2.35" for Future 2 yr event
Inflow = 5.65 cfs @ 12.17 hrs, Volume= 0.466 af
Outflow = 1.00 cfs @ 12.72 hrs, Volume= 0.372 af, Atten= 82%, Lag= 32.6 min
Primary = 1.00 cfs @ 12.72 hrs, Volume= 0.372 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.11' @ 12.72 hrs Surf.Area= 4,509 sf Storage= 11,137 cf

Plug-Flow detention time= 293.3 min calculated for 0.372 af (80% of inflow)
Center-of-Mass det. time= 209.4 min (1,004.7 - 795.3)

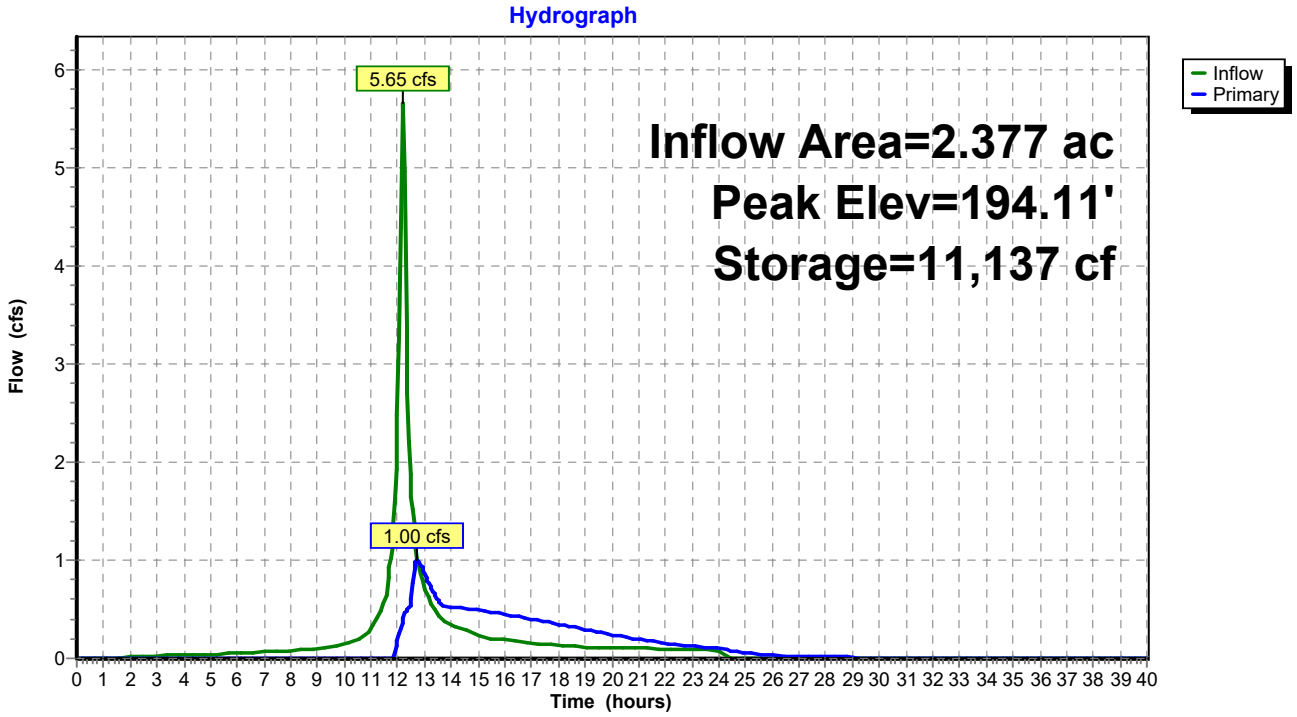
Volume	Invert	Avail.Storage	Storage Description
#1	190.50'	16,844 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.50	0	0	0
191.00	2,366	592	592
192.00	2,995	2,681	3,272
193.00	3,681	3,338	6,610
194.00	4,424	4,053	10,663
195.00	5,223	4,824	15,486
195.25	5,644	1,358	16,844

Device	Routing	Invert	Outlet Devices
#1	Primary	190.50'	**18.0" Round Culvert** L= 82.0' Ke= 0.500 Inlet / Outlet Invert= 190.50' / 190.10' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.24'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	194.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.99 cfs @ 12.72 hrs HW=194.11' (Free Discharge)
- **1=Culvert** (Passes 0.99 cfs of 12.96 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.55 cfs @ 6.28 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.45 cfs @ 1.06 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-36A: Basin #36A



Stage-Discharge for Pond B-36A: Basin #36A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.50	0.00	191.02	0.00	191.54	0.00	192.06	0.00
190.51	0.00	191.03	0.00	191.55	0.00	192.07	0.00
190.52	0.00	191.04	0.00	191.56	0.00	192.08	0.00
190.53	0.00	191.05	0.00	191.57	0.00	192.09	0.00
190.54	0.00	191.06	0.00	191.58	0.00	192.10	0.00
190.55	0.00	191.07	0.00	191.59	0.00	192.11	0.00
190.56	0.00	191.08	0.00	191.60	0.00	192.12	0.00
190.57	0.00	191.09	0.00	191.61	0.00	192.13	0.00
190.58	0.00	191.10	0.00	191.62	0.00	192.14	0.00
190.59	0.00	191.11	0.00	191.63	0.00	192.15	0.00
190.60	0.00	191.12	0.00	191.64	0.00	192.16	0.00
190.61	0.00	191.13	0.00	191.65	0.00	192.17	0.00
190.62	0.00	191.14	0.00	191.66	0.00	192.18	0.00
190.63	0.00	191.15	0.00	191.67	0.00	192.19	0.00
190.64	0.00	191.16	0.00	191.68	0.00	192.20	0.00
190.65	0.00	191.17	0.00	191.69	0.00	192.21	0.00
190.66	0.00	191.18	0.00	191.70	0.00	192.22	0.00
190.67	0.00	191.19	0.00	191.71	0.00	192.23	0.00
190.68	0.00	191.20	0.00	191.72	0.00	192.24	0.00
190.69	0.00	191.21	0.00	191.73	0.00	192.25	0.00
190.70	0.00	191.22	0.00	191.74	0.00	192.26	0.00
190.71	0.00	191.23	0.00	191.75	0.00	192.27	0.00
190.72	0.00	191.24	0.00	191.76	0.00	192.28	0.00
190.73	0.00	191.25	0.00	191.77	0.00	192.29	0.01
190.74	0.00	191.26	0.00	191.78	0.00	192.30	0.01
190.75	0.00	191.27	0.00	191.79	0.00	192.31	0.01
190.76	0.00	191.28	0.00	191.80	0.00	192.32	0.02
190.77	0.00	191.29	0.00	191.81	0.00	192.33	0.02
190.78	0.00	191.30	0.00	191.82	0.00	192.34	0.02
190.79	0.00	191.31	0.00	191.83	0.00	192.35	0.03
190.80	0.00	191.32	0.00	191.84	0.00	192.36	0.03
190.81	0.00	191.33	0.00	191.85	0.00	192.37	0.04
190.82	0.00	191.34	0.00	191.86	0.00	192.38	0.04
190.83	0.00	191.35	0.00	191.87	0.00	192.39	0.05
190.84	0.00	191.36	0.00	191.88	0.00	192.40	0.06
190.85	0.00	191.37	0.00	191.89	0.00	192.41	0.06
190.86	0.00	191.38	0.00	191.90	0.00	192.42	0.07
190.87	0.00	191.39	0.00	191.91	0.00	192.43	0.08
190.88	0.00	191.40	0.00	191.92	0.00	192.44	0.08
190.89	0.00	191.41	0.00	191.93	0.00	192.45	0.09
190.90	0.00	191.42	0.00	191.94	0.00	192.46	0.10
190.91	0.00	191.43	0.00	191.95	0.00	192.47	0.10
190.92	0.00	191.44	0.00	191.96	0.00	192.48	0.11
190.93	0.00	191.45	0.00	191.97	0.00	192.49	0.12
190.94	0.00	191.46	0.00	191.98	0.00	192.50	0.13
190.95	0.00	191.47	0.00	191.99	0.00	192.51	0.13
190.96	0.00	191.48	0.00	192.00	0.00	192.52	0.14
190.97	0.00	191.49	0.00	192.01	0.00	192.53	0.15
190.98	0.00	191.50	0.00	192.02	0.00	192.54	0.15
190.99	0.00	191.51	0.00	192.03	0.00	192.55	0.16
191.00	0.00	191.52	0.00	192.04	0.00	192.56	0.17
191.01	0.00	191.53	0.00	192.05	0.00	192.57	0.17

Stage-Discharge for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.58	0.17	193.10	0.35	193.62	0.46	194.14	1.23
192.59	0.18	193.11	0.35	193.63	0.46	194.15	1.31
192.60	0.18	193.12	0.35	193.64	0.47	194.16	1.39
192.61	0.19	193.13	0.36	193.65	0.47	194.17	1.47
192.62	0.19	193.14	0.36	193.66	0.47	194.18	1.55
192.63	0.20	193.15	0.36	193.67	0.47	194.19	1.63
192.64	0.20	193.16	0.36	193.68	0.47	194.20	1.72
192.65	0.21	193.17	0.37	193.69	0.48	194.21	1.81
192.66	0.21	193.18	0.37	193.70	0.48	194.22	1.90
192.67	0.22	193.19	0.37	193.71	0.48	194.23	1.99
192.68	0.22	193.20	0.37	193.72	0.48	194.24	2.09
192.69	0.22	193.21	0.38	193.73	0.48	194.25	2.19
192.70	0.23	193.22	0.38	193.74	0.49	194.26	2.28
192.71	0.23	193.23	0.38	193.75	0.49	194.27	2.38
192.72	0.24	193.24	0.38	193.76	0.49	194.28	2.49
192.73	0.24	193.25	0.39	193.77	0.49	194.29	2.59
192.74	0.24	193.26	0.39	193.78	0.49	194.30	2.70
192.75	0.25	193.27	0.39	193.79	0.49	194.31	2.80
192.76	0.25	193.28	0.39	193.80	0.50	194.32	2.91
192.77	0.25	193.29	0.39	193.81	0.50	194.33	3.02
192.78	0.26	193.30	0.40	193.82	0.50	194.34	3.13
192.79	0.26	193.31	0.40	193.83	0.50	194.35	3.25
192.80	0.26	193.32	0.40	193.84	0.50	194.36	3.36
192.81	0.27	193.33	0.40	193.85	0.50	194.37	3.48
192.82	0.27	193.34	0.41	193.86	0.51	194.38	3.60
192.83	0.27	193.35	0.41	193.87	0.51	194.39	3.72
192.84	0.28	193.36	0.41	193.88	0.51	194.40	3.84
192.85	0.28	193.37	0.41	193.89	0.51	194.41	3.96
192.86	0.28	193.38	0.41	193.90	0.51	194.42	4.08
192.87	0.29	193.39	0.42	193.91	0.52	194.43	4.21
192.88	0.29	193.40	0.42	193.92	0.52	194.44	4.33
192.89	0.29	193.41	0.42	193.93	0.52	194.45	4.46
192.90	0.30	193.42	0.42	193.94	0.52	194.46	4.59
192.91	0.30	193.43	0.43	193.95	0.52	194.47	4.72
192.92	0.30	193.44	0.43	193.96	0.52	194.48	4.85
192.93	0.30	193.45	0.43	193.97	0.53	194.49	4.98
192.94	0.31	193.46	0.43	193.98	0.53	194.50	5.12
192.95	0.31	193.47	0.43	193.99	0.53	194.51	5.25
192.96	0.31	193.48	0.44	194.00	0.53	194.52	5.39
192.97	0.32	193.49	0.44	194.01	0.55	194.53	5.53
192.98	0.32	193.50	0.44	194.02	0.57	194.54	5.66
192.99	0.32	193.51	0.44	194.03	0.60	194.55	5.80
193.00	0.32	193.52	0.44	194.04	0.64	194.56	5.94
193.01	0.33	193.53	0.45	194.05	0.68	194.57	6.09
193.02	0.33	193.54	0.45	194.06	0.73	194.58	6.23
193.03	0.33	193.55	0.45	194.07	0.78	194.59	6.37
193.04	0.33	193.56	0.45	194.08	0.84	194.60	6.52
193.05	0.34	193.57	0.45	194.09	0.90	194.61	6.67
193.06	0.34	193.58	0.46	194.10	0.96	194.62	6.81
193.07	0.34	193.59	0.46	194.11	1.02	194.63	6.96
193.08	0.34	193.60	0.46	194.12	1.09	194.64	7.11
193.09	0.35	193.61	0.46	194.13	1.16	194.65	7.26

Stage-Discharge for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Primary (cfs)
194.66	7.41
194.67	7.57
194.68	7.72
194.69	7.87
194.70	8.03
194.71	8.19
194.72	8.34
194.73	8.50
194.74	8.66
194.75	8.82
194.76	8.98
194.77	9.14
194.78	9.31
194.79	9.47
194.80	9.63
194.81	9.80
194.82	9.97
194.83	10.13
194.84	10.30
194.85	10.47
194.86	10.64
194.87	10.81
194.88	10.98
194.89	11.16
194.90	11.33
194.91	11.50
194.92	11.68
194.93	11.85
194.94	12.03
194.95	12.21
194.96	12.50
194.97	12.89
194.98	13.35
194.99	13.86
195.00	14.41
195.01	15.01
195.02	15.64
195.03	16.31
195.04	17.01
195.05	17.74
195.06	18.49
195.07	19.28
195.08	20.09
195.09	20.93
195.10	21.80
195.11	22.68
195.12	23.60
195.13	24.40
195.14	25.18
195.15	25.99
195.16	26.86
195.17	27.75
195.18	28.67
195.19	29.62
195.20	30.59
195.21	31.58
195.22	32.60
195.23	33.65
195.24	34.72
195.25	**35.81**

Stage-Area-Storage for Pond B-36A: Basin #36A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.50	0	0
190.51	47	0
190.52	95	1
190.53	142	2
190.54	189	4
190.55	237	6
190.56	284	9
190.57	331	12
190.58	379	15
190.59	426	19
190.60	473	24
190.61	521	29
190.62	568	34
190.63	615	40
190.64	662	46
190.65	710	53
190.66	757	61
190.67	804	68
190.68	852	77
190.69	899	85
190.70	946	95
190.71	994	104
190.72	1,041	115
190.73	1,088	125
190.74	1,136	136
190.75	1,183	148
190.76	1,230	160
190.77	1,278	172
190.78	1,325	185
190.79	1,372	199
190.80	1,420	213
190.81	1,467	227
190.82	1,514	242
190.83	1,562	258
190.84	1,609	274
190.85	1,656	290
190.86	1,704	307
190.87	1,751	324
190.88	1,798	342
190.89	1,845	360
190.90	1,893	379
190.91	1,940	398
190.92	1,987	417
190.93	2,035	437
190.94	2,082	458
190.95	2,129	479
190.96	2,177	501
190.97	2,224	523
190.98	2,271	545
190.99	2,319	568
191.00	2,366	592
191.01	2,372	615
191.02	2,379	639
191.03	2,385	663
191.04	2,391	687
191.05	2,397	711
191.06	2,404	735
191.07	2,410	759
191.08	2,416	783
191.09	2,423	807
191.10	2,429	831
191.11	2,435	856
191.12	2,441	880
191.13	2,448	904
191.14	2,454	929
191.15	2,460	953
191.16	2,467	978
191.17	2,473	1,003
191.18	2,479	1,028
191.19	2,486	1,052
191.20	2,492	1,077
191.21	2,498	1,102
191.22	2,504	1,127
191.23	2,511	1,152
191.24	2,517	1,177
191.25	2,523	1,203
191.26	2,530	1,228
191.27	2,536	1,253
191.28	2,542	1,279
191.29	2,548	1,304
191.30	2,555	1,330
191.31	2,561	1,355
191.32	2,567	1,381
191.33	2,574	1,407
191.34	2,580	1,432
191.35	2,586	1,458
191.36	2,592	1,484
191.37	2,599	1,510
191.38	2,605	1,536
191.39	2,611	1,562
191.40	2,618	1,588
191.41	2,624	1,614
191.42	2,630	1,641
191.43	2,636	1,667
191.44	2,643	1,693
191.45	2,649	1,720
191.46	2,655	1,746
191.47	2,662	1,773
191.48	2,668	1,800
191.49	2,674	1,826
191.50	2,681	1,853
191.51	2,687	1,880
191.52	2,693	1,907
191.53	2,699	1,934

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.54	2,706	1,961	192.06	3,036	3,453
191.55	2,712	1,988	192.07	3,043	3,483
191.56	2,718	2,015	192.08	3,050	3,514
191.57	2,725	2,042	192.09	3,057	3,544
191.58	2,731	2,070	192.10	3,064	3,575
191.59	2,737	2,097	192.11	3,070	3,606
191.60	2,743	2,124	192.12	3,077	3,636
191.61	2,750	2,152	192.13	3,084	3,667
191.62	2,756	2,179	192.14	3,091	3,698
191.63	2,762	2,207	192.15	3,098	3,729
191.64	2,769	2,235	192.16	3,105	3,760
191.65	2,775	2,262	192.17	3,112	3,791
191.66	2,781	2,290	192.18	3,118	3,822
191.67	2,787	2,318	192.19	3,125	3,853
191.68	2,794	2,346	192.20	3,132	3,885
191.69	2,800	2,374	192.21	3,139	3,916
191.70	2,806	2,402	192.22	3,146	3,948
191.71	2,813	2,430	192.23	3,153	3,979
191.72	2,819	2,458	192.24	3,160	4,011
191.73	2,825	2,486	192.25	3,167	4,042
191.74	2,831	2,515	192.26	3,173	4,074
191.75	2,838	2,543	192.27	3,180	4,106
191.76	2,844	2,571	192.28	3,187	4,137
191.77	2,850	2,600	192.29	3,194	4,169
191.78	2,857	2,628	192.30	3,201	4,201
191.79	2,863	2,657	192.31	3,208	4,233
191.80	2,869	2,686	192.32	3,215	4,266
191.81	2,875	2,714	192.33	3,221	4,298
191.82	2,882	2,743	192.34	3,228	4,330
191.83	2,888	2,772	192.35	3,235	4,362
191.84	2,894	2,801	192.36	3,242	4,395
191.85	2,901	2,830	192.37	3,249	4,427
191.86	2,907	2,859	192.38	3,256	4,460
191.87	2,913	2,888	192.39	3,263	4,492
191.88	2,920	2,917	192.40	3,269	4,525
191.89	2,926	2,946	192.41	3,276	4,558
191.90	2,932	2,976	192.42	3,283	4,590
191.91	2,938	3,005	192.43	3,290	4,623
191.92	2,945	3,034	192.44	3,297	4,656
191.93	2,951	3,064	192.45	3,304	4,689
191.94	2,957	3,093	192.46	3,311	4,722
191.95	2,964	3,123	192.47	3,317	4,755
191.96	2,970	3,153	192.48	3,324	4,789
191.97	2,976	3,182	192.49	3,331	4,822
191.98	2,982	3,212	192.50	3,338	4,855
191.99	2,989	3,242	192.51	3,345	4,889
192.00	2,995	3,272	192.52	3,352	4,922
192.01	3,002	3,302	192.53	3,359	4,956
192.02	3,009	3,332	192.54	3,365	4,989
192.03	3,016	3,362	192.55	3,372	5,023
192.04	3,022	3,392	192.56	3,379	5,057
192.05	3,029	3,423	192.57	3,386	5,091

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.58	3,393	5,124	193.10	3,755	6,982
192.59	3,400	5,158	193.11	3,763	7,019
192.60	3,407	5,192	193.12	3,770	7,057
192.61	3,413	5,227	193.13	3,778	7,095
192.62	3,420	5,261	193.14	3,785	7,133
192.63	3,427	5,295	193.15	3,792	7,171
192.64	3,434	5,329	193.16	3,800	7,208
192.65	3,441	5,364	193.17	3,807	7,247
192.66	3,448	5,398	193.18	3,815	7,285
192.67	3,455	5,433	193.19	3,822	7,323
192.68	3,461	5,467	193.20	3,830	7,361
192.69	3,468	5,502	193.21	3,837	7,399
192.70	3,475	5,537	193.22	3,844	7,438
192.71	3,482	5,571	193.23	3,852	7,476
192.72	3,489	5,606	193.24	3,859	7,515
192.73	3,496	5,641	193.25	3,867	7,553
192.74	3,503	5,676	193.26	3,874	7,592
192.75	3,510	5,711	193.27	3,882	7,631
192.76	3,516	5,746	193.28	3,889	7,670
192.77	3,523	5,782	193.29	3,896	7,709
192.78	3,530	5,817	193.30	3,904	7,748
192.79	3,537	5,852	193.31	3,911	7,787
192.80	3,544	5,888	193.32	3,919	7,826
192.81	3,551	5,923	193.33	3,926	7,865
192.82	3,558	5,959	193.34	3,934	7,904
192.83	3,564	5,994	193.35	3,941	7,944
192.84	3,571	6,030	193.36	3,948	7,983
192.85	3,578	6,066	193.37	3,956	8,023
192.86	3,585	6,101	193.38	3,963	8,062
192.87	3,592	6,137	193.39	3,971	8,102
192.88	3,599	6,173	193.40	3,978	8,142
192.89	3,606	6,209	193.41	3,986	8,182
192.90	3,612	6,245	193.42	3,993	8,222
192.91	3,619	6,281	193.43	4,000	8,262
192.92	3,626	6,318	193.44	4,008	8,302
192.93	3,633	6,354	193.45	4,015	8,342
192.94	3,640	6,390	193.46	4,023	8,382
192.95	3,647	6,427	193.47	4,030	8,422
192.96	3,654	6,463	193.48	4,038	8,462
192.97	3,660	6,500	193.49	4,045	8,503
192.98	3,667	6,537	193.50	4,053	8,543
192.99	3,674	6,573	193.51	4,060	8,584
193.00	3,681	6,610	193.52	4,067	8,625
193.01	3,688	6,647	193.53	4,075	8,665
193.02	3,696	6,684	193.54	4,082	8,706
193.03	3,703	6,721	193.55	4,090	8,747
193.04	3,711	6,758	193.56	4,097	8,788
193.05	3,718	6,795	193.57	4,105	8,829
193.06	3,726	6,832	193.58	4,112	8,870
193.07	3,733	6,869	193.59	4,119	8,911
193.08	3,740	6,907	193.60	4,127	8,952
193.09	3,748	6,944	193.61	4,134	8,994

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.62	4,142	9,035	194.14	4,536	11,290
193.63	4,149	9,076	194.15	4,544	11,335
193.64	4,157	9,118	194.16	4,552	11,381
193.65	4,164	9,160	194.17	4,560	11,426
193.66	4,171	9,201	194.18	4,568	11,472
193.67	4,179	9,243	194.19	4,576	11,517
193.68	4,186	9,285	194.20	4,584	11,563
193.69	4,194	9,327	194.21	4,592	11,609
193.70	4,201	9,369	194.22	4,600	11,655
193.71	4,209	9,411	194.23	4,608	11,701
193.72	4,216	9,453	194.24	4,616	11,747
193.73	4,223	9,495	194.25	4,624	11,793
193.74	4,231	9,537	194.26	4,632	11,840
193.75	4,238	9,580	194.27	4,640	11,886
193.76	4,246	9,622	194.28	4,648	11,933
193.77	4,253	9,665	194.29	4,656	11,979
193.78	4,261	9,707	194.30	4,664	12,026
193.79	4,268	9,750	194.31	4,672	12,072
193.80	4,275	9,793	194.32	4,680	12,119
193.81	4,283	9,835	194.33	4,688	12,166
193.82	4,290	9,878	194.34	4,696	12,213
193.83	4,298	9,921	194.35	4,704	12,260
193.84	4,305	9,964	194.36	4,712	12,307
193.85	4,313	10,007	194.37	4,720	12,354
193.86	4,320	10,050	194.38	4,728	12,401
193.87	4,327	10,094	194.39	4,736	12,449
193.88	4,335	10,137	194.40	4,744	12,496
193.89	4,342	10,180	194.41	4,752	12,543
193.90	4,350	10,224	194.42	4,760	12,591
193.91	4,357	10,267	194.43	4,768	12,639
193.92	4,365	10,311	194.44	4,776	12,686
193.93	4,372	10,355	194.45	4,784	12,734
193.94	4,379	10,398	194.46	4,792	12,782
193.95	4,387	10,442	194.47	4,800	12,830
193.96	4,394	10,486	194.48	4,808	12,878
193.97	4,402	10,530	194.49	4,816	12,926
193.98	4,409	10,574	194.50	4,824	12,974
193.99	4,417	10,618	194.51	4,831	13,023
194.00	4,424	10,663	194.52	4,839	13,071
194.01	4,432	10,707	194.53	4,847	13,119
194.02	4,440	10,751	194.54	4,855	13,168
194.03	4,448	10,796	194.55	4,863	13,217
194.04	4,456	10,840	194.56	4,871	13,265
194.05	4,464	10,885	194.57	4,879	13,314
194.06	4,472	10,929	194.58	4,887	13,363
194.07	4,480	10,974	194.59	4,895	13,412
194.08	4,488	11,019	194.60	4,903	13,461
194.09	4,496	11,064	194.61	4,911	13,510
194.10	4,504	11,109	194.62	4,919	13,559
194.11	4,512	11,154	194.63	4,927	13,608
194.12	4,520	11,199	194.64	4,935	13,657
194.13	4,528	11,244	194.65	4,943	13,707

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.66	4,951	13,756
194.67	4,959	13,806
194.68	4,967	13,856
194.69	4,975	13,905
194.70	4,983	13,955
194.71	4,991	14,005
194.72	4,999	14,055
194.73	5,007	14,105
194.74	5,015	14,155
194.75	5,023	14,205
194.76	5,031	14,255
194.77	5,039	14,306
194.78	5,047	14,356
194.79	5,055	14,407
194.80	5,063	14,457
194.81	5,071	14,508
194.82	5,079	14,559
194.83	5,087	14,610
194.84	5,095	14,661
194.85	5,103	14,712
194.86	5,111	14,763
194.87	5,119	14,814
194.88	5,127	14,865
194.89	5,135	14,916
194.90	5,143	14,968
194.91	5,151	15,019
194.92	5,159	15,071
194.93	5,167	15,122
194.94	5,175	15,174
194.95	5,183	15,226
194.96	5,191	15,278
194.97	5,199	15,330
194.98	5,207	15,382
194.99	5,215	15,434
195.00	5,223	15,486
195.01	5,240	15,538
195.02	5,257	15,591
195.03	5,274	15,643
195.04	5,290	15,696
195.05	5,307	15,749
195.06	5,324	15,802
195.07	5,341	15,856
195.08	5,358	15,909
195.09	5,375	15,963
195.10	5,391	16,017
195.11	5,408	16,071
195.12	5,425	16,125
195.13	5,442	16,179
195.14	5,459	16,234
195.15	5,476	16,288
195.16	5,492	16,343
195.17	5,509	16,398
195.18	5,526	16,453
195.19	5,543	16,509
195.20	5,560	16,564
195.21	5,577	16,620
195.22	5,593	16,676
195.23	5,610	16,732
195.24	5,627	16,788
195.25	**5,644**	**16,844**

Summary for Pond B-36B: Basin #36B

Inflow Area = 2.469 ac, 46.54% Impervious, Inflow Depth = 2.48" for Future 2 yr event
Inflow = 6.15 cfs @ 12.17 hrs, Volume= 0.510 af
Outflow = 2.87 cfs @ 12.36 hrs, Volume= 0.402 af, Atten= 53%, Lag= 11.1 min
Primary = 2.87 cfs @ 12.36 hrs, Volume= 0.402 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.55' @ 12.36 hrs Surf.Area= 4,176 sf Storage= 8,500 cf

Plug-Flow detention time= 165.0 min calculated for 0.402 af (79% of inflow)
Center-of-Mass det. time= 78.8 min (868.6 - 789.8)

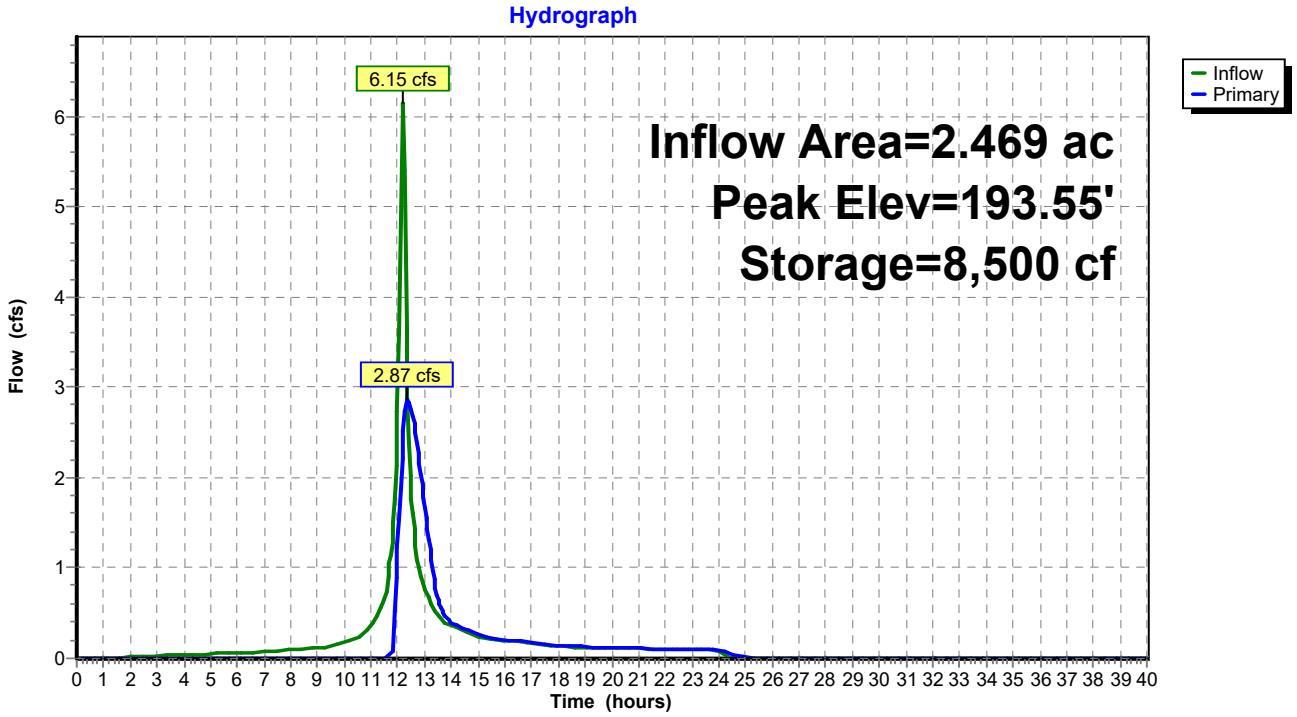
Volume	Invert	Avail.Storage	Storage Description
#1	190.50'	16,864 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.50	0	0	0
191.00	2,110	528	528
192.00	2,893	2,502	3,029
193.00	3,730	3,312	6,341
194.00	4,547	4,139	10,479
195.00	5,356	4,952	15,431
195.25	6,113	1,434	16,864

Device	Routing	Invert	Outlet Devices
#1	Primary	190.50'	**18.0" Round Culvert** L= 82.0' Ke= 0.500 Inlet / Outlet Invert= 190.50' / 190.10' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.53'	**36.0" W x 2.5" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.55'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.87 cfs @ 12.36 hrs HW=193.54' (Free Discharge)
- **1=Culvert** (Passes 2.87 cfs of 11.42 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.87 cfs @ 4.59 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-36B: Basin #36B



Stage-Discharge for Pond B-36B: Basin #36B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.50	0.00	191.02	0.00	191.54	0.00	192.06	0.00
190.51	0.00	191.03	0.00	191.55	0.00	192.07	0.00
190.52	0.00	191.04	0.00	191.56	0.00	192.08	0.00
190.53	0.00	191.05	0.00	191.57	0.00	192.09	0.00
190.54	0.00	191.06	0.00	191.58	0.00	192.10	0.00
190.55	0.00	191.07	0.00	191.59	0.00	192.11	0.00
190.56	0.00	191.08	0.00	191.60	0.00	192.12	0.00
190.57	0.00	191.09	0.00	191.61	0.00	192.13	0.00
190.58	0.00	191.10	0.00	191.62	0.00	192.14	0.00
190.59	0.00	191.11	0.00	191.63	0.00	192.15	0.00
190.60	0.00	191.12	0.00	191.64	0.00	192.16	0.00
190.61	0.00	191.13	0.00	191.65	0.00	192.17	0.00
190.62	0.00	191.14	0.00	191.66	0.00	192.18	0.00
190.63	0.00	191.15	0.00	191.67	0.00	192.19	0.00
190.64	0.00	191.16	0.00	191.68	0.00	192.20	0.00
190.65	0.00	191.17	0.00	191.69	0.00	192.21	0.00
190.66	0.00	191.18	0.00	191.70	0.00	192.22	0.00
190.67	0.00	191.19	0.00	191.71	0.00	192.23	0.00
190.68	0.00	191.20	0.00	191.72	0.00	192.24	0.00
190.69	0.00	191.21	0.00	191.73	0.00	192.25	0.00
190.70	0.00	191.22	0.00	191.74	0.00	192.26	0.00
190.71	0.00	191.23	0.00	191.75	0.00	192.27	0.00
190.72	0.00	191.24	0.00	191.76	0.00	192.28	0.00
190.73	0.00	191.25	0.00	191.77	0.00	192.29	0.00
190.74	0.00	191.26	0.00	191.78	0.00	192.30	0.00
190.75	0.00	191.27	0.00	191.79	0.00	192.31	0.00
190.76	0.00	191.28	0.00	191.80	0.00	192.32	0.00
190.77	0.00	191.29	0.00	191.81	0.00	192.33	0.00
190.78	0.00	191.30	0.00	191.82	0.00	192.34	0.00
190.79	0.00	191.31	0.00	191.83	0.00	192.35	0.00
190.80	0.00	191.32	0.00	191.84	0.00	192.36	0.00
190.81	0.00	191.33	0.00	191.85	0.00	192.37	0.00
190.82	0.00	191.34	0.00	191.86	0.00	192.38	0.00
190.83	0.00	191.35	0.00	191.87	0.00	192.39	0.00
190.84	0.00	191.36	0.00	191.88	0.00	192.40	0.00
190.85	0.00	191.37	0.00	191.89	0.00	192.41	0.00
190.86	0.00	191.38	0.00	191.90	0.00	192.42	0.00
190.87	0.00	191.39	0.00	191.91	0.00	192.43	0.00
190.88	0.00	191.40	0.00	191.92	0.00	192.44	0.00
190.89	0.00	191.41	0.00	191.93	0.00	192.45	0.00
190.90	0.00	191.42	0.00	191.94	0.00	192.46	0.00
190.91	0.00	191.43	0.00	191.95	0.00	192.47	0.00
190.92	0.00	191.44	0.00	191.96	0.00	192.48	0.00
190.93	0.00	191.45	0.00	191.97	0.00	192.49	0.00
190.94	0.00	191.46	0.00	191.98	0.00	192.50	0.00
190.95	0.00	191.47	0.00	191.99	0.00	192.51	0.00
190.96	0.00	191.48	0.00	192.00	0.00	192.52	0.00
190.97	0.00	191.49	0.00	192.01	0.00	192.53	0.00
190.98	0.00	191.50	0.00	192.02	0.00	192.54	0.01
190.99	0.00	191.51	0.00	192.03	0.00	192.55	0.03
191.00	0.00	191.52	0.00	192.04	0.00	192.56	0.05
191.01	0.00	191.53	0.00	192.05	0.00	192.57	0.08

Stage-Discharge for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.58	0.11	193.10	2.05	193.62	3.23	194.14	9.44
192.59	0.14	193.11	2.07	193.63	3.30	194.15	9.60
192.60	0.18	193.12	2.09	193.64	3.37	194.16	9.76
192.61	0.22	193.13	2.12	193.65	3.44	194.17	9.92
192.62	0.26	193.14	2.14	193.66	3.52	194.18	10.08
192.63	0.30	193.15	2.16	193.67	3.60	194.19	10.24
192.64	0.35	193.16	2.18	193.68	3.69	194.20	10.40
192.65	0.40	193.17	2.20	193.69	3.77	194.21	10.56
192.66	0.45	193.18	2.22	193.70	3.86	194.22	10.72
192.67	0.50	193.19	2.24	193.71	3.95	194.23	10.89
192.68	0.56	193.20	2.26	193.72	4.04	194.24	11.05
192.69	0.62	193.21	2.28	193.73	4.14	194.25	11.22
192.70	0.67	193.22	2.30	193.74	4.24	194.26	11.38
192.71	0.74	193.23	2.32	193.75	4.34	194.27	11.55
192.72	0.80	193.24	2.34	193.76	4.44	194.28	11.72
192.73	0.86	193.25	2.36	193.77	4.54	194.29	11.89
192.74	0.93	193.26	2.38	193.78	4.65	194.30	12.06
192.75	0.98	193.27	2.40	193.79	4.75	194.31	12.23
192.76	1.03	193.28	2.42	193.80	4.86	194.32	12.40
192.77	1.08	193.29	2.43	193.81	4.97	194.33	12.58
192.78	1.12	193.30	2.45	193.82	5.09	194.34	12.75
192.79	1.16	193.31	2.47	193.83	5.20	194.35	12.93
192.80	1.20	193.32	2.49	193.84	5.32	194.36	13.10
192.81	1.24	193.33	2.51	193.85	5.43	194.37	13.28
192.82	1.28	193.34	2.53	193.86	5.55	194.38	13.46
192.83	1.32	193.35	2.54	193.87	5.67	194.39	13.63
192.84	1.35	193.36	2.56	193.88	5.80	194.40	13.70
192.85	1.38	193.37	2.58	193.89	5.92	194.41	13.73
192.86	1.42	193.38	2.60	193.90	6.05	194.42	13.75
192.87	1.45	193.39	2.61	193.91	6.17	194.43	13.77
192.88	1.48	193.40	2.63	193.92	6.30	194.44	13.80
192.89	1.51	193.41	2.65	193.93	6.43	194.45	13.82
192.90	1.54	193.42	2.67	193.94	6.56	194.46	13.85
192.91	1.57	193.43	2.68	193.95	6.69	194.47	13.87
192.92	1.60	193.44	2.70	193.96	6.83	194.48	13.90
192.93	1.63	193.45	2.72	193.97	6.96	194.49	13.92
192.94	1.66	193.46	2.73	193.98	7.10	194.50	13.94
192.95	1.68	193.47	2.75	193.99	7.24	194.51	13.97
192.96	1.71	193.48	2.77	194.00	7.38	194.52	13.99
192.97	1.74	193.49	2.78	194.01	7.52	194.53	14.02
192.98	1.76	193.50	2.80	194.02	7.66	194.54	14.04
192.99	1.79	193.51	2.81	194.03	7.80	194.55	14.06
193.00	1.81	193.52	2.83	194.04	7.94	194.56	14.09
193.01	1.84	193.53	2.85	194.05	8.09	194.57	14.11
193.02	1.86	193.54	2.86	194.06	8.24	194.58	14.13
193.03	1.89	193.55	2.88	194.07	8.38	194.59	14.16
193.04	1.91	193.56	2.91	194.08	8.53	194.60	14.18
193.05	1.94	193.57	2.95	194.09	8.68	194.61	14.21
193.06	1.96	193.58	2.99	194.10	8.83	194.62	14.23
193.07	1.98	193.59	3.05	194.11	8.98	194.63	14.25
193.08	2.00	193.60	3.10	194.12	9.14	194.64	14.28
193.09	2.03	193.61	3.16	194.13	9.29	194.65	14.30

Stage-Discharge for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Primary (cfs)
194.66	14.32
194.67	14.35
194.68	14.37
194.69	14.39
194.70	14.42
194.71	14.44
194.72	14.46
194.73	14.49
194.74	14.51
194.75	14.53
194.76	14.56
194.77	14.58
194.78	14.60
194.79	14.62
194.80	14.65
194.81	14.67
194.82	14.69
194.83	14.72
194.84	14.74
194.85	14.76
194.86	14.78
194.87	14.81
194.88	14.83
194.89	14.85
194.90	14.87
194.91	14.90
194.92	14.92
194.93	14.94
194.94	14.96
194.95	14.99
194.96	15.13
194.97	15.36
194.98	15.66
194.99	16.01
195.00	16.41
195.01	16.84
195.02	17.32
195.03	17.82
195.04	18.36
195.05	18.93
195.06	19.52
195.07	20.14
195.08	20.79
195.09	21.47
195.10	22.16
195.11	22.89
195.12	23.63
195.13	24.40
195.14	25.18
195.15	25.99
195.16	26.86
195.17	27.75
195.18	28.67
195.19	29.62
195.20	30.59
195.21	31.58
195.22	32.60
195.23	33.65
195.24	34.72
195.25	**35.81**

Stage-Area-Storage for Pond B-36B: Basin #36B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.50	0	0
190.51	42	0
190.52	84	1
190.53	127	2
190.54	169	3
190.55	211	5
190.56	253	8
190.57	295	10
190.58	338	14
190.59	380	17
190.60	422	21
190.61	464	26
190.62	506	30
190.63	549	36
190.64	591	41
190.65	633	47
190.66	675	54
190.67	717	61
190.68	760	68
190.69	802	76
190.70	844	84
190.71	886	93
190.72	928	102
190.73	971	112
190.74	1,013	122
190.75	1,055	132
190.76	1,097	143
190.77	1,139	154
190.78	1,182	165
190.79	1,224	177
190.80	1,266	190
190.81	1,308	203
190.82	1,350	216
190.83	1,393	230
190.84	1,435	244
190.85	1,477	258
190.86	1,519	273
190.87	1,561	289
190.88	1,604	305
190.89	1,646	321
190.90	1,688	338
190.91	1,730	355
190.92	1,772	372
190.93	1,815	390
190.94	1,857	408
190.95	1,899	427
190.96	1,941	446
190.97	1,983	466
190.98	2,026	486
190.99	2,068	507
191.00	2,110	528
191.01	2,118	549
191.02	2,126	570
191.03	2,133	591
191.04	2,141	613
191.05	2,149	634
191.06	2,157	656
191.07	2,165	677
191.08	2,173	699
191.09	2,180	721
191.10	2,188	742
191.11	2,196	764
191.12	2,204	786
191.13	2,212	808
191.14	2,220	831
191.15	2,227	853
191.16	2,235	875
191.17	2,243	898
191.18	2,251	920
191.19	2,259	943
191.20	2,267	965
191.21	2,274	988
191.22	2,282	1,011
191.23	2,290	1,034
191.24	2,298	1,056
191.25	2,306	1,079
191.26	2,314	1,103
191.27	2,321	1,126
191.28	2,329	1,149
191.29	2,337	1,172
191.30	2,345	1,196
191.31	2,353	1,219
191.32	2,361	1,243
191.33	2,368	1,266
191.34	2,376	1,290
191.35	2,384	1,314
191.36	2,392	1,338
191.37	2,400	1,362
191.38	2,408	1,386
191.39	2,415	1,410
191.40	2,423	1,434
191.41	2,431	1,458
191.42	2,439	1,483
191.43	2,447	1,507
191.44	2,455	1,532
191.45	2,462	1,556
191.46	2,470	1,581
191.47	2,478	1,606
191.48	2,486	1,631
191.49	2,494	1,655
191.50	2,502	1,680
191.51	2,509	1,705
191.52	2,517	1,731
191.53	2,525	1,756

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.54	2,533	1,781	192.06	2,943	3,204
191.55	2,541	1,806	192.07	2,952	3,234
191.56	2,548	1,832	192.08	2,960	3,263
191.57	2,556	1,857	192.09	2,968	3,293
191.58	2,564	1,883	192.10	2,977	3,322
191.59	2,572	1,909	192.11	2,985	3,352
191.60	2,580	1,934	192.12	2,993	3,382
191.61	2,588	1,960	192.13	3,002	3,412
191.62	2,595	1,986	192.14	3,010	3,442
191.63	2,603	2,012	192.15	3,019	3,472
191.64	2,611	2,038	192.16	3,027	3,503
191.65	2,619	2,064	192.17	3,035	3,533
191.66	2,627	2,091	192.18	3,044	3,563
191.67	2,635	2,117	192.19	3,052	3,594
191.68	2,642	2,143	192.20	3,060	3,624
191.69	2,650	2,170	192.21	3,069	3,655
191.70	2,658	2,196	192.22	3,077	3,686
191.71	2,666	2,223	192.23	3,086	3,717
191.72	2,674	2,250	192.24	3,094	3,747
191.73	2,682	2,276	192.25	3,102	3,778
191.74	2,689	2,303	192.26	3,111	3,809
191.75	2,697	2,330	192.27	3,119	3,841
191.76	2,705	2,357	192.28	3,127	3,872
191.77	2,713	2,384	192.29	3,136	3,903
191.78	2,721	2,411	192.30	3,144	3,935
191.79	2,729	2,439	192.31	3,152	3,966
191.80	2,736	2,466	192.32	3,161	3,998
191.81	2,744	2,493	192.33	3,169	4,029
191.82	2,752	2,521	192.34	3,178	4,061
191.83	2,760	2,549	192.35	3,186	4,093
191.84	2,768	2,576	192.36	3,194	4,125
191.85	2,776	2,604	192.37	3,203	4,157
191.86	2,783	2,632	192.38	3,211	4,189
191.87	2,791	2,660	192.39	3,219	4,221
191.88	2,799	2,687	192.40	3,228	4,253
191.89	2,807	2,716	192.41	3,236	4,285
191.90	2,815	2,744	192.42	3,245	4,318
191.91	2,823	2,772	192.43	3,253	4,350
191.92	2,830	2,800	192.44	3,261	4,383
191.93	2,838	2,828	192.45	3,270	4,416
191.94	2,846	2,857	192.46	3,278	4,448
191.95	2,854	2,885	192.47	3,286	4,481
191.96	2,862	2,914	192.48	3,295	4,514
191.97	2,870	2,943	192.49	3,303	4,547
191.98	2,877	2,971	192.50	3,312	4,580
191.99	2,885	3,000	192.51	3,320	4,613
192.00	2,893	3,029	192.52	3,328	4,647
192.01	2,901	3,058	192.53	3,337	4,680
192.02	2,910	3,087	192.54	3,345	4,713
192.03	2,918	3,116	192.55	3,353	4,747
192.04	2,926	3,145	192.56	3,362	4,780
192.05	2,935	3,175	192.57	3,370	4,814

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.58	3,378	4,848
192.59	3,387	4,882
192.60	3,395	4,915
192.61	3,404	4,949
192.62	3,412	4,984
192.63	3,420	5,018
192.64	3,429	5,052
192.65	3,437	5,086
192.66	3,445	5,121
192.67	3,454	5,155
192.68	3,462	5,190
192.69	3,471	5,224
192.70	3,479	5,259
192.71	3,487	5,294
192.72	3,496	5,329
192.73	3,504	5,364
192.74	3,512	5,399
192.75	3,521	5,434
192.76	3,529	5,469
192.77	3,537	5,505
192.78	3,546	5,540
192.79	3,554	5,576
192.80	3,563	5,611
192.81	3,571	5,647
192.82	3,579	5,683
192.83	3,588	5,718
192.84	3,596	5,754
192.85	3,604	5,790
192.86	3,613	5,827
192.87	3,621	5,863
192.88	3,630	5,899
192.89	3,638	5,935
192.90	3,646	5,972
192.91	3,655	6,008
192.92	3,663	6,045
192.93	3,671	6,081
192.94	3,680	6,118
192.95	3,688	6,155
192.96	3,697	6,192
192.97	3,705	6,229
192.98	3,713	6,266
192.99	3,722	6,303
193.00	3,730	6,341
193.01	3,738	6,378
193.02	3,746	6,415
193.03	3,755	6,453
193.04	3,763	6,490
193.05	3,771	6,528
193.06	3,779	6,566
193.07	3,787	6,604
193.08	3,795	6,642
193.09	3,804	6,680
193.10	3,812	6,718
193.11	3,820	6,756
193.12	3,828	6,794
193.13	3,836	6,832
193.14	3,844	6,871
193.15	3,853	6,909
193.16	3,861	6,948
193.17	3,869	6,986
193.18	3,877	7,025
193.19	3,885	7,064
193.20	3,893	7,103
193.21	3,902	7,142
193.22	3,910	7,181
193.23	3,918	7,220
193.24	3,926	7,259
193.25	3,934	7,299
193.26	3,942	7,338
193.27	3,951	7,377
193.28	3,959	7,417
193.29	3,967	7,457
193.30	3,975	7,496
193.31	3,983	7,536
193.32	3,991	7,576
193.33	4,000	7,616
193.34	4,008	7,656
193.35	4,016	7,696
193.36	4,024	7,736
193.37	4,032	7,777
193.38	4,040	7,817
193.39	4,049	7,857
193.40	4,057	7,898
193.41	4,065	7,938
193.42	4,073	7,979
193.43	4,081	8,020
193.44	4,089	8,061
193.45	4,098	8,102
193.46	4,106	8,143
193.47	4,114	8,184
193.48	4,122	8,225
193.49	4,130	8,266
193.50	4,139	8,308
193.51	4,147	8,349
193.52	4,155	8,391
193.53	4,163	8,432
193.54	4,171	8,474
193.55	4,179	8,516
193.56	4,188	8,557
193.57	4,196	8,599
193.58	4,204	8,641
193.59	4,212	8,683
193.60	4,220	8,726
193.61	4,228	8,768

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.62	4,237	8,810	194.14	4,660	11,124
193.63	4,245	8,853	194.15	4,668	11,170
193.64	4,253	8,895	194.16	4,676	11,217
193.65	4,261	8,938	194.17	4,685	11,264
193.66	4,269	8,980	194.18	4,693	11,311
193.67	4,277	9,023	194.19	4,701	11,358
193.68	4,286	9,066	194.20	4,709	11,405
193.69	4,294	9,109	194.21	4,717	11,452
193.70	4,302	9,152	194.22	4,725	11,499
193.71	4,310	9,195	194.23	4,733	11,546
193.72	4,318	9,238	194.24	4,741	11,594
193.73	4,326	9,281	194.25	4,749	11,641
193.74	4,335	9,324	194.26	4,757	11,689
193.75	4,343	9,368	194.27	4,765	11,736
193.76	4,351	9,411	194.28	4,774	11,784
193.77	4,359	9,455	194.29	4,782	11,832
193.78	4,367	9,498	194.30	4,790	11,880
193.79	4,375	9,542	194.31	4,798	11,927
193.80	4,384	9,586	194.32	4,806	11,975
193.81	4,392	9,630	194.33	4,814	12,024
193.82	4,400	9,674	194.34	4,822	12,072
193.83	4,408	9,718	194.35	4,830	12,120
193.84	4,416	9,762	194.36	4,838	12,168
193.85	4,424	9,806	194.37	4,846	12,217
193.86	4,433	9,850	194.38	4,854	12,265
193.87	4,441	9,895	194.39	4,863	12,314
193.88	4,449	9,939	194.40	4,871	12,363
193.89	4,457	9,984	194.41	4,879	12,411
193.90	4,465	10,028	194.42	4,887	12,460
193.91	4,473	10,073	194.43	4,895	12,509
193.92	4,482	10,118	194.44	4,903	12,558
193.93	4,490	10,163	194.45	4,911	12,607
193.94	4,498	10,208	194.46	4,919	12,656
193.95	4,506	10,253	194.47	4,927	12,705
193.96	4,514	10,298	194.48	4,935	12,755
193.97	4,522	10,343	194.49	4,943	12,804
193.98	4,531	10,388	194.50	4,952	12,854
193.99	4,539	10,434	194.51	4,960	12,903
194.00	4,547	10,479	194.52	4,968	12,953
194.01	4,555	10,525	194.53	4,976	13,003
194.02	4,563	10,570	194.54	4,984	13,052
194.03	4,571	10,616	194.55	4,992	13,102
194.04	4,579	10,662	194.56	5,000	13,152
194.05	4,587	10,707	194.57	5,008	13,202
194.06	4,596	10,753	194.58	5,016	13,252
194.07	4,604	10,799	194.59	5,024	13,303
194.08	4,612	10,845	194.60	5,032	13,353
194.09	4,620	10,892	194.61	5,040	13,403
194.10	4,628	10,938	194.62	5,049	13,454
194.11	4,636	10,984	194.63	5,057	13,504
194.12	4,644	11,030	194.64	5,065	13,555
194.13	4,652	11,077	194.65	5,073	13,605

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.66	5,081	13,656
194.67	5,089	13,707
194.68	5,097	13,758
194.69	5,105	13,809
194.70	5,113	13,860
194.71	5,121	13,911
194.72	5,129	13,963
194.73	5,138	14,014
194.74	5,146	14,065
194.75	5,154	14,117
194.76	5,162	14,168
194.77	5,170	14,220
194.78	5,178	14,272
194.79	5,186	14,324
194.80	5,194	14,375
194.81	5,202	14,427
194.82	5,210	14,480
194.83	5,218	14,532
194.84	5,227	14,584
194.85	5,235	14,636
194.86	5,243	14,689
194.87	5,251	14,741
194.88	5,259	14,794
194.89	5,267	14,846
194.90	5,275	14,899
194.91	5,283	14,952
194.92	5,291	15,005
194.93	5,299	15,058
194.94	5,307	15,111
194.95	5,316	15,164
194.96	5,324	15,217
194.97	5,332	15,270
194.98	5,340	15,324
194.99	5,348	15,377
195.00	5,356	15,431
195.01	5,386	15,484
195.02	5,417	15,538
195.03	5,447	15,593
195.04	5,477	15,647
195.05	5,507	15,702
195.06	5,538	15,757
195.07	5,568	15,813
195.08	5,598	15,869
195.09	5,629	15,925
195.10	5,659	15,981
195.11	5,689	16,038
195.12	5,719	16,095
195.13	5,750	16,152
195.14	5,780	16,210
195.15	5,810	16,268
195.16	5,840	16,326
195.17	5,871	16,385
195.18	5,901	16,444
195.19	5,931	16,503
195.20	5,962	16,562
195.21	5,992	16,622
195.22	6,022	16,682
195.23	6,052	16,742
195.24	6,083	16,803
195.25	**6,113**	**16,864**

Summary for Pond B-37A: Basin #37A

Inflow Area = 2.154 ac, 39.65% Impervious, Inflow Depth = 2.33" for Future 2 yr event
Inflow = 5.08 cfs @ 12.17 hrs, Volume= 0.418 af
Outflow = 0.52 cfs @ 13.21 hrs, Volume= 0.336 af, Atten= 90%, Lag= 61.9 min
Primary = 0.52 cfs @ 13.21 hrs, Volume= 0.336 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 196.48' @ 13.21 hrs Surf.Area= 4,692 sf Storage= 10,487 cf

Plug-Flow detention time= 310.2 min calculated for 0.336 af (80% of inflow)
Center-of-Mass det. time= 226.9 min (1,023.2 - 796.2)

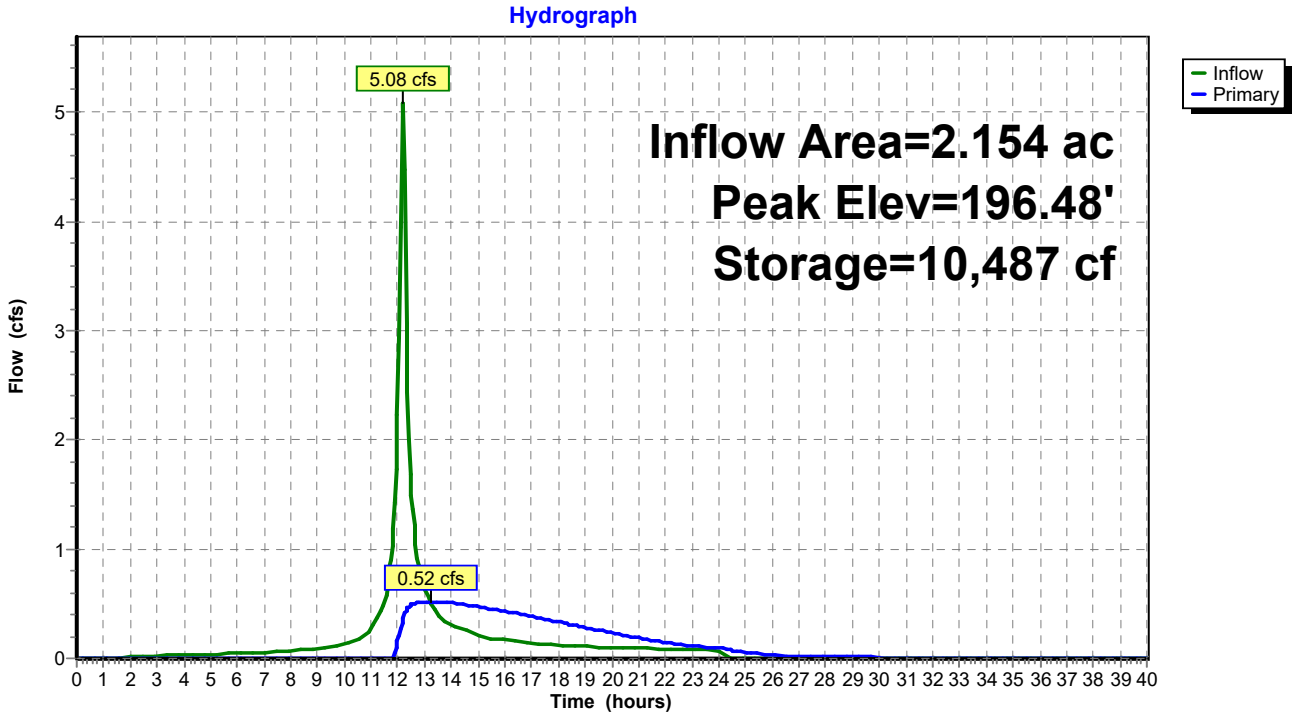
Volume	Invert	Avail.Storage	Storage Description
#1	193.30'	18,546 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.30	0	0	0
194.00	2,990	1,046	1,046
195.00	3,633	3,312	4,358
196.00	4,332	3,983	8,340
197.00	5,089	4,711	13,051
198.00	5,901	5,495	18,546

Device	Routing	Invert	Outlet Devices
#1	Primary	192.65'	**18.0" Round Culvert** L= 265.0' Ke= 0.500 Inlet / Outlet Invert= 192.65' / 191.33' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.77'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	196.48'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.52 cfs @ 13.21 hrs HW=196.48' (Free Discharge)
- **1=Culvert** (Passes 0.52 cfs of 10.75 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.52 cfs @ 5.97 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-37A: Basin #37A



Stage-Discharge for Pond B-37A: Basin #37A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.02
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.02
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.03
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.03
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.04
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.04
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.05
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.06
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.06
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.07
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.08
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.08
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.09
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.10
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.10
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.11
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.12
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.13
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.13
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.14
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.15
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.15
193.52	0.00	194.04	0.00	194.56	0.00	195.08	0.16
193.53	0.00	194.05	0.00	194.57	0.00	195.09	0.17
193.54	0.00	194.06	0.00	194.58	0.00	195.10	0.17
193.55	0.00	194.07	0.00	194.59	0.00	195.11	0.17
193.56	0.00	194.08	0.00	194.60	0.00	195.12	0.18
193.57	0.00	194.09	0.00	194.61	0.00	195.13	0.18
193.58	0.00	194.10	0.00	194.62	0.00	195.14	0.19
193.59	0.00	194.11	0.00	194.63	0.00	195.15	0.19
193.60	0.00	194.12	0.00	194.64	0.00	195.16	0.20
193.61	0.00	194.13	0.00	194.65	0.00	195.17	0.20
193.62	0.00	194.14	0.00	194.66	0.00	195.18	0.21
193.63	0.00	194.15	0.00	194.67	0.00	195.19	0.21
193.64	0.00	194.16	0.00	194.68	0.00	195.20	0.22
193.65	0.00	194.17	0.00	194.69	0.00	195.21	0.22
193.66	0.00	194.18	0.00	194.70	0.00	195.22	0.22
193.67	0.00	194.19	0.00	194.71	0.00	195.23	0.23
193.68	0.00	194.20	0.00	194.72	0.00	195.24	0.23
193.69	0.00	194.21	0.00	194.73	0.00	195.25	0.24
193.70	0.00	194.22	0.00	194.74	0.00	195.26	0.24
193.71	0.00	194.23	0.00	194.75	0.00	195.27	0.24
193.72	0.00	194.24	0.00	194.76	0.00	195.28	0.25
193.73	0.00	194.25	0.00	194.77	0.00	195.29	0.25
193.74	0.00	194.26	0.00	194.78	0.00	195.30	0.25
193.75	0.00	194.27	0.00	194.79	0.00	195.31	0.26
193.76	0.00	194.28	0.00	194.80	0.00	195.32	0.26
193.77	0.00	194.29	0.00	194.81	0.00	195.33	0.26
193.78	0.00	194.30	0.00	194.82	0.01	195.34	0.27
193.79	0.00	194.31	0.00	194.83	0.01	195.35	0.27
193.80	0.00	194.32	0.00	194.84	0.01	195.36	0.27
193.81	0.00	194.33	0.00	194.85	0.02	195.37	0.28

Stage-Discharge for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.38	0.28	195.90	0.41	196.42	0.51	196.94	4.58
195.39	0.28	195.91	0.41	196.43	0.51	196.95	4.71
195.40	0.29	195.92	0.42	196.44	0.52	196.96	4.84
195.41	0.29	195.93	0.42	196.45	0.52	196.97	4.98
195.42	0.29	195.94	0.42	196.46	0.52	196.98	5.11
195.43	0.30	195.95	0.42	196.47	0.52	196.99	5.24
195.44	0.30	195.96	0.43	196.48	0.52	197.00	5.38
195.45	0.30	195.97	0.43	196.49	0.54	197.01	5.52
195.46	0.30	195.98	0.43	196.50	0.56	197.02	5.66
195.47	0.31	195.99	0.43	196.51	0.59	197.03	5.80
195.48	0.31	196.00	0.43	196.52	0.63	197.04	5.94
195.49	0.31	196.01	0.44	196.53	0.68	197.05	6.08
195.50	0.32	196.02	0.44	196.54	0.72	197.06	6.22
195.51	0.32	196.03	0.44	196.55	0.78	197.07	6.37
195.52	0.32	196.04	0.44	196.56	0.83	197.08	6.51
195.53	0.32	196.05	0.44	196.57	0.89	197.09	6.66
195.54	0.33	196.06	0.45	196.58	0.95	197.10	6.81
195.55	0.33	196.07	0.45	196.59	1.01	197.11	6.95
195.56	0.33	196.08	0.45	196.60	1.08	197.12	7.10
195.57	0.33	196.09	0.45	196.61	1.15	197.13	7.25
195.58	0.34	196.10	0.45	196.62	1.23	197.14	7.41
195.59	0.34	196.11	0.46	196.63	1.30	197.15	7.56
195.60	0.34	196.12	0.46	196.64	1.38	197.16	7.71
195.61	0.34	196.13	0.46	196.65	1.46	197.17	7.87
195.62	0.35	196.14	0.46	196.66	1.54	197.18	8.02
195.63	0.35	196.15	0.46	196.67	1.63	197.19	8.18
195.64	0.35	196.16	0.46	196.68	1.71	197.20	8.34
195.65	0.35	196.17	0.47	196.69	1.80	197.21	8.49
195.66	0.36	196.18	0.47	196.70	1.89	197.22	8.65
195.67	0.36	196.19	0.47	196.71	1.99	197.23	8.81
195.68	0.36	196.20	0.47	196.72	2.08	197.24	8.97
195.69	0.36	196.21	0.47	196.73	2.18	197.25	9.14
195.70	0.37	196.22	0.48	196.74	2.28	197.26	9.30
195.71	0.37	196.23	0.48	196.75	2.38	197.27	9.46
195.72	0.37	196.24	0.48	196.76	2.48	197.28	9.63
195.73	0.37	196.25	0.48	196.77	2.58	197.29	9.79
195.74	0.38	196.26	0.48	196.78	2.69	197.30	9.96
195.75	0.38	196.27	0.49	196.79	2.79	197.31	10.13
195.76	0.38	196.28	0.49	196.80	2.90	197.32	10.30
195.77	0.38	196.29	0.49	196.81	3.01	197.33	10.46
195.78	0.39	196.30	0.49	196.82	3.13	197.34	10.63
195.79	0.39	196.31	0.49	196.83	3.24	197.35	10.81
195.80	0.39	196.32	0.49	196.84	3.35	197.36	10.98
195.81	0.39	196.33	0.50	196.85	3.47	197.37	11.15
195.82	0.39	196.34	0.50	196.86	3.59	197.38	11.32
195.83	0.40	196.35	0.50	196.87	3.71	197.39	11.50
195.84	0.40	196.36	0.50	196.88	3.83	197.40	11.67
195.85	0.40	196.37	0.50	196.89	3.95	197.41	11.85
195.86	0.40	196.38	0.50	196.90	4.07	197.42	12.02
195.87	0.41	196.39	0.51	196.91	4.20	197.43	12.07
195.88	0.41	196.40	0.51	196.92	4.33	197.44	12.09
195.89	0.41	196.41	0.51	196.93	4.45	197.45	12.10

Stage-Discharge for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Primary (cfs)
197.46	12.11
197.47	12.13
197.48	12.14
197.49	12.15
197.50	12.17
197.51	12.18
197.52	12.19
197.53	12.20
197.54	12.22
197.55	12.23
197.56	12.24
197.57	12.26
197.58	12.27
197.59	12.28
197.60	12.29
197.61	12.31
197.62	12.32
197.63	12.33
197.64	12.35
197.65	12.36
197.66	12.37
197.67	12.38
197.68	12.40
197.69	12.41
197.70	12.42
197.71	12.44
197.72	12.45
197.73	12.46
197.74	12.47
197.75	12.49
197.76	12.50
197.77	12.51
197.78	12.52
197.79	12.54
197.80	12.55
197.81	12.56
197.82	12.57
197.83	12.59
197.84	12.60
197.85	12.61
197.86	12.63
197.87	12.64
197.88	12.65
197.89	12.66
197.90	12.68
197.91	12.69
197.92	12.70
197.93	12.71
197.94	12.73
197.95	12.74
197.96	12.87
197.97	13.09
197.98	13.38
197.99	13.73
198.00	**14.11**

Stage-Area-Storage for Pond B-37A: Basin #37A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.30	0	0	193.82	2,221	577
193.31	43	0	193.83	2,264	600
193.32	85	1	193.84	2,307	623
193.33	128	2	193.85	2,349	646
193.34	171	3	193.86	2,392	670
193.35	214	5	193.87	2,435	694
193.36	256	8	193.88	2,477	718
193.37	299	10	193.89	2,520	743
193.38	342	14	193.90	2,563	769
193.39	384	17	193.91	2,606	795
193.40	427	21	193.92	2,648	821
193.41	470	26	193.93	2,691	848
193.42	513	31	193.94	2,734	875
193.43	555	36	193.95	2,776	902
193.44	598	42	193.96	2,819	930
193.45	641	48	193.97	2,862	959
193.46	683	55	193.98	2,905	988
193.47	726	62	193.99	2,947	1,017
193.48	769	69	194.00	2,990	1,046
193.49	812	77	194.01	2,996	1,076
193.50	854	85	194.02	3,003	1,106
193.51	897	94	194.03	3,009	1,136
193.52	940	103	194.04	3,016	1,167
193.53	982	113	194.05	3,022	1,197
193.54	1,025	123	194.06	3,029	1,227
193.55	1,068	133	194.07	3,035	1,257
193.56	1,111	144	194.08	3,041	1,288
193.57	1,153	156	194.09	3,048	1,318
193.58	1,196	167	194.10	3,054	1,349
193.59	1,239	180	194.11	3,061	1,379
193.60	1,281	192	194.12	3,067	1,410
193.61	1,324	205	194.13	3,074	1,441
193.62	1,367	219	194.14	3,080	1,471
193.63	1,410	233	194.15	3,086	1,502
193.64	1,452	247	194.16	3,093	1,533
193.65	1,495	262	194.17	3,099	1,564
193.66	1,538	277	194.18	3,106	1,595
193.67	1,580	292	194.19	3,112	1,626
193.68	1,623	308	194.20	3,119	1,657
193.69	1,666	325	194.21	3,125	1,689
193.70	1,709	342	194.22	3,131	1,720
193.71	1,751	359	194.23	3,138	1,751
193.72	1,794	377	194.24	3,144	1,783
193.73	1,837	395	194.25	3,151	1,814
193.74	1,879	413	194.26	3,157	1,846
193.75	1,922	432	194.27	3,164	1,877
193.76	1,965	452	194.28	3,170	1,909
193.77	2,008	472	194.29	3,176	1,941
193.78	2,050	492	194.30	3,183	1,972
193.79	2,093	513	194.31	3,189	2,004
193.80	2,136	534	194.32	3,196	2,036
193.81	2,178	555	194.33	3,202	2,068

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.34	3,209	2,100
194.35	3,215	2,132
194.36	3,221	2,165
194.37	3,228	2,197
194.38	3,234	2,229
194.39	3,241	2,262
194.40	3,247	2,294
194.41	3,254	2,326
194.42	3,260	2,359
194.43	3,266	2,392
194.44	3,273	2,424
194.45	3,279	2,457
194.46	3,286	2,490
194.47	3,292	2,523
194.48	3,299	2,556
194.49	3,305	2,589
194.50	3,312	2,622
194.51	3,318	2,655
194.52	3,324	2,688
194.53	3,331	2,722
194.54	3,337	2,755
194.55	3,344	2,788
194.56	3,350	2,822
194.57	3,357	2,855
194.58	3,363	2,889
194.59	3,369	2,923
194.60	3,376	2,956
194.61	3,382	2,990
194.62	3,389	3,024
194.63	3,395	3,058
194.64	3,402	3,092
194.65	3,408	3,126
194.66	3,414	3,160
194.67	3,421	3,194
194.68	3,427	3,228
194.69	3,434	3,263
194.70	3,440	3,297
194.71	3,447	3,331
194.72	3,453	3,366
194.73	3,459	3,401
194.74	3,466	3,435
194.75	3,472	3,470
194.76	3,479	3,505
194.77	3,485	3,539
194.78	3,492	3,574
194.79	3,498	3,609
194.80	3,504	3,644
194.81	3,511	3,679
194.82	3,517	3,714
194.83	3,524	3,750
194.84	3,530	3,785
194.85	3,537	3,820
194.86	3,543	3,856
194.87	3,549	3,891
194.88	3,556	3,927
194.89	3,562	3,962
194.90	3,569	3,998
194.91	3,575	4,034
194.92	3,582	4,069
194.93	3,588	4,105
194.94	3,594	4,141
194.95	3,601	4,177
194.96	3,607	4,213
194.97	3,614	4,249
194.98	3,620	4,285
194.99	3,627	4,322
195.00	3,633	4,358
195.01	3,640	4,394
195.02	3,647	4,431
195.03	3,654	4,467
195.04	3,661	4,504
195.05	3,668	4,541
195.06	3,675	4,577
195.07	3,682	4,614
195.08	3,689	4,651
195.09	3,696	4,688
195.10	3,703	4,725
195.11	3,710	4,762
195.12	3,717	4,799
195.13	3,724	4,836
195.14	3,731	4,873
195.15	3,738	4,911
195.16	3,745	4,948
195.17	3,752	4,986
195.18	3,759	5,023
195.19	3,766	5,061
195.20	3,773	5,099
195.21	3,780	5,136
195.22	3,787	5,174
195.23	3,794	5,212
195.24	3,801	5,250
195.25	3,808	5,288
195.26	3,815	5,326
195.27	3,822	5,364
195.28	3,829	5,403
195.29	3,836	5,441
195.30	3,843	5,479
195.31	3,850	5,518
195.32	3,857	5,556
195.33	3,864	5,595
195.34	3,871	5,634
195.35	3,878	5,672
195.36	3,885	5,711
195.37	3,892	5,750

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.38	3,899	5,789
195.39	3,906	5,828
195.40	3,913	5,867
195.41	3,920	5,906
195.42	3,927	5,946
195.43	3,934	5,985
195.44	3,941	6,024
195.45	3,948	6,064
195.46	3,955	6,103
195.47	3,962	6,143
195.48	3,969	6,182
195.49	3,976	6,222
195.50	3,983	6,262
195.51	3,989	6,302
195.52	3,996	6,342
195.53	4,003	6,382
195.54	4,010	6,422
195.55	4,017	6,462
195.56	4,024	6,502
195.57	4,031	6,542
195.58	4,038	6,583
195.59	4,045	6,623
195.60	4,052	6,664
195.61	4,059	6,704
195.62	4,066	6,745
195.63	4,073	6,786
195.64	4,080	6,826
195.65	4,087	6,867
195.66	4,094	6,908
195.67	4,101	6,949
195.68	4,108	6,990
195.69	4,115	7,031
195.70	4,122	7,072
195.71	4,129	7,114
195.72	4,136	7,155
195.73	4,143	7,196
195.74	4,150	7,238
195.75	4,157	7,279
195.76	4,164	7,321
195.77	4,171	7,363
195.78	4,178	7,404
195.79	4,185	7,446
195.80	4,192	7,488
195.81	4,199	7,530
195.82	4,206	7,572
195.83	4,213	7,614
195.84	4,220	7,656
195.85	4,227	7,699
195.86	4,234	7,741
195.87	4,241	7,783
195.88	4,248	7,826
195.89	4,255	7,868
195.90	4,262	7,911
195.91	4,269	7,953
195.92	4,276	7,996
195.93	4,283	8,039
195.94	4,290	8,082
195.95	4,297	8,125
195.96	4,304	8,168
195.97	4,311	8,211
195.98	4,318	8,254
195.99	4,325	8,297
196.00	4,332	8,340
196.01	4,340	8,384
196.02	4,347	8,427
196.03	4,355	8,471
196.04	4,362	8,514
196.05	4,370	8,558
196.06	4,377	8,602
196.07	4,385	8,646
196.08	4,393	8,689
196.09	4,400	8,733
196.10	4,408	8,777
196.11	4,415	8,822
196.12	4,423	8,866
196.13	4,430	8,910
196.14	4,438	8,954
196.15	4,446	8,999
196.16	4,453	9,043
196.17	4,461	9,088
196.18	4,468	9,133
196.19	4,476	9,177
196.20	4,483	9,222
196.21	4,491	9,267
196.22	4,499	9,312
196.23	4,506	9,357
196.24	4,514	9,402
196.25	4,521	9,447
196.26	4,529	9,492
196.27	4,536	9,538
196.28	4,544	9,583
196.29	4,552	9,629
196.30	4,559	9,674
196.31	4,567	9,720
196.32	4,574	9,765
196.33	4,582	9,811
196.34	4,589	9,857
196.35	4,597	9,903
196.36	4,605	9,949
196.37	4,612	9,995
196.38	4,620	10,041
196.39	4,627	10,088
196.40	4,635	10,134
196.41	4,642	10,180

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.42	4,650	10,227	196.94	5,044	12,747
196.43	4,658	10,273	196.95	5,051	12,797
196.44	4,665	10,320	196.96	5,059	12,848
196.45	4,673	10,367	196.97	5,066	12,899
196.46	4,680	10,413	196.98	5,074	12,949
196.47	4,688	10,460	196.99	5,081	13,000
196.48	4,695	10,507	197.00	5,089	13,051
196.49	4,703	10,554	197.01	5,097	13,102
196.50	4,711	10,601	197.02	5,105	13,153
196.51	4,718	10,648	197.03	5,113	13,204
196.52	4,726	10,695	197.04	5,121	13,255
196.53	4,733	10,743	197.05	5,130	13,306
196.54	4,741	10,790	197.06	5,138	13,358
196.55	4,748	10,838	197.07	5,146	13,409
196.56	4,756	10,885	197.08	5,154	13,461
196.57	4,763	10,933	197.09	5,162	13,512
196.58	4,771	10,980	197.10	5,170	13,564
196.59	4,779	11,028	197.11	5,178	13,616
196.60	4,786	11,076	197.12	5,186	13,668
196.61	4,794	11,124	197.13	5,195	13,719
196.62	4,801	11,172	197.14	5,203	13,771
196.63	4,809	11,220	197.15	5,211	13,823
196.64	4,816	11,268	197.16	5,219	13,876
196.65	4,824	11,316	197.17	5,227	13,928
196.66	4,832	11,364	197.18	5,235	13,980
196.67	4,839	11,413	197.19	5,243	14,033
196.68	4,847	11,461	197.20	5,251	14,085
196.69	4,854	11,510	197.21	5,260	14,138
196.70	4,862	11,558	197.22	5,268	14,190
196.71	4,869	11,607	197.23	5,276	14,243
196.72	4,877	11,656	197.24	5,284	14,296
196.73	4,885	11,705	197.25	5,292	14,349
196.74	4,892	11,753	197.26	5,300	14,402
196.75	4,900	11,802	197.27	5,308	14,455
196.76	4,907	11,851	197.28	5,316	14,508
196.77	4,915	11,901	197.29	5,324	14,561
196.78	4,922	11,950	197.30	5,333	14,614
196.79	4,930	11,999	197.31	5,341	14,668
196.80	4,938	12,048	197.32	5,349	14,721
196.81	4,945	12,098	197.33	5,357	14,775
196.82	4,953	12,147	197.34	5,365	14,828
196.83	4,960	12,197	197.35	5,373	14,882
196.84	4,968	12,246	197.36	5,381	14,936
196.85	4,975	12,296	197.37	5,389	14,990
196.86	4,983	12,346	197.38	5,398	15,043
196.87	4,991	12,396	197.39	5,406	15,097
196.88	4,998	12,446	197.40	5,414	15,152
196.89	5,006	12,496	197.41	5,422	15,206
196.90	5,013	12,546	197.42	5,430	15,260
196.91	5,021	12,596	197.43	5,438	15,314
196.92	5,028	12,646	197.44	5,446	15,369
196.93	5,036	12,697	197.45	5,454	15,423

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.46	5,463	15,478
197.47	5,471	15,533
197.48	5,479	15,587
197.49	5,487	15,642
197.50	5,495	15,697
197.51	5,503	15,752
197.52	5,511	15,807
197.53	5,519	15,862
197.54	5,527	15,917
197.55	5,536	15,973
197.56	5,544	16,028
197.57	5,552	16,084
197.58	5,560	16,139
197.59	5,568	16,195
197.60	5,576	16,251
197.61	5,584	16,306
197.62	5,592	16,362
197.63	5,601	16,418
197.64	5,609	16,474
197.65	5,617	16,530
197.66	5,625	16,587
197.67	5,633	16,643
197.68	5,641	16,699
197.69	5,649	16,756
197.70	5,657	16,812
197.71	5,666	16,869
197.72	5,674	16,926
197.73	5,682	16,982
197.74	5,690	17,039
197.75	5,698	17,096
197.76	5,706	17,153
197.77	5,714	17,210
197.78	5,722	17,267
197.79	5,730	17,325
197.80	5,739	17,382
197.81	5,747	17,439
197.82	5,755	17,497
197.83	5,763	17,555
197.84	5,771	17,612
197.85	5,779	17,670
197.86	5,787	17,728
197.87	5,795	17,786
197.88	5,804	17,844
197.89	5,812	17,902
197.90	5,820	17,960
197.91	5,828	18,018
197.92	5,836	18,077
197.93	5,844	18,135
197.94	5,852	18,193
197.95	5,860	18,252
197.96	5,869	18,311
197.97	5,877	18,369
197.98	5,885	18,428
197.99	5,893	18,487
198.00	**5,901**	**18,546**

Summary for Pond B-37B: Basin #37B

Inflow Area = 2.179 ac, 53.42% Impervious, Inflow Depth = 2.62" for Future 2 yr event
Inflow = 5.71 cfs @ 12.17 hrs, Volume= 0.476 af
Outflow = 0.22 cfs @ 15.05 hrs, Volume= 0.354 af, Atten= 96%, Lag= 172.4 min
Primary = 0.22 cfs @ 15.05 hrs, Volume= 0.354 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 196.63' @ 15.05 hrs Surf.Area= 6,508 sf Storage= 14,660 cf

Plug-Flow detention time= 706.1 min calculated for 0.354 af (74% of inflow)
Center-of-Mass det. time= 611.7 min (1,395.8 - 784.0)

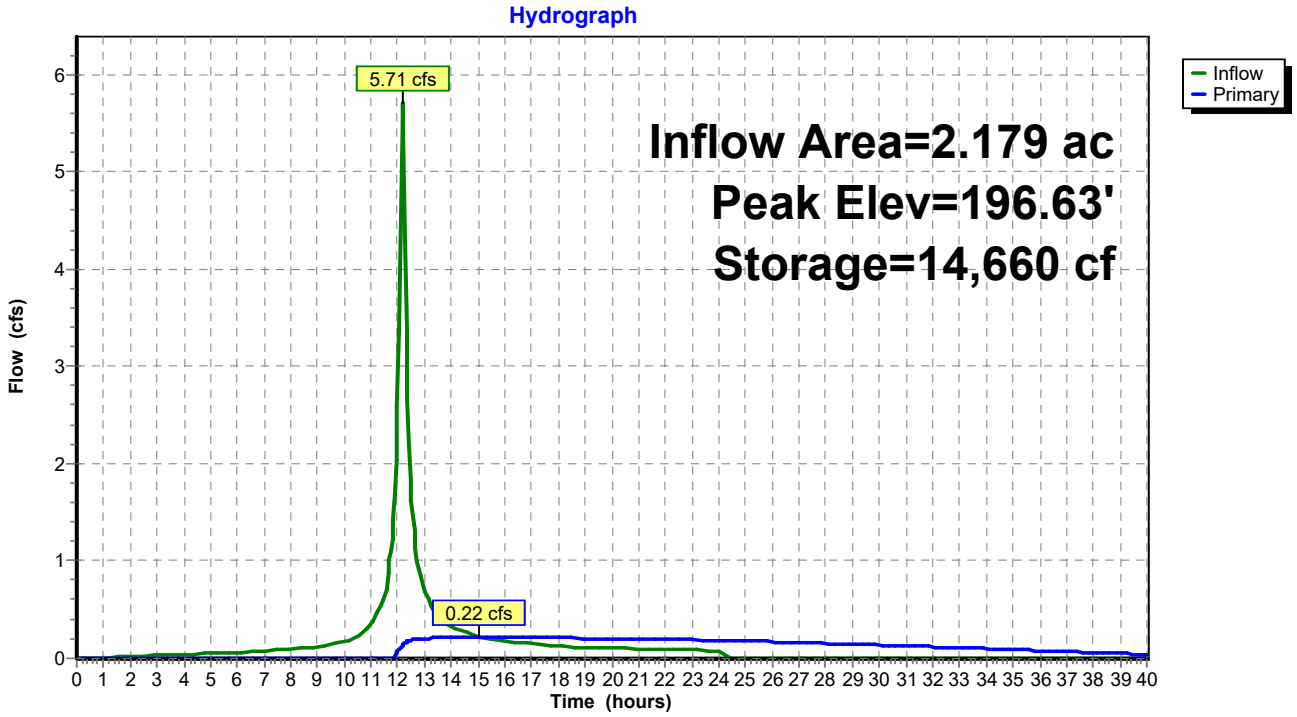
Volume	Invert	Avail.Storage	Storage Description
#1	193.30'	24,651 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.30	0	0	0
194.00	3,709	1,298	1,298
195.00	4,724	4,217	5,515
196.00	5,796	5,260	10,775
197.00	6,924	6,360	17,135
198.00	8,108	7,516	24,651

Device	Routing	Invert	Outlet Devices
#1	Primary	192.65'	**18.0" Round Culvert** L= 265.0' Ke= 0.500 Inlet / Outlet Invert= 192.65' / 191.33' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.81'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	196.63'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.22 cfs @ 15.05 hrs HW=196.63' (Free Discharge)
- **1=Culvert** (Passes 0.22 cfs of 10.98 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.22 cfs @ 6.31 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.13 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-37B: Basin #37B



Stage-Discharge for Pond B-37B: Basin #37B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.01
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.01
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.01
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.01
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.02
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.02
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.02
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.03
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.03
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.03
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.04
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.04
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.05
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.05
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.05
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.05
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.06
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.06
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.06
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.06
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.06
193.52	0.00	194.04	0.00	194.56	0.00	195.08	0.07
193.53	0.00	194.05	0.00	194.57	0.00	195.09	0.07
193.54	0.00	194.06	0.00	194.58	0.00	195.10	0.07
193.55	0.00	194.07	0.00	194.59	0.00	195.11	0.07
193.56	0.00	194.08	0.00	194.60	0.00	195.12	0.07
193.57	0.00	194.09	0.00	194.61	0.00	195.13	0.08
193.58	0.00	194.10	0.00	194.62	0.00	195.14	0.08
193.59	0.00	194.11	0.00	194.63	0.00	195.15	0.08
193.60	0.00	194.12	0.00	194.64	0.00	195.16	0.08
193.61	0.00	194.13	0.00	194.65	0.00	195.17	0.08
193.62	0.00	194.14	0.00	194.66	0.00	195.18	0.08
193.63	0.00	194.15	0.00	194.67	0.00	195.19	0.09
193.64	0.00	194.16	0.00	194.68	0.00	195.20	0.09
193.65	0.00	194.17	0.00	194.69	0.00	195.21	0.09
193.66	0.00	194.18	0.00	194.70	0.00	195.22	0.09
193.67	0.00	194.19	0.00	194.71	0.00	195.23	0.09
193.68	0.00	194.20	0.00	194.72	0.00	195.24	0.09
193.69	0.00	194.21	0.00	194.73	0.00	195.25	0.10
193.70	0.00	194.22	0.00	194.74	0.00	195.26	0.10
193.71	0.00	194.23	0.00	194.75	0.00	195.27	0.10
193.72	0.00	194.24	0.00	194.76	0.00	195.28	0.10
193.73	0.00	194.25	0.00	194.77	0.00	195.29	0.10
193.74	0.00	194.26	0.00	194.78	0.00	195.30	0.10
193.75	0.00	194.27	0.00	194.79	0.00	195.31	0.10
193.76	0.00	194.28	0.00	194.80	0.00	195.32	0.10
193.77	0.00	194.29	0.00	194.81	0.00	195.33	0.11
193.78	0.00	194.30	0.00	194.82	0.00	195.34	0.11
193.79	0.00	194.31	0.00	194.83	0.00	195.35	0.11
193.80	0.00	194.32	0.00	194.84	0.00	195.36	0.11
193.81	0.00	194.33	0.00	194.85	0.00	195.37	0.11

Stage-Discharge for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.38	0.11	195.90	0.16	196.42	0.20	196.94	2.46
195.39	0.11	195.91	0.16	196.43	0.20	196.95	2.56
195.40	0.11	195.92	0.16	196.44	0.20	196.96	2.67
195.41	0.12	195.93	0.17	196.45	0.20	196.97	2.78
195.42	0.12	195.94	0.17	196.46	0.20	196.98	2.90
195.43	0.12	195.95	0.17	196.47	0.20	196.99	3.01
195.44	0.12	195.96	0.17	196.48	0.21	197.00	3.13
195.45	0.12	195.97	0.17	196.49	0.21	197.01	3.24
195.46	0.12	195.98	0.17	196.50	0.21	197.02	3.36
195.47	0.12	195.99	0.17	196.51	0.21	197.03	3.48
195.48	0.12	196.00	0.17	196.52	0.21	197.04	3.60
195.49	0.12	196.01	0.17	196.53	0.21	197.05	3.73
195.50	0.13	196.02	0.17	196.54	0.21	197.06	3.85
195.51	0.13	196.03	0.17	196.55	0.21	197.07	3.97
195.52	0.13	196.04	0.17	196.56	0.21	197.08	4.10
195.53	0.13	196.05	0.17	196.57	0.21	197.09	4.23
195.54	0.13	196.06	0.18	196.58	0.21	197.10	4.36
195.55	0.13	196.07	0.18	196.59	0.21	197.11	4.49
195.56	0.13	196.08	0.18	196.60	0.21	197.12	4.62
195.57	0.13	196.09	0.18	196.61	0.21	197.13	4.75
195.58	0.13	196.10	0.18	196.62	0.21	197.14	4.89
195.59	0.13	196.11	0.18	196.63	0.22	197.15	5.02
195.60	0.14	196.12	0.18	196.64	0.23	197.16	5.16
195.61	0.14	196.13	0.18	196.65	0.25	197.17	5.30
195.62	0.14	196.14	0.18	196.66	0.28	197.18	5.44
195.63	0.14	196.15	0.18	196.67	0.32	197.19	5.58
195.64	0.14	196.16	0.18	196.68	0.36	197.20	5.72
195.65	0.14	196.17	0.18	196.69	0.41	197.21	5.86
195.66	0.14	196.18	0.18	196.70	0.46	197.22	6.00
195.67	0.14	196.19	0.19	196.71	0.51	197.23	6.15
195.68	0.14	196.20	0.19	196.72	0.57	197.24	6.29
195.69	0.14	196.21	0.19	196.73	0.63	197.25	6.44
195.70	0.15	196.22	0.19	196.74	0.70	197.26	6.59
195.71	0.15	196.23	0.19	196.75	0.76	197.27	6.73
195.72	0.15	196.24	0.19	196.76	0.83	197.28	6.88
195.73	0.15	196.25	0.19	196.77	0.90	197.29	7.03
195.74	0.15	196.26	0.19	196.78	0.98	197.30	7.19
195.75	0.15	196.27	0.19	196.79	1.06	197.31	7.34
195.76	0.15	196.28	0.19	196.80	1.13	197.32	7.49
195.77	0.15	196.29	0.19	196.81	1.22	197.33	7.65
195.78	0.15	196.30	0.19	196.82	1.30	197.34	7.80
195.79	0.15	196.31	0.19	196.83	1.39	197.35	7.96
195.80	0.15	196.32	0.19	196.84	1.47	197.36	8.12
195.81	0.16	196.33	0.20	196.85	1.56	197.37	8.28
195.82	0.16	196.34	0.20	196.86	1.66	197.38	8.43
195.83	0.16	196.35	0.20	196.87	1.75	197.39	8.60
195.84	0.16	196.36	0.20	196.88	1.84	197.40	8.76
195.85	0.16	196.37	0.20	196.89	1.94	197.41	8.92
195.86	0.16	196.38	0.20	196.90	2.04	197.42	9.08
195.87	0.16	196.39	0.20	196.91	2.14	197.43	9.25
195.88	0.16	196.40	0.20	196.92	2.25	197.44	9.41
195.89	0.16	196.41	0.20	196.93	2.35	197.45	9.58

Stage-Discharge for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Primary (cfs)
197.46	9.74
197.47	9.91
197.48	10.08
197.49	10.25
197.50	10.42
197.51	10.59
197.52	10.76
197.53	10.93
197.54	11.10
197.55	11.28
197.56	11.45
197.57	11.63
197.58	11.80
197.59	11.98
197.60	12.16
197.61	12.31
197.62	12.32
197.63	12.33
197.64	12.35
197.65	12.36
197.66	12.37
197.67	12.38
197.68	12.40
197.69	12.41
197.70	12.42
197.71	12.44
197.72	12.45
197.73	12.46
197.74	12.47
197.75	12.49
197.76	12.50
197.77	12.51
197.78	12.52
197.79	12.54
197.80	12.55
197.81	12.56
197.82	12.57
197.83	12.59
197.84	12.60
197.85	12.61
197.86	12.63
197.87	12.64
197.88	12.65
197.89	12.66
197.90	12.68
197.91	12.69
197.92	12.70
197.93	12.71
197.94	12.73
197.95	12.74
197.96	12.87
197.97	13.09
197.98	13.38
197.99	13.73
198.00	**14.11**

Stage-Area-Storage for Pond B-37B: Basin #37B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.30	0	0	193.82	2,755	716
193.31	53	0	193.83	2,808	744
193.32	106	1	193.84	2,861	773
193.33	159	2	193.85	2,914	801
193.34	212	4	193.86	2,967	831
193.35	265	7	193.87	3,020	861
193.36	318	10	193.88	3,073	891
193.37	371	13	193.89	3,126	922
193.38	424	17	193.90	3,179	954
193.39	477	21	193.91	3,232	986
193.40	530	26	193.92	3,285	1,018
193.41	583	32	193.93	3,338	1,052
193.42	636	38	193.94	3,391	1,085
193.43	689	45	193.95	3,444	1,119
193.44	742	52	193.96	3,497	1,154
193.45	795	60	193.97	3,550	1,189
193.46	848	68	193.98	3,603	1,225
193.47	901	77	193.99	3,656	1,261
193.48	954	86	194.00	3,709	1,298
193.49	1,007	96	194.01	3,719	1,335
193.50	1,060	106	194.02	3,729	1,373
193.51	1,113	117	194.03	3,739	1,410
193.52	1,166	128	194.04	3,750	1,447
193.53	1,219	140	194.05	3,760	1,485
193.54	1,272	153	194.06	3,770	1,523
193.55	1,325	166	194.07	3,780	1,560
193.56	1,378	179	194.08	3,790	1,598
193.57	1,431	193	194.09	3,800	1,636
193.58	1,484	208	194.10	3,811	1,674
193.59	1,537	223	194.11	3,821	1,712
193.60	1,590	238	194.12	3,831	1,751
193.61	1,643	255	194.13	3,841	1,789
193.62	1,696	271	194.14	3,851	1,827
193.63	1,749	289	194.15	3,861	1,866
193.64	1,802	306	194.16	3,871	1,905
193.65	1,855	325	194.17	3,882	1,943
193.66	1,907	343	194.18	3,892	1,982
193.67	1,960	363	194.19	3,902	2,021
193.68	2,013	383	194.20	3,912	2,060
193.69	2,066	403	194.21	3,922	2,099
193.70	2,119	424	194.22	3,932	2,139
193.71	2,172	445	194.23	3,942	2,178
193.72	2,225	467	194.24	3,953	2,218
193.73	2,278	490	194.25	3,963	2,257
193.74	2,331	513	194.26	3,973	2,297
193.75	2,384	536	194.27	3,983	2,337
193.76	2,437	561	194.28	3,993	2,376
193.77	2,490	585	194.29	4,003	2,416
193.78	2,543	610	194.30	4,014	2,457
193.79	2,596	636	194.31	4,024	2,497
193.80	2,649	662	194.32	4,034	2,537
193.81	2,702	689	194.33	4,044	2,577

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.34	4,054	2,618
194.35	4,064	2,658
194.36	4,074	2,699
194.37	4,085	2,740
194.38	4,095	2,781
194.39	4,105	2,822
194.40	4,115	2,863
194.41	4,125	2,904
194.42	4,135	2,945
194.43	4,145	2,987
194.44	4,156	3,028
194.45	4,166	3,070
194.46	4,176	3,112
194.47	4,186	3,153
194.48	4,196	3,195
194.49	4,206	3,237
194.50	4,217	3,280
194.51	4,227	3,322
194.52	4,237	3,364
194.53	4,247	3,406
194.54	4,257	3,449
194.55	4,267	3,492
194.56	4,277	3,534
194.57	4,288	3,577
194.58	4,298	3,620
194.59	4,308	3,663
194.60	4,318	3,706
194.61	4,328	3,749
194.62	4,338	3,793
194.63	4,348	3,836
194.64	4,359	3,880
194.65	4,369	3,923
194.66	4,379	3,967
194.67	4,389	4,011
194.68	4,399	4,055
194.69	4,409	4,099
194.70	4,420	4,143
194.71	4,430	4,187
194.72	4,440	4,232
194.73	4,450	4,276
194.74	4,460	4,321
194.75	4,470	4,365
194.76	4,480	4,410
194.77	4,491	4,455
194.78	4,501	4,500
194.79	4,511	4,545
194.80	4,521	4,590
194.81	4,531	4,635
194.82	4,541	4,681
194.83	4,551	4,726
194.84	4,562	4,772
194.85	4,572	4,817
194.86	4,582	4,863
194.87	4,592	4,909
194.88	4,602	4,955
194.89	4,612	5,001
194.90	4,623	5,047
194.91	4,633	5,094
194.92	4,643	5,140
194.93	4,653	5,186
194.94	4,663	5,233
194.95	4,673	5,280
194.96	4,683	5,327
194.97	4,694	5,373
194.98	4,704	5,420
194.99	4,714	5,467
195.00	4,724	5,515
195.01	4,735	5,562
195.02	4,745	5,609
195.03	4,756	5,657
195.04	4,767	5,704
195.05	4,778	5,752
195.06	4,788	5,800
195.07	4,799	5,848
195.08	4,810	5,896
195.09	4,820	5,944
195.10	4,831	5,992
195.11	4,842	6,041
195.12	4,853	6,089
195.13	4,863	6,138
195.14	4,874	6,187
195.15	4,885	6,235
195.16	4,896	6,284
195.17	4,906	6,333
195.18	4,917	6,382
195.19	4,928	6,432
195.20	4,938	6,481
195.21	4,949	6,530
195.22	4,960	6,580
195.23	4,971	6,630
195.24	4,981	6,679
195.25	4,992	6,729
195.26	5,003	6,779
195.27	5,013	6,829
195.28	5,024	6,879
195.29	5,035	6,930
195.30	5,046	6,980
195.31	5,056	7,031
195.32	5,067	7,081
195.33	5,078	7,132
195.34	5,088	7,183
195.35	5,099	7,234
195.36	5,110	7,285
195.37	5,121	7,336

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.38	5,131	7,387	195.90	5,689	10,200
195.39	5,142	7,439	195.91	5,700	10,257
195.40	5,153	7,490	195.92	5,710	10,314
195.41	5,164	7,542	195.93	5,721	10,372
195.42	5,174	7,593	195.94	5,732	10,429
195.43	5,185	7,645	195.95	5,742	10,486
195.44	5,196	7,697	195.96	5,753	10,544
195.45	5,206	7,749	195.97	5,764	10,601
195.46	5,217	7,801	195.98	5,775	10,659
195.47	5,228	7,853	195.99	5,785	10,717
195.48	5,239	7,906	196.00	5,796	10,775
195.49	5,249	7,958	196.01	5,807	10,833
195.50	5,260	8,011	196.02	5,819	10,891
195.51	5,271	8,063	196.03	5,830	10,949
195.52	5,281	8,116	196.04	5,841	11,007
195.53	5,292	8,169	196.05	5,852	11,066
195.54	5,303	8,222	196.06	5,864	11,124
195.55	5,314	8,275	196.07	5,875	11,183
195.56	5,324	8,328	196.08	5,886	11,242
195.57	5,335	8,381	196.09	5,898	11,301
195.58	5,346	8,435	196.10	5,909	11,360
195.59	5,356	8,488	196.11	5,920	11,419
195.60	5,367	8,542	196.12	5,931	11,478
195.61	5,378	8,596	196.13	5,943	11,538
195.62	5,389	8,650	196.14	5,954	11,597
195.63	5,399	8,704	196.15	5,965	11,657
195.64	5,410	8,758	196.16	5,976	11,716
195.65	5,421	8,812	196.17	5,988	11,776
195.66	5,432	8,866	196.18	5,999	11,836
195.67	5,442	8,920	196.19	6,010	11,896
195.68	5,453	8,975	196.20	6,022	11,956
195.69	5,464	9,029	196.21	6,033	12,017
195.70	5,474	9,084	196.22	6,044	12,077
195.71	5,485	9,139	196.23	6,055	12,138
195.72	5,496	9,194	196.24	6,067	12,198
195.73	5,507	9,249	196.25	6,078	12,259
195.74	5,517	9,304	196.26	6,089	12,320
195.75	5,528	9,359	196.27	6,101	12,381
195.76	5,539	9,414	196.28	6,112	12,442
195.77	5,549	9,470	196.29	6,123	12,503
195.78	5,560	9,525	196.30	6,134	12,564
195.79	5,571	9,581	196.31	6,146	12,626
195.80	5,582	9,637	196.32	6,157	12,687
195.81	5,592	9,693	196.33	6,168	12,749
195.82	5,603	9,749	196.34	6,180	12,810
195.83	5,614	9,805	196.35	6,191	12,872
195.84	5,624	9,861	196.36	6,202	12,934
195.85	5,635	9,917	196.37	6,213	12,996
195.86	5,646	9,974	196.38	6,225	13,059
195.87	5,657	10,030	196.39	6,236	13,121
195.88	5,667	10,087	196.40	6,247	13,183
195.89	5,678	10,144	196.41	6,258	13,246

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.42	6,270	13,308	196.94	6,856	16,721
196.43	6,281	13,371	196.95	6,868	16,790
196.44	6,292	13,434	196.96	6,879	16,859
196.45	6,304	13,497	196.97	6,890	16,927
196.46	6,315	13,560	196.98	6,901	16,996
196.47	6,326	13,623	196.99	6,913	17,065
196.48	6,337	13,687	197.00	6,924	17,135
196.49	6,349	13,750	197.01	6,936	17,204
196.50	6,360	13,814	197.02	6,948	17,273
196.51	6,371	13,877	197.03	6,960	17,343
196.52	6,383	13,941	197.04	6,971	17,413
196.53	6,394	14,005	197.05	6,983	17,482
196.54	6,405	14,069	197.06	6,995	17,552
196.55	6,416	14,133	197.07	7,007	17,622
196.56	6,428	14,197	197.08	7,019	17,692
196.57	6,439	14,262	197.09	7,031	17,763
196.58	6,450	14,326	197.10	7,042	17,833
196.59	6,462	14,391	197.11	7,054	17,903
196.60	6,473	14,455	197.12	7,066	17,974
196.61	6,484	14,520	197.13	7,078	18,045
196.62	6,495	14,585	197.14	7,090	18,116
196.63	6,507	14,650	197.15	7,102	18,187
196.64	6,518	14,715	197.16	7,113	18,258
196.65	6,529	14,780	197.17	7,125	18,329
196.66	6,540	14,846	197.18	7,137	18,400
196.67	6,552	14,911	197.19	7,149	18,472
196.68	6,563	14,977	197.20	7,161	18,543
196.69	6,574	15,042	197.21	7,173	18,615
196.70	6,586	15,108	197.22	7,184	18,687
196.71	6,597	15,174	197.23	7,196	18,758
196.72	6,608	15,240	197.24	7,208	18,831
196.73	6,619	15,306	197.25	7,220	18,903
196.74	6,631	15,373	197.26	7,232	18,975
196.75	6,642	15,439	197.27	7,244	19,047
196.76	6,653	15,505	197.28	7,256	19,120
196.77	6,665	15,572	197.29	7,267	19,192
196.78	6,676	15,639	197.30	7,279	19,265
196.79	6,687	15,705	197.31	7,291	19,338
196.80	6,698	15,772	197.32	7,303	19,411
196.81	6,710	15,839	197.33	7,315	19,484
196.82	6,721	15,907	197.34	7,327	19,557
196.83	6,732	15,974	197.35	7,338	19,631
196.84	6,744	16,041	197.36	7,350	19,704
196.85	6,755	16,109	197.37	7,362	19,778
196.86	6,766	16,176	197.38	7,374	19,851
196.87	6,777	16,244	197.39	7,386	19,925
196.88	6,789	16,312	197.40	7,398	19,999
196.89	6,800	16,380	197.41	7,409	20,073
196.90	6,811	16,448	197.42	7,421	20,147
196.91	6,822	16,516	197.43	7,433	20,221
196.92	6,834	16,584	197.44	7,445	20,296
196.93	6,845	16,653	197.45	7,457	20,370

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.46	7,469	20,445
197.47	7,480	20,520
197.48	7,492	20,595
197.49	7,504	20,670
197.50	7,516	20,745
197.51	7,528	20,820
197.52	7,540	20,895
197.53	7,552	20,971
197.54	7,563	21,046
197.55	7,575	21,122
197.56	7,587	21,198
197.57	7,599	21,274
197.58	7,611	21,350
197.59	7,623	21,426
197.60	7,634	21,502
197.61	7,646	21,579
197.62	7,658	21,655
197.63	7,670	21,732
197.64	7,682	21,808
197.65	7,694	21,885
197.66	7,705	21,962
197.67	7,717	22,039
197.68	7,729	22,117
197.69	7,741	22,194
197.70	7,753	22,272
197.71	7,765	22,349
197.72	7,776	22,427
197.73	7,788	22,505
197.74	7,800	22,583
197.75	7,812	22,661
197.76	7,824	22,739
197.77	7,836	22,817
197.78	7,848	22,896
197.79	7,859	22,974
197.80	7,871	23,053
197.81	7,883	23,132
197.82	7,895	23,210
197.83	7,907	23,289
197.84	7,919	23,369
197.85	7,930	23,448
197.86	7,942	23,527
197.87	7,954	23,607
197.88	7,966	23,686
197.89	7,978	23,766
197.90	7,990	23,846
197.91	8,001	23,926
197.92	8,013	24,006
197.93	8,025	24,086
197.94	8,037	24,166
197.95	8,049	24,247
197.96	8,061	24,327
197.97	8,072	24,408
197.98	8,084	24,489
197.99	8,096	24,570
198.00	**8,108**	**24,651**

Summary for Pond B-38: Basin #38

Inflow Area = 2.114 ac, 34.96% Impervious, Inflow Depth = 2.23" for Future 2 yr event
Inflow = 4.81 cfs @ 12.17 hrs, Volume= 0.393 af
Outflow = 0.19 cfs @ 15.07 hrs, Volume= 0.305 af, Atten= 96%, Lag= 173.5 min
Primary = 0.19 cfs @ 15.07 hrs, Volume= 0.305 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 206.69' @ 15.07 hrs Surf.Area= 6,609 sf Storage= 11,676 cf

Plug-Flow detention time= 673.5 min calculated for 0.304 af (77% of inflow)
Center-of-Mass det. time= 584.6 min (1,385.8 - 801.1)

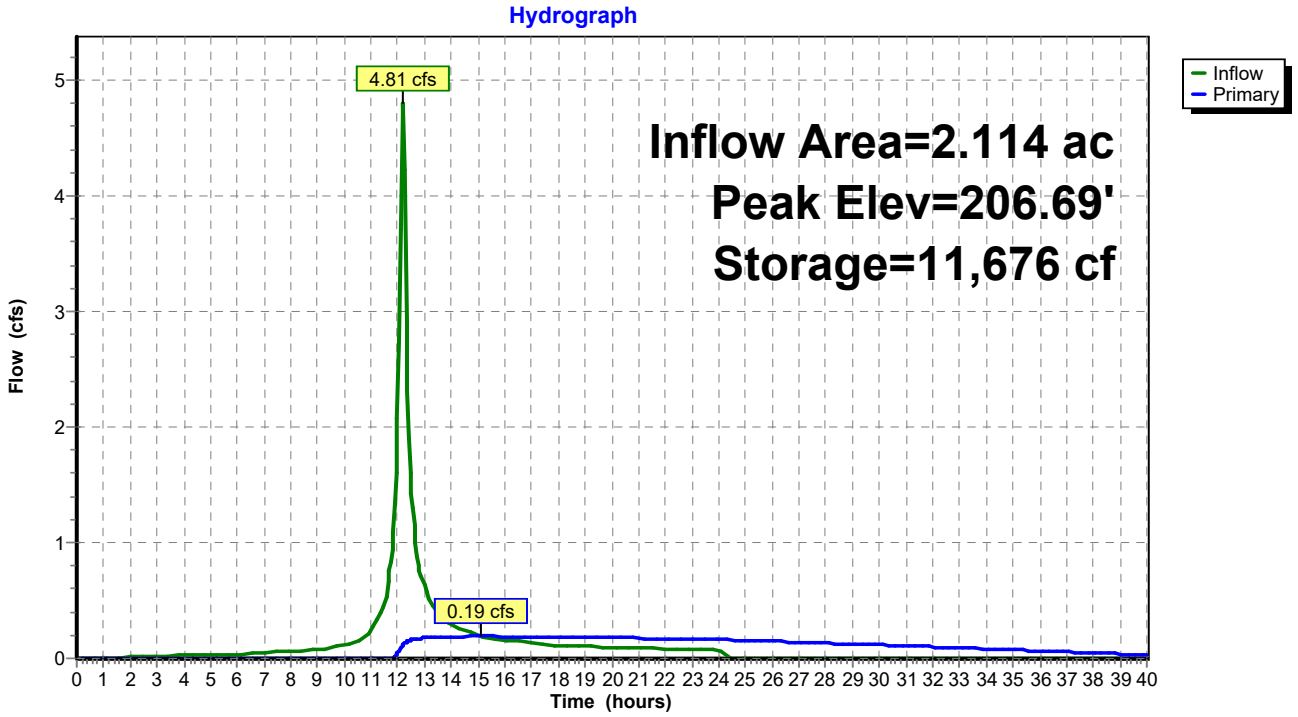
Volume	Invert	Avail.Storage	Storage Description
#1	204.30'	29,525 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
204.30	0	0	0
205.00	5,096	1,784	1,784
206.00	5,966	5,531	7,315
207.00	6,893	6,430	13,744
208.00	7,876	7,385	21,129
209.00	8,916	8,396	29,525

Device	Routing	Invert	Outlet Devices
#1	Primary	204.30'	**18.0" Round Culvert** L= 33.0' Ke= 0.500 Inlet / Outlet Invert= 204.30' / 204.13' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	205.26'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	206.69'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	208.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.19 cfs @ 15.07 hrs HW=206.69' (Free Discharge)
- **1=Culvert** (Passes 0.19 cfs of 10.08 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.55 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.20 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-38: Basin #38



Stage-Discharge for Pond B-38: Basin #38

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
204.30	0.00	204.82	0.00	205.34	0.01	205.86	0.12
204.31	0.00	204.83	0.00	205.35	0.01	205.87	0.12
204.32	0.00	204.84	0.00	205.36	0.02	205.88	0.12
204.33	0.00	204.85	0.00	205.37	0.02	205.89	0.12
204.34	0.00	204.86	0.00	205.38	0.02	205.90	0.12
204.35	0.00	204.87	0.00	205.39	0.03	205.91	0.12
204.36	0.00	204.88	0.00	205.40	0.03	205.92	0.12
204.37	0.00	204.89	0.00	205.41	0.03	205.93	0.12
204.38	0.00	204.90	0.00	205.42	0.04	205.94	0.12
204.39	0.00	204.91	0.00	205.43	0.04	205.95	0.13
204.40	0.00	204.92	0.00	205.44	0.05	205.96	0.13
204.41	0.00	204.93	0.00	205.45	0.05	205.97	0.13
204.42	0.00	204.94	0.00	205.46	0.05	205.98	0.13
204.43	0.00	204.95	0.00	205.47	0.05	205.99	0.13
204.44	0.00	204.96	0.00	205.48	0.06	206.00	0.13
204.45	0.00	204.97	0.00	205.49	0.06	206.01	0.13
204.46	0.00	204.98	0.00	205.50	0.06	206.02	0.13
204.47	0.00	204.99	0.00	205.51	0.06	206.03	0.13
204.48	0.00	205.00	0.00	205.52	0.06	206.04	0.13
204.49	0.00	205.01	0.00	205.53	0.07	206.05	0.14
204.50	0.00	205.02	0.00	205.54	0.07	206.06	0.14
204.51	0.00	205.03	0.00	205.55	0.07	206.07	0.14
204.52	0.00	205.04	0.00	205.56	0.07	206.08	0.14
204.53	0.00	205.05	0.00	205.57	0.07	206.09	0.14
204.54	0.00	205.06	0.00	205.58	0.08	206.10	0.14
204.55	0.00	205.07	0.00	205.59	0.08	206.11	0.14
204.56	0.00	205.08	0.00	205.60	0.08	206.12	0.14
204.57	0.00	205.09	0.00	205.61	0.08	206.13	0.14
204.58	0.00	205.10	0.00	205.62	0.08	206.14	0.14
204.59	0.00	205.11	0.00	205.63	0.08	206.15	0.15
204.60	0.00	205.12	0.00	205.64	0.09	206.16	0.15
204.61	0.00	205.13	0.00	205.65	0.09	206.17	0.15
204.62	0.00	205.14	0.00	205.66	0.09	206.18	0.15
204.63	0.00	205.15	0.00	205.67	0.09	206.19	0.15
204.64	0.00	205.16	0.00	205.68	0.09	206.20	0.15
204.65	0.00	205.17	0.00	205.69	0.09	206.21	0.15
204.66	0.00	205.18	0.00	205.70	0.10	206.22	0.15
204.67	0.00	205.19	0.00	205.71	0.10	206.23	0.15
204.68	0.00	205.20	0.00	205.72	0.10	206.24	0.15
204.69	0.00	205.21	0.00	205.73	0.10	206.25	0.15
204.70	0.00	205.22	0.00	205.74	0.10	206.26	0.16
204.71	0.00	205.23	0.00	205.75	0.10	206.27	0.16
204.72	0.00	205.24	0.00	205.76	0.10	206.28	0.16
204.73	0.00	205.25	0.00	205.77	0.10	206.29	0.16
204.74	0.00	205.26	0.00	205.78	0.11	206.30	0.16
204.75	0.00	205.27	0.00	205.79	0.11	206.31	0.16
204.76	0.00	205.28	0.00	205.80	0.11	206.32	0.16
204.77	0.00	205.29	0.00	205.81	0.11	206.33	0.16
204.78	0.00	205.30	0.00	205.82	0.11	206.34	0.16
204.79	0.00	205.31	0.00	205.83	0.11	206.35	0.16
204.80	0.00	205.32	0.01	205.84	0.11	206.36	0.16
204.81	0.00	205.33	0.01	205.85	0.11	206.37	0.16

Stage-Discharge for Pond B-38: Basin #38 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
206.38	0.17	206.90	1.45	207.42	8.10	207.94	14.46
206.39	0.17	206.91	1.54	207.43	8.25	207.95	14.49
206.40	0.17	206.92	1.63	207.44	8.41	207.96	14.51
206.41	0.17	206.93	1.72	207.45	8.57	207.97	14.54
206.42	0.17	206.94	1.82	207.46	8.74	207.98	14.56
206.43	0.17	206.95	1.92	207.47	8.90	207.99	14.59
206.44	0.17	206.96	2.02	207.48	9.06	208.00	14.61
206.45	0.17	206.97	2.12	207.49	9.22	208.01	14.64
206.46	0.17	206.98	2.22	207.50	9.39	208.02	14.66
206.47	0.17	206.99	2.33	207.51	9.55	208.03	14.69
206.48	0.17	207.00	2.43	207.52	9.72	208.04	14.71
206.49	0.17	207.01	2.54	207.53	9.89	208.05	14.74
206.50	0.17	207.02	2.65	207.54	10.06	208.06	14.76
206.51	0.18	207.03	2.76	207.55	10.23	208.07	14.79
206.52	0.18	207.04	2.87	207.56	10.40	208.08	14.81
206.53	0.18	207.05	2.99	207.57	10.57	208.09	14.84
206.54	0.18	207.06	3.10	207.58	10.74	208.10	14.86
206.55	0.18	207.07	3.22	207.59	10.91	208.11	14.88
206.56	0.18	207.08	3.34	207.60	11.08	208.12	14.91
206.57	0.18	207.09	3.46	207.61	11.26	208.13	14.93
206.58	0.18	207.10	3.58	207.62	11.43	208.14	14.96
206.59	0.18	207.11	3.70	207.63	11.61	208.15	14.98
206.60	0.18	207.12	3.83	207.64	11.78	208.16	15.01
206.61	0.18	207.13	3.95	207.65	11.96	208.17	15.03
206.62	0.18	207.14	4.08	207.66	12.14	208.18	15.05
206.63	0.18	207.15	4.21	207.67	12.32	208.19	15.08
206.64	0.19	207.16	4.34	207.68	12.50	208.20	15.10
206.65	0.19	207.17	4.47	207.69	12.68	208.21	15.13
206.66	0.19	207.18	4.60	207.70	12.86	208.22	15.15
206.67	0.19	207.19	4.73	207.71	13.04	208.23	15.17
206.68	0.19	207.20	4.86	207.72	13.22	208.24	15.20
206.69	0.19	207.21	5.00	207.73	13.40	208.25	15.22
206.70	0.20	207.22	5.14	207.74	13.59	208.26	15.36
206.71	0.23	207.23	5.27	207.75	13.77	208.27	15.60
206.72	0.26	207.24	5.41	207.76	13.96	208.28	15.90
206.73	0.30	207.25	5.55	207.77	14.03	208.29	16.25
206.74	0.34	207.26	5.69	207.78	14.06	208.30	16.65
206.75	0.38	207.27	5.84	207.79	14.08	208.31	17.09
206.76	0.44	207.28	5.98	207.80	14.11	208.32	17.56
206.77	0.49	207.29	6.12	207.81	14.14	208.33	18.07
206.78	0.55	207.30	6.27	207.82	14.16	208.34	18.61
206.79	0.61	207.31	6.42	207.83	14.19	208.35	19.17
206.80	0.67	207.32	6.56	207.84	14.21	208.36	19.77
206.81	0.74	207.33	6.71	207.85	14.24	208.37	20.40
206.82	0.81	207.34	6.86	207.86	14.26	208.38	21.05
206.83	0.88	207.35	7.01	207.87	14.29	208.39	21.72
206.84	0.95	207.36	7.16	207.88	14.31	208.40	22.42
206.85	1.03	207.37	7.32	207.89	14.34	208.41	23.14
206.86	1.11	207.38	7.47	207.90	14.36	208.42	23.89
206.87	1.19	207.39	7.63	207.91	14.39	208.43	24.66
206.88	1.28	207.40	7.78	207.92	14.41	208.44	25.44
206.89	1.36	207.41	7.94	207.93	14.44	208.45	26.25

Stage-Discharge for Pond B-38: Basin #38 (continued)

Elevation (feet)	Primary (cfs)
208.46	27.12
208.47	28.02
208.48	28.94
208.49	29.89
208.50	30.86
208.51	31.85
208.52	32.88
208.53	33.92
208.54	34.99
208.55	36.09
208.56	37.21
208.57	38.35
208.58	39.52
208.59	40.71
208.60	41.93
208.61	43.17
208.62	44.43
208.63	45.72
208.64	47.04
208.65	48.37
208.66	49.76
208.67	51.18
208.68	52.62
208.69	54.08
208.70	55.58
208.71	57.09
208.72	58.64
208.73	60.21
208.74	61.81
208.75	63.43
208.76	65.08
208.77	66.76
208.78	68.46
208.79	70.19
208.80	71.95
208.81	73.73
208.82	75.54
208.83	77.38
208.84	79.24
208.85	81.14
208.86	82.78
208.87	84.45
208.88	86.12
208.89	87.81
208.90	89.51
208.91	91.23
208.92	92.96
208.93	94.70
208.94	96.45
208.95	98.22
208.96	100.00
208.97	101.79
208.98	103.60
208.99	105.42
209.00	**107.25**

Stage-Area-Storage for Pond B-38: Basin #38

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.30	0	0	204.82	3,786	984
204.31	73	0	204.83	3,858	1,022
204.32	146	1	204.84	3,931	1,061
204.33	218	3	204.85	4,004	1,101
204.34	291	6	204.86	4,077	1,142
204.35	364	9	204.87	4,150	1,183
204.36	437	13	204.88	4,222	1,224
204.37	510	18	204.89	4,295	1,267
204.38	582	23	204.90	4,368	1,310
204.39	655	29	204.91	4,441	1,354
204.40	728	36	204.92	4,514	1,399
204.41	801	44	204.93	4,586	1,445
204.42	874	52	204.94	4,659	1,491
204.43	946	62	204.95	4,732	1,538
204.44	1,019	71	204.96	4,805	1,586
204.45	1,092	82	204.97	4,878	1,634
204.46	1,165	93	204.98	4,950	1,683
204.47	1,238	105	204.99	5,023	1,733
204.48	1,310	118	205.00	5,096	1,784
204.49	1,383	131	205.01	5,105	1,835
204.50	1,456	146	205.02	5,113	1,886
204.51	1,529	161	205.03	5,122	1,937
204.52	1,602	176	205.04	5,131	1,988
204.53	1,674	193	205.05	5,140	2,039
204.54	1,747	210	205.06	5,148	2,091
204.55	1,820	228	205.07	5,157	2,142
204.56	1,893	246	205.08	5,166	2,194
204.57	1,966	265	205.09	5,174	2,246
204.58	2,038	285	205.10	5,183	2,298
204.59	2,111	306	205.11	5,192	2,349
204.60	2,184	328	205.12	5,200	2,401
204.61	2,257	350	205.13	5,209	2,453
204.62	2,330	373	205.14	5,218	2,506
204.63	2,402	396	205.15	5,227	2,558
204.64	2,475	421	205.16	5,235	2,610
204.65	2,548	446	205.17	5,244	2,662
204.66	2,621	472	205.18	5,253	2,715
204.67	2,694	498	205.19	5,261	2,768
204.68	2,766	526	205.20	5,270	2,820
204.69	2,839	554	205.21	5,279	2,873
204.70	2,912	582	205.22	5,287	2,926
204.71	2,985	612	205.23	5,296	2,979
204.72	3,058	642	205.24	5,305	3,032
204.73	3,130	673	205.25	5,314	3,085
204.74	3,203	705	205.26	5,322	3,138
204.75	3,276	737	205.27	5,331	3,191
204.76	3,349	770	205.28	5,340	3,245
204.77	3,422	804	205.29	5,348	3,298
204.78	3,494	839	205.30	5,357	3,352
204.79	3,567	874	205.31	5,366	3,405
204.80	3,640	910	205.32	5,374	3,459
204.81	3,713	947	205.33	5,383	3,513

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.34	5,392	3,567	205.86	5,844	6,488
205.35	5,401	3,620	205.87	5,853	6,546
205.36	5,409	3,675	205.88	5,862	6,605
205.37	5,418	3,729	205.89	5,870	6,664
205.38	5,427	3,783	205.90	5,879	6,722
205.39	5,435	3,837	205.91	5,888	6,781
205.40	5,444	3,892	205.92	5,896	6,840
205.41	5,453	3,946	205.93	5,905	6,899
205.42	5,461	4,001	205.94	5,914	6,958
205.43	5,470	4,055	205.95	5,923	7,017
205.44	5,479	4,110	205.96	5,931	7,077
205.45	5,488	4,165	205.97	5,940	7,136
205.46	5,496	4,220	205.98	5,949	7,195
205.47	5,505	4,275	205.99	5,957	7,255
205.48	5,514	4,330	206.00	5,966	7,315
205.49	5,522	4,385	206.01	5,975	7,374
205.50	5,531	4,440	206.02	5,985	7,434
205.51	5,540	4,496	206.03	5,994	7,494
205.52	5,548	4,551	206.04	6,003	7,554
205.53	5,557	4,607	206.05	6,012	7,614
205.54	5,566	4,662	206.06	6,022	7,674
205.55	5,575	4,718	206.07	6,031	7,734
205.56	5,583	4,774	206.08	6,040	7,795
205.57	5,592	4,830	206.09	6,049	7,855
205.58	5,601	4,886	206.10	6,059	7,916
205.59	5,609	4,942	206.11	6,068	7,976
205.60	5,618	4,998	206.12	6,077	8,037
205.61	5,627	5,054	206.13	6,087	8,098
205.62	5,635	5,110	206.14	6,096	8,159
205.63	5,644	5,167	206.15	6,105	8,220
205.64	5,653	5,223	206.16	6,114	8,281
205.65	5,662	5,280	206.17	6,124	8,342
205.66	5,670	5,336	206.18	6,133	8,403
205.67	5,679	5,393	206.19	6,142	8,465
205.68	5,688	5,450	206.20	6,151	8,526
205.69	5,696	5,507	206.21	6,161	8,588
205.70	5,705	5,564	206.22	6,170	8,650
205.71	5,714	5,621	206.23	6,179	8,711
205.72	5,722	5,678	206.24	6,188	8,773
205.73	5,731	5,735	206.25	6,198	8,835
205.74	5,740	5,793	206.26	6,207	8,897
205.75	5,749	5,850	206.27	6,216	8,959
205.76	5,757	5,908	206.28	6,226	9,021
205.77	5,766	5,965	206.29	6,235	9,084
205.78	5,775	6,023	206.30	6,244	9,146
205.79	5,783	6,081	206.31	6,253	9,209
205.80	5,792	6,139	206.32	6,263	9,271
205.81	5,801	6,197	206.33	6,272	9,334
205.82	5,809	6,255	206.34	6,281	9,397
205.83	5,818	6,313	206.35	6,290	9,459
205.84	5,827	6,371	206.36	6,300	9,522
205.85	5,836	6,429	206.37	6,309	9,585

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
206.38	6,318	9,649	206.90	6,800	13,059
206.39	6,328	9,712	206.91	6,810	13,127
206.40	6,337	9,775	206.92	6,819	13,196
206.41	6,346	9,839	206.93	6,828	13,264
206.42	6,355	9,902	206.94	6,837	13,332
206.43	6,365	9,966	206.95	6,847	13,401
206.44	6,374	10,029	206.96	6,856	13,469
206.45	6,383	10,093	206.97	6,865	13,538
206.46	6,392	10,157	206.98	6,874	13,606
206.47	6,402	10,221	206.99	6,884	13,675
206.48	6,411	10,285	207.00	6,893	13,744
206.49	6,420	10,349	207.01	6,903	13,813
206.50	6,430	10,413	207.02	6,913	13,882
206.51	6,439	10,478	207.03	6,922	13,951
206.52	6,448	10,542	207.04	6,932	14,021
206.53	6,457	10,607	207.05	6,942	14,090
206.54	6,467	10,671	207.06	6,952	14,159
206.55	6,476	10,736	207.07	6,962	14,229
206.56	6,485	10,801	207.08	6,972	14,299
206.57	6,494	10,866	207.09	6,981	14,368
206.58	6,504	10,931	207.10	6,991	14,438
206.59	6,513	10,996	207.11	7,001	14,508
206.60	6,522	11,061	207.12	7,011	14,578
206.61	6,531	11,126	207.13	7,021	14,648
206.62	6,541	11,192	207.14	7,031	14,719
206.63	6,550	11,257	207.15	7,040	14,789
206.64	6,559	11,323	207.16	7,050	14,860
206.65	6,569	11,388	207.17	7,060	14,930
206.66	6,578	11,454	207.18	7,070	15,001
206.67	6,587	11,520	207.19	7,080	15,072
206.68	6,596	11,586	207.20	7,090	15,142
206.69	6,606	11,652	207.21	7,099	15,213
206.70	6,615	11,718	207.22	7,109	15,284
206.71	6,624	11,784	207.23	7,119	15,355
206.72	6,633	11,850	207.24	7,129	15,427
206.73	6,643	11,917	207.25	7,139	15,498
206.74	6,652	11,983	207.26	7,149	15,570
206.75	6,661	12,050	207.27	7,158	15,641
206.76	6,671	12,116	207.28	7,168	15,713
206.77	6,680	12,183	207.29	7,178	15,784
206.78	6,689	12,250	207.30	7,188	15,856
206.79	6,698	12,317	207.31	7,198	15,928
206.80	6,708	12,384	207.32	7,208	16,000
206.81	6,717	12,451	207.33	7,217	16,072
206.82	6,726	12,518	207.34	7,227	16,145
206.83	6,735	12,586	207.35	7,237	16,217
206.84	6,745	12,653	207.36	7,247	16,289
206.85	6,754	12,721	207.37	7,257	16,362
206.86	6,763	12,788	207.38	7,267	16,434
206.87	6,772	12,856	207.39	7,276	16,507
206.88	6,782	12,924	207.40	7,286	16,580
206.89	6,791	12,991	207.41	7,296	16,653

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
207.42	7,306	16,726	207.94	7,817	20,658
207.43	7,316	16,799	207.95	7,827	20,736
207.44	7,326	16,872	207.96	7,837	20,814
207.45	7,335	16,945	207.97	7,847	20,893
207.46	7,345	17,019	207.98	7,856	20,971
207.47	7,355	17,092	207.99	7,866	21,050
207.48	7,365	17,166	208.00	7,876	21,129
207.49	7,375	17,240	208.01	7,886	21,207
207.50	7,385	17,313	208.02	7,897	21,286
207.51	7,394	17,387	208.03	7,907	21,365
207.52	7,404	17,461	208.04	7,918	21,444
207.53	7,414	17,535	208.05	7,928	21,524
207.54	7,424	17,610	208.06	7,938	21,603
207.55	7,434	17,684	208.07	7,949	21,682
207.56	7,443	17,758	208.08	7,959	21,762
207.57	7,453	17,833	208.09	7,970	21,842
207.58	7,463	17,907	208.10	7,980	21,921
207.59	7,473	17,982	208.11	7,990	22,001
207.60	7,483	18,057	208.12	8,001	22,081
207.61	7,493	18,132	208.13	8,011	22,161
207.62	7,502	18,207	208.14	8,022	22,241
207.63	7,512	18,282	208.15	8,032	22,322
207.64	7,522	18,357	208.16	8,042	22,402
207.65	7,532	18,432	208.17	8,053	22,483
207.66	7,542	18,508	208.18	8,063	22,563
207.67	7,552	18,583	208.19	8,074	22,644
207.68	7,561	18,659	208.20	8,084	22,725
207.69	7,571	18,734	208.21	8,094	22,805
207.70	7,581	18,810	208.22	8,105	22,886
207.71	7,591	18,886	208.23	8,115	22,968
207.72	7,601	18,962	208.24	8,126	23,049
207.73	7,611	19,038	208.25	8,136	23,130
207.74	7,620	19,114	208.26	8,146	23,212
207.75	7,630	19,190	208.27	8,157	23,293
207.76	7,640	19,267	208.28	8,167	23,375
207.77	7,650	19,343	208.29	8,178	23,456
207.78	7,660	19,420	208.30	8,188	23,538
207.79	7,670	19,496	208.31	8,198	23,620
207.80	7,679	19,573	208.32	8,209	23,702
207.81	7,689	19,650	208.33	8,219	23,784
207.82	7,699	19,727	208.34	8,230	23,867
207.83	7,709	19,804	208.35	8,240	23,949
207.84	7,719	19,881	208.36	8,250	24,031
207.85	7,729	19,958	208.37	8,261	24,114
207.86	7,738	20,036	208.38	8,271	24,197
207.87	7,748	20,113	208.39	8,282	24,279
207.88	7,758	20,191	208.40	8,292	24,362
207.89	7,768	20,268	208.41	8,302	24,445
207.90	7,778	20,346	208.42	8,313	24,528
207.91	7,788	20,424	208.43	8,323	24,611
207.92	7,797	20,502	208.44	8,334	24,695
207.93	7,807	20,580	208.45	8,344	24,778

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
208.46	8,354	24,862
208.47	8,365	24,945
208.48	8,375	25,029
208.49	8,386	25,113
208.50	8,396	25,197
208.51	8,406	25,281
208.52	8,417	25,365
208.53	8,427	25,449
208.54	8,438	25,533
208.55	8,448	25,618
208.56	8,458	25,702
208.57	8,469	25,787
208.58	8,479	25,872
208.59	8,490	25,956
208.60	8,500	26,041
208.61	8,510	26,126
208.62	8,521	26,212
208.63	8,531	26,297
208.64	8,542	26,382
208.65	8,552	26,468
208.66	8,562	26,553
208.67	8,573	26,639
208.68	8,583	26,725
208.69	8,594	26,811
208.70	8,604	26,897
208.71	8,614	26,983
208.72	8,625	27,069
208.73	8,635	27,155
208.74	8,646	27,242
208.75	8,656	27,328
208.76	8,666	27,415
208.77	8,677	27,501
208.78	8,687	27,588
208.79	8,698	27,675
208.80	8,708	27,762
208.81	8,718	27,849
208.82	8,729	27,937
208.83	8,739	28,024
208.84	8,750	28,111
208.85	8,760	28,199
208.86	8,770	28,287
208.87	8,781	28,374
208.88	8,791	28,462
208.89	8,802	28,550
208.90	8,812	28,638
208.91	8,822	28,726
208.92	8,833	28,815
208.93	8,843	28,903
208.94	8,854	28,992
208.95	8,864	29,080
208.96	8,874	29,169
208.97	8,885	29,258
208.98	8,895	29,346
208.99	8,906	29,435
209.00	**8,916**	**29,525**

Summary for Pond B-39: Basin #39

Inflow Area = 1.884 ac, 41.56% Impervious, Inflow Depth = 2.37" for Future 2 yr event
Inflow = 4.51 cfs @ 12.17 hrs, Volume= 0.372 af
Outflow = 0.98 cfs @ 12.63 hrs, Volume= 0.298 af, Atten= 78%, Lag= 27.4 min
Primary = 0.98 cfs @ 12.63 hrs, Volume= 0.298 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.04' @ 12.63 hrs Surf.Area= 3,938 sf Storage= 8,009 cf

Plug-Flow detention time= 219.9 min calculated for 0.297 af (80% of inflow)
Center-of-Mass det. time= 137.6 min (932.0 - 794.4)

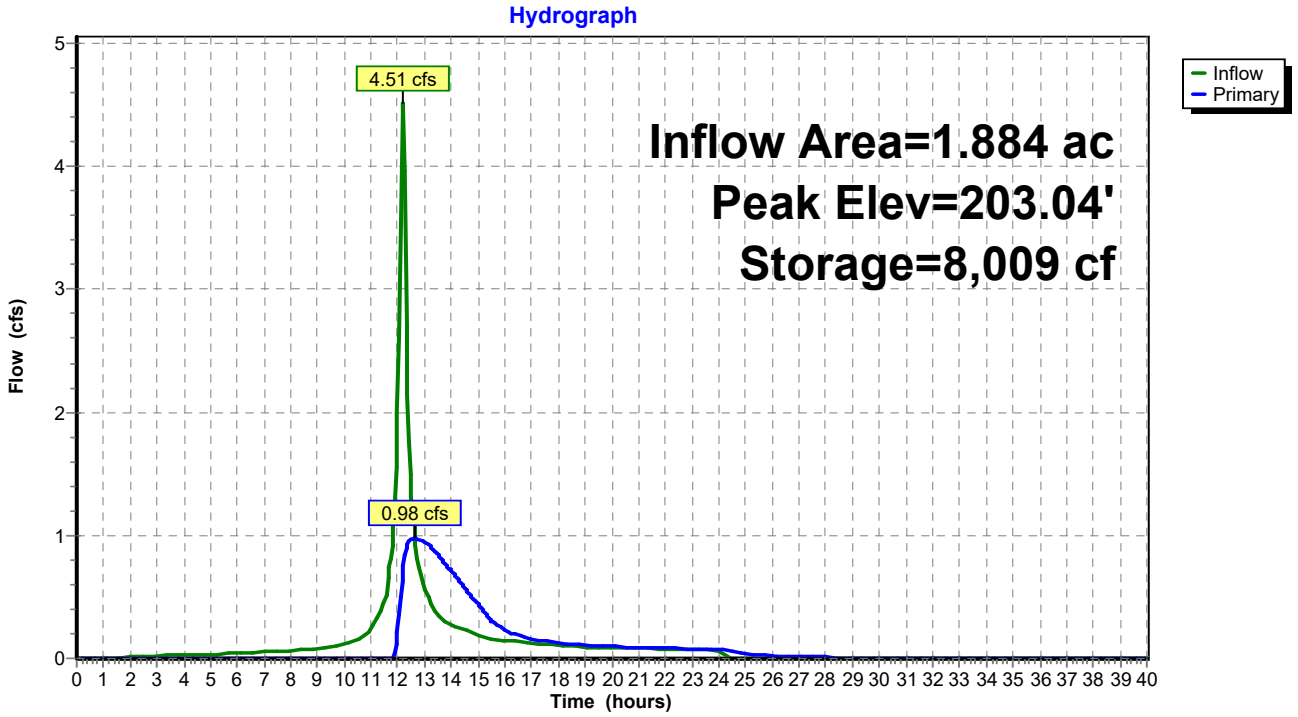
Volume	Invert	Avail.Storage	Storage Description
#1	200.30'	16,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.30	0	0	0
201.00	2,928	1,025	1,025
202.00	3,408	3,168	4,193
203.00	3,917	3,663	7,855
204.00	4,454	4,186	12,041
205.00	5,019	4,737	16,777

Device	Routing	Invert	Outlet Devices
#1	Primary	200.30'	**18.0" Round Culvert** L= 38.0' Ke= 0.500 Inlet / Outlet Invert= 200.30' / 200.11' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.71'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.04'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.98 cfs @ 12.63 hrs HW=203.04' (Free Discharge)
- **1=Culvert** (Passes 0.98 cfs of 11.44 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.98 cfs @ 5.00 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-39: Basin #39



Stage-Discharge for Pond B-39: Basin #39

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.30	0.00	200.82	0.00	201.34	0.00	201.86	0.07
200.31	0.00	200.83	0.00	201.35	0.00	201.87	0.07
200.32	0.00	200.84	0.00	201.36	0.00	201.88	0.08
200.33	0.00	200.85	0.00	201.37	0.00	201.89	0.09
200.34	0.00	200.86	0.00	201.38	0.00	201.90	0.10
200.35	0.00	200.87	0.00	201.39	0.00	201.91	0.11
200.36	0.00	200.88	0.00	201.40	0.00	201.92	0.12
200.37	0.00	200.89	0.00	201.41	0.00	201.93	0.13
200.38	0.00	200.90	0.00	201.42	0.00	201.94	0.14
200.39	0.00	200.91	0.00	201.43	0.00	201.95	0.16
200.40	0.00	200.92	0.00	201.44	0.00	201.96	0.17
200.41	0.00	200.93	0.00	201.45	0.00	201.97	0.18
200.42	0.00	200.94	0.00	201.46	0.00	201.98	0.19
200.43	0.00	200.95	0.00	201.47	0.00	201.99	0.20
200.44	0.00	200.96	0.00	201.48	0.00	202.00	0.22
200.45	0.00	200.97	0.00	201.49	0.00	202.01	0.23
200.46	0.00	200.98	0.00	201.50	0.00	202.02	0.24
200.47	0.00	200.99	0.00	201.51	0.00	202.03	0.26
200.48	0.00	201.00	0.00	201.52	0.00	202.04	0.27
200.49	0.00	201.01	0.00	201.53	0.00	202.05	0.28
200.50	0.00	201.02	0.00	201.54	0.00	202.06	0.30
200.51	0.00	201.03	0.00	201.55	0.00	202.07	0.31
200.52	0.00	201.04	0.00	201.56	0.00	202.08	0.32
200.53	0.00	201.05	0.00	201.57	0.00	202.09	0.34
200.54	0.00	201.06	0.00	201.58	0.00	202.10	0.35
200.55	0.00	201.07	0.00	201.59	0.00	202.11	0.36
200.56	0.00	201.08	0.00	201.60	0.00	202.12	0.38
200.57	0.00	201.09	0.00	201.61	0.00	202.13	0.39
200.58	0.00	201.10	0.00	201.62	0.00	202.14	0.40
200.59	0.00	201.11	0.00	201.63	0.00	202.15	0.41
200.60	0.00	201.12	0.00	201.64	0.00	202.16	0.43
200.61	0.00	201.13	0.00	201.65	0.00	202.17	0.44
200.62	0.00	201.14	0.00	201.66	0.00	202.18	0.45
200.63	0.00	201.15	0.00	201.67	0.00	202.19	0.46
200.64	0.00	201.16	0.00	201.68	0.00	202.20	0.47
200.65	0.00	201.17	0.00	201.69	0.00	202.21	0.47
200.66	0.00	201.18	0.00	201.70	0.00	202.22	0.48
200.67	0.00	201.19	0.00	201.71	0.00	202.23	0.49
200.68	0.00	201.20	0.00	201.72	0.00	202.24	0.50
200.69	0.00	201.21	0.00	201.73	0.00	202.25	0.51
200.70	0.00	201.22	0.00	201.74	0.00	202.26	0.52
200.71	0.00	201.23	0.00	201.75	0.01	202.27	0.53
200.72	0.00	201.24	0.00	201.76	0.01	202.28	0.53
200.73	0.00	201.25	0.00	201.77	0.01	202.29	0.54
200.74	0.00	201.26	0.00	201.78	0.02	202.30	0.55
200.75	0.00	201.27	0.00	201.79	0.02	202.31	0.56
200.76	0.00	201.28	0.00	201.80	0.02	202.32	0.57
200.77	0.00	201.29	0.00	201.81	0.03	202.33	0.58
200.78	0.00	201.30	0.00	201.82	0.04	202.34	0.58
200.79	0.00	201.31	0.00	201.83	0.04	202.35	0.59
200.80	0.00	201.32	0.00	201.84	0.05	202.36	0.60
200.81	0.00	201.33	0.00	201.85	0.06	202.37	0.61

Stage-Discharge for Pond B-39: Basin #39 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
202.38	0.61	202.90	0.92	203.42	4.15	203.94	12.00
202.39	0.62	202.91	0.92	203.43	4.27	203.95	12.17
202.40	0.63	202.92	0.93	203.44	4.39	203.96	12.35
202.41	0.63	202.93	0.93	203.45	4.52	203.97	12.53
202.42	0.64	202.94	0.94	203.46	4.64	203.98	12.70
202.43	0.65	202.95	0.94	203.47	4.77	203.99	12.88
202.44	0.66	202.96	0.95	203.48	4.90	204.00	13.06
202.45	0.66	202.97	0.95	203.49	5.03	204.01	13.24
202.46	0.67	202.98	0.95	203.50	5.16	204.02	13.42
202.47	0.68	202.99	0.96	203.51	5.29	204.03	13.61
202.48	0.68	203.00	0.96	203.52	5.43	204.04	13.79
202.49	0.69	203.01	0.97	203.53	5.56	204.05	13.97
202.50	0.69	203.02	0.97	203.54	5.70	204.06	14.16
202.51	0.70	203.03	0.98	203.55	5.83	204.07	14.34
202.52	0.71	203.04	0.98	203.56	5.97	204.08	14.53
202.53	0.71	203.05	1.00	203.57	6.11	204.09	14.71
202.54	0.72	203.06	1.03	203.58	6.25	204.10	14.86
202.55	0.73	203.07	1.06	203.59	6.40	204.11	14.88
202.56	0.73	203.08	1.10	203.60	6.54	204.12	14.91
202.57	0.74	203.09	1.15	203.61	6.68	204.13	14.93
202.58	0.74	203.10	1.20	203.62	6.83	204.14	14.96
202.59	0.75	203.11	1.26	203.63	6.97	204.15	14.98
202.60	0.76	203.12	1.31	203.64	7.12	204.16	15.01
202.61	0.76	203.13	1.37	203.65	7.27	204.17	15.03
202.62	0.77	203.14	1.44	203.66	7.42	204.18	15.05
202.63	0.77	203.15	1.51	203.67	7.57	204.19	15.08
202.64	0.78	203.16	1.58	203.68	7.72	204.20	15.10
202.65	0.79	203.17	1.65	203.69	7.88	204.21	15.13
202.66	0.79	203.18	1.72	203.70	8.03	204.22	15.15
202.67	0.80	203.19	1.80	203.71	8.18	204.23	15.17
202.68	0.80	203.20	1.88	203.72	8.34	204.24	15.20
202.69	0.81	203.21	1.97	203.73	8.50	204.25	15.22
202.70	0.81	203.22	2.05	203.74	8.65	204.26	15.24
202.71	0.82	203.23	2.14	203.75	8.81	204.27	15.27
202.72	0.82	203.24	2.23	203.76	8.97	204.28	15.29
202.73	0.83	203.25	2.32	203.77	9.13	204.29	15.32
202.74	0.83	203.26	2.41	203.78	9.29	204.30	15.34
202.75	0.84	203.27	2.51	203.79	9.46	204.31	15.36
202.76	0.85	203.28	2.61	203.80	9.62	204.32	15.39
202.77	0.85	203.29	2.70	203.81	9.78	204.33	15.41
202.78	0.86	203.30	2.81	203.82	9.95	204.34	15.43
202.79	0.86	203.31	2.91	203.83	10.11	204.35	15.46
202.80	0.87	203.32	3.01	203.84	10.28	204.36	15.48
202.81	0.87	203.33	3.12	203.85	10.45	204.37	15.50
202.82	0.88	203.34	3.23	203.86	10.62	204.38	15.53
202.83	0.88	203.35	3.34	203.87	10.79	204.39	15.55
202.84	0.89	203.36	3.45	203.88	10.96	204.40	15.57
202.85	0.89	203.37	3.56	203.89	11.13	204.41	15.60
202.86	0.90	203.38	3.68	203.90	11.30	204.42	15.62
202.87	0.90	203.39	3.79	203.91	11.47	204.43	15.64
202.88	0.91	203.40	3.91	203.92	11.65	204.44	15.67
202.89	0.91	203.41	4.03	203.93	11.82	204.45	15.69

Stage-Discharge for Pond B-39: Basin #39 (continued)

Elevation (feet)	Primary (cfs)
204.46	15.71
204.47	15.74
204.48	15.76
204.49	15.78
204.50	15.80
204.51	15.94
204.52	16.18
204.53	16.48
204.54	16.83
204.55	17.23
204.56	17.67
204.57	18.14
204.58	18.64
204.59	19.18
204.60	19.75
204.61	20.35
204.62	20.97
204.63	21.62
204.64	22.29
204.65	22.99
204.66	23.71
204.67	24.46
204.68	25.22
204.69	26.01
204.70	26.82
204.71	27.69
204.72	28.58
204.73	29.50
204.74	30.45
204.75	31.42
204.76	32.42
204.77	33.44
204.78	34.48
204.79	35.55
204.80	36.65
204.81	37.76
204.82	38.91
204.83	40.08
204.84	41.27
204.85	42.48
204.86	43.72
204.87	44.99
204.88	46.28
204.89	47.59
204.90	48.93
204.91	50.31
204.92	51.73
204.93	53.17
204.94	54.63
204.95	56.12
204.96	57.64
204.97	59.19
204.98	60.76
204.99	62.35
205.00	**63.98**

Stage-Area-Storage for Pond B-39: Basin #39

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.30	0	0
200.31	42	0
200.32	84	1
200.33	125	2
200.34	167	3
200.35	209	5
200.36	251	8
200.37	293	10
200.38	335	13
200.39	376	17
200.40	418	21
200.41	460	25
200.42	502	30
200.43	544	35
200.44	586	41
200.45	627	47
200.46	669	54
200.47	711	60
200.48	753	68
200.49	795	76
200.50	837	84
200.51	878	92
200.52	920	101
200.53	962	111
200.54	1,004	120
200.55	1,046	131
200.56	1,088	141
200.57	1,129	152
200.58	1,171	164
200.59	1,213	176
200.60	1,255	188
200.61	1,297	201
200.62	1,339	214
200.63	1,380	228
200.64	1,422	242
200.65	1,464	256
200.66	1,506	271
200.67	1,548	286
200.68	1,589	302
200.69	1,631	318
200.70	1,673	335
200.71	1,715	352
200.72	1,757	369
200.73	1,799	387
200.74	1,840	405
200.75	1,882	424
200.76	1,924	443
200.77	1,966	462
200.78	2,008	482
200.79	2,050	502
200.80	2,091	523
200.81	2,133	544
200.82	2,175	566
200.83	2,217	587
200.84	2,259	610
200.85	2,301	633
200.86	2,342	656
200.87	2,384	680
200.88	2,426	704
200.89	2,468	728
200.90	2,510	753
200.91	2,552	778
200.92	2,593	804
200.93	2,635	830
200.94	2,677	857
200.95	2,719	884
200.96	2,761	911
200.97	2,803	939
200.98	2,844	967
200.99	2,886	996
201.00	2,928	1,025
201.01	2,933	1,054
201.02	2,938	1,083
201.03	2,942	1,113
201.04	2,947	1,142
201.05	2,952	1,172
201.06	2,957	1,201
201.07	2,962	1,231
201.08	2,966	1,261
201.09	2,971	1,290
201.10	2,976	1,320
201.11	2,981	1,350
201.12	2,986	1,380
201.13	2,990	1,409
201.14	2,995	1,439
201.15	3,000	1,469
201.16	3,005	1,499
201.17	3,010	1,529
201.18	3,014	1,560
201.19	3,019	1,590
201.20	3,024	1,620
201.21	3,029	1,650
201.22	3,034	1,681
201.23	3,038	1,711
201.24	3,043	1,741
201.25	3,048	1,772
201.26	3,053	1,802
201.27	3,058	1,833
201.28	3,062	1,863
201.29	3,067	1,894
201.30	3,072	1,925
201.31	3,077	1,956
201.32	3,082	1,986
201.33	3,086	2,017

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.34	3,091	2,048	201.86	3,341	3,720
201.35	3,096	2,079	201.87	3,346	3,754
201.36	3,101	2,110	201.88	3,350	3,787
201.37	3,106	2,141	201.89	3,355	3,821
201.38	3,110	2,172	201.90	3,360	3,854
201.39	3,115	2,203	201.91	3,365	3,888
201.40	3,120	2,234	201.92	3,370	3,922
201.41	3,125	2,266	201.93	3,374	3,955
201.42	3,130	2,297	201.94	3,379	3,989
201.43	3,134	2,328	201.95	3,384	4,023
201.44	3,139	2,360	201.96	3,389	4,057
201.45	3,144	2,391	201.97	3,394	4,091
201.46	3,149	2,422	201.98	3,398	4,125
201.47	3,154	2,454	201.99	3,403	4,159
201.48	3,158	2,486	202.00	3,408	4,193
201.49	3,163	2,517	202.01	3,413	4,227
201.50	3,168	2,549	202.02	3,418	4,261
201.51	3,173	2,581	202.03	3,423	4,295
201.52	3,178	2,612	202.04	3,428	4,330
201.53	3,182	2,644	202.05	3,433	4,364
201.54	3,187	2,676	202.06	3,439	4,398
201.55	3,192	2,708	202.07	3,444	4,433
201.56	3,197	2,740	202.08	3,449	4,467
201.57	3,202	2,772	202.09	3,454	4,502
201.58	3,206	2,804	202.10	3,459	4,536
201.59	3,211	2,836	202.11	3,464	4,571
201.60	3,216	2,868	202.12	3,469	4,605
201.61	3,221	2,900	202.13	3,474	4,640
201.62	3,226	2,932	202.14	3,479	4,675
201.63	3,230	2,965	202.15	3,484	4,710
201.64	3,235	2,997	202.16	3,489	4,745
201.65	3,240	3,029	202.17	3,495	4,780
201.66	3,245	3,062	202.18	3,500	4,814
201.67	3,250	3,094	202.19	3,505	4,850
201.68	3,254	3,127	202.20	3,510	4,885
201.69	3,259	3,159	202.21	3,515	4,920
201.70	3,264	3,192	202.22	3,520	4,955
201.71	3,269	3,225	202.23	3,525	4,990
201.72	3,274	3,257	202.24	3,530	5,025
201.73	3,278	3,290	202.25	3,535	5,061
201.74	3,283	3,323	202.26	3,540	5,096
201.75	3,288	3,356	202.27	3,545	5,132
201.76	3,293	3,389	202.28	3,551	5,167
201.77	3,298	3,422	202.29	3,556	5,203
201.78	3,302	3,455	202.30	3,561	5,238
201.79	3,307	3,488	202.31	3,566	5,274
201.80	3,312	3,521	202.32	3,571	5,309
201.81	3,317	3,554	202.33	3,576	5,345
201.82	3,322	3,587	202.34	3,581	5,381
201.83	3,326	3,620	202.35	3,586	5,417
201.84	3,331	3,654	202.36	3,591	5,453
201.85	3,336	3,687	202.37	3,596	5,489

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.38	3,601	5,525	202.90	3,866	7,466
202.39	3,607	5,561	202.91	3,871	7,505
202.40	3,612	5,597	202.92	3,876	7,544
202.41	3,617	5,633	202.93	3,881	7,582
202.42	3,622	5,669	202.94	3,886	7,621
202.43	3,627	5,705	202.95	3,892	7,660
202.44	3,632	5,742	202.96	3,897	7,699
202.45	3,637	5,778	202.97	3,902	7,738
202.46	3,642	5,814	202.98	3,907	7,777
202.47	3,647	5,851	202.99	3,912	7,816
202.48	3,652	5,887	203.00	3,917	7,855
202.49	3,657	5,924	203.01	3,922	7,894
202.50	3,663	5,960	203.02	3,928	7,934
202.51	3,668	5,997	203.03	3,933	7,973
202.52	3,673	6,034	203.04	3,938	8,012
202.53	3,678	6,071	203.05	3,944	8,052
202.54	3,683	6,107	203.06	3,949	8,091
202.55	3,688	6,144	203.07	3,955	8,131
202.56	3,693	6,181	203.08	3,960	8,170
202.57	3,698	6,218	203.09	3,965	8,210
202.58	3,703	6,255	203.10	3,971	8,250
202.59	3,708	6,292	203.11	3,976	8,289
202.60	3,713	6,329	203.12	3,981	8,329
202.61	3,718	6,366	203.13	3,987	8,369
202.62	3,724	6,404	203.14	3,992	8,409
202.63	3,729	6,441	203.15	3,998	8,449
202.64	3,734	6,478	203.16	4,003	8,489
202.65	3,739	6,516	203.17	4,008	8,529
202.66	3,744	6,553	203.18	4,014	8,569
202.67	3,749	6,590	203.19	4,019	8,609
202.68	3,754	6,628	203.20	4,024	8,649
202.69	3,759	6,665	203.21	4,030	8,690
202.70	3,764	6,703	203.22	4,035	8,730
202.71	3,769	6,741	203.23	4,041	8,770
202.72	3,774	6,778	203.24	4,046	8,811
202.73	3,780	6,816	203.25	4,051	8,851
202.74	3,785	6,854	203.26	4,057	8,892
202.75	3,790	6,892	203.27	4,062	8,932
202.76	3,795	6,930	203.28	4,067	8,973
202.77	3,800	6,968	203.29	4,073	9,014
202.78	3,805	7,006	203.30	4,078	9,055
202.79	3,810	7,044	203.31	4,083	9,095
202.80	3,815	7,082	203.32	4,089	9,136
202.81	3,820	7,120	203.33	4,094	9,177
202.82	3,825	7,158	203.34	4,100	9,218
202.83	3,830	7,197	203.35	4,105	9,259
202.84	3,836	7,235	203.36	4,110	9,300
202.85	3,841	7,273	203.37	4,116	9,341
202.86	3,846	7,312	203.38	4,121	9,383
202.87	3,851	7,350	203.39	4,126	9,424
202.88	3,856	7,389	203.40	4,132	9,465
202.89	3,861	7,428	203.41	4,137	9,506

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.42	4,143	9,548	203.94	4,422	11,775
203.43	4,148	9,589	203.95	4,427	11,819
203.44	4,153	9,631	203.96	4,433	11,863
203.45	4,159	9,672	203.97	4,438	11,907
203.46	4,164	9,714	203.98	4,443	11,952
203.47	4,169	9,756	203.99	4,449	11,996
203.48	4,175	9,797	204.00	4,454	12,041
203.49	4,180	9,839	204.01	4,460	12,085
203.50	4,186	9,881	204.02	4,465	12,130
203.51	4,191	9,923	204.03	4,471	12,175
203.52	4,196	9,965	204.04	4,477	12,219
203.53	4,202	10,007	204.05	4,482	12,264
203.54	4,207	10,049	204.06	4,488	12,309
203.55	4,212	10,091	204.07	4,494	12,354
203.56	4,218	10,133	204.08	4,499	12,399
203.57	4,223	10,175	204.09	4,505	12,444
203.58	4,228	10,217	204.10	4,511	12,489
203.59	4,234	10,260	204.11	4,516	12,534
203.60	4,239	10,302	204.12	4,522	12,579
203.61	4,245	10,345	204.13	4,527	12,625
203.62	4,250	10,387	204.14	4,533	12,670
203.63	4,255	10,430	204.15	4,539	12,715
203.64	4,261	10,472	204.16	4,544	12,761
203.65	4,266	10,515	204.17	4,550	12,806
203.66	4,271	10,557	204.18	4,556	12,852
203.67	4,277	10,600	204.19	4,561	12,897
203.68	4,282	10,643	204.20	4,567	12,943
203.69	4,288	10,686	204.21	4,573	12,989
203.70	4,293	10,729	204.22	4,578	13,034
203.71	4,298	10,772	204.23	4,584	13,080
203.72	4,304	10,815	204.24	4,590	13,126
203.73	4,309	10,858	204.25	4,595	13,172
203.74	4,314	10,901	204.26	4,601	13,218
203.75	4,320	10,944	204.27	4,607	13,264
203.76	4,325	10,987	204.28	4,612	13,310
203.77	4,330	11,031	204.29	4,618	13,356
203.78	4,336	11,074	204.30	4,624	13,402
203.79	4,341	11,117	204.31	4,629	13,449
203.80	4,347	11,161	204.32	4,635	13,495
203.81	4,352	11,204	204.33	4,640	13,541
203.82	4,357	11,248	204.34	4,646	13,588
203.83	4,363	11,291	204.35	4,652	13,634
203.84	4,368	11,335	204.36	4,657	13,681
203.85	4,373	11,379	204.37	4,663	13,727
203.86	4,379	11,423	204.38	4,669	13,774
203.87	4,384	11,466	204.39	4,674	13,821
203.88	4,390	11,510	204.40	4,680	13,868
203.89	4,395	11,554	204.41	4,686	13,914
203.90	4,400	11,598	204.42	4,691	13,961
203.91	4,406	11,642	204.43	4,697	14,008
203.92	4,411	11,686	204.44	4,703	14,055
203.93	4,416	11,730	204.45	4,708	14,102

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.46	4,714	14,149
204.47	4,720	14,197
204.48	4,725	14,244
204.49	4,731	14,291
204.50	4,737	14,338
204.51	4,742	14,386
204.52	4,748	14,433
204.53	4,753	14,481
204.54	4,759	14,528
204.55	4,765	14,576
204.56	4,770	14,624
204.57	4,776	14,671
204.58	4,782	14,719
204.59	4,787	14,767
204.60	4,793	14,815
204.61	4,799	14,863
204.62	4,804	14,911
204.63	4,810	14,959
204.64	4,816	15,007
204.65	4,821	15,055
204.66	4,827	15,103
204.67	4,833	15,152
204.68	4,838	15,200
204.69	4,844	15,249
204.70	4,850	15,297
204.71	4,855	15,346
204.72	4,861	15,394
204.73	4,866	15,443
204.74	4,872	15,491
204.75	4,878	15,540
204.76	4,883	15,589
204.77	4,889	15,638
204.78	4,895	15,687
204.79	4,900	15,736
204.80	4,906	15,785
204.81	4,912	15,834
204.82	4,917	15,883
204.83	4,923	15,932
204.84	4,929	15,981
204.85	4,934	16,031
204.86	4,940	16,080
204.87	4,946	16,130
204.88	4,951	16,179
204.89	4,957	16,229
204.90	4,963	16,278
204.91	4,968	16,328
204.92	4,974	16,378
204.93	4,979	16,427
204.94	4,985	16,477
204.95	4,991	16,527
204.96	4,996	16,577
204.97	5,002	16,627
204.98	5,008	16,677
204.99	5,013	16,727
205.00	**5,019**	**16,777**

Summary for Pond B-40: Basin #40

Inflow Area = 1.888 ac, 47.19% Impervious, Inflow Depth = 2.49" for Future 2 yr event
Inflow = 4.72 cfs @ 12.17 hrs, Volume= 0.392 af
Outflow = 3.03 cfs @ 12.29 hrs, Volume= 0.309 af, Atten= 36%, Lag= 7.2 min
Primary = 3.03 cfs @ 12.29 hrs, Volume= 0.309 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.31' @ 12.29 hrs Surf.Area= 4,004 sf Storage= 6,156 cf

Plug-Flow detention time= 168.2 min calculated for 0.309 af (79% of inflow)
Center-of-Mass det. time= 83.3 min (872.5 - 789.2)

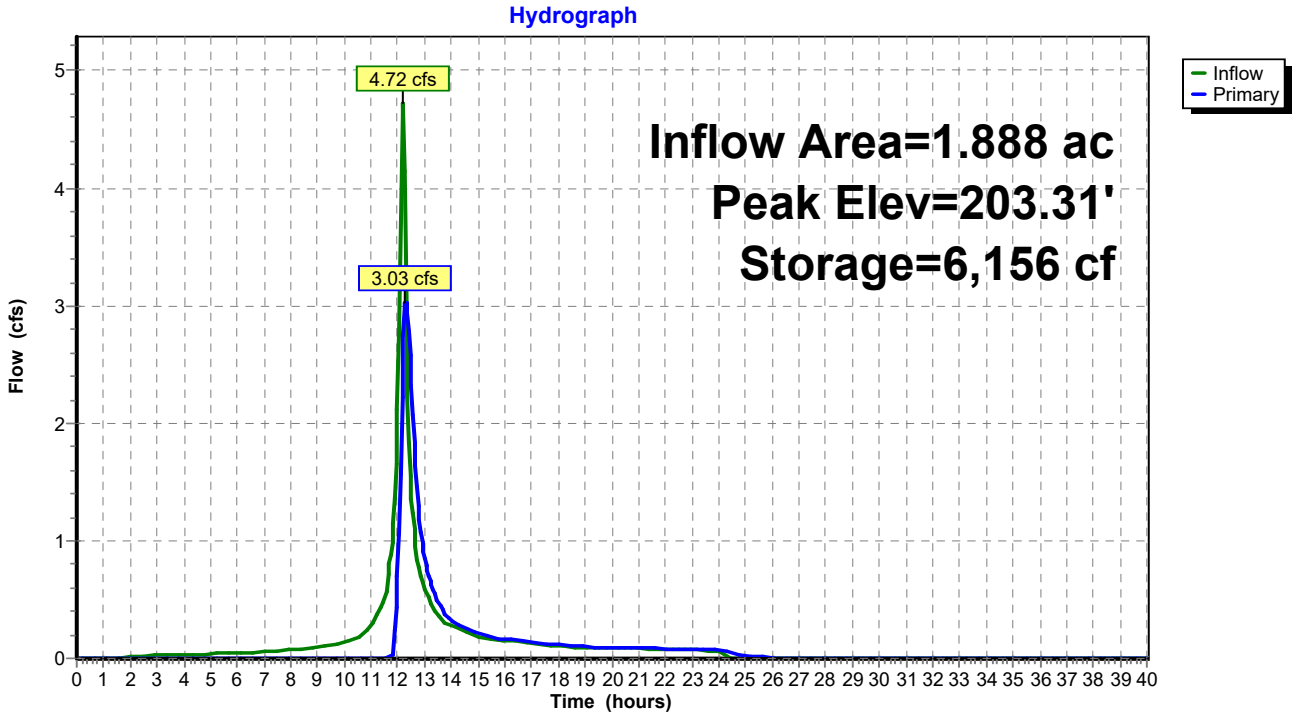
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	18,339 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,521	1,232	1,232
203.00	3,886	3,704	4,936
204.00	4,266	4,076	9,012
205.00	4,660	4,463	13,475
206.00	5,069	4,865	18,339

Device	Routing	Invert	Outlet Devices
#1	Primary	201.30'	**18.0" Round Culvert** L= 38.0' Ke= 0.500 Inlet / Outlet Invert= 201.30' / 201.11' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.65'	**24.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	204.67'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	205.49'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.02 cfs @ 12.29 hrs HW=203.31' (Free Discharge)
- **1=Culvert** (Passes 3.02 cfs of 7.99 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.02 cfs @ 3.02 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-40: Basin #40



Stage-Discharge for Pond B-40: Basin #40

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.62
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.66
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.71
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.75
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.80
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.85
201.36	0.00	201.88	0.00	202.40	0.00	202.92	0.90
201.37	0.00	201.89	0.00	202.41	0.00	202.93	0.95
201.38	0.00	201.90	0.00	202.42	0.00	202.94	1.00
201.39	0.00	201.91	0.00	202.43	0.00	202.95	1.05
201.40	0.00	201.92	0.00	202.44	0.00	202.96	1.11
201.41	0.00	201.93	0.00	202.45	0.00	202.97	1.16
201.42	0.00	201.94	0.00	202.46	0.00	202.98	1.22
201.43	0.00	201.95	0.00	202.47	0.00	202.99	1.27
201.44	0.00	201.96	0.00	202.48	0.00	203.00	1.33
201.45	0.00	201.97	0.00	202.49	0.00	203.01	1.39
201.46	0.00	201.98	0.00	202.50	0.00	203.02	1.44
201.47	0.00	201.99	0.00	202.51	0.00	203.03	1.50
201.48	0.00	202.00	0.00	202.52	0.00	203.04	1.56
201.49	0.00	202.01	0.00	202.53	0.00	203.05	1.62
201.50	0.00	202.02	0.00	202.54	0.00	203.06	1.69
201.51	0.00	202.03	0.00	202.55	0.00	203.07	1.75
201.52	0.00	202.04	0.00	202.56	0.00	203.08	1.81
201.53	0.00	202.05	0.00	202.57	0.00	203.09	1.87
201.54	0.00	202.06	0.00	202.58	0.00	203.10	1.94
201.55	0.00	202.07	0.00	202.59	0.00	203.11	2.00
201.56	0.00	202.08	0.00	202.60	0.00	203.12	2.07
201.57	0.00	202.09	0.00	202.61	0.00	203.13	2.13
201.58	0.00	202.10	0.00	202.62	0.00	203.14	2.20
201.59	0.00	202.11	0.00	202.63	0.00	203.15	2.27
201.60	0.00	202.12	0.00	202.64	0.00	203.16	2.33
201.61	0.00	202.13	0.00	202.65	0.00	203.17	2.39
201.62	0.00	202.14	0.00	202.66	0.01	203.18	2.44
201.63	0.00	202.15	0.00	202.67	0.02	203.19	2.50
201.64	0.00	202.16	0.00	202.68	0.03	203.20	2.55
201.65	0.00	202.17	0.00	202.69	0.05	203.21	2.60
201.66	0.00	202.18	0.00	202.70	0.07	203.22	2.64
201.67	0.00	202.19	0.00	202.71	0.09	203.23	2.69
201.68	0.00	202.20	0.00	202.72	0.12	203.24	2.74
201.69	0.00	202.21	0.00	202.73	0.15	203.25	2.78
201.70	0.00	202.22	0.00	202.74	0.17	203.26	2.82
201.71	0.00	202.23	0.00	202.75	0.20	203.27	2.87
201.72	0.00	202.24	0.00	202.76	0.23	203.28	2.91
201.73	0.00	202.25	0.00	202.77	0.27	203.29	2.95
201.74	0.00	202.26	0.00	202.78	0.30	203.30	2.99
201.75	0.00	202.27	0.00	202.79	0.34	203.31	3.03
201.76	0.00	202.28	0.00	202.80	0.37	203.32	3.07
201.77	0.00	202.29	0.00	202.81	0.41	203.33	3.11
201.78	0.00	202.30	0.00	202.82	0.45	203.34	3.15
201.79	0.00	202.31	0.00	202.83	0.49	203.35	3.19
201.80	0.00	202.32	0.00	202.84	0.53	203.36	3.22
201.81	0.00	202.33	0.00	202.85	0.57	203.37	3.26

Stage-Discharge for Pond B-40: Basin #40 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	3.30	203.90	4.80	204.42	5.93	204.94	8.68
203.39	3.33	203.91	4.83	204.43	5.95	204.95	8.80
203.40	3.37	203.92	4.85	204.44	5.97	204.96	8.92
203.41	3.40	203.93	4.87	204.45	5.99	204.97	9.04
203.42	3.44	203.94	4.90	204.46	6.01	204.98	9.16
203.43	3.47	203.95	4.92	204.47	6.03	204.99	9.29
203.44	3.51	203.96	4.95	204.48	6.05	205.00	9.41
203.45	3.54	203.97	4.97	204.49	6.07	205.01	9.54
203.46	3.57	203.98	4.99	204.50	6.08	205.02	9.67
203.47	3.60	203.99	5.02	204.51	6.10	205.03	9.80
203.48	3.64	204.00	5.04	204.52	6.12	205.04	9.93
203.49	3.67	204.01	5.06	204.53	6.14	205.05	10.06
203.50	3.70	204.02	5.09	204.54	6.16	205.06	10.20
203.51	3.73	204.03	5.11	204.55	6.18	205.07	10.33
203.52	3.76	204.04	5.13	204.56	6.20	205.08	10.47
203.53	3.80	204.05	5.15	204.57	6.22	205.09	10.61
203.54	3.83	204.06	5.18	204.58	6.24	205.10	10.75
203.55	3.86	204.07	5.20	204.59	6.25	205.11	10.89
203.56	3.89	204.08	5.22	204.60	6.27	205.12	11.03
203.57	3.92	204.09	5.24	204.61	6.29	205.13	11.17
203.58	3.95	204.10	5.26	204.62	6.31	205.14	11.32
203.59	3.98	204.11	5.29	204.63	6.33	205.15	11.46
203.60	4.01	204.12	5.31	204.64	6.35	205.16	11.61
203.61	4.04	204.13	5.33	204.65	6.36	205.17	11.76
203.62	4.06	204.14	5.35	204.66	6.38	205.18	11.91
203.63	4.09	204.15	5.37	204.67	6.40	205.19	12.06
203.64	4.12	204.16	5.40	204.68	6.43	205.20	12.21
203.65	4.15	204.17	5.42	204.69	6.47	205.21	12.36
203.66	4.18	204.18	5.44	204.70	6.52	205.22	12.52
203.67	4.21	204.19	5.46	204.71	6.58	205.23	12.67
203.68	4.23	204.20	5.48	204.72	6.64	205.24	12.83
203.69	4.26	204.21	5.50	204.73	6.70	205.25	12.99
203.70	4.29	204.22	5.52	204.74	6.77	205.26	13.15
203.71	4.32	204.23	5.54	204.75	6.84	205.27	13.31
203.72	4.34	204.24	5.57	204.76	6.91	205.28	13.47
203.73	4.37	204.25	5.59	204.77	6.99	205.29	13.63
203.74	4.40	204.26	5.61	204.78	7.07	205.30	13.79
203.75	4.42	204.27	5.63	204.79	7.16	205.31	13.95
203.76	4.45	204.28	5.65	204.80	7.24	205.32	14.12
203.77	4.48	204.29	5.67	204.81	7.33	205.33	14.28
203.78	4.50	204.30	5.69	204.82	7.42	205.34	14.45
203.79	4.53	204.31	5.71	204.83	7.51	205.35	14.62
203.80	4.55	204.32	5.73	204.84	7.61	205.36	14.79
203.81	4.58	204.33	5.75	204.85	7.71	205.37	14.96
203.82	4.60	204.34	5.77	204.86	7.81	205.38	15.13
203.83	4.63	204.35	5.79	204.87	7.91	205.39	15.30
203.84	4.65	204.36	5.81	204.88	8.02	205.40	15.47
203.85	4.68	204.37	5.83	204.89	8.12	205.41	15.60
203.86	4.70	204.38	5.85	204.90	8.23	205.42	15.62
203.87	4.73	204.39	5.87	204.91	8.34	205.43	15.64
203.88	4.75	204.40	5.89	204.92	8.45	205.44	15.67
203.89	4.78	204.41	5.91	204.93	8.57	205.45	15.69

Stage-Discharge for Pond B-40: Basin #40 (continued)

Elevation (feet)	Primary (cfs)
205.46	15.71
205.47	15.74
205.48	15.76
205.49	15.78
205.50	15.92
205.51	16.16
205.52	16.46
205.53	16.81
205.54	17.21
205.55	17.64
205.56	18.12
205.57	18.62
205.58	19.16
205.59	19.73
205.60	20.32
205.61	20.95
205.62	21.60
205.63	22.27
205.64	22.97
205.65	23.69
205.66	24.43
205.67	25.20
205.68	25.99
205.69	26.80
205.70	27.67
205.71	28.56
205.72	29.48
205.73	30.43
205.74	31.40
205.75	32.39
205.76	33.41
205.77	34.46
205.78	35.53
205.79	36.62
205.80	37.74
205.81	38.89
205.82	40.05
205.83	41.25
205.84	42.46
205.85	43.70
205.86	44.97
205.87	46.25
205.88	47.57
205.89	48.90
205.90	50.29
205.91	51.70
205.92	53.14
205.93	54.61
205.94	56.10
205.95	57.62
205.96	59.16
205.97	60.73
205.98	62.33
205.99	63.95
206.00	**65.60**

Stage-Area-Storage for Pond B-40: Basin #40

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,616	680
201.31	50	0	201.83	2,666	706
201.32	101	1	201.84	2,716	733
201.33	151	2	201.85	2,767	761
201.34	201	4	201.86	2,817	789
201.35	252	6	201.87	2,867	817
201.36	302	9	201.88	2,917	846
201.37	352	12	201.89	2,968	875
201.38	402	16	201.90	3,018	905
201.39	453	20	201.91	3,068	936
201.40	503	25	201.92	3,119	967
201.41	553	30	201.93	3,169	998
201.42	604	36	201.94	3,219	1,030
201.43	654	43	201.95	3,270	1,063
201.44	704	49	201.96	3,320	1,096
201.45	755	57	201.97	3,370	1,129
201.46	805	64	201.98	3,420	1,163
201.47	855	73	201.99	3,471	1,197
201.48	905	81	202.00	3,521	1,232
201.49	956	91	202.01	3,525	1,268
201.50	1,006	101	202.02	3,528	1,303
201.51	1,056	111	202.03	3,532	1,338
201.52	1,107	122	202.04	3,536	1,373
201.53	1,157	133	202.05	3,539	1,409
201.54	1,207	145	202.06	3,543	1,444
201.55	1,258	157	202.07	3,547	1,480
201.56	1,308	170	202.08	3,550	1,515
201.57	1,358	183	202.09	3,554	1,551
201.58	1,408	197	202.10	3,558	1,586
201.59	1,459	212	202.11	3,561	1,622
201.60	1,509	226	202.12	3,565	1,657
201.61	1,559	242	202.13	3,568	1,693
201.62	1,610	258	202.14	3,572	1,729
201.63	1,660	274	202.15	3,576	1,765
201.64	1,710	291	202.16	3,579	1,800
201.65	1,761	308	202.17	3,583	1,836
201.66	1,811	326	202.18	3,587	1,872
201.67	1,861	344	202.19	3,590	1,908
201.68	1,911	363	202.20	3,594	1,944
201.69	1,962	383	202.21	3,598	1,980
201.70	2,012	402	202.22	3,601	2,016
201.71	2,062	423	202.23	3,605	2,052
201.72	2,113	444	202.24	3,609	2,088
201.73	2,163	465	202.25	3,612	2,124
201.74	2,213	487	202.26	3,616	2,160
201.75	2,263	509	202.27	3,620	2,196
201.76	2,314	532	202.28	3,623	2,233
201.77	2,364	556	202.29	3,627	2,269
201.78	2,414	579	202.30	3,631	2,305
201.79	2,465	604	202.31	3,634	2,341
201.80	2,515	629	202.32	3,638	2,378
201.81	2,565	654	202.33	3,641	2,414

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	3,645	2,451	202.86	3,835	4,395
202.35	3,649	2,487	202.87	3,839	4,434
202.36	3,652	2,524	202.88	3,842	4,472
202.37	3,656	2,560	202.89	3,846	4,511
202.38	3,660	2,597	202.90	3,850	4,549
202.39	3,663	2,633	202.91	3,853	4,588
202.40	3,667	2,670	202.92	3,857	4,626
202.41	3,671	2,707	202.93	3,860	4,665
202.42	3,674	2,743	202.94	3,864	4,703
202.43	3,678	2,780	202.95	3,868	4,742
202.44	3,682	2,817	202.96	3,871	4,781
202.45	3,685	2,854	202.97	3,875	4,819
202.46	3,689	2,891	202.98	3,879	4,858
202.47	3,693	2,928	202.99	3,882	4,897
202.48	3,696	2,964	203.00	3,886	4,936
202.49	3,700	3,001	203.01	3,890	4,975
202.50	3,704	3,038	203.02	3,894	5,014
202.51	3,707	3,076	203.03	3,897	5,053
202.52	3,711	3,113	203.04	3,901	5,092
202.53	3,714	3,150	203.05	3,905	5,131
202.54	3,718	3,187	203.06	3,909	5,170
202.55	3,722	3,224	203.07	3,913	5,209
202.56	3,725	3,261	203.08	3,916	5,248
202.57	3,729	3,299	203.09	3,920	5,287
202.58	3,733	3,336	203.10	3,924	5,326
202.59	3,736	3,373	203.11	3,928	5,366
202.60	3,740	3,411	203.12	3,932	5,405
202.61	3,744	3,448	203.13	3,935	5,444
202.62	3,747	3,486	203.14	3,939	5,484
202.63	3,751	3,523	203.15	3,943	5,523
202.64	3,755	3,561	203.16	3,947	5,562
202.65	3,758	3,598	203.17	3,951	5,602
202.66	3,762	3,636	203.18	3,954	5,641
202.67	3,766	3,673	203.19	3,958	5,681
202.68	3,769	3,711	203.20	3,962	5,721
202.69	3,773	3,749	203.21	3,966	5,760
202.70	3,777	3,786	203.22	3,970	5,800
202.71	3,780	3,824	203.23	3,973	5,840
202.72	3,784	3,862	203.24	3,977	5,879
202.73	3,787	3,900	203.25	3,981	5,919
202.74	3,791	3,938	203.26	3,985	5,959
202.75	3,795	3,976	203.27	3,989	5,999
202.76	3,798	4,014	203.28	3,992	6,039
202.77	3,802	4,052	203.29	3,996	6,079
202.78	3,806	4,090	203.30	4,000	6,119
202.79	3,809	4,128	203.31	4,004	6,159
202.80	3,813	4,166	203.32	4,008	6,199
202.81	3,817	4,204	203.33	4,011	6,239
202.82	3,820	4,242	203.34	4,015	6,279
202.83	3,824	4,281	203.35	4,019	6,319
202.84	3,828	4,319	203.36	4,023	6,359
202.85	3,831	4,357	203.37	4,027	6,400

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,030	6,440	203.90	4,228	8,587
203.39	4,034	6,480	203.91	4,232	8,629
203.40	4,038	6,521	203.92	4,236	8,672
203.41	4,042	6,561	203.93	4,239	8,714
203.42	4,046	6,601	203.94	4,243	8,757
203.43	4,049	6,642	203.95	4,247	8,799
203.44	4,053	6,682	203.96	4,251	8,842
203.45	4,057	6,723	203.97	4,255	8,884
203.46	4,061	6,764	203.98	4,258	8,927
203.47	4,065	6,804	203.99	4,262	8,969
203.48	4,068	6,845	204.00	4,266	9,012
203.49	4,072	6,886	204.01	4,270	9,055
203.50	4,076	6,926	204.02	4,274	9,097
203.51	4,080	6,967	204.03	4,278	9,140
203.52	4,084	7,008	204.04	4,282	9,183
203.53	4,087	7,049	204.05	4,286	9,226
203.54	4,091	7,090	204.06	4,290	9,269
203.55	4,095	7,131	204.07	4,294	9,311
203.56	4,099	7,172	204.08	4,298	9,354
203.57	4,103	7,213	204.09	4,301	9,397
203.58	4,106	7,254	204.10	4,305	9,440
203.59	4,110	7,295	204.11	4,309	9,483
203.60	4,114	7,336	204.12	4,313	9,527
203.61	4,118	7,377	204.13	4,317	9,570
203.62	4,122	7,418	204.14	4,321	9,613
203.63	4,125	7,459	204.15	4,325	9,656
203.64	4,129	7,501	204.16	4,329	9,699
203.65	4,133	7,542	204.17	4,333	9,743
203.66	4,137	7,583	204.18	4,337	9,786
203.67	4,141	7,625	204.19	4,341	9,830
203.68	4,144	7,666	204.20	4,345	9,873
203.69	4,148	7,708	204.21	4,349	9,916
203.70	4,152	7,749	204.22	4,353	9,960
203.71	4,156	7,791	204.23	4,357	10,003
203.72	4,160	7,832	204.24	4,361	10,047
203.73	4,163	7,874	204.25	4,365	10,091
203.74	4,167	7,916	204.26	4,368	10,134
203.75	4,171	7,957	204.27	4,372	10,178
203.76	4,175	7,999	204.28	4,376	10,222
203.77	4,179	8,041	204.29	4,380	10,266
203.78	4,182	8,083	204.30	4,384	10,309
203.79	4,186	8,124	204.31	4,388	10,353
203.80	4,190	8,166	204.32	4,392	10,397
203.81	4,194	8,208	204.33	4,396	10,441
203.82	4,198	8,250	204.34	4,400	10,485
203.83	4,201	8,292	204.35	4,404	10,529
203.84	4,205	8,334	204.36	4,408	10,573
203.85	4,209	8,376	204.37	4,412	10,617
203.86	4,213	8,418	204.38	4,416	10,661
203.87	4,217	8,460	204.39	4,420	10,706
203.88	4,220	8,503	204.40	4,424	10,750
203.89	4,224	8,545	204.41	4,428	10,794

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	4,431	10,838	204.94	4,636	13,196
204.43	4,435	10,883	204.95	4,640	13,242
204.44	4,439	10,927	204.96	4,644	13,289
204.45	4,443	10,971	204.97	4,648	13,335
204.46	4,447	11,016	204.98	4,652	13,382
204.47	4,451	11,060	204.99	4,656	13,428
204.48	4,455	11,105	205.00	4,660	13,475
204.49	4,459	11,149	205.01	4,664	13,521
204.50	4,463	11,194	205.02	4,668	13,568
204.51	4,467	11,239	205.03	4,672	13,615
204.52	4,471	11,283	205.04	4,676	13,662
204.53	4,475	11,328	205.05	4,680	13,708
204.54	4,479	11,373	205.06	4,685	13,755
204.55	4,483	11,418	205.07	4,689	13,802
204.56	4,487	11,463	205.08	4,693	13,849
204.57	4,491	11,507	205.09	4,697	13,896
204.58	4,495	11,552	205.10	4,701	13,943
204.59	4,498	11,597	205.11	4,705	13,990
204.60	4,502	11,642	205.12	4,709	14,037
204.61	4,506	11,687	205.13	4,713	14,084
204.62	4,510	11,732	205.14	4,717	14,131
204.63	4,514	11,778	205.15	4,721	14,178
204.64	4,518	11,823	205.16	4,725	14,226
204.65	4,522	11,868	205.17	4,730	14,273
204.66	4,526	11,913	205.18	4,734	14,320
204.67	4,530	11,959	205.19	4,738	14,368
204.68	4,534	12,004	205.20	4,742	14,415
204.69	4,538	12,049	205.21	4,746	14,462
204.70	4,542	12,095	205.22	4,750	14,510
204.71	4,546	12,140	205.23	4,754	14,557
204.72	4,550	12,185	205.24	4,758	14,605
204.73	4,554	12,231	205.25	4,762	14,653
204.74	4,558	12,277	205.26	4,766	14,700
204.75	4,562	12,322	205.27	4,770	14,748
204.76	4,565	12,368	205.28	4,775	14,796
204.77	4,569	12,413	205.29	4,779	14,843
204.78	4,573	12,459	205.30	4,783	14,891
204.79	4,577	12,505	205.31	4,787	14,939
204.80	4,581	12,551	205.32	4,791	14,987
204.81	4,585	12,597	205.33	4,795	15,035
204.82	4,589	12,642	205.34	4,799	15,083
204.83	4,593	12,688	205.35	4,803	15,131
204.84	4,597	12,734	205.36	4,807	15,179
204.85	4,601	12,780	205.37	4,811	15,227
204.86	4,605	12,826	205.38	4,815	15,275
204.87	4,609	12,872	205.39	4,820	15,323
204.88	4,613	12,918	205.40	4,824	15,372
204.89	4,617	12,965	205.41	4,828	15,420
204.90	4,621	13,011	205.42	4,832	15,468
204.91	4,625	13,057	205.43	4,836	15,516
204.92	4,628	13,103	205.44	4,840	15,565
204.93	4,632	13,150	205.45	4,844	15,613

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

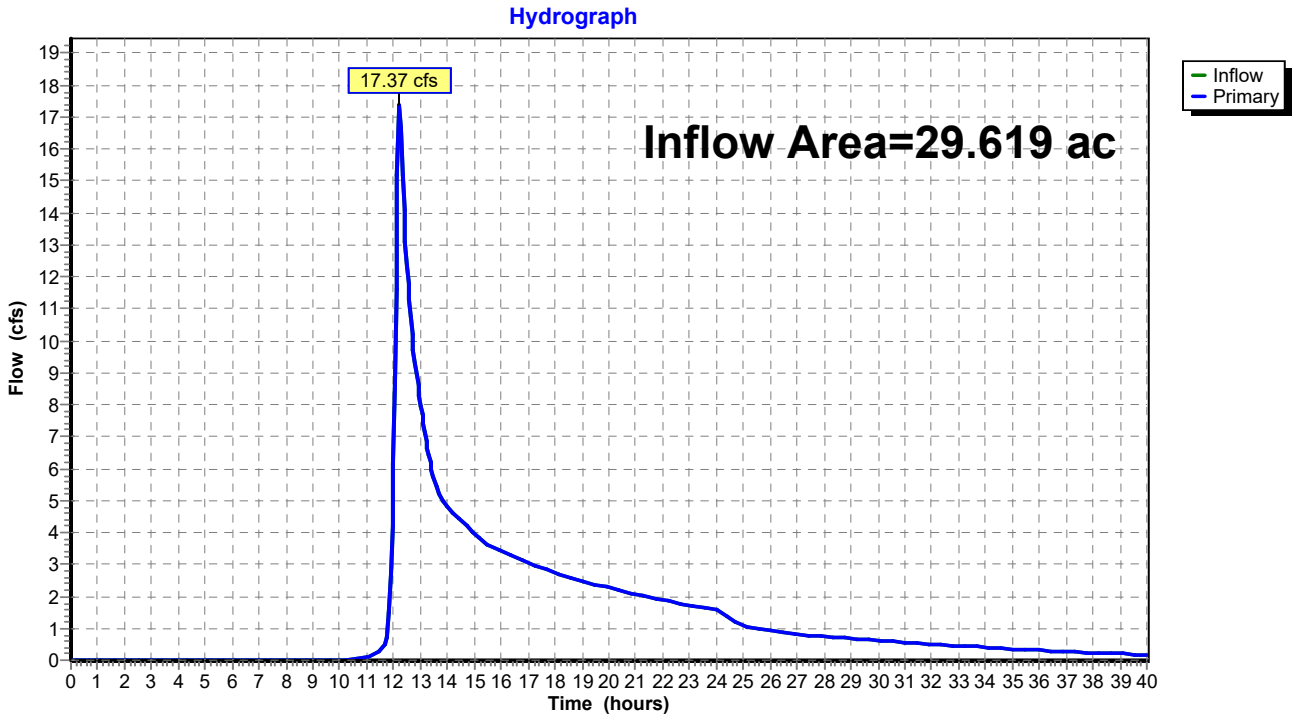
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.46	4,848	15,662
205.47	4,852	15,710
205.48	4,856	15,759
205.49	4,860	15,807
205.50	4,865	15,856
205.51	4,869	15,905
205.52	4,873	15,953
205.53	4,877	16,002
205.54	4,881	16,051
205.55	4,885	16,100
205.56	4,889	16,149
205.57	4,893	16,197
205.58	4,897	16,246
205.59	4,901	16,295
205.60	4,905	16,344
205.61	4,909	16,394
205.62	4,914	16,443
205.63	4,918	16,492
205.64	4,922	16,541
205.65	4,926	16,590
205.66	4,930	16,640
205.67	4,934	16,689
205.68	4,938	16,738
205.69	4,942	16,788
205.70	4,946	16,837
205.71	4,950	16,887
205.72	4,954	16,936
205.73	4,959	16,986
205.74	4,963	17,035
205.75	4,967	17,085
205.76	4,971	17,135
205.77	4,975	17,184
205.78	4,979	17,234
205.79	4,983	17,284
205.80	4,987	17,334
205.81	4,991	17,384
205.82	4,995	17,434
205.83	4,999	17,484
205.84	5,004	17,534
205.85	5,008	17,584
205.86	5,012	17,634
205.87	5,016	17,684
205.88	5,020	17,734
205.89	5,024	17,784
205.90	5,028	17,834
205.91	5,032	17,885
205.92	5,036	17,935
205.93	5,040	17,986
205.94	5,044	18,036
205.95	5,049	18,086
205.96	5,053	18,137
205.97	5,057	18,187
205.98	5,061	18,238
205.99	5,065	18,289
206.00	**5,069**	**18,339**

Summary for Link PDA-3: Proposed Drainage Area #3

Inflow Area = 29.619 ac, 38.13% Impervious, Inflow Depth > 1.82" for Future 2 yr event
Inflow = 17.37 cfs @ 12.22 hrs, Volume= 4.484 af
Primary = 17.37 cfs @ 12.22 hrs, Volume= 4.484 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-3: Proposed Drainage Area #3



Summary for Subcatchment 29l: PDA-29 (impervious)

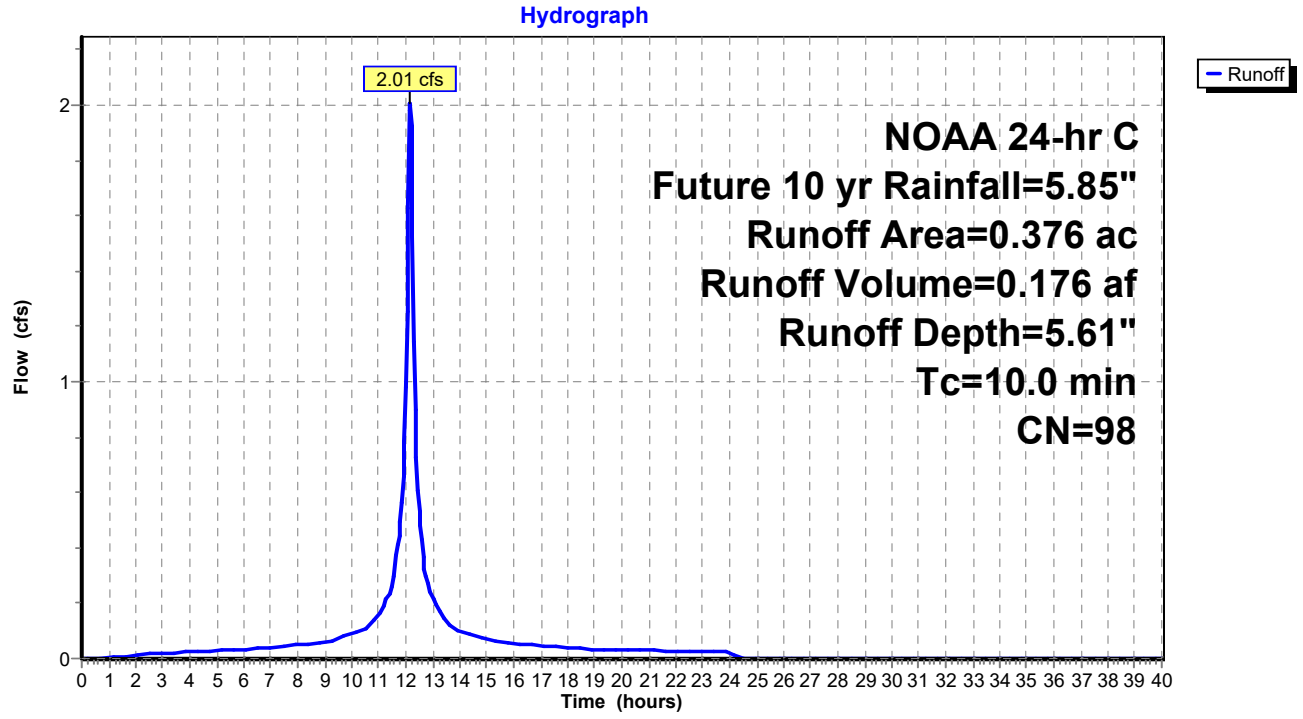
Runoff = 2.01 cfs @ 12.17 hrs, Volume= 0.176 af, Depth= 5.61"
Routed to Pond B-29 : Basin #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.342	98	Pavement, HSG C
*	0.034	98	Concrete, HSC C
	0.376	98	Weighted Average
	0.376		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 29l: PDA-29 (impervious)



Summary for Subcatchment 29P: PDA-29 (pervious)

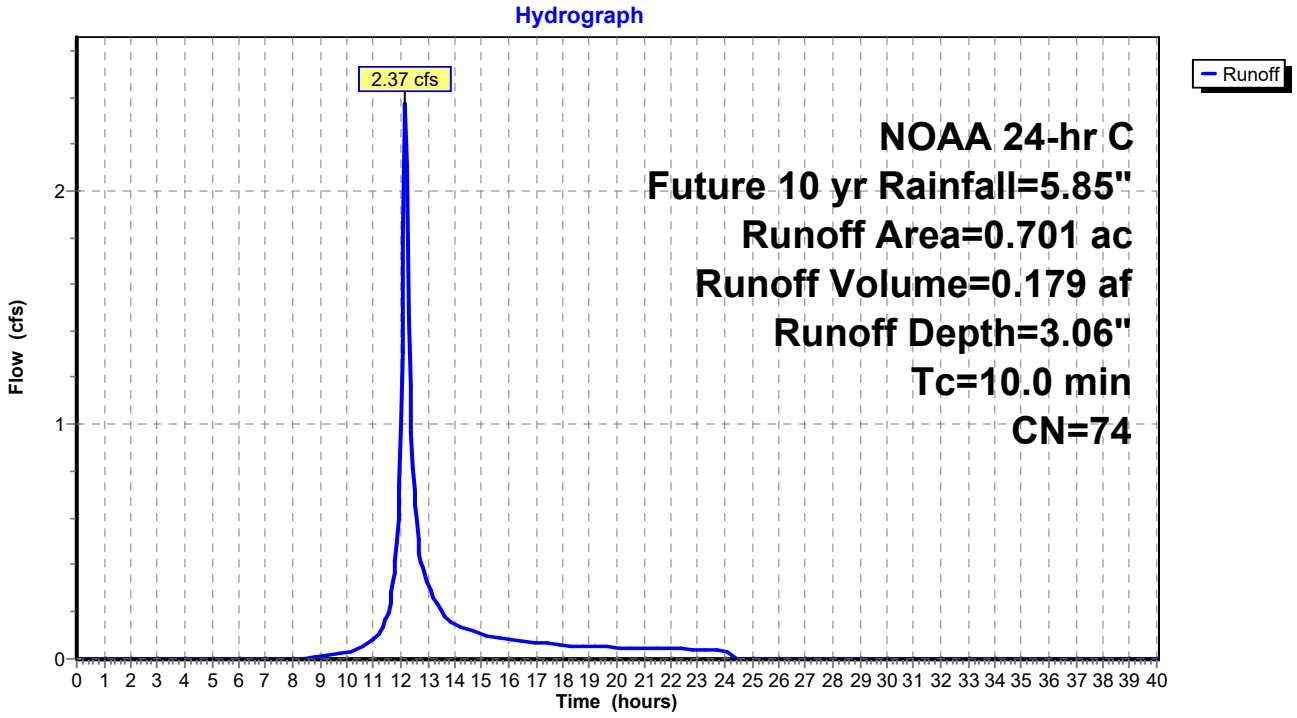
Runoff = 2.37 cfs @ 12.18 hrs, Volume= 0.179 af, Depth= 3.06"
Routed to Pond B-29 : Basin #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.701	74	>75% Grass cover, Good, HSG C
0.701		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 29P: PDA-29 (pervious)



Summary for Subcatchment 30l: PDA-30 (impervious)

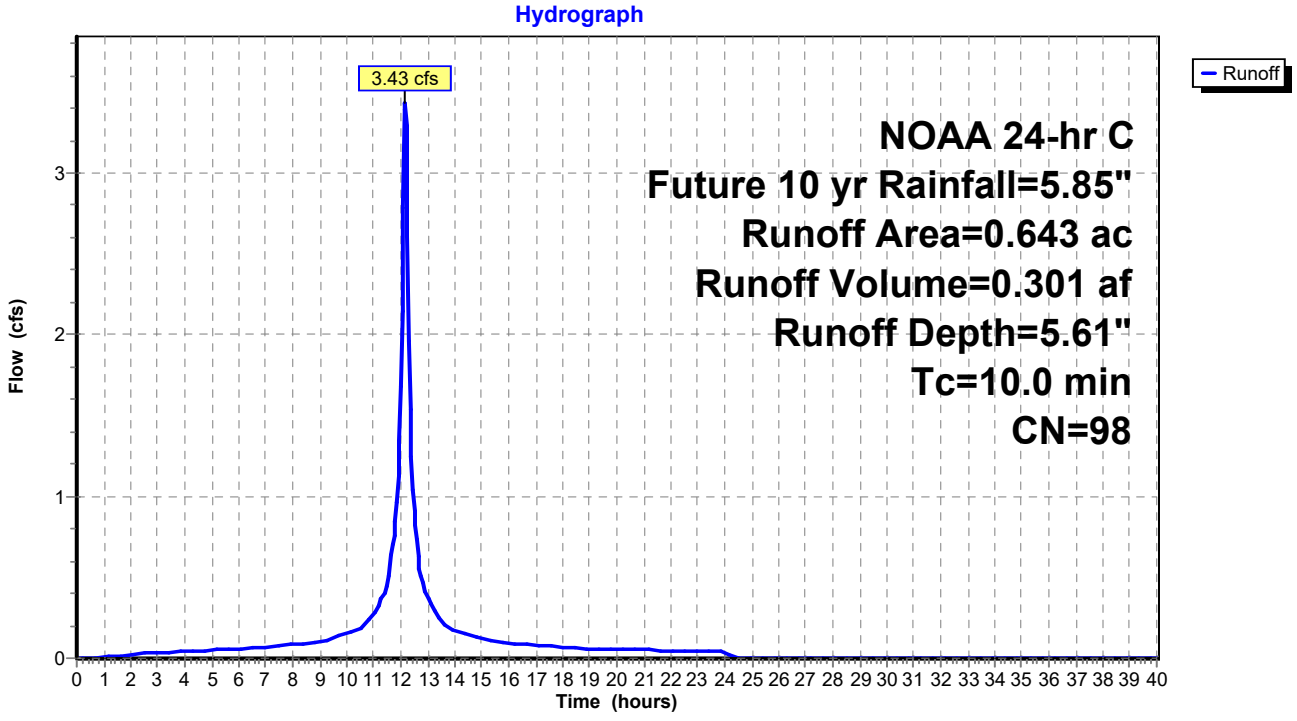
Runoff = 3.43 cfs @ 12.17 hrs, Volume= 0.301 af, Depth= 5.61"
Routed to Pond B-30 : Basin #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.643	98	Weighted Average
	0.643		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 30l: PDA-30 (impervious)



Summary for Subcatchment 30P: PDA-30 (pervious)

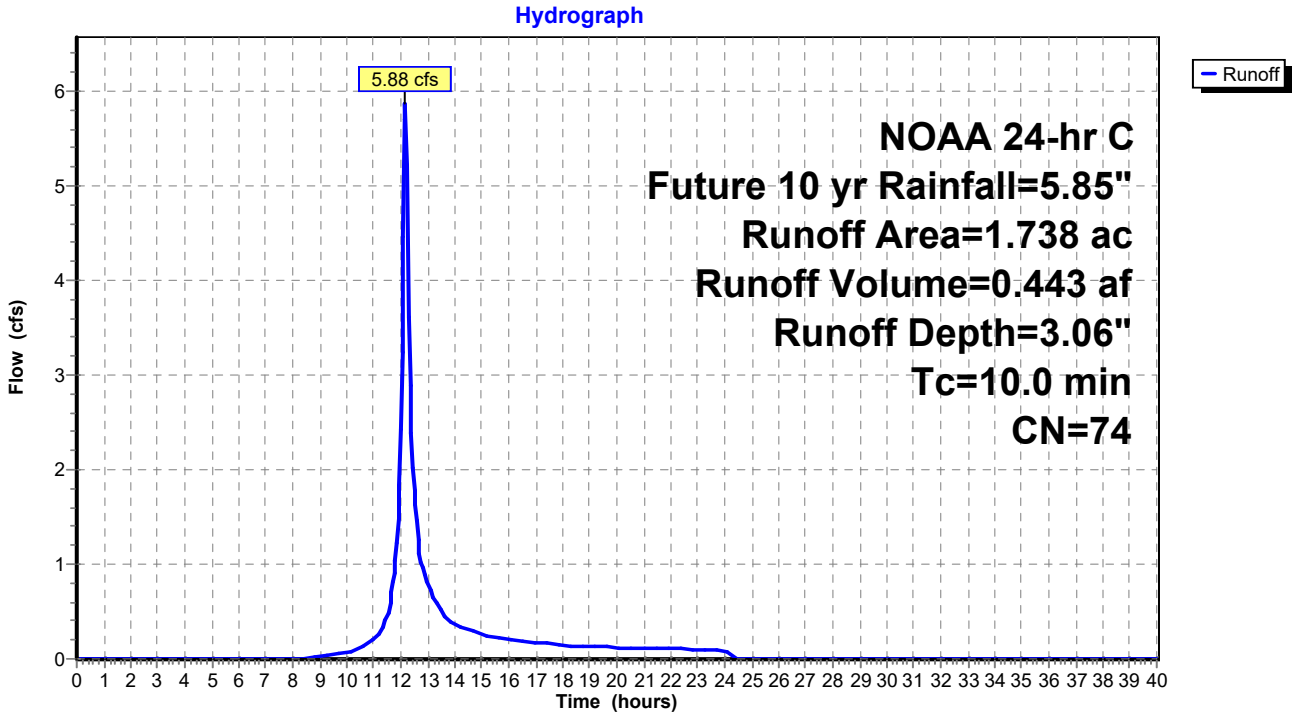
Runoff = 5.88 cfs @ 12.18 hrs, Volume= 0.443 af, Depth= 3.06"
Routed to Pond B-30 : Basin #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.738	74	>75% Grass cover, Good, HSG C
1.738		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 30P: PDA-30 (pervious)



Summary for Subcatchment 31I: PDA-31 (impervious)

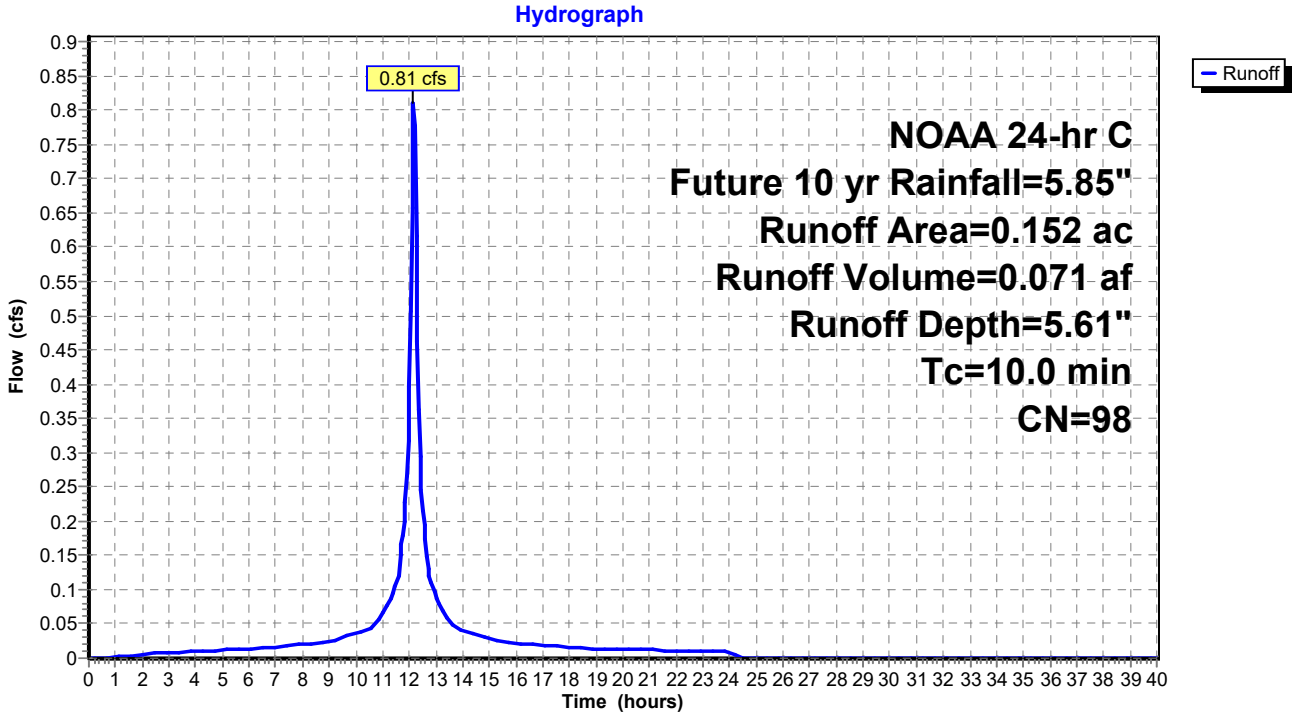
Runoff = 0.81 cfs @ 12.17 hrs, Volume= 0.071 af, Depth= 5.61"
Routed to Pond B-31 : Basin #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.079	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.009	98	Concrete, HSC C
	0.152	98	Weighted Average
	0.152		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 31I: PDA-31 (impervious)



Summary for Subcatchment 31P: PDA-31 (pervious)

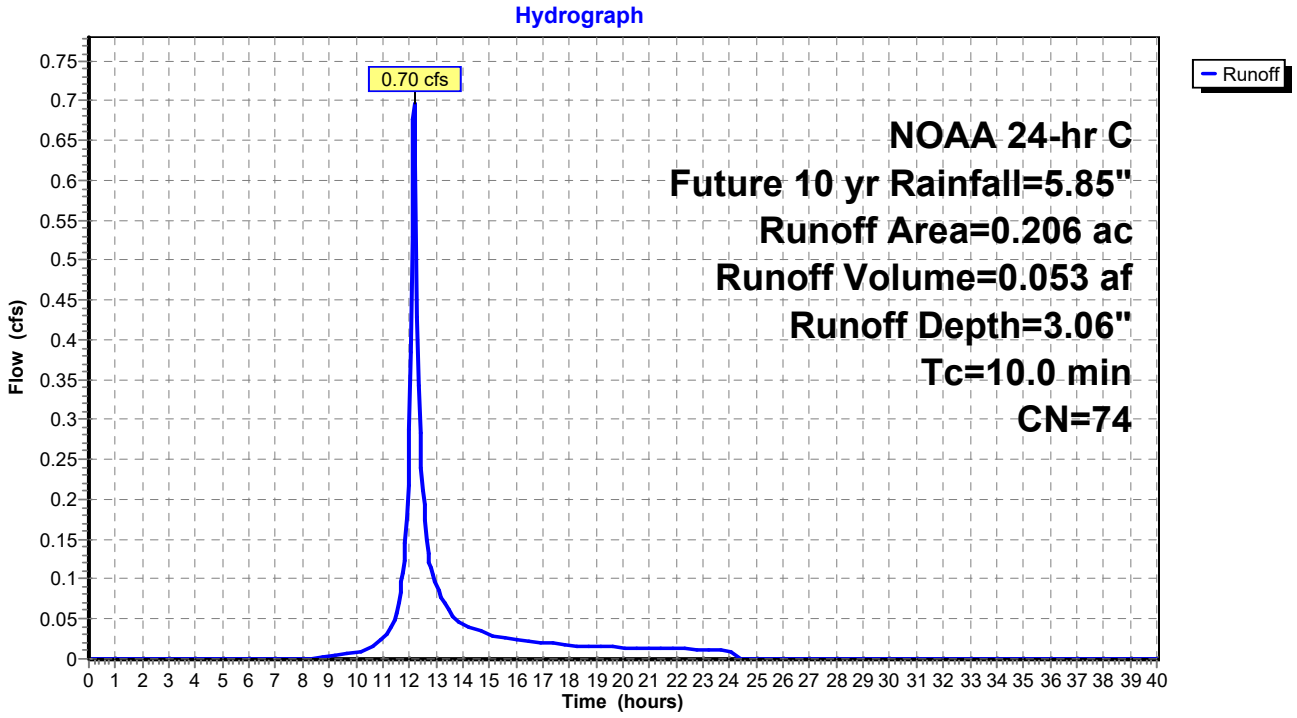
Runoff = 0.70 cfs @ 12.18 hrs, Volume= 0.053 af, Depth= 3.06"
Routed to Pond B-31 : Basin #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.206	74	>75% Grass cover, Good, HSG C
0.206		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 31P: PDA-31 (pervious)



Summary for Subcatchment 32l: PDA-32 (impervious)

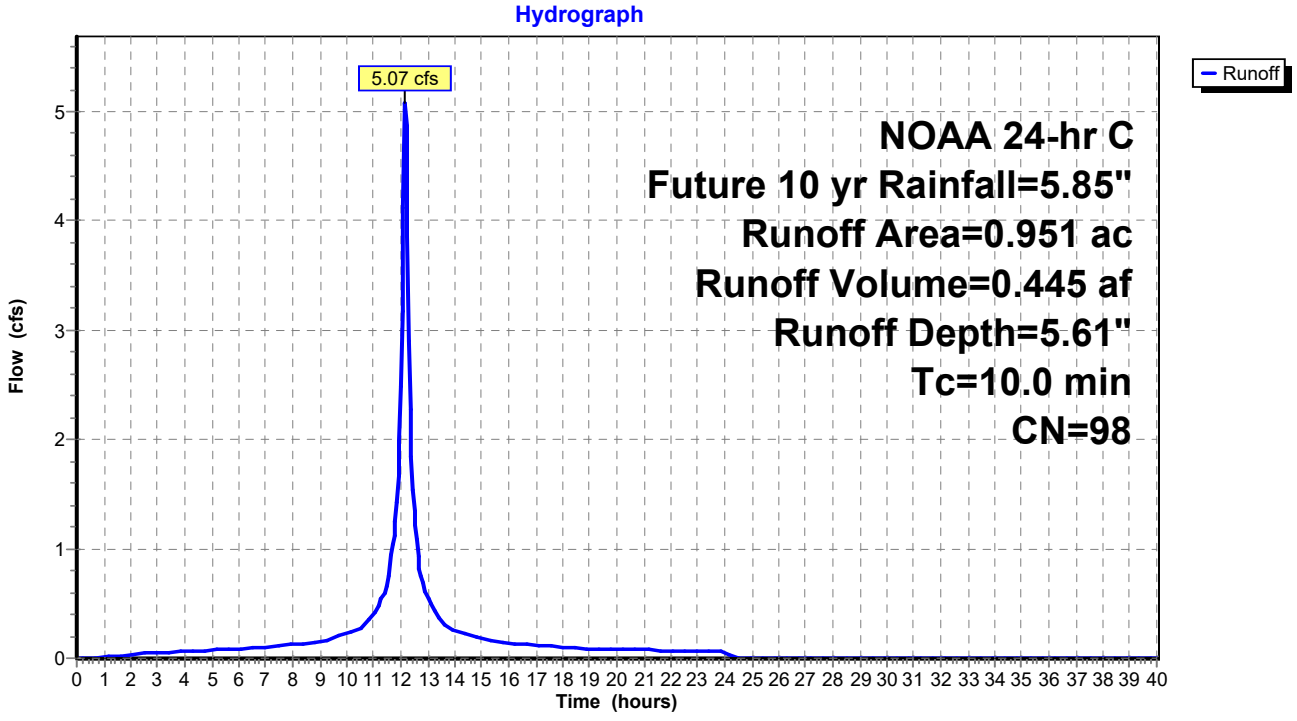
Runoff = 5.07 cfs @ 12.17 hrs, Volume= 0.445 af, Depth= 5.61"
Routed to Pond B-32 : Basin #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.478	98	Pavement, HSG C
*	0.386	98	Roof, HSG C
*	0.087	98	Concrete, HSC C
	0.951	98	Weighted Average
	0.951		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 32l: PDA-32 (impervious)



Summary for Subcatchment 32P: PDA-32 (pervious)

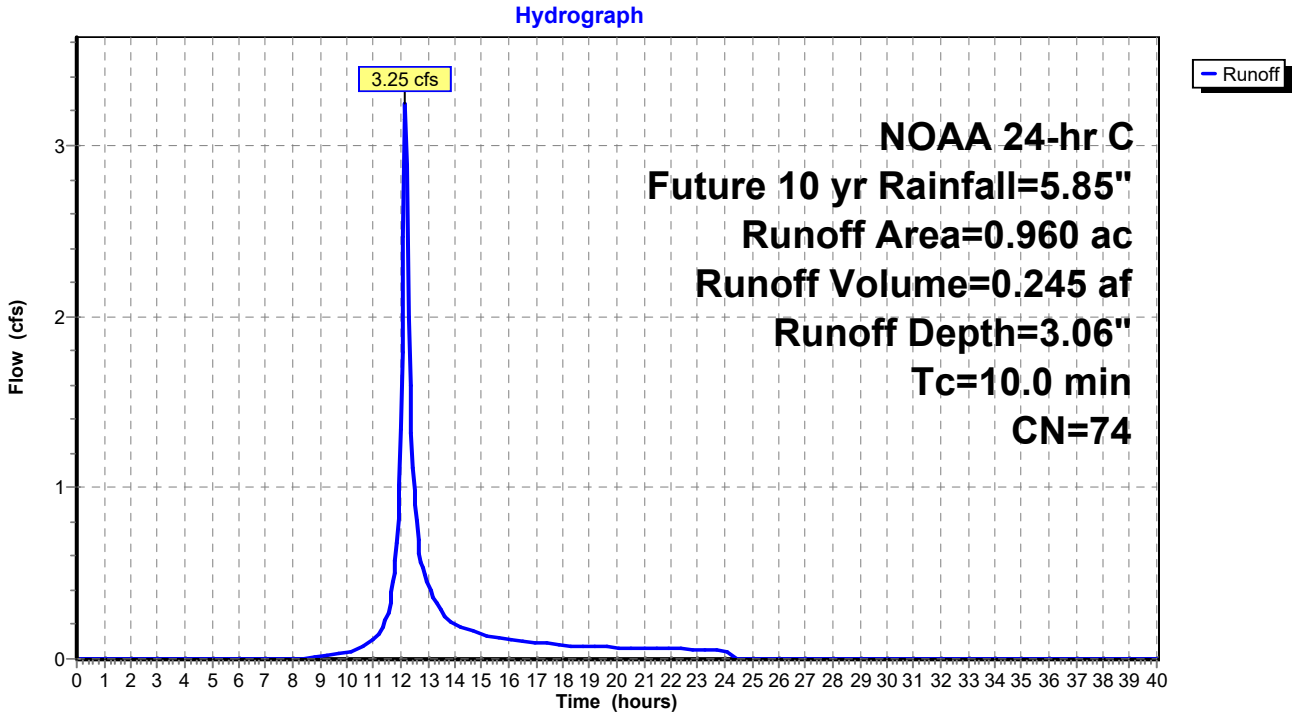
Runoff = 3.25 cfs @ 12.18 hrs, Volume= 0.245 af, Depth= 3.06"
Routed to Pond B-32 : Basin #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.960	74	>75% Grass cover, Good, HSG C
0.960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 32P: PDA-32 (pervious)



Summary for Subcatchment 33l: PDA-33 (impervious)

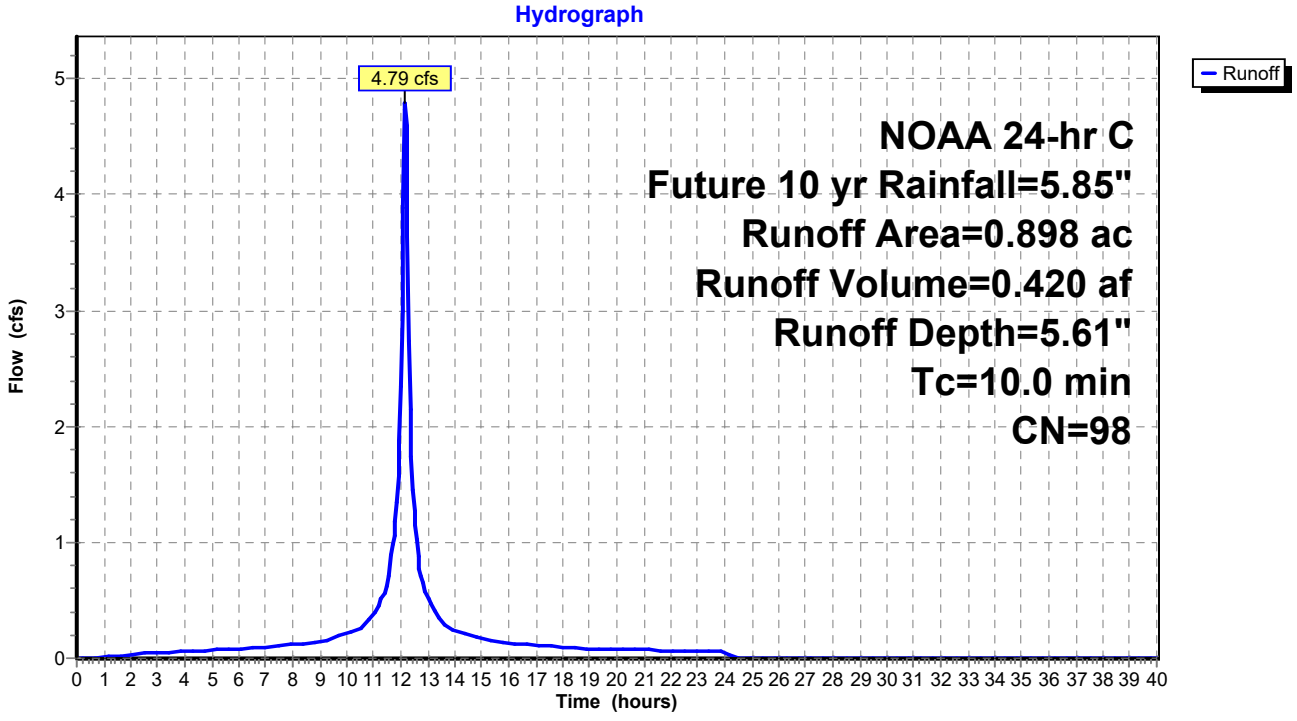
Runoff = 4.79 cfs @ 12.17 hrs, Volume= 0.420 af, Depth= 5.61"
Routed to Pond B-33 : Basin #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.351	98	Pavement, HSG C
*	0.514	98	Roof, HSG C
*	0.033	98	Concrete, HSC C
	0.898	98	Weighted Average
	0.898		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 33l: PDA-33 (impervious)



Summary for Subcatchment 33P: PDA-33 (pervious)

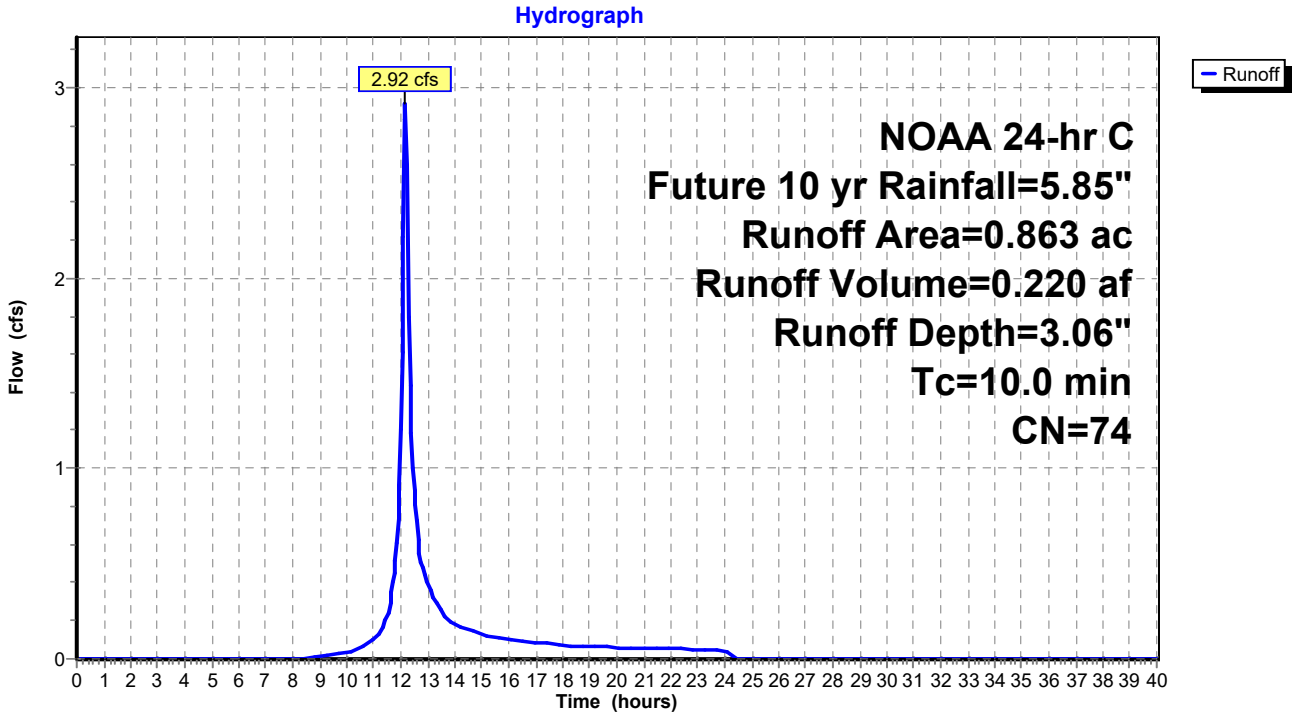
Runoff = 2.92 cfs @ 12.18 hrs, Volume= 0.220 af, Depth= 3.06"
Routed to Pond B-33 : Basin #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.863	74	>75% Grass cover, Good, HSG C
0.863		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 33P: PDA-33 (pervious)



Summary for Subcatchment 34l: PDA-34 (impervious)

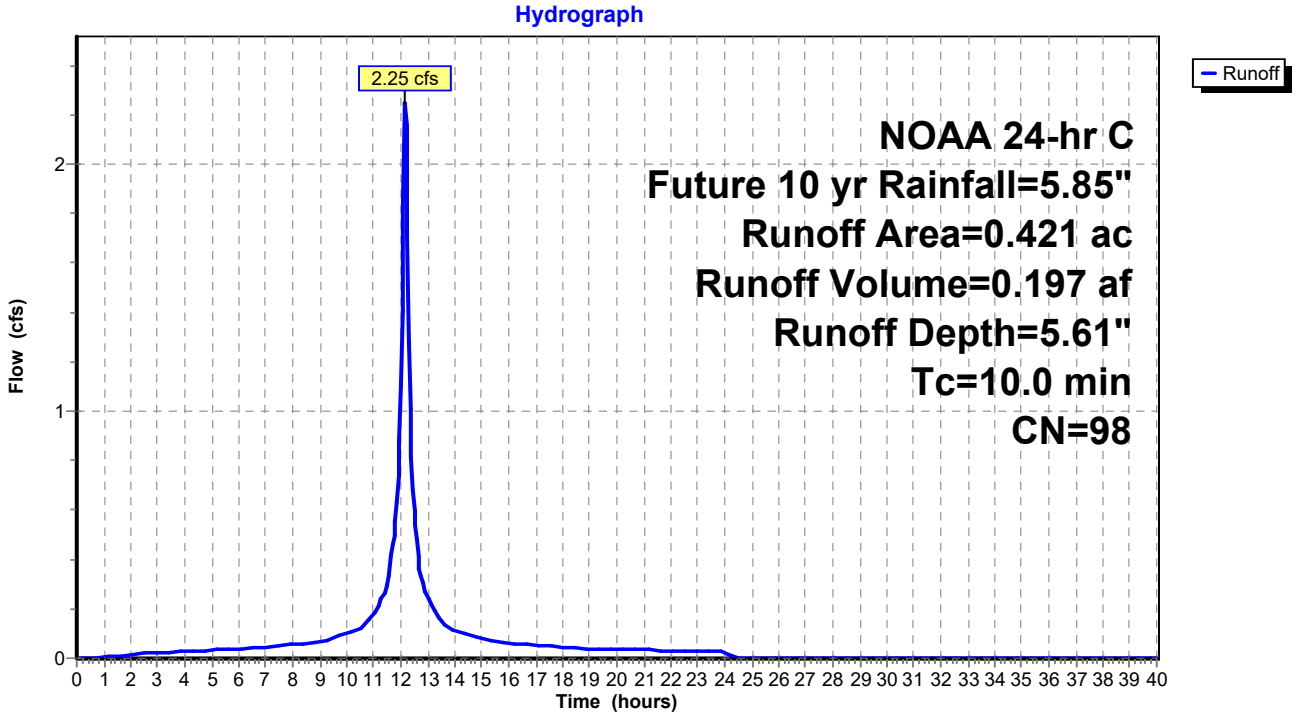
Runoff = 2.25 cfs @ 12.17 hrs, Volume= 0.197 af, Depth= 5.61"
Routed to Pond B-34 : Basin #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.279	98	Roof, HSG C
*	0.142	98	Concrete, HSC C
	0.421	98	Weighted Average
	0.421		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 34l: PDA-34 (impervious)



Summary for Subcatchment 34P: PDA-34 (pervious)

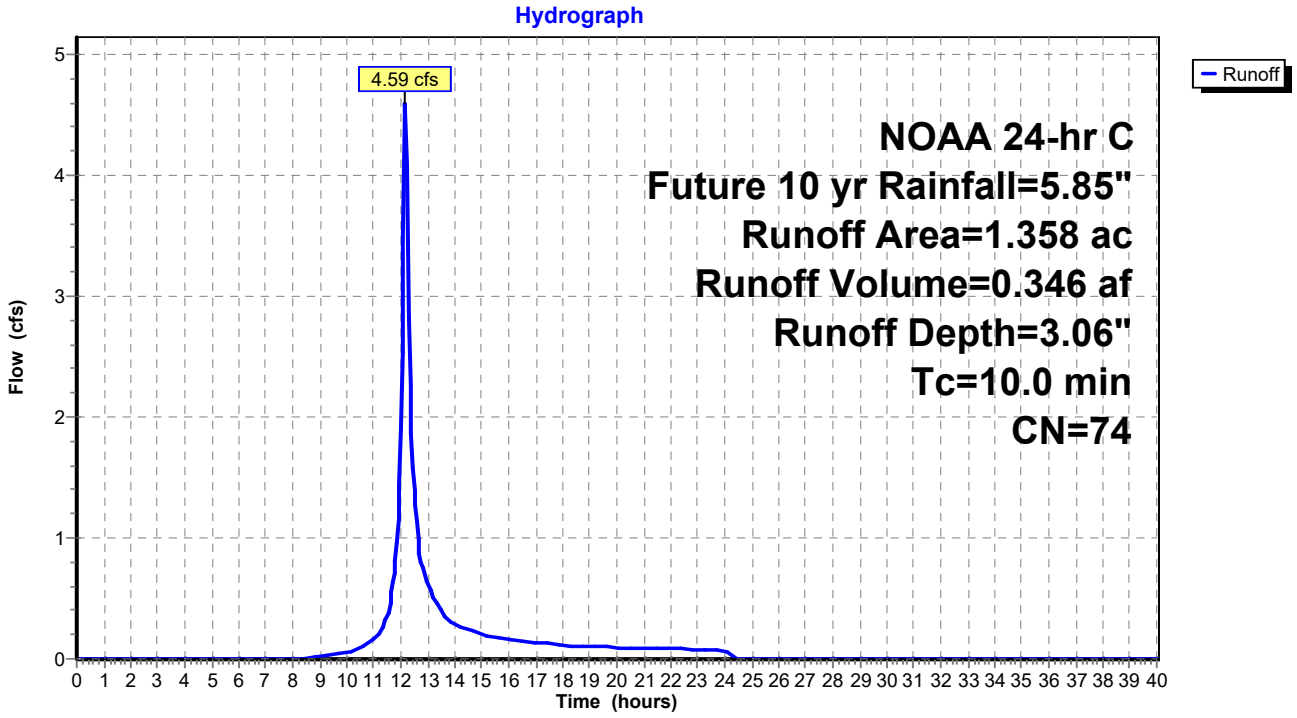
Runoff = 4.59 cfs @ 12.18 hrs, Volume= 0.346 af, Depth= 3.06"
Routed to Pond B-34 : Basin #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.358	74	>75% Grass cover, Good, HSG C
1.358		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 34P: PDA-34 (pervious)



Summary for Subcatchment 35l: PDA-35 (impervious)

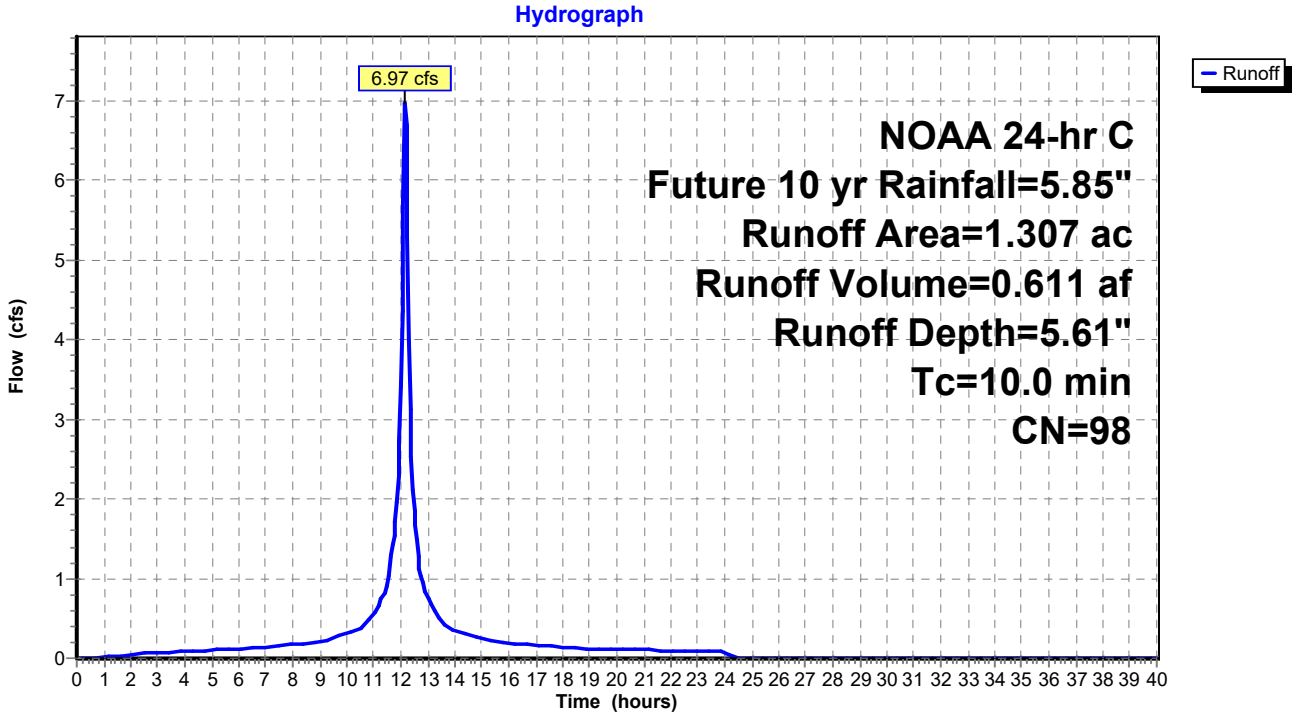
Runoff = 6.97 cfs @ 12.17 hrs, Volume= 0.611 af, Depth= 5.61"
Routed to Pond B-35 : Basin #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	1.003	98	Pavement, HSG C
*	0.139	98	Roof, HSG C
*	0.165	98	Concrete, HSC C
	1.307	98	Weighted Average
	1.307		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 35l: PDA-35 (impervious)



Summary for Subcatchment 35P: PDA-35 (pervious)

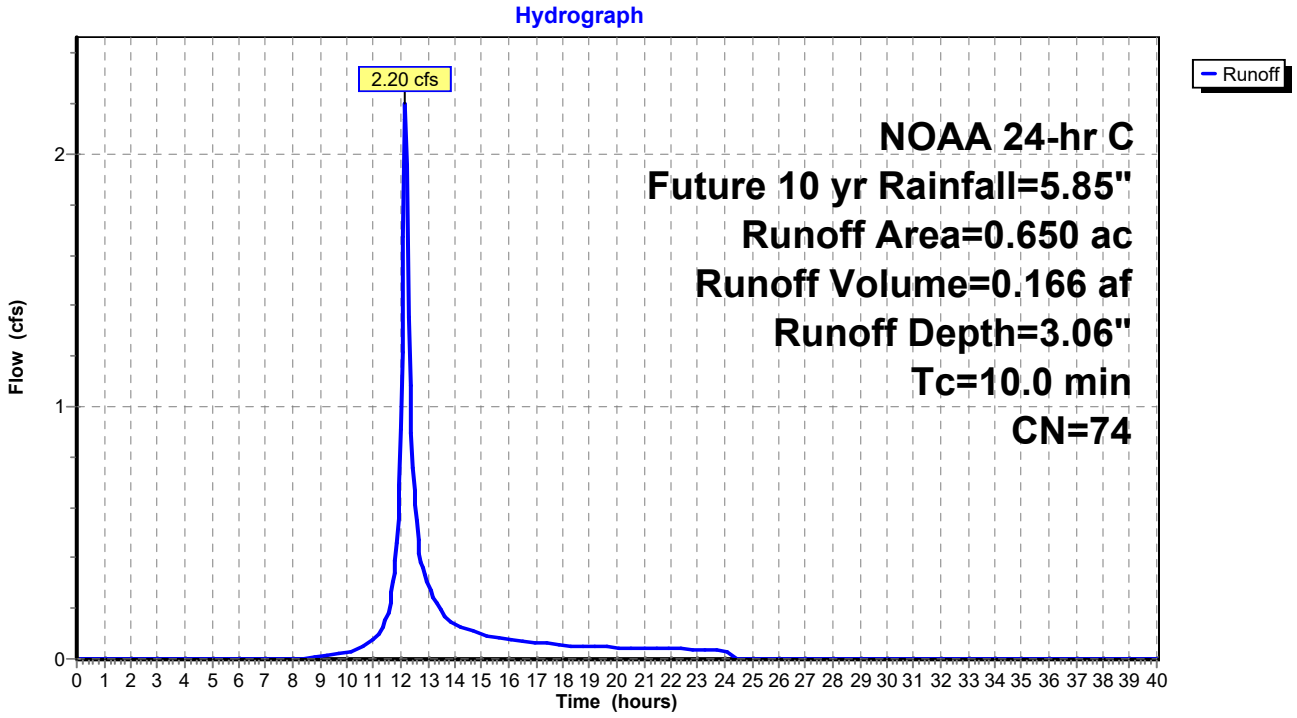
Runoff = 2.20 cfs @ 12.18 hrs, Volume= 0.166 af, Depth= 3.06"
Routed to Pond B-35 : Basin #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.650	74	>75% Grass cover, Good, HSG C
0.650		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 35P: PDA-35 (pervious)



Summary for Subcatchment 36AI: PDA-36A (impervious)

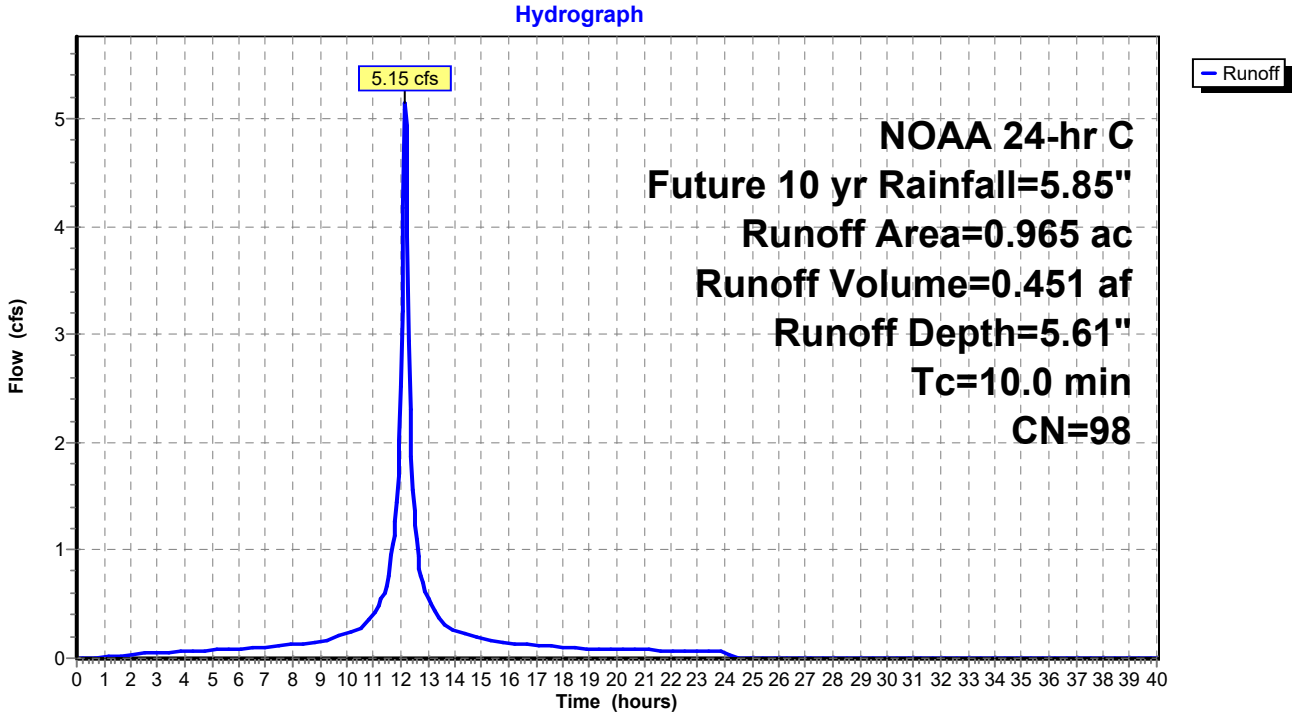
Runoff = 5.15 cfs @ 12.17 hrs, Volume= 0.451 af, Depth= 5.61"
Routed to Pond B-36A : Basin #36A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.415	98	Pavement, HSG C
*	0.418	98	Roof, HSG C
*	0.132	98	Concrete, HSC C
	0.965	98	Weighted Average
	0.965		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36AI: PDA-36A (impervious)



Summary for Subcatchment 36AP: PDA-36A (pervious)

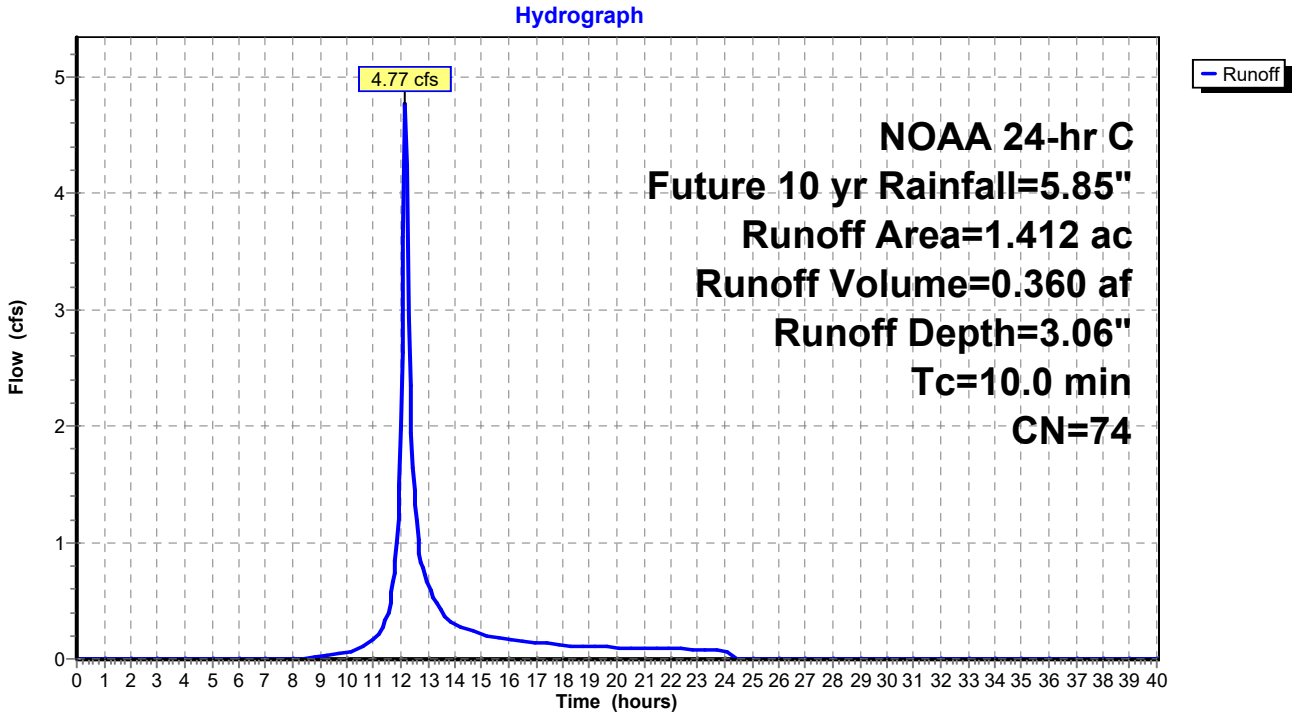
Runoff = 4.77 cfs @ 12.18 hrs, Volume= 0.360 af, Depth= 3.06"
Routed to Pond B-36A : Basin #36A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.412	74	>75% Grass cover, Good, HSG C
1.412		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36AP: PDA-36A (pervious)



Summary for Subcatchment 36BI: PDA-36B (impervious)

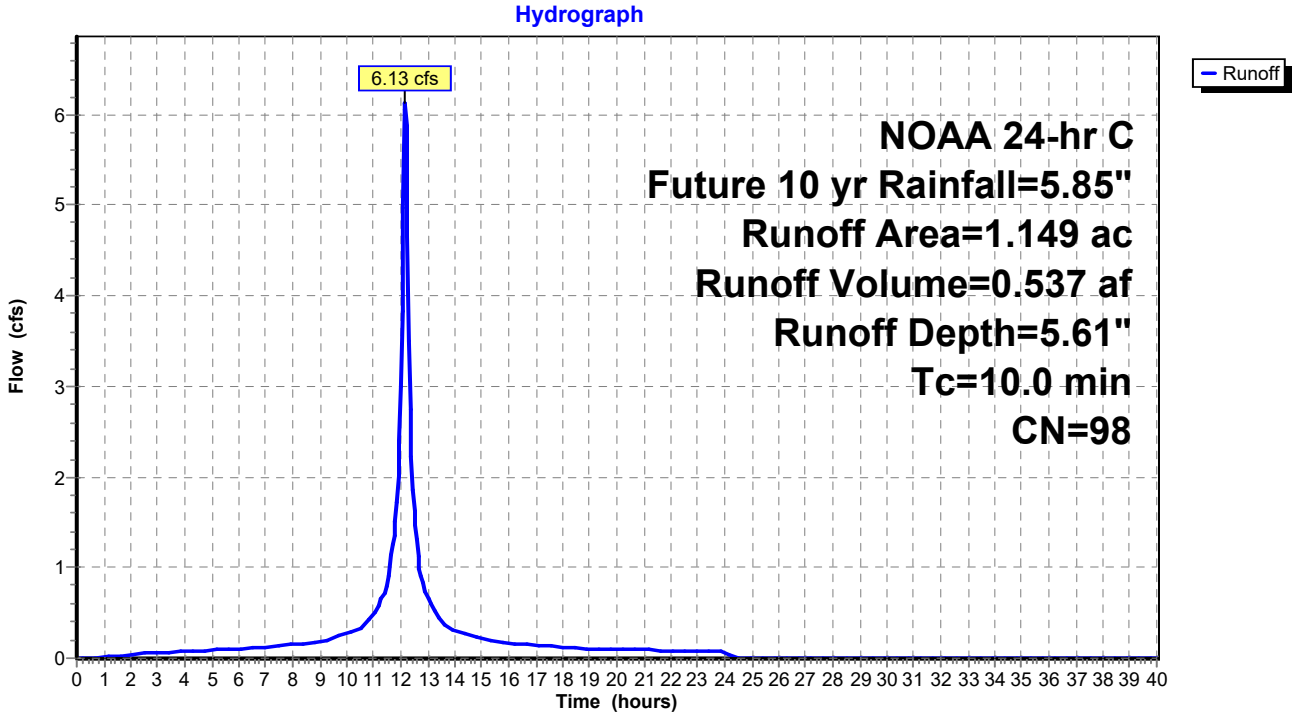
Runoff = 6.13 cfs @ 12.17 hrs, Volume= 0.537 af, Depth= 5.61"
Routed to Pond B-36B : Basin #36B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.501	98	Pavement, HSG C
*	0.579	98	Roof, HSG C
*	0.069	98	Concrete, HSC C
	1.149	98	Weighted Average
	1.149		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36BI: PDA-36B (impervious)



Summary for Subcatchment 36BP: PDA-36B (pervious)

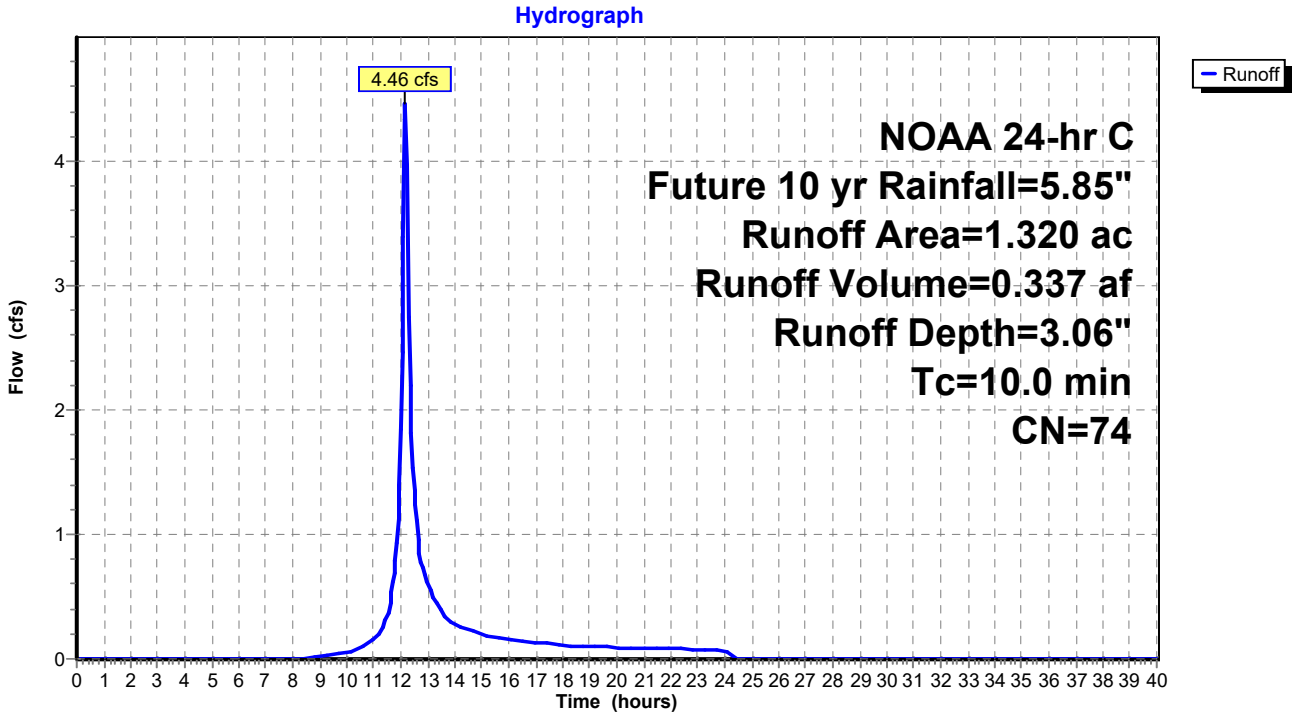
Runoff = 4.46 cfs @ 12.18 hrs, Volume= 0.337 af, Depth= 3.06"
Routed to Pond B-36B : Basin #36B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.320	74	>75% Grass cover, Good, HSG C
1.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36BP: PDA-36B (pervious)



Summary for Subcatchment 37AI: PDA-37B (impervious)

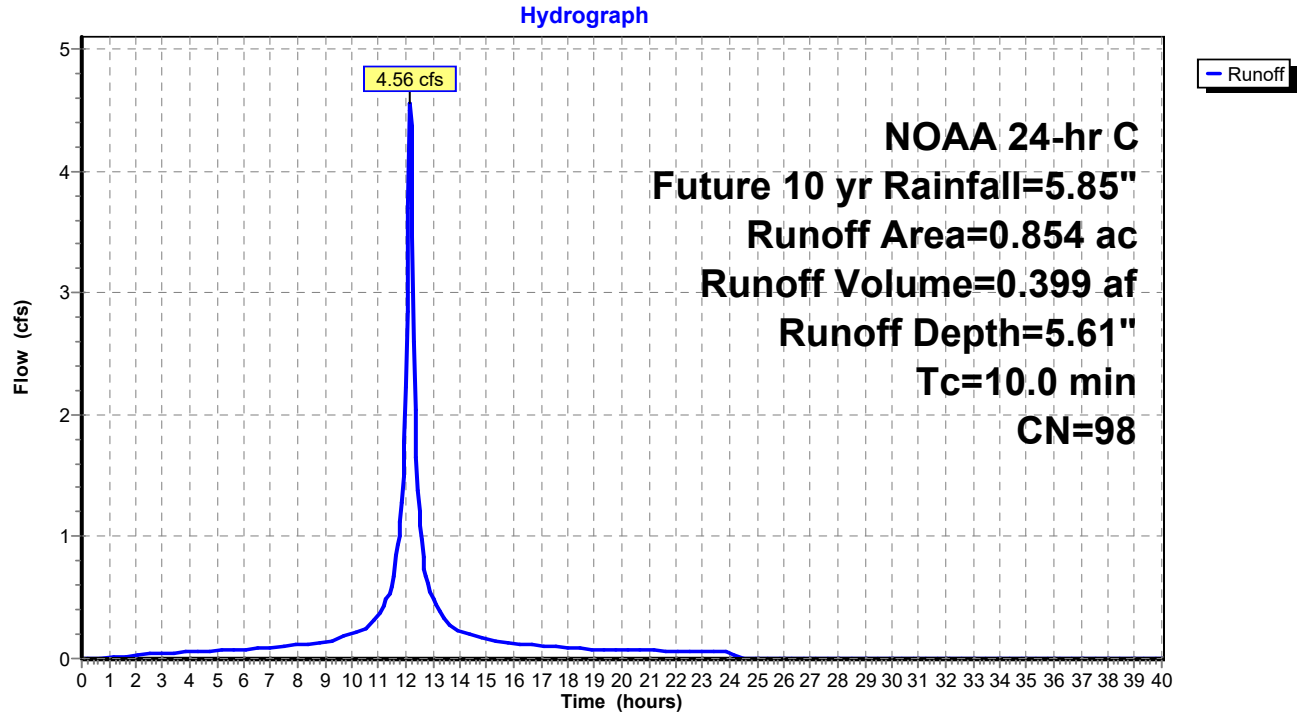
Runoff = 4.56 cfs @ 12.17 hrs, Volume= 0.399 af, Depth= 5.61"
Routed to Pond B-37A : Basin #37A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.673	98	Pavement, HSG C
*	0.181	98	Concrete, HSC C
	0.854	98	Weighted Average
	0.854		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37AI: PDA-37B (impervious)



Summary for Subcatchment 37AP: PDA-37A (pervious)

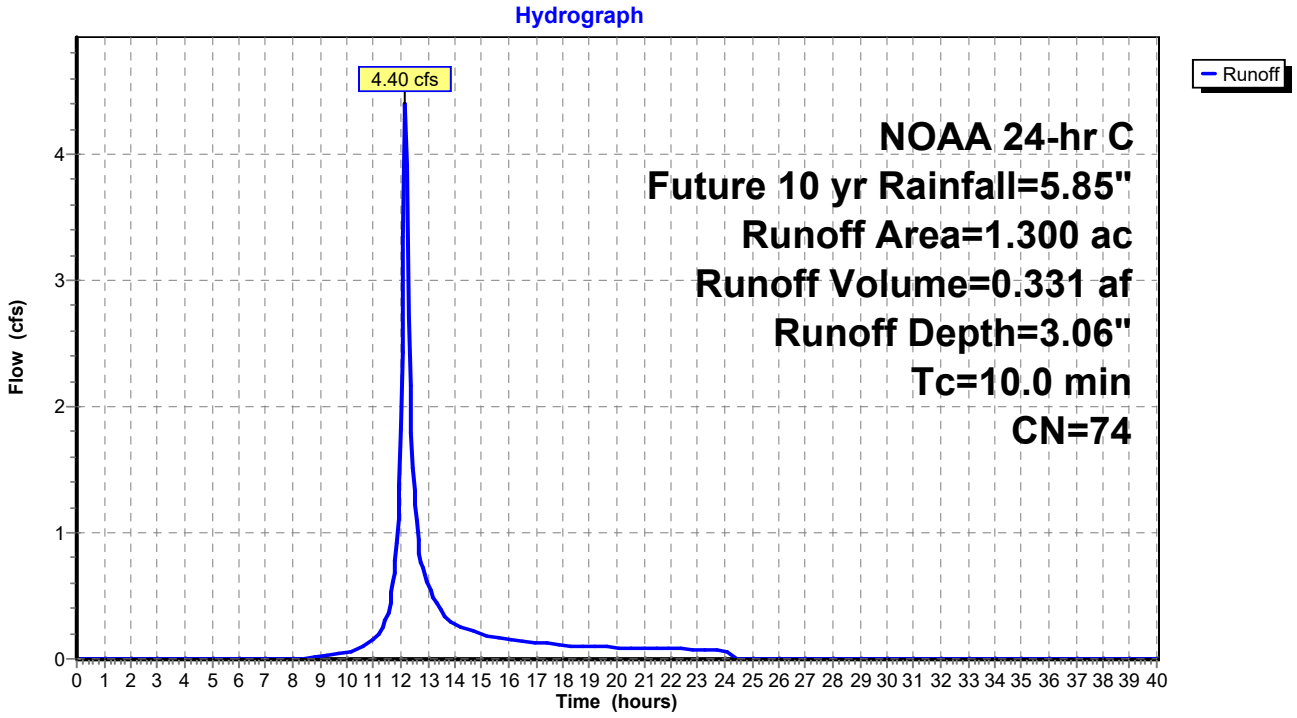
Runoff = 4.40 cfs @ 12.18 hrs, Volume= 0.331 af, Depth= 3.06"
Routed to Pond B-37A : Basin #37A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.300	74	>75% Grass cover, Good, HSG C
1.300		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37AP: PDA-37A (pervious)



Summary for Subcatchment 37BI: PDA-37B (impervious)

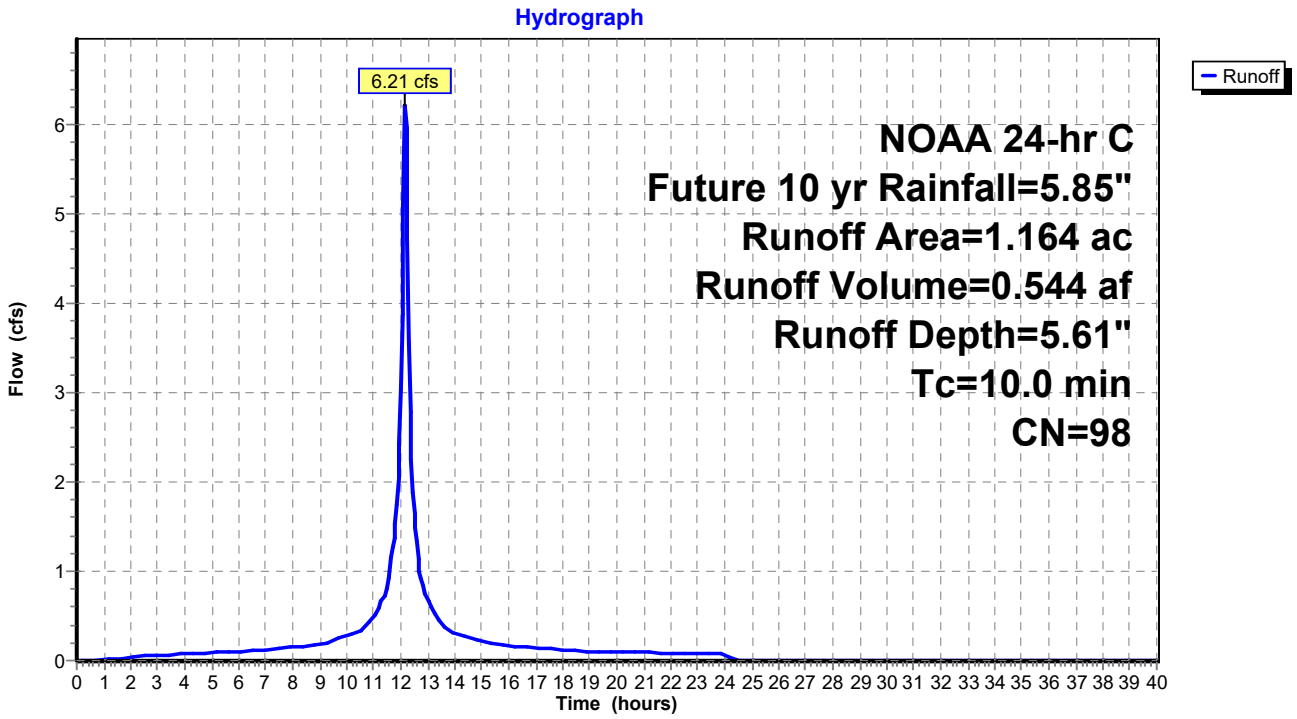
Runoff = 6.21 cfs @ 12.17 hrs, Volume= 0.544 af, Depth= 5.61"
Routed to Pond B-37B : Basin #37B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.806	98	Pavement, HSG C
*	0.079	98	Concrete, HSC C
	0.279	98	Unconnected roofs, HSG C
	1.164	98	Weighted Average
	1.164		100.00% Impervious Area
	0.279		23.97% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37BI: PDA-37B (impervious)



Summary for Subcatchment 38BP: PDA-37B (pervious)

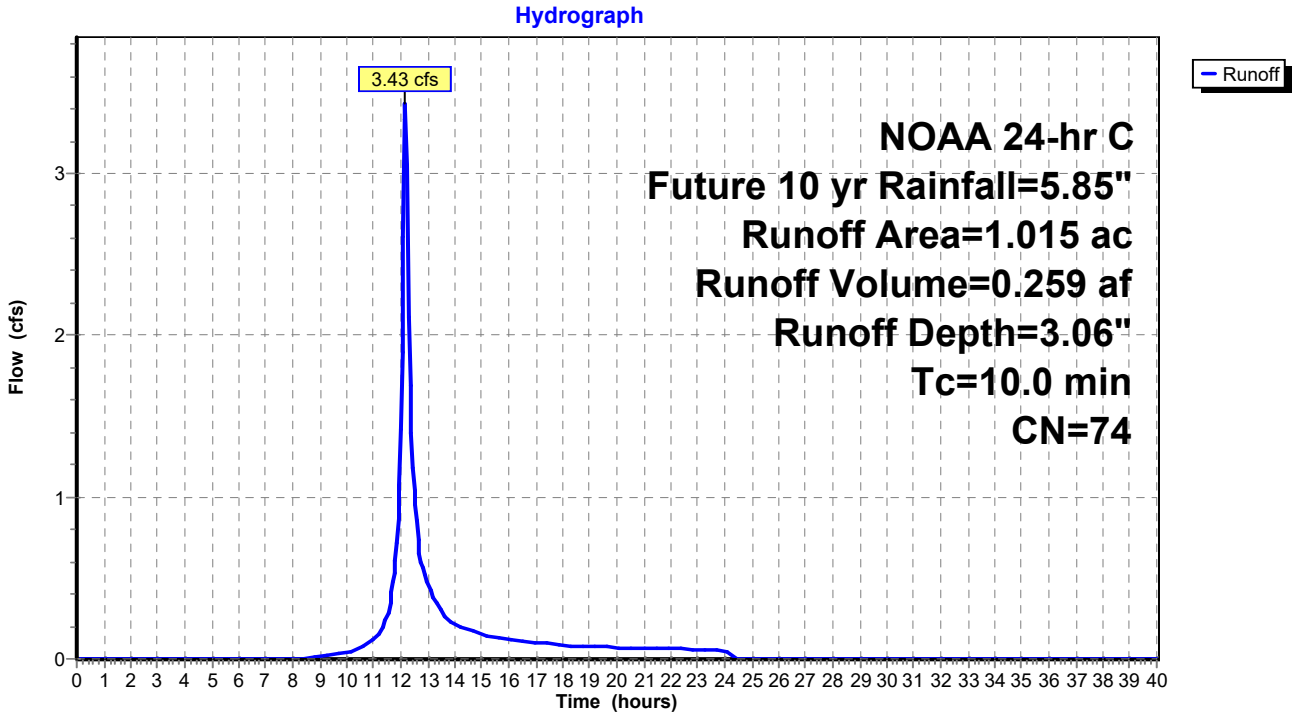
Runoff = 3.43 cfs @ 12.18 hrs, Volume= 0.259 af, Depth= 3.06"
Routed to Pond B-37B : Basin #37B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.015	74	>75% Grass cover, Good, HSG C
1.015		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38BP: PDA-37B (pervious)



Summary for Subcatchment 38I: PDA-38 (impervious)

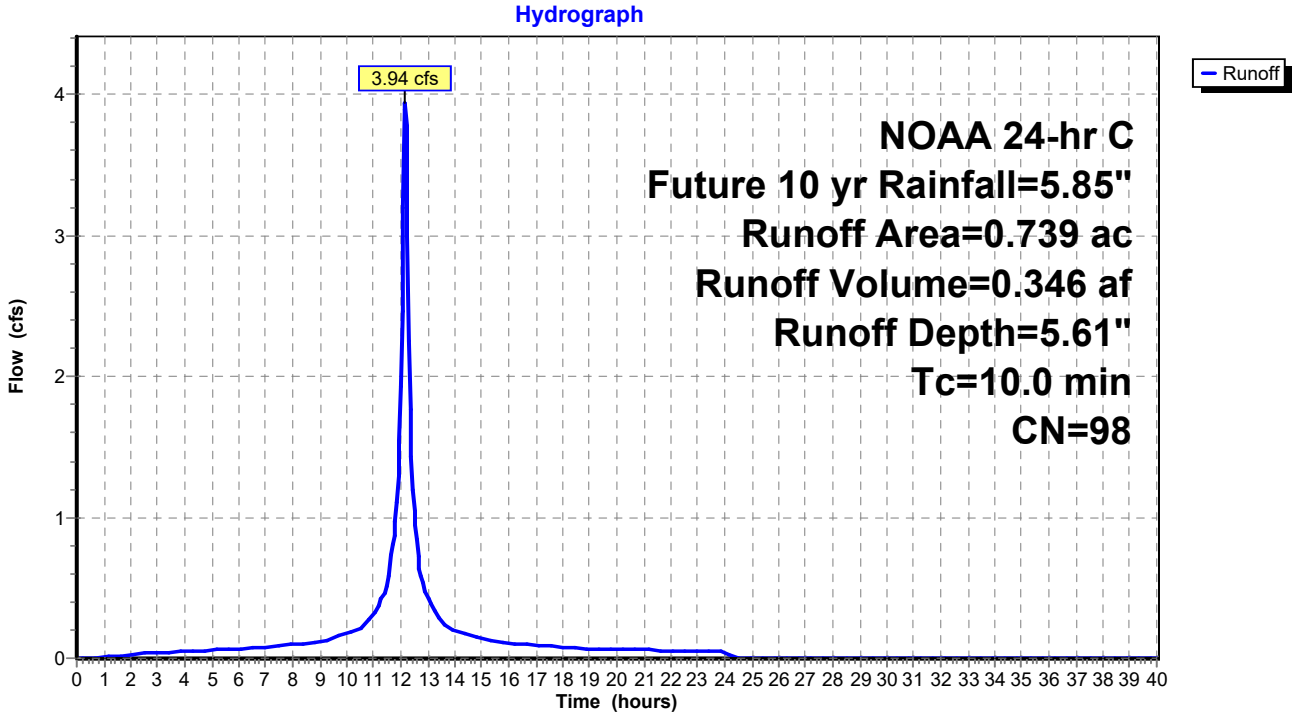
Runoff = 3.94 cfs @ 12.17 hrs, Volume= 0.346 af, Depth= 5.61"
Routed to Pond B-38 : Basin #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.171	98	Concrete, HSC C
	0.000	98	Paved roads w/curbs & sewers, HSG C
	0.739	98	Weighted Average
	0.739		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38I: PDA-38 (impervious)



Summary for Subcatchment 38P: PDA-38 (pervious)

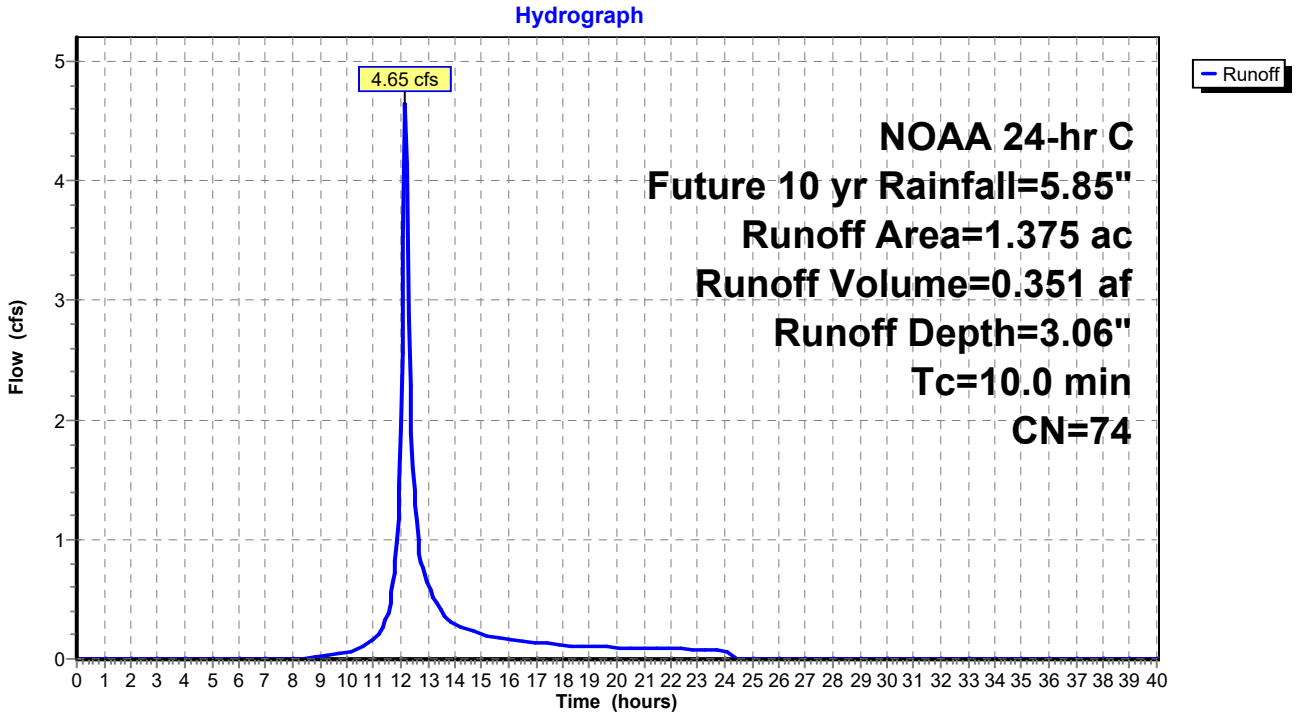
Runoff = 4.65 cfs @ 12.18 hrs, Volume= 0.351 af, Depth= 3.06"
Routed to Pond B-38 : Basin #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.375	74	>75% Grass cover, Good, HSG C
1.375		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38P: PDA-38 (pervious)



Summary for Subcatchment 39l: PDA-39 (impervious)

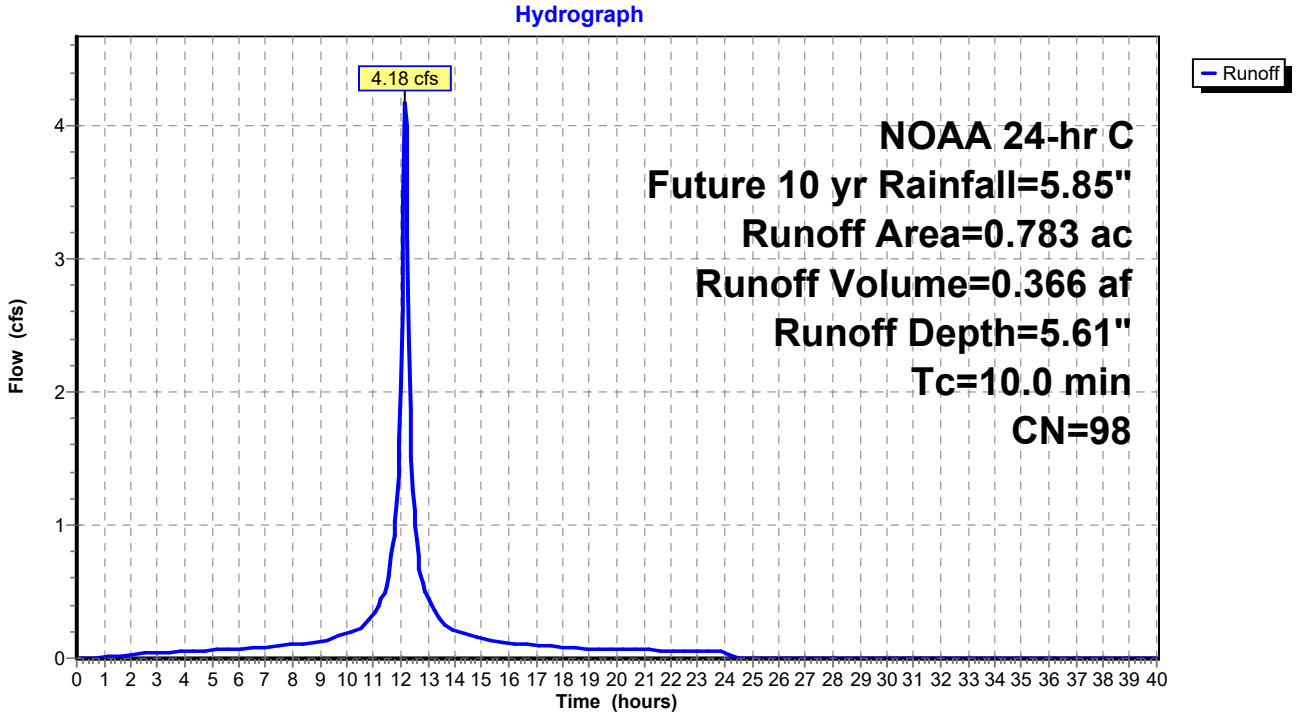
Runoff = 4.18 cfs @ 12.17 hrs, Volume= 0.366 af, Depth= 5.61"
Routed to Pond B-39 : Basin #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.164	98	Concrete, HSC C
	0.051	98	Paved roads w/curbs & sewers, HSG C
	0.783	98	Weighted Average
	0.783		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 39l: PDA-39 (impervious)



Summary for Subcatchment 39P: PDA-39 (pervious)

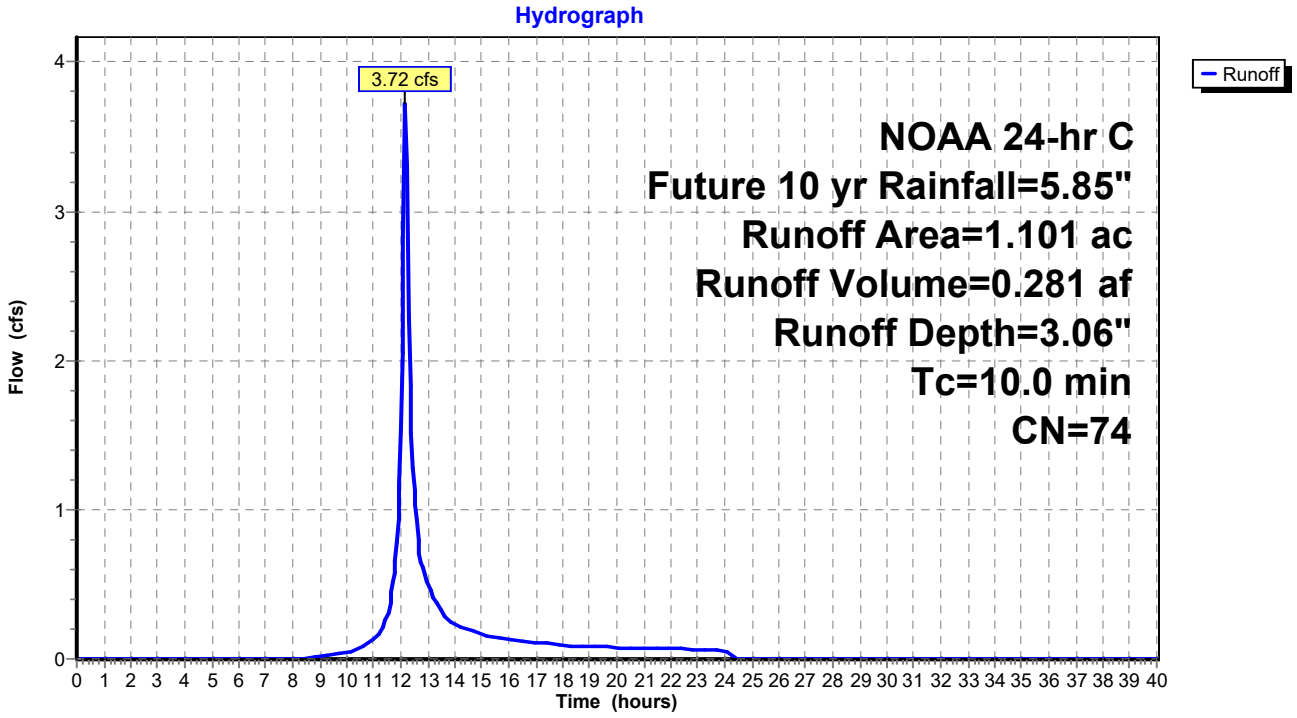
Runoff = 3.72 cfs @ 12.18 hrs, Volume= 0.281 af, Depth= 3.06"
Routed to Pond B-39 : Basin #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.101	74	>75% Grass cover, Good, HSG C
1.101		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 39P: PDA-39 (pervious)



Summary for Subcatchment 40l: PDA-40 (impervious)

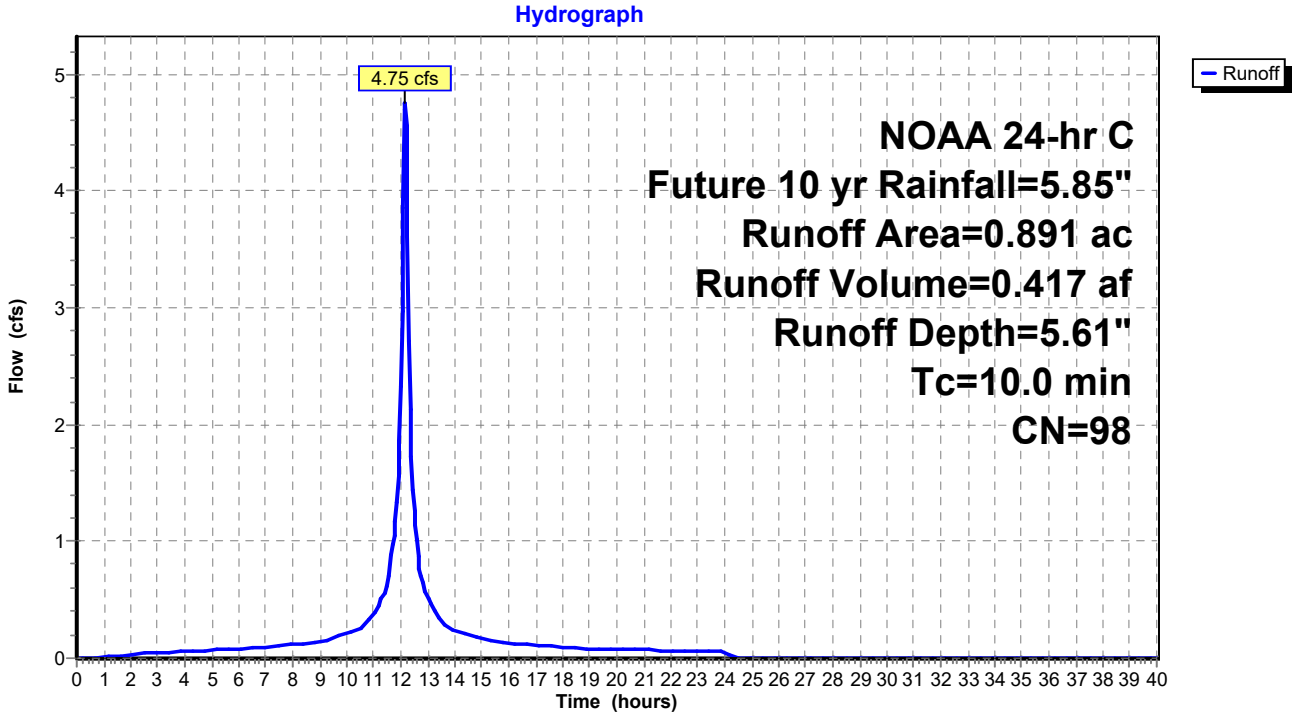
Runoff = 4.75 cfs @ 12.17 hrs, Volume= 0.417 af, Depth= 5.61"
Routed to Pond B-40 : Basin #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.179	98	Concrete, HSC C
	0.144	98	Paved roads w/curbs & sewers, HSG C
	0.891	98	Weighted Average
	0.891		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 40l: PDA-40 (impervious)



Summary for Subcatchment 40P: PDA-40 (pervious)

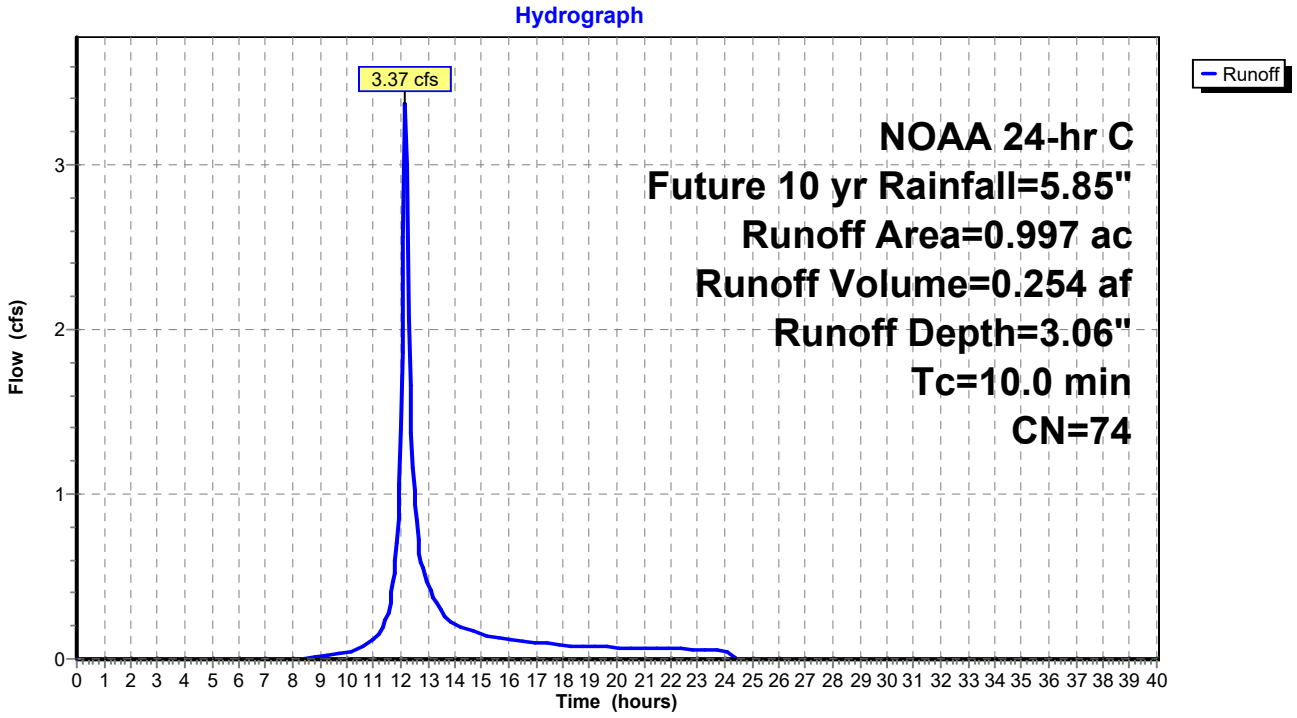
Runoff = 3.37 cfs @ 12.18 hrs, Volume= 0.254 af, Depth= 3.06"
Routed to Pond B-40 : Basin #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.997	74	>75% Grass cover, Good, HSG C
0.997		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 40P: PDA-40 (pervious)



Summary for Subcatchment UPDA-3: PDA-3 (undetained)

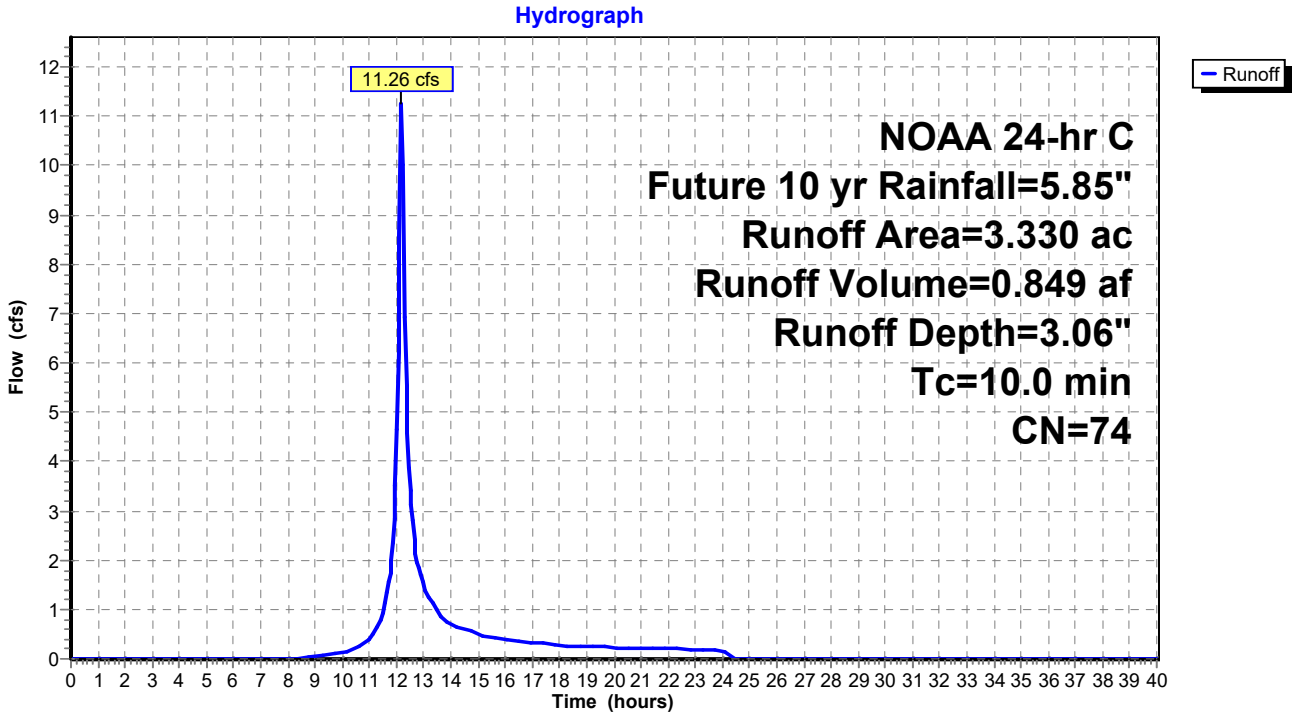
Runoff = 11.26 cfs @ 12.18 hrs, Volume= 0.849 af, Depth= 3.06"
Routed to Link PDA-3 : Proposed Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
3.330	74	>75% Grass cover, Good, HSG C
3.330		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-3: PDA-3 (undetained)



Summary for Pond B-29: Basin #29

Inflow Area = 1.077 ac, 34.91% Impervious, Inflow Depth = 3.95" for Future 10 yr event
Inflow = 4.38 cfs @ 12.17 hrs, Volume= 0.355 af
Outflow = 1.55 cfs @ 12.43 hrs, Volume= 0.308 af, Atten= 65%, Lag= 15.3 min
Primary = 1.55 cfs @ 12.43 hrs, Volume= 0.308 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 187.72' @ 12.43 hrs Surf.Area= 7,312 sf Storage= 7,423 cf

Plug-Flow detention time= 380.7 min calculated for 0.308 af (87% of inflow)
Center-of-Mass det. time= 317.0 min (1,110.9 - 793.8)

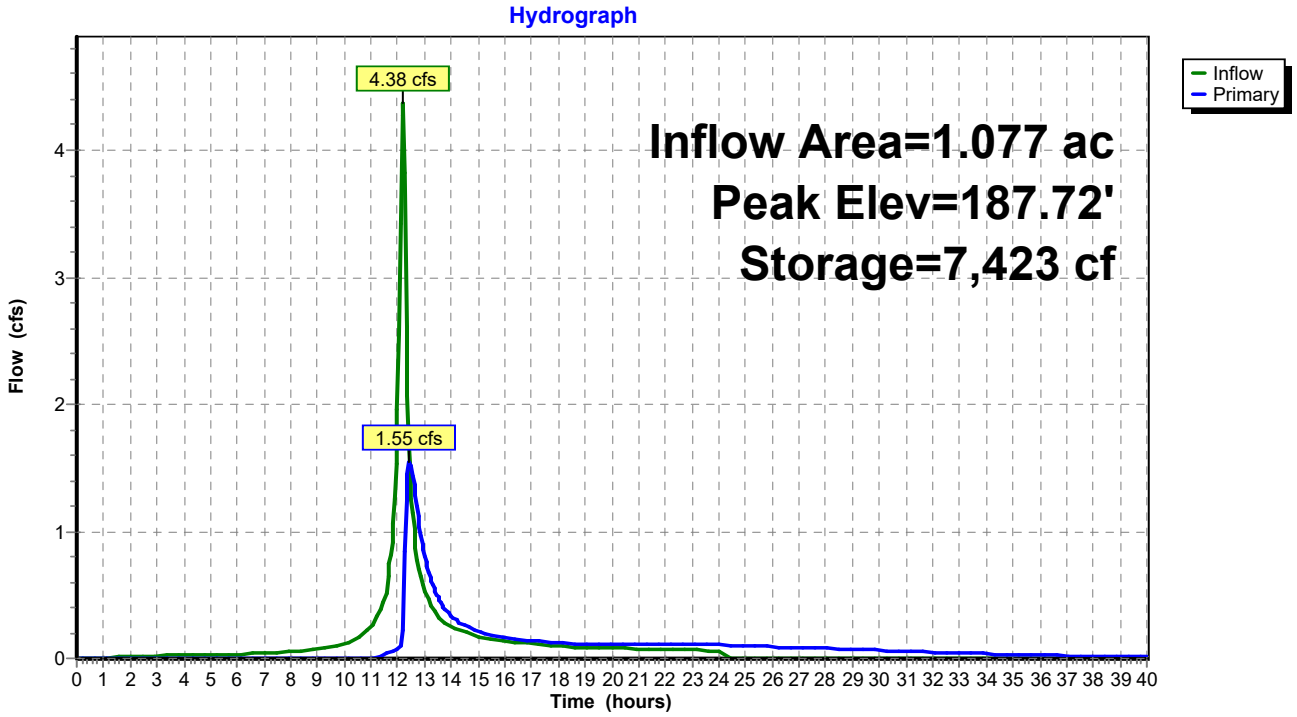
Volume	Invert	Avail.Storage	Storage Description
#1	186.30'	17,435 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.30	0	0	0
187.00	6,769	2,369	2,369
188.00	7,526	7,148	9,517
189.00	8,311	7,919	17,435

Device	Routing	Invert	Outlet Devices
#1	Primary	185.65'	**18.0" Round Culvert** L= 177.0' Ke= 0.500 Inlet / Outlet Invert= 185.65' / 182.00' S= 0.0206 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	186.87'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	187.49'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.17'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.54 cfs @ 12.43 hrs HW=187.72' (Free Discharge)
- **1=Culvert** (Passes 1.54 cfs of 9.77 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.14 cfs @ 4.15 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.40 cfs @ 1.56 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-29: Basin #29



Stage-Discharge for Pond B-29: Basin #29

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.30	0.00	186.82	0.00	187.34	0.10	187.86	3.04
186.31	0.00	186.83	0.00	187.35	0.10	187.87	3.16
186.32	0.00	186.84	0.00	187.36	0.10	187.88	3.28
186.33	0.00	186.85	0.00	187.37	0.10	187.89	3.40
186.34	0.00	186.86	0.00	187.38	0.10	187.90	3.52
186.35	0.00	186.87	0.00	187.39	0.11	187.91	3.64
186.36	0.00	186.88	0.00	187.40	0.11	187.92	3.77
186.37	0.00	186.89	0.00	187.41	0.11	187.93	3.89
186.38	0.00	186.90	0.00	187.42	0.11	187.94	4.02
186.39	0.00	186.91	0.00	187.43	0.11	187.95	4.15
186.40	0.00	186.92	0.00	187.44	0.11	187.96	4.28
186.41	0.00	186.93	0.01	187.45	0.11	187.97	4.41
186.42	0.00	186.94	0.01	187.46	0.11	187.98	4.54
186.43	0.00	186.95	0.01	187.47	0.12	187.99	4.67
186.44	0.00	186.96	0.01	187.48	0.12	188.00	4.81
186.45	0.00	186.97	0.02	187.49	0.12	188.01	4.94
186.46	0.00	186.98	0.02	187.50	0.13	188.02	5.08
186.47	0.00	186.99	0.02	187.51	0.16	188.03	5.22
186.48	0.00	187.00	0.03	187.52	0.19	188.04	5.36
186.49	0.00	187.01	0.03	187.53	0.23	188.05	5.50
186.50	0.00	187.02	0.03	187.54	0.27	188.06	5.64
186.51	0.00	187.03	0.04	187.55	0.32	188.07	5.78
186.52	0.00	187.04	0.04	187.56	0.37	188.08	5.93
186.53	0.00	187.05	0.05	187.57	0.42	188.09	6.07
186.54	0.00	187.06	0.05	187.58	0.48	188.10	6.22
186.55	0.00	187.07	0.05	187.59	0.54	188.11	6.36
186.56	0.00	187.08	0.05	187.60	0.60	188.12	6.51
186.57	0.00	187.09	0.06	187.61	0.67	188.13	6.66
186.58	0.00	187.10	0.06	187.62	0.74	188.14	6.81
186.59	0.00	187.11	0.06	187.63	0.81	188.15	6.96
186.60	0.00	187.12	0.06	187.64	0.89	188.16	7.11
186.61	0.00	187.13	0.06	187.65	0.97	188.17	7.26
186.62	0.00	187.14	0.07	187.66	1.04	188.18	7.54
186.63	0.00	187.15	0.07	187.67	1.13	188.19	7.90
186.64	0.00	187.16	0.07	187.68	1.21	188.20	8.34
186.65	0.00	187.17	0.07	187.69	1.30	188.21	8.82
186.66	0.00	187.18	0.07	187.70	1.39	188.22	9.35
186.67	0.00	187.19	0.08	187.71	1.48	188.23	9.93
186.68	0.00	187.20	0.08	187.72	1.57	188.24	10.54
186.69	0.00	187.21	0.08	187.73	1.66	188.25	11.18
186.70	0.00	187.22	0.08	187.74	1.76	188.26	11.86
186.71	0.00	187.23	0.08	187.75	1.86	188.27	12.56
186.72	0.00	187.24	0.08	187.76	1.96	188.28	13.30
186.73	0.00	187.25	0.09	187.77	2.06	188.29	14.06
186.74	0.00	187.26	0.09	187.78	2.16	188.30	14.86
186.75	0.00	187.27	0.09	187.79	2.27	188.31	15.67
186.76	0.00	187.28	0.09	187.80	2.37	188.32	16.52
186.77	0.00	187.29	0.09	187.81	2.48	188.33	17.38
186.78	0.00	187.30	0.09	187.82	2.59	188.34	18.27
186.79	0.00	187.31	0.10	187.83	2.70	188.35	19.19
186.80	0.00	187.32	0.10	187.84	2.81	188.36	20.12
186.81	0.00	187.33	0.10	187.85	2.93	188.37	21.08

Stage-Discharge for Pond B-29: Basin #29 (continued)

Elevation (feet)	Primary (cfs)
188.38	22.10
188.39	23.14
188.40	24.22
188.41	25.31
188.42	26.44
188.43	27.59
188.44	28.76
188.45	29.96
188.46	31.19
188.47	32.41
188.48	33.54
188.49	34.69
188.50	35.86
188.51	37.06
188.52	38.29
188.53	39.53
188.54	40.80
188.55	42.10
188.56	43.42
188.57	44.76
188.58	46.16
188.59	47.58
188.60	49.03
188.61	50.50
188.62	52.00
188.63	53.52
188.64	55.07
188.65	56.65
188.66	58.25
188.67	59.88
188.68	61.54
188.69	63.22
188.70	64.93
188.71	66.67
188.72	68.43
188.73	70.22
188.74	72.04
188.75	73.88
188.76	75.75
188.77	77.65
188.78	79.30
188.79	80.97
188.80	82.65
188.81	84.35
188.82	86.06
188.83	87.78
188.84	89.51
188.85	91.26
188.86	93.02
188.87	94.79
188.88	96.58
188.89	98.37
188.90	100.19
188.91	102.01
188.92	103.84
188.93	105.69
188.94	107.55
188.95	109.42
188.96	111.31
188.97	113.21
188.98	115.15
188.99	117.11
189.00	**119.08**

Stage-Area-Storage for Pond B-29: Basin #29

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.30	0	0	186.82	5,028	1,307
186.31	97	0	186.83	5,125	1,358
186.32	193	2	186.84	5,222	1,410
186.33	290	4	186.85	5,319	1,463
186.34	387	8	186.86	5,415	1,516
186.35	484	12	186.87	5,512	1,571
186.36	580	17	186.88	5,609	1,626
186.37	677	24	186.89	5,705	1,683
186.38	774	31	186.90	5,802	1,741
186.39	870	39	186.91	5,899	1,799
186.40	967	48	186.92	5,995	1,859
186.41	1,064	59	186.93	6,092	1,919
186.42	1,160	70	186.94	6,189	1,980
186.43	1,257	82	186.95	6,286	2,043
186.44	1,354	95	186.96	6,382	2,106
186.45	1,451	109	186.97	6,479	2,170
186.46	1,547	124	186.98	6,576	2,236
186.47	1,644	140	186.99	6,672	2,302
186.48	1,741	157	187.00	6,769	2,369
186.49	1,837	175	187.01	6,777	2,437
186.50	1,934	193	187.02	6,784	2,505
186.51	2,031	213	187.03	6,792	2,573
186.52	2,127	234	187.04	6,799	2,641
186.53	2,224	256	187.05	6,807	2,709
186.54	2,321	278	187.06	6,814	2,777
186.55	2,418	302	187.07	6,822	2,845
186.56	2,514	327	187.08	6,830	2,913
186.57	2,611	352	187.09	6,837	2,981
186.58	2,708	379	187.10	6,845	3,050
186.59	2,804	407	187.11	6,852	3,118
186.60	2,901	435	187.12	6,860	3,187
186.61	2,998	465	187.13	6,867	3,256
186.62	3,094	495	187.14	6,875	3,324
186.63	3,191	527	187.15	6,883	3,393
186.64	3,288	559	187.16	6,890	3,462
186.65	3,385	592	187.17	6,898	3,531
186.66	3,481	627	187.18	6,905	3,600
186.67	3,578	662	187.19	6,913	3,669
186.68	3,675	698	187.20	6,920	3,738
186.69	3,771	735	187.21	6,928	3,807
186.70	3,868	774	187.22	6,936	3,877
186.71	3,965	813	187.23	6,943	3,946
186.72	4,061	853	187.24	6,951	4,016
186.73	4,158	894	187.25	6,958	4,085
186.74	4,255	936	187.26	6,966	4,155
186.75	4,351	979	187.27	6,973	4,224
186.76	4,448	1,023	187.28	6,981	4,294
186.77	4,545	1,068	187.29	6,989	4,364
186.78	4,642	1,114	187.30	6,996	4,434
186.79	4,738	1,161	187.31	7,004	4,504
186.80	4,835	1,209	187.32	7,011	4,574
186.81	4,932	1,258	187.33	7,019	4,644

Stage-Area-Storage for Pond B-29: Basin #29 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.34	7,026	4,714	187.86	7,420	8,470
187.35	7,034	4,785	187.87	7,428	8,545
187.36	7,042	4,855	187.88	7,435	8,619
187.37	7,049	4,925	187.89	7,443	8,693
187.38	7,057	4,996	187.90	7,450	8,768
187.39	7,064	5,067	187.91	7,458	8,842
187.40	7,072	5,137	187.92	7,465	8,917
187.41	7,079	5,208	187.93	7,473	8,992
187.42	7,087	5,279	187.94	7,481	9,066
187.43	7,095	5,350	187.95	7,488	9,141
187.44	7,102	5,421	187.96	7,496	9,216
187.45	7,110	5,492	187.97	7,503	9,291
187.46	7,117	5,563	187.98	7,511	9,366
187.47	7,125	5,634	187.99	7,518	9,441
187.48	7,132	5,705	188.00	7,526	9,517
187.49	7,140	5,777	188.01	7,534	9,592
187.50	7,148	5,848	188.02	7,542	9,667
187.51	7,155	5,920	188.03	7,550	9,743
187.52	7,163	5,991	188.04	7,557	9,818
187.53	7,170	6,063	188.05	7,565	9,894
187.54	7,178	6,135	188.06	7,573	9,970
187.55	7,185	6,207	188.07	7,581	10,045
187.56	7,193	6,278	188.08	7,589	10,121
187.57	7,200	6,350	188.09	7,597	10,197
187.58	7,208	6,422	188.10	7,605	10,273
187.59	7,216	6,495	188.11	7,612	10,349
187.60	7,223	6,567	188.12	7,620	10,425
187.61	7,231	6,639	188.13	7,628	10,502
187.62	7,238	6,711	188.14	7,636	10,578
187.63	7,246	6,784	188.15	7,644	10,654
187.64	7,253	6,856	188.16	7,652	10,731
187.65	7,261	6,929	188.17	7,659	10,807
187.66	7,269	7,002	188.18	7,667	10,884
187.67	7,276	7,074	188.19	7,675	10,961
187.68	7,284	7,147	188.20	7,683	11,038
187.69	7,291	7,220	188.21	7,691	11,114
187.70	7,299	7,293	188.22	7,699	11,191
187.71	7,306	7,366	188.23	7,707	11,268
187.72	7,314	7,439	188.24	7,714	11,345
187.73	7,322	7,512	188.25	7,722	11,423
187.74	7,329	7,585	188.26	7,730	11,500
187.75	7,337	7,659	188.27	7,738	11,577
187.76	7,344	7,732	188.28	7,746	11,655
187.77	7,352	7,806	188.29	7,754	11,732
187.78	7,359	7,879	188.30	7,762	11,810
187.79	7,367	7,953	188.31	7,769	11,887
187.80	7,375	8,027	188.32	7,777	11,965
187.81	7,382	8,100	188.33	7,785	12,043
187.82	7,390	8,174	188.34	7,793	12,121
187.83	7,397	8,248	188.35	7,801	12,199
187.84	7,405	8,322	188.36	7,809	12,277
187.85	7,412	8,396	188.37	7,816	12,355

Stage-Area-Storage for Pond B-29: Basin #29 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.38	7,824	12,433
188.39	7,832	12,511
188.40	7,840	12,590
188.41	7,848	12,668
188.42	7,856	12,747
188.43	7,864	12,825
188.44	7,871	12,904
188.45	7,879	12,983
188.46	7,887	13,062
188.47	7,895	13,141
188.48	7,903	13,220
188.49	7,911	13,299
188.50	7,919	13,378
188.51	7,926	13,457
188.52	7,934	13,536
188.53	7,942	13,616
188.54	7,950	13,695
188.55	7,958	13,775
188.56	7,966	13,854
188.57	7,973	13,934
188.58	7,981	14,014
188.59	7,989	14,094
188.60	7,997	14,174
188.61	8,005	14,254
188.62	8,013	14,334
188.63	8,021	14,414
188.64	8,028	14,494
188.65	8,036	14,574
188.66	8,044	14,655
188.67	8,052	14,735
188.68	8,060	14,816
188.69	8,068	14,896
188.70	8,076	14,977
188.71	8,083	15,058
188.72	8,091	15,139
188.73	8,099	15,220
188.74	8,107	15,301
188.75	8,115	15,382
188.76	8,123	15,463
188.77	8,130	15,544
188.78	8,138	15,626
188.79	8,146	15,707
188.80	8,154	15,789
188.81	8,162	15,870
188.82	8,170	15,952
188.83	8,178	16,034
188.84	8,185	16,115
188.85	8,193	16,197
188.86	8,201	16,279
188.87	8,209	16,361
188.88	8,217	16,443
188.89	8,225	16,526
188.90	8,233	16,608
188.91	8,240	16,690
188.92	8,248	16,773
188.93	8,256	16,855
188.94	8,264	16,938
188.95	8,272	17,021
188.96	8,280	17,103
188.97	8,287	17,186
188.98	8,295	17,269
188.99	8,303	17,352
189.00	**8,311**	**17,435**

Summary for Pond B-30: Basin #30

Inflow Area = 2.381 ac, 27.01% Impervious, Inflow Depth = 3.75" for Future 10 yr event
Inflow = 9.31 cfs @ 12.17 hrs, Volume= 0.744 af
Outflow = 0.22 cfs @ 17.77 hrs, Volume= 0.450 af, Atten= 98%, Lag= 335.7 min
Primary = 0.22 cfs @ 17.77 hrs, Volume= 0.450 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 177.78' @ 17.77 hrs Surf.Area= 12,993 sf Storage= 24,207 cf

Plug-Flow detention time= 821.2 min calculated for 0.450 af (60% of inflow)
Center-of-Mass det. time= 709.1 min (1,510.9 - 801.8)

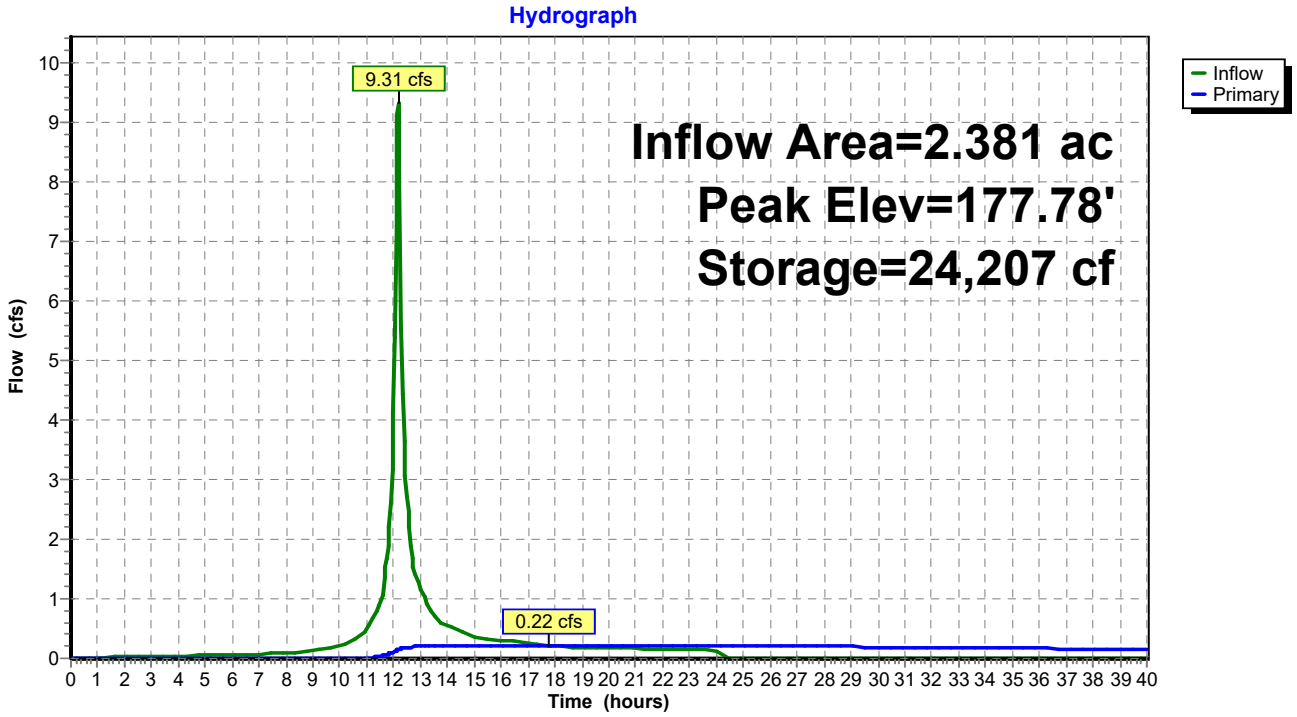
Volume	Invert	Avail.Storage	Storage Description
#1	175.30'	57,146 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
175.30	0	0	0
176.00	10,254	3,589	3,589
177.00	11,773	11,014	14,602
178.00	13,346	12,560	27,162
179.00	14,978	14,162	41,324
180.00	16,667	15,823	57,146

Device	Routing	Invert	Outlet Devices
#1	Primary	174.65'	**18.0" Round Culvert** L= 86.0' Ke= 0.500 Inlet / Outlet Invert= 174.65' / 174.00' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	175.93'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	179.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.22 cfs @ 17.77 hrs HW=177.78' (Free Discharge)
- **1=Culvert** (Passes 0.22 cfs of 12.20 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.22 cfs @ 6.35 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-30: Basin #30



Stage-Discharge for Pond B-30: Basin #30

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
175.30	0.00	175.82	0.00	176.34	0.09	176.86	0.15
175.31	0.00	175.83	0.00	176.35	0.09	176.87	0.15
175.32	0.00	175.84	0.00	176.36	0.09	176.88	0.15
175.33	0.00	175.85	0.00	176.37	0.10	176.89	0.15
175.34	0.00	175.86	0.00	176.38	0.10	176.90	0.15
175.35	0.00	175.87	0.00	176.39	0.10	176.91	0.15
175.36	0.00	175.88	0.00	176.40	0.10	176.92	0.15
175.37	0.00	175.89	0.00	176.41	0.10	176.93	0.16
175.38	0.00	175.90	0.00	176.42	0.10	176.94	0.16
175.39	0.00	175.91	0.00	176.43	0.10	176.95	0.16
175.40	0.00	175.92	0.00	176.44	0.10	176.96	0.16
175.41	0.00	175.93	0.00	176.45	0.11	176.97	0.16
175.42	0.00	175.94	0.00	176.46	0.11	176.98	0.16
175.43	0.00	175.95	0.00	176.47	0.11	176.99	0.16
175.44	0.00	175.96	0.00	176.48	0.11	177.00	0.16
175.45	0.00	175.97	0.00	176.49	0.11	177.01	0.16
175.46	0.00	175.98	0.00	176.50	0.11	177.02	0.16
175.47	0.00	175.99	0.01	176.51	0.11	177.03	0.16
175.48	0.00	176.00	0.01	176.52	0.11	177.04	0.16
175.49	0.00	176.01	0.01	176.53	0.12	177.05	0.17
175.50	0.00	176.02	0.01	176.54	0.12	177.06	0.17
175.51	0.00	176.03	0.02	176.55	0.12	177.07	0.17
175.52	0.00	176.04	0.02	176.56	0.12	177.08	0.17
175.53	0.00	176.05	0.02	176.57	0.12	177.09	0.17
175.54	0.00	176.06	0.03	176.58	0.12	177.10	0.17
175.55	0.00	176.07	0.03	176.59	0.12	177.11	0.17
175.56	0.00	176.08	0.03	176.60	0.12	177.12	0.17
175.57	0.00	176.09	0.04	176.61	0.12	177.13	0.17
175.58	0.00	176.10	0.04	176.62	0.13	177.14	0.17
175.59	0.00	176.11	0.05	176.63	0.13	177.15	0.17
175.60	0.00	176.12	0.05	176.64	0.13	177.16	0.17
175.61	0.00	176.13	0.05	176.65	0.13	177.17	0.17
175.62	0.00	176.14	0.05	176.66	0.13	177.18	0.18
175.63	0.00	176.15	0.06	176.67	0.13	177.19	0.18
175.64	0.00	176.16	0.06	176.68	0.13	177.20	0.18
175.65	0.00	176.17	0.06	176.69	0.13	177.21	0.18
175.66	0.00	176.18	0.06	176.70	0.13	177.22	0.18
175.67	0.00	176.19	0.06	176.71	0.13	177.23	0.18
175.68	0.00	176.20	0.07	176.72	0.14	177.24	0.18
175.69	0.00	176.21	0.07	176.73	0.14	177.25	0.18
175.70	0.00	176.22	0.07	176.74	0.14	177.26	0.18
175.71	0.00	176.23	0.07	176.75	0.14	177.27	0.18
175.72	0.00	176.24	0.07	176.76	0.14	177.28	0.18
175.73	0.00	176.25	0.08	176.77	0.14	177.29	0.18
175.74	0.00	176.26	0.08	176.78	0.14	177.30	0.18
175.75	0.00	176.27	0.08	176.79	0.14	177.31	0.19
175.76	0.00	176.28	0.08	176.80	0.14	177.32	0.19
175.77	0.00	176.29	0.08	176.81	0.14	177.33	0.19
175.78	0.00	176.30	0.08	176.82	0.15	177.34	0.19
175.79	0.00	176.31	0.09	176.83	0.15	177.35	0.19
175.80	0.00	176.32	0.09	176.84	0.15	177.36	0.19
175.81	0.00	176.33	0.09	176.85	0.15	177.37	0.19

Stage-Discharge for Pond B-30: Basin #30 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
177.38	0.19	177.90	0.22	178.42	0.25	178.94	0.28
177.39	0.19	177.91	0.22	178.43	0.25	178.95	0.28
177.40	0.19	177.92	0.23	178.44	0.25	178.96	0.28
177.41	0.19	177.93	0.23	178.45	0.26	178.97	0.28
177.42	0.19	177.94	0.23	178.46	0.26	178.98	0.28
177.43	0.19	177.95	0.23	178.47	0.26	178.99	0.28
177.44	0.19	177.96	0.23	178.48	0.26	179.00	0.28
177.45	0.20	177.97	0.23	178.49	0.26	179.01	0.30
177.46	0.20	177.98	0.23	178.50	0.26	179.02	0.32
177.47	0.20	177.99	0.23	178.51	0.26	179.03	0.35
177.48	0.20	178.00	0.23	178.52	0.26	179.04	0.39
177.49	0.20	178.01	0.23	178.53	0.26	179.05	0.43
177.50	0.20	178.02	0.23	178.54	0.26	179.06	0.48
177.51	0.20	178.03	0.23	178.55	0.26	179.07	0.53
177.52	0.20	178.04	0.23	178.56	0.26	179.08	0.58
177.53	0.20	178.05	0.23	178.57	0.26	179.09	0.64
177.54	0.20	178.06	0.23	178.58	0.26	179.10	0.70
177.55	0.20	178.07	0.23	178.59	0.26	179.11	0.76
177.56	0.20	178.08	0.23	178.60	0.26	179.12	0.83
177.57	0.20	178.09	0.24	178.61	0.26	179.13	0.90
177.58	0.20	178.10	0.24	178.62	0.26	179.14	0.97
177.59	0.20	178.11	0.24	178.63	0.26	179.15	1.04
177.60	0.21	178.12	0.24	178.64	0.26	179.16	1.12
177.61	0.21	178.13	0.24	178.65	0.27	179.17	1.20
177.62	0.21	178.14	0.24	178.66	0.27	179.18	1.28
177.63	0.21	178.15	0.24	178.67	0.27	179.19	1.36
177.64	0.21	178.16	0.24	178.68	0.27	179.20	1.45
177.65	0.21	178.17	0.24	178.69	0.27	179.21	1.54
177.66	0.21	178.18	0.24	178.70	0.27	179.22	1.63
177.67	0.21	178.19	0.24	178.71	0.27	179.23	1.72
177.68	0.21	178.20	0.24	178.72	0.27	179.24	1.81
177.69	0.21	178.21	0.24	178.73	0.27	179.25	1.91
177.70	0.21	178.22	0.24	178.74	0.27	179.26	2.01
177.71	0.21	178.23	0.24	178.75	0.27	179.27	2.11
177.72	0.21	178.24	0.24	178.76	0.27	179.28	2.21
177.73	0.21	178.25	0.24	178.77	0.27	179.29	2.31
177.74	0.21	178.26	0.24	178.78	0.27	179.30	2.41
177.75	0.22	178.27	0.25	178.79	0.27	179.31	2.52
177.76	0.22	178.28	0.25	178.80	0.27	179.32	2.63
177.77	0.22	178.29	0.25	178.81	0.27	179.33	2.74
177.78	0.22	178.30	0.25	178.82	0.27	179.34	2.85
177.79	0.22	178.31	0.25	178.83	0.27	179.35	2.96
177.80	0.22	178.32	0.25	178.84	0.27	179.36	3.07
177.81	0.22	178.33	0.25	178.85	0.28	179.37	3.19
177.82	0.22	178.34	0.25	178.86	0.28	179.38	3.31
177.83	0.22	178.35	0.25	178.87	0.28	179.39	3.42
177.84	0.22	178.36	0.25	178.88	0.28	179.40	3.54
177.85	0.22	178.37	0.25	178.89	0.28	179.41	3.67
177.86	0.22	178.38	0.25	178.90	0.28	179.42	3.79
177.87	0.22	178.39	0.25	178.91	0.28	179.43	3.91
177.88	0.22	178.40	0.25	178.92	0.28	179.44	4.04
177.89	0.22	178.41	0.25	178.93	0.28	179.45	4.16

Stage-Discharge for Pond B-30: Basin #30 (continued)

Elevation (feet)	Primary (cfs)
179.46	4.29
179.47	4.42
179.48	4.55
179.49	4.68
179.50	4.81
179.51	5.07
179.52	5.41
179.53	5.83
179.54	6.30
179.55	6.81
179.56	7.36
179.57	7.95
179.58	8.58
179.59	9.23
179.60	9.92
179.61	10.64
179.62	11.39
179.63	12.16
179.64	12.96
179.65	13.79
179.66	14.64
179.67	15.51
179.68	16.41
179.69	17.33
179.70	18.27
179.71	19.27
179.72	20.30
179.73	21.36
179.74	22.44
179.75	23.55
179.76	24.68
179.77	25.84
179.78	27.03
179.79	28.24
179.80	29.47
179.81	30.73
179.82	32.02
179.83	33.33
179.84	34.67
179.85	36.03
179.86	37.42
179.87	38.83
179.88	40.27
179.89	41.73
179.90	43.22
179.91	44.76
179.92	46.32
179.93	47.91
179.94	49.53
179.95	51.18
179.96	52.85
179.97	54.55
179.98	56.28
179.99	58.04
180.00	**59.82**

Stage-Area-Storage for Pond B-30: Basin #30

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
175.30	0	0	175.82	7,617	1,980
175.31	146	1	175.83	7,764	2,057
175.32	293	3	175.84	7,910	2,136
175.33	439	7	175.85	8,057	2,216
175.34	586	12	175.86	8,203	2,297
175.35	732	18	175.87	8,350	2,380
175.36	879	26	175.88	8,496	2,464
175.37	1,025	36	175.89	8,643	2,550
175.38	1,172	47	175.90	8,789	2,637
175.39	1,318	59	175.91	8,936	2,725
175.40	1,465	73	175.92	9,082	2,815
175.41	1,611	89	175.93	9,229	2,907
175.42	1,758	105	175.94	9,375	3,000
175.43	1,904	124	175.95	9,522	3,095
175.44	2,051	144	175.96	9,668	3,190
175.45	2,197	165	175.97	9,815	3,288
175.46	2,344	188	175.98	9,961	3,387
175.47	2,490	212	175.99	10,108	3,487
175.48	2,637	237	176.00	10,254	3,589
175.49	2,783	264	176.01	10,269	3,692
175.50	2,930	293	176.02	10,284	3,794
175.51	3,076	323	176.03	10,300	3,897
175.52	3,223	354	176.04	10,315	4,000
175.53	3,369	387	176.05	10,330	4,103
175.54	3,516	422	176.06	10,345	4,207
175.55	3,662	458	176.07	10,360	4,310
175.56	3,809	495	176.08	10,376	4,414
175.57	3,955	534	176.09	10,391	4,518
175.58	4,102	574	176.10	10,406	4,622
175.59	4,248	616	176.11	10,421	4,726
175.60	4,395	659	176.12	10,436	4,830
175.61	4,541	704	176.13	10,451	4,935
175.62	4,688	750	176.14	10,467	5,039
175.63	4,834	798	176.15	10,482	5,144
175.64	4,981	847	176.16	10,497	5,249
175.65	5,127	897	176.17	10,512	5,354
175.66	5,273	949	176.18	10,527	5,459
175.67	5,420	1,003	176.19	10,543	5,565
175.68	5,566	1,058	176.20	10,558	5,670
175.69	5,713	1,114	176.21	10,573	5,776
175.70	5,859	1,172	176.22	10,588	5,882
175.71	6,006	1,231	176.23	10,603	5,987
175.72	6,152	1,292	176.24	10,619	6,094
175.73	6,299	1,354	176.25	10,634	6,200
175.74	6,445	1,418	176.26	10,649	6,306
175.75	6,592	1,483	176.27	10,664	6,413
175.76	6,738	1,550	176.28	10,679	6,520
175.77	6,885	1,618	176.29	10,695	6,626
175.78	7,031	1,688	176.30	10,710	6,733
175.79	7,178	1,759	176.31	10,725	6,841
175.80	7,324	1,831	176.32	10,740	6,948
175.81	7,471	1,905	176.33	10,755	7,055

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.34	10,770	7,163	176.86	11,560	12,969
176.35	10,786	7,271	176.87	11,576	13,085
176.36	10,801	7,379	176.88	11,591	13,201
176.37	10,816	7,487	176.89	11,606	13,317
176.38	10,831	7,595	176.90	11,621	13,433
176.39	10,846	7,703	176.91	11,636	13,549
176.40	10,862	7,812	176.92	11,651	13,665
176.41	10,877	7,921	176.93	11,667	13,782
176.42	10,892	8,030	176.94	11,682	13,899
176.43	10,907	8,139	176.95	11,697	14,016
176.44	10,922	8,248	176.96	11,712	14,133
176.45	10,938	8,357	176.97	11,727	14,250
176.46	10,953	8,466	176.98	11,743	14,367
176.47	10,968	8,576	176.99	11,758	14,485
176.48	10,983	8,686	177.00	11,773	14,602
176.49	10,998	8,796	177.01	11,789	14,720
176.50	11,014	8,906	177.02	11,804	14,838
176.51	11,029	9,016	177.03	11,820	14,956
176.52	11,044	9,126	177.04	11,836	15,075
176.53	11,059	9,237	177.05	11,852	15,193
176.54	11,074	9,348	177.06	11,867	15,312
176.55	11,089	9,458	177.07	11,883	15,430
176.56	11,105	9,569	177.08	11,899	15,549
176.57	11,120	9,680	177.09	11,915	15,668
176.58	11,135	9,792	177.10	11,930	15,788
176.59	11,150	9,903	177.11	11,946	15,907
176.60	11,165	10,015	177.12	11,962	16,026
176.61	11,181	10,126	177.13	11,977	16,146
176.62	11,196	10,238	177.14	11,993	16,266
176.63	11,211	10,350	177.15	12,009	16,386
176.64	11,226	10,463	177.16	12,025	16,506
176.65	11,241	10,575	177.17	12,040	16,627
176.66	11,257	10,687	177.18	12,056	16,747
176.67	11,272	10,800	177.19	12,072	16,868
176.68	11,287	10,913	177.20	12,088	16,988
176.69	11,302	11,026	177.21	12,103	17,109
176.70	11,317	11,139	177.22	12,119	17,231
176.71	11,332	11,252	177.23	12,135	17,352
176.72	11,348	11,366	177.24	12,151	17,473
176.73	11,363	11,479	177.25	12,166	17,595
176.74	11,378	11,593	177.26	12,182	17,717
176.75	11,393	11,707	177.27	12,198	17,838
176.76	11,408	11,821	177.28	12,213	17,961
176.77	11,424	11,935	177.29	12,229	18,083
176.78	11,439	12,049	177.30	12,245	18,205
176.79	11,454	12,164	177.31	12,261	18,328
176.80	11,469	12,278	177.32	12,276	18,450
176.81	11,484	12,393	177.33	12,292	18,573
176.82	11,500	12,508	177.34	12,308	18,696
176.83	11,515	12,623	177.35	12,324	18,819
176.84	11,530	12,738	177.36	12,339	18,943
176.85	11,545	12,854	177.37	12,355	19,066

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.38	12,371	19,190	177.90	13,189	25,835
177.39	12,386	19,313	177.91	13,204	25,967
177.40	12,402	19,437	177.92	13,220	26,099
177.41	12,418	19,562	177.93	13,236	26,232
177.42	12,434	19,686	177.94	13,252	26,364
177.43	12,449	19,810	177.95	13,267	26,497
177.44	12,465	19,935	177.96	13,283	26,629
177.45	12,481	20,060	177.97	13,299	26,762
177.46	12,497	20,184	177.98	13,315	26,895
177.47	12,512	20,309	177.99	13,330	27,029
177.48	12,528	20,435	178.00	13,346	27,162
177.49	12,544	20,560	178.01	13,362	27,295
177.50	12,560	20,686	178.02	13,379	27,429
177.51	12,575	20,811	178.03	13,395	27,563
177.52	12,591	20,937	178.04	13,411	27,697
177.53	12,607	21,063	178.05	13,428	27,831
177.54	12,622	21,189	178.06	13,444	27,966
177.55	12,638	21,315	178.07	13,460	28,100
177.56	12,654	21,442	178.08	13,477	28,235
177.57	12,670	21,569	178.09	13,493	28,370
177.58	12,685	21,695	178.10	13,509	28,505
177.59	12,701	21,822	178.11	13,526	28,640
177.60	12,717	21,949	178.12	13,542	28,775
177.61	12,733	22,077	178.13	13,558	28,911
177.62	12,748	22,204	178.14	13,574	29,046
177.63	12,764	22,332	178.15	13,591	29,182
177.64	12,780	22,459	178.16	13,607	29,318
177.65	12,795	22,587	178.17	13,623	29,454
177.66	12,811	22,715	178.18	13,640	29,591
177.67	12,827	22,843	178.19	13,656	29,727
177.68	12,843	22,972	178.20	13,672	29,864
177.69	12,858	23,100	178.21	13,689	30,001
177.70	12,874	23,229	178.22	13,705	30,138
177.71	12,890	23,358	178.23	13,721	30,275
177.72	12,906	23,487	178.24	13,738	30,412
177.73	12,921	23,616	178.25	13,754	30,549
177.74	12,937	23,745	178.26	13,770	30,687
177.75	12,953	23,875	178.27	13,787	30,825
177.76	12,968	24,004	178.28	13,803	30,963
177.77	12,984	24,134	178.29	13,819	31,101
177.78	13,000	24,264	178.30	13,836	31,239
177.79	13,016	24,394	178.31	13,852	31,378
177.80	13,031	24,524	178.32	13,868	31,516
177.81	13,047	24,655	178.33	13,885	31,655
177.82	13,063	24,785	178.34	13,901	31,794
177.83	13,079	24,916	178.35	13,917	31,933
177.84	13,094	25,047	178.36	13,934	32,072
177.85	13,110	25,178	178.37	13,950	32,212
177.86	13,126	25,309	178.38	13,966	32,351
177.87	13,142	25,440	178.39	13,982	32,491
177.88	13,157	25,572	178.40	13,999	32,631
177.89	13,173	25,703	178.41	14,015	32,771

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.42	14,031	32,911	178.94	14,880	40,428
178.43	14,048	33,052	178.95	14,896	40,577
178.44	14,064	33,192	178.96	14,913	40,726
178.45	14,080	33,333	178.97	14,929	40,875
178.46	14,097	33,474	178.98	14,945	41,025
178.47	14,113	33,615	178.99	14,962	41,174
178.48	14,129	33,756	179.00	14,978	41,324
178.49	14,146	33,897	179.01	14,995	41,474
178.50	14,162	34,039	179.02	15,012	41,624
178.51	14,178	34,181	179.03	15,029	41,774
178.52	14,195	34,322	179.04	15,046	41,924
178.53	14,211	34,464	179.05	15,062	42,075
178.54	14,227	34,607	179.06	15,079	42,226
178.55	14,244	34,749	179.07	15,096	42,376
178.56	14,260	34,892	179.08	15,113	42,528
178.57	14,276	35,034	179.09	15,130	42,679
178.58	14,293	35,177	179.10	15,147	42,830
178.59	14,309	35,320	179.11	15,164	42,982
178.60	14,325	35,463	179.12	15,181	43,133
178.61	14,342	35,607	179.13	15,198	43,285
178.62	14,358	35,750	179.14	15,214	43,437
178.63	14,374	35,894	179.15	15,231	43,590
178.64	14,390	36,038	179.16	15,248	43,742
178.65	14,407	36,182	179.17	15,265	43,895
178.66	14,423	36,326	179.18	15,282	44,047
178.67	14,439	36,470	179.19	15,299	44,200
178.68	14,456	36,614	179.20	15,316	44,353
178.69	14,472	36,759	179.21	15,333	44,507
178.70	14,488	36,904	179.22	15,350	44,660
178.71	14,505	37,049	179.23	15,366	44,814
178.72	14,521	37,194	179.24	15,383	44,967
178.73	14,537	37,339	179.25	15,400	45,121
178.74	14,554	37,485	179.26	15,417	45,275
178.75	14,570	37,630	179.27	15,434	45,430
178.76	14,586	37,776	179.28	15,451	45,584
178.77	14,603	37,922	179.29	15,468	45,739
178.78	14,619	38,068	179.30	15,485	45,893
178.79	14,635	38,215	179.31	15,502	46,048
178.80	14,652	38,361	179.32	15,518	46,203
178.81	14,668	38,508	179.33	15,535	46,359
178.82	14,684	38,654	179.34	15,552	46,514
178.83	14,701	38,801	179.35	15,569	46,670
178.84	14,717	38,948	179.36	15,586	46,825
178.85	14,733	39,096	179.37	15,603	46,981
178.86	14,750	39,243	179.38	15,620	47,137
178.87	14,766	39,391	179.39	15,637	47,294
178.88	14,782	39,538	179.40	15,654	47,450
178.89	14,798	39,686	179.41	15,670	47,607
178.90	14,815	39,834	179.42	15,687	47,764
178.91	14,831	39,982	179.43	15,704	47,921
178.92	14,847	40,131	179.44	15,721	48,078
178.93	14,864	40,279	179.45	15,738	48,235

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.46	15,755	48,392
179.47	15,772	48,550
179.48	15,789	48,708
179.49	15,806	48,866
179.50	15,823	49,024
179.51	15,839	49,182
179.52	15,856	49,341
179.53	15,873	49,499
179.54	15,890	49,658
179.55	15,907	49,817
179.56	15,924	49,976
179.57	15,941	50,136
179.58	15,958	50,295
179.59	15,975	50,455
179.60	15,991	50,615
179.61	16,008	50,775
179.62	16,025	50,935
179.63	16,042	51,095
179.64	16,059	51,256
179.65	16,076	51,416
179.66	16,093	51,577
179.67	16,110	51,738
179.68	16,127	51,899
179.69	16,143	52,061
179.70	16,160	52,222
179.71	16,177	52,384
179.72	16,194	52,546
179.73	16,211	52,708
179.74	16,228	52,870
179.75	16,245	53,032
179.76	16,262	53,195
179.77	16,279	53,358
179.78	16,295	53,521
179.79	16,312	53,684
179.80	16,329	53,847
179.81	16,346	54,010
179.82	16,363	54,174
179.83	16,380	54,337
179.84	16,397	54,501
179.85	16,414	54,665
179.86	16,431	54,830
179.87	16,447	54,994
179.88	16,464	55,159
179.89	16,481	55,323
179.90	16,498	55,488
179.91	16,515	55,653
179.92	16,532	55,818
179.93	16,549	55,984
179.94	16,566	56,149
179.95	16,583	56,315
179.96	16,599	56,481
179.97	16,616	56,647
179.98	16,633	56,813
179.99	16,650	56,980
180.00	**16,667**	**57,146**

Summary for Pond B-31: Basin #31

Inflow Area = 0.358 ac, 42.46% Impervious, Inflow Depth = 4.14" for Future 10 yr event
Inflow = 1.51 cfs @ 12.17 hrs, Volume= 0.124 af
Outflow = 0.16 cfs @ 13.12 hrs, Volume= 0.109 af, Atten= 89%, Lag= 56.9 min
Primary = 0.16 cfs @ 13.12 hrs, Volume= 0.109 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.04' @ 13.12 hrs Surf.Area= 2,592 sf Storage= 3,035 cf

Plug-Flow detention time= 293.4 min calculated for 0.109 af (88% of inflow)
Center-of-Mass det. time= 234.0 min (1,020.9 - 786.9)

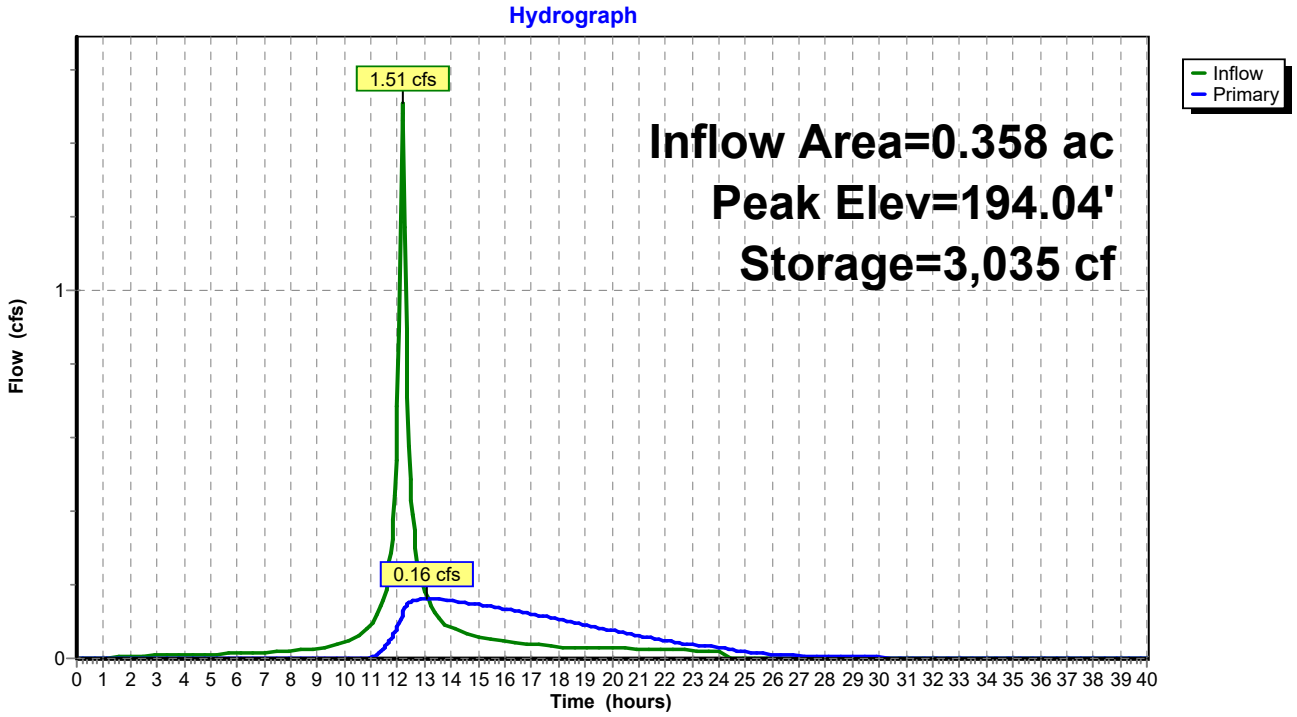
Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	9,453 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	1,944	680	680
194.00	2,566	2,255	2,935
195.00	3,245	2,906	5,841
196.00	3,980	3,613	9,453

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	**18.0" Round Culvert** L= 126.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 188.00' S= 0.0290 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.97'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	195.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.16 cfs @ 13.12 hrs HW=194.04' (Free Discharge)
- **1=Culvert** (Passes 0.16 cfs of 10.89 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.16 cfs @ 4.73 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-31: Basin #31



Stage-Discharge for Pond B-31: Basin #31

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.30	0.00	192.82	0.00	193.34	0.08	193.86	0.15
192.31	0.00	192.83	0.00	193.35	0.09	193.87	0.15
192.32	0.00	192.84	0.00	193.36	0.09	193.88	0.15
192.33	0.00	192.85	0.00	193.37	0.09	193.89	0.15
192.34	0.00	192.86	0.00	193.38	0.09	193.90	0.15
192.35	0.00	192.87	0.00	193.39	0.09	193.91	0.15
192.36	0.00	192.88	0.00	193.40	0.09	193.92	0.15
192.37	0.00	192.89	0.00	193.41	0.10	193.93	0.15
192.38	0.00	192.90	0.00	193.42	0.10	193.94	0.15
192.39	0.00	192.91	0.00	193.43	0.10	193.95	0.15
192.40	0.00	192.92	0.00	193.44	0.10	193.96	0.15
192.41	0.00	192.93	0.00	193.45	0.10	193.97	0.16
192.42	0.00	192.94	0.00	193.46	0.10	193.98	0.16
192.43	0.00	192.95	0.00	193.47	0.10	193.99	0.16
192.44	0.00	192.96	0.00	193.48	0.10	194.00	0.16
192.45	0.00	192.97	0.00	193.49	0.11	194.01	0.16
192.46	0.00	192.98	0.00	193.50	0.11	194.02	0.16
192.47	0.00	192.99	0.00	193.51	0.11	194.03	0.16
192.48	0.00	193.00	0.00	193.52	0.11	194.04	0.16
192.49	0.00	193.01	0.00	193.53	0.11	194.05	0.16
192.50	0.00	193.02	0.00	193.54	0.11	194.06	0.16
192.51	0.00	193.03	0.01	193.55	0.11	194.07	0.16
192.52	0.00	193.04	0.01	193.56	0.11	194.08	0.16
192.53	0.00	193.05	0.01	193.57	0.12	194.09	0.17
192.54	0.00	193.06	0.01	193.58	0.12	194.10	0.17
192.55	0.00	193.07	0.02	193.59	0.12	194.11	0.17
192.56	0.00	193.08	0.02	193.60	0.12	194.12	0.17
192.57	0.00	193.09	0.02	193.61	0.12	194.13	0.17
192.58	0.00	193.10	0.03	193.62	0.12	194.14	0.17
192.59	0.00	193.11	0.03	193.63	0.12	194.15	0.17
192.60	0.00	193.12	0.03	193.64	0.12	194.16	0.17
192.61	0.00	193.13	0.04	193.65	0.12	194.17	0.17
192.62	0.00	193.14	0.04	193.66	0.13	194.18	0.17
192.63	0.00	193.15	0.05	193.67	0.13	194.19	0.17
192.64	0.00	193.16	0.05	193.68	0.13	194.20	0.17
192.65	0.00	193.17	0.05	193.69	0.13	194.21	0.17
192.66	0.00	193.18	0.05	193.70	0.13	194.22	0.18
192.67	0.00	193.19	0.06	193.71	0.13	194.23	0.18
192.68	0.00	193.20	0.06	193.72	0.13	194.24	0.18
192.69	0.00	193.21	0.06	193.73	0.13	194.25	0.18
192.70	0.00	193.22	0.06	193.74	0.13	194.26	0.18
192.71	0.00	193.23	0.06	193.75	0.13	194.27	0.18
192.72	0.00	193.24	0.07	193.76	0.14	194.28	0.18
192.73	0.00	193.25	0.07	193.77	0.14	194.29	0.18
192.74	0.00	193.26	0.07	193.78	0.14	194.30	0.18
192.75	0.00	193.27	0.07	193.79	0.14	194.31	0.18
192.76	0.00	193.28	0.07	193.80	0.14	194.32	0.18
192.77	0.00	193.29	0.08	193.81	0.14	194.33	0.18
192.78	0.00	193.30	0.08	193.82	0.14	194.34	0.18
192.79	0.00	193.31	0.08	193.83	0.14	194.35	0.19
192.80	0.00	193.32	0.08	193.84	0.14	194.36	0.19
192.81	0.00	193.33	0.08	193.85	0.14	194.37	0.19

Stage-Discharge for Pond B-31: Basin #31 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.38	0.19	194.90	0.22	195.42	3.74	195.94	49.49
194.39	0.19	194.91	0.22	195.43	3.86	195.95	51.13
194.40	0.19	194.92	0.22	195.44	3.99	195.96	52.81
194.41	0.19	194.93	0.22	195.45	4.11	195.97	54.51
194.42	0.19	194.94	0.22	195.46	4.24	195.98	56.24
194.43	0.19	194.95	0.22	195.47	4.37	195.99	57.99
194.44	0.19	194.96	0.23	195.48	4.50	196.00	**59.77**
194.45	0.19	194.97	0.23	195.49	4.63		
194.46	0.19	194.98	0.23	195.50	4.76		
194.47	0.19	194.99	0.23	195.51	5.02		
194.48	0.19	195.00	0.23	195.52	5.37		
194.49	0.20	195.01	0.24	195.53	5.78		
194.50	0.20	195.02	0.27	195.54	6.25		
194.51	0.20	195.03	0.30	195.55	6.76		
194.52	0.20	195.04	0.33	195.56	7.31		
194.53	0.20	195.05	0.38	195.57	7.90		
194.54	0.20	195.06	0.42	195.58	8.53		
194.55	0.20	195.07	0.47	195.59	9.19		
194.56	0.20	195.08	0.53	195.60	9.88		
194.57	0.20	195.09	0.58	195.61	10.59		
194.58	0.20	195.10	0.65	195.62	11.34		
194.59	0.20	195.11	0.71	195.63	12.12		
194.60	0.20	195.12	0.78	195.64	12.92		
194.61	0.20	195.13	0.84	195.65	13.74		
194.62	0.20	195.14	0.92	195.66	14.59		
194.63	0.20	195.15	0.99	195.67	15.47		
194.64	0.21	195.16	1.07	195.68	16.36		
194.65	0.21	195.17	1.15	195.69	17.28		
194.66	0.21	195.18	1.23	195.70	18.22		
194.67	0.21	195.19	1.31	195.71	19.23		
194.68	0.21	195.20	1.40	195.72	20.25		
194.69	0.21	195.21	1.49	195.73	21.31		
194.70	0.21	195.22	1.58	195.74	22.39		
194.71	0.21	195.23	1.67	195.75	23.50		
194.72	0.21	195.24	1.76	195.76	24.63		
194.73	0.21	195.25	1.86	195.77	25.79		
194.74	0.21	195.26	1.95	195.78	26.98		
194.75	0.21	195.27	2.05	195.79	28.19		
194.76	0.21	195.28	2.15	195.80	29.42		
194.77	0.21	195.29	2.26	195.81	30.69		
194.78	0.21	195.30	2.36	195.82	31.97		
194.79	0.22	195.31	2.47	195.83	33.29		
194.80	0.22	195.32	2.58	195.84	34.62		
194.81	0.22	195.33	2.69	195.85	35.98		
194.82	0.22	195.34	2.80	195.86	37.37		
194.83	0.22	195.35	2.91	195.87	38.78		
194.84	0.22	195.36	3.02	195.88	40.22		
194.85	0.22	195.37	3.14	195.89	41.68		
194.86	0.22	195.38	3.25	195.90	43.17		
194.87	0.22	195.39	3.37	195.91	44.71		
194.88	0.22	195.40	3.49	195.92	46.28		
194.89	0.22	195.41	3.61	195.93	47.87		

Stage-Area-Storage for Pond B-31: Basin #31

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.30	0	0	192.82	1,444	375
192.31	28	0	192.83	1,472	390
192.32	56	1	192.84	1,500	405
192.33	83	1	192.85	1,527	420
192.34	111	2	192.86	1,555	435
192.35	139	3	192.87	1,583	451
192.36	167	5	192.88	1,611	467
192.37	194	7	192.89	1,639	483
192.38	222	9	192.90	1,666	500
192.39	250	11	192.91	1,694	517
192.40	278	14	192.92	1,722	534
192.41	305	17	192.93	1,750	551
192.42	333	20	192.94	1,777	569
192.43	361	23	192.95	1,805	587
192.44	389	27	192.96	1,833	605
192.45	417	31	192.97	1,861	623
192.46	444	36	192.98	1,888	642
192.47	472	40	192.99	1,916	661
192.48	500	45	193.00	1,944	680
192.49	528	50	193.01	1,950	700
192.50	555	56	193.02	1,956	719
192.51	583	61	193.03	1,963	739
192.52	611	67	193.04	1,969	759
192.53	639	73	193.05	1,975	778
192.54	667	80	193.06	1,981	798
192.55	694	87	193.07	1,988	818
192.56	722	94	193.08	1,994	838
192.57	750	101	193.09	2,000	858
192.58	778	109	193.10	2,006	878
192.59	805	117	193.11	2,012	898
192.60	833	125	193.12	2,019	918
192.61	861	133	193.13	2,025	938
192.62	889	142	193.14	2,031	959
192.63	916	151	193.15	2,037	979
192.64	944	161	193.16	2,044	999
192.65	972	170	193.17	2,050	1,020
192.66	1,000	180	193.18	2,056	1,040
192.67	1,028	190	193.19	2,062	1,061
192.68	1,055	201	193.20	2,068	1,082
192.69	1,083	211	193.21	2,075	1,102
192.70	1,111	222	193.22	2,081	1,123
192.71	1,139	233	193.23	2,087	1,144
192.72	1,166	245	193.24	2,093	1,165
192.73	1,194	257	193.25	2,100	1,186
192.74	1,222	269	193.26	2,106	1,207
192.75	1,250	281	193.27	2,112	1,228
192.76	1,277	294	193.28	2,118	1,249
192.77	1,305	307	193.29	2,124	1,270
192.78	1,333	320	193.30	2,131	1,292
192.79	1,361	333	193.31	2,137	1,313
192.80	1,389	347	193.32	2,143	1,334
192.81	1,416	361	193.33	2,149	1,356

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.34	2,155	1,377	193.86	2,479	2,582
193.35	2,162	1,399	193.87	2,485	2,607
193.36	2,168	1,421	193.88	2,491	2,632
193.37	2,174	1,442	193.89	2,498	2,657
193.38	2,180	1,464	193.90	2,504	2,682
193.39	2,187	1,486	193.91	2,510	2,707
193.40	2,193	1,508	193.92	2,516	2,732
193.41	2,199	1,530	193.93	2,522	2,757
193.42	2,205	1,552	193.94	2,529	2,783
193.43	2,211	1,574	193.95	2,535	2,808
193.44	2,218	1,596	193.96	2,541	2,833
193.45	2,224	1,618	193.97	2,547	2,859
193.46	2,230	1,640	193.98	2,554	2,884
193.47	2,236	1,663	193.99	2,560	2,910
193.48	2,243	1,685	194.00	2,566	2,935
193.49	2,249	1,708	194.01	2,573	2,961
193.50	2,255	1,730	194.02	2,580	2,987
193.51	2,261	1,753	194.03	2,586	3,013
193.52	2,267	1,775	194.04	2,593	3,039
193.53	2,274	1,798	194.05	2,600	3,065
193.54	2,280	1,821	194.06	2,607	3,091
193.55	2,286	1,844	194.07	2,614	3,117
193.56	2,292	1,867	194.08	2,620	3,143
193.57	2,299	1,890	194.09	2,627	3,169
193.58	2,305	1,913	194.10	2,634	3,195
193.59	2,311	1,936	194.11	2,641	3,222
193.60	2,317	1,959	194.12	2,647	3,248
193.61	2,323	1,982	194.13	2,654	3,275
193.62	2,330	2,005	194.14	2,661	3,301
193.63	2,336	2,029	194.15	2,668	3,328
193.64	2,342	2,052	194.16	2,675	3,355
193.65	2,348	2,075	194.17	2,681	3,381
193.66	2,355	2,099	194.18	2,688	3,408
193.67	2,361	2,122	194.19	2,695	3,435
193.68	2,367	2,146	194.20	2,702	3,462
193.69	2,373	2,170	194.21	2,709	3,489
193.70	2,379	2,194	194.22	2,715	3,516
193.71	2,386	2,217	194.23	2,722	3,544
193.72	2,392	2,241	194.24	2,729	3,571
193.73	2,398	2,265	194.25	2,736	3,598
193.74	2,404	2,289	194.26	2,743	3,626
193.75	2,411	2,313	194.27	2,749	3,653
193.76	2,417	2,337	194.28	2,756	3,680
193.77	2,423	2,362	194.29	2,763	3,708
193.78	2,429	2,386	194.30	2,770	3,736
193.79	2,435	2,410	194.31	2,776	3,763
193.80	2,442	2,435	194.32	2,783	3,791
193.81	2,448	2,459	194.33	2,790	3,819
193.82	2,454	2,484	194.34	2,797	3,847
193.83	2,460	2,508	194.35	2,804	3,875
193.84	2,466	2,533	194.36	2,810	3,903
193.85	2,473	2,557	194.37	2,817	3,931

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.38	2,824	3,960
194.39	2,831	3,988
194.40	2,838	4,016
194.41	2,844	4,045
194.42	2,851	4,073
194.43	2,858	4,102
194.44	2,865	4,130
194.45	2,872	4,159
194.46	2,878	4,188
194.47	2,885	4,216
194.48	2,892	4,245
194.49	2,899	4,274
194.50	2,906	4,303
194.51	2,912	4,332
194.52	2,919	4,362
194.53	2,926	4,391
194.54	2,933	4,420
194.55	2,939	4,449
194.56	2,946	4,479
194.57	2,953	4,508
194.58	2,960	4,538
194.59	2,967	4,568
194.60	2,973	4,597
194.61	2,980	4,627
194.62	2,987	4,657
194.63	2,994	4,687
194.64	3,001	4,717
194.65	3,007	4,747
194.66	3,014	4,777
194.67	3,021	4,807
194.68	3,028	4,837
194.69	3,035	4,868
194.70	3,041	4,898
194.71	3,048	4,928
194.72	3,055	4,959
194.73	3,062	4,989
194.74	3,068	5,020
194.75	3,075	5,051
194.76	3,082	5,082
194.77	3,089	5,113
194.78	3,096	5,143
194.79	3,102	5,174
194.80	3,109	5,205
194.81	3,116	5,237
194.82	3,123	5,268
194.83	3,130	5,299
194.84	3,136	5,330
194.85	3,143	5,362
194.86	3,150	5,393
194.87	3,157	5,425
194.88	3,164	5,456
194.89	3,170	5,488
194.90	3,177	5,520
194.91	3,184	5,552
194.92	3,191	5,583
194.93	3,197	5,615
194.94	3,204	5,647
194.95	3,211	5,679
194.96	3,218	5,712
194.97	3,225	5,744
194.98	3,231	5,776
194.99	3,238	5,808
195.00	3,245	5,841
195.01	3,252	5,873
195.02	3,260	5,906
195.03	3,267	5,939
195.04	3,274	5,971
195.05	3,282	6,004
195.06	3,289	6,037
195.07	3,296	6,070
195.08	3,304	6,103
195.09	3,311	6,136
195.10	3,319	6,169
195.11	3,326	6,202
195.12	3,333	6,236
195.13	3,341	6,269
195.14	3,348	6,302
195.15	3,355	6,336
195.16	3,363	6,370
195.17	3,370	6,403
195.18	3,377	6,437
195.19	3,385	6,471
195.20	3,392	6,505
195.21	3,399	6,539
195.22	3,407	6,573
195.23	3,414	6,607
195.24	3,421	6,641
195.25	3,429	6,675
195.26	3,436	6,709
195.27	3,443	6,744
195.28	3,451	6,778
195.29	3,458	6,813
195.30	3,466	6,847
195.31	3,473	6,882
195.32	3,480	6,917
195.33	3,488	6,952
195.34	3,495	6,987
195.35	3,502	7,022
195.36	3,510	7,057
195.37	3,517	7,092
195.38	3,524	7,127
195.39	3,532	7,162
195.40	3,539	7,198
195.41	3,546	7,233

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.42	3,554	7,269
195.43	3,561	7,304
195.44	3,568	7,340
195.45	3,576	7,376
195.46	3,583	7,411
195.47	3,590	7,447
195.48	3,598	7,483
195.49	3,605	7,519
195.50	3,613	7,555
195.51	3,620	7,591
195.52	3,627	7,628
195.53	3,635	7,664
195.54	3,642	7,700
195.55	3,649	7,737
195.56	3,657	7,773
195.57	3,664	7,810
195.58	3,671	7,847
195.59	3,679	7,883
195.60	3,686	7,920
195.61	3,693	7,957
195.62	3,701	7,994
195.63	3,708	8,031
195.64	3,715	8,068
195.65	3,723	8,105
195.66	3,730	8,143
195.67	3,737	8,180
195.68	3,745	8,217
195.69	3,752	8,255
195.70	3,760	8,292
195.71	3,767	8,330
195.72	3,774	8,368
195.73	3,782	8,406
195.74	3,789	8,443
195.75	3,796	8,481
195.76	3,804	8,519
195.77	3,811	8,557
195.78	3,818	8,596
195.79	3,826	8,634
195.80	3,833	8,672
195.81	3,840	8,710
195.82	3,848	8,749
195.83	3,855	8,787
195.84	3,862	8,826
195.85	3,870	8,865
195.86	3,877	8,903
195.87	3,884	8,942
195.88	3,892	8,981
195.89	3,899	9,020
195.90	3,907	9,059
195.91	3,914	9,098
195.92	3,921	9,137
195.93	3,929	9,177
195.94	3,936	9,216
195.95	3,943	9,255
195.96	3,951	9,295
195.97	3,958	9,334
195.98	3,965	9,374
195.99	3,973	9,414
196.00	**3,980**	**9,453**

Summary for Pond B-32: Basin #32

Inflow Area = 1.911 ac, 49.76% Impervious, Inflow Depth = 4.33" for Future 10 yr event
Inflow = 8.32 cfs @ 12.17 hrs, Volume= 0.689 af
Outflow = 6.19 cfs @ 12.26 hrs, Volume= 0.601 af, Atten= 26%, Lag= 5.4 min
Primary = 6.19 cfs @ 12.26 hrs, Volume= 0.601 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.52' @ 12.26 hrs Surf.Area= 3,282 sf Storage= 6,752 cf

Plug-Flow detention time= 118.8 min calculated for 0.601 af (87% of inflow)
Center-of-Mass det. time= 56.4 min (837.2 - 780.9)

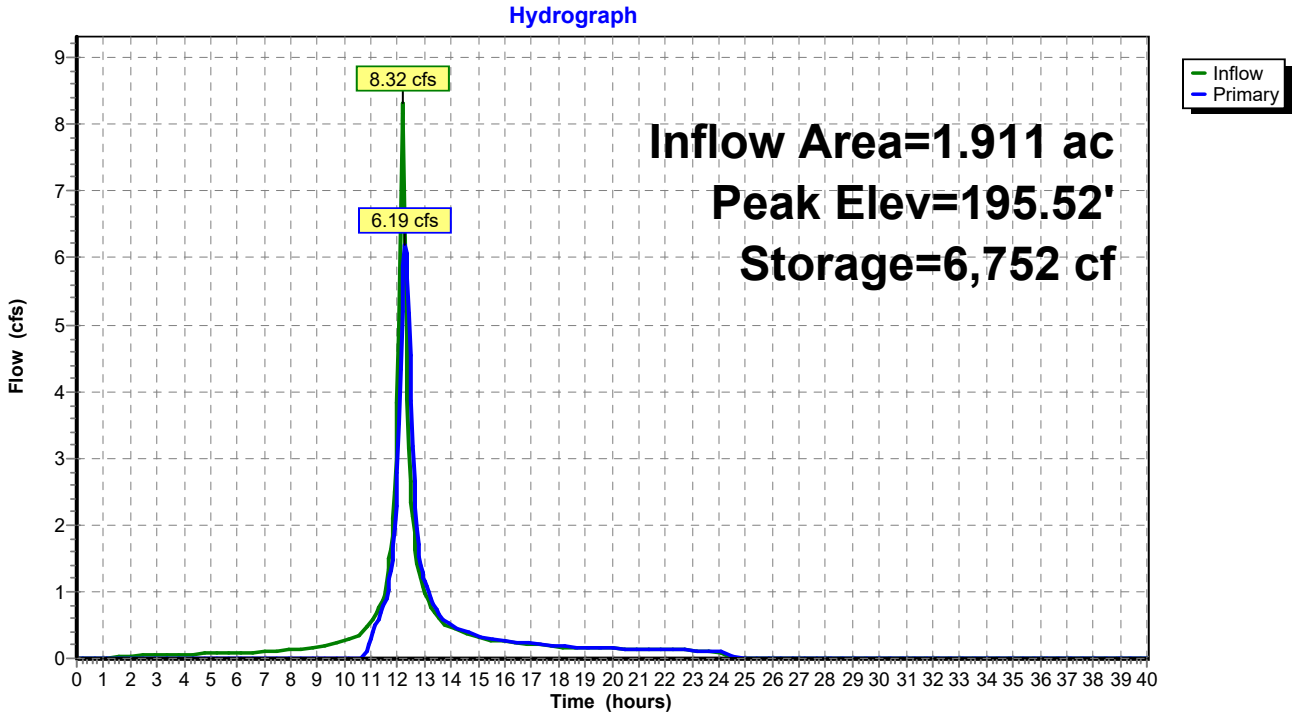
Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	17,202 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	1,675	586	586
194.00	2,256	1,966	2,552
195.00	2,913	2,585	5,136
196.00	3,621	3,267	8,403
197.00	4,385	4,003	12,406
198.00	5,206	4,796	17,202

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 182.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0146 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.53'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	197.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.16 cfs @ 12.26 hrs HW=195.51' (Free Discharge)
- **1=Culvert** (Passes 6.16 cfs of 15.83 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 6.16 cfs @ 4.10 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-32: Basin #32



Stage-Discharge for Pond B-32: Basin #32

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.30	0.00	192.82	0.00	193.34	0.00	193.86	0.00
192.31	0.00	192.83	0.00	193.35	0.00	193.87	0.00
192.32	0.00	192.84	0.00	193.36	0.00	193.88	0.00
192.33	0.00	192.85	0.00	193.37	0.00	193.89	0.00
192.34	0.00	192.86	0.00	193.38	0.00	193.90	0.00
192.35	0.00	192.87	0.00	193.39	0.00	193.91	0.00
192.36	0.00	192.88	0.00	193.40	0.00	193.92	0.00
192.37	0.00	192.89	0.00	193.41	0.00	193.93	0.00
192.38	0.00	192.90	0.00	193.42	0.00	193.94	0.00
192.39	0.00	192.91	0.00	193.43	0.00	193.95	0.00
192.40	0.00	192.92	0.00	193.44	0.00	193.96	0.00
192.41	0.00	192.93	0.00	193.45	0.00	193.97	0.00
192.42	0.00	192.94	0.00	193.46	0.00	193.98	0.00
192.43	0.00	192.95	0.00	193.47	0.00	193.99	0.00
192.44	0.00	192.96	0.00	193.48	0.00	194.00	0.00
192.45	0.00	192.97	0.00	193.49	0.00	194.01	0.00
192.46	0.00	192.98	0.00	193.50	0.00	194.02	0.00
192.47	0.00	192.99	0.00	193.51	0.00	194.03	0.00
192.48	0.00	193.00	0.00	193.52	0.00	194.04	0.00
192.49	0.00	193.01	0.00	193.53	0.00	194.05	0.00
192.50	0.00	193.02	0.00	193.54	0.00	194.06	0.00
192.51	0.00	193.03	0.00	193.55	0.00	194.07	0.00
192.52	0.00	193.04	0.00	193.56	0.00	194.08	0.00
192.53	0.00	193.05	0.00	193.57	0.00	194.09	0.00
192.54	0.00	193.06	0.00	193.58	0.00	194.10	0.00
192.55	0.00	193.07	0.00	193.59	0.00	194.11	0.00
192.56	0.00	193.08	0.00	193.60	0.00	194.12	0.00
192.57	0.00	193.09	0.00	193.61	0.00	194.13	0.00
192.58	0.00	193.10	0.00	193.62	0.00	194.14	0.00
192.59	0.00	193.11	0.00	193.63	0.00	194.15	0.00
192.60	0.00	193.12	0.00	193.64	0.00	194.16	0.00
192.61	0.00	193.13	0.00	193.65	0.00	194.17	0.00
192.62	0.00	193.14	0.00	193.66	0.00	194.18	0.00
192.63	0.00	193.15	0.00	193.67	0.00	194.19	0.00
192.64	0.00	193.16	0.00	193.68	0.00	194.20	0.00
192.65	0.00	193.17	0.00	193.69	0.00	194.21	0.00
192.66	0.00	193.18	0.00	193.70	0.00	194.22	0.00
192.67	0.00	193.19	0.00	193.71	0.00	194.23	0.00
192.68	0.00	193.20	0.00	193.72	0.00	194.24	0.00
192.69	0.00	193.21	0.00	193.73	0.00	194.25	0.00
192.70	0.00	193.22	0.00	193.74	0.00	194.26	0.00
192.71	0.00	193.23	0.00	193.75	0.00	194.27	0.00
192.72	0.00	193.24	0.00	193.76	0.00	194.28	0.00
192.73	0.00	193.25	0.00	193.77	0.00	194.29	0.00
192.74	0.00	193.26	0.00	193.78	0.00	194.30	0.00
192.75	0.00	193.27	0.00	193.79	0.00	194.31	0.00
192.76	0.00	193.28	0.00	193.80	0.00	194.32	0.00
192.77	0.00	193.29	0.00	193.81	0.00	194.33	0.00
192.78	0.00	193.30	0.00	193.82	0.00	194.34	0.00
192.79	0.00	193.31	0.00	193.83	0.00	194.35	0.00
192.80	0.00	193.32	0.00	193.84	0.00	194.36	0.00
192.81	0.00	193.33	0.00	193.85	0.00	194.37	0.00

Stage-Discharge for Pond B-32: Basin #32 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.38	0.00	194.90	2.17	195.42	5.74	195.94	7.76
194.39	0.00	194.91	2.26	195.43	5.79	195.95	7.80
194.40	0.00	194.92	2.35	195.44	5.83	195.96	7.83
194.41	0.00	194.93	2.44	195.45	5.88	195.97	7.86
194.42	0.00	194.94	2.53	195.46	5.92	195.98	7.90
194.43	0.00	194.95	2.62	195.47	5.97	195.99	7.93
194.44	0.00	194.96	2.72	195.48	6.01	196.00	7.96
194.45	0.00	194.97	2.81	195.49	6.05	196.01	8.00
194.46	0.00	194.98	2.91	195.50	6.10	196.02	8.03
194.47	0.00	194.99	3.00	195.51	6.14	196.03	8.06
194.48	0.00	195.00	3.10	195.52	6.18	196.04	8.09
194.49	0.00	195.01	3.20	195.53	6.23	196.05	8.13
194.50	0.00	195.02	3.30	195.54	6.27	196.06	8.16
194.51	0.00	195.03	3.40	195.55	6.31	196.07	8.19
194.52	0.00	195.04	3.50	195.56	6.35	196.08	8.22
194.53	0.00	195.05	3.58	195.57	6.39	196.09	8.25
194.54	0.01	195.06	3.67	195.58	6.43	196.10	8.29
194.55	0.03	195.07	3.74	195.59	6.47	196.11	8.32
194.56	0.05	195.08	3.82	195.60	6.51	196.12	8.35
194.57	0.08	195.09	3.89	195.61	6.55	196.13	8.38
194.58	0.11	195.10	3.97	195.62	6.59	196.14	8.41
194.59	0.14	195.11	4.04	195.63	6.63	196.15	8.44
194.60	0.18	195.12	4.10	195.64	6.67	196.16	8.47
194.61	0.22	195.13	4.17	195.65	6.71	196.17	8.50
194.62	0.26	195.14	4.24	195.66	6.75	196.18	8.53
194.63	0.30	195.15	4.30	195.67	6.79	196.19	8.56
194.64	0.35	195.16	4.36	195.68	6.83	196.20	8.60
194.65	0.40	195.17	4.43	195.69	6.87	196.21	8.63
194.66	0.45	195.18	4.49	195.70	6.91	196.22	8.66
194.67	0.50	195.19	4.55	195.71	6.94	196.23	8.69
194.68	0.56	195.20	4.61	195.72	6.98	196.24	8.72
194.69	0.62	195.21	4.66	195.73	7.02	196.25	8.75
194.70	0.67	195.22	4.72	195.74	7.06	196.26	8.78
194.71	0.74	195.23	4.78	195.75	7.09	196.27	8.81
194.72	0.80	195.24	4.83	195.76	7.13	196.28	8.84
194.73	0.86	195.25	4.89	195.77	7.17	196.29	8.86
194.74	0.93	195.26	4.94	195.78	7.20	196.30	8.89
194.75	0.99	195.27	5.00	195.79	7.24	196.31	8.92
194.76	1.06	195.28	5.05	195.80	7.28	196.32	8.95
194.77	1.13	195.29	5.10	195.81	7.31	196.33	8.98
194.78	1.20	195.30	5.16	195.82	7.35	196.34	9.01
194.79	1.28	195.31	5.21	195.83	7.38	196.35	9.04
194.80	1.35	195.32	5.26	195.84	7.42	196.36	9.07
194.81	1.43	195.33	5.31	195.85	7.45	196.37	9.10
194.82	1.50	195.34	5.36	195.86	7.49	196.38	9.13
194.83	1.58	195.35	5.41	195.87	7.52	196.39	9.16
194.84	1.66	195.36	5.46	195.88	7.56	196.40	9.18
194.85	1.74	195.37	5.50	195.89	7.59	196.41	9.21
194.86	1.83	195.38	5.55	195.90	7.63	196.42	9.24
194.87	1.91	195.39	5.60	195.91	7.66	196.43	9.27
194.88	1.99	195.40	5.65	195.92	7.70	196.44	9.30
194.89	2.08	195.41	5.69	195.93	7.73	196.45	9.32

Stage-Discharge for Pond B-32: Basin #32 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.46	9.35	196.98	10.71	197.50	16.42
196.47	9.38	196.99	10.73	197.51	16.57
196.48	9.41	197.00	10.76	197.52	16.73
196.49	9.44	197.01	10.79	197.53	16.89
196.50	9.46	197.02	10.84	197.54	17.04
196.51	9.49	197.03	10.90	197.55	17.20
196.52	9.52	197.04	10.96	197.56	17.37
196.53	9.55	197.05	11.02	197.57	17.53
196.54	9.57	197.06	11.09	197.58	17.69
196.55	9.60	197.07	11.17	197.59	17.86
196.56	9.63	197.08	11.24	197.60	18.02
196.57	9.66	197.09	11.32	197.61	18.19
196.58	9.68	197.10	11.41	197.62	18.36
196.59	9.71	197.11	11.49	197.63	18.40
196.60	9.74	197.12	11.58	197.64	18.41
196.61	9.76	197.13	11.68	197.65	18.42
196.62	9.79	197.14	11.77	197.66	18.44
196.63	9.82	197.15	11.87	197.67	18.45
196.64	9.84	197.16	11.97	197.68	18.46
196.65	9.87	197.17	12.07	197.69	18.47
196.66	9.90	197.18	12.17	197.70	18.48
196.67	9.92	197.19	12.28	197.71	18.49
196.68	9.95	197.20	12.39	197.72	18.50
196.69	9.97	197.21	12.50	197.73	18.51
196.70	10.00	197.22	12.61	197.74	18.53
196.71	10.03	197.23	12.73	197.75	18.54
196.72	10.05	197.24	12.84	197.76	18.55
196.73	10.08	197.25	12.96	197.77	18.56
196.74	10.10	197.26	13.08	197.78	18.57
196.75	10.13	197.27	13.20	197.79	18.58
196.76	10.16	197.28	13.33	197.80	18.59
196.77	10.18	197.29	13.45	197.81	18.60
196.78	10.21	197.30	13.58	197.82	18.62
196.79	10.23	197.31	13.71	197.83	18.63
196.80	10.26	197.32	13.84	197.84	18.64
196.81	10.28	197.33	13.97	197.85	18.65
196.82	10.31	197.34	14.10	197.86	18.66
196.83	10.33	197.35	14.23	197.87	18.67
196.84	10.36	197.36	14.37	197.88	18.68
196.85	10.38	197.37	14.51	197.89	18.69
196.86	10.41	197.38	14.65	197.90	18.70
196.87	10.44	197.39	14.79	197.91	18.72
196.88	10.46	197.40	14.93	197.92	18.73
196.89	10.49	197.41	15.07	197.93	18.74
196.90	10.51	197.42	15.22	197.94	18.75
196.91	10.53	197.43	15.36	197.95	18.76
196.92	10.56	197.44	15.51	197.96	18.89
196.93	10.58	197.45	15.66	197.97	19.11
196.94	10.61	197.46	15.81	197.98	19.40
196.95	10.63	197.47	15.96	197.99	19.74
196.96	10.66	197.48	16.11	198.00	**20.13**
196.97	10.68	197.49	16.26		

Stage-Area-Storage for Pond B-32: Basin #32

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.30	0	0	192.82	1,244	324
192.31	24	0	192.83	1,268	336
192.32	48	0	192.84	1,292	349
192.33	72	1	192.85	1,316	362
192.34	96	2	192.86	1,340	375
192.35	120	3	192.87	1,364	389
192.36	144	4	192.88	1,388	402
192.37	167	6	192.89	1,412	416
192.38	191	8	192.90	1,436	431
192.39	215	10	192.91	1,460	445
192.40	239	12	192.92	1,484	460
192.41	263	14	192.93	1,508	475
192.42	287	17	192.94	1,531	490
192.43	311	20	192.95	1,555	505
192.44	335	23	192.96	1,579	521
192.45	359	27	192.97	1,603	537
192.46	383	31	192.98	1,627	553
192.47	407	35	192.99	1,651	570
192.48	431	39	193.00	1,675	586
192.49	455	43	193.01	1,681	603
192.50	479	48	193.02	1,687	620
192.51	503	53	193.03	1,692	637
192.52	526	58	193.04	1,698	654
192.53	550	63	193.05	1,704	671
192.54	574	69	193.06	1,710	688
192.55	598	75	193.07	1,716	705
192.56	622	81	193.08	1,721	722
192.57	646	87	193.09	1,727	739
192.58	670	94	193.10	1,733	757
192.59	694	101	193.11	1,739	774
192.60	718	108	193.12	1,745	791
192.61	742	115	193.13	1,751	809
192.62	766	123	193.14	1,756	826
192.63	790	130	193.15	1,762	844
192.64	814	138	193.16	1,768	862
192.65	838	147	193.17	1,774	879
192.66	861	155	193.18	1,780	897
192.67	885	164	193.19	1,785	915
192.68	909	173	193.20	1,791	933
192.69	933	182	193.21	1,797	951
192.70	957	191	193.22	1,803	969
192.71	981	201	193.23	1,809	987
192.72	1,005	211	193.24	1,814	1,005
192.73	1,029	221	193.25	1,820	1,023
192.74	1,053	232	193.26	1,826	1,041
192.75	1,077	242	193.27	1,832	1,060
192.76	1,101	253	193.28	1,838	1,078
192.77	1,125	264	193.29	1,843	1,096
192.78	1,149	276	193.30	1,849	1,115
192.79	1,173	287	193.31	1,855	1,133
192.80	1,196	299	193.32	1,861	1,152
192.81	1,220	311	193.33	1,867	1,171

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.34	1,873	1,189	193.86	2,175	2,242
193.35	1,878	1,208	193.87	2,180	2,263
193.36	1,884	1,227	193.88	2,186	2,285
193.37	1,890	1,246	193.89	2,192	2,307
193.38	1,896	1,265	193.90	2,198	2,329
193.39	1,902	1,284	193.91	2,204	2,351
193.40	1,907	1,303	193.92	2,210	2,373
193.41	1,913	1,322	193.93	2,215	2,395
193.42	1,919	1,341	193.94	2,221	2,417
193.43	1,925	1,360	193.95	2,227	2,440
193.44	1,931	1,379	193.96	2,233	2,462
193.45	1,936	1,399	193.97	2,239	2,484
193.46	1,942	1,418	193.98	2,244	2,507
193.47	1,948	1,438	193.99	2,250	2,529
193.48	1,954	1,457	194.00	2,256	2,552
193.49	1,960	1,477	194.01	2,263	2,574
193.50	1,966	1,496	194.02	2,269	2,597
193.51	1,971	1,516	194.03	2,276	2,620
193.52	1,977	1,536	194.04	2,282	2,643
193.53	1,983	1,556	194.05	2,289	2,665
193.54	1,989	1,575	194.06	2,295	2,688
193.55	1,995	1,595	194.07	2,302	2,711
193.56	2,000	1,615	194.08	2,309	2,734
193.57	2,006	1,635	194.09	2,315	2,757
193.58	2,012	1,655	194.10	2,322	2,781
193.59	2,018	1,676	194.11	2,328	2,804
193.60	2,024	1,696	194.12	2,335	2,827
193.61	2,029	1,716	194.13	2,341	2,851
193.62	2,035	1,736	194.14	2,348	2,874
193.63	2,041	1,757	194.15	2,355	2,898
193.64	2,047	1,777	194.16	2,361	2,921
193.65	2,053	1,798	194.17	2,368	2,945
193.66	2,058	1,818	194.18	2,374	2,968
193.67	2,064	1,839	194.19	2,381	2,992
193.68	2,070	1,860	194.20	2,387	3,016
193.69	2,076	1,880	194.21	2,394	3,040
193.70	2,082	1,901	194.22	2,401	3,064
193.71	2,088	1,922	194.23	2,407	3,088
193.72	2,093	1,943	194.24	2,414	3,112
193.73	2,099	1,964	194.25	2,420	3,136
193.74	2,105	1,985	194.26	2,427	3,161
193.75	2,111	2,006	194.27	2,433	3,185
193.76	2,117	2,027	194.28	2,440	3,209
193.77	2,122	2,048	194.29	2,447	3,234
193.78	2,128	2,069	194.30	2,453	3,258
193.79	2,134	2,091	194.31	2,460	3,283
193.80	2,140	2,112	194.32	2,466	3,307
193.81	2,146	2,134	194.33	2,473	3,332
193.82	2,151	2,155	194.34	2,479	3,357
193.83	2,157	2,177	194.35	2,486	3,382
193.84	2,163	2,198	194.36	2,493	3,406
193.85	2,169	2,220	194.37	2,499	3,431

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.38	2,506	3,456	194.90	2,847	4,848
194.39	2,512	3,482	194.91	2,854	4,877
194.40	2,519	3,507	194.92	2,860	4,905
194.41	2,525	3,532	194.93	2,867	4,934
194.42	2,532	3,557	194.94	2,874	4,963
194.43	2,539	3,583	194.95	2,880	4,991
194.44	2,545	3,608	194.96	2,887	5,020
194.45	2,552	3,633	194.97	2,893	5,049
194.46	2,558	3,659	194.98	2,900	5,078
194.47	2,565	3,685	194.99	2,906	5,107
194.48	2,571	3,710	195.00	2,913	5,136
194.49	2,578	3,736	195.01	2,920	5,165
194.50	2,585	3,762	195.02	2,927	5,195
194.51	2,591	3,788	195.03	2,934	5,224
194.52	2,598	3,814	195.04	2,941	5,253
194.53	2,604	3,840	195.05	2,948	5,283
194.54	2,611	3,866	195.06	2,955	5,312
194.55	2,617	3,892	195.07	2,963	5,342
194.56	2,624	3,918	195.08	2,970	5,372
194.57	2,630	3,944	195.09	2,977	5,401
194.58	2,637	3,971	195.10	2,984	5,431
194.59	2,644	3,997	195.11	2,991	5,461
194.60	2,650	4,024	195.12	2,998	5,491
194.61	2,657	4,050	195.13	3,005	5,521
194.62	2,663	4,077	195.14	3,012	5,551
194.63	2,670	4,103	195.15	3,019	5,581
194.64	2,676	4,130	195.16	3,026	5,611
194.65	2,683	4,157	195.17	3,033	5,642
194.66	2,690	4,184	195.18	3,040	5,672
194.67	2,696	4,211	195.19	3,048	5,702
194.68	2,703	4,238	195.20	3,055	5,733
194.69	2,709	4,265	195.21	3,062	5,764
194.70	2,716	4,292	195.22	3,069	5,794
194.71	2,722	4,319	195.23	3,076	5,825
194.72	2,729	4,346	195.24	3,083	5,856
194.73	2,736	4,374	195.25	3,090	5,887
194.74	2,742	4,401	195.26	3,097	5,918
194.75	2,749	4,429	195.27	3,104	5,949
194.76	2,755	4,456	195.28	3,111	5,980
194.77	2,762	4,484	195.29	3,118	6,011
194.78	2,768	4,511	195.30	3,125	6,042
194.79	2,775	4,539	195.31	3,132	6,073
194.80	2,782	4,567	195.32	3,140	6,105
194.81	2,788	4,595	195.33	3,147	6,136
194.82	2,795	4,623	195.34	3,154	6,168
194.83	2,801	4,651	195.35	3,161	6,199
194.84	2,808	4,679	195.36	3,168	6,231
194.85	2,814	4,707	195.37	3,175	6,263
194.86	2,821	4,735	195.38	3,182	6,294
194.87	2,828	4,763	195.39	3,189	6,326
194.88	2,834	4,791	195.40	3,196	6,358
194.89	2,841	4,820	195.41	3,203	6,390

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.42	3,210	6,422	195.94	3,579	8,187
195.43	3,217	6,454	195.95	3,586	8,223
195.44	3,225	6,487	195.96	3,593	8,259
195.45	3,232	6,519	195.97	3,600	8,295
195.46	3,239	6,551	195.98	3,607	8,331
195.47	3,246	6,584	195.99	3,614	8,367
195.48	3,253	6,616	196.00	3,621	8,403
195.49	3,260	6,649	196.01	3,629	8,439
195.50	3,267	6,681	196.02	3,636	8,476
195.51	3,274	6,714	196.03	3,644	8,512
195.52	3,281	6,747	196.04	3,652	8,549
195.53	3,288	6,780	196.05	3,659	8,585
195.54	3,295	6,812	196.06	3,667	8,622
195.55	3,302	6,845	196.07	3,674	8,659
195.56	3,309	6,879	196.08	3,682	8,695
195.57	3,317	6,912	196.09	3,690	8,732
195.58	3,324	6,945	196.10	3,697	8,769
195.59	3,331	6,978	196.11	3,705	8,806
195.60	3,338	7,011	196.12	3,713	8,843
195.61	3,345	7,045	196.13	3,720	8,880
195.62	3,352	7,078	196.14	3,728	8,918
195.63	3,359	7,112	196.15	3,736	8,955
195.64	3,366	7,146	196.16	3,743	8,992
195.65	3,373	7,179	196.17	3,751	9,030
195.66	3,380	7,213	196.18	3,759	9,067
195.67	3,387	7,247	196.19	3,766	9,105
195.68	3,394	7,281	196.20	3,774	9,143
195.69	3,402	7,315	196.21	3,781	9,181
195.70	3,409	7,349	196.22	3,789	9,218
195.71	3,416	7,383	196.23	3,797	9,256
195.72	3,423	7,417	196.24	3,804	9,294
195.73	3,430	7,451	196.25	3,812	9,332
195.74	3,437	7,486	196.26	3,820	9,371
195.75	3,444	7,520	196.27	3,827	9,409
195.76	3,451	7,555	196.28	3,835	9,447
195.77	3,458	7,589	196.29	3,843	9,485
195.78	3,465	7,624	196.30	3,850	9,524
195.79	3,472	7,658	196.31	3,858	9,562
195.80	3,479	7,693	196.32	3,865	9,601
195.81	3,486	7,728	196.33	3,873	9,640
195.82	3,494	7,763	196.34	3,881	9,679
195.83	3,501	7,798	196.35	3,888	9,717
195.84	3,508	7,833	196.36	3,896	9,756
195.85	3,515	7,868	196.37	3,904	9,795
195.86	3,522	7,903	196.38	3,911	9,834
195.87	3,529	7,939	196.39	3,919	9,874
195.88	3,536	7,974	196.40	3,927	9,913
195.89	3,543	8,009	196.41	3,934	9,952
195.90	3,550	8,045	196.42	3,942	9,991
195.91	3,557	8,080	196.43	3,950	10,031
195.92	3,564	8,116	196.44	3,957	10,070
195.93	3,571	8,152	196.45	3,965	10,110

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.46	3,972	10,150	196.98	4,370	12,319
196.47	3,980	10,190	196.99	4,377	12,362
196.48	3,988	10,229	197.00	4,385	12,406
196.49	3,995	10,269	197.01	4,393	12,450
196.50	4,003	10,309	197.02	4,401	12,494
196.51	4,011	10,349	197.03	4,410	12,538
196.52	4,018	10,389	197.04	4,418	12,582
196.53	4,026	10,430	197.05	4,426	12,627
196.54	4,034	10,470	197.06	4,434	12,671
196.55	4,041	10,510	197.07	4,442	12,715
196.56	4,049	10,551	197.08	4,451	12,760
196.57	4,056	10,591	197.09	4,459	12,804
196.58	4,064	10,632	197.10	4,467	12,849
196.59	4,072	10,673	197.11	4,475	12,894
196.60	4,079	10,713	197.12	4,484	12,938
196.61	4,087	10,754	197.13	4,492	12,983
196.62	4,095	10,795	197.14	4,500	13,028
196.63	4,102	10,836	197.15	4,508	13,073
196.64	4,110	10,877	197.16	4,516	13,118
196.65	4,118	10,918	197.17	4,525	13,164
196.66	4,125	10,960	197.18	4,533	13,209
196.67	4,133	11,001	197.19	4,541	13,254
196.68	4,141	11,042	197.20	4,549	13,300
196.69	4,148	11,084	197.21	4,557	13,345
196.70	4,156	11,125	197.22	4,566	13,391
196.71	4,163	11,167	197.23	4,574	13,437
196.72	4,171	11,208	197.24	4,582	13,482
196.73	4,179	11,250	197.25	4,590	13,528
196.74	4,186	11,292	197.26	4,598	13,574
196.75	4,194	11,334	197.27	4,607	13,620
196.76	4,202	11,376	197.28	4,615	13,666
196.77	4,209	11,418	197.29	4,623	13,712
196.78	4,217	11,460	197.30	4,631	13,759
196.79	4,225	11,502	197.31	4,640	13,805
196.80	4,232	11,545	197.32	4,648	13,851
196.81	4,240	11,587	197.33	4,656	13,898
196.82	4,247	11,629	197.34	4,664	13,945
196.83	4,255	11,672	197.35	4,672	13,991
196.84	4,263	11,714	197.36	4,681	14,038
196.85	4,270	11,757	197.37	4,689	14,085
196.86	4,278	11,800	197.38	4,697	14,132
196.87	4,286	11,843	197.39	4,705	14,179
196.88	4,293	11,886	197.40	4,713	14,226
196.89	4,301	11,929	197.41	4,722	14,273
196.90	4,309	11,972	197.42	4,730	14,320
196.91	4,316	12,015	197.43	4,738	14,368
196.92	4,324	12,058	197.44	4,746	14,415
196.93	4,332	12,101	197.45	4,754	14,463
196.94	4,339	12,145	197.46	4,763	14,510
196.95	4,347	12,188	197.47	4,771	14,558
196.96	4,354	12,231	197.48	4,779	14,606
196.97	4,362	12,275	197.49	4,787	14,653

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.50	4,796	14,701
197.51	4,804	14,749
197.52	4,812	14,797
197.53	4,820	14,846
197.54	4,828	14,894
197.55	4,837	14,942
197.56	4,845	14,991
197.57	4,853	15,039
197.58	4,861	15,088
197.59	4,869	15,136
197.60	4,878	15,185
197.61	4,886	15,234
197.62	4,894	15,283
197.63	4,902	15,332
197.64	4,910	15,381
197.65	4,919	15,430
197.66	4,927	15,479
197.67	4,935	15,528
197.68	4,943	15,578
197.69	4,951	15,627
197.70	4,960	15,677
197.71	4,968	15,727
197.72	4,976	15,776
197.73	4,984	15,826
197.74	4,993	15,876
197.75	5,001	15,926
197.76	5,009	15,976
197.77	5,017	16,026
197.78	5,025	16,076
197.79	5,034	16,127
197.80	5,042	16,177
197.81	5,050	16,227
197.82	5,058	16,278
197.83	5,066	16,329
197.84	5,075	16,379
197.85	5,083	16,430
197.86	5,091	16,481
197.87	5,099	16,532
197.88	5,107	16,583
197.89	5,116	16,634
197.90	5,124	16,685
197.91	5,132	16,737
197.92	5,140	16,788
197.93	5,149	16,839
197.94	5,157	16,891
197.95	5,165	16,942
197.96	5,173	16,994
197.97	5,181	17,046
197.98	5,190	17,098
197.99	5,198	17,150
198.00	**5,206**	**17,202**

Summary for Pond B-33: Basin #33

Inflow Area = 1.761 ac, 50.99% Impervious, Inflow Depth = 4.36" for Future 10 yr event
Inflow = 7.71 cfs @ 12.17 hrs, Volume= 0.640 af
Outflow = 3.59 cfs @ 12.36 hrs, Volume= 0.550 af, Atten= 53%, Lag= 11.3 min
Primary = 3.59 cfs @ 12.36 hrs, Volume= 0.550 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 189.94' @ 12.36 hrs Surf.Area= 5,563 sf Storage= 13,393 cf

Plug-Flow detention time= 408.2 min calculated for 0.550 af (86% of inflow)
Center-of-Mass det. time= 341.9 min (1,121.7 - 779.9)

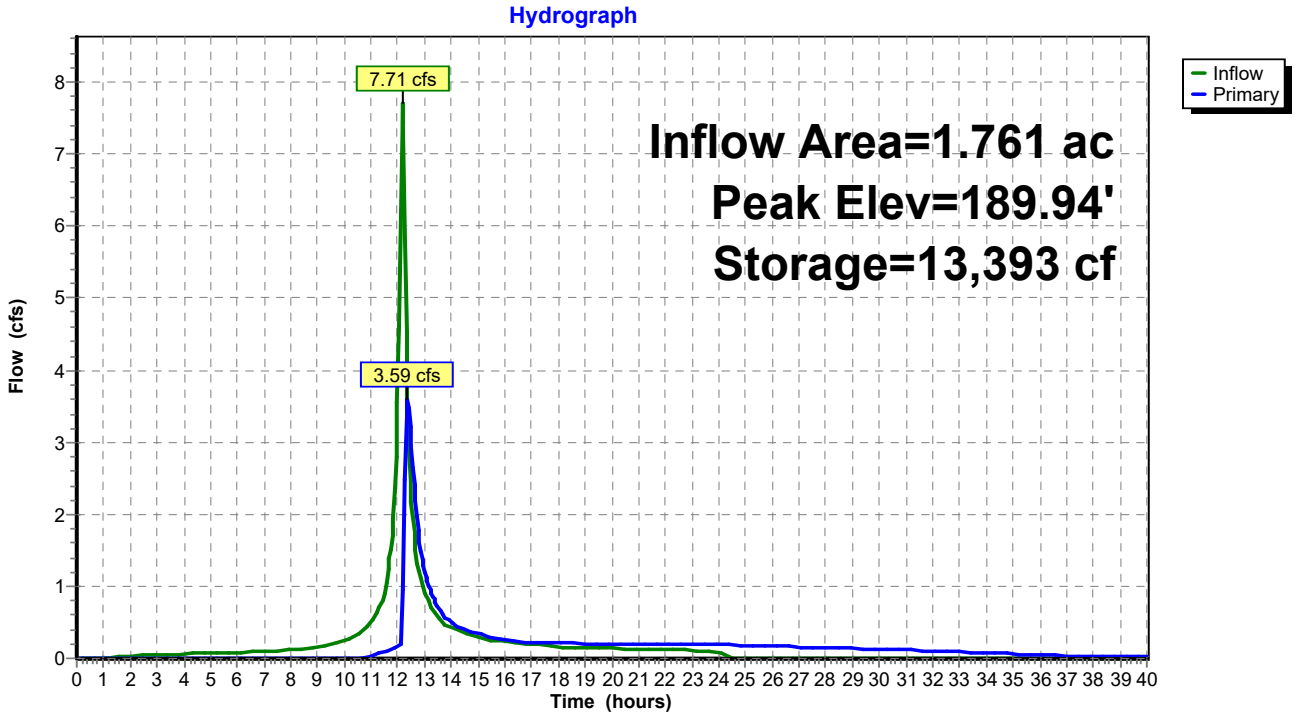
Volume	Invert	Avail.Storage	Storage Description
#1	186.30'	19,860 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.30	0	0	0
187.00	2,936	1,028	1,028
188.00	3,763	3,350	4,377
189.00	4,665	4,214	8,591
190.00	5,621	5,143	13,734
191.00	6,631	6,126	19,860

Device	Routing	Invert	Outlet Devices
#1	Primary	185.65'	**18.0" Round Culvert** L= 91.0' Ke= 0.500 Inlet / Outlet Invert= 185.65' / 185.00' S= 0.0071 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	187.79'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.53'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.75'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.56 cfs @ 12.36 hrs HW=189.94' (Free Discharge)
- **1=Culvert** (Passes 3.56 cfs of 14.78 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.88 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.32 cfs @ 2.09 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-33: Basin #33



Stage-Discharge for Pond B-33: Basin #33

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.30	0.00	186.82	0.00	187.34	0.00	187.86	0.01
186.31	0.00	186.83	0.00	187.35	0.00	187.87	0.01
186.32	0.00	186.84	0.00	187.36	0.00	187.88	0.01
186.33	0.00	186.85	0.00	187.37	0.00	187.89	0.02
186.34	0.00	186.86	0.00	187.38	0.00	187.90	0.02
186.35	0.00	186.87	0.00	187.39	0.00	187.91	0.02
186.36	0.00	186.88	0.00	187.40	0.00	187.92	0.03
186.37	0.00	186.89	0.00	187.41	0.00	187.93	0.03
186.38	0.00	186.90	0.00	187.42	0.00	187.94	0.03
186.39	0.00	186.91	0.00	187.43	0.00	187.95	0.04
186.40	0.00	186.92	0.00	187.44	0.00	187.96	0.04
186.41	0.00	186.93	0.00	187.45	0.00	187.97	0.05
186.42	0.00	186.94	0.00	187.46	0.00	187.98	0.05
186.43	0.00	186.95	0.00	187.47	0.00	187.99	0.05
186.44	0.00	186.96	0.00	187.48	0.00	188.00	0.05
186.45	0.00	186.97	0.00	187.49	0.00	188.01	0.06
186.46	0.00	186.98	0.00	187.50	0.00	188.02	0.06
186.47	0.00	186.99	0.00	187.51	0.00	188.03	0.06
186.48	0.00	187.00	0.00	187.52	0.00	188.04	0.06
186.49	0.00	187.01	0.00	187.53	0.00	188.05	0.06
186.50	0.00	187.02	0.00	187.54	0.00	188.06	0.07
186.51	0.00	187.03	0.00	187.55	0.00	188.07	0.07
186.52	0.00	187.04	0.00	187.56	0.00	188.08	0.07
186.53	0.00	187.05	0.00	187.57	0.00	188.09	0.07
186.54	0.00	187.06	0.00	187.58	0.00	188.10	0.07
186.55	0.00	187.07	0.00	187.59	0.00	188.11	0.08
186.56	0.00	187.08	0.00	187.60	0.00	188.12	0.08
186.57	0.00	187.09	0.00	187.61	0.00	188.13	0.08
186.58	0.00	187.10	0.00	187.62	0.00	188.14	0.08
186.59	0.00	187.11	0.00	187.63	0.00	188.15	0.08
186.60	0.00	187.12	0.00	187.64	0.00	188.16	0.08
186.61	0.00	187.13	0.00	187.65	0.00	188.17	0.09
186.62	0.00	187.14	0.00	187.66	0.00	188.18	0.09
186.63	0.00	187.15	0.00	187.67	0.00	188.19	0.09
186.64	0.00	187.16	0.00	187.68	0.00	188.20	0.09
186.65	0.00	187.17	0.00	187.69	0.00	188.21	0.09
186.66	0.00	187.18	0.00	187.70	0.00	188.22	0.09
186.67	0.00	187.19	0.00	187.71	0.00	188.23	0.10
186.68	0.00	187.20	0.00	187.72	0.00	188.24	0.10
186.69	0.00	187.21	0.00	187.73	0.00	188.25	0.10
186.70	0.00	187.22	0.00	187.74	0.00	188.26	0.10
186.71	0.00	187.23	0.00	187.75	0.00	188.27	0.10
186.72	0.00	187.24	0.00	187.76	0.00	188.28	0.10
186.73	0.00	187.25	0.00	187.77	0.00	188.29	0.10
186.74	0.00	187.26	0.00	187.78	0.00	188.30	0.10
186.75	0.00	187.27	0.00	187.79	0.00	188.31	0.11
186.76	0.00	187.28	0.00	187.80	0.00	188.32	0.11
186.77	0.00	187.29	0.00	187.81	0.00	188.33	0.11
186.78	0.00	187.30	0.00	187.82	0.00	188.34	0.11
186.79	0.00	187.31	0.00	187.83	0.00	188.35	0.11
186.80	0.00	187.32	0.00	187.84	0.00	188.36	0.11
186.81	0.00	187.33	0.00	187.85	0.01	188.37	0.11

Stage-Discharge for Pond B-33: Basin #33 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.38	0.11	188.90	0.16	189.42	0.20	189.94	3.60
188.39	0.12	188.91	0.17	189.43	0.20	189.95	3.72
188.40	0.12	188.92	0.17	189.44	0.20	189.96	3.84
188.41	0.12	188.93	0.17	189.45	0.20	189.97	3.97
188.42	0.12	188.94	0.17	189.46	0.21	189.98	4.10
188.43	0.12	188.95	0.17	189.47	0.21	189.99	4.22
188.44	0.12	188.96	0.17	189.48	0.21	190.00	4.35
188.45	0.12	188.97	0.17	189.49	0.21	190.01	4.48
188.46	0.12	188.98	0.17	189.50	0.21	190.02	4.62
188.47	0.12	188.99	0.17	189.51	0.21	190.03	4.75
188.48	0.13	189.00	0.17	189.52	0.21	190.04	4.88
188.49	0.13	189.01	0.17	189.53	0.21	190.05	5.02
188.50	0.13	189.02	0.17	189.54	0.22	190.06	5.15
188.51	0.13	189.03	0.17	189.55	0.25	190.07	5.29
188.52	0.13	189.04	0.18	189.56	0.28	190.08	5.43
188.53	0.13	189.05	0.18	189.57	0.32	190.09	5.57
188.54	0.13	189.06	0.18	189.58	0.36	190.10	5.71
188.55	0.13	189.07	0.18	189.59	0.41	190.11	5.85
188.56	0.13	189.08	0.18	189.60	0.46	190.12	6.00
188.57	0.13	189.09	0.18	189.61	0.51	190.13	6.14
188.58	0.14	189.10	0.18	189.62	0.57	190.14	6.29
188.59	0.14	189.11	0.18	189.63	0.63	190.15	6.43
188.60	0.14	189.12	0.18	189.64	0.69	190.16	6.58
188.61	0.14	189.13	0.18	189.65	0.76	190.17	6.73
188.62	0.14	189.14	0.18	189.66	0.83	190.18	6.88
188.63	0.14	189.15	0.18	189.67	0.90	190.19	7.03
188.64	0.14	189.16	0.18	189.68	0.97	190.20	7.18
188.65	0.14	189.17	0.19	189.69	1.05	190.21	7.33
188.66	0.14	189.18	0.19	189.70	1.13	190.22	7.49
188.67	0.14	189.19	0.19	189.71	1.21	190.23	7.64
188.68	0.15	189.20	0.19	189.72	1.29	190.24	7.80
188.69	0.15	189.21	0.19	189.73	1.38	190.25	7.96
188.70	0.15	189.22	0.19	189.74	1.47	190.26	8.11
188.71	0.15	189.23	0.19	189.75	1.56	190.27	8.27
188.72	0.15	189.24	0.19	189.76	1.65	190.28	8.43
188.73	0.15	189.25	0.19	189.77	1.74	190.29	8.59
188.74	0.15	189.26	0.19	189.78	1.84	190.30	8.75
188.75	0.15	189.27	0.19	189.79	1.94	190.31	8.91
188.76	0.15	189.28	0.19	189.80	2.04	190.32	9.08
188.77	0.15	189.29	0.19	189.81	2.14	190.33	9.24
188.78	0.15	189.30	0.19	189.82	2.24	190.34	9.41
188.79	0.16	189.31	0.20	189.83	2.35	190.35	9.57
188.80	0.16	189.32	0.20	189.84	2.45	190.36	9.74
188.81	0.16	189.33	0.20	189.85	2.56	190.37	9.91
188.82	0.16	189.34	0.20	189.86	2.67	190.38	10.07
188.83	0.16	189.35	0.20	189.87	2.78	190.39	10.24
188.84	0.16	189.36	0.20	189.88	2.89	190.40	10.41
188.85	0.16	189.37	0.20	189.89	3.01	190.41	10.58
188.86	0.16	189.38	0.20	189.90	3.12	190.42	10.75
188.87	0.16	189.39	0.20	189.91	3.24	190.43	10.93
188.88	0.16	189.40	0.20	189.92	3.36	190.44	11.10
188.89	0.16	189.41	0.20	189.93	3.48	190.45	11.27

Stage-Discharge for Pond B-33: Basin #33 (continued)

Elevation (feet)	Primary (cfs)
190.46	11.45
190.47	11.62
190.48	11.80
190.49	11.98
190.50	12.15
190.51	12.33
190.52	12.51
190.53	12.69
190.54	12.87
190.55	13.05
190.56	13.24
190.57	13.42
190.58	13.60
190.59	13.79
190.60	13.97
190.61	14.16
190.62	14.34
190.63	14.53
190.64	14.72
190.65	14.91
190.66	15.10
190.67	15.29
190.68	15.48
190.69	15.67
190.70	15.86
190.71	16.05
190.72	16.25
190.73	16.40
190.74	16.42
190.75	16.44
190.76	16.57
190.77	16.81
190.78	17.10
190.79	17.45
190.80	17.84
190.81	18.28
190.82	18.74
190.83	19.25
190.84	19.78
190.85	20.35
190.86	20.94
190.87	21.56
190.88	22.20
190.89	22.87
190.90	23.57
190.91	24.29
190.92	25.03
190.93	25.79
190.94	26.58
190.95	27.38
190.96	28.25
190.97	29.14
190.98	30.06
190.99	31.00
191.00	**31.97**

Stage-Area-Storage for Pond B-33: Basin #33

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.30	0	0	186.82	2,181	567
186.31	42	0	186.83	2,223	589
186.32	84	1	186.84	2,265	612
186.33	126	2	186.85	2,307	634
186.34	168	3	186.86	2,349	658
186.35	210	5	186.87	2,391	681
186.36	252	8	186.88	2,433	705
186.37	294	10	186.89	2,475	730
186.38	336	13	186.90	2,517	755
186.39	377	17	186.91	2,559	780
186.40	419	21	186.92	2,600	806
186.41	461	25	186.93	2,642	832
186.42	503	30	186.94	2,684	859
186.43	545	35	186.95	2,726	886
186.44	587	41	186.96	2,768	914
186.45	629	47	186.97	2,810	941
186.46	671	54	186.98	2,852	970
186.47	713	61	186.99	2,894	998
186.48	755	68	187.00	2,936	1,028
186.49	797	76	187.01	2,944	1,057
186.50	839	84	187.02	2,953	1,086
186.51	881	92	187.03	2,961	1,116
186.52	923	102	187.04	2,969	1,146
186.53	965	111	187.05	2,977	1,175
186.54	1,007	121	187.06	2,986	1,205
186.55	1,049	131	187.07	2,994	1,235
186.56	1,091	142	187.08	3,002	1,265
186.57	1,132	153	187.09	3,010	1,295
186.58	1,174	164	187.10	3,019	1,325
186.59	1,216	176	187.11	3,027	1,356
186.60	1,258	189	187.12	3,035	1,386
186.61	1,300	202	187.13	3,044	1,416
186.62	1,342	215	187.14	3,052	1,447
186.63	1,384	228	187.15	3,060	1,477
186.64	1,426	242	187.16	3,068	1,508
186.65	1,468	257	187.17	3,077	1,539
186.66	1,510	272	187.18	3,085	1,569
186.67	1,552	287	187.19	3,093	1,600
186.68	1,594	303	187.20	3,101	1,631
186.69	1,636	319	187.21	3,110	1,662
186.70	1,678	336	187.22	3,118	1,694
186.71	1,720	353	187.23	3,126	1,725
186.72	1,762	370	187.24	3,134	1,756
186.73	1,804	388	187.25	3,143	1,787
186.74	1,845	406	187.26	3,151	1,819
186.75	1,887	425	187.27	3,159	1,850
186.76	1,929	444	187.28	3,168	1,882
186.77	1,971	463	187.29	3,176	1,914
186.78	2,013	483	187.30	3,184	1,946
186.79	2,055	504	187.31	3,192	1,977
186.80	2,097	524	187.32	3,201	2,009
186.81	2,139	545	187.33	3,209	2,042

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.34	3,217	2,074	187.86	3,647	3,858
187.35	3,225	2,106	187.87	3,655	3,895
187.36	3,234	2,138	187.88	3,664	3,931
187.37	3,242	2,171	187.89	3,672	3,968
187.38	3,250	2,203	187.90	3,680	4,005
187.39	3,259	2,236	187.91	3,689	4,042
187.40	3,267	2,268	187.92	3,697	4,079
187.41	3,275	2,301	187.93	3,705	4,116
187.42	3,283	2,334	187.94	3,713	4,153
187.43	3,292	2,367	187.95	3,722	4,190
187.44	3,300	2,399	187.96	3,730	4,227
187.45	3,308	2,433	187.97	3,738	4,265
187.46	3,316	2,466	187.98	3,746	4,302
187.47	3,325	2,499	187.99	3,755	4,340
187.48	3,333	2,532	188.00	3,763	4,377
187.49	3,341	2,566	188.01	3,772	4,415
187.50	3,350	2,599	188.02	3,781	4,453
187.51	3,358	2,633	188.03	3,790	4,490
187.52	3,366	2,666	188.04	3,799	4,528
187.53	3,374	2,700	188.05	3,808	4,566
187.54	3,383	2,734	188.06	3,817	4,605
187.55	3,391	2,767	188.07	3,826	4,643
187.56	3,399	2,801	188.08	3,835	4,681
187.57	3,407	2,835	188.09	3,844	4,719
187.58	3,416	2,870	188.10	3,853	4,758
187.59	3,424	2,904	188.11	3,862	4,796
187.60	3,432	2,938	188.12	3,871	4,835
187.61	3,440	2,972	188.13	3,880	4,874
187.62	3,449	3,007	188.14	3,889	4,913
187.63	3,457	3,041	188.15	3,898	4,952
187.64	3,465	3,076	188.16	3,907	4,991
187.65	3,474	3,111	188.17	3,916	5,030
187.66	3,482	3,145	188.18	3,925	5,069
187.67	3,490	3,180	188.19	3,934	5,108
187.68	3,498	3,215	188.20	3,943	5,148
187.69	3,507	3,250	188.21	3,952	5,187
187.70	3,515	3,285	188.22	3,961	5,227
187.71	3,523	3,321	188.23	3,970	5,266
187.72	3,531	3,356	188.24	3,979	5,306
187.73	3,540	3,391	188.25	3,989	5,346
187.74	3,548	3,427	188.26	3,998	5,386
187.75	3,556	3,462	188.27	4,007	5,426
187.76	3,565	3,498	188.28	4,016	5,466
187.77	3,573	3,533	188.29	4,025	5,506
187.78	3,581	3,569	188.30	4,034	5,547
187.79	3,589	3,605	188.31	4,043	5,587
187.80	3,598	3,641	188.32	4,052	5,627
187.81	3,606	3,677	188.33	4,061	5,668
187.82	3,614	3,713	188.34	4,070	5,709
187.83	3,622	3,749	188.35	4,079	5,749
187.84	3,631	3,786	188.36	4,088	5,790
187.85	3,639	3,822	188.37	4,097	5,831

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.38	4,106	5,872	188.90	4,575	8,129
188.39	4,115	5,913	188.91	4,584	8,175
188.40	4,124	5,954	188.92	4,593	8,221
188.41	4,133	5,996	188.93	4,602	8,267
188.42	4,142	6,037	188.94	4,611	8,313
188.43	4,151	6,079	188.95	4,620	8,359
188.44	4,160	6,120	188.96	4,629	8,405
188.45	4,169	6,162	188.97	4,638	8,452
188.46	4,178	6,204	188.98	4,647	8,498
188.47	4,187	6,245	188.99	4,656	8,544
188.48	4,196	6,287	189.00	4,665	8,591
188.49	4,205	6,329	189.01	4,675	8,638
188.50	4,214	6,371	189.02	4,684	8,685
188.51	4,223	6,414	189.03	4,694	8,731
188.52	4,232	6,456	189.04	4,703	8,778
188.53	4,241	6,498	189.05	4,713	8,826
188.54	4,250	6,541	189.06	4,722	8,873
188.55	4,259	6,583	189.07	4,732	8,920
188.56	4,268	6,626	189.08	4,741	8,967
188.57	4,277	6,669	189.09	4,751	9,015
188.58	4,286	6,711	189.10	4,761	9,062
188.59	4,295	6,754	189.11	4,770	9,110
188.60	4,304	6,797	189.12	4,780	9,158
188.61	4,313	6,840	189.13	4,789	9,206
188.62	4,322	6,884	189.14	4,799	9,254
188.63	4,331	6,927	189.15	4,808	9,302
188.64	4,340	6,970	189.16	4,818	9,350
188.65	4,349	7,014	189.17	4,828	9,398
188.66	4,358	7,057	189.18	4,837	9,446
188.67	4,367	7,101	189.19	4,847	9,495
188.68	4,376	7,144	189.20	4,856	9,543
188.69	4,385	7,188	189.21	4,866	9,592
188.70	4,394	7,232	189.22	4,875	9,641
188.71	4,403	7,276	189.23	4,885	9,689
188.72	4,412	7,320	189.24	4,894	9,738
188.73	4,421	7,364	189.25	4,904	9,787
188.74	4,430	7,409	189.26	4,914	9,836
188.75	4,440	7,453	189.27	4,923	9,885
188.76	4,449	7,497	189.28	4,933	9,935
188.77	4,458	7,542	189.29	4,942	9,984
188.78	4,467	7,587	189.30	4,952	10,034
188.79	4,476	7,631	189.31	4,961	10,083
188.80	4,485	7,676	189.32	4,971	10,133
188.81	4,494	7,721	189.33	4,980	10,183
188.82	4,503	7,766	189.34	4,990	10,232
188.83	4,512	7,811	189.35	5,000	10,282
188.84	4,521	7,856	189.36	5,009	10,332
188.85	4,530	7,901	189.37	5,019	10,383
188.86	4,539	7,947	189.38	5,028	10,433
188.87	4,548	7,992	189.39	5,038	10,483
188.88	4,557	8,038	189.40	5,047	10,534
188.89	4,566	8,083	189.41	5,057	10,584

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.42	5,067	10,635	189.94	5,564	13,399
189.43	5,076	10,685	189.95	5,573	13,454
189.44	5,086	10,736	189.96	5,583	13,510
189.45	5,095	10,787	189.97	5,592	13,566
189.46	5,105	10,838	189.98	5,602	13,622
189.47	5,114	10,889	189.99	5,611	13,678
189.48	5,124	10,940	190.00	5,621	13,734
189.49	5,133	10,992	190.01	5,631	13,790
189.50	5,143	11,043	190.02	5,641	13,847
189.51	5,153	11,095	190.03	5,651	13,903
189.52	5,162	11,146	190.04	5,661	13,960
189.53	5,172	11,198	190.05	5,672	14,016
189.54	5,181	11,250	190.06	5,682	14,073
189.55	5,191	11,301	190.07	5,692	14,130
189.56	5,200	11,353	190.08	5,702	14,187
189.57	5,210	11,405	190.09	5,712	14,244
189.58	5,219	11,458	190.10	5,722	14,301
189.59	5,229	11,510	190.11	5,732	14,359
189.60	5,239	11,562	190.12	5,742	14,416
189.61	5,248	11,615	190.13	5,752	14,473
189.62	5,258	11,667	190.14	5,762	14,531
189.63	5,267	11,720	190.15	5,773	14,589
189.64	5,277	11,772	190.16	5,783	14,646
189.65	5,286	11,825	190.17	5,793	14,704
189.66	5,296	11,878	190.18	5,803	14,762
189.67	5,306	11,931	190.19	5,813	14,820
189.68	5,315	11,984	190.20	5,823	14,879
189.69	5,325	12,038	190.21	5,833	14,937
189.70	5,334	12,091	190.22	5,843	14,995
189.71	5,344	12,144	190.23	5,853	15,054
189.72	5,353	12,198	190.24	5,863	15,112
189.73	5,363	12,251	190.25	5,874	15,171
189.74	5,372	12,305	190.26	5,884	15,230
189.75	5,382	12,359	190.27	5,894	15,289
189.76	5,392	12,413	190.28	5,904	15,348
189.77	5,401	12,467	190.29	5,914	15,407
189.78	5,411	12,521	190.30	5,924	15,466
189.79	5,420	12,575	190.31	5,934	15,525
189.80	5,430	12,629	190.32	5,944	15,585
189.81	5,439	12,683	190.33	5,954	15,644
189.82	5,449	12,738	190.34	5,964	15,704
189.83	5,458	12,792	190.35	5,975	15,763
189.84	5,468	12,847	190.36	5,985	15,823
189.85	5,478	12,902	190.37	5,995	15,883
189.86	5,487	12,957	190.38	6,005	15,943
189.87	5,497	13,011	190.39	6,015	16,003
189.88	5,506	13,066	190.40	6,025	16,063
189.89	5,516	13,122	190.41	6,035	16,124
189.90	5,525	13,177	190.42	6,045	16,184
189.91	5,535	13,232	190.43	6,055	16,245
189.92	5,545	13,287	190.44	6,065	16,305
189.93	5,554	13,343	190.45	6,076	16,366

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.46	6,086	16,427
190.47	6,096	16,488
190.48	6,106	16,549
190.49	6,116	16,610
190.50	6,126	16,671
190.51	6,136	16,732
190.52	6,146	16,794
190.53	6,156	16,855
190.54	6,166	16,917
190.55	6,177	16,978
190.56	6,187	17,040
190.57	6,197	17,102
190.58	6,207	17,164
190.59	6,217	17,226
190.60	6,227	17,289
190.61	6,237	17,351
190.62	6,247	17,413
190.63	6,257	17,476
190.64	6,267	17,538
190.65	6,278	17,601
190.66	6,288	17,664
190.67	6,298	17,727
190.68	6,308	17,790
190.69	6,318	17,853
190.70	6,328	17,916
190.71	6,338	17,980
190.72	6,348	18,043
190.73	6,358	18,107
190.74	6,368	18,170
190.75	6,379	18,234
190.76	6,389	18,298
190.77	6,399	18,362
190.78	6,409	18,426
190.79	6,419	18,490
190.80	6,429	18,554
190.81	6,439	18,618
190.82	6,449	18,683
190.83	6,459	18,747
190.84	6,469	18,812
190.85	6,480	18,877
190.86	6,490	18,942
190.87	6,500	19,007
190.88	6,510	19,072
190.89	6,520	19,137
190.90	6,530	19,202
190.91	6,540	19,267
190.92	6,550	19,333
190.93	6,560	19,398
190.94	6,570	19,464
190.95	6,581	19,530
190.96	6,591	19,596
190.97	6,601	19,662
190.98	6,611	19,728
190.99	6,621	19,794
191.00	**6,631**	**19,860**

Summary for Pond B-34: Basin #34

Inflow Area = 1.779 ac, 23.66% Impervious, Inflow Depth = 3.66" for Future 10 yr event
Inflow = 6.84 cfs @ 12.17 hrs, Volume= 0.543 af
Outflow = 3.01 cfs @ 12.37 hrs, Volume= 0.489 af, Atten= 56%, Lag= 12.0 min
Primary = 3.01 cfs @ 12.37 hrs, Volume= 0.489 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 192.69' @ 12.37 hrs Surf.Area= 6,043 sf Storage= 10,350 cf

Plug-Flow detention time= 360.3 min calculated for 0.489 af (90% of inflow)
Center-of-Mass det. time= 309.0 min (1,114.4 - 805.4)

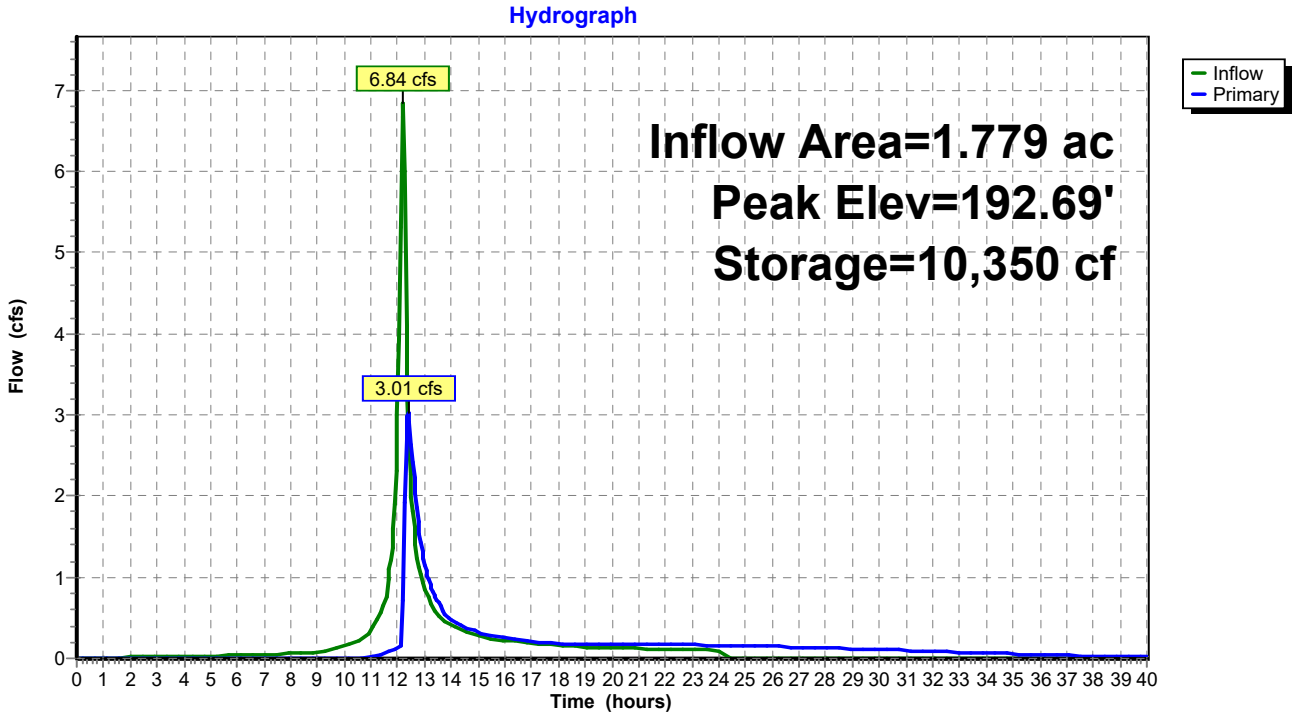
Volume	Invert	Avail.Storage	Storage Description
#1	190.30'	27,449 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.30	0	0	0
191.00	4,390	1,536	1,536
192.00	5,343	4,867	6,403
193.00	6,353	5,848	12,251
194.00	7,419	6,886	19,137
195.00	9,205	8,312	27,449

Device	Routing	Invert	Outlet Devices
#1	Primary	189.65'	**18.0" Round Culvert** L= 100.0' Ke= 0.500 Inlet / Outlet Invert= 189.65' / 189.15' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.09'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	192.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.98 cfs @ 12.37 hrs HW=192.69' (Free Discharge)
- **1=Culvert** (Passes 2.98 cfs of 11.10 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.89 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.78 cfs @ 1.96 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-34: Basin #34



Stage-Discharge for Pond B-34: Basin #34

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.30	0.00	190.82	0.00	191.34	0.06	191.86	0.13
190.31	0.00	190.83	0.00	191.35	0.06	191.87	0.13
190.32	0.00	190.84	0.00	191.36	0.07	191.88	0.14
190.33	0.00	190.85	0.00	191.37	0.07	191.89	0.14
190.34	0.00	190.86	0.00	191.38	0.07	191.90	0.14
190.35	0.00	190.87	0.00	191.39	0.07	191.91	0.14
190.36	0.00	190.88	0.00	191.40	0.07	191.92	0.14
190.37	0.00	190.89	0.00	191.41	0.08	191.93	0.14
190.38	0.00	190.90	0.00	191.42	0.08	191.94	0.14
190.39	0.00	190.91	0.00	191.43	0.08	191.95	0.14
190.40	0.00	190.92	0.00	191.44	0.08	191.96	0.14
190.41	0.00	190.93	0.00	191.45	0.08	191.97	0.14
190.42	0.00	190.94	0.00	191.46	0.08	191.98	0.15
190.43	0.00	190.95	0.00	191.47	0.09	191.99	0.15
190.44	0.00	190.96	0.00	191.48	0.09	192.00	0.15
190.45	0.00	190.97	0.00	191.49	0.09	192.01	0.15
190.46	0.00	190.98	0.00	191.50	0.09	192.02	0.15
190.47	0.00	190.99	0.00	191.51	0.09	192.03	0.15
190.48	0.00	191.00	0.00	191.52	0.09	192.04	0.15
190.49	0.00	191.01	0.00	191.53	0.10	192.05	0.15
190.50	0.00	191.02	0.00	191.54	0.10	192.06	0.15
190.51	0.00	191.03	0.00	191.55	0.10	192.07	0.15
190.52	0.00	191.04	0.00	191.56	0.10	192.08	0.15
190.53	0.00	191.05	0.00	191.57	0.10	192.09	0.16
190.54	0.00	191.06	0.00	191.58	0.10	192.10	0.16
190.55	0.00	191.07	0.00	191.59	0.10	192.11	0.16
190.56	0.00	191.08	0.00	191.60	0.10	192.12	0.16
190.57	0.00	191.09	0.00	191.61	0.11	192.13	0.16
190.58	0.00	191.10	0.00	191.62	0.11	192.14	0.16
190.59	0.00	191.11	0.00	191.63	0.11	192.15	0.16
190.60	0.00	191.12	0.00	191.64	0.11	192.16	0.16
190.61	0.00	191.13	0.00	191.65	0.11	192.17	0.16
190.62	0.00	191.14	0.00	191.66	0.11	192.18	0.16
190.63	0.00	191.15	0.01	191.67	0.11	192.19	0.16
190.64	0.00	191.16	0.01	191.68	0.11	192.20	0.16
190.65	0.00	191.17	0.01	191.69	0.12	192.21	0.17
190.66	0.00	191.18	0.01	191.70	0.12	192.22	0.17
190.67	0.00	191.19	0.02	191.71	0.12	192.23	0.17
190.68	0.00	191.20	0.02	191.72	0.12	192.24	0.17
190.69	0.00	191.21	0.02	191.73	0.12	192.25	0.17
190.70	0.00	191.22	0.03	191.74	0.12	192.26	0.17
190.71	0.00	191.23	0.03	191.75	0.12	192.27	0.17
190.72	0.00	191.24	0.03	191.76	0.12	192.28	0.17
190.73	0.00	191.25	0.04	191.77	0.12	192.29	0.17
190.74	0.00	191.26	0.04	191.78	0.13	192.30	0.17
190.75	0.00	191.27	0.05	191.79	0.13	192.31	0.17
190.76	0.00	191.28	0.05	191.80	0.13	192.32	0.17
190.77	0.00	191.29	0.05	191.81	0.13	192.33	0.17
190.78	0.00	191.30	0.05	191.82	0.13	192.34	0.19
190.79	0.00	191.31	0.06	191.83	0.13	192.35	0.21
190.80	0.00	191.32	0.06	191.84	0.13	192.36	0.25
190.81	0.00	191.33	0.06	191.85	0.13	192.37	0.28

Stage-Discharge for Pond B-34: Basin #34 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.38	0.32	192.90	5.68	193.42	12.94	193.94	14.10
192.39	0.37	192.91	5.83	193.43	12.96	193.95	14.12
192.40	0.42	192.92	5.97	193.44	12.98	193.96	14.14
192.41	0.48	192.93	6.11	193.45	13.01	193.97	14.16
192.42	0.53	192.94	6.26	193.46	13.03	193.98	14.18
192.43	0.59	192.95	6.41	193.47	13.05	193.99	14.21
192.44	0.66	192.96	6.55	193.48	13.08	194.00	14.23
192.45	0.72	192.97	6.70	193.49	13.10	194.01	14.25
192.46	0.79	192.98	6.85	193.50	13.12	194.02	14.27
192.47	0.87	192.99	7.00	193.51	13.14	194.03	14.29
192.48	0.94	193.00	7.15	193.52	13.17	194.04	14.31
192.49	1.02	193.01	7.31	193.53	13.19	194.05	14.33
192.50	1.10	193.02	7.46	193.54	13.21	194.06	14.35
192.51	1.18	193.03	7.61	193.55	13.24	194.07	14.37
192.52	1.26	193.04	7.77	193.56	13.26	194.08	14.40
192.53	1.35	193.05	7.93	193.57	13.28	194.09	14.42
192.54	1.44	193.06	8.08	193.58	13.30	194.10	14.44
192.55	1.53	193.07	8.24	193.59	13.33	194.11	14.46
192.56	1.62	193.08	8.40	193.60	13.35	194.12	14.48
192.57	1.71	193.09	8.56	193.61	13.37	194.13	14.50
192.58	1.81	193.10	8.72	193.62	13.40	194.14	14.52
192.59	1.91	193.11	8.89	193.63	13.42	194.15	14.54
192.60	2.00	193.12	9.05	193.64	13.44	194.16	14.56
192.61	2.11	193.13	9.21	193.65	13.46	194.17	14.58
192.62	2.21	193.14	9.38	193.66	13.49	194.18	14.60
192.63	2.31	193.15	9.54	193.67	13.51	194.19	14.62
192.64	2.42	193.16	9.71	193.68	13.53	194.20	14.64
192.65	2.53	193.17	9.88	193.69	13.55	194.21	14.67
192.66	2.64	193.18	10.05	193.70	13.57	194.22	14.69
192.67	2.75	193.19	10.22	193.71	13.60	194.23	14.71
192.68	2.86	193.20	10.38	193.72	13.62	194.24	14.73
192.69	2.98	193.21	10.56	193.73	13.64	194.25	14.75
192.70	3.09	193.22	10.73	193.74	13.66	194.26	14.89
192.71	3.21	193.23	10.90	193.75	13.69	194.27	15.12
192.72	3.33	193.24	11.07	193.76	13.71	194.28	15.42
192.73	3.45	193.25	11.25	193.77	13.73	194.29	15.77
192.74	3.57	193.26	11.42	193.78	13.75	194.30	16.16
192.75	3.69	193.27	11.60	193.79	13.77	194.31	16.59
192.76	3.81	193.28	11.77	193.80	13.80	194.32	17.06
192.77	3.94	193.29	11.95	193.81	13.82	194.33	17.57
192.78	4.07	193.30	12.13	193.82	13.84	194.34	18.10
192.79	4.19	193.31	12.31	193.83	13.86	194.35	18.67
192.80	4.32	193.32	12.49	193.84	13.88	194.36	19.26
192.81	4.45	193.33	12.67	193.85	13.90	194.37	19.88
192.82	4.59	193.34	12.75	193.86	13.93	194.38	20.53
192.83	4.72	193.35	12.77	193.87	13.95	194.39	21.20
192.84	4.85	193.36	12.80	193.88	13.97	194.40	21.90
192.85	4.99	193.37	12.82	193.89	13.99	194.41	22.62
192.86	5.12	193.38	12.84	193.90	14.01	194.42	23.36
192.87	5.26	193.39	12.87	193.91	14.03	194.43	24.12
192.88	5.40	193.40	12.89	193.92	14.06	194.44	24.91
192.89	5.54	193.41	12.91	193.93	14.08	194.45	25.72

Stage-Discharge for Pond B-34: Basin #34 (continued)

Elevation (feet)	Primary (cfs)
194.46	26.58
194.47	27.48
194.48	28.39
194.49	29.34
194.50	30.30
194.51	31.30
194.52	32.32
194.53	33.36
194.54	34.43
194.55	35.52
194.56	36.64
194.57	37.78
194.58	38.94
194.59	40.13
194.60	41.34
194.61	42.58
194.62	43.84
194.63	45.13
194.64	46.44
194.65	47.78
194.66	49.16
194.67	50.57
194.68	52.01
194.69	53.47
194.70	54.96
194.71	56.48
194.72	58.02
194.73	59.59
194.74	61.18
194.75	62.80
194.76	64.45
194.77	66.12
194.78	67.83
194.79	69.55
194.80	71.31
194.81	73.09
194.82	74.89
194.83	76.73
194.84	78.59
194.85	80.48
194.86	82.12
194.87	83.78
194.88	85.46
194.89	87.14
194.90	88.84
194.91	90.56
194.92	92.28
194.93	94.02
194.94	95.77
194.95	97.54
194.96	99.31
194.97	101.10
194.98	102.91
194.99	104.72
195.00	**106.55**

Stage-Area-Storage for Pond B-34: Basin #34

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.30	0	0	190.82	3,261	848
190.31	63	0	190.83	3,324	881
190.32	125	1	190.84	3,387	914
190.33	188	3	190.85	3,449	949
190.34	251	5	190.86	3,512	983
190.35	314	8	190.87	3,575	1,019
190.36	376	11	190.88	3,637	1,055
190.37	439	15	190.89	3,700	1,092
190.38	502	20	190.90	3,763	1,129
190.39	564	25	190.91	3,826	1,167
190.40	627	31	190.92	3,888	1,205
190.41	690	38	190.93	3,951	1,245
190.42	753	45	190.94	4,014	1,284
190.43	815	53	190.95	4,076	1,325
190.44	878	61	190.96	4,139	1,366
190.45	941	71	190.97	4,202	1,408
190.46	1,003	80	190.98	4,265	1,450
190.47	1,066	91	190.99	4,327	1,493
190.48	1,129	102	191.00	4,390	1,536
190.49	1,192	113	191.01	4,400	1,580
190.50	1,254	125	191.02	4,409	1,624
190.51	1,317	138	191.03	4,419	1,669
190.52	1,380	152	191.04	4,428	1,713
190.53	1,442	166	191.05	4,438	1,757
190.54	1,505	181	191.06	4,447	1,802
190.55	1,568	196	191.07	4,457	1,846
190.56	1,631	212	191.08	4,466	1,891
190.57	1,693	229	191.09	4,476	1,935
190.58	1,756	246	191.10	4,485	1,980
190.59	1,819	264	191.11	4,495	2,025
190.60	1,881	282	191.12	4,504	2,070
190.61	1,944	301	191.13	4,514	2,115
190.62	2,007	321	191.14	4,523	2,160
190.63	2,070	341	191.15	4,533	2,206
190.64	2,132	362	191.16	4,542	2,251
190.65	2,195	384	191.17	4,552	2,297
190.66	2,258	406	191.18	4,562	2,342
190.67	2,320	429	191.19	4,571	2,388
190.68	2,383	453	191.20	4,581	2,434
190.69	2,446	477	191.21	4,590	2,479
190.70	2,509	502	191.22	4,600	2,525
190.71	2,571	527	191.23	4,609	2,571
190.72	2,634	553	191.24	4,619	2,618
190.73	2,697	580	191.25	4,628	2,664
190.74	2,759	607	191.26	4,638	2,710
190.75	2,822	635	191.27	4,647	2,757
190.76	2,885	664	191.28	4,657	2,803
190.77	2,948	693	191.29	4,666	2,850
190.78	3,010	722	191.30	4,676	2,896
190.79	3,073	753	191.31	4,685	2,943
190.80	3,136	784	191.32	4,695	2,990
190.81	3,198	816	191.33	4,704	3,037

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.34	4,714	3,084	191.86	5,210	5,664
191.35	4,724	3,131	191.87	5,219	5,716
191.36	4,733	3,179	191.88	5,229	5,769
191.37	4,743	3,226	191.89	5,238	5,821
191.38	4,752	3,274	191.90	5,248	5,873
191.39	4,762	3,321	191.91	5,257	5,926
191.40	4,771	3,369	191.92	5,267	5,979
191.41	4,781	3,416	191.93	5,276	6,031
191.42	4,790	3,464	191.94	5,286	6,084
191.43	4,800	3,512	191.95	5,295	6,137
191.44	4,809	3,560	191.96	5,305	6,190
191.45	4,819	3,608	191.97	5,314	6,243
191.46	4,828	3,657	191.98	5,324	6,296
191.47	4,838	3,705	191.99	5,333	6,350
191.48	4,847	3,753	192.00	5,343	6,403
191.49	4,857	3,802	192.01	5,353	6,456
191.50	4,867	3,851	192.02	5,363	6,510
191.51	4,876	3,899	192.03	5,373	6,564
191.52	4,886	3,948	192.04	5,383	6,618
191.53	4,895	3,997	192.05	5,394	6,671
191.54	4,905	4,046	192.06	5,404	6,725
191.55	4,914	4,095	192.07	5,414	6,779
191.56	4,924	4,144	192.08	5,424	6,834
191.57	4,933	4,194	192.09	5,434	6,888
191.58	4,943	4,243	192.10	5,444	6,942
191.59	4,952	4,292	192.11	5,454	6,997
191.60	4,962	4,342	192.12	5,464	7,051
191.61	4,971	4,392	192.13	5,474	7,106
191.62	4,981	4,441	192.14	5,484	7,161
191.63	4,990	4,491	192.15	5,495	7,216
191.64	5,000	4,541	192.16	5,505	7,271
191.65	5,009	4,591	192.17	5,515	7,326
191.66	5,019	4,641	192.18	5,525	7,381
191.67	5,029	4,692	192.19	5,535	7,436
191.68	5,038	4,742	192.20	5,545	7,492
191.69	5,048	4,792	192.21	5,555	7,547
191.70	5,057	4,843	192.22	5,565	7,603
191.71	5,067	4,894	192.23	5,575	7,659
191.72	5,076	4,944	192.24	5,585	7,714
191.73	5,086	4,995	192.25	5,596	7,770
191.74	5,095	5,046	192.26	5,606	7,826
191.75	5,105	5,097	192.27	5,616	7,882
191.76	5,114	5,148	192.28	5,626	7,939
191.77	5,124	5,199	192.29	5,636	7,995
191.78	5,133	5,251	192.30	5,646	8,051
191.79	5,143	5,302	192.31	5,656	8,108
191.80	5,152	5,353	192.32	5,666	8,164
191.81	5,162	5,405	192.33	5,676	8,221
191.82	5,171	5,457	192.34	5,686	8,278
191.83	5,181	5,508	192.35	5,697	8,335
191.84	5,191	5,560	192.36	5,707	8,392
191.85	5,200	5,612	192.37	5,717	8,449

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.38	5,727	8,506	192.90	6,252	11,621
192.39	5,737	8,564	192.91	6,262	11,683
192.40	5,747	8,621	192.92	6,272	11,746
192.41	5,757	8,679	192.93	6,282	11,809
192.42	5,767	8,736	192.94	6,292	11,872
192.43	5,777	8,794	192.95	6,303	11,935
192.44	5,787	8,852	192.96	6,313	11,998
192.45	5,798	8,910	192.97	6,323	12,061
192.46	5,808	8,968	192.98	6,333	12,124
192.47	5,818	9,026	192.99	6,343	12,188
192.48	5,828	9,084	193.00	6,353	12,251
192.49	5,838	9,142	193.01	6,364	12,315
192.50	5,848	9,201	193.02	6,374	12,378
192.51	5,858	9,259	193.03	6,385	12,442
192.52	5,868	9,318	193.04	6,396	12,506
192.53	5,878	9,377	193.05	6,406	12,570
192.54	5,888	9,435	193.06	6,417	12,634
192.55	5,899	9,494	193.07	6,428	12,698
192.56	5,909	9,553	193.08	6,438	12,763
192.57	5,919	9,613	193.09	6,449	12,827
192.58	5,929	9,672	193.10	6,460	12,892
192.59	5,939	9,731	193.11	6,470	12,956
192.60	5,949	9,791	193.12	6,481	13,021
192.61	5,959	9,850	193.13	6,492	13,086
192.62	5,969	9,910	193.14	6,502	13,151
192.63	5,979	9,970	193.15	6,513	13,216
192.64	5,989	10,029	193.16	6,524	13,281
192.65	6,000	10,089	193.17	6,534	13,346
192.66	6,010	10,149	193.18	6,545	13,412
192.67	6,020	10,210	193.19	6,556	13,477
192.68	6,030	10,270	193.20	6,566	13,543
192.69	6,040	10,330	193.21	6,577	13,609
192.70	6,050	10,391	193.22	6,588	13,674
192.71	6,060	10,451	193.23	6,598	13,740
192.72	6,070	10,512	193.24	6,609	13,806
192.73	6,080	10,573	193.25	6,620	13,873
192.74	6,090	10,633	193.26	6,630	13,939
192.75	6,101	10,694	193.27	6,641	14,005
192.76	6,111	10,755	193.28	6,651	14,072
192.77	6,121	10,817	193.29	6,662	14,138
192.78	6,131	10,878	193.30	6,673	14,205
192.79	6,141	10,939	193.31	6,683	14,272
192.80	6,151	11,001	193.32	6,694	14,339
192.81	6,161	11,062	193.33	6,705	14,406
192.82	6,171	11,124	193.34	6,715	14,473
192.83	6,181	11,186	193.35	6,726	14,540
192.84	6,191	11,247	193.36	6,737	14,607
192.85	6,202	11,309	193.37	6,747	14,675
192.86	6,212	11,371	193.38	6,758	14,742
192.87	6,222	11,434	193.39	6,769	14,810
192.88	6,232	11,496	193.40	6,779	14,877
192.89	6,242	11,558	193.41	6,790	14,945

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.42	6,801	15,013	193.94	7,355	18,694
193.43	6,811	15,081	193.95	7,366	18,767
193.44	6,822	15,150	193.96	7,376	18,841
193.45	6,833	15,218	193.97	7,387	18,915
193.46	6,843	15,286	193.98	7,398	18,989
193.47	6,854	15,355	193.99	7,408	19,063
193.48	6,865	15,423	194.00	7,419	19,137
193.49	6,875	15,492	194.01	7,437	19,211
193.50	6,886	15,561	194.02	7,455	19,286
193.51	6,897	15,630	194.03	7,473	19,360
193.52	6,907	15,699	194.04	7,490	19,435
193.53	6,918	15,768	194.05	7,508	19,510
193.54	6,929	15,837	194.06	7,526	19,585
193.55	6,939	15,906	194.07	7,544	19,661
193.56	6,950	15,976	194.08	7,562	19,736
193.57	6,961	16,045	194.09	7,580	19,812
193.58	6,971	16,115	194.10	7,598	19,888
193.59	6,982	16,185	194.11	7,615	19,964
193.60	6,993	16,255	194.12	7,633	20,040
193.61	7,003	16,325	194.13	7,651	20,117
193.62	7,014	16,395	194.14	7,669	20,193
193.63	7,025	16,465	194.15	7,687	20,270
193.64	7,035	16,535	194.16	7,705	20,347
193.65	7,046	16,606	194.17	7,723	20,424
193.66	7,057	16,676	194.18	7,740	20,501
193.67	7,067	16,747	194.19	7,758	20,579
193.68	7,078	16,817	194.20	7,776	20,657
193.69	7,089	16,888	194.21	7,794	20,734
193.70	7,099	16,959	194.22	7,812	20,812
193.71	7,110	17,030	194.23	7,830	20,891
193.72	7,121	17,101	194.24	7,848	20,969
193.73	7,131	17,173	194.25	7,866	21,048
193.74	7,142	17,244	194.26	7,883	21,126
193.75	7,153	17,316	194.27	7,901	21,205
193.76	7,163	17,387	194.28	7,919	21,284
193.77	7,174	17,459	194.29	7,937	21,364
193.78	7,184	17,531	194.30	7,955	21,443
193.79	7,195	17,603	194.31	7,973	21,523
193.80	7,206	17,675	194.32	7,991	21,603
193.81	7,216	17,747	194.33	8,008	21,683
193.82	7,227	17,819	194.34	8,026	21,763
193.83	7,238	17,891	194.35	8,044	21,843
193.84	7,248	17,964	194.36	8,062	21,924
193.85	7,259	18,036	194.37	8,080	22,004
193.86	7,270	18,109	194.38	8,098	22,085
193.87	7,280	18,182	194.39	8,116	22,166
193.88	7,291	18,254	194.40	8,133	22,247
193.89	7,302	18,327	194.41	8,151	22,329
193.90	7,312	18,400	194.42	8,169	22,411
193.91	7,323	18,474	194.43	8,187	22,492
193.92	7,334	18,547	194.44	8,205	22,574
193.93	7,344	18,620	194.45	8,223	22,656

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.46	8,241	22,739
194.47	8,258	22,821
194.48	8,276	22,904
194.49	8,294	22,987
194.50	8,312	23,070
194.51	8,330	23,153
194.52	8,348	23,236
194.53	8,366	23,320
194.54	8,383	23,404
194.55	8,401	23,488
194.56	8,419	23,572
194.57	8,437	23,656
194.58	8,455	23,740
194.59	8,473	23,825
194.60	8,491	23,910
194.61	8,508	23,995
194.62	8,526	24,080
194.63	8,544	24,165
194.64	8,562	24,251
194.65	8,580	24,337
194.66	8,598	24,423
194.67	8,616	24,509
194.68	8,633	24,595
194.69	8,651	24,681
194.70	8,669	24,768
194.71	8,687	24,855
194.72	8,705	24,942
194.73	8,723	25,029
194.74	8,741	25,116
194.75	8,759	25,204
194.76	8,776	25,291
194.77	8,794	25,379
194.78	8,812	25,467
194.79	8,830	25,555
194.80	8,848	25,644
194.81	8,866	25,732
194.82	8,884	25,821
194.83	8,901	25,910
194.84	8,919	25,999
194.85	8,937	26,088
194.86	8,955	26,178
194.87	8,973	26,267
194.88	8,991	26,357
194.89	9,009	26,447
194.90	9,026	26,537
194.91	9,044	26,628
194.92	9,062	26,718
194.93	9,080	26,809
194.94	9,098	26,900
194.95	9,116	26,991
194.96	9,134	27,082
194.97	9,151	27,174
194.98	9,169	27,265
194.99	9,187	27,357
195.00	**9,205**	**27,449**

Summary for Pond B-35: Basin #35

Inflow Area = 1.957 ac, 66.79% Impervious, Inflow Depth = 4.76" for Future 10 yr event
Inflow = 9.17 cfs @ 12.17 hrs, Volume= 0.777 af
Outflow = 4.80 cfs @ 12.33 hrs, Volume= 0.658 af, Atten= 48%, Lag= 9.3 min
Primary = 4.80 cfs @ 12.33 hrs, Volume= 0.658 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.53' @ 12.33 hrs Surf.Area= 6,323 sf Storage= 15,828 cf

Plug-Flow detention time= 270.0 min calculated for 0.658 af (85% of inflow)
Center-of-Mass det. time= 201.6 min (970.2 - 768.5)

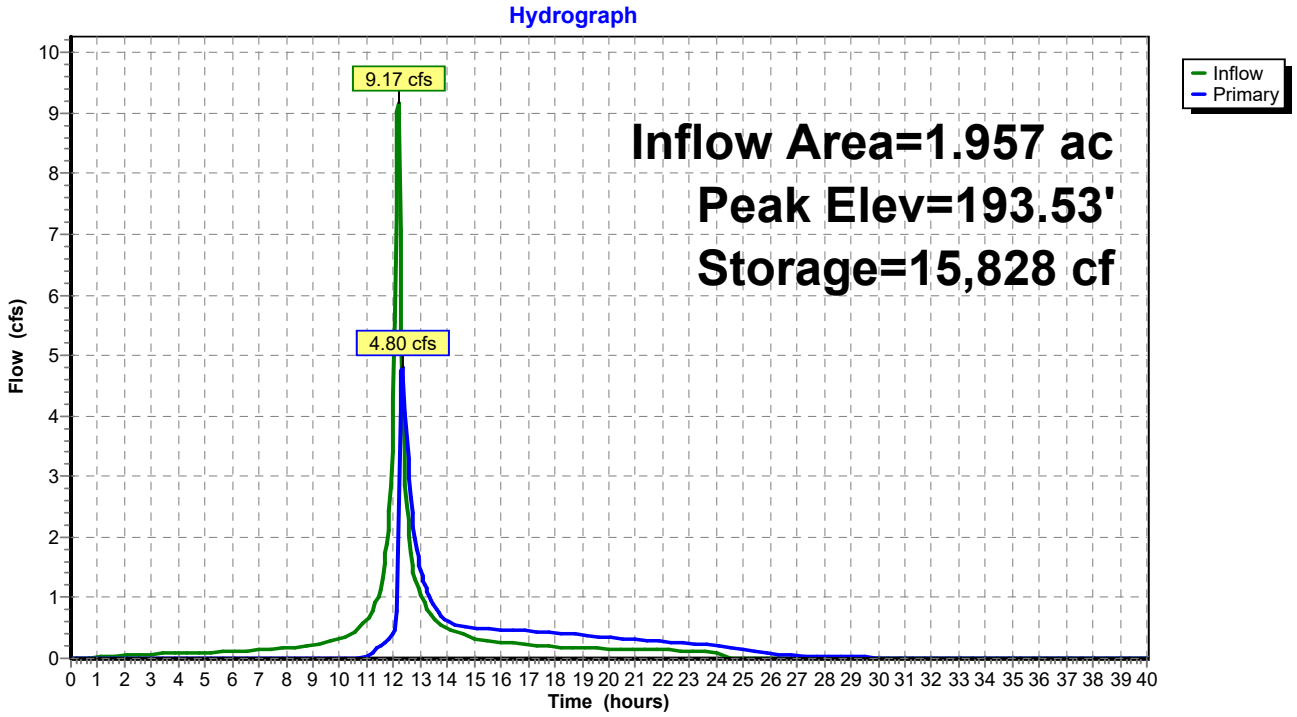
Volume	Invert	Avail.Storage	Storage Description
#1	189.80'	26,431 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
189.80	0	0	0
190.00	2,647	265	265
191.00	3,593	3,120	3,385
192.00	4,618	4,106	7,490
193.00	5,711	5,165	12,655
194.00	6,871	6,291	18,946
195.00	8,099	7,485	26,431

Device	Routing	Invert	Outlet Devices
#1	Primary	189.80'	**18.0" Round Culvert** L= 103.0' Ke= 0.500 Inlet / Outlet Invert= 189.80' / 189.30' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.44'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.05'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.76 cfs @ 12.33 hrs HW=193.52' (Free Discharge)
- **1=Culvert** (Passes 4.76 cfs of 12.73 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.58 cfs @ 6.67 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.17 cfs @ 2.25 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-35: Basin #35



Stage-Discharge for Pond B-35: Basin #35

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
189.80	0.00	190.32	0.00	190.84	0.00	191.36	0.00
189.81	0.00	190.33	0.00	190.85	0.00	191.37	0.00
189.82	0.00	190.34	0.00	190.86	0.00	191.38	0.00
189.83	0.00	190.35	0.00	190.87	0.00	191.39	0.00
189.84	0.00	190.36	0.00	190.88	0.00	191.40	0.00
189.85	0.00	190.37	0.00	190.89	0.00	191.41	0.00
189.86	0.00	190.38	0.00	190.90	0.00	191.42	0.00
189.87	0.00	190.39	0.00	190.91	0.00	191.43	0.00
189.88	0.00	190.40	0.00	190.92	0.00	191.44	0.00
189.89	0.00	190.41	0.00	190.93	0.00	191.45	0.00
189.90	0.00	190.42	0.00	190.94	0.00	191.46	0.00
189.91	0.00	190.43	0.00	190.95	0.00	191.47	0.00
189.92	0.00	190.44	0.00	190.96	0.00	191.48	0.00
189.93	0.00	190.45	0.00	190.97	0.00	191.49	0.01
189.94	0.00	190.46	0.00	190.98	0.00	191.50	0.01
189.95	0.00	190.47	0.00	190.99	0.00	191.51	0.01
189.96	0.00	190.48	0.00	191.00	0.00	191.52	0.02
189.97	0.00	190.49	0.00	191.01	0.00	191.53	0.02
189.98	0.00	190.50	0.00	191.02	0.00	191.54	0.02
189.99	0.00	190.51	0.00	191.03	0.00	191.55	0.03
190.00	0.00	190.52	0.00	191.04	0.00	191.56	0.03
190.01	0.00	190.53	0.00	191.05	0.00	191.57	0.04
190.02	0.00	190.54	0.00	191.06	0.00	191.58	0.04
190.03	0.00	190.55	0.00	191.07	0.00	191.59	0.05
190.04	0.00	190.56	0.00	191.08	0.00	191.60	0.06
190.05	0.00	190.57	0.00	191.09	0.00	191.61	0.06
190.06	0.00	190.58	0.00	191.10	0.00	191.62	0.07
190.07	0.00	190.59	0.00	191.11	0.00	191.63	0.08
190.08	0.00	190.60	0.00	191.12	0.00	191.64	0.08
190.09	0.00	190.61	0.00	191.13	0.00	191.65	0.09
190.10	0.00	190.62	0.00	191.14	0.00	191.66	0.10
190.11	0.00	190.63	0.00	191.15	0.00	191.67	0.10
190.12	0.00	190.64	0.00	191.16	0.00	191.68	0.11
190.13	0.00	190.65	0.00	191.17	0.00	191.69	0.12
190.14	0.00	190.66	0.00	191.18	0.00	191.70	0.13
190.15	0.00	190.67	0.00	191.19	0.00	191.71	0.13
190.16	0.00	190.68	0.00	191.20	0.00	191.72	0.14
190.17	0.00	190.69	0.00	191.21	0.00	191.73	0.15
190.18	0.00	190.70	0.00	191.22	0.00	191.74	0.15
190.19	0.00	190.71	0.00	191.23	0.00	191.75	0.16
190.20	0.00	190.72	0.00	191.24	0.00	191.76	0.17
190.21	0.00	190.73	0.00	191.25	0.00	191.77	0.17
190.22	0.00	190.74	0.00	191.26	0.00	191.78	0.17
190.23	0.00	190.75	0.00	191.27	0.00	191.79	0.18
190.24	0.00	190.76	0.00	191.28	0.00	191.80	0.18
190.25	0.00	190.77	0.00	191.29	0.00	191.81	0.19
190.26	0.00	190.78	0.00	191.30	0.00	191.82	0.19
190.27	0.00	190.79	0.00	191.31	0.00	191.83	0.20
190.28	0.00	190.80	0.00	191.32	0.00	191.84	0.20
190.29	0.00	190.81	0.00	191.33	0.00	191.85	0.21
190.30	0.00	190.82	0.00	191.34	0.00	191.86	0.21
190.31	0.00	190.83	0.00	191.35	0.00	191.87	0.22

Stage-Discharge for Pond B-35: Basin #35 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.88	0.22	192.40	0.37	192.92	0.48	193.44	3.69
191.89	0.22	192.41	0.38	192.93	0.48	193.45	3.81
191.90	0.23	192.42	0.38	192.94	0.49	193.46	3.94
191.91	0.23	192.43	0.38	192.95	0.49	193.47	4.06
191.92	0.24	192.44	0.38	192.96	0.49	193.48	4.18
191.93	0.24	192.45	0.39	192.97	0.49	193.49	4.31
191.94	0.24	192.46	0.39	192.98	0.49	193.50	4.44
191.95	0.25	192.47	0.39	192.99	0.49	193.51	4.57
191.96	0.25	192.48	0.39	193.00	0.50	193.52	4.70
191.97	0.25	192.49	0.39	193.01	0.50	193.53	4.83
191.98	0.26	192.50	0.40	193.02	0.50	193.54	4.96
191.99	0.26	192.51	0.40	193.03	0.50	193.55	5.09
192.00	0.26	192.52	0.40	193.04	0.50	193.56	5.23
192.01	0.27	192.53	0.40	193.05	0.50	193.57	5.37
192.02	0.27	192.54	0.41	193.06	0.52	193.58	5.50
192.03	0.27	192.55	0.41	193.07	0.55	193.59	5.64
192.04	0.28	192.56	0.41	193.08	0.58	193.60	5.78
192.05	0.28	192.57	0.41	193.09	0.62	193.61	5.92
192.06	0.28	192.58	0.41	193.10	0.66	193.62	6.06
192.07	0.29	192.59	0.42	193.11	0.71	193.63	6.21
192.08	0.29	192.60	0.42	193.12	0.76	193.64	6.35
192.09	0.29	192.61	0.42	193.13	0.81	193.65	6.50
192.10	0.30	192.62	0.42	193.14	0.87	193.66	6.64
192.11	0.30	192.63	0.43	193.15	0.93	193.67	6.79
192.12	0.30	192.64	0.43	193.16	1.00	193.68	6.94
192.13	0.30	192.65	0.43	193.17	1.07	193.69	7.09
192.14	0.31	192.66	0.43	193.18	1.14	193.70	7.24
192.15	0.31	192.67	0.43	193.19	1.21	193.71	7.39
192.16	0.31	192.68	0.44	193.20	1.28	193.72	7.54
192.17	0.32	192.69	0.44	193.21	1.36	193.73	7.70
192.18	0.32	192.70	0.44	193.22	1.44	193.74	7.85
192.19	0.32	192.71	0.44	193.23	1.53	193.75	8.01
192.20	0.32	192.72	0.44	193.24	1.61	193.76	8.16
192.21	0.33	192.73	0.45	193.25	1.70	193.77	8.32
192.22	0.33	192.74	0.45	193.26	1.79	193.78	8.48
192.23	0.33	192.75	0.45	193.27	1.88	193.79	8.64
192.24	0.33	192.76	0.45	193.28	1.97	193.80	8.80
192.25	0.34	192.77	0.45	193.29	2.06	193.81	8.96
192.26	0.34	192.78	0.46	193.30	2.16	193.82	9.12
192.27	0.34	192.79	0.46	193.31	2.26	193.83	9.29
192.28	0.34	192.80	0.46	193.32	2.36	193.84	9.45
192.29	0.35	192.81	0.46	193.33	2.46	193.85	9.61
192.30	0.35	192.82	0.46	193.34	2.57	193.86	9.78
192.31	0.35	192.83	0.46	193.35	2.67	193.87	9.95
192.32	0.35	192.84	0.47	193.36	2.78	193.88	10.11
192.33	0.36	192.85	0.47	193.37	2.89	193.89	10.28
192.34	0.36	192.86	0.47	193.38	3.00	193.90	10.45
192.35	0.36	192.87	0.47	193.39	3.11	193.91	10.62
192.36	0.36	192.88	0.47	193.40	3.22	193.92	10.79
192.37	0.37	192.89	0.48	193.41	3.34	193.93	10.96
192.38	0.37	192.90	0.48	193.42	3.46	193.94	11.14
192.39	0.37	192.91	0.48	193.43	3.57	193.95	11.31

Stage-Discharge for Pond B-35: Basin #35 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.96	11.48	194.48	14.79	195.00	**62.86**
193.97	11.66	194.49	14.81		
193.98	11.83	194.50	14.83		
193.99	12.01	194.51	14.97		
194.00	12.19	194.52	15.20		
194.01	12.36	194.53	15.50		
194.02	12.54	194.54	15.85		
194.03	12.72	194.55	16.24		
194.04	12.90	194.56	16.67		
194.05	13.08	194.57	17.14		
194.06	13.26	194.58	17.65		
194.07	13.45	194.59	18.18		
194.08	13.63	194.60	18.75		
194.09	13.81	194.61	19.34		
194.10	14.00	194.62	19.96		
194.11	14.03	194.63	20.61		
194.12	14.05	194.64	21.28		
194.13	14.07	194.65	21.97		
194.14	14.09	194.66	22.69		
194.15	14.11	194.67	23.43		
194.16	14.13	194.68	24.20		
194.17	14.15	194.69	24.98		
194.18	14.17	194.70	25.79		
194.19	14.19	194.71	26.66		
194.20	14.22	194.72	27.55		
194.21	14.24	194.73	28.47		
194.22	14.26	194.74	29.41		
194.23	14.28	194.75	30.38		
194.24	14.30	194.76	31.37		
194.25	14.32	194.77	32.39		
194.26	14.34	194.78	33.43		
194.27	14.36	194.79	34.50		
194.28	14.38	194.80	35.59		
194.29	14.40	194.81	36.70		
194.30	14.42	194.82	37.84		
194.31	14.44	194.83	39.01		
194.32	14.46	194.84	40.20		
194.33	14.48	194.85	41.41		
194.34	14.51	194.86	42.65		
194.35	14.53	194.87	43.91		
194.36	14.55	194.88	45.20		
194.37	14.57	194.89	46.51		
194.38	14.59	194.90	47.84		
194.39	14.61	194.91	49.23		
194.40	14.63	194.92	50.64		
194.41	14.65	194.93	52.07		
194.42	14.67	194.94	53.54		
194.43	14.69	194.95	55.02		
194.44	14.71	194.96	56.54		
194.45	14.73	194.97	58.08		
194.46	14.75	194.98	59.65		
194.47	14.77	194.99	61.24		

Stage-Area-Storage for Pond B-35: Basin #35

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.80	0	0	190.32	2,950	1,160
189.81	132	1	190.33	2,959	1,190
189.82	265	3	190.34	2,969	1,219
189.83	397	6	190.35	2,978	1,249
189.84	529	11	190.36	2,988	1,279
189.85	662	17	190.37	2,997	1,309
189.86	794	24	190.38	3,006	1,339
189.87	926	32	190.39	3,016	1,369
189.88	1,059	42	190.40	3,025	1,399
189.89	1,191	54	190.41	3,035	1,429
189.90	1,324	66	190.42	3,044	1,460
189.91	1,456	80	190.43	3,054	1,490
189.92	1,588	95	190.44	3,063	1,521
189.93	1,721	112	190.45	3,073	1,552
189.94	1,853	130	190.46	3,082	1,582
189.95	1,985	149	190.47	3,092	1,613
189.96	2,118	169	190.48	3,101	1,644
189.97	2,250	191	190.49	3,111	1,675
189.98	2,382	214	190.50	3,120	1,706
189.99	2,515	239	190.51	3,129	1,738
190.00	2,647	265	190.52	3,139	1,769
190.01	2,656	291	190.53	3,148	1,800
190.02	2,666	318	190.54	3,158	1,832
190.03	2,675	345	190.55	3,167	1,864
190.04	2,685	371	190.56	3,177	1,895
190.05	2,694	398	190.57	3,186	1,927
190.06	2,704	425	190.58	3,196	1,959
190.07	2,713	452	190.59	3,205	1,991
190.08	2,723	479	190.60	3,215	2,023
190.09	2,732	507	190.61	3,224	2,055
190.10	2,742	534	190.62	3,234	2,088
190.11	2,751	562	190.63	3,243	2,120
190.12	2,761	589	190.64	3,252	2,153
190.13	2,770	617	190.65	3,262	2,185
190.14	2,779	645	190.66	3,271	2,218
190.15	2,789	672	190.67	3,281	2,251
190.16	2,798	700	190.68	3,290	2,283
190.17	2,808	728	190.69	3,300	2,316
190.18	2,817	756	190.70	3,309	2,349
190.19	2,827	785	190.71	3,319	2,383
190.20	2,836	813	190.72	3,328	2,416
190.21	2,846	841	190.73	3,338	2,449
190.22	2,855	870	190.74	3,347	2,482
190.23	2,865	899	190.75	3,357	2,516
190.24	2,874	927	190.76	3,366	2,550
190.25	2,884	956	190.77	3,375	2,583
190.26	2,893	985	190.78	3,385	2,617
190.27	2,902	1,014	190.79	3,394	2,651
190.28	2,912	1,043	190.80	3,404	2,685
190.29	2,921	1,072	190.81	3,413	2,719
190.30	2,931	1,101	190.82	3,423	2,753
190.31	2,940	1,131	190.83	3,432	2,788

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.84	3,442	2,822	191.36	3,962	4,745
190.85	3,451	2,856	191.37	3,972	4,784
190.86	3,461	2,891	191.38	3,983	4,824
190.87	3,470	2,926	191.39	3,993	4,864
190.88	3,479	2,960	191.40	4,003	4,904
190.89	3,489	2,995	191.41	4,013	4,944
190.90	3,498	3,030	191.42	4,024	4,984
190.91	3,508	3,065	191.43	4,034	5,024
190.92	3,517	3,100	191.44	4,044	5,065
190.93	3,527	3,136	191.45	4,054	5,105
190.94	3,536	3,171	191.46	4,065	5,146
190.95	3,546	3,206	191.47	4,075	5,187
190.96	3,555	3,242	191.48	4,085	5,227
190.97	3,565	3,277	191.49	4,095	5,268
190.98	3,574	3,313	191.50	4,106	5,309
190.99	3,584	3,349	191.51	4,116	5,350
191.00	3,593	3,385	191.52	4,126	5,392
191.01	3,603	3,421	191.53	4,136	5,433
191.02	3,614	3,457	191.54	4,147	5,474
191.03	3,624	3,493	191.55	4,157	5,516
191.04	3,634	3,529	191.56	4,167	5,557
191.05	3,644	3,566	191.57	4,177	5,599
191.06	3,655	3,602	191.58	4,188	5,641
191.07	3,665	3,639	191.59	4,198	5,683
191.08	3,675	3,675	191.60	4,208	5,725
191.09	3,685	3,712	191.61	4,218	5,767
191.10	3,696	3,749	191.62	4,229	5,809
191.11	3,706	3,786	191.63	4,239	5,852
191.12	3,716	3,823	191.64	4,249	5,894
191.13	3,726	3,860	191.65	4,259	5,937
191.14	3,737	3,898	191.66	4,270	5,979
191.15	3,747	3,935	191.67	4,280	6,022
191.16	3,757	3,973	191.68	4,290	6,065
191.17	3,767	4,010	191.69	4,300	6,108
191.18	3,778	4,048	191.70	4,311	6,151
191.19	3,788	4,086	191.71	4,321	6,194
191.20	3,798	4,124	191.72	4,331	6,237
191.21	3,808	4,162	191.73	4,341	6,281
191.22	3,818	4,200	191.74	4,352	6,324
191.23	3,829	4,238	191.75	4,362	6,368
191.24	3,839	4,277	191.76	4,372	6,411
191.25	3,849	4,315	191.77	4,382	6,455
191.26	3,860	4,354	191.78	4,393	6,499
191.27	3,870	4,392	191.79	4,403	6,543
191.28	3,880	4,431	191.80	4,413	6,587
191.29	3,890	4,470	191.81	4,423	6,631
191.30	3,901	4,509	191.82	4,434	6,676
191.31	3,911	4,548	191.83	4,444	6,720
191.32	3,921	4,587	191.84	4,454	6,764
191.33	3,931	4,626	191.85	4,464	6,809
191.34	3,942	4,666	191.86	4,475	6,854
191.35	3,952	4,705	191.87	4,485	6,899

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.88	4,495	6,943	192.40	5,055	9,425
191.89	4,505	6,988	192.41	5,066	9,475
191.90	4,516	7,034	192.42	5,077	9,526
191.91	4,526	7,079	192.43	5,088	9,577
191.92	4,536	7,124	192.44	5,099	9,628
191.93	4,546	7,169	192.45	5,110	9,679
191.94	4,556	7,215	192.46	5,121	9,730
191.95	4,567	7,261	192.47	5,132	9,781
191.96	4,577	7,306	192.48	5,143	9,833
191.97	4,587	7,352	192.49	5,154	9,884
191.98	4,598	7,398	192.50	5,165	9,936
191.99	4,608	7,444	192.51	5,175	9,988
192.00	4,618	7,490	192.52	5,186	10,039
192.01	4,629	7,536	192.53	5,197	10,091
192.02	4,640	7,583	192.54	5,208	10,143
192.03	4,651	7,629	192.55	5,219	10,195
192.04	4,662	7,676	192.56	5,230	10,248
192.05	4,673	7,722	192.57	5,241	10,300
192.06	4,684	7,769	192.58	5,252	10,352
192.07	4,695	7,816	192.59	5,263	10,405
192.08	4,705	7,863	192.60	5,274	10,458
192.09	4,716	7,910	192.61	5,285	10,511
192.10	4,727	7,957	192.62	5,296	10,563
192.11	4,738	8,005	192.63	5,307	10,616
192.12	4,749	8,052	192.64	5,318	10,670
192.13	4,760	8,100	192.65	5,328	10,723
192.14	4,771	8,147	192.66	5,339	10,776
192.15	4,782	8,195	192.67	5,350	10,830
192.16	4,793	8,243	192.68	5,361	10,883
192.17	4,804	8,291	192.69	5,372	10,937
192.18	4,815	8,339	192.70	5,383	10,991
192.19	4,826	8,387	192.71	5,394	11,044
192.20	4,837	8,436	192.72	5,405	11,098
192.21	4,848	8,484	192.73	5,416	11,153
192.22	4,858	8,533	192.74	5,427	11,207
192.23	4,869	8,581	192.75	5,438	11,261
192.24	4,880	8,630	192.76	5,449	11,316
192.25	4,891	8,679	192.77	5,460	11,370
192.26	4,902	8,728	192.78	5,471	11,425
192.27	4,913	8,777	192.79	5,481	11,479
192.28	4,924	8,826	192.80	5,492	11,534
192.29	4,935	8,875	192.81	5,503	11,589
192.30	4,946	8,925	192.82	5,514	11,644
192.31	4,957	8,974	192.83	5,525	11,700
192.32	4,968	9,024	192.84	5,536	11,755
192.33	4,979	9,074	192.85	5,547	11,810
192.34	4,990	9,123	192.86	5,558	11,866
192.35	5,001	9,173	192.87	5,569	11,922
192.36	5,011	9,224	192.88	5,580	11,977
192.37	5,022	9,274	192.89	5,591	12,033
192.38	5,033	9,324	192.90	5,602	12,089
192.39	5,044	9,374	192.91	5,613	12,145

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.92	5,624	12,201	193.44	6,221	15,280
192.93	5,634	12,258	193.45	6,233	15,342
192.94	5,645	12,314	193.46	6,245	15,404
192.95	5,656	12,371	193.47	6,256	15,467
192.96	5,667	12,427	193.48	6,268	15,530
192.97	5,678	12,484	193.49	6,279	15,592
192.98	5,689	12,541	193.50	6,291	15,655
192.99	5,700	12,598	193.51	6,303	15,718
193.00	5,711	12,655	193.52	6,314	15,781
193.01	5,723	12,712	193.53	6,326	15,844
193.02	5,734	12,769	193.54	6,337	15,908
193.03	5,746	12,827	193.55	6,349	15,971
193.04	5,757	12,884	193.56	6,361	16,035
193.05	5,769	12,942	193.57	6,372	16,098
193.06	5,781	12,999	193.58	6,384	16,162
193.07	5,792	13,057	193.59	6,395	16,226
193.08	5,804	13,115	193.60	6,407	16,290
193.09	5,815	13,173	193.61	6,419	16,354
193.10	5,827	13,232	193.62	6,430	16,418
193.11	5,839	13,290	193.63	6,442	16,483
193.12	5,850	13,348	193.64	6,453	16,547
193.13	5,862	13,407	193.65	6,465	16,612
193.14	5,873	13,466	193.66	6,477	16,677
193.15	5,885	13,524	193.67	6,488	16,741
193.16	5,897	13,583	193.68	6,500	16,806
193.17	5,908	13,642	193.69	6,511	16,871
193.18	5,920	13,701	193.70	6,523	16,937
193.19	5,931	13,761	193.71	6,535	17,002
193.20	5,943	13,820	193.72	6,546	17,067
193.21	5,955	13,880	193.73	6,558	17,133
193.22	5,966	13,939	193.74	6,569	17,198
193.23	5,978	13,999	193.75	6,581	17,264
193.24	5,989	14,059	193.76	6,593	17,330
193.25	6,001	14,119	193.77	6,604	17,396
193.26	6,013	14,179	193.78	6,616	17,462
193.27	6,024	14,239	193.79	6,627	17,528
193.28	6,036	14,299	193.80	6,639	17,595
193.29	6,047	14,360	193.81	6,651	17,661
193.30	6,059	14,420	193.82	6,662	17,728
193.31	6,071	14,481	193.83	6,674	17,794
193.32	6,082	14,542	193.84	6,685	17,861
193.33	6,094	14,602	193.85	6,697	17,928
193.34	6,105	14,663	193.86	6,709	17,995
193.35	6,117	14,725	193.87	6,720	18,062
193.36	6,129	14,786	193.88	6,732	18,130
193.37	6,140	14,847	193.89	6,743	18,197
193.38	6,152	14,909	193.90	6,755	18,264
193.39	6,163	14,970	193.91	6,767	18,332
193.40	6,175	15,032	193.92	6,778	18,400
193.41	6,187	15,094	193.93	6,790	18,468
193.42	6,198	15,156	193.94	6,801	18,536
193.43	6,210	15,218	193.95	6,813	18,604

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.96	6,825	18,672	194.48	7,460	22,385
193.97	6,836	18,740	194.49	7,473	22,460
193.98	6,848	18,809	194.50	7,485	22,535
193.99	6,859	18,877	194.51	7,497	22,610
194.00	6,871	18,946	194.52	7,510	22,685
194.01	6,883	19,014	194.53	7,522	22,760
194.02	6,896	19,083	194.54	7,534	22,835
194.03	6,908	19,152	194.55	7,546	22,910
194.04	6,920	19,222	194.56	7,559	22,986
194.05	6,932	19,291	194.57	7,571	23,062
194.06	6,945	19,360	194.58	7,583	23,137
194.07	6,957	19,430	194.59	7,596	23,213
194.08	6,969	19,499	194.60	7,608	23,289
194.09	6,982	19,569	194.61	7,620	23,365
194.10	6,994	19,639	194.62	7,632	23,442
194.11	7,006	19,709	194.63	7,645	23,518
194.12	7,018	19,779	194.64	7,657	23,595
194.13	7,031	19,849	194.65	7,669	23,671
194.14	7,043	19,920	194.66	7,681	23,748
194.15	7,055	19,990	194.67	7,694	23,825
194.16	7,067	20,061	194.68	7,706	23,902
194.17	7,080	20,132	194.69	7,718	23,979
194.18	7,092	20,202	194.70	7,731	24,056
194.19	7,104	20,273	194.71	7,743	24,134
194.20	7,117	20,344	194.72	7,755	24,211
194.21	7,129	20,416	194.73	7,767	24,289
194.22	7,141	20,487	194.74	7,780	24,366
194.23	7,153	20,559	194.75	7,792	24,444
194.24	7,166	20,630	194.76	7,804	24,522
194.25	7,178	20,702	194.77	7,817	24,600
194.26	7,190	20,774	194.78	7,829	24,679
194.27	7,203	20,846	194.79	7,841	24,757
194.28	7,215	20,918	194.80	7,853	24,835
194.29	7,227	20,990	194.81	7,866	24,914
194.30	7,239	21,062	194.82	7,878	24,993
194.31	7,252	21,135	194.83	7,890	25,072
194.32	7,264	21,207	194.84	7,903	25,151
194.33	7,276	21,280	194.85	7,915	25,230
194.34	7,289	21,353	194.86	7,927	25,309
194.35	7,301	21,426	194.87	7,939	25,388
194.36	7,313	21,499	194.88	7,952	25,468
194.37	7,325	21,572	194.89	7,964	25,547
194.38	7,338	21,645	194.90	7,976	25,627
194.39	7,350	21,719	194.91	7,988	25,707
194.40	7,362	21,792	194.92	8,001	25,787
194.41	7,374	21,866	194.93	8,013	25,867
194.42	7,387	21,940	194.94	8,025	25,947
194.43	7,399	22,014	194.95	8,038	26,027
194.44	7,411	22,088	194.96	8,050	26,108
194.45	7,424	22,162	194.97	8,062	26,188
194.46	7,436	22,236	194.98	8,074	26,269
194.47	7,448	22,311	194.99	8,087	26,350

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.00	**8,099**	**26,431**

Summary for Pond B-36A: Basin #36A

Inflow Area = 2.377 ac, 40.60% Impervious, Inflow Depth = 4.10" for Future 10 yr event
Inflow = 9.92 cfs @ 12.17 hrs, Volume= 0.811 af
Outflow = 6.84 cfs @ 12.28 hrs, Volume= 0.718 af, Atten= 31%, Lag= 6.2 min
Primary = 6.84 cfs @ 12.28 hrs, Volume= 0.718 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.62' @ 12.28 hrs Surf.Area= 4,921 sf Storage= 13,569 cf

Plug-Flow detention time= 207.9 min calculated for 0.717 af (88% of inflow)
Center-of-Mass det. time= 151.4 min (940.0 - 788.6)

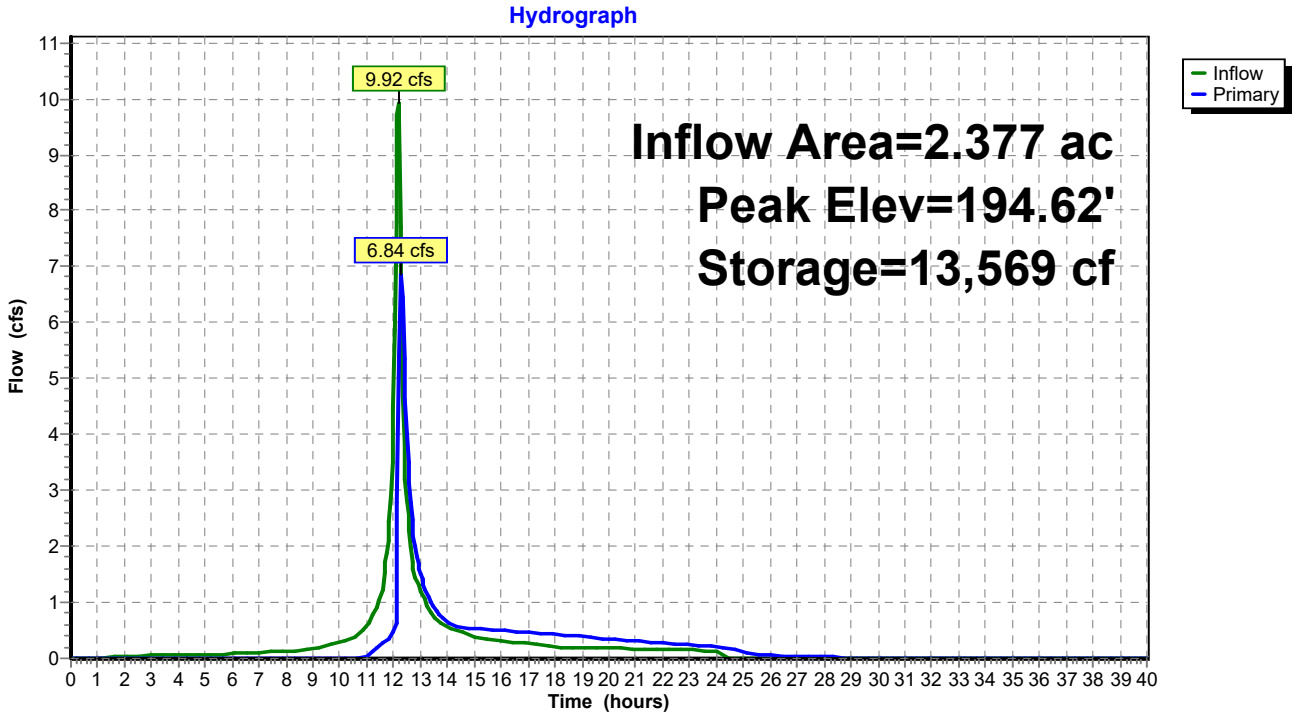
Volume	Invert	Avail.Storage	Storage Description
#1	190.50'	16,844 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.50	0	0	0
191.00	2,366	592	592
192.00	2,995	2,681	3,272
193.00	3,681	3,338	6,610
194.00	4,424	4,053	10,663
195.00	5,223	4,824	15,486
195.25	5,644	1,358	16,844

Device	Routing	Invert	Outlet Devices
#1	Primary	190.50'	**18.0" Round Culvert** L= 82.0' Ke= 0.500 Inlet / Outlet Invert= 190.50' / 190.10' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.24'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	194.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.76 cfs @ 12.28 hrs HW=194.62' (Free Discharge)
- **1=Culvert** (Passes 6.76 cfs of 14.22 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.62 cfs @ 7.16 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 6.14 cfs @ 2.57 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-36A: Basin #36A



Stage-Discharge for Pond B-36A: Basin #36A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.50	0.00	191.02	0.00	191.54	0.00	192.06	0.00
190.51	0.00	191.03	0.00	191.55	0.00	192.07	0.00
190.52	0.00	191.04	0.00	191.56	0.00	192.08	0.00
190.53	0.00	191.05	0.00	191.57	0.00	192.09	0.00
190.54	0.00	191.06	0.00	191.58	0.00	192.10	0.00
190.55	0.00	191.07	0.00	191.59	0.00	192.11	0.00
190.56	0.00	191.08	0.00	191.60	0.00	192.12	0.00
190.57	0.00	191.09	0.00	191.61	0.00	192.13	0.00
190.58	0.00	191.10	0.00	191.62	0.00	192.14	0.00
190.59	0.00	191.11	0.00	191.63	0.00	192.15	0.00
190.60	0.00	191.12	0.00	191.64	0.00	192.16	0.00
190.61	0.00	191.13	0.00	191.65	0.00	192.17	0.00
190.62	0.00	191.14	0.00	191.66	0.00	192.18	0.00
190.63	0.00	191.15	0.00	191.67	0.00	192.19	0.00
190.64	0.00	191.16	0.00	191.68	0.00	192.20	0.00
190.65	0.00	191.17	0.00	191.69	0.00	192.21	0.00
190.66	0.00	191.18	0.00	191.70	0.00	192.22	0.00
190.67	0.00	191.19	0.00	191.71	0.00	192.23	0.00
190.68	0.00	191.20	0.00	191.72	0.00	192.24	0.00
190.69	0.00	191.21	0.00	191.73	0.00	192.25	0.00
190.70	0.00	191.22	0.00	191.74	0.00	192.26	0.00
190.71	0.00	191.23	0.00	191.75	0.00	192.27	0.00
190.72	0.00	191.24	0.00	191.76	0.00	192.28	0.00
190.73	0.00	191.25	0.00	191.77	0.00	192.29	0.01
190.74	0.00	191.26	0.00	191.78	0.00	192.30	0.01
190.75	0.00	191.27	0.00	191.79	0.00	192.31	0.01
190.76	0.00	191.28	0.00	191.80	0.00	192.32	0.02
190.77	0.00	191.29	0.00	191.81	0.00	192.33	0.02
190.78	0.00	191.30	0.00	191.82	0.00	192.34	0.02
190.79	0.00	191.31	0.00	191.83	0.00	192.35	0.03
190.80	0.00	191.32	0.00	191.84	0.00	192.36	0.03
190.81	0.00	191.33	0.00	191.85	0.00	192.37	0.04
190.82	0.00	191.34	0.00	191.86	0.00	192.38	0.04
190.83	0.00	191.35	0.00	191.87	0.00	192.39	0.05
190.84	0.00	191.36	0.00	191.88	0.00	192.40	0.06
190.85	0.00	191.37	0.00	191.89	0.00	192.41	0.06
190.86	0.00	191.38	0.00	191.90	0.00	192.42	0.07
190.87	0.00	191.39	0.00	191.91	0.00	192.43	0.08
190.88	0.00	191.40	0.00	191.92	0.00	192.44	0.08
190.89	0.00	191.41	0.00	191.93	0.00	192.45	0.09
190.90	0.00	191.42	0.00	191.94	0.00	192.46	0.10
190.91	0.00	191.43	0.00	191.95	0.00	192.47	0.10
190.92	0.00	191.44	0.00	191.96	0.00	192.48	0.11
190.93	0.00	191.45	0.00	191.97	0.00	192.49	0.12
190.94	0.00	191.46	0.00	191.98	0.00	192.50	0.13
190.95	0.00	191.47	0.00	191.99	0.00	192.51	0.13
190.96	0.00	191.48	0.00	192.00	0.00	192.52	0.14
190.97	0.00	191.49	0.00	192.01	0.00	192.53	0.15
190.98	0.00	191.50	0.00	192.02	0.00	192.54	0.15
190.99	0.00	191.51	0.00	192.03	0.00	192.55	0.16
191.00	0.00	191.52	0.00	192.04	0.00	192.56	0.17
191.01	0.00	191.53	0.00	192.05	0.00	192.57	0.17

Stage-Discharge for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.58	0.17	193.10	0.35	193.62	0.46	194.14	1.23
192.59	0.18	193.11	0.35	193.63	0.46	194.15	1.31
192.60	0.18	193.12	0.35	193.64	0.47	194.16	1.39
192.61	0.19	193.13	0.36	193.65	0.47	194.17	1.47
192.62	0.19	193.14	0.36	193.66	0.47	194.18	1.55
192.63	0.20	193.15	0.36	193.67	0.47	194.19	1.63
192.64	0.20	193.16	0.36	193.68	0.47	194.20	1.72
192.65	0.21	193.17	0.37	193.69	0.48	194.21	1.81
192.66	0.21	193.18	0.37	193.70	0.48	194.22	1.90
192.67	0.22	193.19	0.37	193.71	0.48	194.23	1.99
192.68	0.22	193.20	0.37	193.72	0.48	194.24	2.09
192.69	0.22	193.21	0.38	193.73	0.48	194.25	2.19
192.70	0.23	193.22	0.38	193.74	0.49	194.26	2.28
192.71	0.23	193.23	0.38	193.75	0.49	194.27	2.38
192.72	0.24	193.24	0.38	193.76	0.49	194.28	2.49
192.73	0.24	193.25	0.39	193.77	0.49	194.29	2.59
192.74	0.24	193.26	0.39	193.78	0.49	194.30	2.70
192.75	0.25	193.27	0.39	193.79	0.49	194.31	2.80
192.76	0.25	193.28	0.39	193.80	0.50	194.32	2.91
192.77	0.25	193.29	0.39	193.81	0.50	194.33	3.02
192.78	0.26	193.30	0.40	193.82	0.50	194.34	3.13
192.79	0.26	193.31	0.40	193.83	0.50	194.35	3.25
192.80	0.26	193.32	0.40	193.84	0.50	194.36	3.36
192.81	0.27	193.33	0.40	193.85	0.50	194.37	3.48
192.82	0.27	193.34	0.41	193.86	0.51	194.38	3.60
192.83	0.27	193.35	0.41	193.87	0.51	194.39	3.72
192.84	0.28	193.36	0.41	193.88	0.51	194.40	3.84
192.85	0.28	193.37	0.41	193.89	0.51	194.41	3.96
192.86	0.28	193.38	0.41	193.90	0.51	194.42	4.08
192.87	0.29	193.39	0.42	193.91	0.52	194.43	4.21
192.88	0.29	193.40	0.42	193.92	0.52	194.44	4.33
192.89	0.29	193.41	0.42	193.93	0.52	194.45	4.46
192.90	0.30	193.42	0.42	193.94	0.52	194.46	4.59
192.91	0.30	193.43	0.43	193.95	0.52	194.47	4.72
192.92	0.30	193.44	0.43	193.96	0.52	194.48	4.85
192.93	0.30	193.45	0.43	193.97	0.53	194.49	4.98
192.94	0.31	193.46	0.43	193.98	0.53	194.50	5.12
192.95	0.31	193.47	0.43	193.99	0.53	194.51	5.25
192.96	0.31	193.48	0.44	194.00	0.53	194.52	5.39
192.97	0.32	193.49	0.44	194.01	0.55	194.53	5.53
192.98	0.32	193.50	0.44	194.02	0.57	194.54	5.66
192.99	0.32	193.51	0.44	194.03	0.60	194.55	5.80
193.00	0.32	193.52	0.44	194.04	0.64	194.56	5.94
193.01	0.33	193.53	0.45	194.05	0.68	194.57	6.09
193.02	0.33	193.54	0.45	194.06	0.73	194.58	6.23
193.03	0.33	193.55	0.45	194.07	0.78	194.59	6.37
193.04	0.33	193.56	0.45	194.08	0.84	194.60	6.52
193.05	0.34	193.57	0.45	194.09	0.90	194.61	6.67
193.06	0.34	193.58	0.46	194.10	0.96	194.62	6.81
193.07	0.34	193.59	0.46	194.11	1.02	194.63	6.96
193.08	0.34	193.60	0.46	194.12	1.09	194.64	7.11
193.09	0.35	193.61	0.46	194.13	1.16	194.65	7.26

Stage-Discharge for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Primary (cfs)
194.66	7.41
194.67	7.57
194.68	7.72
194.69	7.87
194.70	8.03
194.71	8.19
194.72	8.34
194.73	8.50
194.74	8.66
194.75	8.82
194.76	8.98
194.77	9.14
194.78	9.31
194.79	9.47
194.80	9.63
194.81	9.80
194.82	9.97
194.83	10.13
194.84	10.30
194.85	10.47
194.86	10.64
194.87	10.81
194.88	10.98
194.89	11.16
194.90	11.33
194.91	11.50
194.92	11.68
194.93	11.85
194.94	12.03
194.95	12.21
194.96	12.50
194.97	12.89
194.98	13.35
194.99	13.86
195.00	14.41
195.01	15.01
195.02	15.64
195.03	16.31
195.04	17.01
195.05	17.74
195.06	18.49
195.07	19.28
195.08	20.09
195.09	20.93
195.10	21.80
195.11	22.68
195.12	23.60
195.13	24.40
195.14	25.18
195.15	25.99
195.16	26.86
195.17	27.75
195.18	28.67
195.19	29.62
195.20	30.59
195.21	31.58
195.22	32.60
195.23	33.65
195.24	34.72
195.25	**35.81**

Stage-Area-Storage for Pond B-36A: Basin #36A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.50	0	0
190.51	47	0
190.52	95	1
190.53	142	2
190.54	189	4
190.55	237	6
190.56	284	9
190.57	331	12
190.58	379	15
190.59	426	19
190.60	473	24
190.61	521	29
190.62	568	34
190.63	615	40
190.64	662	46
190.65	710	53
190.66	757	61
190.67	804	68
190.68	852	77
190.69	899	85
190.70	946	95
190.71	994	104
190.72	1,041	115
190.73	1,088	125
190.74	1,136	136
190.75	1,183	148
190.76	1,230	160
190.77	1,278	172
190.78	1,325	185
190.79	1,372	199
190.80	1,420	213
190.81	1,467	227
190.82	1,514	242
190.83	1,562	258
190.84	1,609	274
190.85	1,656	290
190.86	1,704	307
190.87	1,751	324
190.88	1,798	342
190.89	1,845	360
190.90	1,893	379
190.91	1,940	398
190.92	1,987	417
190.93	2,035	437
190.94	2,082	458
190.95	2,129	479
190.96	2,177	501
190.97	2,224	523
190.98	2,271	545
190.99	2,319	568
191.00	2,366	592
191.01	2,372	615
191.02	2,379	639
191.03	2,385	663
191.04	2,391	687
191.05	2,397	711
191.06	2,404	735
191.07	2,410	759
191.08	2,416	783
191.09	2,423	807
191.10	2,429	831
191.11	2,435	856
191.12	2,441	880
191.13	2,448	904
191.14	2,454	929
191.15	2,460	953
191.16	2,467	978
191.17	2,473	1,003
191.18	2,479	1,028
191.19	2,486	1,052
191.20	2,492	1,077
191.21	2,498	1,102
191.22	2,504	1,127
191.23	2,511	1,152
191.24	2,517	1,177
191.25	2,523	1,203
191.26	2,530	1,228
191.27	2,536	1,253
191.28	2,542	1,279
191.29	2,548	1,304
191.30	2,555	1,330
191.31	2,561	1,355
191.32	2,567	1,381
191.33	2,574	1,407
191.34	2,580	1,432
191.35	2,586	1,458
191.36	2,592	1,484
191.37	2,599	1,510
191.38	2,605	1,536
191.39	2,611	1,562
191.40	2,618	1,588
191.41	2,624	1,614
191.42	2,630	1,641
191.43	2,636	1,667
191.44	2,643	1,693
191.45	2,649	1,720
191.46	2,655	1,746
191.47	2,662	1,773
191.48	2,668	1,800
191.49	2,674	1,826
191.50	2,681	1,853
191.51	2,687	1,880
191.52	2,693	1,907
191.53	2,699	1,934

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.54	2,706	1,961	192.06	3,036	3,453
191.55	2,712	1,988	192.07	3,043	3,483
191.56	2,718	2,015	192.08	3,050	3,514
191.57	2,725	2,042	192.09	3,057	3,544
191.58	2,731	2,070	192.10	3,064	3,575
191.59	2,737	2,097	192.11	3,070	3,606
191.60	2,743	2,124	192.12	3,077	3,636
191.61	2,750	2,152	192.13	3,084	3,667
191.62	2,756	2,179	192.14	3,091	3,698
191.63	2,762	2,207	192.15	3,098	3,729
191.64	2,769	2,235	192.16	3,105	3,760
191.65	2,775	2,262	192.17	3,112	3,791
191.66	2,781	2,290	192.18	3,118	3,822
191.67	2,787	2,318	192.19	3,125	3,853
191.68	2,794	2,346	192.20	3,132	3,885
191.69	2,800	2,374	192.21	3,139	3,916
191.70	2,806	2,402	192.22	3,146	3,948
191.71	2,813	2,430	192.23	3,153	3,979
191.72	2,819	2,458	192.24	3,160	4,011
191.73	2,825	2,486	192.25	3,167	4,042
191.74	2,831	2,515	192.26	3,173	4,074
191.75	2,838	2,543	192.27	3,180	4,106
191.76	2,844	2,571	192.28	3,187	4,137
191.77	2,850	2,600	192.29	3,194	4,169
191.78	2,857	2,628	192.30	3,201	4,201
191.79	2,863	2,657	192.31	3,208	4,233
191.80	2,869	2,686	192.32	3,215	4,266
191.81	2,875	2,714	192.33	3,221	4,298
191.82	2,882	2,743	192.34	3,228	4,330
191.83	2,888	2,772	192.35	3,235	4,362
191.84	2,894	2,801	192.36	3,242	4,395
191.85	2,901	2,830	192.37	3,249	4,427
191.86	2,907	2,859	192.38	3,256	4,460
191.87	2,913	2,888	192.39	3,263	4,492
191.88	2,920	2,917	192.40	3,269	4,525
191.89	2,926	2,946	192.41	3,276	4,558
191.90	2,932	2,976	192.42	3,283	4,590
191.91	2,938	3,005	192.43	3,290	4,623
191.92	2,945	3,034	192.44	3,297	4,656
191.93	2,951	3,064	192.45	3,304	4,689
191.94	2,957	3,093	192.46	3,311	4,722
191.95	2,964	3,123	192.47	3,317	4,755
191.96	2,970	3,153	192.48	3,324	4,789
191.97	2,976	3,182	192.49	3,331	4,822
191.98	2,982	3,212	192.50	3,338	4,855
191.99	2,989	3,242	192.51	3,345	4,889
192.00	2,995	3,272	192.52	3,352	4,922
192.01	3,002	3,302	192.53	3,359	4,956
192.02	3,009	3,332	192.54	3,365	4,989
192.03	3,016	3,362	192.55	3,372	5,023
192.04	3,022	3,392	192.56	3,379	5,057
192.05	3,029	3,423	192.57	3,386	5,091

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.58	3,393	5,124	193.10	3,755	6,982
192.59	3,400	5,158	193.11	3,763	7,019
192.60	3,407	5,192	193.12	3,770	7,057
192.61	3,413	5,227	193.13	3,778	7,095
192.62	3,420	5,261	193.14	3,785	7,133
192.63	3,427	5,295	193.15	3,792	7,171
192.64	3,434	5,329	193.16	3,800	7,208
192.65	3,441	5,364	193.17	3,807	7,247
192.66	3,448	5,398	193.18	3,815	7,285
192.67	3,455	5,433	193.19	3,822	7,323
192.68	3,461	5,467	193.20	3,830	7,361
192.69	3,468	5,502	193.21	3,837	7,399
192.70	3,475	5,537	193.22	3,844	7,438
192.71	3,482	5,571	193.23	3,852	7,476
192.72	3,489	5,606	193.24	3,859	7,515
192.73	3,496	5,641	193.25	3,867	7,553
192.74	3,503	5,676	193.26	3,874	7,592
192.75	3,510	5,711	193.27	3,882	7,631
192.76	3,516	5,746	193.28	3,889	7,670
192.77	3,523	5,782	193.29	3,896	7,709
192.78	3,530	5,817	193.30	3,904	7,748
192.79	3,537	5,852	193.31	3,911	7,787
192.80	3,544	5,888	193.32	3,919	7,826
192.81	3,551	5,923	193.33	3,926	7,865
192.82	3,558	5,959	193.34	3,934	7,904
192.83	3,564	5,994	193.35	3,941	7,944
192.84	3,571	6,030	193.36	3,948	7,983
192.85	3,578	6,066	193.37	3,956	8,023
192.86	3,585	6,101	193.38	3,963	8,062
192.87	3,592	6,137	193.39	3,971	8,102
192.88	3,599	6,173	193.40	3,978	8,142
192.89	3,606	6,209	193.41	3,986	8,182
192.90	3,612	6,245	193.42	3,993	8,222
192.91	3,619	6,281	193.43	4,000	8,262
192.92	3,626	6,318	193.44	4,008	8,302
192.93	3,633	6,354	193.45	4,015	8,342
192.94	3,640	6,390	193.46	4,023	8,382
192.95	3,647	6,427	193.47	4,030	8,422
192.96	3,654	6,463	193.48	4,038	8,462
192.97	3,660	6,500	193.49	4,045	8,503
192.98	3,667	6,537	193.50	4,053	8,543
192.99	3,674	6,573	193.51	4,060	8,584
193.00	3,681	6,610	193.52	4,067	8,625
193.01	3,688	6,647	193.53	4,075	8,665
193.02	3,696	6,684	193.54	4,082	8,706
193.03	3,703	6,721	193.55	4,090	8,747
193.04	3,711	6,758	193.56	4,097	8,788
193.05	3,718	6,795	193.57	4,105	8,829
193.06	3,726	6,832	193.58	4,112	8,870
193.07	3,733	6,869	193.59	4,119	8,911
193.08	3,740	6,907	193.60	4,127	8,952
193.09	3,748	6,944	193.61	4,134	8,994

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.62	4,142	9,035	194.14	4,536	11,290
193.63	4,149	9,076	194.15	4,544	11,335
193.64	4,157	9,118	194.16	4,552	11,381
193.65	4,164	9,160	194.17	4,560	11,426
193.66	4,171	9,201	194.18	4,568	11,472
193.67	4,179	9,243	194.19	4,576	11,517
193.68	4,186	9,285	194.20	4,584	11,563
193.69	4,194	9,327	194.21	4,592	11,609
193.70	4,201	9,369	194.22	4,600	11,655
193.71	4,209	9,411	194.23	4,608	11,701
193.72	4,216	9,453	194.24	4,616	11,747
193.73	4,223	9,495	194.25	4,624	11,793
193.74	4,231	9,537	194.26	4,632	11,840
193.75	4,238	9,580	194.27	4,640	11,886
193.76	4,246	9,622	194.28	4,648	11,933
193.77	4,253	9,665	194.29	4,656	11,979
193.78	4,261	9,707	194.30	4,664	12,026
193.79	4,268	9,750	194.31	4,672	12,072
193.80	4,275	9,793	194.32	4,680	12,119
193.81	4,283	9,835	194.33	4,688	12,166
193.82	4,290	9,878	194.34	4,696	12,213
193.83	4,298	9,921	194.35	4,704	12,260
193.84	4,305	9,964	194.36	4,712	12,307
193.85	4,313	10,007	194.37	4,720	12,354
193.86	4,320	10,050	194.38	4,728	12,401
193.87	4,327	10,094	194.39	4,736	12,449
193.88	4,335	10,137	194.40	4,744	12,496
193.89	4,342	10,180	194.41	4,752	12,543
193.90	4,350	10,224	194.42	4,760	12,591
193.91	4,357	10,267	194.43	4,768	12,639
193.92	4,365	10,311	194.44	4,776	12,686
193.93	4,372	10,355	194.45	4,784	12,734
193.94	4,379	10,398	194.46	4,792	12,782
193.95	4,387	10,442	194.47	4,800	12,830
193.96	4,394	10,486	194.48	4,808	12,878
193.97	4,402	10,530	194.49	4,816	12,926
193.98	4,409	10,574	194.50	4,824	12,974
193.99	4,417	10,618	194.51	4,831	13,023
194.00	4,424	10,663	194.52	4,839	13,071
194.01	4,432	10,707	194.53	4,847	13,119
194.02	4,440	10,751	194.54	4,855	13,168
194.03	4,448	10,796	194.55	4,863	13,217
194.04	4,456	10,840	194.56	4,871	13,265
194.05	4,464	10,885	194.57	4,879	13,314
194.06	4,472	10,929	194.58	4,887	13,363
194.07	4,480	10,974	194.59	4,895	13,412
194.08	4,488	11,019	194.60	4,903	13,461
194.09	4,496	11,064	194.61	4,911	13,510
194.10	4,504	11,109	194.62	4,919	13,559
194.11	4,512	11,154	194.63	4,927	13,608
194.12	4,520	11,199	194.64	4,935	13,657
194.13	4,528	11,244	194.65	4,943	13,707

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.66	4,951	13,756
194.67	4,959	13,806
194.68	4,967	13,856
194.69	4,975	13,905
194.70	4,983	13,955
194.71	4,991	14,005
194.72	4,999	14,055
194.73	5,007	14,105
194.74	5,015	14,155
194.75	5,023	14,205
194.76	5,031	14,255
194.77	5,039	14,306
194.78	5,047	14,356
194.79	5,055	14,407
194.80	5,063	14,457
194.81	5,071	14,508
194.82	5,079	14,559
194.83	5,087	14,610
194.84	5,095	14,661
194.85	5,103	14,712
194.86	5,111	14,763
194.87	5,119	14,814
194.88	5,127	14,865
194.89	5,135	14,916
194.90	5,143	14,968
194.91	5,151	15,019
194.92	5,159	15,071
194.93	5,167	15,122
194.94	5,175	15,174
194.95	5,183	15,226
194.96	5,191	15,278
194.97	5,199	15,330
194.98	5,207	15,382
194.99	5,215	15,434
195.00	5,223	15,486
195.01	5,240	15,538
195.02	5,257	15,591
195.03	5,274	15,643
195.04	5,290	15,696
195.05	5,307	15,749
195.06	5,324	15,802
195.07	5,341	15,856
195.08	5,358	15,909
195.09	5,375	15,963
195.10	5,391	16,017
195.11	5,408	16,071
195.12	5,425	16,125
195.13	5,442	16,179
195.14	5,459	16,234
195.15	5,476	16,288
195.16	5,492	16,343
195.17	5,509	16,398
195.18	5,526	16,453
195.19	5,543	16,509
195.20	5,560	16,564
195.21	5,577	16,620
195.22	5,593	16,676
195.23	5,610	16,732
195.24	5,627	16,788
195.25	**5,644**	**16,844**

Summary for Pond B-36B: Basin #36B

Inflow Area = 2.469 ac, 46.54% Impervious, Inflow Depth = 4.25" for Future 10 yr event
Inflow = 10.59 cfs @ 12.17 hrs, Volume= 0.874 af
Outflow = 7.90 cfs @ 12.26 hrs, Volume= 0.766 af, Atten= 25%, Lag= 5.6 min
Primary = 7.90 cfs @ 12.26 hrs, Volume= 0.766 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.04' @ 12.27 hrs Surf.Area= 4,577 sf Storage= 10,647 cf

Plug-Flow detention time= 122.2 min calculated for 0.766 af (88% of inflow)
Center-of-Mass det. time= 61.2 min (844.6 - 783.5)

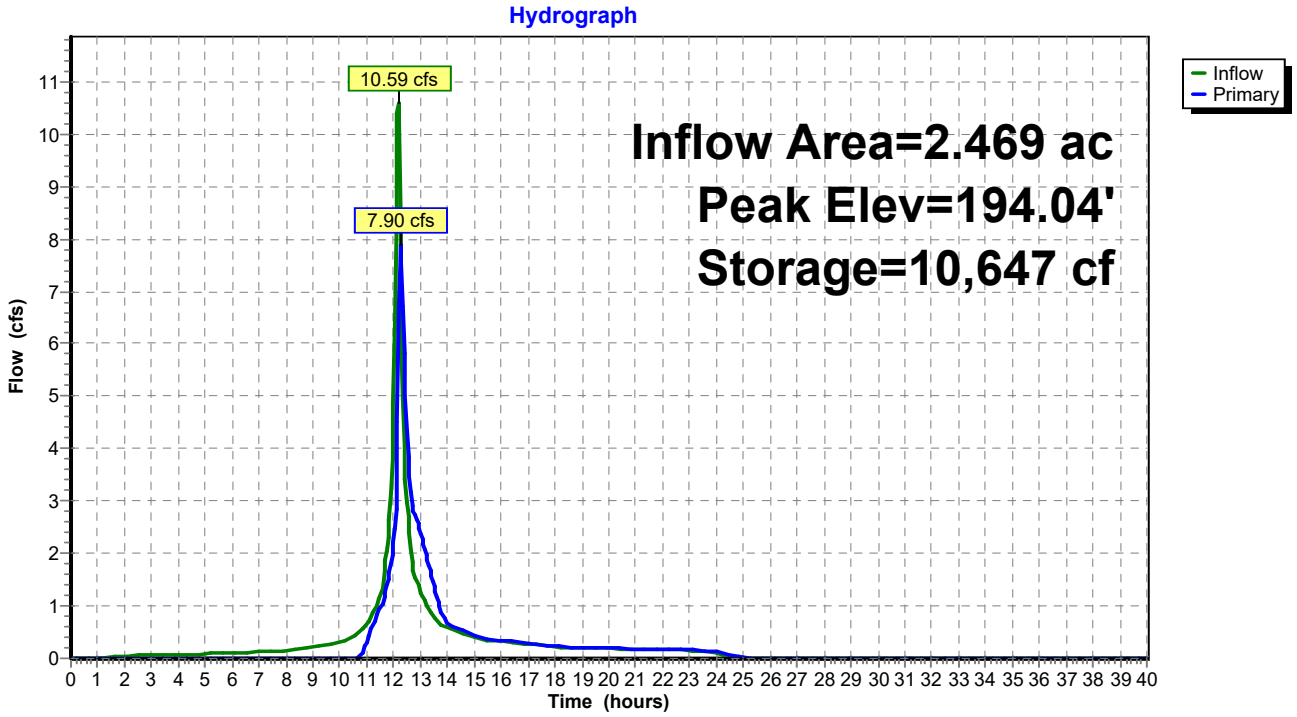
Volume	Invert	Avail.Storage	Storage Description
#1	190.50'	16,864 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.50	0	0	0
191.00	2,110	528	528
192.00	2,893	2,502	3,029
193.00	3,730	3,312	6,341
194.00	4,547	4,139	10,479
195.00	5,356	4,952	15,431
195.25	6,113	1,434	16,864

Device	Routing	Invert	Outlet Devices
#1	Primary	190.50'	**18.0" Round Culvert** L= 82.0' Ke= 0.500 Inlet / Outlet Invert= 190.50' / 190.10' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.53'	**36.0" W x 2.5" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.55'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.76 cfs @ 12.26 hrs HW=194.03' (Free Discharge)
- **1=Culvert** (Passes 7.76 cfs of 12.76 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.55 cfs @ 5.68 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.20 cfs @ 2.26 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-36B: Basin #36B



Stage-Discharge for Pond B-36B: Basin #36B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.50	0.00	191.02	0.00	191.54	0.00	192.06	0.00
190.51	0.00	191.03	0.00	191.55	0.00	192.07	0.00
190.52	0.00	191.04	0.00	191.56	0.00	192.08	0.00
190.53	0.00	191.05	0.00	191.57	0.00	192.09	0.00
190.54	0.00	191.06	0.00	191.58	0.00	192.10	0.00
190.55	0.00	191.07	0.00	191.59	0.00	192.11	0.00
190.56	0.00	191.08	0.00	191.60	0.00	192.12	0.00
190.57	0.00	191.09	0.00	191.61	0.00	192.13	0.00
190.58	0.00	191.10	0.00	191.62	0.00	192.14	0.00
190.59	0.00	191.11	0.00	191.63	0.00	192.15	0.00
190.60	0.00	191.12	0.00	191.64	0.00	192.16	0.00
190.61	0.00	191.13	0.00	191.65	0.00	192.17	0.00
190.62	0.00	191.14	0.00	191.66	0.00	192.18	0.00
190.63	0.00	191.15	0.00	191.67	0.00	192.19	0.00
190.64	0.00	191.16	0.00	191.68	0.00	192.20	0.00
190.65	0.00	191.17	0.00	191.69	0.00	192.21	0.00
190.66	0.00	191.18	0.00	191.70	0.00	192.22	0.00
190.67	0.00	191.19	0.00	191.71	0.00	192.23	0.00
190.68	0.00	191.20	0.00	191.72	0.00	192.24	0.00
190.69	0.00	191.21	0.00	191.73	0.00	192.25	0.00
190.70	0.00	191.22	0.00	191.74	0.00	192.26	0.00
190.71	0.00	191.23	0.00	191.75	0.00	192.27	0.00
190.72	0.00	191.24	0.00	191.76	0.00	192.28	0.00
190.73	0.00	191.25	0.00	191.77	0.00	192.29	0.00
190.74	0.00	191.26	0.00	191.78	0.00	192.30	0.00
190.75	0.00	191.27	0.00	191.79	0.00	192.31	0.00
190.76	0.00	191.28	0.00	191.80	0.00	192.32	0.00
190.77	0.00	191.29	0.00	191.81	0.00	192.33	0.00
190.78	0.00	191.30	0.00	191.82	0.00	192.34	0.00
190.79	0.00	191.31	0.00	191.83	0.00	192.35	0.00
190.80	0.00	191.32	0.00	191.84	0.00	192.36	0.00
190.81	0.00	191.33	0.00	191.85	0.00	192.37	0.00
190.82	0.00	191.34	0.00	191.86	0.00	192.38	0.00
190.83	0.00	191.35	0.00	191.87	0.00	192.39	0.00
190.84	0.00	191.36	0.00	191.88	0.00	192.40	0.00
190.85	0.00	191.37	0.00	191.89	0.00	192.41	0.00
190.86	0.00	191.38	0.00	191.90	0.00	192.42	0.00
190.87	0.00	191.39	0.00	191.91	0.00	192.43	0.00
190.88	0.00	191.40	0.00	191.92	0.00	192.44	0.00
190.89	0.00	191.41	0.00	191.93	0.00	192.45	0.00
190.90	0.00	191.42	0.00	191.94	0.00	192.46	0.00
190.91	0.00	191.43	0.00	191.95	0.00	192.47	0.00
190.92	0.00	191.44	0.00	191.96	0.00	192.48	0.00
190.93	0.00	191.45	0.00	191.97	0.00	192.49	0.00
190.94	0.00	191.46	0.00	191.98	0.00	192.50	0.00
190.95	0.00	191.47	0.00	191.99	0.00	192.51	0.00
190.96	0.00	191.48	0.00	192.00	0.00	192.52	0.00
190.97	0.00	191.49	0.00	192.01	0.00	192.53	0.00
190.98	0.00	191.50	0.00	192.02	0.00	192.54	0.01
190.99	0.00	191.51	0.00	192.03	0.00	192.55	0.03
191.00	0.00	191.52	0.00	192.04	0.00	192.56	0.05
191.01	0.00	191.53	0.00	192.05	0.00	192.57	0.08

Stage-Discharge for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.58	0.11	193.10	2.05	193.62	3.23	194.14	9.44
192.59	0.14	193.11	2.07	193.63	3.30	194.15	9.60
192.60	0.18	193.12	2.09	193.64	3.37	194.16	9.76
192.61	0.22	193.13	2.12	193.65	3.44	194.17	9.92
192.62	0.26	193.14	2.14	193.66	3.52	194.18	10.08
192.63	0.30	193.15	2.16	193.67	3.60	194.19	10.24
192.64	0.35	193.16	2.18	193.68	3.69	194.20	10.40
192.65	0.40	193.17	2.20	193.69	3.77	194.21	10.56
192.66	0.45	193.18	2.22	193.70	3.86	194.22	10.72
192.67	0.50	193.19	2.24	193.71	3.95	194.23	10.89
192.68	0.56	193.20	2.26	193.72	4.04	194.24	11.05
192.69	0.62	193.21	2.28	193.73	4.14	194.25	11.22
192.70	0.67	193.22	2.30	193.74	4.24	194.26	11.38
192.71	0.74	193.23	2.32	193.75	4.34	194.27	11.55
192.72	0.80	193.24	2.34	193.76	4.44	194.28	11.72
192.73	0.86	193.25	2.36	193.77	4.54	194.29	11.89
192.74	0.93	193.26	2.38	193.78	4.65	194.30	12.06
192.75	0.98	193.27	2.40	193.79	4.75	194.31	12.23
192.76	1.03	193.28	2.42	193.80	4.86	194.32	12.40
192.77	1.08	193.29	2.43	193.81	4.97	194.33	12.58
192.78	1.12	193.30	2.45	193.82	5.09	194.34	12.75
192.79	1.16	193.31	2.47	193.83	5.20	194.35	12.93
192.80	1.20	193.32	2.49	193.84	5.32	194.36	13.10
192.81	1.24	193.33	2.51	193.85	5.43	194.37	13.28
192.82	1.28	193.34	2.53	193.86	5.55	194.38	13.46
192.83	1.32	193.35	2.54	193.87	5.67	194.39	13.63
192.84	1.35	193.36	2.56	193.88	5.80	194.40	13.70
192.85	1.38	193.37	2.58	193.89	5.92	194.41	13.73
192.86	1.42	193.38	2.60	193.90	6.05	194.42	13.75
192.87	1.45	193.39	2.61	193.91	6.17	194.43	13.77
192.88	1.48	193.40	2.63	193.92	6.30	194.44	13.80
192.89	1.51	193.41	2.65	193.93	6.43	194.45	13.82
192.90	1.54	193.42	2.67	193.94	6.56	194.46	13.85
192.91	1.57	193.43	2.68	193.95	6.69	194.47	13.87
192.92	1.60	193.44	2.70	193.96	6.83	194.48	13.90
192.93	1.63	193.45	2.72	193.97	6.96	194.49	13.92
192.94	1.66	193.46	2.73	193.98	7.10	194.50	13.94
192.95	1.68	193.47	2.75	193.99	7.24	194.51	13.97
192.96	1.71	193.48	2.77	194.00	7.38	194.52	13.99
192.97	1.74	193.49	2.78	194.01	7.52	194.53	14.02
192.98	1.76	193.50	2.80	194.02	7.66	194.54	14.04
192.99	1.79	193.51	2.81	194.03	7.80	194.55	14.06
193.00	1.81	193.52	2.83	194.04	7.94	194.56	14.09
193.01	1.84	193.53	2.85	194.05	8.09	194.57	14.11
193.02	1.86	193.54	2.86	194.06	8.24	194.58	14.13
193.03	1.89	193.55	2.88	194.07	8.38	194.59	14.16
193.04	1.91	193.56	2.91	194.08	8.53	194.60	14.18
193.05	1.94	193.57	2.95	194.09	8.68	194.61	14.21
193.06	1.96	193.58	2.99	194.10	8.83	194.62	14.23
193.07	1.98	193.59	3.05	194.11	8.98	194.63	14.25
193.08	2.00	193.60	3.10	194.12	9.14	194.64	14.28
193.09	2.03	193.61	3.16	194.13	9.29	194.65	14.30

Stage-Discharge for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Primary (cfs)
194.66	14.32
194.67	14.35
194.68	14.37
194.69	14.39
194.70	14.42
194.71	14.44
194.72	14.46
194.73	14.49
194.74	14.51
194.75	14.53
194.76	14.56
194.77	14.58
194.78	14.60
194.79	14.62
194.80	14.65
194.81	14.67
194.82	14.69
194.83	14.72
194.84	14.74
194.85	14.76
194.86	14.78
194.87	14.81
194.88	14.83
194.89	14.85
194.90	14.87
194.91	14.90
194.92	14.92
194.93	14.94
194.94	14.96
194.95	14.99
194.96	15.13
194.97	15.36
194.98	15.66
194.99	16.01
195.00	16.41
195.01	16.84
195.02	17.32
195.03	17.82
195.04	18.36
195.05	18.93
195.06	19.52
195.07	20.14
195.08	20.79
195.09	21.47
195.10	22.16
195.11	22.89
195.12	23.63
195.13	24.40
195.14	25.18
195.15	25.99
195.16	26.86
195.17	27.75
195.18	28.67
195.19	29.62
195.20	30.59
195.21	31.58
195.22	32.60
195.23	33.65
195.24	34.72
195.25	**35.81**

Stage-Area-Storage for Pond B-36B: Basin #36B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.50	0	0
190.51	42	0
190.52	84	1
190.53	127	2
190.54	169	3
190.55	211	5
190.56	253	8
190.57	295	10
190.58	338	14
190.59	380	17
190.60	422	21
190.61	464	26
190.62	506	30
190.63	549	36
190.64	591	41
190.65	633	47
190.66	675	54
190.67	717	61
190.68	760	68
190.69	802	76
190.70	844	84
190.71	886	93
190.72	928	102
190.73	971	112
190.74	1,013	122
190.75	1,055	132
190.76	1,097	143
190.77	1,139	154
190.78	1,182	165
190.79	1,224	177
190.80	1,266	190
190.81	1,308	203
190.82	1,350	216
190.83	1,393	230
190.84	1,435	244
190.85	1,477	258
190.86	1,519	273
190.87	1,561	289
190.88	1,604	305
190.89	1,646	321
190.90	1,688	338
190.91	1,730	355
190.92	1,772	372
190.93	1,815	390
190.94	1,857	408
190.95	1,899	427
190.96	1,941	446
190.97	1,983	466
190.98	2,026	486
190.99	2,068	507
191.00	2,110	528
191.01	2,118	549
191.02	2,126	570
191.03	2,133	591
191.04	2,141	613
191.05	2,149	634
191.06	2,157	656
191.07	2,165	677
191.08	2,173	699
191.09	2,180	721
191.10	2,188	742
191.11	2,196	764
191.12	2,204	786
191.13	2,212	808
191.14	2,220	831
191.15	2,227	853
191.16	2,235	875
191.17	2,243	898
191.18	2,251	920
191.19	2,259	943
191.20	2,267	965
191.21	2,274	988
191.22	2,282	1,011
191.23	2,290	1,034
191.24	2,298	1,056
191.25	2,306	1,079
191.26	2,314	1,103
191.27	2,321	1,126
191.28	2,329	1,149
191.29	2,337	1,172
191.30	2,345	1,196
191.31	2,353	1,219
191.32	2,361	1,243
191.33	2,368	1,266
191.34	2,376	1,290
191.35	2,384	1,314
191.36	2,392	1,338
191.37	2,400	1,362
191.38	2,408	1,386
191.39	2,415	1,410
191.40	2,423	1,434
191.41	2,431	1,458
191.42	2,439	1,483
191.43	2,447	1,507
191.44	2,455	1,532
191.45	2,462	1,556
191.46	2,470	1,581
191.47	2,478	1,606
191.48	2,486	1,631
191.49	2,494	1,655
191.50	2,502	1,680
191.51	2,509	1,705
191.52	2,517	1,731
191.53	2,525	1,756

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.54	2,533	1,781
191.55	2,541	1,806
191.56	2,548	1,832
191.57	2,556	1,857
191.58	2,564	1,883
191.59	2,572	1,909
191.60	2,580	1,934
191.61	2,588	1,960
191.62	2,595	1,986
191.63	2,603	2,012
191.64	2,611	2,038
191.65	2,619	2,064
191.66	2,627	2,091
191.67	2,635	2,117
191.68	2,642	2,143
191.69	2,650	2,170
191.70	2,658	2,196
191.71	2,666	2,223
191.72	2,674	2,250
191.73	2,682	2,276
191.74	2,689	2,303
191.75	2,697	2,330
191.76	2,705	2,357
191.77	2,713	2,384
191.78	2,721	2,411
191.79	2,729	2,439
191.80	2,736	2,466
191.81	2,744	2,493
191.82	2,752	2,521
191.83	2,760	2,549
191.84	2,768	2,576
191.85	2,776	2,604
191.86	2,783	2,632
191.87	2,791	2,660
191.88	2,799	2,687
191.89	2,807	2,716
191.90	2,815	2,744
191.91	2,823	2,772
191.92	2,830	2,800
191.93	2,838	2,828
191.94	2,846	2,857
191.95	2,854	2,885
191.96	2,862	2,914
191.97	2,870	2,943
191.98	2,877	2,971
191.99	2,885	3,000
192.00	2,893	3,029
192.01	2,901	3,058
192.02	2,910	3,087
192.03	2,918	3,116
192.04	2,926	3,145
192.05	2,935	3,175
192.06	2,943	3,204
192.07	2,952	3,234
192.08	2,960	3,263
192.09	2,968	3,293
192.10	2,977	3,322
192.11	2,985	3,352
192.12	2,993	3,382
192.13	3,002	3,412
192.14	3,010	3,442
192.15	3,019	3,472
192.16	3,027	3,503
192.17	3,035	3,533
192.18	3,044	3,563
192.19	3,052	3,594
192.20	3,060	3,624
192.21	3,069	3,655
192.22	3,077	3,686
192.23	3,086	3,717
192.24	3,094	3,747
192.25	3,102	3,778
192.26	3,111	3,809
192.27	3,119	3,841
192.28	3,127	3,872
192.29	3,136	3,903
192.30	3,144	3,935
192.31	3,152	3,966
192.32	3,161	3,998
192.33	3,169	4,029
192.34	3,178	4,061
192.35	3,186	4,093
192.36	3,194	4,125
192.37	3,203	4,157
192.38	3,211	4,189
192.39	3,219	4,221
192.40	3,228	4,253
192.41	3,236	4,285
192.42	3,245	4,318
192.43	3,253	4,350
192.44	3,261	4,383
192.45	3,270	4,416
192.46	3,278	4,448
192.47	3,286	4,481
192.48	3,295	4,514
192.49	3,303	4,547
192.50	3,312	4,580
192.51	3,320	4,613
192.52	3,328	4,647
192.53	3,337	4,680
192.54	3,345	4,713
192.55	3,353	4,747
192.56	3,362	4,780
192.57	3,370	4,814

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.58	3,378	4,848
192.59	3,387	4,882
192.60	3,395	4,915
192.61	3,404	4,949
192.62	3,412	4,984
192.63	3,420	5,018
192.64	3,429	5,052
192.65	3,437	5,086
192.66	3,445	5,121
192.67	3,454	5,155
192.68	3,462	5,190
192.69	3,471	5,224
192.70	3,479	5,259
192.71	3,487	5,294
192.72	3,496	5,329
192.73	3,504	5,364
192.74	3,512	5,399
192.75	3,521	5,434
192.76	3,529	5,469
192.77	3,537	5,505
192.78	3,546	5,540
192.79	3,554	5,576
192.80	3,563	5,611
192.81	3,571	5,647
192.82	3,579	5,683
192.83	3,588	5,718
192.84	3,596	5,754
192.85	3,604	5,790
192.86	3,613	5,827
192.87	3,621	5,863
192.88	3,630	5,899
192.89	3,638	5,935
192.90	3,646	5,972
192.91	3,655	6,008
192.92	3,663	6,045
192.93	3,671	6,081
192.94	3,680	6,118
192.95	3,688	6,155
192.96	3,697	6,192
192.97	3,705	6,229
192.98	3,713	6,266
192.99	3,722	6,303
193.00	3,730	6,341
193.01	3,738	6,378
193.02	3,746	6,415
193.03	3,755	6,453
193.04	3,763	6,490
193.05	3,771	6,528
193.06	3,779	6,566
193.07	3,787	6,604
193.08	3,795	6,642
193.09	3,804	6,680
193.10	3,812	6,718
193.11	3,820	6,756
193.12	3,828	6,794
193.13	3,836	6,832
193.14	3,844	6,871
193.15	3,853	6,909
193.16	3,861	6,948
193.17	3,869	6,986
193.18	3,877	7,025
193.19	3,885	7,064
193.20	3,893	7,103
193.21	3,902	7,142
193.22	3,910	7,181
193.23	3,918	7,220
193.24	3,926	7,259
193.25	3,934	7,299
193.26	3,942	7,338
193.27	3,951	7,377
193.28	3,959	7,417
193.29	3,967	7,457
193.30	3,975	7,496
193.31	3,983	7,536
193.32	3,991	7,576
193.33	4,000	7,616
193.34	4,008	7,656
193.35	4,016	7,696
193.36	4,024	7,736
193.37	4,032	7,777
193.38	4,040	7,817
193.39	4,049	7,857
193.40	4,057	7,898
193.41	4,065	7,938
193.42	4,073	7,979
193.43	4,081	8,020
193.44	4,089	8,061
193.45	4,098	8,102
193.46	4,106	8,143
193.47	4,114	8,184
193.48	4,122	8,225
193.49	4,130	8,266
193.50	4,139	8,308
193.51	4,147	8,349
193.52	4,155	8,391
193.53	4,163	8,432
193.54	4,171	8,474
193.55	4,179	8,516
193.56	4,188	8,557
193.57	4,196	8,599
193.58	4,204	8,641
193.59	4,212	8,683
193.60	4,220	8,726
193.61	4,228	8,768

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.62	4,237	8,810	194.14	4,660	11,124
193.63	4,245	8,853	194.15	4,668	11,170
193.64	4,253	8,895	194.16	4,676	11,217
193.65	4,261	8,938	194.17	4,685	11,264
193.66	4,269	8,980	194.18	4,693	11,311
193.67	4,277	9,023	194.19	4,701	11,358
193.68	4,286	9,066	194.20	4,709	11,405
193.69	4,294	9,109	194.21	4,717	11,452
193.70	4,302	9,152	194.22	4,725	11,499
193.71	4,310	9,195	194.23	4,733	11,546
193.72	4,318	9,238	194.24	4,741	11,594
193.73	4,326	9,281	194.25	4,749	11,641
193.74	4,335	9,324	194.26	4,757	11,689
193.75	4,343	9,368	194.27	4,765	11,736
193.76	4,351	9,411	194.28	4,774	11,784
193.77	4,359	9,455	194.29	4,782	11,832
193.78	4,367	9,498	194.30	4,790	11,880
193.79	4,375	9,542	194.31	4,798	11,927
193.80	4,384	9,586	194.32	4,806	11,975
193.81	4,392	9,630	194.33	4,814	12,024
193.82	4,400	9,674	194.34	4,822	12,072
193.83	4,408	9,718	194.35	4,830	12,120
193.84	4,416	9,762	194.36	4,838	12,168
193.85	4,424	9,806	194.37	4,846	12,217
193.86	4,433	9,850	194.38	4,854	12,265
193.87	4,441	9,895	194.39	4,863	12,314
193.88	4,449	9,939	194.40	4,871	12,363
193.89	4,457	9,984	194.41	4,879	12,411
193.90	4,465	10,028	194.42	4,887	12,460
193.91	4,473	10,073	194.43	4,895	12,509
193.92	4,482	10,118	194.44	4,903	12,558
193.93	4,490	10,163	194.45	4,911	12,607
193.94	4,498	10,208	194.46	4,919	12,656
193.95	4,506	10,253	194.47	4,927	12,705
193.96	4,514	10,298	194.48	4,935	12,755
193.97	4,522	10,343	194.49	4,943	12,804
193.98	4,531	10,388	194.50	4,952	12,854
193.99	4,539	10,434	194.51	4,960	12,903
194.00	4,547	10,479	194.52	4,968	12,953
194.01	4,555	10,525	194.53	4,976	13,003
194.02	4,563	10,570	194.54	4,984	13,052
194.03	4,571	10,616	194.55	4,992	13,102
194.04	4,579	10,662	194.56	5,000	13,152
194.05	4,587	10,707	194.57	5,008	13,202
194.06	4,596	10,753	194.58	5,016	13,252
194.07	4,604	10,799	194.59	5,024	13,303
194.08	4,612	10,845	194.60	5,032	13,353
194.09	4,620	10,892	194.61	5,040	13,403
194.10	4,628	10,938	194.62	5,049	13,454
194.11	4,636	10,984	194.63	5,057	13,504
194.12	4,644	11,030	194.64	5,065	13,555
194.13	4,652	11,077	194.65	5,073	13,605

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.66	5,081	13,656
194.67	5,089	13,707
194.68	5,097	13,758
194.69	5,105	13,809
194.70	5,113	13,860
194.71	5,121	13,911
194.72	5,129	13,963
194.73	5,138	14,014
194.74	5,146	14,065
194.75	5,154	14,117
194.76	5,162	14,168
194.77	5,170	14,220
194.78	5,178	14,272
194.79	5,186	14,324
194.80	5,194	14,375
194.81	5,202	14,427
194.82	5,210	14,480
194.83	5,218	14,532
194.84	5,227	14,584
194.85	5,235	14,636
194.86	5,243	14,689
194.87	5,251	14,741
194.88	5,259	14,794
194.89	5,267	14,846
194.90	5,275	14,899
194.91	5,283	14,952
194.92	5,291	15,005
194.93	5,299	15,058
194.94	5,307	15,111
194.95	5,316	15,164
194.96	5,324	15,217
194.97	5,332	15,270
194.98	5,340	15,324
194.99	5,348	15,377
195.00	5,356	15,431
195.01	5,386	15,484
195.02	5,417	15,538
195.03	5,447	15,593
195.04	5,477	15,647
195.05	5,507	15,702
195.06	5,538	15,757
195.07	5,568	15,813
195.08	5,598	15,869
195.09	5,629	15,925
195.10	5,659	15,981
195.11	5,689	16,038
195.12	5,719	16,095
195.13	5,750	16,152
195.14	5,780	16,210
195.15	5,810	16,268
195.16	5,840	16,326
195.17	5,871	16,385
195.18	5,901	16,444
195.19	5,931	16,503
195.20	5,962	16,562
195.21	5,992	16,622
195.22	6,022	16,682
195.23	6,052	16,742
195.24	6,083	16,803
195.25	**6,113**	**16,864**

Summary for Pond B-37A: Basin #37A

Inflow Area = 2.154 ac, 39.65% Impervious, Inflow Depth = 4.07" for Future 10 yr event
Inflow = 8.95 cfs @ 12.17 hrs, Volume= 0.731 af
Outflow = 5.37 cfs @ 12.31 hrs, Volume= 0.648 af, Atten= 40%, Lag= 8.2 min
Primary = 5.37 cfs @ 12.31 hrs, Volume= 0.648 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 197.00' @ 12.31 hrs Surf.Area= 5,088 sf Storage= 13,047 cf

Plug-Flow detention time= 222.2 min calculated for 0.648 af (89% of inflow)
Center-of-Mass det. time= 165.1 min (954.6 - 789.4)

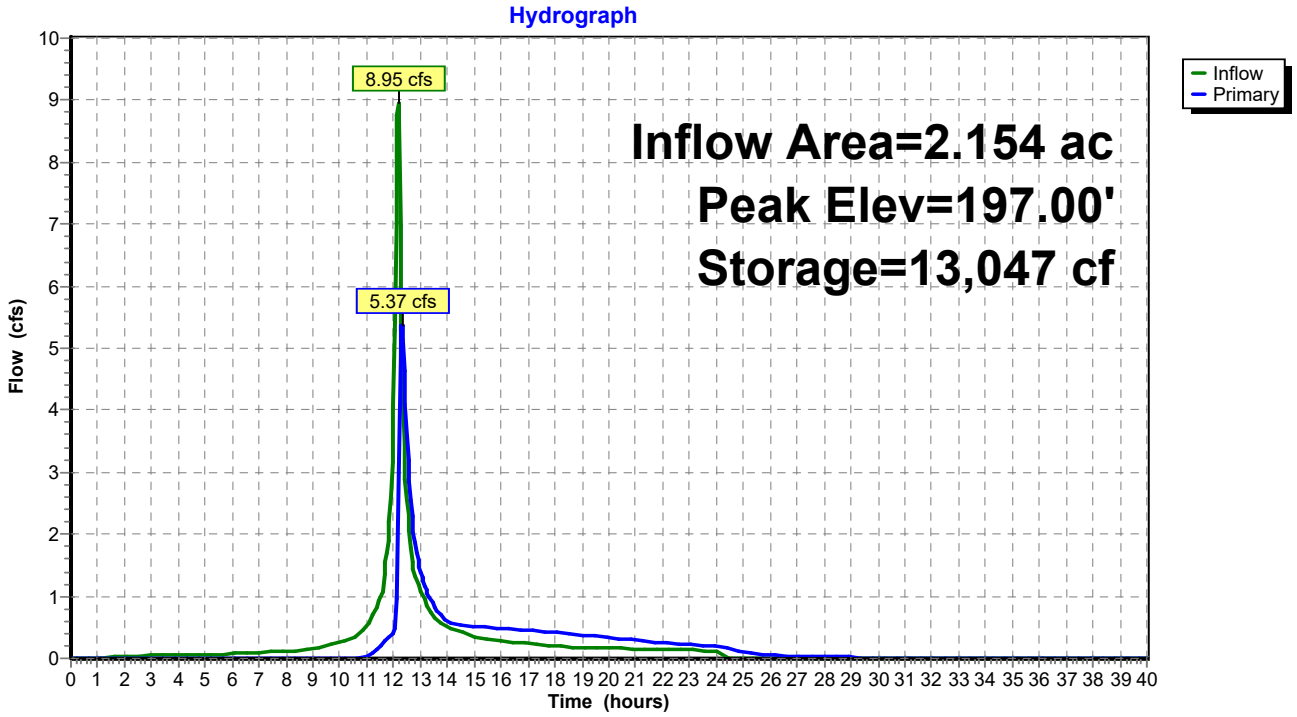
Volume	Invert	Avail.Storage	Storage Description
#1	193.30'	18,546 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.30	0	0	0
194.00	2,990	1,046	1,046
195.00	3,633	3,312	4,358
196.00	4,332	3,983	8,340
197.00	5,089	4,711	13,051
198.00	5,901	5,495	18,546

Device	Routing	Invert	Outlet Devices
#1	Primary	192.65'	**18.0" Round Culvert** L= 265.0' Ke= 0.500 Inlet / Outlet Invert= 192.65' / 191.33' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.77'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	196.48'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.32 cfs @ 12.31 hrs HW=197.00' (Free Discharge)
- **1=Culvert** (Passes 5.32 cfs of 11.49 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.60 cfs @ 6.91 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.72 cfs @ 2.35 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-37A: Basin #37A



Stage-Discharge for Pond B-37A: Basin #37A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.02
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.02
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.03
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.03
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.04
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.04
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.05
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.06
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.06
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.07
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.08
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.08
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.09
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.10
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.10
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.11
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.12
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.13
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.13
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.14
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.15
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.15
193.52	0.00	194.04	0.00	194.56	0.00	195.08	0.16
193.53	0.00	194.05	0.00	194.57	0.00	195.09	0.17
193.54	0.00	194.06	0.00	194.58	0.00	195.10	0.17
193.55	0.00	194.07	0.00	194.59	0.00	195.11	0.17
193.56	0.00	194.08	0.00	194.60	0.00	195.12	0.18
193.57	0.00	194.09	0.00	194.61	0.00	195.13	0.18
193.58	0.00	194.10	0.00	194.62	0.00	195.14	0.19
193.59	0.00	194.11	0.00	194.63	0.00	195.15	0.19
193.60	0.00	194.12	0.00	194.64	0.00	195.16	0.20
193.61	0.00	194.13	0.00	194.65	0.00	195.17	0.20
193.62	0.00	194.14	0.00	194.66	0.00	195.18	0.21
193.63	0.00	194.15	0.00	194.67	0.00	195.19	0.21
193.64	0.00	194.16	0.00	194.68	0.00	195.20	0.22
193.65	0.00	194.17	0.00	194.69	0.00	195.21	0.22
193.66	0.00	194.18	0.00	194.70	0.00	195.22	0.22
193.67	0.00	194.19	0.00	194.71	0.00	195.23	0.23
193.68	0.00	194.20	0.00	194.72	0.00	195.24	0.23
193.69	0.00	194.21	0.00	194.73	0.00	195.25	0.24
193.70	0.00	194.22	0.00	194.74	0.00	195.26	0.24
193.71	0.00	194.23	0.00	194.75	0.00	195.27	0.24
193.72	0.00	194.24	0.00	194.76	0.00	195.28	0.25
193.73	0.00	194.25	0.00	194.77	0.00	195.29	0.25
193.74	0.00	194.26	0.00	194.78	0.00	195.30	0.25
193.75	0.00	194.27	0.00	194.79	0.00	195.31	0.26
193.76	0.00	194.28	0.00	194.80	0.00	195.32	0.26
193.77	0.00	194.29	0.00	194.81	0.00	195.33	0.26
193.78	0.00	194.30	0.00	194.82	0.01	195.34	0.27
193.79	0.00	194.31	0.00	194.83	0.01	195.35	0.27
193.80	0.00	194.32	0.00	194.84	0.01	195.36	0.27
193.81	0.00	194.33	0.00	194.85	0.02	195.37	0.28

Stage-Discharge for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.38	0.28	195.90	0.41	196.42	0.51	196.94	4.58
195.39	0.28	195.91	0.41	196.43	0.51	196.95	4.71
195.40	0.29	195.92	0.42	196.44	0.52	196.96	4.84
195.41	0.29	195.93	0.42	196.45	0.52	196.97	4.98
195.42	0.29	195.94	0.42	196.46	0.52	196.98	5.11
195.43	0.30	195.95	0.42	196.47	0.52	196.99	5.24
195.44	0.30	195.96	0.43	196.48	0.52	197.00	5.38
195.45	0.30	195.97	0.43	196.49	0.54	197.01	5.52
195.46	0.30	195.98	0.43	196.50	0.56	197.02	5.66
195.47	0.31	195.99	0.43	196.51	0.59	197.03	5.80
195.48	0.31	196.00	0.43	196.52	0.63	197.04	5.94
195.49	0.31	196.01	0.44	196.53	0.68	197.05	6.08
195.50	0.32	196.02	0.44	196.54	0.72	197.06	6.22
195.51	0.32	196.03	0.44	196.55	0.78	197.07	6.37
195.52	0.32	196.04	0.44	196.56	0.83	197.08	6.51
195.53	0.32	196.05	0.44	196.57	0.89	197.09	6.66
195.54	0.33	196.06	0.45	196.58	0.95	197.10	6.81
195.55	0.33	196.07	0.45	196.59	1.01	197.11	6.95
195.56	0.33	196.08	0.45	196.60	1.08	197.12	7.10
195.57	0.33	196.09	0.45	196.61	1.15	197.13	7.25
195.58	0.34	196.10	0.45	196.62	1.23	197.14	7.41
195.59	0.34	196.11	0.46	196.63	1.30	197.15	7.56
195.60	0.34	196.12	0.46	196.64	1.38	197.16	7.71
195.61	0.34	196.13	0.46	196.65	1.46	197.17	7.87
195.62	0.35	196.14	0.46	196.66	1.54	197.18	8.02
195.63	0.35	196.15	0.46	196.67	1.63	197.19	8.18
195.64	0.35	196.16	0.46	196.68	1.71	197.20	8.34
195.65	0.35	196.17	0.47	196.69	1.80	197.21	8.49
195.66	0.36	196.18	0.47	196.70	1.89	197.22	8.65
195.67	0.36	196.19	0.47	196.71	1.99	197.23	8.81
195.68	0.36	196.20	0.47	196.72	2.08	197.24	8.97
195.69	0.36	196.21	0.47	196.73	2.18	197.25	9.14
195.70	0.37	196.22	0.48	196.74	2.28	197.26	9.30
195.71	0.37	196.23	0.48	196.75	2.38	197.27	9.46
195.72	0.37	196.24	0.48	196.76	2.48	197.28	9.63
195.73	0.37	196.25	0.48	196.77	2.58	197.29	9.79
195.74	0.38	196.26	0.48	196.78	2.69	197.30	9.96
195.75	0.38	196.27	0.49	196.79	2.79	197.31	10.13
195.76	0.38	196.28	0.49	196.80	2.90	197.32	10.30
195.77	0.38	196.29	0.49	196.81	3.01	197.33	10.46
195.78	0.39	196.30	0.49	196.82	3.13	197.34	10.63
195.79	0.39	196.31	0.49	196.83	3.24	197.35	10.81
195.80	0.39	196.32	0.49	196.84	3.35	197.36	10.98
195.81	0.39	196.33	0.50	196.85	3.47	197.37	11.15
195.82	0.39	196.34	0.50	196.86	3.59	197.38	11.32
195.83	0.40	196.35	0.50	196.87	3.71	197.39	11.50
195.84	0.40	196.36	0.50	196.88	3.83	197.40	11.67
195.85	0.40	196.37	0.50	196.89	3.95	197.41	11.85
195.86	0.40	196.38	0.50	196.90	4.07	197.42	12.02
195.87	0.41	196.39	0.51	196.91	4.20	197.43	12.07
195.88	0.41	196.40	0.51	196.92	4.33	197.44	12.09
195.89	0.41	196.41	0.51	196.93	4.45	197.45	12.10

Stage-Discharge for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Primary (cfs)
197.46	12.11
197.47	12.13
197.48	12.14
197.49	12.15
197.50	12.17
197.51	12.18
197.52	12.19
197.53	12.20
197.54	12.22
197.55	12.23
197.56	12.24
197.57	12.26
197.58	12.27
197.59	12.28
197.60	12.29
197.61	12.31
197.62	12.32
197.63	12.33
197.64	12.35
197.65	12.36
197.66	12.37
197.67	12.38
197.68	12.40
197.69	12.41
197.70	12.42
197.71	12.44
197.72	12.45
197.73	12.46
197.74	12.47
197.75	12.49
197.76	12.50
197.77	12.51
197.78	12.52
197.79	12.54
197.80	12.55
197.81	12.56
197.82	12.57
197.83	12.59
197.84	12.60
197.85	12.61
197.86	12.63
197.87	12.64
197.88	12.65
197.89	12.66
197.90	12.68
197.91	12.69
197.92	12.70
197.93	12.71
197.94	12.73
197.95	12.74
197.96	12.87
197.97	13.09
197.98	13.38
197.99	13.73
198.00	**14.11**

Stage-Area-Storage for Pond B-37A: Basin #37A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.30	0	0
193.31	43	0
193.32	85	1
193.33	128	2
193.34	171	3
193.35	214	5
193.36	256	8
193.37	299	10
193.38	342	14
193.39	384	17
193.40	427	21
193.41	470	26
193.42	513	31
193.43	555	36
193.44	598	42
193.45	641	48
193.46	683	55
193.47	726	62
193.48	769	69
193.49	812	77
193.50	854	85
193.51	897	94
193.52	940	103
193.53	982	113
193.54	1,025	123
193.55	1,068	133
193.56	1,111	144
193.57	1,153	156
193.58	1,196	167
193.59	1,239	180
193.60	1,281	192
193.61	1,324	205
193.62	1,367	219
193.63	1,410	233
193.64	1,452	247
193.65	1,495	262
193.66	1,538	277
193.67	1,580	292
193.68	1,623	308
193.69	1,666	325
193.70	1,709	342
193.71	1,751	359
193.72	1,794	377
193.73	1,837	395
193.74	1,879	413
193.75	1,922	432
193.76	1,965	452
193.77	2,008	472
193.78	2,050	492
193.79	2,093	513
193.80	2,136	534
193.81	2,178	555
193.82	2,221	577
193.83	2,264	600
193.84	2,307	623
193.85	2,349	646
193.86	2,392	670
193.87	2,435	694
193.88	2,477	718
193.89	2,520	743
193.90	2,563	769
193.91	2,606	795
193.92	2,648	821
193.93	2,691	848
193.94	2,734	875
193.95	2,776	902
193.96	2,819	930
193.97	2,862	959
193.98	2,905	988
193.99	2,947	1,017
194.00	2,990	1,046
194.01	2,996	1,076
194.02	3,003	1,106
194.03	3,009	1,136
194.04	3,016	1,167
194.05	3,022	1,197
194.06	3,029	1,227
194.07	3,035	1,257
194.08	3,041	1,288
194.09	3,048	1,318
194.10	3,054	1,349
194.11	3,061	1,379
194.12	3,067	1,410
194.13	3,074	1,441
194.14	3,080	1,471
194.15	3,086	1,502
194.16	3,093	1,533
194.17	3,099	1,564
194.18	3,106	1,595
194.19	3,112	1,626
194.20	3,119	1,657
194.21	3,125	1,689
194.22	3,131	1,720
194.23	3,138	1,751
194.24	3,144	1,783
194.25	3,151	1,814
194.26	3,157	1,846
194.27	3,164	1,877
194.28	3,170	1,909
194.29	3,176	1,941
194.30	3,183	1,972
194.31	3,189	2,004
194.32	3,196	2,036
194.33	3,202	2,068

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.34	3,209	2,100
194.35	3,215	2,132
194.36	3,221	2,165
194.37	3,228	2,197
194.38	3,234	2,229
194.39	3,241	2,262
194.40	3,247	2,294
194.41	3,254	2,326
194.42	3,260	2,359
194.43	3,266	2,392
194.44	3,273	2,424
194.45	3,279	2,457
194.46	3,286	2,490
194.47	3,292	2,523
194.48	3,299	2,556
194.49	3,305	2,589
194.50	3,312	2,622
194.51	3,318	2,655
194.52	3,324	2,688
194.53	3,331	2,722
194.54	3,337	2,755
194.55	3,344	2,788
194.56	3,350	2,822
194.57	3,357	2,855
194.58	3,363	2,889
194.59	3,369	2,923
194.60	3,376	2,956
194.61	3,382	2,990
194.62	3,389	3,024
194.63	3,395	3,058
194.64	3,402	3,092
194.65	3,408	3,126
194.66	3,414	3,160
194.67	3,421	3,194
194.68	3,427	3,228
194.69	3,434	3,263
194.70	3,440	3,297
194.71	3,447	3,331
194.72	3,453	3,366
194.73	3,459	3,401
194.74	3,466	3,435
194.75	3,472	3,470
194.76	3,479	3,505
194.77	3,485	3,539
194.78	3,492	3,574
194.79	3,498	3,609
194.80	3,504	3,644
194.81	3,511	3,679
194.82	3,517	3,714
194.83	3,524	3,750
194.84	3,530	3,785
194.85	3,537	3,820
194.86	3,543	3,856
194.87	3,549	3,891
194.88	3,556	3,927
194.89	3,562	3,962
194.90	3,569	3,998
194.91	3,575	4,034
194.92	3,582	4,069
194.93	3,588	4,105
194.94	3,594	4,141
194.95	3,601	4,177
194.96	3,607	4,213
194.97	3,614	4,249
194.98	3,620	4,285
194.99	3,627	4,322
195.00	3,633	4,358
195.01	3,640	4,394
195.02	3,647	4,431
195.03	3,654	4,467
195.04	3,661	4,504
195.05	3,668	4,541
195.06	3,675	4,577
195.07	3,682	4,614
195.08	3,689	4,651
195.09	3,696	4,688
195.10	3,703	4,725
195.11	3,710	4,762
195.12	3,717	4,799
195.13	3,724	4,836
195.14	3,731	4,873
195.15	3,738	4,911
195.16	3,745	4,948
195.17	3,752	4,986
195.18	3,759	5,023
195.19	3,766	5,061
195.20	3,773	5,099
195.21	3,780	5,136
195.22	3,787	5,174
195.23	3,794	5,212
195.24	3,801	5,250
195.25	3,808	5,288
195.26	3,815	5,326
195.27	3,822	5,364
195.28	3,829	5,403
195.29	3,836	5,441
195.30	3,843	5,479
195.31	3,850	5,518
195.32	3,857	5,556
195.33	3,864	5,595
195.34	3,871	5,634
195.35	3,878	5,672
195.36	3,885	5,711
195.37	3,892	5,750

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.38	3,899	5,789	195.90	4,262	7,911
195.39	3,906	5,828	195.91	4,269	7,953
195.40	3,913	5,867	195.92	4,276	7,996
195.41	3,920	5,906	195.93	4,283	8,039
195.42	3,927	5,946	195.94	4,290	8,082
195.43	3,934	5,985	195.95	4,297	8,125
195.44	3,941	6,024	195.96	4,304	8,168
195.45	3,948	6,064	195.97	4,311	8,211
195.46	3,955	6,103	195.98	4,318	8,254
195.47	3,962	6,143	195.99	4,325	8,297
195.48	3,969	6,182	196.00	4,332	8,340
195.49	3,976	6,222	196.01	4,340	8,384
195.50	3,983	6,262	196.02	4,347	8,427
195.51	3,989	6,302	196.03	4,355	8,471
195.52	3,996	6,342	196.04	4,362	8,514
195.53	4,003	6,382	196.05	4,370	8,558
195.54	4,010	6,422	196.06	4,377	8,602
195.55	4,017	6,462	196.07	4,385	8,646
195.56	4,024	6,502	196.08	4,393	8,689
195.57	4,031	6,542	196.09	4,400	8,733
195.58	4,038	6,583	196.10	4,408	8,777
195.59	4,045	6,623	196.11	4,415	8,822
195.60	4,052	6,664	196.12	4,423	8,866
195.61	4,059	6,704	196.13	4,430	8,910
195.62	4,066	6,745	196.14	4,438	8,954
195.63	4,073	6,786	196.15	4,446	8,999
195.64	4,080	6,826	196.16	4,453	9,043
195.65	4,087	6,867	196.17	4,461	9,088
195.66	4,094	6,908	196.18	4,468	9,133
195.67	4,101	6,949	196.19	4,476	9,177
195.68	4,108	6,990	196.20	4,483	9,222
195.69	4,115	7,031	196.21	4,491	9,267
195.70	4,122	7,072	196.22	4,499	9,312
195.71	4,129	7,114	196.23	4,506	9,357
195.72	4,136	7,155	196.24	4,514	9,402
195.73	4,143	7,196	196.25	4,521	9,447
195.74	4,150	7,238	196.26	4,529	9,492
195.75	4,157	7,279	196.27	4,536	9,538
195.76	4,164	7,321	196.28	4,544	9,583
195.77	4,171	7,363	196.29	4,552	9,629
195.78	4,178	7,404	196.30	4,559	9,674
195.79	4,185	7,446	196.31	4,567	9,720
195.80	4,192	7,488	196.32	4,574	9,765
195.81	4,199	7,530	196.33	4,582	9,811
195.82	4,206	7,572	196.34	4,589	9,857
195.83	4,213	7,614	196.35	4,597	9,903
195.84	4,220	7,656	196.36	4,605	9,949
195.85	4,227	7,699	196.37	4,612	9,995
195.86	4,234	7,741	196.38	4,620	10,041
195.87	4,241	7,783	196.39	4,627	10,088
195.88	4,248	7,826	196.40	4,635	10,134
195.89	4,255	7,868	196.41	4,642	10,180

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.42	4,650	10,227	196.94	5,044	12,747
196.43	4,658	10,273	196.95	5,051	12,797
196.44	4,665	10,320	196.96	5,059	12,848
196.45	4,673	10,367	196.97	5,066	12,899
196.46	4,680	10,413	196.98	5,074	12,949
196.47	4,688	10,460	196.99	5,081	13,000
196.48	4,695	10,507	197.00	5,089	13,051
196.49	4,703	10,554	197.01	5,097	13,102
196.50	4,711	10,601	197.02	5,105	13,153
196.51	4,718	10,648	197.03	5,113	13,204
196.52	4,726	10,695	197.04	5,121	13,255
196.53	4,733	10,743	197.05	5,130	13,306
196.54	4,741	10,790	197.06	5,138	13,358
196.55	4,748	10,838	197.07	5,146	13,409
196.56	4,756	10,885	197.08	5,154	13,461
196.57	4,763	10,933	197.09	5,162	13,512
196.58	4,771	10,980	197.10	5,170	13,564
196.59	4,779	11,028	197.11	5,178	13,616
196.60	4,786	11,076	197.12	5,186	13,668
196.61	4,794	11,124	197.13	5,195	13,719
196.62	4,801	11,172	197.14	5,203	13,771
196.63	4,809	11,220	197.15	5,211	13,823
196.64	4,816	11,268	197.16	5,219	13,876
196.65	4,824	11,316	197.17	5,227	13,928
196.66	4,832	11,364	197.18	5,235	13,980
196.67	4,839	11,413	197.19	5,243	14,033
196.68	4,847	11,461	197.20	5,251	14,085
196.69	4,854	11,510	197.21	5,260	14,138
196.70	4,862	11,558	197.22	5,268	14,190
196.71	4,869	11,607	197.23	5,276	14,243
196.72	4,877	11,656	197.24	5,284	14,296
196.73	4,885	11,705	197.25	5,292	14,349
196.74	4,892	11,753	197.26	5,300	14,402
196.75	4,900	11,802	197.27	5,308	14,455
196.76	4,907	11,851	197.28	5,316	14,508
196.77	4,915	11,901	197.29	5,324	14,561
196.78	4,922	11,950	197.30	5,333	14,614
196.79	4,930	11,999	197.31	5,341	14,668
196.80	4,938	12,048	197.32	5,349	14,721
196.81	4,945	12,098	197.33	5,357	14,775
196.82	4,953	12,147	197.34	5,365	14,828
196.83	4,960	12,197	197.35	5,373	14,882
196.84	4,968	12,246	197.36	5,381	14,936
196.85	4,975	12,296	197.37	5,389	14,990
196.86	4,983	12,346	197.38	5,398	15,043
196.87	4,991	12,396	197.39	5,406	15,097
196.88	4,998	12,446	197.40	5,414	15,152
196.89	5,006	12,496	197.41	5,422	15,206
196.90	5,013	12,546	197.42	5,430	15,260
196.91	5,021	12,596	197.43	5,438	15,314
196.92	5,028	12,646	197.44	5,446	15,369
196.93	5,036	12,697	197.45	5,454	15,423

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.46	5,463	15,478
197.47	5,471	15,533
197.48	5,479	15,587
197.49	5,487	15,642
197.50	5,495	15,697
197.51	5,503	15,752
197.52	5,511	15,807
197.53	5,519	15,862
197.54	5,527	15,917
197.55	5,536	15,973
197.56	5,544	16,028
197.57	5,552	16,084
197.58	5,560	16,139
197.59	5,568	16,195
197.60	5,576	16,251
197.61	5,584	16,306
197.62	5,592	16,362
197.63	5,601	16,418
197.64	5,609	16,474
197.65	5,617	16,530
197.66	5,625	16,587
197.67	5,633	16,643
197.68	5,641	16,699
197.69	5,649	16,756
197.70	5,657	16,812
197.71	5,666	16,869
197.72	5,674	16,926
197.73	5,682	16,982
197.74	5,690	17,039
197.75	5,698	17,096
197.76	5,706	17,153
197.77	5,714	17,210
197.78	5,722	17,267
197.79	5,730	17,325
197.80	5,739	17,382
197.81	5,747	17,439
197.82	5,755	17,497
197.83	5,763	17,555
197.84	5,771	17,612
197.85	5,779	17,670
197.86	5,787	17,728
197.87	5,795	17,786
197.88	5,804	17,844
197.89	5,812	17,902
197.90	5,820	17,960
197.91	5,828	18,018
197.92	5,836	18,077
197.93	5,844	18,135
197.94	5,852	18,193
197.95	5,860	18,252
197.96	5,869	18,311
197.97	5,877	18,369
197.98	5,885	18,428
197.99	5,893	18,487
198.00	**5,901**	**18,546**

Summary for Pond B-37B: Basin #37B

Inflow Area = 2.179 ac, 53.42% Impervious, Inflow Depth = 4.42" for Future 10 yr event
Inflow = 9.64 cfs @ 12.17 hrs, Volume= 0.803 af
Outflow = 3.87 cfs @ 12.39 hrs, Volume= 0.671 af, Atten= 60%, Lag= 13.3 min
Primary = 3.87 cfs @ 12.39 hrs, Volume= 0.671 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 197.06' @ 12.39 hrs Surf.Area= 6,997 sf Storage= 17,563 cf

Plug-Flow detention time= 455.3 min calculated for 0.670 af (83% of inflow)
Center-of-Mass det. time= 383.3 min (1,161.3 - 778.0)

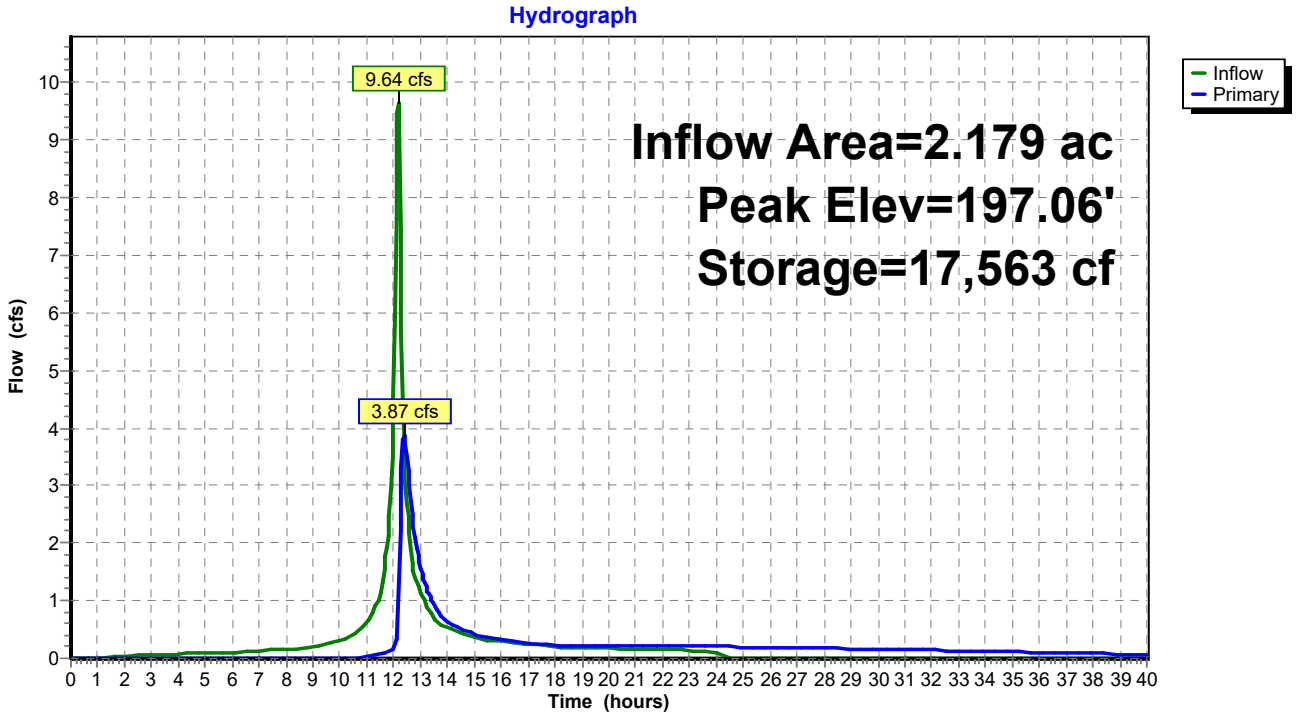
Volume	Invert	Avail.Storage	Storage Description
#1	193.30'	24,651 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.30	0	0	0
194.00	3,709	1,298	1,298
195.00	4,724	4,217	5,515
196.00	5,796	5,260	10,775
197.00	6,924	6,360	17,135
198.00	8,108	7,516	24,651

Device	Routing	Invert	Outlet Devices
#1	Primary	192.65'	**18.0" Round Culvert** L= 265.0' Ke= 0.500 Inlet / Outlet Invert= 192.65' / 191.33' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.81'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	196.63'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.85 cfs @ 12.39 hrs HW=197.06' (Free Discharge)
- **1=Culvert** (Passes 3.85 cfs of 11.58 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.24 cfs @ 7.05 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.61 cfs @ 2.15 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-37B: Basin #37B



Stage-Discharge for Pond B-37B: Basin #37B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.01
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.01
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.01
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.01
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.02
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.02
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.02
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.03
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.03
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.03
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.04
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.04
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.05
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.05
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.05
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.05
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.06
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.06
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.06
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.06
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.06
193.52	0.00	194.04	0.00	194.56	0.00	195.08	0.07
193.53	0.00	194.05	0.00	194.57	0.00	195.09	0.07
193.54	0.00	194.06	0.00	194.58	0.00	195.10	0.07
193.55	0.00	194.07	0.00	194.59	0.00	195.11	0.07
193.56	0.00	194.08	0.00	194.60	0.00	195.12	0.07
193.57	0.00	194.09	0.00	194.61	0.00	195.13	0.08
193.58	0.00	194.10	0.00	194.62	0.00	195.14	0.08
193.59	0.00	194.11	0.00	194.63	0.00	195.15	0.08
193.60	0.00	194.12	0.00	194.64	0.00	195.16	0.08
193.61	0.00	194.13	0.00	194.65	0.00	195.17	0.08
193.62	0.00	194.14	0.00	194.66	0.00	195.18	0.08
193.63	0.00	194.15	0.00	194.67	0.00	195.19	0.09
193.64	0.00	194.16	0.00	194.68	0.00	195.20	0.09
193.65	0.00	194.17	0.00	194.69	0.00	195.21	0.09
193.66	0.00	194.18	0.00	194.70	0.00	195.22	0.09
193.67	0.00	194.19	0.00	194.71	0.00	195.23	0.09
193.68	0.00	194.20	0.00	194.72	0.00	195.24	0.09
193.69	0.00	194.21	0.00	194.73	0.00	195.25	0.10
193.70	0.00	194.22	0.00	194.74	0.00	195.26	0.10
193.71	0.00	194.23	0.00	194.75	0.00	195.27	0.10
193.72	0.00	194.24	0.00	194.76	0.00	195.28	0.10
193.73	0.00	194.25	0.00	194.77	0.00	195.29	0.10
193.74	0.00	194.26	0.00	194.78	0.00	195.30	0.10
193.75	0.00	194.27	0.00	194.79	0.00	195.31	0.10
193.76	0.00	194.28	0.00	194.80	0.00	195.32	0.10
193.77	0.00	194.29	0.00	194.81	0.00	195.33	0.11
193.78	0.00	194.30	0.00	194.82	0.00	195.34	0.11
193.79	0.00	194.31	0.00	194.83	0.00	195.35	0.11
193.80	0.00	194.32	0.00	194.84	0.00	195.36	0.11
193.81	0.00	194.33	0.00	194.85	0.00	195.37	0.11

Stage-Discharge for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.38	0.11	195.90	0.16	196.42	0.20	196.94	2.46
195.39	0.11	195.91	0.16	196.43	0.20	196.95	2.56
195.40	0.11	195.92	0.16	196.44	0.20	196.96	2.67
195.41	0.12	195.93	0.17	196.45	0.20	196.97	2.78
195.42	0.12	195.94	0.17	196.46	0.20	196.98	2.90
195.43	0.12	195.95	0.17	196.47	0.20	196.99	3.01
195.44	0.12	195.96	0.17	196.48	0.21	197.00	3.13
195.45	0.12	195.97	0.17	196.49	0.21	197.01	3.24
195.46	0.12	195.98	0.17	196.50	0.21	197.02	3.36
195.47	0.12	195.99	0.17	196.51	0.21	197.03	3.48
195.48	0.12	196.00	0.17	196.52	0.21	197.04	3.60
195.49	0.12	196.01	0.17	196.53	0.21	197.05	3.73
195.50	0.13	196.02	0.17	196.54	0.21	197.06	3.85
195.51	0.13	196.03	0.17	196.55	0.21	197.07	3.97
195.52	0.13	196.04	0.17	196.56	0.21	197.08	4.10
195.53	0.13	196.05	0.17	196.57	0.21	197.09	4.23
195.54	0.13	196.06	0.18	196.58	0.21	197.10	4.36
195.55	0.13	196.07	0.18	196.59	0.21	197.11	4.49
195.56	0.13	196.08	0.18	196.60	0.21	197.12	4.62
195.57	0.13	196.09	0.18	196.61	0.21	197.13	4.75
195.58	0.13	196.10	0.18	196.62	0.21	197.14	4.89
195.59	0.13	196.11	0.18	196.63	0.22	197.15	5.02
195.60	0.14	196.12	0.18	196.64	0.23	197.16	5.16
195.61	0.14	196.13	0.18	196.65	0.25	197.17	5.30
195.62	0.14	196.14	0.18	196.66	0.28	197.18	5.44
195.63	0.14	196.15	0.18	196.67	0.32	197.19	5.58
195.64	0.14	196.16	0.18	196.68	0.36	197.20	5.72
195.65	0.14	196.17	0.18	196.69	0.41	197.21	5.86
195.66	0.14	196.18	0.18	196.70	0.46	197.22	6.00
195.67	0.14	196.19	0.19	196.71	0.51	197.23	6.15
195.68	0.14	196.20	0.19	196.72	0.57	197.24	6.29
195.69	0.14	196.21	0.19	196.73	0.63	197.25	6.44
195.70	0.15	196.22	0.19	196.74	0.70	197.26	6.59
195.71	0.15	196.23	0.19	196.75	0.76	197.27	6.73
195.72	0.15	196.24	0.19	196.76	0.83	197.28	6.88
195.73	0.15	196.25	0.19	196.77	0.90	197.29	7.03
195.74	0.15	196.26	0.19	196.78	0.98	197.30	7.19
195.75	0.15	196.27	0.19	196.79	1.06	197.31	7.34
195.76	0.15	196.28	0.19	196.80	1.13	197.32	7.49
195.77	0.15	196.29	0.19	196.81	1.22	197.33	7.65
195.78	0.15	196.30	0.19	196.82	1.30	197.34	7.80
195.79	0.15	196.31	0.19	196.83	1.39	197.35	7.96
195.80	0.15	196.32	0.19	196.84	1.47	197.36	8.12
195.81	0.16	196.33	0.20	196.85	1.56	197.37	8.28
195.82	0.16	196.34	0.20	196.86	1.66	197.38	8.43
195.83	0.16	196.35	0.20	196.87	1.75	197.39	8.60
195.84	0.16	196.36	0.20	196.88	1.84	197.40	8.76
195.85	0.16	196.37	0.20	196.89	1.94	197.41	8.92
195.86	0.16	196.38	0.20	196.90	2.04	197.42	9.08
195.87	0.16	196.39	0.20	196.91	2.14	197.43	9.25
195.88	0.16	196.40	0.20	196.92	2.25	197.44	9.41
195.89	0.16	196.41	0.20	196.93	2.35	197.45	9.58

Stage-Discharge for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Primary (cfs)
197.46	9.74
197.47	9.91
197.48	10.08
197.49	10.25
197.50	10.42
197.51	10.59
197.52	10.76
197.53	10.93
197.54	11.10
197.55	11.28
197.56	11.45
197.57	11.63
197.58	11.80
197.59	11.98
197.60	12.16
197.61	12.31
197.62	12.32
197.63	12.33
197.64	12.35
197.65	12.36
197.66	12.37
197.67	12.38
197.68	12.40
197.69	12.41
197.70	12.42
197.71	12.44
197.72	12.45
197.73	12.46
197.74	12.47
197.75	12.49
197.76	12.50
197.77	12.51
197.78	12.52
197.79	12.54
197.80	12.55
197.81	12.56
197.82	12.57
197.83	12.59
197.84	12.60
197.85	12.61
197.86	12.63
197.87	12.64
197.88	12.65
197.89	12.66
197.90	12.68
197.91	12.69
197.92	12.70
197.93	12.71
197.94	12.73
197.95	12.74
197.96	12.87
197.97	13.09
197.98	13.38
197.99	13.73
198.00	**14.11**

Stage-Area-Storage for Pond B-37B: Basin #37B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.30	0	0
193.31	53	0
193.32	106	1
193.33	159	2
193.34	212	4
193.35	265	7
193.36	318	10
193.37	371	13
193.38	424	17
193.39	477	21
193.40	530	26
193.41	583	32
193.42	636	38
193.43	689	45
193.44	742	52
193.45	795	60
193.46	848	68
193.47	901	77
193.48	954	86
193.49	1,007	96
193.50	1,060	106
193.51	1,113	117
193.52	1,166	128
193.53	1,219	140
193.54	1,272	153
193.55	1,325	166
193.56	1,378	179
193.57	1,431	193
193.58	1,484	208
193.59	1,537	223
193.60	1,590	238
193.61	1,643	255
193.62	1,696	271
193.63	1,749	289
193.64	1,802	306
193.65	1,855	325
193.66	1,907	343
193.67	1,960	363
193.68	2,013	383
193.69	2,066	403
193.70	2,119	424
193.71	2,172	445
193.72	2,225	467
193.73	2,278	490
193.74	2,331	513
193.75	2,384	536
193.76	2,437	561
193.77	2,490	585
193.78	2,543	610
193.79	2,596	636
193.80	2,649	662
193.81	2,702	689
193.82	2,755	716
193.83	2,808	744
193.84	2,861	773
193.85	2,914	801
193.86	2,967	831
193.87	3,020	861
193.88	3,073	891
193.89	3,126	922
193.90	3,179	954
193.91	3,232	986
193.92	3,285	1,018
193.93	3,338	1,052
193.94	3,391	1,085
193.95	3,444	1,119
193.96	3,497	1,154
193.97	3,550	1,189
193.98	3,603	1,225
193.99	3,656	1,261
194.00	3,709	1,298
194.01	3,719	1,335
194.02	3,729	1,373
194.03	3,739	1,410
194.04	3,750	1,447
194.05	3,760	1,485
194.06	3,770	1,523
194.07	3,780	1,560
194.08	3,790	1,598
194.09	3,800	1,636
194.10	3,811	1,674
194.11	3,821	1,712
194.12	3,831	1,751
194.13	3,841	1,789
194.14	3,851	1,827
194.15	3,861	1,866
194.16	3,871	1,905
194.17	3,882	1,943
194.18	3,892	1,982
194.19	3,902	2,021
194.20	3,912	2,060
194.21	3,922	2,099
194.22	3,932	2,139
194.23	3,942	2,178
194.24	3,953	2,218
194.25	3,963	2,257
194.26	3,973	2,297
194.27	3,983	2,337
194.28	3,993	2,376
194.29	4,003	2,416
194.30	4,014	2,457
194.31	4,024	2,497
194.32	4,034	2,537
194.33	4,044	2,577

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.34	4,054	2,618
194.35	4,064	2,658
194.36	4,074	2,699
194.37	4,085	2,740
194.38	4,095	2,781
194.39	4,105	2,822
194.40	4,115	2,863
194.41	4,125	2,904
194.42	4,135	2,945
194.43	4,145	2,987
194.44	4,156	3,028
194.45	4,166	3,070
194.46	4,176	3,112
194.47	4,186	3,153
194.48	4,196	3,195
194.49	4,206	3,237
194.50	4,217	3,280
194.51	4,227	3,322
194.52	4,237	3,364
194.53	4,247	3,406
194.54	4,257	3,449
194.55	4,267	3,492
194.56	4,277	3,534
194.57	4,288	3,577
194.58	4,298	3,620
194.59	4,308	3,663
194.60	4,318	3,706
194.61	4,328	3,749
194.62	4,338	3,793
194.63	4,348	3,836
194.64	4,359	3,880
194.65	4,369	3,923
194.66	4,379	3,967
194.67	4,389	4,011
194.68	4,399	4,055
194.69	4,409	4,099
194.70	4,420	4,143
194.71	4,430	4,187
194.72	4,440	4,232
194.73	4,450	4,276
194.74	4,460	4,321
194.75	4,470	4,365
194.76	4,480	4,410
194.77	4,491	4,455
194.78	4,501	4,500
194.79	4,511	4,545
194.80	4,521	4,590
194.81	4,531	4,635
194.82	4,541	4,681
194.83	4,551	4,726
194.84	4,562	4,772
194.85	4,572	4,817
194.86	4,582	4,863
194.87	4,592	4,909
194.88	4,602	4,955
194.89	4,612	5,001
194.90	4,623	5,047
194.91	4,633	5,094
194.92	4,643	5,140
194.93	4,653	5,186
194.94	4,663	5,233
194.95	4,673	5,280
194.96	4,683	5,327
194.97	4,694	5,373
194.98	4,704	5,420
194.99	4,714	5,467
195.00	4,724	5,515
195.01	4,735	5,562
195.02	4,745	5,609
195.03	4,756	5,657
195.04	4,767	5,704
195.05	4,778	5,752
195.06	4,788	5,800
195.07	4,799	5,848
195.08	4,810	5,896
195.09	4,820	5,944
195.10	4,831	5,992
195.11	4,842	6,041
195.12	4,853	6,089
195.13	4,863	6,138
195.14	4,874	6,187
195.15	4,885	6,235
195.16	4,896	6,284
195.17	4,906	6,333
195.18	4,917	6,382
195.19	4,928	6,432
195.20	4,938	6,481
195.21	4,949	6,530
195.22	4,960	6,580
195.23	4,971	6,630
195.24	4,981	6,679
195.25	4,992	6,729
195.26	5,003	6,779
195.27	5,013	6,829
195.28	5,024	6,879
195.29	5,035	6,930
195.30	5,046	6,980
195.31	5,056	7,031
195.32	5,067	7,081
195.33	5,078	7,132
195.34	5,088	7,183
195.35	5,099	7,234
195.36	5,110	7,285
195.37	5,121	7,336

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.38	5,131	7,387	195.90	5,689	10,200
195.39	5,142	7,439	195.91	5,700	10,257
195.40	5,153	7,490	195.92	5,710	10,314
195.41	5,164	7,542	195.93	5,721	10,372
195.42	5,174	7,593	195.94	5,732	10,429
195.43	5,185	7,645	195.95	5,742	10,486
195.44	5,196	7,697	195.96	5,753	10,544
195.45	5,206	7,749	195.97	5,764	10,601
195.46	5,217	7,801	195.98	5,775	10,659
195.47	5,228	7,853	195.99	5,785	10,717
195.48	5,239	7,906	196.00	5,796	10,775
195.49	5,249	7,958	196.01	5,807	10,833
195.50	5,260	8,011	196.02	5,819	10,891
195.51	5,271	8,063	196.03	5,830	10,949
195.52	5,281	8,116	196.04	5,841	11,007
195.53	5,292	8,169	196.05	5,852	11,066
195.54	5,303	8,222	196.06	5,864	11,124
195.55	5,314	8,275	196.07	5,875	11,183
195.56	5,324	8,328	196.08	5,886	11,242
195.57	5,335	8,381	196.09	5,898	11,301
195.58	5,346	8,435	196.10	5,909	11,360
195.59	5,356	8,488	196.11	5,920	11,419
195.60	5,367	8,542	196.12	5,931	11,478
195.61	5,378	8,596	196.13	5,943	11,538
195.62	5,389	8,650	196.14	5,954	11,597
195.63	5,399	8,704	196.15	5,965	11,657
195.64	5,410	8,758	196.16	5,976	11,716
195.65	5,421	8,812	196.17	5,988	11,776
195.66	5,432	8,866	196.18	5,999	11,836
195.67	5,442	8,920	196.19	6,010	11,896
195.68	5,453	8,975	196.20	6,022	11,956
195.69	5,464	9,029	196.21	6,033	12,017
195.70	5,474	9,084	196.22	6,044	12,077
195.71	5,485	9,139	196.23	6,055	12,138
195.72	5,496	9,194	196.24	6,067	12,198
195.73	5,507	9,249	196.25	6,078	12,259
195.74	5,517	9,304	196.26	6,089	12,320
195.75	5,528	9,359	196.27	6,101	12,381
195.76	5,539	9,414	196.28	6,112	12,442
195.77	5,549	9,470	196.29	6,123	12,503
195.78	5,560	9,525	196.30	6,134	12,564
195.79	5,571	9,581	196.31	6,146	12,626
195.80	5,582	9,637	196.32	6,157	12,687
195.81	5,592	9,693	196.33	6,168	12,749
195.82	5,603	9,749	196.34	6,180	12,810
195.83	5,614	9,805	196.35	6,191	12,872
195.84	5,624	9,861	196.36	6,202	12,934
195.85	5,635	9,917	196.37	6,213	12,996
195.86	5,646	9,974	196.38	6,225	13,059
195.87	5,657	10,030	196.39	6,236	13,121
195.88	5,667	10,087	196.40	6,247	13,183
195.89	5,678	10,144	196.41	6,258	13,246

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.42	6,270	13,308	196.94	6,856	16,721
196.43	6,281	13,371	196.95	6,868	16,790
196.44	6,292	13,434	196.96	6,879	16,859
196.45	6,304	13,497	196.97	6,890	16,927
196.46	6,315	13,560	196.98	6,901	16,996
196.47	6,326	13,623	196.99	6,913	17,065
196.48	6,337	13,687	197.00	6,924	17,135
196.49	6,349	13,750	197.01	6,936	17,204
196.50	6,360	13,814	197.02	6,948	17,273
196.51	6,371	13,877	197.03	6,960	17,343
196.52	6,383	13,941	197.04	6,971	17,413
196.53	6,394	14,005	197.05	6,983	17,482
196.54	6,405	14,069	197.06	6,995	17,552
196.55	6,416	14,133	197.07	7,007	17,622
196.56	6,428	14,197	197.08	7,019	17,692
196.57	6,439	14,262	197.09	7,031	17,763
196.58	6,450	14,326	197.10	7,042	17,833
196.59	6,462	14,391	197.11	7,054	17,903
196.60	6,473	14,455	197.12	7,066	17,974
196.61	6,484	14,520	197.13	7,078	18,045
196.62	6,495	14,585	197.14	7,090	18,116
196.63	6,507	14,650	197.15	7,102	18,187
196.64	6,518	14,715	197.16	7,113	18,258
196.65	6,529	14,780	197.17	7,125	18,329
196.66	6,540	14,846	197.18	7,137	18,400
196.67	6,552	14,911	197.19	7,149	18,472
196.68	6,563	14,977	197.20	7,161	18,543
196.69	6,574	15,042	197.21	7,173	18,615
196.70	6,586	15,108	197.22	7,184	18,687
196.71	6,597	15,174	197.23	7,196	18,758
196.72	6,608	15,240	197.24	7,208	18,831
196.73	6,619	15,306	197.25	7,220	18,903
196.74	6,631	15,373	197.26	7,232	18,975
196.75	6,642	15,439	197.27	7,244	19,047
196.76	6,653	15,505	197.28	7,256	19,120
196.77	6,665	15,572	197.29	7,267	19,192
196.78	6,676	15,639	197.30	7,279	19,265
196.79	6,687	15,705	197.31	7,291	19,338
196.80	6,698	15,772	197.32	7,303	19,411
196.81	6,710	15,839	197.33	7,315	19,484
196.82	6,721	15,907	197.34	7,327	19,557
196.83	6,732	15,974	197.35	7,338	19,631
196.84	6,744	16,041	197.36	7,350	19,704
196.85	6,755	16,109	197.37	7,362	19,778
196.86	6,766	16,176	197.38	7,374	19,851
196.87	6,777	16,244	197.39	7,386	19,925
196.88	6,789	16,312	197.40	7,398	19,999
196.89	6,800	16,380	197.41	7,409	20,073
196.90	6,811	16,448	197.42	7,421	20,147
196.91	6,822	16,516	197.43	7,433	20,221
196.92	6,834	16,584	197.44	7,445	20,296
196.93	6,845	16,653	197.45	7,457	20,370

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.46	7,469	20,445
197.47	7,480	20,520
197.48	7,492	20,595
197.49	7,504	20,670
197.50	7,516	20,745
197.51	7,528	20,820
197.52	7,540	20,895
197.53	7,552	20,971
197.54	7,563	21,046
197.55	7,575	21,122
197.56	7,587	21,198
197.57	7,599	21,274
197.58	7,611	21,350
197.59	7,623	21,426
197.60	7,634	21,502
197.61	7,646	21,579
197.62	7,658	21,655
197.63	7,670	21,732
197.64	7,682	21,808
197.65	7,694	21,885
197.66	7,705	21,962
197.67	7,717	22,039
197.68	7,729	22,117
197.69	7,741	22,194
197.70	7,753	22,272
197.71	7,765	22,349
197.72	7,776	22,427
197.73	7,788	22,505
197.74	7,800	22,583
197.75	7,812	22,661
197.76	7,824	22,739
197.77	7,836	22,817
197.78	7,848	22,896
197.79	7,859	22,974
197.80	7,871	23,053
197.81	7,883	23,132
197.82	7,895	23,210
197.83	7,907	23,289
197.84	7,919	23,369
197.85	7,930	23,448
197.86	7,942	23,527
197.87	7,954	23,607
197.88	7,966	23,686
197.89	7,978	23,766
197.90	7,990	23,846
197.91	8,001	23,926
197.92	8,013	24,006
197.93	8,025	24,086
197.94	8,037	24,166
197.95	8,049	24,247
197.96	8,061	24,327
197.97	8,072	24,408
197.98	8,084	24,489
197.99	8,096	24,570
198.00	**8,108**	**24,651**

Summary for Pond B-38: Basin #38

Inflow Area = 2.114 ac, 34.96% Impervious, Inflow Depth = 3.95" for Future 10 yr event
Inflow = 8.59 cfs @ 12.17 hrs, Volume= 0.696 af
Outflow = 3.42 cfs @ 12.40 hrs, Volume= 0.600 af, Atten= 60%, Lag= 13.6 min
Primary = 3.42 cfs @ 12.40 hrs, Volume= 0.600 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 207.09' @ 12.40 hrs Surf.Area= 6,978 sf Storage= 14,347 cf

Plug-Flow detention time= 419.9 min calculated for 0.599 af (86% of inflow)
Center-of-Mass det. time= 355.6 min (1,149.4 - 793.8)

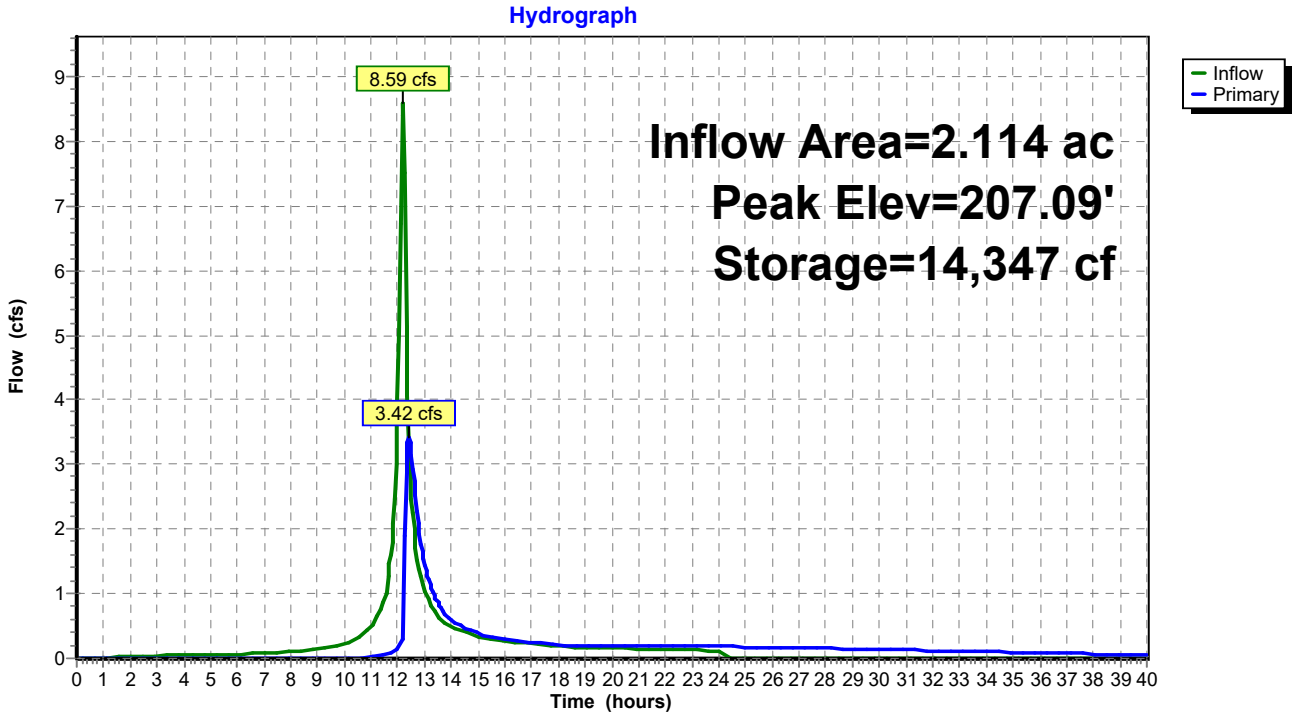
Volume	Invert	Avail.Storage	Storage Description
#1	204.30'	29,525 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
204.30	0	0	0
205.00	5,096	1,784	1,784
206.00	5,966	5,531	7,315
207.00	6,893	6,430	13,744
208.00	7,876	7,385	21,129
209.00	8,916	8,396	29,525

Device	Routing	Invert	Outlet Devices
#1	Primary	204.30'	**18.0" Round Culvert** L= 33.0' Ke= 0.500 Inlet / Outlet Invert= 204.30' / 204.13' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	205.26'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	206.69'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	208.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.42 cfs @ 12.40 hrs HW=207.09' (Free Discharge)
- **1=Culvert** (Passes 3.42 cfs of 11.80 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.22 cfs @ 6.32 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.21 cfs @ 2.06 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-38: Basin #38



Stage-Discharge for Pond B-38: Basin #38

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
204.30	0.00	204.82	0.00	205.34	0.01	205.86	0.12
204.31	0.00	204.83	0.00	205.35	0.01	205.87	0.12
204.32	0.00	204.84	0.00	205.36	0.02	205.88	0.12
204.33	0.00	204.85	0.00	205.37	0.02	205.89	0.12
204.34	0.00	204.86	0.00	205.38	0.02	205.90	0.12
204.35	0.00	204.87	0.00	205.39	0.03	205.91	0.12
204.36	0.00	204.88	0.00	205.40	0.03	205.92	0.12
204.37	0.00	204.89	0.00	205.41	0.03	205.93	0.12
204.38	0.00	204.90	0.00	205.42	0.04	205.94	0.12
204.39	0.00	204.91	0.00	205.43	0.04	205.95	0.13
204.40	0.00	204.92	0.00	205.44	0.05	205.96	0.13
204.41	0.00	204.93	0.00	205.45	0.05	205.97	0.13
204.42	0.00	204.94	0.00	205.46	0.05	205.98	0.13
204.43	0.00	204.95	0.00	205.47	0.05	205.99	0.13
204.44	0.00	204.96	0.00	205.48	0.06	206.00	0.13
204.45	0.00	204.97	0.00	205.49	0.06	206.01	0.13
204.46	0.00	204.98	0.00	205.50	0.06	206.02	0.13
204.47	0.00	204.99	0.00	205.51	0.06	206.03	0.13
204.48	0.00	205.00	0.00	205.52	0.06	206.04	0.13
204.49	0.00	205.01	0.00	205.53	0.07	206.05	0.14
204.50	0.00	205.02	0.00	205.54	0.07	206.06	0.14
204.51	0.00	205.03	0.00	205.55	0.07	206.07	0.14
204.52	0.00	205.04	0.00	205.56	0.07	206.08	0.14
204.53	0.00	205.05	0.00	205.57	0.07	206.09	0.14
204.54	0.00	205.06	0.00	205.58	0.08	206.10	0.14
204.55	0.00	205.07	0.00	205.59	0.08	206.11	0.14
204.56	0.00	205.08	0.00	205.60	0.08	206.12	0.14
204.57	0.00	205.09	0.00	205.61	0.08	206.13	0.14
204.58	0.00	205.10	0.00	205.62	0.08	206.14	0.14
204.59	0.00	205.11	0.00	205.63	0.08	206.15	0.15
204.60	0.00	205.12	0.00	205.64	0.09	206.16	0.15
204.61	0.00	205.13	0.00	205.65	0.09	206.17	0.15
204.62	0.00	205.14	0.00	205.66	0.09	206.18	0.15
204.63	0.00	205.15	0.00	205.67	0.09	206.19	0.15
204.64	0.00	205.16	0.00	205.68	0.09	206.20	0.15
204.65	0.00	205.17	0.00	205.69	0.09	206.21	0.15
204.66	0.00	205.18	0.00	205.70	0.10	206.22	0.15
204.67	0.00	205.19	0.00	205.71	0.10	206.23	0.15
204.68	0.00	205.20	0.00	205.72	0.10	206.24	0.15
204.69	0.00	205.21	0.00	205.73	0.10	206.25	0.15
204.70	0.00	205.22	0.00	205.74	0.10	206.26	0.16
204.71	0.00	205.23	0.00	205.75	0.10	206.27	0.16
204.72	0.00	205.24	0.00	205.76	0.10	206.28	0.16
204.73	0.00	205.25	0.00	205.77	0.10	206.29	0.16
204.74	0.00	205.26	0.00	205.78	0.11	206.30	0.16
204.75	0.00	205.27	0.00	205.79	0.11	206.31	0.16
204.76	0.00	205.28	0.00	205.80	0.11	206.32	0.16
204.77	0.00	205.29	0.00	205.81	0.11	206.33	0.16
204.78	0.00	205.30	0.00	205.82	0.11	206.34	0.16
204.79	0.00	205.31	0.00	205.83	0.11	206.35	0.16
204.80	0.00	205.32	0.01	205.84	0.11	206.36	0.16
204.81	0.00	205.33	0.01	205.85	0.11	206.37	0.16

Stage-Discharge for Pond B-38: Basin #38 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
206.38	0.17	206.90	1.45	207.42	8.10	207.94	14.46
206.39	0.17	206.91	1.54	207.43	8.25	207.95	14.49
206.40	0.17	206.92	1.63	207.44	8.41	207.96	14.51
206.41	0.17	206.93	1.72	207.45	8.57	207.97	14.54
206.42	0.17	206.94	1.82	207.46	8.74	207.98	14.56
206.43	0.17	206.95	1.92	207.47	8.90	207.99	14.59
206.44	0.17	206.96	2.02	207.48	9.06	208.00	14.61
206.45	0.17	206.97	2.12	207.49	9.22	208.01	14.64
206.46	0.17	206.98	2.22	207.50	9.39	208.02	14.66
206.47	0.17	206.99	2.33	207.51	9.55	208.03	14.69
206.48	0.17	207.00	2.43	207.52	9.72	208.04	14.71
206.49	0.17	207.01	2.54	207.53	9.89	208.05	14.74
206.50	0.17	207.02	2.65	207.54	10.06	208.06	14.76
206.51	0.18	207.03	2.76	207.55	10.23	208.07	14.79
206.52	0.18	207.04	2.87	207.56	10.40	208.08	14.81
206.53	0.18	207.05	2.99	207.57	10.57	208.09	14.84
206.54	0.18	207.06	3.10	207.58	10.74	208.10	14.86
206.55	0.18	207.07	3.22	207.59	10.91	208.11	14.88
206.56	0.18	207.08	3.34	207.60	11.08	208.12	14.91
206.57	0.18	207.09	3.46	207.61	11.26	208.13	14.93
206.58	0.18	207.10	3.58	207.62	11.43	208.14	14.96
206.59	0.18	207.11	3.70	207.63	11.61	208.15	14.98
206.60	0.18	207.12	3.83	207.64	11.78	208.16	15.01
206.61	0.18	207.13	3.95	207.65	11.96	208.17	15.03
206.62	0.18	207.14	4.08	207.66	12.14	208.18	15.05
206.63	0.18	207.15	4.21	207.67	12.32	208.19	15.08
206.64	0.19	207.16	4.34	207.68	12.50	208.20	15.10
206.65	0.19	207.17	4.47	207.69	12.68	208.21	15.13
206.66	0.19	207.18	4.60	207.70	12.86	208.22	15.15
206.67	0.19	207.19	4.73	207.71	13.04	208.23	15.17
206.68	0.19	207.20	4.86	207.72	13.22	208.24	15.20
206.69	0.19	207.21	5.00	207.73	13.40	208.25	15.22
206.70	0.20	207.22	5.14	207.74	13.59	208.26	15.36
206.71	0.23	207.23	5.27	207.75	13.77	208.27	15.60
206.72	0.26	207.24	5.41	207.76	13.96	208.28	15.90
206.73	0.30	207.25	5.55	207.77	14.03	208.29	16.25
206.74	0.34	207.26	5.69	207.78	14.06	208.30	16.65
206.75	0.38	207.27	5.84	207.79	14.08	208.31	17.09
206.76	0.44	207.28	5.98	207.80	14.11	208.32	17.56
206.77	0.49	207.29	6.12	207.81	14.14	208.33	18.07
206.78	0.55	207.30	6.27	207.82	14.16	208.34	18.61
206.79	0.61	207.31	6.42	207.83	14.19	208.35	19.17
206.80	0.67	207.32	6.56	207.84	14.21	208.36	19.77
206.81	0.74	207.33	6.71	207.85	14.24	208.37	20.40
206.82	0.81	207.34	6.86	207.86	14.26	208.38	21.05
206.83	0.88	207.35	7.01	207.87	14.29	208.39	21.72
206.84	0.95	207.36	7.16	207.88	14.31	208.40	22.42
206.85	1.03	207.37	7.32	207.89	14.34	208.41	23.14
206.86	1.11	207.38	7.47	207.90	14.36	208.42	23.89
206.87	1.19	207.39	7.63	207.91	14.39	208.43	24.66
206.88	1.28	207.40	7.78	207.92	14.41	208.44	25.44
206.89	1.36	207.41	7.94	207.93	14.44	208.45	26.25

Stage-Discharge for Pond B-38: Basin #38 (continued)

Elevation (feet)	Primary (cfs)
208.46	27.12
208.47	28.02
208.48	28.94
208.49	29.89
208.50	30.86
208.51	31.85
208.52	32.88
208.53	33.92
208.54	34.99
208.55	36.09
208.56	37.21
208.57	38.35
208.58	39.52
208.59	40.71
208.60	41.93
208.61	43.17
208.62	44.43
208.63	45.72
208.64	47.04
208.65	48.37
208.66	49.76
208.67	51.18
208.68	52.62
208.69	54.08
208.70	55.58
208.71	57.09
208.72	58.64
208.73	60.21
208.74	61.81
208.75	63.43
208.76	65.08
208.77	66.76
208.78	68.46
208.79	70.19
208.80	71.95
208.81	73.73
208.82	75.54
208.83	77.38
208.84	79.24
208.85	81.14
208.86	82.78
208.87	84.45
208.88	86.12
208.89	87.81
208.90	89.51
208.91	91.23
208.92	92.96
208.93	94.70
208.94	96.45
208.95	98.22
208.96	100.00
208.97	101.79
208.98	103.60
208.99	105.42
209.00	**107.25**

Stage-Area-Storage for Pond B-38: Basin #38

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.30	0	0	204.82	3,786	984
204.31	73	0	204.83	3,858	1,022
204.32	146	1	204.84	3,931	1,061
204.33	218	3	204.85	4,004	1,101
204.34	291	6	204.86	4,077	1,142
204.35	364	9	204.87	4,150	1,183
204.36	437	13	204.88	4,222	1,224
204.37	510	18	204.89	4,295	1,267
204.38	582	23	204.90	4,368	1,310
204.39	655	29	204.91	4,441	1,354
204.40	728	36	204.92	4,514	1,399
204.41	801	44	204.93	4,586	1,445
204.42	874	52	204.94	4,659	1,491
204.43	946	62	204.95	4,732	1,538
204.44	1,019	71	204.96	4,805	1,586
204.45	1,092	82	204.97	4,878	1,634
204.46	1,165	93	204.98	4,950	1,683
204.47	1,238	105	204.99	5,023	1,733
204.48	1,310	118	205.00	5,096	1,784
204.49	1,383	131	205.01	5,105	1,835
204.50	1,456	146	205.02	5,113	1,886
204.51	1,529	161	205.03	5,122	1,937
204.52	1,602	176	205.04	5,131	1,988
204.53	1,674	193	205.05	5,140	2,039
204.54	1,747	210	205.06	5,148	2,091
204.55	1,820	228	205.07	5,157	2,142
204.56	1,893	246	205.08	5,166	2,194
204.57	1,966	265	205.09	5,174	2,246
204.58	2,038	285	205.10	5,183	2,298
204.59	2,111	306	205.11	5,192	2,349
204.60	2,184	328	205.12	5,200	2,401
204.61	2,257	350	205.13	5,209	2,453
204.62	2,330	373	205.14	5,218	2,506
204.63	2,402	396	205.15	5,227	2,558
204.64	2,475	421	205.16	5,235	2,610
204.65	2,548	446	205.17	5,244	2,662
204.66	2,621	472	205.18	5,253	2,715
204.67	2,694	498	205.19	5,261	2,768
204.68	2,766	526	205.20	5,270	2,820
204.69	2,839	554	205.21	5,279	2,873
204.70	2,912	582	205.22	5,287	2,926
204.71	2,985	612	205.23	5,296	2,979
204.72	3,058	642	205.24	5,305	3,032
204.73	3,130	673	205.25	5,314	3,085
204.74	3,203	705	205.26	5,322	3,138
204.75	3,276	737	205.27	5,331	3,191
204.76	3,349	770	205.28	5,340	3,245
204.77	3,422	804	205.29	5,348	3,298
204.78	3,494	839	205.30	5,357	3,352
204.79	3,567	874	205.31	5,366	3,405
204.80	3,640	910	205.32	5,374	3,459
204.81	3,713	947	205.33	5,383	3,513

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.34	5,392	3,567	205.86	5,844	6,488
205.35	5,401	3,620	205.87	5,853	6,546
205.36	5,409	3,675	205.88	5,862	6,605
205.37	5,418	3,729	205.89	5,870	6,664
205.38	5,427	3,783	205.90	5,879	6,722
205.39	5,435	3,837	205.91	5,888	6,781
205.40	5,444	3,892	205.92	5,896	6,840
205.41	5,453	3,946	205.93	5,905	6,899
205.42	5,461	4,001	205.94	5,914	6,958
205.43	5,470	4,055	205.95	5,923	7,017
205.44	5,479	4,110	205.96	5,931	7,077
205.45	5,488	4,165	205.97	5,940	7,136
205.46	5,496	4,220	205.98	5,949	7,195
205.47	5,505	4,275	205.99	5,957	7,255
205.48	5,514	4,330	206.00	5,966	7,315
205.49	5,522	4,385	206.01	5,975	7,374
205.50	5,531	4,440	206.02	5,985	7,434
205.51	5,540	4,496	206.03	5,994	7,494
205.52	5,548	4,551	206.04	6,003	7,554
205.53	5,557	4,607	206.05	6,012	7,614
205.54	5,566	4,662	206.06	6,022	7,674
205.55	5,575	4,718	206.07	6,031	7,734
205.56	5,583	4,774	206.08	6,040	7,795
205.57	5,592	4,830	206.09	6,049	7,855
205.58	5,601	4,886	206.10	6,059	7,916
205.59	5,609	4,942	206.11	6,068	7,976
205.60	5,618	4,998	206.12	6,077	8,037
205.61	5,627	5,054	206.13	6,087	8,098
205.62	5,635	5,110	206.14	6,096	8,159
205.63	5,644	5,167	206.15	6,105	8,220
205.64	5,653	5,223	206.16	6,114	8,281
205.65	5,662	5,280	206.17	6,124	8,342
205.66	5,670	5,336	206.18	6,133	8,403
205.67	5,679	5,393	206.19	6,142	8,465
205.68	5,688	5,450	206.20	6,151	8,526
205.69	5,696	5,507	206.21	6,161	8,588
205.70	5,705	5,564	206.22	6,170	8,650
205.71	5,714	5,621	206.23	6,179	8,711
205.72	5,722	5,678	206.24	6,188	8,773
205.73	5,731	5,735	206.25	6,198	8,835
205.74	5,740	5,793	206.26	6,207	8,897
205.75	5,749	5,850	206.27	6,216	8,959
205.76	5,757	5,908	206.28	6,226	9,021
205.77	5,766	5,965	206.29	6,235	9,084
205.78	5,775	6,023	206.30	6,244	9,146
205.79	5,783	6,081	206.31	6,253	9,209
205.80	5,792	6,139	206.32	6,263	9,271
205.81	5,801	6,197	206.33	6,272	9,334
205.82	5,809	6,255	206.34	6,281	9,397
205.83	5,818	6,313	206.35	6,290	9,459
205.84	5,827	6,371	206.36	6,300	9,522
205.85	5,836	6,429	206.37	6,309	9,585

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
206.38	6,318	9,649	206.90	6,800	13,059
206.39	6,328	9,712	206.91	6,810	13,127
206.40	6,337	9,775	206.92	6,819	13,196
206.41	6,346	9,839	206.93	6,828	13,264
206.42	6,355	9,902	206.94	6,837	13,332
206.43	6,365	9,966	206.95	6,847	13,401
206.44	6,374	10,029	206.96	6,856	13,469
206.45	6,383	10,093	206.97	6,865	13,538
206.46	6,392	10,157	206.98	6,874	13,606
206.47	6,402	10,221	206.99	6,884	13,675
206.48	6,411	10,285	207.00	6,893	13,744
206.49	6,420	10,349	207.01	6,903	13,813
206.50	6,430	10,413	207.02	6,913	13,882
206.51	6,439	10,478	207.03	6,922	13,951
206.52	6,448	10,542	207.04	6,932	14,021
206.53	6,457	10,607	207.05	6,942	14,090
206.54	6,467	10,671	207.06	6,952	14,159
206.55	6,476	10,736	207.07	6,962	14,229
206.56	6,485	10,801	207.08	6,972	14,299
206.57	6,494	10,866	207.09	6,981	14,368
206.58	6,504	10,931	207.10	6,991	14,438
206.59	6,513	10,996	207.11	7,001	14,508
206.60	6,522	11,061	207.12	7,011	14,578
206.61	6,531	11,126	207.13	7,021	14,648
206.62	6,541	11,192	207.14	7,031	14,719
206.63	6,550	11,257	207.15	7,040	14,789
206.64	6,559	11,323	207.16	7,050	14,860
206.65	6,569	11,388	207.17	7,060	14,930
206.66	6,578	11,454	207.18	7,070	15,001
206.67	6,587	11,520	207.19	7,080	15,072
206.68	6,596	11,586	207.20	7,090	15,142
206.69	6,606	11,652	207.21	7,099	15,213
206.70	6,615	11,718	207.22	7,109	15,284
206.71	6,624	11,784	207.23	7,119	15,355
206.72	6,633	11,850	207.24	7,129	15,427
206.73	6,643	11,917	207.25	7,139	15,498
206.74	6,652	11,983	207.26	7,149	15,570
206.75	6,661	12,050	207.27	7,158	15,641
206.76	6,671	12,116	207.28	7,168	15,713
206.77	6,680	12,183	207.29	7,178	15,784
206.78	6,689	12,250	207.30	7,188	15,856
206.79	6,698	12,317	207.31	7,198	15,928
206.80	6,708	12,384	207.32	7,208	16,000
206.81	6,717	12,451	207.33	7,217	16,072
206.82	6,726	12,518	207.34	7,227	16,145
206.83	6,735	12,586	207.35	7,237	16,217
206.84	6,745	12,653	207.36	7,247	16,289
206.85	6,754	12,721	207.37	7,257	16,362
206.86	6,763	12,788	207.38	7,267	16,434
206.87	6,772	12,856	207.39	7,276	16,507
206.88	6,782	12,924	207.40	7,286	16,580
206.89	6,791	12,991	207.41	7,296	16,653

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
207.42	7,306	16,726	207.94	7,817	20,658
207.43	7,316	16,799	207.95	7,827	20,736
207.44	7,326	16,872	207.96	7,837	20,814
207.45	7,335	16,945	207.97	7,847	20,893
207.46	7,345	17,019	207.98	7,856	20,971
207.47	7,355	17,092	207.99	7,866	21,050
207.48	7,365	17,166	208.00	7,876	21,129
207.49	7,375	17,240	208.01	7,886	21,207
207.50	7,385	17,313	208.02	7,897	21,286
207.51	7,394	17,387	208.03	7,907	21,365
207.52	7,404	17,461	208.04	7,918	21,444
207.53	7,414	17,535	208.05	7,928	21,524
207.54	7,424	17,610	208.06	7,938	21,603
207.55	7,434	17,684	208.07	7,949	21,682
207.56	7,443	17,758	208.08	7,959	21,762
207.57	7,453	17,833	208.09	7,970	21,842
207.58	7,463	17,907	208.10	7,980	21,921
207.59	7,473	17,982	208.11	7,990	22,001
207.60	7,483	18,057	208.12	8,001	22,081
207.61	7,493	18,132	208.13	8,011	22,161
207.62	7,502	18,207	208.14	8,022	22,241
207.63	7,512	18,282	208.15	8,032	22,322
207.64	7,522	18,357	208.16	8,042	22,402
207.65	7,532	18,432	208.17	8,053	22,483
207.66	7,542	18,508	208.18	8,063	22,563
207.67	7,552	18,583	208.19	8,074	22,644
207.68	7,561	18,659	208.20	8,084	22,725
207.69	7,571	18,734	208.21	8,094	22,805
207.70	7,581	18,810	208.22	8,105	22,886
207.71	7,591	18,886	208.23	8,115	22,968
207.72	7,601	18,962	208.24	8,126	23,049
207.73	7,611	19,038	208.25	8,136	23,130
207.74	7,620	19,114	208.26	8,146	23,212
207.75	7,630	19,190	208.27	8,157	23,293
207.76	7,640	19,267	208.28	8,167	23,375
207.77	7,650	19,343	208.29	8,178	23,456
207.78	7,660	19,420	208.30	8,188	23,538
207.79	7,670	19,496	208.31	8,198	23,620
207.80	7,679	19,573	208.32	8,209	23,702
207.81	7,689	19,650	208.33	8,219	23,784
207.82	7,699	19,727	208.34	8,230	23,867
207.83	7,709	19,804	208.35	8,240	23,949
207.84	7,719	19,881	208.36	8,250	24,031
207.85	7,729	19,958	208.37	8,261	24,114
207.86	7,738	20,036	208.38	8,271	24,197
207.87	7,748	20,113	208.39	8,282	24,279
207.88	7,758	20,191	208.40	8,292	24,362
207.89	7,768	20,268	208.41	8,302	24,445
207.90	7,778	20,346	208.42	8,313	24,528
207.91	7,788	20,424	208.43	8,323	24,611
207.92	7,797	20,502	208.44	8,334	24,695
207.93	7,807	20,580	208.45	8,344	24,778

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
208.46	8,354	24,862
208.47	8,365	24,945
208.48	8,375	25,029
208.49	8,386	25,113
208.50	8,396	25,197
208.51	8,406	25,281
208.52	8,417	25,365
208.53	8,427	25,449
208.54	8,438	25,533
208.55	8,448	25,618
208.56	8,458	25,702
208.57	8,469	25,787
208.58	8,479	25,872
208.59	8,490	25,956
208.60	8,500	26,041
208.61	8,510	26,126
208.62	8,521	26,212
208.63	8,531	26,297
208.64	8,542	26,382
208.65	8,552	26,468
208.66	8,562	26,553
208.67	8,573	26,639
208.68	8,583	26,725
208.69	8,594	26,811
208.70	8,604	26,897
208.71	8,614	26,983
208.72	8,625	27,069
208.73	8,635	27,155
208.74	8,646	27,242
208.75	8,656	27,328
208.76	8,666	27,415
208.77	8,677	27,501
208.78	8,687	27,588
208.79	8,698	27,675
208.80	8,708	27,762
208.81	8,718	27,849
208.82	8,729	27,937
208.83	8,739	28,024
208.84	8,750	28,111
208.85	8,760	28,199
208.86	8,770	28,287
208.87	8,781	28,374
208.88	8,791	28,462
208.89	8,802	28,550
208.90	8,812	28,638
208.91	8,822	28,726
208.92	8,833	28,815
208.93	8,843	28,903
208.94	8,854	28,992
208.95	8,864	29,080
208.96	8,874	29,169
208.97	8,885	29,258
208.98	8,895	29,346
208.99	8,906	29,435
209.00	**8,916**	**29,525**

Summary for Pond B-39: Basin #39

Inflow Area = 1.884 ac, 41.56% Impervious, Inflow Depth = 4.12" for Future 10 yr event
Inflow = 7.90 cfs @ 12.17 hrs, Volume= 0.647 af
Outflow = 5.66 cfs @ 12.27 hrs, Volume= 0.572 af, Atten= 28%, Lag= 6.0 min
Primary = 5.66 cfs @ 12.27 hrs, Volume= 0.572 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.54' @ 12.27 hrs Surf.Area= 4,205 sf Storage= 10,037 cf

Plug-Flow detention time= 159.2 min calculated for 0.572 af (88% of inflow)
Center-of-Mass det. time= 101.4 min (889.1 - 787.7)

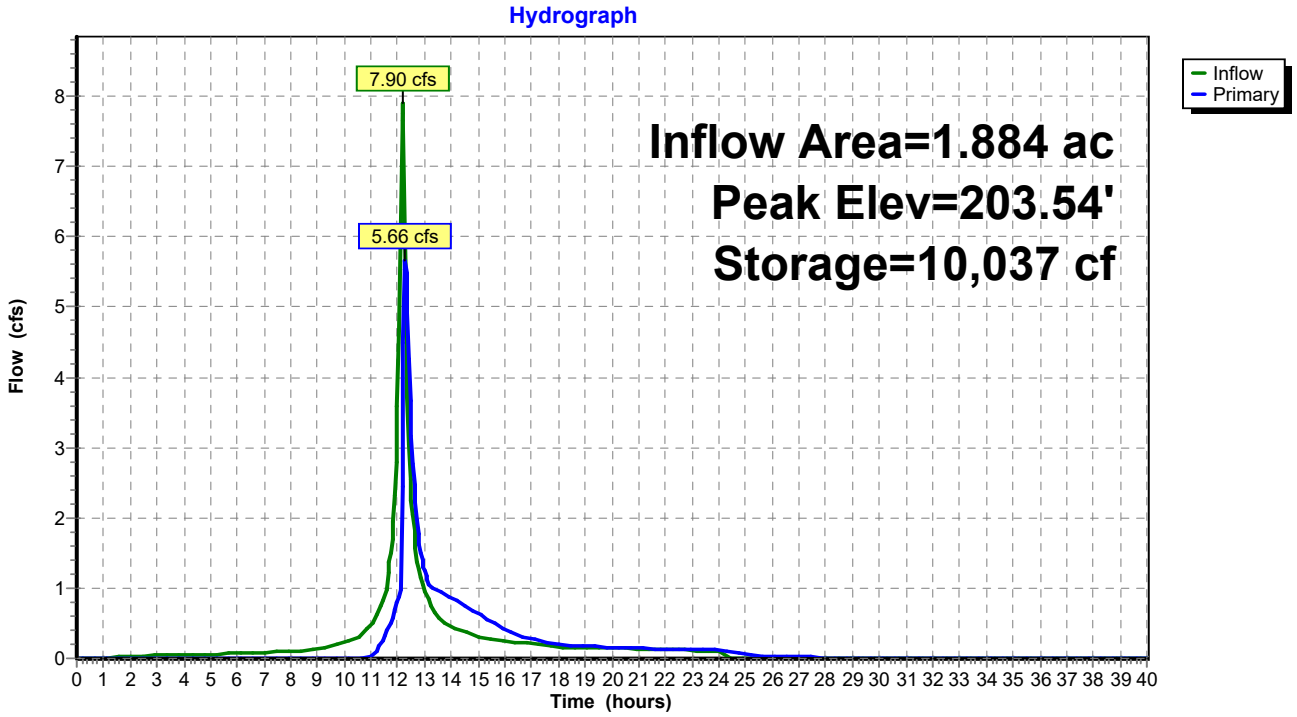
Volume	Invert	Avail.Storage	Storage Description
#1	200.30'	16,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.30	0	0	0
201.00	2,928	1,025	1,025
202.00	3,408	3,168	4,193
203.00	3,917	3,663	7,855
204.00	4,454	4,186	12,041
205.00	5,019	4,737	16,777

Device	Routing	Invert	Outlet Devices
#1	Primary	200.30'	**18.0" Round Culvert** L= 38.0' Ke= 0.500 Inlet / Outlet Invert= 200.30' / 200.11' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.71'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.04'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.52 cfs @ 12.27 hrs HW=203.53' (Free Discharge)
- **1=Culvert** (Passes 5.52 cfs of 13.25 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.18 cfs @ 6.03 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.33 cfs @ 2.28 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-39: Basin #39



Stage-Discharge for Pond B-39: Basin #39

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.30	0.00	200.82	0.00	201.34	0.00	201.86	0.07
200.31	0.00	200.83	0.00	201.35	0.00	201.87	0.07
200.32	0.00	200.84	0.00	201.36	0.00	201.88	0.08
200.33	0.00	200.85	0.00	201.37	0.00	201.89	0.09
200.34	0.00	200.86	0.00	201.38	0.00	201.90	0.10
200.35	0.00	200.87	0.00	201.39	0.00	201.91	0.11
200.36	0.00	200.88	0.00	201.40	0.00	201.92	0.12
200.37	0.00	200.89	0.00	201.41	0.00	201.93	0.13
200.38	0.00	200.90	0.00	201.42	0.00	201.94	0.14
200.39	0.00	200.91	0.00	201.43	0.00	201.95	0.16
200.40	0.00	200.92	0.00	201.44	0.00	201.96	0.17
200.41	0.00	200.93	0.00	201.45	0.00	201.97	0.18
200.42	0.00	200.94	0.00	201.46	0.00	201.98	0.19
200.43	0.00	200.95	0.00	201.47	0.00	201.99	0.20
200.44	0.00	200.96	0.00	201.48	0.00	202.00	0.22
200.45	0.00	200.97	0.00	201.49	0.00	202.01	0.23
200.46	0.00	200.98	0.00	201.50	0.00	202.02	0.24
200.47	0.00	200.99	0.00	201.51	0.00	202.03	0.26
200.48	0.00	201.00	0.00	201.52	0.00	202.04	0.27
200.49	0.00	201.01	0.00	201.53	0.00	202.05	0.28
200.50	0.00	201.02	0.00	201.54	0.00	202.06	0.30
200.51	0.00	201.03	0.00	201.55	0.00	202.07	0.31
200.52	0.00	201.04	0.00	201.56	0.00	202.08	0.32
200.53	0.00	201.05	0.00	201.57	0.00	202.09	0.34
200.54	0.00	201.06	0.00	201.58	0.00	202.10	0.35
200.55	0.00	201.07	0.00	201.59	0.00	202.11	0.36
200.56	0.00	201.08	0.00	201.60	0.00	202.12	0.38
200.57	0.00	201.09	0.00	201.61	0.00	202.13	0.39
200.58	0.00	201.10	0.00	201.62	0.00	202.14	0.40
200.59	0.00	201.11	0.00	201.63	0.00	202.15	0.41
200.60	0.00	201.12	0.00	201.64	0.00	202.16	0.43
200.61	0.00	201.13	0.00	201.65	0.00	202.17	0.44
200.62	0.00	201.14	0.00	201.66	0.00	202.18	0.45
200.63	0.00	201.15	0.00	201.67	0.00	202.19	0.46
200.64	0.00	201.16	0.00	201.68	0.00	202.20	0.47
200.65	0.00	201.17	0.00	201.69	0.00	202.21	0.47
200.66	0.00	201.18	0.00	201.70	0.00	202.22	0.48
200.67	0.00	201.19	0.00	201.71	0.00	202.23	0.49
200.68	0.00	201.20	0.00	201.72	0.00	202.24	0.50
200.69	0.00	201.21	0.00	201.73	0.00	202.25	0.51
200.70	0.00	201.22	0.00	201.74	0.00	202.26	0.52
200.71	0.00	201.23	0.00	201.75	0.01	202.27	0.53
200.72	0.00	201.24	0.00	201.76	0.01	202.28	0.53
200.73	0.00	201.25	0.00	201.77	0.01	202.29	0.54
200.74	0.00	201.26	0.00	201.78	0.02	202.30	0.55
200.75	0.00	201.27	0.00	201.79	0.02	202.31	0.56
200.76	0.00	201.28	0.00	201.80	0.02	202.32	0.57
200.77	0.00	201.29	0.00	201.81	0.03	202.33	0.58
200.78	0.00	201.30	0.00	201.82	0.04	202.34	0.58
200.79	0.00	201.31	0.00	201.83	0.04	202.35	0.59
200.80	0.00	201.32	0.00	201.84	0.05	202.36	0.60
200.81	0.00	201.33	0.00	201.85	0.06	202.37	0.61

Stage-Discharge for Pond B-39: Basin #39 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
202.38	0.61	202.90	0.92	203.42	4.15	203.94	12.00
202.39	0.62	202.91	0.92	203.43	4.27	203.95	12.17
202.40	0.63	202.92	0.93	203.44	4.39	203.96	12.35
202.41	0.63	202.93	0.93	203.45	4.52	203.97	12.53
202.42	0.64	202.94	0.94	203.46	4.64	203.98	12.70
202.43	0.65	202.95	0.94	203.47	4.77	203.99	12.88
202.44	0.66	202.96	0.95	203.48	4.90	204.00	13.06
202.45	0.66	202.97	0.95	203.49	5.03	204.01	13.24
202.46	0.67	202.98	0.95	203.50	5.16	204.02	13.42
202.47	0.68	202.99	0.96	203.51	5.29	204.03	13.61
202.48	0.68	203.00	0.96	203.52	5.43	204.04	13.79
202.49	0.69	203.01	0.97	203.53	5.56	204.05	13.97
202.50	0.69	203.02	0.97	203.54	5.70	204.06	14.16
202.51	0.70	203.03	0.98	203.55	5.83	204.07	14.34
202.52	0.71	203.04	0.98	203.56	5.97	204.08	14.53
202.53	0.71	203.05	1.00	203.57	6.11	204.09	14.71
202.54	0.72	203.06	1.03	203.58	6.25	204.10	14.86
202.55	0.73	203.07	1.06	203.59	6.40	204.11	14.88
202.56	0.73	203.08	1.10	203.60	6.54	204.12	14.91
202.57	0.74	203.09	1.15	203.61	6.68	204.13	14.93
202.58	0.74	203.10	1.20	203.62	6.83	204.14	14.96
202.59	0.75	203.11	1.26	203.63	6.97	204.15	14.98
202.60	0.76	203.12	1.31	203.64	7.12	204.16	15.01
202.61	0.76	203.13	1.37	203.65	7.27	204.17	15.03
202.62	0.77	203.14	1.44	203.66	7.42	204.18	15.05
202.63	0.77	203.15	1.51	203.67	7.57	204.19	15.08
202.64	0.78	203.16	1.58	203.68	7.72	204.20	15.10
202.65	0.79	203.17	1.65	203.69	7.88	204.21	15.13
202.66	0.79	203.18	1.72	203.70	8.03	204.22	15.15
202.67	0.80	203.19	1.80	203.71	8.18	204.23	15.17
202.68	0.80	203.20	1.88	203.72	8.34	204.24	15.20
202.69	0.81	203.21	1.97	203.73	8.50	204.25	15.22
202.70	0.81	203.22	2.05	203.74	8.65	204.26	15.24
202.71	0.82	203.23	2.14	203.75	8.81	204.27	15.27
202.72	0.82	203.24	2.23	203.76	8.97	204.28	15.29
202.73	0.83	203.25	2.32	203.77	9.13	204.29	15.32
202.74	0.83	203.26	2.41	203.78	9.29	204.30	15.34
202.75	0.84	203.27	2.51	203.79	9.46	204.31	15.36
202.76	0.85	203.28	2.61	203.80	9.62	204.32	15.39
202.77	0.85	203.29	2.70	203.81	9.78	204.33	15.41
202.78	0.86	203.30	2.81	203.82	9.95	204.34	15.43
202.79	0.86	203.31	2.91	203.83	10.11	204.35	15.46
202.80	0.87	203.32	3.01	203.84	10.28	204.36	15.48
202.81	0.87	203.33	3.12	203.85	10.45	204.37	15.50
202.82	0.88	203.34	3.23	203.86	10.62	204.38	15.53
202.83	0.88	203.35	3.34	203.87	10.79	204.39	15.55
202.84	0.89	203.36	3.45	203.88	10.96	204.40	15.57
202.85	0.89	203.37	3.56	203.89	11.13	204.41	15.60
202.86	0.90	203.38	3.68	203.90	11.30	204.42	15.62
202.87	0.90	203.39	3.79	203.91	11.47	204.43	15.64
202.88	0.91	203.40	3.91	203.92	11.65	204.44	15.67
202.89	0.91	203.41	4.03	203.93	11.82	204.45	15.69

Stage-Discharge for Pond B-39: Basin #39 (continued)

Elevation (feet)	Primary (cfs)
204.46	15.71
204.47	15.74
204.48	15.76
204.49	15.78
204.50	15.80
204.51	15.94
204.52	16.18
204.53	16.48
204.54	16.83
204.55	17.23
204.56	17.67
204.57	18.14
204.58	18.64
204.59	19.18
204.60	19.75
204.61	20.35
204.62	20.97
204.63	21.62
204.64	22.29
204.65	22.99
204.66	23.71
204.67	24.46
204.68	25.22
204.69	26.01
204.70	26.82
204.71	27.69
204.72	28.58
204.73	29.50
204.74	30.45
204.75	31.42
204.76	32.42
204.77	33.44
204.78	34.48
204.79	35.55
204.80	36.65
204.81	37.76
204.82	38.91
204.83	40.08
204.84	41.27
204.85	42.48
204.86	43.72
204.87	44.99
204.88	46.28
204.89	47.59
204.90	48.93
204.91	50.31
204.92	51.73
204.93	53.17
204.94	54.63
204.95	56.12
204.96	57.64
204.97	59.19
204.98	60.76
204.99	62.35
205.00	**63.98**

Stage-Area-Storage for Pond B-39: Basin #39

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.30	0	0	200.82	2,175	566
200.31	42	0	200.83	2,217	587
200.32	84	1	200.84	2,259	610
200.33	125	2	200.85	2,301	633
200.34	167	3	200.86	2,342	656
200.35	209	5	200.87	2,384	680
200.36	251	8	200.88	2,426	704
200.37	293	10	200.89	2,468	728
200.38	335	13	200.90	2,510	753
200.39	376	17	200.91	2,552	778
200.40	418	21	200.92	2,593	804
200.41	460	25	200.93	2,635	830
200.42	502	30	200.94	2,677	857
200.43	544	35	200.95	2,719	884
200.44	586	41	200.96	2,761	911
200.45	627	47	200.97	2,803	939
200.46	669	54	200.98	2,844	967
200.47	711	60	200.99	2,886	996
200.48	753	68	201.00	2,928	1,025
200.49	795	76	201.01	2,933	1,054
200.50	837	84	201.02	2,938	1,083
200.51	878	92	201.03	2,942	1,113
200.52	920	101	201.04	2,947	1,142
200.53	962	111	201.05	2,952	1,172
200.54	1,004	120	201.06	2,957	1,201
200.55	1,046	131	201.07	2,962	1,231
200.56	1,088	141	201.08	2,966	1,261
200.57	1,129	152	201.09	2,971	1,290
200.58	1,171	164	201.10	2,976	1,320
200.59	1,213	176	201.11	2,981	1,350
200.60	1,255	188	201.12	2,986	1,380
200.61	1,297	201	201.13	2,990	1,409
200.62	1,339	214	201.14	2,995	1,439
200.63	1,380	228	201.15	3,000	1,469
200.64	1,422	242	201.16	3,005	1,499
200.65	1,464	256	201.17	3,010	1,529
200.66	1,506	271	201.18	3,014	1,560
200.67	1,548	286	201.19	3,019	1,590
200.68	1,589	302	201.20	3,024	1,620
200.69	1,631	318	201.21	3,029	1,650
200.70	1,673	335	201.22	3,034	1,681
200.71	1,715	352	201.23	3,038	1,711
200.72	1,757	369	201.24	3,043	1,741
200.73	1,799	387	201.25	3,048	1,772
200.74	1,840	405	201.26	3,053	1,802
200.75	1,882	424	201.27	3,058	1,833
200.76	1,924	443	201.28	3,062	1,863
200.77	1,966	462	201.29	3,067	1,894
200.78	2,008	482	201.30	3,072	1,925
200.79	2,050	502	201.31	3,077	1,956
200.80	2,091	523	201.32	3,082	1,986
200.81	2,133	544	201.33	3,086	2,017

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.34	3,091	2,048	201.86	3,341	3,720
201.35	3,096	2,079	201.87	3,346	3,754
201.36	3,101	2,110	201.88	3,350	3,787
201.37	3,106	2,141	201.89	3,355	3,821
201.38	3,110	2,172	201.90	3,360	3,854
201.39	3,115	2,203	201.91	3,365	3,888
201.40	3,120	2,234	201.92	3,370	3,922
201.41	3,125	2,266	201.93	3,374	3,955
201.42	3,130	2,297	201.94	3,379	3,989
201.43	3,134	2,328	201.95	3,384	4,023
201.44	3,139	2,360	201.96	3,389	4,057
201.45	3,144	2,391	201.97	3,394	4,091
201.46	3,149	2,422	201.98	3,398	4,125
201.47	3,154	2,454	201.99	3,403	4,159
201.48	3,158	2,486	202.00	3,408	4,193
201.49	3,163	2,517	202.01	3,413	4,227
201.50	3,168	2,549	202.02	3,418	4,261
201.51	3,173	2,581	202.03	3,423	4,295
201.52	3,178	2,612	202.04	3,428	4,330
201.53	3,182	2,644	202.05	3,433	4,364
201.54	3,187	2,676	202.06	3,439	4,398
201.55	3,192	2,708	202.07	3,444	4,433
201.56	3,197	2,740	202.08	3,449	4,467
201.57	3,202	2,772	202.09	3,454	4,502
201.58	3,206	2,804	202.10	3,459	4,536
201.59	3,211	2,836	202.11	3,464	4,571
201.60	3,216	2,868	202.12	3,469	4,605
201.61	3,221	2,900	202.13	3,474	4,640
201.62	3,226	2,932	202.14	3,479	4,675
201.63	3,230	2,965	202.15	3,484	4,710
201.64	3,235	2,997	202.16	3,489	4,745
201.65	3,240	3,029	202.17	3,495	4,780
201.66	3,245	3,062	202.18	3,500	4,814
201.67	3,250	3,094	202.19	3,505	4,850
201.68	3,254	3,127	202.20	3,510	4,885
201.69	3,259	3,159	202.21	3,515	4,920
201.70	3,264	3,192	202.22	3,520	4,955
201.71	3,269	3,225	202.23	3,525	4,990
201.72	3,274	3,257	202.24	3,530	5,025
201.73	3,278	3,290	202.25	3,535	5,061
201.74	3,283	3,323	202.26	3,540	5,096
201.75	3,288	3,356	202.27	3,545	5,132
201.76	3,293	3,389	202.28	3,551	5,167
201.77	3,298	3,422	202.29	3,556	5,203
201.78	3,302	3,455	202.30	3,561	5,238
201.79	3,307	3,488	202.31	3,566	5,274
201.80	3,312	3,521	202.32	3,571	5,309
201.81	3,317	3,554	202.33	3,576	5,345
201.82	3,322	3,587	202.34	3,581	5,381
201.83	3,326	3,620	202.35	3,586	5,417
201.84	3,331	3,654	202.36	3,591	5,453
201.85	3,336	3,687	202.37	3,596	5,489

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.38	3,601	5,525	202.90	3,866	7,466
202.39	3,607	5,561	202.91	3,871	7,505
202.40	3,612	5,597	202.92	3,876	7,544
202.41	3,617	5,633	202.93	3,881	7,582
202.42	3,622	5,669	202.94	3,886	7,621
202.43	3,627	5,705	202.95	3,892	7,660
202.44	3,632	5,742	202.96	3,897	7,699
202.45	3,637	5,778	202.97	3,902	7,738
202.46	3,642	5,814	202.98	3,907	7,777
202.47	3,647	5,851	202.99	3,912	7,816
202.48	3,652	5,887	203.00	3,917	7,855
202.49	3,657	5,924	203.01	3,922	7,894
202.50	3,663	5,960	203.02	3,928	7,934
202.51	3,668	5,997	203.03	3,933	7,973
202.52	3,673	6,034	203.04	3,938	8,012
202.53	3,678	6,071	203.05	3,944	8,052
202.54	3,683	6,107	203.06	3,949	8,091
202.55	3,688	6,144	203.07	3,955	8,131
202.56	3,693	6,181	203.08	3,960	8,170
202.57	3,698	6,218	203.09	3,965	8,210
202.58	3,703	6,255	203.10	3,971	8,250
202.59	3,708	6,292	203.11	3,976	8,289
202.60	3,713	6,329	203.12	3,981	8,329
202.61	3,718	6,366	203.13	3,987	8,369
202.62	3,724	6,404	203.14	3,992	8,409
202.63	3,729	6,441	203.15	3,998	8,449
202.64	3,734	6,478	203.16	4,003	8,489
202.65	3,739	6,516	203.17	4,008	8,529
202.66	3,744	6,553	203.18	4,014	8,569
202.67	3,749	6,590	203.19	4,019	8,609
202.68	3,754	6,628	203.20	4,024	8,649
202.69	3,759	6,665	203.21	4,030	8,690
202.70	3,764	6,703	203.22	4,035	8,730
202.71	3,769	6,741	203.23	4,041	8,770
202.72	3,774	6,778	203.24	4,046	8,811
202.73	3,780	6,816	203.25	4,051	8,851
202.74	3,785	6,854	203.26	4,057	8,892
202.75	3,790	6,892	203.27	4,062	8,932
202.76	3,795	6,930	203.28	4,067	8,973
202.77	3,800	6,968	203.29	4,073	9,014
202.78	3,805	7,006	203.30	4,078	9,055
202.79	3,810	7,044	203.31	4,083	9,095
202.80	3,815	7,082	203.32	4,089	9,136
202.81	3,820	7,120	203.33	4,094	9,177
202.82	3,825	7,158	203.34	4,100	9,218
202.83	3,830	7,197	203.35	4,105	9,259
202.84	3,836	7,235	203.36	4,110	9,300
202.85	3,841	7,273	203.37	4,116	9,341
202.86	3,846	7,312	203.38	4,121	9,383
202.87	3,851	7,350	203.39	4,126	9,424
202.88	3,856	7,389	203.40	4,132	9,465
202.89	3,861	7,428	203.41	4,137	9,506

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.42	4,143	9,548	203.94	4,422	11,775
203.43	4,148	9,589	203.95	4,427	11,819
203.44	4,153	9,631	203.96	4,433	11,863
203.45	4,159	9,672	203.97	4,438	11,907
203.46	4,164	9,714	203.98	4,443	11,952
203.47	4,169	9,756	203.99	4,449	11,996
203.48	4,175	9,797	204.00	4,454	12,041
203.49	4,180	9,839	204.01	4,460	12,085
203.50	4,186	9,881	204.02	4,465	12,130
203.51	4,191	9,923	204.03	4,471	12,175
203.52	4,196	9,965	204.04	4,477	12,219
203.53	4,202	10,007	204.05	4,482	12,264
203.54	4,207	10,049	204.06	4,488	12,309
203.55	4,212	10,091	204.07	4,494	12,354
203.56	4,218	10,133	204.08	4,499	12,399
203.57	4,223	10,175	204.09	4,505	12,444
203.58	4,228	10,217	204.10	4,511	12,489
203.59	4,234	10,260	204.11	4,516	12,534
203.60	4,239	10,302	204.12	4,522	12,579
203.61	4,245	10,345	204.13	4,527	12,625
203.62	4,250	10,387	204.14	4,533	12,670
203.63	4,255	10,430	204.15	4,539	12,715
203.64	4,261	10,472	204.16	4,544	12,761
203.65	4,266	10,515	204.17	4,550	12,806
203.66	4,271	10,557	204.18	4,556	12,852
203.67	4,277	10,600	204.19	4,561	12,897
203.68	4,282	10,643	204.20	4,567	12,943
203.69	4,288	10,686	204.21	4,573	12,989
203.70	4,293	10,729	204.22	4,578	13,034
203.71	4,298	10,772	204.23	4,584	13,080
203.72	4,304	10,815	204.24	4,590	13,126
203.73	4,309	10,858	204.25	4,595	13,172
203.74	4,314	10,901	204.26	4,601	13,218
203.75	4,320	10,944	204.27	4,607	13,264
203.76	4,325	10,987	204.28	4,612	13,310
203.77	4,330	11,031	204.29	4,618	13,356
203.78	4,336	11,074	204.30	4,624	13,402
203.79	4,341	11,117	204.31	4,629	13,449
203.80	4,347	11,161	204.32	4,635	13,495
203.81	4,352	11,204	204.33	4,640	13,541
203.82	4,357	11,248	204.34	4,646	13,588
203.83	4,363	11,291	204.35	4,652	13,634
203.84	4,368	11,335	204.36	4,657	13,681
203.85	4,373	11,379	204.37	4,663	13,727
203.86	4,379	11,423	204.38	4,669	13,774
203.87	4,384	11,466	204.39	4,674	13,821
203.88	4,390	11,510	204.40	4,680	13,868
203.89	4,395	11,554	204.41	4,686	13,914
203.90	4,400	11,598	204.42	4,691	13,961
203.91	4,406	11,642	204.43	4,697	14,008
203.92	4,411	11,686	204.44	4,703	14,055
203.93	4,416	11,730	204.45	4,708	14,102

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.46	4,714	14,149
204.47	4,720	14,197
204.48	4,725	14,244
204.49	4,731	14,291
204.50	4,737	14,338
204.51	4,742	14,386
204.52	4,748	14,433
204.53	4,753	14,481
204.54	4,759	14,528
204.55	4,765	14,576
204.56	4,770	14,624
204.57	4,776	14,671
204.58	4,782	14,719
204.59	4,787	14,767
204.60	4,793	14,815
204.61	4,799	14,863
204.62	4,804	14,911
204.63	4,810	14,959
204.64	4,816	15,007
204.65	4,821	15,055
204.66	4,827	15,103
204.67	4,833	15,152
204.68	4,838	15,200
204.69	4,844	15,249
204.70	4,850	15,297
204.71	4,855	15,346
204.72	4,861	15,394
204.73	4,866	15,443
204.74	4,872	15,491
204.75	4,878	15,540
204.76	4,883	15,589
204.77	4,889	15,638
204.78	4,895	15,687
204.79	4,900	15,736
204.80	4,906	15,785
204.81	4,912	15,834
204.82	4,917	15,883
204.83	4,923	15,932
204.84	4,929	15,981
204.85	4,934	16,031
204.86	4,940	16,080
204.87	4,946	16,130
204.88	4,951	16,179
204.89	4,957	16,229
204.90	4,963	16,278
204.91	4,968	16,328
204.92	4,974	16,378
204.93	4,979	16,427
204.94	4,985	16,477
204.95	4,991	16,527
204.96	4,996	16,577
204.97	5,002	16,627
204.98	5,008	16,677
204.99	5,013	16,727
205.00	**5,019**	**16,777**

Summary for Pond B-40: Basin #40

Inflow Area = 1.888 ac, 47.19% Impervious, Inflow Depth = 4.26" for Future 10 yr event
Inflow = 8.13 cfs @ 12.17 hrs, Volume= 0.671 af
Outflow = 4.66 cfs @ 12.31 hrs, Volume= 0.588 af, Atten= 43%, Lag= 8.4 min
Primary = 4.66 cfs @ 12.31 hrs, Volume= 0.588 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.84' @ 12.31 hrs Surf.Area= 4,206 sf Storage= 8,346 cf

Plug-Flow detention time= 125.1 min calculated for 0.588 af (88% of inflow)
Center-of-Mass det. time= 65.2 min (848.1 - 782.9)

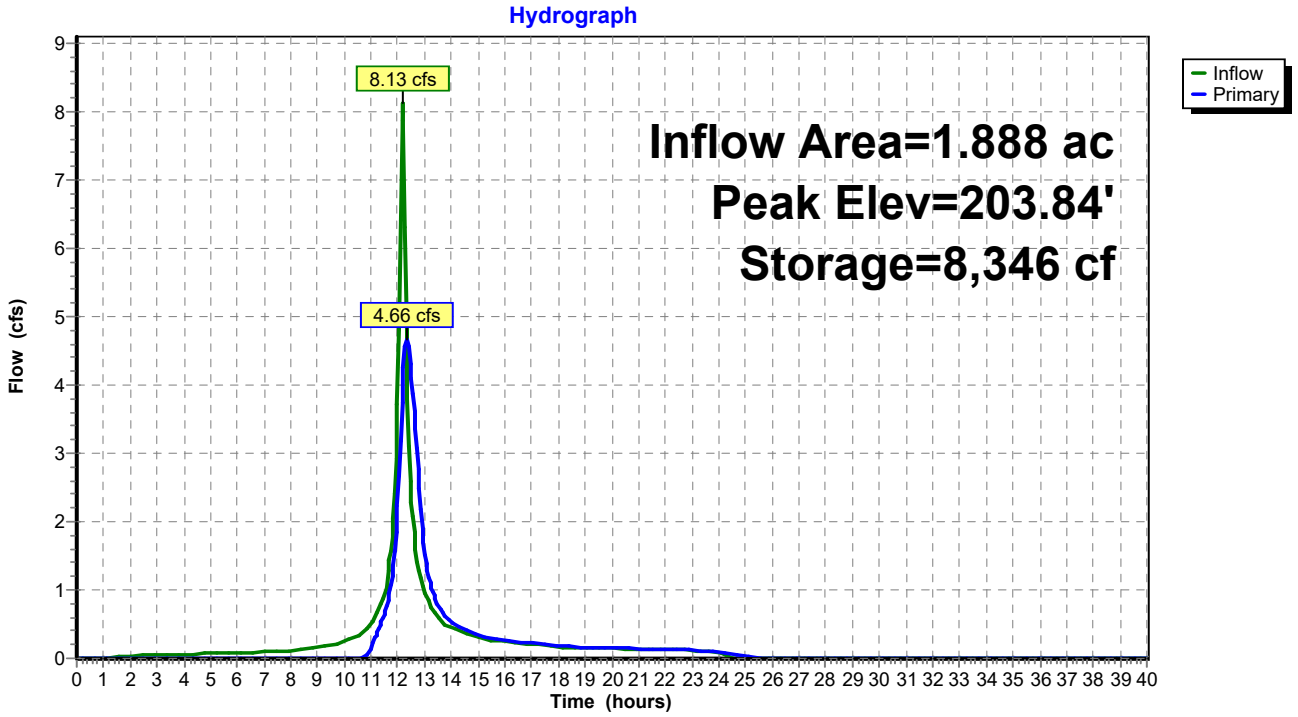
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	18,339 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,521	1,232	1,232
203.00	3,886	3,704	4,936
204.00	4,266	4,076	9,012
205.00	4,660	4,463	13,475
206.00	5,069	4,865	18,339

Device	Routing	Invert	Outlet Devices
#1	Primary	201.30'	**18.0" Round Culvert** L= 38.0' Ke= 0.500 Inlet / Outlet Invert= 201.30' / 201.11' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.65'	**24.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	204.67'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	205.49'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.65 cfs @ 12.31 hrs HW=203.84' (Free Discharge)
- **1=Culvert** (Passes 4.65 cfs of 10.61 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 4.65 cfs @ 4.65 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-40: Basin #40



Stage-Discharge for Pond B-40: Basin #40

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.62
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.66
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.71
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.75
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.80
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.85
201.36	0.00	201.88	0.00	202.40	0.00	202.92	0.90
201.37	0.00	201.89	0.00	202.41	0.00	202.93	0.95
201.38	0.00	201.90	0.00	202.42	0.00	202.94	1.00
201.39	0.00	201.91	0.00	202.43	0.00	202.95	1.05
201.40	0.00	201.92	0.00	202.44	0.00	202.96	1.11
201.41	0.00	201.93	0.00	202.45	0.00	202.97	1.16
201.42	0.00	201.94	0.00	202.46	0.00	202.98	1.22
201.43	0.00	201.95	0.00	202.47	0.00	202.99	1.27
201.44	0.00	201.96	0.00	202.48	0.00	203.00	1.33
201.45	0.00	201.97	0.00	202.49	0.00	203.01	1.39
201.46	0.00	201.98	0.00	202.50	0.00	203.02	1.44
201.47	0.00	201.99	0.00	202.51	0.00	203.03	1.50
201.48	0.00	202.00	0.00	202.52	0.00	203.04	1.56
201.49	0.00	202.01	0.00	202.53	0.00	203.05	1.62
201.50	0.00	202.02	0.00	202.54	0.00	203.06	1.69
201.51	0.00	202.03	0.00	202.55	0.00	203.07	1.75
201.52	0.00	202.04	0.00	202.56	0.00	203.08	1.81
201.53	0.00	202.05	0.00	202.57	0.00	203.09	1.87
201.54	0.00	202.06	0.00	202.58	0.00	203.10	1.94
201.55	0.00	202.07	0.00	202.59	0.00	203.11	2.00
201.56	0.00	202.08	0.00	202.60	0.00	203.12	2.07
201.57	0.00	202.09	0.00	202.61	0.00	203.13	2.13
201.58	0.00	202.10	0.00	202.62	0.00	203.14	2.20
201.59	0.00	202.11	0.00	202.63	0.00	203.15	2.27
201.60	0.00	202.12	0.00	202.64	0.00	203.16	2.33
201.61	0.00	202.13	0.00	202.65	0.00	203.17	2.39
201.62	0.00	202.14	0.00	202.66	0.01	203.18	2.44
201.63	0.00	202.15	0.00	202.67	0.02	203.19	2.50
201.64	0.00	202.16	0.00	202.68	0.03	203.20	2.55
201.65	0.00	202.17	0.00	202.69	0.05	203.21	2.60
201.66	0.00	202.18	0.00	202.70	0.07	203.22	2.64
201.67	0.00	202.19	0.00	202.71	0.09	203.23	2.69
201.68	0.00	202.20	0.00	202.72	0.12	203.24	2.74
201.69	0.00	202.21	0.00	202.73	0.15	203.25	2.78
201.70	0.00	202.22	0.00	202.74	0.17	203.26	2.82
201.71	0.00	202.23	0.00	202.75	0.20	203.27	2.87
201.72	0.00	202.24	0.00	202.76	0.23	203.28	2.91
201.73	0.00	202.25	0.00	202.77	0.27	203.29	2.95
201.74	0.00	202.26	0.00	202.78	0.30	203.30	2.99
201.75	0.00	202.27	0.00	202.79	0.34	203.31	3.03
201.76	0.00	202.28	0.00	202.80	0.37	203.32	3.07
201.77	0.00	202.29	0.00	202.81	0.41	203.33	3.11
201.78	0.00	202.30	0.00	202.82	0.45	203.34	3.15
201.79	0.00	202.31	0.00	202.83	0.49	203.35	3.19
201.80	0.00	202.32	0.00	202.84	0.53	203.36	3.22
201.81	0.00	202.33	0.00	202.85	0.57	203.37	3.26

Stage-Discharge for Pond B-40: Basin #40 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	3.30	203.90	4.80	204.42	5.93	204.94	8.68
203.39	3.33	203.91	4.83	204.43	5.95	204.95	8.80
203.40	3.37	203.92	4.85	204.44	5.97	204.96	8.92
203.41	3.40	203.93	4.87	204.45	5.99	204.97	9.04
203.42	3.44	203.94	4.90	204.46	6.01	204.98	9.16
203.43	3.47	203.95	4.92	204.47	6.03	204.99	9.29
203.44	3.51	203.96	4.95	204.48	6.05	205.00	9.41
203.45	3.54	203.97	4.97	204.49	6.07	205.01	9.54
203.46	3.57	203.98	4.99	204.50	6.08	205.02	9.67
203.47	3.60	203.99	5.02	204.51	6.10	205.03	9.80
203.48	3.64	204.00	5.04	204.52	6.12	205.04	9.93
203.49	3.67	204.01	5.06	204.53	6.14	205.05	10.06
203.50	3.70	204.02	5.09	204.54	6.16	205.06	10.20
203.51	3.73	204.03	5.11	204.55	6.18	205.07	10.33
203.52	3.76	204.04	5.13	204.56	6.20	205.08	10.47
203.53	3.80	204.05	5.15	204.57	6.22	205.09	10.61
203.54	3.83	204.06	5.18	204.58	6.24	205.10	10.75
203.55	3.86	204.07	5.20	204.59	6.25	205.11	10.89
203.56	3.89	204.08	5.22	204.60	6.27	205.12	11.03
203.57	3.92	204.09	5.24	204.61	6.29	205.13	11.17
203.58	3.95	204.10	5.26	204.62	6.31	205.14	11.32
203.59	3.98	204.11	5.29	204.63	6.33	205.15	11.46
203.60	4.01	204.12	5.31	204.64	6.35	205.16	11.61
203.61	4.04	204.13	5.33	204.65	6.36	205.17	11.76
203.62	4.06	204.14	5.35	204.66	6.38	205.18	11.91
203.63	4.09	204.15	5.37	204.67	6.40	205.19	12.06
203.64	4.12	204.16	5.40	204.68	6.43	205.20	12.21
203.65	4.15	204.17	5.42	204.69	6.47	205.21	12.36
203.66	4.18	204.18	5.44	204.70	6.52	205.22	12.52
203.67	4.21	204.19	5.46	204.71	6.58	205.23	12.67
203.68	4.23	204.20	5.48	204.72	6.64	205.24	12.83
203.69	4.26	204.21	5.50	204.73	6.70	205.25	12.99
203.70	4.29	204.22	5.52	204.74	6.77	205.26	13.15
203.71	4.32	204.23	5.54	204.75	6.84	205.27	13.31
203.72	4.34	204.24	5.57	204.76	6.91	205.28	13.47
203.73	4.37	204.25	5.59	204.77	6.99	205.29	13.63
203.74	4.40	204.26	5.61	204.78	7.07	205.30	13.79
203.75	4.42	204.27	5.63	204.79	7.16	205.31	13.95
203.76	4.45	204.28	5.65	204.80	7.24	205.32	14.12
203.77	4.48	204.29	5.67	204.81	7.33	205.33	14.28
203.78	4.50	204.30	5.69	204.82	7.42	205.34	14.45
203.79	4.53	204.31	5.71	204.83	7.51	205.35	14.62
203.80	4.55	204.32	5.73	204.84	7.61	205.36	14.79
203.81	4.58	204.33	5.75	204.85	7.71	205.37	14.96
203.82	4.60	204.34	5.77	204.86	7.81	205.38	15.13
203.83	4.63	204.35	5.79	204.87	7.91	205.39	15.30
203.84	4.65	204.36	5.81	204.88	8.02	205.40	15.47
203.85	4.68	204.37	5.83	204.89	8.12	205.41	15.60
203.86	4.70	204.38	5.85	204.90	8.23	205.42	15.62
203.87	4.73	204.39	5.87	204.91	8.34	205.43	15.64
203.88	4.75	204.40	5.89	204.92	8.45	205.44	15.67
203.89	4.78	204.41	5.91	204.93	8.57	205.45	15.69

Stage-Discharge for Pond B-40: Basin #40 (continued)

Elevation (feet)	Primary (cfs)
205.46	15.71
205.47	15.74
205.48	15.76
205.49	15.78
205.50	15.92
205.51	16.16
205.52	16.46
205.53	16.81
205.54	17.21
205.55	17.64
205.56	18.12
205.57	18.62
205.58	19.16
205.59	19.73
205.60	20.32
205.61	20.95
205.62	21.60
205.63	22.27
205.64	22.97
205.65	23.69
205.66	24.43
205.67	25.20
205.68	25.99
205.69	26.80
205.70	27.67
205.71	28.56
205.72	29.48
205.73	30.43
205.74	31.40
205.75	32.39
205.76	33.41
205.77	34.46
205.78	35.53
205.79	36.62
205.80	37.74
205.81	38.89
205.82	40.05
205.83	41.25
205.84	42.46
205.85	43.70
205.86	44.97
205.87	46.25
205.88	47.57
205.89	48.90
205.90	50.29
205.91	51.70
205.92	53.14
205.93	54.61
205.94	56.10
205.95	57.62
205.96	59.16
205.97	60.73
205.98	62.33
205.99	63.95
206.00	**65.60**

Stage-Area-Storage for Pond B-40: Basin #40

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,616	680
201.31	50	0	201.83	2,666	706
201.32	101	1	201.84	2,716	733
201.33	151	2	201.85	2,767	761
201.34	201	4	201.86	2,817	789
201.35	252	6	201.87	2,867	817
201.36	302	9	201.88	2,917	846
201.37	352	12	201.89	2,968	875
201.38	402	16	201.90	3,018	905
201.39	453	20	201.91	3,068	936
201.40	503	25	201.92	3,119	967
201.41	553	30	201.93	3,169	998
201.42	604	36	201.94	3,219	1,030
201.43	654	43	201.95	3,270	1,063
201.44	704	49	201.96	3,320	1,096
201.45	755	57	201.97	3,370	1,129
201.46	805	64	201.98	3,420	1,163
201.47	855	73	201.99	3,471	1,197
201.48	905	81	202.00	3,521	1,232
201.49	956	91	202.01	3,525	1,268
201.50	1,006	101	202.02	3,528	1,303
201.51	1,056	111	202.03	3,532	1,338
201.52	1,107	122	202.04	3,536	1,373
201.53	1,157	133	202.05	3,539	1,409
201.54	1,207	145	202.06	3,543	1,444
201.55	1,258	157	202.07	3,547	1,480
201.56	1,308	170	202.08	3,550	1,515
201.57	1,358	183	202.09	3,554	1,551
201.58	1,408	197	202.10	3,558	1,586
201.59	1,459	212	202.11	3,561	1,622
201.60	1,509	226	202.12	3,565	1,657
201.61	1,559	242	202.13	3,568	1,693
201.62	1,610	258	202.14	3,572	1,729
201.63	1,660	274	202.15	3,576	1,765
201.64	1,710	291	202.16	3,579	1,800
201.65	1,761	308	202.17	3,583	1,836
201.66	1,811	326	202.18	3,587	1,872
201.67	1,861	344	202.19	3,590	1,908
201.68	1,911	363	202.20	3,594	1,944
201.69	1,962	383	202.21	3,598	1,980
201.70	2,012	402	202.22	3,601	2,016
201.71	2,062	423	202.23	3,605	2,052
201.72	2,113	444	202.24	3,609	2,088
201.73	2,163	465	202.25	3,612	2,124
201.74	2,213	487	202.26	3,616	2,160
201.75	2,263	509	202.27	3,620	2,196
201.76	2,314	532	202.28	3,623	2,233
201.77	2,364	556	202.29	3,627	2,269
201.78	2,414	579	202.30	3,631	2,305
201.79	2,465	604	202.31	3,634	2,341
201.80	2,515	629	202.32	3,638	2,378
201.81	2,565	654	202.33	3,641	2,414

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	3,645	2,451	202.86	3,835	4,395
202.35	3,649	2,487	202.87	3,839	4,434
202.36	3,652	2,524	202.88	3,842	4,472
202.37	3,656	2,560	202.89	3,846	4,511
202.38	3,660	2,597	202.90	3,850	4,549
202.39	3,663	2,633	202.91	3,853	4,588
202.40	3,667	2,670	202.92	3,857	4,626
202.41	3,671	2,707	202.93	3,860	4,665
202.42	3,674	2,743	202.94	3,864	4,703
202.43	3,678	2,780	202.95	3,868	4,742
202.44	3,682	2,817	202.96	3,871	4,781
202.45	3,685	2,854	202.97	3,875	4,819
202.46	3,689	2,891	202.98	3,879	4,858
202.47	3,693	2,928	202.99	3,882	4,897
202.48	3,696	2,964	203.00	3,886	4,936
202.49	3,700	3,001	203.01	3,890	4,975
202.50	3,704	3,038	203.02	3,894	5,014
202.51	3,707	3,076	203.03	3,897	5,053
202.52	3,711	3,113	203.04	3,901	5,092
202.53	3,714	3,150	203.05	3,905	5,131
202.54	3,718	3,187	203.06	3,909	5,170
202.55	3,722	3,224	203.07	3,913	5,209
202.56	3,725	3,261	203.08	3,916	5,248
202.57	3,729	3,299	203.09	3,920	5,287
202.58	3,733	3,336	203.10	3,924	5,326
202.59	3,736	3,373	203.11	3,928	5,366
202.60	3,740	3,411	203.12	3,932	5,405
202.61	3,744	3,448	203.13	3,935	5,444
202.62	3,747	3,486	203.14	3,939	5,484
202.63	3,751	3,523	203.15	3,943	5,523
202.64	3,755	3,561	203.16	3,947	5,562
202.65	3,758	3,598	203.17	3,951	5,602
202.66	3,762	3,636	203.18	3,954	5,641
202.67	3,766	3,673	203.19	3,958	5,681
202.68	3,769	3,711	203.20	3,962	5,721
202.69	3,773	3,749	203.21	3,966	5,760
202.70	3,777	3,786	203.22	3,970	5,800
202.71	3,780	3,824	203.23	3,973	5,840
202.72	3,784	3,862	203.24	3,977	5,879
202.73	3,787	3,900	203.25	3,981	5,919
202.74	3,791	3,938	203.26	3,985	5,959
202.75	3,795	3,976	203.27	3,989	5,999
202.76	3,798	4,014	203.28	3,992	6,039
202.77	3,802	4,052	203.29	3,996	6,079
202.78	3,806	4,090	203.30	4,000	6,119
202.79	3,809	4,128	203.31	4,004	6,159
202.80	3,813	4,166	203.32	4,008	6,199
202.81	3,817	4,204	203.33	4,011	6,239
202.82	3,820	4,242	203.34	4,015	6,279
202.83	3,824	4,281	203.35	4,019	6,319
202.84	3,828	4,319	203.36	4,023	6,359
202.85	3,831	4,357	203.37	4,027	6,400

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,030	6,440	203.90	4,228	8,587
203.39	4,034	6,480	203.91	4,232	8,629
203.40	4,038	6,521	203.92	4,236	8,672
203.41	4,042	6,561	203.93	4,239	8,714
203.42	4,046	6,601	203.94	4,243	8,757
203.43	4,049	6,642	203.95	4,247	8,799
203.44	4,053	6,682	203.96	4,251	8,842
203.45	4,057	6,723	203.97	4,255	8,884
203.46	4,061	6,764	203.98	4,258	8,927
203.47	4,065	6,804	203.99	4,262	8,969
203.48	4,068	6,845	204.00	4,266	9,012
203.49	4,072	6,886	204.01	4,270	9,055
203.50	4,076	6,926	204.02	4,274	9,097
203.51	4,080	6,967	204.03	4,278	9,140
203.52	4,084	7,008	204.04	4,282	9,183
203.53	4,087	7,049	204.05	4,286	9,226
203.54	4,091	7,090	204.06	4,290	9,269
203.55	4,095	7,131	204.07	4,294	9,311
203.56	4,099	7,172	204.08	4,298	9,354
203.57	4,103	7,213	204.09	4,301	9,397
203.58	4,106	7,254	204.10	4,305	9,440
203.59	4,110	7,295	204.11	4,309	9,483
203.60	4,114	7,336	204.12	4,313	9,527
203.61	4,118	7,377	204.13	4,317	9,570
203.62	4,122	7,418	204.14	4,321	9,613
203.63	4,125	7,459	204.15	4,325	9,656
203.64	4,129	7,501	204.16	4,329	9,699
203.65	4,133	7,542	204.17	4,333	9,743
203.66	4,137	7,583	204.18	4,337	9,786
203.67	4,141	7,625	204.19	4,341	9,830
203.68	4,144	7,666	204.20	4,345	9,873
203.69	4,148	7,708	204.21	4,349	9,916
203.70	4,152	7,749	204.22	4,353	9,960
203.71	4,156	7,791	204.23	4,357	10,003
203.72	4,160	7,832	204.24	4,361	10,047
203.73	4,163	7,874	204.25	4,365	10,091
203.74	4,167	7,916	204.26	4,368	10,134
203.75	4,171	7,957	204.27	4,372	10,178
203.76	4,175	7,999	204.28	4,376	10,222
203.77	4,179	8,041	204.29	4,380	10,266
203.78	4,182	8,083	204.30	4,384	10,309
203.79	4,186	8,124	204.31	4,388	10,353
203.80	4,190	8,166	204.32	4,392	10,397
203.81	4,194	8,208	204.33	4,396	10,441
203.82	4,198	8,250	204.34	4,400	10,485
203.83	4,201	8,292	204.35	4,404	10,529
203.84	4,205	8,334	204.36	4,408	10,573
203.85	4,209	8,376	204.37	4,412	10,617
203.86	4,213	8,418	204.38	4,416	10,661
203.87	4,217	8,460	204.39	4,420	10,706
203.88	4,220	8,503	204.40	4,424	10,750
203.89	4,224	8,545	204.41	4,428	10,794

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	4,431	10,838	204.94	4,636	13,196
204.43	4,435	10,883	204.95	4,640	13,242
204.44	4,439	10,927	204.96	4,644	13,289
204.45	4,443	10,971	204.97	4,648	13,335
204.46	4,447	11,016	204.98	4,652	13,382
204.47	4,451	11,060	204.99	4,656	13,428
204.48	4,455	11,105	205.00	4,660	13,475
204.49	4,459	11,149	205.01	4,664	13,521
204.50	4,463	11,194	205.02	4,668	13,568
204.51	4,467	11,239	205.03	4,672	13,615
204.52	4,471	11,283	205.04	4,676	13,662
204.53	4,475	11,328	205.05	4,680	13,708
204.54	4,479	11,373	205.06	4,685	13,755
204.55	4,483	11,418	205.07	4,689	13,802
204.56	4,487	11,463	205.08	4,693	13,849
204.57	4,491	11,507	205.09	4,697	13,896
204.58	4,495	11,552	205.10	4,701	13,943
204.59	4,498	11,597	205.11	4,705	13,990
204.60	4,502	11,642	205.12	4,709	14,037
204.61	4,506	11,687	205.13	4,713	14,084
204.62	4,510	11,732	205.14	4,717	14,131
204.63	4,514	11,778	205.15	4,721	14,178
204.64	4,518	11,823	205.16	4,725	14,226
204.65	4,522	11,868	205.17	4,730	14,273
204.66	4,526	11,913	205.18	4,734	14,320
204.67	4,530	11,959	205.19	4,738	14,368
204.68	4,534	12,004	205.20	4,742	14,415
204.69	4,538	12,049	205.21	4,746	14,462
204.70	4,542	12,095	205.22	4,750	14,510
204.71	4,546	12,140	205.23	4,754	14,557
204.72	4,550	12,185	205.24	4,758	14,605
204.73	4,554	12,231	205.25	4,762	14,653
204.74	4,558	12,277	205.26	4,766	14,700
204.75	4,562	12,322	205.27	4,770	14,748
204.76	4,565	12,368	205.28	4,775	14,796
204.77	4,569	12,413	205.29	4,779	14,843
204.78	4,573	12,459	205.30	4,783	14,891
204.79	4,577	12,505	205.31	4,787	14,939
204.80	4,581	12,551	205.32	4,791	14,987
204.81	4,585	12,597	205.33	4,795	15,035
204.82	4,589	12,642	205.34	4,799	15,083
204.83	4,593	12,688	205.35	4,803	15,131
204.84	4,597	12,734	205.36	4,807	15,179
204.85	4,601	12,780	205.37	4,811	15,227
204.86	4,605	12,826	205.38	4,815	15,275
204.87	4,609	12,872	205.39	4,820	15,323
204.88	4,613	12,918	205.40	4,824	15,372
204.89	4,617	12,965	205.41	4,828	15,420
204.90	4,621	13,011	205.42	4,832	15,468
204.91	4,625	13,057	205.43	4,836	15,516
204.92	4,628	13,103	205.44	4,840	15,565
204.93	4,632	13,150	205.45	4,844	15,613

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

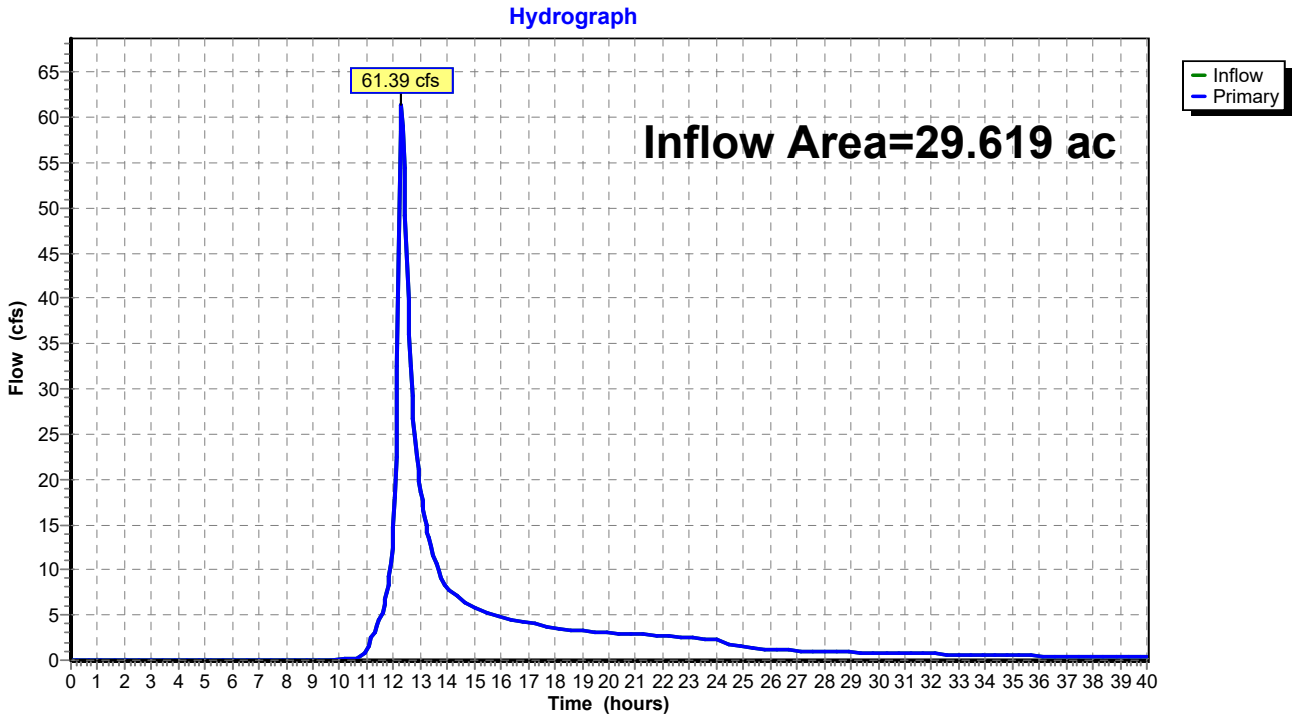
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.46	4,848	15,662
205.47	4,852	15,710
205.48	4,856	15,759
205.49	4,860	15,807
205.50	4,865	15,856
205.51	4,869	15,905
205.52	4,873	15,953
205.53	4,877	16,002
205.54	4,881	16,051
205.55	4,885	16,100
205.56	4,889	16,149
205.57	4,893	16,197
205.58	4,897	16,246
205.59	4,901	16,295
205.60	4,905	16,344
205.61	4,909	16,394
205.62	4,914	16,443
205.63	4,918	16,492
205.64	4,922	16,541
205.65	4,926	16,590
205.66	4,930	16,640
205.67	4,934	16,689
205.68	4,938	16,738
205.69	4,942	16,788
205.70	4,946	16,837
205.71	4,950	16,887
205.72	4,954	16,936
205.73	4,959	16,986
205.74	4,963	17,035
205.75	4,967	17,085
205.76	4,971	17,135
205.77	4,975	17,184
205.78	4,979	17,234
205.79	4,983	17,284
205.80	4,987	17,334
205.81	4,991	17,384
205.82	4,995	17,434
205.83	4,999	17,484
205.84	5,004	17,534
205.85	5,008	17,584
205.86	5,012	17,634
205.87	5,016	17,684
205.88	5,020	17,734
205.89	5,024	17,784
205.90	5,028	17,834
205.91	5,032	17,885
205.92	5,036	17,935
205.93	5,040	17,986
205.94	5,044	18,036
205.95	5,049	18,086
205.96	5,053	18,137
205.97	5,057	18,187
205.98	5,061	18,238
205.99	5,065	18,289
206.00	**5,069**	**18,339**

Summary for Link PDA-3: Proposed Drainage Area #3

Inflow Area = 29.619 ac, 38.13% Impervious, Inflow Depth > 3.48" for Future 10 yr event
Inflow = 61.39 cfs @ 12.30 hrs, Volume= 8.578 af
Primary = 61.39 cfs @ 12.30 hrs, Volume= 8.578 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-3: Proposed Drainage Area #3



Summary for Subcatchment 29l: PDA-29 (impervious)

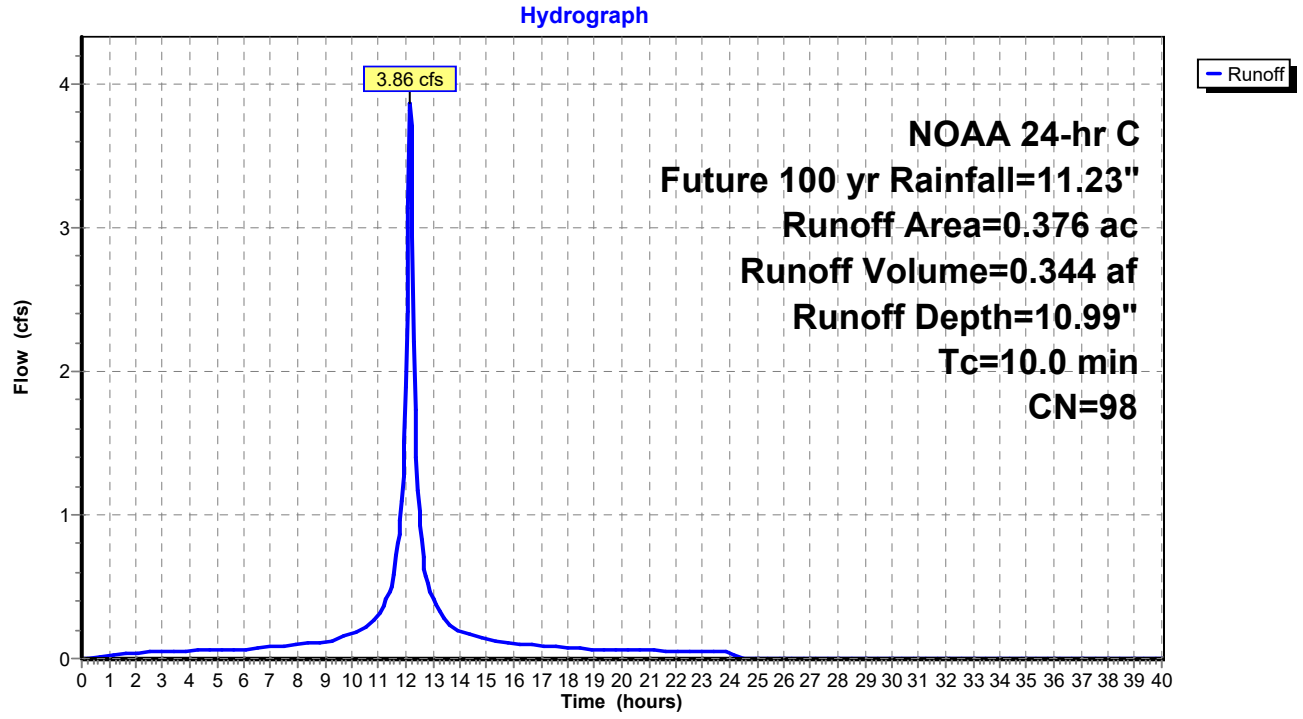
Runoff = 3.86 cfs @ 12.17 hrs, Volume= 0.344 af, Depth=10.99"
Routed to Pond B-29 : Basin #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.342	98	Pavement, HSG C
*	0.034	98	Concrete, HSC C
	0.376	98	Weighted Average
	0.376		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 29l: PDA-29 (impervious)



Summary for Subcatchment 29P: PDA-29 (pervious)

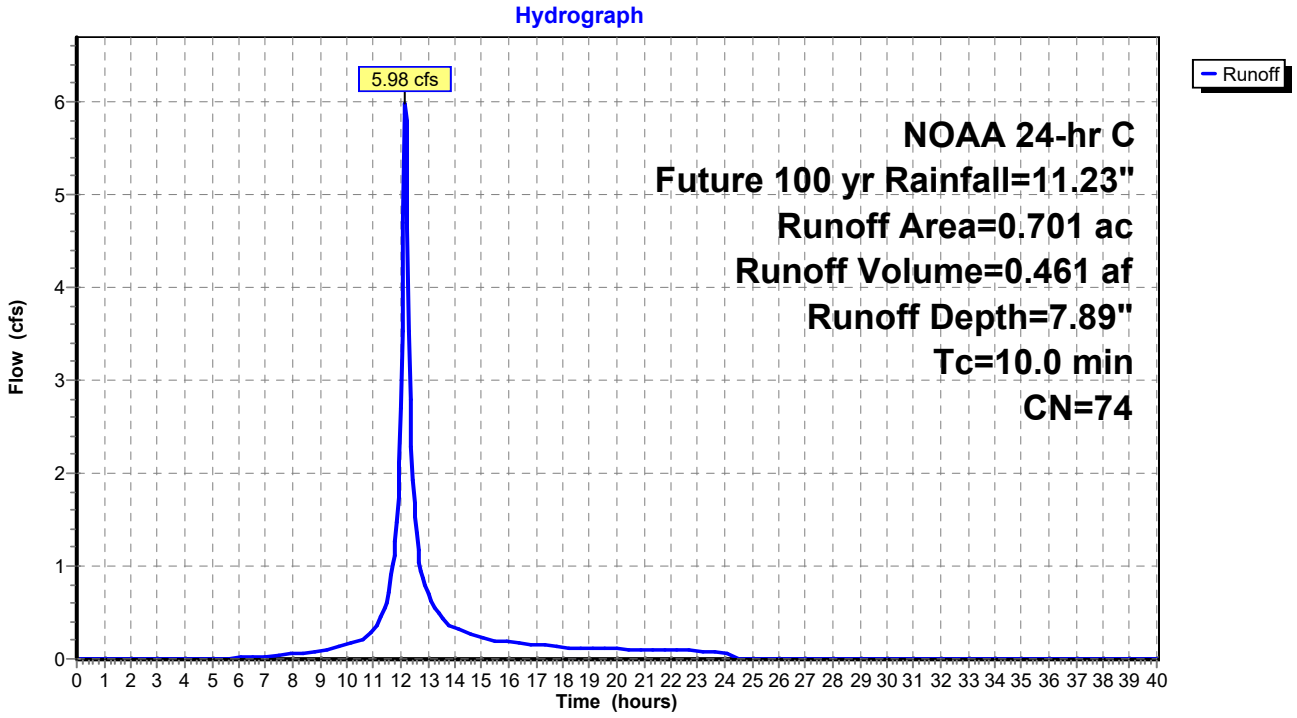
Runoff = 5.98 cfs @ 12.17 hrs, Volume= 0.461 af, Depth= 7.89"
Routed to Pond B-29 : Basin #29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.701	74	>75% Grass cover, Good, HSG C
0.701		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 29P: PDA-29 (pervious)



Summary for Subcatchment 30l: PDA-30 (impervious)

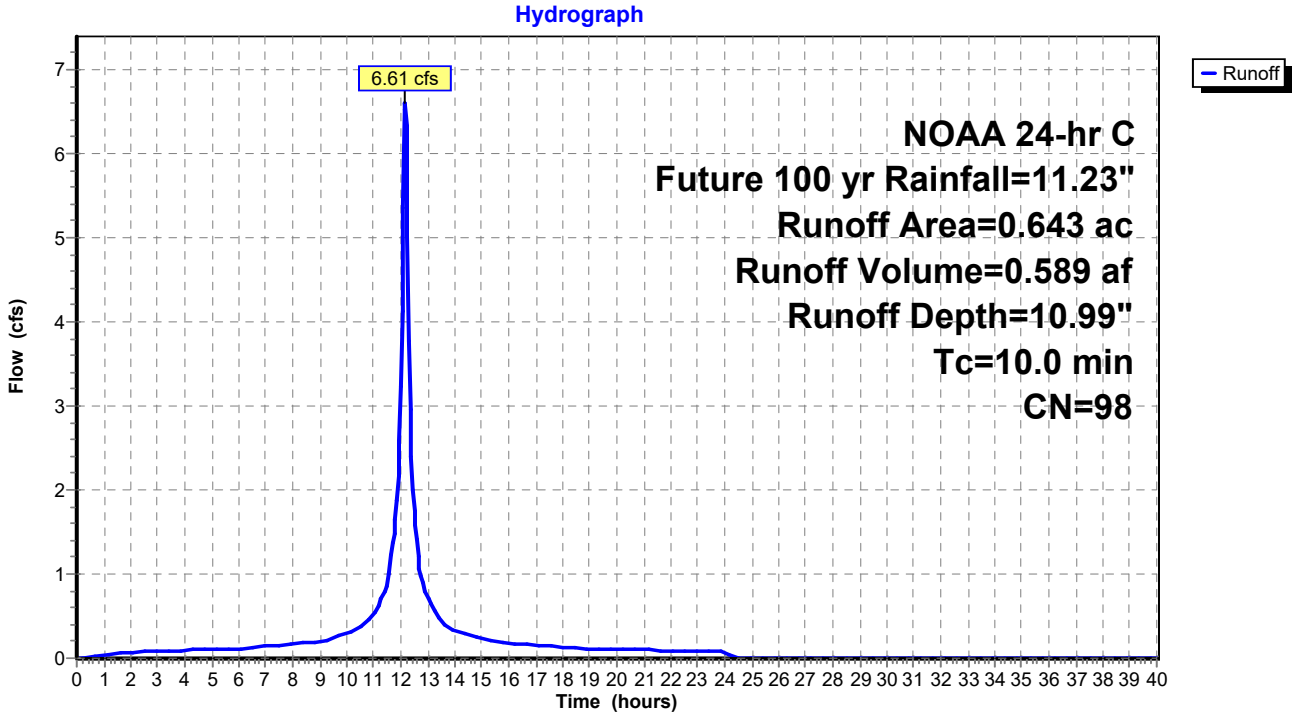
Runoff = 6.61 cfs @ 12.17 hrs, Volume= 0.589 af, Depth=10.99"
Routed to Pond B-30 : Basin #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.643	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.643	98	Weighted Average
	0.643		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 30l: PDA-30 (impervious)



Summary for Subcatchment 30P: PDA-30 (pervious)

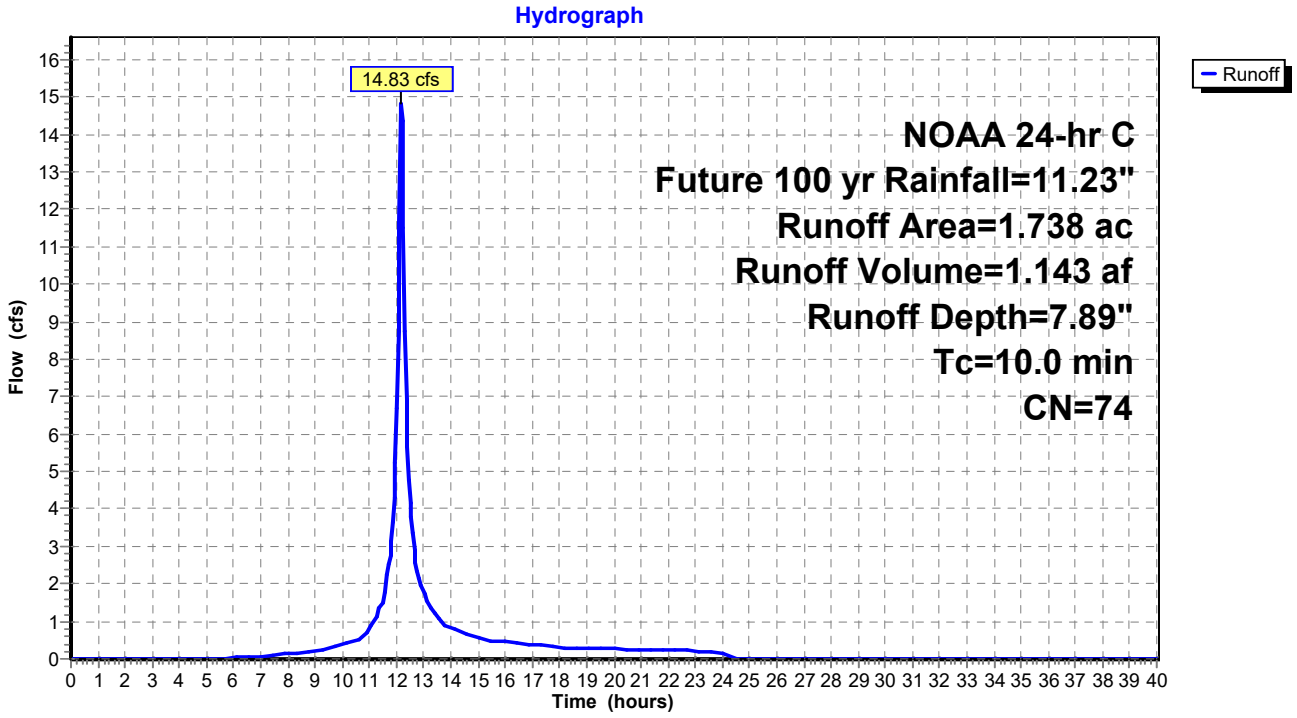
Runoff = 14.83 cfs @ 12.17 hrs, Volume= 1.143 af, Depth= 7.89"
Routed to Pond B-30 : Basin #30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.738	74	>75% Grass cover, Good, HSG C
1.738		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 30P: PDA-30 (pervious)



Summary for Subcatchment 31I: PDA-31 (impervious)

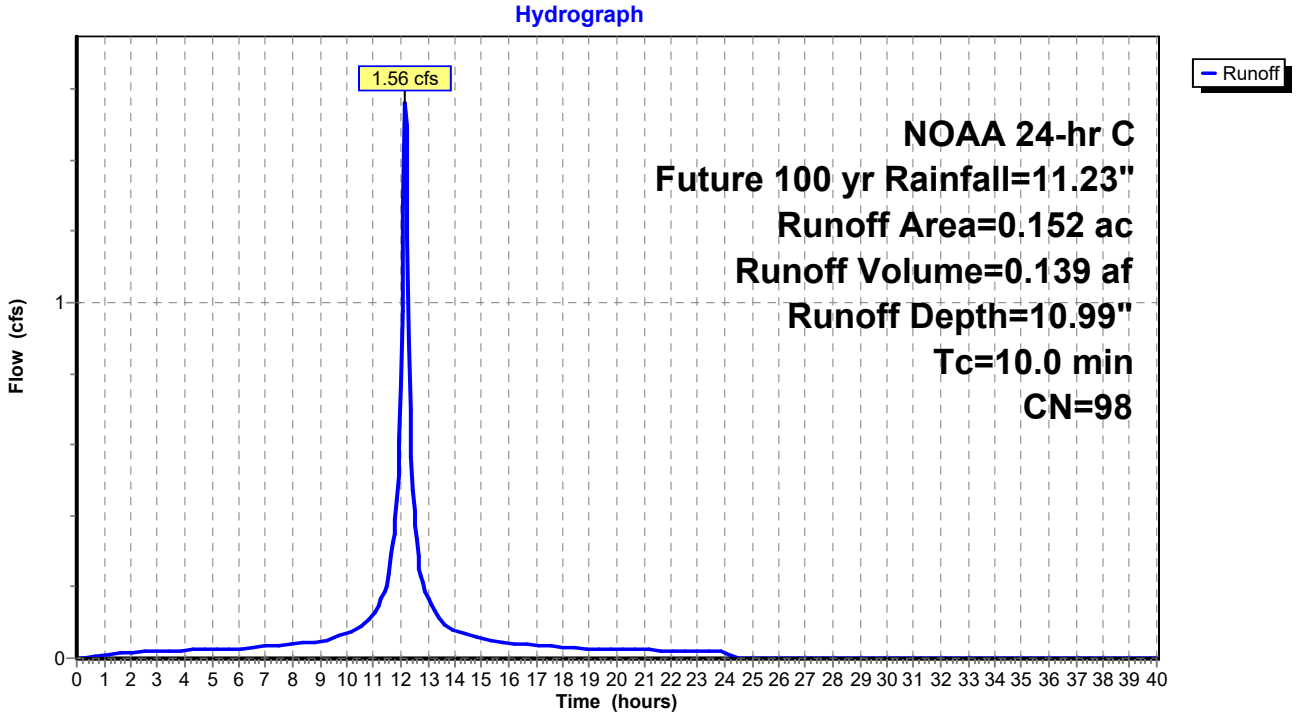
Runoff = 1.56 cfs @ 12.17 hrs, Volume= 0.139 af, Depth=10.99"
Routed to Pond B-31 : Basin #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.079	98	Pavement, HSG C
*	0.064	98	Roof, HSG C
*	0.009	98	Concrete, HSC C
	0.152	98	Weighted Average
	0.152		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 31I: PDA-31 (impervious)



Summary for Subcatchment 31P: PDA-31 (pervious)

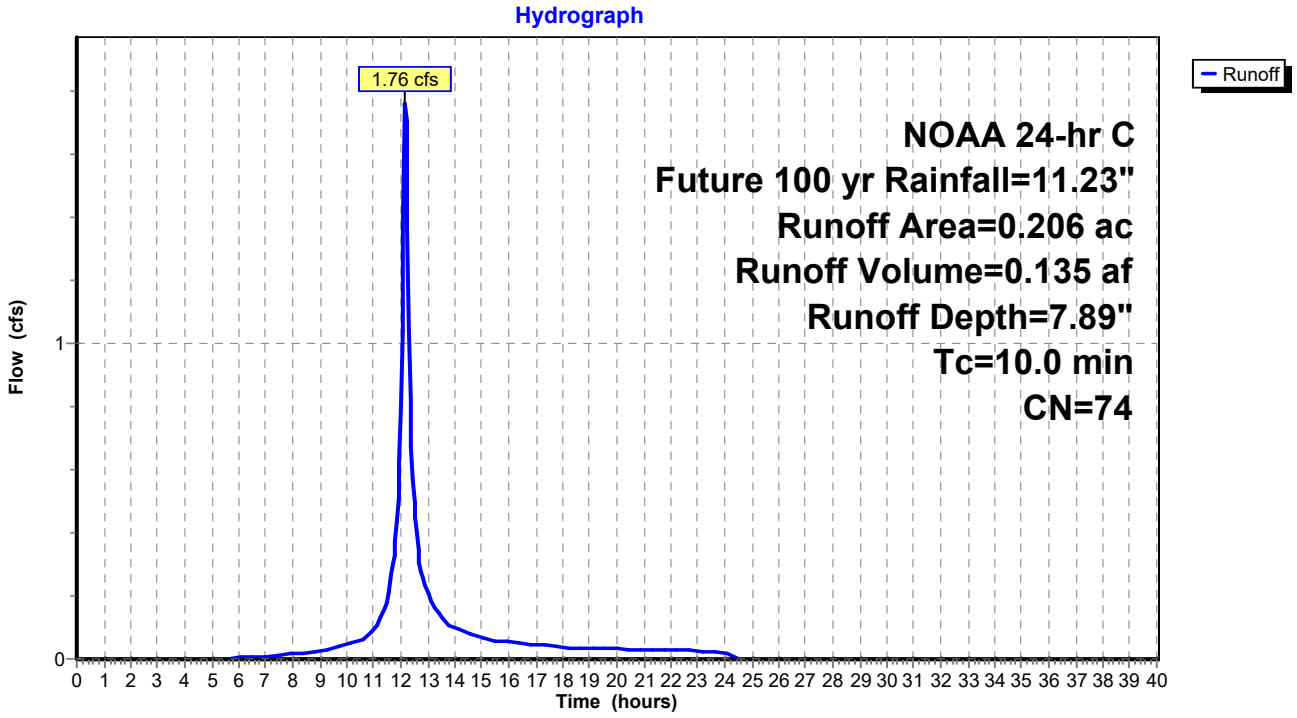
Runoff = 1.76 cfs @ 12.17 hrs, Volume= 0.135 af, Depth= 7.89"
Routed to Pond B-31 : Basin #31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.206	74	>75% Grass cover, Good, HSG C
0.206		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 31P: PDA-31 (pervious)



Summary for Subcatchment 32I: PDA-32 (impervious)

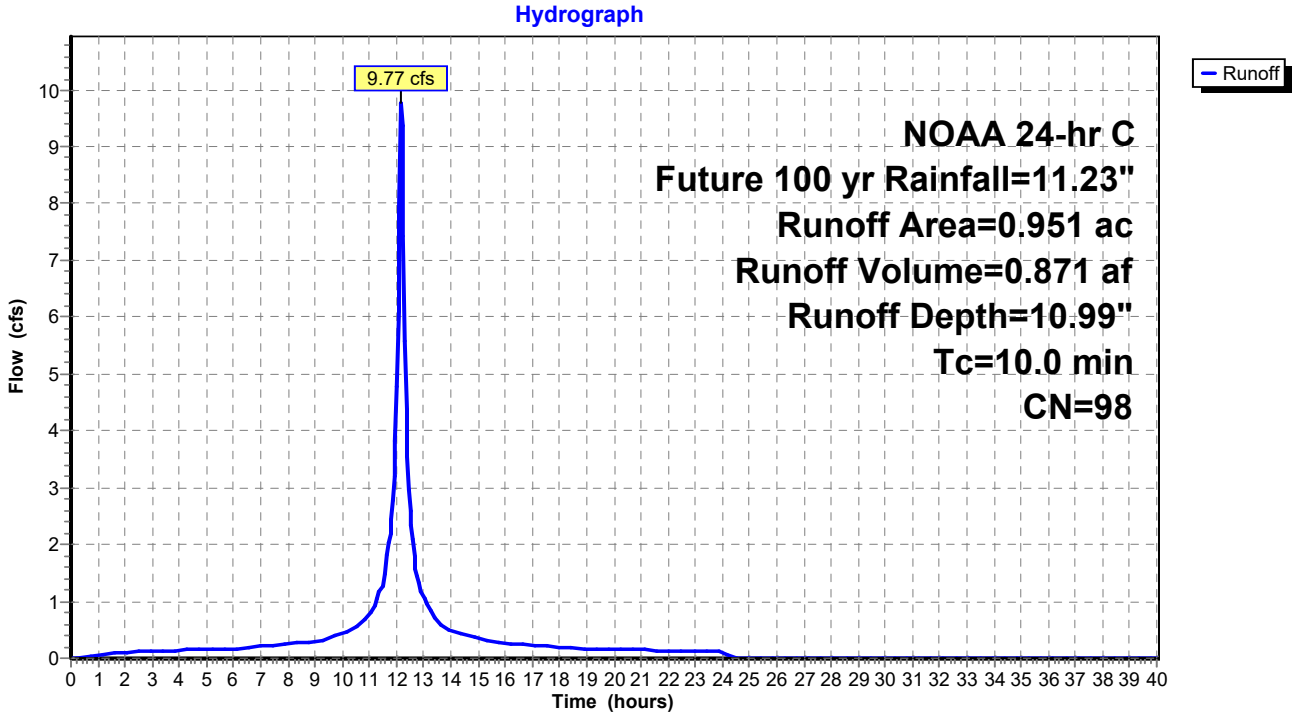
Runoff = 9.77 cfs @ 12.17 hrs, Volume= 0.871 af, Depth=10.99"
Routed to Pond B-32 : Basin #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.478	98	Pavement, HSG C
*	0.386	98	Roof, HSG C
*	0.087	98	Concrete, HSC C
	0.951	98	Weighted Average
	0.951		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 32I: PDA-32 (impervious)



Summary for Subcatchment 32P: PDA-32 (pervious)

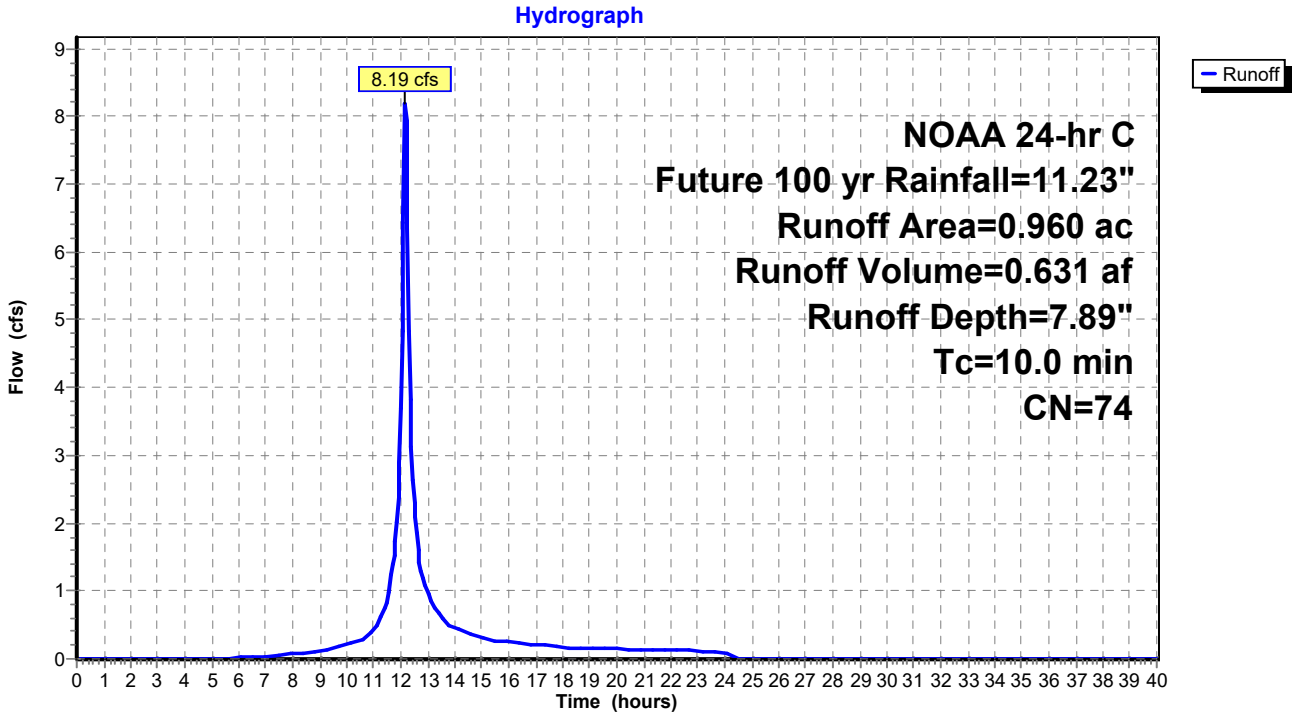
Runoff = 8.19 cfs @ 12.17 hrs, Volume= 0.631 af, Depth= 7.89"
Routed to Pond B-32 : Basin #32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.960	74	>75% Grass cover, Good, HSG C
0.960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 32P: PDA-32 (pervious)



Summary for Subcatchment 33I: PDA-33 (impervious)

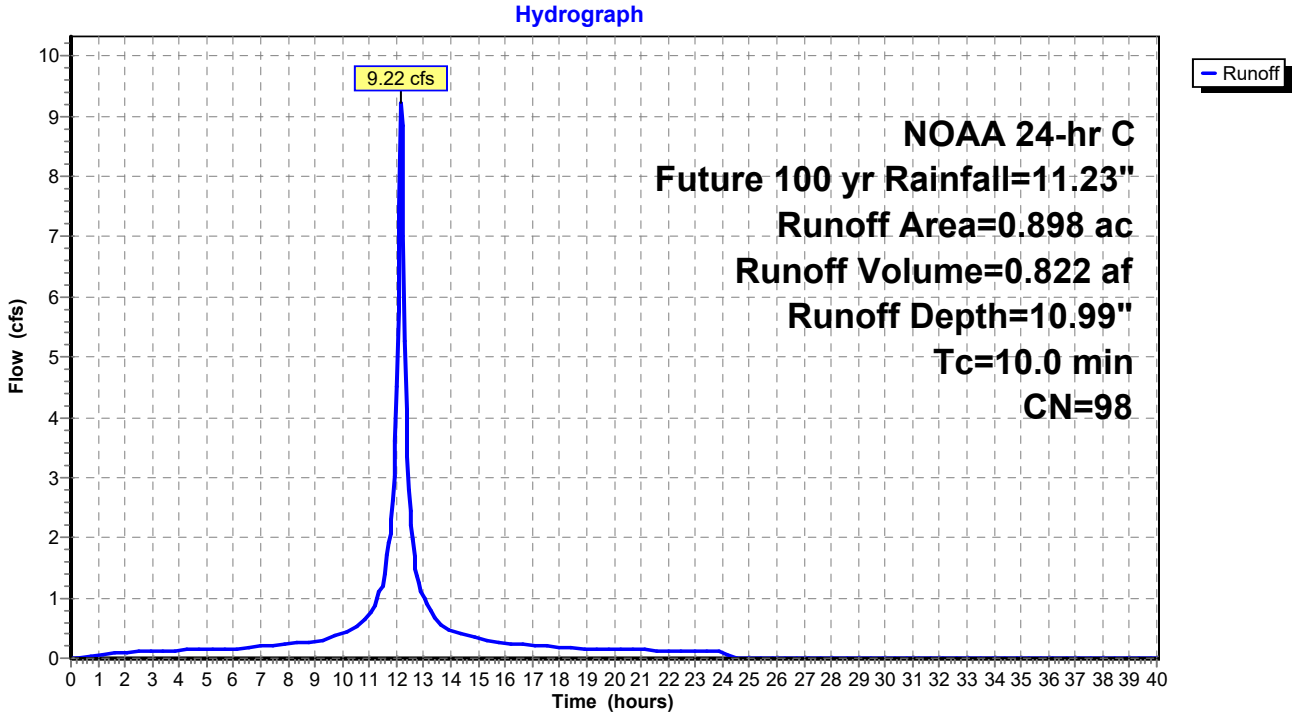
Runoff = 9.22 cfs @ 12.17 hrs, Volume= 0.822 af, Depth=10.99"
Routed to Pond B-33 : Basin #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.351	98	Pavement, HSG C
*	0.514	98	Roof, HSG C
*	0.033	98	Concrete, HSC C
	0.898	98	Weighted Average
	0.898		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 33I: PDA-33 (impervious)



Summary for Subcatchment 33P: PDA-33 (pervious)

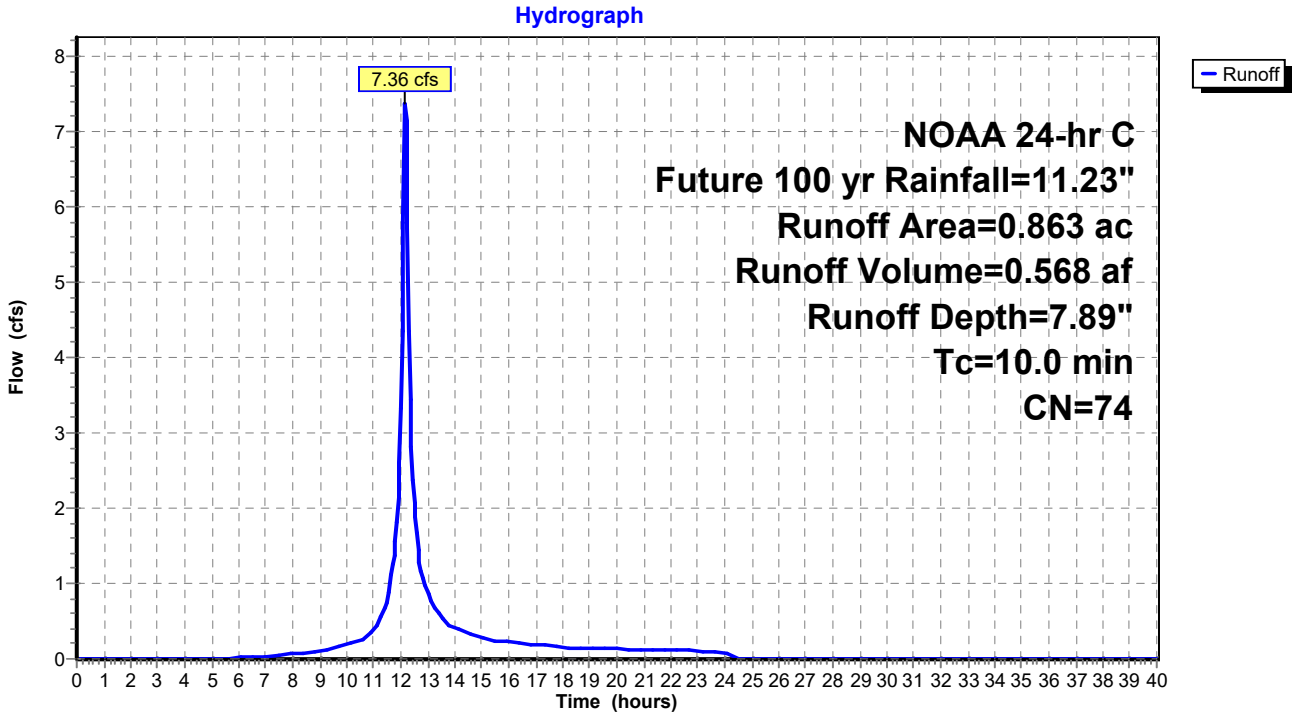
Runoff = 7.36 cfs @ 12.17 hrs, Volume= 0.568 af, Depth= 7.89"
Routed to Pond B-33 : Basin #33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.863	74	>75% Grass cover, Good, HSG C
0.863		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 33P: PDA-33 (pervious)



Summary for Subcatchment 34l: PDA-34 (impervious)

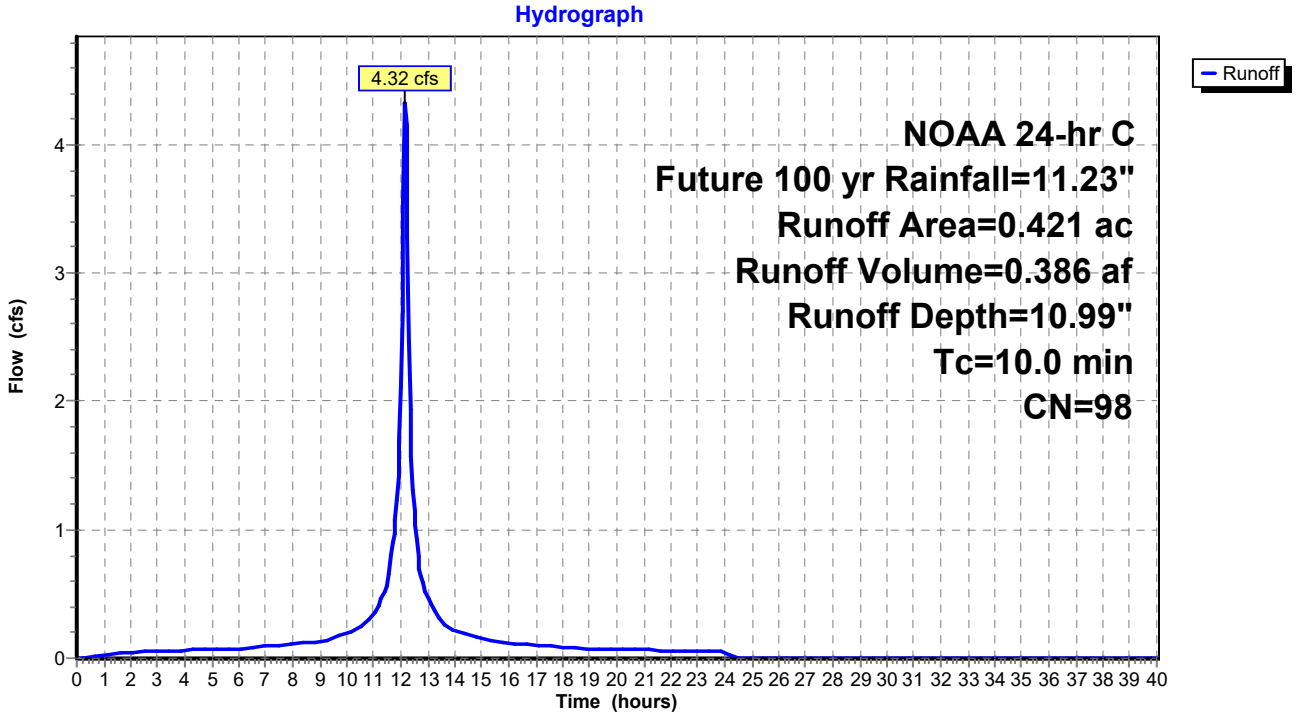
Runoff = 4.32 cfs @ 12.17 hrs, Volume= 0.386 af, Depth=10.99"
Routed to Pond B-34 : Basin #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.279	98	Roof, HSG C
*	0.142	98	Concrete, HSC C
	0.421	98	Weighted Average
	0.421		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 34l: PDA-34 (impervious)



Summary for Subcatchment 34P: PDA-34 (pervious)

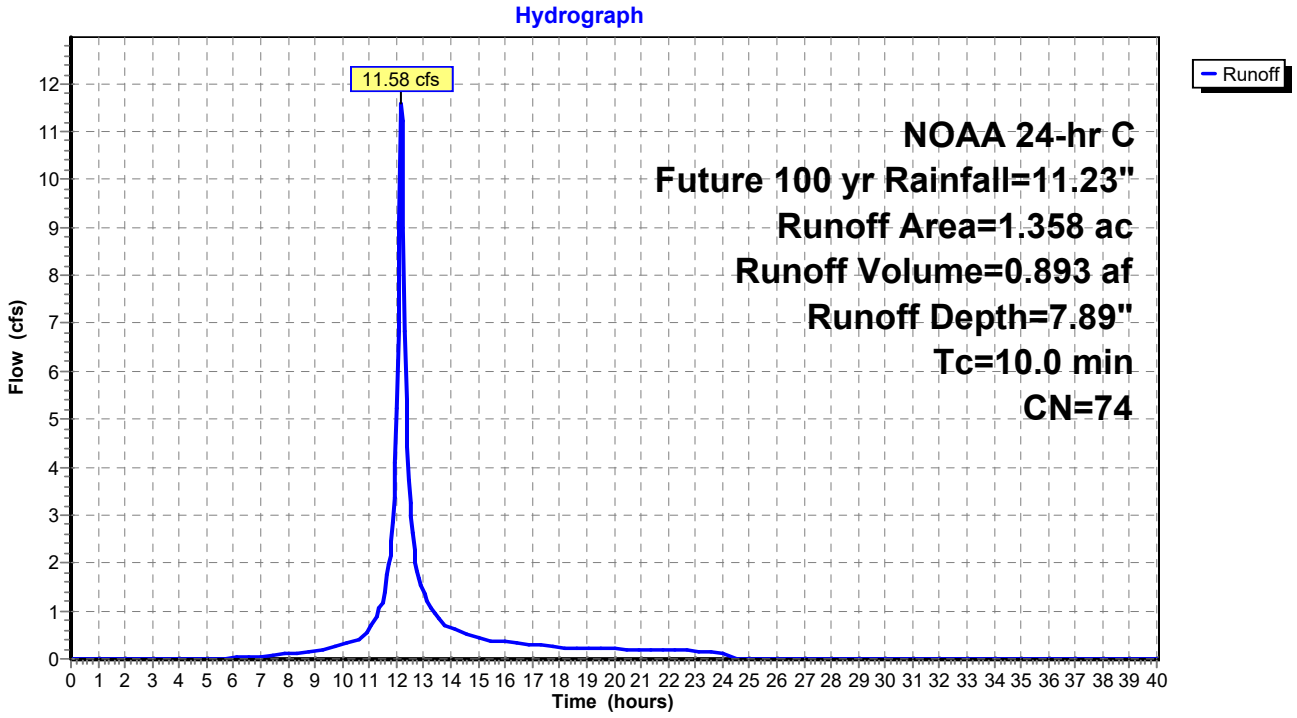
Runoff = 11.58 cfs @ 12.17 hrs, Volume= 0.893 af, Depth= 7.89"
Routed to Pond B-34 : Basin #34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.358	74	>75% Grass cover, Good, HSG C
1.358		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 34P: PDA-34 (pervious)



Summary for Subcatchment 35l: PDA-35 (impervious)

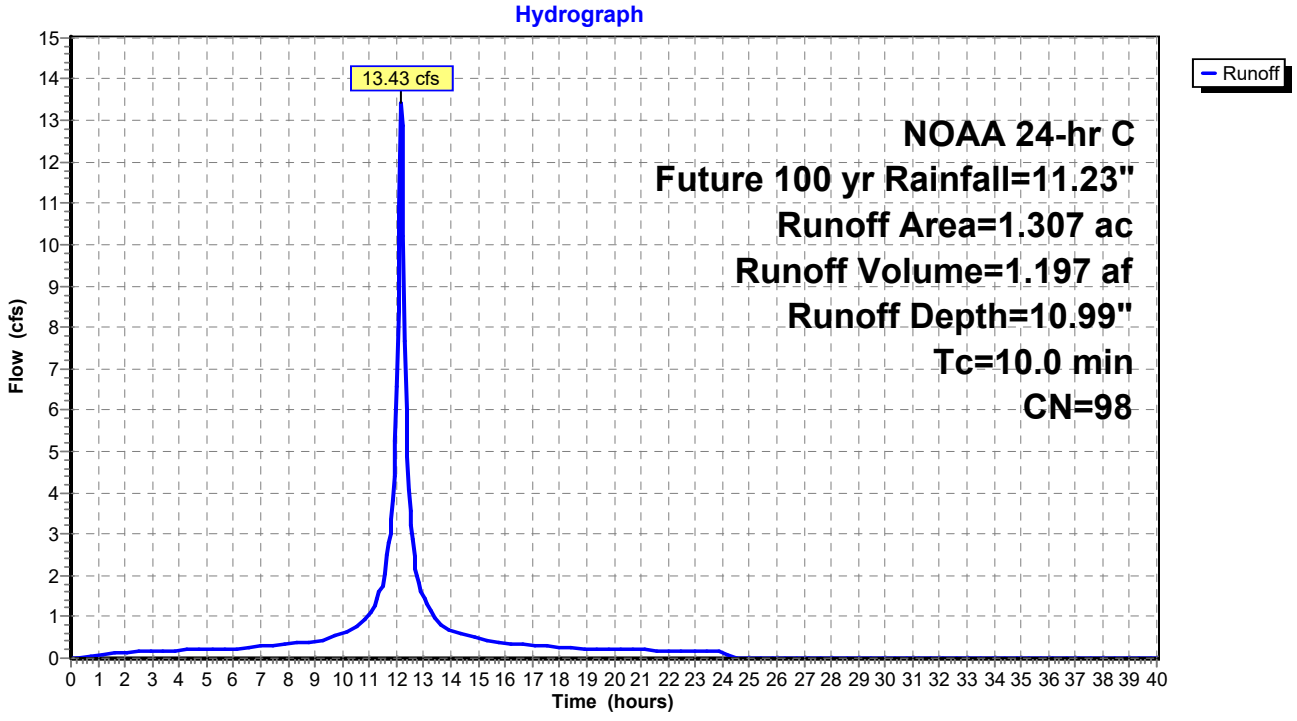
Runoff = 13.43 cfs @ 12.17 hrs, Volume= 1.197 af, Depth=10.99"
Routed to Pond B-35 : Basin #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	1.003	98	Pavement, HSG C
*	0.139	98	Roof, HSG C
*	0.165	98	Concrete, HSC C
	1.307	98	Weighted Average
	1.307		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 35l: PDA-35 (impervious)



Summary for Subcatchment 35P: PDA-35 (pervious)

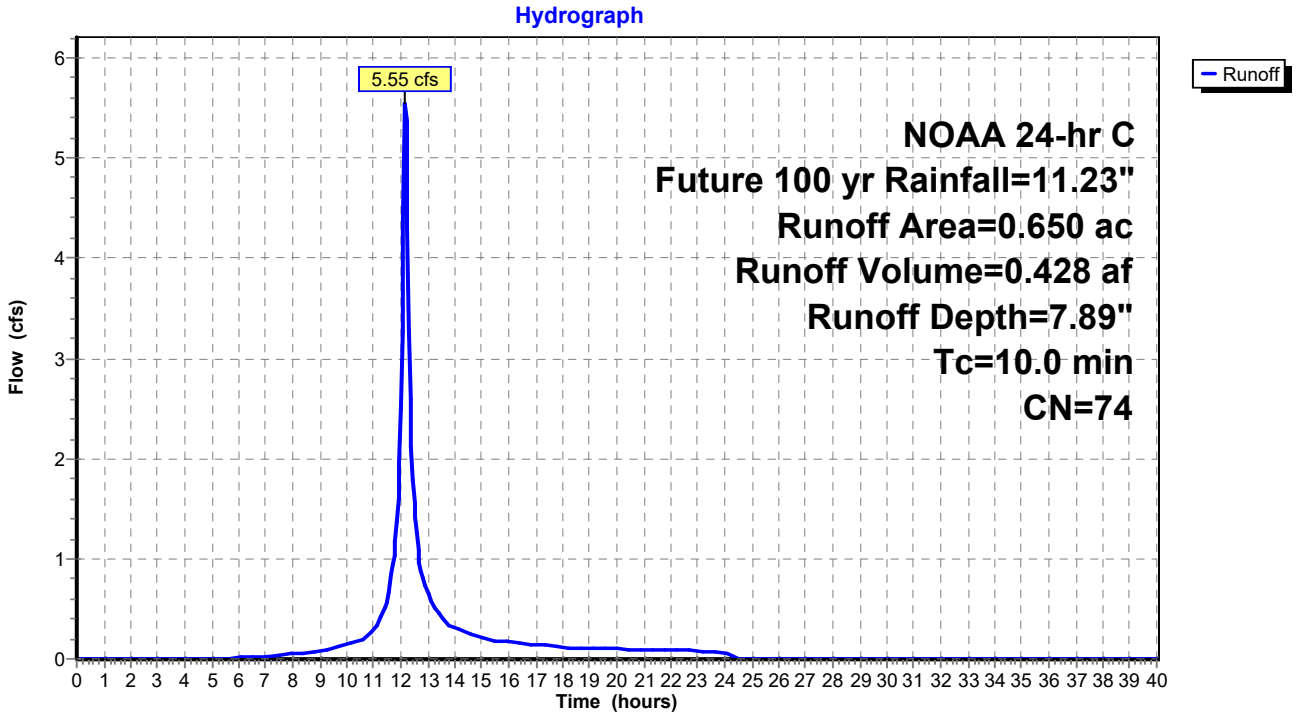
Runoff = 5.55 cfs @ 12.17 hrs, Volume= 0.428 af, Depth= 7.89"
Routed to Pond B-35 : Basin #35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.650	74	>75% Grass cover, Good, HSG C
0.650		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 35P: PDA-35 (pervious)



Summary for Subcatchment 36AI: PDA-36A (impervious)

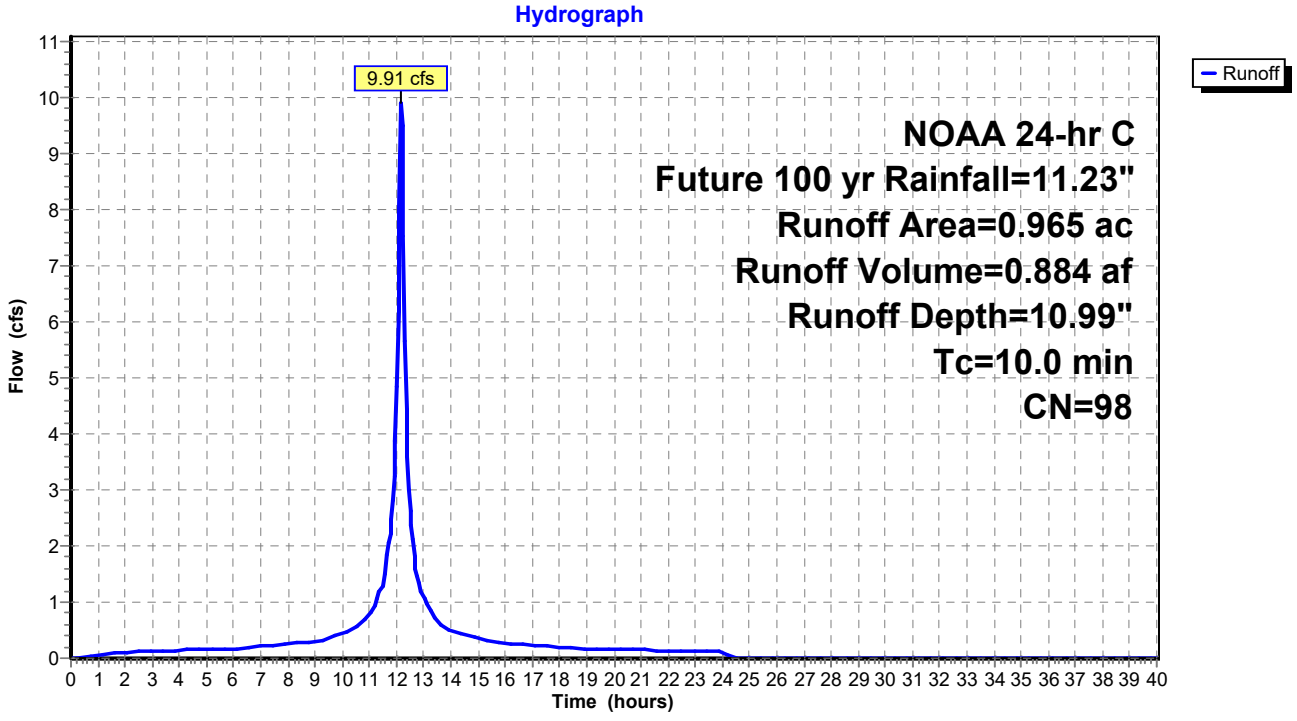
Runoff = 9.91 cfs @ 12.17 hrs, Volume= 0.884 af, Depth=10.99"
Routed to Pond B-36A : Basin #36A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.415	98	Pavement, HSG C
*	0.418	98	Roof, HSG C
*	0.132	98	Concrete, HSC C
	0.965	98	Weighted Average
	0.965		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36AI: PDA-36A (impervious)



Summary for Subcatchment 36AP: PDA-36A (pervious)

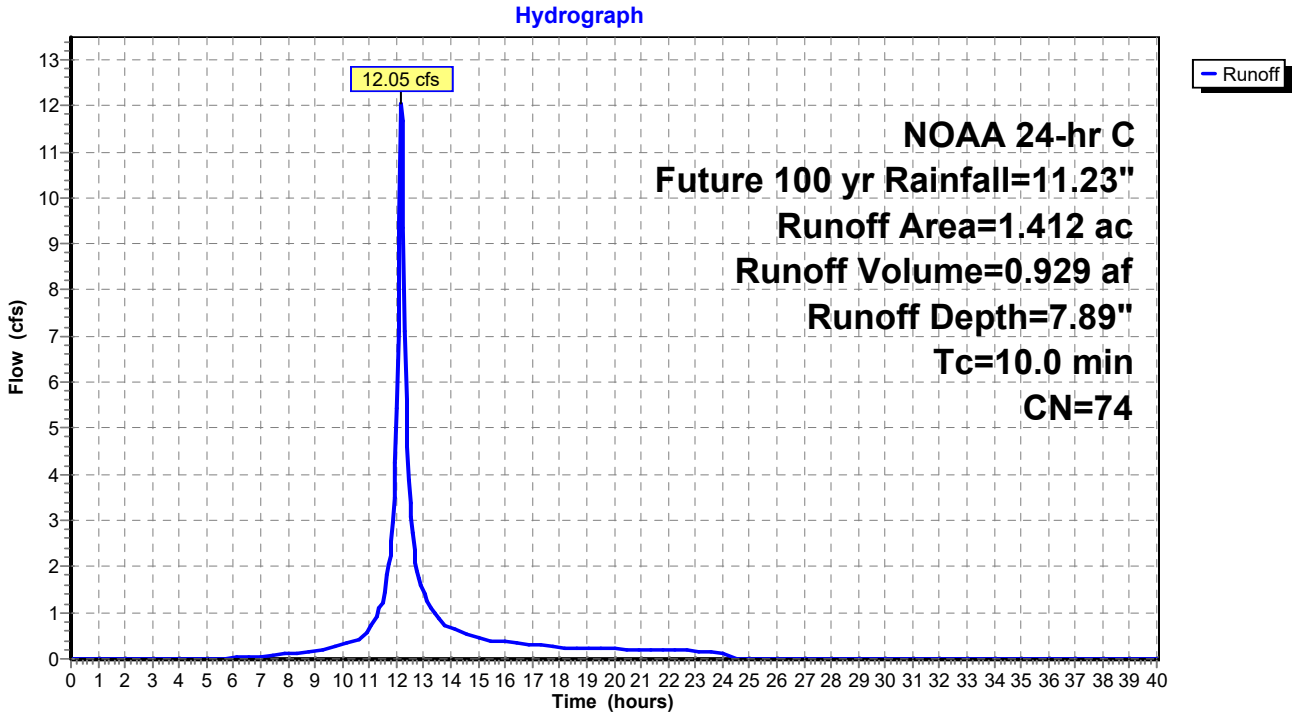
Runoff = 12.05 cfs @ 12.17 hrs, Volume= 0.929 af, Depth= 7.89"
Routed to Pond B-36A : Basin #36A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.412	74	>75% Grass cover, Good, HSG C
1.412		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36AP: PDA-36A (pervious)



Summary for Subcatchment 36BI: PDA-36B (impervious)

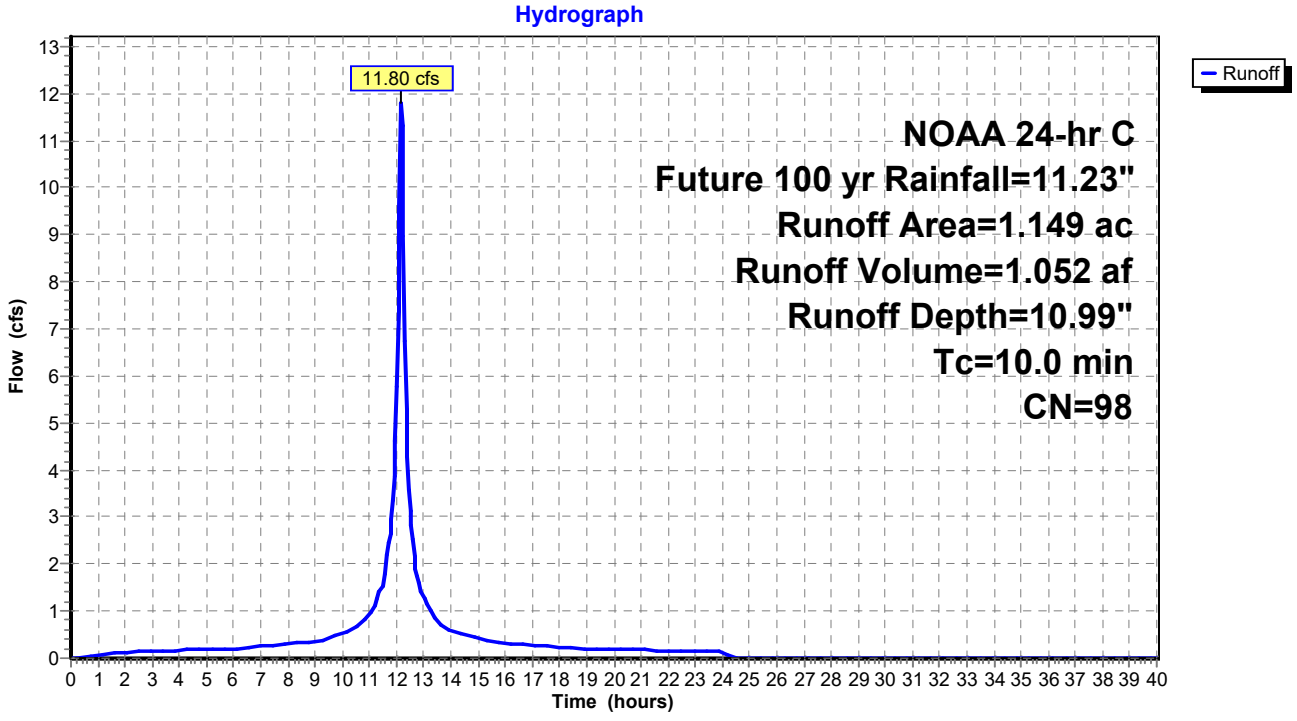
Runoff = 11.80 cfs @ 12.17 hrs, Volume= 1.052 af, Depth=10.99"
Routed to Pond B-36B : Basin #36B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.501	98	Pavement, HSG C
*	0.579	98	Roof, HSG C
*	0.069	98	Concrete, HSC C
	1.149	98	Weighted Average
	1.149		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36BI: PDA-36B (impervious)



Summary for Subcatchment 36BP: PDA-36B (pervious)

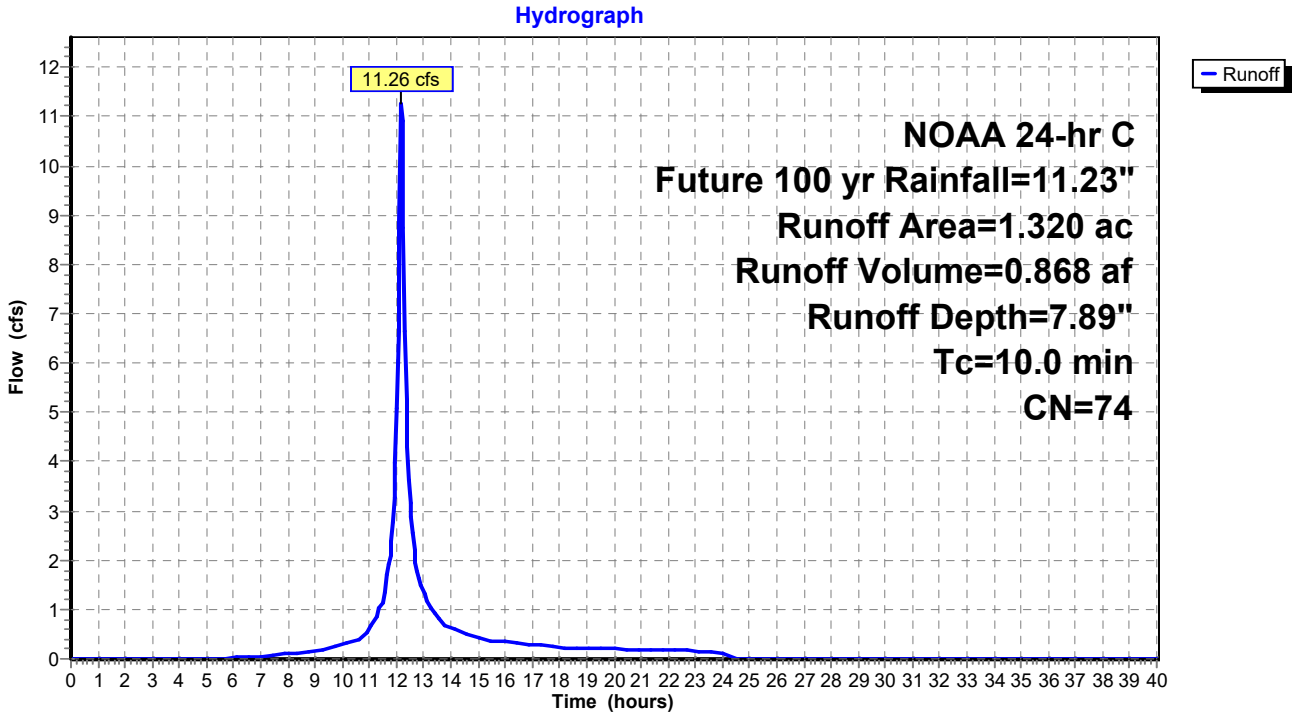
Runoff = 11.26 cfs @ 12.17 hrs, Volume= 0.868 af, Depth= 7.89"
Routed to Pond B-36B : Basin #36B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.320	74	>75% Grass cover, Good, HSG C
1.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 36BP: PDA-36B (pervious)



Summary for Subcatchment 37AI: PDA-37B (impervious)

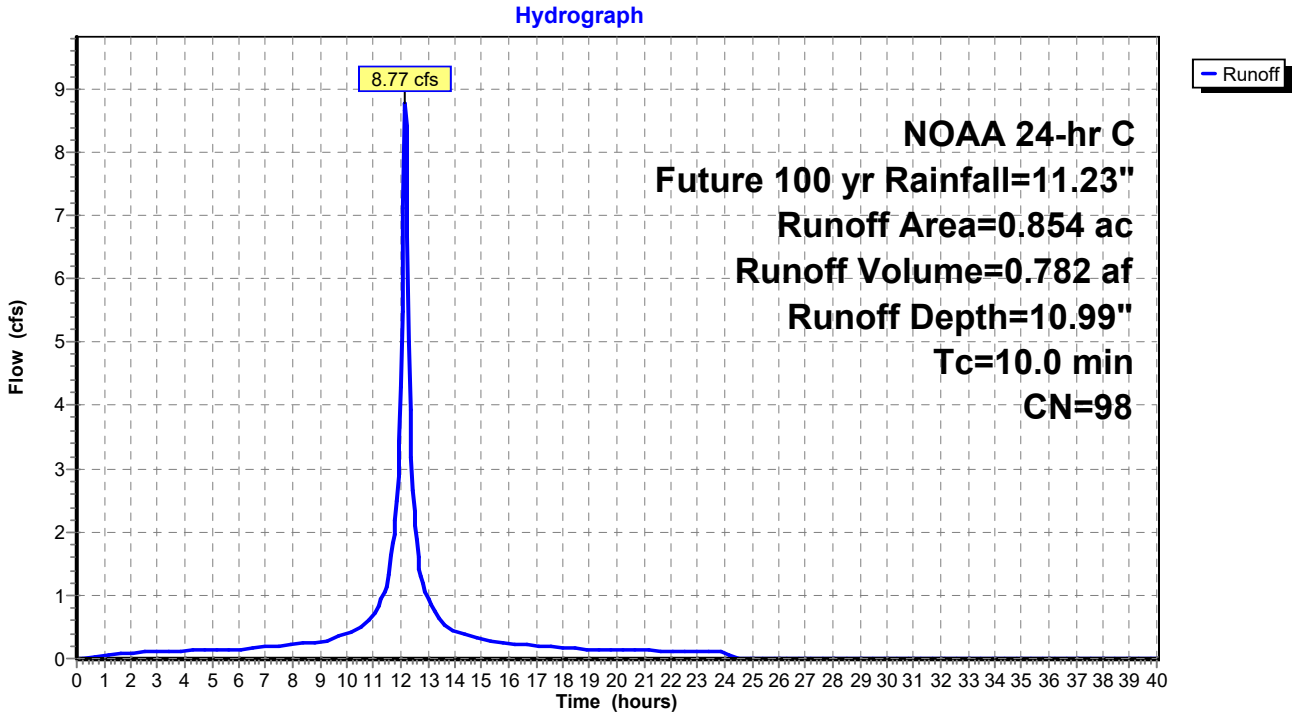
Runoff = 8.77 cfs @ 12.17 hrs, Volume= 0.782 af, Depth=10.99"
Routed to Pond B-37A : Basin #37A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.673	98	Pavement, HSG C
*	0.181	98	Concrete, HSC C
	0.854	98	Weighted Average
	0.854		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37AI: PDA-37B (impervious)



Summary for Subcatchment 37AP: PDA-37A (pervious)

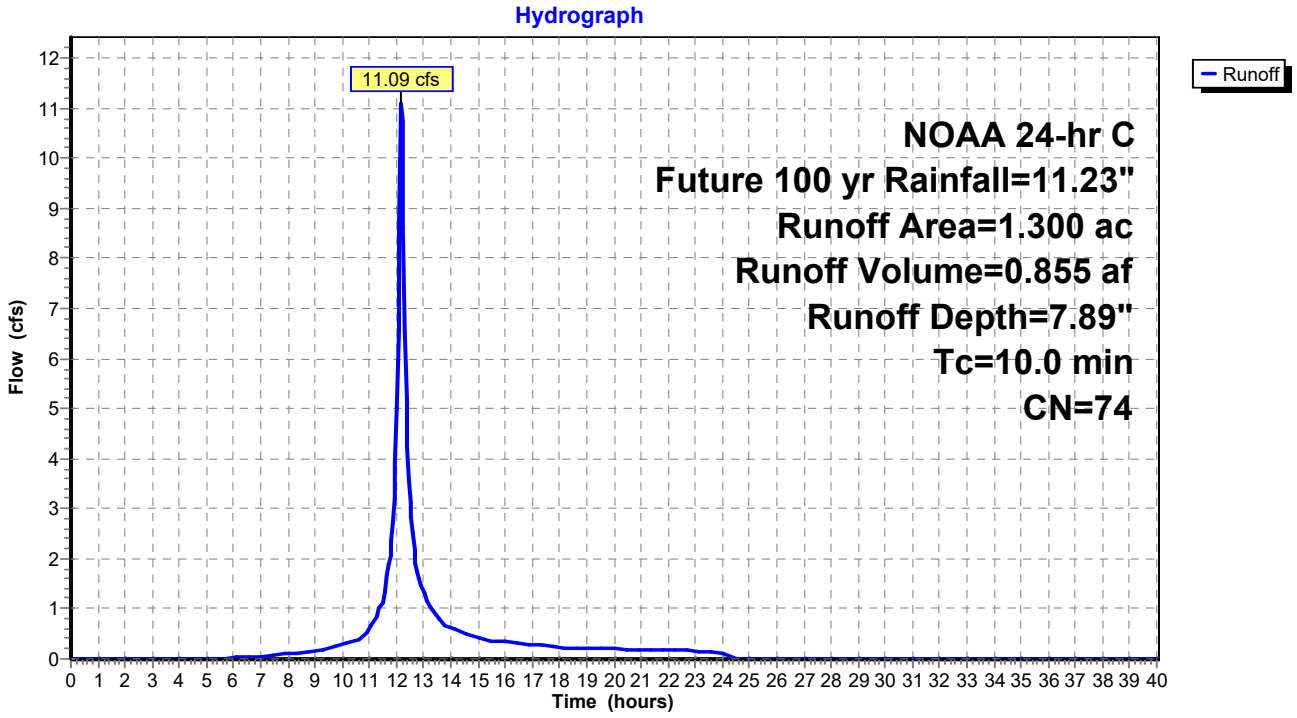
Runoff = 11.09 cfs @ 12.17 hrs, Volume= 0.855 af, Depth= 7.89"
Routed to Pond B-37A : Basin #37A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.300	74	>75% Grass cover, Good, HSG C
1.300		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37AP: PDA-37A (pervious)



Summary for Subcatchment 37BI: PDA-37B (impervious)

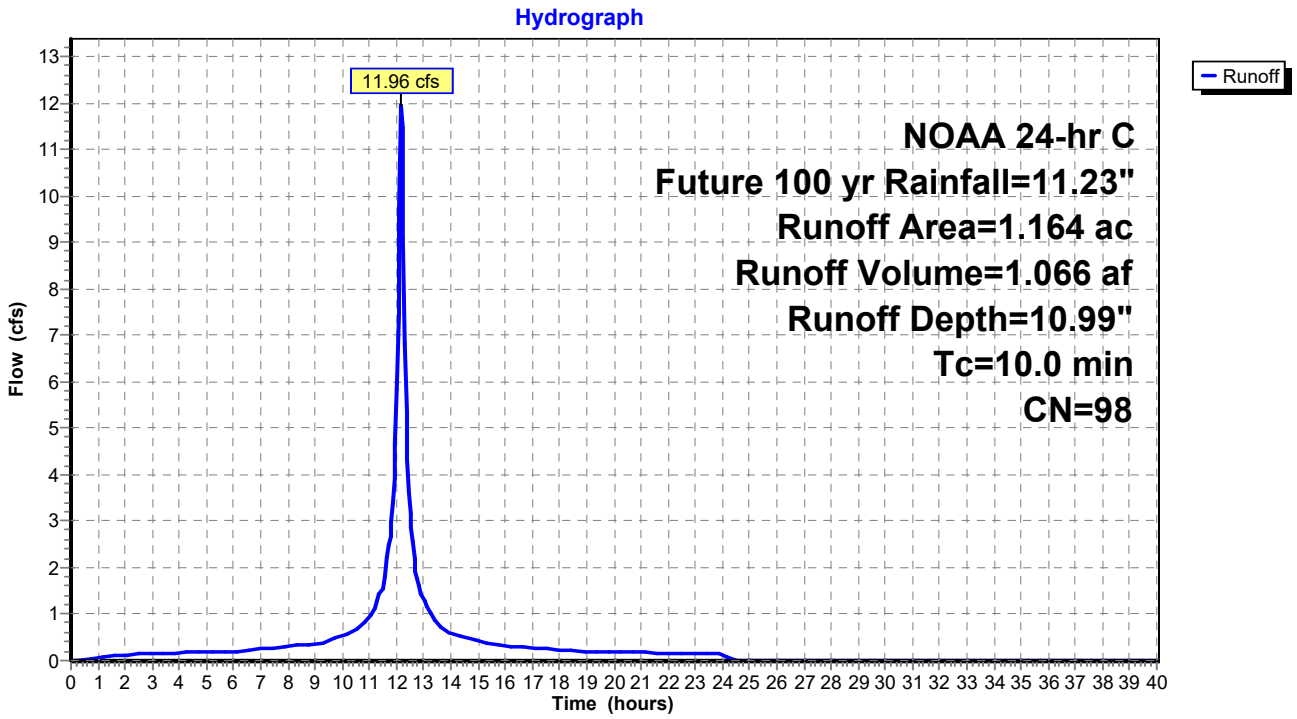
Runoff = 11.96 cfs @ 12.17 hrs, Volume= 1.066 af, Depth=10.99"
Routed to Pond B-37B : Basin #37B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.806	98	Pavement, HSG C
*	0.079	98	Concrete, HSC C
	0.279	98	Unconnected roofs, HSG C
	1.164	98	Weighted Average
	1.164		100.00% Impervious Area
	0.279		23.97% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 37BI: PDA-37B (impervious)



Summary for Subcatchment 38BP: PDA-37B (pervious)

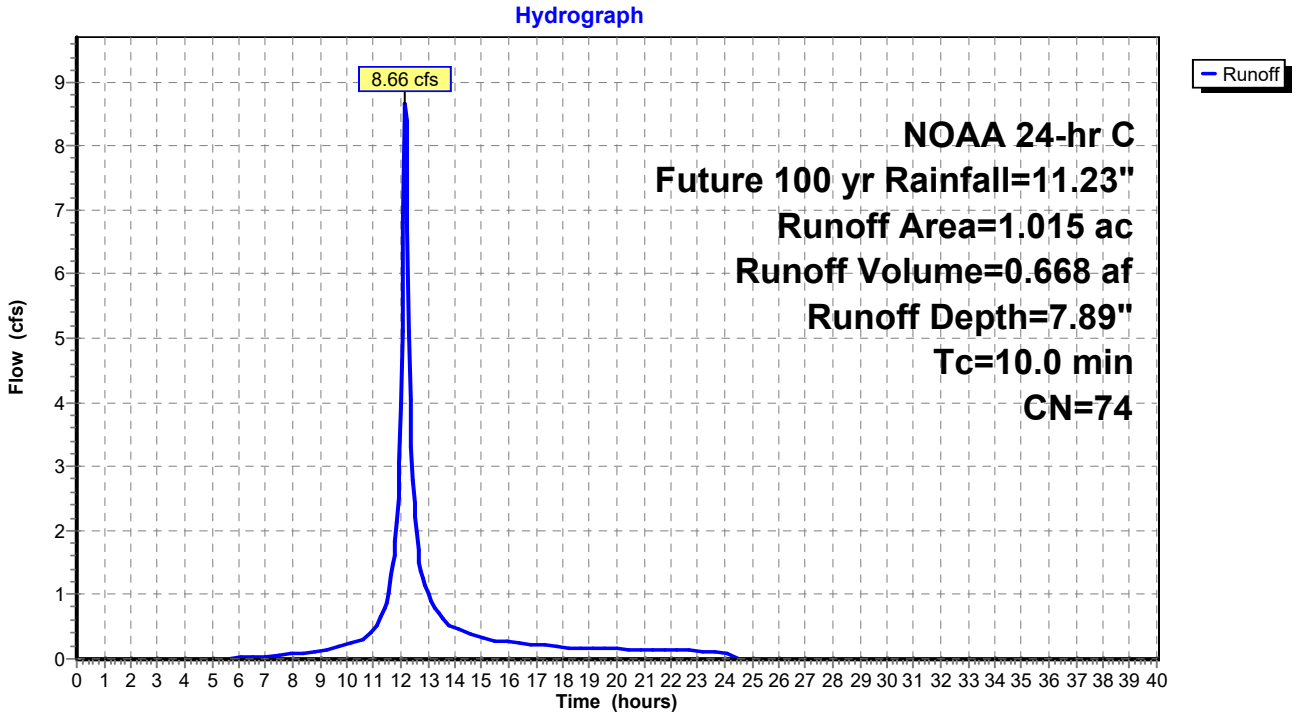
Runoff = 8.66 cfs @ 12.17 hrs, Volume= 0.668 af, Depth= 7.89"
Routed to Pond B-37B : Basin #37B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.015	74	>75% Grass cover, Good, HSG C
1.015		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38BP: PDA-37B (pervious)



Summary for Subcatchment 38I: PDA-38 (impervious)

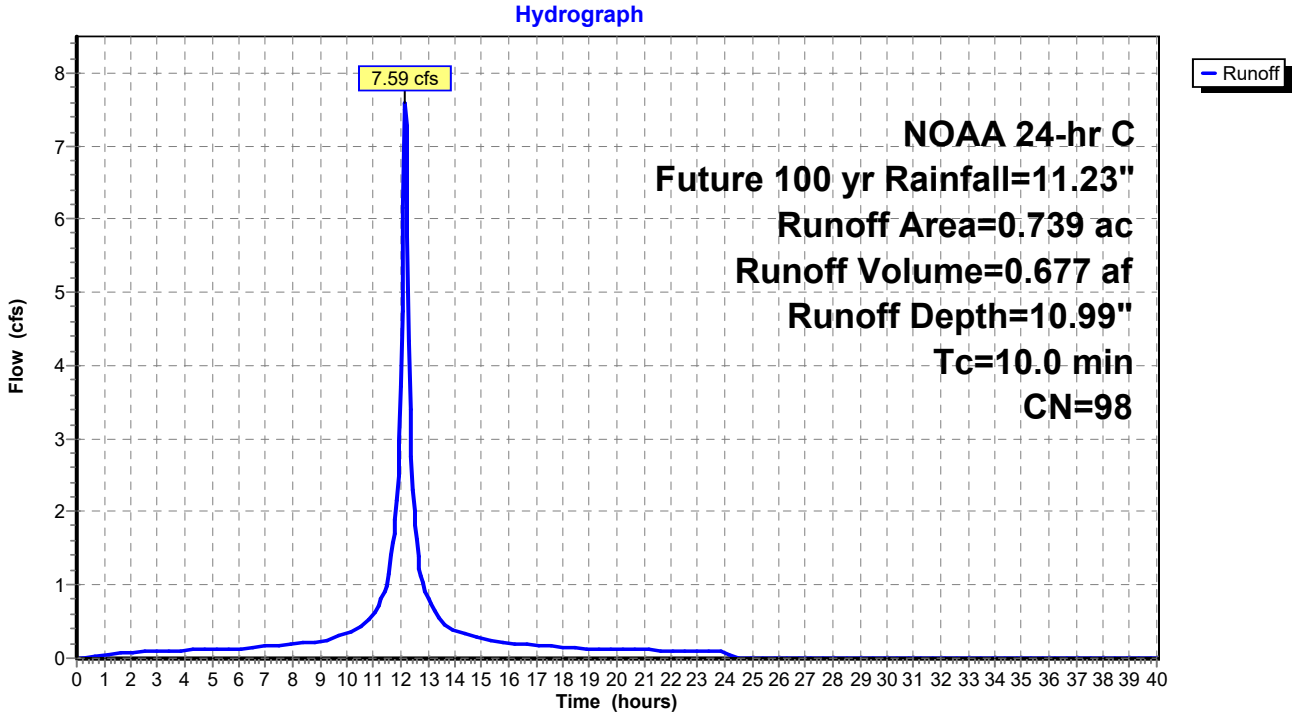
Runoff = 7.59 cfs @ 12.17 hrs, Volume= 0.677 af, Depth=10.99"
Routed to Pond B-38 : Basin #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.171	98	Concrete, HSC C
	0.000	98	Paved roads w/curbs & sewers, HSG C
	0.739	98	Weighted Average
	0.739		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38I: PDA-38 (impervious)



Summary for Subcatchment 38P: PDA-38 (pervious)

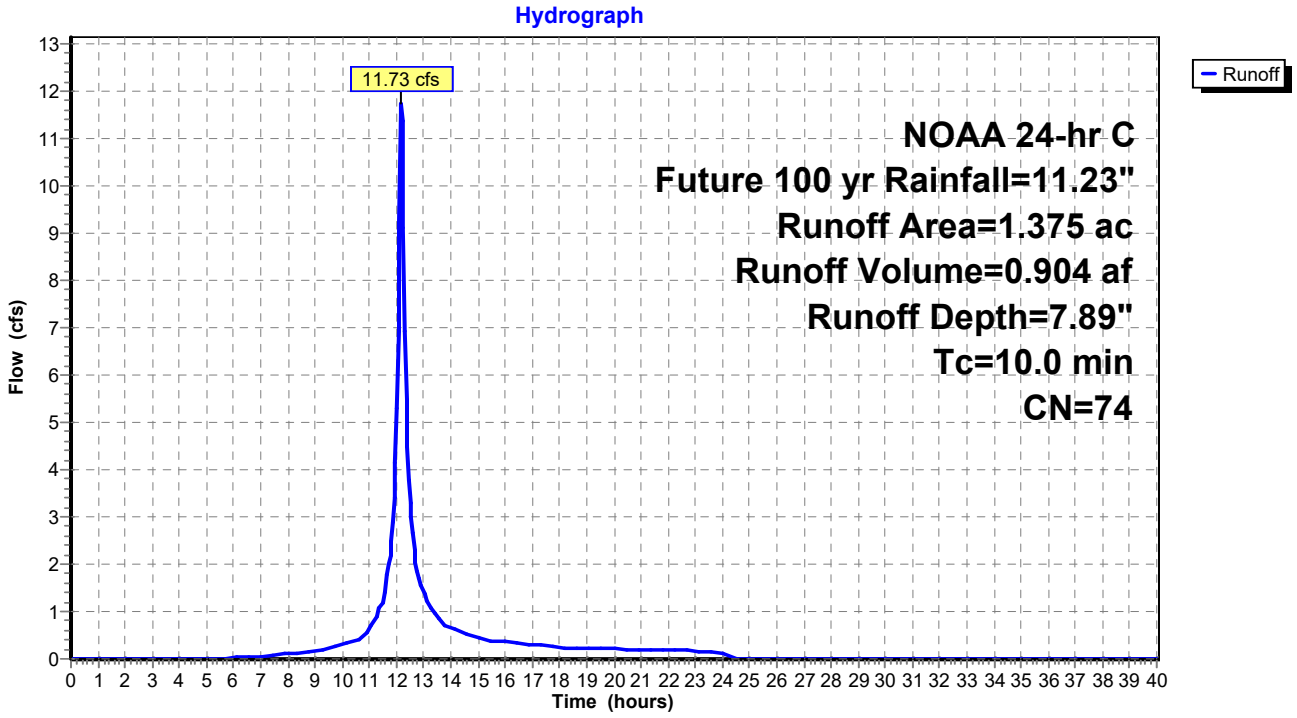
Runoff = 11.73 cfs @ 12.17 hrs, Volume= 0.904 af, Depth= 7.89"
Routed to Pond B-38 : Basin #38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.375	74	>75% Grass cover, Good, HSG C
1.375		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 38P: PDA-38 (pervious)



Summary for Subcatchment 39l: PDA-39 (impervious)

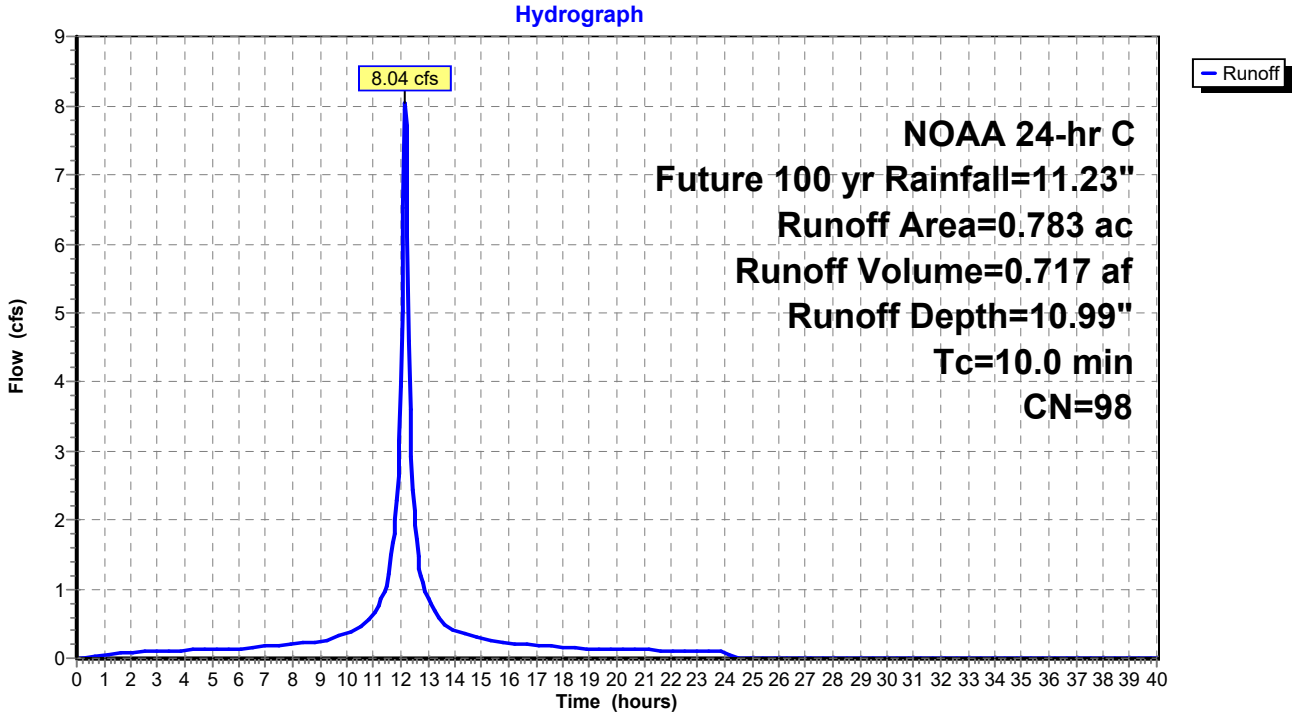
Runoff = 8.04 cfs @ 12.17 hrs, Volume= 0.717 af, Depth=10.99"
Routed to Pond B-39 : Basin #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.164	98	Concrete, HSC C
	0.051	98	Paved roads w/curbs & sewers, HSG C
	0.783	98	Weighted Average
	0.783		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 39l: PDA-39 (impervious)



Summary for Subcatchment 39P: PDA-39 (pervious)

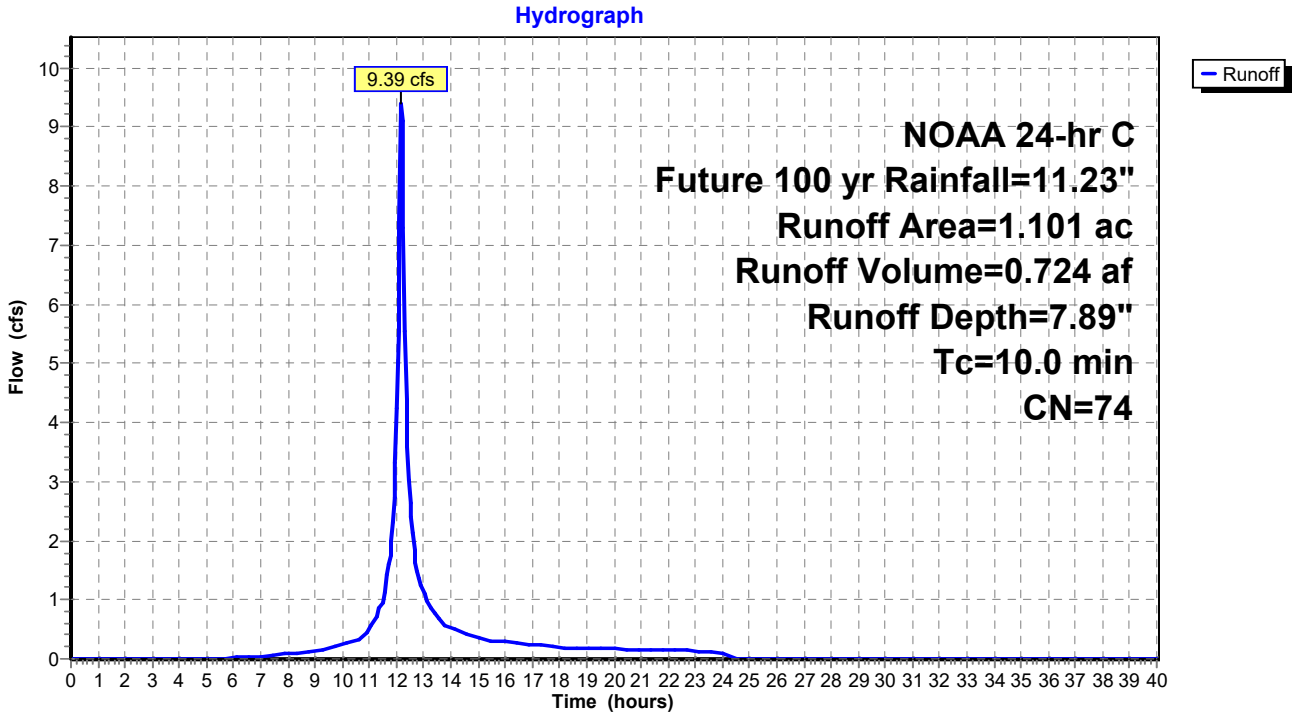
Runoff = 9.39 cfs @ 12.17 hrs, Volume= 0.724 af, Depth= 7.89"
Routed to Pond B-39 : Basin #39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.101	74	>75% Grass cover, Good, HSG C
1.101		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 39P: PDA-39 (pervious)



Summary for Subcatchment 40l: PDA-40 (impervious)

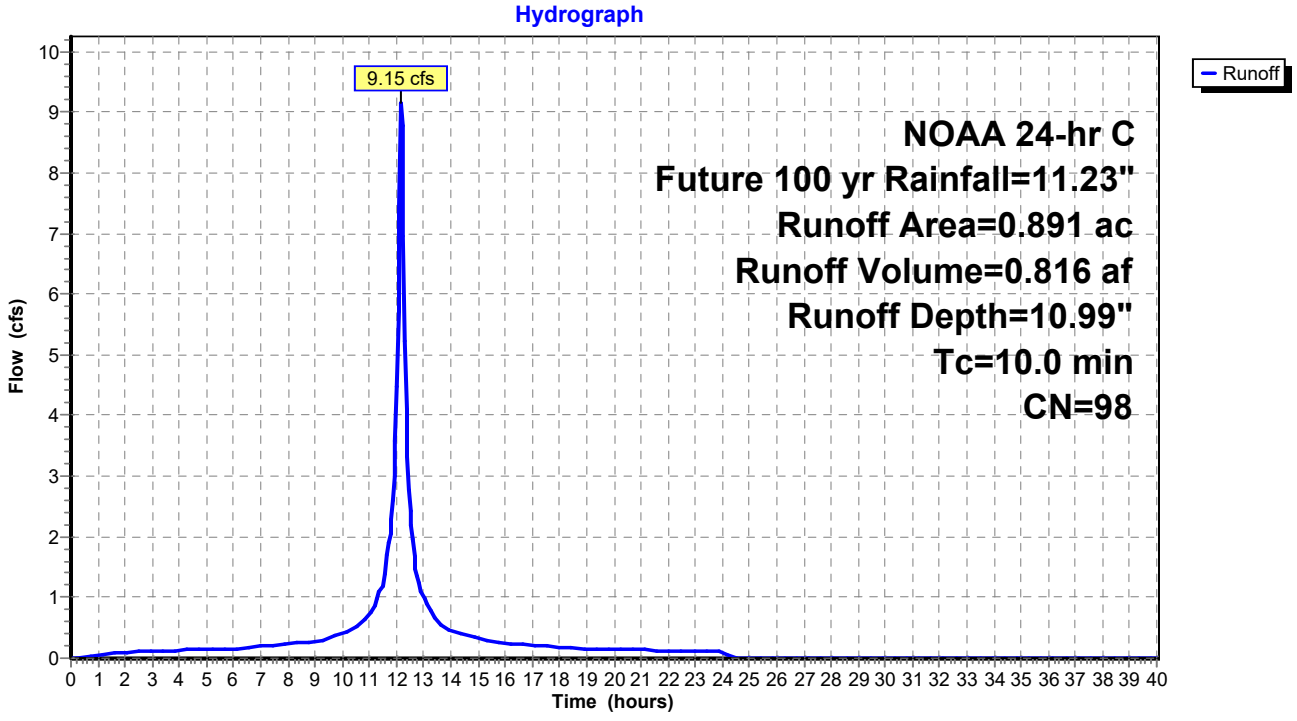
Runoff = 9.15 cfs @ 12.17 hrs, Volume= 0.816 af, Depth=10.99"
Routed to Pond B-40 : Basin #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.568	98	Roof, HSG C
*	0.179	98	Concrete, HSC C
	0.144	98	Paved roads w/curbs & sewers, HSG C
	0.891	98	Weighted Average
	0.891		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 40l: PDA-40 (impervious)



Summary for Subcatchment 40P: PDA-40 (pervious)

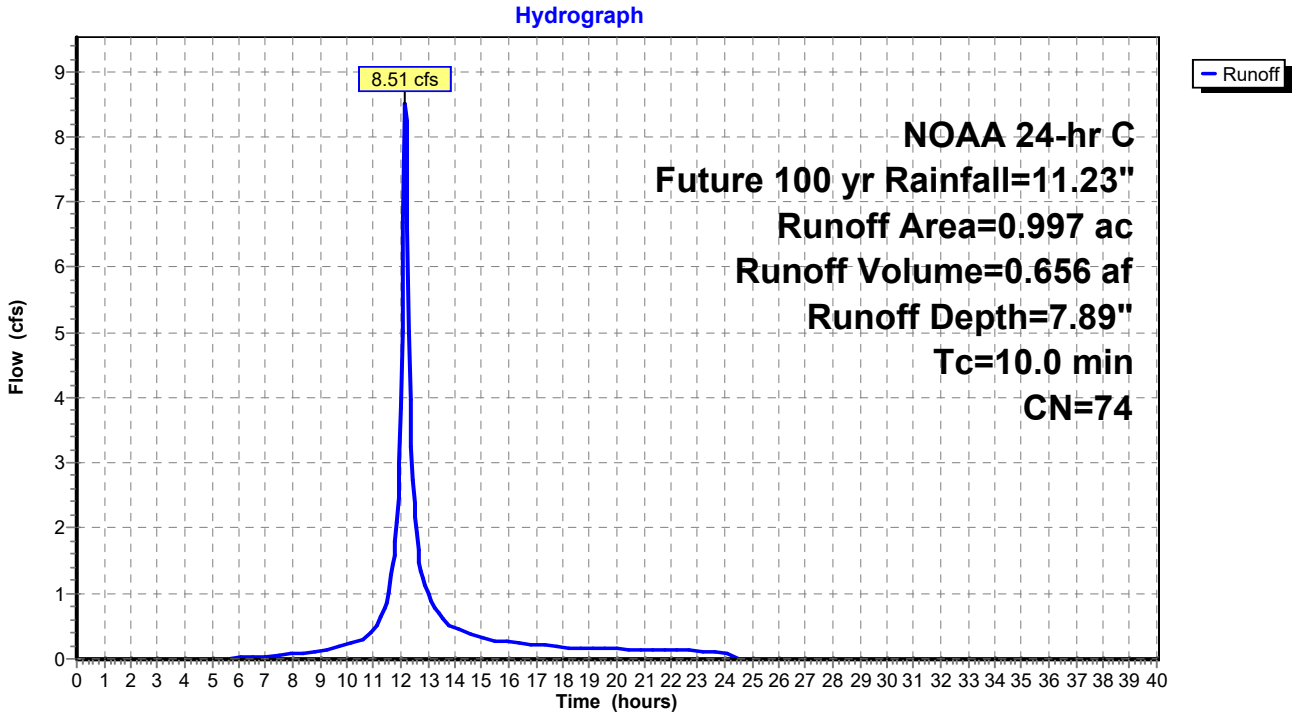
Runoff = 8.51 cfs @ 12.17 hrs, Volume= 0.656 af, Depth= 7.89"
Routed to Pond B-40 : Basin #40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.997	74	>75% Grass cover, Good, HSG C
0.997		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 40P: PDA-40 (pervious)



Summary for Subcatchment UPDA-3: PDA-3 (undetained)

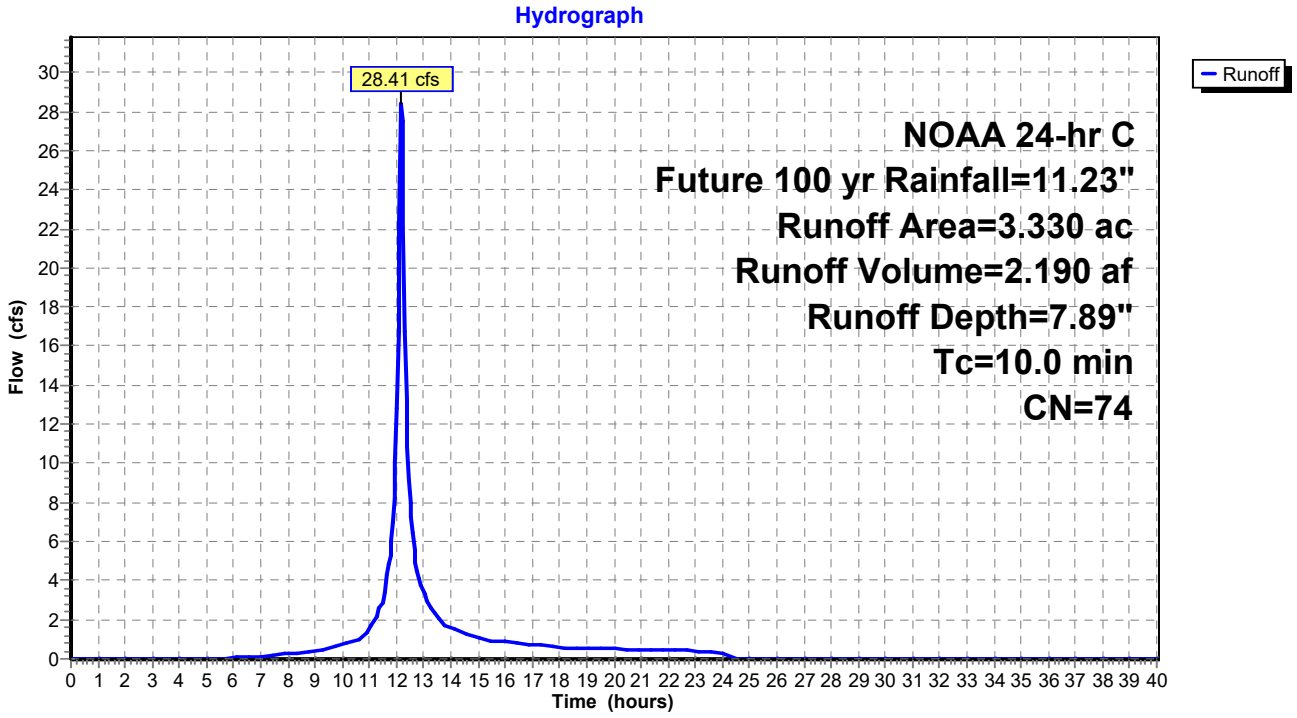
Runoff = 28.41 cfs @ 12.17 hrs, Volume= 2.190 af, Depth= 7.89"
Routed to Link PDA-3 : Proposed Drainage Area #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
3.330	74	>75% Grass cover, Good, HSG C
3.330		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-3: PDA-3 (undetained)



Summary for Pond B-29: Basin #29

Inflow Area = 1.077 ac, 34.91% Impervious, Inflow Depth = 8.97" for Future 100 yr event
Inflow = 9.84 cfs @ 12.17 hrs, Volume= 0.805 af
Outflow = 7.22 cfs @ 12.26 hrs, Volume= 0.756 af, Atten= 27%, Lag= 5.6 min
Primary = 7.22 cfs @ 12.26 hrs, Volume= 0.756 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 188.17' @ 12.26 hrs Surf.Area= 7,657 sf Storage= 10,787 cf

Plug-Flow detention time= 204.4 min calculated for 0.756 af (94% of inflow)
Center-of-Mass det. time= 169.5 min (949.9 - 780.5)

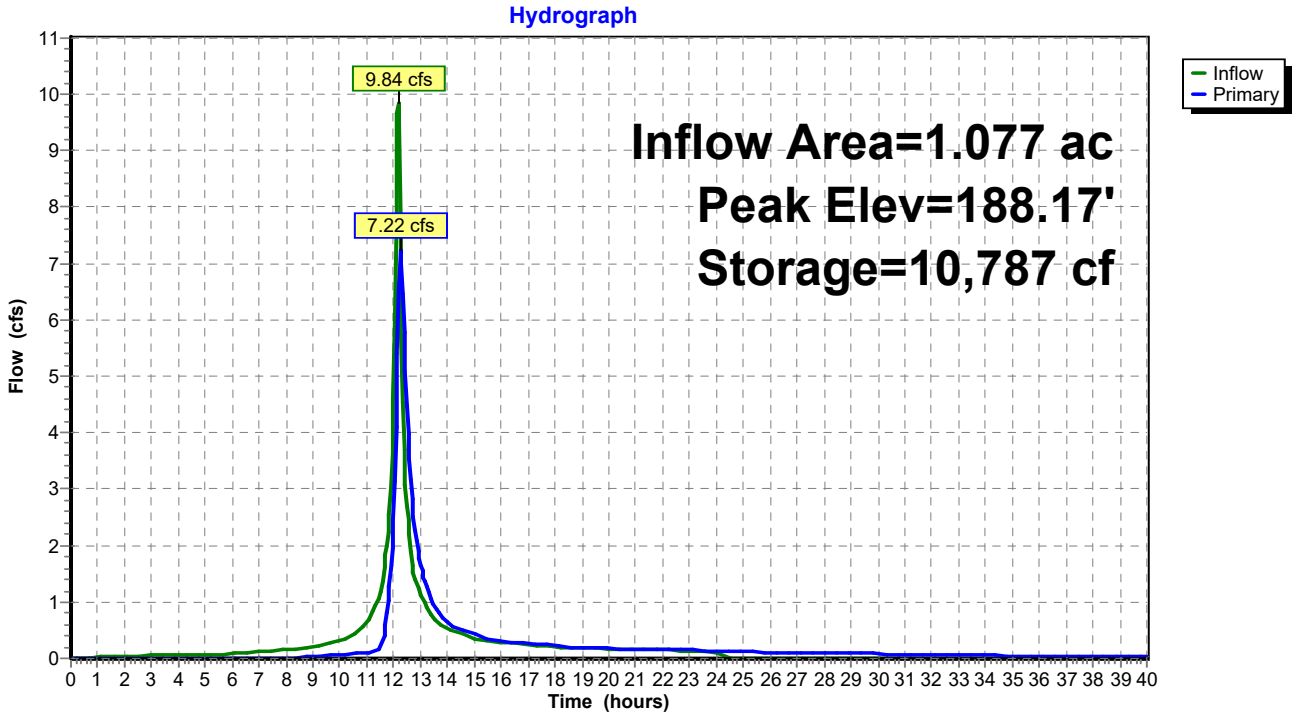
Volume	Invert	Avail.Storage	Storage Description
#1	186.30'	17,435 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.30	0	0	0
187.00	6,769	2,369	2,369
188.00	7,526	7,148	9,517
189.00	8,311	7,919	17,435

Device	Routing	Invert	Outlet Devices
#1	Primary	185.65'	**18.0" Round Culvert** L= 177.0' Ke= 0.500 Inlet / Outlet Invert= 185.65' / 182.00' S= 0.0206 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	186.87'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	187.49'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.17'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.15 cfs @ 12.26 hrs HW=188.16' (Free Discharge)
- **1=Culvert** (Passes 7.15 cfs of 11.30 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.25 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 6.97 cfs @ 2.68 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-29: Basin #29



Stage-Discharge for Pond B-29: Basin #29

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.30	0.00	186.82	0.00	187.34	0.10	187.86	3.04
186.31	0.00	186.83	0.00	187.35	0.10	187.87	3.16
186.32	0.00	186.84	0.00	187.36	0.10	187.88	3.28
186.33	0.00	186.85	0.00	187.37	0.10	187.89	3.40
186.34	0.00	186.86	0.00	187.38	0.10	187.90	3.52
186.35	0.00	186.87	0.00	187.39	0.11	187.91	3.64
186.36	0.00	186.88	0.00	187.40	0.11	187.92	3.77
186.37	0.00	186.89	0.00	187.41	0.11	187.93	3.89
186.38	0.00	186.90	0.00	187.42	0.11	187.94	4.02
186.39	0.00	186.91	0.00	187.43	0.11	187.95	4.15
186.40	0.00	186.92	0.00	187.44	0.11	187.96	4.28
186.41	0.00	186.93	0.01	187.45	0.11	187.97	4.41
186.42	0.00	186.94	0.01	187.46	0.11	187.98	4.54
186.43	0.00	186.95	0.01	187.47	0.12	187.99	4.67
186.44	0.00	186.96	0.01	187.48	0.12	188.00	4.81
186.45	0.00	186.97	0.02	187.49	0.12	188.01	4.94
186.46	0.00	186.98	0.02	187.50	0.13	188.02	5.08
186.47	0.00	186.99	0.02	187.51	0.16	188.03	5.22
186.48	0.00	187.00	0.03	187.52	0.19	188.04	5.36
186.49	0.00	187.01	0.03	187.53	0.23	188.05	5.50
186.50	0.00	187.02	0.03	187.54	0.27	188.06	5.64
186.51	0.00	187.03	0.04	187.55	0.32	188.07	5.78
186.52	0.00	187.04	0.04	187.56	0.37	188.08	5.93
186.53	0.00	187.05	0.05	187.57	0.42	188.09	6.07
186.54	0.00	187.06	0.05	187.58	0.48	188.10	6.22
186.55	0.00	187.07	0.05	187.59	0.54	188.11	6.36
186.56	0.00	187.08	0.05	187.60	0.60	188.12	6.51
186.57	0.00	187.09	0.06	187.61	0.67	188.13	6.66
186.58	0.00	187.10	0.06	187.62	0.74	188.14	6.81
186.59	0.00	187.11	0.06	187.63	0.81	188.15	6.96
186.60	0.00	187.12	0.06	187.64	0.89	188.16	7.11
186.61	0.00	187.13	0.06	187.65	0.97	188.17	7.26
186.62	0.00	187.14	0.07	187.66	1.04	188.18	7.54
186.63	0.00	187.15	0.07	187.67	1.13	188.19	7.90
186.64	0.00	187.16	0.07	187.68	1.21	188.20	8.34
186.65	0.00	187.17	0.07	187.69	1.30	188.21	8.82
186.66	0.00	187.18	0.07	187.70	1.39	188.22	9.35
186.67	0.00	187.19	0.08	187.71	1.48	188.23	9.93
186.68	0.00	187.20	0.08	187.72	1.57	188.24	10.54
186.69	0.00	187.21	0.08	187.73	1.66	188.25	11.18
186.70	0.00	187.22	0.08	187.74	1.76	188.26	11.86
186.71	0.00	187.23	0.08	187.75	1.86	188.27	12.56
186.72	0.00	187.24	0.08	187.76	1.96	188.28	13.30
186.73	0.00	187.25	0.09	187.77	2.06	188.29	14.06
186.74	0.00	187.26	0.09	187.78	2.16	188.30	14.86
186.75	0.00	187.27	0.09	187.79	2.27	188.31	15.67
186.76	0.00	187.28	0.09	187.80	2.37	188.32	16.52
186.77	0.00	187.29	0.09	187.81	2.48	188.33	17.38
186.78	0.00	187.30	0.09	187.82	2.59	188.34	18.27
186.79	0.00	187.31	0.10	187.83	2.70	188.35	19.19
186.80	0.00	187.32	0.10	187.84	2.81	188.36	20.12
186.81	0.00	187.33	0.10	187.85	2.93	188.37	21.08

Stage-Discharge for Pond B-29: Basin #29 (continued)

Elevation (feet)	Primary (cfs)
188.38	22.10
188.39	23.14
188.40	24.22
188.41	25.31
188.42	26.44
188.43	27.59
188.44	28.76
188.45	29.96
188.46	31.19
188.47	32.41
188.48	33.54
188.49	34.69
188.50	35.86
188.51	37.06
188.52	38.29
188.53	39.53
188.54	40.80
188.55	42.10
188.56	43.42
188.57	44.76
188.58	46.16
188.59	47.58
188.60	49.03
188.61	50.50
188.62	52.00
188.63	53.52
188.64	55.07
188.65	56.65
188.66	58.25
188.67	59.88
188.68	61.54
188.69	63.22
188.70	64.93
188.71	66.67
188.72	68.43
188.73	70.22
188.74	72.04
188.75	73.88
188.76	75.75
188.77	77.65
188.78	79.30
188.79	80.97
188.80	82.65
188.81	84.35
188.82	86.06
188.83	87.78
188.84	89.51
188.85	91.26
188.86	93.02
188.87	94.79
188.88	96.58
188.89	98.37
188.90	100.19
188.91	102.01
188.92	103.84
188.93	105.69
188.94	107.55
188.95	109.42
188.96	111.31
188.97	113.21
188.98	115.15
188.99	117.11
189.00	**119.08**

Stage-Area-Storage for Pond B-29: Basin #29

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.30	0	0	186.82	5,028	1,307
186.31	97	0	186.83	5,125	1,358
186.32	193	2	186.84	5,222	1,410
186.33	290	4	186.85	5,319	1,463
186.34	387	8	186.86	5,415	1,516
186.35	484	12	186.87	5,512	1,571
186.36	580	17	186.88	5,609	1,626
186.37	677	24	186.89	5,705	1,683
186.38	774	31	186.90	5,802	1,741
186.39	870	39	186.91	5,899	1,799
186.40	967	48	186.92	5,995	1,859
186.41	1,064	59	186.93	6,092	1,919
186.42	1,160	70	186.94	6,189	1,980
186.43	1,257	82	186.95	6,286	2,043
186.44	1,354	95	186.96	6,382	2,106
186.45	1,451	109	186.97	6,479	2,170
186.46	1,547	124	186.98	6,576	2,236
186.47	1,644	140	186.99	6,672	2,302
186.48	1,741	157	187.00	6,769	2,369
186.49	1,837	175	187.01	6,777	2,437
186.50	1,934	193	187.02	6,784	2,505
186.51	2,031	213	187.03	6,792	2,573
186.52	2,127	234	187.04	6,799	2,641
186.53	2,224	256	187.05	6,807	2,709
186.54	2,321	278	187.06	6,814	2,777
186.55	2,418	302	187.07	6,822	2,845
186.56	2,514	327	187.08	6,830	2,913
186.57	2,611	352	187.09	6,837	2,981
186.58	2,708	379	187.10	6,845	3,050
186.59	2,804	407	187.11	6,852	3,118
186.60	2,901	435	187.12	6,860	3,187
186.61	2,998	465	187.13	6,867	3,256
186.62	3,094	495	187.14	6,875	3,324
186.63	3,191	527	187.15	6,883	3,393
186.64	3,288	559	187.16	6,890	3,462
186.65	3,385	592	187.17	6,898	3,531
186.66	3,481	627	187.18	6,905	3,600
186.67	3,578	662	187.19	6,913	3,669
186.68	3,675	698	187.20	6,920	3,738
186.69	3,771	735	187.21	6,928	3,807
186.70	3,868	774	187.22	6,936	3,877
186.71	3,965	813	187.23	6,943	3,946
186.72	4,061	853	187.24	6,951	4,016
186.73	4,158	894	187.25	6,958	4,085
186.74	4,255	936	187.26	6,966	4,155
186.75	4,351	979	187.27	6,973	4,224
186.76	4,448	1,023	187.28	6,981	4,294
186.77	4,545	1,068	187.29	6,989	4,364
186.78	4,642	1,114	187.30	6,996	4,434
186.79	4,738	1,161	187.31	7,004	4,504
186.80	4,835	1,209	187.32	7,011	4,574
186.81	4,932	1,258	187.33	7,019	4,644

Stage-Area-Storage for Pond B-29: Basin #29 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.34	7,026	4,714	187.86	7,420	8,470
187.35	7,034	4,785	187.87	7,428	8,545
187.36	7,042	4,855	187.88	7,435	8,619
187.37	7,049	4,925	187.89	7,443	8,693
187.38	7,057	4,996	187.90	7,450	8,768
187.39	7,064	5,067	187.91	7,458	8,842
187.40	7,072	5,137	187.92	7,465	8,917
187.41	7,079	5,208	187.93	7,473	8,992
187.42	7,087	5,279	187.94	7,481	9,066
187.43	7,095	5,350	187.95	7,488	9,141
187.44	7,102	5,421	187.96	7,496	9,216
187.45	7,110	5,492	187.97	7,503	9,291
187.46	7,117	5,563	187.98	7,511	9,366
187.47	7,125	5,634	187.99	7,518	9,441
187.48	7,132	5,705	188.00	7,526	9,517
187.49	7,140	5,777	188.01	7,534	9,592
187.50	7,148	5,848	188.02	7,542	9,667
187.51	7,155	5,920	188.03	7,550	9,743
187.52	7,163	5,991	188.04	7,557	9,818
187.53	7,170	6,063	188.05	7,565	9,894
187.54	7,178	6,135	188.06	7,573	9,970
187.55	7,185	6,207	188.07	7,581	10,045
187.56	7,193	6,278	188.08	7,589	10,121
187.57	7,200	6,350	188.09	7,597	10,197
187.58	7,208	6,422	188.10	7,605	10,273
187.59	7,216	6,495	188.11	7,612	10,349
187.60	7,223	6,567	188.12	7,620	10,425
187.61	7,231	6,639	188.13	7,628	10,502
187.62	7,238	6,711	188.14	7,636	10,578
187.63	7,246	6,784	188.15	7,644	10,654
187.64	7,253	6,856	188.16	7,652	10,731
187.65	7,261	6,929	188.17	7,659	10,807
187.66	7,269	7,002	188.18	7,667	10,884
187.67	7,276	7,074	188.19	7,675	10,961
187.68	7,284	7,147	188.20	7,683	11,038
187.69	7,291	7,220	188.21	7,691	11,114
187.70	7,299	7,293	188.22	7,699	11,191
187.71	7,306	7,366	188.23	7,707	11,268
187.72	7,314	7,439	188.24	7,714	11,345
187.73	7,322	7,512	188.25	7,722	11,423
187.74	7,329	7,585	188.26	7,730	11,500
187.75	7,337	7,659	188.27	7,738	11,577
187.76	7,344	7,732	188.28	7,746	11,655
187.77	7,352	7,806	188.29	7,754	11,732
187.78	7,359	7,879	188.30	7,762	11,810
187.79	7,367	7,953	188.31	7,769	11,887
187.80	7,375	8,027	188.32	7,777	11,965
187.81	7,382	8,100	188.33	7,785	12,043
187.82	7,390	8,174	188.34	7,793	12,121
187.83	7,397	8,248	188.35	7,801	12,199
187.84	7,405	8,322	188.36	7,809	12,277
187.85	7,412	8,396	188.37	7,816	12,355

Stage-Area-Storage for Pond B-29: Basin #29 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.38	7,824	12,433
188.39	7,832	12,511
188.40	7,840	12,590
188.41	7,848	12,668
188.42	7,856	12,747
188.43	7,864	12,825
188.44	7,871	12,904
188.45	7,879	12,983
188.46	7,887	13,062
188.47	7,895	13,141
188.48	7,903	13,220
188.49	7,911	13,299
188.50	7,919	13,378
188.51	7,926	13,457
188.52	7,934	13,536
188.53	7,942	13,616
188.54	7,950	13,695
188.55	7,958	13,775
188.56	7,966	13,854
188.57	7,973	13,934
188.58	7,981	14,014
188.59	7,989	14,094
188.60	7,997	14,174
188.61	8,005	14,254
188.62	8,013	14,334
188.63	8,021	14,414
188.64	8,028	14,494
188.65	8,036	14,574
188.66	8,044	14,655
188.67	8,052	14,735
188.68	8,060	14,816
188.69	8,068	14,896
188.70	8,076	14,977
188.71	8,083	15,058
188.72	8,091	15,139
188.73	8,099	15,220
188.74	8,107	15,301
188.75	8,115	15,382
188.76	8,123	15,463
188.77	8,130	15,544
188.78	8,138	15,626
188.79	8,146	15,707
188.80	8,154	15,789
188.81	8,162	15,870
188.82	8,170	15,952
188.83	8,178	16,034
188.84	8,185	16,115
188.85	8,193	16,197
188.86	8,201	16,279
188.87	8,209	16,361
188.88	8,217	16,443
188.89	8,225	16,526
188.90	8,233	16,608
188.91	8,240	16,690
188.92	8,248	16,773
188.93	8,256	16,855
188.94	8,264	16,938
188.95	8,272	17,021
188.96	8,280	17,103
188.97	8,287	17,186
188.98	8,295	17,269
188.99	8,303	17,352
189.00	**8,311**	**17,435**

Summary for Pond B-30: Basin #30

Inflow Area = 2.381 ac, 27.01% Impervious, Inflow Depth = 8.73" for Future 100 yr event
Inflow = 21.43 cfs @ 12.17 hrs, Volume= 1.732 af
Outflow = 2.69 cfs @ 12.94 hrs, Volume= 1.116 af, Atten= 87%, Lag= 46.4 min
Primary = 2.69 cfs @ 12.94 hrs, Volume= 1.116 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.33' @ 12.94 hrs Surf.Area= 15,528 sf Storage= 46,287 cf

Plug-Flow detention time= 557.9 min calculated for 1.116 af (64% of inflow)
Center-of-Mass det. time= 453.5 min (1,239.9 - 786.4)

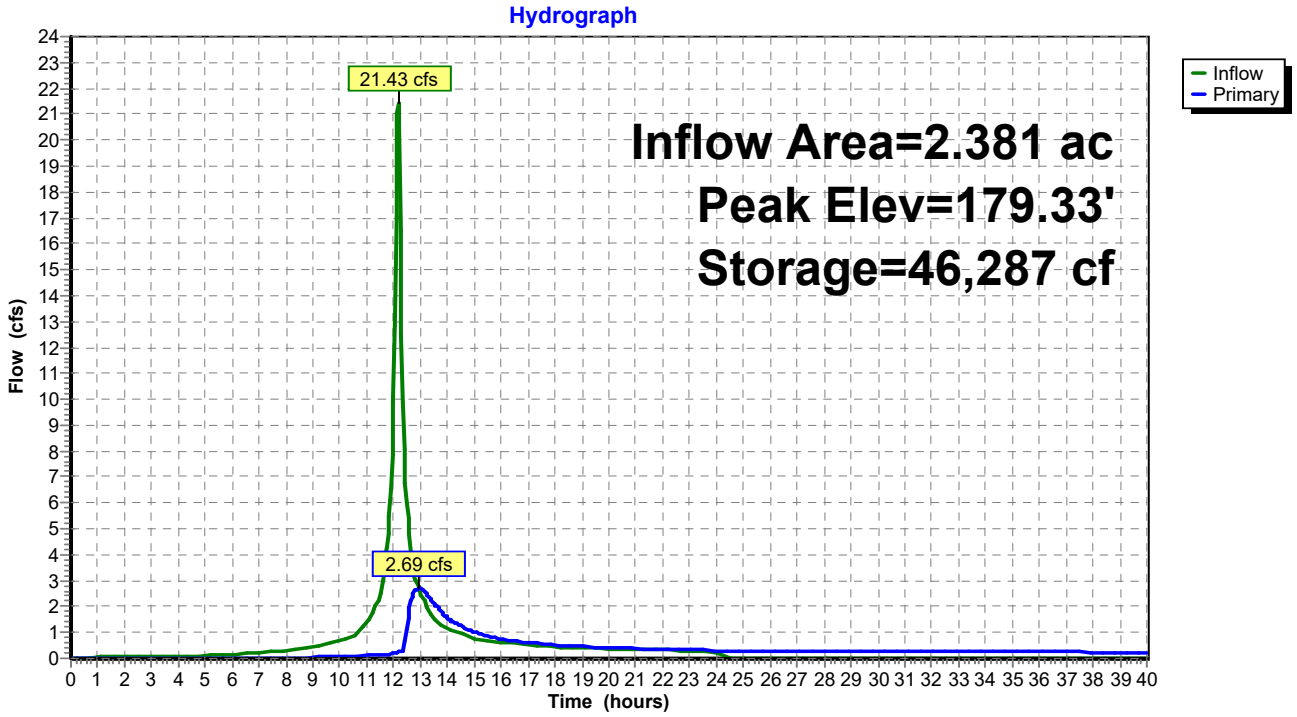
Volume	Invert	Avail.Storage	Storage Description
#1	175.30'	57,146 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
175.30	0	0	0
176.00	10,254	3,589	3,589
177.00	11,773	11,014	14,602
178.00	13,346	12,560	27,162
179.00	14,978	14,162	41,324
180.00	16,667	15,823	57,146

Device	Routing	Invert	Outlet Devices
#1	Primary	174.65'	**18.0" Round Culvert** L= 86.0' Ke= 0.500 Inlet / Outlet Invert= 174.65' / 174.00' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	175.93'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	179.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	179.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.69 cfs @ 12.94 hrs HW=179.33' (Free Discharge)
- **1=Culvert** (Passes 2.69 cfs of 15.82 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.30 cfs @ 8.74 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.39 cfs @ 1.87 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-30: Basin #30



Stage-Discharge for Pond B-30: Basin #30

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
175.30	0.00	175.82	0.00	176.34	0.09	176.86	0.15
175.31	0.00	175.83	0.00	176.35	0.09	176.87	0.15
175.32	0.00	175.84	0.00	176.36	0.09	176.88	0.15
175.33	0.00	175.85	0.00	176.37	0.10	176.89	0.15
175.34	0.00	175.86	0.00	176.38	0.10	176.90	0.15
175.35	0.00	175.87	0.00	176.39	0.10	176.91	0.15
175.36	0.00	175.88	0.00	176.40	0.10	176.92	0.15
175.37	0.00	175.89	0.00	176.41	0.10	176.93	0.16
175.38	0.00	175.90	0.00	176.42	0.10	176.94	0.16
175.39	0.00	175.91	0.00	176.43	0.10	176.95	0.16
175.40	0.00	175.92	0.00	176.44	0.10	176.96	0.16
175.41	0.00	175.93	0.00	176.45	0.11	176.97	0.16
175.42	0.00	175.94	0.00	176.46	0.11	176.98	0.16
175.43	0.00	175.95	0.00	176.47	0.11	176.99	0.16
175.44	0.00	175.96	0.00	176.48	0.11	177.00	0.16
175.45	0.00	175.97	0.00	176.49	0.11	177.01	0.16
175.46	0.00	175.98	0.00	176.50	0.11	177.02	0.16
175.47	0.00	175.99	0.01	176.51	0.11	177.03	0.16
175.48	0.00	176.00	0.01	176.52	0.11	177.04	0.16
175.49	0.00	176.01	0.01	176.53	0.12	177.05	0.17
175.50	0.00	176.02	0.01	176.54	0.12	177.06	0.17
175.51	0.00	176.03	0.02	176.55	0.12	177.07	0.17
175.52	0.00	176.04	0.02	176.56	0.12	177.08	0.17
175.53	0.00	176.05	0.02	176.57	0.12	177.09	0.17
175.54	0.00	176.06	0.03	176.58	0.12	177.10	0.17
175.55	0.00	176.07	0.03	176.59	0.12	177.11	0.17
175.56	0.00	176.08	0.03	176.60	0.12	177.12	0.17
175.57	0.00	176.09	0.04	176.61	0.12	177.13	0.17
175.58	0.00	176.10	0.04	176.62	0.13	177.14	0.17
175.59	0.00	176.11	0.05	176.63	0.13	177.15	0.17
175.60	0.00	176.12	0.05	176.64	0.13	177.16	0.17
175.61	0.00	176.13	0.05	176.65	0.13	177.17	0.17
175.62	0.00	176.14	0.05	176.66	0.13	177.18	0.18
175.63	0.00	176.15	0.06	176.67	0.13	177.19	0.18
175.64	0.00	176.16	0.06	176.68	0.13	177.20	0.18
175.65	0.00	176.17	0.06	176.69	0.13	177.21	0.18
175.66	0.00	176.18	0.06	176.70	0.13	177.22	0.18
175.67	0.00	176.19	0.06	176.71	0.13	177.23	0.18
175.68	0.00	176.20	0.07	176.72	0.14	177.24	0.18
175.69	0.00	176.21	0.07	176.73	0.14	177.25	0.18
175.70	0.00	176.22	0.07	176.74	0.14	177.26	0.18
175.71	0.00	176.23	0.07	176.75	0.14	177.27	0.18
175.72	0.00	176.24	0.07	176.76	0.14	177.28	0.18
175.73	0.00	176.25	0.08	176.77	0.14	177.29	0.18
175.74	0.00	176.26	0.08	176.78	0.14	177.30	0.18
175.75	0.00	176.27	0.08	176.79	0.14	177.31	0.19
175.76	0.00	176.28	0.08	176.80	0.14	177.32	0.19
175.77	0.00	176.29	0.08	176.81	0.14	177.33	0.19
175.78	0.00	176.30	0.08	176.82	0.15	177.34	0.19
175.79	0.00	176.31	0.09	176.83	0.15	177.35	0.19
175.80	0.00	176.32	0.09	176.84	0.15	177.36	0.19
175.81	0.00	176.33	0.09	176.85	0.15	177.37	0.19

Stage-Discharge for Pond B-30: Basin #30 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
177.38	0.19	177.90	0.22	178.42	0.25	178.94	0.28
177.39	0.19	177.91	0.22	178.43	0.25	178.95	0.28
177.40	0.19	177.92	0.23	178.44	0.25	178.96	0.28
177.41	0.19	177.93	0.23	178.45	0.26	178.97	0.28
177.42	0.19	177.94	0.23	178.46	0.26	178.98	0.28
177.43	0.19	177.95	0.23	178.47	0.26	178.99	0.28
177.44	0.19	177.96	0.23	178.48	0.26	179.00	0.28
177.45	0.20	177.97	0.23	178.49	0.26	179.01	0.30
177.46	0.20	177.98	0.23	178.50	0.26	179.02	0.32
177.47	0.20	177.99	0.23	178.51	0.26	179.03	0.35
177.48	0.20	178.00	0.23	178.52	0.26	179.04	0.39
177.49	0.20	178.01	0.23	178.53	0.26	179.05	0.43
177.50	0.20	178.02	0.23	178.54	0.26	179.06	0.48
177.51	0.20	178.03	0.23	178.55	0.26	179.07	0.53
177.52	0.20	178.04	0.23	178.56	0.26	179.08	0.58
177.53	0.20	178.05	0.23	178.57	0.26	179.09	0.64
177.54	0.20	178.06	0.23	178.58	0.26	179.10	0.70
177.55	0.20	178.07	0.23	178.59	0.26	179.11	0.76
177.56	0.20	178.08	0.23	178.60	0.26	179.12	0.83
177.57	0.20	178.09	0.24	178.61	0.26	179.13	0.90
177.58	0.20	178.10	0.24	178.62	0.26	179.14	0.97
177.59	0.20	178.11	0.24	178.63	0.26	179.15	1.04
177.60	0.21	178.12	0.24	178.64	0.26	179.16	1.12
177.61	0.21	178.13	0.24	178.65	0.27	179.17	1.20
177.62	0.21	178.14	0.24	178.66	0.27	179.18	1.28
177.63	0.21	178.15	0.24	178.67	0.27	179.19	1.36
177.64	0.21	178.16	0.24	178.68	0.27	179.20	1.45
177.65	0.21	178.17	0.24	178.69	0.27	179.21	1.54
177.66	0.21	178.18	0.24	178.70	0.27	179.22	1.63
177.67	0.21	178.19	0.24	178.71	0.27	179.23	1.72
177.68	0.21	178.20	0.24	178.72	0.27	179.24	1.81
177.69	0.21	178.21	0.24	178.73	0.27	179.25	1.91
177.70	0.21	178.22	0.24	178.74	0.27	179.26	2.01
177.71	0.21	178.23	0.24	178.75	0.27	179.27	2.11
177.72	0.21	178.24	0.24	178.76	0.27	179.28	2.21
177.73	0.21	178.25	0.24	178.77	0.27	179.29	2.31
177.74	0.21	178.26	0.24	178.78	0.27	179.30	2.41
177.75	0.22	178.27	0.25	178.79	0.27	179.31	2.52
177.76	0.22	178.28	0.25	178.80	0.27	179.32	2.63
177.77	0.22	178.29	0.25	178.81	0.27	179.33	2.74
177.78	0.22	178.30	0.25	178.82	0.27	179.34	2.85
177.79	0.22	178.31	0.25	178.83	0.27	179.35	2.96
177.80	0.22	178.32	0.25	178.84	0.27	179.36	3.07
177.81	0.22	178.33	0.25	178.85	0.28	179.37	3.19
177.82	0.22	178.34	0.25	178.86	0.28	179.38	3.31
177.83	0.22	178.35	0.25	178.87	0.28	179.39	3.42
177.84	0.22	178.36	0.25	178.88	0.28	179.40	3.54
177.85	0.22	178.37	0.25	178.89	0.28	179.41	3.67
177.86	0.22	178.38	0.25	178.90	0.28	179.42	3.79
177.87	0.22	178.39	0.25	178.91	0.28	179.43	3.91
177.88	0.22	178.40	0.25	178.92	0.28	179.44	4.04
177.89	0.22	178.41	0.25	178.93	0.28	179.45	4.16

Stage-Discharge for Pond B-30: Basin #30 (continued)

Elevation (feet)	Primary (cfs)
179.46	4.29
179.47	4.42
179.48	4.55
179.49	4.68
179.50	4.81
179.51	5.07
179.52	5.41
179.53	5.83
179.54	6.30
179.55	6.81
179.56	7.36
179.57	7.95
179.58	8.58
179.59	9.23
179.60	9.92
179.61	10.64
179.62	11.39
179.63	12.16
179.64	12.96
179.65	13.79
179.66	14.64
179.67	15.51
179.68	16.41
179.69	17.33
179.70	18.27
179.71	19.27
179.72	20.30
179.73	21.36
179.74	22.44
179.75	23.55
179.76	24.68
179.77	25.84
179.78	27.03
179.79	28.24
179.80	29.47
179.81	30.73
179.82	32.02
179.83	33.33
179.84	34.67
179.85	36.03
179.86	37.42
179.87	38.83
179.88	40.27
179.89	41.73
179.90	43.22
179.91	44.76
179.92	46.32
179.93	47.91
179.94	49.53
179.95	51.18
179.96	52.85
179.97	54.55
179.98	56.28
179.99	58.04
180.00	**59.82**

Stage-Area-Storage for Pond B-30: Basin #30

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
175.30	0	0	175.82	7,617	1,980
175.31	146	1	175.83	7,764	2,057
175.32	293	3	175.84	7,910	2,136
175.33	439	7	175.85	8,057	2,216
175.34	586	12	175.86	8,203	2,297
175.35	732	18	175.87	8,350	2,380
175.36	879	26	175.88	8,496	2,464
175.37	1,025	36	175.89	8,643	2,550
175.38	1,172	47	175.90	8,789	2,637
175.39	1,318	59	175.91	8,936	2,725
175.40	1,465	73	175.92	9,082	2,815
175.41	1,611	89	175.93	9,229	2,907
175.42	1,758	105	175.94	9,375	3,000
175.43	1,904	124	175.95	9,522	3,095
175.44	2,051	144	175.96	9,668	3,190
175.45	2,197	165	175.97	9,815	3,288
175.46	2,344	188	175.98	9,961	3,387
175.47	2,490	212	175.99	10,108	3,487
175.48	2,637	237	176.00	10,254	3,589
175.49	2,783	264	176.01	10,269	3,692
175.50	2,930	293	176.02	10,284	3,794
175.51	3,076	323	176.03	10,300	3,897
175.52	3,223	354	176.04	10,315	4,000
175.53	3,369	387	176.05	10,330	4,103
175.54	3,516	422	176.06	10,345	4,207
175.55	3,662	458	176.07	10,360	4,310
175.56	3,809	495	176.08	10,376	4,414
175.57	3,955	534	176.09	10,391	4,518
175.58	4,102	574	176.10	10,406	4,622
175.59	4,248	616	176.11	10,421	4,726
175.60	4,395	659	176.12	10,436	4,830
175.61	4,541	704	176.13	10,451	4,935
175.62	4,688	750	176.14	10,467	5,039
175.63	4,834	798	176.15	10,482	5,144
175.64	4,981	847	176.16	10,497	5,249
175.65	5,127	897	176.17	10,512	5,354
175.66	5,273	949	176.18	10,527	5,459
175.67	5,420	1,003	176.19	10,543	5,565
175.68	5,566	1,058	176.20	10,558	5,670
175.69	5,713	1,114	176.21	10,573	5,776
175.70	5,859	1,172	176.22	10,588	5,882
175.71	6,006	1,231	176.23	10,603	5,987
175.72	6,152	1,292	176.24	10,619	6,094
175.73	6,299	1,354	176.25	10,634	6,200
175.74	6,445	1,418	176.26	10,649	6,306
175.75	6,592	1,483	176.27	10,664	6,413
175.76	6,738	1,550	176.28	10,679	6,520
175.77	6,885	1,618	176.29	10,695	6,626
175.78	7,031	1,688	176.30	10,710	6,733
175.79	7,178	1,759	176.31	10,725	6,841
175.80	7,324	1,831	176.32	10,740	6,948
175.81	7,471	1,905	176.33	10,755	7,055

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.34	10,770	7,163	176.86	11,560	12,969
176.35	10,786	7,271	176.87	11,576	13,085
176.36	10,801	7,379	176.88	11,591	13,201
176.37	10,816	7,487	176.89	11,606	13,317
176.38	10,831	7,595	176.90	11,621	13,433
176.39	10,846	7,703	176.91	11,636	13,549
176.40	10,862	7,812	176.92	11,651	13,665
176.41	10,877	7,921	176.93	11,667	13,782
176.42	10,892	8,030	176.94	11,682	13,899
176.43	10,907	8,139	176.95	11,697	14,016
176.44	10,922	8,248	176.96	11,712	14,133
176.45	10,938	8,357	176.97	11,727	14,250
176.46	10,953	8,466	176.98	11,743	14,367
176.47	10,968	8,576	176.99	11,758	14,485
176.48	10,983	8,686	177.00	11,773	14,602
176.49	10,998	8,796	177.01	11,789	14,720
176.50	11,014	8,906	177.02	11,804	14,838
176.51	11,029	9,016	177.03	11,820	14,956
176.52	11,044	9,126	177.04	11,836	15,075
176.53	11,059	9,237	177.05	11,852	15,193
176.54	11,074	9,348	177.06	11,867	15,312
176.55	11,089	9,458	177.07	11,883	15,430
176.56	11,105	9,569	177.08	11,899	15,549
176.57	11,120	9,680	177.09	11,915	15,668
176.58	11,135	9,792	177.10	11,930	15,788
176.59	11,150	9,903	177.11	11,946	15,907
176.60	11,165	10,015	177.12	11,962	16,026
176.61	11,181	10,126	177.13	11,977	16,146
176.62	11,196	10,238	177.14	11,993	16,266
176.63	11,211	10,350	177.15	12,009	16,386
176.64	11,226	10,463	177.16	12,025	16,506
176.65	11,241	10,575	177.17	12,040	16,627
176.66	11,257	10,687	177.18	12,056	16,747
176.67	11,272	10,800	177.19	12,072	16,868
176.68	11,287	10,913	177.20	12,088	16,988
176.69	11,302	11,026	177.21	12,103	17,109
176.70	11,317	11,139	177.22	12,119	17,231
176.71	11,332	11,252	177.23	12,135	17,352
176.72	11,348	11,366	177.24	12,151	17,473
176.73	11,363	11,479	177.25	12,166	17,595
176.74	11,378	11,593	177.26	12,182	17,717
176.75	11,393	11,707	177.27	12,198	17,838
176.76	11,408	11,821	177.28	12,213	17,961
176.77	11,424	11,935	177.29	12,229	18,083
176.78	11,439	12,049	177.30	12,245	18,205
176.79	11,454	12,164	177.31	12,261	18,328
176.80	11,469	12,278	177.32	12,276	18,450
176.81	11,484	12,393	177.33	12,292	18,573
176.82	11,500	12,508	177.34	12,308	18,696
176.83	11,515	12,623	177.35	12,324	18,819
176.84	11,530	12,738	177.36	12,339	18,943
176.85	11,545	12,854	177.37	12,355	19,066

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.38	12,371	19,190	177.90	13,189	25,835
177.39	12,386	19,313	177.91	13,204	25,967
177.40	12,402	19,437	177.92	13,220	26,099
177.41	12,418	19,562	177.93	13,236	26,232
177.42	12,434	19,686	177.94	13,252	26,364
177.43	12,449	19,810	177.95	13,267	26,497
177.44	12,465	19,935	177.96	13,283	26,629
177.45	12,481	20,060	177.97	13,299	26,762
177.46	12,497	20,184	177.98	13,315	26,895
177.47	12,512	20,309	177.99	13,330	27,029
177.48	12,528	20,435	178.00	13,346	27,162
177.49	12,544	20,560	178.01	13,362	27,295
177.50	12,560	20,686	178.02	13,379	27,429
177.51	12,575	20,811	178.03	13,395	27,563
177.52	12,591	20,937	178.04	13,411	27,697
177.53	12,607	21,063	178.05	13,428	27,831
177.54	12,622	21,189	178.06	13,444	27,966
177.55	12,638	21,315	178.07	13,460	28,100
177.56	12,654	21,442	178.08	13,477	28,235
177.57	12,670	21,569	178.09	13,493	28,370
177.58	12,685	21,695	178.10	13,509	28,505
177.59	12,701	21,822	178.11	13,526	28,640
177.60	12,717	21,949	178.12	13,542	28,775
177.61	12,733	22,077	178.13	13,558	28,911
177.62	12,748	22,204	178.14	13,574	29,046
177.63	12,764	22,332	178.15	13,591	29,182
177.64	12,780	22,459	178.16	13,607	29,318
177.65	12,795	22,587	178.17	13,623	29,454
177.66	12,811	22,715	178.18	13,640	29,591
177.67	12,827	22,843	178.19	13,656	29,727
177.68	12,843	22,972	178.20	13,672	29,864
177.69	12,858	23,100	178.21	13,689	30,001
177.70	12,874	23,229	178.22	13,705	30,138
177.71	12,890	23,358	178.23	13,721	30,275
177.72	12,906	23,487	178.24	13,738	30,412
177.73	12,921	23,616	178.25	13,754	30,549
177.74	12,937	23,745	178.26	13,770	30,687
177.75	12,953	23,875	178.27	13,787	30,825
177.76	12,968	24,004	178.28	13,803	30,963
177.77	12,984	24,134	178.29	13,819	31,101
177.78	13,000	24,264	178.30	13,836	31,239
177.79	13,016	24,394	178.31	13,852	31,378
177.80	13,031	24,524	178.32	13,868	31,516
177.81	13,047	24,655	178.33	13,885	31,655
177.82	13,063	24,785	178.34	13,901	31,794
177.83	13,079	24,916	178.35	13,917	31,933
177.84	13,094	25,047	178.36	13,934	32,072
177.85	13,110	25,178	178.37	13,950	32,212
177.86	13,126	25,309	178.38	13,966	32,351
177.87	13,142	25,440	178.39	13,982	32,491
177.88	13,157	25,572	178.40	13,999	32,631
177.89	13,173	25,703	178.41	14,015	32,771

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.42	14,031	32,911	178.94	14,880	40,428
178.43	14,048	33,052	178.95	14,896	40,577
178.44	14,064	33,192	178.96	14,913	40,726
178.45	14,080	33,333	178.97	14,929	40,875
178.46	14,097	33,474	178.98	14,945	41,025
178.47	14,113	33,615	178.99	14,962	41,174
178.48	14,129	33,756	179.00	14,978	41,324
178.49	14,146	33,897	179.01	14,995	41,474
178.50	14,162	34,039	179.02	15,012	41,624
178.51	14,178	34,181	179.03	15,029	41,774
178.52	14,195	34,322	179.04	15,046	41,924
178.53	14,211	34,464	179.05	15,062	42,075
178.54	14,227	34,607	179.06	15,079	42,226
178.55	14,244	34,749	179.07	15,096	42,376
178.56	14,260	34,892	179.08	15,113	42,528
178.57	14,276	35,034	179.09	15,130	42,679
178.58	14,293	35,177	179.10	15,147	42,830
178.59	14,309	35,320	179.11	15,164	42,982
178.60	14,325	35,463	179.12	15,181	43,133
178.61	14,342	35,607	179.13	15,198	43,285
178.62	14,358	35,750	179.14	15,214	43,437
178.63	14,374	35,894	179.15	15,231	43,590
178.64	14,390	36,038	179.16	15,248	43,742
178.65	14,407	36,182	179.17	15,265	43,895
178.66	14,423	36,326	179.18	15,282	44,047
178.67	14,439	36,470	179.19	15,299	44,200
178.68	14,456	36,614	179.20	15,316	44,353
178.69	14,472	36,759	179.21	15,333	44,507
178.70	14,488	36,904	179.22	15,350	44,660
178.71	14,505	37,049	179.23	15,366	44,814
178.72	14,521	37,194	179.24	15,383	44,967
178.73	14,537	37,339	179.25	15,400	45,121
178.74	14,554	37,485	179.26	15,417	45,275
178.75	14,570	37,630	179.27	15,434	45,430
178.76	14,586	37,776	179.28	15,451	45,584
178.77	14,603	37,922	179.29	15,468	45,739
178.78	14,619	38,068	179.30	15,485	45,893
178.79	14,635	38,215	179.31	15,502	46,048
178.80	14,652	38,361	179.32	15,518	46,203
178.81	14,668	38,508	179.33	15,535	46,359
178.82	14,684	38,654	179.34	15,552	46,514
178.83	14,701	38,801	179.35	15,569	46,670
178.84	14,717	38,948	179.36	15,586	46,825
178.85	14,733	39,096	179.37	15,603	46,981
178.86	14,750	39,243	179.38	15,620	47,137
178.87	14,766	39,391	179.39	15,637	47,294
178.88	14,782	39,538	179.40	15,654	47,450
178.89	14,798	39,686	179.41	15,670	47,607
178.90	14,815	39,834	179.42	15,687	47,764
178.91	14,831	39,982	179.43	15,704	47,921
178.92	14,847	40,131	179.44	15,721	48,078
178.93	14,864	40,279	179.45	15,738	48,235

Stage-Area-Storage for Pond B-30: Basin #30 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.46	15,755	48,392
179.47	15,772	48,550
179.48	15,789	48,708
179.49	15,806	48,866
179.50	15,823	49,024
179.51	15,839	49,182
179.52	15,856	49,341
179.53	15,873	49,499
179.54	15,890	49,658
179.55	15,907	49,817
179.56	15,924	49,976
179.57	15,941	50,136
179.58	15,958	50,295
179.59	15,975	50,455
179.60	15,991	50,615
179.61	16,008	50,775
179.62	16,025	50,935
179.63	16,042	51,095
179.64	16,059	51,256
179.65	16,076	51,416
179.66	16,093	51,577
179.67	16,110	51,738
179.68	16,127	51,899
179.69	16,143	52,061
179.70	16,160	52,222
179.71	16,177	52,384
179.72	16,194	52,546
179.73	16,211	52,708
179.74	16,228	52,870
179.75	16,245	53,032
179.76	16,262	53,195
179.77	16,279	53,358
179.78	16,295	53,521
179.79	16,312	53,684
179.80	16,329	53,847
179.81	16,346	54,010
179.82	16,363	54,174
179.83	16,380	54,337
179.84	16,397	54,501
179.85	16,414	54,665
179.86	16,431	54,830
179.87	16,447	54,994
179.88	16,464	55,159
179.89	16,481	55,323
179.90	16,498	55,488
179.91	16,515	55,653
179.92	16,532	55,818
179.93	16,549	55,984
179.94	16,566	56,149
179.95	16,583	56,315
179.96	16,599	56,481
179.97	16,616	56,647
179.98	16,633	56,813
179.99	16,650	56,980
180.00	**16,667**	**57,146**

Summary for Pond B-31: Basin #31

Inflow Area = 0.358 ac, 42.46% Impervious, Inflow Depth = 9.21" for Future 100 yr event
Inflow = 3.32 cfs @ 12.17 hrs, Volume= 0.275 af
Outflow = 0.70 cfs @ 12.62 hrs, Volume= 0.260 af, Atten= 79%, Lag= 27.0 min
Primary = 0.70 cfs @ 12.62 hrs, Volume= 0.260 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.11' @ 12.62 hrs Surf.Area= 3,324 sf Storage= 6,196 cf

Plug-Flow detention time= 310.6 min calculated for 0.260 af (95% of inflow)
Center-of-Mass det. time= 278.8 min (1,053.9 - 775.1)

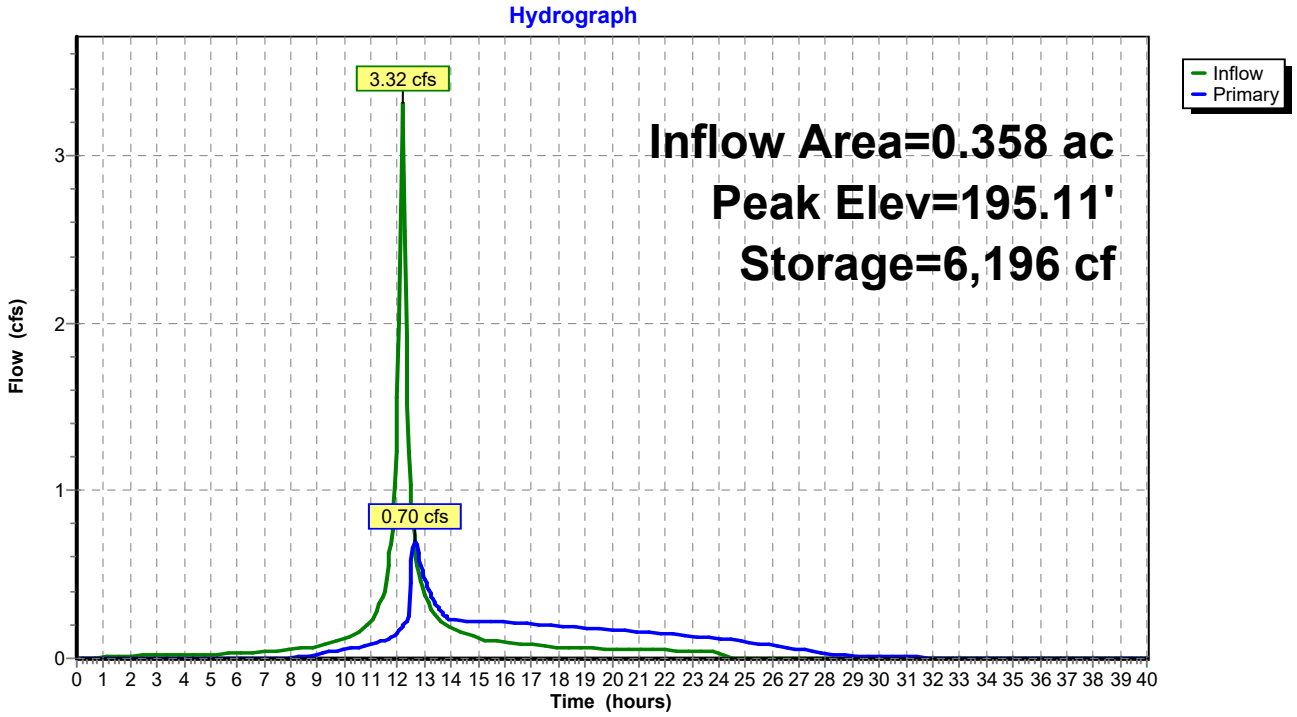
Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	9,453 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	1,944	680	680
194.00	2,566	2,255	2,935
195.00	3,245	2,906	5,841
196.00	3,980	3,613	9,453

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	**18.0" Round Culvert** L= 126.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 188.00' S= 0.0290 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.97'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	195.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.69 cfs @ 12.62 hrs HW=195.11' (Free Discharge)
- **1=Culvert** (Passes 0.69 cfs of 14.00 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.87 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.46 cfs @ 1.07 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-31: Basin #31



Stage-Discharge for Pond B-31: Basin #31

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.30	0.00	192.82	0.00	193.34	0.08	193.86	0.15
192.31	0.00	192.83	0.00	193.35	0.09	193.87	0.15
192.32	0.00	192.84	0.00	193.36	0.09	193.88	0.15
192.33	0.00	192.85	0.00	193.37	0.09	193.89	0.15
192.34	0.00	192.86	0.00	193.38	0.09	193.90	0.15
192.35	0.00	192.87	0.00	193.39	0.09	193.91	0.15
192.36	0.00	192.88	0.00	193.40	0.09	193.92	0.15
192.37	0.00	192.89	0.00	193.41	0.10	193.93	0.15
192.38	0.00	192.90	0.00	193.42	0.10	193.94	0.15
192.39	0.00	192.91	0.00	193.43	0.10	193.95	0.15
192.40	0.00	192.92	0.00	193.44	0.10	193.96	0.15
192.41	0.00	192.93	0.00	193.45	0.10	193.97	0.16
192.42	0.00	192.94	0.00	193.46	0.10	193.98	0.16
192.43	0.00	192.95	0.00	193.47	0.10	193.99	0.16
192.44	0.00	192.96	0.00	193.48	0.10	194.00	0.16
192.45	0.00	192.97	0.00	193.49	0.11	194.01	0.16
192.46	0.00	192.98	0.00	193.50	0.11	194.02	0.16
192.47	0.00	192.99	0.00	193.51	0.11	194.03	0.16
192.48	0.00	193.00	0.00	193.52	0.11	194.04	0.16
192.49	0.00	193.01	0.00	193.53	0.11	194.05	0.16
192.50	0.00	193.02	0.00	193.54	0.11	194.06	0.16
192.51	0.00	193.03	0.01	193.55	0.11	194.07	0.16
192.52	0.00	193.04	0.01	193.56	0.11	194.08	0.16
192.53	0.00	193.05	0.01	193.57	0.12	194.09	0.17
192.54	0.00	193.06	0.01	193.58	0.12	194.10	0.17
192.55	0.00	193.07	0.02	193.59	0.12	194.11	0.17
192.56	0.00	193.08	0.02	193.60	0.12	194.12	0.17
192.57	0.00	193.09	0.02	193.61	0.12	194.13	0.17
192.58	0.00	193.10	0.03	193.62	0.12	194.14	0.17
192.59	0.00	193.11	0.03	193.63	0.12	194.15	0.17
192.60	0.00	193.12	0.03	193.64	0.12	194.16	0.17
192.61	0.00	193.13	0.04	193.65	0.12	194.17	0.17
192.62	0.00	193.14	0.04	193.66	0.13	194.18	0.17
192.63	0.00	193.15	0.05	193.67	0.13	194.19	0.17
192.64	0.00	193.16	0.05	193.68	0.13	194.20	0.17
192.65	0.00	193.17	0.05	193.69	0.13	194.21	0.17
192.66	0.00	193.18	0.05	193.70	0.13	194.22	0.18
192.67	0.00	193.19	0.06	193.71	0.13	194.23	0.18
192.68	0.00	193.20	0.06	193.72	0.13	194.24	0.18
192.69	0.00	193.21	0.06	193.73	0.13	194.25	0.18
192.70	0.00	193.22	0.06	193.74	0.13	194.26	0.18
192.71	0.00	193.23	0.06	193.75	0.13	194.27	0.18
192.72	0.00	193.24	0.07	193.76	0.14	194.28	0.18
192.73	0.00	193.25	0.07	193.77	0.14	194.29	0.18
192.74	0.00	193.26	0.07	193.78	0.14	194.30	0.18
192.75	0.00	193.27	0.07	193.79	0.14	194.31	0.18
192.76	0.00	193.28	0.07	193.80	0.14	194.32	0.18
192.77	0.00	193.29	0.08	193.81	0.14	194.33	0.18
192.78	0.00	193.30	0.08	193.82	0.14	194.34	0.18
192.79	0.00	193.31	0.08	193.83	0.14	194.35	0.19
192.80	0.00	193.32	0.08	193.84	0.14	194.36	0.19
192.81	0.00	193.33	0.08	193.85	0.14	194.37	0.19

Stage-Discharge for Pond B-31: Basin #31 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.38	0.19	194.90	0.22	195.42	3.74	195.94	49.49
194.39	0.19	194.91	0.22	195.43	3.86	195.95	51.13
194.40	0.19	194.92	0.22	195.44	3.99	195.96	52.81
194.41	0.19	194.93	0.22	195.45	4.11	195.97	54.51
194.42	0.19	194.94	0.22	195.46	4.24	195.98	56.24
194.43	0.19	194.95	0.22	195.47	4.37	195.99	57.99
194.44	0.19	194.96	0.23	195.48	4.50	196.00	**59.77**
194.45	0.19	194.97	0.23	195.49	4.63		
194.46	0.19	194.98	0.23	195.50	4.76		
194.47	0.19	194.99	0.23	195.51	5.02		
194.48	0.19	195.00	0.23	195.52	5.37		
194.49	0.20	195.01	0.24	195.53	5.78		
194.50	0.20	195.02	0.27	195.54	6.25		
194.51	0.20	195.03	0.30	195.55	6.76		
194.52	0.20	195.04	0.33	195.56	7.31		
194.53	0.20	195.05	0.38	195.57	7.90		
194.54	0.20	195.06	0.42	195.58	8.53		
194.55	0.20	195.07	0.47	195.59	9.19		
194.56	0.20	195.08	0.53	195.60	9.88		
194.57	0.20	195.09	0.58	195.61	10.59		
194.58	0.20	195.10	0.65	195.62	11.34		
194.59	0.20	195.11	0.71	195.63	12.12		
194.60	0.20	195.12	0.78	195.64	12.92		
194.61	0.20	195.13	0.84	195.65	13.74		
194.62	0.20	195.14	0.92	195.66	14.59		
194.63	0.20	195.15	0.99	195.67	15.47		
194.64	0.21	195.16	1.07	195.68	16.36		
194.65	0.21	195.17	1.15	195.69	17.28		
194.66	0.21	195.18	1.23	195.70	18.22		
194.67	0.21	195.19	1.31	195.71	19.23		
194.68	0.21	195.20	1.40	195.72	20.25		
194.69	0.21	195.21	1.49	195.73	21.31		
194.70	0.21	195.22	1.58	195.74	22.39		
194.71	0.21	195.23	1.67	195.75	23.50		
194.72	0.21	195.24	1.76	195.76	24.63		
194.73	0.21	195.25	1.86	195.77	25.79		
194.74	0.21	195.26	1.95	195.78	26.98		
194.75	0.21	195.27	2.05	195.79	28.19		
194.76	0.21	195.28	2.15	195.80	29.42		
194.77	0.21	195.29	2.26	195.81	30.69		
194.78	0.21	195.30	2.36	195.82	31.97		
194.79	0.22	195.31	2.47	195.83	33.29		
194.80	0.22	195.32	2.58	195.84	34.62		
194.81	0.22	195.33	2.69	195.85	35.98		
194.82	0.22	195.34	2.80	195.86	37.37		
194.83	0.22	195.35	2.91	195.87	38.78		
194.84	0.22	195.36	3.02	195.88	40.22		
194.85	0.22	195.37	3.14	195.89	41.68		
194.86	0.22	195.38	3.25	195.90	43.17		
194.87	0.22	195.39	3.37	195.91	44.71		
194.88	0.22	195.40	3.49	195.92	46.28		
194.89	0.22	195.41	3.61	195.93	47.87		

Stage-Area-Storage for Pond B-31: Basin #31

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.30	0	0
192.31	28	0
192.32	56	1
192.33	83	1
192.34	111	2
192.35	139	3
192.36	167	5
192.37	194	7
192.38	222	9
192.39	250	11
192.40	278	14
192.41	305	17
192.42	333	20
192.43	361	23
192.44	389	27
192.45	417	31
192.46	444	36
192.47	472	40
192.48	500	45
192.49	528	50
192.50	555	56
192.51	583	61
192.52	611	67
192.53	639	73
192.54	667	80
192.55	694	87
192.56	722	94
192.57	750	101
192.58	778	109
192.59	805	117
192.60	833	125
192.61	861	133
192.62	889	142
192.63	916	151
192.64	944	161
192.65	972	170
192.66	1,000	180
192.67	1,028	190
192.68	1,055	201
192.69	1,083	211
192.70	1,111	222
192.71	1,139	233
192.72	1,166	245
192.73	1,194	257
192.74	1,222	269
192.75	1,250	281
192.76	1,277	294
192.77	1,305	307
192.78	1,333	320
192.79	1,361	333
192.80	1,389	347
192.81	1,416	361
192.82	1,444	375
192.83	1,472	390
192.84	1,500	405
192.85	1,527	420
192.86	1,555	435
192.87	1,583	451
192.88	1,611	467
192.89	1,639	483
192.90	1,666	500
192.91	1,694	517
192.92	1,722	534
192.93	1,750	551
192.94	1,777	569
192.95	1,805	587
192.96	1,833	605
192.97	1,861	623
192.98	1,888	642
192.99	1,916	661
193.00	1,944	680
193.01	1,950	700
193.02	1,956	719
193.03	1,963	739
193.04	1,969	759
193.05	1,975	778
193.06	1,981	798
193.07	1,988	818
193.08	1,994	838
193.09	2,000	858
193.10	2,006	878
193.11	2,012	898
193.12	2,019	918
193.13	2,025	938
193.14	2,031	959
193.15	2,037	979
193.16	2,044	999
193.17	2,050	1,020
193.18	2,056	1,040
193.19	2,062	1,061
193.20	2,068	1,082
193.21	2,075	1,102
193.22	2,081	1,123
193.23	2,087	1,144
193.24	2,093	1,165
193.25	2,100	1,186
193.26	2,106	1,207
193.27	2,112	1,228
193.28	2,118	1,249
193.29	2,124	1,270
193.30	2,131	1,292
193.31	2,137	1,313
193.32	2,143	1,334
193.33	2,149	1,356

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.34	2,155	1,377	193.86	2,479	2,582
193.35	2,162	1,399	193.87	2,485	2,607
193.36	2,168	1,421	193.88	2,491	2,632
193.37	2,174	1,442	193.89	2,498	2,657
193.38	2,180	1,464	193.90	2,504	2,682
193.39	2,187	1,486	193.91	2,510	2,707
193.40	2,193	1,508	193.92	2,516	2,732
193.41	2,199	1,530	193.93	2,522	2,757
193.42	2,205	1,552	193.94	2,529	2,783
193.43	2,211	1,574	193.95	2,535	2,808
193.44	2,218	1,596	193.96	2,541	2,833
193.45	2,224	1,618	193.97	2,547	2,859
193.46	2,230	1,640	193.98	2,554	2,884
193.47	2,236	1,663	193.99	2,560	2,910
193.48	2,243	1,685	194.00	2,566	2,935
193.49	2,249	1,708	194.01	2,573	2,961
193.50	2,255	1,730	194.02	2,580	2,987
193.51	2,261	1,753	194.03	2,586	3,013
193.52	2,267	1,775	194.04	2,593	3,039
193.53	2,274	1,798	194.05	2,600	3,065
193.54	2,280	1,821	194.06	2,607	3,091
193.55	2,286	1,844	194.07	2,614	3,117
193.56	2,292	1,867	194.08	2,620	3,143
193.57	2,299	1,890	194.09	2,627	3,169
193.58	2,305	1,913	194.10	2,634	3,195
193.59	2,311	1,936	194.11	2,641	3,222
193.60	2,317	1,959	194.12	2,647	3,248
193.61	2,323	1,982	194.13	2,654	3,275
193.62	2,330	2,005	194.14	2,661	3,301
193.63	2,336	2,029	194.15	2,668	3,328
193.64	2,342	2,052	194.16	2,675	3,355
193.65	2,348	2,075	194.17	2,681	3,381
193.66	2,355	2,099	194.18	2,688	3,408
193.67	2,361	2,122	194.19	2,695	3,435
193.68	2,367	2,146	194.20	2,702	3,462
193.69	2,373	2,170	194.21	2,709	3,489
193.70	2,379	2,194	194.22	2,715	3,516
193.71	2,386	2,217	194.23	2,722	3,544
193.72	2,392	2,241	194.24	2,729	3,571
193.73	2,398	2,265	194.25	2,736	3,598
193.74	2,404	2,289	194.26	2,743	3,626
193.75	2,411	2,313	194.27	2,749	3,653
193.76	2,417	2,337	194.28	2,756	3,680
193.77	2,423	2,362	194.29	2,763	3,708
193.78	2,429	2,386	194.30	2,770	3,736
193.79	2,435	2,410	194.31	2,776	3,763
193.80	2,442	2,435	194.32	2,783	3,791
193.81	2,448	2,459	194.33	2,790	3,819
193.82	2,454	2,484	194.34	2,797	3,847
193.83	2,460	2,508	194.35	2,804	3,875
193.84	2,466	2,533	194.36	2,810	3,903
193.85	2,473	2,557	194.37	2,817	3,931

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.38	2,824	3,960
194.39	2,831	3,988
194.40	2,838	4,016
194.41	2,844	4,045
194.42	2,851	4,073
194.43	2,858	4,102
194.44	2,865	4,130
194.45	2,872	4,159
194.46	2,878	4,188
194.47	2,885	4,216
194.48	2,892	4,245
194.49	2,899	4,274
194.50	2,906	4,303
194.51	2,912	4,332
194.52	2,919	4,362
194.53	2,926	4,391
194.54	2,933	4,420
194.55	2,939	4,449
194.56	2,946	4,479
194.57	2,953	4,508
194.58	2,960	4,538
194.59	2,967	4,568
194.60	2,973	4,597
194.61	2,980	4,627
194.62	2,987	4,657
194.63	2,994	4,687
194.64	3,001	4,717
194.65	3,007	4,747
194.66	3,014	4,777
194.67	3,021	4,807
194.68	3,028	4,837
194.69	3,035	4,868
194.70	3,041	4,898
194.71	3,048	4,928
194.72	3,055	4,959
194.73	3,062	4,989
194.74	3,068	5,020
194.75	3,075	5,051
194.76	3,082	5,082
194.77	3,089	5,113
194.78	3,096	5,143
194.79	3,102	5,174
194.80	3,109	5,205
194.81	3,116	5,237
194.82	3,123	5,268
194.83	3,130	5,299
194.84	3,136	5,330
194.85	3,143	5,362
194.86	3,150	5,393
194.87	3,157	5,425
194.88	3,164	5,456
194.89	3,170	5,488
194.90	3,177	5,520
194.91	3,184	5,552
194.92	3,191	5,583
194.93	3,197	5,615
194.94	3,204	5,647
194.95	3,211	5,679
194.96	3,218	5,712
194.97	3,225	5,744
194.98	3,231	5,776
194.99	3,238	5,808
195.00	3,245	5,841
195.01	3,252	5,873
195.02	3,260	5,906
195.03	3,267	5,939
195.04	3,274	5,971
195.05	3,282	6,004
195.06	3,289	6,037
195.07	3,296	6,070
195.08	3,304	6,103
195.09	3,311	6,136
195.10	3,319	6,169
195.11	3,326	6,202
195.12	3,333	6,236
195.13	3,341	6,269
195.14	3,348	6,302
195.15	3,355	6,336
195.16	3,363	6,370
195.17	3,370	6,403
195.18	3,377	6,437
195.19	3,385	6,471
195.20	3,392	6,505
195.21	3,399	6,539
195.22	3,407	6,573
195.23	3,414	6,607
195.24	3,421	6,641
195.25	3,429	6,675
195.26	3,436	6,709
195.27	3,443	6,744
195.28	3,451	6,778
195.29	3,458	6,813
195.30	3,466	6,847
195.31	3,473	6,882
195.32	3,480	6,917
195.33	3,488	6,952
195.34	3,495	6,987
195.35	3,502	7,022
195.36	3,510	7,057
195.37	3,517	7,092
195.38	3,524	7,127
195.39	3,532	7,162
195.40	3,539	7,198
195.41	3,546	7,233

Stage-Area-Storage for Pond B-31: Basin #31 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.42	3,554	7,269
195.43	3,561	7,304
195.44	3,568	7,340
195.45	3,576	7,376
195.46	3,583	7,411
195.47	3,590	7,447
195.48	3,598	7,483
195.49	3,605	7,519
195.50	3,613	7,555
195.51	3,620	7,591
195.52	3,627	7,628
195.53	3,635	7,664
195.54	3,642	7,700
195.55	3,649	7,737
195.56	3,657	7,773
195.57	3,664	7,810
195.58	3,671	7,847
195.59	3,679	7,883
195.60	3,686	7,920
195.61	3,693	7,957
195.62	3,701	7,994
195.63	3,708	8,031
195.64	3,715	8,068
195.65	3,723	8,105
195.66	3,730	8,143
195.67	3,737	8,180
195.68	3,745	8,217
195.69	3,752	8,255
195.70	3,760	8,292
195.71	3,767	8,330
195.72	3,774	8,368
195.73	3,782	8,406
195.74	3,789	8,443
195.75	3,796	8,481
195.76	3,804	8,519
195.77	3,811	8,557
195.78	3,818	8,596
195.79	3,826	8,634
195.80	3,833	8,672
195.81	3,840	8,710
195.82	3,848	8,749
195.83	3,855	8,787
195.84	3,862	8,826
195.85	3,870	8,865
195.86	3,877	8,903
195.87	3,884	8,942
195.88	3,892	8,981
195.89	3,899	9,020
195.90	3,907	9,059
195.91	3,914	9,098
195.92	3,921	9,137
195.93	3,929	9,177
195.94	3,936	9,216
195.95	3,943	9,255
195.96	3,951	9,295
195.97	3,958	9,334
195.98	3,965	9,374
195.99	3,973	9,414
196.00	**3,980**	**9,453**

Summary for Pond B-32: Basin #32

Inflow Area = 1.911 ac, 49.76% Impervious, Inflow Depth = 9.43" for Future 100 yr event
Inflow = 17.96 cfs @ 12.17 hrs, Volume= 1.502 af
Outflow = 10.60 cfs @ 12.30 hrs, Volume= 1.414 af, Atten= 41%, Lag= 8.0 min
Primary = 10.60 cfs @ 12.30 hrs, Volume= 1.414 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 196.94' @ 12.30 hrs Surf.Area= 4,336 sf Storage= 12,125 cf

Plug-Flow detention time= 73.8 min calculated for 1.414 af (94% of inflow)
Center-of-Mass det. time= 39.6 min (809.7 - 770.1)

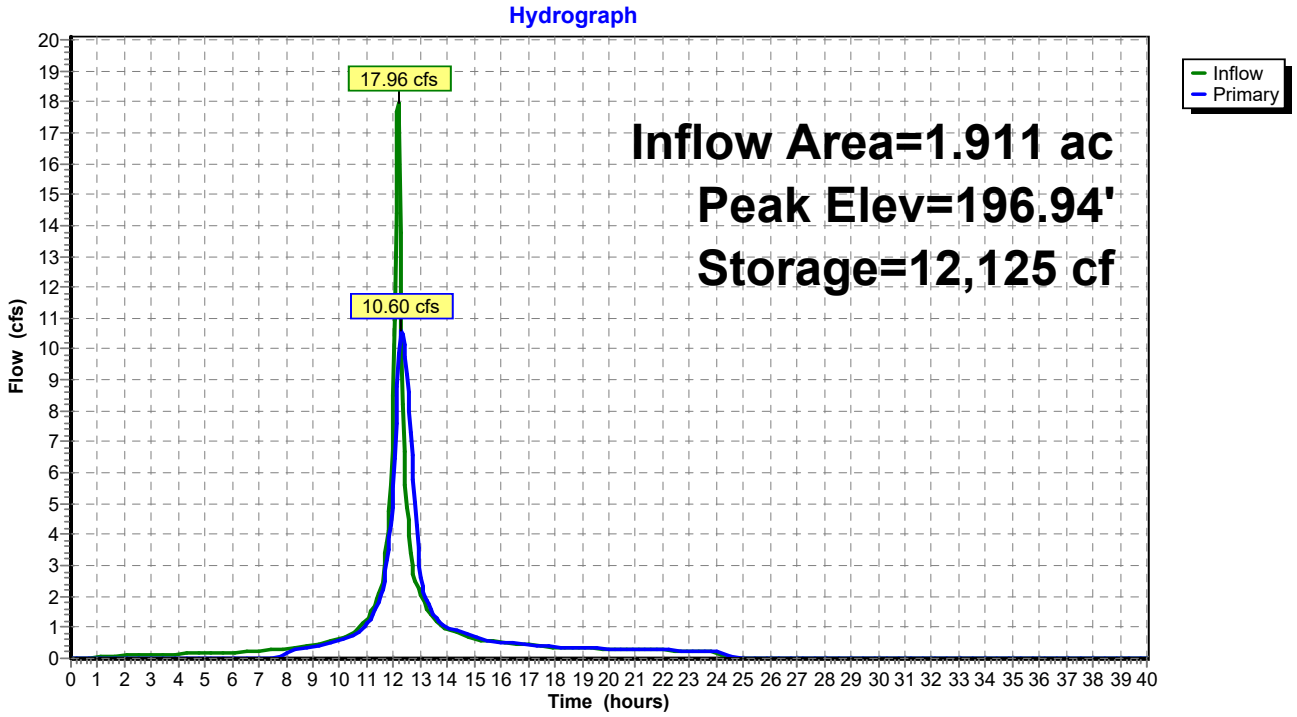
Volume	Invert	Avail.Storage	Storage Description
#1	192.30'	17,202 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
192.30	0	0	0
193.00	1,675	586	586
194.00	2,256	1,966	2,552
195.00	2,913	2,585	5,136
196.00	3,621	3,267	8,403
197.00	4,385	4,003	12,406
198.00	5,206	4,796	17,202

Device	Routing	Invert	Outlet Devices
#1	Primary	190.65'	**18.0" Round Culvert** L= 182.0' Ke= 0.500 Inlet / Outlet Invert= 190.65' / 188.00' S= 0.0146 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.53'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	197.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.59 cfs @ 12.30 hrs HW=196.93' (Free Discharge)
- **1=Culvert** (Passes 10.59 cfs of 17.59 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 10.59 cfs @ 7.06 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-32: Basin #32



Stage-Discharge for Pond B-32: Basin #32

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.30	0.00	192.82	0.00	193.34	0.00	193.86	0.00
192.31	0.00	192.83	0.00	193.35	0.00	193.87	0.00
192.32	0.00	192.84	0.00	193.36	0.00	193.88	0.00
192.33	0.00	192.85	0.00	193.37	0.00	193.89	0.00
192.34	0.00	192.86	0.00	193.38	0.00	193.90	0.00
192.35	0.00	192.87	0.00	193.39	0.00	193.91	0.00
192.36	0.00	192.88	0.00	193.40	0.00	193.92	0.00
192.37	0.00	192.89	0.00	193.41	0.00	193.93	0.00
192.38	0.00	192.90	0.00	193.42	0.00	193.94	0.00
192.39	0.00	192.91	0.00	193.43	0.00	193.95	0.00
192.40	0.00	192.92	0.00	193.44	0.00	193.96	0.00
192.41	0.00	192.93	0.00	193.45	0.00	193.97	0.00
192.42	0.00	192.94	0.00	193.46	0.00	193.98	0.00
192.43	0.00	192.95	0.00	193.47	0.00	193.99	0.00
192.44	0.00	192.96	0.00	193.48	0.00	194.00	0.00
192.45	0.00	192.97	0.00	193.49	0.00	194.01	0.00
192.46	0.00	192.98	0.00	193.50	0.00	194.02	0.00
192.47	0.00	192.99	0.00	193.51	0.00	194.03	0.00
192.48	0.00	193.00	0.00	193.52	0.00	194.04	0.00
192.49	0.00	193.01	0.00	193.53	0.00	194.05	0.00
192.50	0.00	193.02	0.00	193.54	0.00	194.06	0.00
192.51	0.00	193.03	0.00	193.55	0.00	194.07	0.00
192.52	0.00	193.04	0.00	193.56	0.00	194.08	0.00
192.53	0.00	193.05	0.00	193.57	0.00	194.09	0.00
192.54	0.00	193.06	0.00	193.58	0.00	194.10	0.00
192.55	0.00	193.07	0.00	193.59	0.00	194.11	0.00
192.56	0.00	193.08	0.00	193.60	0.00	194.12	0.00
192.57	0.00	193.09	0.00	193.61	0.00	194.13	0.00
192.58	0.00	193.10	0.00	193.62	0.00	194.14	0.00
192.59	0.00	193.11	0.00	193.63	0.00	194.15	0.00
192.60	0.00	193.12	0.00	193.64	0.00	194.16	0.00
192.61	0.00	193.13	0.00	193.65	0.00	194.17	0.00
192.62	0.00	193.14	0.00	193.66	0.00	194.18	0.00
192.63	0.00	193.15	0.00	193.67	0.00	194.19	0.00
192.64	0.00	193.16	0.00	193.68	0.00	194.20	0.00
192.65	0.00	193.17	0.00	193.69	0.00	194.21	0.00
192.66	0.00	193.18	0.00	193.70	0.00	194.22	0.00
192.67	0.00	193.19	0.00	193.71	0.00	194.23	0.00
192.68	0.00	193.20	0.00	193.72	0.00	194.24	0.00
192.69	0.00	193.21	0.00	193.73	0.00	194.25	0.00
192.70	0.00	193.22	0.00	193.74	0.00	194.26	0.00
192.71	0.00	193.23	0.00	193.75	0.00	194.27	0.00
192.72	0.00	193.24	0.00	193.76	0.00	194.28	0.00
192.73	0.00	193.25	0.00	193.77	0.00	194.29	0.00
192.74	0.00	193.26	0.00	193.78	0.00	194.30	0.00
192.75	0.00	193.27	0.00	193.79	0.00	194.31	0.00
192.76	0.00	193.28	0.00	193.80	0.00	194.32	0.00
192.77	0.00	193.29	0.00	193.81	0.00	194.33	0.00
192.78	0.00	193.30	0.00	193.82	0.00	194.34	0.00
192.79	0.00	193.31	0.00	193.83	0.00	194.35	0.00
192.80	0.00	193.32	0.00	193.84	0.00	194.36	0.00
192.81	0.00	193.33	0.00	193.85	0.00	194.37	0.00

Stage-Discharge for Pond B-32: Basin #32 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
194.38	0.00	194.90	2.17	195.42	5.74	195.94	7.76
194.39	0.00	194.91	2.26	195.43	5.79	195.95	7.80
194.40	0.00	194.92	2.35	195.44	5.83	195.96	7.83
194.41	0.00	194.93	2.44	195.45	5.88	195.97	7.86
194.42	0.00	194.94	2.53	195.46	5.92	195.98	7.90
194.43	0.00	194.95	2.62	195.47	5.97	195.99	7.93
194.44	0.00	194.96	2.72	195.48	6.01	196.00	7.96
194.45	0.00	194.97	2.81	195.49	6.05	196.01	8.00
194.46	0.00	194.98	2.91	195.50	6.10	196.02	8.03
194.47	0.00	194.99	3.00	195.51	6.14	196.03	8.06
194.48	0.00	195.00	3.10	195.52	6.18	196.04	8.09
194.49	0.00	195.01	3.20	195.53	6.23	196.05	8.13
194.50	0.00	195.02	3.30	195.54	6.27	196.06	8.16
194.51	0.00	195.03	3.40	195.55	6.31	196.07	8.19
194.52	0.00	195.04	3.50	195.56	6.35	196.08	8.22
194.53	0.00	195.05	3.58	195.57	6.39	196.09	8.25
194.54	0.01	195.06	3.67	195.58	6.43	196.10	8.29
194.55	0.03	195.07	3.74	195.59	6.47	196.11	8.32
194.56	0.05	195.08	3.82	195.60	6.51	196.12	8.35
194.57	0.08	195.09	3.89	195.61	6.55	196.13	8.38
194.58	0.11	195.10	3.97	195.62	6.59	196.14	8.41
194.59	0.14	195.11	4.04	195.63	6.63	196.15	8.44
194.60	0.18	195.12	4.10	195.64	6.67	196.16	8.47
194.61	0.22	195.13	4.17	195.65	6.71	196.17	8.50
194.62	0.26	195.14	4.24	195.66	6.75	196.18	8.53
194.63	0.30	195.15	4.30	195.67	6.79	196.19	8.56
194.64	0.35	195.16	4.36	195.68	6.83	196.20	8.60
194.65	0.40	195.17	4.43	195.69	6.87	196.21	8.63
194.66	0.45	195.18	4.49	195.70	6.91	196.22	8.66
194.67	0.50	195.19	4.55	195.71	6.94	196.23	8.69
194.68	0.56	195.20	4.61	195.72	6.98	196.24	8.72
194.69	0.62	195.21	4.66	195.73	7.02	196.25	8.75
194.70	0.67	195.22	4.72	195.74	7.06	196.26	8.78
194.71	0.74	195.23	4.78	195.75	7.09	196.27	8.81
194.72	0.80	195.24	4.83	195.76	7.13	196.28	8.84
194.73	0.86	195.25	4.89	195.77	7.17	196.29	8.86
194.74	0.93	195.26	4.94	195.78	7.20	196.30	8.89
194.75	0.99	195.27	5.00	195.79	7.24	196.31	8.92
194.76	1.06	195.28	5.05	195.80	7.28	196.32	8.95
194.77	1.13	195.29	5.10	195.81	7.31	196.33	8.98
194.78	1.20	195.30	5.16	195.82	7.35	196.34	9.01
194.79	1.28	195.31	5.21	195.83	7.38	196.35	9.04
194.80	1.35	195.32	5.26	195.84	7.42	196.36	9.07
194.81	1.43	195.33	5.31	195.85	7.45	196.37	9.10
194.82	1.50	195.34	5.36	195.86	7.49	196.38	9.13
194.83	1.58	195.35	5.41	195.87	7.52	196.39	9.16
194.84	1.66	195.36	5.46	195.88	7.56	196.40	9.18
194.85	1.74	195.37	5.50	195.89	7.59	196.41	9.21
194.86	1.83	195.38	5.55	195.90	7.63	196.42	9.24
194.87	1.91	195.39	5.60	195.91	7.66	196.43	9.27
194.88	1.99	195.40	5.65	195.92	7.70	196.44	9.30
194.89	2.08	195.41	5.69	195.93	7.73	196.45	9.32

Stage-Discharge for Pond B-32: Basin #32 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
196.46	9.35	196.98	10.71	197.50	16.42
196.47	9.38	196.99	10.73	197.51	16.57
196.48	9.41	197.00	10.76	197.52	16.73
196.49	9.44	197.01	10.79	197.53	16.89
196.50	9.46	197.02	10.84	197.54	17.04
196.51	9.49	197.03	10.90	197.55	17.20
196.52	9.52	197.04	10.96	197.56	17.37
196.53	9.55	197.05	11.02	197.57	17.53
196.54	9.57	197.06	11.09	197.58	17.69
196.55	9.60	197.07	11.17	197.59	17.86
196.56	9.63	197.08	11.24	197.60	18.02
196.57	9.66	197.09	11.32	197.61	18.19
196.58	9.68	197.10	11.41	197.62	18.36
196.59	9.71	197.11	11.49	197.63	18.40
196.60	9.74	197.12	11.58	197.64	18.41
196.61	9.76	197.13	11.68	197.65	18.42
196.62	9.79	197.14	11.77	197.66	18.44
196.63	9.82	197.15	11.87	197.67	18.45
196.64	9.84	197.16	11.97	197.68	18.46
196.65	9.87	197.17	12.07	197.69	18.47
196.66	9.90	197.18	12.17	197.70	18.48
196.67	9.92	197.19	12.28	197.71	18.49
196.68	9.95	197.20	12.39	197.72	18.50
196.69	9.97	197.21	12.50	197.73	18.51
196.70	10.00	197.22	12.61	197.74	18.53
196.71	10.03	197.23	12.73	197.75	18.54
196.72	10.05	197.24	12.84	197.76	18.55
196.73	10.08	197.25	12.96	197.77	18.56
196.74	10.10	197.26	13.08	197.78	18.57
196.75	10.13	197.27	13.20	197.79	18.58
196.76	10.16	197.28	13.33	197.80	18.59
196.77	10.18	197.29	13.45	197.81	18.60
196.78	10.21	197.30	13.58	197.82	18.62
196.79	10.23	197.31	13.71	197.83	18.63
196.80	10.26	197.32	13.84	197.84	18.64
196.81	10.28	197.33	13.97	197.85	18.65
196.82	10.31	197.34	14.10	197.86	18.66
196.83	10.33	197.35	14.23	197.87	18.67
196.84	10.36	197.36	14.37	197.88	18.68
196.85	10.38	197.37	14.51	197.89	18.69
196.86	10.41	197.38	14.65	197.90	18.70
196.87	10.44	197.39	14.79	197.91	18.72
196.88	10.46	197.40	14.93	197.92	18.73
196.89	10.49	197.41	15.07	197.93	18.74
196.90	10.51	197.42	15.22	197.94	18.75
196.91	10.53	197.43	15.36	197.95	18.76
196.92	10.56	197.44	15.51	197.96	18.89
196.93	10.58	197.45	15.66	197.97	19.11
196.94	10.61	197.46	15.81	197.98	19.40
196.95	10.63	197.47	15.96	197.99	19.74
196.96	10.66	197.48	16.11	198.00	**20.13**
196.97	10.68	197.49	16.26		

Stage-Area-Storage for Pond B-32: Basin #32

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.30	0	0	192.82	1,244	324
192.31	24	0	192.83	1,268	336
192.32	48	0	192.84	1,292	349
192.33	72	1	192.85	1,316	362
192.34	96	2	192.86	1,340	375
192.35	120	3	192.87	1,364	389
192.36	144	4	192.88	1,388	402
192.37	167	6	192.89	1,412	416
192.38	191	8	192.90	1,436	431
192.39	215	10	192.91	1,460	445
192.40	239	12	192.92	1,484	460
192.41	263	14	192.93	1,508	475
192.42	287	17	192.94	1,531	490
192.43	311	20	192.95	1,555	505
192.44	335	23	192.96	1,579	521
192.45	359	27	192.97	1,603	537
192.46	383	31	192.98	1,627	553
192.47	407	35	192.99	1,651	570
192.48	431	39	193.00	1,675	586
192.49	455	43	193.01	1,681	603
192.50	479	48	193.02	1,687	620
192.51	503	53	193.03	1,692	637
192.52	526	58	193.04	1,698	654
192.53	550	63	193.05	1,704	671
192.54	574	69	193.06	1,710	688
192.55	598	75	193.07	1,716	705
192.56	622	81	193.08	1,721	722
192.57	646	87	193.09	1,727	739
192.58	670	94	193.10	1,733	757
192.59	694	101	193.11	1,739	774
192.60	718	108	193.12	1,745	791
192.61	742	115	193.13	1,751	809
192.62	766	123	193.14	1,756	826
192.63	790	130	193.15	1,762	844
192.64	814	138	193.16	1,768	862
192.65	838	147	193.17	1,774	879
192.66	861	155	193.18	1,780	897
192.67	885	164	193.19	1,785	915
192.68	909	173	193.20	1,791	933
192.69	933	182	193.21	1,797	951
192.70	957	191	193.22	1,803	969
192.71	981	201	193.23	1,809	987
192.72	1,005	211	193.24	1,814	1,005
192.73	1,029	221	193.25	1,820	1,023
192.74	1,053	232	193.26	1,826	1,041
192.75	1,077	242	193.27	1,832	1,060
192.76	1,101	253	193.28	1,838	1,078
192.77	1,125	264	193.29	1,843	1,096
192.78	1,149	276	193.30	1,849	1,115
192.79	1,173	287	193.31	1,855	1,133
192.80	1,196	299	193.32	1,861	1,152
192.81	1,220	311	193.33	1,867	1,171

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.34	1,873	1,189	193.86	2,175	2,242
193.35	1,878	1,208	193.87	2,180	2,263
193.36	1,884	1,227	193.88	2,186	2,285
193.37	1,890	1,246	193.89	2,192	2,307
193.38	1,896	1,265	193.90	2,198	2,329
193.39	1,902	1,284	193.91	2,204	2,351
193.40	1,907	1,303	193.92	2,210	2,373
193.41	1,913	1,322	193.93	2,215	2,395
193.42	1,919	1,341	193.94	2,221	2,417
193.43	1,925	1,360	193.95	2,227	2,440
193.44	1,931	1,379	193.96	2,233	2,462
193.45	1,936	1,399	193.97	2,239	2,484
193.46	1,942	1,418	193.98	2,244	2,507
193.47	1,948	1,438	193.99	2,250	2,529
193.48	1,954	1,457	194.00	2,256	2,552
193.49	1,960	1,477	194.01	2,263	2,574
193.50	1,966	1,496	194.02	2,269	2,597
193.51	1,971	1,516	194.03	2,276	2,620
193.52	1,977	1,536	194.04	2,282	2,643
193.53	1,983	1,556	194.05	2,289	2,665
193.54	1,989	1,575	194.06	2,295	2,688
193.55	1,995	1,595	194.07	2,302	2,711
193.56	2,000	1,615	194.08	2,309	2,734
193.57	2,006	1,635	194.09	2,315	2,757
193.58	2,012	1,655	194.10	2,322	2,781
193.59	2,018	1,676	194.11	2,328	2,804
193.60	2,024	1,696	194.12	2,335	2,827
193.61	2,029	1,716	194.13	2,341	2,851
193.62	2,035	1,736	194.14	2,348	2,874
193.63	2,041	1,757	194.15	2,355	2,898
193.64	2,047	1,777	194.16	2,361	2,921
193.65	2,053	1,798	194.17	2,368	2,945
193.66	2,058	1,818	194.18	2,374	2,968
193.67	2,064	1,839	194.19	2,381	2,992
193.68	2,070	1,860	194.20	2,387	3,016
193.69	2,076	1,880	194.21	2,394	3,040
193.70	2,082	1,901	194.22	2,401	3,064
193.71	2,088	1,922	194.23	2,407	3,088
193.72	2,093	1,943	194.24	2,414	3,112
193.73	2,099	1,964	194.25	2,420	3,136
193.74	2,105	1,985	194.26	2,427	3,161
193.75	2,111	2,006	194.27	2,433	3,185
193.76	2,117	2,027	194.28	2,440	3,209
193.77	2,122	2,048	194.29	2,447	3,234
193.78	2,128	2,069	194.30	2,453	3,258
193.79	2,134	2,091	194.31	2,460	3,283
193.80	2,140	2,112	194.32	2,466	3,307
193.81	2,146	2,134	194.33	2,473	3,332
193.82	2,151	2,155	194.34	2,479	3,357
193.83	2,157	2,177	194.35	2,486	3,382
193.84	2,163	2,198	194.36	2,493	3,406
193.85	2,169	2,220	194.37	2,499	3,431

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.38	2,506	3,456
194.39	2,512	3,482
194.40	2,519	3,507
194.41	2,525	3,532
194.42	2,532	3,557
194.43	2,539	3,583
194.44	2,545	3,608
194.45	2,552	3,633
194.46	2,558	3,659
194.47	2,565	3,685
194.48	2,571	3,710
194.49	2,578	3,736
194.50	2,585	3,762
194.51	2,591	3,788
194.52	2,598	3,814
194.53	2,604	3,840
194.54	2,611	3,866
194.55	2,617	3,892
194.56	2,624	3,918
194.57	2,630	3,944
194.58	2,637	3,971
194.59	2,644	3,997
194.60	2,650	4,024
194.61	2,657	4,050
194.62	2,663	4,077
194.63	2,670	4,103
194.64	2,676	4,130
194.65	2,683	4,157
194.66	2,690	4,184
194.67	2,696	4,211
194.68	2,703	4,238
194.69	2,709	4,265
194.70	2,716	4,292
194.71	2,722	4,319
194.72	2,729	4,346
194.73	2,736	4,374
194.74	2,742	4,401
194.75	2,749	4,429
194.76	2,755	4,456
194.77	2,762	4,484
194.78	2,768	4,511
194.79	2,775	4,539
194.80	2,782	4,567
194.81	2,788	4,595
194.82	2,795	4,623
194.83	2,801	4,651
194.84	2,808	4,679
194.85	2,814	4,707
194.86	2,821	4,735
194.87	2,828	4,763
194.88	2,834	4,791
194.89	2,841	4,820
194.90	2,847	4,848
194.91	2,854	4,877
194.92	2,860	4,905
194.93	2,867	4,934
194.94	2,874	4,963
194.95	2,880	4,991
194.96	2,887	5,020
194.97	2,893	5,049
194.98	2,900	5,078
194.99	2,906	5,107
195.00	2,913	5,136
195.01	2,920	5,165
195.02	2,927	5,195
195.03	2,934	5,224
195.04	2,941	5,253
195.05	2,948	5,283
195.06	2,955	5,312
195.07	2,963	5,342
195.08	2,970	5,372
195.09	2,977	5,401
195.10	2,984	5,431
195.11	2,991	5,461
195.12	2,998	5,491
195.13	3,005	5,521
195.14	3,012	5,551
195.15	3,019	5,581
195.16	3,026	5,611
195.17	3,033	5,642
195.18	3,040	5,672
195.19	3,048	5,702
195.20	3,055	5,733
195.21	3,062	5,764
195.22	3,069	5,794
195.23	3,076	5,825
195.24	3,083	5,856
195.25	3,090	5,887
195.26	3,097	5,918
195.27	3,104	5,949
195.28	3,111	5,980
195.29	3,118	6,011
195.30	3,125	6,042
195.31	3,132	6,073
195.32	3,140	6,105
195.33	3,147	6,136
195.34	3,154	6,168
195.35	3,161	6,199
195.36	3,168	6,231
195.37	3,175	6,263
195.38	3,182	6,294
195.39	3,189	6,326
195.40	3,196	6,358
195.41	3,203	6,390

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.42	3,210	6,422	195.94	3,579	8,187
195.43	3,217	6,454	195.95	3,586	8,223
195.44	3,225	6,487	195.96	3,593	8,259
195.45	3,232	6,519	195.97	3,600	8,295
195.46	3,239	6,551	195.98	3,607	8,331
195.47	3,246	6,584	195.99	3,614	8,367
195.48	3,253	6,616	196.00	3,621	8,403
195.49	3,260	6,649	196.01	3,629	8,439
195.50	3,267	6,681	196.02	3,636	8,476
195.51	3,274	6,714	196.03	3,644	8,512
195.52	3,281	6,747	196.04	3,652	8,549
195.53	3,288	6,780	196.05	3,659	8,585
195.54	3,295	6,812	196.06	3,667	8,622
195.55	3,302	6,845	196.07	3,674	8,659
195.56	3,309	6,879	196.08	3,682	8,695
195.57	3,317	6,912	196.09	3,690	8,732
195.58	3,324	6,945	196.10	3,697	8,769
195.59	3,331	6,978	196.11	3,705	8,806
195.60	3,338	7,011	196.12	3,713	8,843
195.61	3,345	7,045	196.13	3,720	8,880
195.62	3,352	7,078	196.14	3,728	8,918
195.63	3,359	7,112	196.15	3,736	8,955
195.64	3,366	7,146	196.16	3,743	8,992
195.65	3,373	7,179	196.17	3,751	9,030
195.66	3,380	7,213	196.18	3,759	9,067
195.67	3,387	7,247	196.19	3,766	9,105
195.68	3,394	7,281	196.20	3,774	9,143
195.69	3,402	7,315	196.21	3,781	9,181
195.70	3,409	7,349	196.22	3,789	9,218
195.71	3,416	7,383	196.23	3,797	9,256
195.72	3,423	7,417	196.24	3,804	9,294
195.73	3,430	7,451	196.25	3,812	9,332
195.74	3,437	7,486	196.26	3,820	9,371
195.75	3,444	7,520	196.27	3,827	9,409
195.76	3,451	7,555	196.28	3,835	9,447
195.77	3,458	7,589	196.29	3,843	9,485
195.78	3,465	7,624	196.30	3,850	9,524
195.79	3,472	7,658	196.31	3,858	9,562
195.80	3,479	7,693	196.32	3,865	9,601
195.81	3,486	7,728	196.33	3,873	9,640
195.82	3,494	7,763	196.34	3,881	9,679
195.83	3,501	7,798	196.35	3,888	9,717
195.84	3,508	7,833	196.36	3,896	9,756
195.85	3,515	7,868	196.37	3,904	9,795
195.86	3,522	7,903	196.38	3,911	9,834
195.87	3,529	7,939	196.39	3,919	9,874
195.88	3,536	7,974	196.40	3,927	9,913
195.89	3,543	8,009	196.41	3,934	9,952
195.90	3,550	8,045	196.42	3,942	9,991
195.91	3,557	8,080	196.43	3,950	10,031
195.92	3,564	8,116	196.44	3,957	10,070
195.93	3,571	8,152	196.45	3,965	10,110

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.46	3,972	10,150	196.98	4,370	12,319
196.47	3,980	10,190	196.99	4,377	12,362
196.48	3,988	10,229	197.00	4,385	12,406
196.49	3,995	10,269	197.01	4,393	12,450
196.50	4,003	10,309	197.02	4,401	12,494
196.51	4,011	10,349	197.03	4,410	12,538
196.52	4,018	10,389	197.04	4,418	12,582
196.53	4,026	10,430	197.05	4,426	12,627
196.54	4,034	10,470	197.06	4,434	12,671
196.55	4,041	10,510	197.07	4,442	12,715
196.56	4,049	10,551	197.08	4,451	12,760
196.57	4,056	10,591	197.09	4,459	12,804
196.58	4,064	10,632	197.10	4,467	12,849
196.59	4,072	10,673	197.11	4,475	12,894
196.60	4,079	10,713	197.12	4,484	12,938
196.61	4,087	10,754	197.13	4,492	12,983
196.62	4,095	10,795	197.14	4,500	13,028
196.63	4,102	10,836	197.15	4,508	13,073
196.64	4,110	10,877	197.16	4,516	13,118
196.65	4,118	10,918	197.17	4,525	13,164
196.66	4,125	10,960	197.18	4,533	13,209
196.67	4,133	11,001	197.19	4,541	13,254
196.68	4,141	11,042	197.20	4,549	13,300
196.69	4,148	11,084	197.21	4,557	13,345
196.70	4,156	11,125	197.22	4,566	13,391
196.71	4,163	11,167	197.23	4,574	13,437
196.72	4,171	11,208	197.24	4,582	13,482
196.73	4,179	11,250	197.25	4,590	13,528
196.74	4,186	11,292	197.26	4,598	13,574
196.75	4,194	11,334	197.27	4,607	13,620
196.76	4,202	11,376	197.28	4,615	13,666
196.77	4,209	11,418	197.29	4,623	13,712
196.78	4,217	11,460	197.30	4,631	13,759
196.79	4,225	11,502	197.31	4,640	13,805
196.80	4,232	11,545	197.32	4,648	13,851
196.81	4,240	11,587	197.33	4,656	13,898
196.82	4,247	11,629	197.34	4,664	13,945
196.83	4,255	11,672	197.35	4,672	13,991
196.84	4,263	11,714	197.36	4,681	14,038
196.85	4,270	11,757	197.37	4,689	14,085
196.86	4,278	11,800	197.38	4,697	14,132
196.87	4,286	11,843	197.39	4,705	14,179
196.88	4,293	11,886	197.40	4,713	14,226
196.89	4,301	11,929	197.41	4,722	14,273
196.90	4,309	11,972	197.42	4,730	14,320
196.91	4,316	12,015	197.43	4,738	14,368
196.92	4,324	12,058	197.44	4,746	14,415
196.93	4,332	12,101	197.45	4,754	14,463
196.94	4,339	12,145	197.46	4,763	14,510
196.95	4,347	12,188	197.47	4,771	14,558
196.96	4,354	12,231	197.48	4,779	14,606
196.97	4,362	12,275	197.49	4,787	14,653

Stage-Area-Storage for Pond B-32: Basin #32 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.50	4,796	14,701
197.51	4,804	14,749
197.52	4,812	14,797
197.53	4,820	14,846
197.54	4,828	14,894
197.55	4,837	14,942
197.56	4,845	14,991
197.57	4,853	15,039
197.58	4,861	15,088
197.59	4,869	15,136
197.60	4,878	15,185
197.61	4,886	15,234
197.62	4,894	15,283
197.63	4,902	15,332
197.64	4,910	15,381
197.65	4,919	15,430
197.66	4,927	15,479
197.67	4,935	15,528
197.68	4,943	15,578
197.69	4,951	15,627
197.70	4,960	15,677
197.71	4,968	15,727
197.72	4,976	15,776
197.73	4,984	15,826
197.74	4,993	15,876
197.75	5,001	15,926
197.76	5,009	15,976
197.77	5,017	16,026
197.78	5,025	16,076
197.79	5,034	16,127
197.80	5,042	16,177
197.81	5,050	16,227
197.82	5,058	16,278
197.83	5,066	16,329
197.84	5,075	16,379
197.85	5,083	16,430
197.86	5,091	16,481
197.87	5,099	16,532
197.88	5,107	16,583
197.89	5,116	16,634
197.90	5,124	16,685
197.91	5,132	16,737
197.92	5,140	16,788
197.93	5,149	16,839
197.94	5,157	16,891
197.95	5,165	16,942
197.96	5,173	16,994
197.97	5,181	17,046
197.98	5,190	17,098
197.99	5,198	17,150
198.00	**5,206**	**17,202**

Summary for Pond B-33: Basin #33

Inflow Area = 1.761 ac, 50.99% Impervious, Inflow Depth = 9.47" for Future 100 yr event
Inflow = 16.58 cfs @ 12.17 hrs, Volume= 1.390 af
Outflow = 13.69 cfs @ 12.24 hrs, Volume= 1.296 af, Atten= 17%, Lag= 4.3 min
Primary = 13.69 cfs @ 12.24 hrs, Volume= 1.296 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 190.58' @ 12.24 hrs Surf.Area= 6,212 sf Storage= 17,193 cf

Plug-Flow detention time= 227.7 min calculated for 1.296 af (93% of inflow)
Center-of-Mass det. time= 189.5 min (958.8 - 769.3)

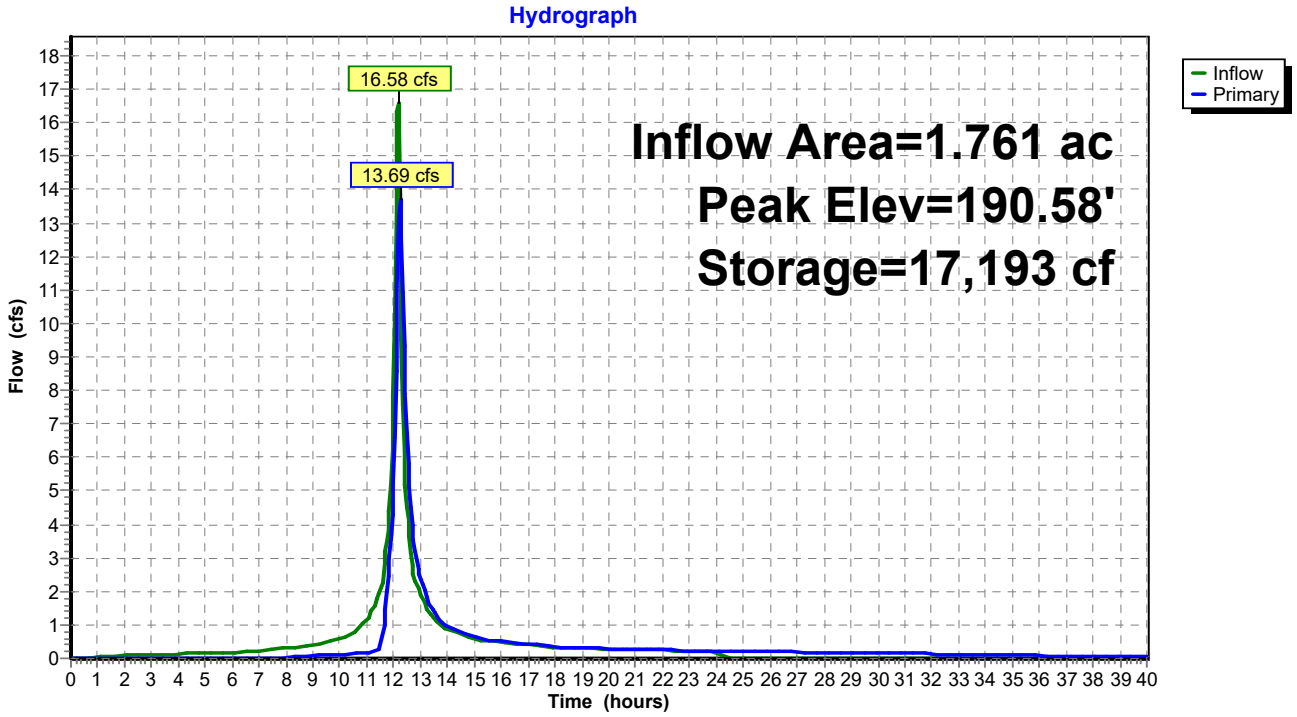
Volume	Invert	Avail.Storage	Storage Description
#1	186.30'	19,860 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
186.30	0	0	0
187.00	2,936	1,028	1,028
188.00	3,763	3,350	4,377
189.00	4,665	4,214	8,591
190.00	5,621	5,143	13,734
191.00	6,631	6,126	19,860

Device	Routing	Invert	Outlet Devices
#1	Primary	185.65'	**18.0" Round Culvert** L= 91.0' Ke= 0.500 Inlet / Outlet Invert= 185.65' / 185.00' S= 0.0071 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	187.79'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.53'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.75'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.57 cfs @ 12.24 hrs HW=190.58' (Free Discharge)
- **1=Culvert** (Passes 13.57 cfs of 16.10 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.27 cfs @ 7.89 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 13.31 cfs @ 3.35 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-33: Basin #33



Stage-Discharge for Pond B-33: Basin #33

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.30	0.00	186.82	0.00	187.34	0.00	187.86	0.01
186.31	0.00	186.83	0.00	187.35	0.00	187.87	0.01
186.32	0.00	186.84	0.00	187.36	0.00	187.88	0.01
186.33	0.00	186.85	0.00	187.37	0.00	187.89	0.02
186.34	0.00	186.86	0.00	187.38	0.00	187.90	0.02
186.35	0.00	186.87	0.00	187.39	0.00	187.91	0.02
186.36	0.00	186.88	0.00	187.40	0.00	187.92	0.03
186.37	0.00	186.89	0.00	187.41	0.00	187.93	0.03
186.38	0.00	186.90	0.00	187.42	0.00	187.94	0.03
186.39	0.00	186.91	0.00	187.43	0.00	187.95	0.04
186.40	0.00	186.92	0.00	187.44	0.00	187.96	0.04
186.41	0.00	186.93	0.00	187.45	0.00	187.97	0.05
186.42	0.00	186.94	0.00	187.46	0.00	187.98	0.05
186.43	0.00	186.95	0.00	187.47	0.00	187.99	0.05
186.44	0.00	186.96	0.00	187.48	0.00	188.00	0.05
186.45	0.00	186.97	0.00	187.49	0.00	188.01	0.06
186.46	0.00	186.98	0.00	187.50	0.00	188.02	0.06
186.47	0.00	186.99	0.00	187.51	0.00	188.03	0.06
186.48	0.00	187.00	0.00	187.52	0.00	188.04	0.06
186.49	0.00	187.01	0.00	187.53	0.00	188.05	0.06
186.50	0.00	187.02	0.00	187.54	0.00	188.06	0.07
186.51	0.00	187.03	0.00	187.55	0.00	188.07	0.07
186.52	0.00	187.04	0.00	187.56	0.00	188.08	0.07
186.53	0.00	187.05	0.00	187.57	0.00	188.09	0.07
186.54	0.00	187.06	0.00	187.58	0.00	188.10	0.07
186.55	0.00	187.07	0.00	187.59	0.00	188.11	0.08
186.56	0.00	187.08	0.00	187.60	0.00	188.12	0.08
186.57	0.00	187.09	0.00	187.61	0.00	188.13	0.08
186.58	0.00	187.10	0.00	187.62	0.00	188.14	0.08
186.59	0.00	187.11	0.00	187.63	0.00	188.15	0.08
186.60	0.00	187.12	0.00	187.64	0.00	188.16	0.08
186.61	0.00	187.13	0.00	187.65	0.00	188.17	0.09
186.62	0.00	187.14	0.00	187.66	0.00	188.18	0.09
186.63	0.00	187.15	0.00	187.67	0.00	188.19	0.09
186.64	0.00	187.16	0.00	187.68	0.00	188.20	0.09
186.65	0.00	187.17	0.00	187.69	0.00	188.21	0.09
186.66	0.00	187.18	0.00	187.70	0.00	188.22	0.09
186.67	0.00	187.19	0.00	187.71	0.00	188.23	0.10
186.68	0.00	187.20	0.00	187.72	0.00	188.24	0.10
186.69	0.00	187.21	0.00	187.73	0.00	188.25	0.10
186.70	0.00	187.22	0.00	187.74	0.00	188.26	0.10
186.71	0.00	187.23	0.00	187.75	0.00	188.27	0.10
186.72	0.00	187.24	0.00	187.76	0.00	188.28	0.10
186.73	0.00	187.25	0.00	187.77	0.00	188.29	0.10
186.74	0.00	187.26	0.00	187.78	0.00	188.30	0.10
186.75	0.00	187.27	0.00	187.79	0.00	188.31	0.11
186.76	0.00	187.28	0.00	187.80	0.00	188.32	0.11
186.77	0.00	187.29	0.00	187.81	0.00	188.33	0.11
186.78	0.00	187.30	0.00	187.82	0.00	188.34	0.11
186.79	0.00	187.31	0.00	187.83	0.00	188.35	0.11
186.80	0.00	187.32	0.00	187.84	0.00	188.36	0.11
186.81	0.00	187.33	0.00	187.85	0.01	188.37	0.11

Stage-Discharge for Pond B-33: Basin #33 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.38	0.11	188.90	0.16	189.42	0.20	189.94	3.60
188.39	0.12	188.91	0.17	189.43	0.20	189.95	3.72
188.40	0.12	188.92	0.17	189.44	0.20	189.96	3.84
188.41	0.12	188.93	0.17	189.45	0.20	189.97	3.97
188.42	0.12	188.94	0.17	189.46	0.21	189.98	4.10
188.43	0.12	188.95	0.17	189.47	0.21	189.99	4.22
188.44	0.12	188.96	0.17	189.48	0.21	190.00	4.35
188.45	0.12	188.97	0.17	189.49	0.21	190.01	4.48
188.46	0.12	188.98	0.17	189.50	0.21	190.02	4.62
188.47	0.12	188.99	0.17	189.51	0.21	190.03	4.75
188.48	0.13	189.00	0.17	189.52	0.21	190.04	4.88
188.49	0.13	189.01	0.17	189.53	0.21	190.05	5.02
188.50	0.13	189.02	0.17	189.54	0.22	190.06	5.15
188.51	0.13	189.03	0.17	189.55	0.25	190.07	5.29
188.52	0.13	189.04	0.18	189.56	0.28	190.08	5.43
188.53	0.13	189.05	0.18	189.57	0.32	190.09	5.57
188.54	0.13	189.06	0.18	189.58	0.36	190.10	5.71
188.55	0.13	189.07	0.18	189.59	0.41	190.11	5.85
188.56	0.13	189.08	0.18	189.60	0.46	190.12	6.00
188.57	0.13	189.09	0.18	189.61	0.51	190.13	6.14
188.58	0.14	189.10	0.18	189.62	0.57	190.14	6.29
188.59	0.14	189.11	0.18	189.63	0.63	190.15	6.43
188.60	0.14	189.12	0.18	189.64	0.69	190.16	6.58
188.61	0.14	189.13	0.18	189.65	0.76	190.17	6.73
188.62	0.14	189.14	0.18	189.66	0.83	190.18	6.88
188.63	0.14	189.15	0.18	189.67	0.90	190.19	7.03
188.64	0.14	189.16	0.18	189.68	0.97	190.20	7.18
188.65	0.14	189.17	0.19	189.69	1.05	190.21	7.33
188.66	0.14	189.18	0.19	189.70	1.13	190.22	7.49
188.67	0.14	189.19	0.19	189.71	1.21	190.23	7.64
188.68	0.15	189.20	0.19	189.72	1.29	190.24	7.80
188.69	0.15	189.21	0.19	189.73	1.38	190.25	7.96
188.70	0.15	189.22	0.19	189.74	1.47	190.26	8.11
188.71	0.15	189.23	0.19	189.75	1.56	190.27	8.27
188.72	0.15	189.24	0.19	189.76	1.65	190.28	8.43
188.73	0.15	189.25	0.19	189.77	1.74	190.29	8.59
188.74	0.15	189.26	0.19	189.78	1.84	190.30	8.75
188.75	0.15	189.27	0.19	189.79	1.94	190.31	8.91
188.76	0.15	189.28	0.19	189.80	2.04	190.32	9.08
188.77	0.15	189.29	0.19	189.81	2.14	190.33	9.24
188.78	0.15	189.30	0.19	189.82	2.24	190.34	9.41
188.79	0.16	189.31	0.20	189.83	2.35	190.35	9.57
188.80	0.16	189.32	0.20	189.84	2.45	190.36	9.74
188.81	0.16	189.33	0.20	189.85	2.56	190.37	9.91
188.82	0.16	189.34	0.20	189.86	2.67	190.38	10.07
188.83	0.16	189.35	0.20	189.87	2.78	190.39	10.24
188.84	0.16	189.36	0.20	189.88	2.89	190.40	10.41
188.85	0.16	189.37	0.20	189.89	3.01	190.41	10.58
188.86	0.16	189.38	0.20	189.90	3.12	190.42	10.75
188.87	0.16	189.39	0.20	189.91	3.24	190.43	10.93
188.88	0.16	189.40	0.20	189.92	3.36	190.44	11.10
188.89	0.16	189.41	0.20	189.93	3.48	190.45	11.27

Stage-Discharge for Pond B-33: Basin #33 (continued)

Elevation (feet)	Primary (cfs)
190.46	11.45
190.47	11.62
190.48	11.80
190.49	11.98
190.50	12.15
190.51	12.33
190.52	12.51
190.53	12.69
190.54	12.87
190.55	13.05
190.56	13.24
190.57	13.42
190.58	13.60
190.59	13.79
190.60	13.97
190.61	14.16
190.62	14.34
190.63	14.53
190.64	14.72
190.65	14.91
190.66	15.10
190.67	15.29
190.68	15.48
190.69	15.67
190.70	15.86
190.71	16.05
190.72	16.25
190.73	16.40
190.74	16.42
190.75	16.44
190.76	16.57
190.77	16.81
190.78	17.10
190.79	17.45
190.80	17.84
190.81	18.28
190.82	18.74
190.83	19.25
190.84	19.78
190.85	20.35
190.86	20.94
190.87	21.56
190.88	22.20
190.89	22.87
190.90	23.57
190.91	24.29
190.92	25.03
190.93	25.79
190.94	26.58
190.95	27.38
190.96	28.25
190.97	29.14
190.98	30.06
190.99	31.00
191.00	**31.97**

Stage-Area-Storage for Pond B-33: Basin #33

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.30	0	0	186.82	2,181	567
186.31	42	0	186.83	2,223	589
186.32	84	1	186.84	2,265	612
186.33	126	2	186.85	2,307	634
186.34	168	3	186.86	2,349	658
186.35	210	5	186.87	2,391	681
186.36	252	8	186.88	2,433	705
186.37	294	10	186.89	2,475	730
186.38	336	13	186.90	2,517	755
186.39	377	17	186.91	2,559	780
186.40	419	21	186.92	2,600	806
186.41	461	25	186.93	2,642	832
186.42	503	30	186.94	2,684	859
186.43	545	35	186.95	2,726	886
186.44	587	41	186.96	2,768	914
186.45	629	47	186.97	2,810	941
186.46	671	54	186.98	2,852	970
186.47	713	61	186.99	2,894	998
186.48	755	68	187.00	2,936	1,028
186.49	797	76	187.01	2,944	1,057
186.50	839	84	187.02	2,953	1,086
186.51	881	92	187.03	2,961	1,116
186.52	923	102	187.04	2,969	1,146
186.53	965	111	187.05	2,977	1,175
186.54	1,007	121	187.06	2,986	1,205
186.55	1,049	131	187.07	2,994	1,235
186.56	1,091	142	187.08	3,002	1,265
186.57	1,132	153	187.09	3,010	1,295
186.58	1,174	164	187.10	3,019	1,325
186.59	1,216	176	187.11	3,027	1,356
186.60	1,258	189	187.12	3,035	1,386
186.61	1,300	202	187.13	3,044	1,416
186.62	1,342	215	187.14	3,052	1,447
186.63	1,384	228	187.15	3,060	1,477
186.64	1,426	242	187.16	3,068	1,508
186.65	1,468	257	187.17	3,077	1,539
186.66	1,510	272	187.18	3,085	1,569
186.67	1,552	287	187.19	3,093	1,600
186.68	1,594	303	187.20	3,101	1,631
186.69	1,636	319	187.21	3,110	1,662
186.70	1,678	336	187.22	3,118	1,694
186.71	1,720	353	187.23	3,126	1,725
186.72	1,762	370	187.24	3,134	1,756
186.73	1,804	388	187.25	3,143	1,787
186.74	1,845	406	187.26	3,151	1,819
186.75	1,887	425	187.27	3,159	1,850
186.76	1,929	444	187.28	3,168	1,882
186.77	1,971	463	187.29	3,176	1,914
186.78	2,013	483	187.30	3,184	1,946
186.79	2,055	504	187.31	3,192	1,977
186.80	2,097	524	187.32	3,201	2,009
186.81	2,139	545	187.33	3,209	2,042

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.34	3,217	2,074	187.86	3,647	3,858
187.35	3,225	2,106	187.87	3,655	3,895
187.36	3,234	2,138	187.88	3,664	3,931
187.37	3,242	2,171	187.89	3,672	3,968
187.38	3,250	2,203	187.90	3,680	4,005
187.39	3,259	2,236	187.91	3,689	4,042
187.40	3,267	2,268	187.92	3,697	4,079
187.41	3,275	2,301	187.93	3,705	4,116
187.42	3,283	2,334	187.94	3,713	4,153
187.43	3,292	2,367	187.95	3,722	4,190
187.44	3,300	2,399	187.96	3,730	4,227
187.45	3,308	2,433	187.97	3,738	4,265
187.46	3,316	2,466	187.98	3,746	4,302
187.47	3,325	2,499	187.99	3,755	4,340
187.48	3,333	2,532	188.00	3,763	4,377
187.49	3,341	2,566	188.01	3,772	4,415
187.50	3,350	2,599	188.02	3,781	4,453
187.51	3,358	2,633	188.03	3,790	4,490
187.52	3,366	2,666	188.04	3,799	4,528
187.53	3,374	2,700	188.05	3,808	4,566
187.54	3,383	2,734	188.06	3,817	4,605
187.55	3,391	2,767	188.07	3,826	4,643
187.56	3,399	2,801	188.08	3,835	4,681
187.57	3,407	2,835	188.09	3,844	4,719
187.58	3,416	2,870	188.10	3,853	4,758
187.59	3,424	2,904	188.11	3,862	4,796
187.60	3,432	2,938	188.12	3,871	4,835
187.61	3,440	2,972	188.13	3,880	4,874
187.62	3,449	3,007	188.14	3,889	4,913
187.63	3,457	3,041	188.15	3,898	4,952
187.64	3,465	3,076	188.16	3,907	4,991
187.65	3,474	3,111	188.17	3,916	5,030
187.66	3,482	3,145	188.18	3,925	5,069
187.67	3,490	3,180	188.19	3,934	5,108
187.68	3,498	3,215	188.20	3,943	5,148
187.69	3,507	3,250	188.21	3,952	5,187
187.70	3,515	3,285	188.22	3,961	5,227
187.71	3,523	3,321	188.23	3,970	5,266
187.72	3,531	3,356	188.24	3,979	5,306
187.73	3,540	3,391	188.25	3,989	5,346
187.74	3,548	3,427	188.26	3,998	5,386
187.75	3,556	3,462	188.27	4,007	5,426
187.76	3,565	3,498	188.28	4,016	5,466
187.77	3,573	3,533	188.29	4,025	5,506
187.78	3,581	3,569	188.30	4,034	5,547
187.79	3,589	3,605	188.31	4,043	5,587
187.80	3,598	3,641	188.32	4,052	5,627
187.81	3,606	3,677	188.33	4,061	5,668
187.82	3,614	3,713	188.34	4,070	5,709
187.83	3,622	3,749	188.35	4,079	5,749
187.84	3,631	3,786	188.36	4,088	5,790
187.85	3,639	3,822	188.37	4,097	5,831

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.38	4,106	5,872	188.90	4,575	8,129
188.39	4,115	5,913	188.91	4,584	8,175
188.40	4,124	5,954	188.92	4,593	8,221
188.41	4,133	5,996	188.93	4,602	8,267
188.42	4,142	6,037	188.94	4,611	8,313
188.43	4,151	6,079	188.95	4,620	8,359
188.44	4,160	6,120	188.96	4,629	8,405
188.45	4,169	6,162	188.97	4,638	8,452
188.46	4,178	6,204	188.98	4,647	8,498
188.47	4,187	6,245	188.99	4,656	8,544
188.48	4,196	6,287	189.00	4,665	8,591
188.49	4,205	6,329	189.01	4,675	8,638
188.50	4,214	6,371	189.02	4,684	8,685
188.51	4,223	6,414	189.03	4,694	8,731
188.52	4,232	6,456	189.04	4,703	8,778
188.53	4,241	6,498	189.05	4,713	8,826
188.54	4,250	6,541	189.06	4,722	8,873
188.55	4,259	6,583	189.07	4,732	8,920
188.56	4,268	6,626	189.08	4,741	8,967
188.57	4,277	6,669	189.09	4,751	9,015
188.58	4,286	6,711	189.10	4,761	9,062
188.59	4,295	6,754	189.11	4,770	9,110
188.60	4,304	6,797	189.12	4,780	9,158
188.61	4,313	6,840	189.13	4,789	9,206
188.62	4,322	6,884	189.14	4,799	9,254
188.63	4,331	6,927	189.15	4,808	9,302
188.64	4,340	6,970	189.16	4,818	9,350
188.65	4,349	7,014	189.17	4,828	9,398
188.66	4,358	7,057	189.18	4,837	9,446
188.67	4,367	7,101	189.19	4,847	9,495
188.68	4,376	7,144	189.20	4,856	9,543
188.69	4,385	7,188	189.21	4,866	9,592
188.70	4,394	7,232	189.22	4,875	9,641
188.71	4,403	7,276	189.23	4,885	9,689
188.72	4,412	7,320	189.24	4,894	9,738
188.73	4,421	7,364	189.25	4,904	9,787
188.74	4,430	7,409	189.26	4,914	9,836
188.75	4,440	7,453	189.27	4,923	9,885
188.76	4,449	7,497	189.28	4,933	9,935
188.77	4,458	7,542	189.29	4,942	9,984
188.78	4,467	7,587	189.30	4,952	10,034
188.79	4,476	7,631	189.31	4,961	10,083
188.80	4,485	7,676	189.32	4,971	10,133
188.81	4,494	7,721	189.33	4,980	10,183
188.82	4,503	7,766	189.34	4,990	10,232
188.83	4,512	7,811	189.35	5,000	10,282
188.84	4,521	7,856	189.36	5,009	10,332
188.85	4,530	7,901	189.37	5,019	10,383
188.86	4,539	7,947	189.38	5,028	10,433
188.87	4,548	7,992	189.39	5,038	10,483
188.88	4,557	8,038	189.40	5,047	10,534
188.89	4,566	8,083	189.41	5,057	10,584

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.42	5,067	10,635	189.94	5,564	13,399
189.43	5,076	10,685	189.95	5,573	13,454
189.44	5,086	10,736	189.96	5,583	13,510
189.45	5,095	10,787	189.97	5,592	13,566
189.46	5,105	10,838	189.98	5,602	13,622
189.47	5,114	10,889	189.99	5,611	13,678
189.48	5,124	10,940	190.00	5,621	13,734
189.49	5,133	10,992	190.01	5,631	13,790
189.50	5,143	11,043	190.02	5,641	13,847
189.51	5,153	11,095	190.03	5,651	13,903
189.52	5,162	11,146	190.04	5,661	13,960
189.53	5,172	11,198	190.05	5,672	14,016
189.54	5,181	11,250	190.06	5,682	14,073
189.55	5,191	11,301	190.07	5,692	14,130
189.56	5,200	11,353	190.08	5,702	14,187
189.57	5,210	11,405	190.09	5,712	14,244
189.58	5,219	11,458	190.10	5,722	14,301
189.59	5,229	11,510	190.11	5,732	14,359
189.60	5,239	11,562	190.12	5,742	14,416
189.61	5,248	11,615	190.13	5,752	14,473
189.62	5,258	11,667	190.14	5,762	14,531
189.63	5,267	11,720	190.15	5,773	14,589
189.64	5,277	11,772	190.16	5,783	14,646
189.65	5,286	11,825	190.17	5,793	14,704
189.66	5,296	11,878	190.18	5,803	14,762
189.67	5,306	11,931	190.19	5,813	14,820
189.68	5,315	11,984	190.20	5,823	14,879
189.69	5,325	12,038	190.21	5,833	14,937
189.70	5,334	12,091	190.22	5,843	14,995
189.71	5,344	12,144	190.23	5,853	15,054
189.72	5,353	12,198	190.24	5,863	15,112
189.73	5,363	12,251	190.25	5,874	15,171
189.74	5,372	12,305	190.26	5,884	15,230
189.75	5,382	12,359	190.27	5,894	15,289
189.76	5,392	12,413	190.28	5,904	15,348
189.77	5,401	12,467	190.29	5,914	15,407
189.78	5,411	12,521	190.30	5,924	15,466
189.79	5,420	12,575	190.31	5,934	15,525
189.80	5,430	12,629	190.32	5,944	15,585
189.81	5,439	12,683	190.33	5,954	15,644
189.82	5,449	12,738	190.34	5,964	15,704
189.83	5,458	12,792	190.35	5,975	15,763
189.84	5,468	12,847	190.36	5,985	15,823
189.85	5,478	12,902	190.37	5,995	15,883
189.86	5,487	12,957	190.38	6,005	15,943
189.87	5,497	13,011	190.39	6,015	16,003
189.88	5,506	13,066	190.40	6,025	16,063
189.89	5,516	13,122	190.41	6,035	16,124
189.90	5,525	13,177	190.42	6,045	16,184
189.91	5,535	13,232	190.43	6,055	16,245
189.92	5,545	13,287	190.44	6,065	16,305
189.93	5,554	13,343	190.45	6,076	16,366

Stage-Area-Storage for Pond B-33: Basin #33 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.46	6,086	16,427
190.47	6,096	16,488
190.48	6,106	16,549
190.49	6,116	16,610
190.50	6,126	16,671
190.51	6,136	16,732
190.52	6,146	16,794
190.53	6,156	16,855
190.54	6,166	16,917
190.55	6,177	16,978
190.56	6,187	17,040
190.57	6,197	17,102
190.58	6,207	17,164
190.59	6,217	17,226
190.60	6,227	17,289
190.61	6,237	17,351
190.62	6,247	17,413
190.63	6,257	17,476
190.64	6,267	17,538
190.65	6,278	17,601
190.66	6,288	17,664
190.67	6,298	17,727
190.68	6,308	17,790
190.69	6,318	17,853
190.70	6,328	17,916
190.71	6,338	17,980
190.72	6,348	18,043
190.73	6,358	18,107
190.74	6,368	18,170
190.75	6,379	18,234
190.76	6,389	18,298
190.77	6,399	18,362
190.78	6,409	18,426
190.79	6,419	18,490
190.80	6,429	18,554
190.81	6,439	18,618
190.82	6,449	18,683
190.83	6,459	18,747
190.84	6,469	18,812
190.85	6,480	18,877
190.86	6,490	18,942
190.87	6,500	19,007
190.88	6,510	19,072
190.89	6,520	19,137
190.90	6,530	19,202
190.91	6,540	19,267
190.92	6,550	19,333
190.93	6,560	19,398
190.94	6,570	19,464
190.95	6,581	19,530
190.96	6,591	19,596
190.97	6,601	19,662
190.98	6,611	19,728
190.99	6,621	19,794
191.00	**6,631**	**19,860**

Summary for Pond B-34: Basin #34

Inflow Area = 1.779 ac, 23.66% Impervious, Inflow Depth = 8.63" for Future 100 yr event
Inflow = 15.91 cfs @ 12.17 hrs, Volume= 1.279 af
Outflow = 12.62 cfs @ 12.25 hrs, Volume= 1.222 af, Atten= 21%, Lag= 4.6 min
Primary = 12.62 cfs @ 12.25 hrs, Volume= 1.222 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.34' @ 12.25 hrs Surf.Area= 6,715 sf Storage= 14,473 cf

Plug-Flow detention time= 183.3 min calculated for 1.222 af (96% of inflow)
Center-of-Mass det. time= 157.2 min (946.2 - 789.0)

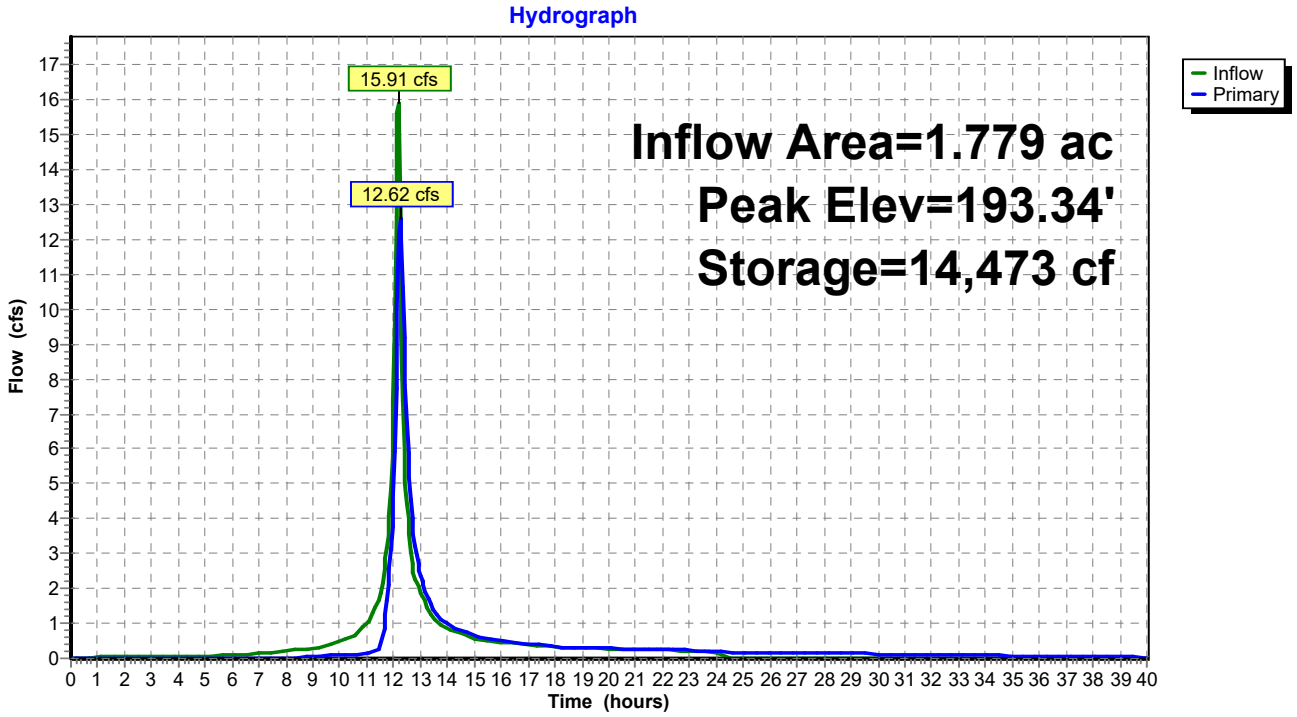
Volume	Invert	Avail.Storage	Storage Description
#1	190.30'	27,449 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.30	0	0	0
191.00	4,390	1,536	1,536
192.00	5,343	4,867	6,403
193.00	6,353	5,848	12,251
194.00	7,419	6,886	19,137
195.00	9,205	8,312	27,449

Device	Routing	Invert	Outlet Devices
#1	Primary	189.65'	**18.0" Round Culvert** L= 100.0' Ke= 0.500 Inlet / Outlet Invert= 189.65' / 189.15' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.09'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	192.33'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.75 cfs @ 12.25 hrs HW=193.34' (Free Discharge)
- **1=Culvert** (Barrel Controls 12.75 cfs @ 7.21 fps)
  - **2=Orifice/Grate** (Passes < 0.24 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 12.58 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-34: Basin #34



Stage-Discharge for Pond B-34: Basin #34

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.30	0.00	190.82	0.00	191.34	0.06	191.86	0.13
190.31	0.00	190.83	0.00	191.35	0.06	191.87	0.13
190.32	0.00	190.84	0.00	191.36	0.07	191.88	0.14
190.33	0.00	190.85	0.00	191.37	0.07	191.89	0.14
190.34	0.00	190.86	0.00	191.38	0.07	191.90	0.14
190.35	0.00	190.87	0.00	191.39	0.07	191.91	0.14
190.36	0.00	190.88	0.00	191.40	0.07	191.92	0.14
190.37	0.00	190.89	0.00	191.41	0.08	191.93	0.14
190.38	0.00	190.90	0.00	191.42	0.08	191.94	0.14
190.39	0.00	190.91	0.00	191.43	0.08	191.95	0.14
190.40	0.00	190.92	0.00	191.44	0.08	191.96	0.14
190.41	0.00	190.93	0.00	191.45	0.08	191.97	0.14
190.42	0.00	190.94	0.00	191.46	0.08	191.98	0.15
190.43	0.00	190.95	0.00	191.47	0.09	191.99	0.15
190.44	0.00	190.96	0.00	191.48	0.09	192.00	0.15
190.45	0.00	190.97	0.00	191.49	0.09	192.01	0.15
190.46	0.00	190.98	0.00	191.50	0.09	192.02	0.15
190.47	0.00	190.99	0.00	191.51	0.09	192.03	0.15
190.48	0.00	191.00	0.00	191.52	0.09	192.04	0.15
190.49	0.00	191.01	0.00	191.53	0.10	192.05	0.15
190.50	0.00	191.02	0.00	191.54	0.10	192.06	0.15
190.51	0.00	191.03	0.00	191.55	0.10	192.07	0.15
190.52	0.00	191.04	0.00	191.56	0.10	192.08	0.15
190.53	0.00	191.05	0.00	191.57	0.10	192.09	0.16
190.54	0.00	191.06	0.00	191.58	0.10	192.10	0.16
190.55	0.00	191.07	0.00	191.59	0.10	192.11	0.16
190.56	0.00	191.08	0.00	191.60	0.10	192.12	0.16
190.57	0.00	191.09	0.00	191.61	0.11	192.13	0.16
190.58	0.00	191.10	0.00	191.62	0.11	192.14	0.16
190.59	0.00	191.11	0.00	191.63	0.11	192.15	0.16
190.60	0.00	191.12	0.00	191.64	0.11	192.16	0.16
190.61	0.00	191.13	0.00	191.65	0.11	192.17	0.16
190.62	0.00	191.14	0.00	191.66	0.11	192.18	0.16
190.63	0.00	191.15	0.01	191.67	0.11	192.19	0.16
190.64	0.00	191.16	0.01	191.68	0.11	192.20	0.16
190.65	0.00	191.17	0.01	191.69	0.12	192.21	0.17
190.66	0.00	191.18	0.01	191.70	0.12	192.22	0.17
190.67	0.00	191.19	0.02	191.71	0.12	192.23	0.17
190.68	0.00	191.20	0.02	191.72	0.12	192.24	0.17
190.69	0.00	191.21	0.02	191.73	0.12	192.25	0.17
190.70	0.00	191.22	0.03	191.74	0.12	192.26	0.17
190.71	0.00	191.23	0.03	191.75	0.12	192.27	0.17
190.72	0.00	191.24	0.03	191.76	0.12	192.28	0.17
190.73	0.00	191.25	0.04	191.77	0.12	192.29	0.17
190.74	0.00	191.26	0.04	191.78	0.13	192.30	0.17
190.75	0.00	191.27	0.05	191.79	0.13	192.31	0.17
190.76	0.00	191.28	0.05	191.80	0.13	192.32	0.17
190.77	0.00	191.29	0.05	191.81	0.13	192.33	0.17
190.78	0.00	191.30	0.05	191.82	0.13	192.34	0.19
190.79	0.00	191.31	0.06	191.83	0.13	192.35	0.21
190.80	0.00	191.32	0.06	191.84	0.13	192.36	0.25
190.81	0.00	191.33	0.06	191.85	0.13	192.37	0.28

Stage-Discharge for Pond B-34: Basin #34 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.38	0.32	192.90	5.68	193.42	12.94	193.94	14.10
192.39	0.37	192.91	5.83	193.43	12.96	193.95	14.12
192.40	0.42	192.92	5.97	193.44	12.98	193.96	14.14
192.41	0.48	192.93	6.11	193.45	13.01	193.97	14.16
192.42	0.53	192.94	6.26	193.46	13.03	193.98	14.18
192.43	0.59	192.95	6.41	193.47	13.05	193.99	14.21
192.44	0.66	192.96	6.55	193.48	13.08	194.00	14.23
192.45	0.72	192.97	6.70	193.49	13.10	194.01	14.25
192.46	0.79	192.98	6.85	193.50	13.12	194.02	14.27
192.47	0.87	192.99	7.00	193.51	13.14	194.03	14.29
192.48	0.94	193.00	7.15	193.52	13.17	194.04	14.31
192.49	1.02	193.01	7.31	193.53	13.19	194.05	14.33
192.50	1.10	193.02	7.46	193.54	13.21	194.06	14.35
192.51	1.18	193.03	7.61	193.55	13.24	194.07	14.37
192.52	1.26	193.04	7.77	193.56	13.26	194.08	14.40
192.53	1.35	193.05	7.93	193.57	13.28	194.09	14.42
192.54	1.44	193.06	8.08	193.58	13.30	194.10	14.44
192.55	1.53	193.07	8.24	193.59	13.33	194.11	14.46
192.56	1.62	193.08	8.40	193.60	13.35	194.12	14.48
192.57	1.71	193.09	8.56	193.61	13.37	194.13	14.50
192.58	1.81	193.10	8.72	193.62	13.40	194.14	14.52
192.59	1.91	193.11	8.89	193.63	13.42	194.15	14.54
192.60	2.00	193.12	9.05	193.64	13.44	194.16	14.56
192.61	2.11	193.13	9.21	193.65	13.46	194.17	14.58
192.62	2.21	193.14	9.38	193.66	13.49	194.18	14.60
192.63	2.31	193.15	9.54	193.67	13.51	194.19	14.62
192.64	2.42	193.16	9.71	193.68	13.53	194.20	14.64
192.65	2.53	193.17	9.88	193.69	13.55	194.21	14.67
192.66	2.64	193.18	10.05	193.70	13.57	194.22	14.69
192.67	2.75	193.19	10.22	193.71	13.60	194.23	14.71
192.68	2.86	193.20	10.38	193.72	13.62	194.24	14.73
192.69	2.98	193.21	10.56	193.73	13.64	194.25	14.75
192.70	3.09	193.22	10.73	193.74	13.66	194.26	14.89
192.71	3.21	193.23	10.90	193.75	13.69	194.27	15.12
192.72	3.33	193.24	11.07	193.76	13.71	194.28	15.42
192.73	3.45	193.25	11.25	193.77	13.73	194.29	15.77
192.74	3.57	193.26	11.42	193.78	13.75	194.30	16.16
192.75	3.69	193.27	11.60	193.79	13.77	194.31	16.59
192.76	3.81	193.28	11.77	193.80	13.80	194.32	17.06
192.77	3.94	193.29	11.95	193.81	13.82	194.33	17.57
192.78	4.07	193.30	12.13	193.82	13.84	194.34	18.10
192.79	4.19	193.31	12.31	193.83	13.86	194.35	18.67
192.80	4.32	193.32	12.49	193.84	13.88	194.36	19.26
192.81	4.45	193.33	12.67	193.85	13.90	194.37	19.88
192.82	4.59	193.34	12.75	193.86	13.93	194.38	20.53
192.83	4.72	193.35	12.77	193.87	13.95	194.39	21.20
192.84	4.85	193.36	12.80	193.88	13.97	194.40	21.90
192.85	4.99	193.37	12.82	193.89	13.99	194.41	22.62
192.86	5.12	193.38	12.84	193.90	14.01	194.42	23.36
192.87	5.26	193.39	12.87	193.91	14.03	194.43	24.12
192.88	5.40	193.40	12.89	193.92	14.06	194.44	24.91
192.89	5.54	193.41	12.91	193.93	14.08	194.45	25.72

Stage-Discharge for Pond B-34: Basin #34 (continued)

Elevation (feet)	Primary (cfs)
194.46	26.58
194.47	27.48
194.48	28.39
194.49	29.34
194.50	30.30
194.51	31.30
194.52	32.32
194.53	33.36
194.54	34.43
194.55	35.52
194.56	36.64
194.57	37.78
194.58	38.94
194.59	40.13
194.60	41.34
194.61	42.58
194.62	43.84
194.63	45.13
194.64	46.44
194.65	47.78
194.66	49.16
194.67	50.57
194.68	52.01
194.69	53.47
194.70	54.96
194.71	56.48
194.72	58.02
194.73	59.59
194.74	61.18
194.75	62.80
194.76	64.45
194.77	66.12
194.78	67.83
194.79	69.55
194.80	71.31
194.81	73.09
194.82	74.89
194.83	76.73
194.84	78.59
194.85	80.48
194.86	82.12
194.87	83.78
194.88	85.46
194.89	87.14
194.90	88.84
194.91	90.56
194.92	92.28
194.93	94.02
194.94	95.77
194.95	97.54
194.96	99.31
194.97	101.10
194.98	102.91
194.99	104.72
195.00	**106.55**

Stage-Area-Storage for Pond B-34: Basin #34

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.30	0	0	190.82	3,261	848
190.31	63	0	190.83	3,324	881
190.32	125	1	190.84	3,387	914
190.33	188	3	190.85	3,449	949
190.34	251	5	190.86	3,512	983
190.35	314	8	190.87	3,575	1,019
190.36	376	11	190.88	3,637	1,055
190.37	439	15	190.89	3,700	1,092
190.38	502	20	190.90	3,763	1,129
190.39	564	25	190.91	3,826	1,167
190.40	627	31	190.92	3,888	1,205
190.41	690	38	190.93	3,951	1,245
190.42	753	45	190.94	4,014	1,284
190.43	815	53	190.95	4,076	1,325
190.44	878	61	190.96	4,139	1,366
190.45	941	71	190.97	4,202	1,408
190.46	1,003	80	190.98	4,265	1,450
190.47	1,066	91	190.99	4,327	1,493
190.48	1,129	102	191.00	4,390	1,536
190.49	1,192	113	191.01	4,400	1,580
190.50	1,254	125	191.02	4,409	1,624
190.51	1,317	138	191.03	4,419	1,669
190.52	1,380	152	191.04	4,428	1,713
190.53	1,442	166	191.05	4,438	1,757
190.54	1,505	181	191.06	4,447	1,802
190.55	1,568	196	191.07	4,457	1,846
190.56	1,631	212	191.08	4,466	1,891
190.57	1,693	229	191.09	4,476	1,935
190.58	1,756	246	191.10	4,485	1,980
190.59	1,819	264	191.11	4,495	2,025
190.60	1,881	282	191.12	4,504	2,070
190.61	1,944	301	191.13	4,514	2,115
190.62	2,007	321	191.14	4,523	2,160
190.63	2,070	341	191.15	4,533	2,206
190.64	2,132	362	191.16	4,542	2,251
190.65	2,195	384	191.17	4,552	2,297
190.66	2,258	406	191.18	4,562	2,342
190.67	2,320	429	191.19	4,571	2,388
190.68	2,383	453	191.20	4,581	2,434
190.69	2,446	477	191.21	4,590	2,479
190.70	2,509	502	191.22	4,600	2,525
190.71	2,571	527	191.23	4,609	2,571
190.72	2,634	553	191.24	4,619	2,618
190.73	2,697	580	191.25	4,628	2,664
190.74	2,759	607	191.26	4,638	2,710
190.75	2,822	635	191.27	4,647	2,757
190.76	2,885	664	191.28	4,657	2,803
190.77	2,948	693	191.29	4,666	2,850
190.78	3,010	722	191.30	4,676	2,896
190.79	3,073	753	191.31	4,685	2,943
190.80	3,136	784	191.32	4,695	2,990
190.81	3,198	816	191.33	4,704	3,037

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.34	4,714	3,084	191.86	5,210	5,664
191.35	4,724	3,131	191.87	5,219	5,716
191.36	4,733	3,179	191.88	5,229	5,769
191.37	4,743	3,226	191.89	5,238	5,821
191.38	4,752	3,274	191.90	5,248	5,873
191.39	4,762	3,321	191.91	5,257	5,926
191.40	4,771	3,369	191.92	5,267	5,979
191.41	4,781	3,416	191.93	5,276	6,031
191.42	4,790	3,464	191.94	5,286	6,084
191.43	4,800	3,512	191.95	5,295	6,137
191.44	4,809	3,560	191.96	5,305	6,190
191.45	4,819	3,608	191.97	5,314	6,243
191.46	4,828	3,657	191.98	5,324	6,296
191.47	4,838	3,705	191.99	5,333	6,350
191.48	4,847	3,753	192.00	5,343	6,403
191.49	4,857	3,802	192.01	5,353	6,456
191.50	4,867	3,851	192.02	5,363	6,510
191.51	4,876	3,899	192.03	5,373	6,564
191.52	4,886	3,948	192.04	5,383	6,618
191.53	4,895	3,997	192.05	5,394	6,671
191.54	4,905	4,046	192.06	5,404	6,725
191.55	4,914	4,095	192.07	5,414	6,779
191.56	4,924	4,144	192.08	5,424	6,834
191.57	4,933	4,194	192.09	5,434	6,888
191.58	4,943	4,243	192.10	5,444	6,942
191.59	4,952	4,292	192.11	5,454	6,997
191.60	4,962	4,342	192.12	5,464	7,051
191.61	4,971	4,392	192.13	5,474	7,106
191.62	4,981	4,441	192.14	5,484	7,161
191.63	4,990	4,491	192.15	5,495	7,216
191.64	5,000	4,541	192.16	5,505	7,271
191.65	5,009	4,591	192.17	5,515	7,326
191.66	5,019	4,641	192.18	5,525	7,381
191.67	5,029	4,692	192.19	5,535	7,436
191.68	5,038	4,742	192.20	5,545	7,492
191.69	5,048	4,792	192.21	5,555	7,547
191.70	5,057	4,843	192.22	5,565	7,603
191.71	5,067	4,894	192.23	5,575	7,659
191.72	5,076	4,944	192.24	5,585	7,714
191.73	5,086	4,995	192.25	5,596	7,770
191.74	5,095	5,046	192.26	5,606	7,826
191.75	5,105	5,097	192.27	5,616	7,882
191.76	5,114	5,148	192.28	5,626	7,939
191.77	5,124	5,199	192.29	5,636	7,995
191.78	5,133	5,251	192.30	5,646	8,051
191.79	5,143	5,302	192.31	5,656	8,108
191.80	5,152	5,353	192.32	5,666	8,164
191.81	5,162	5,405	192.33	5,676	8,221
191.82	5,171	5,457	192.34	5,686	8,278
191.83	5,181	5,508	192.35	5,697	8,335
191.84	5,191	5,560	192.36	5,707	8,392
191.85	5,200	5,612	192.37	5,717	8,449

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.38	5,727	8,506	192.90	6,252	11,621
192.39	5,737	8,564	192.91	6,262	11,683
192.40	5,747	8,621	192.92	6,272	11,746
192.41	5,757	8,679	192.93	6,282	11,809
192.42	5,767	8,736	192.94	6,292	11,872
192.43	5,777	8,794	192.95	6,303	11,935
192.44	5,787	8,852	192.96	6,313	11,998
192.45	5,798	8,910	192.97	6,323	12,061
192.46	5,808	8,968	192.98	6,333	12,124
192.47	5,818	9,026	192.99	6,343	12,188
192.48	5,828	9,084	193.00	6,353	12,251
192.49	5,838	9,142	193.01	6,364	12,315
192.50	5,848	9,201	193.02	6,374	12,378
192.51	5,858	9,259	193.03	6,385	12,442
192.52	5,868	9,318	193.04	6,396	12,506
192.53	5,878	9,377	193.05	6,406	12,570
192.54	5,888	9,435	193.06	6,417	12,634
192.55	5,899	9,494	193.07	6,428	12,698
192.56	5,909	9,553	193.08	6,438	12,763
192.57	5,919	9,613	193.09	6,449	12,827
192.58	5,929	9,672	193.10	6,460	12,892
192.59	5,939	9,731	193.11	6,470	12,956
192.60	5,949	9,791	193.12	6,481	13,021
192.61	5,959	9,850	193.13	6,492	13,086
192.62	5,969	9,910	193.14	6,502	13,151
192.63	5,979	9,970	193.15	6,513	13,216
192.64	5,989	10,029	193.16	6,524	13,281
192.65	6,000	10,089	193.17	6,534	13,346
192.66	6,010	10,149	193.18	6,545	13,412
192.67	6,020	10,210	193.19	6,556	13,477
192.68	6,030	10,270	193.20	6,566	13,543
192.69	6,040	10,330	193.21	6,577	13,609
192.70	6,050	10,391	193.22	6,588	13,674
192.71	6,060	10,451	193.23	6,598	13,740
192.72	6,070	10,512	193.24	6,609	13,806
192.73	6,080	10,573	193.25	6,620	13,873
192.74	6,090	10,633	193.26	6,630	13,939
192.75	6,101	10,694	193.27	6,641	14,005
192.76	6,111	10,755	193.28	6,651	14,072
192.77	6,121	10,817	193.29	6,662	14,138
192.78	6,131	10,878	193.30	6,673	14,205
192.79	6,141	10,939	193.31	6,683	14,272
192.80	6,151	11,001	193.32	6,694	14,339
192.81	6,161	11,062	193.33	6,705	14,406
192.82	6,171	11,124	193.34	6,715	14,473
192.83	6,181	11,186	193.35	6,726	14,540
192.84	6,191	11,247	193.36	6,737	14,607
192.85	6,202	11,309	193.37	6,747	14,675
192.86	6,212	11,371	193.38	6,758	14,742
192.87	6,222	11,434	193.39	6,769	14,810
192.88	6,232	11,496	193.40	6,779	14,877
192.89	6,242	11,558	193.41	6,790	14,945

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.42	6,801	15,013
193.43	6,811	15,081
193.44	6,822	15,150
193.45	6,833	15,218
193.46	6,843	15,286
193.47	6,854	15,355
193.48	6,865	15,423
193.49	6,875	15,492
193.50	6,886	15,561
193.51	6,897	15,630
193.52	6,907	15,699
193.53	6,918	15,768
193.54	6,929	15,837
193.55	6,939	15,906
193.56	6,950	15,976
193.57	6,961	16,045
193.58	6,971	16,115
193.59	6,982	16,185
193.60	6,993	16,255
193.61	7,003	16,325
193.62	7,014	16,395
193.63	7,025	16,465
193.64	7,035	16,535
193.65	7,046	16,606
193.66	7,057	16,676
193.67	7,067	16,747
193.68	7,078	16,817
193.69	7,089	16,888
193.70	7,099	16,959
193.71	7,110	17,030
193.72	7,121	17,101
193.73	7,131	17,173
193.74	7,142	17,244
193.75	7,153	17,316
193.76	7,163	17,387
193.77	7,174	17,459
193.78	7,184	17,531
193.79	7,195	17,603
193.80	7,206	17,675
193.81	7,216	17,747
193.82	7,227	17,819
193.83	7,238	17,891
193.84	7,248	17,964
193.85	7,259	18,036
193.86	7,270	18,109
193.87	7,280	18,182
193.88	7,291	18,254
193.89	7,302	18,327
193.90	7,312	18,400
193.91	7,323	18,474
193.92	7,334	18,547
193.93	7,344	18,620
193.94	7,355	18,694
193.95	7,366	18,767
193.96	7,376	18,841
193.97	7,387	18,915
193.98	7,398	18,989
193.99	7,408	19,063
194.00	7,419	19,137
194.01	7,437	19,211
194.02	7,455	19,286
194.03	7,473	19,360
194.04	7,490	19,435
194.05	7,508	19,510
194.06	7,526	19,585
194.07	7,544	19,661
194.08	7,562	19,736
194.09	7,580	19,812
194.10	7,598	19,888
194.11	7,615	19,964
194.12	7,633	20,040
194.13	7,651	20,117
194.14	7,669	20,193
194.15	7,687	20,270
194.16	7,705	20,347
194.17	7,723	20,424
194.18	7,740	20,501
194.19	7,758	20,579
194.20	7,776	20,657
194.21	7,794	20,734
194.22	7,812	20,812
194.23	7,830	20,891
194.24	7,848	20,969
194.25	7,866	21,048
194.26	7,883	21,126
194.27	7,901	21,205
194.28	7,919	21,284
194.29	7,937	21,364
194.30	7,955	21,443
194.31	7,973	21,523
194.32	7,991	21,603
194.33	8,008	21,683
194.34	8,026	21,763
194.35	8,044	21,843
194.36	8,062	21,924
194.37	8,080	22,004
194.38	8,098	22,085
194.39	8,116	22,166
194.40	8,133	22,247
194.41	8,151	22,329
194.42	8,169	22,411
194.43	8,187	22,492
194.44	8,205	22,574
194.45	8,223	22,656

Stage-Area-Storage for Pond B-34: Basin #34 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.46	8,241	22,739
194.47	8,258	22,821
194.48	8,276	22,904
194.49	8,294	22,987
194.50	8,312	23,070
194.51	8,330	23,153
194.52	8,348	23,236
194.53	8,366	23,320
194.54	8,383	23,404
194.55	8,401	23,488
194.56	8,419	23,572
194.57	8,437	23,656
194.58	8,455	23,740
194.59	8,473	23,825
194.60	8,491	23,910
194.61	8,508	23,995
194.62	8,526	24,080
194.63	8,544	24,165
194.64	8,562	24,251
194.65	8,580	24,337
194.66	8,598	24,423
194.67	8,616	24,509
194.68	8,633	24,595
194.69	8,651	24,681
194.70	8,669	24,768
194.71	8,687	24,855
194.72	8,705	24,942
194.73	8,723	25,029
194.74	8,741	25,116
194.75	8,759	25,204
194.76	8,776	25,291
194.77	8,794	25,379
194.78	8,812	25,467
194.79	8,830	25,555
194.80	8,848	25,644
194.81	8,866	25,732
194.82	8,884	25,821
194.83	8,901	25,910
194.84	8,919	25,999
194.85	8,937	26,088
194.86	8,955	26,178
194.87	8,973	26,267
194.88	8,991	26,357
194.89	9,009	26,447
194.90	9,026	26,537
194.91	9,044	26,628
194.92	9,062	26,718
194.93	9,080	26,809
194.94	9,098	26,900
194.95	9,116	26,991
194.96	9,134	27,082
194.97	9,151	27,174
194.98	9,169	27,265
194.99	9,187	27,357
195.00	**9,205**	**27,449**

Summary for Pond B-35: Basin #35

Inflow Area = 1.957 ac, 66.79% Impervious, Inflow Depth = 9.96" for Future 100 yr event
Inflow = 18.97 cfs @ 12.17 hrs, Volume= 1.624 af
Outflow = 14.21 cfs @ 12.26 hrs, Volume= 1.505 af, Atten= 25%, Lag= 5.2 min
Primary = 14.21 cfs @ 12.26 hrs, Volume= 1.505 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.20' @ 12.26 hrs Surf.Area= 7,116 sf Storage= 20,341 cf

Plug-Flow detention time= 180.8 min calculated for 1.505 af (93% of inflow)
Center-of-Mass det. time= 139.6 min (899.1 - 759.5)

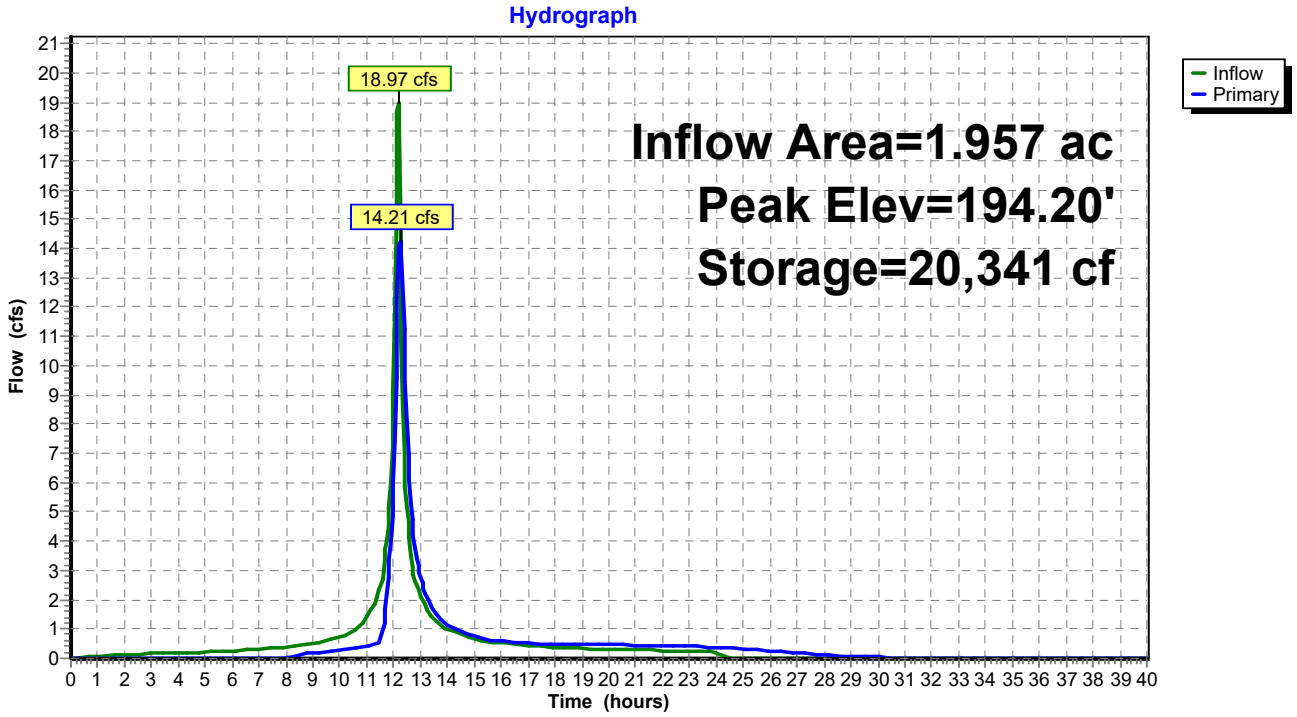
Volume	Invert	Avail.Storage	Storage Description
#1	189.80'	26,431 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
189.80	0	0	0
190.00	2,647	265	265
191.00	3,593	3,120	3,385
192.00	4,618	4,106	7,490
193.00	5,711	5,165	12,655
194.00	6,871	6,291	18,946
195.00	8,099	7,485	26,431

Device	Routing	Invert	Outlet Devices
#1	Primary	189.80'	**18.0" Round Culvert** L= 103.0' Ke= 0.500 Inlet / Outlet Invert= 189.80' / 189.30' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.44'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.05'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.21 cfs @ 12.26 hrs HW=194.20' (Free Discharge)
- **1=Culvert** (Barrel Controls 14.21 cfs @ 8.04 fps)
  - **2=Orifice/Grate** (Passes < 0.68 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 15.11 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-35: Basin #35



Stage-Discharge for Pond B-35: Basin #35

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
189.80	0.00	190.32	0.00	190.84	0.00	191.36	0.00
189.81	0.00	190.33	0.00	190.85	0.00	191.37	0.00
189.82	0.00	190.34	0.00	190.86	0.00	191.38	0.00
189.83	0.00	190.35	0.00	190.87	0.00	191.39	0.00
189.84	0.00	190.36	0.00	190.88	0.00	191.40	0.00
189.85	0.00	190.37	0.00	190.89	0.00	191.41	0.00
189.86	0.00	190.38	0.00	190.90	0.00	191.42	0.00
189.87	0.00	190.39	0.00	190.91	0.00	191.43	0.00
189.88	0.00	190.40	0.00	190.92	0.00	191.44	0.00
189.89	0.00	190.41	0.00	190.93	0.00	191.45	0.00
189.90	0.00	190.42	0.00	190.94	0.00	191.46	0.00
189.91	0.00	190.43	0.00	190.95	0.00	191.47	0.00
189.92	0.00	190.44	0.00	190.96	0.00	191.48	0.00
189.93	0.00	190.45	0.00	190.97	0.00	191.49	0.01
189.94	0.00	190.46	0.00	190.98	0.00	191.50	0.01
189.95	0.00	190.47	0.00	190.99	0.00	191.51	0.01
189.96	0.00	190.48	0.00	191.00	0.00	191.52	0.02
189.97	0.00	190.49	0.00	191.01	0.00	191.53	0.02
189.98	0.00	190.50	0.00	191.02	0.00	191.54	0.02
189.99	0.00	190.51	0.00	191.03	0.00	191.55	0.03
190.00	0.00	190.52	0.00	191.04	0.00	191.56	0.03
190.01	0.00	190.53	0.00	191.05	0.00	191.57	0.04
190.02	0.00	190.54	0.00	191.06	0.00	191.58	0.04
190.03	0.00	190.55	0.00	191.07	0.00	191.59	0.05
190.04	0.00	190.56	0.00	191.08	0.00	191.60	0.06
190.05	0.00	190.57	0.00	191.09	0.00	191.61	0.06
190.06	0.00	190.58	0.00	191.10	0.00	191.62	0.07
190.07	0.00	190.59	0.00	191.11	0.00	191.63	0.08
190.08	0.00	190.60	0.00	191.12	0.00	191.64	0.08
190.09	0.00	190.61	0.00	191.13	0.00	191.65	0.09
190.10	0.00	190.62	0.00	191.14	0.00	191.66	0.10
190.11	0.00	190.63	0.00	191.15	0.00	191.67	0.10
190.12	0.00	190.64	0.00	191.16	0.00	191.68	0.11
190.13	0.00	190.65	0.00	191.17	0.00	191.69	0.12
190.14	0.00	190.66	0.00	191.18	0.00	191.70	0.13
190.15	0.00	190.67	0.00	191.19	0.00	191.71	0.13
190.16	0.00	190.68	0.00	191.20	0.00	191.72	0.14
190.17	0.00	190.69	0.00	191.21	0.00	191.73	0.15
190.18	0.00	190.70	0.00	191.22	0.00	191.74	0.15
190.19	0.00	190.71	0.00	191.23	0.00	191.75	0.16
190.20	0.00	190.72	0.00	191.24	0.00	191.76	0.17
190.21	0.00	190.73	0.00	191.25	0.00	191.77	0.17
190.22	0.00	190.74	0.00	191.26	0.00	191.78	0.17
190.23	0.00	190.75	0.00	191.27	0.00	191.79	0.18
190.24	0.00	190.76	0.00	191.28	0.00	191.80	0.18
190.25	0.00	190.77	0.00	191.29	0.00	191.81	0.19
190.26	0.00	190.78	0.00	191.30	0.00	191.82	0.19
190.27	0.00	190.79	0.00	191.31	0.00	191.83	0.20
190.28	0.00	190.80	0.00	191.32	0.00	191.84	0.20
190.29	0.00	190.81	0.00	191.33	0.00	191.85	0.21
190.30	0.00	190.82	0.00	191.34	0.00	191.86	0.21
190.31	0.00	190.83	0.00	191.35	0.00	191.87	0.22

Stage-Discharge for Pond B-35: Basin #35 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.88	0.22	192.40	0.37	192.92	0.48	193.44	3.69
191.89	0.22	192.41	0.38	192.93	0.48	193.45	3.81
191.90	0.23	192.42	0.38	192.94	0.49	193.46	3.94
191.91	0.23	192.43	0.38	192.95	0.49	193.47	4.06
191.92	0.24	192.44	0.38	192.96	0.49	193.48	4.18
191.93	0.24	192.45	0.39	192.97	0.49	193.49	4.31
191.94	0.24	192.46	0.39	192.98	0.49	193.50	4.44
191.95	0.25	192.47	0.39	192.99	0.49	193.51	4.57
191.96	0.25	192.48	0.39	193.00	0.50	193.52	4.70
191.97	0.25	192.49	0.39	193.01	0.50	193.53	4.83
191.98	0.26	192.50	0.40	193.02	0.50	193.54	4.96
191.99	0.26	192.51	0.40	193.03	0.50	193.55	5.09
192.00	0.26	192.52	0.40	193.04	0.50	193.56	5.23
192.01	0.27	192.53	0.40	193.05	0.50	193.57	5.37
192.02	0.27	192.54	0.41	193.06	0.52	193.58	5.50
192.03	0.27	192.55	0.41	193.07	0.55	193.59	5.64
192.04	0.28	192.56	0.41	193.08	0.58	193.60	5.78
192.05	0.28	192.57	0.41	193.09	0.62	193.61	5.92
192.06	0.28	192.58	0.41	193.10	0.66	193.62	6.06
192.07	0.29	192.59	0.42	193.11	0.71	193.63	6.21
192.08	0.29	192.60	0.42	193.12	0.76	193.64	6.35
192.09	0.29	192.61	0.42	193.13	0.81	193.65	6.50
192.10	0.30	192.62	0.42	193.14	0.87	193.66	6.64
192.11	0.30	192.63	0.43	193.15	0.93	193.67	6.79
192.12	0.30	192.64	0.43	193.16	1.00	193.68	6.94
192.13	0.30	192.65	0.43	193.17	1.07	193.69	7.09
192.14	0.31	192.66	0.43	193.18	1.14	193.70	7.24
192.15	0.31	192.67	0.43	193.19	1.21	193.71	7.39
192.16	0.31	192.68	0.44	193.20	1.28	193.72	7.54
192.17	0.32	192.69	0.44	193.21	1.36	193.73	7.70
192.18	0.32	192.70	0.44	193.22	1.44	193.74	7.85
192.19	0.32	192.71	0.44	193.23	1.53	193.75	8.01
192.20	0.32	192.72	0.44	193.24	1.61	193.76	8.16
192.21	0.33	192.73	0.45	193.25	1.70	193.77	8.32
192.22	0.33	192.74	0.45	193.26	1.79	193.78	8.48
192.23	0.33	192.75	0.45	193.27	1.88	193.79	8.64
192.24	0.33	192.76	0.45	193.28	1.97	193.80	8.80
192.25	0.34	192.77	0.45	193.29	2.06	193.81	8.96
192.26	0.34	192.78	0.46	193.30	2.16	193.82	9.12
192.27	0.34	192.79	0.46	193.31	2.26	193.83	9.29
192.28	0.34	192.80	0.46	193.32	2.36	193.84	9.45
192.29	0.35	192.81	0.46	193.33	2.46	193.85	9.61
192.30	0.35	192.82	0.46	193.34	2.57	193.86	9.78
192.31	0.35	192.83	0.46	193.35	2.67	193.87	9.95
192.32	0.35	192.84	0.47	193.36	2.78	193.88	10.11
192.33	0.36	192.85	0.47	193.37	2.89	193.89	10.28
192.34	0.36	192.86	0.47	193.38	3.00	193.90	10.45
192.35	0.36	192.87	0.47	193.39	3.11	193.91	10.62
192.36	0.36	192.88	0.47	193.40	3.22	193.92	10.79
192.37	0.37	192.89	0.48	193.41	3.34	193.93	10.96
192.38	0.37	192.90	0.48	193.42	3.46	193.94	11.14
192.39	0.37	192.91	0.48	193.43	3.57	193.95	11.31

Stage-Discharge for Pond B-35: Basin #35 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.96	11.48	194.48	14.79	195.00	**62.86**
193.97	11.66	194.49	14.81		
193.98	11.83	194.50	14.83		
193.99	12.01	194.51	14.97		
194.00	12.19	194.52	15.20		
194.01	12.36	194.53	15.50		
194.02	12.54	194.54	15.85		
194.03	12.72	194.55	16.24		
194.04	12.90	194.56	16.67		
194.05	13.08	194.57	17.14		
194.06	13.26	194.58	17.65		
194.07	13.45	194.59	18.18		
194.08	13.63	194.60	18.75		
194.09	13.81	194.61	19.34		
194.10	14.00	194.62	19.96		
194.11	14.03	194.63	20.61		
194.12	14.05	194.64	21.28		
194.13	14.07	194.65	21.97		
194.14	14.09	194.66	22.69		
194.15	14.11	194.67	23.43		
194.16	14.13	194.68	24.20		
194.17	14.15	194.69	24.98		
194.18	14.17	194.70	25.79		
194.19	14.19	194.71	26.66		
194.20	14.22	194.72	27.55		
194.21	14.24	194.73	28.47		
194.22	14.26	194.74	29.41		
194.23	14.28	194.75	30.38		
194.24	14.30	194.76	31.37		
194.25	14.32	194.77	32.39		
194.26	14.34	194.78	33.43		
194.27	14.36	194.79	34.50		
194.28	14.38	194.80	35.59		
194.29	14.40	194.81	36.70		
194.30	14.42	194.82	37.84		
194.31	14.44	194.83	39.01		
194.32	14.46	194.84	40.20		
194.33	14.48	194.85	41.41		
194.34	14.51	194.86	42.65		
194.35	14.53	194.87	43.91		
194.36	14.55	194.88	45.20		
194.37	14.57	194.89	46.51		
194.38	14.59	194.90	47.84		
194.39	14.61	194.91	49.23		
194.40	14.63	194.92	50.64		
194.41	14.65	194.93	52.07		
194.42	14.67	194.94	53.54		
194.43	14.69	194.95	55.02		
194.44	14.71	194.96	56.54		
194.45	14.73	194.97	58.08		
194.46	14.75	194.98	59.65		
194.47	14.77	194.99	61.24		

Stage-Area-Storage for Pond B-35: Basin #35

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.80	0	0
189.81	132	1
189.82	265	3
189.83	397	6
189.84	529	11
189.85	662	17
189.86	794	24
189.87	926	32
189.88	1,059	42
189.89	1,191	54
189.90	1,324	66
189.91	1,456	80
189.92	1,588	95
189.93	1,721	112
189.94	1,853	130
189.95	1,985	149
189.96	2,118	169
189.97	2,250	191
189.98	2,382	214
189.99	2,515	239
190.00	2,647	265
190.01	2,656	291
190.02	2,666	318
190.03	2,675	345
190.04	2,685	371
190.05	2,694	398
190.06	2,704	425
190.07	2,713	452
190.08	2,723	479
190.09	2,732	507
190.10	2,742	534
190.11	2,751	562
190.12	2,761	589
190.13	2,770	617
190.14	2,779	645
190.15	2,789	672
190.16	2,798	700
190.17	2,808	728
190.18	2,817	756
190.19	2,827	785
190.20	2,836	813
190.21	2,846	841
190.22	2,855	870
190.23	2,865	899
190.24	2,874	927
190.25	2,884	956
190.26	2,893	985
190.27	2,902	1,014
190.28	2,912	1,043
190.29	2,921	1,072
190.30	2,931	1,101
190.31	2,940	1,131
190.32	2,950	1,160
190.33	2,959	1,190
190.34	2,969	1,219
190.35	2,978	1,249
190.36	2,988	1,279
190.37	2,997	1,309
190.38	3,006	1,339
190.39	3,016	1,369
190.40	3,025	1,399
190.41	3,035	1,429
190.42	3,044	1,460
190.43	3,054	1,490
190.44	3,063	1,521
190.45	3,073	1,552
190.46	3,082	1,582
190.47	3,092	1,613
190.48	3,101	1,644
190.49	3,111	1,675
190.50	3,120	1,706
190.51	3,129	1,738
190.52	3,139	1,769
190.53	3,148	1,800
190.54	3,158	1,832
190.55	3,167	1,864
190.56	3,177	1,895
190.57	3,186	1,927
190.58	3,196	1,959
190.59	3,205	1,991
190.60	3,215	2,023
190.61	3,224	2,055
190.62	3,234	2,088
190.63	3,243	2,120
190.64	3,252	2,153
190.65	3,262	2,185
190.66	3,271	2,218
190.67	3,281	2,251
190.68	3,290	2,283
190.69	3,300	2,316
190.70	3,309	2,349
190.71	3,319	2,383
190.72	3,328	2,416
190.73	3,338	2,449
190.74	3,347	2,482
190.75	3,357	2,516
190.76	3,366	2,550
190.77	3,375	2,583
190.78	3,385	2,617
190.79	3,394	2,651
190.80	3,404	2,685
190.81	3,413	2,719
190.82	3,423	2,753
190.83	3,432	2,788

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.84	3,442	2,822	191.36	3,962	4,745
190.85	3,451	2,856	191.37	3,972	4,784
190.86	3,461	2,891	191.38	3,983	4,824
190.87	3,470	2,926	191.39	3,993	4,864
190.88	3,479	2,960	191.40	4,003	4,904
190.89	3,489	2,995	191.41	4,013	4,944
190.90	3,498	3,030	191.42	4,024	4,984
190.91	3,508	3,065	191.43	4,034	5,024
190.92	3,517	3,100	191.44	4,044	5,065
190.93	3,527	3,136	191.45	4,054	5,105
190.94	3,536	3,171	191.46	4,065	5,146
190.95	3,546	3,206	191.47	4,075	5,187
190.96	3,555	3,242	191.48	4,085	5,227
190.97	3,565	3,277	191.49	4,095	5,268
190.98	3,574	3,313	191.50	4,106	5,309
190.99	3,584	3,349	191.51	4,116	5,350
191.00	3,593	3,385	191.52	4,126	5,392
191.01	3,603	3,421	191.53	4,136	5,433
191.02	3,614	3,457	191.54	4,147	5,474
191.03	3,624	3,493	191.55	4,157	5,516
191.04	3,634	3,529	191.56	4,167	5,557
191.05	3,644	3,566	191.57	4,177	5,599
191.06	3,655	3,602	191.58	4,188	5,641
191.07	3,665	3,639	191.59	4,198	5,683
191.08	3,675	3,675	191.60	4,208	5,725
191.09	3,685	3,712	191.61	4,218	5,767
191.10	3,696	3,749	191.62	4,229	5,809
191.11	3,706	3,786	191.63	4,239	5,852
191.12	3,716	3,823	191.64	4,249	5,894
191.13	3,726	3,860	191.65	4,259	5,937
191.14	3,737	3,898	191.66	4,270	5,979
191.15	3,747	3,935	191.67	4,280	6,022
191.16	3,757	3,973	191.68	4,290	6,065
191.17	3,767	4,010	191.69	4,300	6,108
191.18	3,778	4,048	191.70	4,311	6,151
191.19	3,788	4,086	191.71	4,321	6,194
191.20	3,798	4,124	191.72	4,331	6,237
191.21	3,808	4,162	191.73	4,341	6,281
191.22	3,818	4,200	191.74	4,352	6,324
191.23	3,829	4,238	191.75	4,362	6,368
191.24	3,839	4,277	191.76	4,372	6,411
191.25	3,849	4,315	191.77	4,382	6,455
191.26	3,860	4,354	191.78	4,393	6,499
191.27	3,870	4,392	191.79	4,403	6,543
191.28	3,880	4,431	191.80	4,413	6,587
191.29	3,890	4,470	191.81	4,423	6,631
191.30	3,901	4,509	191.82	4,434	6,676
191.31	3,911	4,548	191.83	4,444	6,720
191.32	3,921	4,587	191.84	4,454	6,764
191.33	3,931	4,626	191.85	4,464	6,809
191.34	3,942	4,666	191.86	4,475	6,854
191.35	3,952	4,705	191.87	4,485	6,899

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.88	4,495	6,943
191.89	4,505	6,988
191.90	4,516	7,034
191.91	4,526	7,079
191.92	4,536	7,124
191.93	4,546	7,169
191.94	4,556	7,215
191.95	4,567	7,261
191.96	4,577	7,306
191.97	4,587	7,352
191.98	4,598	7,398
191.99	4,608	7,444
192.00	4,618	7,490
192.01	4,629	7,536
192.02	4,640	7,583
192.03	4,651	7,629
192.04	4,662	7,676
192.05	4,673	7,722
192.06	4,684	7,769
192.07	4,695	7,816
192.08	4,705	7,863
192.09	4,716	7,910
192.10	4,727	7,957
192.11	4,738	8,005
192.12	4,749	8,052
192.13	4,760	8,100
192.14	4,771	8,147
192.15	4,782	8,195
192.16	4,793	8,243
192.17	4,804	8,291
192.18	4,815	8,339
192.19	4,826	8,387
192.20	4,837	8,436
192.21	4,848	8,484
192.22	4,858	8,533
192.23	4,869	8,581
192.24	4,880	8,630
192.25	4,891	8,679
192.26	4,902	8,728
192.27	4,913	8,777
192.28	4,924	8,826
192.29	4,935	8,875
192.30	4,946	8,925
192.31	4,957	8,974
192.32	4,968	9,024
192.33	4,979	9,074
192.34	4,990	9,123
192.35	5,001	9,173
192.36	5,011	9,224
192.37	5,022	9,274
192.38	5,033	9,324
192.39	5,044	9,374
192.40	5,055	9,425
192.41	5,066	9,475
192.42	5,077	9,526
192.43	5,088	9,577
192.44	5,099	9,628
192.45	5,110	9,679
192.46	5,121	9,730
192.47	5,132	9,781
192.48	5,143	9,833
192.49	5,154	9,884
192.50	5,165	9,936
192.51	5,175	9,988
192.52	5,186	10,039
192.53	5,197	10,091
192.54	5,208	10,143
192.55	5,219	10,195
192.56	5,230	10,248
192.57	5,241	10,300
192.58	5,252	10,352
192.59	5,263	10,405
192.60	5,274	10,458
192.61	5,285	10,511
192.62	5,296	10,563
192.63	5,307	10,616
192.64	5,318	10,670
192.65	5,328	10,723
192.66	5,339	10,776
192.67	5,350	10,830
192.68	5,361	10,883
192.69	5,372	10,937
192.70	5,383	10,991
192.71	5,394	11,044
192.72	5,405	11,098
192.73	5,416	11,153
192.74	5,427	11,207
192.75	5,438	11,261
192.76	5,449	11,316
192.77	5,460	11,370
192.78	5,471	11,425
192.79	5,481	11,479
192.80	5,492	11,534
192.81	5,503	11,589
192.82	5,514	11,644
192.83	5,525	11,700
192.84	5,536	11,755
192.85	5,547	11,810
192.86	5,558	11,866
192.87	5,569	11,922
192.88	5,580	11,977
192.89	5,591	12,033
192.90	5,602	12,089
192.91	5,613	12,145

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.92	5,624	12,201	193.44	6,221	15,280
192.93	5,634	12,258	193.45	6,233	15,342
192.94	5,645	12,314	193.46	6,245	15,404
192.95	5,656	12,371	193.47	6,256	15,467
192.96	5,667	12,427	193.48	6,268	15,530
192.97	5,678	12,484	193.49	6,279	15,592
192.98	5,689	12,541	193.50	6,291	15,655
192.99	5,700	12,598	193.51	6,303	15,718
193.00	5,711	12,655	193.52	6,314	15,781
193.01	5,723	12,712	193.53	6,326	15,844
193.02	5,734	12,769	193.54	6,337	15,908
193.03	5,746	12,827	193.55	6,349	15,971
193.04	5,757	12,884	193.56	6,361	16,035
193.05	5,769	12,942	193.57	6,372	16,098
193.06	5,781	12,999	193.58	6,384	16,162
193.07	5,792	13,057	193.59	6,395	16,226
193.08	5,804	13,115	193.60	6,407	16,290
193.09	5,815	13,173	193.61	6,419	16,354
193.10	5,827	13,232	193.62	6,430	16,418
193.11	5,839	13,290	193.63	6,442	16,483
193.12	5,850	13,348	193.64	6,453	16,547
193.13	5,862	13,407	193.65	6,465	16,612
193.14	5,873	13,466	193.66	6,477	16,677
193.15	5,885	13,524	193.67	6,488	16,741
193.16	5,897	13,583	193.68	6,500	16,806
193.17	5,908	13,642	193.69	6,511	16,871
193.18	5,920	13,701	193.70	6,523	16,937
193.19	5,931	13,761	193.71	6,535	17,002
193.20	5,943	13,820	193.72	6,546	17,067
193.21	5,955	13,880	193.73	6,558	17,133
193.22	5,966	13,939	193.74	6,569	17,198
193.23	5,978	13,999	193.75	6,581	17,264
193.24	5,989	14,059	193.76	6,593	17,330
193.25	6,001	14,119	193.77	6,604	17,396
193.26	6,013	14,179	193.78	6,616	17,462
193.27	6,024	14,239	193.79	6,627	17,528
193.28	6,036	14,299	193.80	6,639	17,595
193.29	6,047	14,360	193.81	6,651	17,661
193.30	6,059	14,420	193.82	6,662	17,728
193.31	6,071	14,481	193.83	6,674	17,794
193.32	6,082	14,542	193.84	6,685	17,861
193.33	6,094	14,602	193.85	6,697	17,928
193.34	6,105	14,663	193.86	6,709	17,995
193.35	6,117	14,725	193.87	6,720	18,062
193.36	6,129	14,786	193.88	6,732	18,130
193.37	6,140	14,847	193.89	6,743	18,197
193.38	6,152	14,909	193.90	6,755	18,264
193.39	6,163	14,970	193.91	6,767	18,332
193.40	6,175	15,032	193.92	6,778	18,400
193.41	6,187	15,094	193.93	6,790	18,468
193.42	6,198	15,156	193.94	6,801	18,536
193.43	6,210	15,218	193.95	6,813	18,604

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.96	6,825	18,672	194.48	7,460	22,385
193.97	6,836	18,740	194.49	7,473	22,460
193.98	6,848	18,809	194.50	7,485	22,535
193.99	6,859	18,877	194.51	7,497	22,610
194.00	6,871	18,946	194.52	7,510	22,685
194.01	6,883	19,014	194.53	7,522	22,760
194.02	6,896	19,083	194.54	7,534	22,835
194.03	6,908	19,152	194.55	7,546	22,910
194.04	6,920	19,222	194.56	7,559	22,986
194.05	6,932	19,291	194.57	7,571	23,062
194.06	6,945	19,360	194.58	7,583	23,137
194.07	6,957	19,430	194.59	7,596	23,213
194.08	6,969	19,499	194.60	7,608	23,289
194.09	6,982	19,569	194.61	7,620	23,365
194.10	6,994	19,639	194.62	7,632	23,442
194.11	7,006	19,709	194.63	7,645	23,518
194.12	7,018	19,779	194.64	7,657	23,595
194.13	7,031	19,849	194.65	7,669	23,671
194.14	7,043	19,920	194.66	7,681	23,748
194.15	7,055	19,990	194.67	7,694	23,825
194.16	7,067	20,061	194.68	7,706	23,902
194.17	7,080	20,132	194.69	7,718	23,979
194.18	7,092	20,202	194.70	7,731	24,056
194.19	7,104	20,273	194.71	7,743	24,134
194.20	7,117	20,344	194.72	7,755	24,211
194.21	7,129	20,416	194.73	7,767	24,289
194.22	7,141	20,487	194.74	7,780	24,366
194.23	7,153	20,559	194.75	7,792	24,444
194.24	7,166	20,630	194.76	7,804	24,522
194.25	7,178	20,702	194.77	7,817	24,600
194.26	7,190	20,774	194.78	7,829	24,679
194.27	7,203	20,846	194.79	7,841	24,757
194.28	7,215	20,918	194.80	7,853	24,835
194.29	7,227	20,990	194.81	7,866	24,914
194.30	7,239	21,062	194.82	7,878	24,993
194.31	7,252	21,135	194.83	7,890	25,072
194.32	7,264	21,207	194.84	7,903	25,151
194.33	7,276	21,280	194.85	7,915	25,230
194.34	7,289	21,353	194.86	7,927	25,309
194.35	7,301	21,426	194.87	7,939	25,388
194.36	7,313	21,499	194.88	7,952	25,468
194.37	7,325	21,572	194.89	7,964	25,547
194.38	7,338	21,645	194.90	7,976	25,627
194.39	7,350	21,719	194.91	7,988	25,707
194.40	7,362	21,792	194.92	8,001	25,787
194.41	7,374	21,866	194.93	8,013	25,867
194.42	7,387	21,940	194.94	8,025	25,947
194.43	7,399	22,014	194.95	8,038	26,027
194.44	7,411	22,088	194.96	8,050	26,108
194.45	7,424	22,162	194.97	8,062	26,188
194.46	7,436	22,236	194.98	8,074	26,269
194.47	7,448	22,311	194.99	8,087	26,350

Stage-Area-Storage for Pond B-35: Basin #35 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.00	**8,099**	**26,431**

Summary for Pond B-36A: Basin #36A

Inflow Area = 2.377 ac, 40.60% Impervious, Inflow Depth = 9.15" for Future 100 yr event
Inflow = 21.96 cfs @ 12.17 hrs, Volume= 1.812 af
Outflow = 21.70 cfs @ 12.20 hrs, Volume= 1.719 af, Atten= 1%, Lag= 1.5 min
Primary = 21.70 cfs @ 12.20 hrs, Volume= 1.719 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.10' @ 12.20 hrs Surf.Area= 5,389 sf Storage= 16,008 cf

Plug-Flow detention time= 132.5 min calculated for 1.717 af (95% of inflow)
Center-of-Mass det. time= 103.3 min (879.7 - 776.4)

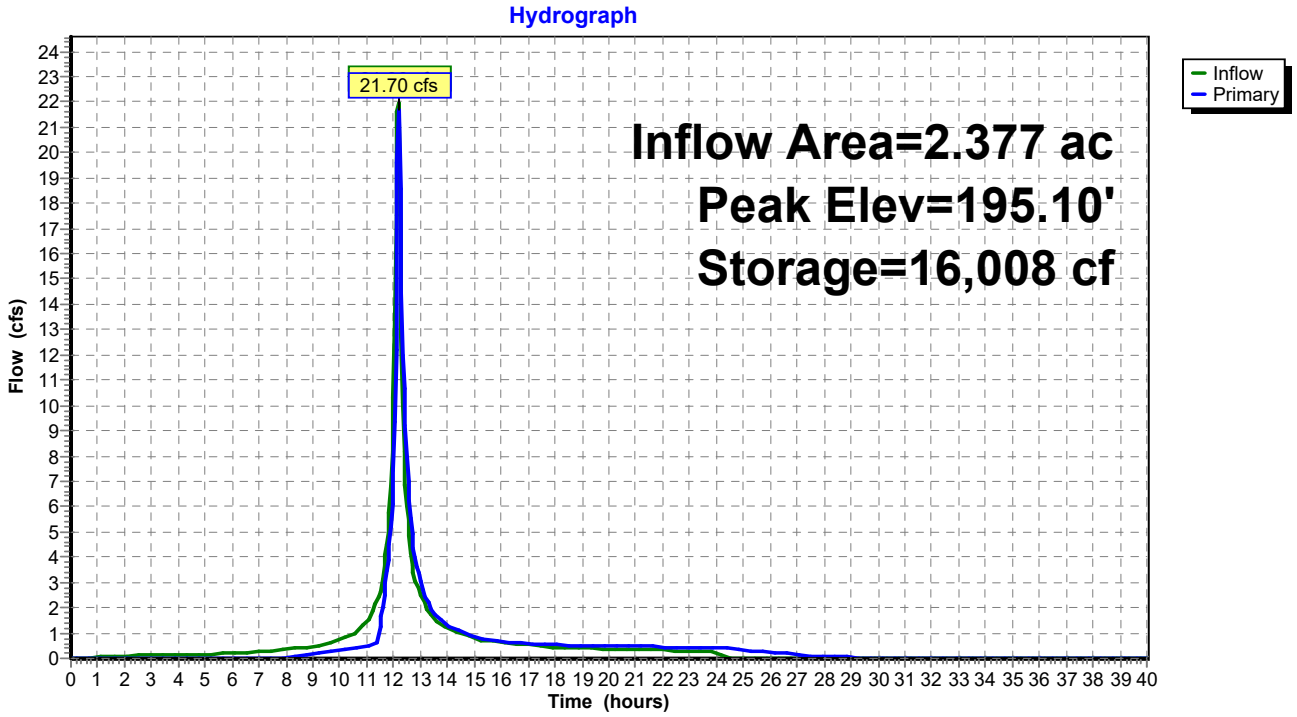
Volume	Invert	Avail.Storage	Storage Description
#1	190.50'	16,844 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.50	0	0	0
191.00	2,366	592	592
192.00	2,995	2,681	3,272
193.00	3,681	3,338	6,610
194.00	4,424	4,053	10,663
195.00	5,223	4,824	15,486
195.25	5,644	1,358	16,844

Device	Routing	Invert	Outlet Devices
#1	Primary	190.50'	**18.0" Round Culvert** L= 82.0' Ke= 0.500 Inlet / Outlet Invert= 190.50' / 190.10' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.24'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	194.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=21.41 cfs @ 12.20 hrs HW=195.10' (Free Discharge)
- **1=Culvert** (Passes 14.87 cfs of 15.31 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.69 cfs @ 7.90 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 14.18 cfs @ 3.42 fps)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 6.55 cfs @ 0.89 fps)

Pond B-36A: Basin #36A



Stage-Discharge for Pond B-36A: Basin #36A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.50	0.00	191.02	0.00	191.54	0.00	192.06	0.00
190.51	0.00	191.03	0.00	191.55	0.00	192.07	0.00
190.52	0.00	191.04	0.00	191.56	0.00	192.08	0.00
190.53	0.00	191.05	0.00	191.57	0.00	192.09	0.00
190.54	0.00	191.06	0.00	191.58	0.00	192.10	0.00
190.55	0.00	191.07	0.00	191.59	0.00	192.11	0.00
190.56	0.00	191.08	0.00	191.60	0.00	192.12	0.00
190.57	0.00	191.09	0.00	191.61	0.00	192.13	0.00
190.58	0.00	191.10	0.00	191.62	0.00	192.14	0.00
190.59	0.00	191.11	0.00	191.63	0.00	192.15	0.00
190.60	0.00	191.12	0.00	191.64	0.00	192.16	0.00
190.61	0.00	191.13	0.00	191.65	0.00	192.17	0.00
190.62	0.00	191.14	0.00	191.66	0.00	192.18	0.00
190.63	0.00	191.15	0.00	191.67	0.00	192.19	0.00
190.64	0.00	191.16	0.00	191.68	0.00	192.20	0.00
190.65	0.00	191.17	0.00	191.69	0.00	192.21	0.00
190.66	0.00	191.18	0.00	191.70	0.00	192.22	0.00
190.67	0.00	191.19	0.00	191.71	0.00	192.23	0.00
190.68	0.00	191.20	0.00	191.72	0.00	192.24	0.00
190.69	0.00	191.21	0.00	191.73	0.00	192.25	0.00
190.70	0.00	191.22	0.00	191.74	0.00	192.26	0.00
190.71	0.00	191.23	0.00	191.75	0.00	192.27	0.00
190.72	0.00	191.24	0.00	191.76	0.00	192.28	0.00
190.73	0.00	191.25	0.00	191.77	0.00	192.29	0.01
190.74	0.00	191.26	0.00	191.78	0.00	192.30	0.01
190.75	0.00	191.27	0.00	191.79	0.00	192.31	0.01
190.76	0.00	191.28	0.00	191.80	0.00	192.32	0.02
190.77	0.00	191.29	0.00	191.81	0.00	192.33	0.02
190.78	0.00	191.30	0.00	191.82	0.00	192.34	0.02
190.79	0.00	191.31	0.00	191.83	0.00	192.35	0.03
190.80	0.00	191.32	0.00	191.84	0.00	192.36	0.03
190.81	0.00	191.33	0.00	191.85	0.00	192.37	0.04
190.82	0.00	191.34	0.00	191.86	0.00	192.38	0.04
190.83	0.00	191.35	0.00	191.87	0.00	192.39	0.05
190.84	0.00	191.36	0.00	191.88	0.00	192.40	0.06
190.85	0.00	191.37	0.00	191.89	0.00	192.41	0.06
190.86	0.00	191.38	0.00	191.90	0.00	192.42	0.07
190.87	0.00	191.39	0.00	191.91	0.00	192.43	0.08
190.88	0.00	191.40	0.00	191.92	0.00	192.44	0.08
190.89	0.00	191.41	0.00	191.93	0.00	192.45	0.09
190.90	0.00	191.42	0.00	191.94	0.00	192.46	0.10
190.91	0.00	191.43	0.00	191.95	0.00	192.47	0.10
190.92	0.00	191.44	0.00	191.96	0.00	192.48	0.11
190.93	0.00	191.45	0.00	191.97	0.00	192.49	0.12
190.94	0.00	191.46	0.00	191.98	0.00	192.50	0.13
190.95	0.00	191.47	0.00	191.99	0.00	192.51	0.13
190.96	0.00	191.48	0.00	192.00	0.00	192.52	0.14
190.97	0.00	191.49	0.00	192.01	0.00	192.53	0.15
190.98	0.00	191.50	0.00	192.02	0.00	192.54	0.15
190.99	0.00	191.51	0.00	192.03	0.00	192.55	0.16
191.00	0.00	191.52	0.00	192.04	0.00	192.56	0.17
191.01	0.00	191.53	0.00	192.05	0.00	192.57	0.17

Stage-Discharge for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.58	0.17	193.10	0.35	193.62	0.46	194.14	1.23
192.59	0.18	193.11	0.35	193.63	0.46	194.15	1.31
192.60	0.18	193.12	0.35	193.64	0.47	194.16	1.39
192.61	0.19	193.13	0.36	193.65	0.47	194.17	1.47
192.62	0.19	193.14	0.36	193.66	0.47	194.18	1.55
192.63	0.20	193.15	0.36	193.67	0.47	194.19	1.63
192.64	0.20	193.16	0.36	193.68	0.47	194.20	1.72
192.65	0.21	193.17	0.37	193.69	0.48	194.21	1.81
192.66	0.21	193.18	0.37	193.70	0.48	194.22	1.90
192.67	0.22	193.19	0.37	193.71	0.48	194.23	1.99
192.68	0.22	193.20	0.37	193.72	0.48	194.24	2.09
192.69	0.22	193.21	0.38	193.73	0.48	194.25	2.19
192.70	0.23	193.22	0.38	193.74	0.49	194.26	2.28
192.71	0.23	193.23	0.38	193.75	0.49	194.27	2.38
192.72	0.24	193.24	0.38	193.76	0.49	194.28	2.49
192.73	0.24	193.25	0.39	193.77	0.49	194.29	2.59
192.74	0.24	193.26	0.39	193.78	0.49	194.30	2.70
192.75	0.25	193.27	0.39	193.79	0.49	194.31	2.80
192.76	0.25	193.28	0.39	193.80	0.50	194.32	2.91
192.77	0.25	193.29	0.39	193.81	0.50	194.33	3.02
192.78	0.26	193.30	0.40	193.82	0.50	194.34	3.13
192.79	0.26	193.31	0.40	193.83	0.50	194.35	3.25
192.80	0.26	193.32	0.40	193.84	0.50	194.36	3.36
192.81	0.27	193.33	0.40	193.85	0.50	194.37	3.48
192.82	0.27	193.34	0.41	193.86	0.51	194.38	3.60
192.83	0.27	193.35	0.41	193.87	0.51	194.39	3.72
192.84	0.28	193.36	0.41	193.88	0.51	194.40	3.84
192.85	0.28	193.37	0.41	193.89	0.51	194.41	3.96
192.86	0.28	193.38	0.41	193.90	0.51	194.42	4.08
192.87	0.29	193.39	0.42	193.91	0.52	194.43	4.21
192.88	0.29	193.40	0.42	193.92	0.52	194.44	4.33
192.89	0.29	193.41	0.42	193.93	0.52	194.45	4.46
192.90	0.30	193.42	0.42	193.94	0.52	194.46	4.59
192.91	0.30	193.43	0.43	193.95	0.52	194.47	4.72
192.92	0.30	193.44	0.43	193.96	0.52	194.48	4.85
192.93	0.30	193.45	0.43	193.97	0.53	194.49	4.98
192.94	0.31	193.46	0.43	193.98	0.53	194.50	5.12
192.95	0.31	193.47	0.43	193.99	0.53	194.51	5.25
192.96	0.31	193.48	0.44	194.00	0.53	194.52	5.39
192.97	0.32	193.49	0.44	194.01	0.55	194.53	5.53
192.98	0.32	193.50	0.44	194.02	0.57	194.54	5.66
192.99	0.32	193.51	0.44	194.03	0.60	194.55	5.80
193.00	0.32	193.52	0.44	194.04	0.64	194.56	5.94
193.01	0.33	193.53	0.45	194.05	0.68	194.57	6.09
193.02	0.33	193.54	0.45	194.06	0.73	194.58	6.23
193.03	0.33	193.55	0.45	194.07	0.78	194.59	6.37
193.04	0.33	193.56	0.45	194.08	0.84	194.60	6.52
193.05	0.34	193.57	0.45	194.09	0.90	194.61	6.67
193.06	0.34	193.58	0.46	194.10	0.96	194.62	6.81
193.07	0.34	193.59	0.46	194.11	1.02	194.63	6.96
193.08	0.34	193.60	0.46	194.12	1.09	194.64	7.11
193.09	0.35	193.61	0.46	194.13	1.16	194.65	7.26

Stage-Discharge for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Primary (cfs)
194.66	7.41
194.67	7.57
194.68	7.72
194.69	7.87
194.70	8.03
194.71	8.19
194.72	8.34
194.73	8.50
194.74	8.66
194.75	8.82
194.76	8.98
194.77	9.14
194.78	9.31
194.79	9.47
194.80	9.63
194.81	9.80
194.82	9.97
194.83	10.13
194.84	10.30
194.85	10.47
194.86	10.64
194.87	10.81
194.88	10.98
194.89	11.16
194.90	11.33
194.91	11.50
194.92	11.68
194.93	11.85
194.94	12.03
194.95	12.21
194.96	12.50
194.97	12.89
194.98	13.35
194.99	13.86
195.00	14.41
195.01	15.01
195.02	15.64
195.03	16.31
195.04	17.01
195.05	17.74
195.06	18.49
195.07	19.28
195.08	20.09
195.09	20.93
195.10	21.80
195.11	22.68
195.12	23.60
195.13	24.40
195.14	25.18
195.15	25.99
195.16	26.86
195.17	27.75
195.18	28.67
195.19	29.62
195.20	30.59
195.21	31.58
195.22	32.60
195.23	33.65
195.24	34.72
195.25	**35.81**

Stage-Area-Storage for Pond B-36A: Basin #36A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.50	0	0
190.51	47	0
190.52	95	1
190.53	142	2
190.54	189	4
190.55	237	6
190.56	284	9
190.57	331	12
190.58	379	15
190.59	426	19
190.60	473	24
190.61	521	29
190.62	568	34
190.63	615	40
190.64	662	46
190.65	710	53
190.66	757	61
190.67	804	68
190.68	852	77
190.69	899	85
190.70	946	95
190.71	994	104
190.72	1,041	115
190.73	1,088	125
190.74	1,136	136
190.75	1,183	148
190.76	1,230	160
190.77	1,278	172
190.78	1,325	185
190.79	1,372	199
190.80	1,420	213
190.81	1,467	227
190.82	1,514	242
190.83	1,562	258
190.84	1,609	274
190.85	1,656	290
190.86	1,704	307
190.87	1,751	324
190.88	1,798	342
190.89	1,845	360
190.90	1,893	379
190.91	1,940	398
190.92	1,987	417
190.93	2,035	437
190.94	2,082	458
190.95	2,129	479
190.96	2,177	501
190.97	2,224	523
190.98	2,271	545
190.99	2,319	568
191.00	2,366	592
191.01	2,372	615
191.02	2,379	639
191.03	2,385	663
191.04	2,391	687
191.05	2,397	711
191.06	2,404	735
191.07	2,410	759
191.08	2,416	783
191.09	2,423	807
191.10	2,429	831
191.11	2,435	856
191.12	2,441	880
191.13	2,448	904
191.14	2,454	929
191.15	2,460	953
191.16	2,467	978
191.17	2,473	1,003
191.18	2,479	1,028
191.19	2,486	1,052
191.20	2,492	1,077
191.21	2,498	1,102
191.22	2,504	1,127
191.23	2,511	1,152
191.24	2,517	1,177
191.25	2,523	1,203
191.26	2,530	1,228
191.27	2,536	1,253
191.28	2,542	1,279
191.29	2,548	1,304
191.30	2,555	1,330
191.31	2,561	1,355
191.32	2,567	1,381
191.33	2,574	1,407
191.34	2,580	1,432
191.35	2,586	1,458
191.36	2,592	1,484
191.37	2,599	1,510
191.38	2,605	1,536
191.39	2,611	1,562
191.40	2,618	1,588
191.41	2,624	1,614
191.42	2,630	1,641
191.43	2,636	1,667
191.44	2,643	1,693
191.45	2,649	1,720
191.46	2,655	1,746
191.47	2,662	1,773
191.48	2,668	1,800
191.49	2,674	1,826
191.50	2,681	1,853
191.51	2,687	1,880
191.52	2,693	1,907
191.53	2,699	1,934

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.54	2,706	1,961	192.06	3,036	3,453
191.55	2,712	1,988	192.07	3,043	3,483
191.56	2,718	2,015	192.08	3,050	3,514
191.57	2,725	2,042	192.09	3,057	3,544
191.58	2,731	2,070	192.10	3,064	3,575
191.59	2,737	2,097	192.11	3,070	3,606
191.60	2,743	2,124	192.12	3,077	3,636
191.61	2,750	2,152	192.13	3,084	3,667
191.62	2,756	2,179	192.14	3,091	3,698
191.63	2,762	2,207	192.15	3,098	3,729
191.64	2,769	2,235	192.16	3,105	3,760
191.65	2,775	2,262	192.17	3,112	3,791
191.66	2,781	2,290	192.18	3,118	3,822
191.67	2,787	2,318	192.19	3,125	3,853
191.68	2,794	2,346	192.20	3,132	3,885
191.69	2,800	2,374	192.21	3,139	3,916
191.70	2,806	2,402	192.22	3,146	3,948
191.71	2,813	2,430	192.23	3,153	3,979
191.72	2,819	2,458	192.24	3,160	4,011
191.73	2,825	2,486	192.25	3,167	4,042
191.74	2,831	2,515	192.26	3,173	4,074
191.75	2,838	2,543	192.27	3,180	4,106
191.76	2,844	2,571	192.28	3,187	4,137
191.77	2,850	2,600	192.29	3,194	4,169
191.78	2,857	2,628	192.30	3,201	4,201
191.79	2,863	2,657	192.31	3,208	4,233
191.80	2,869	2,686	192.32	3,215	4,266
191.81	2,875	2,714	192.33	3,221	4,298
191.82	2,882	2,743	192.34	3,228	4,330
191.83	2,888	2,772	192.35	3,235	4,362
191.84	2,894	2,801	192.36	3,242	4,395
191.85	2,901	2,830	192.37	3,249	4,427
191.86	2,907	2,859	192.38	3,256	4,460
191.87	2,913	2,888	192.39	3,263	4,492
191.88	2,920	2,917	192.40	3,269	4,525
191.89	2,926	2,946	192.41	3,276	4,558
191.90	2,932	2,976	192.42	3,283	4,590
191.91	2,938	3,005	192.43	3,290	4,623
191.92	2,945	3,034	192.44	3,297	4,656
191.93	2,951	3,064	192.45	3,304	4,689
191.94	2,957	3,093	192.46	3,311	4,722
191.95	2,964	3,123	192.47	3,317	4,755
191.96	2,970	3,153	192.48	3,324	4,789
191.97	2,976	3,182	192.49	3,331	4,822
191.98	2,982	3,212	192.50	3,338	4,855
191.99	2,989	3,242	192.51	3,345	4,889
192.00	2,995	3,272	192.52	3,352	4,922
192.01	3,002	3,302	192.53	3,359	4,956
192.02	3,009	3,332	192.54	3,365	4,989
192.03	3,016	3,362	192.55	3,372	5,023
192.04	3,022	3,392	192.56	3,379	5,057
192.05	3,029	3,423	192.57	3,386	5,091

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.58	3,393	5,124
192.59	3,400	5,158
192.60	3,407	5,192
192.61	3,413	5,227
192.62	3,420	5,261
192.63	3,427	5,295
192.64	3,434	5,329
192.65	3,441	5,364
192.66	3,448	5,398
192.67	3,455	5,433
192.68	3,461	5,467
192.69	3,468	5,502
192.70	3,475	5,537
192.71	3,482	5,571
192.72	3,489	5,606
192.73	3,496	5,641
192.74	3,503	5,676
192.75	3,510	5,711
192.76	3,516	5,746
192.77	3,523	5,782
192.78	3,530	5,817
192.79	3,537	5,852
192.80	3,544	5,888
192.81	3,551	5,923
192.82	3,558	5,959
192.83	3,564	5,994
192.84	3,571	6,030
192.85	3,578	6,066
192.86	3,585	6,101
192.87	3,592	6,137
192.88	3,599	6,173
192.89	3,606	6,209
192.90	3,612	6,245
192.91	3,619	6,281
192.92	3,626	6,318
192.93	3,633	6,354
192.94	3,640	6,390
192.95	3,647	6,427
192.96	3,654	6,463
192.97	3,660	6,500
192.98	3,667	6,537
192.99	3,674	6,573
193.00	3,681	6,610
193.01	3,688	6,647
193.02	3,696	6,684
193.03	3,703	6,721
193.04	3,711	6,758
193.05	3,718	6,795
193.06	3,726	6,832
193.07	3,733	6,869
193.08	3,740	6,907
193.09	3,748	6,944
193.10	3,755	6,982
193.11	3,763	7,019
193.12	3,770	7,057
193.13	3,778	7,095
193.14	3,785	7,133
193.15	3,792	7,171
193.16	3,800	7,208
193.17	3,807	7,247
193.18	3,815	7,285
193.19	3,822	7,323
193.20	3,830	7,361
193.21	3,837	7,399
193.22	3,844	7,438
193.23	3,852	7,476
193.24	3,859	7,515
193.25	3,867	7,553
193.26	3,874	7,592
193.27	3,882	7,631
193.28	3,889	7,670
193.29	3,896	7,709
193.30	3,904	7,748
193.31	3,911	7,787
193.32	3,919	7,826
193.33	3,926	7,865
193.34	3,934	7,904
193.35	3,941	7,944
193.36	3,948	7,983
193.37	3,956	8,023
193.38	3,963	8,062
193.39	3,971	8,102
193.40	3,978	8,142
193.41	3,986	8,182
193.42	3,993	8,222
193.43	4,000	8,262
193.44	4,008	8,302
193.45	4,015	8,342
193.46	4,023	8,382
193.47	4,030	8,422
193.48	4,038	8,462
193.49	4,045	8,503
193.50	4,053	8,543
193.51	4,060	8,584
193.52	4,067	8,625
193.53	4,075	8,665
193.54	4,082	8,706
193.55	4,090	8,747
193.56	4,097	8,788
193.57	4,105	8,829
193.58	4,112	8,870
193.59	4,119	8,911
193.60	4,127	8,952
193.61	4,134	8,994

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.62	4,142	9,035	194.14	4,536	11,290
193.63	4,149	9,076	194.15	4,544	11,335
193.64	4,157	9,118	194.16	4,552	11,381
193.65	4,164	9,160	194.17	4,560	11,426
193.66	4,171	9,201	194.18	4,568	11,472
193.67	4,179	9,243	194.19	4,576	11,517
193.68	4,186	9,285	194.20	4,584	11,563
193.69	4,194	9,327	194.21	4,592	11,609
193.70	4,201	9,369	194.22	4,600	11,655
193.71	4,209	9,411	194.23	4,608	11,701
193.72	4,216	9,453	194.24	4,616	11,747
193.73	4,223	9,495	194.25	4,624	11,793
193.74	4,231	9,537	194.26	4,632	11,840
193.75	4,238	9,580	194.27	4,640	11,886
193.76	4,246	9,622	194.28	4,648	11,933
193.77	4,253	9,665	194.29	4,656	11,979
193.78	4,261	9,707	194.30	4,664	12,026
193.79	4,268	9,750	194.31	4,672	12,072
193.80	4,275	9,793	194.32	4,680	12,119
193.81	4,283	9,835	194.33	4,688	12,166
193.82	4,290	9,878	194.34	4,696	12,213
193.83	4,298	9,921	194.35	4,704	12,260
193.84	4,305	9,964	194.36	4,712	12,307
193.85	4,313	10,007	194.37	4,720	12,354
193.86	4,320	10,050	194.38	4,728	12,401
193.87	4,327	10,094	194.39	4,736	12,449
193.88	4,335	10,137	194.40	4,744	12,496
193.89	4,342	10,180	194.41	4,752	12,543
193.90	4,350	10,224	194.42	4,760	12,591
193.91	4,357	10,267	194.43	4,768	12,639
193.92	4,365	10,311	194.44	4,776	12,686
193.93	4,372	10,355	194.45	4,784	12,734
193.94	4,379	10,398	194.46	4,792	12,782
193.95	4,387	10,442	194.47	4,800	12,830
193.96	4,394	10,486	194.48	4,808	12,878
193.97	4,402	10,530	194.49	4,816	12,926
193.98	4,409	10,574	194.50	4,824	12,974
193.99	4,417	10,618	194.51	4,831	13,023
194.00	4,424	10,663	194.52	4,839	13,071
194.01	4,432	10,707	194.53	4,847	13,119
194.02	4,440	10,751	194.54	4,855	13,168
194.03	4,448	10,796	194.55	4,863	13,217
194.04	4,456	10,840	194.56	4,871	13,265
194.05	4,464	10,885	194.57	4,879	13,314
194.06	4,472	10,929	194.58	4,887	13,363
194.07	4,480	10,974	194.59	4,895	13,412
194.08	4,488	11,019	194.60	4,903	13,461
194.09	4,496	11,064	194.61	4,911	13,510
194.10	4,504	11,109	194.62	4,919	13,559
194.11	4,512	11,154	194.63	4,927	13,608
194.12	4,520	11,199	194.64	4,935	13,657
194.13	4,528	11,244	194.65	4,943	13,707

Stage-Area-Storage for Pond B-36A: Basin #36A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.66	4,951	13,756
194.67	4,959	13,806
194.68	4,967	13,856
194.69	4,975	13,905
194.70	4,983	13,955
194.71	4,991	14,005
194.72	4,999	14,055
194.73	5,007	14,105
194.74	5,015	14,155
194.75	5,023	14,205
194.76	5,031	14,255
194.77	5,039	14,306
194.78	5,047	14,356
194.79	5,055	14,407
194.80	5,063	14,457
194.81	5,071	14,508
194.82	5,079	14,559
194.83	5,087	14,610
194.84	5,095	14,661
194.85	5,103	14,712
194.86	5,111	14,763
194.87	5,119	14,814
194.88	5,127	14,865
194.89	5,135	14,916
194.90	5,143	14,968
194.91	5,151	15,019
194.92	5,159	15,071
194.93	5,167	15,122
194.94	5,175	15,174
194.95	5,183	15,226
194.96	5,191	15,278
194.97	5,199	15,330
194.98	5,207	15,382
194.99	5,215	15,434
195.00	5,223	15,486
195.01	5,240	15,538
195.02	5,257	15,591
195.03	5,274	15,643
195.04	5,290	15,696
195.05	5,307	15,749
195.06	5,324	15,802
195.07	5,341	15,856
195.08	5,358	15,909
195.09	5,375	15,963
195.10	5,391	16,017
195.11	5,408	16,071
195.12	5,425	16,125
195.13	5,442	16,179
195.14	5,459	16,234
195.15	5,476	16,288
195.16	5,492	16,343
195.17	5,509	16,398
195.18	5,526	16,453
195.19	5,543	16,509
195.20	5,560	16,564
195.21	5,577	16,620
195.22	5,593	16,676
195.23	5,610	16,732
195.24	5,627	16,788
195.25	**5,644**	**16,844**

Summary for Pond B-36B: Basin #36B

Inflow Area = 2.469 ac, 46.54% Impervious, Inflow Depth = 9.33" for Future 100 yr event
Inflow = 23.06 cfs @ 12.17 hrs, Volume= 1.920 af
Outflow = 17.09 cfs @ 12.26 hrs, Volume= 1.813 af, Atten= 26%, Lag= 5.3 min
Primary = 17.09 cfs @ 12.26 hrs, Volume= 1.813 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.02' @ 12.27 hrs Surf.Area= 5,424 sf Storage= 15,552 cf

Plug-Flow detention time= 75.2 min calculated for 1.813 af (94% of inflow)
Center-of-Mass det. time= 42.1 min (814.4 - 772.3)

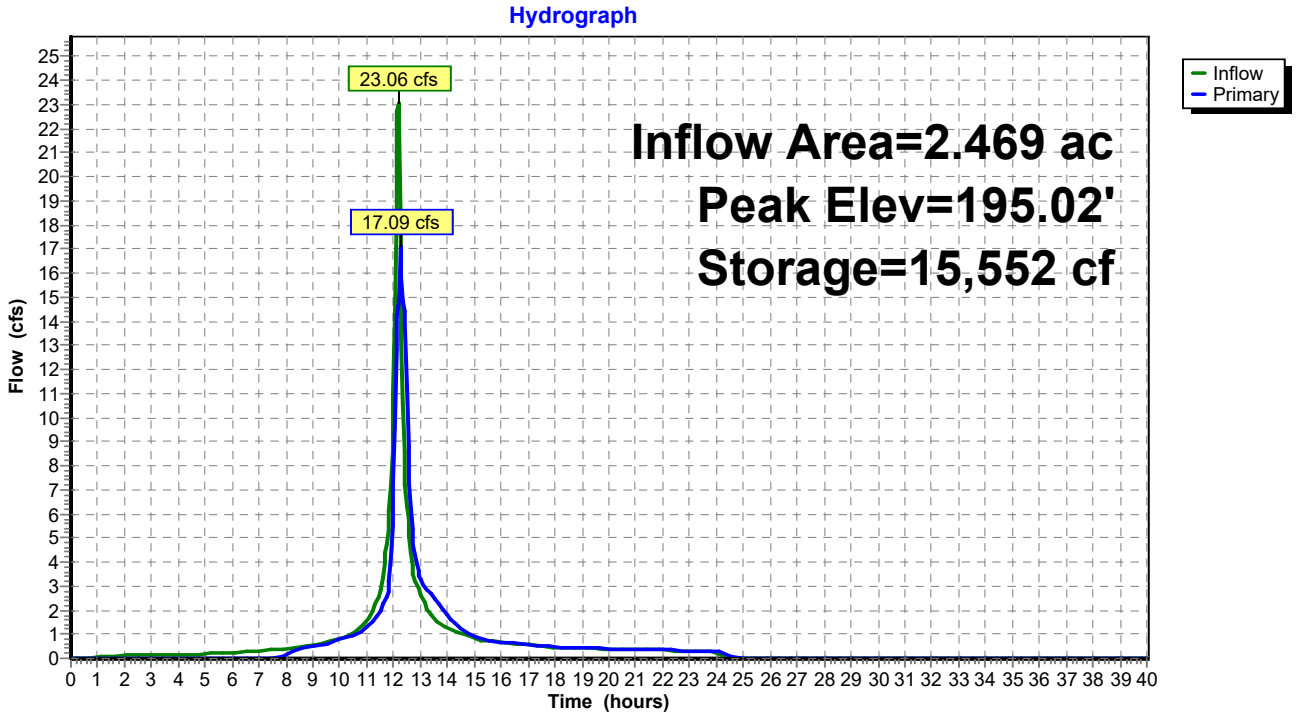
Volume	Invert	Avail.Storage	Storage Description
#1	190.50'	16,864 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
190.50	0	0	0
191.00	2,110	528	528
192.00	2,893	2,502	3,029
193.00	3,730	3,312	6,341
194.00	4,547	4,139	10,479
195.00	5,356	4,952	15,431
195.25	6,113	1,434	16,864

Device	Routing	Invert	Outlet Devices
#1	Primary	190.50'	**18.0" Round Culvert** L= 82.0' Ke= 0.500 Inlet / Outlet Invert= 190.50' / 190.10' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.53'	**36.0" W x 2.5" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.55'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=16.82 cfs @ 12.26 hrs HW=195.01' (Free Discharge)
- **1=Culvert** (Barrel Controls 15.12 cfs @ 8.56 fps)
- **2=Orifice/Grate** (Passes < 4.64 cfs potential flow)
- **3=Sharp-Crested Rectangular Weir** (Passes < 21.38 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 1.70 cfs @ 0.57 fps)

Pond B-36B: Basin #36B



Stage-Discharge for Pond B-36B: Basin #36B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.50	0.00	191.02	0.00	191.54	0.00	192.06	0.00
190.51	0.00	191.03	0.00	191.55	0.00	192.07	0.00
190.52	0.00	191.04	0.00	191.56	0.00	192.08	0.00
190.53	0.00	191.05	0.00	191.57	0.00	192.09	0.00
190.54	0.00	191.06	0.00	191.58	0.00	192.10	0.00
190.55	0.00	191.07	0.00	191.59	0.00	192.11	0.00
190.56	0.00	191.08	0.00	191.60	0.00	192.12	0.00
190.57	0.00	191.09	0.00	191.61	0.00	192.13	0.00
190.58	0.00	191.10	0.00	191.62	0.00	192.14	0.00
190.59	0.00	191.11	0.00	191.63	0.00	192.15	0.00
190.60	0.00	191.12	0.00	191.64	0.00	192.16	0.00
190.61	0.00	191.13	0.00	191.65	0.00	192.17	0.00
190.62	0.00	191.14	0.00	191.66	0.00	192.18	0.00
190.63	0.00	191.15	0.00	191.67	0.00	192.19	0.00
190.64	0.00	191.16	0.00	191.68	0.00	192.20	0.00
190.65	0.00	191.17	0.00	191.69	0.00	192.21	0.00
190.66	0.00	191.18	0.00	191.70	0.00	192.22	0.00
190.67	0.00	191.19	0.00	191.71	0.00	192.23	0.00
190.68	0.00	191.20	0.00	191.72	0.00	192.24	0.00
190.69	0.00	191.21	0.00	191.73	0.00	192.25	0.00
190.70	0.00	191.22	0.00	191.74	0.00	192.26	0.00
190.71	0.00	191.23	0.00	191.75	0.00	192.27	0.00
190.72	0.00	191.24	0.00	191.76	0.00	192.28	0.00
190.73	0.00	191.25	0.00	191.77	0.00	192.29	0.00
190.74	0.00	191.26	0.00	191.78	0.00	192.30	0.00
190.75	0.00	191.27	0.00	191.79	0.00	192.31	0.00
190.76	0.00	191.28	0.00	191.80	0.00	192.32	0.00
190.77	0.00	191.29	0.00	191.81	0.00	192.33	0.00
190.78	0.00	191.30	0.00	191.82	0.00	192.34	0.00
190.79	0.00	191.31	0.00	191.83	0.00	192.35	0.00
190.80	0.00	191.32	0.00	191.84	0.00	192.36	0.00
190.81	0.00	191.33	0.00	191.85	0.00	192.37	0.00
190.82	0.00	191.34	0.00	191.86	0.00	192.38	0.00
190.83	0.00	191.35	0.00	191.87	0.00	192.39	0.00
190.84	0.00	191.36	0.00	191.88	0.00	192.40	0.00
190.85	0.00	191.37	0.00	191.89	0.00	192.41	0.00
190.86	0.00	191.38	0.00	191.90	0.00	192.42	0.00
190.87	0.00	191.39	0.00	191.91	0.00	192.43	0.00
190.88	0.00	191.40	0.00	191.92	0.00	192.44	0.00
190.89	0.00	191.41	0.00	191.93	0.00	192.45	0.00
190.90	0.00	191.42	0.00	191.94	0.00	192.46	0.00
190.91	0.00	191.43	0.00	191.95	0.00	192.47	0.00
190.92	0.00	191.44	0.00	191.96	0.00	192.48	0.00
190.93	0.00	191.45	0.00	191.97	0.00	192.49	0.00
190.94	0.00	191.46	0.00	191.98	0.00	192.50	0.00
190.95	0.00	191.47	0.00	191.99	0.00	192.51	0.00
190.96	0.00	191.48	0.00	192.00	0.00	192.52	0.00
190.97	0.00	191.49	0.00	192.01	0.00	192.53	0.00
190.98	0.00	191.50	0.00	192.02	0.00	192.54	0.01
190.99	0.00	191.51	0.00	192.03	0.00	192.55	0.03
191.00	0.00	191.52	0.00	192.04	0.00	192.56	0.05
191.01	0.00	191.53	0.00	192.05	0.00	192.57	0.08

Stage-Discharge for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
192.58	0.11	193.10	2.05	193.62	3.23	194.14	9.44
192.59	0.14	193.11	2.07	193.63	3.30	194.15	9.60
192.60	0.18	193.12	2.09	193.64	3.37	194.16	9.76
192.61	0.22	193.13	2.12	193.65	3.44	194.17	9.92
192.62	0.26	193.14	2.14	193.66	3.52	194.18	10.08
192.63	0.30	193.15	2.16	193.67	3.60	194.19	10.24
192.64	0.35	193.16	2.18	193.68	3.69	194.20	10.40
192.65	0.40	193.17	2.20	193.69	3.77	194.21	10.56
192.66	0.45	193.18	2.22	193.70	3.86	194.22	10.72
192.67	0.50	193.19	2.24	193.71	3.95	194.23	10.89
192.68	0.56	193.20	2.26	193.72	4.04	194.24	11.05
192.69	0.62	193.21	2.28	193.73	4.14	194.25	11.22
192.70	0.67	193.22	2.30	193.74	4.24	194.26	11.38
192.71	0.74	193.23	2.32	193.75	4.34	194.27	11.55
192.72	0.80	193.24	2.34	193.76	4.44	194.28	11.72
192.73	0.86	193.25	2.36	193.77	4.54	194.29	11.89
192.74	0.93	193.26	2.38	193.78	4.65	194.30	12.06
192.75	0.98	193.27	2.40	193.79	4.75	194.31	12.23
192.76	1.03	193.28	2.42	193.80	4.86	194.32	12.40
192.77	1.08	193.29	2.43	193.81	4.97	194.33	12.58
192.78	1.12	193.30	2.45	193.82	5.09	194.34	12.75
192.79	1.16	193.31	2.47	193.83	5.20	194.35	12.93
192.80	1.20	193.32	2.49	193.84	5.32	194.36	13.10
192.81	1.24	193.33	2.51	193.85	5.43	194.37	13.28
192.82	1.28	193.34	2.53	193.86	5.55	194.38	13.46
192.83	1.32	193.35	2.54	193.87	5.67	194.39	13.63
192.84	1.35	193.36	2.56	193.88	5.80	194.40	13.70
192.85	1.38	193.37	2.58	193.89	5.92	194.41	13.73
192.86	1.42	193.38	2.60	193.90	6.05	194.42	13.75
192.87	1.45	193.39	2.61	193.91	6.17	194.43	13.77
192.88	1.48	193.40	2.63	193.92	6.30	194.44	13.80
192.89	1.51	193.41	2.65	193.93	6.43	194.45	13.82
192.90	1.54	193.42	2.67	193.94	6.56	194.46	13.85
192.91	1.57	193.43	2.68	193.95	6.69	194.47	13.87
192.92	1.60	193.44	2.70	193.96	6.83	194.48	13.90
192.93	1.63	193.45	2.72	193.97	6.96	194.49	13.92
192.94	1.66	193.46	2.73	193.98	7.10	194.50	13.94
192.95	1.68	193.47	2.75	193.99	7.24	194.51	13.97
192.96	1.71	193.48	2.77	194.00	7.38	194.52	13.99
192.97	1.74	193.49	2.78	194.01	7.52	194.53	14.02
192.98	1.76	193.50	2.80	194.02	7.66	194.54	14.04
192.99	1.79	193.51	2.81	194.03	7.80	194.55	14.06
193.00	1.81	193.52	2.83	194.04	7.94	194.56	14.09
193.01	1.84	193.53	2.85	194.05	8.09	194.57	14.11
193.02	1.86	193.54	2.86	194.06	8.24	194.58	14.13
193.03	1.89	193.55	2.88	194.07	8.38	194.59	14.16
193.04	1.91	193.56	2.91	194.08	8.53	194.60	14.18
193.05	1.94	193.57	2.95	194.09	8.68	194.61	14.21
193.06	1.96	193.58	2.99	194.10	8.83	194.62	14.23
193.07	1.98	193.59	3.05	194.11	8.98	194.63	14.25
193.08	2.00	193.60	3.10	194.12	9.14	194.64	14.28
193.09	2.03	193.61	3.16	194.13	9.29	194.65	14.30

Stage-Discharge for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Primary (cfs)
194.66	14.32
194.67	14.35
194.68	14.37
194.69	14.39
194.70	14.42
194.71	14.44
194.72	14.46
194.73	14.49
194.74	14.51
194.75	14.53
194.76	14.56
194.77	14.58
194.78	14.60
194.79	14.62
194.80	14.65
194.81	14.67
194.82	14.69
194.83	14.72
194.84	14.74
194.85	14.76
194.86	14.78
194.87	14.81
194.88	14.83
194.89	14.85
194.90	14.87
194.91	14.90
194.92	14.92
194.93	14.94
194.94	14.96
194.95	14.99
194.96	15.13
194.97	15.36
194.98	15.66
194.99	16.01
195.00	16.41
195.01	16.84
195.02	17.32
195.03	17.82
195.04	18.36
195.05	18.93
195.06	19.52
195.07	20.14
195.08	20.79
195.09	21.47
195.10	22.16
195.11	22.89
195.12	23.63
195.13	24.40
195.14	25.18
195.15	25.99
195.16	26.86
195.17	27.75
195.18	28.67
195.19	29.62
195.20	30.59
195.21	31.58
195.22	32.60
195.23	33.65
195.24	34.72
195.25	**35.81**

Stage-Area-Storage for Pond B-36B: Basin #36B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.50	0	0
190.51	42	0
190.52	84	1
190.53	127	2
190.54	169	3
190.55	211	5
190.56	253	8
190.57	295	10
190.58	338	14
190.59	380	17
190.60	422	21
190.61	464	26
190.62	506	30
190.63	549	36
190.64	591	41
190.65	633	47
190.66	675	54
190.67	717	61
190.68	760	68
190.69	802	76
190.70	844	84
190.71	886	93
190.72	928	102
190.73	971	112
190.74	1,013	122
190.75	1,055	132
190.76	1,097	143
190.77	1,139	154
190.78	1,182	165
190.79	1,224	177
190.80	1,266	190
190.81	1,308	203
190.82	1,350	216
190.83	1,393	230
190.84	1,435	244
190.85	1,477	258
190.86	1,519	273
190.87	1,561	289
190.88	1,604	305
190.89	1,646	321
190.90	1,688	338
190.91	1,730	355
190.92	1,772	372
190.93	1,815	390
190.94	1,857	408
190.95	1,899	427
190.96	1,941	446
190.97	1,983	466
190.98	2,026	486
190.99	2,068	507
191.00	2,110	528
191.01	2,118	549
191.02	2,126	570
191.03	2,133	591
191.04	2,141	613
191.05	2,149	634
191.06	2,157	656
191.07	2,165	677
191.08	2,173	699
191.09	2,180	721
191.10	2,188	742
191.11	2,196	764
191.12	2,204	786
191.13	2,212	808
191.14	2,220	831
191.15	2,227	853
191.16	2,235	875
191.17	2,243	898
191.18	2,251	920
191.19	2,259	943
191.20	2,267	965
191.21	2,274	988
191.22	2,282	1,011
191.23	2,290	1,034
191.24	2,298	1,056
191.25	2,306	1,079
191.26	2,314	1,103
191.27	2,321	1,126
191.28	2,329	1,149
191.29	2,337	1,172
191.30	2,345	1,196
191.31	2,353	1,219
191.32	2,361	1,243
191.33	2,368	1,266
191.34	2,376	1,290
191.35	2,384	1,314
191.36	2,392	1,338
191.37	2,400	1,362
191.38	2,408	1,386
191.39	2,415	1,410
191.40	2,423	1,434
191.41	2,431	1,458
191.42	2,439	1,483
191.43	2,447	1,507
191.44	2,455	1,532
191.45	2,462	1,556
191.46	2,470	1,581
191.47	2,478	1,606
191.48	2,486	1,631
191.49	2,494	1,655
191.50	2,502	1,680
191.51	2,509	1,705
191.52	2,517	1,731
191.53	2,525	1,756

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.54	2,533	1,781
191.55	2,541	1,806
191.56	2,548	1,832
191.57	2,556	1,857
191.58	2,564	1,883
191.59	2,572	1,909
191.60	2,580	1,934
191.61	2,588	1,960
191.62	2,595	1,986
191.63	2,603	2,012
191.64	2,611	2,038
191.65	2,619	2,064
191.66	2,627	2,091
191.67	2,635	2,117
191.68	2,642	2,143
191.69	2,650	2,170
191.70	2,658	2,196
191.71	2,666	2,223
191.72	2,674	2,250
191.73	2,682	2,276
191.74	2,689	2,303
191.75	2,697	2,330
191.76	2,705	2,357
191.77	2,713	2,384
191.78	2,721	2,411
191.79	2,729	2,439
191.80	2,736	2,466
191.81	2,744	2,493
191.82	2,752	2,521
191.83	2,760	2,549
191.84	2,768	2,576
191.85	2,776	2,604
191.86	2,783	2,632
191.87	2,791	2,660
191.88	2,799	2,687
191.89	2,807	2,716
191.90	2,815	2,744
191.91	2,823	2,772
191.92	2,830	2,800
191.93	2,838	2,828
191.94	2,846	2,857
191.95	2,854	2,885
191.96	2,862	2,914
191.97	2,870	2,943
191.98	2,877	2,971
191.99	2,885	3,000
192.00	2,893	3,029
192.01	2,901	3,058
192.02	2,910	3,087
192.03	2,918	3,116
192.04	2,926	3,145
192.05	2,935	3,175
192.06	2,943	3,204
192.07	2,952	3,234
192.08	2,960	3,263
192.09	2,968	3,293
192.10	2,977	3,322
192.11	2,985	3,352
192.12	2,993	3,382
192.13	3,002	3,412
192.14	3,010	3,442
192.15	3,019	3,472
192.16	3,027	3,503
192.17	3,035	3,533
192.18	3,044	3,563
192.19	3,052	3,594
192.20	3,060	3,624
192.21	3,069	3,655
192.22	3,077	3,686
192.23	3,086	3,717
192.24	3,094	3,747
192.25	3,102	3,778
192.26	3,111	3,809
192.27	3,119	3,841
192.28	3,127	3,872
192.29	3,136	3,903
192.30	3,144	3,935
192.31	3,152	3,966
192.32	3,161	3,998
192.33	3,169	4,029
192.34	3,178	4,061
192.35	3,186	4,093
192.36	3,194	4,125
192.37	3,203	4,157
192.38	3,211	4,189
192.39	3,219	4,221
192.40	3,228	4,253
192.41	3,236	4,285
192.42	3,245	4,318
192.43	3,253	4,350
192.44	3,261	4,383
192.45	3,270	4,416
192.46	3,278	4,448
192.47	3,286	4,481
192.48	3,295	4,514
192.49	3,303	4,547
192.50	3,312	4,580
192.51	3,320	4,613
192.52	3,328	4,647
192.53	3,337	4,680
192.54	3,345	4,713
192.55	3,353	4,747
192.56	3,362	4,780
192.57	3,370	4,814

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.58	3,378	4,848
192.59	3,387	4,882
192.60	3,395	4,915
192.61	3,404	4,949
192.62	3,412	4,984
192.63	3,420	5,018
192.64	3,429	5,052
192.65	3,437	5,086
192.66	3,445	5,121
192.67	3,454	5,155
192.68	3,462	5,190
192.69	3,471	5,224
192.70	3,479	5,259
192.71	3,487	5,294
192.72	3,496	5,329
192.73	3,504	5,364
192.74	3,512	5,399
192.75	3,521	5,434
192.76	3,529	5,469
192.77	3,537	5,505
192.78	3,546	5,540
192.79	3,554	5,576
192.80	3,563	5,611
192.81	3,571	5,647
192.82	3,579	5,683
192.83	3,588	5,718
192.84	3,596	5,754
192.85	3,604	5,790
192.86	3,613	5,827
192.87	3,621	5,863
192.88	3,630	5,899
192.89	3,638	5,935
192.90	3,646	5,972
192.91	3,655	6,008
192.92	3,663	6,045
192.93	3,671	6,081
192.94	3,680	6,118
192.95	3,688	6,155
192.96	3,697	6,192
192.97	3,705	6,229
192.98	3,713	6,266
192.99	3,722	6,303
193.00	3,730	6,341
193.01	3,738	6,378
193.02	3,746	6,415
193.03	3,755	6,453
193.04	3,763	6,490
193.05	3,771	6,528
193.06	3,779	6,566
193.07	3,787	6,604
193.08	3,795	6,642
193.09	3,804	6,680
193.10	3,812	6,718
193.11	3,820	6,756
193.12	3,828	6,794
193.13	3,836	6,832
193.14	3,844	6,871
193.15	3,853	6,909
193.16	3,861	6,948
193.17	3,869	6,986
193.18	3,877	7,025
193.19	3,885	7,064
193.20	3,893	7,103
193.21	3,902	7,142
193.22	3,910	7,181
193.23	3,918	7,220
193.24	3,926	7,259
193.25	3,934	7,299
193.26	3,942	7,338
193.27	3,951	7,377
193.28	3,959	7,417
193.29	3,967	7,457
193.30	3,975	7,496
193.31	3,983	7,536
193.32	3,991	7,576
193.33	4,000	7,616
193.34	4,008	7,656
193.35	4,016	7,696
193.36	4,024	7,736
193.37	4,032	7,777
193.38	4,040	7,817
193.39	4,049	7,857
193.40	4,057	7,898
193.41	4,065	7,938
193.42	4,073	7,979
193.43	4,081	8,020
193.44	4,089	8,061
193.45	4,098	8,102
193.46	4,106	8,143
193.47	4,114	8,184
193.48	4,122	8,225
193.49	4,130	8,266
193.50	4,139	8,308
193.51	4,147	8,349
193.52	4,155	8,391
193.53	4,163	8,432
193.54	4,171	8,474
193.55	4,179	8,516
193.56	4,188	8,557
193.57	4,196	8,599
193.58	4,204	8,641
193.59	4,212	8,683
193.60	4,220	8,726
193.61	4,228	8,768

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.62	4,237	8,810	194.14	4,660	11,124
193.63	4,245	8,853	194.15	4,668	11,170
193.64	4,253	8,895	194.16	4,676	11,217
193.65	4,261	8,938	194.17	4,685	11,264
193.66	4,269	8,980	194.18	4,693	11,311
193.67	4,277	9,023	194.19	4,701	11,358
193.68	4,286	9,066	194.20	4,709	11,405
193.69	4,294	9,109	194.21	4,717	11,452
193.70	4,302	9,152	194.22	4,725	11,499
193.71	4,310	9,195	194.23	4,733	11,546
193.72	4,318	9,238	194.24	4,741	11,594
193.73	4,326	9,281	194.25	4,749	11,641
193.74	4,335	9,324	194.26	4,757	11,689
193.75	4,343	9,368	194.27	4,765	11,736
193.76	4,351	9,411	194.28	4,774	11,784
193.77	4,359	9,455	194.29	4,782	11,832
193.78	4,367	9,498	194.30	4,790	11,880
193.79	4,375	9,542	194.31	4,798	11,927
193.80	4,384	9,586	194.32	4,806	11,975
193.81	4,392	9,630	194.33	4,814	12,024
193.82	4,400	9,674	194.34	4,822	12,072
193.83	4,408	9,718	194.35	4,830	12,120
193.84	4,416	9,762	194.36	4,838	12,168
193.85	4,424	9,806	194.37	4,846	12,217
193.86	4,433	9,850	194.38	4,854	12,265
193.87	4,441	9,895	194.39	4,863	12,314
193.88	4,449	9,939	194.40	4,871	12,363
193.89	4,457	9,984	194.41	4,879	12,411
193.90	4,465	10,028	194.42	4,887	12,460
193.91	4,473	10,073	194.43	4,895	12,509
193.92	4,482	10,118	194.44	4,903	12,558
193.93	4,490	10,163	194.45	4,911	12,607
193.94	4,498	10,208	194.46	4,919	12,656
193.95	4,506	10,253	194.47	4,927	12,705
193.96	4,514	10,298	194.48	4,935	12,755
193.97	4,522	10,343	194.49	4,943	12,804
193.98	4,531	10,388	194.50	4,952	12,854
193.99	4,539	10,434	194.51	4,960	12,903
194.00	4,547	10,479	194.52	4,968	12,953
194.01	4,555	10,525	194.53	4,976	13,003
194.02	4,563	10,570	194.54	4,984	13,052
194.03	4,571	10,616	194.55	4,992	13,102
194.04	4,579	10,662	194.56	5,000	13,152
194.05	4,587	10,707	194.57	5,008	13,202
194.06	4,596	10,753	194.58	5,016	13,252
194.07	4,604	10,799	194.59	5,024	13,303
194.08	4,612	10,845	194.60	5,032	13,353
194.09	4,620	10,892	194.61	5,040	13,403
194.10	4,628	10,938	194.62	5,049	13,454
194.11	4,636	10,984	194.63	5,057	13,504
194.12	4,644	11,030	194.64	5,065	13,555
194.13	4,652	11,077	194.65	5,073	13,605

Stage-Area-Storage for Pond B-36B: Basin #36B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.66	5,081	13,656
194.67	5,089	13,707
194.68	5,097	13,758
194.69	5,105	13,809
194.70	5,113	13,860
194.71	5,121	13,911
194.72	5,129	13,963
194.73	5,138	14,014
194.74	5,146	14,065
194.75	5,154	14,117
194.76	5,162	14,168
194.77	5,170	14,220
194.78	5,178	14,272
194.79	5,186	14,324
194.80	5,194	14,375
194.81	5,202	14,427
194.82	5,210	14,480
194.83	5,218	14,532
194.84	5,227	14,584
194.85	5,235	14,636
194.86	5,243	14,689
194.87	5,251	14,741
194.88	5,259	14,794
194.89	5,267	14,846
194.90	5,275	14,899
194.91	5,283	14,952
194.92	5,291	15,005
194.93	5,299	15,058
194.94	5,307	15,111
194.95	5,316	15,164
194.96	5,324	15,217
194.97	5,332	15,270
194.98	5,340	15,324
194.99	5,348	15,377
195.00	5,356	15,431
195.01	5,386	15,484
195.02	5,417	15,538
195.03	5,447	15,593
195.04	5,477	15,647
195.05	5,507	15,702
195.06	5,538	15,757
195.07	5,568	15,813
195.08	5,598	15,869
195.09	5,629	15,925
195.10	5,659	15,981
195.11	5,689	16,038
195.12	5,719	16,095
195.13	5,750	16,152
195.14	5,780	16,210
195.15	5,810	16,268
195.16	5,840	16,326
195.17	5,871	16,385
195.18	5,901	16,444
195.19	5,931	16,503
195.20	5,962	16,562
195.21	5,992	16,622
195.22	6,022	16,682
195.23	6,052	16,742
195.24	6,083	16,803
195.25	**6,113**	**16,864**

Summary for Pond B-37A: Basin #37A

Inflow Area = 2.154 ac, 39.65% Impervious, Inflow Depth = 9.12" for Future 100 yr event
Inflow = 19.86 cfs @ 12.17 hrs, Volume= 1.637 af
Outflow = 12.73 cfs @ 12.29 hrs, Volume= 1.554 af, Atten= 36%, Lag= 7.0 min
Primary = 12.73 cfs @ 12.29 hrs, Volume= 1.554 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 197.94' @ 12.29 hrs Surf.Area= 5,853 sf Storage= 18,202 cf

Plug-Flow detention time= 142.2 min calculated for 1.554 af (95% of inflow)
Center-of-Mass det. time= 112.4 min (889.4 - 777.1)

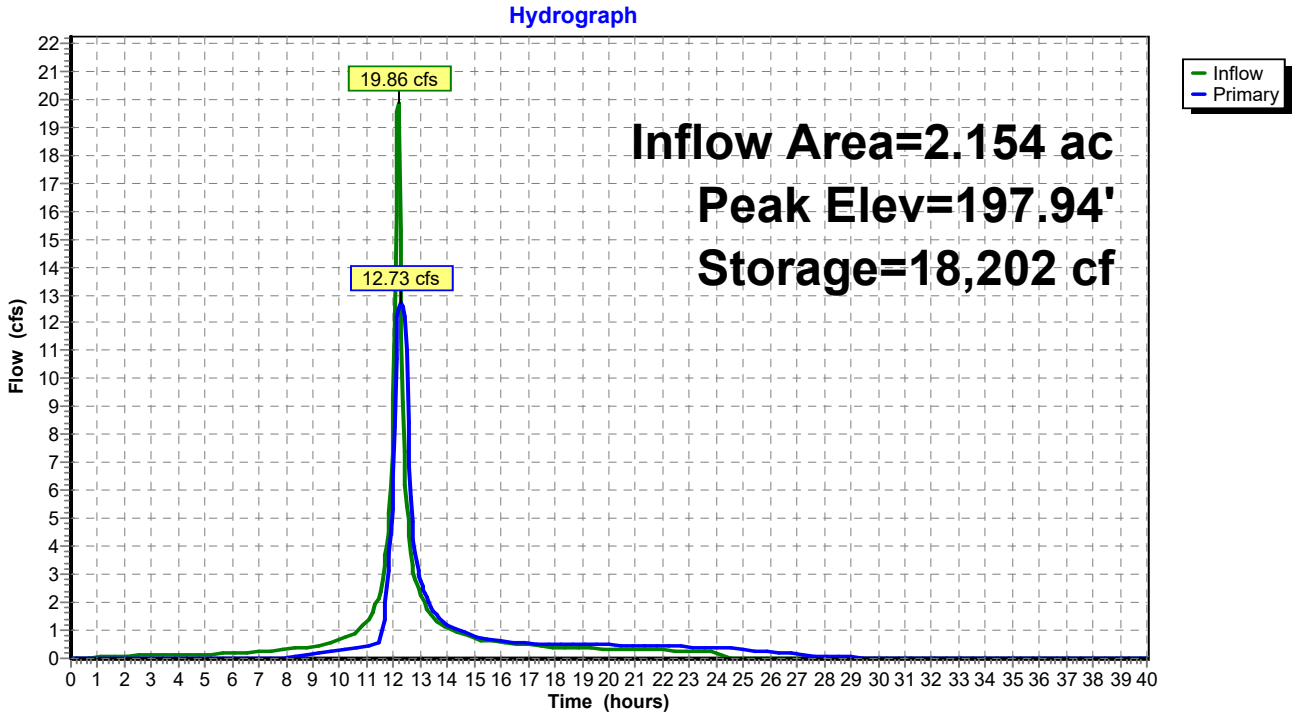
Volume	Invert	Avail.Storage	Storage Description
#1	193.30'	18,546 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.30	0	0	0
194.00	2,990	1,046	1,046
195.00	3,633	3,312	4,358
196.00	4,332	3,983	8,340
197.00	5,089	4,711	13,051
198.00	5,901	5,495	18,546

Device	Routing	Invert	Outlet Devices
#1	Primary	192.65'	**18.0" Round Culvert** L= 265.0' Ke= 0.500 Inlet / Outlet Invert= 192.65' / 191.33' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.77'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	196.48'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.72 cfs @ 12.29 hrs HW=197.93' (Free Discharge)
- **1=Culvert** (Barrel Controls 12.72 cfs @ 7.20 fps)
  - **2=Orifice/Grate** (Passes < 0.73 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 21.23 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-37A: Basin #37A



Stage-Discharge for Pond B-37A: Basin #37A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.02
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.02
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.03
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.03
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.04
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.04
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.05
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.06
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.06
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.07
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.08
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.08
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.09
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.10
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.10
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.11
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.12
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.13
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.13
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.14
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.15
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.15
193.52	0.00	194.04	0.00	194.56	0.00	195.08	0.16
193.53	0.00	194.05	0.00	194.57	0.00	195.09	0.17
193.54	0.00	194.06	0.00	194.58	0.00	195.10	0.17
193.55	0.00	194.07	0.00	194.59	0.00	195.11	0.17
193.56	0.00	194.08	0.00	194.60	0.00	195.12	0.18
193.57	0.00	194.09	0.00	194.61	0.00	195.13	0.18
193.58	0.00	194.10	0.00	194.62	0.00	195.14	0.19
193.59	0.00	194.11	0.00	194.63	0.00	195.15	0.19
193.60	0.00	194.12	0.00	194.64	0.00	195.16	0.20
193.61	0.00	194.13	0.00	194.65	0.00	195.17	0.20
193.62	0.00	194.14	0.00	194.66	0.00	195.18	0.21
193.63	0.00	194.15	0.00	194.67	0.00	195.19	0.21
193.64	0.00	194.16	0.00	194.68	0.00	195.20	0.22
193.65	0.00	194.17	0.00	194.69	0.00	195.21	0.22
193.66	0.00	194.18	0.00	194.70	0.00	195.22	0.22
193.67	0.00	194.19	0.00	194.71	0.00	195.23	0.23
193.68	0.00	194.20	0.00	194.72	0.00	195.24	0.23
193.69	0.00	194.21	0.00	194.73	0.00	195.25	0.24
193.70	0.00	194.22	0.00	194.74	0.00	195.26	0.24
193.71	0.00	194.23	0.00	194.75	0.00	195.27	0.24
193.72	0.00	194.24	0.00	194.76	0.00	195.28	0.25
193.73	0.00	194.25	0.00	194.77	0.00	195.29	0.25
193.74	0.00	194.26	0.00	194.78	0.00	195.30	0.25
193.75	0.00	194.27	0.00	194.79	0.00	195.31	0.26
193.76	0.00	194.28	0.00	194.80	0.00	195.32	0.26
193.77	0.00	194.29	0.00	194.81	0.00	195.33	0.26
193.78	0.00	194.30	0.00	194.82	0.01	195.34	0.27
193.79	0.00	194.31	0.00	194.83	0.01	195.35	0.27
193.80	0.00	194.32	0.00	194.84	0.01	195.36	0.27
193.81	0.00	194.33	0.00	194.85	0.02	195.37	0.28

Stage-Discharge for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.38	0.28	195.90	0.41	196.42	0.51	196.94	4.58
195.39	0.28	195.91	0.41	196.43	0.51	196.95	4.71
195.40	0.29	195.92	0.42	196.44	0.52	196.96	4.84
195.41	0.29	195.93	0.42	196.45	0.52	196.97	4.98
195.42	0.29	195.94	0.42	196.46	0.52	196.98	5.11
195.43	0.30	195.95	0.42	196.47	0.52	196.99	5.24
195.44	0.30	195.96	0.43	196.48	0.52	197.00	5.38
195.45	0.30	195.97	0.43	196.49	0.54	197.01	5.52
195.46	0.30	195.98	0.43	196.50	0.56	197.02	5.66
195.47	0.31	195.99	0.43	196.51	0.59	197.03	5.80
195.48	0.31	196.00	0.43	196.52	0.63	197.04	5.94
195.49	0.31	196.01	0.44	196.53	0.68	197.05	6.08
195.50	0.32	196.02	0.44	196.54	0.72	197.06	6.22
195.51	0.32	196.03	0.44	196.55	0.78	197.07	6.37
195.52	0.32	196.04	0.44	196.56	0.83	197.08	6.51
195.53	0.32	196.05	0.44	196.57	0.89	197.09	6.66
195.54	0.33	196.06	0.45	196.58	0.95	197.10	6.81
195.55	0.33	196.07	0.45	196.59	1.01	197.11	6.95
195.56	0.33	196.08	0.45	196.60	1.08	197.12	7.10
195.57	0.33	196.09	0.45	196.61	1.15	197.13	7.25
195.58	0.34	196.10	0.45	196.62	1.23	197.14	7.41
195.59	0.34	196.11	0.46	196.63	1.30	197.15	7.56
195.60	0.34	196.12	0.46	196.64	1.38	197.16	7.71
195.61	0.34	196.13	0.46	196.65	1.46	197.17	7.87
195.62	0.35	196.14	0.46	196.66	1.54	197.18	8.02
195.63	0.35	196.15	0.46	196.67	1.63	197.19	8.18
195.64	0.35	196.16	0.46	196.68	1.71	197.20	8.34
195.65	0.35	196.17	0.47	196.69	1.80	197.21	8.49
195.66	0.36	196.18	0.47	196.70	1.89	197.22	8.65
195.67	0.36	196.19	0.47	196.71	1.99	197.23	8.81
195.68	0.36	196.20	0.47	196.72	2.08	197.24	8.97
195.69	0.36	196.21	0.47	196.73	2.18	197.25	9.14
195.70	0.37	196.22	0.48	196.74	2.28	197.26	9.30
195.71	0.37	196.23	0.48	196.75	2.38	197.27	9.46
195.72	0.37	196.24	0.48	196.76	2.48	197.28	9.63
195.73	0.37	196.25	0.48	196.77	2.58	197.29	9.79
195.74	0.38	196.26	0.48	196.78	2.69	197.30	9.96
195.75	0.38	196.27	0.49	196.79	2.79	197.31	10.13
195.76	0.38	196.28	0.49	196.80	2.90	197.32	10.30
195.77	0.38	196.29	0.49	196.81	3.01	197.33	10.46
195.78	0.39	196.30	0.49	196.82	3.13	197.34	10.63
195.79	0.39	196.31	0.49	196.83	3.24	197.35	10.81
195.80	0.39	196.32	0.49	196.84	3.35	197.36	10.98
195.81	0.39	196.33	0.50	196.85	3.47	197.37	11.15
195.82	0.39	196.34	0.50	196.86	3.59	197.38	11.32
195.83	0.40	196.35	0.50	196.87	3.71	197.39	11.50
195.84	0.40	196.36	0.50	196.88	3.83	197.40	11.67
195.85	0.40	196.37	0.50	196.89	3.95	197.41	11.85
195.86	0.40	196.38	0.50	196.90	4.07	197.42	12.02
195.87	0.41	196.39	0.51	196.91	4.20	197.43	12.07
195.88	0.41	196.40	0.51	196.92	4.33	197.44	12.09
195.89	0.41	196.41	0.51	196.93	4.45	197.45	12.10

Stage-Discharge for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Primary (cfs)
197.46	12.11
197.47	12.13
197.48	12.14
197.49	12.15
197.50	12.17
197.51	12.18
197.52	12.19
197.53	12.20
197.54	12.22
197.55	12.23
197.56	12.24
197.57	12.26
197.58	12.27
197.59	12.28
197.60	12.29
197.61	12.31
197.62	12.32
197.63	12.33
197.64	12.35
197.65	12.36
197.66	12.37
197.67	12.38
197.68	12.40
197.69	12.41
197.70	12.42
197.71	12.44
197.72	12.45
197.73	12.46
197.74	12.47
197.75	12.49
197.76	12.50
197.77	12.51
197.78	12.52
197.79	12.54
197.80	12.55
197.81	12.56
197.82	12.57
197.83	12.59
197.84	12.60
197.85	12.61
197.86	12.63
197.87	12.64
197.88	12.65
197.89	12.66
197.90	12.68
197.91	12.69
197.92	12.70
197.93	12.71
197.94	12.73
197.95	12.74
197.96	12.87
197.97	13.09
197.98	13.38
197.99	13.73
198.00	**14.11**

Stage-Area-Storage for Pond B-37A: Basin #37A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.30	0	0
193.31	43	0
193.32	85	1
193.33	128	2
193.34	171	3
193.35	214	5
193.36	256	8
193.37	299	10
193.38	342	14
193.39	384	17
193.40	427	21
193.41	470	26
193.42	513	31
193.43	555	36
193.44	598	42
193.45	641	48
193.46	683	55
193.47	726	62
193.48	769	69
193.49	812	77
193.50	854	85
193.51	897	94
193.52	940	103
193.53	982	113
193.54	1,025	123
193.55	1,068	133
193.56	1,111	144
193.57	1,153	156
193.58	1,196	167
193.59	1,239	180
193.60	1,281	192
193.61	1,324	205
193.62	1,367	219
193.63	1,410	233
193.64	1,452	247
193.65	1,495	262
193.66	1,538	277
193.67	1,580	292
193.68	1,623	308
193.69	1,666	325
193.70	1,709	342
193.71	1,751	359
193.72	1,794	377
193.73	1,837	395
193.74	1,879	413
193.75	1,922	432
193.76	1,965	452
193.77	2,008	472
193.78	2,050	492
193.79	2,093	513
193.80	2,136	534
193.81	2,178	555
193.82	2,221	577
193.83	2,264	600
193.84	2,307	623
193.85	2,349	646
193.86	2,392	670
193.87	2,435	694
193.88	2,477	718
193.89	2,520	743
193.90	2,563	769
193.91	2,606	795
193.92	2,648	821
193.93	2,691	848
193.94	2,734	875
193.95	2,776	902
193.96	2,819	930
193.97	2,862	959
193.98	2,905	988
193.99	2,947	1,017
194.00	2,990	1,046
194.01	2,996	1,076
194.02	3,003	1,106
194.03	3,009	1,136
194.04	3,016	1,167
194.05	3,022	1,197
194.06	3,029	1,227
194.07	3,035	1,257
194.08	3,041	1,288
194.09	3,048	1,318
194.10	3,054	1,349
194.11	3,061	1,379
194.12	3,067	1,410
194.13	3,074	1,441
194.14	3,080	1,471
194.15	3,086	1,502
194.16	3,093	1,533
194.17	3,099	1,564
194.18	3,106	1,595
194.19	3,112	1,626
194.20	3,119	1,657
194.21	3,125	1,689
194.22	3,131	1,720
194.23	3,138	1,751
194.24	3,144	1,783
194.25	3,151	1,814
194.26	3,157	1,846
194.27	3,164	1,877
194.28	3,170	1,909
194.29	3,176	1,941
194.30	3,183	1,972
194.31	3,189	2,004
194.32	3,196	2,036
194.33	3,202	2,068

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.34	3,209	2,100
194.35	3,215	2,132
194.36	3,221	2,165
194.37	3,228	2,197
194.38	3,234	2,229
194.39	3,241	2,262
194.40	3,247	2,294
194.41	3,254	2,326
194.42	3,260	2,359
194.43	3,266	2,392
194.44	3,273	2,424
194.45	3,279	2,457
194.46	3,286	2,490
194.47	3,292	2,523
194.48	3,299	2,556
194.49	3,305	2,589
194.50	3,312	2,622
194.51	3,318	2,655
194.52	3,324	2,688
194.53	3,331	2,722
194.54	3,337	2,755
194.55	3,344	2,788
194.56	3,350	2,822
194.57	3,357	2,855
194.58	3,363	2,889
194.59	3,369	2,923
194.60	3,376	2,956
194.61	3,382	2,990
194.62	3,389	3,024
194.63	3,395	3,058
194.64	3,402	3,092
194.65	3,408	3,126
194.66	3,414	3,160
194.67	3,421	3,194
194.68	3,427	3,228
194.69	3,434	3,263
194.70	3,440	3,297
194.71	3,447	3,331
194.72	3,453	3,366
194.73	3,459	3,401
194.74	3,466	3,435
194.75	3,472	3,470
194.76	3,479	3,505
194.77	3,485	3,539
194.78	3,492	3,574
194.79	3,498	3,609
194.80	3,504	3,644
194.81	3,511	3,679
194.82	3,517	3,714
194.83	3,524	3,750
194.84	3,530	3,785
194.85	3,537	3,820
194.86	3,543	3,856
194.87	3,549	3,891
194.88	3,556	3,927
194.89	3,562	3,962
194.90	3,569	3,998
194.91	3,575	4,034
194.92	3,582	4,069
194.93	3,588	4,105
194.94	3,594	4,141
194.95	3,601	4,177
194.96	3,607	4,213
194.97	3,614	4,249
194.98	3,620	4,285
194.99	3,627	4,322
195.00	3,633	4,358
195.01	3,640	4,394
195.02	3,647	4,431
195.03	3,654	4,467
195.04	3,661	4,504
195.05	3,668	4,541
195.06	3,675	4,577
195.07	3,682	4,614
195.08	3,689	4,651
195.09	3,696	4,688
195.10	3,703	4,725
195.11	3,710	4,762
195.12	3,717	4,799
195.13	3,724	4,836
195.14	3,731	4,873
195.15	3,738	4,911
195.16	3,745	4,948
195.17	3,752	4,986
195.18	3,759	5,023
195.19	3,766	5,061
195.20	3,773	5,099
195.21	3,780	5,136
195.22	3,787	5,174
195.23	3,794	5,212
195.24	3,801	5,250
195.25	3,808	5,288
195.26	3,815	5,326
195.27	3,822	5,364
195.28	3,829	5,403
195.29	3,836	5,441
195.30	3,843	5,479
195.31	3,850	5,518
195.32	3,857	5,556
195.33	3,864	5,595
195.34	3,871	5,634
195.35	3,878	5,672
195.36	3,885	5,711
195.37	3,892	5,750

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.38	3,899	5,789	195.90	4,262	7,911
195.39	3,906	5,828	195.91	4,269	7,953
195.40	3,913	5,867	195.92	4,276	7,996
195.41	3,920	5,906	195.93	4,283	8,039
195.42	3,927	5,946	195.94	4,290	8,082
195.43	3,934	5,985	195.95	4,297	8,125
195.44	3,941	6,024	195.96	4,304	8,168
195.45	3,948	6,064	195.97	4,311	8,211
195.46	3,955	6,103	195.98	4,318	8,254
195.47	3,962	6,143	195.99	4,325	8,297
195.48	3,969	6,182	196.00	4,332	8,340
195.49	3,976	6,222	196.01	4,340	8,384
195.50	3,983	6,262	196.02	4,347	8,427
195.51	3,989	6,302	196.03	4,355	8,471
195.52	3,996	6,342	196.04	4,362	8,514
195.53	4,003	6,382	196.05	4,370	8,558
195.54	4,010	6,422	196.06	4,377	8,602
195.55	4,017	6,462	196.07	4,385	8,646
195.56	4,024	6,502	196.08	4,393	8,689
195.57	4,031	6,542	196.09	4,400	8,733
195.58	4,038	6,583	196.10	4,408	8,777
195.59	4,045	6,623	196.11	4,415	8,822
195.60	4,052	6,664	196.12	4,423	8,866
195.61	4,059	6,704	196.13	4,430	8,910
195.62	4,066	6,745	196.14	4,438	8,954
195.63	4,073	6,786	196.15	4,446	8,999
195.64	4,080	6,826	196.16	4,453	9,043
195.65	4,087	6,867	196.17	4,461	9,088
195.66	4,094	6,908	196.18	4,468	9,133
195.67	4,101	6,949	196.19	4,476	9,177
195.68	4,108	6,990	196.20	4,483	9,222
195.69	4,115	7,031	196.21	4,491	9,267
195.70	4,122	7,072	196.22	4,499	9,312
195.71	4,129	7,114	196.23	4,506	9,357
195.72	4,136	7,155	196.24	4,514	9,402
195.73	4,143	7,196	196.25	4,521	9,447
195.74	4,150	7,238	196.26	4,529	9,492
195.75	4,157	7,279	196.27	4,536	9,538
195.76	4,164	7,321	196.28	4,544	9,583
195.77	4,171	7,363	196.29	4,552	9,629
195.78	4,178	7,404	196.30	4,559	9,674
195.79	4,185	7,446	196.31	4,567	9,720
195.80	4,192	7,488	196.32	4,574	9,765
195.81	4,199	7,530	196.33	4,582	9,811
195.82	4,206	7,572	196.34	4,589	9,857
195.83	4,213	7,614	196.35	4,597	9,903
195.84	4,220	7,656	196.36	4,605	9,949
195.85	4,227	7,699	196.37	4,612	9,995
195.86	4,234	7,741	196.38	4,620	10,041
195.87	4,241	7,783	196.39	4,627	10,088
195.88	4,248	7,826	196.40	4,635	10,134
195.89	4,255	7,868	196.41	4,642	10,180

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.42	4,650	10,227	196.94	5,044	12,747
196.43	4,658	10,273	196.95	5,051	12,797
196.44	4,665	10,320	196.96	5,059	12,848
196.45	4,673	10,367	196.97	5,066	12,899
196.46	4,680	10,413	196.98	5,074	12,949
196.47	4,688	10,460	196.99	5,081	13,000
196.48	4,695	10,507	197.00	5,089	13,051
196.49	4,703	10,554	197.01	5,097	13,102
196.50	4,711	10,601	197.02	5,105	13,153
196.51	4,718	10,648	197.03	5,113	13,204
196.52	4,726	10,695	197.04	5,121	13,255
196.53	4,733	10,743	197.05	5,130	13,306
196.54	4,741	10,790	197.06	5,138	13,358
196.55	4,748	10,838	197.07	5,146	13,409
196.56	4,756	10,885	197.08	5,154	13,461
196.57	4,763	10,933	197.09	5,162	13,512
196.58	4,771	10,980	197.10	5,170	13,564
196.59	4,779	11,028	197.11	5,178	13,616
196.60	4,786	11,076	197.12	5,186	13,668
196.61	4,794	11,124	197.13	5,195	13,719
196.62	4,801	11,172	197.14	5,203	13,771
196.63	4,809	11,220	197.15	5,211	13,823
196.64	4,816	11,268	197.16	5,219	13,876
196.65	4,824	11,316	197.17	5,227	13,928
196.66	4,832	11,364	197.18	5,235	13,980
196.67	4,839	11,413	197.19	5,243	14,033
196.68	4,847	11,461	197.20	5,251	14,085
196.69	4,854	11,510	197.21	5,260	14,138
196.70	4,862	11,558	197.22	5,268	14,190
196.71	4,869	11,607	197.23	5,276	14,243
196.72	4,877	11,656	197.24	5,284	14,296
196.73	4,885	11,705	197.25	5,292	14,349
196.74	4,892	11,753	197.26	5,300	14,402
196.75	4,900	11,802	197.27	5,308	14,455
196.76	4,907	11,851	197.28	5,316	14,508
196.77	4,915	11,901	197.29	5,324	14,561
196.78	4,922	11,950	197.30	5,333	14,614
196.79	4,930	11,999	197.31	5,341	14,668
196.80	4,938	12,048	197.32	5,349	14,721
196.81	4,945	12,098	197.33	5,357	14,775
196.82	4,953	12,147	197.34	5,365	14,828
196.83	4,960	12,197	197.35	5,373	14,882
196.84	4,968	12,246	197.36	5,381	14,936
196.85	4,975	12,296	197.37	5,389	14,990
196.86	4,983	12,346	197.38	5,398	15,043
196.87	4,991	12,396	197.39	5,406	15,097
196.88	4,998	12,446	197.40	5,414	15,152
196.89	5,006	12,496	197.41	5,422	15,206
196.90	5,013	12,546	197.42	5,430	15,260
196.91	5,021	12,596	197.43	5,438	15,314
196.92	5,028	12,646	197.44	5,446	15,369
196.93	5,036	12,697	197.45	5,454	15,423

Stage-Area-Storage for Pond B-37A: Basin #37A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.46	5,463	15,478
197.47	5,471	15,533
197.48	5,479	15,587
197.49	5,487	15,642
197.50	5,495	15,697
197.51	5,503	15,752
197.52	5,511	15,807
197.53	5,519	15,862
197.54	5,527	15,917
197.55	5,536	15,973
197.56	5,544	16,028
197.57	5,552	16,084
197.58	5,560	16,139
197.59	5,568	16,195
197.60	5,576	16,251
197.61	5,584	16,306
197.62	5,592	16,362
197.63	5,601	16,418
197.64	5,609	16,474
197.65	5,617	16,530
197.66	5,625	16,587
197.67	5,633	16,643
197.68	5,641	16,699
197.69	5,649	16,756
197.70	5,657	16,812
197.71	5,666	16,869
197.72	5,674	16,926
197.73	5,682	16,982
197.74	5,690	17,039
197.75	5,698	17,096
197.76	5,706	17,153
197.77	5,714	17,210
197.78	5,722	17,267
197.79	5,730	17,325
197.80	5,739	17,382
197.81	5,747	17,439
197.82	5,755	17,497
197.83	5,763	17,555
197.84	5,771	17,612
197.85	5,779	17,670
197.86	5,787	17,728
197.87	5,795	17,786
197.88	5,804	17,844
197.89	5,812	17,902
197.90	5,820	17,960
197.91	5,828	18,018
197.92	5,836	18,077
197.93	5,844	18,135
197.94	5,852	18,193
197.95	5,860	18,252
197.96	5,869	18,311
197.97	5,877	18,369
197.98	5,885	18,428
197.99	5,893	18,487
198.00	**5,901**	**18,546**

Summary for Pond B-37B: Basin #37B

Inflow Area = 2.179 ac, 53.42% Impervious, Inflow Depth = 9.55" for Future 100 yr event
Inflow = 20.61 cfs @ 12.17 hrs, Volume= 1.734 af
Outflow = 12.95 cfs @ 12.30 hrs, Volume= 1.592 af, Atten= 37%, Lag= 7.7 min
Primary = 12.95 cfs @ 12.30 hrs, Volume= 1.592 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 197.96' @ 12.29 hrs Surf.Area= 8,061 sf Storage= 24,332 cf

Plug-Flow detention time= 241.7 min calculated for 1.592 af (92% of inflow)
Center-of-Mass det. time= 197.0 min (964.8 - 767.8)

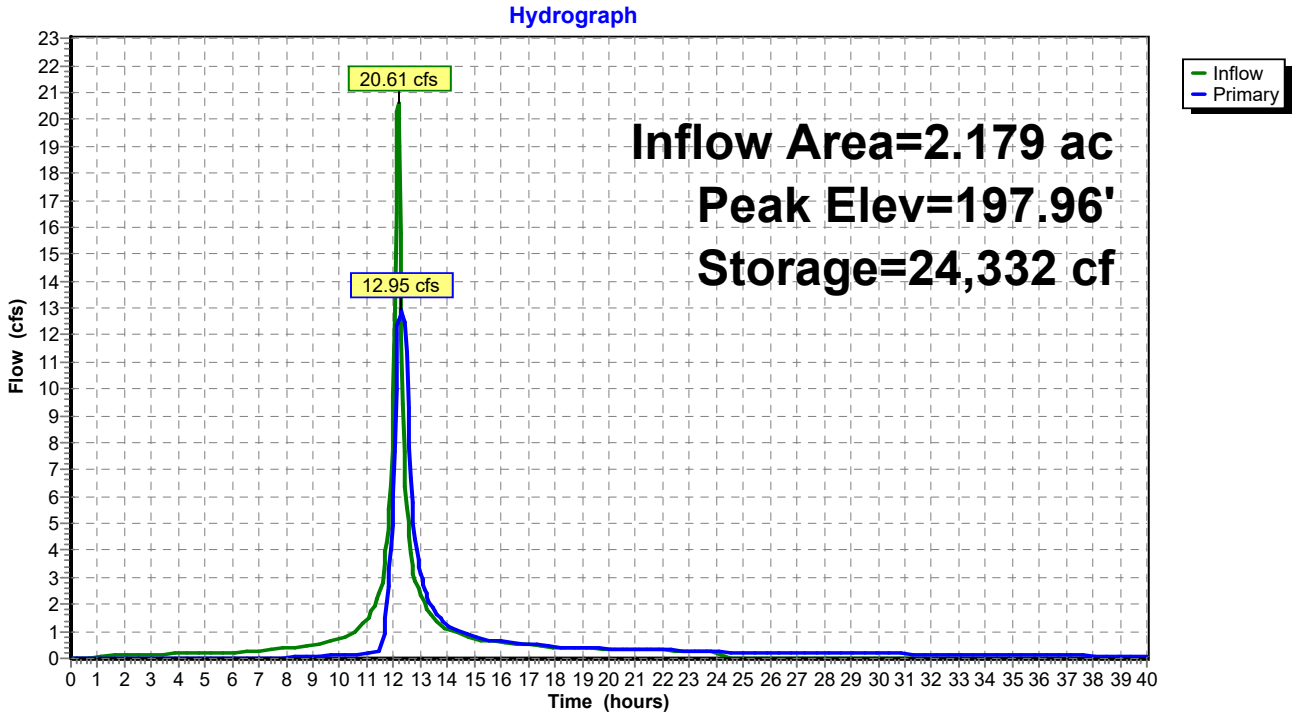
Volume	Invert	Avail.Storage	Storage Description
#1	193.30'	24,651 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.30	0	0	0
194.00	3,709	1,298	1,298
195.00	4,724	4,217	5,515
196.00	5,796	5,260	10,775
197.00	6,924	6,360	17,135
198.00	8,108	7,516	24,651

Device	Routing	Invert	Outlet Devices
#1	Primary	192.65'	**18.0" Round Culvert** L= 265.0' Ke= 0.500 Inlet / Outlet Invert= 192.65' / 191.33' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	194.81'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	196.63'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.95'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.85 cfs @ 12.30 hrs HW=197.96' (Free Discharge)
- **1=Culvert** (Barrel Controls 12.75 cfs @ 7.21 fps)
  - **2=Orifice/Grate** (Passes < 0.29 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 18.70 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 0.10 cfs @ 0.22 fps)

Pond B-37B: Basin #37B



Stage-Discharge for Pond B-37B: Basin #37B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.01
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.01
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.01
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.01
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.02
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.02
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.02
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.03
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.03
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.03
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.04
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.04
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.05
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.05
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.05
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.05
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.06
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.06
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.06
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.06
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.06
193.52	0.00	194.04	0.00	194.56	0.00	195.08	0.07
193.53	0.00	194.05	0.00	194.57	0.00	195.09	0.07
193.54	0.00	194.06	0.00	194.58	0.00	195.10	0.07
193.55	0.00	194.07	0.00	194.59	0.00	195.11	0.07
193.56	0.00	194.08	0.00	194.60	0.00	195.12	0.07
193.57	0.00	194.09	0.00	194.61	0.00	195.13	0.08
193.58	0.00	194.10	0.00	194.62	0.00	195.14	0.08
193.59	0.00	194.11	0.00	194.63	0.00	195.15	0.08
193.60	0.00	194.12	0.00	194.64	0.00	195.16	0.08
193.61	0.00	194.13	0.00	194.65	0.00	195.17	0.08
193.62	0.00	194.14	0.00	194.66	0.00	195.18	0.08
193.63	0.00	194.15	0.00	194.67	0.00	195.19	0.09
193.64	0.00	194.16	0.00	194.68	0.00	195.20	0.09
193.65	0.00	194.17	0.00	194.69	0.00	195.21	0.09
193.66	0.00	194.18	0.00	194.70	0.00	195.22	0.09
193.67	0.00	194.19	0.00	194.71	0.00	195.23	0.09
193.68	0.00	194.20	0.00	194.72	0.00	195.24	0.09
193.69	0.00	194.21	0.00	194.73	0.00	195.25	0.10
193.70	0.00	194.22	0.00	194.74	0.00	195.26	0.10
193.71	0.00	194.23	0.00	194.75	0.00	195.27	0.10
193.72	0.00	194.24	0.00	194.76	0.00	195.28	0.10
193.73	0.00	194.25	0.00	194.77	0.00	195.29	0.10
193.74	0.00	194.26	0.00	194.78	0.00	195.30	0.10
193.75	0.00	194.27	0.00	194.79	0.00	195.31	0.10
193.76	0.00	194.28	0.00	194.80	0.00	195.32	0.10
193.77	0.00	194.29	0.00	194.81	0.00	195.33	0.11
193.78	0.00	194.30	0.00	194.82	0.00	195.34	0.11
193.79	0.00	194.31	0.00	194.83	0.00	195.35	0.11
193.80	0.00	194.32	0.00	194.84	0.00	195.36	0.11
193.81	0.00	194.33	0.00	194.85	0.00	195.37	0.11

Stage-Discharge for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.38	0.11	195.90	0.16	196.42	0.20	196.94	2.46
195.39	0.11	195.91	0.16	196.43	0.20	196.95	2.56
195.40	0.11	195.92	0.16	196.44	0.20	196.96	2.67
195.41	0.12	195.93	0.17	196.45	0.20	196.97	2.78
195.42	0.12	195.94	0.17	196.46	0.20	196.98	2.90
195.43	0.12	195.95	0.17	196.47	0.20	196.99	3.01
195.44	0.12	195.96	0.17	196.48	0.21	197.00	3.13
195.45	0.12	195.97	0.17	196.49	0.21	197.01	3.24
195.46	0.12	195.98	0.17	196.50	0.21	197.02	3.36
195.47	0.12	195.99	0.17	196.51	0.21	197.03	3.48
195.48	0.12	196.00	0.17	196.52	0.21	197.04	3.60
195.49	0.12	196.01	0.17	196.53	0.21	197.05	3.73
195.50	0.13	196.02	0.17	196.54	0.21	197.06	3.85
195.51	0.13	196.03	0.17	196.55	0.21	197.07	3.97
195.52	0.13	196.04	0.17	196.56	0.21	197.08	4.10
195.53	0.13	196.05	0.17	196.57	0.21	197.09	4.23
195.54	0.13	196.06	0.18	196.58	0.21	197.10	4.36
195.55	0.13	196.07	0.18	196.59	0.21	197.11	4.49
195.56	0.13	196.08	0.18	196.60	0.21	197.12	4.62
195.57	0.13	196.09	0.18	196.61	0.21	197.13	4.75
195.58	0.13	196.10	0.18	196.62	0.21	197.14	4.89
195.59	0.13	196.11	0.18	196.63	0.22	197.15	5.02
195.60	0.14	196.12	0.18	196.64	0.23	197.16	5.16
195.61	0.14	196.13	0.18	196.65	0.25	197.17	5.30
195.62	0.14	196.14	0.18	196.66	0.28	197.18	5.44
195.63	0.14	196.15	0.18	196.67	0.32	197.19	5.58
195.64	0.14	196.16	0.18	196.68	0.36	197.20	5.72
195.65	0.14	196.17	0.18	196.69	0.41	197.21	5.86
195.66	0.14	196.18	0.18	196.70	0.46	197.22	6.00
195.67	0.14	196.19	0.19	196.71	0.51	197.23	6.15
195.68	0.14	196.20	0.19	196.72	0.57	197.24	6.29
195.69	0.14	196.21	0.19	196.73	0.63	197.25	6.44
195.70	0.15	196.22	0.19	196.74	0.70	197.26	6.59
195.71	0.15	196.23	0.19	196.75	0.76	197.27	6.73
195.72	0.15	196.24	0.19	196.76	0.83	197.28	6.88
195.73	0.15	196.25	0.19	196.77	0.90	197.29	7.03
195.74	0.15	196.26	0.19	196.78	0.98	197.30	7.19
195.75	0.15	196.27	0.19	196.79	1.06	197.31	7.34
195.76	0.15	196.28	0.19	196.80	1.13	197.32	7.49
195.77	0.15	196.29	0.19	196.81	1.22	197.33	7.65
195.78	0.15	196.30	0.19	196.82	1.30	197.34	7.80
195.79	0.15	196.31	0.19	196.83	1.39	197.35	7.96
195.80	0.15	196.32	0.19	196.84	1.47	197.36	8.12
195.81	0.16	196.33	0.20	196.85	1.56	197.37	8.28
195.82	0.16	196.34	0.20	196.86	1.66	197.38	8.43
195.83	0.16	196.35	0.20	196.87	1.75	197.39	8.60
195.84	0.16	196.36	0.20	196.88	1.84	197.40	8.76
195.85	0.16	196.37	0.20	196.89	1.94	197.41	8.92
195.86	0.16	196.38	0.20	196.90	2.04	197.42	9.08
195.87	0.16	196.39	0.20	196.91	2.14	197.43	9.25
195.88	0.16	196.40	0.20	196.92	2.25	197.44	9.41
195.89	0.16	196.41	0.20	196.93	2.35	197.45	9.58

Stage-Discharge for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Primary (cfs)
197.46	9.74
197.47	9.91
197.48	10.08
197.49	10.25
197.50	10.42
197.51	10.59
197.52	10.76
197.53	10.93
197.54	11.10
197.55	11.28
197.56	11.45
197.57	11.63
197.58	11.80
197.59	11.98
197.60	12.16
197.61	12.31
197.62	12.32
197.63	12.33
197.64	12.35
197.65	12.36
197.66	12.37
197.67	12.38
197.68	12.40
197.69	12.41
197.70	12.42
197.71	12.44
197.72	12.45
197.73	12.46
197.74	12.47
197.75	12.49
197.76	12.50
197.77	12.51
197.78	12.52
197.79	12.54
197.80	12.55
197.81	12.56
197.82	12.57
197.83	12.59
197.84	12.60
197.85	12.61
197.86	12.63
197.87	12.64
197.88	12.65
197.89	12.66
197.90	12.68
197.91	12.69
197.92	12.70
197.93	12.71
197.94	12.73
197.95	12.74
197.96	12.87
197.97	13.09
197.98	13.38
197.99	13.73
198.00	**14.11**

Stage-Area-Storage for Pond B-37B: Basin #37B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.30	0	0
193.31	53	0
193.32	106	1
193.33	159	2
193.34	212	4
193.35	265	7
193.36	318	10
193.37	371	13
193.38	424	17
193.39	477	21
193.40	530	26
193.41	583	32
193.42	636	38
193.43	689	45
193.44	742	52
193.45	795	60
193.46	848	68
193.47	901	77
193.48	954	86
193.49	1,007	96
193.50	1,060	106
193.51	1,113	117
193.52	1,166	128
193.53	1,219	140
193.54	1,272	153
193.55	1,325	166
193.56	1,378	179
193.57	1,431	193
193.58	1,484	208
193.59	1,537	223
193.60	1,590	238
193.61	1,643	255
193.62	1,696	271
193.63	1,749	289
193.64	1,802	306
193.65	1,855	325
193.66	1,907	343
193.67	1,960	363
193.68	2,013	383
193.69	2,066	403
193.70	2,119	424
193.71	2,172	445
193.72	2,225	467
193.73	2,278	490
193.74	2,331	513
193.75	2,384	536
193.76	2,437	561
193.77	2,490	585
193.78	2,543	610
193.79	2,596	636
193.80	2,649	662
193.81	2,702	689
193.82	2,755	716
193.83	2,808	744
193.84	2,861	773
193.85	2,914	801
193.86	2,967	831
193.87	3,020	861
193.88	3,073	891
193.89	3,126	922
193.90	3,179	954
193.91	3,232	986
193.92	3,285	1,018
193.93	3,338	1,052
193.94	3,391	1,085
193.95	3,444	1,119
193.96	3,497	1,154
193.97	3,550	1,189
193.98	3,603	1,225
193.99	3,656	1,261
194.00	3,709	1,298
194.01	3,719	1,335
194.02	3,729	1,373
194.03	3,739	1,410
194.04	3,750	1,447
194.05	3,760	1,485
194.06	3,770	1,523
194.07	3,780	1,560
194.08	3,790	1,598
194.09	3,800	1,636
194.10	3,811	1,674
194.11	3,821	1,712
194.12	3,831	1,751
194.13	3,841	1,789
194.14	3,851	1,827
194.15	3,861	1,866
194.16	3,871	1,905
194.17	3,882	1,943
194.18	3,892	1,982
194.19	3,902	2,021
194.20	3,912	2,060
194.21	3,922	2,099
194.22	3,932	2,139
194.23	3,942	2,178
194.24	3,953	2,218
194.25	3,963	2,257
194.26	3,973	2,297
194.27	3,983	2,337
194.28	3,993	2,376
194.29	4,003	2,416
194.30	4,014	2,457
194.31	4,024	2,497
194.32	4,034	2,537
194.33	4,044	2,577

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.34	4,054	2,618
194.35	4,064	2,658
194.36	4,074	2,699
194.37	4,085	2,740
194.38	4,095	2,781
194.39	4,105	2,822
194.40	4,115	2,863
194.41	4,125	2,904
194.42	4,135	2,945
194.43	4,145	2,987
194.44	4,156	3,028
194.45	4,166	3,070
194.46	4,176	3,112
194.47	4,186	3,153
194.48	4,196	3,195
194.49	4,206	3,237
194.50	4,217	3,280
194.51	4,227	3,322
194.52	4,237	3,364
194.53	4,247	3,406
194.54	4,257	3,449
194.55	4,267	3,492
194.56	4,277	3,534
194.57	4,288	3,577
194.58	4,298	3,620
194.59	4,308	3,663
194.60	4,318	3,706
194.61	4,328	3,749
194.62	4,338	3,793
194.63	4,348	3,836
194.64	4,359	3,880
194.65	4,369	3,923
194.66	4,379	3,967
194.67	4,389	4,011
194.68	4,399	4,055
194.69	4,409	4,099
194.70	4,420	4,143
194.71	4,430	4,187
194.72	4,440	4,232
194.73	4,450	4,276
194.74	4,460	4,321
194.75	4,470	4,365
194.76	4,480	4,410
194.77	4,491	4,455
194.78	4,501	4,500
194.79	4,511	4,545
194.80	4,521	4,590
194.81	4,531	4,635
194.82	4,541	4,681
194.83	4,551	4,726
194.84	4,562	4,772
194.85	4,572	4,817
194.86	4,582	4,863
194.87	4,592	4,909
194.88	4,602	4,955
194.89	4,612	5,001
194.90	4,623	5,047
194.91	4,633	5,094
194.92	4,643	5,140
194.93	4,653	5,186
194.94	4,663	5,233
194.95	4,673	5,280
194.96	4,683	5,327
194.97	4,694	5,373
194.98	4,704	5,420
194.99	4,714	5,467
195.00	4,724	5,515
195.01	4,735	5,562
195.02	4,745	5,609
195.03	4,756	5,657
195.04	4,767	5,704
195.05	4,778	5,752
195.06	4,788	5,800
195.07	4,799	5,848
195.08	4,810	5,896
195.09	4,820	5,944
195.10	4,831	5,992
195.11	4,842	6,041
195.12	4,853	6,089
195.13	4,863	6,138
195.14	4,874	6,187
195.15	4,885	6,235
195.16	4,896	6,284
195.17	4,906	6,333
195.18	4,917	6,382
195.19	4,928	6,432
195.20	4,938	6,481
195.21	4,949	6,530
195.22	4,960	6,580
195.23	4,971	6,630
195.24	4,981	6,679
195.25	4,992	6,729
195.26	5,003	6,779
195.27	5,013	6,829
195.28	5,024	6,879
195.29	5,035	6,930
195.30	5,046	6,980
195.31	5,056	7,031
195.32	5,067	7,081
195.33	5,078	7,132
195.34	5,088	7,183
195.35	5,099	7,234
195.36	5,110	7,285
195.37	5,121	7,336

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.38	5,131	7,387	195.90	5,689	10,200
195.39	5,142	7,439	195.91	5,700	10,257
195.40	5,153	7,490	195.92	5,710	10,314
195.41	5,164	7,542	195.93	5,721	10,372
195.42	5,174	7,593	195.94	5,732	10,429
195.43	5,185	7,645	195.95	5,742	10,486
195.44	5,196	7,697	195.96	5,753	10,544
195.45	5,206	7,749	195.97	5,764	10,601
195.46	5,217	7,801	195.98	5,775	10,659
195.47	5,228	7,853	195.99	5,785	10,717
195.48	5,239	7,906	196.00	5,796	10,775
195.49	5,249	7,958	196.01	5,807	10,833
195.50	5,260	8,011	196.02	5,819	10,891
195.51	5,271	8,063	196.03	5,830	10,949
195.52	5,281	8,116	196.04	5,841	11,007
195.53	5,292	8,169	196.05	5,852	11,066
195.54	5,303	8,222	196.06	5,864	11,124
195.55	5,314	8,275	196.07	5,875	11,183
195.56	5,324	8,328	196.08	5,886	11,242
195.57	5,335	8,381	196.09	5,898	11,301
195.58	5,346	8,435	196.10	5,909	11,360
195.59	5,356	8,488	196.11	5,920	11,419
195.60	5,367	8,542	196.12	5,931	11,478
195.61	5,378	8,596	196.13	5,943	11,538
195.62	5,389	8,650	196.14	5,954	11,597
195.63	5,399	8,704	196.15	5,965	11,657
195.64	5,410	8,758	196.16	5,976	11,716
195.65	5,421	8,812	196.17	5,988	11,776
195.66	5,432	8,866	196.18	5,999	11,836
195.67	5,442	8,920	196.19	6,010	11,896
195.68	5,453	8,975	196.20	6,022	11,956
195.69	5,464	9,029	196.21	6,033	12,017
195.70	5,474	9,084	196.22	6,044	12,077
195.71	5,485	9,139	196.23	6,055	12,138
195.72	5,496	9,194	196.24	6,067	12,198
195.73	5,507	9,249	196.25	6,078	12,259
195.74	5,517	9,304	196.26	6,089	12,320
195.75	5,528	9,359	196.27	6,101	12,381
195.76	5,539	9,414	196.28	6,112	12,442
195.77	5,549	9,470	196.29	6,123	12,503
195.78	5,560	9,525	196.30	6,134	12,564
195.79	5,571	9,581	196.31	6,146	12,626
195.80	5,582	9,637	196.32	6,157	12,687
195.81	5,592	9,693	196.33	6,168	12,749
195.82	5,603	9,749	196.34	6,180	12,810
195.83	5,614	9,805	196.35	6,191	12,872
195.84	5,624	9,861	196.36	6,202	12,934
195.85	5,635	9,917	196.37	6,213	12,996
195.86	5,646	9,974	196.38	6,225	13,059
195.87	5,657	10,030	196.39	6,236	13,121
195.88	5,667	10,087	196.40	6,247	13,183
195.89	5,678	10,144	196.41	6,258	13,246

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.42	6,270	13,308	196.94	6,856	16,721
196.43	6,281	13,371	196.95	6,868	16,790
196.44	6,292	13,434	196.96	6,879	16,859
196.45	6,304	13,497	196.97	6,890	16,927
196.46	6,315	13,560	196.98	6,901	16,996
196.47	6,326	13,623	196.99	6,913	17,065
196.48	6,337	13,687	197.00	6,924	17,135
196.49	6,349	13,750	197.01	6,936	17,204
196.50	6,360	13,814	197.02	6,948	17,273
196.51	6,371	13,877	197.03	6,960	17,343
196.52	6,383	13,941	197.04	6,971	17,413
196.53	6,394	14,005	197.05	6,983	17,482
196.54	6,405	14,069	197.06	6,995	17,552
196.55	6,416	14,133	197.07	7,007	17,622
196.56	6,428	14,197	197.08	7,019	17,692
196.57	6,439	14,262	197.09	7,031	17,763
196.58	6,450	14,326	197.10	7,042	17,833
196.59	6,462	14,391	197.11	7,054	17,903
196.60	6,473	14,455	197.12	7,066	17,974
196.61	6,484	14,520	197.13	7,078	18,045
196.62	6,495	14,585	197.14	7,090	18,116
196.63	6,507	14,650	197.15	7,102	18,187
196.64	6,518	14,715	197.16	7,113	18,258
196.65	6,529	14,780	197.17	7,125	18,329
196.66	6,540	14,846	197.18	7,137	18,400
196.67	6,552	14,911	197.19	7,149	18,472
196.68	6,563	14,977	197.20	7,161	18,543
196.69	6,574	15,042	197.21	7,173	18,615
196.70	6,586	15,108	197.22	7,184	18,687
196.71	6,597	15,174	197.23	7,196	18,758
196.72	6,608	15,240	197.24	7,208	18,831
196.73	6,619	15,306	197.25	7,220	18,903
196.74	6,631	15,373	197.26	7,232	18,975
196.75	6,642	15,439	197.27	7,244	19,047
196.76	6,653	15,505	197.28	7,256	19,120
196.77	6,665	15,572	197.29	7,267	19,192
196.78	6,676	15,639	197.30	7,279	19,265
196.79	6,687	15,705	197.31	7,291	19,338
196.80	6,698	15,772	197.32	7,303	19,411
196.81	6,710	15,839	197.33	7,315	19,484
196.82	6,721	15,907	197.34	7,327	19,557
196.83	6,732	15,974	197.35	7,338	19,631
196.84	6,744	16,041	197.36	7,350	19,704
196.85	6,755	16,109	197.37	7,362	19,778
196.86	6,766	16,176	197.38	7,374	19,851
196.87	6,777	16,244	197.39	7,386	19,925
196.88	6,789	16,312	197.40	7,398	19,999
196.89	6,800	16,380	197.41	7,409	20,073
196.90	6,811	16,448	197.42	7,421	20,147
196.91	6,822	16,516	197.43	7,433	20,221
196.92	6,834	16,584	197.44	7,445	20,296
196.93	6,845	16,653	197.45	7,457	20,370

Stage-Area-Storage for Pond B-37B: Basin #37B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.46	7,469	20,445
197.47	7,480	20,520
197.48	7,492	20,595
197.49	7,504	20,670
197.50	7,516	20,745
197.51	7,528	20,820
197.52	7,540	20,895
197.53	7,552	20,971
197.54	7,563	21,046
197.55	7,575	21,122
197.56	7,587	21,198
197.57	7,599	21,274
197.58	7,611	21,350
197.59	7,623	21,426
197.60	7,634	21,502
197.61	7,646	21,579
197.62	7,658	21,655
197.63	7,670	21,732
197.64	7,682	21,808
197.65	7,694	21,885
197.66	7,705	21,962
197.67	7,717	22,039
197.68	7,729	22,117
197.69	7,741	22,194
197.70	7,753	22,272
197.71	7,765	22,349
197.72	7,776	22,427
197.73	7,788	22,505
197.74	7,800	22,583
197.75	7,812	22,661
197.76	7,824	22,739
197.77	7,836	22,817
197.78	7,848	22,896
197.79	7,859	22,974
197.80	7,871	23,053
197.81	7,883	23,132
197.82	7,895	23,210
197.83	7,907	23,289
197.84	7,919	23,369
197.85	7,930	23,448
197.86	7,942	23,527
197.87	7,954	23,607
197.88	7,966	23,686
197.89	7,978	23,766
197.90	7,990	23,846
197.91	8,001	23,926
197.92	8,013	24,006
197.93	8,025	24,086
197.94	8,037	24,166
197.95	8,049	24,247
197.96	8,061	24,327
197.97	8,072	24,408
197.98	8,084	24,489
197.99	8,096	24,570
198.00	**8,108**	**24,651**

Summary for Pond B-38: Basin #38

Inflow Area = 2.114 ac, 34.96% Impervious, Inflow Depth = 8.98" for Future 100 yr event
Inflow = 19.32 cfs @ 12.17 hrs, Volume= 1.581 af
Outflow = 14.23 cfs @ 12.26 hrs, Volume= 1.478 af, Atten= 26%, Lag= 5.4 min
Primary = 14.23 cfs @ 12.26 hrs, Volume= 1.478 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 207.85' @ 12.26 hrs Surf.Area= 7,725 sf Storage= 19,930 cf

Plug-Flow detention time= 211.7 min calculated for 1.478 af (94% of inflow)
Center-of-Mass det. time= 175.1 min (955.5 - 780.4)

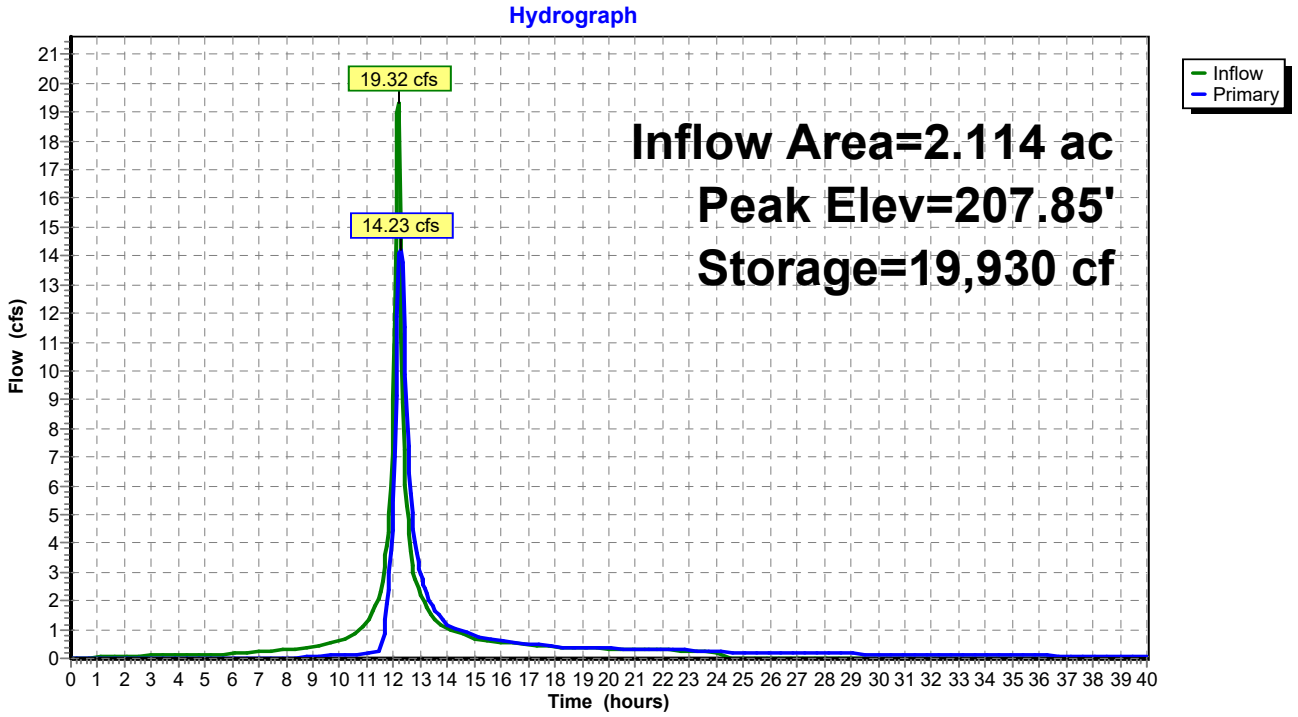
Volume	Invert	Avail.Storage	Storage Description
#1	204.30'	29,525 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
204.30	0	0	0
205.00	5,096	1,784	1,784
206.00	5,966	5,531	7,315
207.00	6,893	6,430	13,744
208.00	7,876	7,385	21,129
209.00	8,916	8,396	29,525

Device	Routing	Invert	Outlet Devices
#1	Primary	204.30'	**18.0" Round Culvert** L= 33.0' Ke= 0.500 Inlet / Outlet Invert= 204.30' / 204.13' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	205.26'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	206.69'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	208.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.21 cfs @ 12.26 hrs HW=207.84' (Free Discharge)
- **1=Culvert** (Inlet Controls 14.21 cfs @ 8.04 fps)
  - **2=Orifice/Grate** (Passes < 0.26 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 15.19 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-38: Basin #38



Stage-Discharge for Pond B-38: Basin #38

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
204.30	0.00	204.82	0.00	205.34	0.01	205.86	0.12
204.31	0.00	204.83	0.00	205.35	0.01	205.87	0.12
204.32	0.00	204.84	0.00	205.36	0.02	205.88	0.12
204.33	0.00	204.85	0.00	205.37	0.02	205.89	0.12
204.34	0.00	204.86	0.00	205.38	0.02	205.90	0.12
204.35	0.00	204.87	0.00	205.39	0.03	205.91	0.12
204.36	0.00	204.88	0.00	205.40	0.03	205.92	0.12
204.37	0.00	204.89	0.00	205.41	0.03	205.93	0.12
204.38	0.00	204.90	0.00	205.42	0.04	205.94	0.12
204.39	0.00	204.91	0.00	205.43	0.04	205.95	0.13
204.40	0.00	204.92	0.00	205.44	0.05	205.96	0.13
204.41	0.00	204.93	0.00	205.45	0.05	205.97	0.13
204.42	0.00	204.94	0.00	205.46	0.05	205.98	0.13
204.43	0.00	204.95	0.00	205.47	0.05	205.99	0.13
204.44	0.00	204.96	0.00	205.48	0.06	206.00	0.13
204.45	0.00	204.97	0.00	205.49	0.06	206.01	0.13
204.46	0.00	204.98	0.00	205.50	0.06	206.02	0.13
204.47	0.00	204.99	0.00	205.51	0.06	206.03	0.13
204.48	0.00	205.00	0.00	205.52	0.06	206.04	0.13
204.49	0.00	205.01	0.00	205.53	0.07	206.05	0.14
204.50	0.00	205.02	0.00	205.54	0.07	206.06	0.14
204.51	0.00	205.03	0.00	205.55	0.07	206.07	0.14
204.52	0.00	205.04	0.00	205.56	0.07	206.08	0.14
204.53	0.00	205.05	0.00	205.57	0.07	206.09	0.14
204.54	0.00	205.06	0.00	205.58	0.08	206.10	0.14
204.55	0.00	205.07	0.00	205.59	0.08	206.11	0.14
204.56	0.00	205.08	0.00	205.60	0.08	206.12	0.14
204.57	0.00	205.09	0.00	205.61	0.08	206.13	0.14
204.58	0.00	205.10	0.00	205.62	0.08	206.14	0.14
204.59	0.00	205.11	0.00	205.63	0.08	206.15	0.15
204.60	0.00	205.12	0.00	205.64	0.09	206.16	0.15
204.61	0.00	205.13	0.00	205.65	0.09	206.17	0.15
204.62	0.00	205.14	0.00	205.66	0.09	206.18	0.15
204.63	0.00	205.15	0.00	205.67	0.09	206.19	0.15
204.64	0.00	205.16	0.00	205.68	0.09	206.20	0.15
204.65	0.00	205.17	0.00	205.69	0.09	206.21	0.15
204.66	0.00	205.18	0.00	205.70	0.10	206.22	0.15
204.67	0.00	205.19	0.00	205.71	0.10	206.23	0.15
204.68	0.00	205.20	0.00	205.72	0.10	206.24	0.15
204.69	0.00	205.21	0.00	205.73	0.10	206.25	0.15
204.70	0.00	205.22	0.00	205.74	0.10	206.26	0.16
204.71	0.00	205.23	0.00	205.75	0.10	206.27	0.16
204.72	0.00	205.24	0.00	205.76	0.10	206.28	0.16
204.73	0.00	205.25	0.00	205.77	0.10	206.29	0.16
204.74	0.00	205.26	0.00	205.78	0.11	206.30	0.16
204.75	0.00	205.27	0.00	205.79	0.11	206.31	0.16
204.76	0.00	205.28	0.00	205.80	0.11	206.32	0.16
204.77	0.00	205.29	0.00	205.81	0.11	206.33	0.16
204.78	0.00	205.30	0.00	205.82	0.11	206.34	0.16
204.79	0.00	205.31	0.00	205.83	0.11	206.35	0.16
204.80	0.00	205.32	0.01	205.84	0.11	206.36	0.16
204.81	0.00	205.33	0.01	205.85	0.11	206.37	0.16

Stage-Discharge for Pond B-38: Basin #38 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
206.38	0.17	206.90	1.45	207.42	8.10	207.94	14.46
206.39	0.17	206.91	1.54	207.43	8.25	207.95	14.49
206.40	0.17	206.92	1.63	207.44	8.41	207.96	14.51
206.41	0.17	206.93	1.72	207.45	8.57	207.97	14.54
206.42	0.17	206.94	1.82	207.46	8.74	207.98	14.56
206.43	0.17	206.95	1.92	207.47	8.90	207.99	14.59
206.44	0.17	206.96	2.02	207.48	9.06	208.00	14.61
206.45	0.17	206.97	2.12	207.49	9.22	208.01	14.64
206.46	0.17	206.98	2.22	207.50	9.39	208.02	14.66
206.47	0.17	206.99	2.33	207.51	9.55	208.03	14.69
206.48	0.17	207.00	2.43	207.52	9.72	208.04	14.71
206.49	0.17	207.01	2.54	207.53	9.89	208.05	14.74
206.50	0.17	207.02	2.65	207.54	10.06	208.06	14.76
206.51	0.18	207.03	2.76	207.55	10.23	208.07	14.79
206.52	0.18	207.04	2.87	207.56	10.40	208.08	14.81
206.53	0.18	207.05	2.99	207.57	10.57	208.09	14.84
206.54	0.18	207.06	3.10	207.58	10.74	208.10	14.86
206.55	0.18	207.07	3.22	207.59	10.91	208.11	14.88
206.56	0.18	207.08	3.34	207.60	11.08	208.12	14.91
206.57	0.18	207.09	3.46	207.61	11.26	208.13	14.93
206.58	0.18	207.10	3.58	207.62	11.43	208.14	14.96
206.59	0.18	207.11	3.70	207.63	11.61	208.15	14.98
206.60	0.18	207.12	3.83	207.64	11.78	208.16	15.01
206.61	0.18	207.13	3.95	207.65	11.96	208.17	15.03
206.62	0.18	207.14	4.08	207.66	12.14	208.18	15.05
206.63	0.18	207.15	4.21	207.67	12.32	208.19	15.08
206.64	0.19	207.16	4.34	207.68	12.50	208.20	15.10
206.65	0.19	207.17	4.47	207.69	12.68	208.21	15.13
206.66	0.19	207.18	4.60	207.70	12.86	208.22	15.15
206.67	0.19	207.19	4.73	207.71	13.04	208.23	15.17
206.68	0.19	207.20	4.86	207.72	13.22	208.24	15.20
206.69	0.19	207.21	5.00	207.73	13.40	208.25	15.22
206.70	0.20	207.22	5.14	207.74	13.59	208.26	15.36
206.71	0.23	207.23	5.27	207.75	13.77	208.27	15.60
206.72	0.26	207.24	5.41	207.76	13.96	208.28	15.90
206.73	0.30	207.25	5.55	207.77	14.03	208.29	16.25
206.74	0.34	207.26	5.69	207.78	14.06	208.30	16.65
206.75	0.38	207.27	5.84	207.79	14.08	208.31	17.09
206.76	0.44	207.28	5.98	207.80	14.11	208.32	17.56
206.77	0.49	207.29	6.12	207.81	14.14	208.33	18.07
206.78	0.55	207.30	6.27	207.82	14.16	208.34	18.61
206.79	0.61	207.31	6.42	207.83	14.19	208.35	19.17
206.80	0.67	207.32	6.56	207.84	14.21	208.36	19.77
206.81	0.74	207.33	6.71	207.85	14.24	208.37	20.40
206.82	0.81	207.34	6.86	207.86	14.26	208.38	21.05
206.83	0.88	207.35	7.01	207.87	14.29	208.39	21.72
206.84	0.95	207.36	7.16	207.88	14.31	208.40	22.42
206.85	1.03	207.37	7.32	207.89	14.34	208.41	23.14
206.86	1.11	207.38	7.47	207.90	14.36	208.42	23.89
206.87	1.19	207.39	7.63	207.91	14.39	208.43	24.66
206.88	1.28	207.40	7.78	207.92	14.41	208.44	25.44
206.89	1.36	207.41	7.94	207.93	14.44	208.45	26.25

Stage-Discharge for Pond B-38: Basin #38 (continued)

Elevation (feet)	Primary (cfs)
208.46	27.12
208.47	28.02
208.48	28.94
208.49	29.89
208.50	30.86
208.51	31.85
208.52	32.88
208.53	33.92
208.54	34.99
208.55	36.09
208.56	37.21
208.57	38.35
208.58	39.52
208.59	40.71
208.60	41.93
208.61	43.17
208.62	44.43
208.63	45.72
208.64	47.04
208.65	48.37
208.66	49.76
208.67	51.18
208.68	52.62
208.69	54.08
208.70	55.58
208.71	57.09
208.72	58.64
208.73	60.21
208.74	61.81
208.75	63.43
208.76	65.08
208.77	66.76
208.78	68.46
208.79	70.19
208.80	71.95
208.81	73.73
208.82	75.54
208.83	77.38
208.84	79.24
208.85	81.14
208.86	82.78
208.87	84.45
208.88	86.12
208.89	87.81
208.90	89.51
208.91	91.23
208.92	92.96
208.93	94.70
208.94	96.45
208.95	98.22
208.96	100.00
208.97	101.79
208.98	103.60
208.99	105.42
209.00	**107.25**

Stage-Area-Storage for Pond B-38: Basin #38

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.30	0	0	204.82	3,786	984
204.31	73	0	204.83	3,858	1,022
204.32	146	1	204.84	3,931	1,061
204.33	218	3	204.85	4,004	1,101
204.34	291	6	204.86	4,077	1,142
204.35	364	9	204.87	4,150	1,183
204.36	437	13	204.88	4,222	1,224
204.37	510	18	204.89	4,295	1,267
204.38	582	23	204.90	4,368	1,310
204.39	655	29	204.91	4,441	1,354
204.40	728	36	204.92	4,514	1,399
204.41	801	44	204.93	4,586	1,445
204.42	874	52	204.94	4,659	1,491
204.43	946	62	204.95	4,732	1,538
204.44	1,019	71	204.96	4,805	1,586
204.45	1,092	82	204.97	4,878	1,634
204.46	1,165	93	204.98	4,950	1,683
204.47	1,238	105	204.99	5,023	1,733
204.48	1,310	118	205.00	5,096	1,784
204.49	1,383	131	205.01	5,105	1,835
204.50	1,456	146	205.02	5,113	1,886
204.51	1,529	161	205.03	5,122	1,937
204.52	1,602	176	205.04	5,131	1,988
204.53	1,674	193	205.05	5,140	2,039
204.54	1,747	210	205.06	5,148	2,091
204.55	1,820	228	205.07	5,157	2,142
204.56	1,893	246	205.08	5,166	2,194
204.57	1,966	265	205.09	5,174	2,246
204.58	2,038	285	205.10	5,183	2,298
204.59	2,111	306	205.11	5,192	2,349
204.60	2,184	328	205.12	5,200	2,401
204.61	2,257	350	205.13	5,209	2,453
204.62	2,330	373	205.14	5,218	2,506
204.63	2,402	396	205.15	5,227	2,558
204.64	2,475	421	205.16	5,235	2,610
204.65	2,548	446	205.17	5,244	2,662
204.66	2,621	472	205.18	5,253	2,715
204.67	2,694	498	205.19	5,261	2,768
204.68	2,766	526	205.20	5,270	2,820
204.69	2,839	554	205.21	5,279	2,873
204.70	2,912	582	205.22	5,287	2,926
204.71	2,985	612	205.23	5,296	2,979
204.72	3,058	642	205.24	5,305	3,032
204.73	3,130	673	205.25	5,314	3,085
204.74	3,203	705	205.26	5,322	3,138
204.75	3,276	737	205.27	5,331	3,191
204.76	3,349	770	205.28	5,340	3,245
204.77	3,422	804	205.29	5,348	3,298
204.78	3,494	839	205.30	5,357	3,352
204.79	3,567	874	205.31	5,366	3,405
204.80	3,640	910	205.32	5,374	3,459
204.81	3,713	947	205.33	5,383	3,513

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.34	5,392	3,567
205.35	5,401	3,620
205.36	5,409	3,675
205.37	5,418	3,729
205.38	5,427	3,783
205.39	5,435	3,837
205.40	5,444	3,892
205.41	5,453	3,946
205.42	5,461	4,001
205.43	5,470	4,055
205.44	5,479	4,110
205.45	5,488	4,165
205.46	5,496	4,220
205.47	5,505	4,275
205.48	5,514	4,330
205.49	5,522	4,385
205.50	5,531	4,440
205.51	5,540	4,496
205.52	5,548	4,551
205.53	5,557	4,607
205.54	5,566	4,662
205.55	5,575	4,718
205.56	5,583	4,774
205.57	5,592	4,830
205.58	5,601	4,886
205.59	5,609	4,942
205.60	5,618	4,998
205.61	5,627	5,054
205.62	5,635	5,110
205.63	5,644	5,167
205.64	5,653	5,223
205.65	5,662	5,280
205.66	5,670	5,336
205.67	5,679	5,393
205.68	5,688	5,450
205.69	5,696	5,507
205.70	5,705	5,564
205.71	5,714	5,621
205.72	5,722	5,678
205.73	5,731	5,735
205.74	5,740	5,793
205.75	5,749	5,850
205.76	5,757	5,908
205.77	5,766	5,965
205.78	5,775	6,023
205.79	5,783	6,081
205.80	5,792	6,139
205.81	5,801	6,197
205.82	5,809	6,255
205.83	5,818	6,313
205.84	5,827	6,371
205.85	5,836	6,429
205.86	5,844	6,488
205.87	5,853	6,546
205.88	5,862	6,605
205.89	5,870	6,664
205.90	5,879	6,722
205.91	5,888	6,781
205.92	5,896	6,840
205.93	5,905	6,899
205.94	5,914	6,958
205.95	5,923	7,017
205.96	5,931	7,077
205.97	5,940	7,136
205.98	5,949	7,195
205.99	5,957	7,255
206.00	5,966	7,315
206.01	5,975	7,374
206.02	5,985	7,434
206.03	5,994	7,494
206.04	6,003	7,554
206.05	6,012	7,614
206.06	6,022	7,674
206.07	6,031	7,734
206.08	6,040	7,795
206.09	6,049	7,855
206.10	6,059	7,916
206.11	6,068	7,976
206.12	6,077	8,037
206.13	6,087	8,098
206.14	6,096	8,159
206.15	6,105	8,220
206.16	6,114	8,281
206.17	6,124	8,342
206.18	6,133	8,403
206.19	6,142	8,465
206.20	6,151	8,526
206.21	6,161	8,588
206.22	6,170	8,650
206.23	6,179	8,711
206.24	6,188	8,773
206.25	6,198	8,835
206.26	6,207	8,897
206.27	6,216	8,959
206.28	6,226	9,021
206.29	6,235	9,084
206.30	6,244	9,146
206.31	6,253	9,209
206.32	6,263	9,271
206.33	6,272	9,334
206.34	6,281	9,397
206.35	6,290	9,459
206.36	6,300	9,522
206.37	6,309	9,585

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
206.38	6,318	9,649
206.39	6,328	9,712
206.40	6,337	9,775
206.41	6,346	9,839
206.42	6,355	9,902
206.43	6,365	9,966
206.44	6,374	10,029
206.45	6,383	10,093
206.46	6,392	10,157
206.47	6,402	10,221
206.48	6,411	10,285
206.49	6,420	10,349
206.50	6,430	10,413
206.51	6,439	10,478
206.52	6,448	10,542
206.53	6,457	10,607
206.54	6,467	10,671
206.55	6,476	10,736
206.56	6,485	10,801
206.57	6,494	10,866
206.58	6,504	10,931
206.59	6,513	10,996
206.60	6,522	11,061
206.61	6,531	11,126
206.62	6,541	11,192
206.63	6,550	11,257
206.64	6,559	11,323
206.65	6,569	11,388
206.66	6,578	11,454
206.67	6,587	11,520
206.68	6,596	11,586
206.69	6,606	11,652
206.70	6,615	11,718
206.71	6,624	11,784
206.72	6,633	11,850
206.73	6,643	11,917
206.74	6,652	11,983
206.75	6,661	12,050
206.76	6,671	12,116
206.77	6,680	12,183
206.78	6,689	12,250
206.79	6,698	12,317
206.80	6,708	12,384
206.81	6,717	12,451
206.82	6,726	12,518
206.83	6,735	12,586
206.84	6,745	12,653
206.85	6,754	12,721
206.86	6,763	12,788
206.87	6,772	12,856
206.88	6,782	12,924
206.89	6,791	12,991
206.90	6,800	13,059
206.91	6,810	13,127
206.92	6,819	13,196
206.93	6,828	13,264
206.94	6,837	13,332
206.95	6,847	13,401
206.96	6,856	13,469
206.97	6,865	13,538
206.98	6,874	13,606
206.99	6,884	13,675
207.00	6,893	13,744
207.01	6,903	13,813
207.02	6,913	13,882
207.03	6,922	13,951
207.04	6,932	14,021
207.05	6,942	14,090
207.06	6,952	14,159
207.07	6,962	14,229
207.08	6,972	14,299
207.09	6,981	14,368
207.10	6,991	14,438
207.11	7,001	14,508
207.12	7,011	14,578
207.13	7,021	14,648
207.14	7,031	14,719
207.15	7,040	14,789
207.16	7,050	14,860
207.17	7,060	14,930
207.18	7,070	15,001
207.19	7,080	15,072
207.20	7,090	15,142
207.21	7,099	15,213
207.22	7,109	15,284
207.23	7,119	15,355
207.24	7,129	15,427
207.25	7,139	15,498
207.26	7,149	15,570
207.27	7,158	15,641
207.28	7,168	15,713
207.29	7,178	15,784
207.30	7,188	15,856
207.31	7,198	15,928
207.32	7,208	16,000
207.33	7,217	16,072
207.34	7,227	16,145
207.35	7,237	16,217
207.36	7,247	16,289
207.37	7,257	16,362
207.38	7,267	16,434
207.39	7,276	16,507
207.40	7,286	16,580
207.41	7,296	16,653

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
207.42	7,306	16,726	207.94	7,817	20,658
207.43	7,316	16,799	207.95	7,827	20,736
207.44	7,326	16,872	207.96	7,837	20,814
207.45	7,335	16,945	207.97	7,847	20,893
207.46	7,345	17,019	207.98	7,856	20,971
207.47	7,355	17,092	207.99	7,866	21,050
207.48	7,365	17,166	208.00	7,876	21,129
207.49	7,375	17,240	208.01	7,886	21,207
207.50	7,385	17,313	208.02	7,897	21,286
207.51	7,394	17,387	208.03	7,907	21,365
207.52	7,404	17,461	208.04	7,918	21,444
207.53	7,414	17,535	208.05	7,928	21,524
207.54	7,424	17,610	208.06	7,938	21,603
207.55	7,434	17,684	208.07	7,949	21,682
207.56	7,443	17,758	208.08	7,959	21,762
207.57	7,453	17,833	208.09	7,970	21,842
207.58	7,463	17,907	208.10	7,980	21,921
207.59	7,473	17,982	208.11	7,990	22,001
207.60	7,483	18,057	208.12	8,001	22,081
207.61	7,493	18,132	208.13	8,011	22,161
207.62	7,502	18,207	208.14	8,022	22,241
207.63	7,512	18,282	208.15	8,032	22,322
207.64	7,522	18,357	208.16	8,042	22,402
207.65	7,532	18,432	208.17	8,053	22,483
207.66	7,542	18,508	208.18	8,063	22,563
207.67	7,552	18,583	208.19	8,074	22,644
207.68	7,561	18,659	208.20	8,084	22,725
207.69	7,571	18,734	208.21	8,094	22,805
207.70	7,581	18,810	208.22	8,105	22,886
207.71	7,591	18,886	208.23	8,115	22,968
207.72	7,601	18,962	208.24	8,126	23,049
207.73	7,611	19,038	208.25	8,136	23,130
207.74	7,620	19,114	208.26	8,146	23,212
207.75	7,630	19,190	208.27	8,157	23,293
207.76	7,640	19,267	208.28	8,167	23,375
207.77	7,650	19,343	208.29	8,178	23,456
207.78	7,660	19,420	208.30	8,188	23,538
207.79	7,670	19,496	208.31	8,198	23,620
207.80	7,679	19,573	208.32	8,209	23,702
207.81	7,689	19,650	208.33	8,219	23,784
207.82	7,699	19,727	208.34	8,230	23,867
207.83	7,709	19,804	208.35	8,240	23,949
207.84	7,719	19,881	208.36	8,250	24,031
207.85	7,729	19,958	208.37	8,261	24,114
207.86	7,738	20,036	208.38	8,271	24,197
207.87	7,748	20,113	208.39	8,282	24,279
207.88	7,758	20,191	208.40	8,292	24,362
207.89	7,768	20,268	208.41	8,302	24,445
207.90	7,778	20,346	208.42	8,313	24,528
207.91	7,788	20,424	208.43	8,323	24,611
207.92	7,797	20,502	208.44	8,334	24,695
207.93	7,807	20,580	208.45	8,344	24,778

Stage-Area-Storage for Pond B-38: Basin #38 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
208.46	8,354	24,862
208.47	8,365	24,945
208.48	8,375	25,029
208.49	8,386	25,113
208.50	8,396	25,197
208.51	8,406	25,281
208.52	8,417	25,365
208.53	8,427	25,449
208.54	8,438	25,533
208.55	8,448	25,618
208.56	8,458	25,702
208.57	8,469	25,787
208.58	8,479	25,872
208.59	8,490	25,956
208.60	8,500	26,041
208.61	8,510	26,126
208.62	8,521	26,212
208.63	8,531	26,297
208.64	8,542	26,382
208.65	8,552	26,468
208.66	8,562	26,553
208.67	8,573	26,639
208.68	8,583	26,725
208.69	8,594	26,811
208.70	8,604	26,897
208.71	8,614	26,983
208.72	8,625	27,069
208.73	8,635	27,155
208.74	8,646	27,242
208.75	8,656	27,328
208.76	8,666	27,415
208.77	8,677	27,501
208.78	8,687	27,588
208.79	8,698	27,675
208.80	8,708	27,762
208.81	8,718	27,849
208.82	8,729	27,937
208.83	8,739	28,024
208.84	8,750	28,111
208.85	8,760	28,199
208.86	8,770	28,287
208.87	8,781	28,374
208.88	8,791	28,462
208.89	8,802	28,550
208.90	8,812	28,638
208.91	8,822	28,726
208.92	8,833	28,815
208.93	8,843	28,903
208.94	8,854	28,992
208.95	8,864	29,080
208.96	8,874	29,169
208.97	8,885	29,258
208.98	8,895	29,346
208.99	8,906	29,435
209.00	**8,916**	**29,525**

Summary for Pond B-39: Basin #39

Inflow Area = 1.884 ac, 41.56% Impervious, Inflow Depth = 9.18" for Future 100 yr event
Inflow = 17.43 cfs @ 12.17 hrs, Volume= 1.441 af
Outflow = 15.08 cfs @ 12.23 hrs, Volume= 1.367 af, Atten= 14%, Lag= 3.3 min
Primary = 15.08 cfs @ 12.23 hrs, Volume= 1.367 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 204.13' @ 12.23 hrs Surf.Area= 4,527 sf Storage= 12,620 cf

Plug-Flow detention time= 99.0 min calculated for 1.367 af (95% of inflow)
Center-of-Mass det. time= 68.7 min (844.4 - 775.7)

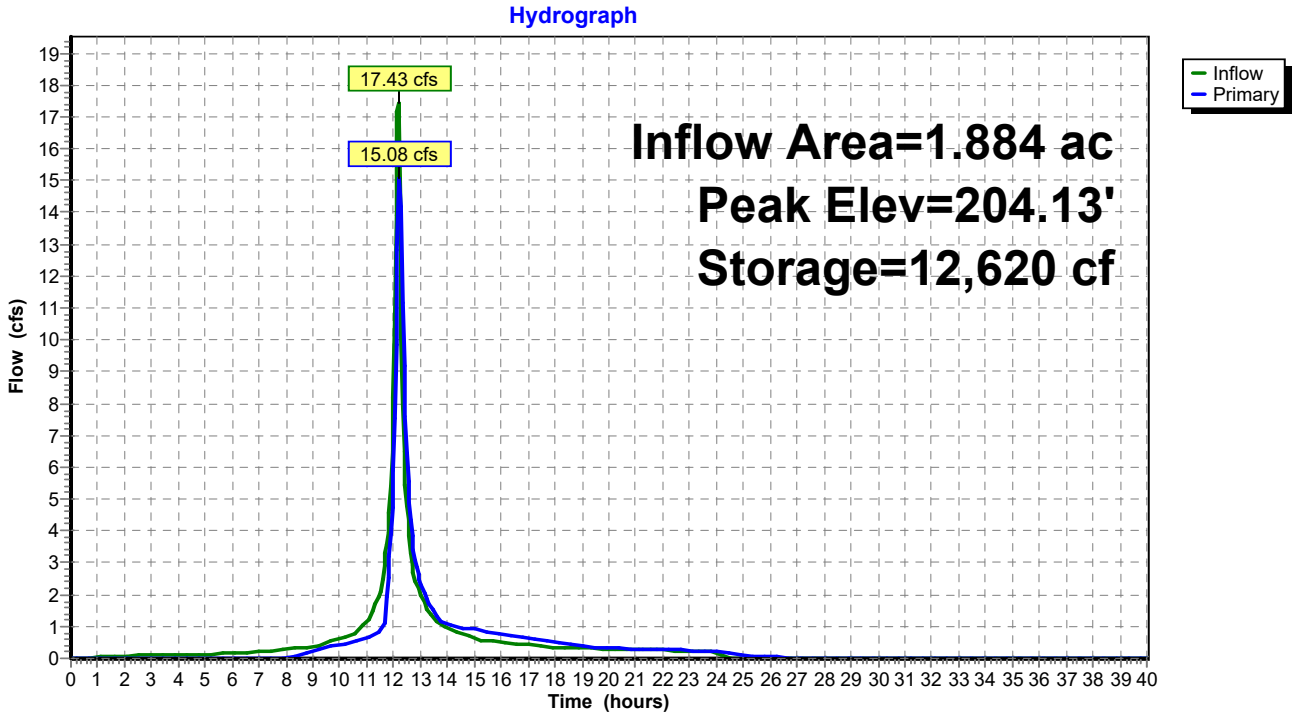
Volume	Invert	Avail.Storage	Storage Description
#1	200.30'	16,777 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
200.30	0	0	0
201.00	2,928	1,025	1,025
202.00	3,408	3,168	4,193
203.00	3,917	3,663	7,855
204.00	4,454	4,186	12,041
205.00	5,019	4,737	16,777

Device	Routing	Invert	Outlet Devices
#1	Primary	200.30'	**18.0" Round Culvert** L= 38.0' Ke= 0.500 Inlet / Outlet Invert= 200.30' / 200.11' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.71'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.04'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.90 cfs @ 12.23 hrs HW=204.12' (Free Discharge)
- **1=Culvert** (Inlet Controls 14.90 cfs @ 8.43 fps)
  - **2=Orifice/Grate** (Passes < 1.39 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 13.81 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-39: Basin #39



Stage-Discharge for Pond B-39: Basin #39

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.30	0.00	200.82	0.00	201.34	0.00	201.86	0.07
200.31	0.00	200.83	0.00	201.35	0.00	201.87	0.07
200.32	0.00	200.84	0.00	201.36	0.00	201.88	0.08
200.33	0.00	200.85	0.00	201.37	0.00	201.89	0.09
200.34	0.00	200.86	0.00	201.38	0.00	201.90	0.10
200.35	0.00	200.87	0.00	201.39	0.00	201.91	0.11
200.36	0.00	200.88	0.00	201.40	0.00	201.92	0.12
200.37	0.00	200.89	0.00	201.41	0.00	201.93	0.13
200.38	0.00	200.90	0.00	201.42	0.00	201.94	0.14
200.39	0.00	200.91	0.00	201.43	0.00	201.95	0.16
200.40	0.00	200.92	0.00	201.44	0.00	201.96	0.17
200.41	0.00	200.93	0.00	201.45	0.00	201.97	0.18
200.42	0.00	200.94	0.00	201.46	0.00	201.98	0.19
200.43	0.00	200.95	0.00	201.47	0.00	201.99	0.20
200.44	0.00	200.96	0.00	201.48	0.00	202.00	0.22
200.45	0.00	200.97	0.00	201.49	0.00	202.01	0.23
200.46	0.00	200.98	0.00	201.50	0.00	202.02	0.24
200.47	0.00	200.99	0.00	201.51	0.00	202.03	0.26
200.48	0.00	201.00	0.00	201.52	0.00	202.04	0.27
200.49	0.00	201.01	0.00	201.53	0.00	202.05	0.28
200.50	0.00	201.02	0.00	201.54	0.00	202.06	0.30
200.51	0.00	201.03	0.00	201.55	0.00	202.07	0.31
200.52	0.00	201.04	0.00	201.56	0.00	202.08	0.32
200.53	0.00	201.05	0.00	201.57	0.00	202.09	0.34
200.54	0.00	201.06	0.00	201.58	0.00	202.10	0.35
200.55	0.00	201.07	0.00	201.59	0.00	202.11	0.36
200.56	0.00	201.08	0.00	201.60	0.00	202.12	0.38
200.57	0.00	201.09	0.00	201.61	0.00	202.13	0.39
200.58	0.00	201.10	0.00	201.62	0.00	202.14	0.40
200.59	0.00	201.11	0.00	201.63	0.00	202.15	0.41
200.60	0.00	201.12	0.00	201.64	0.00	202.16	0.43
200.61	0.00	201.13	0.00	201.65	0.00	202.17	0.44
200.62	0.00	201.14	0.00	201.66	0.00	202.18	0.45
200.63	0.00	201.15	0.00	201.67	0.00	202.19	0.46
200.64	0.00	201.16	0.00	201.68	0.00	202.20	0.47
200.65	0.00	201.17	0.00	201.69	0.00	202.21	0.47
200.66	0.00	201.18	0.00	201.70	0.00	202.22	0.48
200.67	0.00	201.19	0.00	201.71	0.00	202.23	0.49
200.68	0.00	201.20	0.00	201.72	0.00	202.24	0.50
200.69	0.00	201.21	0.00	201.73	0.00	202.25	0.51
200.70	0.00	201.22	0.00	201.74	0.00	202.26	0.52
200.71	0.00	201.23	0.00	201.75	0.01	202.27	0.53
200.72	0.00	201.24	0.00	201.76	0.01	202.28	0.53
200.73	0.00	201.25	0.00	201.77	0.01	202.29	0.54
200.74	0.00	201.26	0.00	201.78	0.02	202.30	0.55
200.75	0.00	201.27	0.00	201.79	0.02	202.31	0.56
200.76	0.00	201.28	0.00	201.80	0.02	202.32	0.57
200.77	0.00	201.29	0.00	201.81	0.03	202.33	0.58
200.78	0.00	201.30	0.00	201.82	0.04	202.34	0.58
200.79	0.00	201.31	0.00	201.83	0.04	202.35	0.59
200.80	0.00	201.32	0.00	201.84	0.05	202.36	0.60
200.81	0.00	201.33	0.00	201.85	0.06	202.37	0.61

Stage-Discharge for Pond B-39: Basin #39 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
202.38	0.61	202.90	0.92	203.42	4.15	203.94	12.00
202.39	0.62	202.91	0.92	203.43	4.27	203.95	12.17
202.40	0.63	202.92	0.93	203.44	4.39	203.96	12.35
202.41	0.63	202.93	0.93	203.45	4.52	203.97	12.53
202.42	0.64	202.94	0.94	203.46	4.64	203.98	12.70
202.43	0.65	202.95	0.94	203.47	4.77	203.99	12.88
202.44	0.66	202.96	0.95	203.48	4.90	204.00	13.06
202.45	0.66	202.97	0.95	203.49	5.03	204.01	13.24
202.46	0.67	202.98	0.95	203.50	5.16	204.02	13.42
202.47	0.68	202.99	0.96	203.51	5.29	204.03	13.61
202.48	0.68	203.00	0.96	203.52	5.43	204.04	13.79
202.49	0.69	203.01	0.97	203.53	5.56	204.05	13.97
202.50	0.69	203.02	0.97	203.54	5.70	204.06	14.16
202.51	0.70	203.03	0.98	203.55	5.83	204.07	14.34
202.52	0.71	203.04	0.98	203.56	5.97	204.08	14.53
202.53	0.71	203.05	1.00	203.57	6.11	204.09	14.71
202.54	0.72	203.06	1.03	203.58	6.25	204.10	14.86
202.55	0.73	203.07	1.06	203.59	6.40	204.11	14.88
202.56	0.73	203.08	1.10	203.60	6.54	204.12	14.91
202.57	0.74	203.09	1.15	203.61	6.68	204.13	14.93
202.58	0.74	203.10	1.20	203.62	6.83	204.14	14.96
202.59	0.75	203.11	1.26	203.63	6.97	204.15	14.98
202.60	0.76	203.12	1.31	203.64	7.12	204.16	15.01
202.61	0.76	203.13	1.37	203.65	7.27	204.17	15.03
202.62	0.77	203.14	1.44	203.66	7.42	204.18	15.05
202.63	0.77	203.15	1.51	203.67	7.57	204.19	15.08
202.64	0.78	203.16	1.58	203.68	7.72	204.20	15.10
202.65	0.79	203.17	1.65	203.69	7.88	204.21	15.13
202.66	0.79	203.18	1.72	203.70	8.03	204.22	15.15
202.67	0.80	203.19	1.80	203.71	8.18	204.23	15.17
202.68	0.80	203.20	1.88	203.72	8.34	204.24	15.20
202.69	0.81	203.21	1.97	203.73	8.50	204.25	15.22
202.70	0.81	203.22	2.05	203.74	8.65	204.26	15.24
202.71	0.82	203.23	2.14	203.75	8.81	204.27	15.27
202.72	0.82	203.24	2.23	203.76	8.97	204.28	15.29
202.73	0.83	203.25	2.32	203.77	9.13	204.29	15.32
202.74	0.83	203.26	2.41	203.78	9.29	204.30	15.34
202.75	0.84	203.27	2.51	203.79	9.46	204.31	15.36
202.76	0.85	203.28	2.61	203.80	9.62	204.32	15.39
202.77	0.85	203.29	2.70	203.81	9.78	204.33	15.41
202.78	0.86	203.30	2.81	203.82	9.95	204.34	15.43
202.79	0.86	203.31	2.91	203.83	10.11	204.35	15.46
202.80	0.87	203.32	3.01	203.84	10.28	204.36	15.48
202.81	0.87	203.33	3.12	203.85	10.45	204.37	15.50
202.82	0.88	203.34	3.23	203.86	10.62	204.38	15.53
202.83	0.88	203.35	3.34	203.87	10.79	204.39	15.55
202.84	0.89	203.36	3.45	203.88	10.96	204.40	15.57
202.85	0.89	203.37	3.56	203.89	11.13	204.41	15.60
202.86	0.90	203.38	3.68	203.90	11.30	204.42	15.62
202.87	0.90	203.39	3.79	203.91	11.47	204.43	15.64
202.88	0.91	203.40	3.91	203.92	11.65	204.44	15.67
202.89	0.91	203.41	4.03	203.93	11.82	204.45	15.69

Stage-Discharge for Pond B-39: Basin #39 (continued)

Elevation (feet)	Primary (cfs)
204.46	15.71
204.47	15.74
204.48	15.76
204.49	15.78
204.50	15.80
204.51	15.94
204.52	16.18
204.53	16.48
204.54	16.83
204.55	17.23
204.56	17.67
204.57	18.14
204.58	18.64
204.59	19.18
204.60	19.75
204.61	20.35
204.62	20.97
204.63	21.62
204.64	22.29
204.65	22.99
204.66	23.71
204.67	24.46
204.68	25.22
204.69	26.01
204.70	26.82
204.71	27.69
204.72	28.58
204.73	29.50
204.74	30.45
204.75	31.42
204.76	32.42
204.77	33.44
204.78	34.48
204.79	35.55
204.80	36.65
204.81	37.76
204.82	38.91
204.83	40.08
204.84	41.27
204.85	42.48
204.86	43.72
204.87	44.99
204.88	46.28
204.89	47.59
204.90	48.93
204.91	50.31
204.92	51.73
204.93	53.17
204.94	54.63
204.95	56.12
204.96	57.64
204.97	59.19
204.98	60.76
204.99	62.35
205.00	**63.98**

Stage-Area-Storage for Pond B-39: Basin #39

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.30	0	0	200.82	2,175	566
200.31	42	0	200.83	2,217	587
200.32	84	1	200.84	2,259	610
200.33	125	2	200.85	2,301	633
200.34	167	3	200.86	2,342	656
200.35	209	5	200.87	2,384	680
200.36	251	8	200.88	2,426	704
200.37	293	10	200.89	2,468	728
200.38	335	13	200.90	2,510	753
200.39	376	17	200.91	2,552	778
200.40	418	21	200.92	2,593	804
200.41	460	25	200.93	2,635	830
200.42	502	30	200.94	2,677	857
200.43	544	35	200.95	2,719	884
200.44	586	41	200.96	2,761	911
200.45	627	47	200.97	2,803	939
200.46	669	54	200.98	2,844	967
200.47	711	60	200.99	2,886	996
200.48	753	68	201.00	2,928	1,025
200.49	795	76	201.01	2,933	1,054
200.50	837	84	201.02	2,938	1,083
200.51	878	92	201.03	2,942	1,113
200.52	920	101	201.04	2,947	1,142
200.53	962	111	201.05	2,952	1,172
200.54	1,004	120	201.06	2,957	1,201
200.55	1,046	131	201.07	2,962	1,231
200.56	1,088	141	201.08	2,966	1,261
200.57	1,129	152	201.09	2,971	1,290
200.58	1,171	164	201.10	2,976	1,320
200.59	1,213	176	201.11	2,981	1,350
200.60	1,255	188	201.12	2,986	1,380
200.61	1,297	201	201.13	2,990	1,409
200.62	1,339	214	201.14	2,995	1,439
200.63	1,380	228	201.15	3,000	1,469
200.64	1,422	242	201.16	3,005	1,499
200.65	1,464	256	201.17	3,010	1,529
200.66	1,506	271	201.18	3,014	1,560
200.67	1,548	286	201.19	3,019	1,590
200.68	1,589	302	201.20	3,024	1,620
200.69	1,631	318	201.21	3,029	1,650
200.70	1,673	335	201.22	3,034	1,681
200.71	1,715	352	201.23	3,038	1,711
200.72	1,757	369	201.24	3,043	1,741
200.73	1,799	387	201.25	3,048	1,772
200.74	1,840	405	201.26	3,053	1,802
200.75	1,882	424	201.27	3,058	1,833
200.76	1,924	443	201.28	3,062	1,863
200.77	1,966	462	201.29	3,067	1,894
200.78	2,008	482	201.30	3,072	1,925
200.79	2,050	502	201.31	3,077	1,956
200.80	2,091	523	201.32	3,082	1,986
200.81	2,133	544	201.33	3,086	2,017

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.34	3,091	2,048
201.35	3,096	2,079
201.36	3,101	2,110
201.37	3,106	2,141
201.38	3,110	2,172
201.39	3,115	2,203
201.40	3,120	2,234
201.41	3,125	2,266
201.42	3,130	2,297
201.43	3,134	2,328
201.44	3,139	2,360
201.45	3,144	2,391
201.46	3,149	2,422
201.47	3,154	2,454
201.48	3,158	2,486
201.49	3,163	2,517
201.50	3,168	2,549
201.51	3,173	2,581
201.52	3,178	2,612
201.53	3,182	2,644
201.54	3,187	2,676
201.55	3,192	2,708
201.56	3,197	2,740
201.57	3,202	2,772
201.58	3,206	2,804
201.59	3,211	2,836
201.60	3,216	2,868
201.61	3,221	2,900
201.62	3,226	2,932
201.63	3,230	2,965
201.64	3,235	2,997
201.65	3,240	3,029
201.66	3,245	3,062
201.67	3,250	3,094
201.68	3,254	3,127
201.69	3,259	3,159
201.70	3,264	3,192
201.71	3,269	3,225
201.72	3,274	3,257
201.73	3,278	3,290
201.74	3,283	3,323
201.75	3,288	3,356
201.76	3,293	3,389
201.77	3,298	3,422
201.78	3,302	3,455
201.79	3,307	3,488
201.80	3,312	3,521
201.81	3,317	3,554
201.82	3,322	3,587
201.83	3,326	3,620
201.84	3,331	3,654
201.85	3,336	3,687
201.86	3,341	3,720
201.87	3,346	3,754
201.88	3,350	3,787
201.89	3,355	3,821
201.90	3,360	3,854
201.91	3,365	3,888
201.92	3,370	3,922
201.93	3,374	3,955
201.94	3,379	3,989
201.95	3,384	4,023
201.96	3,389	4,057
201.97	3,394	4,091
201.98	3,398	4,125
201.99	3,403	4,159
202.00	3,408	4,193
202.01	3,413	4,227
202.02	3,418	4,261
202.03	3,423	4,295
202.04	3,428	4,330
202.05	3,433	4,364
202.06	3,439	4,398
202.07	3,444	4,433
202.08	3,449	4,467
202.09	3,454	4,502
202.10	3,459	4,536
202.11	3,464	4,571
202.12	3,469	4,605
202.13	3,474	4,640
202.14	3,479	4,675
202.15	3,484	4,710
202.16	3,489	4,745
202.17	3,495	4,780
202.18	3,500	4,814
202.19	3,505	4,850
202.20	3,510	4,885
202.21	3,515	4,920
202.22	3,520	4,955
202.23	3,525	4,990
202.24	3,530	5,025
202.25	3,535	5,061
202.26	3,540	5,096
202.27	3,545	5,132
202.28	3,551	5,167
202.29	3,556	5,203
202.30	3,561	5,238
202.31	3,566	5,274
202.32	3,571	5,309
202.33	3,576	5,345
202.34	3,581	5,381
202.35	3,586	5,417
202.36	3,591	5,453
202.37	3,596	5,489

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.38	3,601	5,525	202.90	3,866	7,466
202.39	3,607	5,561	202.91	3,871	7,505
202.40	3,612	5,597	202.92	3,876	7,544
202.41	3,617	5,633	202.93	3,881	7,582
202.42	3,622	5,669	202.94	3,886	7,621
202.43	3,627	5,705	202.95	3,892	7,660
202.44	3,632	5,742	202.96	3,897	7,699
202.45	3,637	5,778	202.97	3,902	7,738
202.46	3,642	5,814	202.98	3,907	7,777
202.47	3,647	5,851	202.99	3,912	7,816
202.48	3,652	5,887	203.00	3,917	7,855
202.49	3,657	5,924	203.01	3,922	7,894
202.50	3,663	5,960	203.02	3,928	7,934
202.51	3,668	5,997	203.03	3,933	7,973
202.52	3,673	6,034	203.04	3,938	8,012
202.53	3,678	6,071	203.05	3,944	8,052
202.54	3,683	6,107	203.06	3,949	8,091
202.55	3,688	6,144	203.07	3,955	8,131
202.56	3,693	6,181	203.08	3,960	8,170
202.57	3,698	6,218	203.09	3,965	8,210
202.58	3,703	6,255	203.10	3,971	8,250
202.59	3,708	6,292	203.11	3,976	8,289
202.60	3,713	6,329	203.12	3,981	8,329
202.61	3,718	6,366	203.13	3,987	8,369
202.62	3,724	6,404	203.14	3,992	8,409
202.63	3,729	6,441	203.15	3,998	8,449
202.64	3,734	6,478	203.16	4,003	8,489
202.65	3,739	6,516	203.17	4,008	8,529
202.66	3,744	6,553	203.18	4,014	8,569
202.67	3,749	6,590	203.19	4,019	8,609
202.68	3,754	6,628	203.20	4,024	8,649
202.69	3,759	6,665	203.21	4,030	8,690
202.70	3,764	6,703	203.22	4,035	8,730
202.71	3,769	6,741	203.23	4,041	8,770
202.72	3,774	6,778	203.24	4,046	8,811
202.73	3,780	6,816	203.25	4,051	8,851
202.74	3,785	6,854	203.26	4,057	8,892
202.75	3,790	6,892	203.27	4,062	8,932
202.76	3,795	6,930	203.28	4,067	8,973
202.77	3,800	6,968	203.29	4,073	9,014
202.78	3,805	7,006	203.30	4,078	9,055
202.79	3,810	7,044	203.31	4,083	9,095
202.80	3,815	7,082	203.32	4,089	9,136
202.81	3,820	7,120	203.33	4,094	9,177
202.82	3,825	7,158	203.34	4,100	9,218
202.83	3,830	7,197	203.35	4,105	9,259
202.84	3,836	7,235	203.36	4,110	9,300
202.85	3,841	7,273	203.37	4,116	9,341
202.86	3,846	7,312	203.38	4,121	9,383
202.87	3,851	7,350	203.39	4,126	9,424
202.88	3,856	7,389	203.40	4,132	9,465
202.89	3,861	7,428	203.41	4,137	9,506

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.42	4,143	9,548	203.94	4,422	11,775
203.43	4,148	9,589	203.95	4,427	11,819
203.44	4,153	9,631	203.96	4,433	11,863
203.45	4,159	9,672	203.97	4,438	11,907
203.46	4,164	9,714	203.98	4,443	11,952
203.47	4,169	9,756	203.99	4,449	11,996
203.48	4,175	9,797	204.00	4,454	12,041
203.49	4,180	9,839	204.01	4,460	12,085
203.50	4,186	9,881	204.02	4,465	12,130
203.51	4,191	9,923	204.03	4,471	12,175
203.52	4,196	9,965	204.04	4,477	12,219
203.53	4,202	10,007	204.05	4,482	12,264
203.54	4,207	10,049	204.06	4,488	12,309
203.55	4,212	10,091	204.07	4,494	12,354
203.56	4,218	10,133	204.08	4,499	12,399
203.57	4,223	10,175	204.09	4,505	12,444
203.58	4,228	10,217	204.10	4,511	12,489
203.59	4,234	10,260	204.11	4,516	12,534
203.60	4,239	10,302	204.12	4,522	12,579
203.61	4,245	10,345	204.13	4,527	12,625
203.62	4,250	10,387	204.14	4,533	12,670
203.63	4,255	10,430	204.15	4,539	12,715
203.64	4,261	10,472	204.16	4,544	12,761
203.65	4,266	10,515	204.17	4,550	12,806
203.66	4,271	10,557	204.18	4,556	12,852
203.67	4,277	10,600	204.19	4,561	12,897
203.68	4,282	10,643	204.20	4,567	12,943
203.69	4,288	10,686	204.21	4,573	12,989
203.70	4,293	10,729	204.22	4,578	13,034
203.71	4,298	10,772	204.23	4,584	13,080
203.72	4,304	10,815	204.24	4,590	13,126
203.73	4,309	10,858	204.25	4,595	13,172
203.74	4,314	10,901	204.26	4,601	13,218
203.75	4,320	10,944	204.27	4,607	13,264
203.76	4,325	10,987	204.28	4,612	13,310
203.77	4,330	11,031	204.29	4,618	13,356
203.78	4,336	11,074	204.30	4,624	13,402
203.79	4,341	11,117	204.31	4,629	13,449
203.80	4,347	11,161	204.32	4,635	13,495
203.81	4,352	11,204	204.33	4,640	13,541
203.82	4,357	11,248	204.34	4,646	13,588
203.83	4,363	11,291	204.35	4,652	13,634
203.84	4,368	11,335	204.36	4,657	13,681
203.85	4,373	11,379	204.37	4,663	13,727
203.86	4,379	11,423	204.38	4,669	13,774
203.87	4,384	11,466	204.39	4,674	13,821
203.88	4,390	11,510	204.40	4,680	13,868
203.89	4,395	11,554	204.41	4,686	13,914
203.90	4,400	11,598	204.42	4,691	13,961
203.91	4,406	11,642	204.43	4,697	14,008
203.92	4,411	11,686	204.44	4,703	14,055
203.93	4,416	11,730	204.45	4,708	14,102

Stage-Area-Storage for Pond B-39: Basin #39 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.46	4,714	14,149
204.47	4,720	14,197
204.48	4,725	14,244
204.49	4,731	14,291
204.50	4,737	14,338
204.51	4,742	14,386
204.52	4,748	14,433
204.53	4,753	14,481
204.54	4,759	14,528
204.55	4,765	14,576
204.56	4,770	14,624
204.57	4,776	14,671
204.58	4,782	14,719
204.59	4,787	14,767
204.60	4,793	14,815
204.61	4,799	14,863
204.62	4,804	14,911
204.63	4,810	14,959
204.64	4,816	15,007
204.65	4,821	15,055
204.66	4,827	15,103
204.67	4,833	15,152
204.68	4,838	15,200
204.69	4,844	15,249
204.70	4,850	15,297
204.71	4,855	15,346
204.72	4,861	15,394
204.73	4,866	15,443
204.74	4,872	15,491
204.75	4,878	15,540
204.76	4,883	15,589
204.77	4,889	15,638
204.78	4,895	15,687
204.79	4,900	15,736
204.80	4,906	15,785
204.81	4,912	15,834
204.82	4,917	15,883
204.83	4,923	15,932
204.84	4,929	15,981
204.85	4,934	16,031
204.86	4,940	16,080
204.87	4,946	16,130
204.88	4,951	16,179
204.89	4,957	16,229
204.90	4,963	16,278
204.91	4,968	16,328
204.92	4,974	16,378
204.93	4,979	16,427
204.94	4,985	16,477
204.95	4,991	16,527
204.96	4,996	16,577
204.97	5,002	16,627
204.98	5,008	16,677
204.99	5,013	16,727
205.00	**5,019**	**16,777**

Summary for Pond B-40: Basin #40

Inflow Area = 1.888 ac, 47.19% Impervious, Inflow Depth = 9.35" for Future 100 yr event
Inflow = 17.66 cfs @ 12.17 hrs, Volume= 1.472 af
Outflow = 11.86 cfs @ 12.28 hrs, Volume= 1.389 af, Atten= 33%, Lag= 6.6 min
Primary = 11.86 cfs @ 12.28 hrs, Volume= 1.389 af
Routed to Link PDA-3 : Proposed Drainage Area #3

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 205.18' @ 12.28 hrs Surf.Area= 4,732 sf Storage= 14,307 cf

Plug-Flow detention time= 79.6 min calculated for 1.387 af (94% of inflow)
Center-of-Mass det. time= 47.3 min (819.2 - 771.9)

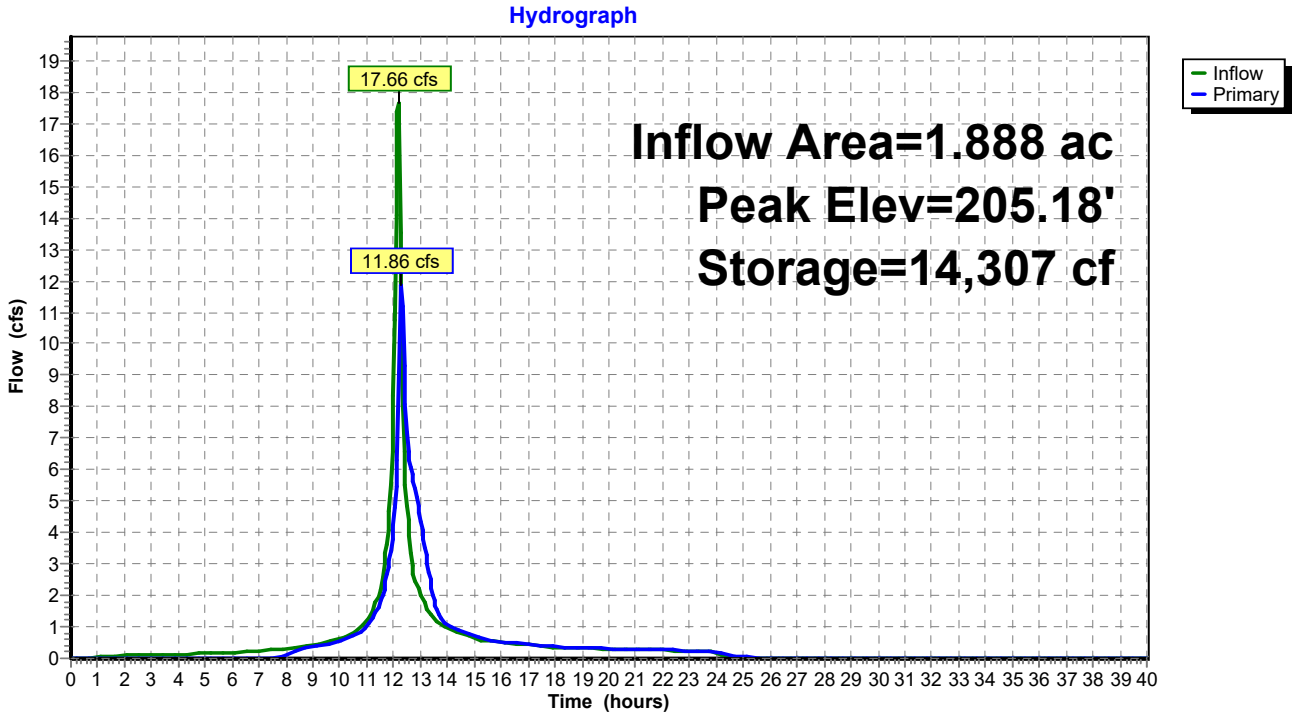
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	18,339 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,521	1,232	1,232
203.00	3,886	3,704	4,936
204.00	4,266	4,076	9,012
205.00	4,660	4,463	13,475
206.00	5,069	4,865	18,339

Device	Routing	Invert	Outlet Devices
#1	Primary	201.30'	**18.0" Round Culvert** L= 38.0' Ke= 0.500 Inlet / Outlet Invert= 201.30' / 201.11' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.65'	**24.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	204.67'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	205.49'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.71 cfs @ 12.28 hrs HW=205.17' (Free Discharge)
- **1=Culvert** (Passes 11.71 cfs of 15.02 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 7.25 cfs @ 7.25 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.47 cfs @ 2.30 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-40: Basin #40



Stage-Discharge for Pond B-40: Basin #40

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.62
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.66
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.71
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.75
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.80
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.85
201.36	0.00	201.88	0.00	202.40	0.00	202.92	0.90
201.37	0.00	201.89	0.00	202.41	0.00	202.93	0.95
201.38	0.00	201.90	0.00	202.42	0.00	202.94	1.00
201.39	0.00	201.91	0.00	202.43	0.00	202.95	1.05
201.40	0.00	201.92	0.00	202.44	0.00	202.96	1.11
201.41	0.00	201.93	0.00	202.45	0.00	202.97	1.16
201.42	0.00	201.94	0.00	202.46	0.00	202.98	1.22
201.43	0.00	201.95	0.00	202.47	0.00	202.99	1.27
201.44	0.00	201.96	0.00	202.48	0.00	203.00	1.33
201.45	0.00	201.97	0.00	202.49	0.00	203.01	1.39
201.46	0.00	201.98	0.00	202.50	0.00	203.02	1.44
201.47	0.00	201.99	0.00	202.51	0.00	203.03	1.50
201.48	0.00	202.00	0.00	202.52	0.00	203.04	1.56
201.49	0.00	202.01	0.00	202.53	0.00	203.05	1.62
201.50	0.00	202.02	0.00	202.54	0.00	203.06	1.69
201.51	0.00	202.03	0.00	202.55	0.00	203.07	1.75
201.52	0.00	202.04	0.00	202.56	0.00	203.08	1.81
201.53	0.00	202.05	0.00	202.57	0.00	203.09	1.87
201.54	0.00	202.06	0.00	202.58	0.00	203.10	1.94
201.55	0.00	202.07	0.00	202.59	0.00	203.11	2.00
201.56	0.00	202.08	0.00	202.60	0.00	203.12	2.07
201.57	0.00	202.09	0.00	202.61	0.00	203.13	2.13
201.58	0.00	202.10	0.00	202.62	0.00	203.14	2.20
201.59	0.00	202.11	0.00	202.63	0.00	203.15	2.27
201.60	0.00	202.12	0.00	202.64	0.00	203.16	2.33
201.61	0.00	202.13	0.00	202.65	0.00	203.17	2.39
201.62	0.00	202.14	0.00	202.66	0.01	203.18	2.44
201.63	0.00	202.15	0.00	202.67	0.02	203.19	2.50
201.64	0.00	202.16	0.00	202.68	0.03	203.20	2.55
201.65	0.00	202.17	0.00	202.69	0.05	203.21	2.60
201.66	0.00	202.18	0.00	202.70	0.07	203.22	2.64
201.67	0.00	202.19	0.00	202.71	0.09	203.23	2.69
201.68	0.00	202.20	0.00	202.72	0.12	203.24	2.74
201.69	0.00	202.21	0.00	202.73	0.15	203.25	2.78
201.70	0.00	202.22	0.00	202.74	0.17	203.26	2.82
201.71	0.00	202.23	0.00	202.75	0.20	203.27	2.87
201.72	0.00	202.24	0.00	202.76	0.23	203.28	2.91
201.73	0.00	202.25	0.00	202.77	0.27	203.29	2.95
201.74	0.00	202.26	0.00	202.78	0.30	203.30	2.99
201.75	0.00	202.27	0.00	202.79	0.34	203.31	3.03
201.76	0.00	202.28	0.00	202.80	0.37	203.32	3.07
201.77	0.00	202.29	0.00	202.81	0.41	203.33	3.11
201.78	0.00	202.30	0.00	202.82	0.45	203.34	3.15
201.79	0.00	202.31	0.00	202.83	0.49	203.35	3.19
201.80	0.00	202.32	0.00	202.84	0.53	203.36	3.22
201.81	0.00	202.33	0.00	202.85	0.57	203.37	3.26

Stage-Discharge for Pond B-40: Basin #40 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	3.30	203.90	4.80	204.42	5.93	204.94	8.68
203.39	3.33	203.91	4.83	204.43	5.95	204.95	8.80
203.40	3.37	203.92	4.85	204.44	5.97	204.96	8.92
203.41	3.40	203.93	4.87	204.45	5.99	204.97	9.04
203.42	3.44	203.94	4.90	204.46	6.01	204.98	9.16
203.43	3.47	203.95	4.92	204.47	6.03	204.99	9.29
203.44	3.51	203.96	4.95	204.48	6.05	205.00	9.41
203.45	3.54	203.97	4.97	204.49	6.07	205.01	9.54
203.46	3.57	203.98	4.99	204.50	6.08	205.02	9.67
203.47	3.60	203.99	5.02	204.51	6.10	205.03	9.80
203.48	3.64	204.00	5.04	204.52	6.12	205.04	9.93
203.49	3.67	204.01	5.06	204.53	6.14	205.05	10.06
203.50	3.70	204.02	5.09	204.54	6.16	205.06	10.20
203.51	3.73	204.03	5.11	204.55	6.18	205.07	10.33
203.52	3.76	204.04	5.13	204.56	6.20	205.08	10.47
203.53	3.80	204.05	5.15	204.57	6.22	205.09	10.61
203.54	3.83	204.06	5.18	204.58	6.24	205.10	10.75
203.55	3.86	204.07	5.20	204.59	6.25	205.11	10.89
203.56	3.89	204.08	5.22	204.60	6.27	205.12	11.03
203.57	3.92	204.09	5.24	204.61	6.29	205.13	11.17
203.58	3.95	204.10	5.26	204.62	6.31	205.14	11.32
203.59	3.98	204.11	5.29	204.63	6.33	205.15	11.46
203.60	4.01	204.12	5.31	204.64	6.35	205.16	11.61
203.61	4.04	204.13	5.33	204.65	6.36	205.17	11.76
203.62	4.06	204.14	5.35	204.66	6.38	205.18	11.91
203.63	4.09	204.15	5.37	204.67	6.40	205.19	12.06
203.64	4.12	204.16	5.40	204.68	6.43	205.20	12.21
203.65	4.15	204.17	5.42	204.69	6.47	205.21	12.36
203.66	4.18	204.18	5.44	204.70	6.52	205.22	12.52
203.67	4.21	204.19	5.46	204.71	6.58	205.23	12.67
203.68	4.23	204.20	5.48	204.72	6.64	205.24	12.83
203.69	4.26	204.21	5.50	204.73	6.70	205.25	12.99
203.70	4.29	204.22	5.52	204.74	6.77	205.26	13.15
203.71	4.32	204.23	5.54	204.75	6.84	205.27	13.31
203.72	4.34	204.24	5.57	204.76	6.91	205.28	13.47
203.73	4.37	204.25	5.59	204.77	6.99	205.29	13.63
203.74	4.40	204.26	5.61	204.78	7.07	205.30	13.79
203.75	4.42	204.27	5.63	204.79	7.16	205.31	13.95
203.76	4.45	204.28	5.65	204.80	7.24	205.32	14.12
203.77	4.48	204.29	5.67	204.81	7.33	205.33	14.28
203.78	4.50	204.30	5.69	204.82	7.42	205.34	14.45
203.79	4.53	204.31	5.71	204.83	7.51	205.35	14.62
203.80	4.55	204.32	5.73	204.84	7.61	205.36	14.79
203.81	4.58	204.33	5.75	204.85	7.71	205.37	14.96
203.82	4.60	204.34	5.77	204.86	7.81	205.38	15.13
203.83	4.63	204.35	5.79	204.87	7.91	205.39	15.30
203.84	4.65	204.36	5.81	204.88	8.02	205.40	15.47
203.85	4.68	204.37	5.83	204.89	8.12	205.41	15.60
203.86	4.70	204.38	5.85	204.90	8.23	205.42	15.62
203.87	4.73	204.39	5.87	204.91	8.34	205.43	15.64
203.88	4.75	204.40	5.89	204.92	8.45	205.44	15.67
203.89	4.78	204.41	5.91	204.93	8.57	205.45	15.69

Stage-Discharge for Pond B-40: Basin #40 (continued)

Elevation (feet)	Primary (cfs)
205.46	15.71
205.47	15.74
205.48	15.76
205.49	15.78
205.50	15.92
205.51	16.16
205.52	16.46
205.53	16.81
205.54	17.21
205.55	17.64
205.56	18.12
205.57	18.62
205.58	19.16
205.59	19.73
205.60	20.32
205.61	20.95
205.62	21.60
205.63	22.27
205.64	22.97
205.65	23.69
205.66	24.43
205.67	25.20
205.68	25.99
205.69	26.80
205.70	27.67
205.71	28.56
205.72	29.48
205.73	30.43
205.74	31.40
205.75	32.39
205.76	33.41
205.77	34.46
205.78	35.53
205.79	36.62
205.80	37.74
205.81	38.89
205.82	40.05
205.83	41.25
205.84	42.46
205.85	43.70
205.86	44.97
205.87	46.25
205.88	47.57
205.89	48.90
205.90	50.29
205.91	51.70
205.92	53.14
205.93	54.61
205.94	56.10
205.95	57.62
205.96	59.16
205.97	60.73
205.98	62.33
205.99	63.95
206.00	**65.60**

Stage-Area-Storage for Pond B-40: Basin #40

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0
201.31	50	0
201.32	101	1
201.33	151	2
201.34	201	4
201.35	252	6
201.36	302	9
201.37	352	12
201.38	402	16
201.39	453	20
201.40	503	25
201.41	553	30
201.42	604	36
201.43	654	43
201.44	704	49
201.45	755	57
201.46	805	64
201.47	855	73
201.48	905	81
201.49	956	91
201.50	1,006	101
201.51	1,056	111
201.52	1,107	122
201.53	1,157	133
201.54	1,207	145
201.55	1,258	157
201.56	1,308	170
201.57	1,358	183
201.58	1,408	197
201.59	1,459	212
201.60	1,509	226
201.61	1,559	242
201.62	1,610	258
201.63	1,660	274
201.64	1,710	291
201.65	1,761	308
201.66	1,811	326
201.67	1,861	344
201.68	1,911	363
201.69	1,962	383
201.70	2,012	402
201.71	2,062	423
201.72	2,113	444
201.73	2,163	465
201.74	2,213	487
201.75	2,263	509
201.76	2,314	532
201.77	2,364	556
201.78	2,414	579
201.79	2,465	604
201.80	2,515	629
201.81	2,565	654
201.82	2,616	680
201.83	2,666	706
201.84	2,716	733
201.85	2,767	761
201.86	2,817	789
201.87	2,867	817
201.88	2,917	846
201.89	2,968	875
201.90	3,018	905
201.91	3,068	936
201.92	3,119	967
201.93	3,169	998
201.94	3,219	1,030
201.95	3,270	1,063
201.96	3,320	1,096
201.97	3,370	1,129
201.98	3,420	1,163
201.99	3,471	1,197
202.00	3,521	1,232
202.01	3,525	1,268
202.02	3,528	1,303
202.03	3,532	1,338
202.04	3,536	1,373
202.05	3,539	1,409
202.06	3,543	1,444
202.07	3,547	1,480
202.08	3,550	1,515
202.09	3,554	1,551
202.10	3,558	1,586
202.11	3,561	1,622
202.12	3,565	1,657
202.13	3,568	1,693
202.14	3,572	1,729
202.15	3,576	1,765
202.16	3,579	1,800
202.17	3,583	1,836
202.18	3,587	1,872
202.19	3,590	1,908
202.20	3,594	1,944
202.21	3,598	1,980
202.22	3,601	2,016
202.23	3,605	2,052
202.24	3,609	2,088
202.25	3,612	2,124
202.26	3,616	2,160
202.27	3,620	2,196
202.28	3,623	2,233
202.29	3,627	2,269
202.30	3,631	2,305
202.31	3,634	2,341
202.32	3,638	2,378
202.33	3,641	2,414

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	3,645	2,451	202.86	3,835	4,395
202.35	3,649	2,487	202.87	3,839	4,434
202.36	3,652	2,524	202.88	3,842	4,472
202.37	3,656	2,560	202.89	3,846	4,511
202.38	3,660	2,597	202.90	3,850	4,549
202.39	3,663	2,633	202.91	3,853	4,588
202.40	3,667	2,670	202.92	3,857	4,626
202.41	3,671	2,707	202.93	3,860	4,665
202.42	3,674	2,743	202.94	3,864	4,703
202.43	3,678	2,780	202.95	3,868	4,742
202.44	3,682	2,817	202.96	3,871	4,781
202.45	3,685	2,854	202.97	3,875	4,819
202.46	3,689	2,891	202.98	3,879	4,858
202.47	3,693	2,928	202.99	3,882	4,897
202.48	3,696	2,964	203.00	3,886	4,936
202.49	3,700	3,001	203.01	3,890	4,975
202.50	3,704	3,038	203.02	3,894	5,014
202.51	3,707	3,076	203.03	3,897	5,053
202.52	3,711	3,113	203.04	3,901	5,092
202.53	3,714	3,150	203.05	3,905	5,131
202.54	3,718	3,187	203.06	3,909	5,170
202.55	3,722	3,224	203.07	3,913	5,209
202.56	3,725	3,261	203.08	3,916	5,248
202.57	3,729	3,299	203.09	3,920	5,287
202.58	3,733	3,336	203.10	3,924	5,326
202.59	3,736	3,373	203.11	3,928	5,366
202.60	3,740	3,411	203.12	3,932	5,405
202.61	3,744	3,448	203.13	3,935	5,444
202.62	3,747	3,486	203.14	3,939	5,484
202.63	3,751	3,523	203.15	3,943	5,523
202.64	3,755	3,561	203.16	3,947	5,562
202.65	3,758	3,598	203.17	3,951	5,602
202.66	3,762	3,636	203.18	3,954	5,641
202.67	3,766	3,673	203.19	3,958	5,681
202.68	3,769	3,711	203.20	3,962	5,721
202.69	3,773	3,749	203.21	3,966	5,760
202.70	3,777	3,786	203.22	3,970	5,800
202.71	3,780	3,824	203.23	3,973	5,840
202.72	3,784	3,862	203.24	3,977	5,879
202.73	3,787	3,900	203.25	3,981	5,919
202.74	3,791	3,938	203.26	3,985	5,959
202.75	3,795	3,976	203.27	3,989	5,999
202.76	3,798	4,014	203.28	3,992	6,039
202.77	3,802	4,052	203.29	3,996	6,079
202.78	3,806	4,090	203.30	4,000	6,119
202.79	3,809	4,128	203.31	4,004	6,159
202.80	3,813	4,166	203.32	4,008	6,199
202.81	3,817	4,204	203.33	4,011	6,239
202.82	3,820	4,242	203.34	4,015	6,279
202.83	3,824	4,281	203.35	4,019	6,319
202.84	3,828	4,319	203.36	4,023	6,359
202.85	3,831	4,357	203.37	4,027	6,400

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,030	6,440
203.39	4,034	6,480
203.40	4,038	6,521
203.41	4,042	6,561
203.42	4,046	6,601
203.43	4,049	6,642
203.44	4,053	6,682
203.45	4,057	6,723
203.46	4,061	6,764
203.47	4,065	6,804
203.48	4,068	6,845
203.49	4,072	6,886
203.50	4,076	6,926
203.51	4,080	6,967
203.52	4,084	7,008
203.53	4,087	7,049
203.54	4,091	7,090
203.55	4,095	7,131
203.56	4,099	7,172
203.57	4,103	7,213
203.58	4,106	7,254
203.59	4,110	7,295
203.60	4,114	7,336
203.61	4,118	7,377
203.62	4,122	7,418
203.63	4,125	7,459
203.64	4,129	7,501
203.65	4,133	7,542
203.66	4,137	7,583
203.67	4,141	7,625
203.68	4,144	7,666
203.69	4,148	7,708
203.70	4,152	7,749
203.71	4,156	7,791
203.72	4,160	7,832
203.73	4,163	7,874
203.74	4,167	7,916
203.75	4,171	7,957
203.76	4,175	7,999
203.77	4,179	8,041
203.78	4,182	8,083
203.79	4,186	8,124
203.80	4,190	8,166
203.81	4,194	8,208
203.82	4,198	8,250
203.83	4,201	8,292
203.84	4,205	8,334
203.85	4,209	8,376
203.86	4,213	8,418
203.87	4,217	8,460
203.88	4,220	8,503
203.89	4,224	8,545
203.90	4,228	8,587
203.91	4,232	8,629
203.92	4,236	8,672
203.93	4,239	8,714
203.94	4,243	8,757
203.95	4,247	8,799
203.96	4,251	8,842
203.97	4,255	8,884
203.98	4,258	8,927
203.99	4,262	8,969
204.00	4,266	9,012
204.01	4,270	9,055
204.02	4,274	9,097
204.03	4,278	9,140
204.04	4,282	9,183
204.05	4,286	9,226
204.06	4,290	9,269
204.07	4,294	9,311
204.08	4,298	9,354
204.09	4,301	9,397
204.10	4,305	9,440
204.11	4,309	9,483
204.12	4,313	9,527
204.13	4,317	9,570
204.14	4,321	9,613
204.15	4,325	9,656
204.16	4,329	9,699
204.17	4,333	9,743
204.18	4,337	9,786
204.19	4,341	9,830
204.20	4,345	9,873
204.21	4,349	9,916
204.22	4,353	9,960
204.23	4,357	10,003
204.24	4,361	10,047
204.25	4,365	10,091
204.26	4,368	10,134
204.27	4,372	10,178
204.28	4,376	10,222
204.29	4,380	10,266
204.30	4,384	10,309
204.31	4,388	10,353
204.32	4,392	10,397
204.33	4,396	10,441
204.34	4,400	10,485
204.35	4,404	10,529
204.36	4,408	10,573
204.37	4,412	10,617
204.38	4,416	10,661
204.39	4,420	10,706
204.40	4,424	10,750
204.41	4,428	10,794

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	4,431	10,838	204.94	4,636	13,196
204.43	4,435	10,883	204.95	4,640	13,242
204.44	4,439	10,927	204.96	4,644	13,289
204.45	4,443	10,971	204.97	4,648	13,335
204.46	4,447	11,016	204.98	4,652	13,382
204.47	4,451	11,060	204.99	4,656	13,428
204.48	4,455	11,105	205.00	4,660	13,475
204.49	4,459	11,149	205.01	4,664	13,521
204.50	4,463	11,194	205.02	4,668	13,568
204.51	4,467	11,239	205.03	4,672	13,615
204.52	4,471	11,283	205.04	4,676	13,662
204.53	4,475	11,328	205.05	4,680	13,708
204.54	4,479	11,373	205.06	4,685	13,755
204.55	4,483	11,418	205.07	4,689	13,802
204.56	4,487	11,463	205.08	4,693	13,849
204.57	4,491	11,507	205.09	4,697	13,896
204.58	4,495	11,552	205.10	4,701	13,943
204.59	4,498	11,597	205.11	4,705	13,990
204.60	4,502	11,642	205.12	4,709	14,037
204.61	4,506	11,687	205.13	4,713	14,084
204.62	4,510	11,732	205.14	4,717	14,131
204.63	4,514	11,778	205.15	4,721	14,178
204.64	4,518	11,823	205.16	4,725	14,226
204.65	4,522	11,868	205.17	4,730	14,273
204.66	4,526	11,913	205.18	4,734	14,320
204.67	4,530	11,959	205.19	4,738	14,368
204.68	4,534	12,004	205.20	4,742	14,415
204.69	4,538	12,049	205.21	4,746	14,462
204.70	4,542	12,095	205.22	4,750	14,510
204.71	4,546	12,140	205.23	4,754	14,557
204.72	4,550	12,185	205.24	4,758	14,605
204.73	4,554	12,231	205.25	4,762	14,653
204.74	4,558	12,277	205.26	4,766	14,700
204.75	4,562	12,322	205.27	4,770	14,748
204.76	4,565	12,368	205.28	4,775	14,796
204.77	4,569	12,413	205.29	4,779	14,843
204.78	4,573	12,459	205.30	4,783	14,891
204.79	4,577	12,505	205.31	4,787	14,939
204.80	4,581	12,551	205.32	4,791	14,987
204.81	4,585	12,597	205.33	4,795	15,035
204.82	4,589	12,642	205.34	4,799	15,083
204.83	4,593	12,688	205.35	4,803	15,131
204.84	4,597	12,734	205.36	4,807	15,179
204.85	4,601	12,780	205.37	4,811	15,227
204.86	4,605	12,826	205.38	4,815	15,275
204.87	4,609	12,872	205.39	4,820	15,323
204.88	4,613	12,918	205.40	4,824	15,372
204.89	4,617	12,965	205.41	4,828	15,420
204.90	4,621	13,011	205.42	4,832	15,468
204.91	4,625	13,057	205.43	4,836	15,516
204.92	4,628	13,103	205.44	4,840	15,565
204.93	4,632	13,150	205.45	4,844	15,613

Stage-Area-Storage for Pond B-40: Basin #40 (continued)

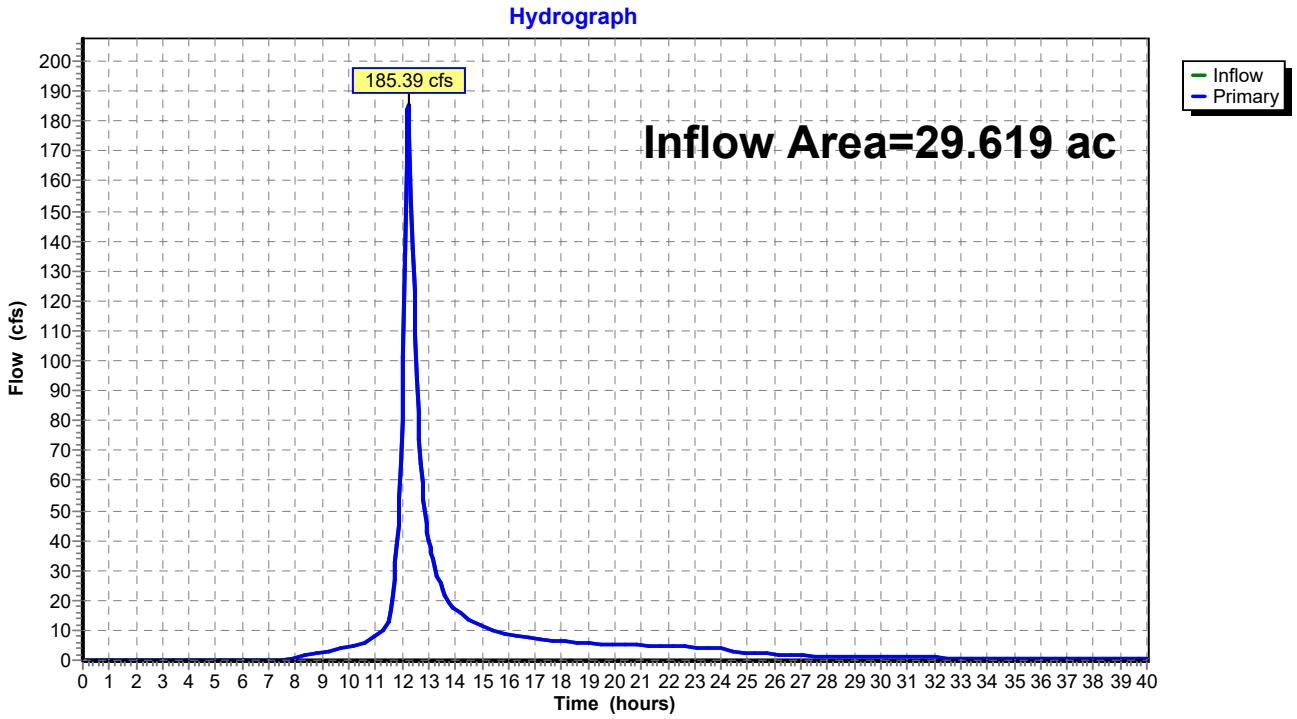
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.46	4,848	15,662
205.47	4,852	15,710
205.48	4,856	15,759
205.49	4,860	15,807
205.50	4,865	15,856
205.51	4,869	15,905
205.52	4,873	15,953
205.53	4,877	16,002
205.54	4,881	16,051
205.55	4,885	16,100
205.56	4,889	16,149
205.57	4,893	16,197
205.58	4,897	16,246
205.59	4,901	16,295
205.60	4,905	16,344
205.61	4,909	16,394
205.62	4,914	16,443
205.63	4,918	16,492
205.64	4,922	16,541
205.65	4,926	16,590
205.66	4,930	16,640
205.67	4,934	16,689
205.68	4,938	16,738
205.69	4,942	16,788
205.70	4,946	16,837
205.71	4,950	16,887
205.72	4,954	16,936
205.73	4,959	16,986
205.74	4,963	17,035
205.75	4,967	17,085
205.76	4,971	17,135
205.77	4,975	17,184
205.78	4,979	17,234
205.79	4,983	17,284
205.80	4,987	17,334
205.81	4,991	17,384
205.82	4,995	17,434
205.83	4,999	17,484
205.84	5,004	17,534
205.85	5,008	17,584
205.86	5,012	17,634
205.87	5,016	17,684
205.88	5,020	17,734
205.89	5,024	17,784
205.90	5,028	17,834
205.91	5,032	17,885
205.92	5,036	17,935
205.93	5,040	17,986
205.94	5,044	18,036
205.95	5,049	18,086
205.96	5,053	18,137
205.97	5,057	18,187
205.98	5,061	18,238
205.99	5,065	18,289
206.00	**5,069**	**18,339**

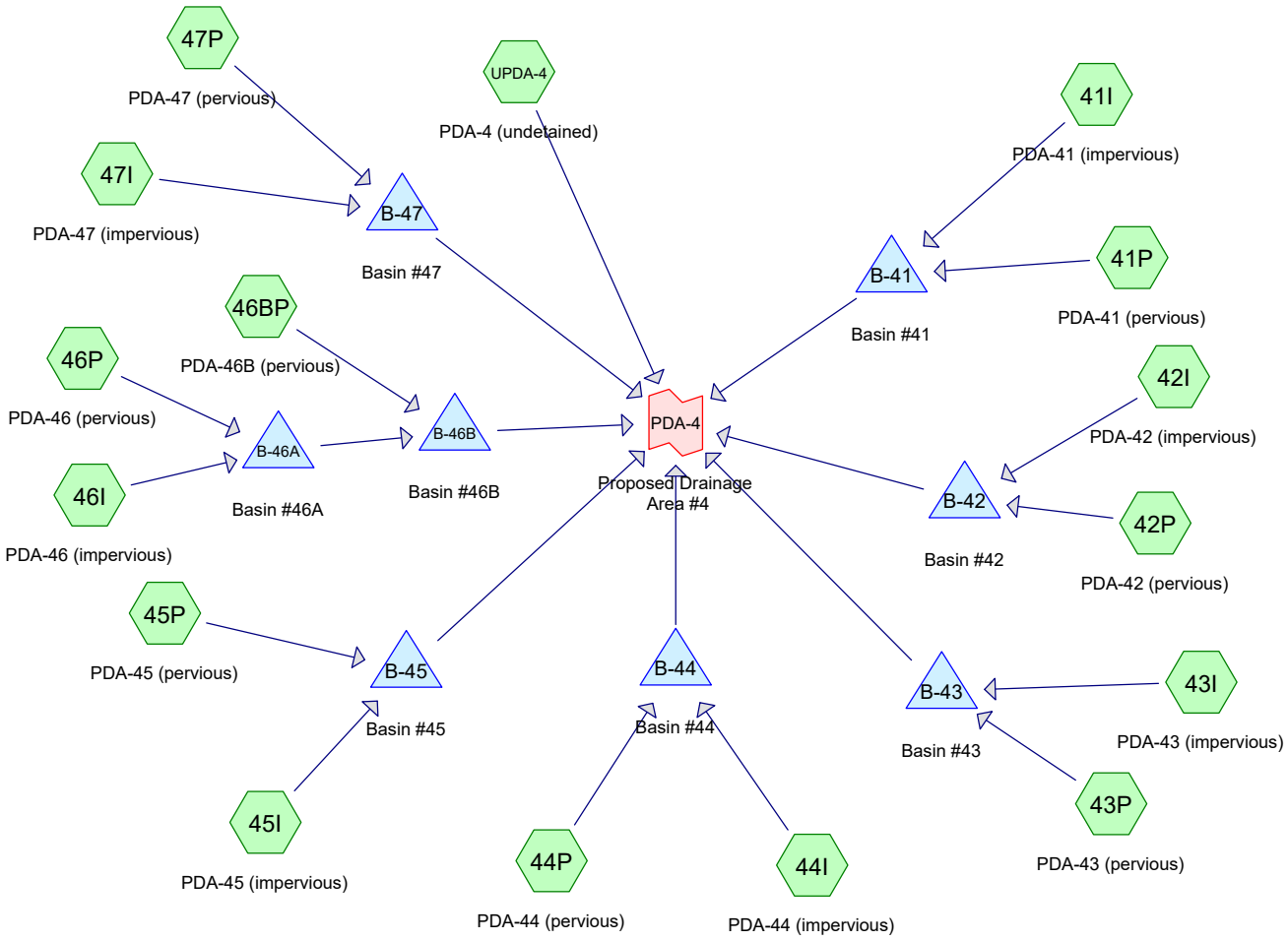
Summary for Link PDA-3: Proposed Drainage Area #3

Inflow Area = 29.619 ac, 38.13% Impervious, Inflow Depth > 8.37" for Future 100 yr event
Inflow = 185.39 cfs @ 12.22 hrs, Volume= 20.670 af
Primary = 185.39 cfs @ 12.22 hrs, Volume= 20.670 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-3: Proposed Drainage Area #3





Subcat Reach Pond Link

Routing Diagram for 2024-12-17 Proposed- 081391_4
Prepared by Bowman Consulting Group, Printed 12/19/2024
HydroCAD® 10.20-5c s/n 09435 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 41I: PDA-41 (impervious)

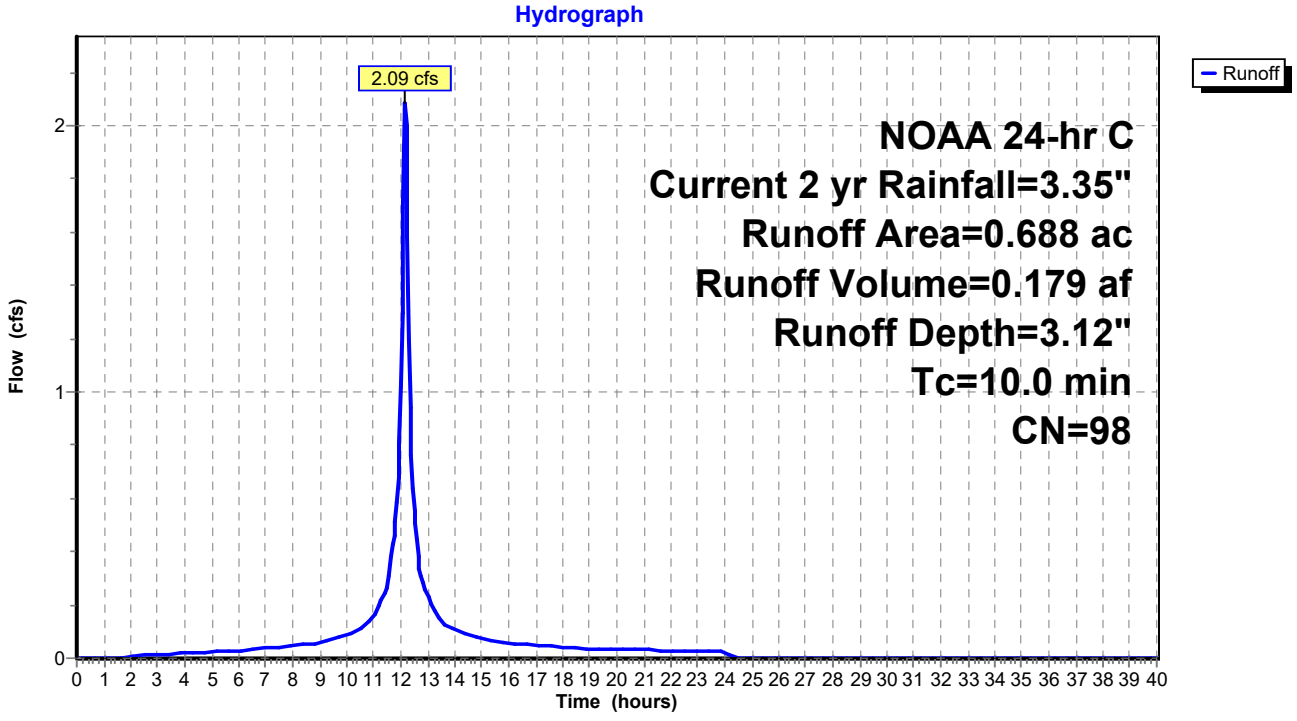
Runoff = 2.09 cfs @ 12.17 hrs, Volume= 0.179 af, Depth= 3.12"
Routed to Pond B-41 : Basin #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.136	98	Pavement, HSG C
*	0.514	98	Roof, HSG C
*	0.038	98	Concrete, HSC C
	0.688	98	Weighted Average
	0.688		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 41I: PDA-41 (impervious)



Summary for Subcatchment 41P: PDA-41 (pervious)

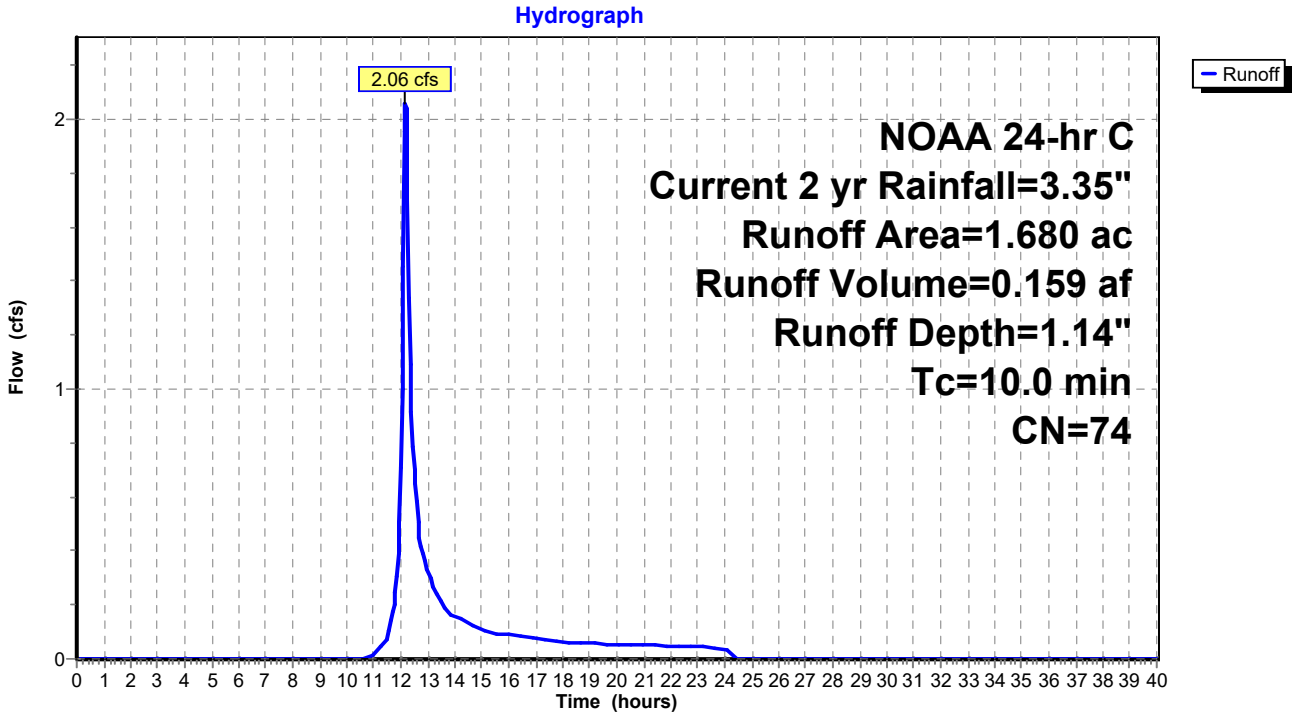
Runoff = 2.06 cfs @ 12.18 hrs, Volume= 0.159 af, Depth= 1.14"
Routed to Pond B-41 : Basin #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.680	74	>75% Grass cover, Good, HSG C
1.680		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 41P: PDA-41 (pervious)



Summary for Subcatchment 42I: PDA-42 (impervious)

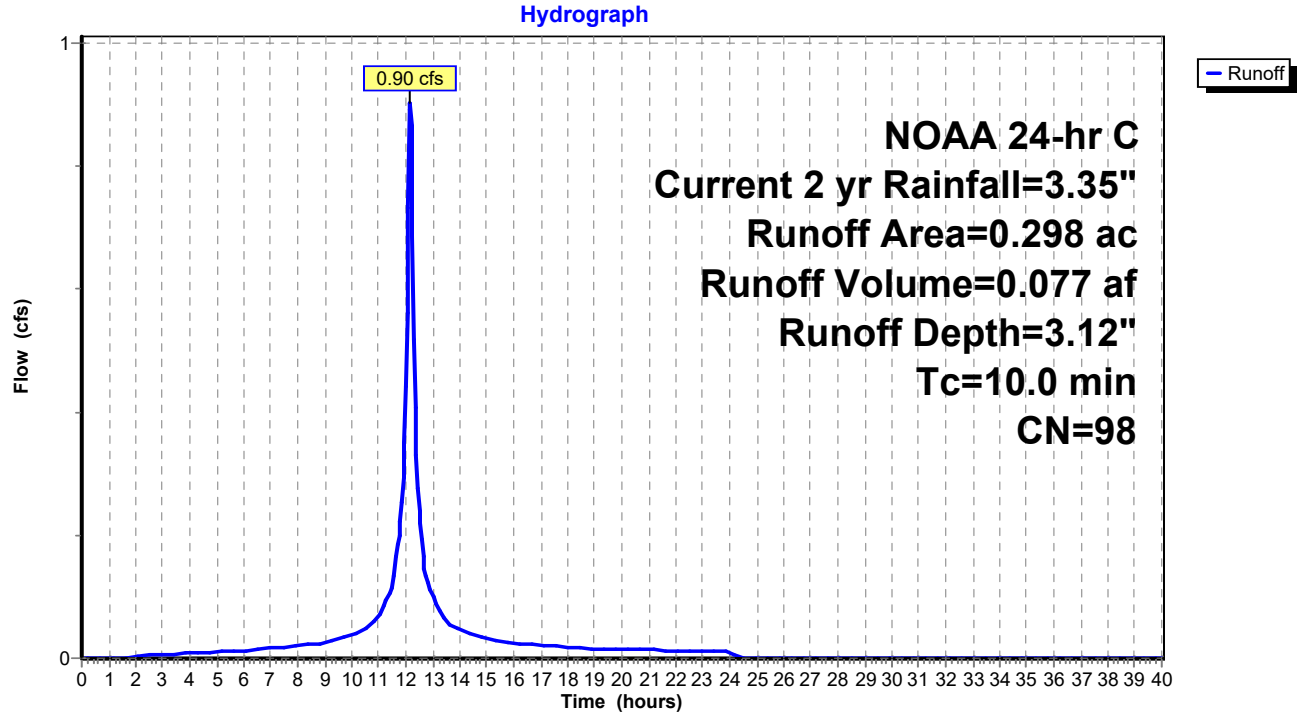
Runoff = 0.90 cfs @ 12.17 hrs, Volume= 0.077 af, Depth= 3.12"
Routed to Pond B-42 : Basin #42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.298	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.298	98	Weighted Average
	0.298		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 42I: PDA-42 (impervious)



Summary for Subcatchment 42P: PDA-42 (pervious)

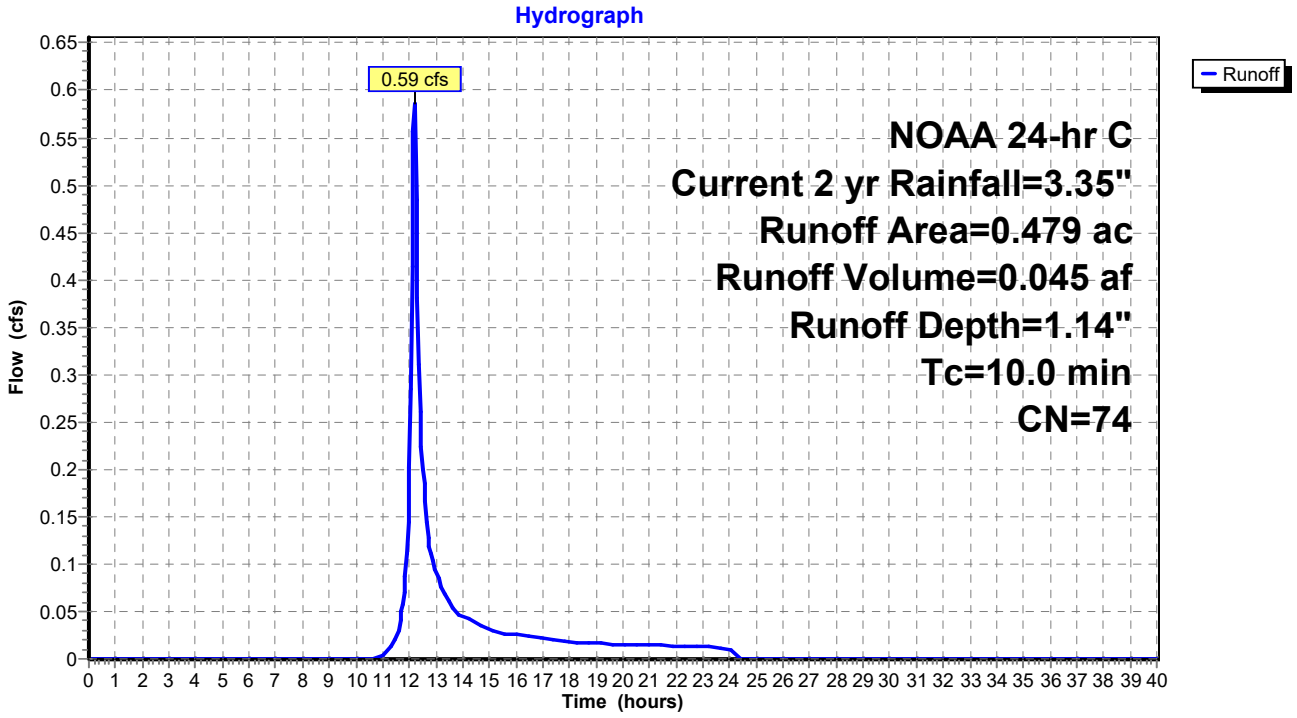
Runoff = 0.59 cfs @ 12.18 hrs, Volume= 0.045 af, Depth= 1.14"
Routed to Pond B-42 : Basin #42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.479	74	>75% Grass cover, Good, HSG C
0.479		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 42P: PDA-42 (pervious)



Summary for Subcatchment 43I: PDA-43 (impervious)

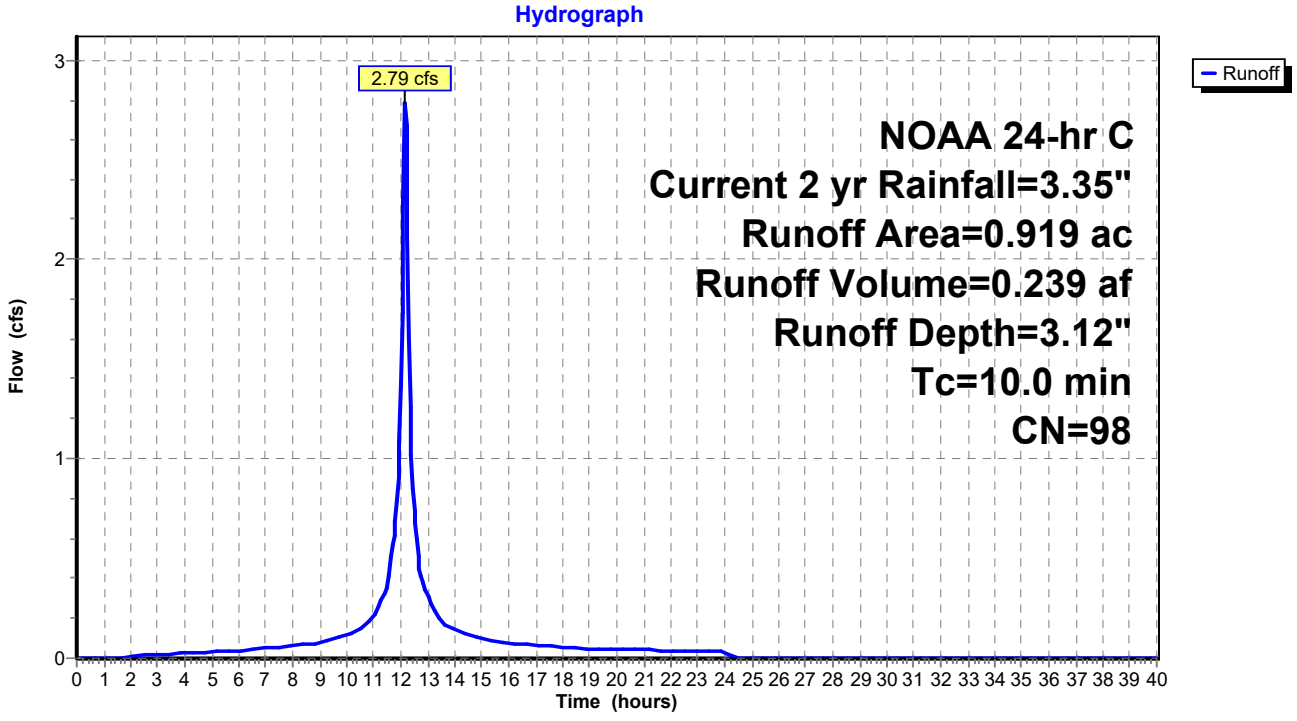
Runoff = 2.79 cfs @ 12.17 hrs, Volume= 0.239 af, Depth= 3.12"
Routed to Pond B-43 : Basin #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.326	98	Pavement, HSG C
*	0.522	98	Roof, HSG C
*	0.071	98	Concrete, HSC C
	0.919	98	Weighted Average
	0.919		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 43I: PDA-43 (impervious)



Summary for Subcatchment 43P: PDA-43 (pervious)

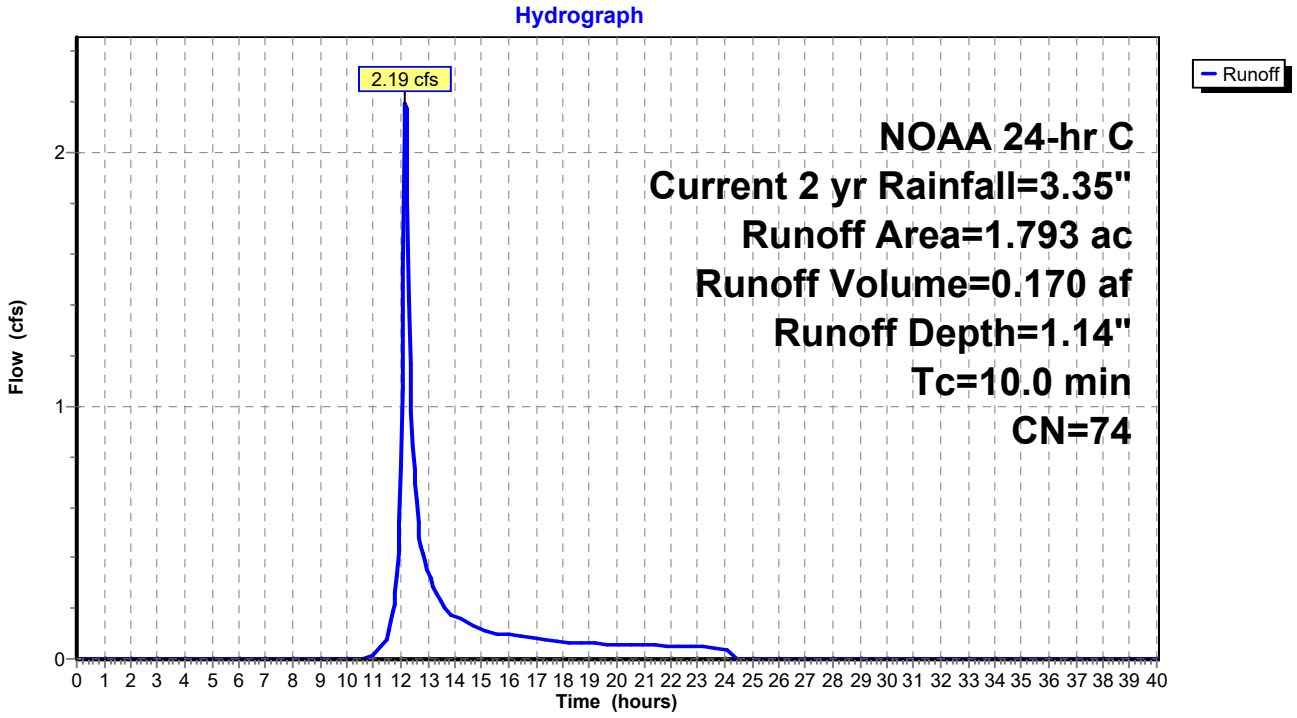
Runoff = 2.19 cfs @ 12.18 hrs, Volume= 0.170 af, Depth= 1.14"
Routed to Pond B-43 : Basin #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.793	74	>75% Grass cover, Good, HSG C
1.793		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 43P: PDA-43 (pervious)



Summary for Subcatchment 44I: PDA-44 (impervious)

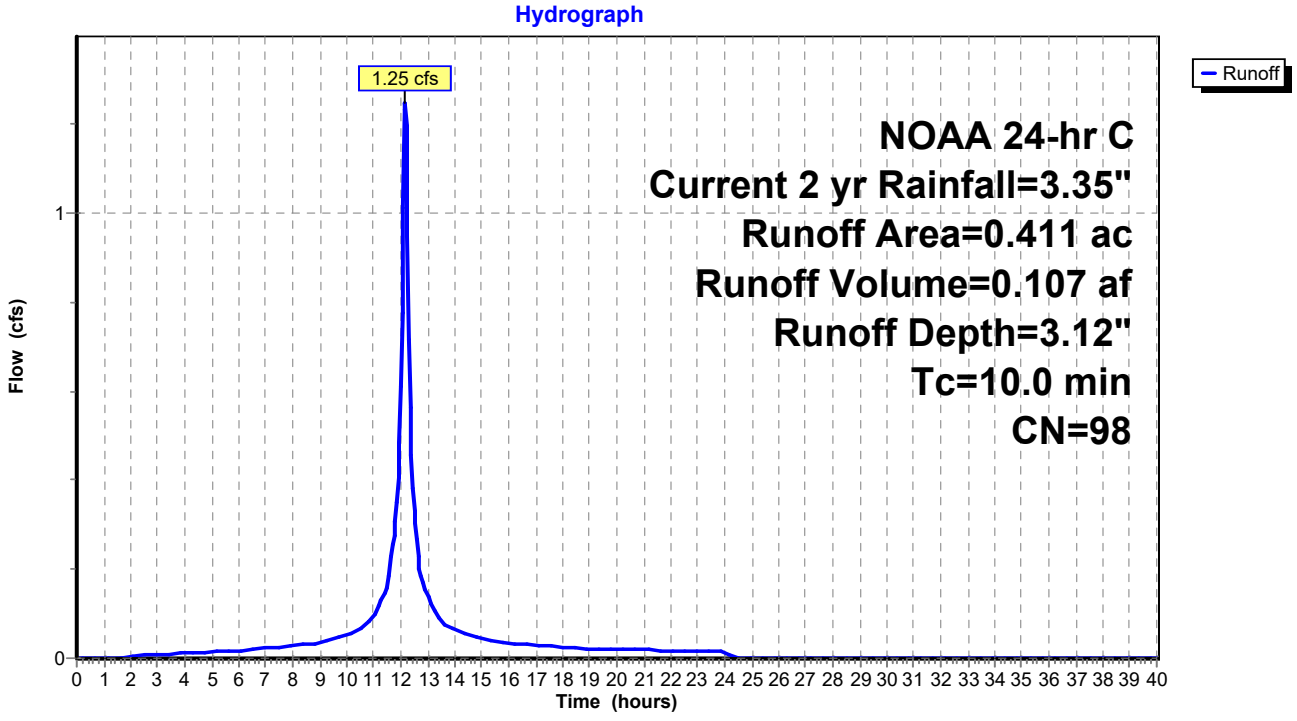
Runoff = 1.25 cfs @ 12.17 hrs, Volume= 0.107 af, Depth= 3.12"
Routed to Pond B-44 : Basin #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.283	98	Pavement, HSG C
*	0.104	98	Roof, HSG C
*	0.024	98	Concrete, HSC C
	0.411	98	Weighted Average
	0.411		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 44I: PDA-44 (impervious)



Summary for Subcatchment 44P: PDA-44 (pervious)

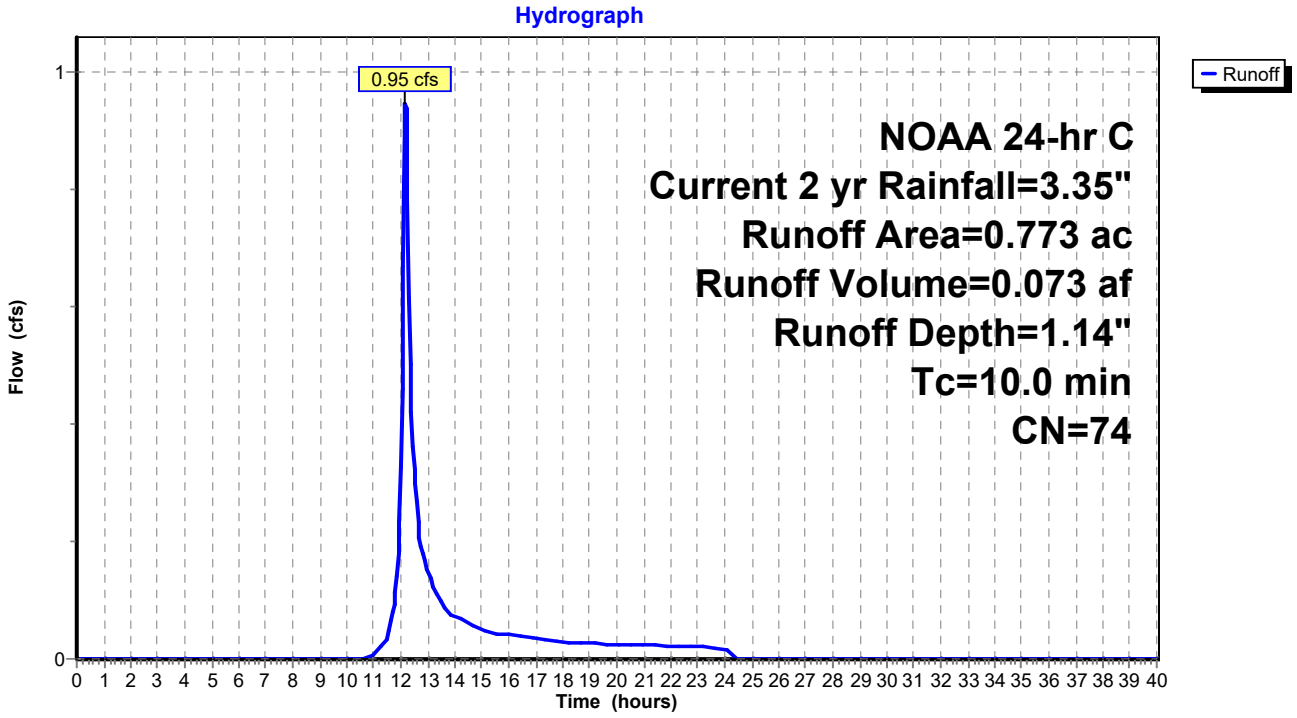
Runoff = 0.95 cfs @ 12.18 hrs, Volume= 0.073 af, Depth= 1.14"
Routed to Pond B-44 : Basin #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.773	74	>75% Grass cover, Good, HSG C
0.773		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 44P: PDA-44 (pervious)



Summary for Subcatchment 45l: PDA-45 (impervious)

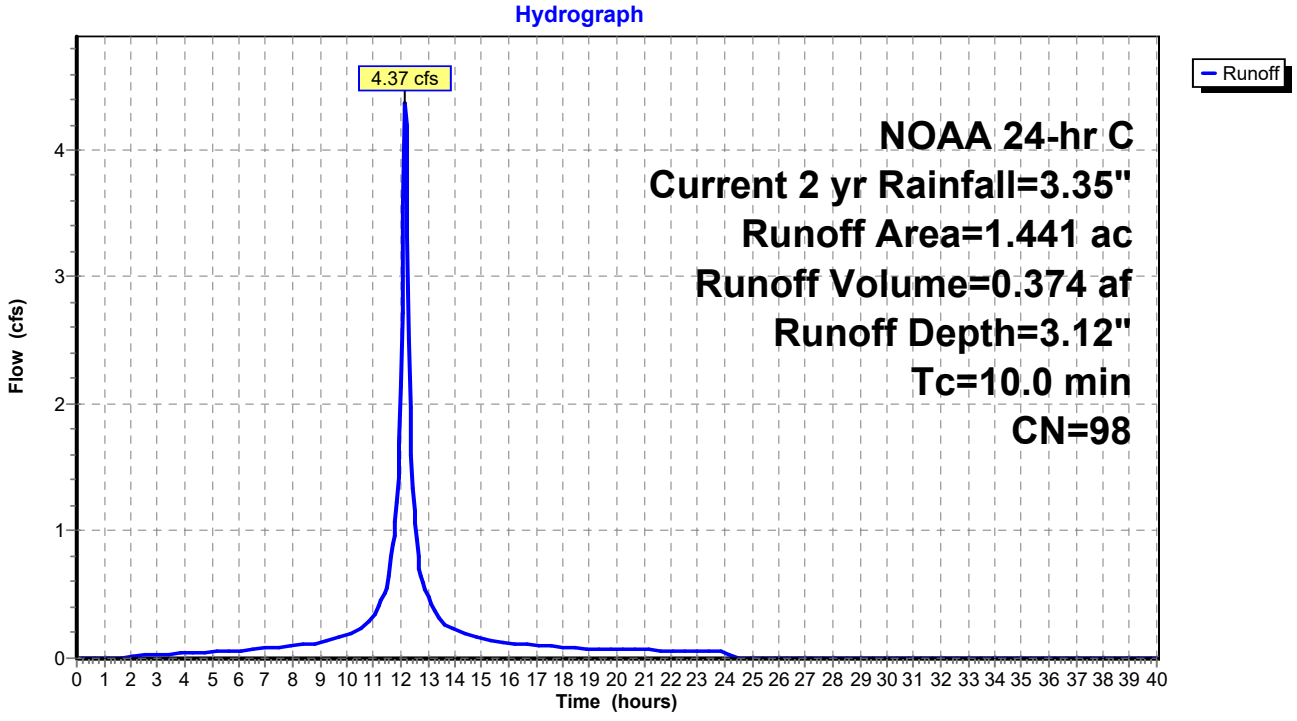
Runoff = 4.37 cfs @ 12.17 hrs, Volume= 0.374 af, Depth= 3.12"
Routed to Pond B-45 : Basin #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.394	98	Pavement, HSG C
*	1.045	98	Roof, HSG C
*	0.002	98	Concrete, HSG C
	1.441	98	Weighted Average
	1.441		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 45l: PDA-45 (impervious)



Summary for Subcatchment 45P: PDA-45 (pervious)

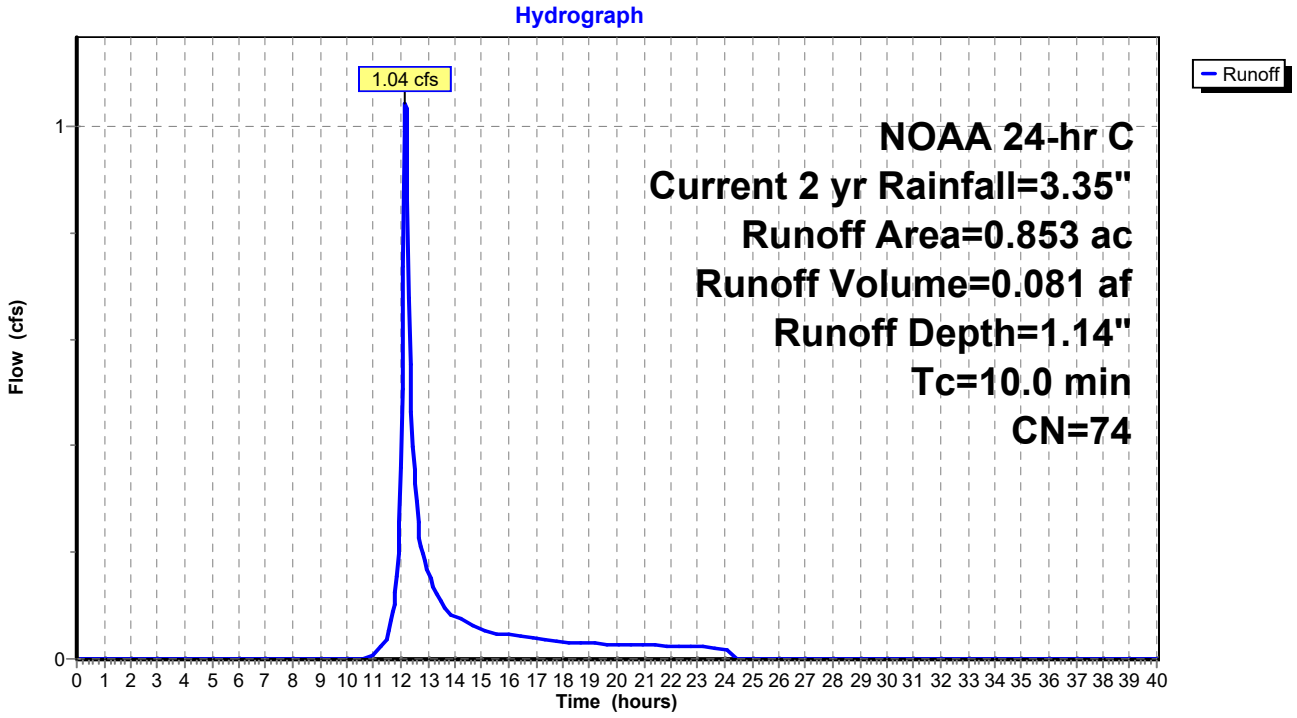
Runoff = 1.04 cfs @ 12.18 hrs, Volume= 0.081 af, Depth= 1.14"
Routed to Pond B-45 : Basin #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.853	74	>75% Grass cover, Good, HSG C
0.853		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 45P: PDA-45 (pervious)



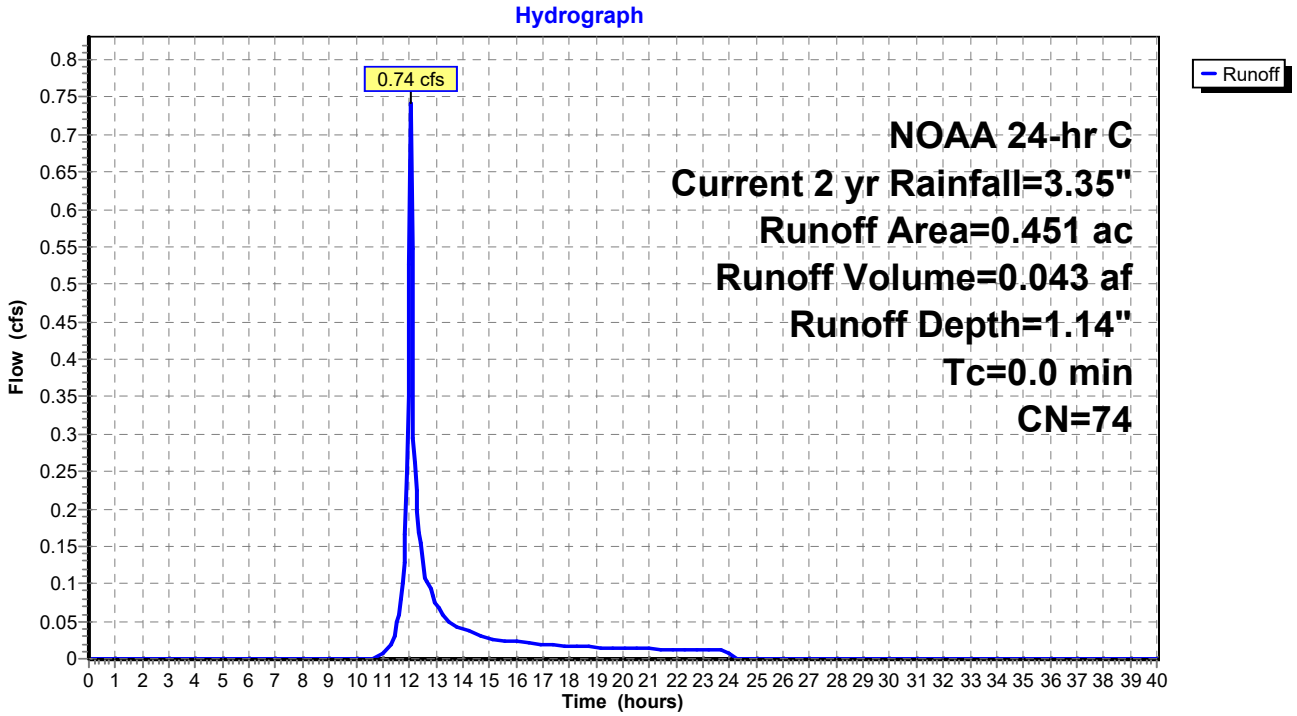
Summary for Subcatchment 46BP: PDA-46B (pervious)

Runoff = 0.74 cfs @ 12.05 hrs, Volume= 0.043 af, Depth= 1.14"
Routed to Pond B-46B : Basin #46B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.451	74	>75% Grass cover, Good, HSG C
0.451		100.00% Pervious Area

Subcatchment 46BP: PDA-46B (pervious)



Summary for Subcatchment 46I: PDA-46 (impervious)

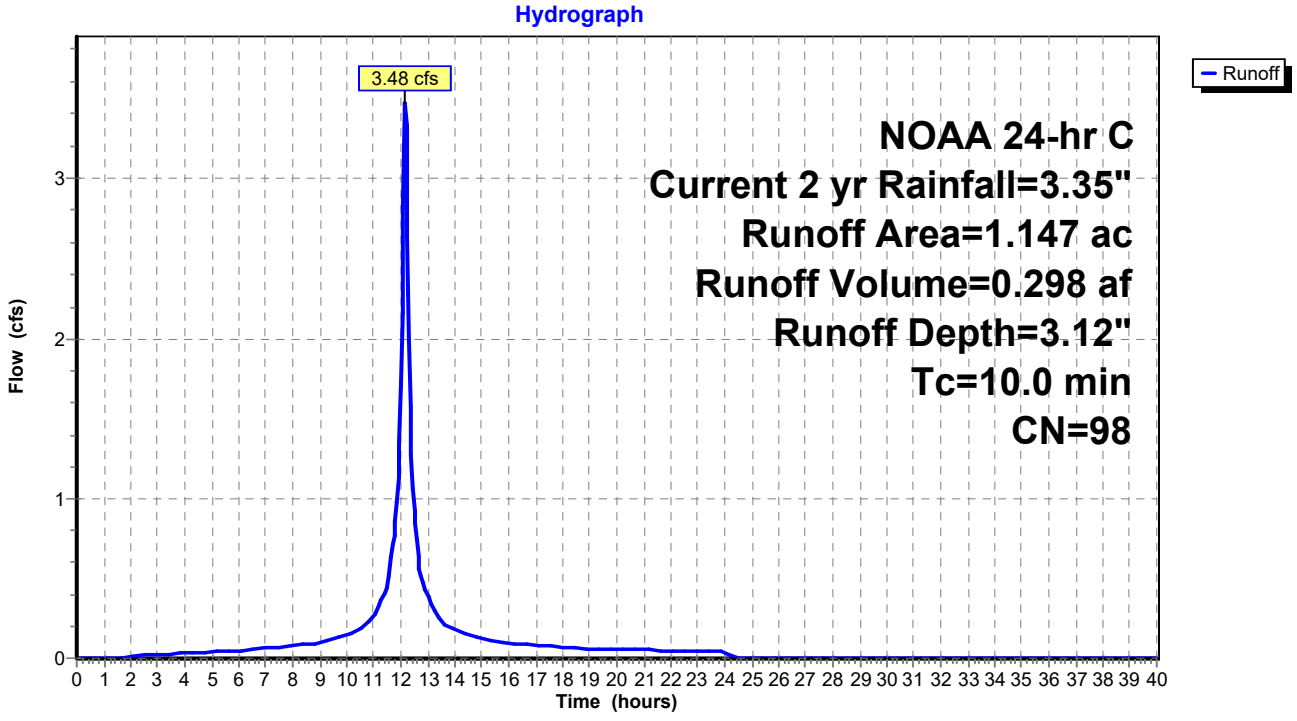
Runoff = 3.48 cfs @ 12.17 hrs, Volume= 0.298 af, Depth= 3.12"
Routed to Pond B-46A : Basin #46A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.430	98	Pavement, HSG C
*	0.653	98	Roof, HSG C
*	0.064	98	Concrete, HSG C
	1.147	98	Weighted Average
	1.147		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 46I: PDA-46 (impervious)



Summary for Subcatchment 46P: PDA-46 (pervious)

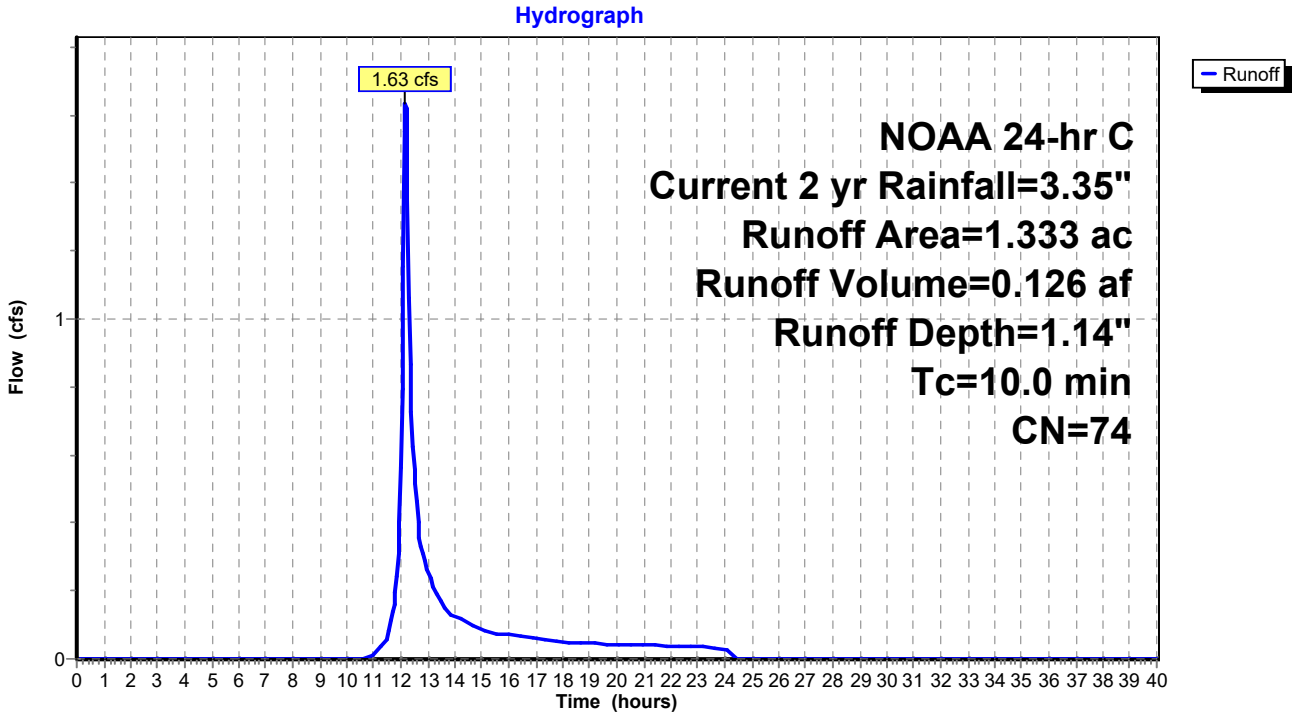
Runoff = 1.63 cfs @ 12.18 hrs, Volume= 0.126 af, Depth= 1.14"
Routed to Pond B-46A : Basin #46A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.333	74	>75% Grass cover, Good, HSG C
1.333		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 46P: PDA-46 (pervious)



Summary for Subcatchment 47I: PDA-47 (impervious)

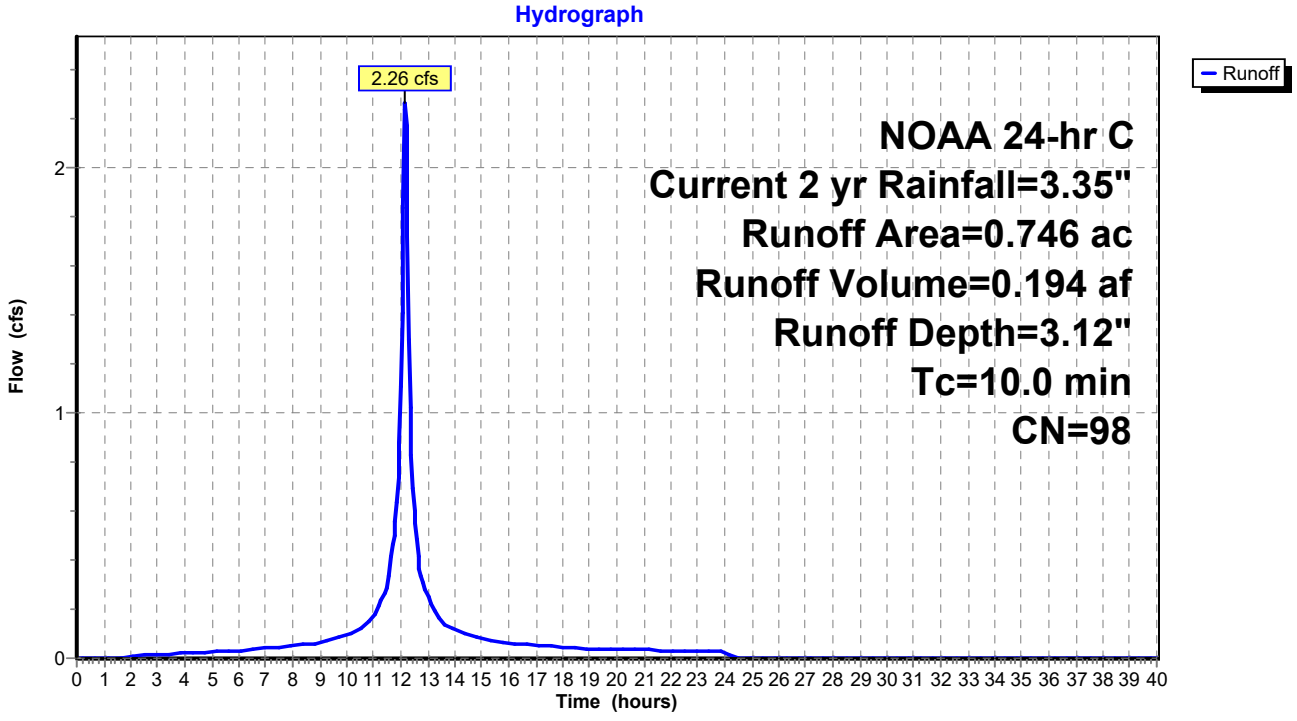
Runoff = 2.26 cfs @ 12.17 hrs, Volume= 0.194 af, Depth= 3.12"
Routed to Pond B-47 : Basin #47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.244	98	Pavement, HSG C
*	0.484	98	Roof, HSG C
*	0.018	98	Concrete, HSG C
	0.746	98	Weighted Average
	0.746		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 47I: PDA-47 (impervious)



Summary for Subcatchment 47P: PDA-47 (pervious)

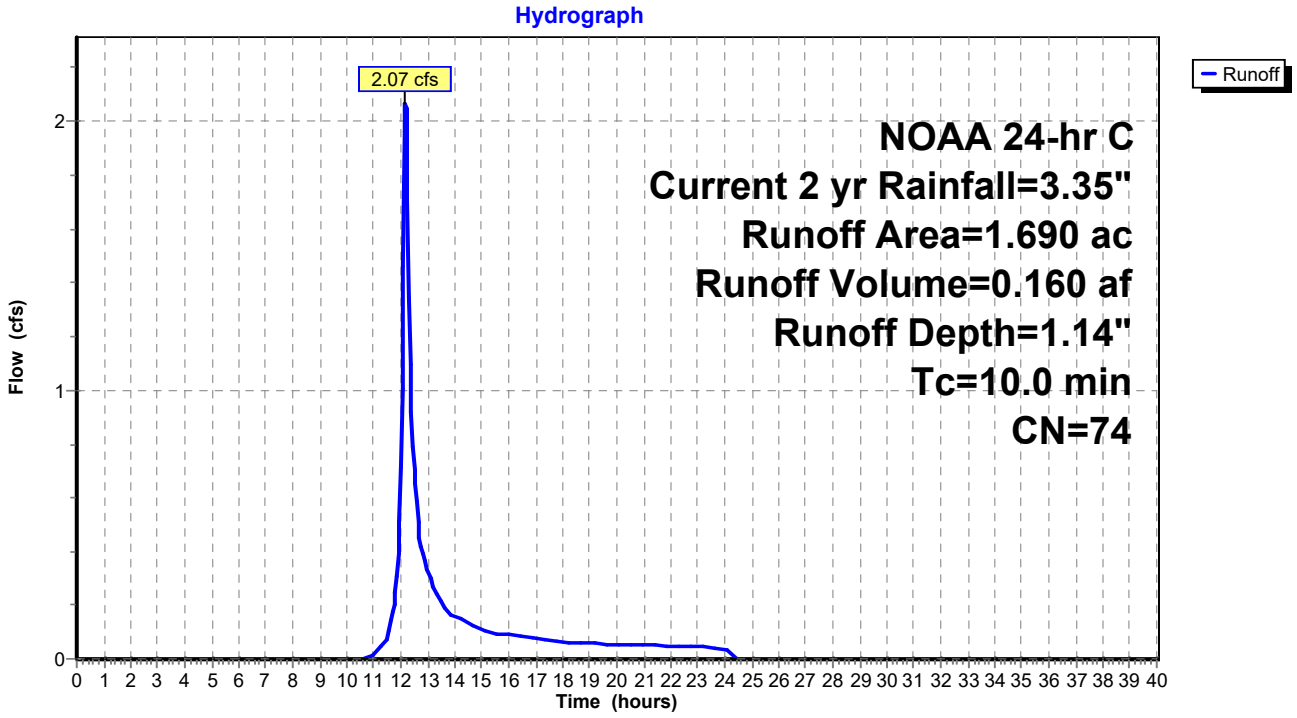
Runoff = 2.07 cfs @ 12.18 hrs, Volume= 0.160 af, Depth= 1.14"
Routed to Pond B-47 : Basin #47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.690	74	>75% Grass cover, Good, HSG C
1.690		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 47P: PDA-47 (pervious)



Summary for Subcatchment UPDA-4: PDA-4 (undetained)

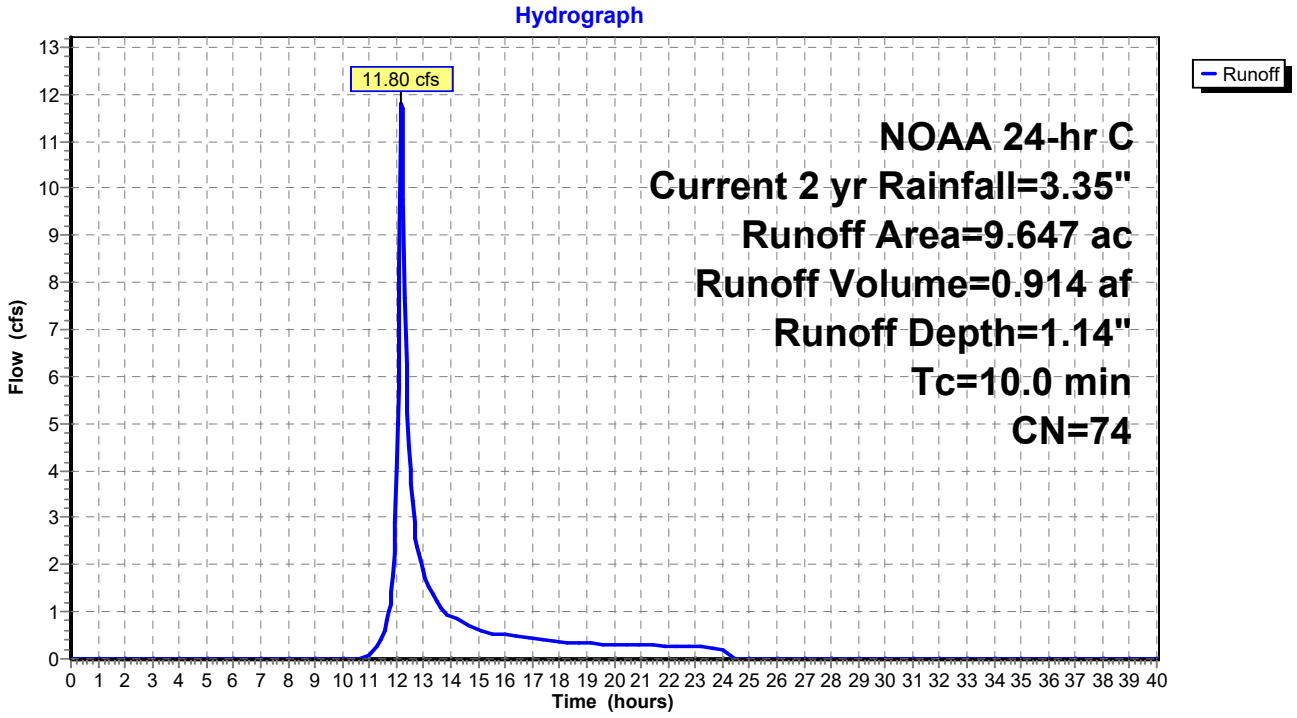
Runoff = 11.80 cfs @ 12.18 hrs, Volume= 0.914 af, Depth= 1.14"
Routed to Link PDA-4 : Proposed Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
9.647	74	>75% Grass cover, Good, HSG C
9.647		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-4: PDA-4 (undetained)



Summary for Pond B-41: Basin #41

Inflow Area = 2.368 ac, 29.05% Impervious, Inflow Depth = 1.71" for Current 2 yr event
Inflow = 4.12 cfs @ 12.18 hrs, Volume= 0.338 af
Outflow = 0.20 cfs @ 14.73 hrs, Volume= 0.281 af, Atten= 95%, Lag= 153.5 min
Primary = 0.20 cfs @ 14.73 hrs, Volume= 0.281 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.13' @ 14.73 hrs Surf.Area= 4,950 sf Storage= 9,442 cf

Plug-Flow detention time= 567.9 min calculated for 0.281 af (83% of inflow)
Center-of-Mass det. time= 492.8 min (1,303.1 - 810.3)

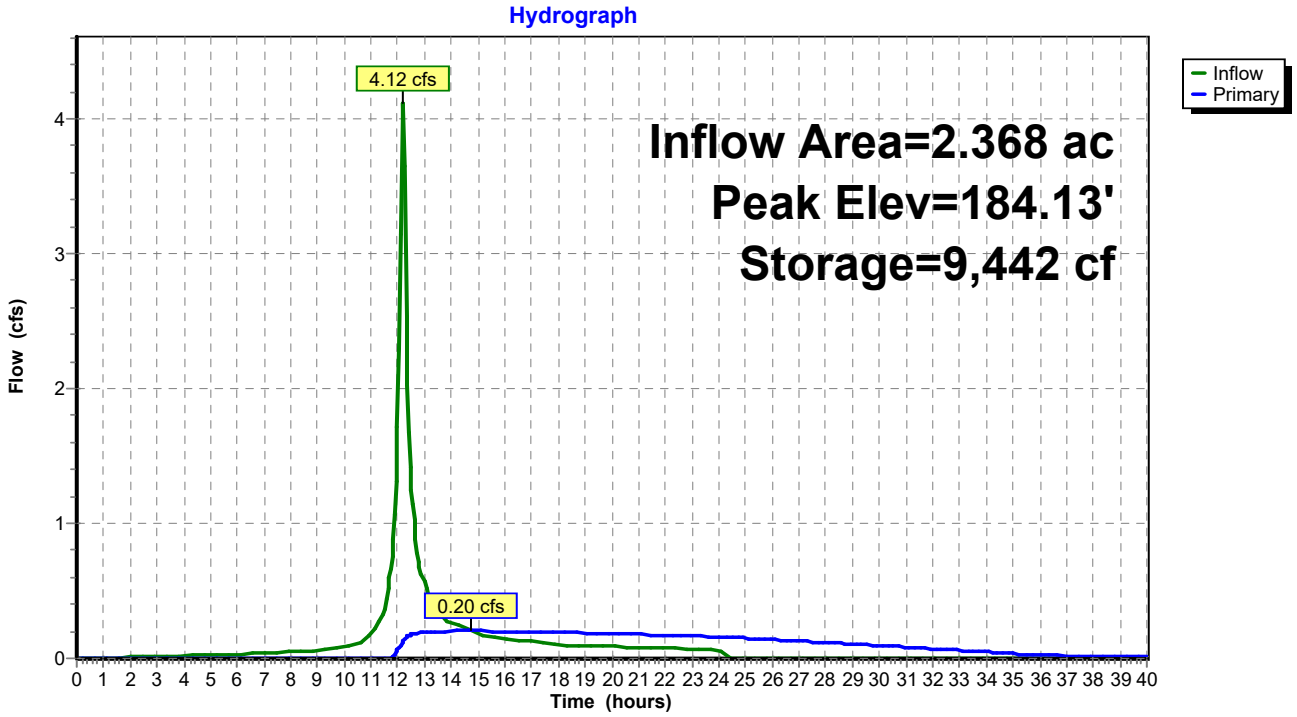
Volume	Invert	Avail.Storage	Storage Description
#1	181.85'	23,005 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.85	0	0	0
182.00	3,695	277	277
183.00	4,265	3,980	4,257
184.00	4,870	4,568	8,825
185.00	5,505	5,188	14,012
186.00	6,153	5,829	19,841
186.50	6,502	3,164	23,005

Device	Routing	Invert	Outlet Devices
#1	Primary	181.85'	**18.0" Round Culvert** L= 59.0' Ke= 0.500 Inlet / Outlet Invert= 181.85' / 181.55' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	182.50'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.13'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.39'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.20 cfs @ 14.73 hrs HW=184.13' (Free Discharge)
- **1=Culvert** (Passes 0.20 cfs of 9.16 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.94 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-41: Basin #41



Stage-Discharge for Pond B-41: Basin #41

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.85	0.00	182.37	0.00	182.89	0.09	183.41	0.15
181.86	0.00	182.38	0.00	182.90	0.09	183.42	0.15
181.87	0.00	182.39	0.00	182.91	0.09	183.43	0.15
181.88	0.00	182.40	0.00	182.92	0.09	183.44	0.15
181.89	0.00	182.41	0.00	182.93	0.09	183.45	0.15
181.90	0.00	182.42	0.00	182.94	0.10	183.46	0.15
181.91	0.00	182.43	0.00	182.95	0.10	183.47	0.15
181.92	0.00	182.44	0.00	182.96	0.10	183.48	0.15
181.93	0.00	182.45	0.00	182.97	0.10	183.49	0.15
181.94	0.00	182.46	0.00	182.98	0.10	183.50	0.16
181.95	0.00	182.47	0.00	182.99	0.10	183.51	0.16
181.96	0.00	182.48	0.00	183.00	0.10	183.52	0.16
181.97	0.00	182.49	0.00	183.01	0.10	183.53	0.16
181.98	0.00	182.50	0.00	183.02	0.11	183.54	0.16
181.99	0.00	182.51	0.00	183.03	0.11	183.55	0.16
182.00	0.00	182.52	0.00	183.04	0.11	183.56	0.16
182.01	0.00	182.53	0.00	183.05	0.11	183.57	0.16
182.02	0.00	182.54	0.00	183.06	0.11	183.58	0.16
182.03	0.00	182.55	0.00	183.07	0.11	183.59	0.16
182.04	0.00	182.56	0.01	183.08	0.11	183.60	0.16
182.05	0.00	182.57	0.01	183.09	0.11	183.61	0.16
182.06	0.00	182.58	0.01	183.10	0.12	183.62	0.17
182.07	0.00	182.59	0.01	183.11	0.12	183.63	0.17
182.08	0.00	182.60	0.02	183.12	0.12	183.64	0.17
182.09	0.00	182.61	0.02	183.13	0.12	183.65	0.17
182.10	0.00	182.62	0.02	183.14	0.12	183.66	0.17
182.11	0.00	182.63	0.03	183.15	0.12	183.67	0.17
182.12	0.00	182.64	0.03	183.16	0.12	183.68	0.17
182.13	0.00	182.65	0.03	183.17	0.12	183.69	0.17
182.14	0.00	182.66	0.04	183.18	0.12	183.70	0.17
182.15	0.00	182.67	0.04	183.19	0.13	183.71	0.17
182.16	0.00	182.68	0.05	183.20	0.13	183.72	0.17
182.17	0.00	182.69	0.05	183.21	0.13	183.73	0.17
182.18	0.00	182.70	0.05	183.22	0.13	183.74	0.17
182.19	0.00	182.71	0.05	183.23	0.13	183.75	0.18
182.20	0.00	182.72	0.06	183.24	0.13	183.76	0.18
182.21	0.00	182.73	0.06	183.25	0.13	183.77	0.18
182.22	0.00	182.74	0.06	183.26	0.13	183.78	0.18
182.23	0.00	182.75	0.06	183.27	0.13	183.79	0.18
182.24	0.00	182.76	0.06	183.28	0.13	183.80	0.18
182.25	0.00	182.77	0.07	183.29	0.14	183.81	0.18
182.26	0.00	182.78	0.07	183.30	0.14	183.82	0.18
182.27	0.00	182.79	0.07	183.31	0.14	183.83	0.18
182.28	0.00	182.80	0.07	183.32	0.14	183.84	0.18
182.29	0.00	182.81	0.07	183.33	0.14	183.85	0.18
182.30	0.00	182.82	0.08	183.34	0.14	183.86	0.18
182.31	0.00	182.83	0.08	183.35	0.14	183.87	0.18
182.32	0.00	182.84	0.08	183.36	0.14	183.88	0.19
182.33	0.00	182.85	0.08	183.37	0.14	183.89	0.19
182.34	0.00	182.86	0.08	183.38	0.14	183.90	0.19
182.35	0.00	182.87	0.08	183.39	0.15	183.91	0.19
182.36	0.00	182.88	0.09	183.40	0.15	183.92	0.19

Stage-Discharge for Pond B-41: Basin #41 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.93	0.19	184.45	2.55	184.97	9.90	185.49	17.51
183.94	0.19	184.46	2.66	184.98	10.07	185.50	18.11
183.95	0.19	184.47	2.77	184.99	10.24	185.51	18.74
183.96	0.19	184.48	2.89	185.00	10.41	185.52	19.40
183.97	0.19	184.49	3.00	185.01	10.58	185.53	20.08
183.98	0.19	184.50	3.12	185.02	10.75	185.54	20.78
183.99	0.19	184.51	3.23	185.03	10.92	185.55	21.51
184.00	0.19	184.52	3.35	185.04	11.09	185.56	22.26
184.01	0.19	184.53	3.47	185.05	11.27	185.57	23.03
184.02	0.20	184.54	3.59	185.06	11.44	185.58	23.82
184.03	0.20	184.55	3.71	185.07	11.62	185.59	24.64
184.04	0.20	184.56	3.84	185.08	11.79	185.60	25.51
184.05	0.20	184.57	3.96	185.09	11.97	185.61	26.41
184.06	0.20	184.58	4.09	185.10	12.15	185.62	27.34
184.07	0.20	184.59	4.22	185.11	12.33	185.63	28.29
184.08	0.20	184.60	4.35	185.12	12.51	185.64	29.27
184.09	0.20	184.61	4.48	185.13	12.69	185.65	30.27
184.10	0.20	184.62	4.61	185.14	12.77	185.66	31.29
184.11	0.20	184.63	4.74	185.15	12.80	185.67	32.34
184.12	0.20	184.64	4.88	185.16	12.83	185.68	33.42
184.13	0.20	184.65	5.01	185.17	12.86	185.69	34.52
184.14	0.22	184.66	5.15	185.18	12.89	185.70	35.64
184.15	0.24	184.67	5.29	185.19	12.92	185.71	36.79
184.16	0.27	184.68	5.42	185.20	12.95	185.72	37.96
184.17	0.31	184.69	5.56	185.21	12.98	185.73	39.16
184.18	0.35	184.70	5.71	185.22	13.01	185.74	40.38
184.19	0.40	184.71	5.85	185.23	13.04	185.75	41.63
184.20	0.45	184.72	5.99	185.24	13.07	185.76	42.89
184.21	0.50	184.73	6.14	185.25	13.10	185.77	44.19
184.22	0.56	184.74	6.28	185.26	13.13	185.78	45.51
184.23	0.62	184.75	6.43	185.27	13.16	185.79	46.85
184.24	0.68	184.76	6.58	185.28	13.19	185.80	48.24
184.25	0.75	184.77	6.72	185.29	13.22	185.81	49.66
184.26	0.82	184.78	6.87	185.30	13.25	185.82	51.10
184.27	0.89	184.79	7.02	185.31	13.28	185.83	52.57
184.28	0.97	184.80	7.18	185.32	13.30	185.84	54.07
184.29	1.04	184.81	7.33	185.33	13.33	185.85	55.59
184.30	1.12	184.82	7.48	185.34	13.36	185.86	57.14
184.31	1.20	184.83	7.64	185.35	13.39	185.87	58.72
184.32	1.29	184.84	7.79	185.36	13.42	185.88	60.32
184.33	1.37	184.85	7.95	185.37	13.45	185.89	61.95
184.34	1.46	184.86	8.11	185.38	13.48	185.90	63.60
184.35	1.55	184.87	8.27	185.39	13.51	185.91	65.28
184.36	1.64	184.88	8.42	185.40	13.65	185.92	66.99
184.37	1.74	184.89	8.59	185.41	13.90	185.93	68.72
184.38	1.83	184.90	8.75	185.42	14.20	185.94	70.48
184.39	1.93	184.91	8.91	185.43	14.56	185.95	72.27
184.40	2.03	184.92	9.07	185.44	14.96	185.96	74.09
184.41	2.13	184.93	9.24	185.45	15.40	185.97	75.93
184.42	2.23	184.94	9.40	185.46	15.88	185.98	77.80
184.43	2.34	184.95	9.57	185.47	16.39	185.99	79.69
184.44	2.45	184.96	9.73	185.48	16.94	186.00	81.34

Stage-Discharge for Pond B-41: Basin #41 (continued)

Elevation (feet)	Primary (cfs)
186.01	83.01
186.02	84.69
186.03	86.38
186.04	88.09
186.05	89.81
186.06	91.54
186.07	93.29
186.08	95.04
186.09	96.81
186.10	98.60
186.11	100.40
186.12	102.20
186.13	104.03
186.14	105.86
186.15	107.71
186.16	109.56
186.17	111.44
186.18	113.32
186.19	115.21
186.20	117.16
186.21	119.11
186.22	121.09
186.23	123.07
186.24	125.07
186.25	127.08
186.26	129.10
186.27	131.14
186.28	133.19
186.29	135.25
186.30	137.32
186.31	139.41
186.32	141.51
186.33	143.63
186.34	145.75
186.35	147.89
186.36	150.04
186.37	152.21
186.38	154.38
186.39	156.57
186.40	158.72
186.41	160.88
186.42	163.05
186.43	165.23
186.44	167.42
186.45	169.62
186.46	171.83
186.47	174.05
186.48	176.29
186.49	178.53
186.50	**180.78**

Stage-Area-Storage for Pond B-41: Basin #41

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.85	0	0
181.86	246	1
181.87	493	5
181.88	739	11
181.89	985	20
181.90	1,232	31
181.91	1,478	44
181.92	1,724	60
181.93	1,971	79
181.94	2,217	100
181.95	2,463	123
181.96	2,710	149
181.97	2,956	177
181.98	3,202	208
181.99	3,449	241
182.00	3,695	277
182.01	3,701	314
182.02	3,706	351
182.03	3,712	388
182.04	3,718	425
182.05	3,723	463
182.06	3,729	500
182.07	3,735	537
182.08	3,741	575
182.09	3,746	612
182.10	3,752	649
182.11	3,758	687
182.12	3,763	725
182.13	3,769	762
182.14	3,775	800
182.15	3,781	838
182.16	3,786	876
182.17	3,792	914
182.18	3,798	951
182.19	3,803	989
182.20	3,809	1,028
182.21	3,815	1,066
182.22	3,820	1,104
182.23	3,826	1,142
182.24	3,832	1,180
182.25	3,838	1,219
182.26	3,843	1,257
182.27	3,849	1,296
182.28	3,855	1,334
182.29	3,860	1,373
182.30	3,866	1,411
182.31	3,872	1,450
182.32	3,877	1,489
182.33	3,883	1,528
182.34	3,889	1,566
182.35	3,894	1,605
182.36	3,900	1,644
182.37	3,906	1,683
182.38	3,912	1,722
182.39	3,917	1,762
182.40	3,923	1,801
182.41	3,929	1,840
182.42	3,934	1,879
182.43	3,940	1,919
182.44	3,946	1,958
182.45	3,951	1,998
182.46	3,957	2,037
182.47	3,963	2,077
182.48	3,969	2,116
182.49	3,974	2,156
182.50	3,980	2,196
182.51	3,986	2,236
182.52	3,991	2,276
182.53	3,997	2,316
182.54	4,003	2,356
182.55	4,008	2,396
182.56	4,014	2,436
182.57	4,020	2,476
182.58	4,026	2,516
182.59	4,031	2,556
182.60	4,037	2,597
182.61	4,043	2,637
182.62	4,048	2,678
182.63	4,054	2,718
182.64	4,060	2,759
182.65	4,066	2,799
182.66	4,071	2,840
182.67	4,077	2,881
182.68	4,083	2,922
182.69	4,088	2,962
182.70	4,094	3,003
182.71	4,100	3,044
182.72	4,105	3,085
182.73	4,111	3,126
182.74	4,117	3,167
182.75	4,123	3,209
182.76	4,128	3,250
182.77	4,134	3,291
182.78	4,140	3,333
182.79	4,145	3,374
182.80	4,151	3,416
182.81	4,157	3,457
182.82	4,162	3,499
182.83	4,168	3,540
182.84	4,174	3,582
182.85	4,179	3,624
182.86	4,185	3,666
182.87	4,191	3,707
182.88	4,197	3,749

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.89	4,202	3,791	183.41	4,513	6,057
182.90	4,208	3,833	183.42	4,519	6,102
182.91	4,214	3,876	183.43	4,525	6,147
182.92	4,219	3,918	183.44	4,531	6,192
182.93	4,225	3,960	183.45	4,537	6,238
182.94	4,231	4,002	183.46	4,543	6,283
182.95	4,236	4,045	183.47	4,549	6,328
182.96	4,242	4,087	183.48	4,555	6,374
182.97	4,248	4,129	183.49	4,561	6,420
182.98	4,254	4,172	183.50	4,568	6,465
182.99	4,259	4,215	183.51	4,574	6,511
183.00	4,265	4,257	183.52	4,580	6,557
183.01	4,271	4,300	183.53	4,586	6,603
183.02	4,277	4,343	183.54	4,592	6,648
183.03	4,283	4,385	183.55	4,598	6,694
183.04	4,289	4,428	183.56	4,604	6,740
183.05	4,295	4,471	183.57	4,610	6,786
183.06	4,301	4,514	183.58	4,616	6,833
183.07	4,307	4,557	183.59	4,622	6,879
183.08	4,313	4,600	183.60	4,628	6,925
183.09	4,319	4,643	183.61	4,634	6,971
183.10	4,325	4,687	183.62	4,640	7,018
183.11	4,332	4,730	183.63	4,646	7,064
183.12	4,338	4,773	183.64	4,652	7,111
183.13	4,344	4,817	183.65	4,658	7,157
183.14	4,350	4,860	183.66	4,664	7,204
183.15	4,356	4,904	183.67	4,670	7,250
183.16	4,362	4,947	183.68	4,676	7,297
183.17	4,368	4,991	183.69	4,682	7,344
183.18	4,374	5,035	183.70	4,688	7,391
183.19	4,380	5,078	183.71	4,695	7,438
183.20	4,386	5,122	183.72	4,701	7,485
183.21	4,392	5,166	183.73	4,707	7,532
183.22	4,398	5,210	183.74	4,713	7,579
183.23	4,404	5,254	183.75	4,719	7,626
183.24	4,410	5,298	183.76	4,725	7,673
183.25	4,416	5,342	183.77	4,731	7,721
183.26	4,422	5,386	183.78	4,737	7,768
183.27	4,428	5,431	183.79	4,743	7,815
183.28	4,434	5,475	183.80	4,749	7,863
183.29	4,440	5,519	183.81	4,755	7,910
183.30	4,446	5,564	183.82	4,761	7,958
183.31	4,453	5,608	183.83	4,767	8,005
183.32	4,459	5,653	183.84	4,773	8,053
183.33	4,465	5,698	183.85	4,779	8,101
183.34	4,471	5,742	183.86	4,785	8,149
183.35	4,477	5,787	183.87	4,791	8,197
183.36	4,483	5,832	183.88	4,797	8,245
183.37	4,489	5,877	183.89	4,803	8,293
183.38	4,495	5,922	183.90	4,810	8,341
183.39	4,501	5,966	183.91	4,816	8,389
183.40	4,507	6,012	183.92	4,822	8,437

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.93	4,828	8,485	184.45	5,156	11,080
183.94	4,834	8,534	184.46	5,162	11,132
183.95	4,840	8,582	184.47	5,168	11,184
183.96	4,846	8,630	184.48	5,175	11,235
183.97	4,852	8,679	184.49	5,181	11,287
183.98	4,858	8,727	184.50	5,188	11,339
183.99	4,864	8,776	184.51	5,194	11,391
184.00	4,870	8,825	184.52	5,200	11,443
184.01	4,876	8,873	184.53	5,207	11,495
184.02	4,883	8,922	184.54	5,213	11,547
184.03	4,889	8,971	184.55	5,219	11,599
184.04	4,895	9,020	184.56	5,226	11,651
184.05	4,902	9,069	184.57	5,232	11,704
184.06	4,908	9,118	184.58	5,238	11,756
184.07	4,914	9,167	184.59	5,245	11,808
184.08	4,921	9,216	184.60	5,251	11,861
184.09	4,927	9,265	184.61	5,257	11,913
184.10	4,933	9,315	184.62	5,264	11,966
184.11	4,940	9,364	184.63	5,270	12,019
184.12	4,946	9,414	184.64	5,276	12,071
184.13	4,953	9,463	184.65	5,283	12,124
184.14	4,959	9,513	184.66	5,289	12,177
184.15	4,965	9,562	184.67	5,295	12,230
184.16	4,972	9,612	184.68	5,302	12,283
184.17	4,978	9,662	184.69	5,308	12,336
184.18	4,984	9,712	184.70	5,314	12,389
184.19	4,991	9,761	184.71	5,321	12,442
184.20	4,997	9,811	184.72	5,327	12,496
184.21	5,003	9,861	184.73	5,334	12,549
184.22	5,010	9,911	184.74	5,340	12,602
184.23	5,016	9,962	184.75	5,346	12,656
184.24	5,022	10,012	184.76	5,353	12,709
184.25	5,029	10,062	184.77	5,359	12,763
184.26	5,035	10,112	184.78	5,365	12,816
184.27	5,041	10,163	184.79	5,372	12,870
184.28	5,048	10,213	184.80	5,378	12,924
184.29	5,054	10,264	184.81	5,384	12,978
184.30	5,060	10,314	184.82	5,391	13,032
184.31	5,067	10,365	184.83	5,397	13,085
184.32	5,073	10,416	184.84	5,403	13,139
184.33	5,080	10,466	184.85	5,410	13,194
184.34	5,086	10,517	184.86	5,416	13,248
184.35	5,092	10,568	184.87	5,422	13,302
184.36	5,099	10,619	184.88	5,429	13,356
184.37	5,105	10,670	184.89	5,435	13,410
184.38	5,111	10,721	184.90	5,442	13,465
184.39	5,118	10,772	184.91	5,448	13,519
184.40	5,124	10,823	184.92	5,454	13,574
184.41	5,130	10,875	184.93	5,461	13,628
184.42	5,137	10,926	184.94	5,467	13,683
184.43	5,143	10,977	184.95	5,473	13,738
184.44	5,149	11,029	184.96	5,480	13,792

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.97	5,486	13,847	185.49	5,823	16,787
184.98	5,492	13,902	185.50	5,829	16,846
184.99	5,499	13,957	185.51	5,835	16,904
185.00	5,505	14,012	185.52	5,842	16,962
185.01	5,511	14,067	185.53	5,848	17,021
185.02	5,518	14,122	185.54	5,855	17,079
185.03	5,524	14,178	185.55	5,861	17,138
185.04	5,531	14,233	185.56	5,868	17,197
185.05	5,537	14,288	185.57	5,874	17,255
185.06	5,544	14,344	185.58	5,881	17,314
185.07	5,550	14,399	185.59	5,887	17,373
185.08	5,557	14,455	185.60	5,894	17,432
185.09	5,563	14,510	185.61	5,900	17,491
185.10	5,570	14,566	185.62	5,907	17,550
185.11	5,576	14,622	185.63	5,913	17,609
185.12	5,583	14,677	185.64	5,920	17,668
185.13	5,589	14,733	185.65	5,926	17,727
185.14	5,596	14,789	185.66	5,933	17,787
185.15	5,602	14,845	185.67	5,939	17,846
185.16	5,609	14,901	185.68	5,946	17,905
185.17	5,615	14,957	185.69	5,952	17,965
185.18	5,622	15,014	185.70	5,959	18,024
185.19	5,628	15,070	185.71	5,965	18,084
185.20	5,635	15,126	185.72	5,972	18,144
185.21	5,641	15,182	185.73	5,978	18,203
185.22	5,648	15,239	185.74	5,985	18,263
185.23	5,654	15,295	185.75	5,991	18,323
185.24	5,661	15,352	185.76	5,997	18,383
185.25	5,667	15,409	185.77	6,004	18,443
185.26	5,673	15,465	185.78	6,010	18,503
185.27	5,680	15,522	185.79	6,017	18,563
185.28	5,686	15,579	185.80	6,023	18,623
185.29	5,693	15,636	185.81	6,030	18,684
185.30	5,699	15,693	185.82	6,036	18,744
185.31	5,706	15,750	185.83	6,043	18,804
185.32	5,712	15,807	185.84	6,049	18,865
185.33	5,719	15,864	185.85	6,056	18,925
185.34	5,725	15,921	185.86	6,062	18,986
185.35	5,732	15,979	185.87	6,069	19,047
185.36	5,738	16,036	185.88	6,075	19,107
185.37	5,745	16,093	185.89	6,082	19,168
185.38	5,751	16,151	185.90	6,088	19,229
185.39	5,758	16,208	185.91	6,095	19,290
185.40	5,764	16,266	185.92	6,101	19,351
185.41	5,771	16,324	185.93	6,108	19,412
185.42	5,777	16,381	185.94	6,114	19,473
185.43	5,784	16,439	185.95	6,121	19,534
185.44	5,790	16,497	185.96	6,127	19,596
185.45	5,797	16,555	185.97	6,134	19,657
185.46	5,803	16,613	185.98	6,140	19,718
185.47	5,810	16,671	185.99	6,147	19,780
185.48	5,816	16,729	186.00	6,153	19,841

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.01	6,160	19,903
186.02	6,167	19,964
186.03	6,174	20,026
186.04	6,181	20,088
186.05	6,188	20,150
186.06	6,195	20,212
186.07	6,202	20,274
186.08	6,209	20,336
186.09	6,216	20,398
186.10	6,223	20,460
186.11	6,230	20,522
186.12	6,237	20,585
186.13	6,244	20,647
186.14	6,251	20,709
186.15	6,258	20,772
186.16	6,265	20,835
186.17	6,272	20,897
186.18	6,279	20,960
186.19	6,286	21,023
186.20	6,293	21,086
186.21	6,300	21,149
186.22	6,307	21,212
186.23	6,314	21,275
186.24	6,321	21,338
186.25	6,328	21,401
186.26	6,334	21,464
186.27	6,341	21,528
186.28	6,348	21,591
186.29	6,355	21,655
186.30	6,362	21,718
186.31	6,369	21,782
186.32	6,376	21,846
186.33	6,383	21,910
186.34	6,390	21,973
186.35	6,397	22,037
186.36	6,404	22,101
186.37	6,411	22,166
186.38	6,418	22,230
186.39	6,425	22,294
186.40	6,432	22,358
186.41	6,439	22,423
186.42	6,446	22,487
186.43	6,453	22,551
186.44	6,460	22,616
186.45	6,467	22,681
186.46	6,474	22,745
186.47	6,481	22,810
186.48	6,488	22,875
186.49	6,495	22,940
186.50	**6,502**	**23,005**

Summary for Pond B-42: Basin #42

Inflow Area = 0.777 ac, 38.35% Impervious, Inflow Depth = 1.90" for Current 2 yr event
Inflow = 1.49 cfs @ 12.17 hrs, Volume= 0.123 af
Outflow = 0.03 cfs @ 18.81 hrs, Volume= 0.028 af, Atten= 98%, Lag= 398.4 min
Primary = 0.03 cfs @ 18.81 hrs, Volume= 0.028 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 182.74' @ 18.81 hrs Surf.Area= 2,988 sf Storage= 4,497 cf

Plug-Flow detention time= 730.0 min calculated for 0.028 af (23% of inflow)
Center-of-Mass det. time= 527.3 min (1,326.9 - 799.6)

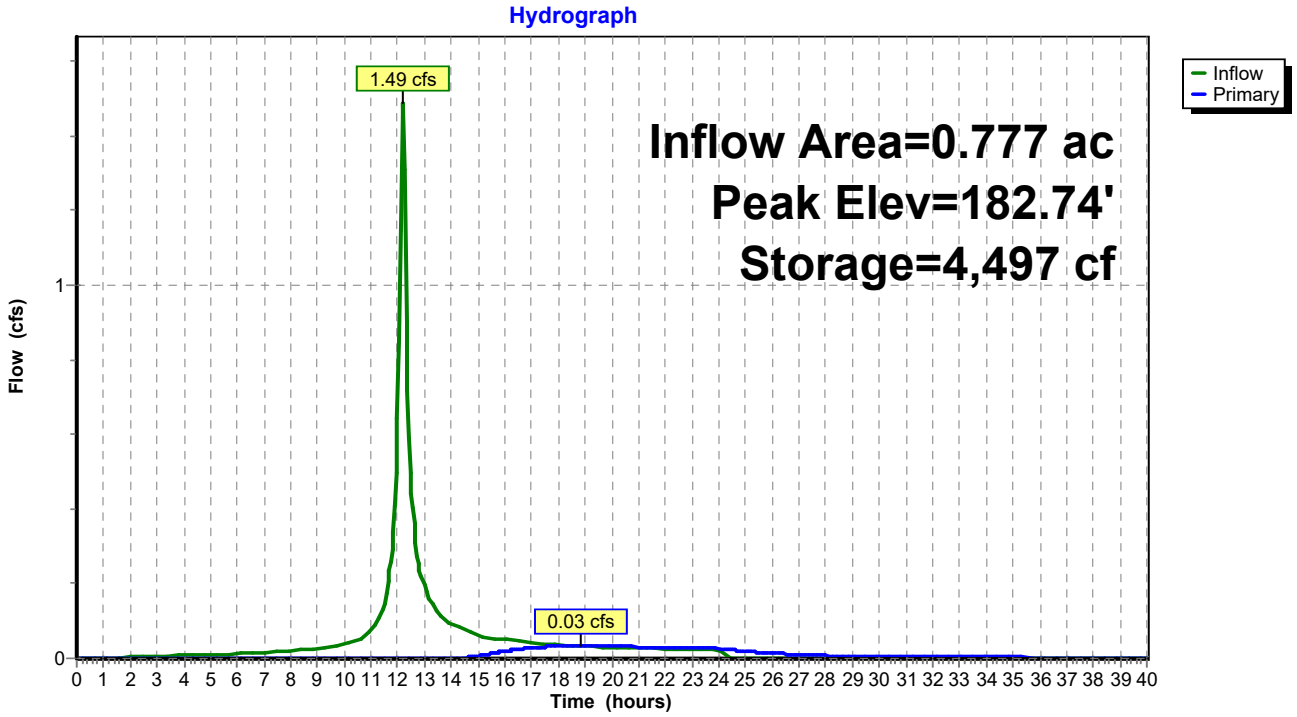
Volume	Invert	Avail.Storage	Storage Description
#1	180.96'	22,293 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.96	0	0	0
181.00	2,142	43	43
182.00	2,613	2,378	2,420
183.00	3,118	2,866	5,286
184.00	3,656	3,387	8,673
185.00	4,227	3,942	12,614
186.00	4,831	4,529	17,143
187.00	5,468	5,150	22,293

Device	Routing	Invert	Outlet Devices
#1	Primary	181.96'	**18.0" Round Culvert** L= 192.0' Ke= 0.500 Inlet / Outlet Invert= 181.96' / 181.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	182.60'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.01'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.03 cfs @ 18.81 hrs HW=182.74' (Free Discharge)
- **1=Culvert** (Passes 0.03 cfs of 2.27 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.03 cfs @ 1.28 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-42: Basin #42



Stage-Discharge for Pond B-42: Basin #42

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
180.96	0.00	181.48	0.00	182.00	0.00	182.52	0.00
180.97	0.00	181.49	0.00	182.01	0.00	182.53	0.00
180.98	0.00	181.50	0.00	182.02	0.00	182.54	0.00
180.99	0.00	181.51	0.00	182.03	0.00	182.55	0.00
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.01
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.01
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.01
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.01
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.02
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.02
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.02
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.03
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.03
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.03
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.04
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.04
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.05
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.05
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.05
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.05
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.06
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.06
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.06
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.06
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.06
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.07
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.07
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.07
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.07
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.07
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.08
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.08
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.08
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.08
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.08
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.08
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.09
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.09
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.09
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.09
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.09
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.09

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.04	0.10	183.56	0.15	184.08	0.43	184.60	5.98
183.05	0.10	183.57	0.15	184.09	0.49	184.61	6.12
183.06	0.10	183.58	0.15	184.10	0.55	184.62	6.27
183.07	0.10	183.59	0.15	184.11	0.61	184.63	6.42
183.08	0.10	183.60	0.16	184.12	0.67	184.64	6.56
183.09	0.10	183.61	0.16	184.13	0.74	184.65	6.71
183.10	0.10	183.62	0.16	184.14	0.81	184.66	6.86
183.11	0.10	183.63	0.16	184.15	0.88	184.67	7.01
183.12	0.11	183.64	0.16	184.16	0.95	184.68	7.16
183.13	0.11	183.65	0.16	184.17	1.03	184.69	7.32
183.14	0.11	183.66	0.16	184.18	1.11	184.70	7.47
183.15	0.11	183.67	0.16	184.19	1.19	184.71	7.62
183.16	0.11	183.68	0.16	184.20	1.27	184.72	7.78
183.17	0.11	183.69	0.16	184.21	1.36	184.73	7.94
183.18	0.11	183.70	0.16	184.22	1.45	184.74	8.09
183.19	0.11	183.71	0.16	184.23	1.54	184.75	8.25
183.20	0.12	183.72	0.17	184.24	1.63	184.76	8.41
183.21	0.12	183.73	0.17	184.25	1.72	184.77	8.57
183.22	0.12	183.74	0.17	184.26	1.82	184.78	8.73
183.23	0.12	183.75	0.17	184.27	1.92	184.79	8.90
183.24	0.12	183.76	0.17	184.28	2.02	184.80	9.06
183.25	0.12	183.77	0.17	184.29	2.12	184.81	9.22
183.26	0.12	183.78	0.17	184.30	2.22	184.82	9.39
183.27	0.12	183.79	0.17	184.31	2.33	184.83	9.55
183.28	0.12	183.80	0.17	184.32	2.43	184.84	9.69
183.29	0.13	183.81	0.17	184.33	2.54	184.85	9.71
183.30	0.13	183.82	0.17	184.34	2.65	184.86	9.73
183.31	0.13	183.83	0.17	184.35	2.76	184.87	9.75
183.32	0.13	183.84	0.17	184.36	2.87	184.88	9.77
183.33	0.13	183.85	0.18	184.37	2.99	184.89	9.79
183.34	0.13	183.86	0.18	184.38	3.10	184.90	9.81
183.35	0.13	183.87	0.18	184.39	3.22	184.91	9.83
183.36	0.13	183.88	0.18	184.40	3.34	184.92	9.85
183.37	0.13	183.89	0.18	184.41	3.46	184.93	9.88
183.38	0.13	183.90	0.18	184.42	3.58	184.94	9.90
183.39	0.14	183.91	0.18	184.43	3.70	184.95	9.92
183.40	0.14	183.92	0.18	184.44	3.83	184.96	9.94
183.41	0.14	183.93	0.18	184.45	3.95	184.97	9.96
183.42	0.14	183.94	0.18	184.46	4.08	184.98	9.98
183.43	0.14	183.95	0.18	184.47	4.21	184.99	10.00
183.44	0.14	183.96	0.18	184.48	4.33	185.00	10.02
183.45	0.14	183.97	0.18	184.49	4.46	185.01	10.04
183.46	0.14	183.98	0.19	184.50	4.60	185.02	10.06
183.47	0.14	183.99	0.19	184.51	4.73	185.03	10.08
183.48	0.14	184.00	0.19	184.52	4.86	185.04	10.10
183.49	0.15	184.01	0.19	184.53	5.00	185.05	10.12
183.50	0.15	184.02	0.20	184.54	5.14	185.06	10.14
183.51	0.15	184.03	0.23	184.55	5.27	185.07	10.16
183.52	0.15	184.04	0.26	184.56	5.41	185.08	10.18
183.53	0.15	184.05	0.29	184.57	5.55	185.09	10.20
183.54	0.15	184.06	0.34	184.58	5.69	185.10	10.21
183.55	0.15	184.07	0.38	184.59	5.84	185.11	10.23

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.12	10.25	185.64	11.23	186.16	20.39	186.68	92.62
185.13	10.27	185.65	11.24	186.17	21.15	186.69	94.39
185.14	10.29	185.66	11.26	186.18	21.93	186.70	96.16
185.15	10.31	185.67	11.28	186.19	22.73	186.71	97.95
185.16	10.33	185.68	11.30	186.20	23.60	186.72	99.75
185.17	10.35	185.69	11.31	186.21	24.49	186.73	101.56
185.18	10.37	185.70	11.33	186.22	25.40	186.74	103.38
185.19	10.39	185.71	11.35	186.23	26.34	186.75	105.22
185.20	10.41	185.72	11.37	186.24	27.30	186.76	107.07
185.21	10.43	185.73	11.39	186.25	28.29	186.77	108.93
185.22	10.45	185.74	11.40	186.26	29.31	186.78	110.80
185.23	10.47	185.75	11.42	186.27	30.35	186.79	112.69
185.24	10.49	185.76	11.44	186.28	31.41	186.80	114.62
185.25	10.51	185.77	11.46	186.29	32.50	186.81	116.57
185.26	10.52	185.78	11.47	186.30	33.61	186.82	118.53
185.27	10.54	185.79	11.49	186.31	34.75	186.83	120.50
185.28	10.56	185.80	11.51	186.32	35.91	186.84	122.49
185.29	10.58	185.81	11.53	186.33	37.10	186.85	124.49
185.30	10.60	185.82	11.54	186.34	38.31	186.86	126.51
185.31	10.62	185.83	11.56	186.35	39.54	186.87	128.53
185.32	10.64	185.84	11.58	186.36	40.80	186.88	130.57
185.33	10.66	185.85	11.59	186.37	42.09	186.89	132.63
185.34	10.68	185.86	11.61	186.38	43.39	186.90	134.69
185.35	10.69	185.87	11.63	186.39	44.72	186.91	136.77
185.36	10.71	185.88	11.65	186.40	46.11	186.92	138.86
185.37	10.73	185.89	11.66	186.41	47.51	186.93	140.97
185.38	10.75	185.90	11.68	186.42	48.95	186.94	143.08
185.39	10.77	185.91	11.70	186.43	50.41	186.95	145.21
185.40	10.79	185.92	11.72	186.44	51.89	186.96	147.35
185.41	10.81	185.93	11.73	186.45	53.41	186.97	149.51
185.42	10.83	185.94	11.75	186.46	54.95	186.98	151.68
185.43	10.84	185.95	11.77	186.47	56.51	186.99	153.86
185.44	10.86	185.96	11.78	186.48	58.10	187.00	**155.99**
185.45	10.88	185.97	11.80	186.49	59.72		
185.46	10.90	185.98	11.82	186.50	61.36		
185.47	10.92	185.99	11.83	186.51	63.03		
185.48	10.94	186.00	11.97	186.52	64.73		
185.49	10.95	186.01	12.20	186.53	66.45		
185.50	10.97	186.02	12.49	186.54	68.21		
185.51	10.99	186.03	12.84	186.55	69.98		
185.52	11.01	186.04	13.23	186.56	71.79		
185.53	11.03	186.05	13.66	186.57	73.62		
185.54	11.05	186.06	14.13	186.58	75.48		
185.55	11.06	186.07	14.63	186.59	77.36		
185.56	11.08	186.08	15.16	186.60	79.00		
185.57	11.10	186.09	15.72	186.61	80.66		
185.58	11.12	186.10	16.31	186.62	82.33		
185.59	11.14	186.11	16.93	186.63	84.01		
185.60	11.15	186.12	17.57	186.64	85.71		
185.61	11.17	186.13	18.24	186.65	87.42		
185.62	11.19	186.14	18.93	186.66	89.14		
185.63	11.21	186.15	19.65	186.67	90.88		

Stage-Area-Storage for Pond B-42: Basin #42

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.96	0	0	181.48	2,368	1,125
180.97	535	3	181.49	2,373	1,149
180.98	1,071	11	181.50	2,378	1,173
180.99	1,607	24	181.51	2,382	1,197
181.00	2,142	43	181.52	2,387	1,220
181.01	2,147	64	181.53	2,392	1,244
181.02	2,151	86	181.54	2,396	1,268
181.03	2,156	107	181.55	2,401	1,292
181.04	2,161	129	181.56	2,406	1,316
181.05	2,166	151	181.57	2,410	1,340
181.06	2,170	172	181.58	2,415	1,364
181.07	2,175	194	181.59	2,420	1,389
181.08	2,180	216	181.60	2,425	1,413
181.09	2,184	238	181.61	2,429	1,437
181.10	2,189	259	181.62	2,434	1,461
181.11	2,194	281	181.63	2,439	1,486
181.12	2,199	303	181.64	2,443	1,510
181.13	2,203	325	181.65	2,448	1,535
181.14	2,208	347	181.66	2,453	1,559
181.15	2,213	369	181.67	2,458	1,584
181.16	2,217	392	181.68	2,462	1,608
181.17	2,222	414	181.69	2,467	1,633
181.18	2,227	436	181.70	2,472	1,658
181.19	2,231	458	181.71	2,476	1,682
181.20	2,236	481	181.72	2,481	1,707
181.21	2,241	503	181.73	2,486	1,732
181.22	2,246	525	181.74	2,491	1,757
181.23	2,250	548	181.75	2,495	1,782
181.24	2,255	570	181.76	2,500	1,807
181.25	2,260	593	181.77	2,505	1,832
181.26	2,264	616	181.78	2,509	1,857
181.27	2,269	638	181.79	2,514	1,882
181.28	2,274	661	181.80	2,519	1,907
181.29	2,279	684	181.81	2,524	1,932
181.30	2,283	707	181.82	2,528	1,958
181.31	2,288	729	181.83	2,533	1,983
181.32	2,293	752	181.84	2,538	2,008
181.33	2,297	775	181.85	2,542	2,034
181.34	2,302	798	181.86	2,547	2,059
181.35	2,307	821	181.87	2,552	2,085
181.36	2,312	844	181.88	2,556	2,110
181.37	2,316	868	181.89	2,561	2,136
181.38	2,321	891	181.90	2,566	2,161
181.39	2,326	914	181.91	2,571	2,187
181.40	2,330	937	181.92	2,575	2,213
181.41	2,335	961	181.93	2,580	2,239
181.42	2,340	984	181.94	2,585	2,264
181.43	2,345	1,007	181.95	2,589	2,290
181.44	2,349	1,031	181.96	2,594	2,316
181.45	2,354	1,054	181.97	2,599	2,342
181.46	2,359	1,078	181.98	2,604	2,368
181.47	2,363	1,102	181.99	2,608	2,394

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.00	2,613	2,420	182.52	2,876	3,847
182.01	2,618	2,446	182.53	2,881	3,876
182.02	2,623	2,473	182.54	2,886	3,905
182.03	2,628	2,499	182.55	2,891	3,934
182.04	2,633	2,525	182.56	2,896	3,963
182.05	2,638	2,552	182.57	2,901	3,992
182.06	2,643	2,578	182.58	2,906	4,021
182.07	2,648	2,604	182.59	2,911	4,050
182.08	2,653	2,631	182.60	2,916	4,079
182.09	2,658	2,658	182.61	2,921	4,108
182.10	2,663	2,684	182.62	2,926	4,137
182.11	2,669	2,711	182.63	2,931	4,167
182.12	2,674	2,738	182.64	2,936	4,196
182.13	2,679	2,764	182.65	2,941	4,225
182.14	2,684	2,791	182.66	2,946	4,255
182.15	2,689	2,818	182.67	2,951	4,284
182.16	2,694	2,845	182.68	2,956	4,314
182.17	2,699	2,872	182.69	2,961	4,344
182.18	2,704	2,899	182.70	2,967	4,373
182.19	2,709	2,926	182.71	2,972	4,403
182.20	2,714	2,953	182.72	2,977	4,433
182.21	2,719	2,980	182.73	2,982	4,462
182.22	2,724	3,007	182.74	2,987	4,492
182.23	2,729	3,035	182.75	2,992	4,522
182.24	2,734	3,062	182.76	2,997	4,552
182.25	2,739	3,089	182.77	3,002	4,582
182.26	2,744	3,117	182.78	3,007	4,612
182.27	2,749	3,144	182.79	3,012	4,642
182.28	2,754	3,172	182.80	3,017	4,672
182.29	2,759	3,199	182.81	3,022	4,703
182.30	2,765	3,227	182.82	3,027	4,733
182.31	2,770	3,255	182.83	3,032	4,763
182.32	2,775	3,282	182.84	3,037	4,793
182.33	2,780	3,310	182.85	3,042	4,824
182.34	2,785	3,338	182.86	3,047	4,854
182.35	2,790	3,366	182.87	3,052	4,885
182.36	2,795	3,394	182.88	3,057	4,915
182.37	2,800	3,422	182.89	3,062	4,946
182.38	2,805	3,450	182.90	3,068	4,977
182.39	2,810	3,478	182.91	3,073	5,007
182.40	2,815	3,506	182.92	3,078	5,038
182.41	2,820	3,534	182.93	3,083	5,069
182.42	2,825	3,562	182.94	3,088	5,100
182.43	2,830	3,591	182.95	3,093	5,131
182.44	2,835	3,619	182.96	3,098	5,162
182.45	2,840	3,647	182.97	3,103	5,193
182.46	2,845	3,676	182.98	3,108	5,224
182.47	2,850	3,704	182.99	3,113	5,255
182.48	2,855	3,733	183.00	3,118	5,286
182.49	2,860	3,761	183.01	3,123	5,317
182.50	2,866	3,790	183.02	3,129	5,348
182.51	2,871	3,819	183.03	3,134	5,380

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.04	3,140	5,411	183.56	3,419	7,116
183.05	3,145	5,442	183.57	3,425	7,150
183.06	3,150	5,474	183.58	3,430	7,185
183.07	3,156	5,505	183.59	3,435	7,219
183.08	3,161	5,537	183.60	3,441	7,253
183.09	3,166	5,569	183.61	3,446	7,288
183.10	3,172	5,600	183.62	3,452	7,322
183.11	3,177	5,632	183.63	3,457	7,357
183.12	3,183	5,664	183.64	3,462	7,392
183.13	3,188	5,696	183.65	3,468	7,426
183.14	3,193	5,728	183.66	3,473	7,461
183.15	3,199	5,760	183.67	3,478	7,496
183.16	3,204	5,792	183.68	3,484	7,530
183.17	3,209	5,824	183.69	3,489	7,565
183.18	3,215	5,856	183.70	3,495	7,600
183.19	3,220	5,888	183.71	3,500	7,635
183.20	3,226	5,920	183.72	3,505	7,670
183.21	3,231	5,952	183.73	3,511	7,705
183.22	3,236	5,985	183.74	3,516	7,740
183.23	3,242	6,017	183.75	3,522	7,776
183.24	3,247	6,050	183.76	3,527	7,811
183.25	3,253	6,082	183.77	3,532	7,846
183.26	3,258	6,115	183.78	3,538	7,882
183.27	3,263	6,147	183.79	3,543	7,917
183.28	3,269	6,180	183.80	3,548	7,952
183.29	3,274	6,213	183.81	3,554	7,988
183.30	3,279	6,245	183.82	3,559	8,023
183.31	3,285	6,278	183.83	3,565	8,059
183.32	3,290	6,311	183.84	3,570	8,095
183.33	3,296	6,344	183.85	3,575	8,130
183.34	3,301	6,377	183.86	3,581	8,166
183.35	3,306	6,410	183.87	3,586	8,202
183.36	3,312	6,443	183.88	3,591	8,238
183.37	3,317	6,476	183.89	3,597	8,274
183.38	3,322	6,510	183.90	3,602	8,310
183.39	3,328	6,543	183.91	3,608	8,346
183.40	3,333	6,576	183.92	3,613	8,382
183.41	3,339	6,609	183.93	3,618	8,418
183.42	3,344	6,643	183.94	3,624	8,454
183.43	3,349	6,676	183.95	3,629	8,491
183.44	3,355	6,710	183.96	3,634	8,527
183.45	3,360	6,743	183.97	3,640	8,563
183.46	3,365	6,777	183.98	3,645	8,600
183.47	3,371	6,811	183.99	3,651	8,636
183.48	3,376	6,844	184.00	3,656	8,673
183.49	3,382	6,878	184.01	3,662	8,709
183.50	3,387	6,912	184.02	3,667	8,746
183.51	3,392	6,946	184.03	3,673	8,783
183.52	3,398	6,980	184.04	3,679	8,820
183.53	3,403	7,014	184.05	3,685	8,856
183.54	3,409	7,048	184.06	3,690	8,893
183.55	3,414	7,082	184.07	3,696	8,930

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.08	3,702	8,967	184.60	3,999	10,969
184.09	3,707	9,004	184.61	4,004	11,009
184.10	3,713	9,041	184.62	4,010	11,049
184.11	3,719	9,078	184.63	4,016	11,089
184.12	3,725	9,116	184.64	4,021	11,130
184.13	3,730	9,153	184.65	4,027	11,170
184.14	3,736	9,190	184.66	4,033	11,210
184.15	3,742	9,228	184.67	4,039	11,251
184.16	3,747	9,265	184.68	4,044	11,291
184.17	3,753	9,303	184.69	4,050	11,331
184.18	3,759	9,340	184.70	4,056	11,372
184.19	3,764	9,378	184.71	4,061	11,413
184.20	3,770	9,415	184.72	4,067	11,453
184.21	3,776	9,453	184.73	4,073	11,494
184.22	3,782	9,491	184.74	4,079	11,535
184.23	3,787	9,529	184.75	4,084	11,575
184.24	3,793	9,567	184.76	4,090	11,616
184.25	3,799	9,605	184.77	4,096	11,657
184.26	3,804	9,643	184.78	4,101	11,698
184.27	3,810	9,681	184.79	4,107	11,739
184.28	3,816	9,719	184.80	4,113	11,780
184.29	3,822	9,757	184.81	4,119	11,822
184.30	3,827	9,795	184.82	4,124	11,863
184.31	3,833	9,834	184.83	4,130	11,904
184.32	3,839	9,872	184.84	4,136	11,945
184.33	3,844	9,910	184.85	4,141	11,987
184.34	3,850	9,949	184.86	4,147	12,028
184.35	3,856	9,987	184.87	4,153	12,070
184.36	3,862	10,026	184.88	4,158	12,111
184.37	3,867	10,065	184.89	4,164	12,153
184.38	3,873	10,103	184.90	4,170	12,194
184.39	3,879	10,142	184.91	4,176	12,236
184.40	3,884	10,181	184.92	4,181	12,278
184.41	3,890	10,220	184.93	4,187	12,320
184.42	3,896	10,259	184.94	4,193	12,362
184.43	3,902	10,298	184.95	4,198	12,404
184.44	3,907	10,337	184.96	4,204	12,446
184.45	3,913	10,376	184.97	4,210	12,488
184.46	3,919	10,415	184.98	4,216	12,530
184.47	3,924	10,454	184.99	4,221	12,572
184.48	3,930	10,493	185.00	4,227	12,614
184.49	3,936	10,533	185.01	4,233	12,657
184.50	3,942	10,572	185.02	4,239	12,699
184.51	3,947	10,612	185.03	4,245	12,741
184.52	3,953	10,651	185.04	4,251	12,784
184.53	3,959	10,691	185.05	4,257	12,826
184.54	3,964	10,730	185.06	4,263	12,869
184.55	3,970	10,770	185.07	4,269	12,912
184.56	3,976	10,810	185.08	4,275	12,954
184.57	3,981	10,850	185.09	4,281	12,997
184.58	3,987	10,889	185.10	4,287	13,040
184.59	3,993	10,929	185.11	4,293	13,083

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.12	4,299	13,126	185.64	4,614	15,443
185.13	4,306	13,169	185.65	4,620	15,489
185.14	4,312	13,212	185.66	4,626	15,536
185.15	4,318	13,255	185.67	4,632	15,582
185.16	4,324	13,298	185.68	4,638	15,628
185.17	4,330	13,342	185.69	4,644	15,675
185.18	4,336	13,385	185.70	4,650	15,721
185.19	4,342	13,428	185.71	4,656	15,768
185.20	4,348	13,472	185.72	4,662	15,814
185.21	4,354	13,515	185.73	4,668	15,861
185.22	4,360	13,559	185.74	4,674	15,908
185.23	4,366	13,603	185.75	4,680	15,954
185.24	4,372	13,646	185.76	4,686	16,001
185.25	4,378	13,690	185.77	4,692	16,048
185.26	4,384	13,734	185.78	4,698	16,095
185.27	4,390	13,778	185.79	4,704	16,142
185.28	4,396	13,822	185.80	4,710	16,189
185.29	4,402	13,866	185.81	4,716	16,236
185.30	4,408	13,910	185.82	4,722	16,284
185.31	4,414	13,954	185.83	4,728	16,331
185.32	4,420	13,998	185.84	4,734	16,378
185.33	4,426	14,042	185.85	4,740	16,425
185.34	4,432	14,086	185.86	4,746	16,473
185.35	4,438	14,131	185.87	4,752	16,520
185.36	4,444	14,175	185.88	4,759	16,568
185.37	4,450	14,220	185.89	4,765	16,616
185.38	4,457	14,264	185.90	4,771	16,663
185.39	4,463	14,309	185.91	4,777	16,711
185.40	4,469	14,353	185.92	4,783	16,759
185.41	4,475	14,398	185.93	4,789	16,807
185.42	4,481	14,443	185.94	4,795	16,855
185.43	4,487	14,488	185.95	4,801	16,903
185.44	4,493	14,533	185.96	4,807	16,951
185.45	4,499	14,578	185.97	4,813	16,999
185.46	4,505	14,623	185.98	4,819	17,047
185.47	4,511	14,668	185.99	4,825	17,095
185.48	4,517	14,713	186.00	4,831	17,143
185.49	4,523	14,758	186.01	4,837	17,192
185.50	4,529	14,803	186.02	4,844	17,240
185.51	4,535	14,849	186.03	4,850	17,289
185.52	4,541	14,894	186.04	4,856	17,337
185.53	4,547	14,939	186.05	4,863	17,386
185.54	4,553	14,985	186.06	4,869	17,434
185.55	4,559	15,031	186.07	4,876	17,483
185.56	4,565	15,076	186.08	4,882	17,532
185.57	4,571	15,122	186.09	4,888	17,581
185.58	4,577	15,168	186.10	4,895	17,630
185.59	4,583	15,213	186.11	4,901	17,679
185.60	4,589	15,259	186.12	4,907	17,728
185.61	4,595	15,305	186.13	4,914	17,777
185.62	4,601	15,351	186.14	4,920	17,826
185.63	4,608	15,397	186.15	4,927	17,875

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.16	4,933	17,924
186.17	4,939	17,974
186.18	4,946	18,023
186.19	4,952	18,073
186.20	4,958	18,122
186.21	4,965	18,172
186.22	4,971	18,222
186.23	4,978	18,271
186.24	4,984	18,321
186.25	4,990	18,371
186.26	4,997	18,421
186.27	5,003	18,471
186.28	5,009	18,521
186.29	5,016	18,571
186.30	5,022	18,621
186.31	5,028	18,672
186.32	5,035	18,722
186.33	5,041	18,772
186.34	5,048	18,823
186.35	5,054	18,873
186.36	5,060	18,924
186.37	5,067	18,974
186.38	5,073	19,025
186.39	5,079	19,076
186.40	5,086	19,127
186.41	5,092	19,178
186.42	5,099	19,229
186.43	5,105	19,280
186.44	5,111	19,331
186.45	5,118	19,382
186.46	5,124	19,433
186.47	5,130	19,484
186.48	5,137	19,536
186.49	5,143	19,587
186.50	5,150	19,638
186.51	5,156	19,690
186.52	5,162	19,742
186.53	5,169	19,793
186.54	5,175	19,845
186.55	5,181	19,897
186.56	5,188	19,949
186.57	5,194	20,000
186.58	5,200	20,052
186.59	5,207	20,104
186.60	5,213	20,157
186.61	5,220	20,209
186.62	5,226	20,261
186.63	5,232	20,313
186.64	5,239	20,366
186.65	5,245	20,418
186.66	5,251	20,471
186.67	5,258	20,523
186.68	5,264	20,576
186.69	5,271	20,628
186.70	5,277	20,681
186.71	5,283	20,734
186.72	5,290	20,787
186.73	5,296	20,840
186.74	5,302	20,893
186.75	5,309	20,946
186.76	5,315	20,999
186.77	5,321	21,052
186.78	5,328	21,105
186.79	5,334	21,159
186.80	5,341	21,212
186.81	5,347	21,265
186.82	5,353	21,319
186.83	5,360	21,372
186.84	5,366	21,426
186.85	5,372	21,480
186.86	5,379	21,534
186.87	5,385	21,587
186.88	5,392	21,641
186.89	5,398	21,695
186.90	5,404	21,749
186.91	5,411	21,803
186.92	5,417	21,857
186.93	5,423	21,912
186.94	5,430	21,966
186.95	5,436	22,020
186.96	5,443	22,075
186.97	5,449	22,129
186.98	5,455	22,184
186.99	5,462	22,238
187.00	**5,468**	**22,293**

Summary for Pond B-43: Basin #43

Inflow Area = 2.712 ac, 33.89% Impervious, Inflow Depth = 1.81" for Current 2 yr event
Inflow = 4.95 cfs @ 12.18 hrs, Volume= 0.409 af
Outflow = 0.73 cfs @ 12.90 hrs, Volume= 0.300 af, Atten= 85%, Lag= 43.3 min
Primary = 0.73 cfs @ 12.90 hrs, Volume= 0.300 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 178.70' @ 12.90 hrs Surf.Area= 5,926 sf Storage= 10,258 cf

Plug-Flow detention time= 506.1 min calculated for 0.300 af (73% of inflow)
Center-of-Mass det. time= 407.0 min (1,211.5 - 804.5)

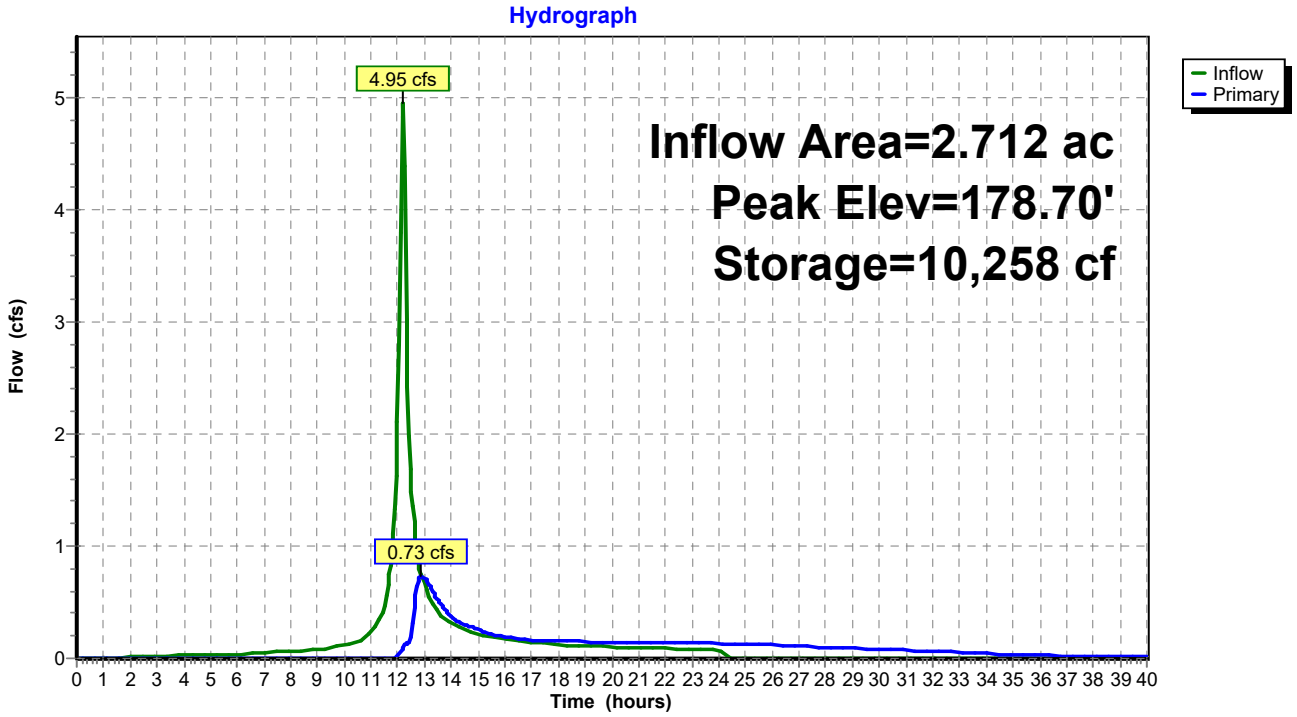
Volume	Invert	Avail.Storage	Storage Description
#1	176.35'	26,392 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
176.35	0	0	0
177.00	4,447	1,445	1,445
178.00	5,292	4,870	6,315
179.00	6,194	5,743	12,058
180.00	7,153	6,674	18,731
181.00	8,168	7,661	26,392

Device	Routing	Invert	Outlet Devices
#1	Primary	176.30'	**18.0" Round Culvert** L= 200.0' Ke= 0.500 Inlet / Outlet Invert= 176.30' / 166.10' S= 0.0510 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	177.62'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	178.58'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.00'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.72 cfs @ 12.90 hrs HW=178.70' (Free Discharge)
- **1=Culvert** (Passes 0.72 cfs of 10.94 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.16 cfs @ 4.76 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.56 cfs @ 1.15 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-43: Basin #43



Stage-Discharge for Pond B-43: Basin #43

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
176.35	0.00	176.87	0.00	177.39	0.00	177.91	0.07
176.36	0.00	176.88	0.00	177.40	0.00	177.92	0.07
176.37	0.00	176.89	0.00	177.41	0.00	177.93	0.07
176.38	0.00	176.90	0.00	177.42	0.00	177.94	0.08
176.39	0.00	176.91	0.00	177.43	0.00	177.95	0.08
176.40	0.00	176.92	0.00	177.44	0.00	177.96	0.08
176.41	0.00	176.93	0.00	177.45	0.00	177.97	0.08
176.42	0.00	176.94	0.00	177.46	0.00	177.98	0.08
176.43	0.00	176.95	0.00	177.47	0.00	177.99	0.08
176.44	0.00	176.96	0.00	177.48	0.00	178.00	0.09
176.45	0.00	176.97	0.00	177.49	0.00	178.01	0.09
176.46	0.00	176.98	0.00	177.50	0.00	178.02	0.09
176.47	0.00	176.99	0.00	177.51	0.00	178.03	0.09
176.48	0.00	177.00	0.00	177.52	0.00	178.04	0.09
176.49	0.00	177.01	0.00	177.53	0.00	178.05	0.09
176.50	0.00	177.02	0.00	177.54	0.00	178.06	0.10
176.51	0.00	177.03	0.00	177.55	0.00	178.07	0.10
176.52	0.00	177.04	0.00	177.56	0.00	178.08	0.10
176.53	0.00	177.05	0.00	177.57	0.00	178.09	0.10
176.54	0.00	177.06	0.00	177.58	0.00	178.10	0.10
176.55	0.00	177.07	0.00	177.59	0.00	178.11	0.10
176.56	0.00	177.08	0.00	177.60	0.00	178.12	0.10
176.57	0.00	177.09	0.00	177.61	0.00	178.13	0.10
176.58	0.00	177.10	0.00	177.62	0.00	178.14	0.11
176.59	0.00	177.11	0.00	177.63	0.00	178.15	0.11
176.60	0.00	177.12	0.00	177.64	0.00	178.16	0.11
176.61	0.00	177.13	0.00	177.65	0.00	178.17	0.11
176.62	0.00	177.14	0.00	177.66	0.00	178.18	0.11
176.63	0.00	177.15	0.00	177.67	0.00	178.19	0.11
176.64	0.00	177.16	0.00	177.68	0.01	178.20	0.11
176.65	0.00	177.17	0.00	177.69	0.01	178.21	0.11
176.66	0.00	177.18	0.00	177.70	0.01	178.22	0.12
176.67	0.00	177.19	0.00	177.71	0.01	178.23	0.12
176.68	0.00	177.20	0.00	177.72	0.02	178.24	0.12
176.69	0.00	177.21	0.00	177.73	0.02	178.25	0.12
176.70	0.00	177.22	0.00	177.74	0.02	178.26	0.12
176.71	0.00	177.23	0.00	177.75	0.03	178.27	0.12
176.72	0.00	177.24	0.00	177.76	0.03	178.28	0.12
176.73	0.00	177.25	0.00	177.77	0.03	178.29	0.12
176.74	0.00	177.26	0.00	177.78	0.04	178.30	0.12
176.75	0.00	177.27	0.00	177.79	0.04	178.31	0.13
176.76	0.00	177.28	0.00	177.80	0.05	178.32	0.13
176.77	0.00	177.29	0.00	177.81	0.05	178.33	0.13
176.78	0.00	177.30	0.00	177.82	0.05	178.34	0.13
176.79	0.00	177.31	0.00	177.83	0.05	178.35	0.13
176.80	0.00	177.32	0.00	177.84	0.06	178.36	0.13
176.81	0.00	177.33	0.00	177.85	0.06	178.37	0.13
176.82	0.00	177.34	0.00	177.86	0.06	178.38	0.13
176.83	0.00	177.35	0.00	177.87	0.06	178.39	0.13
176.84	0.00	177.36	0.00	177.88	0.06	178.40	0.13
176.85	0.00	177.37	0.00	177.89	0.07	178.41	0.14
176.86	0.00	177.38	0.00	177.90	0.07	178.42	0.14

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.43	0.14	178.95	3.07	179.47	10.71	179.99	14.59
178.44	0.14	178.96	3.19	179.48	10.88	180.00	14.61
178.45	0.14	178.97	3.31	179.49	11.06	180.01	14.76
178.46	0.14	178.98	3.43	179.50	11.23	180.02	14.99
178.47	0.14	178.99	3.55	179.51	11.40	180.03	15.30
178.48	0.14	179.00	3.67	179.52	11.58	180.04	15.65
178.49	0.14	179.01	3.79	179.53	11.76	180.05	16.05
178.50	0.14	179.02	3.92	179.54	11.93	180.06	16.49
178.51	0.15	179.03	4.05	179.55	12.11	180.07	16.96
178.52	0.15	179.04	4.18	179.56	12.29	180.08	17.47
178.53	0.15	179.05	4.30	179.57	12.47	180.09	18.01
178.54	0.15	179.06	4.44	179.58	12.65	180.10	18.58
178.55	0.15	179.07	4.57	179.59	12.83	180.11	19.18
178.56	0.15	179.08	4.70	179.60	13.01	180.12	19.80
178.57	0.15	179.09	4.83	179.61	13.19	180.13	20.45
178.58	0.15	179.10	4.97	179.62	13.38	180.14	21.13
178.59	0.17	179.11	5.11	179.63	13.56	180.15	21.83
178.60	0.19	179.12	5.24	179.64	13.69	180.16	22.55
178.61	0.22	179.13	5.38	179.65	13.72	180.17	23.30
178.62	0.26	179.14	5.52	179.66	13.75	180.18	24.07
178.63	0.30	179.15	5.66	179.67	13.77	180.19	24.86
178.64	0.35	179.16	5.81	179.68	13.80	180.20	25.67
178.65	0.40	179.17	5.95	179.69	13.83	180.21	26.54
178.66	0.45	179.18	6.09	179.70	13.85	180.22	27.43
178.67	0.51	179.19	6.24	179.71	13.88	180.23	28.36
178.68	0.57	179.20	6.39	179.72	13.90	180.24	29.30
178.69	0.64	179.21	6.53	179.73	13.93	180.25	30.27
178.70	0.70	179.22	6.68	179.74	13.96	180.26	31.27
178.71	0.77	179.23	6.83	179.75	13.98	180.27	32.29
178.72	0.84	179.24	6.98	179.76	14.01	180.28	33.34
178.73	0.92	179.25	7.14	179.77	14.03	180.29	34.41
178.74	1.00	179.26	7.29	179.78	14.06	180.30	35.51
178.75	1.08	179.27	7.44	179.79	14.08	180.31	36.63
178.76	1.16	179.28	7.60	179.80	14.11	180.32	37.77
178.77	1.24	179.29	7.75	179.81	14.14	180.33	38.94
178.78	1.33	179.30	7.91	179.82	14.16	180.34	40.14
178.79	1.41	179.31	8.07	179.83	14.19	180.35	41.35
178.80	1.51	179.32	8.23	179.84	14.21	180.36	42.60
178.81	1.60	179.33	8.39	179.85	14.24	180.37	43.86
178.82	1.69	179.34	8.55	179.86	14.26	180.38	45.15
178.83	1.79	179.35	8.71	179.87	14.29	180.39	46.47
178.84	1.88	179.36	8.87	179.88	14.31	180.40	47.80
178.85	1.98	179.37	9.03	179.89	14.34	180.41	49.19
178.86	2.09	179.38	9.20	179.90	14.36	180.42	50.61
178.87	2.19	179.39	9.36	179.91	14.39	180.43	52.05
178.88	2.29	179.40	9.53	179.92	14.41	180.44	53.52
178.89	2.40	179.41	9.69	179.93	14.44	180.45	55.01
178.90	2.51	179.42	9.86	179.94	14.46	180.46	56.53
178.91	2.62	179.43	10.03	179.95	14.49	180.47	58.07
178.92	2.73	179.44	10.20	179.96	14.51	180.48	59.65
178.93	2.84	179.45	10.37	179.97	14.54	180.49	61.24
178.94	2.96	179.46	10.54	179.98	14.56	180.50	62.87

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)
180.51	64.52
180.52	66.20
180.53	67.90
180.54	69.63
180.55	71.39
180.56	73.18
180.57	74.99
180.58	76.82
180.59	78.69
180.60	80.58
180.61	82.23
180.62	83.89
180.63	85.57
180.64	87.26
180.65	88.96
180.66	90.68
180.67	92.41
180.68	94.15
180.69	95.91
180.70	97.67
180.71	99.46
180.72	101.25
180.73	103.05
180.74	104.87
180.75	106.70
180.76	108.55
180.77	110.40
180.78	112.27
180.79	114.15
180.80	116.04
180.81	117.98
180.82	119.94
180.83	121.91
180.84	123.89
180.85	125.88
180.86	127.89
180.87	129.91
180.88	131.94
180.89	133.99
180.90	136.05
180.91	138.12
180.92	140.21
180.93	142.30
180.94	144.41
180.95	146.54
180.96	148.67
180.97	150.82
180.98	152.98
180.99	155.16
181.00	**157.34**

Stage-Area-Storage for Pond B-43: Basin #43

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.35	0	0	176.87	3,558	925
176.36	68	0	176.88	3,626	961
176.37	137	1	176.89	3,694	997
176.38	205	3	176.90	3,763	1,035
176.39	274	5	176.91	3,831	1,073
176.40	342	9	176.92	3,900	1,111
176.41	410	12	176.93	3,968	1,151
176.42	479	17	176.94	4,037	1,191
176.43	547	22	176.95	4,105	1,231
176.44	616	28	176.96	4,173	1,273
176.45	684	34	176.97	4,242	1,315
176.46	753	41	176.98	4,310	1,358
176.47	821	49	176.99	4,379	1,401
176.48	889	58	177.00	4,447	1,445
176.49	958	67	177.01	4,455	1,490
176.50	1,026	77	177.02	4,464	1,534
176.51	1,095	88	177.03	4,472	1,579
176.52	1,163	99	177.04	4,481	1,624
176.53	1,231	111	177.05	4,489	1,669
176.54	1,300	123	177.06	4,498	1,714
176.55	1,368	137	177.07	4,506	1,759
176.56	1,437	151	177.08	4,515	1,804
176.57	1,505	166	177.09	4,523	1,849
176.58	1,574	181	177.10	4,531	1,894
176.59	1,642	197	177.11	4,540	1,940
176.60	1,710	214	177.12	4,548	1,985
176.61	1,779	231	177.13	4,557	2,031
176.62	1,847	249	177.14	4,565	2,076
176.63	1,916	268	177.15	4,574	2,122
176.64	1,984	288	177.16	4,582	2,168
176.65	2,052	308	177.17	4,591	2,213
176.66	2,121	329	177.18	4,599	2,259
176.67	2,189	350	177.19	4,608	2,305
176.68	2,258	373	177.20	4,616	2,352
176.69	2,326	395	177.21	4,624	2,398
176.70	2,395	419	177.22	4,633	2,444
176.71	2,463	443	177.23	4,641	2,490
176.72	2,531	468	177.24	4,650	2,537
176.73	2,600	494	177.25	4,658	2,583
176.74	2,668	520	177.26	4,667	2,630
176.75	2,737	547	177.27	4,675	2,677
176.76	2,805	575	177.28	4,684	2,724
176.77	2,873	603	177.29	4,692	2,770
176.78	2,942	633	177.30	4,700	2,817
176.79	3,010	662	177.31	4,709	2,864
176.80	3,079	693	177.32	4,717	2,912
176.81	3,147	724	177.33	4,726	2,959
176.82	3,216	756	177.34	4,734	3,006
176.83	3,284	788	177.35	4,743	3,053
176.84	3,352	821	177.36	4,751	3,101
176.85	3,421	855	177.37	4,760	3,149
176.86	3,489	890	177.38	4,768	3,196

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.39	4,777	3,244	177.91	5,216	5,842
177.40	4,785	3,292	177.92	5,224	5,894
177.41	4,793	3,340	177.93	5,233	5,946
177.42	4,802	3,388	177.94	5,241	5,999
177.43	4,810	3,436	177.95	5,250	6,051
177.44	4,819	3,484	177.96	5,258	6,104
177.45	4,827	3,532	177.97	5,267	6,156
177.46	4,836	3,580	177.98	5,275	6,209
177.47	4,844	3,629	177.99	5,284	6,262
177.48	4,853	3,677	178.00	5,292	6,315
177.49	4,861	3,726	178.01	5,301	6,368
177.50	4,870	3,774	178.02	5,310	6,421
177.51	4,878	3,823	178.03	5,319	6,474
177.52	4,886	3,872	178.04	5,328	6,527
177.53	4,895	3,921	178.05	5,337	6,581
177.54	4,903	3,970	178.06	5,346	6,634
177.55	4,912	4,019	178.07	5,355	6,687
177.56	4,920	4,068	178.08	5,364	6,741
177.57	4,929	4,117	178.09	5,373	6,795
177.58	4,937	4,167	178.10	5,382	6,848
177.59	4,946	4,216	178.11	5,391	6,902
177.60	4,954	4,266	178.12	5,400	6,956
177.61	4,962	4,315	178.13	5,409	7,010
177.62	4,971	4,365	178.14	5,418	7,064
177.63	4,979	4,415	178.15	5,427	7,119
177.64	4,988	4,464	178.16	5,436	7,173
177.65	4,996	4,514	178.17	5,445	7,227
177.66	5,005	4,564	178.18	5,454	7,282
177.67	5,013	4,614	178.19	5,463	7,337
177.68	5,022	4,665	178.20	5,472	7,391
177.69	5,030	4,715	178.21	5,481	7,446
177.70	5,038	4,765	178.22	5,490	7,501
177.71	5,047	4,816	178.23	5,499	7,556
177.72	5,055	4,866	178.24	5,508	7,611
177.73	5,064	4,917	178.25	5,518	7,666
177.74	5,072	4,967	178.26	5,527	7,721
177.75	5,081	5,018	178.27	5,536	7,776
177.76	5,089	5,069	178.28	5,545	7,832
177.77	5,098	5,120	178.29	5,554	7,887
177.78	5,106	5,171	178.30	5,563	7,943
177.79	5,115	5,222	178.31	5,572	7,999
177.80	5,123	5,273	178.32	5,581	8,054
177.81	5,131	5,325	178.33	5,590	8,110
177.82	5,140	5,376	178.34	5,599	8,166
177.83	5,148	5,427	178.35	5,608	8,222
177.84	5,157	5,479	178.36	5,617	8,278
177.85	5,165	5,530	178.37	5,626	8,335
177.86	5,174	5,582	178.38	5,635	8,391
177.87	5,182	5,634	178.39	5,644	8,447
177.88	5,191	5,686	178.40	5,653	8,504
177.89	5,199	5,738	178.41	5,662	8,560
177.90	5,208	5,790	178.42	5,671	8,617

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.43	5,680	8,674	178.95	6,149	11,749
178.44	5,689	8,731	178.96	6,158	11,811
178.45	5,698	8,788	178.97	6,167	11,872
178.46	5,707	8,845	178.98	6,176	11,934
178.47	5,716	8,902	178.99	6,185	11,996
178.48	5,725	8,959	179.00	6,194	12,058
178.49	5,734	9,016	179.01	6,204	12,120
178.50	5,743	9,074	179.02	6,213	12,182
178.51	5,752	9,131	179.03	6,223	12,244
178.52	5,761	9,189	179.04	6,232	12,306
178.53	5,770	9,246	179.05	6,242	12,369
178.54	5,779	9,304	179.06	6,252	12,431
178.55	5,788	9,362	179.07	6,261	12,494
178.56	5,797	9,420	179.08	6,271	12,556
178.57	5,806	9,478	179.09	6,280	12,619
178.58	5,815	9,536	179.10	6,290	12,682
178.59	5,824	9,594	179.11	6,299	12,745
178.60	5,833	9,652	179.12	6,309	12,808
178.61	5,842	9,711	179.13	6,319	12,871
178.62	5,851	9,769	179.14	6,328	12,934
178.63	5,860	9,828	179.15	6,338	12,998
178.64	5,869	9,886	179.16	6,347	13,061
178.65	5,878	9,945	179.17	6,357	13,125
178.66	5,887	10,004	179.18	6,367	13,188
178.67	5,896	10,063	179.19	6,376	13,252
178.68	5,905	10,122	179.20	6,386	13,316
178.69	5,914	10,181	179.21	6,395	13,380
178.70	5,923	10,240	179.22	6,405	13,444
178.71	5,932	10,299	179.23	6,415	13,508
178.72	5,941	10,359	179.24	6,424	13,572
178.73	5,950	10,418	179.25	6,434	13,636
178.74	5,959	10,478	179.26	6,443	13,701
178.75	5,969	10,537	179.27	6,453	13,765
178.76	5,978	10,597	179.28	6,463	13,830
178.77	5,987	10,657	179.29	6,472	13,894
178.78	5,996	10,717	179.30	6,482	13,959
178.79	6,005	10,777	179.31	6,491	14,024
178.80	6,014	10,837	179.32	6,501	14,089
178.81	6,023	10,897	179.33	6,510	14,154
178.82	6,032	10,957	179.34	6,520	14,219
178.83	6,041	11,018	179.35	6,530	14,284
178.84	6,050	11,078	179.36	6,539	14,350
178.85	6,059	11,139	179.37	6,549	14,415
178.86	6,068	11,199	179.38	6,558	14,481
178.87	6,077	11,260	179.39	6,568	14,546
178.88	6,086	11,321	179.40	6,578	14,612
178.89	6,095	11,382	179.41	6,587	14,678
178.90	6,104	11,443	179.42	6,597	14,744
178.91	6,113	11,504	179.43	6,606	14,810
178.92	6,122	11,565	179.44	6,616	14,876
178.93	6,131	11,626	179.45	6,626	14,942
178.94	6,140	11,688	179.46	6,635	15,008

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.47	6,645	15,075	179.99	7,143	18,660
179.48	6,654	15,141	180.00	7,153	18,731
179.49	6,664	15,208	180.01	7,163	18,803
179.50	6,674	15,275	180.02	7,173	18,875
179.51	6,683	15,341	180.03	7,183	18,946
179.52	6,693	15,408	180.04	7,194	19,018
179.53	6,702	15,475	180.05	7,204	19,090
179.54	6,712	15,542	180.06	7,214	19,162
179.55	6,721	15,610	180.07	7,224	19,234
179.56	6,731	15,677	180.08	7,234	19,307
179.57	6,741	15,744	180.09	7,244	19,379
179.58	6,750	15,812	180.10	7,254	19,452
179.59	6,760	15,879	180.11	7,265	19,524
179.60	6,769	15,947	180.12	7,275	19,597
179.61	6,779	16,015	180.13	7,285	19,670
179.62	6,789	16,082	180.14	7,295	19,743
179.63	6,798	16,150	180.15	7,305	19,816
179.64	6,808	16,218	180.16	7,315	19,889
179.65	6,817	16,286	180.17	7,326	19,962
179.66	6,827	16,355	180.18	7,336	20,035
179.67	6,837	16,423	180.19	7,346	20,109
179.68	6,846	16,491	180.20	7,356	20,182
179.69	6,856	16,560	180.21	7,366	20,256
179.70	6,865	16,629	180.22	7,376	20,329
179.71	6,875	16,697	180.23	7,386	20,403
179.72	6,884	16,766	180.24	7,397	20,477
179.73	6,894	16,835	180.25	7,407	20,551
179.74	6,904	16,904	180.26	7,417	20,625
179.75	6,913	16,973	180.27	7,427	20,700
179.76	6,923	17,042	180.28	7,437	20,774
179.77	6,932	17,111	180.29	7,447	20,848
179.78	6,942	17,181	180.30	7,457	20,923
179.79	6,952	17,250	180.31	7,468	20,997
179.80	6,961	17,320	180.32	7,478	21,072
179.81	6,971	17,390	180.33	7,488	21,147
179.82	6,980	17,459	180.34	7,498	21,222
179.83	6,990	17,529	180.35	7,508	21,297
179.84	7,000	17,599	180.36	7,518	21,372
179.85	7,009	17,669	180.37	7,529	21,447
179.86	7,019	17,739	180.38	7,539	21,523
179.87	7,028	17,809	180.39	7,549	21,598
179.88	7,038	17,880	180.40	7,559	21,674
179.89	7,048	17,950	180.41	7,569	21,749
179.90	7,057	18,021	180.42	7,579	21,825
179.91	7,067	18,091	180.43	7,589	21,901
179.92	7,076	18,162	180.44	7,600	21,977
179.93	7,086	18,233	180.45	7,610	22,053
179.94	7,095	18,304	180.46	7,620	22,129
179.95	7,105	18,375	180.47	7,630	22,205
179.96	7,115	18,446	180.48	7,640	22,282
179.97	7,124	18,517	180.49	7,650	22,358
179.98	7,134	18,588	180.50	7,661	22,435

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.51	7,671	22,511
180.52	7,681	22,588
180.53	7,691	22,665
180.54	7,701	22,742
180.55	7,711	22,819
180.56	7,721	22,896
180.57	7,732	22,973
180.58	7,742	23,051
180.59	7,752	23,128
180.60	7,762	23,206
180.61	7,772	23,283
180.62	7,782	23,361
180.63	7,792	23,439
180.64	7,803	23,517
180.65	7,813	23,595
180.66	7,823	23,673
180.67	7,833	23,752
180.68	7,843	23,830
180.69	7,853	23,908
180.70	7,863	23,987
180.71	7,874	24,066
180.72	7,884	24,145
180.73	7,894	24,223
180.74	7,904	24,302
180.75	7,914	24,381
180.76	7,924	24,461
180.77	7,935	24,540
180.78	7,945	24,619
180.79	7,955	24,699
180.80	7,965	24,778
180.81	7,975	24,858
180.82	7,985	24,938
180.83	7,995	25,018
180.84	8,006	25,098
180.85	8,016	25,178
180.86	8,026	25,258
180.87	8,036	25,339
180.88	8,046	25,419
180.89	8,056	25,499
180.90	8,067	25,580
180.91	8,077	25,661
180.92	8,087	25,742
180.93	8,097	25,823
180.94	8,107	25,904
180.95	8,117	25,985
180.96	8,127	26,066
180.97	8,138	26,147
180.98	8,148	26,229
180.99	8,158	26,310
181.00	**8,168**	**26,392**

Summary for Pond B-44: Basin #44

Inflow Area = 1.184 ac, 34.71% Impervious, Inflow Depth = 1.82" for Current 2 yr event
Inflow = 2.18 cfs @ 12.18 hrs, Volume= 0.180 af
Outflow = 0.06 cfs @ 17.10 hrs, Volume= 0.073 af, Atten= 97%, Lag= 295.4 min
Primary = 0.06 cfs @ 17.10 hrs, Volume= 0.073 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 166.66' @ 17.10 hrs Surf.Area= 6,236 sf Storage= 5,923 cf

Plug-Flow detention time= 638.0 min calculated for 0.073 af (41% of inflow)
Center-of-Mass det. time= 491.1 min (1,294.6 - 803.5)

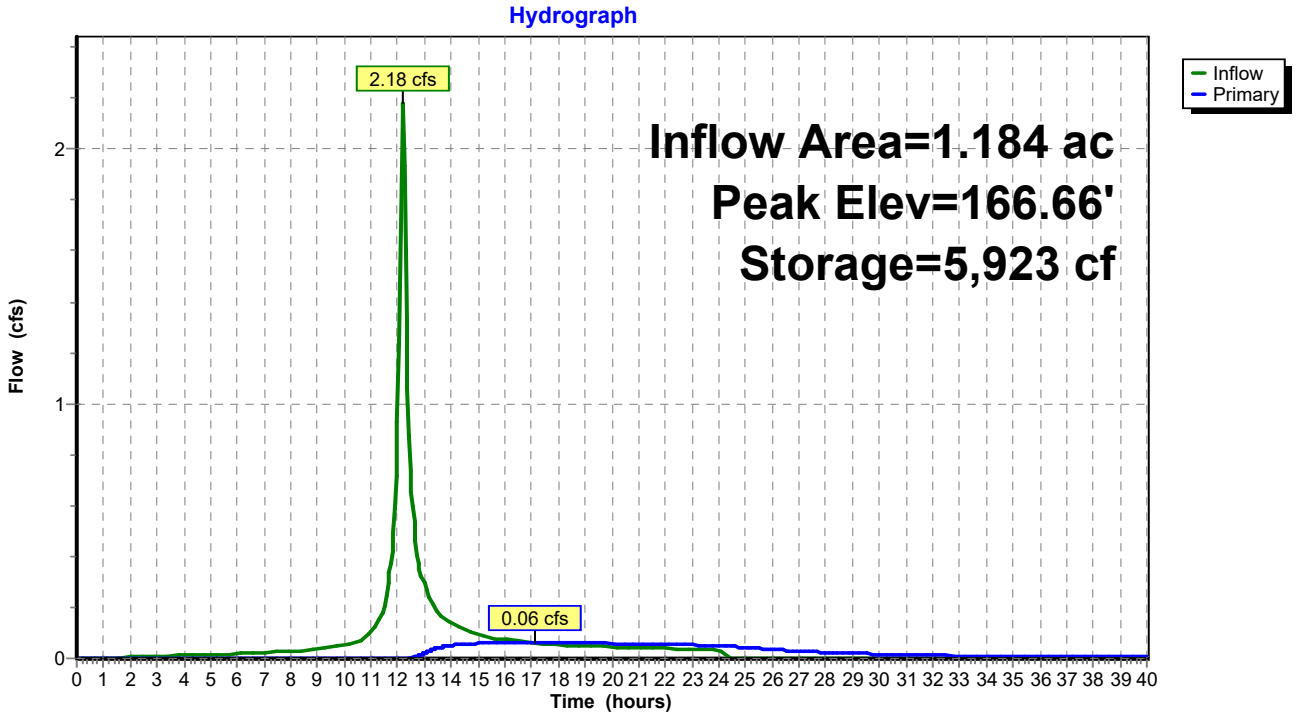
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	31,812 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	5,690	1,991	1,991
167.00	6,518	6,104	8,095
168.00	7,407	6,963	15,058
169.00	8,360	7,884	22,941
170.00	9,381	8,871	31,812

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	**18.0" Round Culvert** L= 44.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0295 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	166.41'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	167.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	168.98'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.06 cfs @ 17.10 hrs HW=166.66' (Free Discharge)
- **1=Culvert** (Passes 0.06 cfs of 6.68 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.06 cfs @ 1.83 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-44: Basin #44



Stage-Discharge for Pond B-44: Basin #44

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.10
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.10
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.10
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.10
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.10
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.10
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.10
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.11
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.11
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.11
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.11
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.11
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.11
165.43	0.00	165.95	0.00	166.47	0.01	166.99	0.11
165.44	0.00	165.96	0.00	166.48	0.01	167.00	0.11
165.45	0.00	165.97	0.00	166.49	0.01	167.01	0.12
165.46	0.00	165.98	0.00	166.50	0.01	167.02	0.12
165.47	0.00	165.99	0.00	166.51	0.02	167.03	0.12
165.48	0.00	166.00	0.00	166.52	0.02	167.04	0.12
165.49	0.00	166.01	0.00	166.53	0.02	167.05	0.12
165.50	0.00	166.02	0.00	166.54	0.03	167.06	0.12
165.51	0.00	166.03	0.00	166.55	0.03	167.07	0.12
165.52	0.00	166.04	0.00	166.56	0.03	167.08	0.12
165.53	0.00	166.05	0.00	166.57	0.04	167.09	0.12
165.54	0.00	166.06	0.00	166.58	0.04	167.10	0.13
165.55	0.00	166.07	0.00	166.59	0.05	167.11	0.13
165.56	0.00	166.08	0.00	166.60	0.05	167.12	0.13
165.57	0.00	166.09	0.00	166.61	0.05	167.13	0.13
165.58	0.00	166.10	0.00	166.62	0.05	167.14	0.13
165.59	0.00	166.11	0.00	166.63	0.06	167.15	0.13
165.60	0.00	166.12	0.00	166.64	0.06	167.16	0.13
165.61	0.00	166.13	0.00	166.65	0.06	167.17	0.13
165.62	0.00	166.14	0.00	166.66	0.06	167.18	0.13
165.63	0.00	166.15	0.00	166.67	0.06	167.19	0.13
165.64	0.00	166.16	0.00	166.68	0.07	167.20	0.14
165.65	0.00	166.17	0.00	166.69	0.07	167.21	0.14
165.66	0.00	166.18	0.00	166.70	0.07	167.22	0.14
165.67	0.00	166.19	0.00	166.71	0.07	167.23	0.14
165.68	0.00	166.20	0.00	166.72	0.07	167.24	0.14
165.69	0.00	166.21	0.00	166.73	0.08	167.25	0.14
165.70	0.00	166.22	0.00	166.74	0.08	167.26	0.14
165.71	0.00	166.23	0.00	166.75	0.08	167.27	0.14
165.72	0.00	166.24	0.00	166.76	0.08	167.28	0.14
165.73	0.00	166.25	0.00	166.77	0.08	167.29	0.14
165.74	0.00	166.26	0.00	166.78	0.08	167.30	0.15
165.75	0.00	166.27	0.00	166.79	0.09	167.31	0.15
165.76	0.00	166.28	0.00	166.80	0.09	167.32	0.15
165.77	0.00	166.29	0.00	166.81	0.09	167.33	0.15
165.78	0.00	166.30	0.00	166.82	0.09	167.34	0.15
165.79	0.00	166.31	0.00	166.83	0.09	167.35	0.15
165.80	0.00	166.32	0.00	166.84	0.09	167.36	0.15
165.81	0.00	166.33	0.00	166.85	0.10	167.37	0.15

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.15	167.90	3.44	168.42	11.24	168.94	14.46
167.39	0.15	167.91	3.56	168.43	11.41	168.95	14.49
167.40	0.15	167.92	3.68	168.44	11.59	168.96	14.51
167.41	0.16	167.93	3.80	168.45	11.76	168.97	14.54
167.42	0.16	167.94	3.93	168.46	11.94	168.98	14.56
167.43	0.16	167.95	4.06	168.47	12.12	168.99	14.71
167.44	0.16	167.96	4.18	168.48	12.30	169.00	14.95
167.45	0.16	167.97	4.31	168.49	12.48	169.01	15.25
167.46	0.16	167.98	4.44	168.50	12.66	169.02	15.60
167.47	0.16	167.99	4.58	168.51	12.84	169.03	16.00
167.48	0.16	168.00	4.71	168.52	13.02	169.04	16.44
167.49	0.16	168.01	4.84	168.53	13.20	169.05	16.91
167.50	0.16	168.02	4.98	168.54	13.38	169.06	17.42
167.51	0.18	168.03	5.12	168.55	13.45	169.07	17.96
167.52	0.20	168.04	5.25	168.56	13.48	169.08	18.53
167.53	0.23	168.05	5.39	168.57	13.51	169.09	19.13
167.54	0.27	168.06	5.53	168.58	13.53	169.10	19.75
167.55	0.31	168.07	5.67	168.59	13.56	169.11	20.40
167.56	0.36	168.08	5.82	168.60	13.59	169.12	21.08
167.57	0.41	168.09	5.96	168.61	13.61	169.13	21.78
167.58	0.46	168.10	6.10	168.62	13.64	169.14	22.50
167.59	0.52	168.11	6.25	168.63	13.67	169.15	23.25
167.60	0.58	168.12	6.40	168.64	13.69	169.16	24.02
167.61	0.65	168.13	6.54	168.65	13.72	169.17	24.81
167.62	0.71	168.14	6.69	168.66	13.75	169.18	25.62
167.63	0.78	168.15	6.84	168.67	13.77	169.19	26.49
167.64	0.85	168.16	6.99	168.68	13.80	169.20	27.39
167.65	0.93	168.17	7.14	168.69	13.83	169.21	28.31
167.66	1.01	168.18	7.30	168.70	13.85	169.22	29.25
167.67	1.09	168.19	7.45	168.71	13.88	169.23	30.23
167.68	1.17	168.20	7.61	168.72	13.90	169.24	31.22
167.69	1.25	168.21	7.76	168.73	13.93	169.25	32.25
167.70	1.34	168.22	7.92	168.74	13.96	169.26	33.29
167.71	1.43	168.23	8.08	168.75	13.98	169.27	34.36
167.72	1.52	168.24	8.23	168.76	14.01	169.28	35.46
167.73	1.61	168.25	8.39	168.77	14.03	169.29	36.58
167.74	1.70	168.26	8.55	168.78	14.06	169.30	37.73
167.75	1.80	168.27	8.72	168.79	14.08	169.31	38.90
167.76	1.89	168.28	8.88	168.80	14.11	169.32	40.09
167.77	1.99	168.29	9.04	168.81	14.14	169.33	41.31
167.78	2.10	168.30	9.20	168.82	14.16	169.34	42.55
167.79	2.20	168.31	9.37	168.83	14.19	169.35	43.81
167.80	2.30	168.32	9.53	168.84	14.21	169.36	45.10
167.81	2.41	168.33	9.70	168.85	14.24	169.37	46.42
167.82	2.52	168.34	9.87	168.86	14.26	169.38	47.76
167.83	2.63	168.35	10.04	168.87	14.29	169.39	49.15
167.84	2.74	168.36	10.21	168.88	14.31	169.40	50.56
167.85	2.85	168.37	10.38	168.89	14.34	169.41	52.00
167.86	2.96	168.38	10.55	168.90	14.36	169.42	53.47
167.87	3.08	168.39	10.72	168.91	14.39	169.43	54.96
167.88	3.20	168.40	10.89	168.92	14.41	169.44	56.48
167.89	3.32	168.41	11.06	168.93	14.44	169.45	58.03

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)
169.46	59.60
169.47	61.20
169.48	62.82
169.49	64.47
169.50	66.15
169.51	67.86
169.52	69.59
169.53	71.35
169.54	73.13
169.55	74.94
169.56	76.78
169.57	78.64
169.58	80.54
169.59	82.19
169.60	83.85
169.61	85.52
169.62	87.21
169.63	88.92
169.64	90.63
169.65	92.36
169.66	94.11
169.67	95.86
169.68	97.63
169.69	99.41
169.70	101.20
169.71	103.01
169.72	104.83
169.73	106.66
169.74	108.50
169.75	110.36
169.76	112.23
169.77	114.11
169.78	116.00
169.79	117.94
169.80	119.89
169.81	121.86
169.82	123.84
169.83	125.84
169.84	127.85
169.85	129.87
169.86	131.90
169.87	133.95
169.88	136.01
169.89	138.08
169.90	140.16
169.91	142.26
169.92	144.37
169.93	146.49
169.94	148.63
169.95	150.78
169.96	152.94
169.97	155.11
169.98	157.30
169.99	159.45
170.00	**161.60**

Stage-Area-Storage for Pond B-44: Basin #44

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0
165.31	81	0
165.32	163	2
165.33	244	4
165.34	325	7
165.35	406	10
165.36	488	15
165.37	569	20
165.38	650	26
165.39	732	33
165.40	813	41
165.41	894	49
165.42	975	59
165.43	1,057	69
165.44	1,138	80
165.45	1,219	91
165.46	1,301	104
165.47	1,382	117
165.48	1,463	132
165.49	1,544	147
165.50	1,626	163
165.51	1,707	179
165.52	1,788	197
165.53	1,870	215
165.54	1,951	234
165.55	2,032	254
165.56	2,113	275
165.57	2,195	296
165.58	2,276	319
165.59	2,357	342
165.60	2,439	366
165.61	2,520	391
165.62	2,601	416
165.63	2,682	443
165.64	2,764	470
165.65	2,845	498
165.66	2,926	527
165.67	3,008	556
165.68	3,089	587
165.69	3,170	618
165.70	3,251	650
165.71	3,333	683
165.72	3,414	717
165.73	3,495	751
165.74	3,577	787
165.75	3,658	823
165.76	3,739	860
165.77	3,820	898
165.78	3,902	936
165.79	3,983	976
165.80	4,064	1,016
165.81	4,146	1,057
165.82	4,227	1,099
165.83	4,308	1,142
165.84	4,389	1,185
165.85	4,471	1,229
165.86	4,552	1,275
165.87	4,633	1,320
165.88	4,715	1,367
165.89	4,796	1,415
165.90	4,877	1,463
165.91	4,958	1,512
165.92	5,040	1,562
165.93	5,121	1,613
165.94	5,202	1,665
165.95	5,284	1,717
165.96	5,365	1,770
165.97	5,446	1,824
165.98	5,527	1,879
165.99	5,609	1,935
166.00	5,690	1,991
166.01	5,698	2,048
166.02	5,707	2,105
166.03	5,715	2,163
166.04	5,723	2,220
166.05	5,731	2,277
166.06	5,740	2,334
166.07	5,748	2,392
166.08	5,756	2,449
166.09	5,765	2,507
166.10	5,773	2,565
166.11	5,781	2,622
166.12	5,789	2,680
166.13	5,798	2,738
166.14	5,806	2,796
166.15	5,814	2,854
166.16	5,822	2,912
166.17	5,831	2,971
166.18	5,839	3,029
166.19	5,847	3,088
166.20	5,856	3,146
166.21	5,864	3,205
166.22	5,872	3,263
166.23	5,880	3,322
166.24	5,889	3,381
166.25	5,897	3,440
166.26	5,905	3,499
166.27	5,914	3,558
166.28	5,922	3,617
166.29	5,930	3,676
166.30	5,938	3,736
166.31	5,947	3,795
166.32	5,955	3,855
166.33	5,963	3,914

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	5,972	3,974	166.86	6,402	7,191
166.35	5,980	4,034	166.87	6,410	7,255
166.36	5,988	4,094	166.88	6,419	7,319
166.37	5,996	4,153	166.89	6,427	7,384
166.38	6,005	4,213	166.90	6,435	7,448
166.39	6,013	4,274	166.91	6,443	7,512
166.40	6,021	4,334	166.92	6,452	7,577
166.41	6,029	4,394	166.93	6,460	7,641
166.42	6,038	4,454	166.94	6,468	7,706
166.43	6,046	4,515	166.95	6,477	7,771
166.44	6,054	4,575	166.96	6,485	7,835
166.45	6,063	4,636	166.97	6,493	7,900
166.46	6,071	4,697	166.98	6,501	7,965
166.47	6,079	4,757	166.99	6,510	8,030
166.48	6,087	4,818	167.00	6,518	8,095
166.49	6,096	4,879	167.01	6,527	8,161
166.50	6,104	4,940	167.02	6,536	8,226
166.51	6,112	5,001	167.03	6,545	8,291
166.52	6,121	5,062	167.04	6,554	8,357
166.53	6,129	5,123	167.05	6,562	8,423
166.54	6,137	5,185	167.06	6,571	8,488
166.55	6,145	5,246	167.07	6,580	8,554
166.56	6,154	5,308	167.08	6,589	8,620
166.57	6,162	5,369	167.09	6,598	8,686
166.58	6,170	5,431	167.10	6,607	8,752
166.59	6,179	5,493	167.11	6,616	8,818
166.60	6,187	5,555	167.12	6,625	8,884
166.61	6,195	5,616	167.13	6,634	8,950
166.62	6,203	5,678	167.14	6,642	9,017
166.63	6,212	5,741	167.15	6,651	9,083
166.64	6,220	5,803	167.16	6,660	9,150
166.65	6,228	5,865	167.17	6,669	9,216
166.66	6,236	5,927	167.18	6,678	9,283
166.67	6,245	5,990	167.19	6,687	9,350
166.68	6,253	6,052	167.20	6,696	9,417
166.69	6,261	6,115	167.21	6,705	9,484
166.70	6,270	6,177	167.22	6,714	9,551
166.71	6,278	6,240	167.23	6,722	9,618
166.72	6,286	6,303	167.24	6,731	9,685
166.73	6,294	6,366	167.25	6,740	9,753
166.74	6,303	6,429	167.26	6,749	9,820
166.75	6,311	6,492	167.27	6,758	9,888
166.76	6,319	6,555	167.28	6,767	9,955
166.77	6,328	6,618	167.29	6,776	10,023
166.78	6,336	6,682	167.30	6,785	10,091
166.79	6,344	6,745	167.31	6,794	10,159
166.80	6,352	6,808	167.32	6,802	10,227
166.81	6,361	6,872	167.33	6,811	10,295
166.82	6,369	6,936	167.34	6,820	10,363
166.83	6,377	6,999	167.35	6,829	10,431
166.84	6,386	7,063	167.36	6,838	10,500
166.85	6,394	7,127	167.37	6,847	10,568

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	6,856	10,637	167.90	7,318	14,322
167.39	6,865	10,705	167.91	7,327	14,395
167.40	6,874	10,774	167.92	7,336	14,468
167.41	6,882	10,843	167.93	7,345	14,542
167.42	6,891	10,911	167.94	7,354	14,615
167.43	6,900	10,980	167.95	7,363	14,689
167.44	6,909	11,049	167.96	7,371	14,762
167.45	6,918	11,119	167.97	7,380	14,836
167.46	6,927	11,188	167.98	7,389	14,910
167.47	6,936	11,257	167.99	7,398	14,984
167.48	6,945	11,327	168.00	7,407	15,058
167.49	6,954	11,396	168.01	7,417	15,132
167.50	6,963	11,466	168.02	7,426	15,206
167.51	6,971	11,535	168.03	7,436	15,281
167.52	6,980	11,605	168.04	7,445	15,355
167.53	6,989	11,675	168.05	7,455	15,430
167.54	6,998	11,745	168.06	7,464	15,504
167.55	7,007	11,815	168.07	7,474	15,579
167.56	7,016	11,885	168.08	7,483	15,654
167.57	7,025	11,955	168.09	7,493	15,728
167.58	7,034	12,025	168.10	7,502	15,803
167.59	7,043	12,096	168.11	7,512	15,879
167.60	7,051	12,166	168.12	7,521	15,954
167.61	7,060	12,237	168.13	7,531	16,029
167.62	7,069	12,308	168.14	7,540	16,104
167.63	7,078	12,378	168.15	7,550	16,180
167.64	7,087	12,449	168.16	7,559	16,255
167.65	7,096	12,520	168.17	7,569	16,331
167.66	7,105	12,591	168.18	7,579	16,407
167.67	7,114	12,662	168.19	7,588	16,483
167.68	7,123	12,733	168.20	7,598	16,558
167.69	7,131	12,805	168.21	7,607	16,634
167.70	7,140	12,876	168.22	7,617	16,711
167.71	7,149	12,947	168.23	7,626	16,787
167.72	7,158	13,019	168.24	7,636	16,863
167.73	7,167	13,091	168.25	7,645	16,940
167.74	7,176	13,162	168.26	7,655	17,016
167.75	7,185	13,234	168.27	7,664	17,093
167.76	7,194	13,306	168.28	7,674	17,169
167.77	7,203	13,378	168.29	7,683	17,246
167.78	7,211	13,450	168.30	7,693	17,323
167.79	7,220	13,522	168.31	7,702	17,400
167.80	7,229	13,594	168.32	7,712	17,477
167.81	7,238	13,667	168.33	7,721	17,554
167.82	7,247	13,739	168.34	7,731	17,631
167.83	7,256	13,812	168.35	7,741	17,709
167.84	7,265	13,884	168.36	7,750	17,786
167.85	7,274	13,957	168.37	7,760	17,864
167.86	7,283	14,030	168.38	7,769	17,941
167.87	7,291	14,103	168.39	7,779	18,019
167.88	7,300	14,176	168.40	7,788	18,097
167.89	7,309	14,249	168.41	7,798	18,175

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	7,807	18,253	168.94	8,303	22,442
168.43	7,817	18,331	168.95	8,312	22,525
168.44	7,826	18,409	168.96	8,322	22,608
168.45	7,836	18,488	168.97	8,331	22,691
168.46	7,845	18,566	168.98	8,341	22,774
168.47	7,855	18,645	168.99	8,350	22,858
168.48	7,864	18,723	169.00	8,360	22,941
168.49	7,874	18,802	169.01	8,370	23,025
168.50	7,884	18,881	169.02	8,380	23,109
168.51	7,893	18,960	169.03	8,391	23,193
168.52	7,903	19,038	169.04	8,401	23,277
168.53	7,912	19,118	169.05	8,411	23,361
168.54	7,922	19,197	169.06	8,421	23,445
168.55	7,931	19,276	169.07	8,431	23,529
168.56	7,941	19,355	169.08	8,442	23,614
168.57	7,950	19,435	169.09	8,452	23,698
168.58	7,960	19,514	169.10	8,462	23,783
168.59	7,969	19,594	169.11	8,472	23,867
168.60	7,979	19,674	169.12	8,483	23,952
168.61	7,988	19,754	169.13	8,493	24,037
168.62	7,998	19,834	169.14	8,503	24,122
168.63	8,007	19,914	169.15	8,513	24,207
168.64	8,017	19,994	169.16	8,523	24,292
168.65	8,026	20,074	169.17	8,534	24,377
168.66	8,036	20,154	169.18	8,544	24,463
168.67	8,046	20,235	169.19	8,554	24,548
168.68	8,055	20,315	169.20	8,564	24,634
168.69	8,065	20,396	169.21	8,574	24,720
168.70	8,074	20,476	169.22	8,585	24,805
168.71	8,084	20,557	169.23	8,595	24,891
168.72	8,093	20,638	169.24	8,605	24,977
168.73	8,103	20,719	169.25	8,615	25,063
168.74	8,112	20,800	169.26	8,625	25,150
168.75	8,122	20,881	169.27	8,636	25,236
168.76	8,131	20,963	169.28	8,646	25,322
168.77	8,141	21,044	169.29	8,656	25,409
168.78	8,150	21,125	169.30	8,666	25,495
168.79	8,160	21,207	169.31	8,677	25,582
168.80	8,169	21,289	169.32	8,687	25,669
168.81	8,179	21,370	169.33	8,697	25,756
168.82	8,188	21,452	169.34	8,707	25,843
168.83	8,198	21,534	169.35	8,717	25,930
168.84	8,208	21,616	169.36	8,728	26,017
168.85	8,217	21,698	169.37	8,738	26,105
168.86	8,227	21,780	169.38	8,748	26,192
168.87	8,236	21,863	169.39	8,758	26,280
168.88	8,246	21,945	169.40	8,768	26,367
168.89	8,255	22,028	169.41	8,779	26,455
168.90	8,265	22,110	169.42	8,789	26,543
168.91	8,274	22,193	169.43	8,799	26,631
168.92	8,284	22,276	169.44	8,809	26,719
168.93	8,293	22,359	169.45	8,819	26,807

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	8,830	26,895
169.47	8,840	26,983
169.48	8,850	27,072
169.49	8,860	27,160
169.50	8,871	27,249
169.51	8,881	27,338
169.52	8,891	27,427
169.53	8,901	27,516
169.54	8,911	27,605
169.55	8,922	27,694
169.56	8,932	27,783
169.57	8,942	27,873
169.58	8,952	27,962
169.59	8,962	28,052
169.60	8,973	28,141
169.61	8,983	28,231
169.62	8,993	28,321
169.63	9,003	28,411
169.64	9,013	28,501
169.65	9,024	28,591
169.66	9,034	28,681
169.67	9,044	28,772
169.68	9,054	28,862
169.69	9,064	28,953
169.70	9,075	29,044
169.71	9,085	29,134
169.72	9,095	29,225
169.73	9,105	29,316
169.74	9,116	29,407
169.75	9,126	29,499
169.76	9,136	29,590
169.77	9,146	29,681
169.78	9,156	29,773
169.79	9,167	29,865
169.80	9,177	29,956
169.81	9,187	30,048
169.82	9,197	30,140
169.83	9,207	30,232
169.84	9,218	30,324
169.85	9,228	30,416
169.86	9,238	30,509
169.87	9,248	30,601
169.88	9,258	30,694
169.89	9,269	30,786
169.90	9,279	30,879
169.91	9,289	30,972
169.92	9,299	31,065
169.93	9,310	31,158
169.94	9,320	31,251
169.95	9,330	31,344
169.96	9,340	31,438
169.97	9,350	31,531
169.98	9,361	31,625
169.99	9,371	31,718
170.00	**9,381**	**31,812**

Summary for Pond B-45: Basin #45

Inflow Area = 2.294 ac, 62.82% Impervious, Inflow Depth = 2.38" for Current 2 yr event
Inflow = 5.40 cfs @ 12.17 hrs, Volume= 0.455 af
Outflow = 0.46 cfs @ 13.36 hrs, Volume= 0.298 af, Atten= 91%, Lag= 71.2 min
Primary = 0.46 cfs @ 13.36 hrs, Volume= 0.298 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 168.62' @ 13.36 hrs Surf.Area= 5,353 sf Storage= 13,284 cf

Plug-Flow detention time= 584.6 min calculated for 0.297 af (65% of inflow)
Center-of-Mass det. time= 479.0 min (1,258.1 - 779.2)

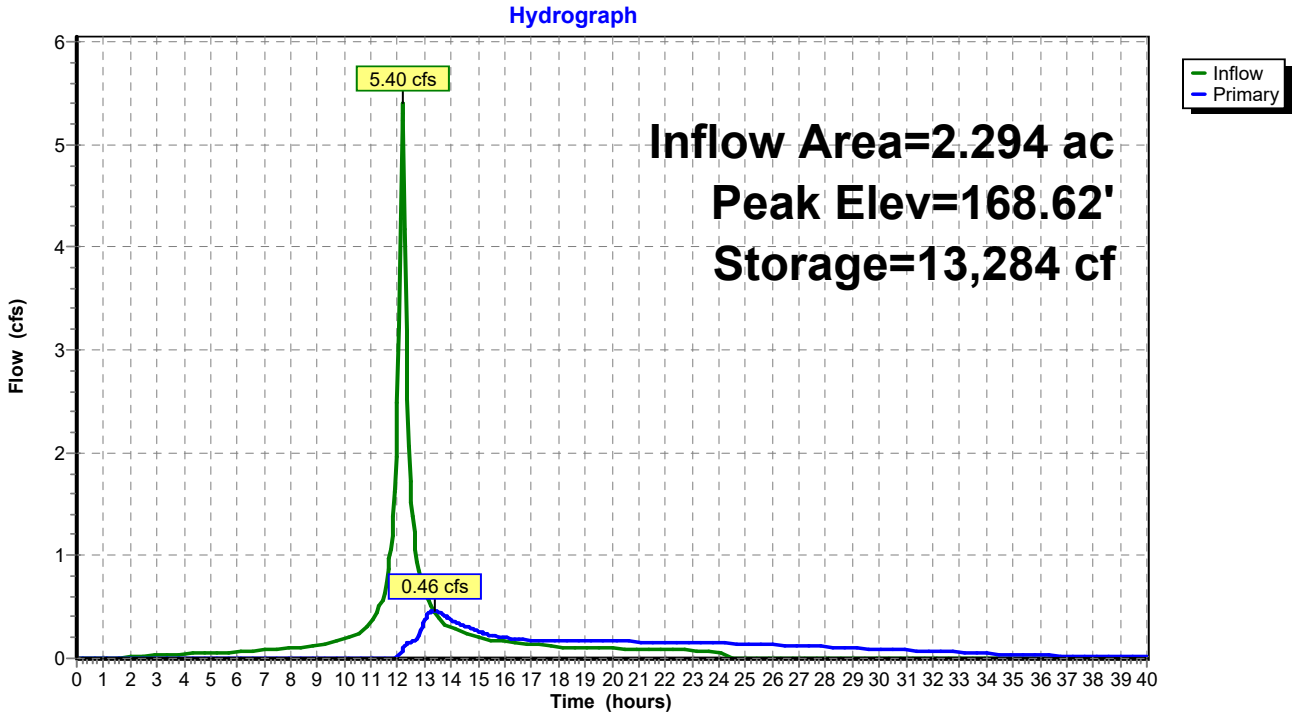
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	21,270 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	3,797	1,329	1,329
167.00	4,370	4,084	5,412
168.00	4,967	4,669	10,081
169.00	5,588	5,278	15,358
170.00	6,235	5,912	21,270

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0325 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.25'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	168.50'	**2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	169.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	169.97'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.46 cfs @ 13.36 hrs HW=168.62' (Free Discharge)
- **1=Culvert** (Passes 0.46 cfs of 13.64 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.42 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.27 cfs @ 1.14 fps)
  - **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-45: Basin #45



Stage-Discharge for Pond B-45: Basin #45

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.00
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.00
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.00
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.00
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.00
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.00
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.00
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.00
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.00
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.00
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.00
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.00
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.00
165.43	0.00	165.95	0.00	166.47	0.00	166.99	0.00
165.44	0.00	165.96	0.00	166.48	0.00	167.00	0.00
165.45	0.00	165.97	0.00	166.49	0.00	167.01	0.00
165.46	0.00	165.98	0.00	166.50	0.00	167.02	0.00
165.47	0.00	165.99	0.00	166.51	0.00	167.03	0.00
165.48	0.00	166.00	0.00	166.52	0.00	167.04	0.00
165.49	0.00	166.01	0.00	166.53	0.00	167.05	0.00
165.50	0.00	166.02	0.00	166.54	0.00	167.06	0.00
165.51	0.00	166.03	0.00	166.55	0.00	167.07	0.00
165.52	0.00	166.04	0.00	166.56	0.00	167.08	0.00
165.53	0.00	166.05	0.00	166.57	0.00	167.09	0.00
165.54	0.00	166.06	0.00	166.58	0.00	167.10	0.00
165.55	0.00	166.07	0.00	166.59	0.00	167.11	0.00
165.56	0.00	166.08	0.00	166.60	0.00	167.12	0.00
165.57	0.00	166.09	0.00	166.61	0.00	167.13	0.00
165.58	0.00	166.10	0.00	166.62	0.00	167.14	0.00
165.59	0.00	166.11	0.00	166.63	0.00	167.15	0.00
165.60	0.00	166.12	0.00	166.64	0.00	167.16	0.00
165.61	0.00	166.13	0.00	166.65	0.00	167.17	0.00
165.62	0.00	166.14	0.00	166.66	0.00	167.18	0.00
165.63	0.00	166.15	0.00	166.67	0.00	167.19	0.00
165.64	0.00	166.16	0.00	166.68	0.00	167.20	0.00
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.01
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.01
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.01
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.01
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.02
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.02
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.02

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.03	167.90	0.12	168.42	0.17	168.94	2.03
167.39	0.03	167.91	0.12	168.43	0.17	168.95	2.09
167.40	0.03	167.92	0.12	168.44	0.17	168.96	2.15
167.41	0.04	167.93	0.12	168.45	0.17	168.97	2.22
167.42	0.04	167.94	0.13	168.46	0.17	168.98	2.28
167.43	0.05	167.95	0.13	168.47	0.17	168.99	2.34
167.44	0.05	167.96	0.13	168.48	0.17	169.00	2.41
167.45	0.05	167.97	0.13	168.49	0.17	169.01	2.48
167.46	0.05	167.98	0.13	168.50	0.18	169.02	2.57
167.47	0.06	167.99	0.13	168.51	0.18	169.03	2.67
167.48	0.06	168.00	0.13	168.52	0.20	169.04	2.77
167.49	0.06	168.01	0.13	168.53	0.21	169.05	2.88
167.50	0.06	168.02	0.13	168.54	0.23	169.06	2.99
167.51	0.06	168.03	0.13	168.55	0.25	169.07	3.11
167.52	0.07	168.04	0.14	168.56	0.28	169.08	3.23
167.53	0.07	168.05	0.14	168.57	0.30	169.09	3.36
167.54	0.07	168.06	0.14	168.58	0.33	169.10	3.49
167.55	0.07	168.07	0.14	168.59	0.36	169.11	3.62
167.56	0.07	168.08	0.14	168.60	0.39	169.12	3.75
167.57	0.08	168.09	0.14	168.61	0.42	169.13	3.89
167.58	0.08	168.10	0.14	168.62	0.45	169.14	4.03
167.59	0.08	168.11	0.14	168.63	0.49	169.15	4.18
167.60	0.08	168.12	0.14	168.64	0.52	169.16	4.33
167.61	0.08	168.13	0.14	168.65	0.56	169.17	4.48
167.62	0.08	168.14	0.15	168.66	0.60	169.18	4.63
167.63	0.09	168.15	0.15	168.67	0.64	169.19	4.79
167.64	0.09	168.16	0.15	168.68	0.68	169.20	4.94
167.65	0.09	168.17	0.15	168.69	0.72	169.21	5.10
167.66	0.09	168.18	0.15	168.70	0.76	169.22	5.27
167.67	0.09	168.19	0.15	168.71	0.81	169.23	5.43
167.68	0.09	168.20	0.15	168.72	0.85	169.24	5.60
167.69	0.10	168.21	0.15	168.73	0.90	169.25	5.77
167.70	0.10	168.22	0.15	168.74	0.94	169.26	5.94
167.71	0.10	168.23	0.15	168.75	0.99	169.27	6.12
167.72	0.10	168.24	0.15	168.76	1.04	169.28	6.29
167.73	0.10	168.25	0.16	168.77	1.09	169.29	6.47
167.74	0.10	168.26	0.16	168.78	1.14	169.30	6.65
167.75	0.10	168.27	0.16	168.79	1.19	169.31	6.83
167.76	0.10	168.28	0.16	168.80	1.24	169.32	7.02
167.77	0.11	168.29	0.16	168.81	1.29	169.33	7.20
167.78	0.11	168.30	0.16	168.82	1.34	169.34	7.39
167.79	0.11	168.31	0.16	168.83	1.40	169.35	7.58
167.80	0.11	168.32	0.16	168.84	1.45	169.36	7.77
167.81	0.11	168.33	0.16	168.85	1.51	169.37	7.97
167.82	0.11	168.34	0.16	168.86	1.56	169.38	8.16
167.83	0.11	168.35	0.16	168.87	1.62	169.39	8.36
167.84	0.11	168.36	0.16	168.88	1.68	169.40	8.56
167.85	0.12	168.37	0.17	168.89	1.73	169.41	8.76
167.86	0.12	168.38	0.17	168.90	1.79	169.42	8.96
167.87	0.12	168.39	0.17	168.91	1.85	169.43	9.17
167.88	0.12	168.40	0.17	168.92	1.91	169.44	9.37
167.89	0.12	168.41	0.17	168.93	1.97	169.45	9.58

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)
169.46	9.79
169.47	10.00
169.48	10.21
169.49	10.42
169.50	10.64
169.51	10.85
169.52	11.07
169.53	11.29
169.54	11.51
169.55	11.73
169.56	11.95
169.57	12.18
169.58	12.40
169.59	12.63
169.60	12.86
169.61	13.09
169.62	13.32
169.63	13.55
169.64	13.78
169.65	14.02
169.66	14.25
169.67	14.49
169.68	14.73
169.69	14.97
169.70	15.21
169.71	15.45
169.72	15.69
169.73	15.94
169.74	16.18
169.75	16.37
169.76	16.39
169.77	16.41
169.78	16.43
169.79	16.46
169.80	16.48
169.81	16.50
169.82	16.52
169.83	16.54
169.84	16.56
169.85	16.59
169.86	16.61
169.87	16.63
169.88	16.65
169.89	16.67
169.90	16.70
169.91	16.72
169.92	16.74
169.93	16.76
169.94	16.78
169.95	16.80
169.96	16.82
169.97	16.85
169.98	16.99
169.99	17.22
170.00	**17.52**

Stage-Area-Storage for Pond B-45: Basin #45

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0	165.82	2,821	733
165.31	54	0	165.83	2,875	762
165.32	108	1	165.84	2,929	791
165.33	163	2	165.85	2,983	820
165.34	217	4	165.86	3,038	851
165.35	271	7	165.87	3,092	881
165.36	325	10	165.88	3,146	912
165.37	380	13	165.89	3,200	944
165.38	434	17	165.90	3,255	976
165.39	488	22	165.91	3,309	1,009
165.40	542	27	165.92	3,363	1,043
165.41	597	33	165.93	3,417	1,076
165.42	651	39	165.94	3,472	1,111
165.43	705	46	165.95	3,526	1,146
165.44	759	53	165.96	3,580	1,181
165.45	814	61	165.97	3,634	1,217
165.46	868	69	165.98	3,689	1,254
165.47	922	78	165.99	3,743	1,291
165.48	976	88	166.00	3,797	1,329
165.49	1,031	98	166.01	3,803	1,367
165.50	1,085	108	166.02	3,808	1,405
165.51	1,139	120	166.03	3,814	1,443
165.52	1,193	131	166.04	3,820	1,481
165.53	1,248	143	166.05	3,826	1,520
165.54	1,302	156	166.06	3,831	1,558
165.55	1,356	170	166.07	3,837	1,596
165.56	1,410	183	166.08	3,843	1,635
165.57	1,465	198	166.09	3,849	1,673
165.58	1,519	213	166.10	3,854	1,712
165.59	1,573	228	166.11	3,860	1,750
165.60	1,627	244	166.12	3,866	1,789
165.61	1,682	261	166.13	3,871	1,827
165.62	1,736	278	166.14	3,877	1,866
165.63	1,790	295	166.15	3,883	1,905
165.64	1,844	314	166.16	3,889	1,944
165.65	1,899	332	166.17	3,894	1,983
165.66	1,953	351	166.18	3,900	2,022
165.67	2,007	371	166.19	3,906	2,061
165.68	2,061	392	166.20	3,912	2,100
165.69	2,115	413	166.21	3,917	2,139
165.70	2,170	434	166.22	3,923	2,178
165.71	2,224	456	166.23	3,929	2,217
165.72	2,278	478	166.24	3,935	2,257
165.73	2,332	501	166.25	3,940	2,296
165.74	2,387	525	166.26	3,946	2,336
165.75	2,441	549	166.27	3,952	2,375
165.76	2,495	574	166.28	3,957	2,415
165.77	2,549	599	166.29	3,963	2,454
165.78	2,604	625	166.30	3,969	2,494
165.79	2,658	651	166.31	3,975	2,534
165.80	2,712	678	166.32	3,980	2,573
165.81	2,766	705	166.33	3,986	2,613

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	3,992	2,653	166.86	4,290	4,806
166.35	3,998	2,693	166.87	4,296	4,849
166.36	4,003	2,733	166.88	4,301	4,892
166.37	4,009	2,773	166.89	4,307	4,935
166.38	4,015	2,813	166.90	4,313	4,978
166.39	4,020	2,853	166.91	4,318	5,021
166.40	4,026	2,894	166.92	4,324	5,065
166.41	4,032	2,934	166.93	4,330	5,108
166.42	4,038	2,974	166.94	4,336	5,151
166.43	4,043	3,015	166.95	4,341	5,195
166.44	4,049	3,055	166.96	4,347	5,238
166.45	4,055	3,096	166.97	4,353	5,282
166.46	4,061	3,136	166.98	4,359	5,325
166.47	4,066	3,177	166.99	4,364	5,369
166.48	4,072	3,218	167.00	4,370	5,412
166.49	4,078	3,258	167.01	4,376	5,456
166.50	4,084	3,299	167.02	4,382	5,500
166.51	4,089	3,340	167.03	4,388	5,544
166.52	4,095	3,381	167.04	4,394	5,588
166.53	4,101	3,422	167.05	4,400	5,632
166.54	4,106	3,463	167.06	4,406	5,676
166.55	4,112	3,504	167.07	4,412	5,720
166.56	4,118	3,545	167.08	4,418	5,764
166.57	4,124	3,586	167.09	4,424	5,808
166.58	4,129	3,628	167.10	4,430	5,852
166.59	4,135	3,669	167.11	4,436	5,897
166.60	4,141	3,710	167.12	4,442	5,941
166.61	4,147	3,752	167.13	4,448	5,986
166.62	4,152	3,793	167.14	4,454	6,030
166.63	4,158	3,835	167.15	4,460	6,075
166.64	4,164	3,876	167.16	4,466	6,119
166.65	4,169	3,918	167.17	4,471	6,164
166.66	4,175	3,960	167.18	4,477	6,209
166.67	4,181	4,002	167.19	4,483	6,254
166.68	4,187	4,043	167.20	4,489	6,298
166.69	4,192	4,085	167.21	4,495	6,343
166.70	4,198	4,127	167.22	4,501	6,388
166.71	4,204	4,169	167.23	4,507	6,433
166.72	4,210	4,211	167.24	4,513	6,478
166.73	4,215	4,253	167.25	4,519	6,524
166.74	4,221	4,296	167.26	4,525	6,569
166.75	4,227	4,338	167.27	4,531	6,614
166.76	4,232	4,380	167.28	4,537	6,659
166.77	4,238	4,423	167.29	4,543	6,705
166.78	4,244	4,465	167.30	4,549	6,750
166.79	4,250	4,507	167.31	4,555	6,796
166.80	4,255	4,550	167.32	4,561	6,841
166.81	4,261	4,592	167.33	4,567	6,887
166.82	4,267	4,635	167.34	4,573	6,933
166.83	4,273	4,678	167.35	4,579	6,979
166.84	4,278	4,721	167.36	4,585	7,024
166.85	4,284	4,763	167.37	4,591	7,070

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	4,597	7,116	167.90	4,907	9,587
167.39	4,603	7,162	167.91	4,913	9,636
167.40	4,609	7,208	167.92	4,919	9,686
167.41	4,615	7,254	167.93	4,925	9,735
167.42	4,621	7,301	167.94	4,931	9,784
167.43	4,627	7,347	167.95	4,937	9,833
167.44	4,633	7,393	167.96	4,943	9,883
167.45	4,639	7,439	167.97	4,949	9,932
167.46	4,645	7,486	167.98	4,955	9,982
167.47	4,651	7,532	167.99	4,961	10,031
167.48	4,657	7,579	168.00	4,967	10,081
167.49	4,663	7,625	168.01	4,973	10,131
167.50	4,669	7,672	168.02	4,979	10,180
167.51	4,674	7,719	168.03	4,986	10,230
167.52	4,680	7,766	168.04	4,992	10,280
167.53	4,686	7,812	168.05	4,998	10,330
167.54	4,692	7,859	168.06	5,004	10,380
167.55	4,698	7,906	168.07	5,010	10,430
167.56	4,704	7,953	168.08	5,017	10,480
167.57	4,710	8,000	168.09	5,023	10,530
167.58	4,716	8,047	168.10	5,029	10,581
167.59	4,722	8,095	168.11	5,035	10,631
167.60	4,728	8,142	168.12	5,042	10,681
167.61	4,734	8,189	168.13	5,048	10,732
167.62	4,740	8,237	168.14	5,054	10,782
167.63	4,746	8,284	168.15	5,060	10,833
167.64	4,752	8,332	168.16	5,066	10,884
167.65	4,758	8,379	168.17	5,073	10,934
167.66	4,764	8,427	168.18	5,079	10,985
167.67	4,770	8,474	168.19	5,085	11,036
167.68	4,776	8,522	168.20	5,091	11,087
167.69	4,782	8,570	168.21	5,097	11,138
167.70	4,788	8,618	168.22	5,104	11,189
167.71	4,794	8,666	168.23	5,110	11,240
167.72	4,800	8,714	168.24	5,116	11,291
167.73	4,806	8,762	168.25	5,122	11,342
167.74	4,812	8,810	168.26	5,128	11,393
167.75	4,818	8,858	168.27	5,135	11,445
167.76	4,824	8,906	168.28	5,141	11,496
167.77	4,830	8,954	168.29	5,147	11,547
167.78	4,836	9,003	168.30	5,153	11,599
167.79	4,842	9,051	168.31	5,160	11,651
167.80	4,848	9,099	168.32	5,166	11,702
167.81	4,854	9,148	168.33	5,172	11,754
167.82	4,860	9,197	168.34	5,178	11,806
167.83	4,866	9,245	168.35	5,184	11,857
167.84	4,871	9,294	168.36	5,191	11,909
167.85	4,877	9,343	168.37	5,197	11,961
167.86	4,883	9,391	168.38	5,203	12,013
167.87	4,889	9,440	168.39	5,209	12,065
167.88	4,895	9,489	168.40	5,215	12,117
167.89	4,901	9,538	168.41	5,222	12,170

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	5,228	12,222	168.94	5,551	15,024
168.43	5,234	12,274	168.95	5,557	15,080
168.44	5,240	12,327	168.96	5,563	15,135
168.45	5,246	12,379	168.97	5,569	15,191
168.46	5,253	12,431	168.98	5,576	15,247
168.47	5,259	12,484	168.99	5,582	15,303
168.48	5,265	12,537	169.00	5,588	15,358
168.49	5,271	12,589	169.01	5,594	15,414
168.50	5,278	12,642	169.02	5,601	15,470
168.51	5,284	12,695	169.03	5,607	15,526
168.52	5,290	12,748	169.04	5,614	15,582
168.53	5,296	12,801	169.05	5,620	15,639
168.54	5,302	12,854	169.06	5,627	15,695
168.55	5,309	12,907	169.07	5,633	15,751
168.56	5,315	12,960	169.08	5,640	15,808
168.57	5,321	13,013	169.09	5,646	15,864
168.58	5,327	13,066	169.10	5,653	15,920
168.59	5,333	13,120	169.11	5,659	15,977
168.60	5,340	13,173	169.12	5,666	16,034
168.61	5,346	13,226	169.13	5,672	16,090
168.62	5,352	13,280	169.14	5,679	16,147
168.63	5,358	13,333	169.15	5,685	16,204
168.64	5,364	13,387	169.16	5,692	16,261
168.65	5,371	13,441	169.17	5,698	16,318
168.66	5,377	13,494	169.18	5,704	16,375
168.67	5,383	13,548	169.19	5,711	16,432
168.68	5,389	13,602	169.20	5,717	16,489
168.69	5,395	13,656	169.21	5,724	16,546
168.70	5,402	13,710	169.22	5,730	16,603
168.71	5,408	13,764	169.23	5,737	16,661
168.72	5,414	13,818	169.24	5,743	16,718
168.73	5,420	13,872	169.25	5,750	16,776
168.74	5,427	13,927	169.26	5,756	16,833
168.75	5,433	13,981	169.27	5,763	16,891
168.76	5,439	14,035	169.28	5,769	16,948
168.77	5,445	14,090	169.29	5,776	17,006
168.78	5,451	14,144	169.30	5,782	17,064
168.79	5,458	14,199	169.31	5,789	17,122
168.80	5,464	14,253	169.32	5,795	17,180
168.81	5,470	14,308	169.33	5,802	17,238
168.82	5,476	14,363	169.34	5,808	17,296
168.83	5,482	14,417	169.35	5,814	17,354
168.84	5,489	14,472	169.36	5,821	17,412
168.85	5,495	14,527	169.37	5,827	17,470
168.86	5,501	14,582	169.38	5,834	17,529
168.87	5,507	14,637	169.39	5,840	17,587
168.88	5,513	14,692	169.40	5,847	17,645
168.89	5,520	14,748	169.41	5,853	17,704
168.90	5,526	14,803	169.42	5,860	17,762
168.91	5,532	14,858	169.43	5,866	17,821
168.92	5,538	14,913	169.44	5,873	17,880
168.93	5,545	14,969	169.45	5,879	17,939

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	5,886	17,997
169.47	5,892	18,056
169.48	5,899	18,115
169.49	5,905	18,174
169.50	5,912	18,233
169.51	5,918	18,292
169.52	5,924	18,352
169.53	5,931	18,411
169.54	5,937	18,470
169.55	5,944	18,530
169.56	5,950	18,589
169.57	5,957	18,649
169.58	5,963	18,708
169.59	5,970	18,768
169.60	5,976	18,828
169.61	5,983	18,888
169.62	5,989	18,947
169.63	5,996	19,007
169.64	6,002	19,067
169.65	6,009	19,127
169.66	6,015	19,187
169.67	6,021	19,248
169.68	6,028	19,308
169.69	6,034	19,368
169.70	6,041	19,429
169.71	6,047	19,489
169.72	6,054	19,550
169.73	6,060	19,610
169.74	6,067	19,671
169.75	6,073	19,731
169.76	6,080	19,792
169.77	6,086	19,853
169.78	6,093	19,914
169.79	6,099	19,975
169.80	6,106	20,036
169.81	6,112	20,097
169.82	6,119	20,158
169.83	6,125	20,219
169.84	6,131	20,281
169.85	6,138	20,342
169.86	6,144	20,403
169.87	6,151	20,465
169.88	6,157	20,526
169.89	6,164	20,588
169.90	6,170	20,650
169.91	6,177	20,711
169.92	6,183	20,773
169.93	6,190	20,835
169.94	6,196	20,897
169.95	6,203	20,959
169.96	6,209	21,021
169.97	6,216	21,083
169.98	6,222	21,145
169.99	6,229	21,208
170.00	**6,235**	**21,270**

Summary for Pond B-46A: Basin #46A

Inflow Area = 2.480 ac, 46.25% Impervious, Inflow Depth = 2.05" for Current 2 yr event
Inflow = 5.10 cfs @ 12.17 hrs, Volume= 0.424 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond B-46B : Basin #46B

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 183.25' @ 24.60 hrs Surf.Area= 10,191 sf Storage= 18,481 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

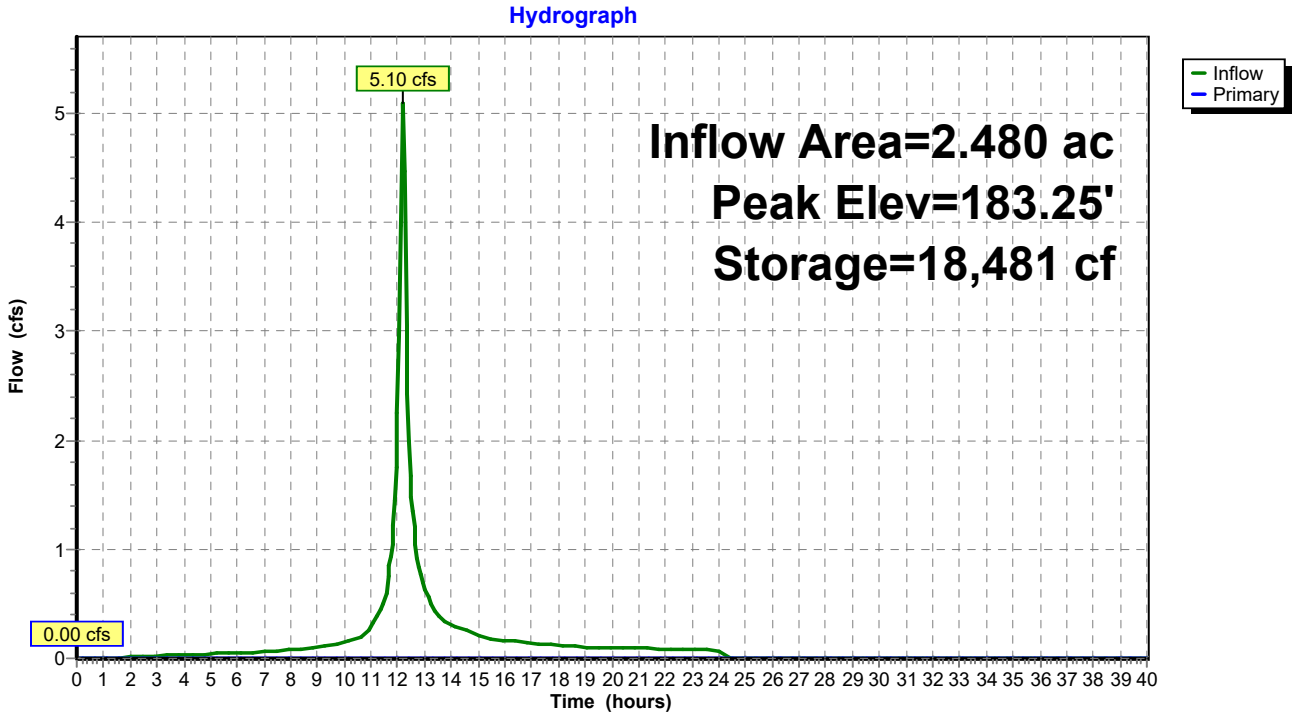
Volume	Invert	Avail.Storage	Storage Description
#1	181.00'	90,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.00	6,639	0	0
182.00	7,998	7,319	7,319
183.00	9,413	8,706	16,024
184.00	12,515	10,964	26,988
185.00	14,128	13,322	40,310
186.00	15,798	14,963	55,273
187.00	17,524	16,661	71,934
188.00	19,310	18,417	90,351

Device	Routing	Invert	Outlet Devices
#1	Primary	187.50'	**50.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=181.00' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-46A: Basin #46A



Stage-Discharge for Pond B-46A: Basin #46A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.00
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.00
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.00
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.00
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.00
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.00
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.00
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.00
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.00
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.00
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.00
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.00
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.00
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.00
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.00
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.00
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.00
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.00
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.00
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.00
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.00
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.00
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.00
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.00
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.00
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.00
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.00
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.00
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.00
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.00
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.00
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.00
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.00
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.00
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.00
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.00
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.00
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.00
181.48	0.00	182.00	0.00	182.52	0.00	183.04	0.00
181.49	0.00	182.01	0.00	182.53	0.00	183.05	0.00
181.50	0.00	182.02	0.00	182.54	0.00	183.06	0.00
181.51	0.00	182.03	0.00	182.55	0.00	183.07	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.08	0.00	183.60	0.00	184.12	0.00	184.64	0.00
183.09	0.00	183.61	0.00	184.13	0.00	184.65	0.00
183.10	0.00	183.62	0.00	184.14	0.00	184.66	0.00
183.11	0.00	183.63	0.00	184.15	0.00	184.67	0.00
183.12	0.00	183.64	0.00	184.16	0.00	184.68	0.00
183.13	0.00	183.65	0.00	184.17	0.00	184.69	0.00
183.14	0.00	183.66	0.00	184.18	0.00	184.70	0.00
183.15	0.00	183.67	0.00	184.19	0.00	184.71	0.00
183.16	0.00	183.68	0.00	184.20	0.00	184.72	0.00
183.17	0.00	183.69	0.00	184.21	0.00	184.73	0.00
183.18	0.00	183.70	0.00	184.22	0.00	184.74	0.00
183.19	0.00	183.71	0.00	184.23	0.00	184.75	0.00
183.20	0.00	183.72	0.00	184.24	0.00	184.76	0.00
183.21	0.00	183.73	0.00	184.25	0.00	184.77	0.00
183.22	0.00	183.74	0.00	184.26	0.00	184.78	0.00
183.23	0.00	183.75	0.00	184.27	0.00	184.79	0.00
183.24	0.00	183.76	0.00	184.28	0.00	184.80	0.00
183.25	0.00	183.77	0.00	184.29	0.00	184.81	0.00
183.26	0.00	183.78	0.00	184.30	0.00	184.82	0.00
183.27	0.00	183.79	0.00	184.31	0.00	184.83	0.00
183.28	0.00	183.80	0.00	184.32	0.00	184.84	0.00
183.29	0.00	183.81	0.00	184.33	0.00	184.85	0.00
183.30	0.00	183.82	0.00	184.34	0.00	184.86	0.00
183.31	0.00	183.83	0.00	184.35	0.00	184.87	0.00
183.32	0.00	183.84	0.00	184.36	0.00	184.88	0.00
183.33	0.00	183.85	0.00	184.37	0.00	184.89	0.00
183.34	0.00	183.86	0.00	184.38	0.00	184.90	0.00
183.35	0.00	183.87	0.00	184.39	0.00	184.91	0.00
183.36	0.00	183.88	0.00	184.40	0.00	184.92	0.00
183.37	0.00	183.89	0.00	184.41	0.00	184.93	0.00
183.38	0.00	183.90	0.00	184.42	0.00	184.94	0.00
183.39	0.00	183.91	0.00	184.43	0.00	184.95	0.00
183.40	0.00	183.92	0.00	184.44	0.00	184.96	0.00
183.41	0.00	183.93	0.00	184.45	0.00	184.97	0.00
183.42	0.00	183.94	0.00	184.46	0.00	184.98	0.00
183.43	0.00	183.95	0.00	184.47	0.00	184.99	0.00
183.44	0.00	183.96	0.00	184.48	0.00	185.00	0.00
183.45	0.00	183.97	0.00	184.49	0.00	185.01	0.00
183.46	0.00	183.98	0.00	184.50	0.00	185.02	0.00
183.47	0.00	183.99	0.00	184.51	0.00	185.03	0.00
183.48	0.00	184.00	0.00	184.52	0.00	185.04	0.00
183.49	0.00	184.01	0.00	184.53	0.00	185.05	0.00
183.50	0.00	184.02	0.00	184.54	0.00	185.06	0.00
183.51	0.00	184.03	0.00	184.55	0.00	185.07	0.00
183.52	0.00	184.04	0.00	184.56	0.00	185.08	0.00
183.53	0.00	184.05	0.00	184.57	0.00	185.09	0.00
183.54	0.00	184.06	0.00	184.58	0.00	185.10	0.00
183.55	0.00	184.07	0.00	184.59	0.00	185.11	0.00
183.56	0.00	184.08	0.00	184.60	0.00	185.12	0.00
183.57	0.00	184.09	0.00	184.61	0.00	185.13	0.00
183.58	0.00	184.10	0.00	184.62	0.00	185.14	0.00
183.59	0.00	184.11	0.00	184.63	0.00	185.15	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.16	0.00	185.68	0.00	186.20	0.00	186.72	0.00
185.17	0.00	185.69	0.00	186.21	0.00	186.73	0.00
185.18	0.00	185.70	0.00	186.22	0.00	186.74	0.00
185.19	0.00	185.71	0.00	186.23	0.00	186.75	0.00
185.20	0.00	185.72	0.00	186.24	0.00	186.76	0.00
185.21	0.00	185.73	0.00	186.25	0.00	186.77	0.00
185.22	0.00	185.74	0.00	186.26	0.00	186.78	0.00
185.23	0.00	185.75	0.00	186.27	0.00	186.79	0.00
185.24	0.00	185.76	0.00	186.28	0.00	186.80	0.00
185.25	0.00	185.77	0.00	186.29	0.00	186.81	0.00
185.26	0.00	185.78	0.00	186.30	0.00	186.82	0.00
185.27	0.00	185.79	0.00	186.31	0.00	186.83	0.00
185.28	0.00	185.80	0.00	186.32	0.00	186.84	0.00
185.29	0.00	185.81	0.00	186.33	0.00	186.85	0.00
185.30	0.00	185.82	0.00	186.34	0.00	186.86	0.00
185.31	0.00	185.83	0.00	186.35	0.00	186.87	0.00
185.32	0.00	185.84	0.00	186.36	0.00	186.88	0.00
185.33	0.00	185.85	0.00	186.37	0.00	186.89	0.00
185.34	0.00	185.86	0.00	186.38	0.00	186.90	0.00
185.35	0.00	185.87	0.00	186.39	0.00	186.91	0.00
185.36	0.00	185.88	0.00	186.40	0.00	186.92	0.00
185.37	0.00	185.89	0.00	186.41	0.00	186.93	0.00
185.38	0.00	185.90	0.00	186.42	0.00	186.94	0.00
185.39	0.00	185.91	0.00	186.43	0.00	186.95	0.00
185.40	0.00	185.92	0.00	186.44	0.00	186.96	0.00
185.41	0.00	185.93	0.00	186.45	0.00	186.97	0.00
185.42	0.00	185.94	0.00	186.46	0.00	186.98	0.00
185.43	0.00	185.95	0.00	186.47	0.00	186.99	0.00
185.44	0.00	185.96	0.00	186.48	0.00	187.00	0.00
185.45	0.00	185.97	0.00	186.49	0.00	187.01	0.00
185.46	0.00	185.98	0.00	186.50	0.00	187.02	0.00
185.47	0.00	185.99	0.00	186.51	0.00	187.03	0.00
185.48	0.00	186.00	0.00	186.52	0.00	187.04	0.00
185.49	0.00	186.01	0.00	186.53	0.00	187.05	0.00
185.50	0.00	186.02	0.00	186.54	0.00	187.06	0.00
185.51	0.00	186.03	0.00	186.55	0.00	187.07	0.00
185.52	0.00	186.04	0.00	186.56	0.00	187.08	0.00
185.53	0.00	186.05	0.00	186.57	0.00	187.09	0.00
185.54	0.00	186.06	0.00	186.58	0.00	187.10	0.00
185.55	0.00	186.07	0.00	186.59	0.00	187.11	0.00
185.56	0.00	186.08	0.00	186.60	0.00	187.12	0.00
185.57	0.00	186.09	0.00	186.61	0.00	187.13	0.00
185.58	0.00	186.10	0.00	186.62	0.00	187.14	0.00
185.59	0.00	186.11	0.00	186.63	0.00	187.15	0.00
185.60	0.00	186.12	0.00	186.64	0.00	187.16	0.00
185.61	0.00	186.13	0.00	186.65	0.00	187.17	0.00
185.62	0.00	186.14	0.00	186.66	0.00	187.18	0.00
185.63	0.00	186.15	0.00	186.67	0.00	187.19	0.00
185.64	0.00	186.16	0.00	186.68	0.00	187.20	0.00
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)
187.24	0.00
187.25	0.00
187.26	0.00
187.27	0.00
187.28	0.00
187.29	0.00
187.30	0.00
187.31	0.00
187.32	0.00
187.33	0.00
187.34	0.00
187.35	0.00
187.36	0.00
187.37	0.00
187.38	0.00
187.39	0.00
187.40	0.00
187.41	0.00
187.42	0.00
187.43	0.00
187.44	0.00
187.45	0.00
187.46	0.00
187.47	0.00
187.48	0.00
187.49	0.00
187.50	0.00
187.51	0.16
187.52	0.46
187.53	0.86
187.54	1.32
187.55	1.85
187.56	2.44
187.57	3.08
187.58	3.77
187.59	4.51
187.60	5.29
187.61	6.12
187.62	6.99
187.63	7.90
187.64	8.85
187.65	9.84
187.66	10.87
187.67	11.93
187.68	13.03
187.69	14.16
187.70	15.33
187.71	16.53
187.72	17.76
187.73	19.03
187.74	20.33
187.75	21.67
187.76	23.03
187.77	24.43
187.78	25.85
187.79	27.31
187.80	28.80
187.81	30.32
187.82	31.87
187.83	33.45
187.84	35.06
187.85	36.70
187.86	38.37
187.87	40.07
187.88	41.80
187.89	43.55
187.90	45.34
187.91	47.15
187.92	48.99
187.93	50.86
187.94	52.76
187.95	54.69
187.96	56.65
187.97	58.63
187.98	60.64
187.99	62.68
188.00	**64.75**

Stage-Area-Storage for Pond B-46A: Basin #46A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.00	6,639	0
181.01	6,653	66
181.02	6,666	133
181.03	6,680	200
181.04	6,693	267
181.05	6,707	334
181.06	6,721	401
181.07	6,734	468
181.08	6,748	535
181.09	6,761	603
181.10	6,775	671
181.11	6,788	739
181.12	6,802	806
181.13	6,816	875
181.14	6,829	943
181.15	6,843	1,011
181.16	6,856	1,080
181.17	6,870	1,148
181.18	6,884	1,217
181.19	6,897	1,286
181.20	6,911	1,355
181.21	6,924	1,424
181.22	6,938	1,493
181.23	6,952	1,563
181.24	6,965	1,632
181.25	6,979	1,702
181.26	6,992	1,772
181.27	7,006	1,842
181.28	7,020	1,912
181.29	7,033	1,982
181.30	7,047	2,053
181.31	7,060	2,123
181.32	7,074	2,194
181.33	7,087	2,265
181.34	7,101	2,336
181.35	7,115	2,407
181.36	7,128	2,478
181.37	7,142	2,549
181.38	7,155	2,621
181.39	7,169	2,693
181.40	7,183	2,764
181.41	7,196	2,836
181.42	7,210	2,908
181.43	7,223	2,980
181.44	7,237	3,053
181.45	7,251	3,125
181.46	7,264	3,198
181.47	7,278	3,270
181.48	7,291	3,343
181.49	7,305	3,416
181.50	7,319	3,489
181.51	7,332	3,563
181.52	7,346	3,636
181.53	7,359	3,710
181.54	7,373	3,783
181.55	7,386	3,857
181.56	7,400	3,931
181.57	7,414	4,005
181.58	7,427	4,079
181.59	7,441	4,154
181.60	7,454	4,228
181.61	7,468	4,303
181.62	7,482	4,377
181.63	7,495	4,452
181.64	7,509	4,527
181.65	7,522	4,602
181.66	7,536	4,678
181.67	7,550	4,753
181.68	7,563	4,829
181.69	7,577	4,904
181.70	7,590	4,980
181.71	7,604	5,056
181.72	7,617	5,132
181.73	7,631	5,209
181.74	7,645	5,285
181.75	7,658	5,361
181.76	7,672	5,438
181.77	7,685	5,515
181.78	7,699	5,592
181.79	7,713	5,669
181.80	7,726	5,746
181.81	7,740	5,823
181.82	7,753	5,901
181.83	7,767	5,978
181.84	7,781	6,056
181.85	7,794	6,134
181.86	7,808	6,212
181.87	7,821	6,290
181.88	7,835	6,369
181.89	7,849	6,447
181.90	7,862	6,525
181.91	7,876	6,604
181.92	7,889	6,683
181.93	7,903	6,762
181.94	7,916	6,841
181.95	7,930	6,920
181.96	7,944	7,000
181.97	7,957	7,079
181.98	7,971	7,159
181.99	7,984	7,239
182.00	7,998	7,319
182.01	8,012	7,399
182.02	8,026	7,479
182.03	8,040	7,559

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.04	8,055	7,640	182.56	8,790	12,019
182.05	8,069	7,720	182.57	8,805	12,107
182.06	8,083	7,801	182.58	8,819	12,195
182.07	8,097	7,882	182.59	8,833	12,284
182.08	8,111	7,963	182.60	8,847	12,372
182.09	8,125	8,044	182.61	8,861	12,461
182.10	8,139	8,125	182.62	8,875	12,549
182.11	8,154	8,207	182.63	8,889	12,638
182.12	8,168	8,288	182.64	8,904	12,727
182.13	8,182	8,370	182.65	8,918	12,816
182.14	8,196	8,452	182.66	8,932	12,905
182.15	8,210	8,534	182.67	8,946	12,995
182.16	8,224	8,616	182.68	8,960	13,084
182.17	8,239	8,699	182.69	8,974	13,174
182.18	8,253	8,781	182.70	8,988	13,264
182.19	8,267	8,864	182.71	9,003	13,354
182.20	8,281	8,946	182.72	9,017	13,444
182.21	8,295	9,029	182.73	9,031	13,534
182.22	8,309	9,112	182.74	9,045	13,624
182.23	8,323	9,195	182.75	9,059	13,715
182.24	8,338	9,279	182.76	9,073	13,806
182.25	8,352	9,362	182.77	9,088	13,896
182.26	8,366	9,446	182.78	9,102	13,987
182.27	8,380	9,530	182.79	9,116	14,078
182.28	8,394	9,613	182.80	9,130	14,170
182.29	8,408	9,697	182.81	9,144	14,261
182.30	8,423	9,782	182.82	9,158	14,353
182.31	8,437	9,866	182.83	9,172	14,444
182.32	8,451	9,950	182.84	9,187	14,536
182.33	8,465	10,035	182.85	9,201	14,628
182.34	8,479	10,120	182.86	9,215	14,720
182.35	8,493	10,204	182.87	9,229	14,812
182.36	8,507	10,289	182.88	9,243	14,905
182.37	8,522	10,375	182.89	9,257	14,997
182.38	8,536	10,460	182.90	9,272	15,090
182.39	8,550	10,545	182.91	9,286	15,183
182.40	8,564	10,631	182.92	9,300	15,275
182.41	8,578	10,717	182.93	9,314	15,369
182.42	8,592	10,802	182.94	9,328	15,462
182.43	8,606	10,888	182.95	9,342	15,555
182.44	8,621	10,975	182.96	9,356	15,649
182.45	8,635	11,061	182.97	9,371	15,742
182.46	8,649	11,147	182.98	9,385	15,836
182.47	8,663	11,234	182.99	9,399	15,930
182.48	8,677	11,321	183.00	9,413	16,024
182.49	8,691	11,407	183.01	9,444	16,118
182.50	8,706	11,494	183.02	9,475	16,213
182.51	8,720	11,582	183.03	9,506	16,308
182.52	8,734	11,669	183.04	9,537	16,403
182.53	8,748	11,756	183.05	9,568	16,499
182.54	8,762	11,844	183.06	9,599	16,594
182.55	8,776	11,931	183.07	9,630	16,691

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.08	9,661	16,787	183.60	11,274	22,230
183.09	9,692	16,884	183.61	11,305	22,343
183.10	9,723	16,981	183.62	11,336	22,456
183.11	9,754	17,078	183.63	11,367	22,570
183.12	9,785	17,176	183.64	11,398	22,684
183.13	9,816	17,274	183.65	11,429	22,798
183.14	9,847	17,372	183.66	11,460	22,912
183.15	9,878	17,471	183.67	11,491	23,027
183.16	9,909	17,570	183.68	11,522	23,142
183.17	9,940	17,669	183.69	11,553	23,257
183.18	9,971	17,769	183.70	11,584	23,373
183.19	10,002	17,868	183.71	11,615	23,489
183.20	10,033	17,969	183.72	11,646	23,605
183.21	10,064	18,069	183.73	11,677	23,722
183.22	10,095	18,170	183.74	11,708	23,839
183.23	10,126	18,271	183.75	11,740	23,956
183.24	10,157	18,372	183.76	11,771	24,074
183.25	10,189	18,474	183.77	11,802	24,192
183.26	10,220	18,576	183.78	11,833	24,310
183.27	10,251	18,679	183.79	11,864	24,428
183.28	10,282	18,781	183.80	11,895	24,547
183.29	10,313	18,884	183.81	11,926	24,666
183.30	10,344	18,987	183.82	11,957	24,786
183.31	10,375	19,091	183.83	11,988	24,905
183.32	10,406	19,195	183.84	12,019	25,025
183.33	10,437	19,299	183.85	12,050	25,146
183.34	10,468	19,404	183.86	12,081	25,266
183.35	10,499	19,509	183.87	12,112	25,387
183.36	10,530	19,614	183.88	12,143	25,509
183.37	10,561	19,719	183.89	12,174	25,630
183.38	10,592	19,825	183.90	12,205	25,752
183.39	10,623	19,931	183.91	12,236	25,874
183.40	10,654	20,037	183.92	12,267	25,997
183.41	10,685	20,144	183.93	12,298	26,120
183.42	10,716	20,251	183.94	12,329	26,243
183.43	10,747	20,358	183.95	12,360	26,366
183.44	10,778	20,466	183.96	12,391	26,490
183.45	10,809	20,574	183.97	12,422	26,614
183.46	10,840	20,682	183.98	12,453	26,738
183.47	10,871	20,791	183.99	12,484	26,863
183.48	10,902	20,900	184.00	12,515	26,988
183.49	10,933	21,009	184.01	12,531	27,113
183.50	10,964	21,118	184.02	12,547	27,239
183.51	10,995	21,228	184.03	12,563	27,364
183.52	11,026	21,338	184.04	12,580	27,490
183.53	11,057	21,449	184.05	12,596	27,616
183.54	11,088	21,559	184.06	12,612	27,742
183.55	11,119	21,670	184.07	12,628	27,868
183.56	11,150	21,782	184.08	12,644	27,994
183.57	11,181	21,893	184.09	12,660	28,121
183.58	11,212	22,005	184.10	12,676	28,248
183.59	11,243	22,118	184.11	12,692	28,374

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.12	12,709	28,501	184.64	13,547	35,328
184.13	12,725	28,629	184.65	13,563	35,463
184.14	12,741	28,756	184.66	13,580	35,599
184.15	12,757	28,883	184.67	13,596	35,735
184.16	12,773	29,011	184.68	13,612	35,871
184.17	12,789	29,139	184.69	13,628	36,007
184.18	12,805	29,267	184.70	13,644	36,144
184.19	12,821	29,395	184.71	13,660	36,280
184.20	12,838	29,523	184.72	13,676	36,417
184.21	12,854	29,652	184.73	13,692	36,554
184.22	12,870	29,780	184.74	13,709	36,691
184.23	12,886	29,909	184.75	13,725	36,828
184.24	12,902	30,038	184.76	13,741	36,965
184.25	12,918	30,167	184.77	13,757	37,103
184.26	12,934	30,296	184.78	13,773	37,240
184.27	12,951	30,426	184.79	13,789	37,378
184.28	12,967	30,555	184.80	13,805	37,516
184.29	12,983	30,685	184.81	13,822	37,654
184.30	12,999	30,815	184.82	13,838	37,793
184.31	13,015	30,945	184.83	13,854	37,931
184.32	13,031	31,075	184.84	13,870	38,070
184.33	13,047	31,206	184.85	13,886	38,208
184.34	13,063	31,336	184.86	13,902	38,347
184.35	13,080	31,467	184.87	13,918	38,486
184.36	13,096	31,598	184.88	13,934	38,626
184.37	13,112	31,729	184.89	13,951	38,765
184.38	13,128	31,860	184.90	13,967	38,905
184.39	13,144	31,992	184.91	13,983	39,045
184.40	13,160	32,123	184.92	13,999	39,184
184.41	13,176	32,255	184.93	14,015	39,324
184.42	13,192	32,387	184.94	14,031	39,465
184.43	13,209	32,519	184.95	14,047	39,605
184.44	13,225	32,651	184.96	14,063	39,746
184.45	13,241	32,783	184.97	14,080	39,886
184.46	13,257	32,916	184.98	14,096	40,027
184.47	13,273	33,048	184.99	14,112	40,168
184.48	13,289	33,181	185.00	14,128	40,310
184.49	13,305	33,314	185.01	14,145	40,451
184.50	13,322	33,447	185.02	14,161	40,592
184.51	13,338	33,580	185.03	14,178	40,734
184.52	13,354	33,714	185.04	14,195	40,876
184.53	13,370	33,847	185.05	14,212	41,018
184.54	13,386	33,981	185.06	14,228	41,160
184.55	13,402	34,115	185.07	14,245	41,303
184.56	13,418	34,249	185.08	14,262	41,445
184.57	13,434	34,384	185.09	14,278	41,588
184.58	13,451	34,518	185.10	14,295	41,731
184.59	13,467	34,653	185.11	14,312	41,874
184.60	13,483	34,787	185.12	14,328	42,017
184.61	13,499	34,922	185.13	14,345	42,160
184.62	13,515	35,057	185.14	14,362	42,304
184.63	13,531	35,193	185.15	14,379	42,447

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.16	14,395	42,591
185.17	14,412	42,735
185.18	14,429	42,880
185.19	14,445	43,024
185.20	14,462	43,168
185.21	14,479	43,313
185.22	14,495	43,458
185.23	14,512	43,603
185.24	14,529	43,748
185.25	14,546	43,894
185.26	14,562	44,039
185.27	14,579	44,185
185.28	14,596	44,331
185.29	14,612	44,477
185.30	14,629	44,623
185.31	14,646	44,769
185.32	14,662	44,916
185.33	14,679	45,063
185.34	14,696	45,210
185.35	14,712	45,357
185.36	14,729	45,504
185.37	14,746	45,651
185.38	14,763	45,799
185.39	14,779	45,946
185.40	14,796	46,094
185.41	14,813	46,242
185.42	14,829	46,391
185.43	14,846	46,539
185.44	14,863	46,687
185.45	14,879	46,836
185.46	14,896	46,985
185.47	14,913	47,134
185.48	14,930	47,283
185.49	14,946	47,433
185.50	14,963	47,582
185.51	14,980	47,732
185.52	14,996	47,882
185.53	15,013	48,032
185.54	15,030	48,182
185.55	15,047	48,332
185.56	15,063	48,483
185.57	15,080	48,634
185.58	15,097	48,785
185.59	15,113	48,936
185.60	15,130	49,087
185.61	15,147	49,238
185.62	15,163	49,390
185.63	15,180	49,542
185.64	15,197	49,693
185.65	15,214	49,845
185.66	15,230	49,998
185.67	15,247	50,150
185.68	15,264	50,303
185.69	15,280	50,455
185.70	15,297	50,608
185.71	15,314	50,761
185.72	15,330	50,915
185.73	15,347	51,068
185.74	15,364	51,221
185.75	15,381	51,375
185.76	15,397	51,529
185.77	15,414	51,683
185.78	15,431	51,837
185.79	15,447	51,992
185.80	15,464	52,146
185.81	15,481	52,301
185.82	15,497	52,456
185.83	15,514	52,611
185.84	15,531	52,766
185.85	15,547	52,922
185.86	15,564	53,077
185.87	15,581	53,233
185.88	15,598	53,389
185.89	15,614	53,545
185.90	15,631	53,701
185.91	15,648	53,857
185.92	15,664	54,014
185.93	15,681	54,171
185.94	15,698	54,328
185.95	15,714	54,485
185.96	15,731	54,642
185.97	15,748	54,799
185.98	15,765	54,957
185.99	15,781	55,115
186.00	15,798	55,273
186.01	15,815	55,431
186.02	15,833	55,589
186.03	15,850	55,747
186.04	15,867	55,906
186.05	15,884	56,065
186.06	15,902	56,223
186.07	15,919	56,383
186.08	15,936	56,542
186.09	15,953	56,701
186.10	15,971	56,861
186.11	15,988	57,021
186.12	16,005	57,181
186.13	16,022	57,341
186.14	16,040	57,501
186.15	16,057	57,662
186.16	16,074	57,822
186.17	16,091	57,983
186.18	16,109	58,144
186.19	16,126	58,305

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.20	16,143	58,467	186.72	17,041	67,094
186.21	16,160	58,628	186.73	17,058	67,265
186.22	16,178	58,790	186.74	17,075	67,436
186.23	16,195	58,952	186.75	17,093	67,606
186.24	16,212	59,114	186.76	17,110	67,777
186.25	16,230	59,276	186.77	17,127	67,949
186.26	16,247	59,438	186.78	17,144	68,120
186.27	16,264	59,601	186.79	17,162	68,292
186.28	16,281	59,764	186.80	17,179	68,463
186.29	16,299	59,926	186.81	17,196	68,635
186.30	16,316	60,090	186.82	17,213	68,807
186.31	16,333	60,253	186.83	17,231	68,979
186.32	16,350	60,416	186.84	17,248	69,152
186.33	16,368	60,580	186.85	17,265	69,324
186.34	16,385	60,744	186.86	17,282	69,497
186.35	16,402	60,908	186.87	17,300	69,670
186.36	16,419	61,072	186.88	17,317	69,843
186.37	16,437	61,236	186.89	17,334	70,016
186.38	16,454	61,400	186.90	17,351	70,190
186.39	16,471	61,565	186.91	17,369	70,363
186.40	16,488	61,730	186.92	17,386	70,537
186.41	16,506	61,895	186.93	17,403	70,711
186.42	16,523	62,060	186.94	17,420	70,885
186.43	16,540	62,225	186.95	17,438	71,059
186.44	16,557	62,391	186.96	17,455	71,234
186.45	16,575	62,556	186.97	17,472	71,409
186.46	16,592	62,722	186.98	17,489	71,583
186.47	16,609	62,888	186.99	17,507	71,758
186.48	16,626	63,054	187.00	17,524	71,934
186.49	16,644	63,221	187.01	17,542	72,109
186.50	16,661	63,387	187.02	17,560	72,284
186.51	16,678	63,554	187.03	17,578	72,460
186.52	16,696	63,721	187.04	17,595	72,636
186.53	16,713	63,888	187.05	17,613	72,812
186.54	16,730	64,055	187.06	17,631	72,988
186.55	16,747	64,222	187.07	17,649	73,165
186.56	16,765	64,390	187.08	17,667	73,341
186.57	16,782	64,558	187.09	17,685	73,518
186.58	16,799	64,726	187.10	17,703	73,695
186.59	16,816	64,894	187.11	17,720	73,872
186.60	16,834	65,062	187.12	17,738	74,049
186.61	16,851	65,230	187.13	17,756	74,227
186.62	16,868	65,399	187.14	17,774	74,404
186.63	16,885	65,568	187.15	17,792	74,582
186.64	16,903	65,737	187.16	17,810	74,760
186.65	16,920	65,906	187.17	17,828	74,938
186.66	16,937	66,075	187.18	17,845	75,117
186.67	16,954	66,245	187.19	17,863	75,295
186.68	16,972	66,414	187.20	17,881	75,474
186.69	16,989	66,584	187.21	17,899	75,653
186.70	17,006	66,754	187.22	17,917	75,832
186.71	17,023	66,924	187.23	17,935	76,011

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.24	17,953	76,191
187.25	17,971	76,370
187.26	17,988	76,550
187.27	18,006	76,730
187.28	18,024	76,910
187.29	18,042	77,091
187.30	18,060	77,271
187.31	18,078	77,452
187.32	18,096	77,633
187.33	18,113	77,814
187.34	18,131	77,995
187.35	18,149	78,176
187.36	18,167	78,358
187.37	18,185	78,540
187.38	18,203	78,722
187.39	18,221	78,904
187.40	18,238	79,086
187.41	18,256	79,268
187.42	18,274	79,451
187.43	18,292	79,634
187.44	18,310	79,817
187.45	18,328	80,000
187.46	18,346	80,183
187.47	18,363	80,367
187.48	18,381	80,551
187.49	18,399	80,735
187.50	18,417	80,919
187.51	18,435	81,103
187.52	18,453	81,287
187.53	18,471	81,472
187.54	18,488	81,657
187.55	18,506	81,842
187.56	18,524	82,027
187.57	18,542	82,212
187.58	18,560	82,398
187.59	18,578	82,584
187.60	18,596	82,769
187.61	18,613	82,955
187.62	18,631	83,142
187.63	18,649	83,328
187.64	18,667	83,515
187.65	18,685	83,701
187.66	18,703	83,888
187.67	18,721	84,075
187.68	18,738	84,263
187.69	18,756	84,450
187.70	18,774	84,638
187.71	18,792	84,826
187.72	18,810	85,014
187.73	18,828	85,202
187.74	18,846	85,390
187.75	18,864	85,579
187.76	18,881	85,768
187.77	18,899	85,956
187.78	18,917	86,146
187.79	18,935	86,335
187.80	18,953	86,524
187.81	18,971	86,714
187.82	18,989	86,904
187.83	19,006	87,094
187.84	19,024	87,284
187.85	19,042	87,474
187.86	19,060	87,665
187.87	19,078	87,855
187.88	19,096	88,046
187.89	19,114	88,237
187.90	19,131	88,428
187.91	19,149	88,620
187.92	19,167	88,811
187.93	19,185	89,003
187.94	19,203	89,195
187.95	19,221	89,387
187.96	19,239	89,580
187.97	19,256	89,772
187.98	19,274	89,965
187.99	19,292	90,157
188.00	**19,310**	**90,351**

Summary for Pond B-46B: Basin #46B

Inflow Area = 2.931 ac, 39.13% Impervious, Inflow Depth = 0.18" for Current 2 yr event
Inflow = 0.74 cfs @ 12.05 hrs, Volume= 0.043 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 183.79' @ 24.05 hrs Surf.Area= 7,663 sf Storage= 1,859 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

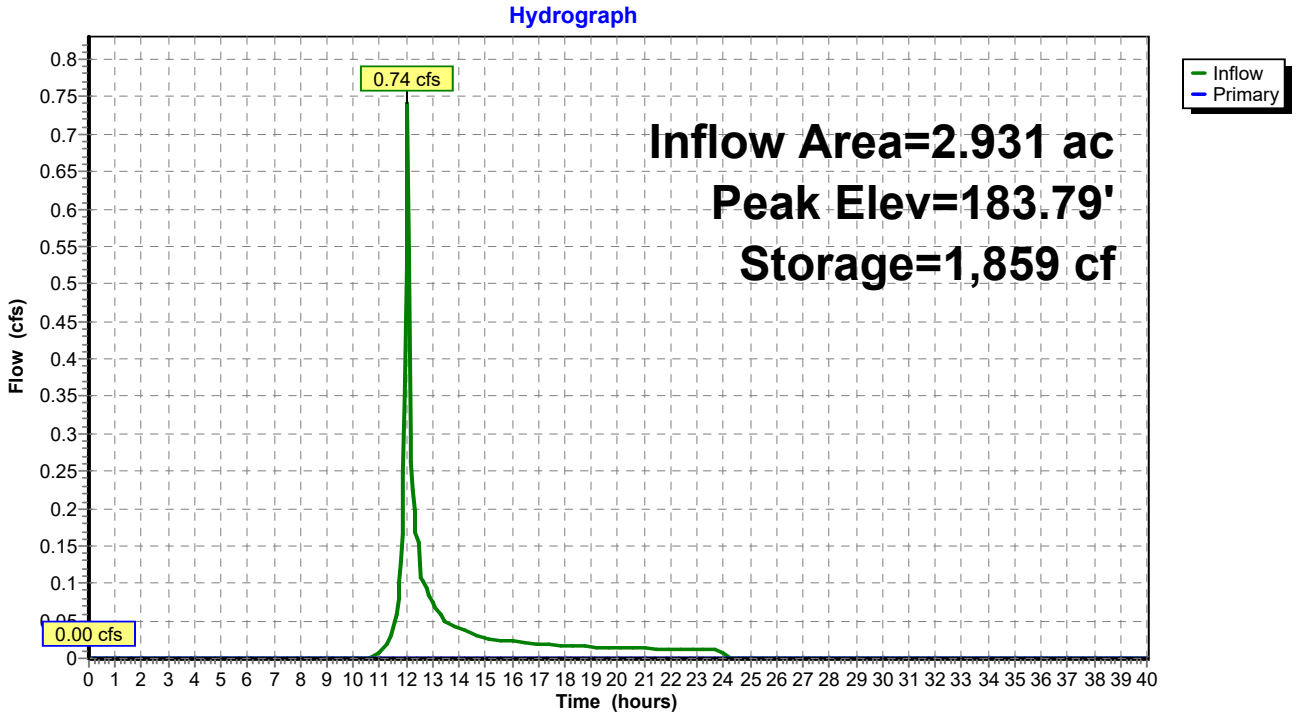
Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	59,250 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	11,059	3,871	3,871
185.00	12,402	11,731	15,601
186.00	13,803	13,103	28,704
187.00	15,259	14,531	43,235
188.00	16,772	16,016	59,250

Device	Routing	Invert	Outlet Devices
#1	Primary	182.65'	**18.0" Round Culvert** L= 65.0' Ke= 0.500 Inlet / Outlet Invert= 182.65' / 176.00' S= 0.1023 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.82'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.45'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.75'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=183.30' (Free Discharge)
- **1=Culvert** (Passes 0.00 cfs of 2.01 cfs potential flow)
  - **2=Orifice/Grate** (Controls 0.00 cfs)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-46B: Basin #46B



Stage-Discharge for Pond B-46B: Basin #46B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.30	0.00	183.82	0.00	184.34	0.11	184.86	3.52
183.31	0.00	183.83	0.00	184.35	0.11	184.87	3.65
183.32	0.00	183.84	0.00	184.36	0.11	184.88	3.77
183.33	0.00	183.85	0.00	184.37	0.11	184.89	3.89
183.34	0.00	183.86	0.00	184.38	0.11	184.90	4.02
183.35	0.00	183.87	0.00	184.39	0.11	184.91	4.15
183.36	0.00	183.88	0.01	184.40	0.11	184.92	4.28
183.37	0.00	183.89	0.01	184.41	0.11	184.93	4.41
183.38	0.00	183.90	0.01	184.42	0.12	184.94	4.54
183.39	0.00	183.91	0.01	184.43	0.12	184.95	4.68
183.40	0.00	183.92	0.02	184.44	0.12	184.96	4.81
183.41	0.00	183.93	0.02	184.45	0.12	184.97	4.95
183.42	0.00	183.94	0.02	184.46	0.13	184.98	5.08
183.43	0.00	183.95	0.03	184.47	0.16	184.99	5.22
183.44	0.00	183.96	0.03	184.48	0.19	185.00	5.36
183.45	0.00	183.97	0.03	184.49	0.23	185.01	5.50
183.46	0.00	183.98	0.04	184.50	0.27	185.02	5.64
183.47	0.00	183.99	0.04	184.51	0.32	185.03	5.78
183.48	0.00	184.00	0.05	184.52	0.37	185.04	5.93
183.49	0.00	184.01	0.05	184.53	0.42	185.05	6.07
183.50	0.00	184.02	0.05	184.54	0.48	185.06	6.22
183.51	0.00	184.03	0.05	184.55	0.54	185.07	6.36
183.52	0.00	184.04	0.06	184.56	0.61	185.08	6.51
183.53	0.00	184.05	0.06	184.57	0.67	185.09	6.66
183.54	0.00	184.06	0.06	184.58	0.74	185.10	6.81
183.55	0.00	184.07	0.06	184.59	0.81	185.11	6.96
183.56	0.00	184.08	0.06	184.60	0.89	185.12	7.11
183.57	0.00	184.09	0.07	184.61	0.97	185.13	7.27
183.58	0.00	184.10	0.07	184.62	1.05	185.14	7.42
183.59	0.00	184.11	0.07	184.63	1.13	185.15	7.57
183.60	0.00	184.12	0.07	184.64	1.21	185.16	7.73
183.61	0.00	184.13	0.07	184.65	1.30	185.17	7.89
183.62	0.00	184.14	0.08	184.66	1.39	185.18	8.04
183.63	0.00	184.15	0.08	184.67	1.48	185.19	8.20
183.64	0.00	184.16	0.08	184.68	1.57	185.20	8.36
183.65	0.00	184.17	0.08	184.69	1.66	185.21	8.52
183.66	0.00	184.18	0.08	184.70	1.76	185.22	8.68
183.67	0.00	184.19	0.08	184.71	1.86	185.23	8.85
183.68	0.00	184.20	0.09	184.72	1.96	185.24	9.01
183.69	0.00	184.21	0.09	184.73	2.06	185.25	9.17
183.70	0.00	184.22	0.09	184.74	2.16	185.26	9.34
183.71	0.00	184.23	0.09	184.75	2.27	185.27	9.50
183.72	0.00	184.24	0.09	184.76	2.37	185.28	9.67
183.73	0.00	184.25	0.09	184.77	2.48	185.29	9.84
183.74	0.00	184.26	0.10	184.78	2.59	185.30	10.01
183.75	0.00	184.27	0.10	184.79	2.70	185.31	10.18
183.76	0.00	184.28	0.10	184.80	2.81	185.32	10.35
183.77	0.00	184.29	0.10	184.81	2.93	185.33	10.52
183.78	0.00	184.30	0.10	184.82	3.04	185.34	10.69
183.79	0.00	184.31	0.10	184.83	3.16	185.35	10.86
183.80	0.00	184.32	0.10	184.84	3.28	185.36	11.03
183.81	0.00	184.33	0.10	184.85	3.40	185.37	11.21

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.38	11.38	185.90	20.30	186.42	91.01	186.94	198.59
185.39	11.56	185.91	21.03	186.43	92.75	186.95	200.94
185.40	11.74	185.92	21.78	186.44	94.51	186.96	203.32
185.41	11.91	185.93	22.55	186.45	96.28	186.97	205.72
185.42	12.09	185.94	23.34	186.46	98.06	186.98	208.13
185.43	12.12	185.95	24.15	186.47	99.86	186.99	210.55
185.44	12.15	185.96	25.03	186.48	101.66	187.00	212.98
185.45	12.18	185.97	25.92	186.49	103.49	187.01	215.43
185.46	12.21	185.98	26.85	186.50	105.32	187.02	217.88
185.47	12.24	185.99	27.80	186.51	107.16	187.03	220.34
185.48	12.27	186.00	28.77	186.52	109.02	187.04	222.82
185.49	12.30	186.01	29.77	186.53	110.89	187.05	225.30
185.50	12.33	186.02	30.80	186.54	112.77	187.06	227.79
185.51	12.36	186.03	31.85	186.55	114.67	187.07	230.30
185.52	12.39	186.04	32.92	186.56	116.61	187.08	232.82
185.53	12.42	186.05	34.02	186.57	118.57	187.09	235.34
185.54	12.45	186.06	35.14	186.58	120.54	187.10	237.88
185.55	12.48	186.07	36.29	186.59	122.52	187.11	240.42
185.56	12.51	186.08	37.46	186.60	124.52	187.12	242.98
185.57	12.53	186.09	38.66	186.61	126.53	187.13	245.55
185.58	12.56	186.10	39.88	186.62	128.55	187.14	248.13
185.59	12.59	186.11	41.12	186.63	130.58	187.15	250.71
185.60	12.62	186.12	42.39	186.64	132.63	187.16	253.36
185.61	12.65	186.13	43.68	186.65	134.69	187.17	256.01
185.62	12.68	186.14	45.00	186.66	136.77	187.18	258.67
185.63	12.71	186.15	46.34	186.67	138.85	187.19	261.35
185.64	12.73	186.16	47.73	186.68	140.95	187.20	264.04
185.65	12.76	186.17	49.15	186.69	143.07	187.21	266.74
185.66	12.79	186.18	50.59	186.70	145.19	187.22	269.45
185.67	12.82	186.19	52.06	186.71	147.33	187.23	272.17
185.68	12.85	186.20	53.56	186.72	149.48	187.24	274.90
185.69	12.88	186.21	55.08	186.73	151.64	187.25	277.64
185.70	12.90	186.22	56.63	186.74	153.82	187.26	280.39
185.71	12.93	186.23	58.20	186.75	156.01	187.27	283.16
185.72	12.96	186.24	59.80	186.76	158.15	187.28	285.93
185.73	12.99	186.25	61.43	186.77	160.31	187.29	288.72
185.74	13.02	186.26	63.08	186.78	162.48	187.30	291.52
185.75	13.04	186.27	64.76	186.79	164.66	187.31	294.32
185.76	13.19	186.28	66.47	186.80	166.85	187.32	297.14
185.77	13.43	186.29	68.20	186.81	169.05	187.33	299.97
185.78	13.74	186.30	69.96	186.82	171.26	187.34	302.81
185.79	14.09	186.31	71.75	186.83	173.48	187.35	305.67
185.80	14.49	186.32	73.56	186.84	175.71	187.36	308.53
185.81	14.93	186.33	75.40	186.85	177.95	187.37	311.40
185.82	15.41	186.34	77.27	186.86	180.21	187.38	314.29
185.83	15.92	186.35	79.16	186.87	182.47	187.39	317.18
185.84	16.46	186.36	80.82	186.88	184.74	187.40	320.09
185.85	17.04	186.37	82.48	186.89	187.03	187.41	323.00
185.86	17.64	186.38	84.16	186.90	189.32	187.42	325.93
185.87	18.26	186.39	85.85	186.91	191.62	187.43	328.87
185.88	18.92	186.40	87.56	186.92	193.94	187.44	331.82
185.89	19.60	186.41	89.27	186.93	196.26	187.45	334.78

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)
187.46	337.75
187.47	340.73
187.48	343.72
187.49	346.72
187.50	349.74
187.51	352.76
187.52	355.79
187.53	358.84
187.54	361.90
187.55	364.96
187.56	368.04
187.57	371.13
187.58	374.22
187.59	377.33
187.60	380.45
187.61	383.58
187.62	386.72
187.63	389.87
187.64	393.03
187.65	396.20
187.66	399.38
187.67	402.58
187.68	405.78
187.69	408.99
187.70	412.22
187.71	415.45
187.72	418.69
187.73	421.95
187.74	425.21
187.75	428.49
187.76	431.84
187.77	435.20
187.78	438.57
187.79	441.95
187.80	445.35
187.81	448.75
187.82	452.17
187.83	455.60
187.84	459.04
187.85	462.49
187.86	465.95
187.87	469.42
187.88	472.91
187.89	476.40
187.90	479.91
187.91	483.43
187.92	486.96
187.93	490.50
187.94	494.05
187.95	497.61
187.96	501.19
187.97	504.78
187.98	508.37
187.99	511.98
188.00	**515.60**

Stage-Area-Storage for Pond B-46B: Basin #46B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.30	0	0
183.31	158	1
183.32	316	3
183.33	474	7
183.34	632	13
183.35	790	20
183.36	948	28
183.37	1,106	39
183.38	1,264	51
183.39	1,422	64
183.40	1,580	79
183.41	1,738	96
183.42	1,896	114
183.43	2,054	133
183.44	2,212	155
183.45	2,370	178
183.46	2,528	202
183.47	2,686	228
183.48	2,844	256
183.49	3,002	285
183.50	3,160	316
183.51	3,318	348
183.52	3,476	382
183.53	3,634	418
183.54	3,792	455
183.55	3,950	494
183.56	4,108	534
183.57	4,266	576
183.58	4,424	619
183.59	4,582	664
183.60	4,740	711
183.61	4,898	759
183.62	5,056	809
183.63	5,214	860
183.64	5,372	913
183.65	5,530	968
183.66	5,687	1,024
183.67	5,845	1,081
183.68	6,003	1,141
183.69	6,161	1,201
183.70	6,319	1,264
183.71	6,477	1,328
183.72	6,635	1,393
183.73	6,793	1,461
183.74	6,951	1,529
183.75	7,109	1,600
183.76	7,267	1,671
183.77	7,425	1,745
183.78	7,583	1,820
183.79	7,741	1,897
183.80	7,899	1,975
183.81	8,057	2,055
183.82	8,215	2,136
183.83	8,373	2,219
183.84	8,531	2,303
183.85	8,689	2,390
183.86	8,847	2,477
183.87	9,005	2,566
183.88	9,163	2,657
183.89	9,321	2,750
183.90	9,479	2,844
183.91	9,637	2,939
183.92	9,795	3,036
183.93	9,953	3,135
183.94	10,111	3,236
183.95	10,269	3,337
183.96	10,427	3,441
183.97	10,585	3,546
183.98	10,743	3,653
183.99	10,901	3,761
184.00	11,059	3,871
184.01	11,072	3,981
184.02	11,086	4,092
184.03	11,099	4,203
184.04	11,113	4,314
184.05	11,126	4,425
184.06	11,140	4,537
184.07	11,153	4,648
184.08	11,166	4,760
184.09	11,180	4,871
184.10	11,193	4,983
184.11	11,207	5,095
184.12	11,220	5,207
184.13	11,234	5,320
184.14	11,247	5,432
184.15	11,260	5,545
184.16	11,274	5,657
184.17	11,287	5,770
184.18	11,301	5,883
184.19	11,314	5,996
184.20	11,328	6,109
184.21	11,341	6,223
184.22	11,354	6,336
184.23	11,368	6,450
184.24	11,381	6,563
184.25	11,395	6,677
184.26	11,408	6,791
184.27	11,422	6,906
184.28	11,435	7,020
184.29	11,448	7,134
184.30	11,462	7,249
184.31	11,475	7,363
184.32	11,489	7,478
184.33	11,502	7,593

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.34	11,516	7,708	184.86	12,214	13,878
184.35	11,529	7,824	184.87	12,227	14,000
184.36	11,542	7,939	184.88	12,241	14,123
184.37	11,556	8,054	184.89	12,254	14,245
184.38	11,569	8,170	184.90	12,268	14,368
184.39	11,583	8,286	184.91	12,281	14,490
184.40	11,596	8,402	184.92	12,295	14,613
184.41	11,610	8,518	184.93	12,308	14,736
184.42	11,623	8,634	184.94	12,321	14,859
184.43	11,636	8,750	184.95	12,335	14,983
184.44	11,650	8,867	184.96	12,348	15,106
184.45	11,663	8,983	184.97	12,362	15,230
184.46	11,677	9,100	184.98	12,375	15,353
184.47	11,690	9,217	184.99	12,389	15,477
184.48	11,704	9,334	185.00	12,402	15,601
184.49	11,717	9,451	185.01	12,416	15,725
184.50	11,731	9,568	185.02	12,430	15,849
184.51	11,744	9,685	185.03	12,444	15,974
184.52	11,757	9,803	185.04	12,458	16,098
184.53	11,771	9,921	185.05	12,472	16,223
184.54	11,784	10,038	185.06	12,486	16,348
184.55	11,798	10,156	185.07	12,500	16,473
184.56	11,811	10,274	185.08	12,514	16,598
184.57	11,825	10,392	185.09	12,528	16,723
184.58	11,838	10,511	185.10	12,542	16,848
184.59	11,851	10,629	185.11	12,556	16,974
184.60	11,865	10,748	185.12	12,570	17,099
184.61	11,878	10,867	185.13	12,584	17,225
184.62	11,892	10,985	185.14	12,598	17,351
184.63	11,905	11,104	185.15	12,612	17,477
184.64	11,919	11,223	185.16	12,626	17,603
184.65	11,932	11,343	185.17	12,640	17,730
184.66	11,945	11,462	185.18	12,654	17,856
184.67	11,959	11,582	185.19	12,668	17,983
184.68	11,972	11,701	185.20	12,682	18,110
184.69	11,986	11,821	185.21	12,696	18,236
184.70	11,999	11,941	185.22	12,710	18,363
184.71	12,013	12,061	185.23	12,724	18,491
184.72	12,026	12,181	185.24	12,738	18,618
184.73	12,039	12,302	185.25	12,752	18,745
184.74	12,053	12,422	185.26	12,766	18,873
184.75	12,066	12,543	185.27	12,780	19,001
184.76	12,080	12,663	185.28	12,794	19,129
184.77	12,093	12,784	185.29	12,808	19,257
184.78	12,107	12,905	185.30	12,822	19,385
184.79	12,120	13,026	185.31	12,836	19,513
184.80	12,133	13,148	185.32	12,850	19,642
184.81	12,147	13,269	185.33	12,864	19,770
184.82	12,160	13,391	185.34	12,878	19,899
184.83	12,174	13,512	185.35	12,892	20,028
184.84	12,187	13,634	185.36	12,906	20,157
184.85	12,201	13,756	185.37	12,920	20,286

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.38	12,934	20,415	185.90	13,663	27,330
185.39	12,948	20,544	185.91	13,677	27,467
185.40	12,962	20,674	185.92	13,691	27,604
185.41	12,976	20,804	185.93	13,705	27,741
185.42	12,990	20,934	185.94	13,719	27,878
185.43	13,004	21,064	185.95	13,733	28,015
185.44	13,018	21,194	185.96	13,747	28,153
185.45	13,032	21,324	185.97	13,761	28,290
185.46	13,046	21,454	185.98	13,775	28,428
185.47	13,060	21,585	185.99	13,789	28,566
185.48	13,074	21,716	186.00	13,803	28,704
185.49	13,088	21,846	186.01	13,818	28,842
185.50	13,103	21,977	186.02	13,832	28,980
185.51	13,117	22,108	186.03	13,847	29,118
185.52	13,131	22,240	186.04	13,861	29,257
185.53	13,145	22,371	186.05	13,876	29,396
185.54	13,159	22,502	186.06	13,890	29,534
185.55	13,173	22,634	186.07	13,905	29,673
185.56	13,187	22,766	186.08	13,919	29,813
185.57	13,201	22,898	186.09	13,934	29,952
185.58	13,215	23,030	186.10	13,949	30,091
185.59	13,229	23,162	186.11	13,963	30,231
185.60	13,243	23,295	186.12	13,978	30,370
185.61	13,257	23,427	186.13	13,992	30,510
185.62	13,271	23,560	186.14	14,007	30,650
185.63	13,285	23,692	186.15	14,021	30,790
185.64	13,299	23,825	186.16	14,036	30,931
185.65	13,313	23,958	186.17	14,051	31,071
185.66	13,327	24,092	186.18	14,065	31,212
185.67	13,341	24,225	186.19	14,080	31,353
185.68	13,355	24,358	186.20	14,094	31,493
185.69	13,369	24,492	186.21	14,109	31,634
185.70	13,383	24,626	186.22	14,123	31,776
185.71	13,397	24,760	186.23	14,138	31,917
185.72	13,411	24,894	186.24	14,152	32,058
185.73	13,425	25,028	186.25	14,167	32,200
185.74	13,439	25,162	186.26	14,182	32,342
185.75	13,453	25,297	186.27	14,196	32,484
185.76	13,467	25,431	186.28	14,211	32,626
185.77	13,481	25,566	186.29	14,225	32,768
185.78	13,495	25,701	186.30	14,240	32,910
185.79	13,509	25,836	186.31	14,254	33,053
185.80	13,523	25,971	186.32	14,269	33,195
185.81	13,537	26,106	186.33	14,283	33,338
185.82	13,551	26,242	186.34	14,298	33,481
185.83	13,565	26,377	186.35	14,313	33,624
185.84	13,579	26,513	186.36	14,327	33,767
185.85	13,593	26,649	186.37	14,342	33,910
185.86	13,607	26,785	186.38	14,356	34,054
185.87	13,621	26,921	186.39	14,371	34,198
185.88	13,635	27,057	186.40	14,385	34,341
185.89	13,649	27,194	186.41	14,400	34,485

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.42	14,415	34,629	186.94	15,172	42,322
186.43	14,429	34,774	186.95	15,186	42,474
186.44	14,444	34,918	186.96	15,201	42,625
186.45	14,458	35,062	186.97	15,215	42,778
186.46	14,473	35,207	186.98	15,230	42,930
186.47	14,487	35,352	186.99	15,244	43,082
186.48	14,502	35,497	187.00	15,259	43,235
186.49	14,516	35,642	187.01	15,274	43,387
186.50	14,531	35,787	187.02	15,289	43,540
186.51	14,546	35,933	187.03	15,304	43,693
186.52	14,560	36,078	187.04	15,320	43,846
186.53	14,575	36,224	187.05	15,335	43,999
186.54	14,589	36,370	187.06	15,350	44,153
186.55	14,604	36,516	187.07	15,365	44,306
186.56	14,618	36,662	187.08	15,380	44,460
186.57	14,633	36,808	187.09	15,395	44,614
186.58	14,647	36,954	187.10	15,410	44,768
186.59	14,662	37,101	187.11	15,425	44,922
186.60	14,677	37,248	187.12	15,441	45,077
186.61	14,691	37,394	187.13	15,456	45,231
186.62	14,706	37,541	187.14	15,471	45,386
186.63	14,720	37,688	187.15	15,486	45,541
186.64	14,735	37,836	187.16	15,501	45,695
186.65	14,749	37,983	187.17	15,516	45,851
186.66	14,764	38,131	187.18	15,531	46,006
186.67	14,779	38,278	187.19	15,546	46,161
186.68	14,793	38,426	187.20	15,562	46,317
186.69	14,808	38,574	187.21	15,577	46,472
186.70	14,822	38,722	187.22	15,592	46,628
186.71	14,837	38,871	187.23	15,607	46,784
186.72	14,851	39,019	187.24	15,622	46,940
186.73	14,866	39,168	187.25	15,637	47,097
186.74	14,880	39,317	187.26	15,652	47,253
186.75	14,895	39,465	187.27	15,668	47,410
186.76	14,910	39,614	187.28	15,683	47,566
186.77	14,924	39,764	187.29	15,698	47,723
186.78	14,939	39,913	187.30	15,713	47,880
186.79	14,953	40,062	187.31	15,728	48,038
186.80	14,968	40,212	187.32	15,743	48,195
186.81	14,982	40,362	187.33	15,758	48,353
186.82	14,997	40,512	187.34	15,773	48,510
186.83	15,011	40,662	187.35	15,789	48,668
186.84	15,026	40,812	187.36	15,804	48,826
186.85	15,041	40,962	187.37	15,819	48,984
186.86	15,055	41,113	187.38	15,834	49,142
186.87	15,070	41,263	187.39	15,849	49,301
186.88	15,084	41,414	187.40	15,864	49,459
186.89	15,099	41,565	187.41	15,879	49,618
186.90	15,113	41,716	187.42	15,894	49,777
186.91	15,128	41,867	187.43	15,910	49,936
186.92	15,143	42,019	187.44	15,925	50,095
186.93	15,157	42,170	187.45	15,940	50,254

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.46	15,955	50,414
187.47	15,970	50,573
187.48	15,985	50,733
187.49	16,000	50,893
187.50	16,016	51,053
187.51	16,031	51,214
187.52	16,046	51,374
187.53	16,061	51,534
187.54	16,076	51,695
187.55	16,091	51,856
187.56	16,106	52,017
187.57	16,121	52,178
187.58	16,137	52,339
187.59	16,152	52,501
187.60	16,167	52,662
187.61	16,182	52,824
187.62	16,197	52,986
187.63	16,212	53,148
187.64	16,227	53,310
187.65	16,242	53,473
187.66	16,258	53,635
187.67	16,273	53,798
187.68	16,288	53,961
187.69	16,303	54,124
187.70	16,318	54,287
187.71	16,333	54,450
187.72	16,348	54,613
187.73	16,363	54,777
187.74	16,379	54,941
187.75	16,394	55,104
187.76	16,409	55,268
187.77	16,424	55,433
187.78	16,439	55,597
187.79	16,454	55,761
187.80	16,469	55,926
187.81	16,485	56,091
187.82	16,500	56,256
187.83	16,515	56,421
187.84	16,530	56,586
187.85	16,545	56,751
187.86	16,560	56,917
187.87	16,575	57,083
187.88	16,590	57,248
187.89	16,606	57,414
187.90	16,621	57,581
187.91	16,636	57,747
187.92	16,651	57,913
187.93	16,666	58,080
187.94	16,681	58,247
187.95	16,696	58,413
187.96	16,711	58,580
187.97	16,727	58,748
187.98	16,742	58,915
187.99	16,757	59,083
188.00	**16,772**	**59,250**

Summary for Pond B-47: Basin #47

Inflow Area = 2.436 ac, 30.62% Impervious, Inflow Depth = 1.74" for Current 2 yr event
Inflow = 4.31 cfs @ 12.18 hrs, Volume= 0.354 af
Outflow = 0.09 cfs @ 20.76 hrs, Volume= 0.167 af, Atten= 98%, Lag= 515.0 min
Primary = 0.09 cfs @ 20.76 hrs, Volume= 0.167 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 189.21' @ 20.76 hrs Surf.Area= 21,732 sf Storage= 12,070 cf

Plug-Flow detention time= 839.6 min calculated for 0.167 af (47% of inflow)
Center-of-Mass det. time= 704.7 min (1,513.1 - 808.4)

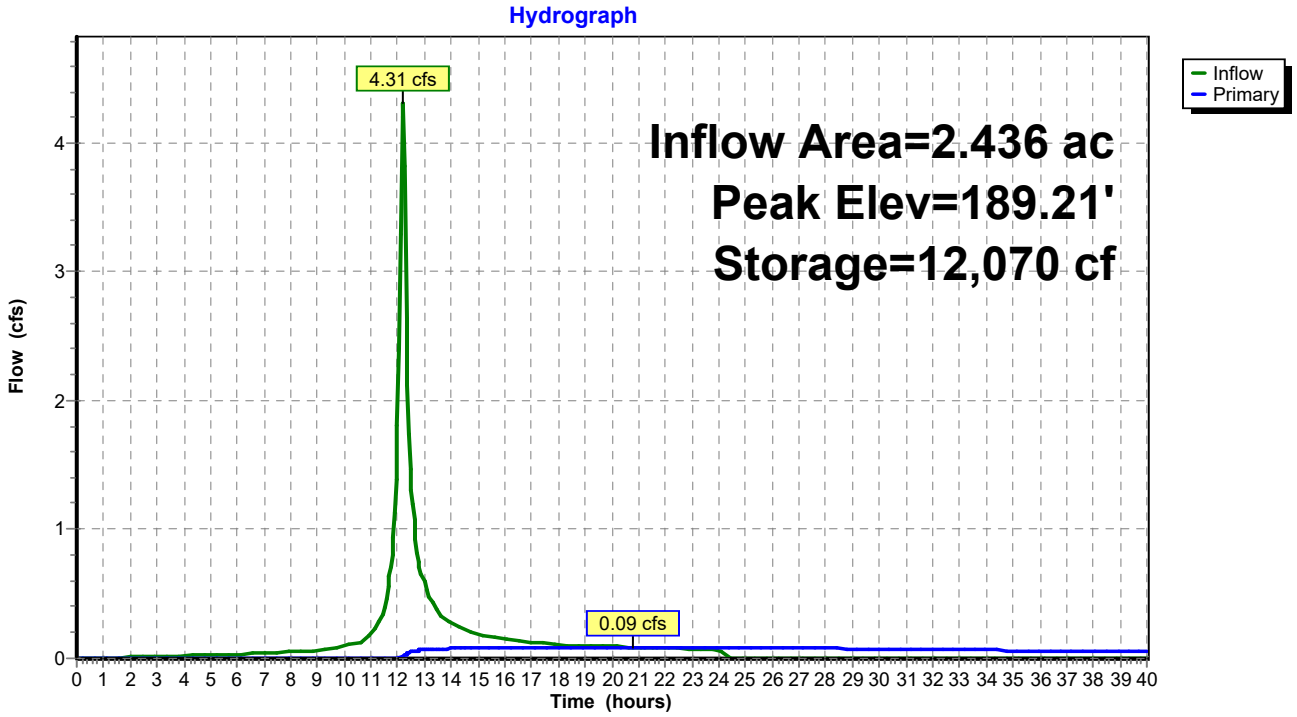
Volume	Invert	Avail.Storage	Storage Description
#1	188.30'	80,305 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
188.30	0	0	0
189.00	21,318	7,461	7,461
190.00	23,252	22,285	29,746
191.00	25,242	24,247	53,993
192.00	27,382	26,312	80,305

Device	Routing	Invert	Outlet Devices
#1	Primary	187.65'	**18.0" Round Culvert** L= 62.0' Ke= 0.500 Inlet / Outlet Invert= 187.65' / 184.00' S= 0.0589 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.84'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.52'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.51'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.09 cfs @ 20.76 hrs HW=189.21' (Free Discharge)
- **1=Culvert** (Passes 0.09 cfs of 7.68 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.09 cfs @ 2.50 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-47: Basin #47



Stage-Discharge for Pond B-47: Basin #47

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.30	0.00	188.82	0.00	189.34	0.10	189.86	2.71
188.31	0.00	188.83	0.00	189.35	0.10	189.87	2.82
188.32	0.00	188.84	0.00	189.36	0.11	189.88	2.93
188.33	0.00	188.85	0.00	189.37	0.11	189.89	3.05
188.34	0.00	188.86	0.00	189.38	0.11	189.90	3.17
188.35	0.00	188.87	0.00	189.39	0.11	189.91	3.28
188.36	0.00	188.88	0.00	189.40	0.11	189.92	3.40
188.37	0.00	188.89	0.00	189.41	0.11	189.93	3.53
188.38	0.00	188.90	0.01	189.42	0.11	189.94	3.65
188.39	0.00	188.91	0.01	189.43	0.11	189.95	3.77
188.40	0.00	188.92	0.01	189.44	0.12	189.96	3.90
188.41	0.00	188.93	0.01	189.45	0.12	189.97	4.03
188.42	0.00	188.94	0.02	189.46	0.12	189.98	4.15
188.43	0.00	188.95	0.02	189.47	0.12	189.99	4.28
188.44	0.00	188.96	0.02	189.48	0.12	190.00	4.41
188.45	0.00	188.97	0.03	189.49	0.12	190.01	4.55
188.46	0.00	188.98	0.03	189.50	0.12	190.02	4.68
188.47	0.00	188.99	0.03	189.51	0.12	190.03	4.81
188.48	0.00	189.00	0.04	189.52	0.12	190.04	4.95
188.49	0.00	189.01	0.04	189.53	0.14	190.05	5.09
188.50	0.00	189.02	0.05	189.54	0.16	190.06	5.22
188.51	0.00	189.03	0.05	189.55	0.20	190.07	5.36
188.52	0.00	189.04	0.05	189.56	0.23	190.08	5.50
188.53	0.00	189.05	0.05	189.57	0.28	190.09	5.64
188.54	0.00	189.06	0.06	189.58	0.32	190.10	5.79
188.55	0.00	189.07	0.06	189.59	0.37	190.11	5.93
188.56	0.00	189.08	0.06	189.60	0.43	190.12	6.07
188.57	0.00	189.09	0.06	189.61	0.49	190.13	6.22
188.58	0.00	189.10	0.06	189.62	0.55	190.14	6.37
188.59	0.00	189.11	0.07	189.63	0.61	190.15	6.51
188.60	0.00	189.12	0.07	189.64	0.68	190.16	6.66
188.61	0.00	189.13	0.07	189.65	0.75	190.17	6.81
188.62	0.00	189.14	0.07	189.66	0.82	190.18	6.96
188.63	0.00	189.15	0.07	189.67	0.89	190.19	7.12
188.64	0.00	189.16	0.08	189.68	0.97	190.20	7.27
188.65	0.00	189.17	0.08	189.69	1.05	190.21	7.42
188.66	0.00	189.18	0.08	189.70	1.13	190.22	7.58
188.67	0.00	189.19	0.08	189.71	1.22	190.23	7.73
188.68	0.00	189.20	0.08	189.72	1.30	190.24	7.89
188.69	0.00	189.21	0.08	189.73	1.39	190.25	8.05
188.70	0.00	189.22	0.09	189.74	1.48	190.26	8.21
188.71	0.00	189.23	0.09	189.75	1.57	190.27	8.37
188.72	0.00	189.24	0.09	189.76	1.67	190.28	8.53
188.73	0.00	189.25	0.09	189.77	1.76	190.29	8.69
188.74	0.00	189.26	0.09	189.78	1.86	190.30	8.85
188.75	0.00	189.27	0.09	189.79	1.96	190.31	9.01
188.76	0.00	189.28	0.10	189.80	2.06	190.32	9.18
188.77	0.00	189.29	0.10	189.81	2.17	190.33	9.34
188.78	0.00	189.30	0.10	189.82	2.27	190.34	9.51
188.79	0.00	189.31	0.10	189.83	2.38	190.35	9.67
188.80	0.00	189.32	0.10	189.84	2.49	190.36	9.84
188.81	0.00	189.33	0.10	189.85	2.59	190.37	10.01

Stage-Discharge for Pond B-47: Basin #47 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.38	10.18	190.90	44.37	191.42	136.19	191.94	258.14
190.39	10.35	190.91	45.71	191.43	138.28	191.95	260.82
190.40	10.52	190.92	47.10	191.44	140.38	191.96	263.51
190.41	10.69	190.93	48.52	191.45	142.49	191.97	266.20
190.42	10.86	190.94	49.97	191.46	144.62	191.98	268.91
190.43	11.04	190.95	51.44	191.47	146.76	191.99	271.64
190.44	11.21	190.96	52.93	191.48	148.91	192.00	**274.37**
190.45	11.39	190.97	54.46	191.49	151.07		
190.46	11.56	190.98	56.01	191.50	153.25		
190.47	11.74	190.99	57.58	191.51	155.44		
190.48	11.92	191.00	59.18	191.52	157.59		
190.49	12.09	191.01	60.81	191.53	159.74		
190.50	12.27	191.02	62.47	191.54	161.91		
190.51	12.36	191.03	64.15	191.55	164.09		
190.52	12.51	191.04	65.85	191.56	166.28		
190.53	12.75	191.05	67.59	191.57	168.49		
190.54	13.06	191.06	69.35	191.58	170.70		
190.55	13.41	191.07	71.14	191.59	172.92		
190.56	13.82	191.08	72.95	191.60	175.15		
190.57	14.26	191.09	74.79	191.61	177.39		
190.58	14.74	191.10	76.66	191.62	179.65		
190.59	15.25	191.11	78.56	191.63	181.91		
190.60	15.79	191.12	80.21	191.64	184.18		
190.61	16.37	191.13	81.88	191.65	186.47		
190.62	16.97	191.14	83.55	191.66	188.76		
190.63	17.60	191.15	85.25	191.67	191.07		
190.64	18.25	191.16	86.95	191.68	193.38		
190.65	18.93	191.17	88.67	191.69	195.71		
190.66	19.64	191.18	90.41	191.70	198.04		
190.67	20.37	191.19	92.15	191.71	200.38		
190.68	21.12	191.20	93.91	191.72	202.77		
190.69	21.89	191.21	95.68	191.73	205.17		
190.70	22.68	191.22	97.47	191.74	207.58		
190.71	23.50	191.23	99.26	191.75	210.01		
190.72	24.37	191.24	101.07	191.76	212.44		
190.73	25.27	191.25	102.89	191.77	214.88		
190.74	26.20	191.26	104.73	191.78	217.33		
190.75	27.15	191.27	106.57	191.79	219.80		
190.76	28.12	191.28	108.43	191.80	222.27		
190.77	29.13	191.29	110.30	191.81	224.76		
190.78	30.15	191.30	112.18	191.82	227.25		
190.79	31.20	191.31	114.08	191.83	229.76		
190.80	32.28	191.32	116.02	191.84	232.27		
190.81	33.38	191.33	117.98	191.85	234.80		
190.82	34.50	191.34	119.95	191.86	237.34		
190.83	35.65	191.35	121.94	191.87	239.88		
190.84	36.82	191.36	123.93	191.88	242.44		
190.85	38.02	191.37	125.94	191.89	245.01		
190.86	39.24	191.38	127.97	191.90	247.59		
190.87	40.49	191.39	130.00	191.91	250.18		
190.88	41.76	191.40	132.05	191.92	252.82		
190.89	43.05	191.41	134.12	191.93	255.48		

Stage-Area-Storage for Pond B-47: Basin #47

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.30	0	0	188.82	15,836	4,117
188.31	305	2	188.83	16,141	4,277
188.32	609	6	188.84	16,445	4,440
188.33	914	14	188.85	16,750	4,606
188.34	1,218	24	188.86	17,054	4,775
188.35	1,523	38	188.87	17,359	4,947
188.36	1,827	55	188.88	17,663	5,122
188.37	2,132	75	188.89	17,968	5,301
188.38	2,436	97	188.90	18,273	5,482
188.39	2,741	123	188.91	18,577	5,666
188.40	3,045	152	188.92	18,882	5,853
188.41	3,350	184	188.93	19,186	6,044
188.42	3,655	219	188.94	19,491	6,237
188.43	3,959	257	188.95	19,795	6,433
188.44	4,264	298	188.96	20,100	6,633
188.45	4,568	343	188.97	20,404	6,835
188.46	4,873	390	188.98	20,709	7,041
188.47	5,177	440	188.99	21,013	7,250
188.48	5,482	493	189.00	21,318	7,461
188.49	5,786	550	189.01	21,337	7,675
188.50	6,091	609	189.02	21,357	7,888
188.51	6,395	672	189.03	21,376	8,102
188.52	6,700	737	189.04	21,395	8,316
188.53	7,004	806	189.05	21,415	8,530
188.54	7,309	877	189.06	21,434	8,744
188.55	7,614	952	189.07	21,453	8,958
188.56	7,918	1,029	189.08	21,473	9,173
188.57	8,223	1,110	189.09	21,492	9,388
188.58	8,527	1,194	189.10	21,511	9,603
188.59	8,832	1,281	189.11	21,531	9,818
188.60	9,136	1,370	189.12	21,550	10,033
188.61	9,441	1,463	189.13	21,569	10,249
188.62	9,745	1,559	189.14	21,589	10,465
188.63	10,050	1,658	189.15	21,608	10,681
188.64	10,354	1,760	189.16	21,627	10,897
188.65	10,659	1,865	189.17	21,647	11,113
188.66	10,964	1,973	189.18	21,666	11,330
188.67	11,268	2,085	189.19	21,685	11,547
188.68	11,573	2,199	189.20	21,705	11,764
188.69	11,877	2,316	189.21	21,724	11,981
188.70	12,182	2,436	189.22	21,743	12,198
188.71	12,486	2,560	189.23	21,763	12,416
188.72	12,791	2,686	189.24	21,782	12,633
188.73	13,095	2,815	189.25	21,802	12,851
188.74	13,400	2,948	189.26	21,821	13,069
188.75	13,704	3,083	189.27	21,840	13,288
188.76	14,009	3,222	189.28	21,860	13,506
188.77	14,314	3,364	189.29	21,879	13,725
188.78	14,618	3,508	189.30	21,898	13,944
188.79	14,923	3,656	189.31	21,918	14,163
188.80	15,227	3,807	189.32	21,937	14,382
188.81	15,532	3,961	189.33	21,956	14,602

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.34	21,976	14,821	189.86	22,981	26,510
189.35	21,995	15,041	189.87	23,001	26,740
189.36	22,014	15,261	189.88	23,020	26,970
189.37	22,034	15,481	189.89	23,039	27,200
189.38	22,053	15,702	189.90	23,059	27,431
189.39	22,072	15,922	189.91	23,078	27,661
189.40	22,092	16,143	189.92	23,097	27,892
189.41	22,111	16,364	189.93	23,117	28,123
189.42	22,130	16,585	189.94	23,136	28,355
189.43	22,150	16,807	189.95	23,155	28,586
189.44	22,169	17,028	189.96	23,175	28,818
189.45	22,188	17,250	189.97	23,194	29,050
189.46	22,208	17,472	189.98	23,213	29,282
189.47	22,227	17,694	189.99	23,233	29,514
189.48	22,246	17,917	190.00	23,252	29,746
189.49	22,266	18,139	190.01	23,272	29,979
189.50	22,285	18,362	190.02	23,292	30,212
189.51	22,304	18,585	190.03	23,312	30,445
189.52	22,324	18,808	190.04	23,332	30,678
189.53	22,343	19,031	190.05	23,352	30,911
189.54	22,362	19,255	190.06	23,371	31,145
189.55	22,382	19,479	190.07	23,391	31,379
189.56	22,401	19,703	190.08	23,411	31,613
189.57	22,420	19,927	190.09	23,431	31,847
189.58	22,440	20,151	190.10	23,451	32,081
189.59	22,459	20,376	190.11	23,471	32,316
189.60	22,478	20,600	190.12	23,491	32,551
189.61	22,498	20,825	190.13	23,511	32,786
189.62	22,517	21,050	190.14	23,531	33,021
189.63	22,536	21,275	190.15	23,551	33,256
189.64	22,556	21,501	190.16	23,570	33,492
189.65	22,575	21,727	190.17	23,590	33,728
189.66	22,594	21,952	190.18	23,610	33,964
189.67	22,614	22,178	190.19	23,630	34,200
189.68	22,633	22,405	190.20	23,650	34,437
189.69	22,652	22,631	190.21	23,670	34,673
189.70	22,672	22,858	190.22	23,690	34,910
189.71	22,691	23,085	190.23	23,710	35,147
189.72	22,710	23,312	190.24	23,730	35,384
189.73	22,730	23,539	190.25	23,750	35,621
189.74	22,749	23,766	190.26	23,769	35,859
189.75	22,769	23,994	190.27	23,789	36,097
189.76	22,788	24,222	190.28	23,809	36,335
189.77	22,807	24,449	190.29	23,829	36,573
189.78	22,827	24,678	190.30	23,849	36,811
189.79	22,846	24,906	190.31	23,869	37,050
189.80	22,865	25,135	190.32	23,889	37,289
189.81	22,885	25,363	190.33	23,909	37,528
189.82	22,904	25,592	190.34	23,929	37,767
189.83	22,923	25,821	190.35	23,949	38,006
189.84	22,943	26,051	190.36	23,968	38,246
189.85	22,962	26,280	190.37	23,988	38,486

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.38	24,008	38,726	190.90	25,043	51,479
190.39	24,028	38,966	190.91	25,063	51,730
190.40	24,048	39,206	190.92	25,083	51,980
190.41	24,068	39,447	190.93	25,103	52,231
190.42	24,088	39,688	190.94	25,123	52,482
190.43	24,108	39,929	190.95	25,143	52,734
190.44	24,128	40,170	190.96	25,162	52,985
190.45	24,148	40,411	190.97	25,182	53,237
190.46	24,167	40,653	190.98	25,202	53,489
190.47	24,187	40,895	190.99	25,222	53,741
190.48	24,207	41,137	191.00	25,242	53,993
190.49	24,227	41,379	191.01	25,263	54,246
190.50	24,247	41,621	191.02	25,285	54,499
190.51	24,267	41,864	191.03	25,306	54,752
190.52	24,287	42,106	191.04	25,328	55,005
190.53	24,307	42,349	191.05	25,349	55,258
190.54	24,327	42,593	191.06	25,370	55,512
190.55	24,347	42,836	191.07	25,392	55,765
190.56	24,366	43,079	191.08	25,413	56,020
190.57	24,386	43,323	191.09	25,435	56,274
190.58	24,406	43,567	191.10	25,456	56,528
190.59	24,426	43,811	191.11	25,477	56,783
190.60	24,446	44,056	191.12	25,499	57,038
190.61	24,466	44,300	191.13	25,520	57,293
190.62	24,486	44,545	191.14	25,542	57,548
190.63	24,506	44,790	191.15	25,563	57,804
190.64	24,526	45,035	191.16	25,584	58,059
190.65	24,546	45,280	191.17	25,606	58,315
190.66	24,565	45,526	191.18	25,627	58,572
190.67	24,585	45,772	191.19	25,649	58,828
190.68	24,605	46,018	191.20	25,670	59,085
190.69	24,625	46,264	191.21	25,691	59,341
190.70	24,645	46,510	191.22	25,713	59,598
190.71	24,665	46,757	191.23	25,734	59,856
190.72	24,685	47,004	191.24	25,756	60,113
190.73	24,705	47,250	191.25	25,777	60,371
190.74	24,725	47,498	191.26	25,798	60,629
190.75	24,745	47,745	191.27	25,820	60,887
190.76	24,764	47,993	191.28	25,841	61,145
190.77	24,784	48,240	191.29	25,863	61,403
190.78	24,804	48,488	191.30	25,884	61,662
190.79	24,824	48,736	191.31	25,905	61,921
190.80	24,844	48,985	191.32	25,927	62,180
190.81	24,864	49,233	191.33	25,948	62,440
190.82	24,884	49,482	191.34	25,970	62,699
190.83	24,904	49,731	191.35	25,991	62,959
190.84	24,924	49,980	191.36	26,012	63,219
190.85	24,944	50,229	191.37	26,034	63,479
190.86	24,963	50,479	191.38	26,055	63,740
190.87	24,983	50,729	191.39	26,077	64,000
190.88	25,003	50,979	191.40	26,098	64,261
190.89	25,023	51,229	191.41	26,119	64,522

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

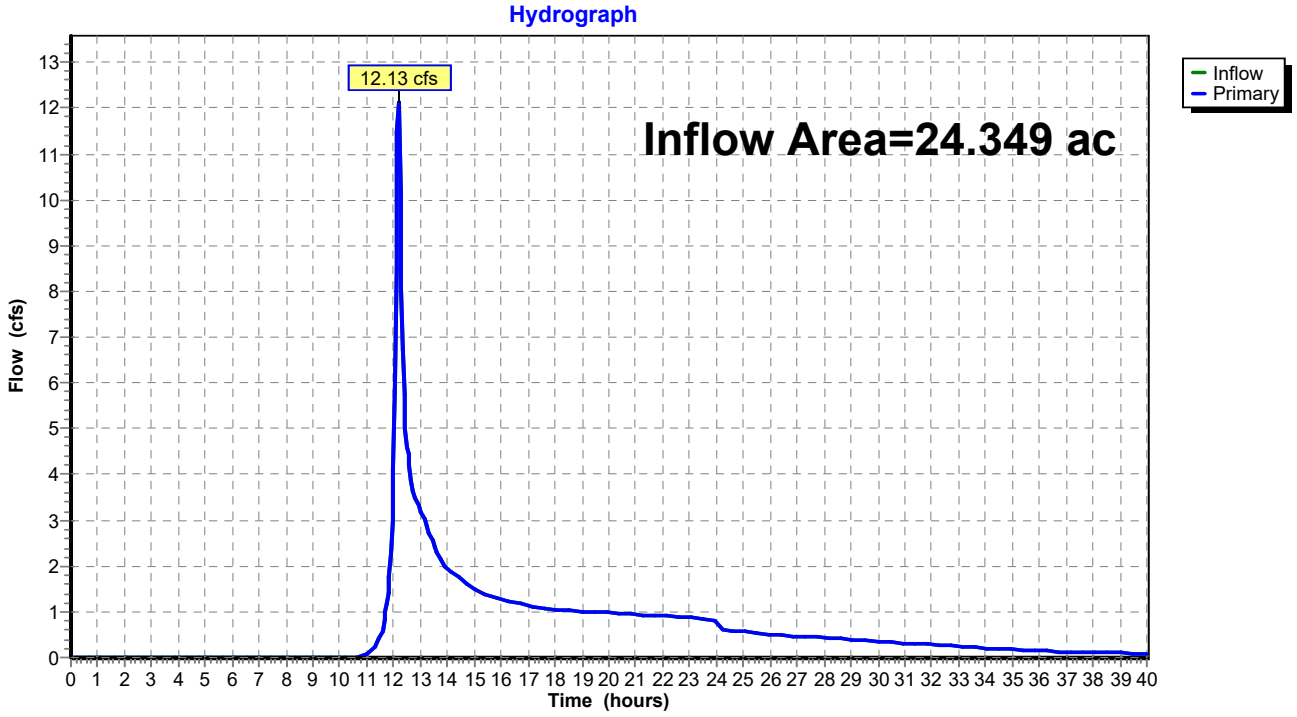
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.42	26,141	64,784
191.43	26,162	65,045
191.44	26,184	65,307
191.45	26,205	65,569
191.46	26,226	65,831
191.47	26,248	66,093
191.48	26,269	66,356
191.49	26,291	66,619
191.50	26,312	66,882
191.51	26,333	67,145
191.52	26,355	67,408
191.53	26,376	67,672
191.54	26,398	67,936
191.55	26,419	68,200
191.56	26,440	68,464
191.57	26,462	68,729
191.58	26,483	68,994
191.59	26,505	69,259
191.60	26,526	69,524
191.61	26,547	69,789
191.62	26,569	70,055
191.63	26,590	70,320
191.64	26,612	70,586
191.65	26,633	70,853
191.66	26,654	71,119
191.67	26,676	71,386
191.68	26,697	71,653
191.69	26,719	71,920
191.70	26,740	72,187
191.71	26,761	72,455
191.72	26,783	72,722
191.73	26,804	72,990
191.74	26,826	73,258
191.75	26,847	73,527
191.76	26,868	73,795
191.77	26,890	74,064
191.78	26,911	74,333
191.79	26,933	74,602
191.80	26,954	74,872
191.81	26,975	75,141
191.82	26,997	75,411
191.83	27,018	75,681
191.84	27,040	75,952
191.85	27,061	76,222
191.86	27,082	76,493
191.87	27,104	76,764
191.88	27,125	77,035
191.89	27,147	77,306
191.90	27,168	77,578
191.91	27,189	77,850
191.92	27,211	78,122
191.93	27,232	78,394
191.94	27,254	78,666
191.95	27,275	78,939
191.96	27,296	79,212
191.97	27,318	79,485
191.98	27,339	79,758
191.99	27,361	80,032
192.00	**27,382**	**80,305**

Summary for Link PDA-4: Proposed Drainage Area #4

Inflow Area = 24.349 ac, 23.20% Impervious, Inflow Depth > 1.02" for Current 2 yr event
Inflow = 12.13 cfs @ 12.19 hrs, Volume= 2.061 af
Primary = 12.13 cfs @ 12.19 hrs, Volume= 2.061 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-4: Proposed Drainage Area #4



Summary for Subcatchment 41I: PDA-41 (impervious)

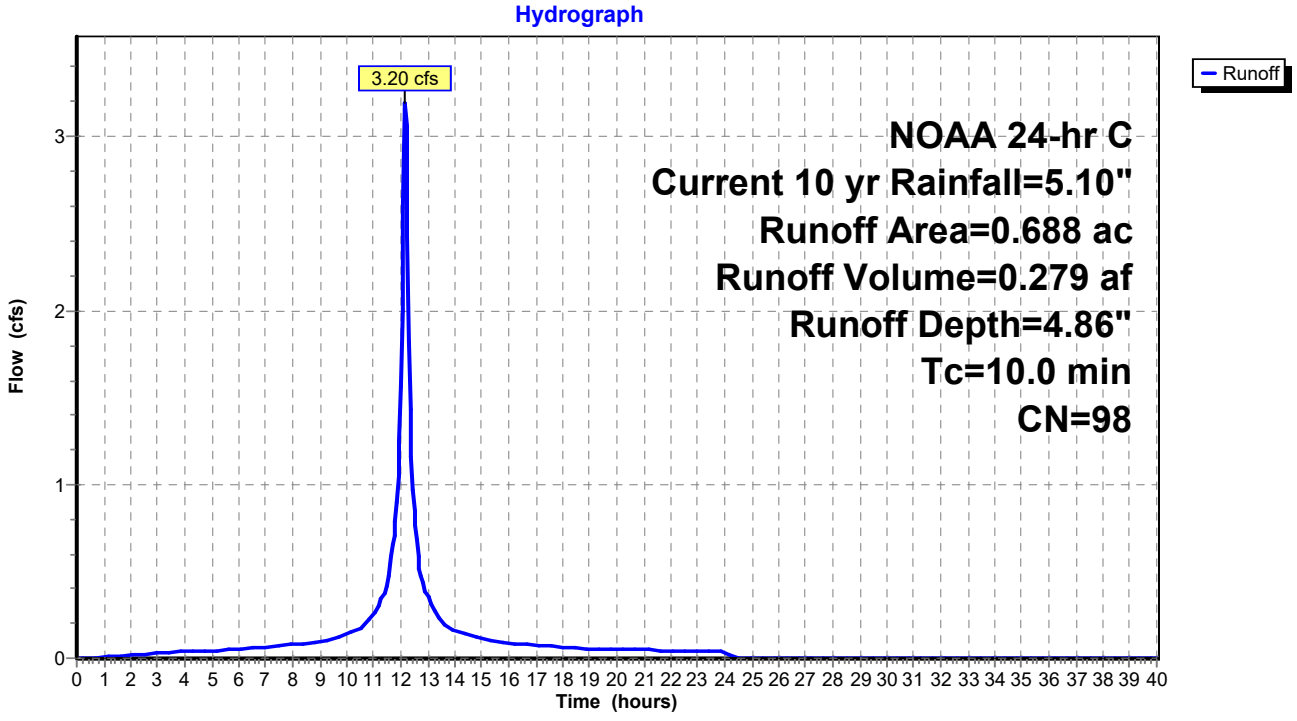
Runoff = 3.20 cfs @ 12.17 hrs, Volume= 0.279 af, Depth= 4.86"
Routed to Pond B-41 : Basin #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.136	98	Pavement, HSG C
*	0.514	98	Roof, HSG C
*	0.038	98	Concrete, HSC C
	0.688	98	Weighted Average
	0.688		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 41I: PDA-41 (impervious)



Summary for Subcatchment 41P: PDA-41 (pervious)

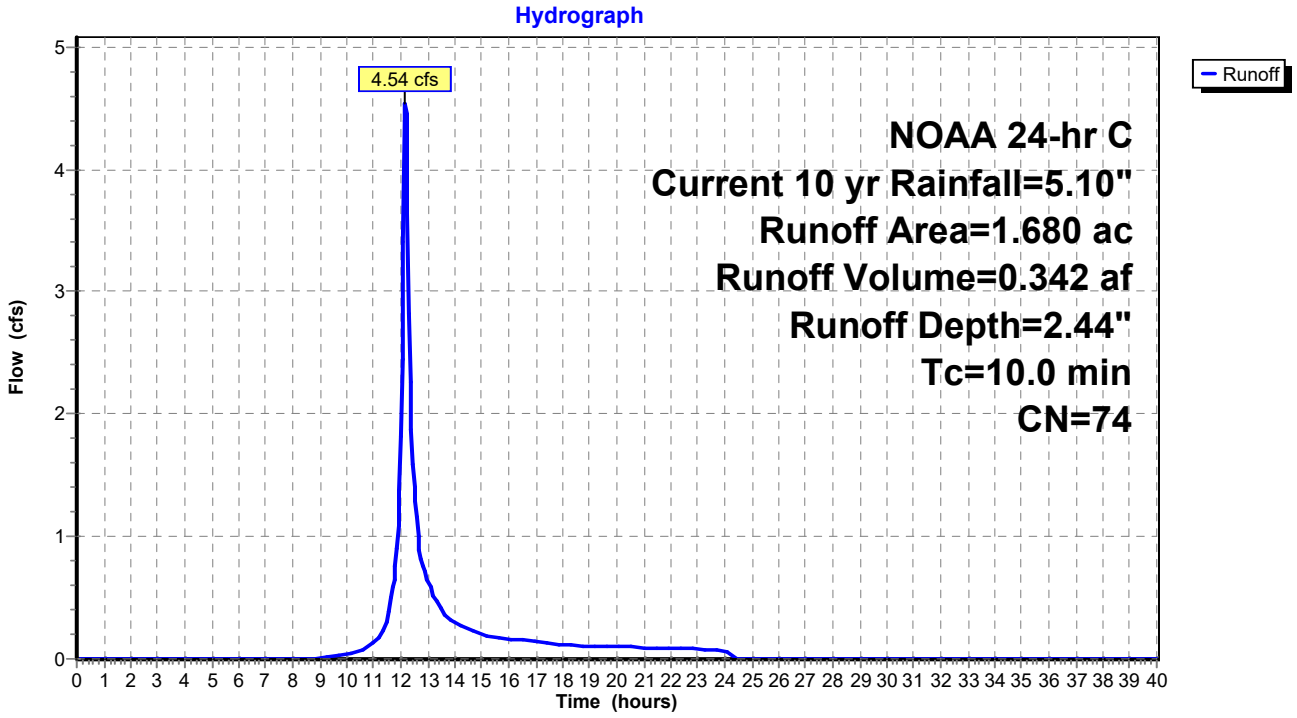
Runoff = 4.54 cfs @ 12.18 hrs, Volume= 0.342 af, Depth= 2.44"
Routed to Pond B-41 : Basin #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.680	74	>75% Grass cover, Good, HSG C
1.680		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 41P: PDA-41 (pervious)



Summary for Subcatchment 42I: PDA-42 (impervious)

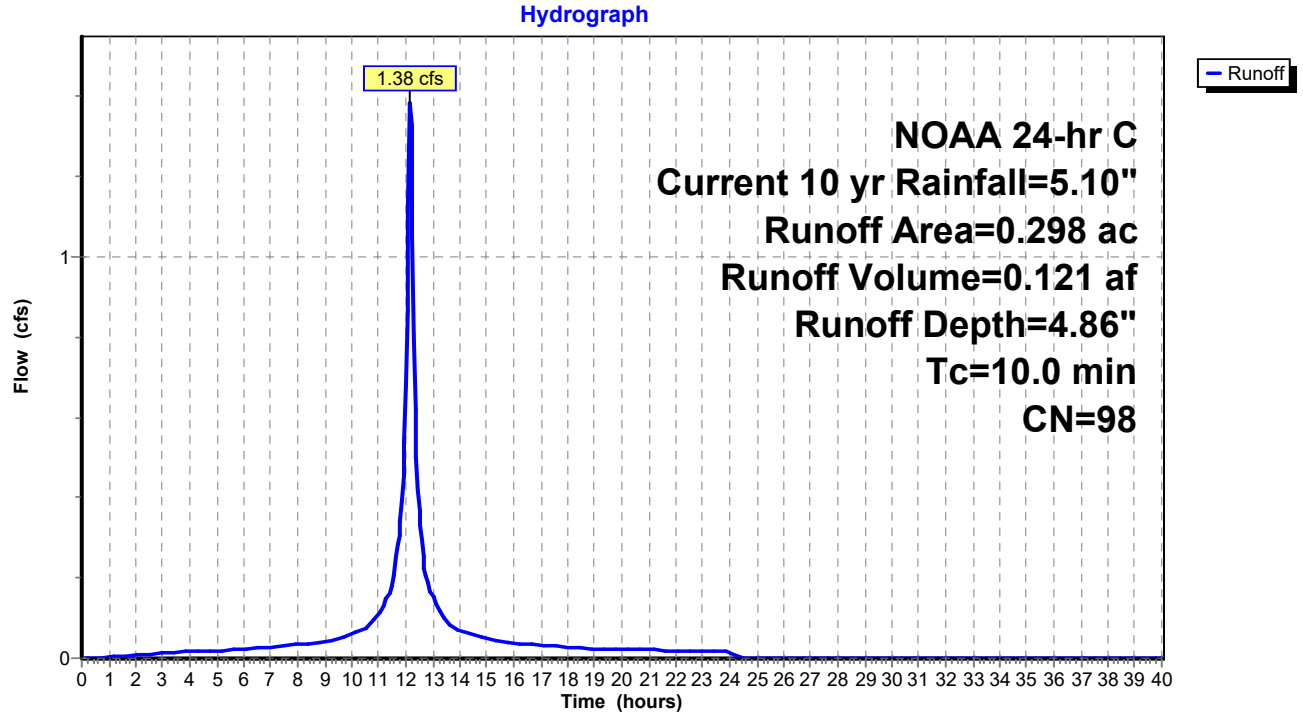
Runoff = 1.38 cfs @ 12.17 hrs, Volume= 0.121 af, Depth= 4.86"
Routed to Pond B-42 : Basin #42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.298	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.298	98	Weighted Average
	0.298		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 42I: PDA-42 (impervious)



Summary for Subcatchment 42P: PDA-42 (pervious)

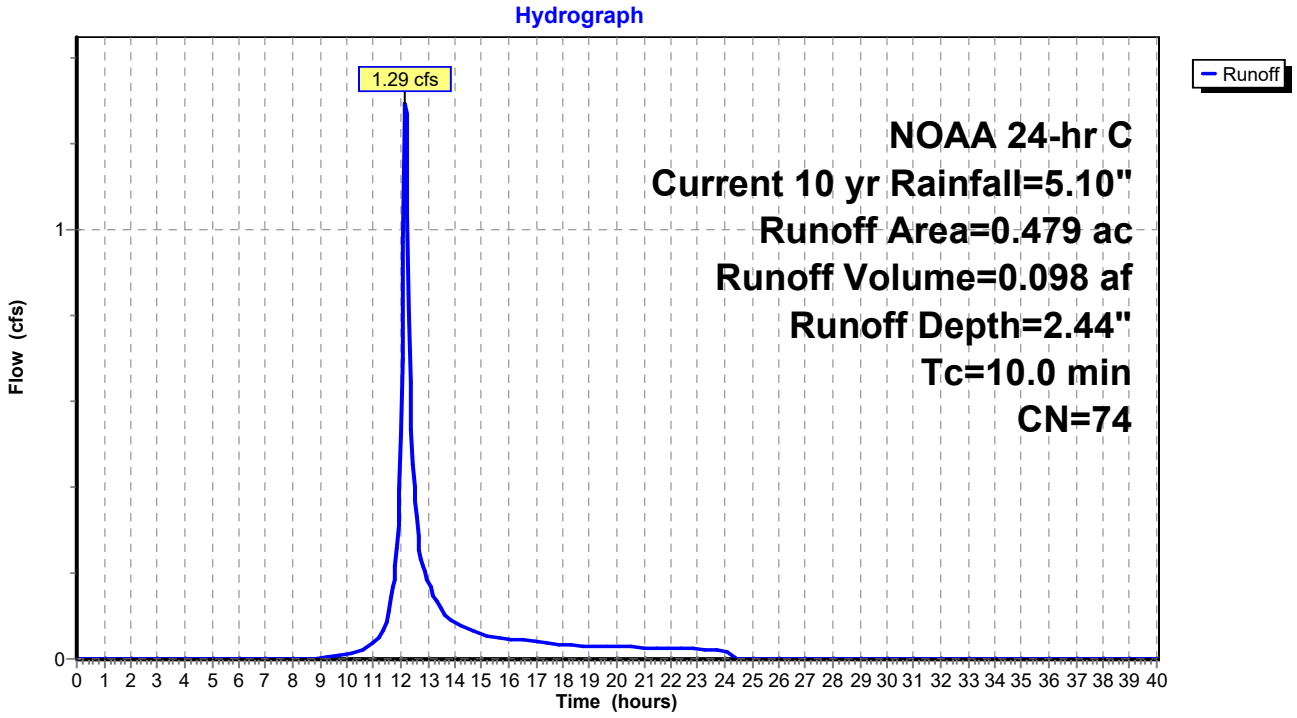
Runoff = 1.29 cfs @ 12.18 hrs, Volume= 0.098 af, Depth= 2.44"
Routed to Pond B-42 : Basin #42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.479	74	>75% Grass cover, Good, HSG C
0.479		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 42P: PDA-42 (pervious)



Summary for Subcatchment 43I: PDA-43 (impervious)

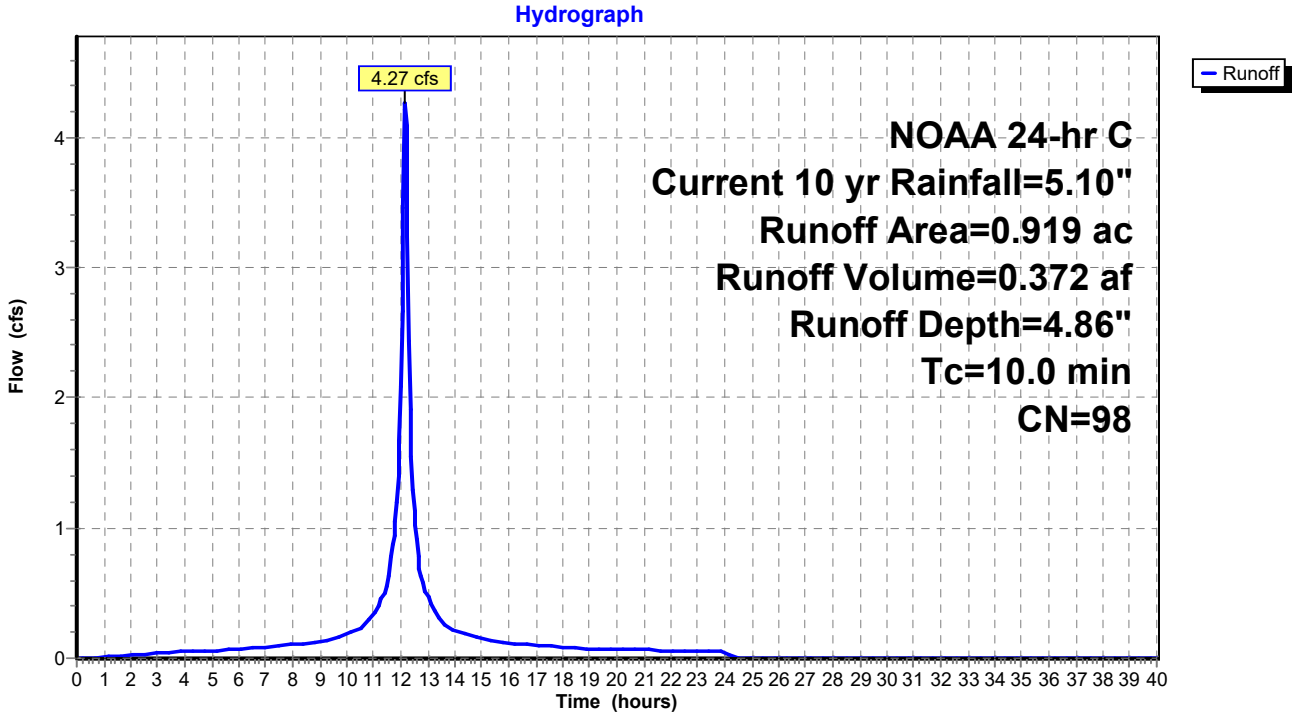
Runoff = 4.27 cfs @ 12.17 hrs, Volume= 0.372 af, Depth= 4.86"
Routed to Pond B-43 : Basin #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.326	98	Pavement, HSG C
*	0.522	98	Roof, HSG C
*	0.071	98	Concrete, HSC C
	0.919	98	Weighted Average
	0.919		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 43I: PDA-43 (impervious)



Summary for Subcatchment 43P: PDA-43 (pervious)

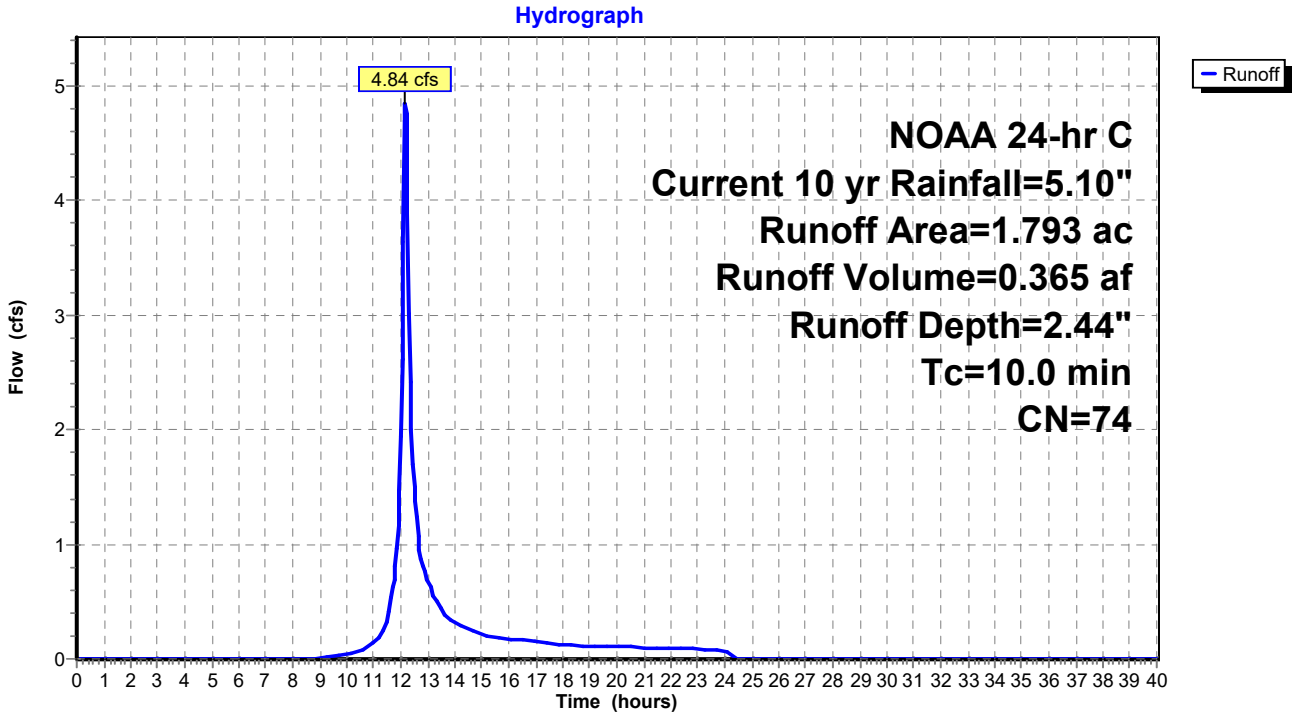
Runoff = 4.84 cfs @ 12.18 hrs, Volume= 0.365 af, Depth= 2.44"
Routed to Pond B-43 : Basin #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.793	74	>75% Grass cover, Good, HSG C
1.793		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 43P: PDA-43 (pervious)



Summary for Subcatchment 44I: PDA-44 (impervious)

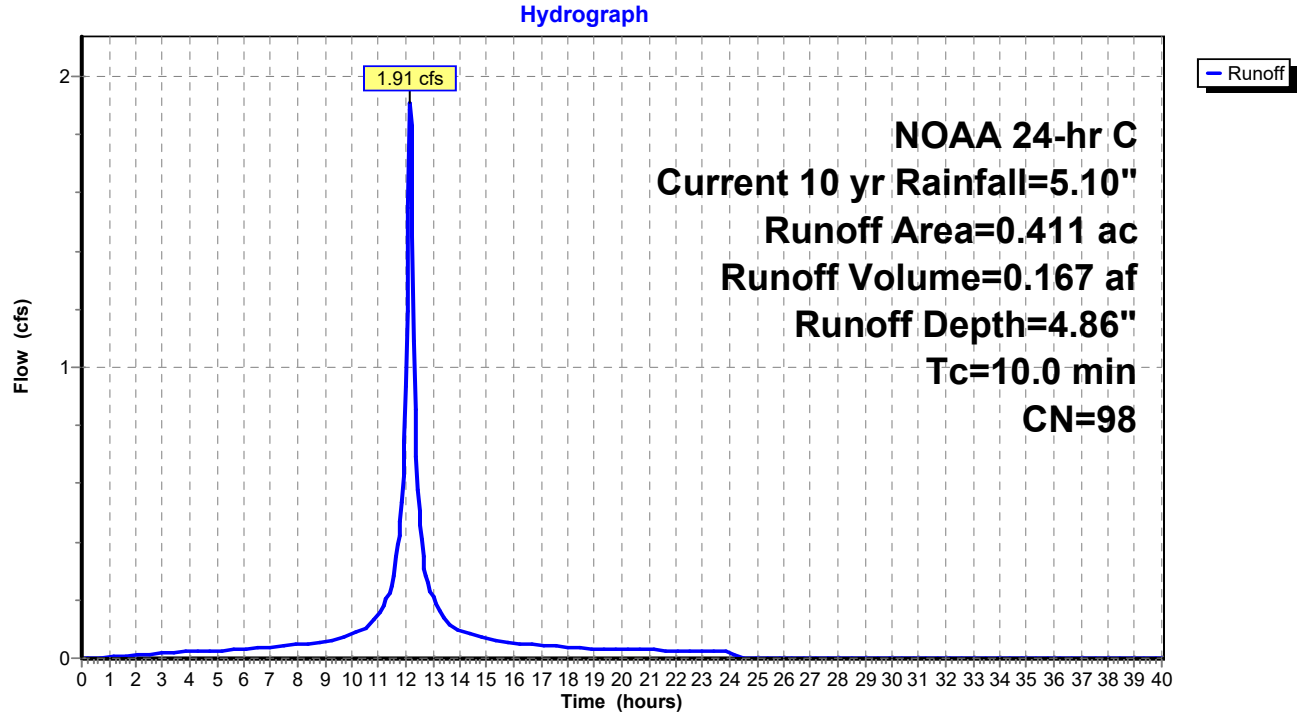
Runoff = 1.91 cfs @ 12.17 hrs, Volume= 0.167 af, Depth= 4.86"
Routed to Pond B-44 : Basin #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.283	98	Pavement, HSG C
*	0.104	98	Roof, HSG C
*	0.024	98	Concrete, HSC C
	0.411	98	Weighted Average
	0.411		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 44I: PDA-44 (impervious)



Summary for Subcatchment 44P: PDA-44 (pervious)

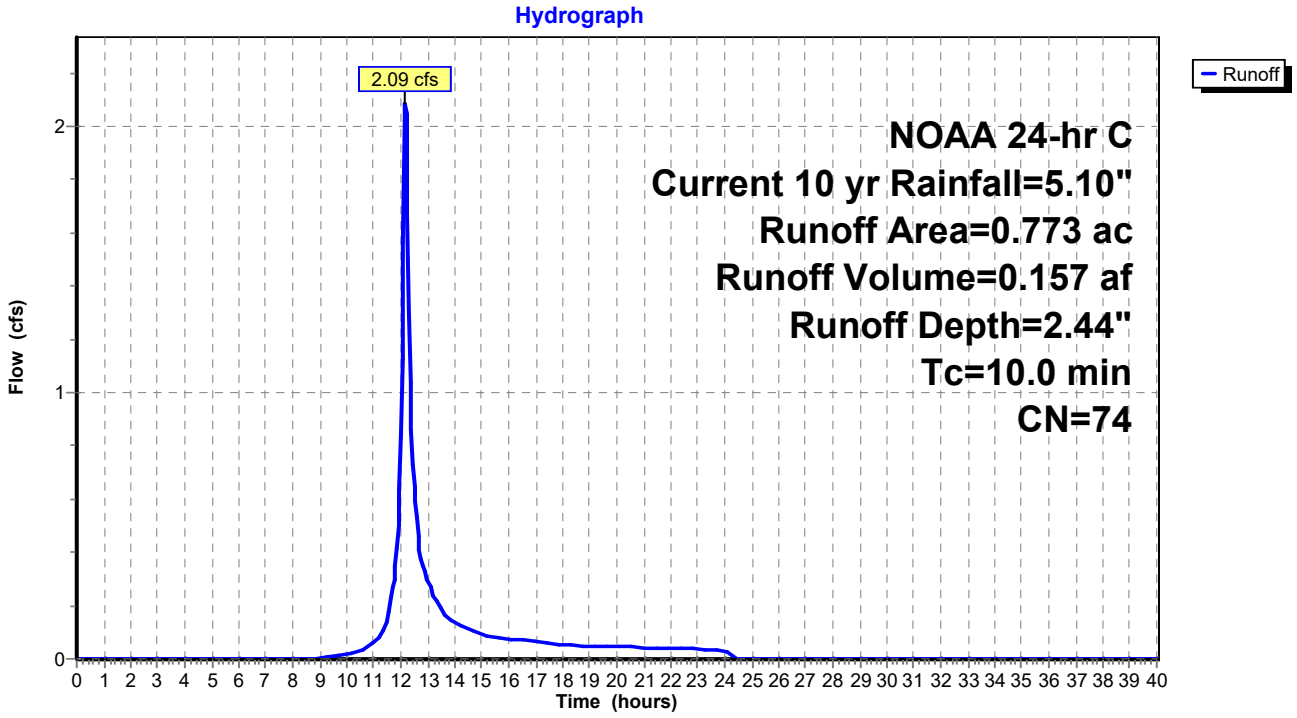
Runoff = 2.09 cfs @ 12.18 hrs, Volume= 0.157 af, Depth= 2.44"
Routed to Pond B-44 : Basin #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.773	74	>75% Grass cover, Good, HSG C
0.773		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 44P: PDA-44 (pervious)



Summary for Subcatchment 45l: PDA-45 (impervious)

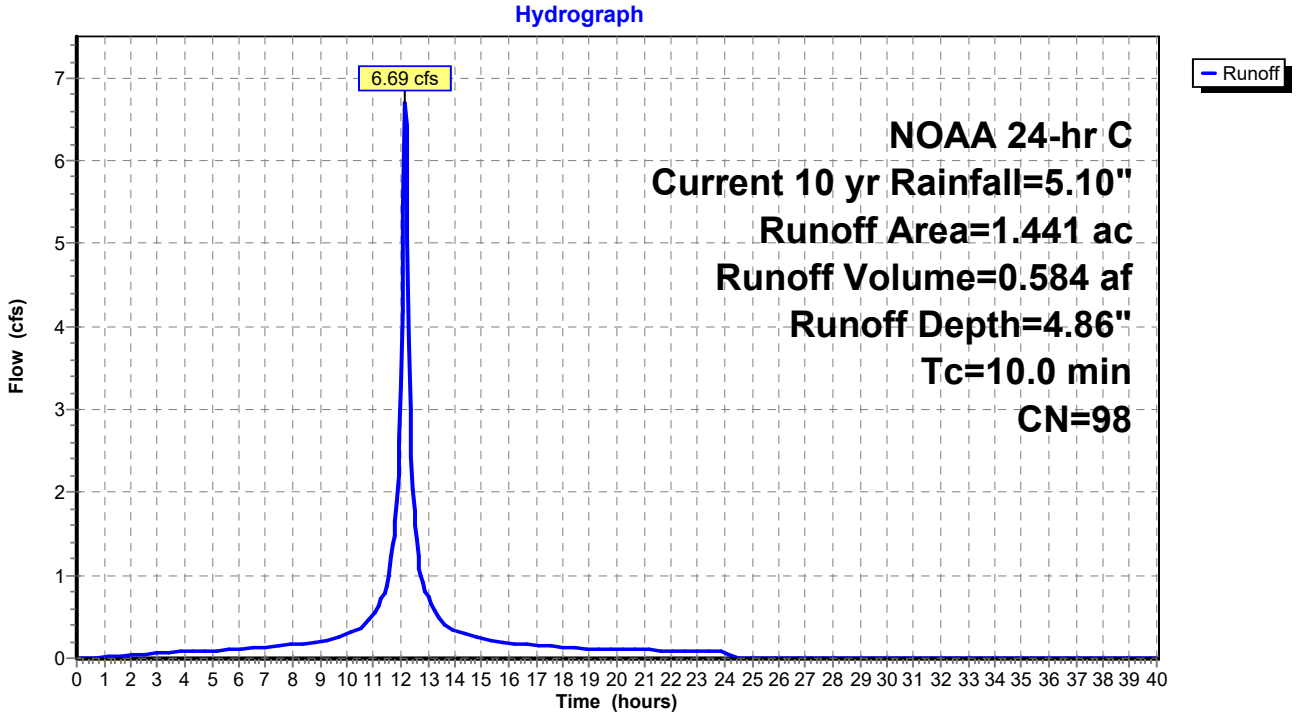
Runoff = 6.69 cfs @ 12.17 hrs, Volume= 0.584 af, Depth= 4.86"
Routed to Pond B-45 : Basin #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.394	98	Pavement, HSG C
*	1.045	98	Roof, HSG C
*	0.002	98	Concrete, HSG C
	1.441	98	Weighted Average
	1.441		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 45l: PDA-45 (impervious)



Summary for Subcatchment 45P: PDA-45 (pervious)

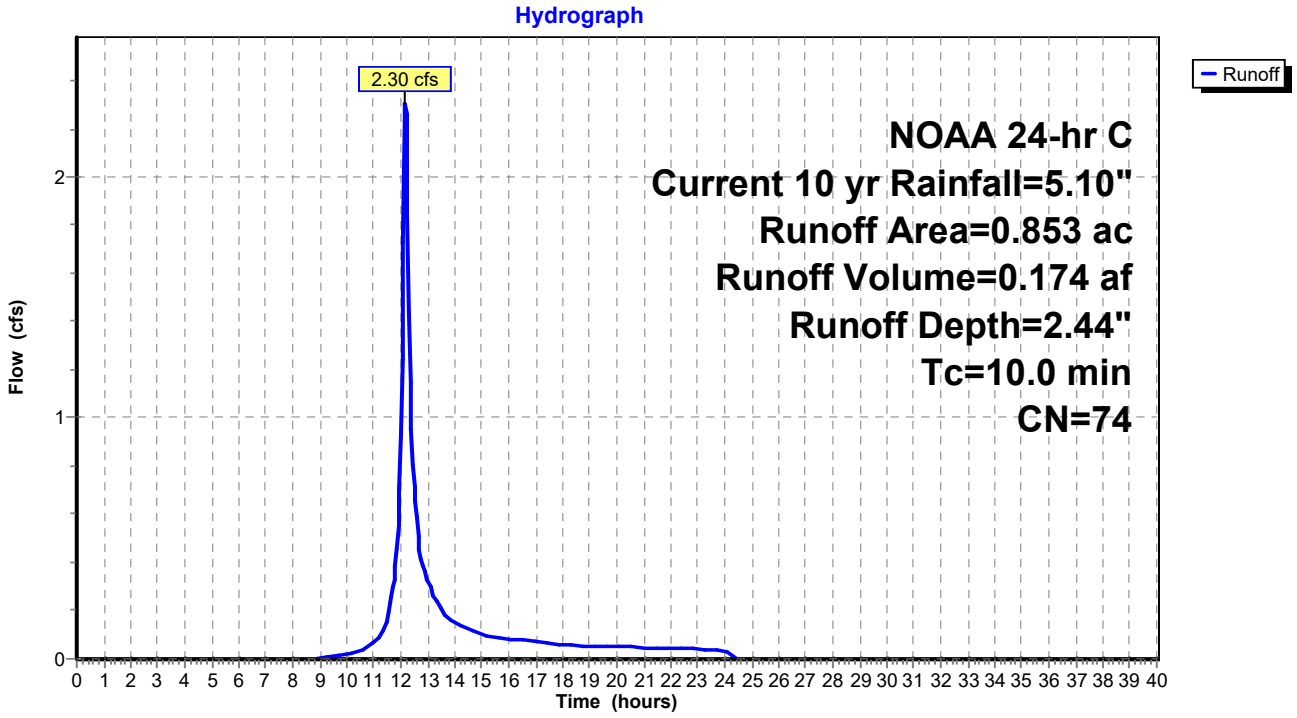
Runoff = 2.30 cfs @ 12.18 hrs, Volume= 0.174 af, Depth= 2.44"
Routed to Pond B-45 : Basin #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.853	74	>75% Grass cover, Good, HSG C
0.853		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 45P: PDA-45 (pervious)



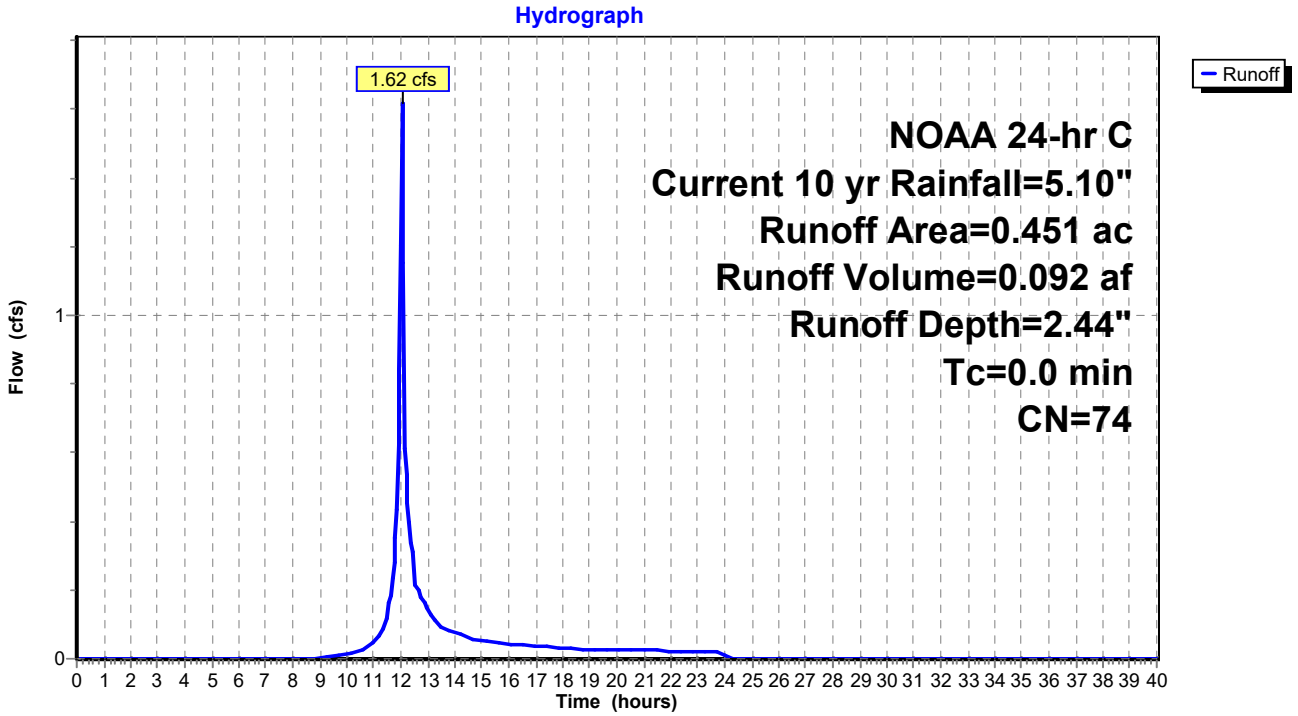
Summary for Subcatchment 46BP: PDA-46B (pervious)

Runoff = 1.62 cfs @ 12.05 hrs, Volume= 0.092 af, Depth= 2.44"
Routed to Pond B-46B : Basin #46B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.451	74	>75% Grass cover, Good, HSG C
0.451		100.00% Pervious Area

Subcatchment 46BP: PDA-46B (pervious)



Summary for Subcatchment 46I: PDA-46 (impervious)

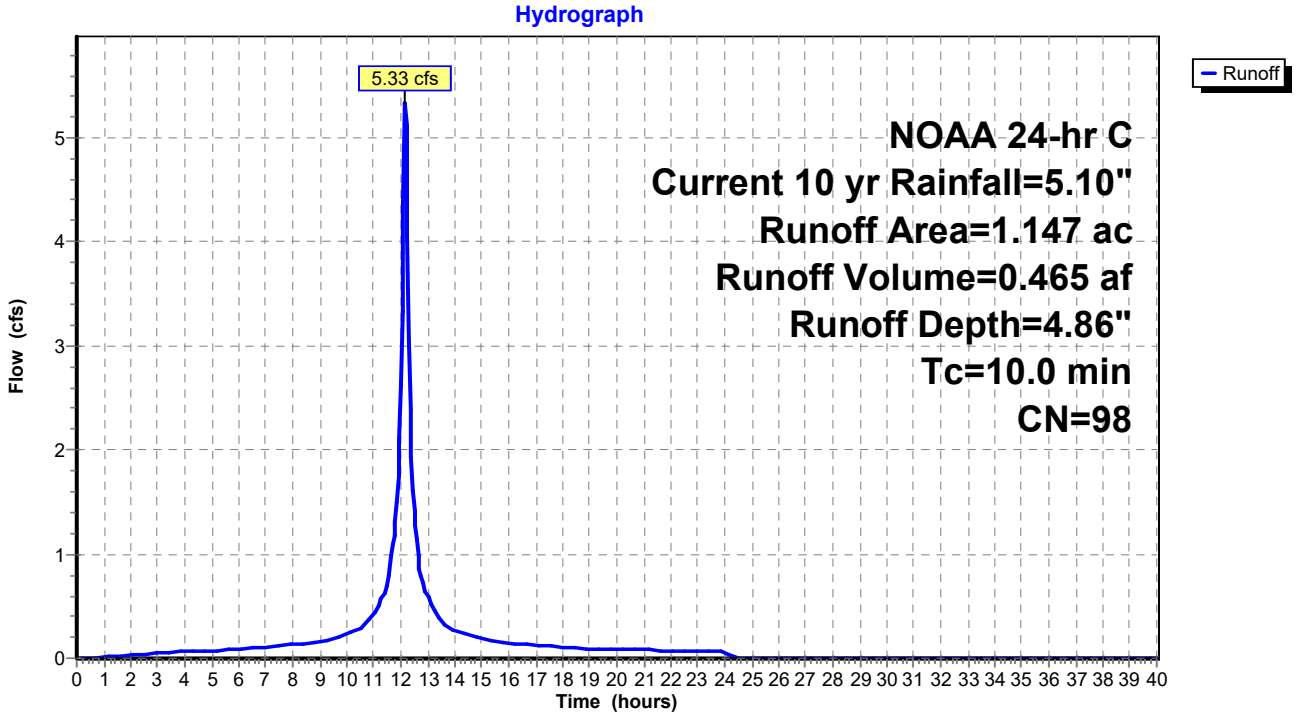
Runoff = 5.33 cfs @ 12.17 hrs, Volume= 0.465 af, Depth= 4.86"
Routed to Pond B-46A : Basin #46A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.430	98	Pavement, HSG C
*	0.653	98	Roof, HSG C
*	0.064	98	Concrete, HSG C
	1.147	98	Weighted Average
	1.147		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 46I: PDA-46 (impervious)



Summary for Subcatchment 46P: PDA-46 (pervious)

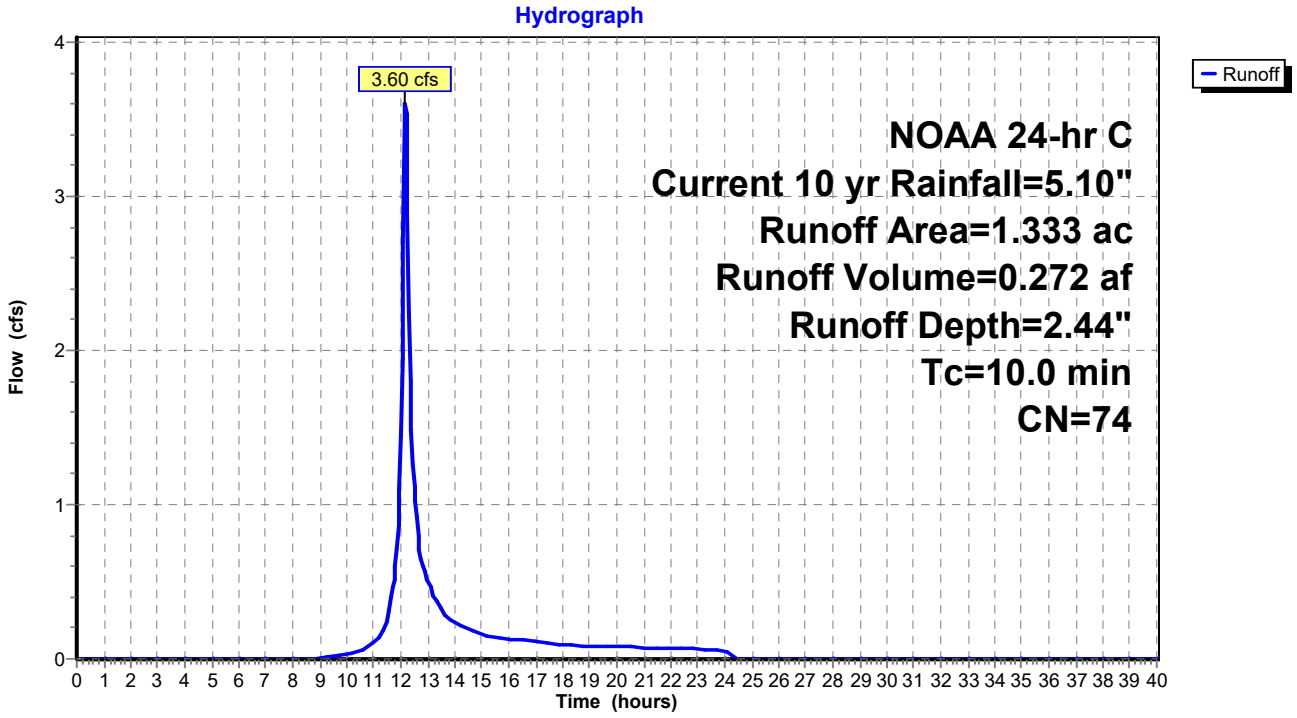
Runoff = 3.60 cfs @ 12.18 hrs, Volume= 0.272 af, Depth= 2.44"
Routed to Pond B-46A : Basin #46A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.333	74	>75% Grass cover, Good, HSG C
1.333		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 46P: PDA-46 (pervious)



Summary for Subcatchment 47I: PDA-47 (impervious)

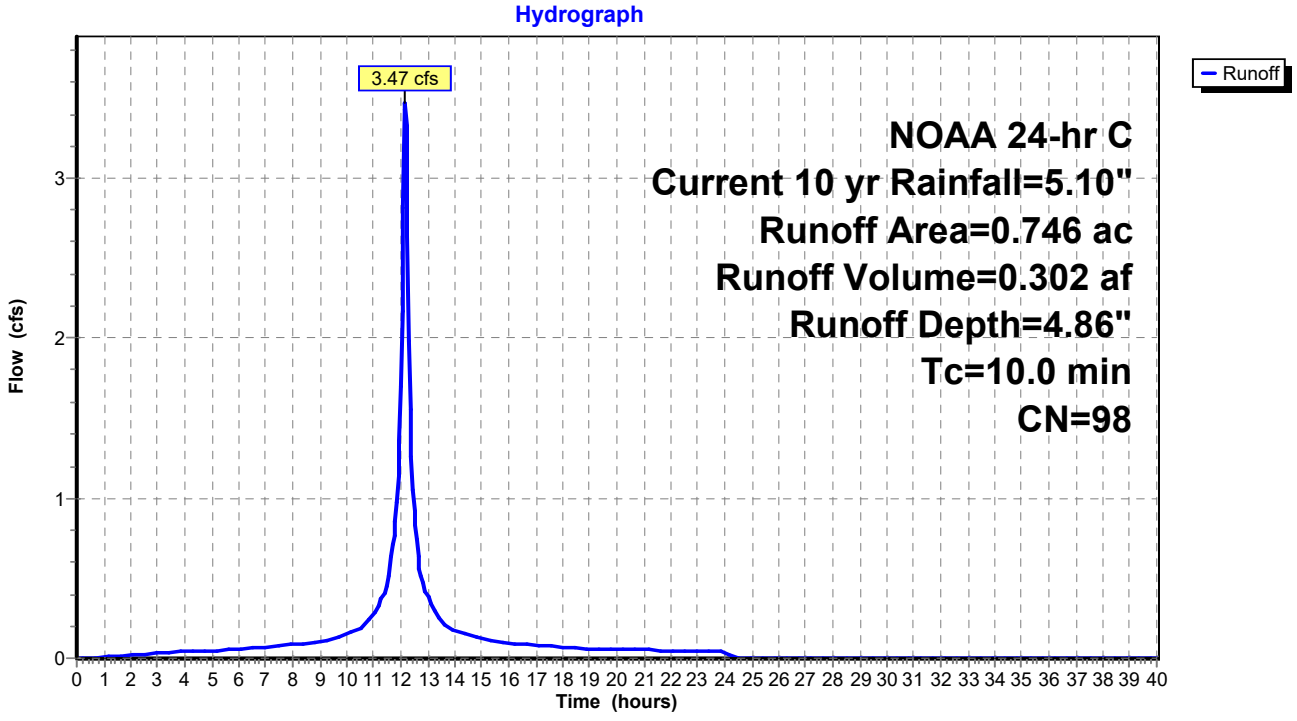
Runoff = 3.47 cfs @ 12.17 hrs, Volume= 0.302 af, Depth= 4.86"
Routed to Pond B-47 : Basin #47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.244	98	Pavement, HSG C
*	0.484	98	Roof, HSG C
*	0.018	98	Concrete, HSG C
	0.746	98	Weighted Average
	0.746		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 47I: PDA-47 (impervious)



Summary for Subcatchment 47P: PDA-47 (pervious)

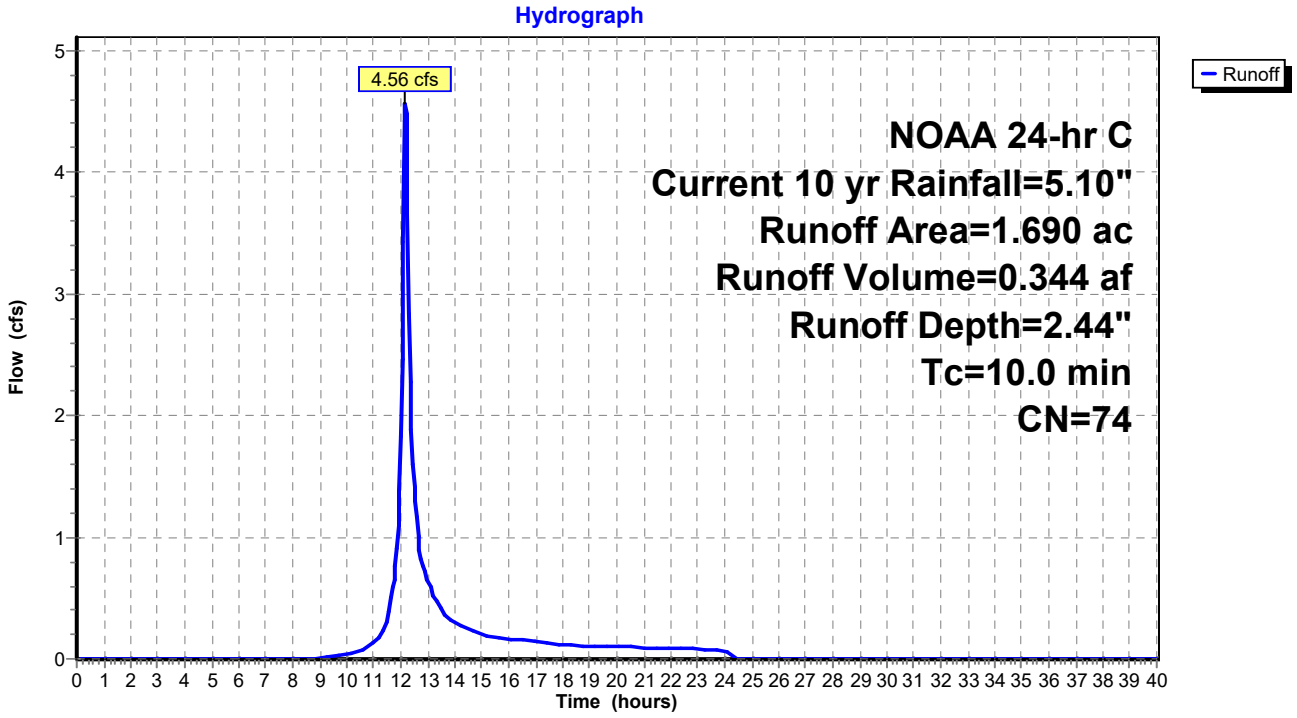
Runoff = 4.56 cfs @ 12.18 hrs, Volume= 0.344 af, Depth= 2.44"
Routed to Pond B-47 : Basin #47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.690	74	>75% Grass cover, Good, HSG C
1.690		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 47P: PDA-47 (pervious)



Summary for Subcatchment UPDA-4: PDA-4 (undetained)

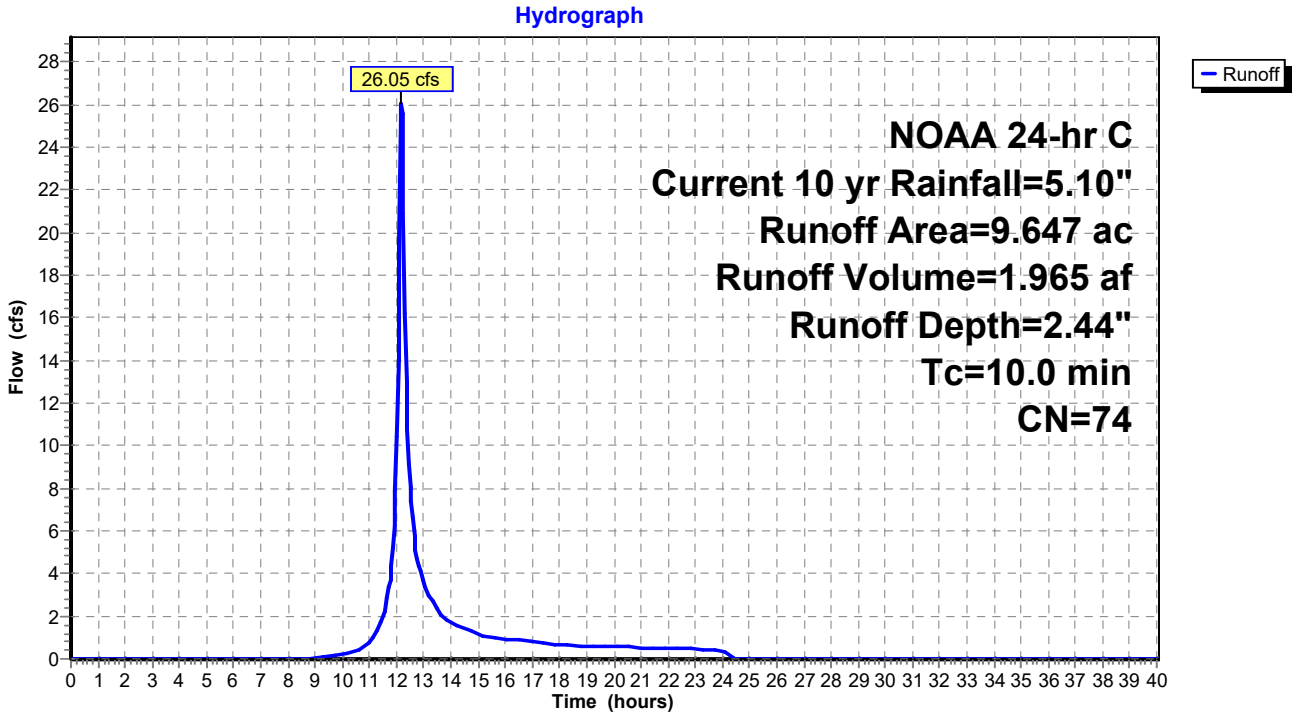
Runoff = 26.05 cfs @ 12.18 hrs, Volume= 1.965 af, Depth= 2.44"
Routed to Link PDA-4 : Proposed Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
9.647	74	>75% Grass cover, Good, HSG C
9.647		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-4: PDA-4 (undetained)



Summary for Pond B-41: Basin #41

Inflow Area = 2.368 ac, 29.05% Impervious, Inflow Depth = 3.15" for Current 10 yr event
Inflow = 7.73 cfs @ 12.17 hrs, Volume= 0.621 af
Outflow = 3.76 cfs @ 12.36 hrs, Volume= 0.562 af, Atten= 51%, Lag= 10.9 min
Primary = 3.76 cfs @ 12.36 hrs, Volume= 0.562 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.55' @ 12.36 hrs Surf.Area= 5,221 sf Storage= 11,616 cf

Plug-Flow detention time= 364.1 min calculated for 0.562 af (90% of inflow)
Center-of-Mass det. time= 314.3 min (1,116.8 - 802.5)

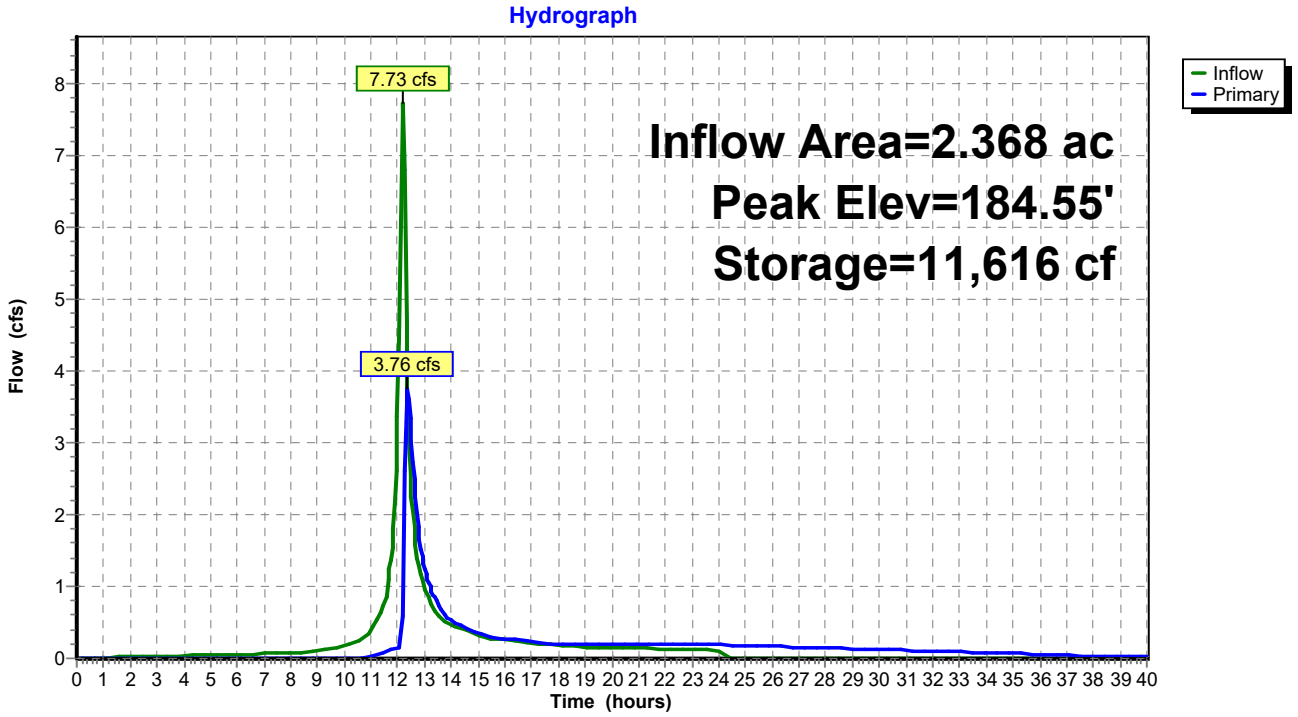
Volume	Invert	Avail.Storage	Storage Description
#1	181.85'	23,005 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.85	0	0	0
182.00	3,695	277	277
183.00	4,265	3,980	4,257
184.00	4,870	4,568	8,825
185.00	5,505	5,188	14,012
186.00	6,153	5,829	19,841
186.50	6,502	3,164	23,005

Device	Routing	Invert	Outlet Devices
#1	Primary	181.85'	**18.0" Round Culvert** L= 59.0' Ke= 0.500 Inlet / Outlet Invert= 181.85' / 181.55' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	182.50'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.13'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.39'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.73 cfs @ 12.36 hrs HW=184.55' (Free Discharge)
- **1=Culvert** (Passes 3.73 cfs of 10.82 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.72 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.51 cfs @ 2.12 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-41: Basin #41



Stage-Discharge for Pond B-41: Basin #41

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.85	0.00	182.37	0.00	182.89	0.09	183.41	0.15
181.86	0.00	182.38	0.00	182.90	0.09	183.42	0.15
181.87	0.00	182.39	0.00	182.91	0.09	183.43	0.15
181.88	0.00	182.40	0.00	182.92	0.09	183.44	0.15
181.89	0.00	182.41	0.00	182.93	0.09	183.45	0.15
181.90	0.00	182.42	0.00	182.94	0.10	183.46	0.15
181.91	0.00	182.43	0.00	182.95	0.10	183.47	0.15
181.92	0.00	182.44	0.00	182.96	0.10	183.48	0.15
181.93	0.00	182.45	0.00	182.97	0.10	183.49	0.15
181.94	0.00	182.46	0.00	182.98	0.10	183.50	0.16
181.95	0.00	182.47	0.00	182.99	0.10	183.51	0.16
181.96	0.00	182.48	0.00	183.00	0.10	183.52	0.16
181.97	0.00	182.49	0.00	183.01	0.10	183.53	0.16
181.98	0.00	182.50	0.00	183.02	0.11	183.54	0.16
181.99	0.00	182.51	0.00	183.03	0.11	183.55	0.16
182.00	0.00	182.52	0.00	183.04	0.11	183.56	0.16
182.01	0.00	182.53	0.00	183.05	0.11	183.57	0.16
182.02	0.00	182.54	0.00	183.06	0.11	183.58	0.16
182.03	0.00	182.55	0.00	183.07	0.11	183.59	0.16
182.04	0.00	182.56	0.01	183.08	0.11	183.60	0.16
182.05	0.00	182.57	0.01	183.09	0.11	183.61	0.16
182.06	0.00	182.58	0.01	183.10	0.12	183.62	0.17
182.07	0.00	182.59	0.01	183.11	0.12	183.63	0.17
182.08	0.00	182.60	0.02	183.12	0.12	183.64	0.17
182.09	0.00	182.61	0.02	183.13	0.12	183.65	0.17
182.10	0.00	182.62	0.02	183.14	0.12	183.66	0.17
182.11	0.00	182.63	0.03	183.15	0.12	183.67	0.17
182.12	0.00	182.64	0.03	183.16	0.12	183.68	0.17
182.13	0.00	182.65	0.03	183.17	0.12	183.69	0.17
182.14	0.00	182.66	0.04	183.18	0.12	183.70	0.17
182.15	0.00	182.67	0.04	183.19	0.13	183.71	0.17
182.16	0.00	182.68	0.05	183.20	0.13	183.72	0.17
182.17	0.00	182.69	0.05	183.21	0.13	183.73	0.17
182.18	0.00	182.70	0.05	183.22	0.13	183.74	0.17
182.19	0.00	182.71	0.05	183.23	0.13	183.75	0.18
182.20	0.00	182.72	0.06	183.24	0.13	183.76	0.18
182.21	0.00	182.73	0.06	183.25	0.13	183.77	0.18
182.22	0.00	182.74	0.06	183.26	0.13	183.78	0.18
182.23	0.00	182.75	0.06	183.27	0.13	183.79	0.18
182.24	0.00	182.76	0.06	183.28	0.13	183.80	0.18
182.25	0.00	182.77	0.07	183.29	0.14	183.81	0.18
182.26	0.00	182.78	0.07	183.30	0.14	183.82	0.18
182.27	0.00	182.79	0.07	183.31	0.14	183.83	0.18
182.28	0.00	182.80	0.07	183.32	0.14	183.84	0.18
182.29	0.00	182.81	0.07	183.33	0.14	183.85	0.18
182.30	0.00	182.82	0.08	183.34	0.14	183.86	0.18
182.31	0.00	182.83	0.08	183.35	0.14	183.87	0.18
182.32	0.00	182.84	0.08	183.36	0.14	183.88	0.19
182.33	0.00	182.85	0.08	183.37	0.14	183.89	0.19
182.34	0.00	182.86	0.08	183.38	0.14	183.90	0.19
182.35	0.00	182.87	0.08	183.39	0.15	183.91	0.19
182.36	0.00	182.88	0.09	183.40	0.15	183.92	0.19

Stage-Discharge for Pond B-41: Basin #41 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.93	0.19	184.45	2.55	184.97	9.90	185.49	17.51
183.94	0.19	184.46	2.66	184.98	10.07	185.50	18.11
183.95	0.19	184.47	2.77	184.99	10.24	185.51	18.74
183.96	0.19	184.48	2.89	185.00	10.41	185.52	19.40
183.97	0.19	184.49	3.00	185.01	10.58	185.53	20.08
183.98	0.19	184.50	3.12	185.02	10.75	185.54	20.78
183.99	0.19	184.51	3.23	185.03	10.92	185.55	21.51
184.00	0.19	184.52	3.35	185.04	11.09	185.56	22.26
184.01	0.19	184.53	3.47	185.05	11.27	185.57	23.03
184.02	0.20	184.54	3.59	185.06	11.44	185.58	23.82
184.03	0.20	184.55	3.71	185.07	11.62	185.59	24.64
184.04	0.20	184.56	3.84	185.08	11.79	185.60	25.51
184.05	0.20	184.57	3.96	185.09	11.97	185.61	26.41
184.06	0.20	184.58	4.09	185.10	12.15	185.62	27.34
184.07	0.20	184.59	4.22	185.11	12.33	185.63	28.29
184.08	0.20	184.60	4.35	185.12	12.51	185.64	29.27
184.09	0.20	184.61	4.48	185.13	12.69	185.65	30.27
184.10	0.20	184.62	4.61	185.14	12.77	185.66	31.29
184.11	0.20	184.63	4.74	185.15	12.80	185.67	32.34
184.12	0.20	184.64	4.88	185.16	12.83	185.68	33.42
184.13	0.20	184.65	5.01	185.17	12.86	185.69	34.52
184.14	0.22	184.66	5.15	185.18	12.89	185.70	35.64
184.15	0.24	184.67	5.29	185.19	12.92	185.71	36.79
184.16	0.27	184.68	5.42	185.20	12.95	185.72	37.96
184.17	0.31	184.69	5.56	185.21	12.98	185.73	39.16
184.18	0.35	184.70	5.71	185.22	13.01	185.74	40.38
184.19	0.40	184.71	5.85	185.23	13.04	185.75	41.63
184.20	0.45	184.72	5.99	185.24	13.07	185.76	42.89
184.21	0.50	184.73	6.14	185.25	13.10	185.77	44.19
184.22	0.56	184.74	6.28	185.26	13.13	185.78	45.51
184.23	0.62	184.75	6.43	185.27	13.16	185.79	46.85
184.24	0.68	184.76	6.58	185.28	13.19	185.80	48.24
184.25	0.75	184.77	6.72	185.29	13.22	185.81	49.66
184.26	0.82	184.78	6.87	185.30	13.25	185.82	51.10
184.27	0.89	184.79	7.02	185.31	13.28	185.83	52.57
184.28	0.97	184.80	7.18	185.32	13.30	185.84	54.07
184.29	1.04	184.81	7.33	185.33	13.33	185.85	55.59
184.30	1.12	184.82	7.48	185.34	13.36	185.86	57.14
184.31	1.20	184.83	7.64	185.35	13.39	185.87	58.72
184.32	1.29	184.84	7.79	185.36	13.42	185.88	60.32
184.33	1.37	184.85	7.95	185.37	13.45	185.89	61.95
184.34	1.46	184.86	8.11	185.38	13.48	185.90	63.60
184.35	1.55	184.87	8.27	185.39	13.51	185.91	65.28
184.36	1.64	184.88	8.42	185.40	13.65	185.92	66.99
184.37	1.74	184.89	8.59	185.41	13.90	185.93	68.72
184.38	1.83	184.90	8.75	185.42	14.20	185.94	70.48
184.39	1.93	184.91	8.91	185.43	14.56	185.95	72.27
184.40	2.03	184.92	9.07	185.44	14.96	185.96	74.09
184.41	2.13	184.93	9.24	185.45	15.40	185.97	75.93
184.42	2.23	184.94	9.40	185.46	15.88	185.98	77.80
184.43	2.34	184.95	9.57	185.47	16.39	185.99	79.69
184.44	2.45	184.96	9.73	185.48	16.94	186.00	81.34

Stage-Discharge for Pond B-41: Basin #41 (continued)

Elevation (feet)	Primary (cfs)
186.01	83.01
186.02	84.69
186.03	86.38
186.04	88.09
186.05	89.81
186.06	91.54
186.07	93.29
186.08	95.04
186.09	96.81
186.10	98.60
186.11	100.40
186.12	102.20
186.13	104.03
186.14	105.86
186.15	107.71
186.16	109.56
186.17	111.44
186.18	113.32
186.19	115.21
186.20	117.16
186.21	119.11
186.22	121.09
186.23	123.07
186.24	125.07
186.25	127.08
186.26	129.10
186.27	131.14
186.28	133.19
186.29	135.25
186.30	137.32
186.31	139.41
186.32	141.51
186.33	143.63
186.34	145.75
186.35	147.89
186.36	150.04
186.37	152.21
186.38	154.38
186.39	156.57
186.40	158.72
186.41	160.88
186.42	163.05
186.43	165.23
186.44	167.42
186.45	169.62
186.46	171.83
186.47	174.05
186.48	176.29
186.49	178.53
186.50	**180.78**

Stage-Area-Storage for Pond B-41: Basin #41

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.85	0	0
181.86	246	1
181.87	493	5
181.88	739	11
181.89	985	20
181.90	1,232	31
181.91	1,478	44
181.92	1,724	60
181.93	1,971	79
181.94	2,217	100
181.95	2,463	123
181.96	2,710	149
181.97	2,956	177
181.98	3,202	208
181.99	3,449	241
182.00	3,695	277
182.01	3,701	314
182.02	3,706	351
182.03	3,712	388
182.04	3,718	425
182.05	3,723	463
182.06	3,729	500
182.07	3,735	537
182.08	3,741	575
182.09	3,746	612
182.10	3,752	649
182.11	3,758	687
182.12	3,763	725
182.13	3,769	762
182.14	3,775	800
182.15	3,781	838
182.16	3,786	876
182.17	3,792	914
182.18	3,798	951
182.19	3,803	989
182.20	3,809	1,028
182.21	3,815	1,066
182.22	3,820	1,104
182.23	3,826	1,142
182.24	3,832	1,180
182.25	3,838	1,219
182.26	3,843	1,257
182.27	3,849	1,296
182.28	3,855	1,334
182.29	3,860	1,373
182.30	3,866	1,411
182.31	3,872	1,450
182.32	3,877	1,489
182.33	3,883	1,528
182.34	3,889	1,566
182.35	3,894	1,605
182.36	3,900	1,644
182.37	3,906	1,683
182.38	3,912	1,722
182.39	3,917	1,762
182.40	3,923	1,801
182.41	3,929	1,840
182.42	3,934	1,879
182.43	3,940	1,919
182.44	3,946	1,958
182.45	3,951	1,998
182.46	3,957	2,037
182.47	3,963	2,077
182.48	3,969	2,116
182.49	3,974	2,156
182.50	3,980	2,196
182.51	3,986	2,236
182.52	3,991	2,276
182.53	3,997	2,316
182.54	4,003	2,356
182.55	4,008	2,396
182.56	4,014	2,436
182.57	4,020	2,476
182.58	4,026	2,516
182.59	4,031	2,556
182.60	4,037	2,597
182.61	4,043	2,637
182.62	4,048	2,678
182.63	4,054	2,718
182.64	4,060	2,759
182.65	4,066	2,799
182.66	4,071	2,840
182.67	4,077	2,881
182.68	4,083	2,922
182.69	4,088	2,962
182.70	4,094	3,003
182.71	4,100	3,044
182.72	4,105	3,085
182.73	4,111	3,126
182.74	4,117	3,167
182.75	4,123	3,209
182.76	4,128	3,250
182.77	4,134	3,291
182.78	4,140	3,333
182.79	4,145	3,374
182.80	4,151	3,416
182.81	4,157	3,457
182.82	4,162	3,499
182.83	4,168	3,540
182.84	4,174	3,582
182.85	4,179	3,624
182.86	4,185	3,666
182.87	4,191	3,707
182.88	4,197	3,749

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.89	4,202	3,791	183.41	4,513	6,057
182.90	4,208	3,833	183.42	4,519	6,102
182.91	4,214	3,876	183.43	4,525	6,147
182.92	4,219	3,918	183.44	4,531	6,192
182.93	4,225	3,960	183.45	4,537	6,238
182.94	4,231	4,002	183.46	4,543	6,283
182.95	4,236	4,045	183.47	4,549	6,328
182.96	4,242	4,087	183.48	4,555	6,374
182.97	4,248	4,129	183.49	4,561	6,420
182.98	4,254	4,172	183.50	4,568	6,465
182.99	4,259	4,215	183.51	4,574	6,511
183.00	4,265	4,257	183.52	4,580	6,557
183.01	4,271	4,300	183.53	4,586	6,603
183.02	4,277	4,343	183.54	4,592	6,648
183.03	4,283	4,385	183.55	4,598	6,694
183.04	4,289	4,428	183.56	4,604	6,740
183.05	4,295	4,471	183.57	4,610	6,786
183.06	4,301	4,514	183.58	4,616	6,833
183.07	4,307	4,557	183.59	4,622	6,879
183.08	4,313	4,600	183.60	4,628	6,925
183.09	4,319	4,643	183.61	4,634	6,971
183.10	4,325	4,687	183.62	4,640	7,018
183.11	4,332	4,730	183.63	4,646	7,064
183.12	4,338	4,773	183.64	4,652	7,111
183.13	4,344	4,817	183.65	4,658	7,157
183.14	4,350	4,860	183.66	4,664	7,204
183.15	4,356	4,904	183.67	4,670	7,250
183.16	4,362	4,947	183.68	4,676	7,297
183.17	4,368	4,991	183.69	4,682	7,344
183.18	4,374	5,035	183.70	4,688	7,391
183.19	4,380	5,078	183.71	4,695	7,438
183.20	4,386	5,122	183.72	4,701	7,485
183.21	4,392	5,166	183.73	4,707	7,532
183.22	4,398	5,210	183.74	4,713	7,579
183.23	4,404	5,254	183.75	4,719	7,626
183.24	4,410	5,298	183.76	4,725	7,673
183.25	4,416	5,342	183.77	4,731	7,721
183.26	4,422	5,386	183.78	4,737	7,768
183.27	4,428	5,431	183.79	4,743	7,815
183.28	4,434	5,475	183.80	4,749	7,863
183.29	4,440	5,519	183.81	4,755	7,910
183.30	4,446	5,564	183.82	4,761	7,958
183.31	4,453	5,608	183.83	4,767	8,005
183.32	4,459	5,653	183.84	4,773	8,053
183.33	4,465	5,698	183.85	4,779	8,101
183.34	4,471	5,742	183.86	4,785	8,149
183.35	4,477	5,787	183.87	4,791	8,197
183.36	4,483	5,832	183.88	4,797	8,245
183.37	4,489	5,877	183.89	4,803	8,293
183.38	4,495	5,922	183.90	4,810	8,341
183.39	4,501	5,966	183.91	4,816	8,389
183.40	4,507	6,012	183.92	4,822	8,437

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.93	4,828	8,485	184.45	5,156	11,080
183.94	4,834	8,534	184.46	5,162	11,132
183.95	4,840	8,582	184.47	5,168	11,184
183.96	4,846	8,630	184.48	5,175	11,235
183.97	4,852	8,679	184.49	5,181	11,287
183.98	4,858	8,727	184.50	5,188	11,339
183.99	4,864	8,776	184.51	5,194	11,391
184.00	4,870	8,825	184.52	5,200	11,443
184.01	4,876	8,873	184.53	5,207	11,495
184.02	4,883	8,922	184.54	5,213	11,547
184.03	4,889	8,971	184.55	5,219	11,599
184.04	4,895	9,020	184.56	5,226	11,651
184.05	4,902	9,069	184.57	5,232	11,704
184.06	4,908	9,118	184.58	5,238	11,756
184.07	4,914	9,167	184.59	5,245	11,808
184.08	4,921	9,216	184.60	5,251	11,861
184.09	4,927	9,265	184.61	5,257	11,913
184.10	4,933	9,315	184.62	5,264	11,966
184.11	4,940	9,364	184.63	5,270	12,019
184.12	4,946	9,414	184.64	5,276	12,071
184.13	4,953	9,463	184.65	5,283	12,124
184.14	4,959	9,513	184.66	5,289	12,177
184.15	4,965	9,562	184.67	5,295	12,230
184.16	4,972	9,612	184.68	5,302	12,283
184.17	4,978	9,662	184.69	5,308	12,336
184.18	4,984	9,712	184.70	5,314	12,389
184.19	4,991	9,761	184.71	5,321	12,442
184.20	4,997	9,811	184.72	5,327	12,496
184.21	5,003	9,861	184.73	5,334	12,549
184.22	5,010	9,911	184.74	5,340	12,602
184.23	5,016	9,962	184.75	5,346	12,656
184.24	5,022	10,012	184.76	5,353	12,709
184.25	5,029	10,062	184.77	5,359	12,763
184.26	5,035	10,112	184.78	5,365	12,816
184.27	5,041	10,163	184.79	5,372	12,870
184.28	5,048	10,213	184.80	5,378	12,924
184.29	5,054	10,264	184.81	5,384	12,978
184.30	5,060	10,314	184.82	5,391	13,032
184.31	5,067	10,365	184.83	5,397	13,085
184.32	5,073	10,416	184.84	5,403	13,139
184.33	5,080	10,466	184.85	5,410	13,194
184.34	5,086	10,517	184.86	5,416	13,248
184.35	5,092	10,568	184.87	5,422	13,302
184.36	5,099	10,619	184.88	5,429	13,356
184.37	5,105	10,670	184.89	5,435	13,410
184.38	5,111	10,721	184.90	5,442	13,465
184.39	5,118	10,772	184.91	5,448	13,519
184.40	5,124	10,823	184.92	5,454	13,574
184.41	5,130	10,875	184.93	5,461	13,628
184.42	5,137	10,926	184.94	5,467	13,683
184.43	5,143	10,977	184.95	5,473	13,738
184.44	5,149	11,029	184.96	5,480	13,792

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.97	5,486	13,847	185.49	5,823	16,787
184.98	5,492	13,902	185.50	5,829	16,846
184.99	5,499	13,957	185.51	5,835	16,904
185.00	5,505	14,012	185.52	5,842	16,962
185.01	5,511	14,067	185.53	5,848	17,021
185.02	5,518	14,122	185.54	5,855	17,079
185.03	5,524	14,178	185.55	5,861	17,138
185.04	5,531	14,233	185.56	5,868	17,197
185.05	5,537	14,288	185.57	5,874	17,255
185.06	5,544	14,344	185.58	5,881	17,314
185.07	5,550	14,399	185.59	5,887	17,373
185.08	5,557	14,455	185.60	5,894	17,432
185.09	5,563	14,510	185.61	5,900	17,491
185.10	5,570	14,566	185.62	5,907	17,550
185.11	5,576	14,622	185.63	5,913	17,609
185.12	5,583	14,677	185.64	5,920	17,668
185.13	5,589	14,733	185.65	5,926	17,727
185.14	5,596	14,789	185.66	5,933	17,787
185.15	5,602	14,845	185.67	5,939	17,846
185.16	5,609	14,901	185.68	5,946	17,905
185.17	5,615	14,957	185.69	5,952	17,965
185.18	5,622	15,014	185.70	5,959	18,024
185.19	5,628	15,070	185.71	5,965	18,084
185.20	5,635	15,126	185.72	5,972	18,144
185.21	5,641	15,182	185.73	5,978	18,203
185.22	5,648	15,239	185.74	5,985	18,263
185.23	5,654	15,295	185.75	5,991	18,323
185.24	5,661	15,352	185.76	5,997	18,383
185.25	5,667	15,409	185.77	6,004	18,443
185.26	5,673	15,465	185.78	6,010	18,503
185.27	5,680	15,522	185.79	6,017	18,563
185.28	5,686	15,579	185.80	6,023	18,623
185.29	5,693	15,636	185.81	6,030	18,684
185.30	5,699	15,693	185.82	6,036	18,744
185.31	5,706	15,750	185.83	6,043	18,804
185.32	5,712	15,807	185.84	6,049	18,865
185.33	5,719	15,864	185.85	6,056	18,925
185.34	5,725	15,921	185.86	6,062	18,986
185.35	5,732	15,979	185.87	6,069	19,047
185.36	5,738	16,036	185.88	6,075	19,107
185.37	5,745	16,093	185.89	6,082	19,168
185.38	5,751	16,151	185.90	6,088	19,229
185.39	5,758	16,208	185.91	6,095	19,290
185.40	5,764	16,266	185.92	6,101	19,351
185.41	5,771	16,324	185.93	6,108	19,412
185.42	5,777	16,381	185.94	6,114	19,473
185.43	5,784	16,439	185.95	6,121	19,534
185.44	5,790	16,497	185.96	6,127	19,596
185.45	5,797	16,555	185.97	6,134	19,657
185.46	5,803	16,613	185.98	6,140	19,718
185.47	5,810	16,671	185.99	6,147	19,780
185.48	5,816	16,729	186.00	6,153	19,841

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.01	6,160	19,903
186.02	6,167	19,964
186.03	6,174	20,026
186.04	6,181	20,088
186.05	6,188	20,150
186.06	6,195	20,212
186.07	6,202	20,274
186.08	6,209	20,336
186.09	6,216	20,398
186.10	6,223	20,460
186.11	6,230	20,522
186.12	6,237	20,585
186.13	6,244	20,647
186.14	6,251	20,709
186.15	6,258	20,772
186.16	6,265	20,835
186.17	6,272	20,897
186.18	6,279	20,960
186.19	6,286	21,023
186.20	6,293	21,086
186.21	6,300	21,149
186.22	6,307	21,212
186.23	6,314	21,275
186.24	6,321	21,338
186.25	6,328	21,401
186.26	6,334	21,464
186.27	6,341	21,528
186.28	6,348	21,591
186.29	6,355	21,655
186.30	6,362	21,718
186.31	6,369	21,782
186.32	6,376	21,846
186.33	6,383	21,910
186.34	6,390	21,973
186.35	6,397	22,037
186.36	6,404	22,101
186.37	6,411	22,166
186.38	6,418	22,230
186.39	6,425	22,294
186.40	6,432	22,358
186.41	6,439	22,423
186.42	6,446	22,487
186.43	6,453	22,551
186.44	6,460	22,616
186.45	6,467	22,681
186.46	6,474	22,745
186.47	6,481	22,810
186.48	6,488	22,875
186.49	6,495	22,940
186.50	**6,502**	**23,005**

Summary for Pond B-42: Basin #42

Inflow Area = 0.777 ac, 38.35% Impervious, Inflow Depth = 3.37" for Current 10 yr event
Inflow = 2.68 cfs @ 12.17 hrs, Volume= 0.218 af
Outflow = 0.13 cfs @ 14.45 hrs, Volume= 0.123 af, Atten= 95%, Lag= 136.4 min
Primary = 0.13 cfs @ 14.45 hrs, Volume= 0.123 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 183.36' @ 14.45 hrs Surf.Area= 3,313 sf Storage= 6,450 cf

Plug-Flow detention time= 471.6 min calculated for 0.123 af (57% of inflow)
Center-of-Mass det. time= 352.2 min (1,145.2 - 793.0)

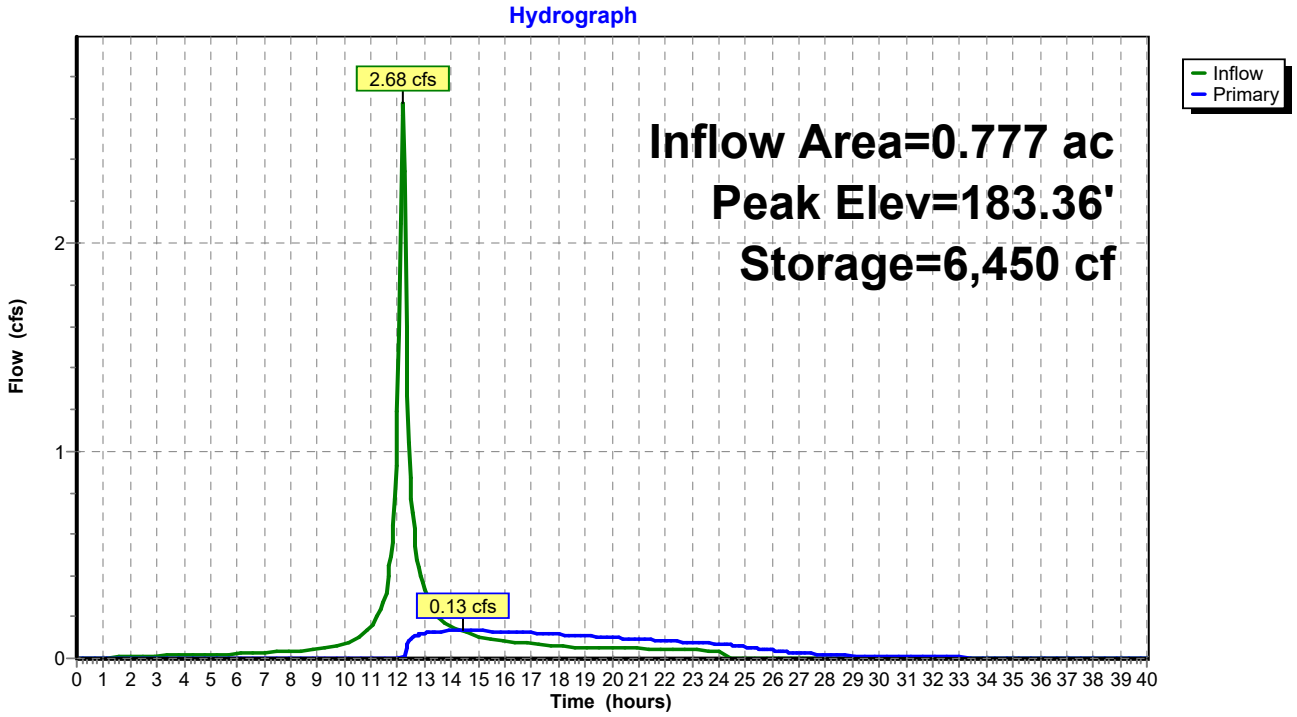
Volume	Invert	Avail.Storage	Storage Description
#1	180.96'	22,293 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.96	0	0	0
181.00	2,142	43	43
182.00	2,613	2,378	2,420
183.00	3,118	2,866	5,286
184.00	3,656	3,387	8,673
185.00	4,227	3,942	12,614
186.00	4,831	4,529	17,143
187.00	5,468	5,150	22,293

Device	Routing	Invert	Outlet Devices
#1	Primary	181.96'	**18.0" Round Culvert** L= 192.0' Ke= 0.500 Inlet / Outlet Invert= 181.96' / 181.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	182.60'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.01'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.13 cfs @ 14.45 hrs HW=183.36' (Free Discharge)
- **1=Culvert** (Passes 0.13 cfs of 5.86 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.91 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-42: Basin #42



Stage-Discharge for Pond B-42: Basin #42

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
180.96	0.00	181.48	0.00	182.00	0.00	182.52	0.00
180.97	0.00	181.49	0.00	182.01	0.00	182.53	0.00
180.98	0.00	181.50	0.00	182.02	0.00	182.54	0.00
180.99	0.00	181.51	0.00	182.03	0.00	182.55	0.00
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.01
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.01
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.01
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.01
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.02
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.02
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.02
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.03
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.03
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.03
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.04
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.04
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.05
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.05
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.05
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.05
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.06
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.06
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.06
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.06
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.06
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.07
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.07
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.07
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.07
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.07
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.08
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.08
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.08
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.08
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.08
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.08
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.09
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.09
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.09
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.09
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.09
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.09

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.04	0.10	183.56	0.15	184.08	0.43	184.60	5.98
183.05	0.10	183.57	0.15	184.09	0.49	184.61	6.12
183.06	0.10	183.58	0.15	184.10	0.55	184.62	6.27
183.07	0.10	183.59	0.15	184.11	0.61	184.63	6.42
183.08	0.10	183.60	0.16	184.12	0.67	184.64	6.56
183.09	0.10	183.61	0.16	184.13	0.74	184.65	6.71
183.10	0.10	183.62	0.16	184.14	0.81	184.66	6.86
183.11	0.10	183.63	0.16	184.15	0.88	184.67	7.01
183.12	0.11	183.64	0.16	184.16	0.95	184.68	7.16
183.13	0.11	183.65	0.16	184.17	1.03	184.69	7.32
183.14	0.11	183.66	0.16	184.18	1.11	184.70	7.47
183.15	0.11	183.67	0.16	184.19	1.19	184.71	7.62
183.16	0.11	183.68	0.16	184.20	1.27	184.72	7.78
183.17	0.11	183.69	0.16	184.21	1.36	184.73	7.94
183.18	0.11	183.70	0.16	184.22	1.45	184.74	8.09
183.19	0.11	183.71	0.16	184.23	1.54	184.75	8.25
183.20	0.12	183.72	0.17	184.24	1.63	184.76	8.41
183.21	0.12	183.73	0.17	184.25	1.72	184.77	8.57
183.22	0.12	183.74	0.17	184.26	1.82	184.78	8.73
183.23	0.12	183.75	0.17	184.27	1.92	184.79	8.90
183.24	0.12	183.76	0.17	184.28	2.02	184.80	9.06
183.25	0.12	183.77	0.17	184.29	2.12	184.81	9.22
183.26	0.12	183.78	0.17	184.30	2.22	184.82	9.39
183.27	0.12	183.79	0.17	184.31	2.33	184.83	9.55
183.28	0.12	183.80	0.17	184.32	2.43	184.84	9.69
183.29	0.13	183.81	0.17	184.33	2.54	184.85	9.71
183.30	0.13	183.82	0.17	184.34	2.65	184.86	9.73
183.31	0.13	183.83	0.17	184.35	2.76	184.87	9.75
183.32	0.13	183.84	0.17	184.36	2.87	184.88	9.77
183.33	0.13	183.85	0.18	184.37	2.99	184.89	9.79
183.34	0.13	183.86	0.18	184.38	3.10	184.90	9.81
183.35	0.13	183.87	0.18	184.39	3.22	184.91	9.83
183.36	0.13	183.88	0.18	184.40	3.34	184.92	9.85
183.37	0.13	183.89	0.18	184.41	3.46	184.93	9.88
183.38	0.13	183.90	0.18	184.42	3.58	184.94	9.90
183.39	0.14	183.91	0.18	184.43	3.70	184.95	9.92
183.40	0.14	183.92	0.18	184.44	3.83	184.96	9.94
183.41	0.14	183.93	0.18	184.45	3.95	184.97	9.96
183.42	0.14	183.94	0.18	184.46	4.08	184.98	9.98
183.43	0.14	183.95	0.18	184.47	4.21	184.99	10.00
183.44	0.14	183.96	0.18	184.48	4.33	185.00	10.02
183.45	0.14	183.97	0.18	184.49	4.46	185.01	10.04
183.46	0.14	183.98	0.19	184.50	4.60	185.02	10.06
183.47	0.14	183.99	0.19	184.51	4.73	185.03	10.08
183.48	0.14	184.00	0.19	184.52	4.86	185.04	10.10
183.49	0.15	184.01	0.19	184.53	5.00	185.05	10.12
183.50	0.15	184.02	0.20	184.54	5.14	185.06	10.14
183.51	0.15	184.03	0.23	184.55	5.27	185.07	10.16
183.52	0.15	184.04	0.26	184.56	5.41	185.08	10.18
183.53	0.15	184.05	0.29	184.57	5.55	185.09	10.20
183.54	0.15	184.06	0.34	184.58	5.69	185.10	10.21
183.55	0.15	184.07	0.38	184.59	5.84	185.11	10.23

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.12	10.25	185.64	11.23	186.16	20.39	186.68	92.62
185.13	10.27	185.65	11.24	186.17	21.15	186.69	94.39
185.14	10.29	185.66	11.26	186.18	21.93	186.70	96.16
185.15	10.31	185.67	11.28	186.19	22.73	186.71	97.95
185.16	10.33	185.68	11.30	186.20	23.60	186.72	99.75
185.17	10.35	185.69	11.31	186.21	24.49	186.73	101.56
185.18	10.37	185.70	11.33	186.22	25.40	186.74	103.38
185.19	10.39	185.71	11.35	186.23	26.34	186.75	105.22
185.20	10.41	185.72	11.37	186.24	27.30	186.76	107.07
185.21	10.43	185.73	11.39	186.25	28.29	186.77	108.93
185.22	10.45	185.74	11.40	186.26	29.31	186.78	110.80
185.23	10.47	185.75	11.42	186.27	30.35	186.79	112.69
185.24	10.49	185.76	11.44	186.28	31.41	186.80	114.62
185.25	10.51	185.77	11.46	186.29	32.50	186.81	116.57
185.26	10.52	185.78	11.47	186.30	33.61	186.82	118.53
185.27	10.54	185.79	11.49	186.31	34.75	186.83	120.50
185.28	10.56	185.80	11.51	186.32	35.91	186.84	122.49
185.29	10.58	185.81	11.53	186.33	37.10	186.85	124.49
185.30	10.60	185.82	11.54	186.34	38.31	186.86	126.51
185.31	10.62	185.83	11.56	186.35	39.54	186.87	128.53
185.32	10.64	185.84	11.58	186.36	40.80	186.88	130.57
185.33	10.66	185.85	11.59	186.37	42.09	186.89	132.63
185.34	10.68	185.86	11.61	186.38	43.39	186.90	134.69
185.35	10.69	185.87	11.63	186.39	44.72	186.91	136.77
185.36	10.71	185.88	11.65	186.40	46.11	186.92	138.86
185.37	10.73	185.89	11.66	186.41	47.51	186.93	140.97
185.38	10.75	185.90	11.68	186.42	48.95	186.94	143.08
185.39	10.77	185.91	11.70	186.43	50.41	186.95	145.21
185.40	10.79	185.92	11.72	186.44	51.89	186.96	147.35
185.41	10.81	185.93	11.73	186.45	53.41	186.97	149.51
185.42	10.83	185.94	11.75	186.46	54.95	186.98	151.68
185.43	10.84	185.95	11.77	186.47	56.51	186.99	153.86
185.44	10.86	185.96	11.78	186.48	58.10	187.00	**155.99**
185.45	10.88	185.97	11.80	186.49	59.72		
185.46	10.90	185.98	11.82	186.50	61.36		
185.47	10.92	185.99	11.83	186.51	63.03		
185.48	10.94	186.00	11.97	186.52	64.73		
185.49	10.95	186.01	12.20	186.53	66.45		
185.50	10.97	186.02	12.49	186.54	68.21		
185.51	10.99	186.03	12.84	186.55	69.98		
185.52	11.01	186.04	13.23	186.56	71.79		
185.53	11.03	186.05	13.66	186.57	73.62		
185.54	11.05	186.06	14.13	186.58	75.48		
185.55	11.06	186.07	14.63	186.59	77.36		
185.56	11.08	186.08	15.16	186.60	79.00		
185.57	11.10	186.09	15.72	186.61	80.66		
185.58	11.12	186.10	16.31	186.62	82.33		
185.59	11.14	186.11	16.93	186.63	84.01		
185.60	11.15	186.12	17.57	186.64	85.71		
185.61	11.17	186.13	18.24	186.65	87.42		
185.62	11.19	186.14	18.93	186.66	89.14		
185.63	11.21	186.15	19.65	186.67	90.88		

Stage-Area-Storage for Pond B-42: Basin #42

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.96	0	0
180.97	535	3
180.98	1,071	11
180.99	1,607	24
181.00	2,142	43
181.01	2,147	64
181.02	2,151	86
181.03	2,156	107
181.04	2,161	129
181.05	2,166	151
181.06	2,170	172
181.07	2,175	194
181.08	2,180	216
181.09	2,184	238
181.10	2,189	259
181.11	2,194	281
181.12	2,199	303
181.13	2,203	325
181.14	2,208	347
181.15	2,213	369
181.16	2,217	392
181.17	2,222	414
181.18	2,227	436
181.19	2,231	458
181.20	2,236	481
181.21	2,241	503
181.22	2,246	525
181.23	2,250	548
181.24	2,255	570
181.25	2,260	593
181.26	2,264	616
181.27	2,269	638
181.28	2,274	661
181.29	2,279	684
181.30	2,283	707
181.31	2,288	729
181.32	2,293	752
181.33	2,297	775
181.34	2,302	798
181.35	2,307	821
181.36	2,312	844
181.37	2,316	868
181.38	2,321	891
181.39	2,326	914
181.40	2,330	937
181.41	2,335	961
181.42	2,340	984
181.43	2,345	1,007
181.44	2,349	1,031
181.45	2,354	1,054
181.46	2,359	1,078
181.47	2,363	1,102
181.48	2,368	1,125
181.49	2,373	1,149
181.50	2,378	1,173
181.51	2,382	1,197
181.52	2,387	1,220
181.53	2,392	1,244
181.54	2,396	1,268
181.55	2,401	1,292
181.56	2,406	1,316
181.57	2,410	1,340
181.58	2,415	1,364
181.59	2,420	1,389
181.60	2,425	1,413
181.61	2,429	1,437
181.62	2,434	1,461
181.63	2,439	1,486
181.64	2,443	1,510
181.65	2,448	1,535
181.66	2,453	1,559
181.67	2,458	1,584
181.68	2,462	1,608
181.69	2,467	1,633
181.70	2,472	1,658
181.71	2,476	1,682
181.72	2,481	1,707
181.73	2,486	1,732
181.74	2,491	1,757
181.75	2,495	1,782
181.76	2,500	1,807
181.77	2,505	1,832
181.78	2,509	1,857
181.79	2,514	1,882
181.80	2,519	1,907
181.81	2,524	1,932
181.82	2,528	1,958
181.83	2,533	1,983
181.84	2,538	2,008
181.85	2,542	2,034
181.86	2,547	2,059
181.87	2,552	2,085
181.88	2,556	2,110
181.89	2,561	2,136
181.90	2,566	2,161
181.91	2,571	2,187
181.92	2,575	2,213
181.93	2,580	2,239
181.94	2,585	2,264
181.95	2,589	2,290
181.96	2,594	2,316
181.97	2,599	2,342
181.98	2,604	2,368
181.99	2,608	2,394

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.00	2,613	2,420	182.52	2,876	3,847
182.01	2,618	2,446	182.53	2,881	3,876
182.02	2,623	2,473	182.54	2,886	3,905
182.03	2,628	2,499	182.55	2,891	3,934
182.04	2,633	2,525	182.56	2,896	3,963
182.05	2,638	2,552	182.57	2,901	3,992
182.06	2,643	2,578	182.58	2,906	4,021
182.07	2,648	2,604	182.59	2,911	4,050
182.08	2,653	2,631	182.60	2,916	4,079
182.09	2,658	2,658	182.61	2,921	4,108
182.10	2,663	2,684	182.62	2,926	4,137
182.11	2,669	2,711	182.63	2,931	4,167
182.12	2,674	2,738	182.64	2,936	4,196
182.13	2,679	2,764	182.65	2,941	4,225
182.14	2,684	2,791	182.66	2,946	4,255
182.15	2,689	2,818	182.67	2,951	4,284
182.16	2,694	2,845	182.68	2,956	4,314
182.17	2,699	2,872	182.69	2,961	4,344
182.18	2,704	2,899	182.70	2,967	4,373
182.19	2,709	2,926	182.71	2,972	4,403
182.20	2,714	2,953	182.72	2,977	4,433
182.21	2,719	2,980	182.73	2,982	4,462
182.22	2,724	3,007	182.74	2,987	4,492
182.23	2,729	3,035	182.75	2,992	4,522
182.24	2,734	3,062	182.76	2,997	4,552
182.25	2,739	3,089	182.77	3,002	4,582
182.26	2,744	3,117	182.78	3,007	4,612
182.27	2,749	3,144	182.79	3,012	4,642
182.28	2,754	3,172	182.80	3,017	4,672
182.29	2,759	3,199	182.81	3,022	4,703
182.30	2,765	3,227	182.82	3,027	4,733
182.31	2,770	3,255	182.83	3,032	4,763
182.32	2,775	3,282	182.84	3,037	4,793
182.33	2,780	3,310	182.85	3,042	4,824
182.34	2,785	3,338	182.86	3,047	4,854
182.35	2,790	3,366	182.87	3,052	4,885
182.36	2,795	3,394	182.88	3,057	4,915
182.37	2,800	3,422	182.89	3,062	4,946
182.38	2,805	3,450	182.90	3,068	4,977
182.39	2,810	3,478	182.91	3,073	5,007
182.40	2,815	3,506	182.92	3,078	5,038
182.41	2,820	3,534	182.93	3,083	5,069
182.42	2,825	3,562	182.94	3,088	5,100
182.43	2,830	3,591	182.95	3,093	5,131
182.44	2,835	3,619	182.96	3,098	5,162
182.45	2,840	3,647	182.97	3,103	5,193
182.46	2,845	3,676	182.98	3,108	5,224
182.47	2,850	3,704	182.99	3,113	5,255
182.48	2,855	3,733	183.00	3,118	5,286
182.49	2,860	3,761	183.01	3,123	5,317
182.50	2,866	3,790	183.02	3,129	5,348
182.51	2,871	3,819	183.03	3,134	5,380

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.04	3,140	5,411	183.56	3,419	7,116
183.05	3,145	5,442	183.57	3,425	7,150
183.06	3,150	5,474	183.58	3,430	7,185
183.07	3,156	5,505	183.59	3,435	7,219
183.08	3,161	5,537	183.60	3,441	7,253
183.09	3,166	5,569	183.61	3,446	7,288
183.10	3,172	5,600	183.62	3,452	7,322
183.11	3,177	5,632	183.63	3,457	7,357
183.12	3,183	5,664	183.64	3,462	7,392
183.13	3,188	5,696	183.65	3,468	7,426
183.14	3,193	5,728	183.66	3,473	7,461
183.15	3,199	5,760	183.67	3,478	7,496
183.16	3,204	5,792	183.68	3,484	7,530
183.17	3,209	5,824	183.69	3,489	7,565
183.18	3,215	5,856	183.70	3,495	7,600
183.19	3,220	5,888	183.71	3,500	7,635
183.20	3,226	5,920	183.72	3,505	7,670
183.21	3,231	5,952	183.73	3,511	7,705
183.22	3,236	5,985	183.74	3,516	7,740
183.23	3,242	6,017	183.75	3,522	7,776
183.24	3,247	6,050	183.76	3,527	7,811
183.25	3,253	6,082	183.77	3,532	7,846
183.26	3,258	6,115	183.78	3,538	7,882
183.27	3,263	6,147	183.79	3,543	7,917
183.28	3,269	6,180	183.80	3,548	7,952
183.29	3,274	6,213	183.81	3,554	7,988
183.30	3,279	6,245	183.82	3,559	8,023
183.31	3,285	6,278	183.83	3,565	8,059
183.32	3,290	6,311	183.84	3,570	8,095
183.33	3,296	6,344	183.85	3,575	8,130
183.34	3,301	6,377	183.86	3,581	8,166
183.35	3,306	6,410	183.87	3,586	8,202
183.36	3,312	6,443	183.88	3,591	8,238
183.37	3,317	6,476	183.89	3,597	8,274
183.38	3,322	6,510	183.90	3,602	8,310
183.39	3,328	6,543	183.91	3,608	8,346
183.40	3,333	6,576	183.92	3,613	8,382
183.41	3,339	6,609	183.93	3,618	8,418
183.42	3,344	6,643	183.94	3,624	8,454
183.43	3,349	6,676	183.95	3,629	8,491
183.44	3,355	6,710	183.96	3,634	8,527
183.45	3,360	6,743	183.97	3,640	8,563
183.46	3,365	6,777	183.98	3,645	8,600
183.47	3,371	6,811	183.99	3,651	8,636
183.48	3,376	6,844	184.00	3,656	8,673
183.49	3,382	6,878	184.01	3,662	8,709
183.50	3,387	6,912	184.02	3,667	8,746
183.51	3,392	6,946	184.03	3,673	8,783
183.52	3,398	6,980	184.04	3,679	8,820
183.53	3,403	7,014	184.05	3,685	8,856
183.54	3,409	7,048	184.06	3,690	8,893
183.55	3,414	7,082	184.07	3,696	8,930

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.08	3,702	8,967	184.60	3,999	10,969
184.09	3,707	9,004	184.61	4,004	11,009
184.10	3,713	9,041	184.62	4,010	11,049
184.11	3,719	9,078	184.63	4,016	11,089
184.12	3,725	9,116	184.64	4,021	11,130
184.13	3,730	9,153	184.65	4,027	11,170
184.14	3,736	9,190	184.66	4,033	11,210
184.15	3,742	9,228	184.67	4,039	11,251
184.16	3,747	9,265	184.68	4,044	11,291
184.17	3,753	9,303	184.69	4,050	11,331
184.18	3,759	9,340	184.70	4,056	11,372
184.19	3,764	9,378	184.71	4,061	11,413
184.20	3,770	9,415	184.72	4,067	11,453
184.21	3,776	9,453	184.73	4,073	11,494
184.22	3,782	9,491	184.74	4,079	11,535
184.23	3,787	9,529	184.75	4,084	11,575
184.24	3,793	9,567	184.76	4,090	11,616
184.25	3,799	9,605	184.77	4,096	11,657
184.26	3,804	9,643	184.78	4,101	11,698
184.27	3,810	9,681	184.79	4,107	11,739
184.28	3,816	9,719	184.80	4,113	11,780
184.29	3,822	9,757	184.81	4,119	11,822
184.30	3,827	9,795	184.82	4,124	11,863
184.31	3,833	9,834	184.83	4,130	11,904
184.32	3,839	9,872	184.84	4,136	11,945
184.33	3,844	9,910	184.85	4,141	11,987
184.34	3,850	9,949	184.86	4,147	12,028
184.35	3,856	9,987	184.87	4,153	12,070
184.36	3,862	10,026	184.88	4,158	12,111
184.37	3,867	10,065	184.89	4,164	12,153
184.38	3,873	10,103	184.90	4,170	12,194
184.39	3,879	10,142	184.91	4,176	12,236
184.40	3,884	10,181	184.92	4,181	12,278
184.41	3,890	10,220	184.93	4,187	12,320
184.42	3,896	10,259	184.94	4,193	12,362
184.43	3,902	10,298	184.95	4,198	12,404
184.44	3,907	10,337	184.96	4,204	12,446
184.45	3,913	10,376	184.97	4,210	12,488
184.46	3,919	10,415	184.98	4,216	12,530
184.47	3,924	10,454	184.99	4,221	12,572
184.48	3,930	10,493	185.00	4,227	12,614
184.49	3,936	10,533	185.01	4,233	12,657
184.50	3,942	10,572	185.02	4,239	12,699
184.51	3,947	10,612	185.03	4,245	12,741
184.52	3,953	10,651	185.04	4,251	12,784
184.53	3,959	10,691	185.05	4,257	12,826
184.54	3,964	10,730	185.06	4,263	12,869
184.55	3,970	10,770	185.07	4,269	12,912
184.56	3,976	10,810	185.08	4,275	12,954
184.57	3,981	10,850	185.09	4,281	12,997
184.58	3,987	10,889	185.10	4,287	13,040
184.59	3,993	10,929	185.11	4,293	13,083

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.12	4,299	13,126	185.64	4,614	15,443
185.13	4,306	13,169	185.65	4,620	15,489
185.14	4,312	13,212	185.66	4,626	15,536
185.15	4,318	13,255	185.67	4,632	15,582
185.16	4,324	13,298	185.68	4,638	15,628
185.17	4,330	13,342	185.69	4,644	15,675
185.18	4,336	13,385	185.70	4,650	15,721
185.19	4,342	13,428	185.71	4,656	15,768
185.20	4,348	13,472	185.72	4,662	15,814
185.21	4,354	13,515	185.73	4,668	15,861
185.22	4,360	13,559	185.74	4,674	15,908
185.23	4,366	13,603	185.75	4,680	15,954
185.24	4,372	13,646	185.76	4,686	16,001
185.25	4,378	13,690	185.77	4,692	16,048
185.26	4,384	13,734	185.78	4,698	16,095
185.27	4,390	13,778	185.79	4,704	16,142
185.28	4,396	13,822	185.80	4,710	16,189
185.29	4,402	13,866	185.81	4,716	16,236
185.30	4,408	13,910	185.82	4,722	16,284
185.31	4,414	13,954	185.83	4,728	16,331
185.32	4,420	13,998	185.84	4,734	16,378
185.33	4,426	14,042	185.85	4,740	16,425
185.34	4,432	14,086	185.86	4,746	16,473
185.35	4,438	14,131	185.87	4,752	16,520
185.36	4,444	14,175	185.88	4,759	16,568
185.37	4,450	14,220	185.89	4,765	16,616
185.38	4,457	14,264	185.90	4,771	16,663
185.39	4,463	14,309	185.91	4,777	16,711
185.40	4,469	14,353	185.92	4,783	16,759
185.41	4,475	14,398	185.93	4,789	16,807
185.42	4,481	14,443	185.94	4,795	16,855
185.43	4,487	14,488	185.95	4,801	16,903
185.44	4,493	14,533	185.96	4,807	16,951
185.45	4,499	14,578	185.97	4,813	16,999
185.46	4,505	14,623	185.98	4,819	17,047
185.47	4,511	14,668	185.99	4,825	17,095
185.48	4,517	14,713	186.00	4,831	17,143
185.49	4,523	14,758	186.01	4,837	17,192
185.50	4,529	14,803	186.02	4,844	17,240
185.51	4,535	14,849	186.03	4,850	17,289
185.52	4,541	14,894	186.04	4,856	17,337
185.53	4,547	14,939	186.05	4,863	17,386
185.54	4,553	14,985	186.06	4,869	17,434
185.55	4,559	15,031	186.07	4,876	17,483
185.56	4,565	15,076	186.08	4,882	17,532
185.57	4,571	15,122	186.09	4,888	17,581
185.58	4,577	15,168	186.10	4,895	17,630
185.59	4,583	15,213	186.11	4,901	17,679
185.60	4,589	15,259	186.12	4,907	17,728
185.61	4,595	15,305	186.13	4,914	17,777
185.62	4,601	15,351	186.14	4,920	17,826
185.63	4,608	15,397	186.15	4,927	17,875

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.16	4,933	17,924
186.17	4,939	17,974
186.18	4,946	18,023
186.19	4,952	18,073
186.20	4,958	18,122
186.21	4,965	18,172
186.22	4,971	18,222
186.23	4,978	18,271
186.24	4,984	18,321
186.25	4,990	18,371
186.26	4,997	18,421
186.27	5,003	18,471
186.28	5,009	18,521
186.29	5,016	18,571
186.30	5,022	18,621
186.31	5,028	18,672
186.32	5,035	18,722
186.33	5,041	18,772
186.34	5,048	18,823
186.35	5,054	18,873
186.36	5,060	18,924
186.37	5,067	18,974
186.38	5,073	19,025
186.39	5,079	19,076
186.40	5,086	19,127
186.41	5,092	19,178
186.42	5,099	19,229
186.43	5,105	19,280
186.44	5,111	19,331
186.45	5,118	19,382
186.46	5,124	19,433
186.47	5,130	19,484
186.48	5,137	19,536
186.49	5,143	19,587
186.50	5,150	19,638
186.51	5,156	19,690
186.52	5,162	19,742
186.53	5,169	19,793
186.54	5,175	19,845
186.55	5,181	19,897
186.56	5,188	19,949
186.57	5,194	20,000
186.58	5,200	20,052
186.59	5,207	20,104
186.60	5,213	20,157
186.61	5,220	20,209
186.62	5,226	20,261
186.63	5,232	20,313
186.64	5,239	20,366
186.65	5,245	20,418
186.66	5,251	20,471
186.67	5,258	20,523
186.68	5,264	20,576
186.69	5,271	20,628
186.70	5,277	20,681
186.71	5,283	20,734
186.72	5,290	20,787
186.73	5,296	20,840
186.74	5,302	20,893
186.75	5,309	20,946
186.76	5,315	20,999
186.77	5,321	21,052
186.78	5,328	21,105
186.79	5,334	21,159
186.80	5,341	21,212
186.81	5,347	21,265
186.82	5,353	21,319
186.83	5,360	21,372
186.84	5,366	21,426
186.85	5,372	21,480
186.86	5,379	21,534
186.87	5,385	21,587
186.88	5,392	21,641
186.89	5,398	21,695
186.90	5,404	21,749
186.91	5,411	21,803
186.92	5,417	21,857
186.93	5,423	21,912
186.94	5,430	21,966
186.95	5,436	22,020
186.96	5,443	22,075
186.97	5,449	22,129
186.98	5,455	22,184
186.99	5,462	22,238
187.00	**5,468**	**22,293**

Summary for Pond B-43: Basin #43

Inflow Area = 2.712 ac, 33.89% Impervious, Inflow Depth = 3.26" for Current 10 yr event
Inflow = 9.11 cfs @ 12.17 hrs, Volume= 0.738 af
Outflow = 5.57 cfs @ 12.31 hrs, Volume= 0.626 af, Atten= 39%, Lag= 7.9 min
Primary = 5.57 cfs @ 12.31 hrs, Volume= 0.626 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.14' @ 12.31 hrs Surf.Area= 6,331 sf Storage= 12,956 cf

Plug-Flow detention time= 306.4 min calculated for 0.626 af (85% of inflow)
Center-of-Mass det. time= 238.0 min (1,035.5 - 797.4)

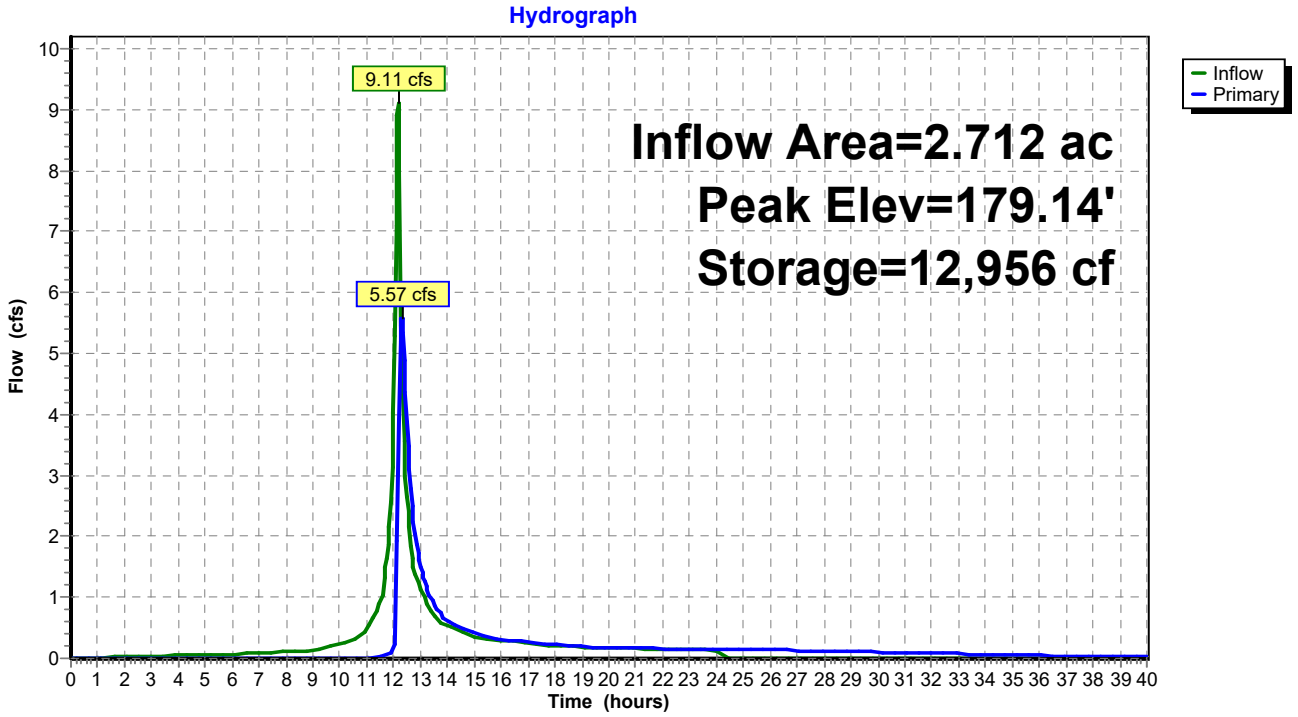
Volume	Invert	Avail.Storage	Storage Description
#1	176.35'	26,392 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
176.35	0	0	0
177.00	4,447	1,445	1,445
178.00	5,292	4,870	6,315
179.00	6,194	5,743	12,058
180.00	7,153	6,674	18,731
181.00	8,168	7,661	26,392

Device	Routing	Invert	Outlet Devices
#1	Primary	176.30'	**18.0" Round Culvert** L= 200.0' Ke= 0.500 Inlet / Outlet Invert= 176.30' / 166.10' S= 0.0510 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	177.62'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	178.58'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.00'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.54 cfs @ 12.31 hrs HW=179.14' (Free Discharge)
- **1=Culvert** (Passes 5.54 cfs of 12.30 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.73 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 5.35 cfs @ 2.45 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-43: Basin #43



Stage-Discharge for Pond B-43: Basin #43

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
176.35	0.00	176.87	0.00	177.39	0.00	177.91	0.07
176.36	0.00	176.88	0.00	177.40	0.00	177.92	0.07
176.37	0.00	176.89	0.00	177.41	0.00	177.93	0.07
176.38	0.00	176.90	0.00	177.42	0.00	177.94	0.08
176.39	0.00	176.91	0.00	177.43	0.00	177.95	0.08
176.40	0.00	176.92	0.00	177.44	0.00	177.96	0.08
176.41	0.00	176.93	0.00	177.45	0.00	177.97	0.08
176.42	0.00	176.94	0.00	177.46	0.00	177.98	0.08
176.43	0.00	176.95	0.00	177.47	0.00	177.99	0.08
176.44	0.00	176.96	0.00	177.48	0.00	178.00	0.09
176.45	0.00	176.97	0.00	177.49	0.00	178.01	0.09
176.46	0.00	176.98	0.00	177.50	0.00	178.02	0.09
176.47	0.00	176.99	0.00	177.51	0.00	178.03	0.09
176.48	0.00	177.00	0.00	177.52	0.00	178.04	0.09
176.49	0.00	177.01	0.00	177.53	0.00	178.05	0.09
176.50	0.00	177.02	0.00	177.54	0.00	178.06	0.10
176.51	0.00	177.03	0.00	177.55	0.00	178.07	0.10
176.52	0.00	177.04	0.00	177.56	0.00	178.08	0.10
176.53	0.00	177.05	0.00	177.57	0.00	178.09	0.10
176.54	0.00	177.06	0.00	177.58	0.00	178.10	0.10
176.55	0.00	177.07	0.00	177.59	0.00	178.11	0.10
176.56	0.00	177.08	0.00	177.60	0.00	178.12	0.10
176.57	0.00	177.09	0.00	177.61	0.00	178.13	0.10
176.58	0.00	177.10	0.00	177.62	0.00	178.14	0.11
176.59	0.00	177.11	0.00	177.63	0.00	178.15	0.11
176.60	0.00	177.12	0.00	177.64	0.00	178.16	0.11
176.61	0.00	177.13	0.00	177.65	0.00	178.17	0.11
176.62	0.00	177.14	0.00	177.66	0.00	178.18	0.11
176.63	0.00	177.15	0.00	177.67	0.00	178.19	0.11
176.64	0.00	177.16	0.00	177.68	0.01	178.20	0.11
176.65	0.00	177.17	0.00	177.69	0.01	178.21	0.11
176.66	0.00	177.18	0.00	177.70	0.01	178.22	0.12
176.67	0.00	177.19	0.00	177.71	0.01	178.23	0.12
176.68	0.00	177.20	0.00	177.72	0.02	178.24	0.12
176.69	0.00	177.21	0.00	177.73	0.02	178.25	0.12
176.70	0.00	177.22	0.00	177.74	0.02	178.26	0.12
176.71	0.00	177.23	0.00	177.75	0.03	178.27	0.12
176.72	0.00	177.24	0.00	177.76	0.03	178.28	0.12
176.73	0.00	177.25	0.00	177.77	0.03	178.29	0.12
176.74	0.00	177.26	0.00	177.78	0.04	178.30	0.12
176.75	0.00	177.27	0.00	177.79	0.04	178.31	0.13
176.76	0.00	177.28	0.00	177.80	0.05	178.32	0.13
176.77	0.00	177.29	0.00	177.81	0.05	178.33	0.13
176.78	0.00	177.30	0.00	177.82	0.05	178.34	0.13
176.79	0.00	177.31	0.00	177.83	0.05	178.35	0.13
176.80	0.00	177.32	0.00	177.84	0.06	178.36	0.13
176.81	0.00	177.33	0.00	177.85	0.06	178.37	0.13
176.82	0.00	177.34	0.00	177.86	0.06	178.38	0.13
176.83	0.00	177.35	0.00	177.87	0.06	178.39	0.13
176.84	0.00	177.36	0.00	177.88	0.06	178.40	0.13
176.85	0.00	177.37	0.00	177.89	0.07	178.41	0.14
176.86	0.00	177.38	0.00	177.90	0.07	178.42	0.14

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.43	0.14	178.95	3.07	179.47	10.71	179.99	14.59
178.44	0.14	178.96	3.19	179.48	10.88	180.00	14.61
178.45	0.14	178.97	3.31	179.49	11.06	180.01	14.76
178.46	0.14	178.98	3.43	179.50	11.23	180.02	14.99
178.47	0.14	178.99	3.55	179.51	11.40	180.03	15.30
178.48	0.14	179.00	3.67	179.52	11.58	180.04	15.65
178.49	0.14	179.01	3.79	179.53	11.76	180.05	16.05
178.50	0.14	179.02	3.92	179.54	11.93	180.06	16.49
178.51	0.15	179.03	4.05	179.55	12.11	180.07	16.96
178.52	0.15	179.04	4.18	179.56	12.29	180.08	17.47
178.53	0.15	179.05	4.30	179.57	12.47	180.09	18.01
178.54	0.15	179.06	4.44	179.58	12.65	180.10	18.58
178.55	0.15	179.07	4.57	179.59	12.83	180.11	19.18
178.56	0.15	179.08	4.70	179.60	13.01	180.12	19.80
178.57	0.15	179.09	4.83	179.61	13.19	180.13	20.45
178.58	0.15	179.10	4.97	179.62	13.38	180.14	21.13
178.59	0.17	179.11	5.11	179.63	13.56	180.15	21.83
178.60	0.19	179.12	5.24	179.64	13.69	180.16	22.55
178.61	0.22	179.13	5.38	179.65	13.72	180.17	23.30
178.62	0.26	179.14	5.52	179.66	13.75	180.18	24.07
178.63	0.30	179.15	5.66	179.67	13.77	180.19	24.86
178.64	0.35	179.16	5.81	179.68	13.80	180.20	25.67
178.65	0.40	179.17	5.95	179.69	13.83	180.21	26.54
178.66	0.45	179.18	6.09	179.70	13.85	180.22	27.43
178.67	0.51	179.19	6.24	179.71	13.88	180.23	28.36
178.68	0.57	179.20	6.39	179.72	13.90	180.24	29.30
178.69	0.64	179.21	6.53	179.73	13.93	180.25	30.27
178.70	0.70	179.22	6.68	179.74	13.96	180.26	31.27
178.71	0.77	179.23	6.83	179.75	13.98	180.27	32.29
178.72	0.84	179.24	6.98	179.76	14.01	180.28	33.34
178.73	0.92	179.25	7.14	179.77	14.03	180.29	34.41
178.74	1.00	179.26	7.29	179.78	14.06	180.30	35.51
178.75	1.08	179.27	7.44	179.79	14.08	180.31	36.63
178.76	1.16	179.28	7.60	179.80	14.11	180.32	37.77
178.77	1.24	179.29	7.75	179.81	14.14	180.33	38.94
178.78	1.33	179.30	7.91	179.82	14.16	180.34	40.14
178.79	1.41	179.31	8.07	179.83	14.19	180.35	41.35
178.80	1.51	179.32	8.23	179.84	14.21	180.36	42.60
178.81	1.60	179.33	8.39	179.85	14.24	180.37	43.86
178.82	1.69	179.34	8.55	179.86	14.26	180.38	45.15
178.83	1.79	179.35	8.71	179.87	14.29	180.39	46.47
178.84	1.88	179.36	8.87	179.88	14.31	180.40	47.80
178.85	1.98	179.37	9.03	179.89	14.34	180.41	49.19
178.86	2.09	179.38	9.20	179.90	14.36	180.42	50.61
178.87	2.19	179.39	9.36	179.91	14.39	180.43	52.05
178.88	2.29	179.40	9.53	179.92	14.41	180.44	53.52
178.89	2.40	179.41	9.69	179.93	14.44	180.45	55.01
178.90	2.51	179.42	9.86	179.94	14.46	180.46	56.53
178.91	2.62	179.43	10.03	179.95	14.49	180.47	58.07
178.92	2.73	179.44	10.20	179.96	14.51	180.48	59.65
178.93	2.84	179.45	10.37	179.97	14.54	180.49	61.24
178.94	2.96	179.46	10.54	179.98	14.56	180.50	62.87

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)
180.51	64.52
180.52	66.20
180.53	67.90
180.54	69.63
180.55	71.39
180.56	73.18
180.57	74.99
180.58	76.82
180.59	78.69
180.60	80.58
180.61	82.23
180.62	83.89
180.63	85.57
180.64	87.26
180.65	88.96
180.66	90.68
180.67	92.41
180.68	94.15
180.69	95.91
180.70	97.67
180.71	99.46
180.72	101.25
180.73	103.05
180.74	104.87
180.75	106.70
180.76	108.55
180.77	110.40
180.78	112.27
180.79	114.15
180.80	116.04
180.81	117.98
180.82	119.94
180.83	121.91
180.84	123.89
180.85	125.88
180.86	127.89
180.87	129.91
180.88	131.94
180.89	133.99
180.90	136.05
180.91	138.12
180.92	140.21
180.93	142.30
180.94	144.41
180.95	146.54
180.96	148.67
180.97	150.82
180.98	152.98
180.99	155.16
181.00	**157.34**

Stage-Area-Storage for Pond B-43: Basin #43

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.35	0	0	176.87	3,558	925
176.36	68	0	176.88	3,626	961
176.37	137	1	176.89	3,694	997
176.38	205	3	176.90	3,763	1,035
176.39	274	5	176.91	3,831	1,073
176.40	342	9	176.92	3,900	1,111
176.41	410	12	176.93	3,968	1,151
176.42	479	17	176.94	4,037	1,191
176.43	547	22	176.95	4,105	1,231
176.44	616	28	176.96	4,173	1,273
176.45	684	34	176.97	4,242	1,315
176.46	753	41	176.98	4,310	1,358
176.47	821	49	176.99	4,379	1,401
176.48	889	58	177.00	4,447	1,445
176.49	958	67	177.01	4,455	1,490
176.50	1,026	77	177.02	4,464	1,534
176.51	1,095	88	177.03	4,472	1,579
176.52	1,163	99	177.04	4,481	1,624
176.53	1,231	111	177.05	4,489	1,669
176.54	1,300	123	177.06	4,498	1,714
176.55	1,368	137	177.07	4,506	1,759
176.56	1,437	151	177.08	4,515	1,804
176.57	1,505	166	177.09	4,523	1,849
176.58	1,574	181	177.10	4,531	1,894
176.59	1,642	197	177.11	4,540	1,940
176.60	1,710	214	177.12	4,548	1,985
176.61	1,779	231	177.13	4,557	2,031
176.62	1,847	249	177.14	4,565	2,076
176.63	1,916	268	177.15	4,574	2,122
176.64	1,984	288	177.16	4,582	2,168
176.65	2,052	308	177.17	4,591	2,213
176.66	2,121	329	177.18	4,599	2,259
176.67	2,189	350	177.19	4,608	2,305
176.68	2,258	373	177.20	4,616	2,352
176.69	2,326	395	177.21	4,624	2,398
176.70	2,395	419	177.22	4,633	2,444
176.71	2,463	443	177.23	4,641	2,490
176.72	2,531	468	177.24	4,650	2,537
176.73	2,600	494	177.25	4,658	2,583
176.74	2,668	520	177.26	4,667	2,630
176.75	2,737	547	177.27	4,675	2,677
176.76	2,805	575	177.28	4,684	2,724
176.77	2,873	603	177.29	4,692	2,770
176.78	2,942	633	177.30	4,700	2,817
176.79	3,010	662	177.31	4,709	2,864
176.80	3,079	693	177.32	4,717	2,912
176.81	3,147	724	177.33	4,726	2,959
176.82	3,216	756	177.34	4,734	3,006
176.83	3,284	788	177.35	4,743	3,053
176.84	3,352	821	177.36	4,751	3,101
176.85	3,421	855	177.37	4,760	3,149
176.86	3,489	890	177.38	4,768	3,196

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.39	4,777	3,244	177.91	5,216	5,842
177.40	4,785	3,292	177.92	5,224	5,894
177.41	4,793	3,340	177.93	5,233	5,946
177.42	4,802	3,388	177.94	5,241	5,999
177.43	4,810	3,436	177.95	5,250	6,051
177.44	4,819	3,484	177.96	5,258	6,104
177.45	4,827	3,532	177.97	5,267	6,156
177.46	4,836	3,580	177.98	5,275	6,209
177.47	4,844	3,629	177.99	5,284	6,262
177.48	4,853	3,677	178.00	5,292	6,315
177.49	4,861	3,726	178.01	5,301	6,368
177.50	4,870	3,774	178.02	5,310	6,421
177.51	4,878	3,823	178.03	5,319	6,474
177.52	4,886	3,872	178.04	5,328	6,527
177.53	4,895	3,921	178.05	5,337	6,581
177.54	4,903	3,970	178.06	5,346	6,634
177.55	4,912	4,019	178.07	5,355	6,687
177.56	4,920	4,068	178.08	5,364	6,741
177.57	4,929	4,117	178.09	5,373	6,795
177.58	4,937	4,167	178.10	5,382	6,848
177.59	4,946	4,216	178.11	5,391	6,902
177.60	4,954	4,266	178.12	5,400	6,956
177.61	4,962	4,315	178.13	5,409	7,010
177.62	4,971	4,365	178.14	5,418	7,064
177.63	4,979	4,415	178.15	5,427	7,119
177.64	4,988	4,464	178.16	5,436	7,173
177.65	4,996	4,514	178.17	5,445	7,227
177.66	5,005	4,564	178.18	5,454	7,282
177.67	5,013	4,614	178.19	5,463	7,337
177.68	5,022	4,665	178.20	5,472	7,391
177.69	5,030	4,715	178.21	5,481	7,446
177.70	5,038	4,765	178.22	5,490	7,501
177.71	5,047	4,816	178.23	5,499	7,556
177.72	5,055	4,866	178.24	5,508	7,611
177.73	5,064	4,917	178.25	5,518	7,666
177.74	5,072	4,967	178.26	5,527	7,721
177.75	5,081	5,018	178.27	5,536	7,776
177.76	5,089	5,069	178.28	5,545	7,832
177.77	5,098	5,120	178.29	5,554	7,887
177.78	5,106	5,171	178.30	5,563	7,943
177.79	5,115	5,222	178.31	5,572	7,999
177.80	5,123	5,273	178.32	5,581	8,054
177.81	5,131	5,325	178.33	5,590	8,110
177.82	5,140	5,376	178.34	5,599	8,166
177.83	5,148	5,427	178.35	5,608	8,222
177.84	5,157	5,479	178.36	5,617	8,278
177.85	5,165	5,530	178.37	5,626	8,335
177.86	5,174	5,582	178.38	5,635	8,391
177.87	5,182	5,634	178.39	5,644	8,447
177.88	5,191	5,686	178.40	5,653	8,504
177.89	5,199	5,738	178.41	5,662	8,560
177.90	5,208	5,790	178.42	5,671	8,617

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.43	5,680	8,674	178.95	6,149	11,749
178.44	5,689	8,731	178.96	6,158	11,811
178.45	5,698	8,788	178.97	6,167	11,872
178.46	5,707	8,845	178.98	6,176	11,934
178.47	5,716	8,902	178.99	6,185	11,996
178.48	5,725	8,959	179.00	6,194	12,058
178.49	5,734	9,016	179.01	6,204	12,120
178.50	5,743	9,074	179.02	6,213	12,182
178.51	5,752	9,131	179.03	6,223	12,244
178.52	5,761	9,189	179.04	6,232	12,306
178.53	5,770	9,246	179.05	6,242	12,369
178.54	5,779	9,304	179.06	6,252	12,431
178.55	5,788	9,362	179.07	6,261	12,494
178.56	5,797	9,420	179.08	6,271	12,556
178.57	5,806	9,478	179.09	6,280	12,619
178.58	5,815	9,536	179.10	6,290	12,682
178.59	5,824	9,594	179.11	6,299	12,745
178.60	5,833	9,652	179.12	6,309	12,808
178.61	5,842	9,711	179.13	6,319	12,871
178.62	5,851	9,769	179.14	6,328	12,934
178.63	5,860	9,828	179.15	6,338	12,998
178.64	5,869	9,886	179.16	6,347	13,061
178.65	5,878	9,945	179.17	6,357	13,125
178.66	5,887	10,004	179.18	6,367	13,188
178.67	5,896	10,063	179.19	6,376	13,252
178.68	5,905	10,122	179.20	6,386	13,316
178.69	5,914	10,181	179.21	6,395	13,380
178.70	5,923	10,240	179.22	6,405	13,444
178.71	5,932	10,299	179.23	6,415	13,508
178.72	5,941	10,359	179.24	6,424	13,572
178.73	5,950	10,418	179.25	6,434	13,636
178.74	5,959	10,478	179.26	6,443	13,701
178.75	5,969	10,537	179.27	6,453	13,765
178.76	5,978	10,597	179.28	6,463	13,830
178.77	5,987	10,657	179.29	6,472	13,894
178.78	5,996	10,717	179.30	6,482	13,959
178.79	6,005	10,777	179.31	6,491	14,024
178.80	6,014	10,837	179.32	6,501	14,089
178.81	6,023	10,897	179.33	6,510	14,154
178.82	6,032	10,957	179.34	6,520	14,219
178.83	6,041	11,018	179.35	6,530	14,284
178.84	6,050	11,078	179.36	6,539	14,350
178.85	6,059	11,139	179.37	6,549	14,415
178.86	6,068	11,199	179.38	6,558	14,481
178.87	6,077	11,260	179.39	6,568	14,546
178.88	6,086	11,321	179.40	6,578	14,612
178.89	6,095	11,382	179.41	6,587	14,678
178.90	6,104	11,443	179.42	6,597	14,744
178.91	6,113	11,504	179.43	6,606	14,810
178.92	6,122	11,565	179.44	6,616	14,876
178.93	6,131	11,626	179.45	6,626	14,942
178.94	6,140	11,688	179.46	6,635	15,008

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.47	6,645	15,075	179.99	7,143	18,660
179.48	6,654	15,141	180.00	7,153	18,731
179.49	6,664	15,208	180.01	7,163	18,803
179.50	6,674	15,275	180.02	7,173	18,875
179.51	6,683	15,341	180.03	7,183	18,946
179.52	6,693	15,408	180.04	7,194	19,018
179.53	6,702	15,475	180.05	7,204	19,090
179.54	6,712	15,542	180.06	7,214	19,162
179.55	6,721	15,610	180.07	7,224	19,234
179.56	6,731	15,677	180.08	7,234	19,307
179.57	6,741	15,744	180.09	7,244	19,379
179.58	6,750	15,812	180.10	7,254	19,452
179.59	6,760	15,879	180.11	7,265	19,524
179.60	6,769	15,947	180.12	7,275	19,597
179.61	6,779	16,015	180.13	7,285	19,670
179.62	6,789	16,082	180.14	7,295	19,743
179.63	6,798	16,150	180.15	7,305	19,816
179.64	6,808	16,218	180.16	7,315	19,889
179.65	6,817	16,286	180.17	7,326	19,962
179.66	6,827	16,355	180.18	7,336	20,035
179.67	6,837	16,423	180.19	7,346	20,109
179.68	6,846	16,491	180.20	7,356	20,182
179.69	6,856	16,560	180.21	7,366	20,256
179.70	6,865	16,629	180.22	7,376	20,329
179.71	6,875	16,697	180.23	7,386	20,403
179.72	6,884	16,766	180.24	7,397	20,477
179.73	6,894	16,835	180.25	7,407	20,551
179.74	6,904	16,904	180.26	7,417	20,625
179.75	6,913	16,973	180.27	7,427	20,700
179.76	6,923	17,042	180.28	7,437	20,774
179.77	6,932	17,111	180.29	7,447	20,848
179.78	6,942	17,181	180.30	7,457	20,923
179.79	6,952	17,250	180.31	7,468	20,997
179.80	6,961	17,320	180.32	7,478	21,072
179.81	6,971	17,390	180.33	7,488	21,147
179.82	6,980	17,459	180.34	7,498	21,222
179.83	6,990	17,529	180.35	7,508	21,297
179.84	7,000	17,599	180.36	7,518	21,372
179.85	7,009	17,669	180.37	7,529	21,447
179.86	7,019	17,739	180.38	7,539	21,523
179.87	7,028	17,809	180.39	7,549	21,598
179.88	7,038	17,880	180.40	7,559	21,674
179.89	7,048	17,950	180.41	7,569	21,749
179.90	7,057	18,021	180.42	7,579	21,825
179.91	7,067	18,091	180.43	7,589	21,901
179.92	7,076	18,162	180.44	7,600	21,977
179.93	7,086	18,233	180.45	7,610	22,053
179.94	7,095	18,304	180.46	7,620	22,129
179.95	7,105	18,375	180.47	7,630	22,205
179.96	7,115	18,446	180.48	7,640	22,282
179.97	7,124	18,517	180.49	7,650	22,358
179.98	7,134	18,588	180.50	7,661	22,435

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.51	7,671	22,511
180.52	7,681	22,588
180.53	7,691	22,665
180.54	7,701	22,742
180.55	7,711	22,819
180.56	7,721	22,896
180.57	7,732	22,973
180.58	7,742	23,051
180.59	7,752	23,128
180.60	7,762	23,206
180.61	7,772	23,283
180.62	7,782	23,361
180.63	7,792	23,439
180.64	7,803	23,517
180.65	7,813	23,595
180.66	7,823	23,673
180.67	7,833	23,752
180.68	7,843	23,830
180.69	7,853	23,908
180.70	7,863	23,987
180.71	7,874	24,066
180.72	7,884	24,145
180.73	7,894	24,223
180.74	7,904	24,302
180.75	7,914	24,381
180.76	7,924	24,461
180.77	7,935	24,540
180.78	7,945	24,619
180.79	7,955	24,699
180.80	7,965	24,778
180.81	7,975	24,858
180.82	7,985	24,938
180.83	7,995	25,018
180.84	8,006	25,098
180.85	8,016	25,178
180.86	8,026	25,258
180.87	8,036	25,339
180.88	8,046	25,419
180.89	8,056	25,499
180.90	8,067	25,580
180.91	8,077	25,661
180.92	8,087	25,742
180.93	8,097	25,823
180.94	8,107	25,904
180.95	8,117	25,985
180.96	8,127	26,066
180.97	8,138	26,147
180.98	8,148	26,229
180.99	8,158	26,310
181.00	**8,168**	**26,392**

Summary for Pond B-44: Basin #44

Inflow Area = 1.184 ac, 34.71% Impervious, Inflow Depth = 3.28" for Current 10 yr event
Inflow = 4.00 cfs @ 12.17 hrs, Volume= 0.324 af
Outflow = 0.14 cfs @ 15.26 hrs, Volume= 0.211 af, Atten= 96%, Lag= 185.0 min
Primary = 0.14 cfs @ 15.26 hrs, Volume= 0.211 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 167.28' @ 15.26 hrs Surf.Area= 6,766 sf Storage= 9,952 cf

Plug-Flow detention time= 655.8 min calculated for 0.211 af (65% of inflow)
Center-of-Mass det. time= 547.4 min (1,344.0 - 796.6)

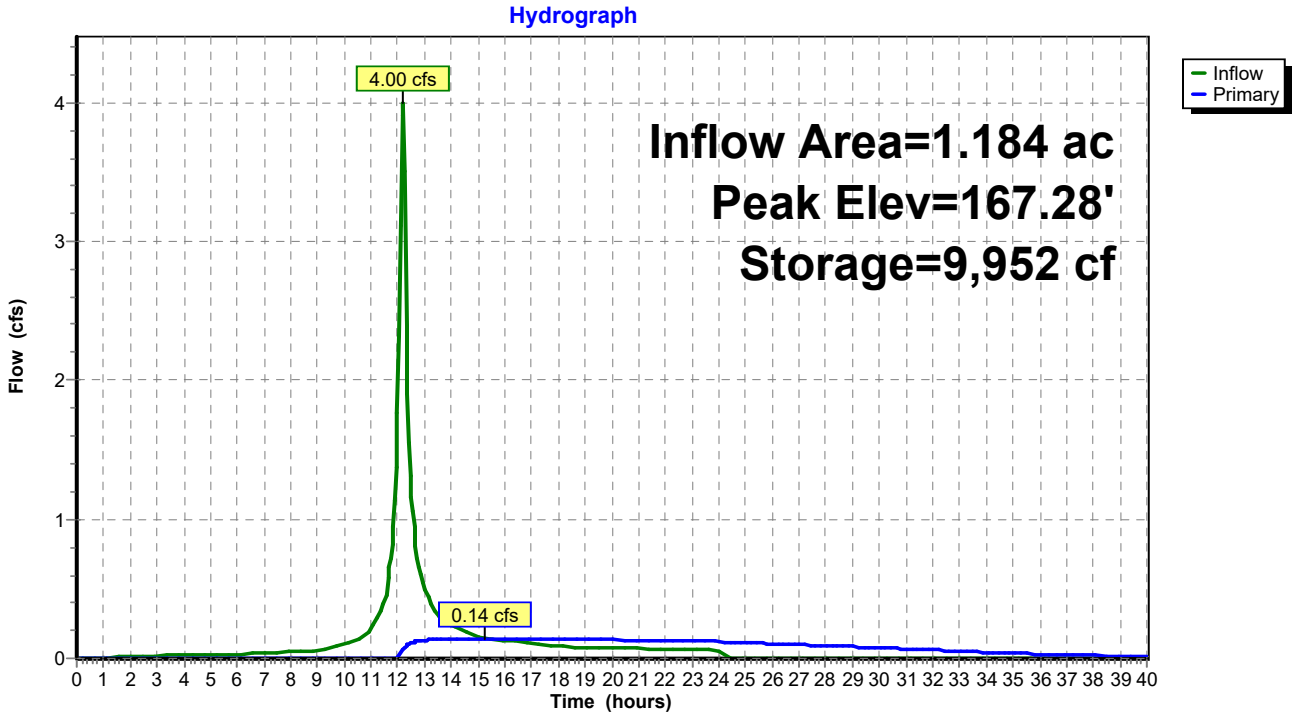
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	31,812 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	5,690	1,991	1,991
167.00	6,518	6,104	8,095
168.00	7,407	6,963	15,058
169.00	8,360	7,884	22,941
170.00	9,381	8,871	31,812

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	**18.0" Round Culvert** L= 44.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0295 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	166.41'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	167.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	168.98'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.14 cfs @ 15.26 hrs HW=167.28' (Free Discharge)
- **1=Culvert** (Passes 0.14 cfs of 9.43 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.14 cfs @ 4.21 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-44: Basin #44



Stage-Discharge for Pond B-44: Basin #44

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.10
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.10
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.10
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.10
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.10
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.10
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.10
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.11
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.11
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.11
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.11
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.11
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.11
165.43	0.00	165.95	0.00	166.47	0.01	166.99	0.11
165.44	0.00	165.96	0.00	166.48	0.01	167.00	0.11
165.45	0.00	165.97	0.00	166.49	0.01	167.01	0.12
165.46	0.00	165.98	0.00	166.50	0.01	167.02	0.12
165.47	0.00	165.99	0.00	166.51	0.02	167.03	0.12
165.48	0.00	166.00	0.00	166.52	0.02	167.04	0.12
165.49	0.00	166.01	0.00	166.53	0.02	167.05	0.12
165.50	0.00	166.02	0.00	166.54	0.03	167.06	0.12
165.51	0.00	166.03	0.00	166.55	0.03	167.07	0.12
165.52	0.00	166.04	0.00	166.56	0.03	167.08	0.12
165.53	0.00	166.05	0.00	166.57	0.04	167.09	0.12
165.54	0.00	166.06	0.00	166.58	0.04	167.10	0.13
165.55	0.00	166.07	0.00	166.59	0.05	167.11	0.13
165.56	0.00	166.08	0.00	166.60	0.05	167.12	0.13
165.57	0.00	166.09	0.00	166.61	0.05	167.13	0.13
165.58	0.00	166.10	0.00	166.62	0.05	167.14	0.13
165.59	0.00	166.11	0.00	166.63	0.06	167.15	0.13
165.60	0.00	166.12	0.00	166.64	0.06	167.16	0.13
165.61	0.00	166.13	0.00	166.65	0.06	167.17	0.13
165.62	0.00	166.14	0.00	166.66	0.06	167.18	0.13
165.63	0.00	166.15	0.00	166.67	0.06	167.19	0.13
165.64	0.00	166.16	0.00	166.68	0.07	167.20	0.14
165.65	0.00	166.17	0.00	166.69	0.07	167.21	0.14
165.66	0.00	166.18	0.00	166.70	0.07	167.22	0.14
165.67	0.00	166.19	0.00	166.71	0.07	167.23	0.14
165.68	0.00	166.20	0.00	166.72	0.07	167.24	0.14
165.69	0.00	166.21	0.00	166.73	0.08	167.25	0.14
165.70	0.00	166.22	0.00	166.74	0.08	167.26	0.14
165.71	0.00	166.23	0.00	166.75	0.08	167.27	0.14
165.72	0.00	166.24	0.00	166.76	0.08	167.28	0.14
165.73	0.00	166.25	0.00	166.77	0.08	167.29	0.14
165.74	0.00	166.26	0.00	166.78	0.08	167.30	0.15
165.75	0.00	166.27	0.00	166.79	0.09	167.31	0.15
165.76	0.00	166.28	0.00	166.80	0.09	167.32	0.15
165.77	0.00	166.29	0.00	166.81	0.09	167.33	0.15
165.78	0.00	166.30	0.00	166.82	0.09	167.34	0.15
165.79	0.00	166.31	0.00	166.83	0.09	167.35	0.15
165.80	0.00	166.32	0.00	166.84	0.09	167.36	0.15
165.81	0.00	166.33	0.00	166.85	0.10	167.37	0.15

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.15	167.90	3.44	168.42	11.24	168.94	14.46
167.39	0.15	167.91	3.56	168.43	11.41	168.95	14.49
167.40	0.15	167.92	3.68	168.44	11.59	168.96	14.51
167.41	0.16	167.93	3.80	168.45	11.76	168.97	14.54
167.42	0.16	167.94	3.93	168.46	11.94	168.98	14.56
167.43	0.16	167.95	4.06	168.47	12.12	168.99	14.71
167.44	0.16	167.96	4.18	168.48	12.30	169.00	14.95
167.45	0.16	167.97	4.31	168.49	12.48	169.01	15.25
167.46	0.16	167.98	4.44	168.50	12.66	169.02	15.60
167.47	0.16	167.99	4.58	168.51	12.84	169.03	16.00
167.48	0.16	168.00	4.71	168.52	13.02	169.04	16.44
167.49	0.16	168.01	4.84	168.53	13.20	169.05	16.91
167.50	0.16	168.02	4.98	168.54	13.38	169.06	17.42
167.51	0.18	168.03	5.12	168.55	13.45	169.07	17.96
167.52	0.20	168.04	5.25	168.56	13.48	169.08	18.53
167.53	0.23	168.05	5.39	168.57	13.51	169.09	19.13
167.54	0.27	168.06	5.53	168.58	13.53	169.10	19.75
167.55	0.31	168.07	5.67	168.59	13.56	169.11	20.40
167.56	0.36	168.08	5.82	168.60	13.59	169.12	21.08
167.57	0.41	168.09	5.96	168.61	13.61	169.13	21.78
167.58	0.46	168.10	6.10	168.62	13.64	169.14	22.50
167.59	0.52	168.11	6.25	168.63	13.67	169.15	23.25
167.60	0.58	168.12	6.40	168.64	13.69	169.16	24.02
167.61	0.65	168.13	6.54	168.65	13.72	169.17	24.81
167.62	0.71	168.14	6.69	168.66	13.75	169.18	25.62
167.63	0.78	168.15	6.84	168.67	13.77	169.19	26.49
167.64	0.85	168.16	6.99	168.68	13.80	169.20	27.39
167.65	0.93	168.17	7.14	168.69	13.83	169.21	28.31
167.66	1.01	168.18	7.30	168.70	13.85	169.22	29.25
167.67	1.09	168.19	7.45	168.71	13.88	169.23	30.23
167.68	1.17	168.20	7.61	168.72	13.90	169.24	31.22
167.69	1.25	168.21	7.76	168.73	13.93	169.25	32.25
167.70	1.34	168.22	7.92	168.74	13.96	169.26	33.29
167.71	1.43	168.23	8.08	168.75	13.98	169.27	34.36
167.72	1.52	168.24	8.23	168.76	14.01	169.28	35.46
167.73	1.61	168.25	8.39	168.77	14.03	169.29	36.58
167.74	1.70	168.26	8.55	168.78	14.06	169.30	37.73
167.75	1.80	168.27	8.72	168.79	14.08	169.31	38.90
167.76	1.89	168.28	8.88	168.80	14.11	169.32	40.09
167.77	1.99	168.29	9.04	168.81	14.14	169.33	41.31
167.78	2.10	168.30	9.20	168.82	14.16	169.34	42.55
167.79	2.20	168.31	9.37	168.83	14.19	169.35	43.81
167.80	2.30	168.32	9.53	168.84	14.21	169.36	45.10
167.81	2.41	168.33	9.70	168.85	14.24	169.37	46.42
167.82	2.52	168.34	9.87	168.86	14.26	169.38	47.76
167.83	2.63	168.35	10.04	168.87	14.29	169.39	49.15
167.84	2.74	168.36	10.21	168.88	14.31	169.40	50.56
167.85	2.85	168.37	10.38	168.89	14.34	169.41	52.00
167.86	2.96	168.38	10.55	168.90	14.36	169.42	53.47
167.87	3.08	168.39	10.72	168.91	14.39	169.43	54.96
167.88	3.20	168.40	10.89	168.92	14.41	169.44	56.48
167.89	3.32	168.41	11.06	168.93	14.44	169.45	58.03

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)
169.46	59.60
169.47	61.20
169.48	62.82
169.49	64.47
169.50	66.15
169.51	67.86
169.52	69.59
169.53	71.35
169.54	73.13
169.55	74.94
169.56	76.78
169.57	78.64
169.58	80.54
169.59	82.19
169.60	83.85
169.61	85.52
169.62	87.21
169.63	88.92
169.64	90.63
169.65	92.36
169.66	94.11
169.67	95.86
169.68	97.63
169.69	99.41
169.70	101.20
169.71	103.01
169.72	104.83
169.73	106.66
169.74	108.50
169.75	110.36
169.76	112.23
169.77	114.11
169.78	116.00
169.79	117.94
169.80	119.89
169.81	121.86
169.82	123.84
169.83	125.84
169.84	127.85
169.85	129.87
169.86	131.90
169.87	133.95
169.88	136.01
169.89	138.08
169.90	140.16
169.91	142.26
169.92	144.37
169.93	146.49
169.94	148.63
169.95	150.78
169.96	152.94
169.97	155.11
169.98	157.30
169.99	159.45
170.00	**161.60**

Stage-Area-Storage for Pond B-44: Basin #44

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0
165.31	81	0
165.32	163	2
165.33	244	4
165.34	325	7
165.35	406	10
165.36	488	15
165.37	569	20
165.38	650	26
165.39	732	33
165.40	813	41
165.41	894	49
165.42	975	59
165.43	1,057	69
165.44	1,138	80
165.45	1,219	91
165.46	1,301	104
165.47	1,382	117
165.48	1,463	132
165.49	1,544	147
165.50	1,626	163
165.51	1,707	179
165.52	1,788	197
165.53	1,870	215
165.54	1,951	234
165.55	2,032	254
165.56	2,113	275
165.57	2,195	296
165.58	2,276	319
165.59	2,357	342
165.60	2,439	366
165.61	2,520	391
165.62	2,601	416
165.63	2,682	443
165.64	2,764	470
165.65	2,845	498
165.66	2,926	527
165.67	3,008	556
165.68	3,089	587
165.69	3,170	618
165.70	3,251	650
165.71	3,333	683
165.72	3,414	717
165.73	3,495	751
165.74	3,577	787
165.75	3,658	823
165.76	3,739	860
165.77	3,820	898
165.78	3,902	936
165.79	3,983	976
165.80	4,064	1,016
165.81	4,146	1,057
165.82	4,227	1,099
165.83	4,308	1,142
165.84	4,389	1,185
165.85	4,471	1,229
165.86	4,552	1,275
165.87	4,633	1,320
165.88	4,715	1,367
165.89	4,796	1,415
165.90	4,877	1,463
165.91	4,958	1,512
165.92	5,040	1,562
165.93	5,121	1,613
165.94	5,202	1,665
165.95	5,284	1,717
165.96	5,365	1,770
165.97	5,446	1,824
165.98	5,527	1,879
165.99	5,609	1,935
166.00	5,690	1,991
166.01	5,698	2,048
166.02	5,707	2,105
166.03	5,715	2,163
166.04	5,723	2,220
166.05	5,731	2,277
166.06	5,740	2,334
166.07	5,748	2,392
166.08	5,756	2,449
166.09	5,765	2,507
166.10	5,773	2,565
166.11	5,781	2,622
166.12	5,789	2,680
166.13	5,798	2,738
166.14	5,806	2,796
166.15	5,814	2,854
166.16	5,822	2,912
166.17	5,831	2,971
166.18	5,839	3,029
166.19	5,847	3,088
166.20	5,856	3,146
166.21	5,864	3,205
166.22	5,872	3,263
166.23	5,880	3,322
166.24	5,889	3,381
166.25	5,897	3,440
166.26	5,905	3,499
166.27	5,914	3,558
166.28	5,922	3,617
166.29	5,930	3,676
166.30	5,938	3,736
166.31	5,947	3,795
166.32	5,955	3,855
166.33	5,963	3,914

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	5,972	3,974	166.86	6,402	7,191
166.35	5,980	4,034	166.87	6,410	7,255
166.36	5,988	4,094	166.88	6,419	7,319
166.37	5,996	4,153	166.89	6,427	7,384
166.38	6,005	4,213	166.90	6,435	7,448
166.39	6,013	4,274	166.91	6,443	7,512
166.40	6,021	4,334	166.92	6,452	7,577
166.41	6,029	4,394	166.93	6,460	7,641
166.42	6,038	4,454	166.94	6,468	7,706
166.43	6,046	4,515	166.95	6,477	7,771
166.44	6,054	4,575	166.96	6,485	7,835
166.45	6,063	4,636	166.97	6,493	7,900
166.46	6,071	4,697	166.98	6,501	7,965
166.47	6,079	4,757	166.99	6,510	8,030
166.48	6,087	4,818	167.00	6,518	8,095
166.49	6,096	4,879	167.01	6,527	8,161
166.50	6,104	4,940	167.02	6,536	8,226
166.51	6,112	5,001	167.03	6,545	8,291
166.52	6,121	5,062	167.04	6,554	8,357
166.53	6,129	5,123	167.05	6,562	8,423
166.54	6,137	5,185	167.06	6,571	8,488
166.55	6,145	5,246	167.07	6,580	8,554
166.56	6,154	5,308	167.08	6,589	8,620
166.57	6,162	5,369	167.09	6,598	8,686
166.58	6,170	5,431	167.10	6,607	8,752
166.59	6,179	5,493	167.11	6,616	8,818
166.60	6,187	5,555	167.12	6,625	8,884
166.61	6,195	5,616	167.13	6,634	8,950
166.62	6,203	5,678	167.14	6,642	9,017
166.63	6,212	5,741	167.15	6,651	9,083
166.64	6,220	5,803	167.16	6,660	9,150
166.65	6,228	5,865	167.17	6,669	9,216
166.66	6,236	5,927	167.18	6,678	9,283
166.67	6,245	5,990	167.19	6,687	9,350
166.68	6,253	6,052	167.20	6,696	9,417
166.69	6,261	6,115	167.21	6,705	9,484
166.70	6,270	6,177	167.22	6,714	9,551
166.71	6,278	6,240	167.23	6,722	9,618
166.72	6,286	6,303	167.24	6,731	9,685
166.73	6,294	6,366	167.25	6,740	9,753
166.74	6,303	6,429	167.26	6,749	9,820
166.75	6,311	6,492	167.27	6,758	9,888
166.76	6,319	6,555	167.28	6,767	9,955
166.77	6,328	6,618	167.29	6,776	10,023
166.78	6,336	6,682	167.30	6,785	10,091
166.79	6,344	6,745	167.31	6,794	10,159
166.80	6,352	6,808	167.32	6,802	10,227
166.81	6,361	6,872	167.33	6,811	10,295
166.82	6,369	6,936	167.34	6,820	10,363
166.83	6,377	6,999	167.35	6,829	10,431
166.84	6,386	7,063	167.36	6,838	10,500
166.85	6,394	7,127	167.37	6,847	10,568

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	6,856	10,637	167.90	7,318	14,322
167.39	6,865	10,705	167.91	7,327	14,395
167.40	6,874	10,774	167.92	7,336	14,468
167.41	6,882	10,843	167.93	7,345	14,542
167.42	6,891	10,911	167.94	7,354	14,615
167.43	6,900	10,980	167.95	7,363	14,689
167.44	6,909	11,049	167.96	7,371	14,762
167.45	6,918	11,119	167.97	7,380	14,836
167.46	6,927	11,188	167.98	7,389	14,910
167.47	6,936	11,257	167.99	7,398	14,984
167.48	6,945	11,327	168.00	7,407	15,058
167.49	6,954	11,396	168.01	7,417	15,132
167.50	6,963	11,466	168.02	7,426	15,206
167.51	6,971	11,535	168.03	7,436	15,281
167.52	6,980	11,605	168.04	7,445	15,355
167.53	6,989	11,675	168.05	7,455	15,430
167.54	6,998	11,745	168.06	7,464	15,504
167.55	7,007	11,815	168.07	7,474	15,579
167.56	7,016	11,885	168.08	7,483	15,654
167.57	7,025	11,955	168.09	7,493	15,728
167.58	7,034	12,025	168.10	7,502	15,803
167.59	7,043	12,096	168.11	7,512	15,879
167.60	7,051	12,166	168.12	7,521	15,954
167.61	7,060	12,237	168.13	7,531	16,029
167.62	7,069	12,308	168.14	7,540	16,104
167.63	7,078	12,378	168.15	7,550	16,180
167.64	7,087	12,449	168.16	7,559	16,255
167.65	7,096	12,520	168.17	7,569	16,331
167.66	7,105	12,591	168.18	7,579	16,407
167.67	7,114	12,662	168.19	7,588	16,483
167.68	7,123	12,733	168.20	7,598	16,558
167.69	7,131	12,805	168.21	7,607	16,634
167.70	7,140	12,876	168.22	7,617	16,711
167.71	7,149	12,947	168.23	7,626	16,787
167.72	7,158	13,019	168.24	7,636	16,863
167.73	7,167	13,091	168.25	7,645	16,940
167.74	7,176	13,162	168.26	7,655	17,016
167.75	7,185	13,234	168.27	7,664	17,093
167.76	7,194	13,306	168.28	7,674	17,169
167.77	7,203	13,378	168.29	7,683	17,246
167.78	7,211	13,450	168.30	7,693	17,323
167.79	7,220	13,522	168.31	7,702	17,400
167.80	7,229	13,594	168.32	7,712	17,477
167.81	7,238	13,667	168.33	7,721	17,554
167.82	7,247	13,739	168.34	7,731	17,631
167.83	7,256	13,812	168.35	7,741	17,709
167.84	7,265	13,884	168.36	7,750	17,786
167.85	7,274	13,957	168.37	7,760	17,864
167.86	7,283	14,030	168.38	7,769	17,941
167.87	7,291	14,103	168.39	7,779	18,019
167.88	7,300	14,176	168.40	7,788	18,097
167.89	7,309	14,249	168.41	7,798	18,175

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	7,807	18,253	168.94	8,303	22,442
168.43	7,817	18,331	168.95	8,312	22,525
168.44	7,826	18,409	168.96	8,322	22,608
168.45	7,836	18,488	168.97	8,331	22,691
168.46	7,845	18,566	168.98	8,341	22,774
168.47	7,855	18,645	168.99	8,350	22,858
168.48	7,864	18,723	169.00	8,360	22,941
168.49	7,874	18,802	169.01	8,370	23,025
168.50	7,884	18,881	169.02	8,380	23,109
168.51	7,893	18,960	169.03	8,391	23,193
168.52	7,903	19,038	169.04	8,401	23,277
168.53	7,912	19,118	169.05	8,411	23,361
168.54	7,922	19,197	169.06	8,421	23,445
168.55	7,931	19,276	169.07	8,431	23,529
168.56	7,941	19,355	169.08	8,442	23,614
168.57	7,950	19,435	169.09	8,452	23,698
168.58	7,960	19,514	169.10	8,462	23,783
168.59	7,969	19,594	169.11	8,472	23,867
168.60	7,979	19,674	169.12	8,483	23,952
168.61	7,988	19,754	169.13	8,493	24,037
168.62	7,998	19,834	169.14	8,503	24,122
168.63	8,007	19,914	169.15	8,513	24,207
168.64	8,017	19,994	169.16	8,523	24,292
168.65	8,026	20,074	169.17	8,534	24,377
168.66	8,036	20,154	169.18	8,544	24,463
168.67	8,046	20,235	169.19	8,554	24,548
168.68	8,055	20,315	169.20	8,564	24,634
168.69	8,065	20,396	169.21	8,574	24,720
168.70	8,074	20,476	169.22	8,585	24,805
168.71	8,084	20,557	169.23	8,595	24,891
168.72	8,093	20,638	169.24	8,605	24,977
168.73	8,103	20,719	169.25	8,615	25,063
168.74	8,112	20,800	169.26	8,625	25,150
168.75	8,122	20,881	169.27	8,636	25,236
168.76	8,131	20,963	169.28	8,646	25,322
168.77	8,141	21,044	169.29	8,656	25,409
168.78	8,150	21,125	169.30	8,666	25,495
168.79	8,160	21,207	169.31	8,677	25,582
168.80	8,169	21,289	169.32	8,687	25,669
168.81	8,179	21,370	169.33	8,697	25,756
168.82	8,188	21,452	169.34	8,707	25,843
168.83	8,198	21,534	169.35	8,717	25,930
168.84	8,208	21,616	169.36	8,728	26,017
168.85	8,217	21,698	169.37	8,738	26,105
168.86	8,227	21,780	169.38	8,748	26,192
168.87	8,236	21,863	169.39	8,758	26,280
168.88	8,246	21,945	169.40	8,768	26,367
168.89	8,255	22,028	169.41	8,779	26,455
168.90	8,265	22,110	169.42	8,789	26,543
168.91	8,274	22,193	169.43	8,799	26,631
168.92	8,284	22,276	169.44	8,809	26,719
168.93	8,293	22,359	169.45	8,819	26,807

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	8,830	26,895
169.47	8,840	26,983
169.48	8,850	27,072
169.49	8,860	27,160
169.50	8,871	27,249
169.51	8,881	27,338
169.52	8,891	27,427
169.53	8,901	27,516
169.54	8,911	27,605
169.55	8,922	27,694
169.56	8,932	27,783
169.57	8,942	27,873
169.58	8,952	27,962
169.59	8,962	28,052
169.60	8,973	28,141
169.61	8,983	28,231
169.62	8,993	28,321
169.63	9,003	28,411
169.64	9,013	28,501
169.65	9,024	28,591
169.66	9,034	28,681
169.67	9,044	28,772
169.68	9,054	28,862
169.69	9,064	28,953
169.70	9,075	29,044
169.71	9,085	29,134
169.72	9,095	29,225
169.73	9,105	29,316
169.74	9,116	29,407
169.75	9,126	29,499
169.76	9,136	29,590
169.77	9,146	29,681
169.78	9,156	29,773
169.79	9,167	29,865
169.80	9,177	29,956
169.81	9,187	30,048
169.82	9,197	30,140
169.83	9,207	30,232
169.84	9,218	30,324
169.85	9,228	30,416
169.86	9,238	30,509
169.87	9,248	30,601
169.88	9,258	30,694
169.89	9,269	30,786
169.90	9,279	30,879
169.91	9,289	30,972
169.92	9,299	31,065
169.93	9,310	31,158
169.94	9,320	31,251
169.95	9,330	31,344
169.96	9,340	31,438
169.97	9,350	31,531
169.98	9,361	31,625
169.99	9,371	31,718
170.00	**9,381**	**31,812**

Summary for Pond B-45: Basin #45

Inflow Area = 2.294 ac, 62.82% Impervious, Inflow Depth = 3.96" for Current 10 yr event
Inflow = 8.99 cfs @ 12.17 hrs, Volume= 0.758 af
Outflow = 4.40 cfs @ 12.35 hrs, Volume= 0.598 af, Atten= 51%, Lag= 10.6 min
Primary = 4.40 cfs @ 12.35 hrs, Volume= 0.598 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 169.16' @ 12.35 hrs Surf.Area= 5,694 sf Storage= 16,285 cf

Plug-Flow detention time= 382.2 min calculated for 0.597 af (79% of inflow)
Center-of-Mass det. time= 299.5 min (1,072.7 - 773.2)

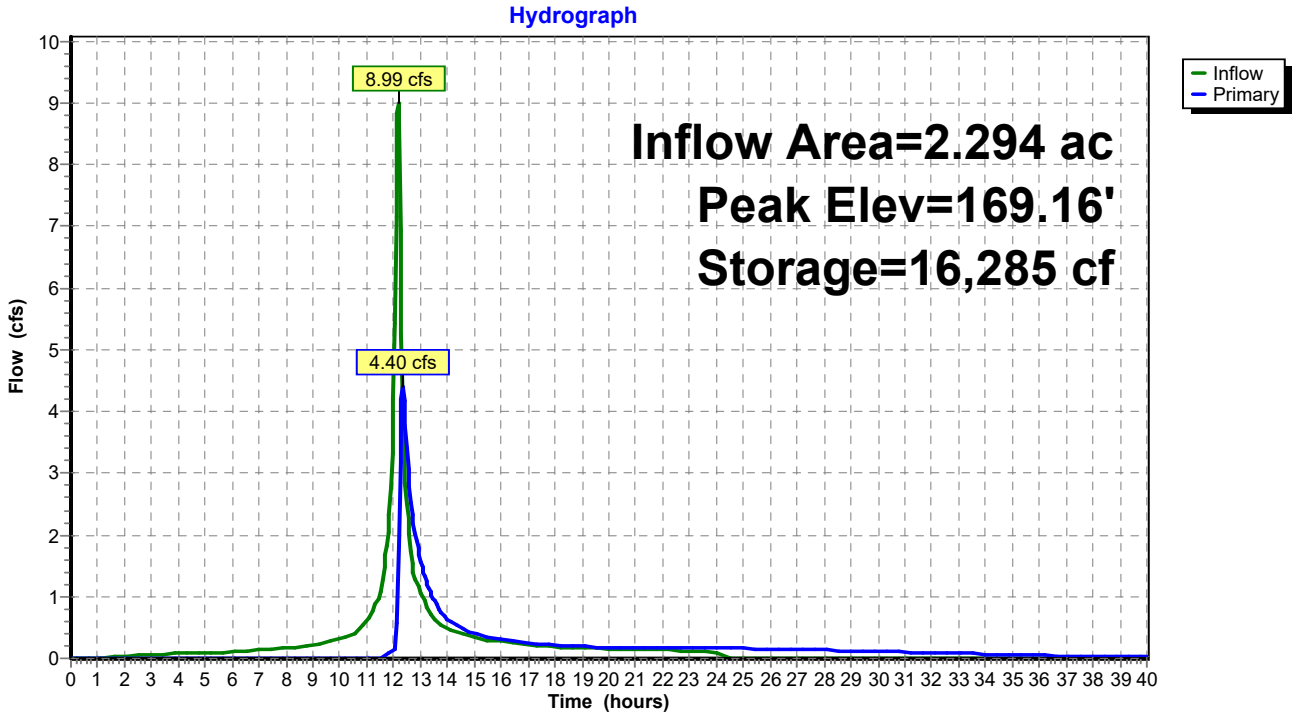
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	21,270 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	3,797	1,329	1,329
167.00	4,370	4,084	5,412
168.00	4,967	4,669	10,081
169.00	5,588	5,278	15,358
170.00	6,235	5,912	21,270

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0325 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.25'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	168.50'	**2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	169.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	169.97'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.38 cfs @ 12.35 hrs HW=169.16' (Free Discharge)
- **1=Culvert** (Passes 4.38 cfs of 15.01 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.22 cfs @ 6.48 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.30 cfs @ 2.66 fps)
  - **4=Sharp-Crested Rectangular Weir** (Weir Controls 0.86 cfs @ 1.32 fps)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-45: Basin #45



Stage-Discharge for Pond B-45: Basin #45

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.00
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.00
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.00
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.00
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.00
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.00
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.00
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.00
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.00
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.00
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.00
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.00
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.00
165.43	0.00	165.95	0.00	166.47	0.00	166.99	0.00
165.44	0.00	165.96	0.00	166.48	0.00	167.00	0.00
165.45	0.00	165.97	0.00	166.49	0.00	167.01	0.00
165.46	0.00	165.98	0.00	166.50	0.00	167.02	0.00
165.47	0.00	165.99	0.00	166.51	0.00	167.03	0.00
165.48	0.00	166.00	0.00	166.52	0.00	167.04	0.00
165.49	0.00	166.01	0.00	166.53	0.00	167.05	0.00
165.50	0.00	166.02	0.00	166.54	0.00	167.06	0.00
165.51	0.00	166.03	0.00	166.55	0.00	167.07	0.00
165.52	0.00	166.04	0.00	166.56	0.00	167.08	0.00
165.53	0.00	166.05	0.00	166.57	0.00	167.09	0.00
165.54	0.00	166.06	0.00	166.58	0.00	167.10	0.00
165.55	0.00	166.07	0.00	166.59	0.00	167.11	0.00
165.56	0.00	166.08	0.00	166.60	0.00	167.12	0.00
165.57	0.00	166.09	0.00	166.61	0.00	167.13	0.00
165.58	0.00	166.10	0.00	166.62	0.00	167.14	0.00
165.59	0.00	166.11	0.00	166.63	0.00	167.15	0.00
165.60	0.00	166.12	0.00	166.64	0.00	167.16	0.00
165.61	0.00	166.13	0.00	166.65	0.00	167.17	0.00
165.62	0.00	166.14	0.00	166.66	0.00	167.18	0.00
165.63	0.00	166.15	0.00	166.67	0.00	167.19	0.00
165.64	0.00	166.16	0.00	166.68	0.00	167.20	0.00
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.01
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.01
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.01
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.01
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.02
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.02
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.02

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.03	167.90	0.12	168.42	0.17	168.94	2.03
167.39	0.03	167.91	0.12	168.43	0.17	168.95	2.09
167.40	0.03	167.92	0.12	168.44	0.17	168.96	2.15
167.41	0.04	167.93	0.12	168.45	0.17	168.97	2.22
167.42	0.04	167.94	0.13	168.46	0.17	168.98	2.28
167.43	0.05	167.95	0.13	168.47	0.17	168.99	2.34
167.44	0.05	167.96	0.13	168.48	0.17	169.00	2.41
167.45	0.05	167.97	0.13	168.49	0.17	169.01	2.48
167.46	0.05	167.98	0.13	168.50	0.18	169.02	2.57
167.47	0.06	167.99	0.13	168.51	0.18	169.03	2.67
167.48	0.06	168.00	0.13	168.52	0.20	169.04	2.77
167.49	0.06	168.01	0.13	168.53	0.21	169.05	2.88
167.50	0.06	168.02	0.13	168.54	0.23	169.06	2.99
167.51	0.06	168.03	0.13	168.55	0.25	169.07	3.11
167.52	0.07	168.04	0.14	168.56	0.28	169.08	3.23
167.53	0.07	168.05	0.14	168.57	0.30	169.09	3.36
167.54	0.07	168.06	0.14	168.58	0.33	169.10	3.49
167.55	0.07	168.07	0.14	168.59	0.36	169.11	3.62
167.56	0.07	168.08	0.14	168.60	0.39	169.12	3.75
167.57	0.08	168.09	0.14	168.61	0.42	169.13	3.89
167.58	0.08	168.10	0.14	168.62	0.45	169.14	4.03
167.59	0.08	168.11	0.14	168.63	0.49	169.15	4.18
167.60	0.08	168.12	0.14	168.64	0.52	169.16	4.33
167.61	0.08	168.13	0.14	168.65	0.56	169.17	4.48
167.62	0.08	168.14	0.15	168.66	0.60	169.18	4.63
167.63	0.09	168.15	0.15	168.67	0.64	169.19	4.79
167.64	0.09	168.16	0.15	168.68	0.68	169.20	4.94
167.65	0.09	168.17	0.15	168.69	0.72	169.21	5.10
167.66	0.09	168.18	0.15	168.70	0.76	169.22	5.27
167.67	0.09	168.19	0.15	168.71	0.81	169.23	5.43
167.68	0.09	168.20	0.15	168.72	0.85	169.24	5.60
167.69	0.10	168.21	0.15	168.73	0.90	169.25	5.77
167.70	0.10	168.22	0.15	168.74	0.94	169.26	5.94
167.71	0.10	168.23	0.15	168.75	0.99	169.27	6.12
167.72	0.10	168.24	0.15	168.76	1.04	169.28	6.29
167.73	0.10	168.25	0.16	168.77	1.09	169.29	6.47
167.74	0.10	168.26	0.16	168.78	1.14	169.30	6.65
167.75	0.10	168.27	0.16	168.79	1.19	169.31	6.83
167.76	0.10	168.28	0.16	168.80	1.24	169.32	7.02
167.77	0.11	168.29	0.16	168.81	1.29	169.33	7.20
167.78	0.11	168.30	0.16	168.82	1.34	169.34	7.39
167.79	0.11	168.31	0.16	168.83	1.40	169.35	7.58
167.80	0.11	168.32	0.16	168.84	1.45	169.36	7.77
167.81	0.11	168.33	0.16	168.85	1.51	169.37	7.97
167.82	0.11	168.34	0.16	168.86	1.56	169.38	8.16
167.83	0.11	168.35	0.16	168.87	1.62	169.39	8.36
167.84	0.11	168.36	0.16	168.88	1.68	169.40	8.56
167.85	0.12	168.37	0.17	168.89	1.73	169.41	8.76
167.86	0.12	168.38	0.17	168.90	1.79	169.42	8.96
167.87	0.12	168.39	0.17	168.91	1.85	169.43	9.17
167.88	0.12	168.40	0.17	168.92	1.91	169.44	9.37
167.89	0.12	168.41	0.17	168.93	1.97	169.45	9.58

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)
169.46	9.79
169.47	10.00
169.48	10.21
169.49	10.42
169.50	10.64
169.51	10.85
169.52	11.07
169.53	11.29
169.54	11.51
169.55	11.73
169.56	11.95
169.57	12.18
169.58	12.40
169.59	12.63
169.60	12.86
169.61	13.09
169.62	13.32
169.63	13.55
169.64	13.78
169.65	14.02
169.66	14.25
169.67	14.49
169.68	14.73
169.69	14.97
169.70	15.21
169.71	15.45
169.72	15.69
169.73	15.94
169.74	16.18
169.75	16.37
169.76	16.39
169.77	16.41
169.78	16.43
169.79	16.46
169.80	16.48
169.81	16.50
169.82	16.52
169.83	16.54
169.84	16.56
169.85	16.59
169.86	16.61
169.87	16.63
169.88	16.65
169.89	16.67
169.90	16.70
169.91	16.72
169.92	16.74
169.93	16.76
169.94	16.78
169.95	16.80
169.96	16.82
169.97	16.85
169.98	16.99
169.99	17.22
170.00	**17.52**

Stage-Area-Storage for Pond B-45: Basin #45

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0	165.82	2,821	733
165.31	54	0	165.83	2,875	762
165.32	108	1	165.84	2,929	791
165.33	163	2	165.85	2,983	820
165.34	217	4	165.86	3,038	851
165.35	271	7	165.87	3,092	881
165.36	325	10	165.88	3,146	912
165.37	380	13	165.89	3,200	944
165.38	434	17	165.90	3,255	976
165.39	488	22	165.91	3,309	1,009
165.40	542	27	165.92	3,363	1,043
165.41	597	33	165.93	3,417	1,076
165.42	651	39	165.94	3,472	1,111
165.43	705	46	165.95	3,526	1,146
165.44	759	53	165.96	3,580	1,181
165.45	814	61	165.97	3,634	1,217
165.46	868	69	165.98	3,689	1,254
165.47	922	78	165.99	3,743	1,291
165.48	976	88	166.00	3,797	1,329
165.49	1,031	98	166.01	3,803	1,367
165.50	1,085	108	166.02	3,808	1,405
165.51	1,139	120	166.03	3,814	1,443
165.52	1,193	131	166.04	3,820	1,481
165.53	1,248	143	166.05	3,826	1,520
165.54	1,302	156	166.06	3,831	1,558
165.55	1,356	170	166.07	3,837	1,596
165.56	1,410	183	166.08	3,843	1,635
165.57	1,465	198	166.09	3,849	1,673
165.58	1,519	213	166.10	3,854	1,712
165.59	1,573	228	166.11	3,860	1,750
165.60	1,627	244	166.12	3,866	1,789
165.61	1,682	261	166.13	3,871	1,827
165.62	1,736	278	166.14	3,877	1,866
165.63	1,790	295	166.15	3,883	1,905
165.64	1,844	314	166.16	3,889	1,944
165.65	1,899	332	166.17	3,894	1,983
165.66	1,953	351	166.18	3,900	2,022
165.67	2,007	371	166.19	3,906	2,061
165.68	2,061	392	166.20	3,912	2,100
165.69	2,115	413	166.21	3,917	2,139
165.70	2,170	434	166.22	3,923	2,178
165.71	2,224	456	166.23	3,929	2,217
165.72	2,278	478	166.24	3,935	2,257
165.73	2,332	501	166.25	3,940	2,296
165.74	2,387	525	166.26	3,946	2,336
165.75	2,441	549	166.27	3,952	2,375
165.76	2,495	574	166.28	3,957	2,415
165.77	2,549	599	166.29	3,963	2,454
165.78	2,604	625	166.30	3,969	2,494
165.79	2,658	651	166.31	3,975	2,534
165.80	2,712	678	166.32	3,980	2,573
165.81	2,766	705	166.33	3,986	2,613

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	3,992	2,653
166.35	3,998	2,693
166.36	4,003	2,733
166.37	4,009	2,773
166.38	4,015	2,813
166.39	4,020	2,853
166.40	4,026	2,894
166.41	4,032	2,934
166.42	4,038	2,974
166.43	4,043	3,015
166.44	4,049	3,055
166.45	4,055	3,096
166.46	4,061	3,136
166.47	4,066	3,177
166.48	4,072	3,218
166.49	4,078	3,258
166.50	4,084	3,299
166.51	4,089	3,340
166.52	4,095	3,381
166.53	4,101	3,422
166.54	4,106	3,463
166.55	4,112	3,504
166.56	4,118	3,545
166.57	4,124	3,586
166.58	4,129	3,628
166.59	4,135	3,669
166.60	4,141	3,710
166.61	4,147	3,752
166.62	4,152	3,793
166.63	4,158	3,835
166.64	4,164	3,876
166.65	4,169	3,918
166.66	4,175	3,960
166.67	4,181	4,002
166.68	4,187	4,043
166.69	4,192	4,085
166.70	4,198	4,127
166.71	4,204	4,169
166.72	4,210	4,211
166.73	4,215	4,253
166.74	4,221	4,296
166.75	4,227	4,338
166.76	4,232	4,380
166.77	4,238	4,423
166.78	4,244	4,465
166.79	4,250	4,507
166.80	4,255	4,550
166.81	4,261	4,592
166.82	4,267	4,635
166.83	4,273	4,678
166.84	4,278	4,721
166.85	4,284	4,763
166.86	4,290	4,806
166.87	4,296	4,849
166.88	4,301	4,892
166.89	4,307	4,935
166.90	4,313	4,978
166.91	4,318	5,021
166.92	4,324	5,065
166.93	4,330	5,108
166.94	4,336	5,151
166.95	4,341	5,195
166.96	4,347	5,238
166.97	4,353	5,282
166.98	4,359	5,325
166.99	4,364	5,369
167.00	4,370	5,412
167.01	4,376	5,456
167.02	4,382	5,500
167.03	4,388	5,544
167.04	4,394	5,588
167.05	4,400	5,632
167.06	4,406	5,676
167.07	4,412	5,720
167.08	4,418	5,764
167.09	4,424	5,808
167.10	4,430	5,852
167.11	4,436	5,897
167.12	4,442	5,941
167.13	4,448	5,986
167.14	4,454	6,030
167.15	4,460	6,075
167.16	4,466	6,119
167.17	4,471	6,164
167.18	4,477	6,209
167.19	4,483	6,254
167.20	4,489	6,298
167.21	4,495	6,343
167.22	4,501	6,388
167.23	4,507	6,433
167.24	4,513	6,478
167.25	4,519	6,524
167.26	4,525	6,569
167.27	4,531	6,614
167.28	4,537	6,659
167.29	4,543	6,705
167.30	4,549	6,750
167.31	4,555	6,796
167.32	4,561	6,841
167.33	4,567	6,887
167.34	4,573	6,933
167.35	4,579	6,979
167.36	4,585	7,024
167.37	4,591	7,070

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	4,597	7,116	167.90	4,907	9,587
167.39	4,603	7,162	167.91	4,913	9,636
167.40	4,609	7,208	167.92	4,919	9,686
167.41	4,615	7,254	167.93	4,925	9,735
167.42	4,621	7,301	167.94	4,931	9,784
167.43	4,627	7,347	167.95	4,937	9,833
167.44	4,633	7,393	167.96	4,943	9,883
167.45	4,639	7,439	167.97	4,949	9,932
167.46	4,645	7,486	167.98	4,955	9,982
167.47	4,651	7,532	167.99	4,961	10,031
167.48	4,657	7,579	168.00	4,967	10,081
167.49	4,663	7,625	168.01	4,973	10,131
167.50	4,669	7,672	168.02	4,979	10,180
167.51	4,674	7,719	168.03	4,986	10,230
167.52	4,680	7,766	168.04	4,992	10,280
167.53	4,686	7,812	168.05	4,998	10,330
167.54	4,692	7,859	168.06	5,004	10,380
167.55	4,698	7,906	168.07	5,010	10,430
167.56	4,704	7,953	168.08	5,017	10,480
167.57	4,710	8,000	168.09	5,023	10,530
167.58	4,716	8,047	168.10	5,029	10,581
167.59	4,722	8,095	168.11	5,035	10,631
167.60	4,728	8,142	168.12	5,042	10,681
167.61	4,734	8,189	168.13	5,048	10,732
167.62	4,740	8,237	168.14	5,054	10,782
167.63	4,746	8,284	168.15	5,060	10,833
167.64	4,752	8,332	168.16	5,066	10,884
167.65	4,758	8,379	168.17	5,073	10,934
167.66	4,764	8,427	168.18	5,079	10,985
167.67	4,770	8,474	168.19	5,085	11,036
167.68	4,776	8,522	168.20	5,091	11,087
167.69	4,782	8,570	168.21	5,097	11,138
167.70	4,788	8,618	168.22	5,104	11,189
167.71	4,794	8,666	168.23	5,110	11,240
167.72	4,800	8,714	168.24	5,116	11,291
167.73	4,806	8,762	168.25	5,122	11,342
167.74	4,812	8,810	168.26	5,128	11,393
167.75	4,818	8,858	168.27	5,135	11,445
167.76	4,824	8,906	168.28	5,141	11,496
167.77	4,830	8,954	168.29	5,147	11,547
167.78	4,836	9,003	168.30	5,153	11,599
167.79	4,842	9,051	168.31	5,160	11,651
167.80	4,848	9,099	168.32	5,166	11,702
167.81	4,854	9,148	168.33	5,172	11,754
167.82	4,860	9,197	168.34	5,178	11,806
167.83	4,866	9,245	168.35	5,184	11,857
167.84	4,871	9,294	168.36	5,191	11,909
167.85	4,877	9,343	168.37	5,197	11,961
167.86	4,883	9,391	168.38	5,203	12,013
167.87	4,889	9,440	168.39	5,209	12,065
167.88	4,895	9,489	168.40	5,215	12,117
167.89	4,901	9,538	168.41	5,222	12,170

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	5,228	12,222	168.94	5,551	15,024
168.43	5,234	12,274	168.95	5,557	15,080
168.44	5,240	12,327	168.96	5,563	15,135
168.45	5,246	12,379	168.97	5,569	15,191
168.46	5,253	12,431	168.98	5,576	15,247
168.47	5,259	12,484	168.99	5,582	15,303
168.48	5,265	12,537	169.00	5,588	15,358
168.49	5,271	12,589	169.01	5,594	15,414
168.50	5,278	12,642	169.02	5,601	15,470
168.51	5,284	12,695	169.03	5,607	15,526
168.52	5,290	12,748	169.04	5,614	15,582
168.53	5,296	12,801	169.05	5,620	15,639
168.54	5,302	12,854	169.06	5,627	15,695
168.55	5,309	12,907	169.07	5,633	15,751
168.56	5,315	12,960	169.08	5,640	15,808
168.57	5,321	13,013	169.09	5,646	15,864
168.58	5,327	13,066	169.10	5,653	15,920
168.59	5,333	13,120	169.11	5,659	15,977
168.60	5,340	13,173	169.12	5,666	16,034
168.61	5,346	13,226	169.13	5,672	16,090
168.62	5,352	13,280	169.14	5,679	16,147
168.63	5,358	13,333	169.15	5,685	16,204
168.64	5,364	13,387	169.16	5,692	16,261
168.65	5,371	13,441	169.17	5,698	16,318
168.66	5,377	13,494	169.18	5,704	16,375
168.67	5,383	13,548	169.19	5,711	16,432
168.68	5,389	13,602	169.20	5,717	16,489
168.69	5,395	13,656	169.21	5,724	16,546
168.70	5,402	13,710	169.22	5,730	16,603
168.71	5,408	13,764	169.23	5,737	16,661
168.72	5,414	13,818	169.24	5,743	16,718
168.73	5,420	13,872	169.25	5,750	16,776
168.74	5,427	13,927	169.26	5,756	16,833
168.75	5,433	13,981	169.27	5,763	16,891
168.76	5,439	14,035	169.28	5,769	16,948
168.77	5,445	14,090	169.29	5,776	17,006
168.78	5,451	14,144	169.30	5,782	17,064
168.79	5,458	14,199	169.31	5,789	17,122
168.80	5,464	14,253	169.32	5,795	17,180
168.81	5,470	14,308	169.33	5,802	17,238
168.82	5,476	14,363	169.34	5,808	17,296
168.83	5,482	14,417	169.35	5,814	17,354
168.84	5,489	14,472	169.36	5,821	17,412
168.85	5,495	14,527	169.37	5,827	17,470
168.86	5,501	14,582	169.38	5,834	17,529
168.87	5,507	14,637	169.39	5,840	17,587
168.88	5,513	14,692	169.40	5,847	17,645
168.89	5,520	14,748	169.41	5,853	17,704
168.90	5,526	14,803	169.42	5,860	17,762
168.91	5,532	14,858	169.43	5,866	17,821
168.92	5,538	14,913	169.44	5,873	17,880
168.93	5,545	14,969	169.45	5,879	17,939

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	5,886	17,997
169.47	5,892	18,056
169.48	5,899	18,115
169.49	5,905	18,174
169.50	5,912	18,233
169.51	5,918	18,292
169.52	5,924	18,352
169.53	5,931	18,411
169.54	5,937	18,470
169.55	5,944	18,530
169.56	5,950	18,589
169.57	5,957	18,649
169.58	5,963	18,708
169.59	5,970	18,768
169.60	5,976	18,828
169.61	5,983	18,888
169.62	5,989	18,947
169.63	5,996	19,007
169.64	6,002	19,067
169.65	6,009	19,127
169.66	6,015	19,187
169.67	6,021	19,248
169.68	6,028	19,308
169.69	6,034	19,368
169.70	6,041	19,429
169.71	6,047	19,489
169.72	6,054	19,550
169.73	6,060	19,610
169.74	6,067	19,671
169.75	6,073	19,731
169.76	6,080	19,792
169.77	6,086	19,853
169.78	6,093	19,914
169.79	6,099	19,975
169.80	6,106	20,036
169.81	6,112	20,097
169.82	6,119	20,158
169.83	6,125	20,219
169.84	6,131	20,281
169.85	6,138	20,342
169.86	6,144	20,403
169.87	6,151	20,465
169.88	6,157	20,526
169.89	6,164	20,588
169.90	6,170	20,650
169.91	6,177	20,711
169.92	6,183	20,773
169.93	6,190	20,835
169.94	6,196	20,897
169.95	6,203	20,959
169.96	6,209	21,021
169.97	6,216	21,083
169.98	6,222	21,145
169.99	6,229	21,208
170.00	**6,235**	**21,270**

Summary for Pond B-46A: Basin #46A

Inflow Area = 2.480 ac, 46.25% Impervious, Inflow Depth = 3.56" for Current 10 yr event
Inflow = 8.92 cfs @ 12.17 hrs, Volume= 0.736 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond B-46B : Basin #46B

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.40' @ 24.60 hrs Surf.Area= 13,154 sf Storage= 32,074 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

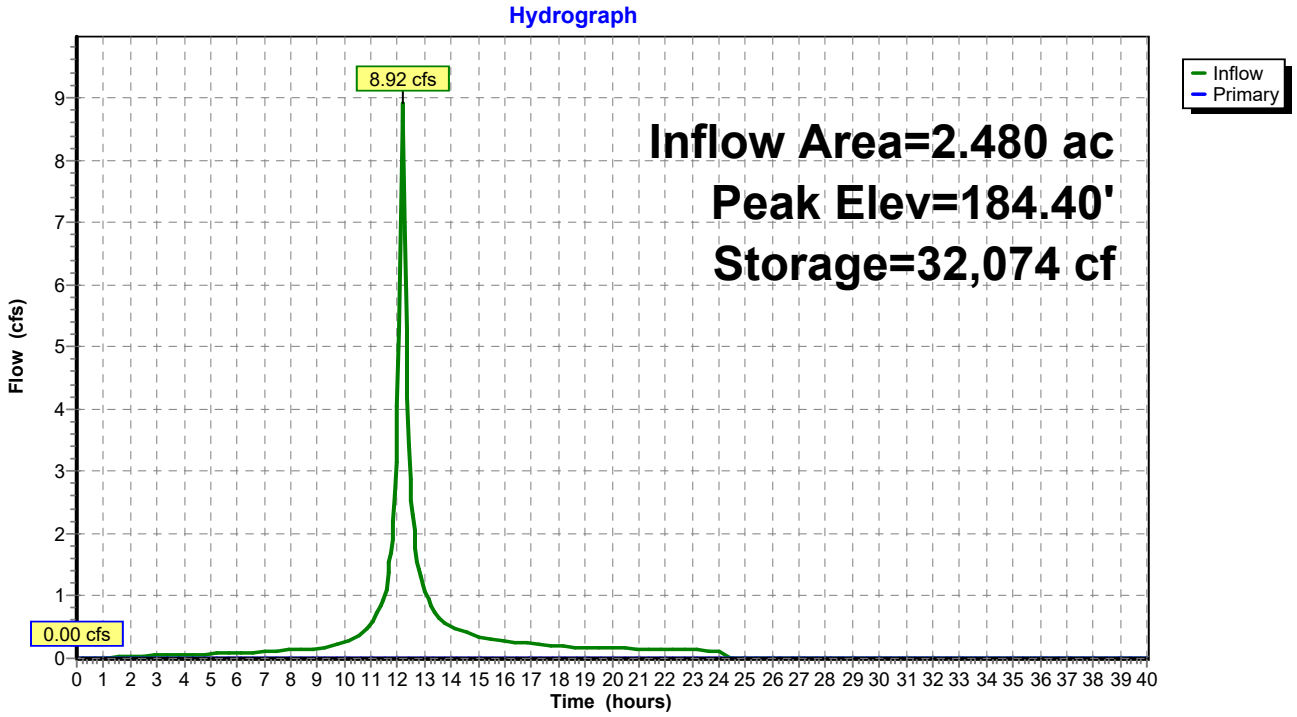
Volume	Invert	Avail.Storage	Storage Description
#1	181.00'	90,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.00	6,639	0	0
182.00	7,998	7,319	7,319
183.00	9,413	8,706	16,024
184.00	12,515	10,964	26,988
185.00	14,128	13,322	40,310
186.00	15,798	14,963	55,273
187.00	17,524	16,661	71,934
188.00	19,310	18,417	90,351

Device	Routing	Invert	Outlet Devices
#1	Primary	187.50'	**50.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=181.00' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-46A: Basin #46A



Stage-Discharge for Pond B-46A: Basin #46A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.00
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.00
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.00
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.00
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.00
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.00
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.00
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.00
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.00
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.00
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.00
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.00
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.00
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.00
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.00
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.00
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.00
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.00
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.00
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.00
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.00
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.00
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.00
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.00
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.00
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.00
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.00
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.00
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.00
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.00
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.00
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.00
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.00
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.00
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.00
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.00
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.00
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.00
181.48	0.00	182.00	0.00	182.52	0.00	183.04	0.00
181.49	0.00	182.01	0.00	182.53	0.00	183.05	0.00
181.50	0.00	182.02	0.00	182.54	0.00	183.06	0.00
181.51	0.00	182.03	0.00	182.55	0.00	183.07	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.08	0.00	183.60	0.00	184.12	0.00	184.64	0.00
183.09	0.00	183.61	0.00	184.13	0.00	184.65	0.00
183.10	0.00	183.62	0.00	184.14	0.00	184.66	0.00
183.11	0.00	183.63	0.00	184.15	0.00	184.67	0.00
183.12	0.00	183.64	0.00	184.16	0.00	184.68	0.00
183.13	0.00	183.65	0.00	184.17	0.00	184.69	0.00
183.14	0.00	183.66	0.00	184.18	0.00	184.70	0.00
183.15	0.00	183.67	0.00	184.19	0.00	184.71	0.00
183.16	0.00	183.68	0.00	184.20	0.00	184.72	0.00
183.17	0.00	183.69	0.00	184.21	0.00	184.73	0.00
183.18	0.00	183.70	0.00	184.22	0.00	184.74	0.00
183.19	0.00	183.71	0.00	184.23	0.00	184.75	0.00
183.20	0.00	183.72	0.00	184.24	0.00	184.76	0.00
183.21	0.00	183.73	0.00	184.25	0.00	184.77	0.00
183.22	0.00	183.74	0.00	184.26	0.00	184.78	0.00
183.23	0.00	183.75	0.00	184.27	0.00	184.79	0.00
183.24	0.00	183.76	0.00	184.28	0.00	184.80	0.00
183.25	0.00	183.77	0.00	184.29	0.00	184.81	0.00
183.26	0.00	183.78	0.00	184.30	0.00	184.82	0.00
183.27	0.00	183.79	0.00	184.31	0.00	184.83	0.00
183.28	0.00	183.80	0.00	184.32	0.00	184.84	0.00
183.29	0.00	183.81	0.00	184.33	0.00	184.85	0.00
183.30	0.00	183.82	0.00	184.34	0.00	184.86	0.00
183.31	0.00	183.83	0.00	184.35	0.00	184.87	0.00
183.32	0.00	183.84	0.00	184.36	0.00	184.88	0.00
183.33	0.00	183.85	0.00	184.37	0.00	184.89	0.00
183.34	0.00	183.86	0.00	184.38	0.00	184.90	0.00
183.35	0.00	183.87	0.00	184.39	0.00	184.91	0.00
183.36	0.00	183.88	0.00	184.40	0.00	184.92	0.00
183.37	0.00	183.89	0.00	184.41	0.00	184.93	0.00
183.38	0.00	183.90	0.00	184.42	0.00	184.94	0.00
183.39	0.00	183.91	0.00	184.43	0.00	184.95	0.00
183.40	0.00	183.92	0.00	184.44	0.00	184.96	0.00
183.41	0.00	183.93	0.00	184.45	0.00	184.97	0.00
183.42	0.00	183.94	0.00	184.46	0.00	184.98	0.00
183.43	0.00	183.95	0.00	184.47	0.00	184.99	0.00
183.44	0.00	183.96	0.00	184.48	0.00	185.00	0.00
183.45	0.00	183.97	0.00	184.49	0.00	185.01	0.00
183.46	0.00	183.98	0.00	184.50	0.00	185.02	0.00
183.47	0.00	183.99	0.00	184.51	0.00	185.03	0.00
183.48	0.00	184.00	0.00	184.52	0.00	185.04	0.00
183.49	0.00	184.01	0.00	184.53	0.00	185.05	0.00
183.50	0.00	184.02	0.00	184.54	0.00	185.06	0.00
183.51	0.00	184.03	0.00	184.55	0.00	185.07	0.00
183.52	0.00	184.04	0.00	184.56	0.00	185.08	0.00
183.53	0.00	184.05	0.00	184.57	0.00	185.09	0.00
183.54	0.00	184.06	0.00	184.58	0.00	185.10	0.00
183.55	0.00	184.07	0.00	184.59	0.00	185.11	0.00
183.56	0.00	184.08	0.00	184.60	0.00	185.12	0.00
183.57	0.00	184.09	0.00	184.61	0.00	185.13	0.00
183.58	0.00	184.10	0.00	184.62	0.00	185.14	0.00
183.59	0.00	184.11	0.00	184.63	0.00	185.15	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.16	0.00	185.68	0.00	186.20	0.00	186.72	0.00
185.17	0.00	185.69	0.00	186.21	0.00	186.73	0.00
185.18	0.00	185.70	0.00	186.22	0.00	186.74	0.00
185.19	0.00	185.71	0.00	186.23	0.00	186.75	0.00
185.20	0.00	185.72	0.00	186.24	0.00	186.76	0.00
185.21	0.00	185.73	0.00	186.25	0.00	186.77	0.00
185.22	0.00	185.74	0.00	186.26	0.00	186.78	0.00
185.23	0.00	185.75	0.00	186.27	0.00	186.79	0.00
185.24	0.00	185.76	0.00	186.28	0.00	186.80	0.00
185.25	0.00	185.77	0.00	186.29	0.00	186.81	0.00
185.26	0.00	185.78	0.00	186.30	0.00	186.82	0.00
185.27	0.00	185.79	0.00	186.31	0.00	186.83	0.00
185.28	0.00	185.80	0.00	186.32	0.00	186.84	0.00
185.29	0.00	185.81	0.00	186.33	0.00	186.85	0.00
185.30	0.00	185.82	0.00	186.34	0.00	186.86	0.00
185.31	0.00	185.83	0.00	186.35	0.00	186.87	0.00
185.32	0.00	185.84	0.00	186.36	0.00	186.88	0.00
185.33	0.00	185.85	0.00	186.37	0.00	186.89	0.00
185.34	0.00	185.86	0.00	186.38	0.00	186.90	0.00
185.35	0.00	185.87	0.00	186.39	0.00	186.91	0.00
185.36	0.00	185.88	0.00	186.40	0.00	186.92	0.00
185.37	0.00	185.89	0.00	186.41	0.00	186.93	0.00
185.38	0.00	185.90	0.00	186.42	0.00	186.94	0.00
185.39	0.00	185.91	0.00	186.43	0.00	186.95	0.00
185.40	0.00	185.92	0.00	186.44	0.00	186.96	0.00
185.41	0.00	185.93	0.00	186.45	0.00	186.97	0.00
185.42	0.00	185.94	0.00	186.46	0.00	186.98	0.00
185.43	0.00	185.95	0.00	186.47	0.00	186.99	0.00
185.44	0.00	185.96	0.00	186.48	0.00	187.00	0.00
185.45	0.00	185.97	0.00	186.49	0.00	187.01	0.00
185.46	0.00	185.98	0.00	186.50	0.00	187.02	0.00
185.47	0.00	185.99	0.00	186.51	0.00	187.03	0.00
185.48	0.00	186.00	0.00	186.52	0.00	187.04	0.00
185.49	0.00	186.01	0.00	186.53	0.00	187.05	0.00
185.50	0.00	186.02	0.00	186.54	0.00	187.06	0.00
185.51	0.00	186.03	0.00	186.55	0.00	187.07	0.00
185.52	0.00	186.04	0.00	186.56	0.00	187.08	0.00
185.53	0.00	186.05	0.00	186.57	0.00	187.09	0.00
185.54	0.00	186.06	0.00	186.58	0.00	187.10	0.00
185.55	0.00	186.07	0.00	186.59	0.00	187.11	0.00
185.56	0.00	186.08	0.00	186.60	0.00	187.12	0.00
185.57	0.00	186.09	0.00	186.61	0.00	187.13	0.00
185.58	0.00	186.10	0.00	186.62	0.00	187.14	0.00
185.59	0.00	186.11	0.00	186.63	0.00	187.15	0.00
185.60	0.00	186.12	0.00	186.64	0.00	187.16	0.00
185.61	0.00	186.13	0.00	186.65	0.00	187.17	0.00
185.62	0.00	186.14	0.00	186.66	0.00	187.18	0.00
185.63	0.00	186.15	0.00	186.67	0.00	187.19	0.00
185.64	0.00	186.16	0.00	186.68	0.00	187.20	0.00
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)
187.24	0.00
187.25	0.00
187.26	0.00
187.27	0.00
187.28	0.00
187.29	0.00
187.30	0.00
187.31	0.00
187.32	0.00
187.33	0.00
187.34	0.00
187.35	0.00
187.36	0.00
187.37	0.00
187.38	0.00
187.39	0.00
187.40	0.00
187.41	0.00
187.42	0.00
187.43	0.00
187.44	0.00
187.45	0.00
187.46	0.00
187.47	0.00
187.48	0.00
187.49	0.00
187.50	0.00
187.51	0.16
187.52	0.46
187.53	0.86
187.54	1.32
187.55	1.85
187.56	2.44
187.57	3.08
187.58	3.77
187.59	4.51
187.60	5.29
187.61	6.12
187.62	6.99
187.63	7.90
187.64	8.85
187.65	9.84
187.66	10.87
187.67	11.93
187.68	13.03
187.69	14.16
187.70	15.33
187.71	16.53
187.72	17.76
187.73	19.03
187.74	20.33
187.75	21.67
187.76	23.03
187.77	24.43
187.78	25.85
187.79	27.31
187.80	28.80
187.81	30.32
187.82	31.87
187.83	33.45
187.84	35.06
187.85	36.70
187.86	38.37
187.87	40.07
187.88	41.80
187.89	43.55
187.90	45.34
187.91	47.15
187.92	48.99
187.93	50.86
187.94	52.76
187.95	54.69
187.96	56.65
187.97	58.63
187.98	60.64
187.99	62.68
188.00	**64.75**

Stage-Area-Storage for Pond B-46A: Basin #46A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.00	6,639	0	181.52	7,346	3,636
181.01	6,653	66	181.53	7,359	3,710
181.02	6,666	133	181.54	7,373	3,783
181.03	6,680	200	181.55	7,386	3,857
181.04	6,693	267	181.56	7,400	3,931
181.05	6,707	334	181.57	7,414	4,005
181.06	6,721	401	181.58	7,427	4,079
181.07	6,734	468	181.59	7,441	4,154
181.08	6,748	535	181.60	7,454	4,228
181.09	6,761	603	181.61	7,468	4,303
181.10	6,775	671	181.62	7,482	4,377
181.11	6,788	739	181.63	7,495	4,452
181.12	6,802	806	181.64	7,509	4,527
181.13	6,816	875	181.65	7,522	4,602
181.14	6,829	943	181.66	7,536	4,678
181.15	6,843	1,011	181.67	7,550	4,753
181.16	6,856	1,080	181.68	7,563	4,829
181.17	6,870	1,148	181.69	7,577	4,904
181.18	6,884	1,217	181.70	7,590	4,980
181.19	6,897	1,286	181.71	7,604	5,056
181.20	6,911	1,355	181.72	7,617	5,132
181.21	6,924	1,424	181.73	7,631	5,209
181.22	6,938	1,493	181.74	7,645	5,285
181.23	6,952	1,563	181.75	7,658	5,361
181.24	6,965	1,632	181.76	7,672	5,438
181.25	6,979	1,702	181.77	7,685	5,515
181.26	6,992	1,772	181.78	7,699	5,592
181.27	7,006	1,842	181.79	7,713	5,669
181.28	7,020	1,912	181.80	7,726	5,746
181.29	7,033	1,982	181.81	7,740	5,823
181.30	7,047	2,053	181.82	7,753	5,901
181.31	7,060	2,123	181.83	7,767	5,978
181.32	7,074	2,194	181.84	7,781	6,056
181.33	7,087	2,265	181.85	7,794	6,134
181.34	7,101	2,336	181.86	7,808	6,212
181.35	7,115	2,407	181.87	7,821	6,290
181.36	7,128	2,478	181.88	7,835	6,369
181.37	7,142	2,549	181.89	7,849	6,447
181.38	7,155	2,621	181.90	7,862	6,525
181.39	7,169	2,693	181.91	7,876	6,604
181.40	7,183	2,764	181.92	7,889	6,683
181.41	7,196	2,836	181.93	7,903	6,762
181.42	7,210	2,908	181.94	7,916	6,841
181.43	7,223	2,980	181.95	7,930	6,920
181.44	7,237	3,053	181.96	7,944	7,000
181.45	7,251	3,125	181.97	7,957	7,079
181.46	7,264	3,198	181.98	7,971	7,159
181.47	7,278	3,270	181.99	7,984	7,239
181.48	7,291	3,343	182.00	7,998	7,319
181.49	7,305	3,416	182.01	8,012	7,399
181.50	7,319	3,489	182.02	8,026	7,479
181.51	7,332	3,563	182.03	8,040	7,559

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.04	8,055	7,640	182.56	8,790	12,019
182.05	8,069	7,720	182.57	8,805	12,107
182.06	8,083	7,801	182.58	8,819	12,195
182.07	8,097	7,882	182.59	8,833	12,284
182.08	8,111	7,963	182.60	8,847	12,372
182.09	8,125	8,044	182.61	8,861	12,461
182.10	8,139	8,125	182.62	8,875	12,549
182.11	8,154	8,207	182.63	8,889	12,638
182.12	8,168	8,288	182.64	8,904	12,727
182.13	8,182	8,370	182.65	8,918	12,816
182.14	8,196	8,452	182.66	8,932	12,905
182.15	8,210	8,534	182.67	8,946	12,995
182.16	8,224	8,616	182.68	8,960	13,084
182.17	8,239	8,699	182.69	8,974	13,174
182.18	8,253	8,781	182.70	8,988	13,264
182.19	8,267	8,864	182.71	9,003	13,354
182.20	8,281	8,946	182.72	9,017	13,444
182.21	8,295	9,029	182.73	9,031	13,534
182.22	8,309	9,112	182.74	9,045	13,624
182.23	8,323	9,195	182.75	9,059	13,715
182.24	8,338	9,279	182.76	9,073	13,806
182.25	8,352	9,362	182.77	9,088	13,896
182.26	8,366	9,446	182.78	9,102	13,987
182.27	8,380	9,530	182.79	9,116	14,078
182.28	8,394	9,613	182.80	9,130	14,170
182.29	8,408	9,697	182.81	9,144	14,261
182.30	8,423	9,782	182.82	9,158	14,353
182.31	8,437	9,866	182.83	9,172	14,444
182.32	8,451	9,950	182.84	9,187	14,536
182.33	8,465	10,035	182.85	9,201	14,628
182.34	8,479	10,120	182.86	9,215	14,720
182.35	8,493	10,204	182.87	9,229	14,812
182.36	8,507	10,289	182.88	9,243	14,905
182.37	8,522	10,375	182.89	9,257	14,997
182.38	8,536	10,460	182.90	9,272	15,090
182.39	8,550	10,545	182.91	9,286	15,183
182.40	8,564	10,631	182.92	9,300	15,275
182.41	8,578	10,717	182.93	9,314	15,369
182.42	8,592	10,802	182.94	9,328	15,462
182.43	8,606	10,888	182.95	9,342	15,555
182.44	8,621	10,975	182.96	9,356	15,649
182.45	8,635	11,061	182.97	9,371	15,742
182.46	8,649	11,147	182.98	9,385	15,836
182.47	8,663	11,234	182.99	9,399	15,930
182.48	8,677	11,321	183.00	9,413	16,024
182.49	8,691	11,407	183.01	9,444	16,118
182.50	8,706	11,494	183.02	9,475	16,213
182.51	8,720	11,582	183.03	9,506	16,308
182.52	8,734	11,669	183.04	9,537	16,403
182.53	8,748	11,756	183.05	9,568	16,499
182.54	8,762	11,844	183.06	9,599	16,594
182.55	8,776	11,931	183.07	9,630	16,691

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.08	9,661	16,787	183.60	11,274	22,230
183.09	9,692	16,884	183.61	11,305	22,343
183.10	9,723	16,981	183.62	11,336	22,456
183.11	9,754	17,078	183.63	11,367	22,570
183.12	9,785	17,176	183.64	11,398	22,684
183.13	9,816	17,274	183.65	11,429	22,798
183.14	9,847	17,372	183.66	11,460	22,912
183.15	9,878	17,471	183.67	11,491	23,027
183.16	9,909	17,570	183.68	11,522	23,142
183.17	9,940	17,669	183.69	11,553	23,257
183.18	9,971	17,769	183.70	11,584	23,373
183.19	10,002	17,868	183.71	11,615	23,489
183.20	10,033	17,969	183.72	11,646	23,605
183.21	10,064	18,069	183.73	11,677	23,722
183.22	10,095	18,170	183.74	11,708	23,839
183.23	10,126	18,271	183.75	11,740	23,956
183.24	10,157	18,372	183.76	11,771	24,074
183.25	10,189	18,474	183.77	11,802	24,192
183.26	10,220	18,576	183.78	11,833	24,310
183.27	10,251	18,679	183.79	11,864	24,428
183.28	10,282	18,781	183.80	11,895	24,547
183.29	10,313	18,884	183.81	11,926	24,666
183.30	10,344	18,987	183.82	11,957	24,786
183.31	10,375	19,091	183.83	11,988	24,905
183.32	10,406	19,195	183.84	12,019	25,025
183.33	10,437	19,299	183.85	12,050	25,146
183.34	10,468	19,404	183.86	12,081	25,266
183.35	10,499	19,509	183.87	12,112	25,387
183.36	10,530	19,614	183.88	12,143	25,509
183.37	10,561	19,719	183.89	12,174	25,630
183.38	10,592	19,825	183.90	12,205	25,752
183.39	10,623	19,931	183.91	12,236	25,874
183.40	10,654	20,037	183.92	12,267	25,997
183.41	10,685	20,144	183.93	12,298	26,120
183.42	10,716	20,251	183.94	12,329	26,243
183.43	10,747	20,358	183.95	12,360	26,366
183.44	10,778	20,466	183.96	12,391	26,490
183.45	10,809	20,574	183.97	12,422	26,614
183.46	10,840	20,682	183.98	12,453	26,738
183.47	10,871	20,791	183.99	12,484	26,863
183.48	10,902	20,900	184.00	12,515	26,988
183.49	10,933	21,009	184.01	12,531	27,113
183.50	10,964	21,118	184.02	12,547	27,239
183.51	10,995	21,228	184.03	12,563	27,364
183.52	11,026	21,338	184.04	12,580	27,490
183.53	11,057	21,449	184.05	12,596	27,616
183.54	11,088	21,559	184.06	12,612	27,742
183.55	11,119	21,670	184.07	12,628	27,868
183.56	11,150	21,782	184.08	12,644	27,994
183.57	11,181	21,893	184.09	12,660	28,121
183.58	11,212	22,005	184.10	12,676	28,248
183.59	11,243	22,118	184.11	12,692	28,374

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.12	12,709	28,501	184.64	13,547	35,328
184.13	12,725	28,629	184.65	13,563	35,463
184.14	12,741	28,756	184.66	13,580	35,599
184.15	12,757	28,883	184.67	13,596	35,735
184.16	12,773	29,011	184.68	13,612	35,871
184.17	12,789	29,139	184.69	13,628	36,007
184.18	12,805	29,267	184.70	13,644	36,144
184.19	12,821	29,395	184.71	13,660	36,280
184.20	12,838	29,523	184.72	13,676	36,417
184.21	12,854	29,652	184.73	13,692	36,554
184.22	12,870	29,780	184.74	13,709	36,691
184.23	12,886	29,909	184.75	13,725	36,828
184.24	12,902	30,038	184.76	13,741	36,965
184.25	12,918	30,167	184.77	13,757	37,103
184.26	12,934	30,296	184.78	13,773	37,240
184.27	12,951	30,426	184.79	13,789	37,378
184.28	12,967	30,555	184.80	13,805	37,516
184.29	12,983	30,685	184.81	13,822	37,654
184.30	12,999	30,815	184.82	13,838	37,793
184.31	13,015	30,945	184.83	13,854	37,931
184.32	13,031	31,075	184.84	13,870	38,070
184.33	13,047	31,206	184.85	13,886	38,208
184.34	13,063	31,336	184.86	13,902	38,347
184.35	13,080	31,467	184.87	13,918	38,486
184.36	13,096	31,598	184.88	13,934	38,626
184.37	13,112	31,729	184.89	13,951	38,765
184.38	13,128	31,860	184.90	13,967	38,905
184.39	13,144	31,992	184.91	13,983	39,045
184.40	13,160	32,123	184.92	13,999	39,184
184.41	13,176	32,255	184.93	14,015	39,324
184.42	13,192	32,387	184.94	14,031	39,465
184.43	13,209	32,519	184.95	14,047	39,605
184.44	13,225	32,651	184.96	14,063	39,746
184.45	13,241	32,783	184.97	14,080	39,886
184.46	13,257	32,916	184.98	14,096	40,027
184.47	13,273	33,048	184.99	14,112	40,168
184.48	13,289	33,181	185.00	14,128	40,310
184.49	13,305	33,314	185.01	14,145	40,451
184.50	13,322	33,447	185.02	14,161	40,592
184.51	13,338	33,580	185.03	14,178	40,734
184.52	13,354	33,714	185.04	14,195	40,876
184.53	13,370	33,847	185.05	14,212	41,018
184.54	13,386	33,981	185.06	14,228	41,160
184.55	13,402	34,115	185.07	14,245	41,303
184.56	13,418	34,249	185.08	14,262	41,445
184.57	13,434	34,384	185.09	14,278	41,588
184.58	13,451	34,518	185.10	14,295	41,731
184.59	13,467	34,653	185.11	14,312	41,874
184.60	13,483	34,787	185.12	14,328	42,017
184.61	13,499	34,922	185.13	14,345	42,160
184.62	13,515	35,057	185.14	14,362	42,304
184.63	13,531	35,193	185.15	14,379	42,447

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.16	14,395	42,591
185.17	14,412	42,735
185.18	14,429	42,880
185.19	14,445	43,024
185.20	14,462	43,168
185.21	14,479	43,313
185.22	14,495	43,458
185.23	14,512	43,603
185.24	14,529	43,748
185.25	14,546	43,894
185.26	14,562	44,039
185.27	14,579	44,185
185.28	14,596	44,331
185.29	14,612	44,477
185.30	14,629	44,623
185.31	14,646	44,769
185.32	14,662	44,916
185.33	14,679	45,063
185.34	14,696	45,210
185.35	14,712	45,357
185.36	14,729	45,504
185.37	14,746	45,651
185.38	14,763	45,799
185.39	14,779	45,946
185.40	14,796	46,094
185.41	14,813	46,242
185.42	14,829	46,391
185.43	14,846	46,539
185.44	14,863	46,687
185.45	14,879	46,836
185.46	14,896	46,985
185.47	14,913	47,134
185.48	14,930	47,283
185.49	14,946	47,433
185.50	14,963	47,582
185.51	14,980	47,732
185.52	14,996	47,882
185.53	15,013	48,032
185.54	15,030	48,182
185.55	15,047	48,332
185.56	15,063	48,483
185.57	15,080	48,634
185.58	15,097	48,785
185.59	15,113	48,936
185.60	15,130	49,087
185.61	15,147	49,238
185.62	15,163	49,390
185.63	15,180	49,542
185.64	15,197	49,693
185.65	15,214	49,845
185.66	15,230	49,998
185.67	15,247	50,150
185.68	15,264	50,303
185.69	15,280	50,455
185.70	15,297	50,608
185.71	15,314	50,761
185.72	15,330	50,915
185.73	15,347	51,068
185.74	15,364	51,221
185.75	15,381	51,375
185.76	15,397	51,529
185.77	15,414	51,683
185.78	15,431	51,837
185.79	15,447	51,992
185.80	15,464	52,146
185.81	15,481	52,301
185.82	15,497	52,456
185.83	15,514	52,611
185.84	15,531	52,766
185.85	15,547	52,922
185.86	15,564	53,077
185.87	15,581	53,233
185.88	15,598	53,389
185.89	15,614	53,545
185.90	15,631	53,701
185.91	15,648	53,857
185.92	15,664	54,014
185.93	15,681	54,171
185.94	15,698	54,328
185.95	15,714	54,485
185.96	15,731	54,642
185.97	15,748	54,799
185.98	15,765	54,957
185.99	15,781	55,115
186.00	15,798	55,273
186.01	15,815	55,431
186.02	15,833	55,589
186.03	15,850	55,747
186.04	15,867	55,906
186.05	15,884	56,065
186.06	15,902	56,223
186.07	15,919	56,383
186.08	15,936	56,542
186.09	15,953	56,701
186.10	15,971	56,861
186.11	15,988	57,021
186.12	16,005	57,181
186.13	16,022	57,341
186.14	16,040	57,501
186.15	16,057	57,662
186.16	16,074	57,822
186.17	16,091	57,983
186.18	16,109	58,144
186.19	16,126	58,305

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.20	16,143	58,467
186.21	16,160	58,628
186.22	16,178	58,790
186.23	16,195	58,952
186.24	16,212	59,114
186.25	16,230	59,276
186.26	16,247	59,438
186.27	16,264	59,601
186.28	16,281	59,764
186.29	16,299	59,926
186.30	16,316	60,090
186.31	16,333	60,253
186.32	16,350	60,416
186.33	16,368	60,580
186.34	16,385	60,744
186.35	16,402	60,908
186.36	16,419	61,072
186.37	16,437	61,236
186.38	16,454	61,400
186.39	16,471	61,565
186.40	16,488	61,730
186.41	16,506	61,895
186.42	16,523	62,060
186.43	16,540	62,225
186.44	16,557	62,391
186.45	16,575	62,556
186.46	16,592	62,722
186.47	16,609	62,888
186.48	16,626	63,054
186.49	16,644	63,221
186.50	16,661	63,387
186.51	16,678	63,554
186.52	16,696	63,721
186.53	16,713	63,888
186.54	16,730	64,055
186.55	16,747	64,222
186.56	16,765	64,390
186.57	16,782	64,558
186.58	16,799	64,726
186.59	16,816	64,894
186.60	16,834	65,062
186.61	16,851	65,230
186.62	16,868	65,399
186.63	16,885	65,568
186.64	16,903	65,737
186.65	16,920	65,906
186.66	16,937	66,075
186.67	16,954	66,245
186.68	16,972	66,414
186.69	16,989	66,584
186.70	17,006	66,754
186.71	17,023	66,924
186.72	17,041	67,094
186.73	17,058	67,265
186.74	17,075	67,436
186.75	17,093	67,606
186.76	17,110	67,777
186.77	17,127	67,949
186.78	17,144	68,120
186.79	17,162	68,292
186.80	17,179	68,463
186.81	17,196	68,635
186.82	17,213	68,807
186.83	17,231	68,979
186.84	17,248	69,152
186.85	17,265	69,324
186.86	17,282	69,497
186.87	17,300	69,670
186.88	17,317	69,843
186.89	17,334	70,016
186.90	17,351	70,190
186.91	17,369	70,363
186.92	17,386	70,537
186.93	17,403	70,711
186.94	17,420	70,885
186.95	17,438	71,059
186.96	17,455	71,234
186.97	17,472	71,409
186.98	17,489	71,583
186.99	17,507	71,758
187.00	17,524	71,934
187.01	17,542	72,109
187.02	17,560	72,284
187.03	17,578	72,460
187.04	17,595	72,636
187.05	17,613	72,812
187.06	17,631	72,988
187.07	17,649	73,165
187.08	17,667	73,341
187.09	17,685	73,518
187.10	17,703	73,695
187.11	17,720	73,872
187.12	17,738	74,049
187.13	17,756	74,227
187.14	17,774	74,404
187.15	17,792	74,582
187.16	17,810	74,760
187.17	17,828	74,938
187.18	17,845	75,117
187.19	17,863	75,295
187.20	17,881	75,474
187.21	17,899	75,653
187.22	17,917	75,832
187.23	17,935	76,011

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.24	17,953	76,191
187.25	17,971	76,370
187.26	17,988	76,550
187.27	18,006	76,730
187.28	18,024	76,910
187.29	18,042	77,091
187.30	18,060	77,271
187.31	18,078	77,452
187.32	18,096	77,633
187.33	18,113	77,814
187.34	18,131	77,995
187.35	18,149	78,176
187.36	18,167	78,358
187.37	18,185	78,540
187.38	18,203	78,722
187.39	18,221	78,904
187.40	18,238	79,086
187.41	18,256	79,268
187.42	18,274	79,451
187.43	18,292	79,634
187.44	18,310	79,817
187.45	18,328	80,000
187.46	18,346	80,183
187.47	18,363	80,367
187.48	18,381	80,551
187.49	18,399	80,735
187.50	18,417	80,919
187.51	18,435	81,103
187.52	18,453	81,287
187.53	18,471	81,472
187.54	18,488	81,657
187.55	18,506	81,842
187.56	18,524	82,027
187.57	18,542	82,212
187.58	18,560	82,398
187.59	18,578	82,584
187.60	18,596	82,769
187.61	18,613	82,955
187.62	18,631	83,142
187.63	18,649	83,328
187.64	18,667	83,515
187.65	18,685	83,701
187.66	18,703	83,888
187.67	18,721	84,075
187.68	18,738	84,263
187.69	18,756	84,450
187.70	18,774	84,638
187.71	18,792	84,826
187.72	18,810	85,014
187.73	18,828	85,202
187.74	18,846	85,390
187.75	18,864	85,579
187.76	18,881	85,768
187.77	18,899	85,956
187.78	18,917	86,146
187.79	18,935	86,335
187.80	18,953	86,524
187.81	18,971	86,714
187.82	18,989	86,904
187.83	19,006	87,094
187.84	19,024	87,284
187.85	19,042	87,474
187.86	19,060	87,665
187.87	19,078	87,855
187.88	19,096	88,046
187.89	19,114	88,237
187.90	19,131	88,428
187.91	19,149	88,620
187.92	19,167	88,811
187.93	19,185	89,003
187.94	19,203	89,195
187.95	19,221	89,387
187.96	19,239	89,580
187.97	19,256	89,772
187.98	19,274	89,965
187.99	19,292	90,157
188.00	**19,310**	**90,351**

Summary for Pond B-46B: Basin #46B

Inflow Area = 2.931 ac, 39.13% Impervious, Inflow Depth = 0.38" for Current 10 yr event
Inflow = 1.62 cfs @ 12.05 hrs, Volume= 0.092 af
Outflow = 0.02 cfs @ 21.29 hrs, Volume= 0.033 af, Atten= 99%, Lag= 554.6 min
Primary = 0.02 cfs @ 21.29 hrs, Volume= 0.033 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 183.94' @ 21.29 hrs Surf.Area= 10,086 sf Storage= 3,219 cf

Plug-Flow detention time= 736.7 min calculated for 0.033 af (36% of inflow)
Center-of-Mass det. time= 607.4 min (1,441.7 - 834.3)

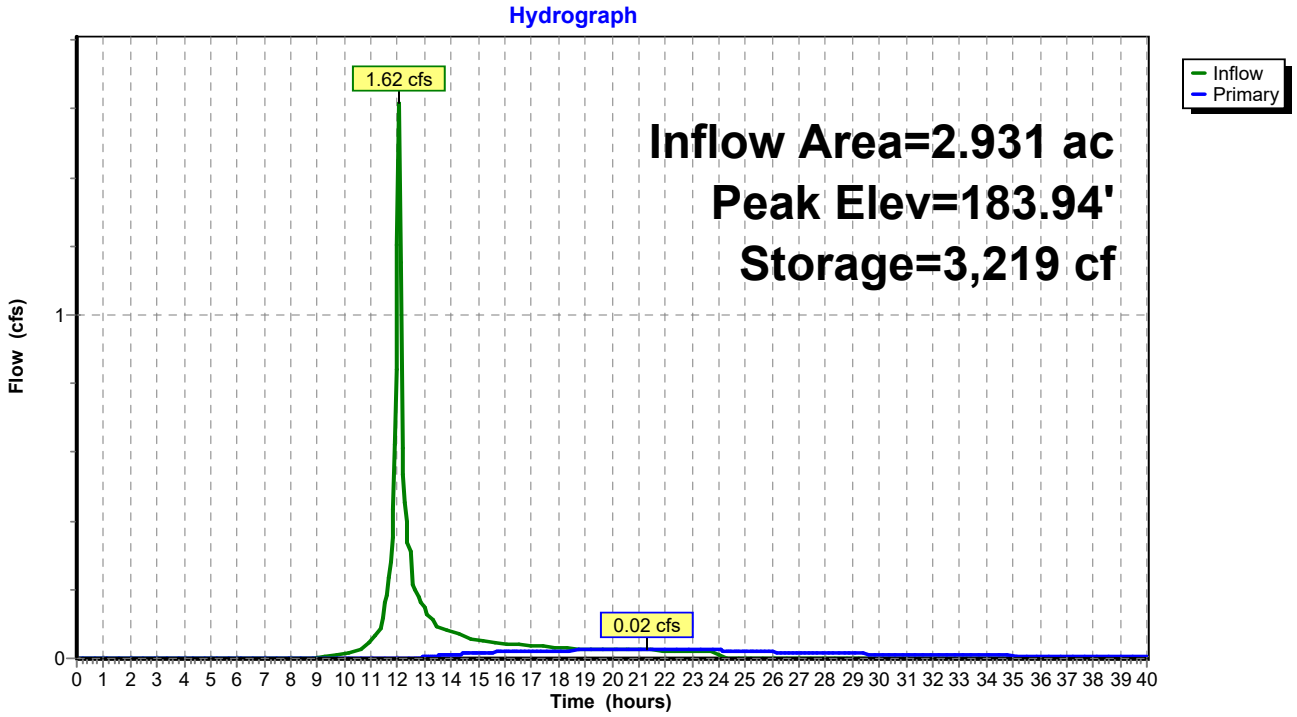
Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	59,250 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	11,059	3,871	3,871
185.00	12,402	11,731	15,601
186.00	13,803	13,103	28,704
187.00	15,259	14,531	43,235
188.00	16,772	16,016	59,250

Device	Routing	Invert	Outlet Devices
#1	Primary	182.65'	**18.0" Round Culvert** L= 65.0' Ke= 0.500 Inlet / Outlet Invert= 182.65' / 176.00' S= 0.1023 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.82'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.45'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.75'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.02 cfs @ 21.29 hrs HW=183.94' (Free Discharge)
- **1=Culvert** (Passes 0.02 cfs of 6.24 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.02 cfs @ 1.17 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-46B: Basin #46B



Stage-Discharge for Pond B-46B: Basin #46B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.30	0.00	183.82	0.00	184.34	0.11	184.86	3.52
183.31	0.00	183.83	0.00	184.35	0.11	184.87	3.65
183.32	0.00	183.84	0.00	184.36	0.11	184.88	3.77
183.33	0.00	183.85	0.00	184.37	0.11	184.89	3.89
183.34	0.00	183.86	0.00	184.38	0.11	184.90	4.02
183.35	0.00	183.87	0.00	184.39	0.11	184.91	4.15
183.36	0.00	183.88	0.01	184.40	0.11	184.92	4.28
183.37	0.00	183.89	0.01	184.41	0.11	184.93	4.41
183.38	0.00	183.90	0.01	184.42	0.12	184.94	4.54
183.39	0.00	183.91	0.01	184.43	0.12	184.95	4.68
183.40	0.00	183.92	0.02	184.44	0.12	184.96	4.81
183.41	0.00	183.93	0.02	184.45	0.12	184.97	4.95
183.42	0.00	183.94	0.02	184.46	0.13	184.98	5.08
183.43	0.00	183.95	0.03	184.47	0.16	184.99	5.22
183.44	0.00	183.96	0.03	184.48	0.19	185.00	5.36
183.45	0.00	183.97	0.03	184.49	0.23	185.01	5.50
183.46	0.00	183.98	0.04	184.50	0.27	185.02	5.64
183.47	0.00	183.99	0.04	184.51	0.32	185.03	5.78
183.48	0.00	184.00	0.05	184.52	0.37	185.04	5.93
183.49	0.00	184.01	0.05	184.53	0.42	185.05	6.07
183.50	0.00	184.02	0.05	184.54	0.48	185.06	6.22
183.51	0.00	184.03	0.05	184.55	0.54	185.07	6.36
183.52	0.00	184.04	0.06	184.56	0.61	185.08	6.51
183.53	0.00	184.05	0.06	184.57	0.67	185.09	6.66
183.54	0.00	184.06	0.06	184.58	0.74	185.10	6.81
183.55	0.00	184.07	0.06	184.59	0.81	185.11	6.96
183.56	0.00	184.08	0.06	184.60	0.89	185.12	7.11
183.57	0.00	184.09	0.07	184.61	0.97	185.13	7.27
183.58	0.00	184.10	0.07	184.62	1.05	185.14	7.42
183.59	0.00	184.11	0.07	184.63	1.13	185.15	7.57
183.60	0.00	184.12	0.07	184.64	1.21	185.16	7.73
183.61	0.00	184.13	0.07	184.65	1.30	185.17	7.89
183.62	0.00	184.14	0.08	184.66	1.39	185.18	8.04
183.63	0.00	184.15	0.08	184.67	1.48	185.19	8.20
183.64	0.00	184.16	0.08	184.68	1.57	185.20	8.36
183.65	0.00	184.17	0.08	184.69	1.66	185.21	8.52
183.66	0.00	184.18	0.08	184.70	1.76	185.22	8.68
183.67	0.00	184.19	0.08	184.71	1.86	185.23	8.85
183.68	0.00	184.20	0.09	184.72	1.96	185.24	9.01
183.69	0.00	184.21	0.09	184.73	2.06	185.25	9.17
183.70	0.00	184.22	0.09	184.74	2.16	185.26	9.34
183.71	0.00	184.23	0.09	184.75	2.27	185.27	9.50
183.72	0.00	184.24	0.09	184.76	2.37	185.28	9.67
183.73	0.00	184.25	0.09	184.77	2.48	185.29	9.84
183.74	0.00	184.26	0.10	184.78	2.59	185.30	10.01
183.75	0.00	184.27	0.10	184.79	2.70	185.31	10.18
183.76	0.00	184.28	0.10	184.80	2.81	185.32	10.35
183.77	0.00	184.29	0.10	184.81	2.93	185.33	10.52
183.78	0.00	184.30	0.10	184.82	3.04	185.34	10.69
183.79	0.00	184.31	0.10	184.83	3.16	185.35	10.86
183.80	0.00	184.32	0.10	184.84	3.28	185.36	11.03
183.81	0.00	184.33	0.10	184.85	3.40	185.37	11.21

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.38	11.38	185.90	20.30	186.42	91.01	186.94	198.59
185.39	11.56	185.91	21.03	186.43	92.75	186.95	200.94
185.40	11.74	185.92	21.78	186.44	94.51	186.96	203.32
185.41	11.91	185.93	22.55	186.45	96.28	186.97	205.72
185.42	12.09	185.94	23.34	186.46	98.06	186.98	208.13
185.43	12.12	185.95	24.15	186.47	99.86	186.99	210.55
185.44	12.15	185.96	25.03	186.48	101.66	187.00	212.98
185.45	12.18	185.97	25.92	186.49	103.49	187.01	215.43
185.46	12.21	185.98	26.85	186.50	105.32	187.02	217.88
185.47	12.24	185.99	27.80	186.51	107.16	187.03	220.34
185.48	12.27	186.00	28.77	186.52	109.02	187.04	222.82
185.49	12.30	186.01	29.77	186.53	110.89	187.05	225.30
185.50	12.33	186.02	30.80	186.54	112.77	187.06	227.79
185.51	12.36	186.03	31.85	186.55	114.67	187.07	230.30
185.52	12.39	186.04	32.92	186.56	116.61	187.08	232.82
185.53	12.42	186.05	34.02	186.57	118.57	187.09	235.34
185.54	12.45	186.06	35.14	186.58	120.54	187.10	237.88
185.55	12.48	186.07	36.29	186.59	122.52	187.11	240.42
185.56	12.51	186.08	37.46	186.60	124.52	187.12	242.98
185.57	12.53	186.09	38.66	186.61	126.53	187.13	245.55
185.58	12.56	186.10	39.88	186.62	128.55	187.14	248.13
185.59	12.59	186.11	41.12	186.63	130.58	187.15	250.71
185.60	12.62	186.12	42.39	186.64	132.63	187.16	253.36
185.61	12.65	186.13	43.68	186.65	134.69	187.17	256.01
185.62	12.68	186.14	45.00	186.66	136.77	187.18	258.67
185.63	12.71	186.15	46.34	186.67	138.85	187.19	261.35
185.64	12.73	186.16	47.73	186.68	140.95	187.20	264.04
185.65	12.76	186.17	49.15	186.69	143.07	187.21	266.74
185.66	12.79	186.18	50.59	186.70	145.19	187.22	269.45
185.67	12.82	186.19	52.06	186.71	147.33	187.23	272.17
185.68	12.85	186.20	53.56	186.72	149.48	187.24	274.90
185.69	12.88	186.21	55.08	186.73	151.64	187.25	277.64
185.70	12.90	186.22	56.63	186.74	153.82	187.26	280.39
185.71	12.93	186.23	58.20	186.75	156.01	187.27	283.16
185.72	12.96	186.24	59.80	186.76	158.15	187.28	285.93
185.73	12.99	186.25	61.43	186.77	160.31	187.29	288.72
185.74	13.02	186.26	63.08	186.78	162.48	187.30	291.52
185.75	13.04	186.27	64.76	186.79	164.66	187.31	294.32
185.76	13.19	186.28	66.47	186.80	166.85	187.32	297.14
185.77	13.43	186.29	68.20	186.81	169.05	187.33	299.97
185.78	13.74	186.30	69.96	186.82	171.26	187.34	302.81
185.79	14.09	186.31	71.75	186.83	173.48	187.35	305.67
185.80	14.49	186.32	73.56	186.84	175.71	187.36	308.53
185.81	14.93	186.33	75.40	186.85	177.95	187.37	311.40
185.82	15.41	186.34	77.27	186.86	180.21	187.38	314.29
185.83	15.92	186.35	79.16	186.87	182.47	187.39	317.18
185.84	16.46	186.36	80.82	186.88	184.74	187.40	320.09
185.85	17.04	186.37	82.48	186.89	187.03	187.41	323.00
185.86	17.64	186.38	84.16	186.90	189.32	187.42	325.93
185.87	18.26	186.39	85.85	186.91	191.62	187.43	328.87
185.88	18.92	186.40	87.56	186.92	193.94	187.44	331.82
185.89	19.60	186.41	89.27	186.93	196.26	187.45	334.78

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)
187.46	337.75
187.47	340.73
187.48	343.72
187.49	346.72
187.50	349.74
187.51	352.76
187.52	355.79
187.53	358.84
187.54	361.90
187.55	364.96
187.56	368.04
187.57	371.13
187.58	374.22
187.59	377.33
187.60	380.45
187.61	383.58
187.62	386.72
187.63	389.87
187.64	393.03
187.65	396.20
187.66	399.38
187.67	402.58
187.68	405.78
187.69	408.99
187.70	412.22
187.71	415.45
187.72	418.69
187.73	421.95
187.74	425.21
187.75	428.49
187.76	431.84
187.77	435.20
187.78	438.57
187.79	441.95
187.80	445.35
187.81	448.75
187.82	452.17
187.83	455.60
187.84	459.04
187.85	462.49
187.86	465.95
187.87	469.42
187.88	472.91
187.89	476.40
187.90	479.91
187.91	483.43
187.92	486.96
187.93	490.50
187.94	494.05
187.95	497.61
187.96	501.19
187.97	504.78
187.98	508.37
187.99	511.98
188.00	**515.60**

Stage-Area-Storage for Pond B-46B: Basin #46B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.30	0	0	183.82	8,215	2,136
183.31	158	1	183.83	8,373	2,219
183.32	316	3	183.84	8,531	2,303
183.33	474	7	183.85	8,689	2,390
183.34	632	13	183.86	8,847	2,477
183.35	790	20	183.87	9,005	2,566
183.36	948	28	183.88	9,163	2,657
183.37	1,106	39	183.89	9,321	2,750
183.38	1,264	51	183.90	9,479	2,844
183.39	1,422	64	183.91	9,637	2,939
183.40	1,580	79	183.92	9,795	3,036
183.41	1,738	96	183.93	9,953	3,135
183.42	1,896	114	183.94	10,111	3,236
183.43	2,054	133	183.95	10,269	3,337
183.44	2,212	155	183.96	10,427	3,441
183.45	2,370	178	183.97	10,585	3,546
183.46	2,528	202	183.98	10,743	3,653
183.47	2,686	228	183.99	10,901	3,761
183.48	2,844	256	184.00	11,059	3,871
183.49	3,002	285	184.01	11,072	3,981
183.50	3,160	316	184.02	11,086	4,092
183.51	3,318	348	184.03	11,099	4,203
183.52	3,476	382	184.04	11,113	4,314
183.53	3,634	418	184.05	11,126	4,425
183.54	3,792	455	184.06	11,140	4,537
183.55	3,950	494	184.07	11,153	4,648
183.56	4,108	534	184.08	11,166	4,760
183.57	4,266	576	184.09	11,180	4,871
183.58	4,424	619	184.10	11,193	4,983
183.59	4,582	664	184.11	11,207	5,095
183.60	4,740	711	184.12	11,220	5,207
183.61	4,898	759	184.13	11,234	5,320
183.62	5,056	809	184.14	11,247	5,432
183.63	5,214	860	184.15	11,260	5,545
183.64	5,372	913	184.16	11,274	5,657
183.65	5,530	968	184.17	11,287	5,770
183.66	5,687	1,024	184.18	11,301	5,883
183.67	5,845	1,081	184.19	11,314	5,996
183.68	6,003	1,141	184.20	11,328	6,109
183.69	6,161	1,201	184.21	11,341	6,223
183.70	6,319	1,264	184.22	11,354	6,336
183.71	6,477	1,328	184.23	11,368	6,450
183.72	6,635	1,393	184.24	11,381	6,563
183.73	6,793	1,461	184.25	11,395	6,677
183.74	6,951	1,529	184.26	11,408	6,791
183.75	7,109	1,600	184.27	11,422	6,906
183.76	7,267	1,671	184.28	11,435	7,020
183.77	7,425	1,745	184.29	11,448	7,134
183.78	7,583	1,820	184.30	11,462	7,249
183.79	7,741	1,897	184.31	11,475	7,363
183.80	7,899	1,975	184.32	11,489	7,478
183.81	8,057	2,055	184.33	11,502	7,593

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.34	11,516	7,708	184.86	12,214	13,878
184.35	11,529	7,824	184.87	12,227	14,000
184.36	11,542	7,939	184.88	12,241	14,123
184.37	11,556	8,054	184.89	12,254	14,245
184.38	11,569	8,170	184.90	12,268	14,368
184.39	11,583	8,286	184.91	12,281	14,490
184.40	11,596	8,402	184.92	12,295	14,613
184.41	11,610	8,518	184.93	12,308	14,736
184.42	11,623	8,634	184.94	12,321	14,859
184.43	11,636	8,750	184.95	12,335	14,983
184.44	11,650	8,867	184.96	12,348	15,106
184.45	11,663	8,983	184.97	12,362	15,230
184.46	11,677	9,100	184.98	12,375	15,353
184.47	11,690	9,217	184.99	12,389	15,477
184.48	11,704	9,334	185.00	12,402	15,601
184.49	11,717	9,451	185.01	12,416	15,725
184.50	11,731	9,568	185.02	12,430	15,849
184.51	11,744	9,685	185.03	12,444	15,974
184.52	11,757	9,803	185.04	12,458	16,098
184.53	11,771	9,921	185.05	12,472	16,223
184.54	11,784	10,038	185.06	12,486	16,348
184.55	11,798	10,156	185.07	12,500	16,473
184.56	11,811	10,274	185.08	12,514	16,598
184.57	11,825	10,392	185.09	12,528	16,723
184.58	11,838	10,511	185.10	12,542	16,848
184.59	11,851	10,629	185.11	12,556	16,974
184.60	11,865	10,748	185.12	12,570	17,099
184.61	11,878	10,867	185.13	12,584	17,225
184.62	11,892	10,985	185.14	12,598	17,351
184.63	11,905	11,104	185.15	12,612	17,477
184.64	11,919	11,223	185.16	12,626	17,603
184.65	11,932	11,343	185.17	12,640	17,730
184.66	11,945	11,462	185.18	12,654	17,856
184.67	11,959	11,582	185.19	12,668	17,983
184.68	11,972	11,701	185.20	12,682	18,110
184.69	11,986	11,821	185.21	12,696	18,236
184.70	11,999	11,941	185.22	12,710	18,363
184.71	12,013	12,061	185.23	12,724	18,491
184.72	12,026	12,181	185.24	12,738	18,618
184.73	12,039	12,302	185.25	12,752	18,745
184.74	12,053	12,422	185.26	12,766	18,873
184.75	12,066	12,543	185.27	12,780	19,001
184.76	12,080	12,663	185.28	12,794	19,129
184.77	12,093	12,784	185.29	12,808	19,257
184.78	12,107	12,905	185.30	12,822	19,385
184.79	12,120	13,026	185.31	12,836	19,513
184.80	12,133	13,148	185.32	12,850	19,642
184.81	12,147	13,269	185.33	12,864	19,770
184.82	12,160	13,391	185.34	12,878	19,899
184.83	12,174	13,512	185.35	12,892	20,028
184.84	12,187	13,634	185.36	12,906	20,157
184.85	12,201	13,756	185.37	12,920	20,286

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.38	12,934	20,415	185.90	13,663	27,330
185.39	12,948	20,544	185.91	13,677	27,467
185.40	12,962	20,674	185.92	13,691	27,604
185.41	12,976	20,804	185.93	13,705	27,741
185.42	12,990	20,934	185.94	13,719	27,878
185.43	13,004	21,064	185.95	13,733	28,015
185.44	13,018	21,194	185.96	13,747	28,153
185.45	13,032	21,324	185.97	13,761	28,290
185.46	13,046	21,454	185.98	13,775	28,428
185.47	13,060	21,585	185.99	13,789	28,566
185.48	13,074	21,716	186.00	13,803	28,704
185.49	13,088	21,846	186.01	13,818	28,842
185.50	13,103	21,977	186.02	13,832	28,980
185.51	13,117	22,108	186.03	13,847	29,118
185.52	13,131	22,240	186.04	13,861	29,257
185.53	13,145	22,371	186.05	13,876	29,396
185.54	13,159	22,502	186.06	13,890	29,534
185.55	13,173	22,634	186.07	13,905	29,673
185.56	13,187	22,766	186.08	13,919	29,813
185.57	13,201	22,898	186.09	13,934	29,952
185.58	13,215	23,030	186.10	13,949	30,091
185.59	13,229	23,162	186.11	13,963	30,231
185.60	13,243	23,295	186.12	13,978	30,370
185.61	13,257	23,427	186.13	13,992	30,510
185.62	13,271	23,560	186.14	14,007	30,650
185.63	13,285	23,692	186.15	14,021	30,790
185.64	13,299	23,825	186.16	14,036	30,931
185.65	13,313	23,958	186.17	14,051	31,071
185.66	13,327	24,092	186.18	14,065	31,212
185.67	13,341	24,225	186.19	14,080	31,353
185.68	13,355	24,358	186.20	14,094	31,493
185.69	13,369	24,492	186.21	14,109	31,634
185.70	13,383	24,626	186.22	14,123	31,776
185.71	13,397	24,760	186.23	14,138	31,917
185.72	13,411	24,894	186.24	14,152	32,058
185.73	13,425	25,028	186.25	14,167	32,200
185.74	13,439	25,162	186.26	14,182	32,342
185.75	13,453	25,297	186.27	14,196	32,484
185.76	13,467	25,431	186.28	14,211	32,626
185.77	13,481	25,566	186.29	14,225	32,768
185.78	13,495	25,701	186.30	14,240	32,910
185.79	13,509	25,836	186.31	14,254	33,053
185.80	13,523	25,971	186.32	14,269	33,195
185.81	13,537	26,106	186.33	14,283	33,338
185.82	13,551	26,242	186.34	14,298	33,481
185.83	13,565	26,377	186.35	14,313	33,624
185.84	13,579	26,513	186.36	14,327	33,767
185.85	13,593	26,649	186.37	14,342	33,910
185.86	13,607	26,785	186.38	14,356	34,054
185.87	13,621	26,921	186.39	14,371	34,198
185.88	13,635	27,057	186.40	14,385	34,341
185.89	13,649	27,194	186.41	14,400	34,485

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.42	14,415	34,629
186.43	14,429	34,774
186.44	14,444	34,918
186.45	14,458	35,062
186.46	14,473	35,207
186.47	14,487	35,352
186.48	14,502	35,497
186.49	14,516	35,642
186.50	14,531	35,787
186.51	14,546	35,933
186.52	14,560	36,078
186.53	14,575	36,224
186.54	14,589	36,370
186.55	14,604	36,516
186.56	14,618	36,662
186.57	14,633	36,808
186.58	14,647	36,954
186.59	14,662	37,101
186.60	14,677	37,248
186.61	14,691	37,394
186.62	14,706	37,541
186.63	14,720	37,688
186.64	14,735	37,836
186.65	14,749	37,983
186.66	14,764	38,131
186.67	14,779	38,278
186.68	14,793	38,426
186.69	14,808	38,574
186.70	14,822	38,722
186.71	14,837	38,871
186.72	14,851	39,019
186.73	14,866	39,168
186.74	14,880	39,317
186.75	14,895	39,465
186.76	14,910	39,614
186.77	14,924	39,764
186.78	14,939	39,913
186.79	14,953	40,062
186.80	14,968	40,212
186.81	14,982	40,362
186.82	14,997	40,512
186.83	15,011	40,662
186.84	15,026	40,812
186.85	15,041	40,962
186.86	15,055	41,113
186.87	15,070	41,263
186.88	15,084	41,414
186.89	15,099	41,565
186.90	15,113	41,716
186.91	15,128	41,867
186.92	15,143	42,019
186.93	15,157	42,170
186.94	15,172	42,322
186.95	15,186	42,474
186.96	15,201	42,625
186.97	15,215	42,778
186.98	15,230	42,930
186.99	15,244	43,082
187.00	15,259	43,235
187.01	15,274	43,387
187.02	15,289	43,540
187.03	15,304	43,693
187.04	15,320	43,846
187.05	15,335	43,999
187.06	15,350	44,153
187.07	15,365	44,306
187.08	15,380	44,460
187.09	15,395	44,614
187.10	15,410	44,768
187.11	15,425	44,922
187.12	15,441	45,077
187.13	15,456	45,231
187.14	15,471	45,386
187.15	15,486	45,541
187.16	15,501	45,695
187.17	15,516	45,851
187.18	15,531	46,006
187.19	15,546	46,161
187.20	15,562	46,317
187.21	15,577	46,472
187.22	15,592	46,628
187.23	15,607	46,784
187.24	15,622	46,940
187.25	15,637	47,097
187.26	15,652	47,253
187.27	15,668	47,410
187.28	15,683	47,566
187.29	15,698	47,723
187.30	15,713	47,880
187.31	15,728	48,038
187.32	15,743	48,195
187.33	15,758	48,353
187.34	15,773	48,510
187.35	15,789	48,668
187.36	15,804	48,826
187.37	15,819	48,984
187.38	15,834	49,142
187.39	15,849	49,301
187.40	15,864	49,459
187.41	15,879	49,618
187.42	15,894	49,777
187.43	15,910	49,936
187.44	15,925	50,095
187.45	15,940	50,254

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.46	15,955	50,414
187.47	15,970	50,573
187.48	15,985	50,733
187.49	16,000	50,893
187.50	16,016	51,053
187.51	16,031	51,214
187.52	16,046	51,374
187.53	16,061	51,534
187.54	16,076	51,695
187.55	16,091	51,856
187.56	16,106	52,017
187.57	16,121	52,178
187.58	16,137	52,339
187.59	16,152	52,501
187.60	16,167	52,662
187.61	16,182	52,824
187.62	16,197	52,986
187.63	16,212	53,148
187.64	16,227	53,310
187.65	16,242	53,473
187.66	16,258	53,635
187.67	16,273	53,798
187.68	16,288	53,961
187.69	16,303	54,124
187.70	16,318	54,287
187.71	16,333	54,450
187.72	16,348	54,613
187.73	16,363	54,777
187.74	16,379	54,941
187.75	16,394	55,104
187.76	16,409	55,268
187.77	16,424	55,433
187.78	16,439	55,597
187.79	16,454	55,761
187.80	16,469	55,926
187.81	16,485	56,091
187.82	16,500	56,256
187.83	16,515	56,421
187.84	16,530	56,586
187.85	16,545	56,751
187.86	16,560	56,917
187.87	16,575	57,083
187.88	16,590	57,248
187.89	16,606	57,414
187.90	16,621	57,581
187.91	16,636	57,747
187.92	16,651	57,913
187.93	16,666	58,080
187.94	16,681	58,247
187.95	16,696	58,413
187.96	16,711	58,580
187.97	16,727	58,748
187.98	16,742	58,915
187.99	16,757	59,083
188.00	**16,772**	**59,250**

Summary for Pond B-47: Basin #47

Inflow Area = 2.436 ac, 30.62% Impervious, Inflow Depth = 3.18" for Current 10 yr event
Inflow = 8.03 cfs @ 12.17 hrs, Volume= 0.647 af
Outflow = 0.34 cfs @ 14.90 hrs, Volume= 0.353 af, Atten= 96%, Lag= 163.8 min
Primary = 0.34 cfs @ 14.90 hrs, Volume= 0.353 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 189.58' @ 14.90 hrs Surf.Area= 22,444 sf Storage= 20,197 cf

Plug-Flow detention time= 716.9 min calculated for 0.353 af (55% of inflow)
Center-of-Mass det. time= 595.4 min (1,396.2 - 800.8)

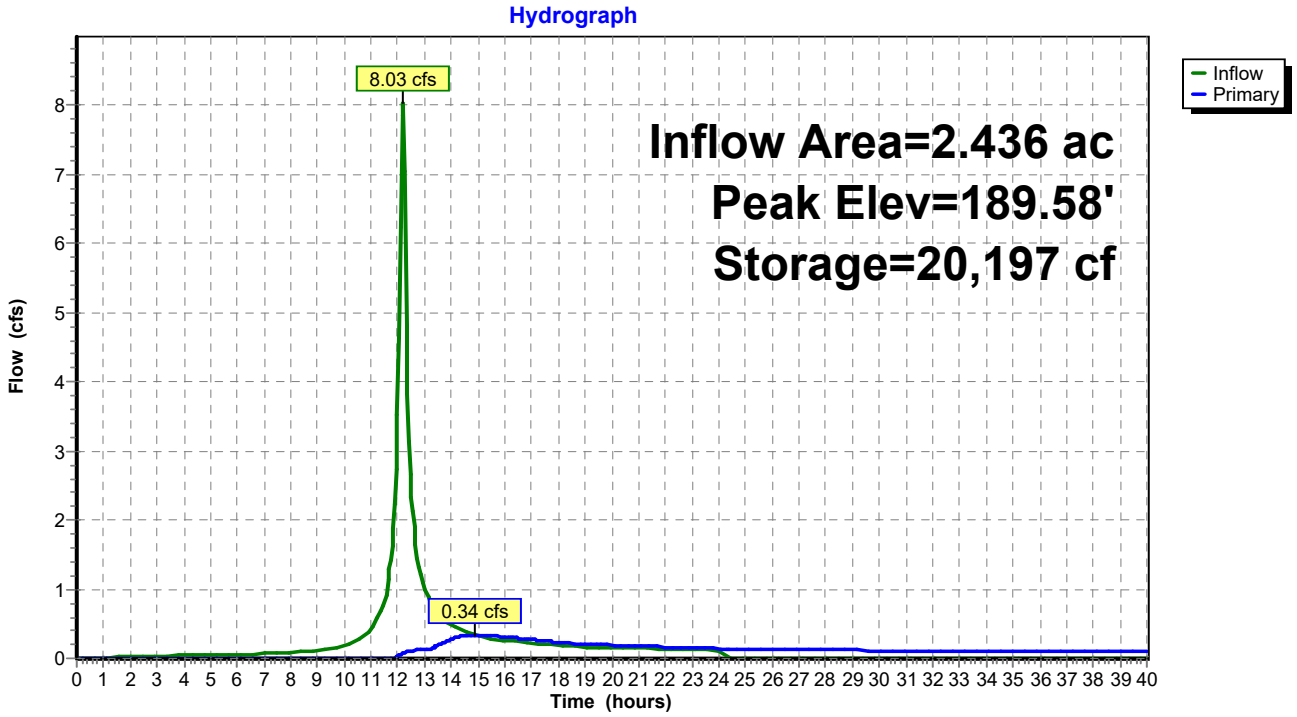
Volume	Invert	Avail.Storage	Storage Description
#1	188.30'	80,305 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
188.30	0	0	0
189.00	21,318	7,461	7,461
190.00	23,252	22,285	29,746
191.00	25,242	24,247	53,993
192.00	27,382	26,312	80,305

Device	Routing	Invert	Outlet Devices
#1	Primary	187.65'	**18.0" Round Culvert** L= 62.0' Ke= 0.500 Inlet / Outlet Invert= 187.65' / 184.00' S= 0.0589 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.84'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.52'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.51'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.33 cfs @ 14.90 hrs HW=189.58' (Free Discharge)
- **1=Culvert** (Passes 0.33 cfs of 9.25 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.85 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.20 cfs @ 0.81 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-47: Basin #47



Stage-Discharge for Pond B-47: Basin #47

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.30	0.00	188.82	0.00	189.34	0.10	189.86	2.71
188.31	0.00	188.83	0.00	189.35	0.10	189.87	2.82
188.32	0.00	188.84	0.00	189.36	0.11	189.88	2.93
188.33	0.00	188.85	0.00	189.37	0.11	189.89	3.05
188.34	0.00	188.86	0.00	189.38	0.11	189.90	3.17
188.35	0.00	188.87	0.00	189.39	0.11	189.91	3.28
188.36	0.00	188.88	0.00	189.40	0.11	189.92	3.40
188.37	0.00	188.89	0.00	189.41	0.11	189.93	3.53
188.38	0.00	188.90	0.01	189.42	0.11	189.94	3.65
188.39	0.00	188.91	0.01	189.43	0.11	189.95	3.77
188.40	0.00	188.92	0.01	189.44	0.12	189.96	3.90
188.41	0.00	188.93	0.01	189.45	0.12	189.97	4.03
188.42	0.00	188.94	0.02	189.46	0.12	189.98	4.15
188.43	0.00	188.95	0.02	189.47	0.12	189.99	4.28
188.44	0.00	188.96	0.02	189.48	0.12	190.00	4.41
188.45	0.00	188.97	0.03	189.49	0.12	190.01	4.55
188.46	0.00	188.98	0.03	189.50	0.12	190.02	4.68
188.47	0.00	188.99	0.03	189.51	0.12	190.03	4.81
188.48	0.00	189.00	0.04	189.52	0.12	190.04	4.95
188.49	0.00	189.01	0.04	189.53	0.14	190.05	5.09
188.50	0.00	189.02	0.05	189.54	0.16	190.06	5.22
188.51	0.00	189.03	0.05	189.55	0.20	190.07	5.36
188.52	0.00	189.04	0.05	189.56	0.23	190.08	5.50
188.53	0.00	189.05	0.05	189.57	0.28	190.09	5.64
188.54	0.00	189.06	0.06	189.58	0.32	190.10	5.79
188.55	0.00	189.07	0.06	189.59	0.37	190.11	5.93
188.56	0.00	189.08	0.06	189.60	0.43	190.12	6.07
188.57	0.00	189.09	0.06	189.61	0.49	190.13	6.22
188.58	0.00	189.10	0.06	189.62	0.55	190.14	6.37
188.59	0.00	189.11	0.07	189.63	0.61	190.15	6.51
188.60	0.00	189.12	0.07	189.64	0.68	190.16	6.66
188.61	0.00	189.13	0.07	189.65	0.75	190.17	6.81
188.62	0.00	189.14	0.07	189.66	0.82	190.18	6.96
188.63	0.00	189.15	0.07	189.67	0.89	190.19	7.12
188.64	0.00	189.16	0.08	189.68	0.97	190.20	7.27
188.65	0.00	189.17	0.08	189.69	1.05	190.21	7.42
188.66	0.00	189.18	0.08	189.70	1.13	190.22	7.58
188.67	0.00	189.19	0.08	189.71	1.22	190.23	7.73
188.68	0.00	189.20	0.08	189.72	1.30	190.24	7.89
188.69	0.00	189.21	0.08	189.73	1.39	190.25	8.05
188.70	0.00	189.22	0.09	189.74	1.48	190.26	8.21
188.71	0.00	189.23	0.09	189.75	1.57	190.27	8.37
188.72	0.00	189.24	0.09	189.76	1.67	190.28	8.53
188.73	0.00	189.25	0.09	189.77	1.76	190.29	8.69
188.74	0.00	189.26	0.09	189.78	1.86	190.30	8.85
188.75	0.00	189.27	0.09	189.79	1.96	190.31	9.01
188.76	0.00	189.28	0.10	189.80	2.06	190.32	9.18
188.77	0.00	189.29	0.10	189.81	2.17	190.33	9.34
188.78	0.00	189.30	0.10	189.82	2.27	190.34	9.51
188.79	0.00	189.31	0.10	189.83	2.38	190.35	9.67
188.80	0.00	189.32	0.10	189.84	2.49	190.36	9.84
188.81	0.00	189.33	0.10	189.85	2.59	190.37	10.01

Stage-Discharge for Pond B-47: Basin #47 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.38	10.18	190.90	44.37	191.42	136.19	191.94	258.14
190.39	10.35	190.91	45.71	191.43	138.28	191.95	260.82
190.40	10.52	190.92	47.10	191.44	140.38	191.96	263.51
190.41	10.69	190.93	48.52	191.45	142.49	191.97	266.20
190.42	10.86	190.94	49.97	191.46	144.62	191.98	268.91
190.43	11.04	190.95	51.44	191.47	146.76	191.99	271.64
190.44	11.21	190.96	52.93	191.48	148.91	192.00	**274.37**
190.45	11.39	190.97	54.46	191.49	151.07		
190.46	11.56	190.98	56.01	191.50	153.25		
190.47	11.74	190.99	57.58	191.51	155.44		
190.48	11.92	191.00	59.18	191.52	157.59		
190.49	12.09	191.01	60.81	191.53	159.74		
190.50	12.27	191.02	62.47	191.54	161.91		
190.51	12.36	191.03	64.15	191.55	164.09		
190.52	12.51	191.04	65.85	191.56	166.28		
190.53	12.75	191.05	67.59	191.57	168.49		
190.54	13.06	191.06	69.35	191.58	170.70		
190.55	13.41	191.07	71.14	191.59	172.92		
190.56	13.82	191.08	72.95	191.60	175.15		
190.57	14.26	191.09	74.79	191.61	177.39		
190.58	14.74	191.10	76.66	191.62	179.65		
190.59	15.25	191.11	78.56	191.63	181.91		
190.60	15.79	191.12	80.21	191.64	184.18		
190.61	16.37	191.13	81.88	191.65	186.47		
190.62	16.97	191.14	83.55	191.66	188.76		
190.63	17.60	191.15	85.25	191.67	191.07		
190.64	18.25	191.16	86.95	191.68	193.38		
190.65	18.93	191.17	88.67	191.69	195.71		
190.66	19.64	191.18	90.41	191.70	198.04		
190.67	20.37	191.19	92.15	191.71	200.38		
190.68	21.12	191.20	93.91	191.72	202.77		
190.69	21.89	191.21	95.68	191.73	205.17		
190.70	22.68	191.22	97.47	191.74	207.58		
190.71	23.50	191.23	99.26	191.75	210.01		
190.72	24.37	191.24	101.07	191.76	212.44		
190.73	25.27	191.25	102.89	191.77	214.88		
190.74	26.20	191.26	104.73	191.78	217.33		
190.75	27.15	191.27	106.57	191.79	219.80		
190.76	28.12	191.28	108.43	191.80	222.27		
190.77	29.13	191.29	110.30	191.81	224.76		
190.78	30.15	191.30	112.18	191.82	227.25		
190.79	31.20	191.31	114.08	191.83	229.76		
190.80	32.28	191.32	116.02	191.84	232.27		
190.81	33.38	191.33	117.98	191.85	234.80		
190.82	34.50	191.34	119.95	191.86	237.34		
190.83	35.65	191.35	121.94	191.87	239.88		
190.84	36.82	191.36	123.93	191.88	242.44		
190.85	38.02	191.37	125.94	191.89	245.01		
190.86	39.24	191.38	127.97	191.90	247.59		
190.87	40.49	191.39	130.00	191.91	250.18		
190.88	41.76	191.40	132.05	191.92	252.82		
190.89	43.05	191.41	134.12	191.93	255.48		

Stage-Area-Storage for Pond B-47: Basin #47

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.30	0	0	188.82	15,836	4,117
188.31	305	2	188.83	16,141	4,277
188.32	609	6	188.84	16,445	4,440
188.33	914	14	188.85	16,750	4,606
188.34	1,218	24	188.86	17,054	4,775
188.35	1,523	38	188.87	17,359	4,947
188.36	1,827	55	188.88	17,663	5,122
188.37	2,132	75	188.89	17,968	5,301
188.38	2,436	97	188.90	18,273	5,482
188.39	2,741	123	188.91	18,577	5,666
188.40	3,045	152	188.92	18,882	5,853
188.41	3,350	184	188.93	19,186	6,044
188.42	3,655	219	188.94	19,491	6,237
188.43	3,959	257	188.95	19,795	6,433
188.44	4,264	298	188.96	20,100	6,633
188.45	4,568	343	188.97	20,404	6,835
188.46	4,873	390	188.98	20,709	7,041
188.47	5,177	440	188.99	21,013	7,250
188.48	5,482	493	189.00	21,318	7,461
188.49	5,786	550	189.01	21,337	7,675
188.50	6,091	609	189.02	21,357	7,888
188.51	6,395	672	189.03	21,376	8,102
188.52	6,700	737	189.04	21,395	8,316
188.53	7,004	806	189.05	21,415	8,530
188.54	7,309	877	189.06	21,434	8,744
188.55	7,614	952	189.07	21,453	8,958
188.56	7,918	1,029	189.08	21,473	9,173
188.57	8,223	1,110	189.09	21,492	9,388
188.58	8,527	1,194	189.10	21,511	9,603
188.59	8,832	1,281	189.11	21,531	9,818
188.60	9,136	1,370	189.12	21,550	10,033
188.61	9,441	1,463	189.13	21,569	10,249
188.62	9,745	1,559	189.14	21,589	10,465
188.63	10,050	1,658	189.15	21,608	10,681
188.64	10,354	1,760	189.16	21,627	10,897
188.65	10,659	1,865	189.17	21,647	11,113
188.66	10,964	1,973	189.18	21,666	11,330
188.67	11,268	2,085	189.19	21,685	11,547
188.68	11,573	2,199	189.20	21,705	11,764
188.69	11,877	2,316	189.21	21,724	11,981
188.70	12,182	2,436	189.22	21,743	12,198
188.71	12,486	2,560	189.23	21,763	12,416
188.72	12,791	2,686	189.24	21,782	12,633
188.73	13,095	2,815	189.25	21,802	12,851
188.74	13,400	2,948	189.26	21,821	13,069
188.75	13,704	3,083	189.27	21,840	13,288
188.76	14,009	3,222	189.28	21,860	13,506
188.77	14,314	3,364	189.29	21,879	13,725
188.78	14,618	3,508	189.30	21,898	13,944
188.79	14,923	3,656	189.31	21,918	14,163
188.80	15,227	3,807	189.32	21,937	14,382
188.81	15,532	3,961	189.33	21,956	14,602

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.34	21,976	14,821	189.86	22,981	26,510
189.35	21,995	15,041	189.87	23,001	26,740
189.36	22,014	15,261	189.88	23,020	26,970
189.37	22,034	15,481	189.89	23,039	27,200
189.38	22,053	15,702	189.90	23,059	27,431
189.39	22,072	15,922	189.91	23,078	27,661
189.40	22,092	16,143	189.92	23,097	27,892
189.41	22,111	16,364	189.93	23,117	28,123
189.42	22,130	16,585	189.94	23,136	28,355
189.43	22,150	16,807	189.95	23,155	28,586
189.44	22,169	17,028	189.96	23,175	28,818
189.45	22,188	17,250	189.97	23,194	29,050
189.46	22,208	17,472	189.98	23,213	29,282
189.47	22,227	17,694	189.99	23,233	29,514
189.48	22,246	17,917	190.00	23,252	29,746
189.49	22,266	18,139	190.01	23,272	29,979
189.50	22,285	18,362	190.02	23,292	30,212
189.51	22,304	18,585	190.03	23,312	30,445
189.52	22,324	18,808	190.04	23,332	30,678
189.53	22,343	19,031	190.05	23,352	30,911
189.54	22,362	19,255	190.06	23,371	31,145
189.55	22,382	19,479	190.07	23,391	31,379
189.56	22,401	19,703	190.08	23,411	31,613
189.57	22,420	19,927	190.09	23,431	31,847
189.58	22,440	20,151	190.10	23,451	32,081
189.59	22,459	20,376	190.11	23,471	32,316
189.60	22,478	20,600	190.12	23,491	32,551
189.61	22,498	20,825	190.13	23,511	32,786
189.62	22,517	21,050	190.14	23,531	33,021
189.63	22,536	21,275	190.15	23,551	33,256
189.64	22,556	21,501	190.16	23,570	33,492
189.65	22,575	21,727	190.17	23,590	33,728
189.66	22,594	21,952	190.18	23,610	33,964
189.67	22,614	22,178	190.19	23,630	34,200
189.68	22,633	22,405	190.20	23,650	34,437
189.69	22,652	22,631	190.21	23,670	34,673
189.70	22,672	22,858	190.22	23,690	34,910
189.71	22,691	23,085	190.23	23,710	35,147
189.72	22,710	23,312	190.24	23,730	35,384
189.73	22,730	23,539	190.25	23,750	35,621
189.74	22,749	23,766	190.26	23,769	35,859
189.75	22,769	23,994	190.27	23,789	36,097
189.76	22,788	24,222	190.28	23,809	36,335
189.77	22,807	24,449	190.29	23,829	36,573
189.78	22,827	24,678	190.30	23,849	36,811
189.79	22,846	24,906	190.31	23,869	37,050
189.80	22,865	25,135	190.32	23,889	37,289
189.81	22,885	25,363	190.33	23,909	37,528
189.82	22,904	25,592	190.34	23,929	37,767
189.83	22,923	25,821	190.35	23,949	38,006
189.84	22,943	26,051	190.36	23,968	38,246
189.85	22,962	26,280	190.37	23,988	38,486

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.38	24,008	38,726	190.90	25,043	51,479
190.39	24,028	38,966	190.91	25,063	51,730
190.40	24,048	39,206	190.92	25,083	51,980
190.41	24,068	39,447	190.93	25,103	52,231
190.42	24,088	39,688	190.94	25,123	52,482
190.43	24,108	39,929	190.95	25,143	52,734
190.44	24,128	40,170	190.96	25,162	52,985
190.45	24,148	40,411	190.97	25,182	53,237
190.46	24,167	40,653	190.98	25,202	53,489
190.47	24,187	40,895	190.99	25,222	53,741
190.48	24,207	41,137	191.00	25,242	53,993
190.49	24,227	41,379	191.01	25,263	54,246
190.50	24,247	41,621	191.02	25,285	54,499
190.51	24,267	41,864	191.03	25,306	54,752
190.52	24,287	42,106	191.04	25,328	55,005
190.53	24,307	42,349	191.05	25,349	55,258
190.54	24,327	42,593	191.06	25,370	55,512
190.55	24,347	42,836	191.07	25,392	55,765
190.56	24,366	43,079	191.08	25,413	56,020
190.57	24,386	43,323	191.09	25,435	56,274
190.58	24,406	43,567	191.10	25,456	56,528
190.59	24,426	43,811	191.11	25,477	56,783
190.60	24,446	44,056	191.12	25,499	57,038
190.61	24,466	44,300	191.13	25,520	57,293
190.62	24,486	44,545	191.14	25,542	57,548
190.63	24,506	44,790	191.15	25,563	57,804
190.64	24,526	45,035	191.16	25,584	58,059
190.65	24,546	45,280	191.17	25,606	58,315
190.66	24,565	45,526	191.18	25,627	58,572
190.67	24,585	45,772	191.19	25,649	58,828
190.68	24,605	46,018	191.20	25,670	59,085
190.69	24,625	46,264	191.21	25,691	59,341
190.70	24,645	46,510	191.22	25,713	59,598
190.71	24,665	46,757	191.23	25,734	59,856
190.72	24,685	47,004	191.24	25,756	60,113
190.73	24,705	47,250	191.25	25,777	60,371
190.74	24,725	47,498	191.26	25,798	60,629
190.75	24,745	47,745	191.27	25,820	60,887
190.76	24,764	47,993	191.28	25,841	61,145
190.77	24,784	48,240	191.29	25,863	61,403
190.78	24,804	48,488	191.30	25,884	61,662
190.79	24,824	48,736	191.31	25,905	61,921
190.80	24,844	48,985	191.32	25,927	62,180
190.81	24,864	49,233	191.33	25,948	62,440
190.82	24,884	49,482	191.34	25,970	62,699
190.83	24,904	49,731	191.35	25,991	62,959
190.84	24,924	49,980	191.36	26,012	63,219
190.85	24,944	50,229	191.37	26,034	63,479
190.86	24,963	50,479	191.38	26,055	63,740
190.87	24,983	50,729	191.39	26,077	64,000
190.88	25,003	50,979	191.40	26,098	64,261
190.89	25,023	51,229	191.41	26,119	64,522

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

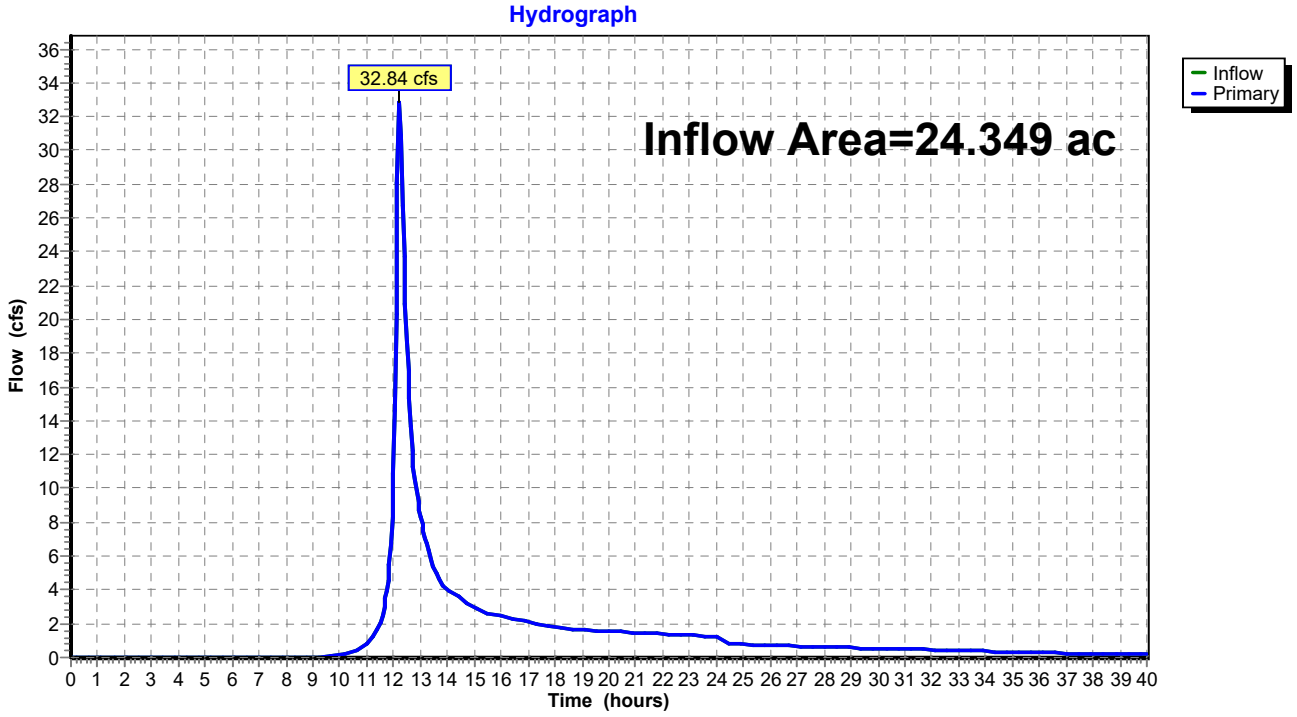
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.42	26,141	64,784
191.43	26,162	65,045
191.44	26,184	65,307
191.45	26,205	65,569
191.46	26,226	65,831
191.47	26,248	66,093
191.48	26,269	66,356
191.49	26,291	66,619
191.50	26,312	66,882
191.51	26,333	67,145
191.52	26,355	67,408
191.53	26,376	67,672
191.54	26,398	67,936
191.55	26,419	68,200
191.56	26,440	68,464
191.57	26,462	68,729
191.58	26,483	68,994
191.59	26,505	69,259
191.60	26,526	69,524
191.61	26,547	69,789
191.62	26,569	70,055
191.63	26,590	70,320
191.64	26,612	70,586
191.65	26,633	70,853
191.66	26,654	71,119
191.67	26,676	71,386
191.68	26,697	71,653
191.69	26,719	71,920
191.70	26,740	72,187
191.71	26,761	72,455
191.72	26,783	72,722
191.73	26,804	72,990
191.74	26,826	73,258
191.75	26,847	73,527
191.76	26,868	73,795
191.77	26,890	74,064
191.78	26,911	74,333
191.79	26,933	74,602
191.80	26,954	74,872
191.81	26,975	75,141
191.82	26,997	75,411
191.83	27,018	75,681
191.84	27,040	75,952
191.85	27,061	76,222
191.86	27,082	76,493
191.87	27,104	76,764
191.88	27,125	77,035
191.89	27,147	77,306
191.90	27,168	77,578
191.91	27,189	77,850
191.92	27,211	78,122
191.93	27,232	78,394
191.94	27,254	78,666
191.95	27,275	78,939
191.96	27,296	79,212
191.97	27,318	79,485
191.98	27,339	79,758
191.99	27,361	80,032
192.00	**27,382**	**80,305**

Summary for Link PDA-4: Proposed Drainage Area #4

Inflow Area = 24.349 ac, 23.20% Impervious, Inflow Depth > 2.20" for Current 10 yr event
Inflow = 32.84 cfs @ 12.22 hrs, Volume= 4.472 af
Primary = 32.84 cfs @ 12.22 hrs, Volume= 4.472 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-4: Proposed Drainage Area #4



Summary for Subcatchment 41I: PDA-41 (impervious)

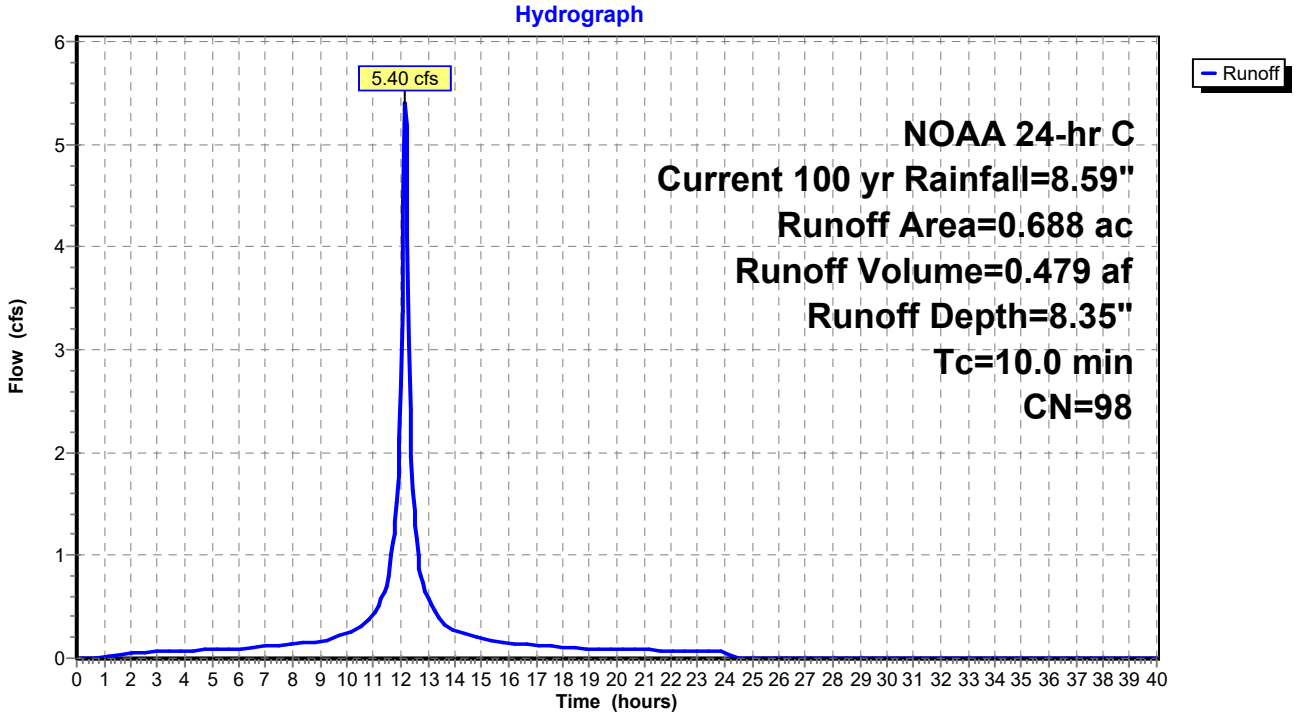
Runoff = 5.40 cfs @ 12.17 hrs, Volume= 0.479 af, Depth= 8.35"
Routed to Pond B-41 : Basin #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.136	98	Pavement, HSG C
*	0.514	98	Roof, HSG C
*	0.038	98	Concrete, HSC C
	0.688	98	Weighted Average
	0.688		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 41I: PDA-41 (impervious)



Summary for Subcatchment 41P: PDA-41 (pervious)

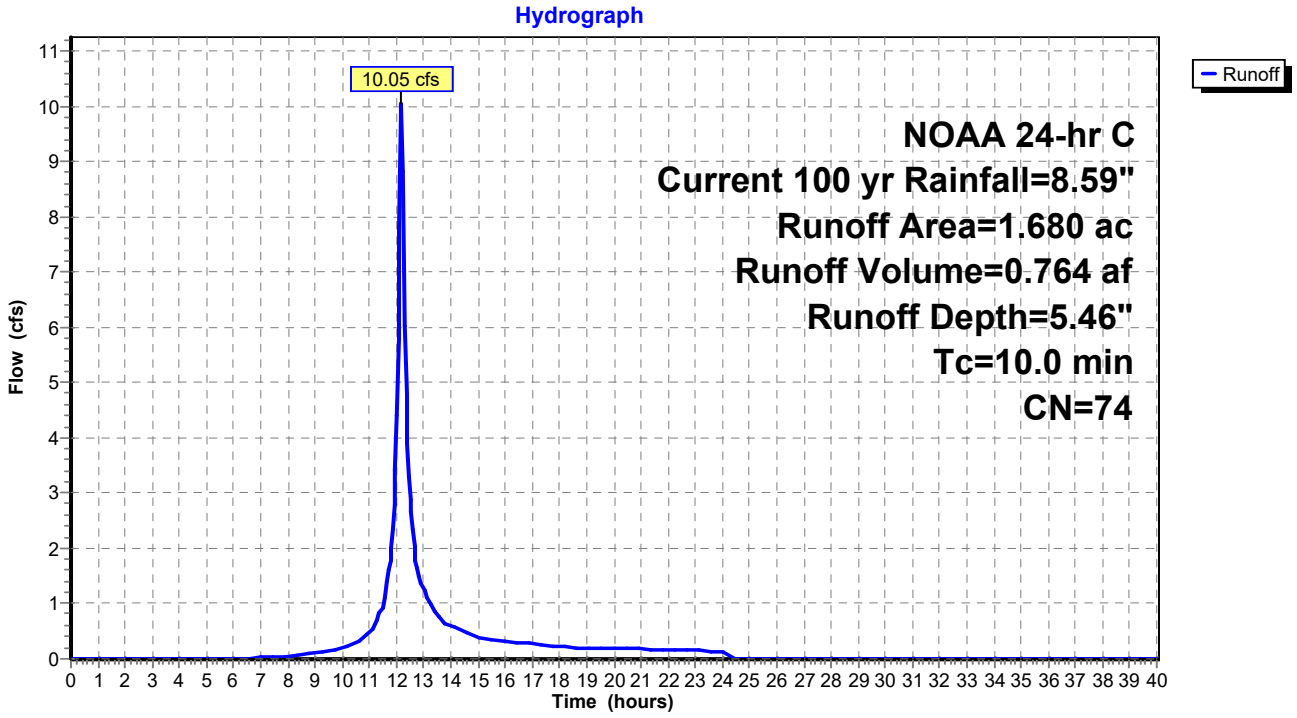
Runoff = 10.05 cfs @ 12.17 hrs, Volume= 0.764 af, Depth= 5.46"
Routed to Pond B-41 : Basin #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.680	74	>75% Grass cover, Good, HSG C
1.680		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 41P: PDA-41 (pervious)



Summary for Subcatchment 42l: PDA-42 (impervious)

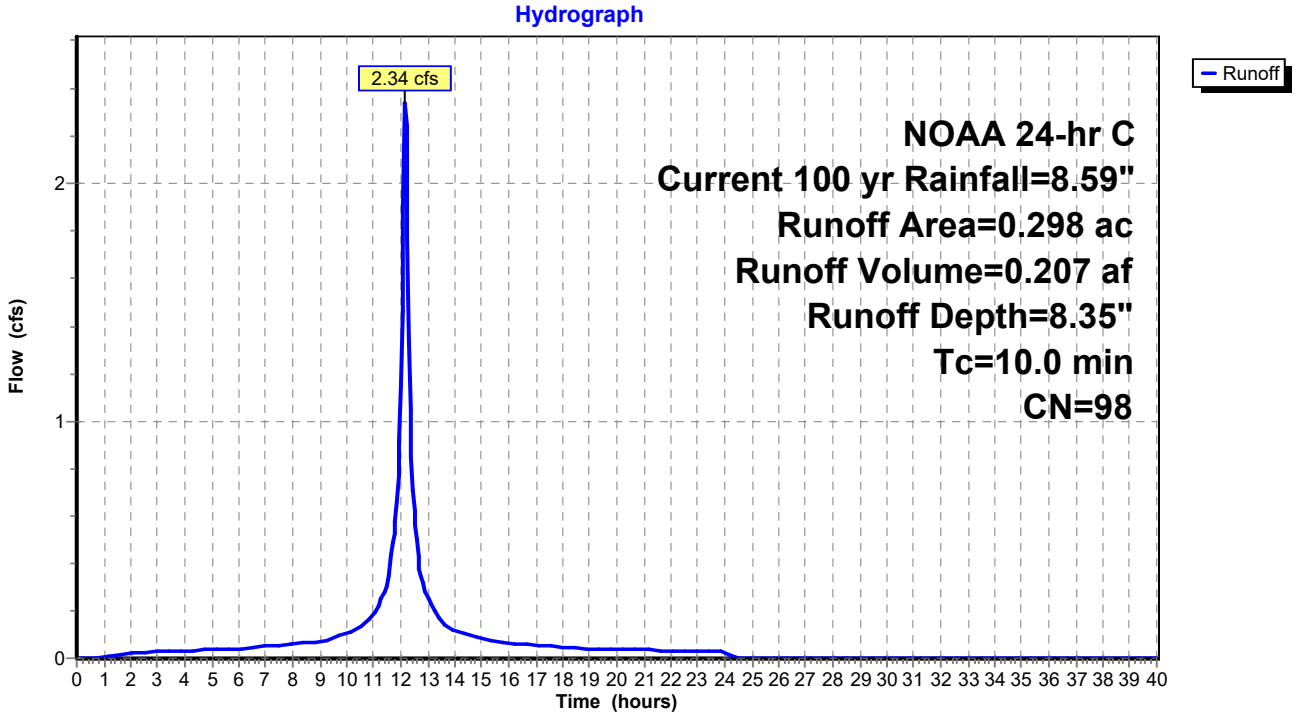
Runoff = 2.34 cfs @ 12.17 hrs, Volume= 0.207 af, Depth= 8.35"
Routed to Pond B-42 : Basin #42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.298	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.298	98	Weighted Average
	0.298		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 42l: PDA-42 (impervious)



Summary for Subcatchment 42P: PDA-42 (pervious)

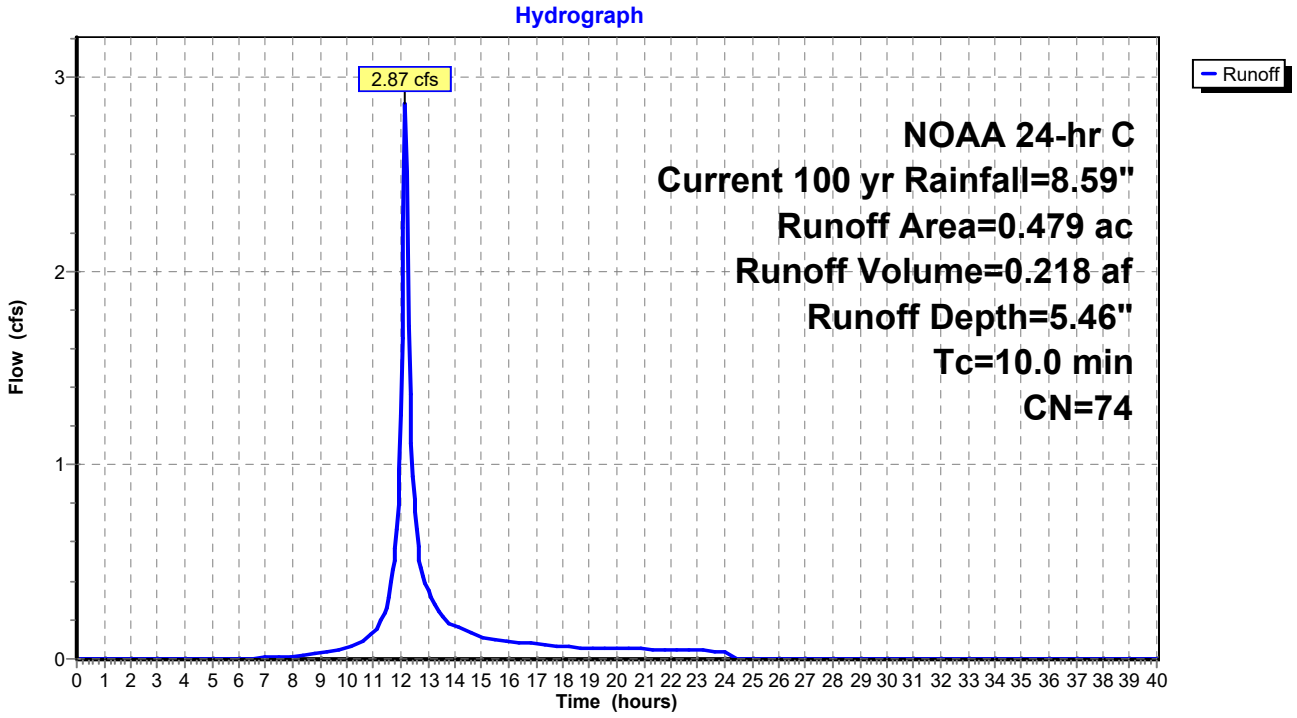
Runoff = 2.87 cfs @ 12.17 hrs, Volume= 0.218 af, Depth= 5.46"
Routed to Pond B-42 : Basin #42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.479	74	>75% Grass cover, Good, HSG C
0.479		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 42P: PDA-42 (pervious)



Summary for Subcatchment 43I: PDA-43 (impervious)

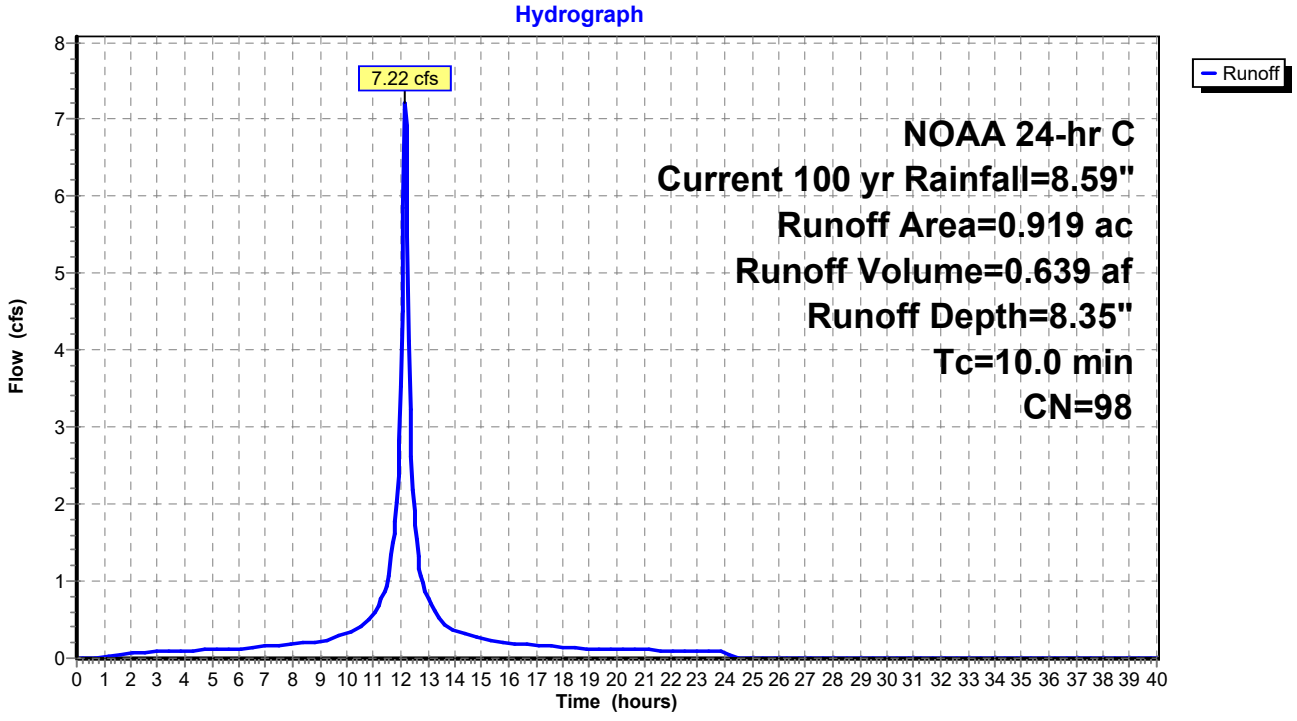
Runoff = 7.22 cfs @ 12.17 hrs, Volume= 0.639 af, Depth= 8.35"
Routed to Pond B-43 : Basin #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.326	98	Pavement, HSG C
*	0.522	98	Roof, HSG C
*	0.071	98	Concrete, HSC C
	0.919	98	Weighted Average
	0.919		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 43I: PDA-43 (impervious)



Summary for Subcatchment 43P: PDA-43 (pervious)

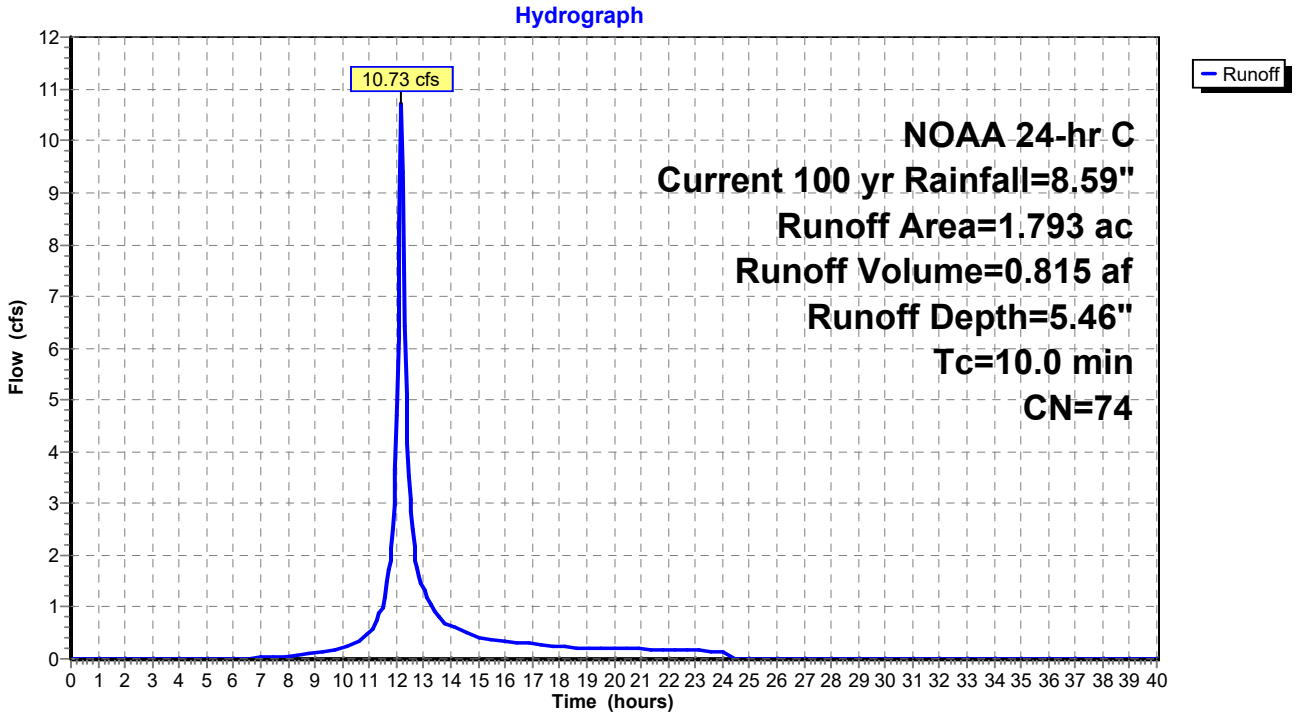
Runoff = 10.73 cfs @ 12.17 hrs, Volume= 0.815 af, Depth= 5.46"
Routed to Pond B-43 : Basin #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.793	74	>75% Grass cover, Good, HSG C
1.793		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 43P: PDA-43 (pervious)



Summary for Subcatchment 44I: PDA-44 (impervious)

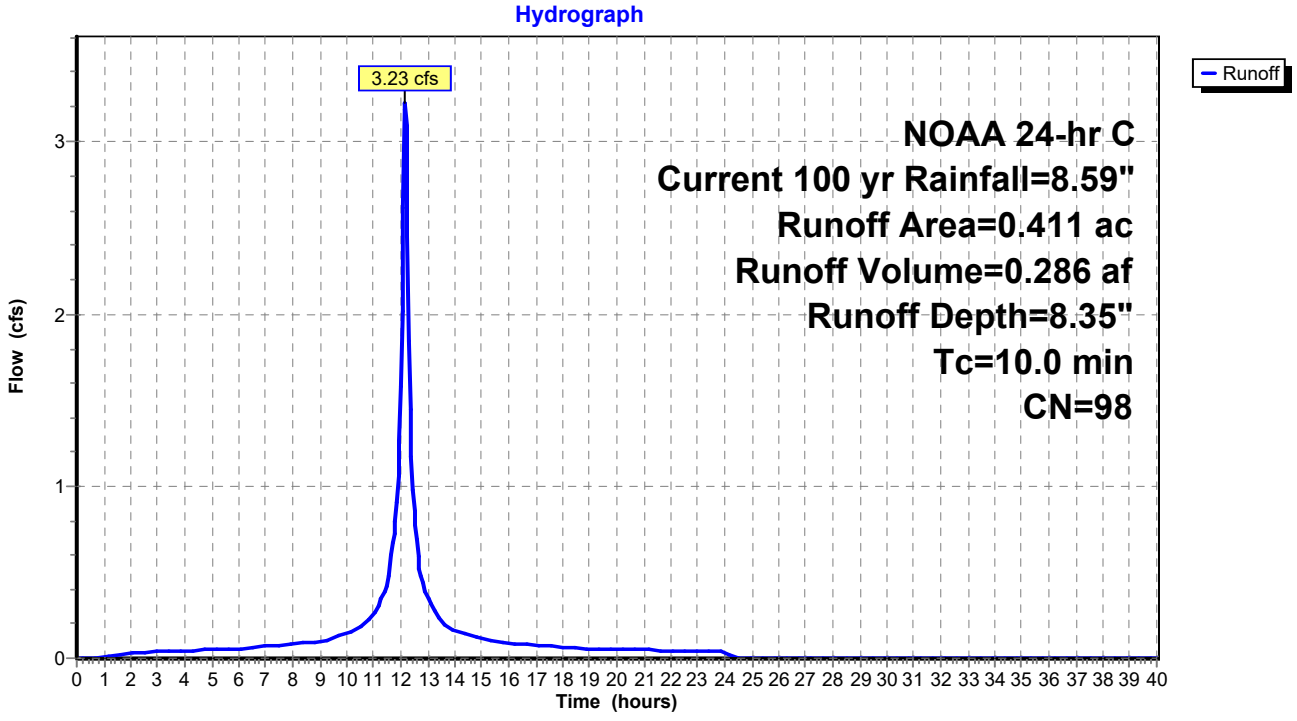
Runoff = 3.23 cfs @ 12.17 hrs, Volume= 0.286 af, Depth= 8.35"
Routed to Pond B-44 : Basin #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.283	98	Pavement, HSG C
*	0.104	98	Roof, HSG C
*	0.024	98	Concrete, HSC C
	0.411	98	Weighted Average
	0.411		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 44I: PDA-44 (impervious)



Summary for Subcatchment 44P: PDA-44 (pervious)

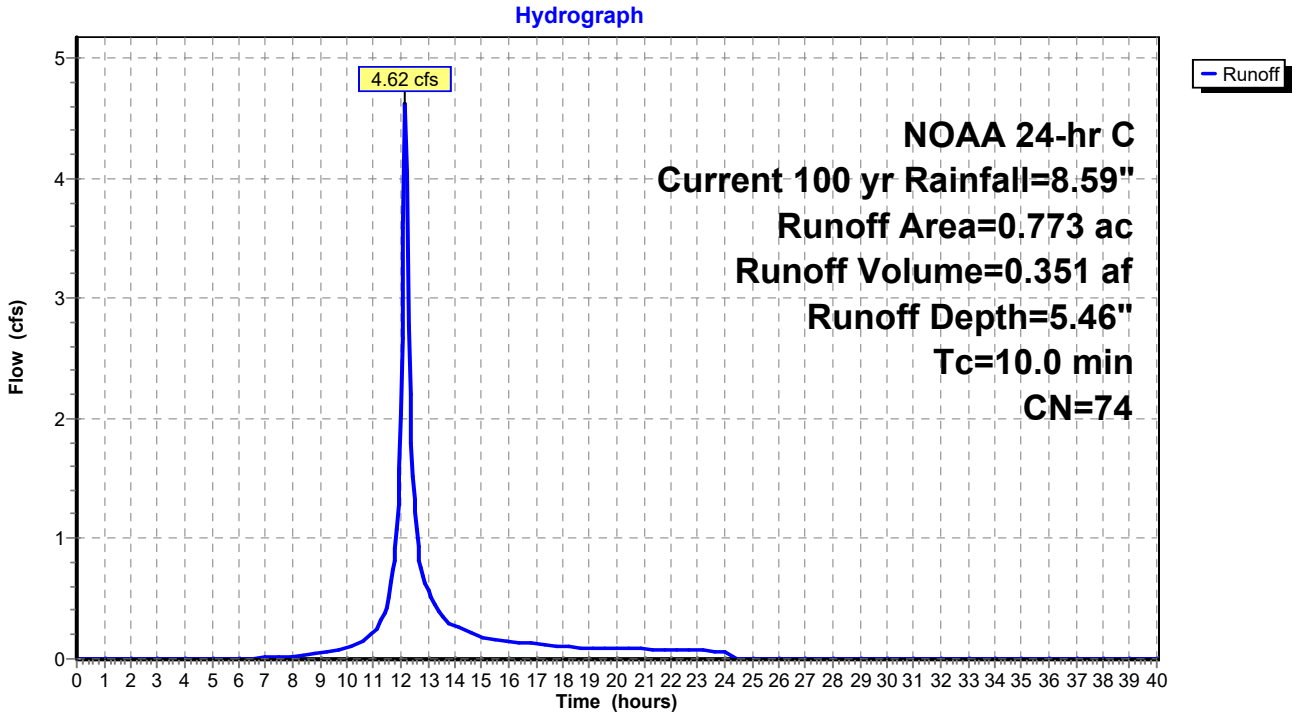
Runoff = 4.62 cfs @ 12.17 hrs, Volume= 0.351 af, Depth= 5.46"
Routed to Pond B-44 : Basin #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.773	74	>75% Grass cover, Good, HSG C
0.773		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 44P: PDA-44 (pervious)



Summary for Subcatchment 45l: PDA-45 (impervious)

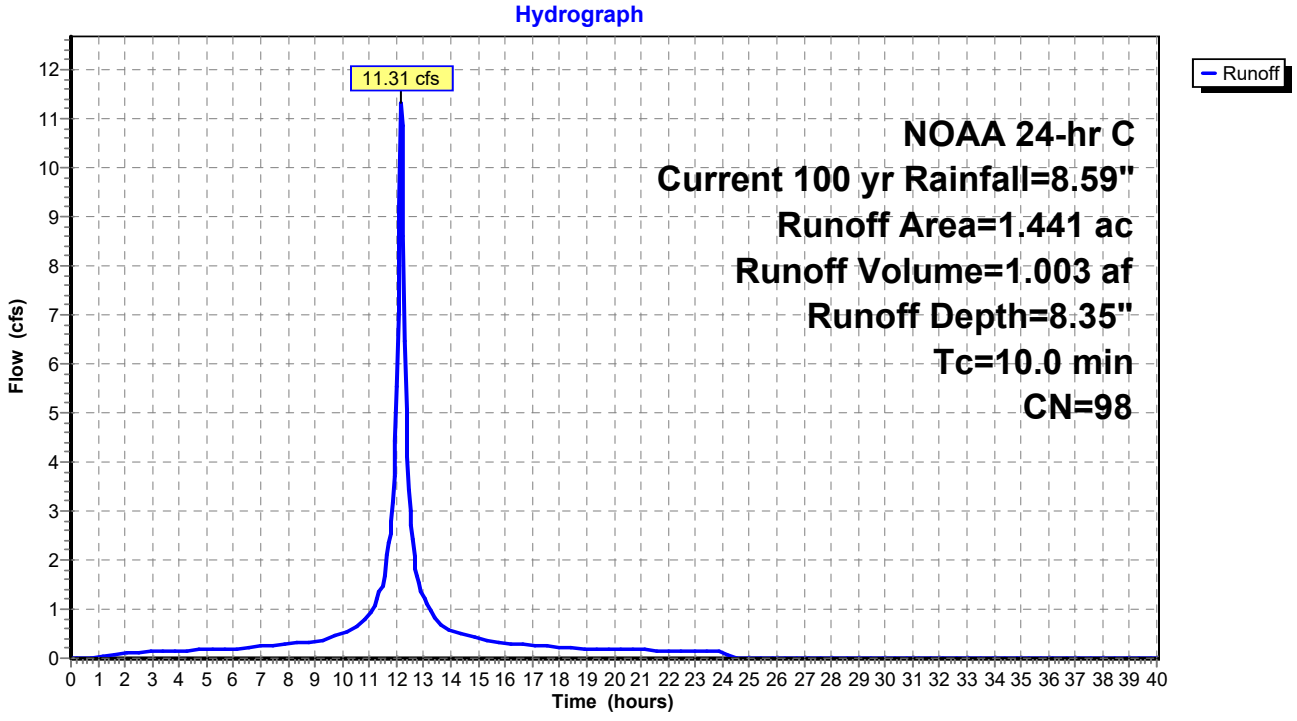
Runoff = 11.31 cfs @ 12.17 hrs, Volume= 1.003 af, Depth= 8.35"
Routed to Pond B-45 : Basin #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.394	98	Pavement, HSG C
*	1.045	98	Roof, HSG C
*	0.002	98	Concrete, HSG C
	1.441	98	Weighted Average
	1.441		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 45l: PDA-45 (impervious)



Summary for Subcatchment 45P: PDA-45 (pervious)

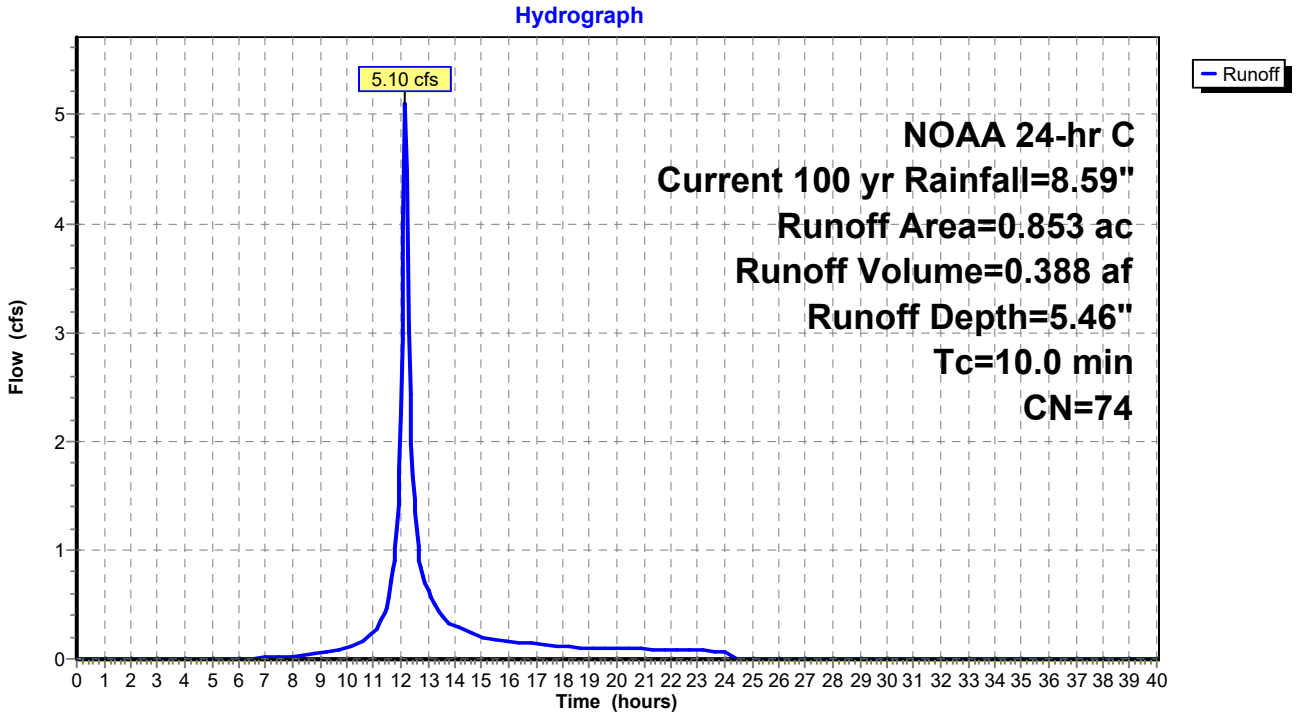
Runoff = 5.10 cfs @ 12.17 hrs, Volume= 0.388 af, Depth= 5.46"
Routed to Pond B-45 : Basin #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.853	74	>75% Grass cover, Good, HSG C
0.853		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 45P: PDA-45 (pervious)



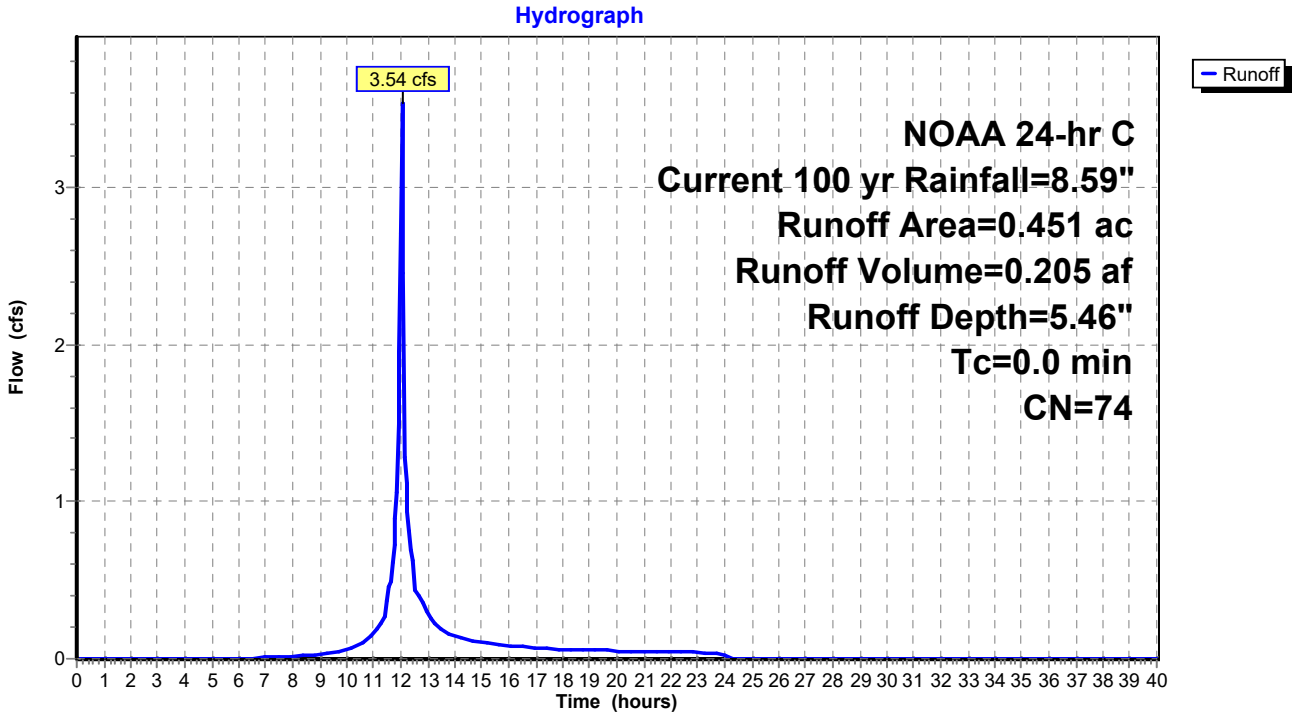
Summary for Subcatchment 46BP: PDA-46B (pervious)

Runoff = 3.54 cfs @ 12.05 hrs, Volume= 0.205 af, Depth= 5.46"
Routed to Pond B-46B : Basin #46B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.451	74	>75% Grass cover, Good, HSG C
0.451		100.00% Pervious Area

Subcatchment 46BP: PDA-46B (pervious)



Summary for Subcatchment 46I: PDA-46 (impervious)

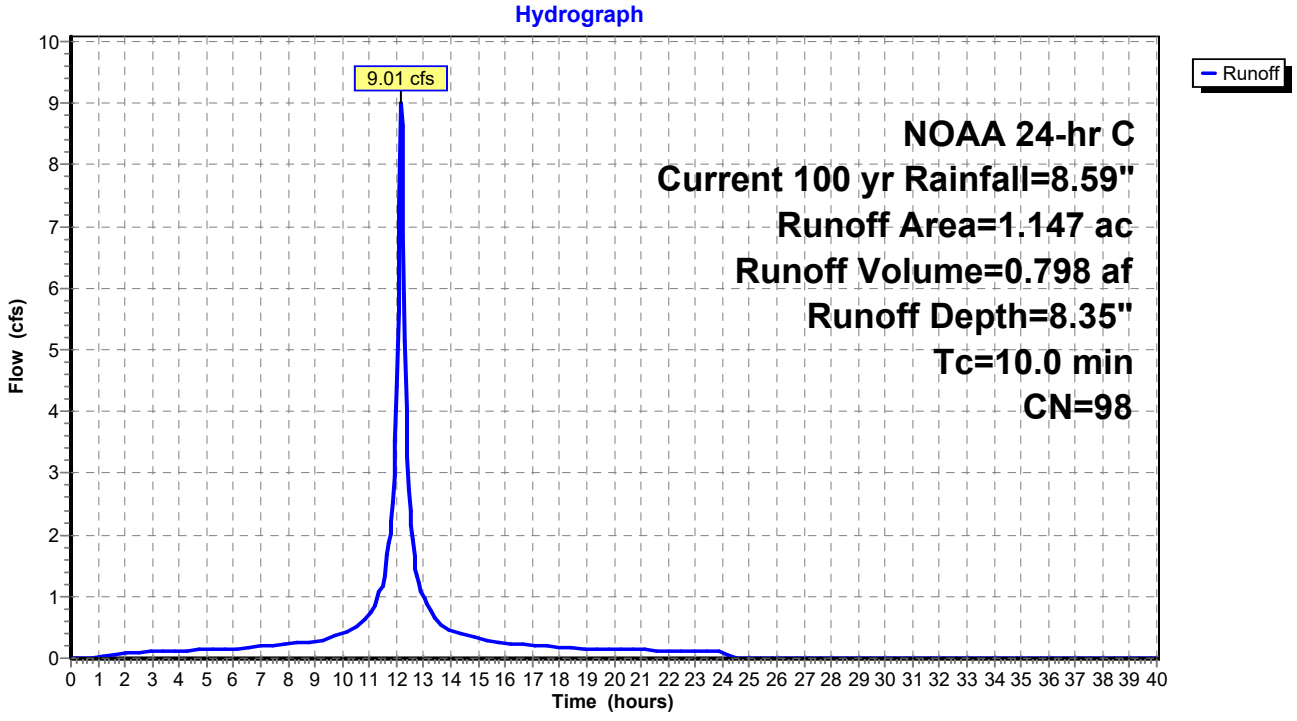
Runoff = 9.01 cfs @ 12.17 hrs, Volume= 0.798 af, Depth= 8.35"
Routed to Pond B-46A : Basin #46A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.430	98	Pavement, HSG C
*	0.653	98	Roof, HSG C
*	0.064	98	Concrete, HSG C
	1.147	98	Weighted Average
	1.147		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 46I: PDA-46 (impervious)



Summary for Subcatchment 46P: PDA-46 (pervious)

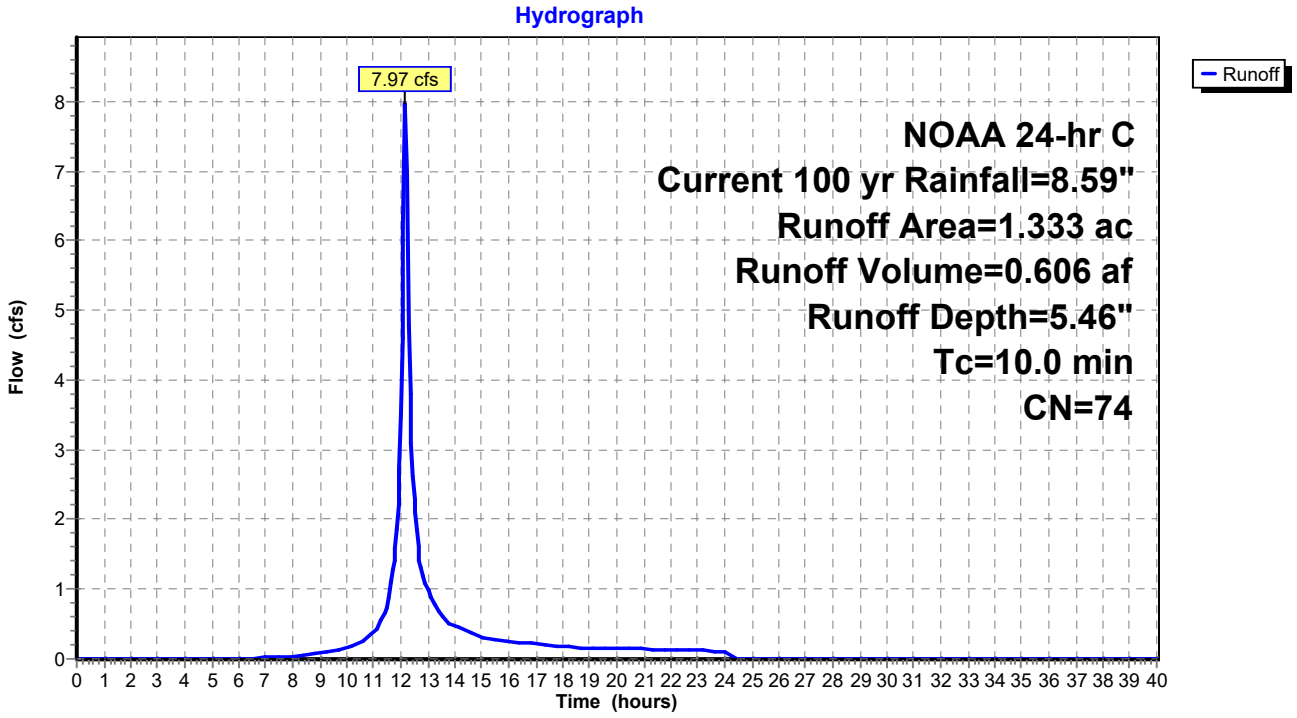
Runoff = 7.97 cfs @ 12.17 hrs, Volume= 0.606 af, Depth= 5.46"
Routed to Pond B-46A : Basin #46A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.333	74	>75% Grass cover, Good, HSG C
1.333		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 46P: PDA-46 (pervious)



Summary for Subcatchment 47I: PDA-47 (impervious)

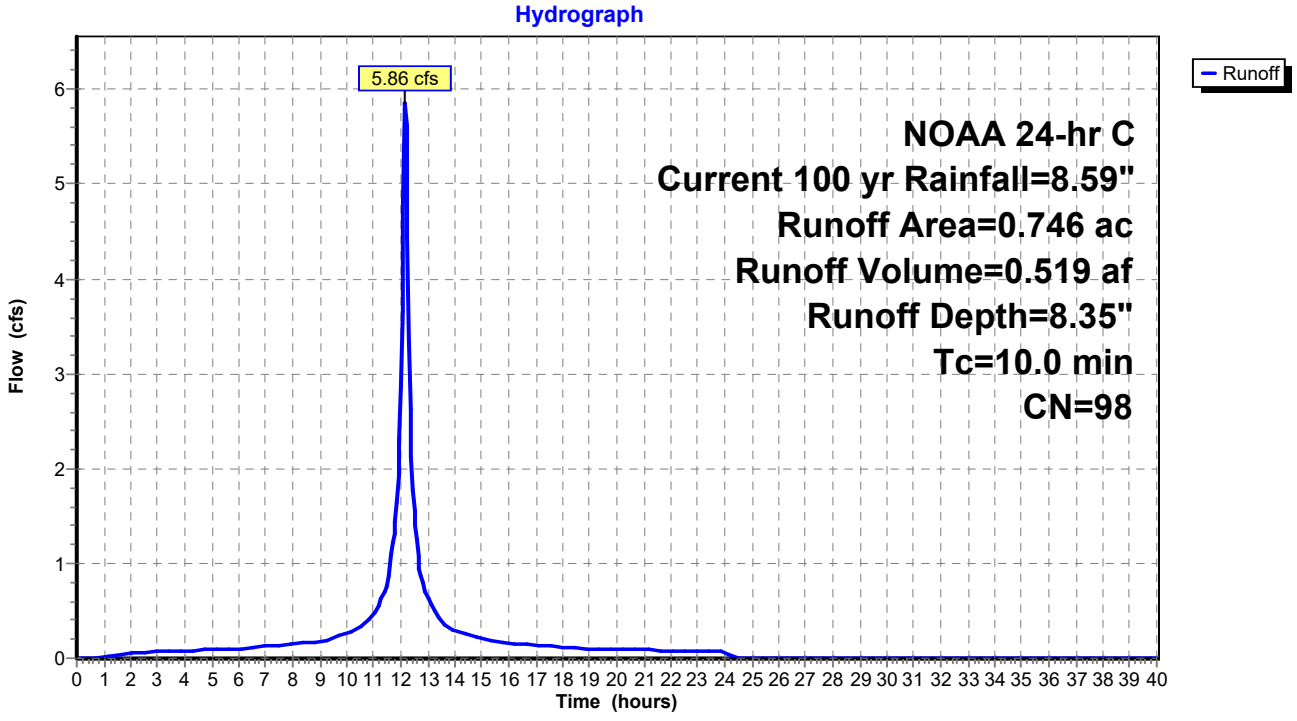
Runoff = 5.86 cfs @ 12.17 hrs, Volume= 0.519 af, Depth= 8.35"
Routed to Pond B-47 : Basin #47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.244	98	Pavement, HSG C
*	0.484	98	Roof, HSG C
*	0.018	98	Concrete, HSG C
	0.746	98	Weighted Average
	0.746		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 47I: PDA-47 (impervious)



Summary for Subcatchment 47P: PDA-47 (pervious)

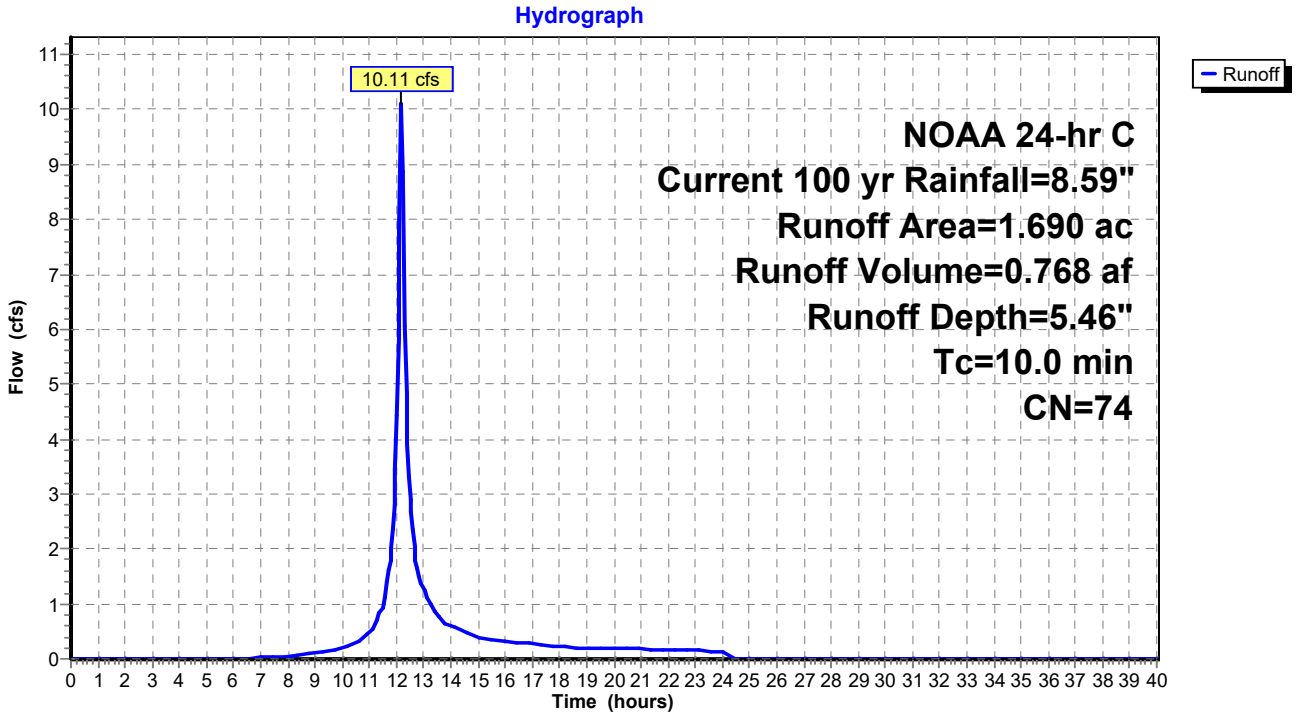
Runoff = 10.11 cfs @ 12.17 hrs, Volume= 0.768 af, Depth= 5.46"
Routed to Pond B-47 : Basin #47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.690	74	>75% Grass cover, Good, HSG C
1.690		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 47P: PDA-47 (pervious)



Summary for Subcatchment UPDA-4: PDA-4 (undetained)

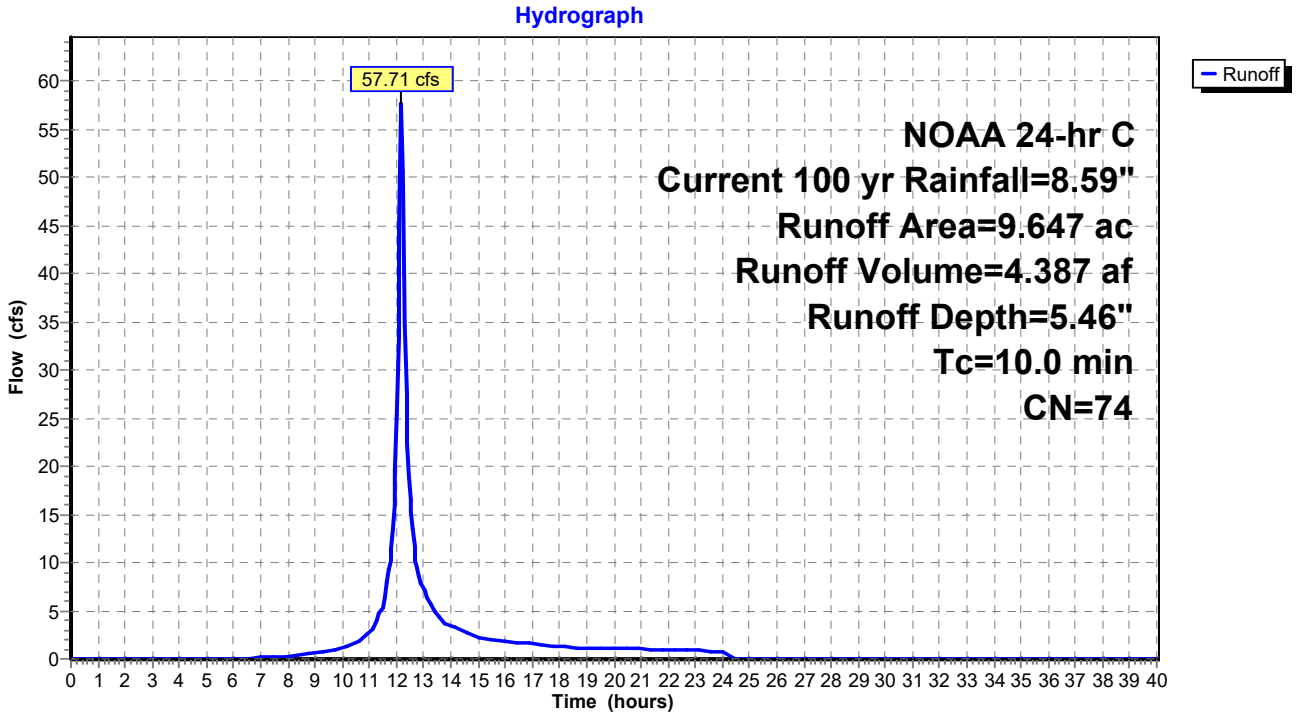
Runoff = 57.71 cfs @ 12.17 hrs, Volume= 4.387 af, Depth= 5.46"
Routed to Link PDA-4 : Proposed Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
9.647	74	>75% Grass cover, Good, HSG C
9.647		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-4: PDA-4 (undetained)



Summary for Pond B-41: Basin #41

Inflow Area = 2.368 ac, 29.05% Impervious, Inflow Depth = 6.30" for Current 100 yr event
Inflow = 15.45 cfs @ 12.17 hrs, Volume= 1.243 af
Outflow = 12.71 cfs @ 12.24 hrs, Volume= 1.180 af, Atten= 18%, Lag= 4.2 min
Primary = 12.71 cfs @ 12.24 hrs, Volume= 1.180 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 185.14' @ 12.24 hrs Surf.Area= 5,598 sf Storage= 14,807 cf

Plug-Flow detention time= 211.1 min calculated for 1.180 af (95% of inflow)
Center-of-Mass det. time= 182.0 min (973.0 - 791.1)

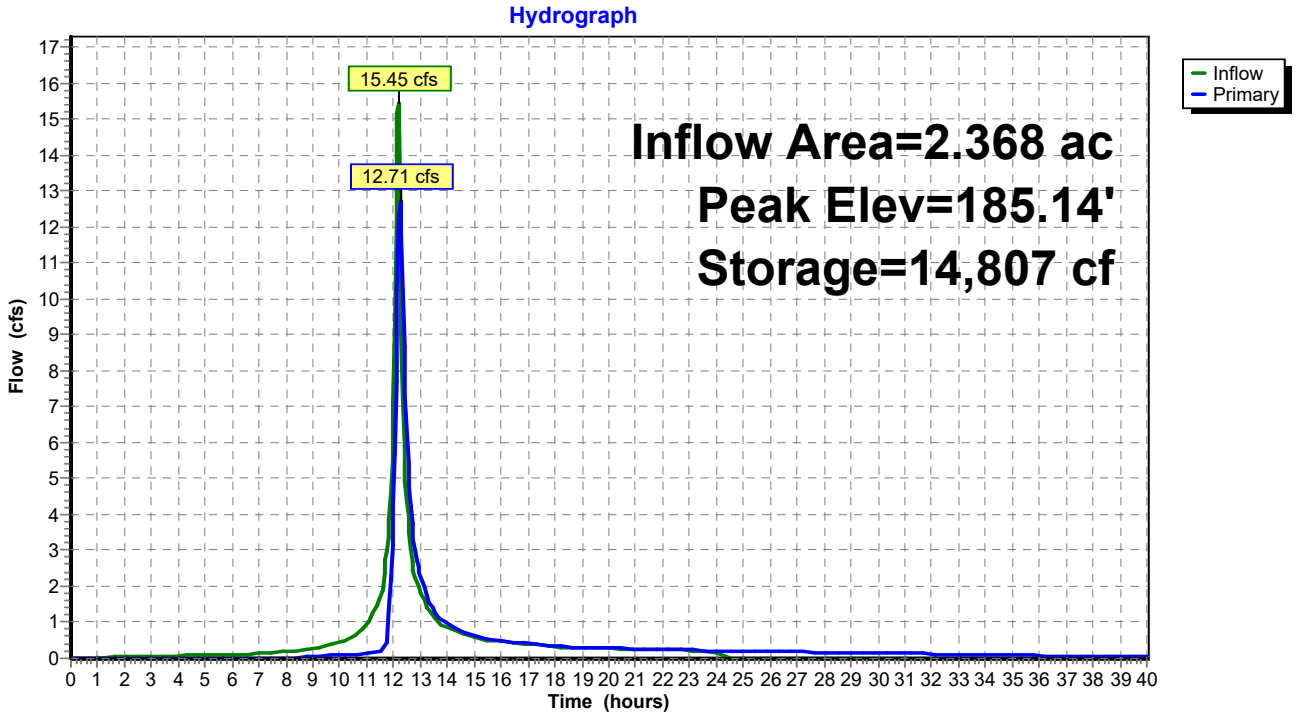
Volume	Invert	Avail.Storage	Storage Description
#1	181.85'	23,005 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.85	0	0	0
182.00	3,695	277	277
183.00	4,265	3,980	4,257
184.00	4,870	4,568	8,825
185.00	5,505	5,188	14,012
186.00	6,153	5,829	19,841
186.50	6,502	3,164	23,005

Device	Routing	Invert	Outlet Devices
#1	Primary	181.85'	**18.0" Round Culvert** L= 59.0' Ke= 0.500 Inlet / Outlet Invert= 181.85' / 181.55' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	182.50'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.13'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.39'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.76 cfs @ 12.24 hrs HW=185.14' (Free Discharge)
- **1=Culvert** (Barrel Controls 12.76 cfs @ 7.22 fps)
  - **2=Orifice/Grate** (Passes < 0.26 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 12.54 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-41: Basin #41



Stage-Discharge for Pond B-41: Basin #41

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.85	0.00	182.37	0.00	182.89	0.09	183.41	0.15
181.86	0.00	182.38	0.00	182.90	0.09	183.42	0.15
181.87	0.00	182.39	0.00	182.91	0.09	183.43	0.15
181.88	0.00	182.40	0.00	182.92	0.09	183.44	0.15
181.89	0.00	182.41	0.00	182.93	0.09	183.45	0.15
181.90	0.00	182.42	0.00	182.94	0.10	183.46	0.15
181.91	0.00	182.43	0.00	182.95	0.10	183.47	0.15
181.92	0.00	182.44	0.00	182.96	0.10	183.48	0.15
181.93	0.00	182.45	0.00	182.97	0.10	183.49	0.15
181.94	0.00	182.46	0.00	182.98	0.10	183.50	0.16
181.95	0.00	182.47	0.00	182.99	0.10	183.51	0.16
181.96	0.00	182.48	0.00	183.00	0.10	183.52	0.16
181.97	0.00	182.49	0.00	183.01	0.10	183.53	0.16
181.98	0.00	182.50	0.00	183.02	0.11	183.54	0.16
181.99	0.00	182.51	0.00	183.03	0.11	183.55	0.16
182.00	0.00	182.52	0.00	183.04	0.11	183.56	0.16
182.01	0.00	182.53	0.00	183.05	0.11	183.57	0.16
182.02	0.00	182.54	0.00	183.06	0.11	183.58	0.16
182.03	0.00	182.55	0.00	183.07	0.11	183.59	0.16
182.04	0.00	182.56	0.01	183.08	0.11	183.60	0.16
182.05	0.00	182.57	0.01	183.09	0.11	183.61	0.16
182.06	0.00	182.58	0.01	183.10	0.12	183.62	0.17
182.07	0.00	182.59	0.01	183.11	0.12	183.63	0.17
182.08	0.00	182.60	0.02	183.12	0.12	183.64	0.17
182.09	0.00	182.61	0.02	183.13	0.12	183.65	0.17
182.10	0.00	182.62	0.02	183.14	0.12	183.66	0.17
182.11	0.00	182.63	0.03	183.15	0.12	183.67	0.17
182.12	0.00	182.64	0.03	183.16	0.12	183.68	0.17
182.13	0.00	182.65	0.03	183.17	0.12	183.69	0.17
182.14	0.00	182.66	0.04	183.18	0.12	183.70	0.17
182.15	0.00	182.67	0.04	183.19	0.13	183.71	0.17
182.16	0.00	182.68	0.05	183.20	0.13	183.72	0.17
182.17	0.00	182.69	0.05	183.21	0.13	183.73	0.17
182.18	0.00	182.70	0.05	183.22	0.13	183.74	0.17
182.19	0.00	182.71	0.05	183.23	0.13	183.75	0.18
182.20	0.00	182.72	0.06	183.24	0.13	183.76	0.18
182.21	0.00	182.73	0.06	183.25	0.13	183.77	0.18
182.22	0.00	182.74	0.06	183.26	0.13	183.78	0.18
182.23	0.00	182.75	0.06	183.27	0.13	183.79	0.18
182.24	0.00	182.76	0.06	183.28	0.13	183.80	0.18
182.25	0.00	182.77	0.07	183.29	0.14	183.81	0.18
182.26	0.00	182.78	0.07	183.30	0.14	183.82	0.18
182.27	0.00	182.79	0.07	183.31	0.14	183.83	0.18
182.28	0.00	182.80	0.07	183.32	0.14	183.84	0.18
182.29	0.00	182.81	0.07	183.33	0.14	183.85	0.18
182.30	0.00	182.82	0.08	183.34	0.14	183.86	0.18
182.31	0.00	182.83	0.08	183.35	0.14	183.87	0.18
182.32	0.00	182.84	0.08	183.36	0.14	183.88	0.19
182.33	0.00	182.85	0.08	183.37	0.14	183.89	0.19
182.34	0.00	182.86	0.08	183.38	0.14	183.90	0.19
182.35	0.00	182.87	0.08	183.39	0.15	183.91	0.19
182.36	0.00	182.88	0.09	183.40	0.15	183.92	0.19

Stage-Discharge for Pond B-41: Basin #41 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.93	0.19	184.45	2.55	184.97	9.90	185.49	17.51
183.94	0.19	184.46	2.66	184.98	10.07	185.50	18.11
183.95	0.19	184.47	2.77	184.99	10.24	185.51	18.74
183.96	0.19	184.48	2.89	185.00	10.41	185.52	19.40
183.97	0.19	184.49	3.00	185.01	10.58	185.53	20.08
183.98	0.19	184.50	3.12	185.02	10.75	185.54	20.78
183.99	0.19	184.51	3.23	185.03	10.92	185.55	21.51
184.00	0.19	184.52	3.35	185.04	11.09	185.56	22.26
184.01	0.19	184.53	3.47	185.05	11.27	185.57	23.03
184.02	0.20	184.54	3.59	185.06	11.44	185.58	23.82
184.03	0.20	184.55	3.71	185.07	11.62	185.59	24.64
184.04	0.20	184.56	3.84	185.08	11.79	185.60	25.51
184.05	0.20	184.57	3.96	185.09	11.97	185.61	26.41
184.06	0.20	184.58	4.09	185.10	12.15	185.62	27.34
184.07	0.20	184.59	4.22	185.11	12.33	185.63	28.29
184.08	0.20	184.60	4.35	185.12	12.51	185.64	29.27
184.09	0.20	184.61	4.48	185.13	12.69	185.65	30.27
184.10	0.20	184.62	4.61	185.14	12.77	185.66	31.29
184.11	0.20	184.63	4.74	185.15	12.80	185.67	32.34
184.12	0.20	184.64	4.88	185.16	12.83	185.68	33.42
184.13	0.20	184.65	5.01	185.17	12.86	185.69	34.52
184.14	0.22	184.66	5.15	185.18	12.89	185.70	35.64
184.15	0.24	184.67	5.29	185.19	12.92	185.71	36.79
184.16	0.27	184.68	5.42	185.20	12.95	185.72	37.96
184.17	0.31	184.69	5.56	185.21	12.98	185.73	39.16
184.18	0.35	184.70	5.71	185.22	13.01	185.74	40.38
184.19	0.40	184.71	5.85	185.23	13.04	185.75	41.63
184.20	0.45	184.72	5.99	185.24	13.07	185.76	42.89
184.21	0.50	184.73	6.14	185.25	13.10	185.77	44.19
184.22	0.56	184.74	6.28	185.26	13.13	185.78	45.51
184.23	0.62	184.75	6.43	185.27	13.16	185.79	46.85
184.24	0.68	184.76	6.58	185.28	13.19	185.80	48.24
184.25	0.75	184.77	6.72	185.29	13.22	185.81	49.66
184.26	0.82	184.78	6.87	185.30	13.25	185.82	51.10
184.27	0.89	184.79	7.02	185.31	13.28	185.83	52.57
184.28	0.97	184.80	7.18	185.32	13.30	185.84	54.07
184.29	1.04	184.81	7.33	185.33	13.33	185.85	55.59
184.30	1.12	184.82	7.48	185.34	13.36	185.86	57.14
184.31	1.20	184.83	7.64	185.35	13.39	185.87	58.72
184.32	1.29	184.84	7.79	185.36	13.42	185.88	60.32
184.33	1.37	184.85	7.95	185.37	13.45	185.89	61.95
184.34	1.46	184.86	8.11	185.38	13.48	185.90	63.60
184.35	1.55	184.87	8.27	185.39	13.51	185.91	65.28
184.36	1.64	184.88	8.42	185.40	13.65	185.92	66.99
184.37	1.74	184.89	8.59	185.41	13.90	185.93	68.72
184.38	1.83	184.90	8.75	185.42	14.20	185.94	70.48
184.39	1.93	184.91	8.91	185.43	14.56	185.95	72.27
184.40	2.03	184.92	9.07	185.44	14.96	185.96	74.09
184.41	2.13	184.93	9.24	185.45	15.40	185.97	75.93
184.42	2.23	184.94	9.40	185.46	15.88	185.98	77.80
184.43	2.34	184.95	9.57	185.47	16.39	185.99	79.69
184.44	2.45	184.96	9.73	185.48	16.94	186.00	81.34

Stage-Discharge for Pond B-41: Basin #41 (continued)

Elevation (feet)	Primary (cfs)
186.01	83.01
186.02	84.69
186.03	86.38
186.04	88.09
186.05	89.81
186.06	91.54
186.07	93.29
186.08	95.04
186.09	96.81
186.10	98.60
186.11	100.40
186.12	102.20
186.13	104.03
186.14	105.86
186.15	107.71
186.16	109.56
186.17	111.44
186.18	113.32
186.19	115.21
186.20	117.16
186.21	119.11
186.22	121.09
186.23	123.07
186.24	125.07
186.25	127.08
186.26	129.10
186.27	131.14
186.28	133.19
186.29	135.25
186.30	137.32
186.31	139.41
186.32	141.51
186.33	143.63
186.34	145.75
186.35	147.89
186.36	150.04
186.37	152.21
186.38	154.38
186.39	156.57
186.40	158.72
186.41	160.88
186.42	163.05
186.43	165.23
186.44	167.42
186.45	169.62
186.46	171.83
186.47	174.05
186.48	176.29
186.49	178.53
186.50	**180.78**

Stage-Area-Storage for Pond B-41: Basin #41

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.85	0	0
181.86	246	1
181.87	493	5
181.88	739	11
181.89	985	20
181.90	1,232	31
181.91	1,478	44
181.92	1,724	60
181.93	1,971	79
181.94	2,217	100
181.95	2,463	123
181.96	2,710	149
181.97	2,956	177
181.98	3,202	208
181.99	3,449	241
182.00	3,695	277
182.01	3,701	314
182.02	3,706	351
182.03	3,712	388
182.04	3,718	425
182.05	3,723	463
182.06	3,729	500
182.07	3,735	537
182.08	3,741	575
182.09	3,746	612
182.10	3,752	649
182.11	3,758	687
182.12	3,763	725
182.13	3,769	762
182.14	3,775	800
182.15	3,781	838
182.16	3,786	876
182.17	3,792	914
182.18	3,798	951
182.19	3,803	989
182.20	3,809	1,028
182.21	3,815	1,066
182.22	3,820	1,104
182.23	3,826	1,142
182.24	3,832	1,180
182.25	3,838	1,219
182.26	3,843	1,257
182.27	3,849	1,296
182.28	3,855	1,334
182.29	3,860	1,373
182.30	3,866	1,411
182.31	3,872	1,450
182.32	3,877	1,489
182.33	3,883	1,528
182.34	3,889	1,566
182.35	3,894	1,605
182.36	3,900	1,644
182.37	3,906	1,683
182.38	3,912	1,722
182.39	3,917	1,762
182.40	3,923	1,801
182.41	3,929	1,840
182.42	3,934	1,879
182.43	3,940	1,919
182.44	3,946	1,958
182.45	3,951	1,998
182.46	3,957	2,037
182.47	3,963	2,077
182.48	3,969	2,116
182.49	3,974	2,156
182.50	3,980	2,196
182.51	3,986	2,236
182.52	3,991	2,276
182.53	3,997	2,316
182.54	4,003	2,356
182.55	4,008	2,396
182.56	4,014	2,436
182.57	4,020	2,476
182.58	4,026	2,516
182.59	4,031	2,556
182.60	4,037	2,597
182.61	4,043	2,637
182.62	4,048	2,678
182.63	4,054	2,718
182.64	4,060	2,759
182.65	4,066	2,799
182.66	4,071	2,840
182.67	4,077	2,881
182.68	4,083	2,922
182.69	4,088	2,962
182.70	4,094	3,003
182.71	4,100	3,044
182.72	4,105	3,085
182.73	4,111	3,126
182.74	4,117	3,167
182.75	4,123	3,209
182.76	4,128	3,250
182.77	4,134	3,291
182.78	4,140	3,333
182.79	4,145	3,374
182.80	4,151	3,416
182.81	4,157	3,457
182.82	4,162	3,499
182.83	4,168	3,540
182.84	4,174	3,582
182.85	4,179	3,624
182.86	4,185	3,666
182.87	4,191	3,707
182.88	4,197	3,749

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.89	4,202	3,791	183.41	4,513	6,057
182.90	4,208	3,833	183.42	4,519	6,102
182.91	4,214	3,876	183.43	4,525	6,147
182.92	4,219	3,918	183.44	4,531	6,192
182.93	4,225	3,960	183.45	4,537	6,238
182.94	4,231	4,002	183.46	4,543	6,283
182.95	4,236	4,045	183.47	4,549	6,328
182.96	4,242	4,087	183.48	4,555	6,374
182.97	4,248	4,129	183.49	4,561	6,420
182.98	4,254	4,172	183.50	4,568	6,465
182.99	4,259	4,215	183.51	4,574	6,511
183.00	4,265	4,257	183.52	4,580	6,557
183.01	4,271	4,300	183.53	4,586	6,603
183.02	4,277	4,343	183.54	4,592	6,648
183.03	4,283	4,385	183.55	4,598	6,694
183.04	4,289	4,428	183.56	4,604	6,740
183.05	4,295	4,471	183.57	4,610	6,786
183.06	4,301	4,514	183.58	4,616	6,833
183.07	4,307	4,557	183.59	4,622	6,879
183.08	4,313	4,600	183.60	4,628	6,925
183.09	4,319	4,643	183.61	4,634	6,971
183.10	4,325	4,687	183.62	4,640	7,018
183.11	4,332	4,730	183.63	4,646	7,064
183.12	4,338	4,773	183.64	4,652	7,111
183.13	4,344	4,817	183.65	4,658	7,157
183.14	4,350	4,860	183.66	4,664	7,204
183.15	4,356	4,904	183.67	4,670	7,250
183.16	4,362	4,947	183.68	4,676	7,297
183.17	4,368	4,991	183.69	4,682	7,344
183.18	4,374	5,035	183.70	4,688	7,391
183.19	4,380	5,078	183.71	4,695	7,438
183.20	4,386	5,122	183.72	4,701	7,485
183.21	4,392	5,166	183.73	4,707	7,532
183.22	4,398	5,210	183.74	4,713	7,579
183.23	4,404	5,254	183.75	4,719	7,626
183.24	4,410	5,298	183.76	4,725	7,673
183.25	4,416	5,342	183.77	4,731	7,721
183.26	4,422	5,386	183.78	4,737	7,768
183.27	4,428	5,431	183.79	4,743	7,815
183.28	4,434	5,475	183.80	4,749	7,863
183.29	4,440	5,519	183.81	4,755	7,910
183.30	4,446	5,564	183.82	4,761	7,958
183.31	4,453	5,608	183.83	4,767	8,005
183.32	4,459	5,653	183.84	4,773	8,053
183.33	4,465	5,698	183.85	4,779	8,101
183.34	4,471	5,742	183.86	4,785	8,149
183.35	4,477	5,787	183.87	4,791	8,197
183.36	4,483	5,832	183.88	4,797	8,245
183.37	4,489	5,877	183.89	4,803	8,293
183.38	4,495	5,922	183.90	4,810	8,341
183.39	4,501	5,966	183.91	4,816	8,389
183.40	4,507	6,012	183.92	4,822	8,437

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.93	4,828	8,485	184.45	5,156	11,080
183.94	4,834	8,534	184.46	5,162	11,132
183.95	4,840	8,582	184.47	5,168	11,184
183.96	4,846	8,630	184.48	5,175	11,235
183.97	4,852	8,679	184.49	5,181	11,287
183.98	4,858	8,727	184.50	5,188	11,339
183.99	4,864	8,776	184.51	5,194	11,391
184.00	4,870	8,825	184.52	5,200	11,443
184.01	4,876	8,873	184.53	5,207	11,495
184.02	4,883	8,922	184.54	5,213	11,547
184.03	4,889	8,971	184.55	5,219	11,599
184.04	4,895	9,020	184.56	5,226	11,651
184.05	4,902	9,069	184.57	5,232	11,704
184.06	4,908	9,118	184.58	5,238	11,756
184.07	4,914	9,167	184.59	5,245	11,808
184.08	4,921	9,216	184.60	5,251	11,861
184.09	4,927	9,265	184.61	5,257	11,913
184.10	4,933	9,315	184.62	5,264	11,966
184.11	4,940	9,364	184.63	5,270	12,019
184.12	4,946	9,414	184.64	5,276	12,071
184.13	4,953	9,463	184.65	5,283	12,124
184.14	4,959	9,513	184.66	5,289	12,177
184.15	4,965	9,562	184.67	5,295	12,230
184.16	4,972	9,612	184.68	5,302	12,283
184.17	4,978	9,662	184.69	5,308	12,336
184.18	4,984	9,712	184.70	5,314	12,389
184.19	4,991	9,761	184.71	5,321	12,442
184.20	4,997	9,811	184.72	5,327	12,496
184.21	5,003	9,861	184.73	5,334	12,549
184.22	5,010	9,911	184.74	5,340	12,602
184.23	5,016	9,962	184.75	5,346	12,656
184.24	5,022	10,012	184.76	5,353	12,709
184.25	5,029	10,062	184.77	5,359	12,763
184.26	5,035	10,112	184.78	5,365	12,816
184.27	5,041	10,163	184.79	5,372	12,870
184.28	5,048	10,213	184.80	5,378	12,924
184.29	5,054	10,264	184.81	5,384	12,978
184.30	5,060	10,314	184.82	5,391	13,032
184.31	5,067	10,365	184.83	5,397	13,085
184.32	5,073	10,416	184.84	5,403	13,139
184.33	5,080	10,466	184.85	5,410	13,194
184.34	5,086	10,517	184.86	5,416	13,248
184.35	5,092	10,568	184.87	5,422	13,302
184.36	5,099	10,619	184.88	5,429	13,356
184.37	5,105	10,670	184.89	5,435	13,410
184.38	5,111	10,721	184.90	5,442	13,465
184.39	5,118	10,772	184.91	5,448	13,519
184.40	5,124	10,823	184.92	5,454	13,574
184.41	5,130	10,875	184.93	5,461	13,628
184.42	5,137	10,926	184.94	5,467	13,683
184.43	5,143	10,977	184.95	5,473	13,738
184.44	5,149	11,029	184.96	5,480	13,792

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.97	5,486	13,847	185.49	5,823	16,787
184.98	5,492	13,902	185.50	5,829	16,846
184.99	5,499	13,957	185.51	5,835	16,904
185.00	5,505	14,012	185.52	5,842	16,962
185.01	5,511	14,067	185.53	5,848	17,021
185.02	5,518	14,122	185.54	5,855	17,079
185.03	5,524	14,178	185.55	5,861	17,138
185.04	5,531	14,233	185.56	5,868	17,197
185.05	5,537	14,288	185.57	5,874	17,255
185.06	5,544	14,344	185.58	5,881	17,314
185.07	5,550	14,399	185.59	5,887	17,373
185.08	5,557	14,455	185.60	5,894	17,432
185.09	5,563	14,510	185.61	5,900	17,491
185.10	5,570	14,566	185.62	5,907	17,550
185.11	5,576	14,622	185.63	5,913	17,609
185.12	5,583	14,677	185.64	5,920	17,668
185.13	5,589	14,733	185.65	5,926	17,727
185.14	5,596	14,789	185.66	5,933	17,787
185.15	5,602	14,845	185.67	5,939	17,846
185.16	5,609	14,901	185.68	5,946	17,905
185.17	5,615	14,957	185.69	5,952	17,965
185.18	5,622	15,014	185.70	5,959	18,024
185.19	5,628	15,070	185.71	5,965	18,084
185.20	5,635	15,126	185.72	5,972	18,144
185.21	5,641	15,182	185.73	5,978	18,203
185.22	5,648	15,239	185.74	5,985	18,263
185.23	5,654	15,295	185.75	5,991	18,323
185.24	5,661	15,352	185.76	5,997	18,383
185.25	5,667	15,409	185.77	6,004	18,443
185.26	5,673	15,465	185.78	6,010	18,503
185.27	5,680	15,522	185.79	6,017	18,563
185.28	5,686	15,579	185.80	6,023	18,623
185.29	5,693	15,636	185.81	6,030	18,684
185.30	5,699	15,693	185.82	6,036	18,744
185.31	5,706	15,750	185.83	6,043	18,804
185.32	5,712	15,807	185.84	6,049	18,865
185.33	5,719	15,864	185.85	6,056	18,925
185.34	5,725	15,921	185.86	6,062	18,986
185.35	5,732	15,979	185.87	6,069	19,047
185.36	5,738	16,036	185.88	6,075	19,107
185.37	5,745	16,093	185.89	6,082	19,168
185.38	5,751	16,151	185.90	6,088	19,229
185.39	5,758	16,208	185.91	6,095	19,290
185.40	5,764	16,266	185.92	6,101	19,351
185.41	5,771	16,324	185.93	6,108	19,412
185.42	5,777	16,381	185.94	6,114	19,473
185.43	5,784	16,439	185.95	6,121	19,534
185.44	5,790	16,497	185.96	6,127	19,596
185.45	5,797	16,555	185.97	6,134	19,657
185.46	5,803	16,613	185.98	6,140	19,718
185.47	5,810	16,671	185.99	6,147	19,780
185.48	5,816	16,729	186.00	6,153	19,841

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.01	6,160	19,903
186.02	6,167	19,964
186.03	6,174	20,026
186.04	6,181	20,088
186.05	6,188	20,150
186.06	6,195	20,212
186.07	6,202	20,274
186.08	6,209	20,336
186.09	6,216	20,398
186.10	6,223	20,460
186.11	6,230	20,522
186.12	6,237	20,585
186.13	6,244	20,647
186.14	6,251	20,709
186.15	6,258	20,772
186.16	6,265	20,835
186.17	6,272	20,897
186.18	6,279	20,960
186.19	6,286	21,023
186.20	6,293	21,086
186.21	6,300	21,149
186.22	6,307	21,212
186.23	6,314	21,275
186.24	6,321	21,338
186.25	6,328	21,401
186.26	6,334	21,464
186.27	6,341	21,528
186.28	6,348	21,591
186.29	6,355	21,655
186.30	6,362	21,718
186.31	6,369	21,782
186.32	6,376	21,846
186.33	6,383	21,910
186.34	6,390	21,973
186.35	6,397	22,037
186.36	6,404	22,101
186.37	6,411	22,166
186.38	6,418	22,230
186.39	6,425	22,294
186.40	6,432	22,358
186.41	6,439	22,423
186.42	6,446	22,487
186.43	6,453	22,551
186.44	6,460	22,616
186.45	6,467	22,681
186.46	6,474	22,745
186.47	6,481	22,810
186.48	6,488	22,875
186.49	6,495	22,940
186.50	**6,502**	**23,005**

Summary for Pond B-42: Basin #42

Inflow Area = 0.777 ac, 38.35% Impervious, Inflow Depth = 6.57" for Current 100 yr event
Inflow = 5.20 cfs @ 12.17 hrs, Volume= 0.425 af
Outflow = 1.90 cfs @ 12.42 hrs, Volume= 0.329 af, Atten= 63%, Lag= 14.8 min
Primary = 1.90 cfs @ 12.42 hrs, Volume= 0.329 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.27' @ 12.42 hrs Surf.Area= 3,809 sf Storage= 9,673 cf

Plug-Flow detention time= 383.2 min calculated for 0.329 af (77% of inflow)
Center-of-Mass det. time= 296.8 min (1,080.1 - 783.3)

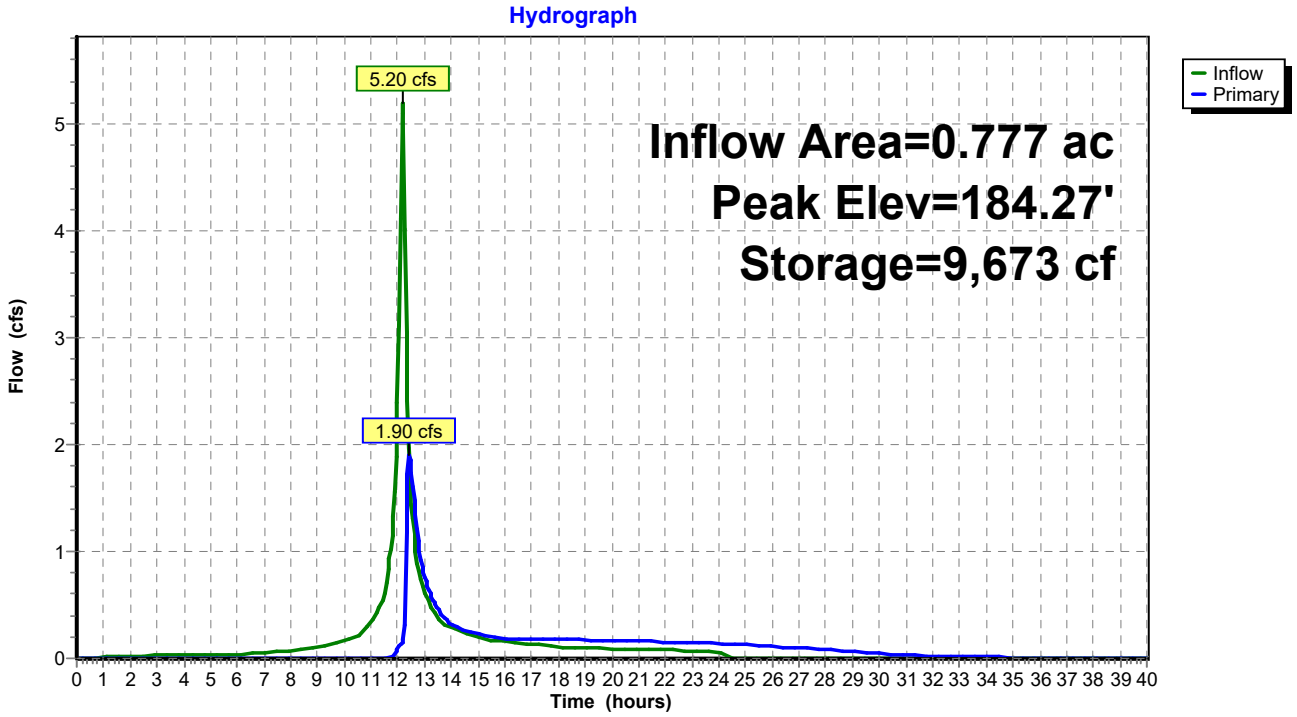
Volume	Invert	Avail.Storage	Storage Description
#1	180.96'	22,293 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.96	0	0	0
181.00	2,142	43	43
182.00	2,613	2,378	2,420
183.00	3,118	2,866	5,286
184.00	3,656	3,387	8,673
185.00	4,227	3,942	12,614
186.00	4,831	4,529	17,143
187.00	5,468	5,150	22,293

Device	Routing	Invert	Outlet Devices
#1	Primary	181.96'	**18.0" Round Culvert** L= 192.0' Ke= 0.500 Inlet / Outlet Invert= 181.96' / 181.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	182.60'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.01'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.87 cfs @ 12.42 hrs HW=184.27' (Free Discharge)
- **1=Culvert** (Passes 1.87 cfs of 8.42 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.21 cfs @ 6.02 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.67 cfs @ 1.65 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-42: Basin #42



Stage-Discharge for Pond B-42: Basin #42

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
180.96	0.00	181.48	0.00	182.00	0.00	182.52	0.00
180.97	0.00	181.49	0.00	182.01	0.00	182.53	0.00
180.98	0.00	181.50	0.00	182.02	0.00	182.54	0.00
180.99	0.00	181.51	0.00	182.03	0.00	182.55	0.00
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.01
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.01
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.01
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.01
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.02
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.02
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.02
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.03
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.03
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.03
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.04
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.04
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.05
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.05
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.05
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.05
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.06
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.06
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.06
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.06
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.06
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.07
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.07
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.07
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.07
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.07
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.08
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.08
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.08
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.08
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.08
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.08
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.09
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.09
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.09
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.09
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.09
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.09

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.04	0.10	183.56	0.15	184.08	0.43	184.60	5.98
183.05	0.10	183.57	0.15	184.09	0.49	184.61	6.12
183.06	0.10	183.58	0.15	184.10	0.55	184.62	6.27
183.07	0.10	183.59	0.15	184.11	0.61	184.63	6.42
183.08	0.10	183.60	0.16	184.12	0.67	184.64	6.56
183.09	0.10	183.61	0.16	184.13	0.74	184.65	6.71
183.10	0.10	183.62	0.16	184.14	0.81	184.66	6.86
183.11	0.10	183.63	0.16	184.15	0.88	184.67	7.01
183.12	0.11	183.64	0.16	184.16	0.95	184.68	7.16
183.13	0.11	183.65	0.16	184.17	1.03	184.69	7.32
183.14	0.11	183.66	0.16	184.18	1.11	184.70	7.47
183.15	0.11	183.67	0.16	184.19	1.19	184.71	7.62
183.16	0.11	183.68	0.16	184.20	1.27	184.72	7.78
183.17	0.11	183.69	0.16	184.21	1.36	184.73	7.94
183.18	0.11	183.70	0.16	184.22	1.45	184.74	8.09
183.19	0.11	183.71	0.16	184.23	1.54	184.75	8.25
183.20	0.12	183.72	0.17	184.24	1.63	184.76	8.41
183.21	0.12	183.73	0.17	184.25	1.72	184.77	8.57
183.22	0.12	183.74	0.17	184.26	1.82	184.78	8.73
183.23	0.12	183.75	0.17	184.27	1.92	184.79	8.90
183.24	0.12	183.76	0.17	184.28	2.02	184.80	9.06
183.25	0.12	183.77	0.17	184.29	2.12	184.81	9.22
183.26	0.12	183.78	0.17	184.30	2.22	184.82	9.39
183.27	0.12	183.79	0.17	184.31	2.33	184.83	9.55
183.28	0.12	183.80	0.17	184.32	2.43	184.84	9.69
183.29	0.13	183.81	0.17	184.33	2.54	184.85	9.71
183.30	0.13	183.82	0.17	184.34	2.65	184.86	9.73
183.31	0.13	183.83	0.17	184.35	2.76	184.87	9.75
183.32	0.13	183.84	0.17	184.36	2.87	184.88	9.77
183.33	0.13	183.85	0.18	184.37	2.99	184.89	9.79
183.34	0.13	183.86	0.18	184.38	3.10	184.90	9.81
183.35	0.13	183.87	0.18	184.39	3.22	184.91	9.83
183.36	0.13	183.88	0.18	184.40	3.34	184.92	9.85
183.37	0.13	183.89	0.18	184.41	3.46	184.93	9.88
183.38	0.13	183.90	0.18	184.42	3.58	184.94	9.90
183.39	0.14	183.91	0.18	184.43	3.70	184.95	9.92
183.40	0.14	183.92	0.18	184.44	3.83	184.96	9.94
183.41	0.14	183.93	0.18	184.45	3.95	184.97	9.96
183.42	0.14	183.94	0.18	184.46	4.08	184.98	9.98
183.43	0.14	183.95	0.18	184.47	4.21	184.99	10.00
183.44	0.14	183.96	0.18	184.48	4.33	185.00	10.02
183.45	0.14	183.97	0.18	184.49	4.46	185.01	10.04
183.46	0.14	183.98	0.19	184.50	4.60	185.02	10.06
183.47	0.14	183.99	0.19	184.51	4.73	185.03	10.08
183.48	0.14	184.00	0.19	184.52	4.86	185.04	10.10
183.49	0.15	184.01	0.19	184.53	5.00	185.05	10.12
183.50	0.15	184.02	0.20	184.54	5.14	185.06	10.14
183.51	0.15	184.03	0.23	184.55	5.27	185.07	10.16
183.52	0.15	184.04	0.26	184.56	5.41	185.08	10.18
183.53	0.15	184.05	0.29	184.57	5.55	185.09	10.20
183.54	0.15	184.06	0.34	184.58	5.69	185.10	10.21
183.55	0.15	184.07	0.38	184.59	5.84	185.11	10.23

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.12	10.25	185.64	11.23	186.16	20.39	186.68	92.62
185.13	10.27	185.65	11.24	186.17	21.15	186.69	94.39
185.14	10.29	185.66	11.26	186.18	21.93	186.70	96.16
185.15	10.31	185.67	11.28	186.19	22.73	186.71	97.95
185.16	10.33	185.68	11.30	186.20	23.60	186.72	99.75
185.17	10.35	185.69	11.31	186.21	24.49	186.73	101.56
185.18	10.37	185.70	11.33	186.22	25.40	186.74	103.38
185.19	10.39	185.71	11.35	186.23	26.34	186.75	105.22
185.20	10.41	185.72	11.37	186.24	27.30	186.76	107.07
185.21	10.43	185.73	11.39	186.25	28.29	186.77	108.93
185.22	10.45	185.74	11.40	186.26	29.31	186.78	110.80
185.23	10.47	185.75	11.42	186.27	30.35	186.79	112.69
185.24	10.49	185.76	11.44	186.28	31.41	186.80	114.62
185.25	10.51	185.77	11.46	186.29	32.50	186.81	116.57
185.26	10.52	185.78	11.47	186.30	33.61	186.82	118.53
185.27	10.54	185.79	11.49	186.31	34.75	186.83	120.50
185.28	10.56	185.80	11.51	186.32	35.91	186.84	122.49
185.29	10.58	185.81	11.53	186.33	37.10	186.85	124.49
185.30	10.60	185.82	11.54	186.34	38.31	186.86	126.51
185.31	10.62	185.83	11.56	186.35	39.54	186.87	128.53
185.32	10.64	185.84	11.58	186.36	40.80	186.88	130.57
185.33	10.66	185.85	11.59	186.37	42.09	186.89	132.63
185.34	10.68	185.86	11.61	186.38	43.39	186.90	134.69
185.35	10.69	185.87	11.63	186.39	44.72	186.91	136.77
185.36	10.71	185.88	11.65	186.40	46.11	186.92	138.86
185.37	10.73	185.89	11.66	186.41	47.51	186.93	140.97
185.38	10.75	185.90	11.68	186.42	48.95	186.94	143.08
185.39	10.77	185.91	11.70	186.43	50.41	186.95	145.21
185.40	10.79	185.92	11.72	186.44	51.89	186.96	147.35
185.41	10.81	185.93	11.73	186.45	53.41	186.97	149.51
185.42	10.83	185.94	11.75	186.46	54.95	186.98	151.68
185.43	10.84	185.95	11.77	186.47	56.51	186.99	153.86
185.44	10.86	185.96	11.78	186.48	58.10	187.00	**155.99**
185.45	10.88	185.97	11.80	186.49	59.72		
185.46	10.90	185.98	11.82	186.50	61.36		
185.47	10.92	185.99	11.83	186.51	63.03		
185.48	10.94	186.00	11.97	186.52	64.73		
185.49	10.95	186.01	12.20	186.53	66.45		
185.50	10.97	186.02	12.49	186.54	68.21		
185.51	10.99	186.03	12.84	186.55	69.98		
185.52	11.01	186.04	13.23	186.56	71.79		
185.53	11.03	186.05	13.66	186.57	73.62		
185.54	11.05	186.06	14.13	186.58	75.48		
185.55	11.06	186.07	14.63	186.59	77.36		
185.56	11.08	186.08	15.16	186.60	79.00		
185.57	11.10	186.09	15.72	186.61	80.66		
185.58	11.12	186.10	16.31	186.62	82.33		
185.59	11.14	186.11	16.93	186.63	84.01		
185.60	11.15	186.12	17.57	186.64	85.71		
185.61	11.17	186.13	18.24	186.65	87.42		
185.62	11.19	186.14	18.93	186.66	89.14		
185.63	11.21	186.15	19.65	186.67	90.88		

Stage-Area-Storage for Pond B-42: Basin #42

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.96	0	0
180.97	535	3
180.98	1,071	11
180.99	1,607	24
181.00	2,142	43
181.01	2,147	64
181.02	2,151	86
181.03	2,156	107
181.04	2,161	129
181.05	2,166	151
181.06	2,170	172
181.07	2,175	194
181.08	2,180	216
181.09	2,184	238
181.10	2,189	259
181.11	2,194	281
181.12	2,199	303
181.13	2,203	325
181.14	2,208	347
181.15	2,213	369
181.16	2,217	392
181.17	2,222	414
181.18	2,227	436
181.19	2,231	458
181.20	2,236	481
181.21	2,241	503
181.22	2,246	525
181.23	2,250	548
181.24	2,255	570
181.25	2,260	593
181.26	2,264	616
181.27	2,269	638
181.28	2,274	661
181.29	2,279	684
181.30	2,283	707
181.31	2,288	729
181.32	2,293	752
181.33	2,297	775
181.34	2,302	798
181.35	2,307	821
181.36	2,312	844
181.37	2,316	868
181.38	2,321	891
181.39	2,326	914
181.40	2,330	937
181.41	2,335	961
181.42	2,340	984
181.43	2,345	1,007
181.44	2,349	1,031
181.45	2,354	1,054
181.46	2,359	1,078
181.47	2,363	1,102
181.48	2,368	1,125
181.49	2,373	1,149
181.50	2,378	1,173
181.51	2,382	1,197
181.52	2,387	1,220
181.53	2,392	1,244
181.54	2,396	1,268
181.55	2,401	1,292
181.56	2,406	1,316
181.57	2,410	1,340
181.58	2,415	1,364
181.59	2,420	1,389
181.60	2,425	1,413
181.61	2,429	1,437
181.62	2,434	1,461
181.63	2,439	1,486
181.64	2,443	1,510
181.65	2,448	1,535
181.66	2,453	1,559
181.67	2,458	1,584
181.68	2,462	1,608
181.69	2,467	1,633
181.70	2,472	1,658
181.71	2,476	1,682
181.72	2,481	1,707
181.73	2,486	1,732
181.74	2,491	1,757
181.75	2,495	1,782
181.76	2,500	1,807
181.77	2,505	1,832
181.78	2,509	1,857
181.79	2,514	1,882
181.80	2,519	1,907
181.81	2,524	1,932
181.82	2,528	1,958
181.83	2,533	1,983
181.84	2,538	2,008
181.85	2,542	2,034
181.86	2,547	2,059
181.87	2,552	2,085
181.88	2,556	2,110
181.89	2,561	2,136
181.90	2,566	2,161
181.91	2,571	2,187
181.92	2,575	2,213
181.93	2,580	2,239
181.94	2,585	2,264
181.95	2,589	2,290
181.96	2,594	2,316
181.97	2,599	2,342
181.98	2,604	2,368
181.99	2,608	2,394

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.00	2,613	2,420	182.52	2,876	3,847
182.01	2,618	2,446	182.53	2,881	3,876
182.02	2,623	2,473	182.54	2,886	3,905
182.03	2,628	2,499	182.55	2,891	3,934
182.04	2,633	2,525	182.56	2,896	3,963
182.05	2,638	2,552	182.57	2,901	3,992
182.06	2,643	2,578	182.58	2,906	4,021
182.07	2,648	2,604	182.59	2,911	4,050
182.08	2,653	2,631	182.60	2,916	4,079
182.09	2,658	2,658	182.61	2,921	4,108
182.10	2,663	2,684	182.62	2,926	4,137
182.11	2,669	2,711	182.63	2,931	4,167
182.12	2,674	2,738	182.64	2,936	4,196
182.13	2,679	2,764	182.65	2,941	4,225
182.14	2,684	2,791	182.66	2,946	4,255
182.15	2,689	2,818	182.67	2,951	4,284
182.16	2,694	2,845	182.68	2,956	4,314
182.17	2,699	2,872	182.69	2,961	4,344
182.18	2,704	2,899	182.70	2,967	4,373
182.19	2,709	2,926	182.71	2,972	4,403
182.20	2,714	2,953	182.72	2,977	4,433
182.21	2,719	2,980	182.73	2,982	4,462
182.22	2,724	3,007	182.74	2,987	4,492
182.23	2,729	3,035	182.75	2,992	4,522
182.24	2,734	3,062	182.76	2,997	4,552
182.25	2,739	3,089	182.77	3,002	4,582
182.26	2,744	3,117	182.78	3,007	4,612
182.27	2,749	3,144	182.79	3,012	4,642
182.28	2,754	3,172	182.80	3,017	4,672
182.29	2,759	3,199	182.81	3,022	4,703
182.30	2,765	3,227	182.82	3,027	4,733
182.31	2,770	3,255	182.83	3,032	4,763
182.32	2,775	3,282	182.84	3,037	4,793
182.33	2,780	3,310	182.85	3,042	4,824
182.34	2,785	3,338	182.86	3,047	4,854
182.35	2,790	3,366	182.87	3,052	4,885
182.36	2,795	3,394	182.88	3,057	4,915
182.37	2,800	3,422	182.89	3,062	4,946
182.38	2,805	3,450	182.90	3,068	4,977
182.39	2,810	3,478	182.91	3,073	5,007
182.40	2,815	3,506	182.92	3,078	5,038
182.41	2,820	3,534	182.93	3,083	5,069
182.42	2,825	3,562	182.94	3,088	5,100
182.43	2,830	3,591	182.95	3,093	5,131
182.44	2,835	3,619	182.96	3,098	5,162
182.45	2,840	3,647	182.97	3,103	5,193
182.46	2,845	3,676	182.98	3,108	5,224
182.47	2,850	3,704	182.99	3,113	5,255
182.48	2,855	3,733	183.00	3,118	5,286
182.49	2,860	3,761	183.01	3,123	5,317
182.50	2,866	3,790	183.02	3,129	5,348
182.51	2,871	3,819	183.03	3,134	5,380

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.04	3,140	5,411	183.56	3,419	7,116
183.05	3,145	5,442	183.57	3,425	7,150
183.06	3,150	5,474	183.58	3,430	7,185
183.07	3,156	5,505	183.59	3,435	7,219
183.08	3,161	5,537	183.60	3,441	7,253
183.09	3,166	5,569	183.61	3,446	7,288
183.10	3,172	5,600	183.62	3,452	7,322
183.11	3,177	5,632	183.63	3,457	7,357
183.12	3,183	5,664	183.64	3,462	7,392
183.13	3,188	5,696	183.65	3,468	7,426
183.14	3,193	5,728	183.66	3,473	7,461
183.15	3,199	5,760	183.67	3,478	7,496
183.16	3,204	5,792	183.68	3,484	7,530
183.17	3,209	5,824	183.69	3,489	7,565
183.18	3,215	5,856	183.70	3,495	7,600
183.19	3,220	5,888	183.71	3,500	7,635
183.20	3,226	5,920	183.72	3,505	7,670
183.21	3,231	5,952	183.73	3,511	7,705
183.22	3,236	5,985	183.74	3,516	7,740
183.23	3,242	6,017	183.75	3,522	7,776
183.24	3,247	6,050	183.76	3,527	7,811
183.25	3,253	6,082	183.77	3,532	7,846
183.26	3,258	6,115	183.78	3,538	7,882
183.27	3,263	6,147	183.79	3,543	7,917
183.28	3,269	6,180	183.80	3,548	7,952
183.29	3,274	6,213	183.81	3,554	7,988
183.30	3,279	6,245	183.82	3,559	8,023
183.31	3,285	6,278	183.83	3,565	8,059
183.32	3,290	6,311	183.84	3,570	8,095
183.33	3,296	6,344	183.85	3,575	8,130
183.34	3,301	6,377	183.86	3,581	8,166
183.35	3,306	6,410	183.87	3,586	8,202
183.36	3,312	6,443	183.88	3,591	8,238
183.37	3,317	6,476	183.89	3,597	8,274
183.38	3,322	6,510	183.90	3,602	8,310
183.39	3,328	6,543	183.91	3,608	8,346
183.40	3,333	6,576	183.92	3,613	8,382
183.41	3,339	6,609	183.93	3,618	8,418
183.42	3,344	6,643	183.94	3,624	8,454
183.43	3,349	6,676	183.95	3,629	8,491
183.44	3,355	6,710	183.96	3,634	8,527
183.45	3,360	6,743	183.97	3,640	8,563
183.46	3,365	6,777	183.98	3,645	8,600
183.47	3,371	6,811	183.99	3,651	8,636
183.48	3,376	6,844	184.00	3,656	8,673
183.49	3,382	6,878	184.01	3,662	8,709
183.50	3,387	6,912	184.02	3,667	8,746
183.51	3,392	6,946	184.03	3,673	8,783
183.52	3,398	6,980	184.04	3,679	8,820
183.53	3,403	7,014	184.05	3,685	8,856
183.54	3,409	7,048	184.06	3,690	8,893
183.55	3,414	7,082	184.07	3,696	8,930

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.08	3,702	8,967	184.60	3,999	10,969
184.09	3,707	9,004	184.61	4,004	11,009
184.10	3,713	9,041	184.62	4,010	11,049
184.11	3,719	9,078	184.63	4,016	11,089
184.12	3,725	9,116	184.64	4,021	11,130
184.13	3,730	9,153	184.65	4,027	11,170
184.14	3,736	9,190	184.66	4,033	11,210
184.15	3,742	9,228	184.67	4,039	11,251
184.16	3,747	9,265	184.68	4,044	11,291
184.17	3,753	9,303	184.69	4,050	11,331
184.18	3,759	9,340	184.70	4,056	11,372
184.19	3,764	9,378	184.71	4,061	11,413
184.20	3,770	9,415	184.72	4,067	11,453
184.21	3,776	9,453	184.73	4,073	11,494
184.22	3,782	9,491	184.74	4,079	11,535
184.23	3,787	9,529	184.75	4,084	11,575
184.24	3,793	9,567	184.76	4,090	11,616
184.25	3,799	9,605	184.77	4,096	11,657
184.26	3,804	9,643	184.78	4,101	11,698
184.27	3,810	9,681	184.79	4,107	11,739
184.28	3,816	9,719	184.80	4,113	11,780
184.29	3,822	9,757	184.81	4,119	11,822
184.30	3,827	9,795	184.82	4,124	11,863
184.31	3,833	9,834	184.83	4,130	11,904
184.32	3,839	9,872	184.84	4,136	11,945
184.33	3,844	9,910	184.85	4,141	11,987
184.34	3,850	9,949	184.86	4,147	12,028
184.35	3,856	9,987	184.87	4,153	12,070
184.36	3,862	10,026	184.88	4,158	12,111
184.37	3,867	10,065	184.89	4,164	12,153
184.38	3,873	10,103	184.90	4,170	12,194
184.39	3,879	10,142	184.91	4,176	12,236
184.40	3,884	10,181	184.92	4,181	12,278
184.41	3,890	10,220	184.93	4,187	12,320
184.42	3,896	10,259	184.94	4,193	12,362
184.43	3,902	10,298	184.95	4,198	12,404
184.44	3,907	10,337	184.96	4,204	12,446
184.45	3,913	10,376	184.97	4,210	12,488
184.46	3,919	10,415	184.98	4,216	12,530
184.47	3,924	10,454	184.99	4,221	12,572
184.48	3,930	10,493	185.00	4,227	12,614
184.49	3,936	10,533	185.01	4,233	12,657
184.50	3,942	10,572	185.02	4,239	12,699
184.51	3,947	10,612	185.03	4,245	12,741
184.52	3,953	10,651	185.04	4,251	12,784
184.53	3,959	10,691	185.05	4,257	12,826
184.54	3,964	10,730	185.06	4,263	12,869
184.55	3,970	10,770	185.07	4,269	12,912
184.56	3,976	10,810	185.08	4,275	12,954
184.57	3,981	10,850	185.09	4,281	12,997
184.58	3,987	10,889	185.10	4,287	13,040
184.59	3,993	10,929	185.11	4,293	13,083

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.12	4,299	13,126	185.64	4,614	15,443
185.13	4,306	13,169	185.65	4,620	15,489
185.14	4,312	13,212	185.66	4,626	15,536
185.15	4,318	13,255	185.67	4,632	15,582
185.16	4,324	13,298	185.68	4,638	15,628
185.17	4,330	13,342	185.69	4,644	15,675
185.18	4,336	13,385	185.70	4,650	15,721
185.19	4,342	13,428	185.71	4,656	15,768
185.20	4,348	13,472	185.72	4,662	15,814
185.21	4,354	13,515	185.73	4,668	15,861
185.22	4,360	13,559	185.74	4,674	15,908
185.23	4,366	13,603	185.75	4,680	15,954
185.24	4,372	13,646	185.76	4,686	16,001
185.25	4,378	13,690	185.77	4,692	16,048
185.26	4,384	13,734	185.78	4,698	16,095
185.27	4,390	13,778	185.79	4,704	16,142
185.28	4,396	13,822	185.80	4,710	16,189
185.29	4,402	13,866	185.81	4,716	16,236
185.30	4,408	13,910	185.82	4,722	16,284
185.31	4,414	13,954	185.83	4,728	16,331
185.32	4,420	13,998	185.84	4,734	16,378
185.33	4,426	14,042	185.85	4,740	16,425
185.34	4,432	14,086	185.86	4,746	16,473
185.35	4,438	14,131	185.87	4,752	16,520
185.36	4,444	14,175	185.88	4,759	16,568
185.37	4,450	14,220	185.89	4,765	16,616
185.38	4,457	14,264	185.90	4,771	16,663
185.39	4,463	14,309	185.91	4,777	16,711
185.40	4,469	14,353	185.92	4,783	16,759
185.41	4,475	14,398	185.93	4,789	16,807
185.42	4,481	14,443	185.94	4,795	16,855
185.43	4,487	14,488	185.95	4,801	16,903
185.44	4,493	14,533	185.96	4,807	16,951
185.45	4,499	14,578	185.97	4,813	16,999
185.46	4,505	14,623	185.98	4,819	17,047
185.47	4,511	14,668	185.99	4,825	17,095
185.48	4,517	14,713	186.00	4,831	17,143
185.49	4,523	14,758	186.01	4,837	17,192
185.50	4,529	14,803	186.02	4,844	17,240
185.51	4,535	14,849	186.03	4,850	17,289
185.52	4,541	14,894	186.04	4,856	17,337
185.53	4,547	14,939	186.05	4,863	17,386
185.54	4,553	14,985	186.06	4,869	17,434
185.55	4,559	15,031	186.07	4,876	17,483
185.56	4,565	15,076	186.08	4,882	17,532
185.57	4,571	15,122	186.09	4,888	17,581
185.58	4,577	15,168	186.10	4,895	17,630
185.59	4,583	15,213	186.11	4,901	17,679
185.60	4,589	15,259	186.12	4,907	17,728
185.61	4,595	15,305	186.13	4,914	17,777
185.62	4,601	15,351	186.14	4,920	17,826
185.63	4,608	15,397	186.15	4,927	17,875

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.16	4,933	17,924
186.17	4,939	17,974
186.18	4,946	18,023
186.19	4,952	18,073
186.20	4,958	18,122
186.21	4,965	18,172
186.22	4,971	18,222
186.23	4,978	18,271
186.24	4,984	18,321
186.25	4,990	18,371
186.26	4,997	18,421
186.27	5,003	18,471
186.28	5,009	18,521
186.29	5,016	18,571
186.30	5,022	18,621
186.31	5,028	18,672
186.32	5,035	18,722
186.33	5,041	18,772
186.34	5,048	18,823
186.35	5,054	18,873
186.36	5,060	18,924
186.37	5,067	18,974
186.38	5,073	19,025
186.39	5,079	19,076
186.40	5,086	19,127
186.41	5,092	19,178
186.42	5,099	19,229
186.43	5,105	19,280
186.44	5,111	19,331
186.45	5,118	19,382
186.46	5,124	19,433
186.47	5,130	19,484
186.48	5,137	19,536
186.49	5,143	19,587
186.50	5,150	19,638
186.51	5,156	19,690
186.52	5,162	19,742
186.53	5,169	19,793
186.54	5,175	19,845
186.55	5,181	19,897
186.56	5,188	19,949
186.57	5,194	20,000
186.58	5,200	20,052
186.59	5,207	20,104
186.60	5,213	20,157
186.61	5,220	20,209
186.62	5,226	20,261
186.63	5,232	20,313
186.64	5,239	20,366
186.65	5,245	20,418
186.66	5,251	20,471
186.67	5,258	20,523
186.68	5,264	20,576
186.69	5,271	20,628
186.70	5,277	20,681
186.71	5,283	20,734
186.72	5,290	20,787
186.73	5,296	20,840
186.74	5,302	20,893
186.75	5,309	20,946
186.76	5,315	20,999
186.77	5,321	21,052
186.78	5,328	21,105
186.79	5,334	21,159
186.80	5,341	21,212
186.81	5,347	21,265
186.82	5,353	21,319
186.83	5,360	21,372
186.84	5,366	21,426
186.85	5,372	21,480
186.86	5,379	21,534
186.87	5,385	21,587
186.88	5,392	21,641
186.89	5,398	21,695
186.90	5,404	21,749
186.91	5,411	21,803
186.92	5,417	21,857
186.93	5,423	21,912
186.94	5,430	21,966
186.95	5,436	22,020
186.96	5,443	22,075
186.97	5,449	22,129
186.98	5,455	22,184
186.99	5,462	22,238
187.00	**5,468**	**22,293**

Summary for Pond B-43: Basin #43

Inflow Area = 2.712 ac, 33.89% Impervious, Inflow Depth = 6.44" for Current 100 yr event
Inflow = 17.94 cfs @ 12.17 hrs, Volume= 1.455 af
Outflow = 13.84 cfs @ 12.26 hrs, Volume= 1.343 af, Atten= 23%, Lag= 5.2 min
Primary = 13.84 cfs @ 12.26 hrs, Volume= 1.343 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.69' @ 12.25 hrs Surf.Area= 6,858 sf Storage= 16,580 cf

Plug-Flow detention time= 174.8 min calculated for 1.341 af (92% of inflow)
Center-of-Mass det. time= 134.1 min (921.1 - 787.0)

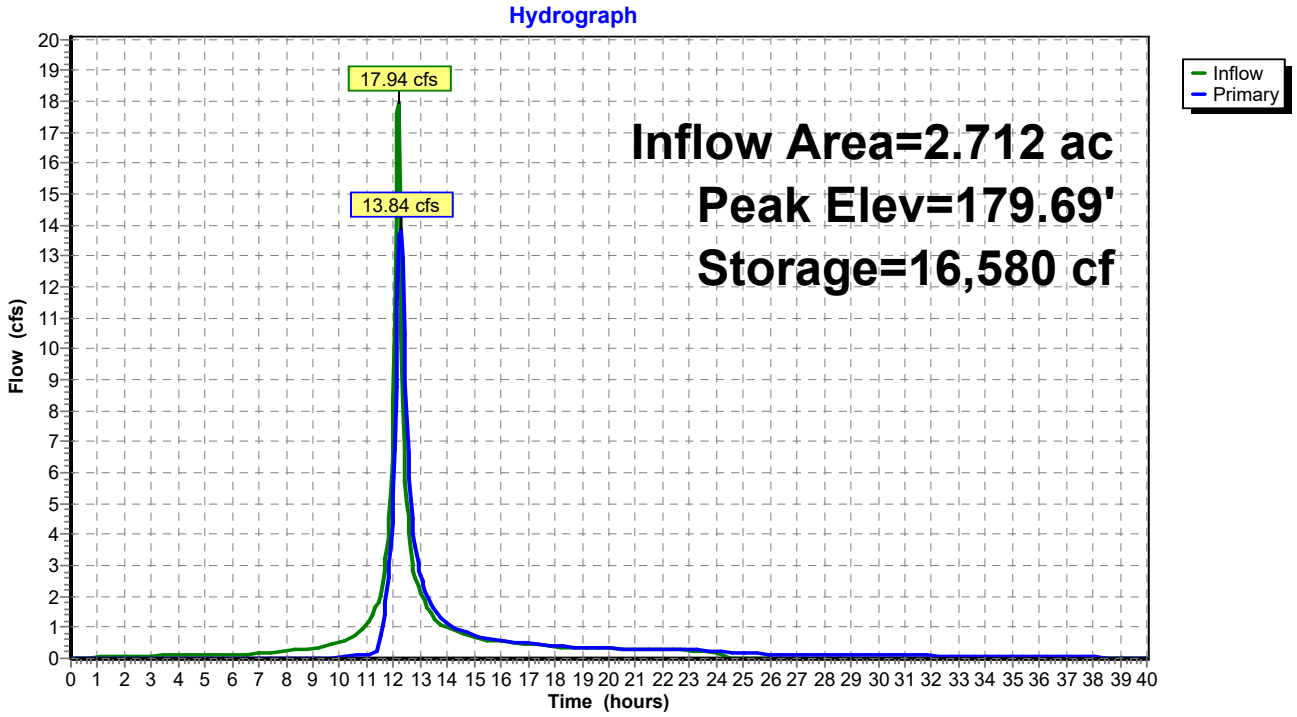
Volume	Invert	Avail.Storage	Storage Description
#1	176.35'	26,392 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
176.35	0	0	0
177.00	4,447	1,445	1,445
178.00	5,292	4,870	6,315
179.00	6,194	5,743	12,058
180.00	7,153	6,674	18,731
181.00	8,168	7,661	26,392

Device	Routing	Invert	Outlet Devices
#1	Primary	176.30'	**18.0" Round Culvert** L= 200.0' Ke= 0.500 Inlet / Outlet Invert= 176.30' / 166.10' S= 0.0510 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	177.62'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	178.58'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.00'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.81 cfs @ 12.26 hrs HW=179.69' (Free Discharge)
- **1=Culvert** (Inlet Controls 13.81 cfs @ 7.82 fps)
  - **2=Orifice/Grate** (Passes < 0.23 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 14.37 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-43: Basin #43



Stage-Discharge for Pond B-43: Basin #43

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
176.35	0.00	176.87	0.00	177.39	0.00	177.91	0.07
176.36	0.00	176.88	0.00	177.40	0.00	177.92	0.07
176.37	0.00	176.89	0.00	177.41	0.00	177.93	0.07
176.38	0.00	176.90	0.00	177.42	0.00	177.94	0.08
176.39	0.00	176.91	0.00	177.43	0.00	177.95	0.08
176.40	0.00	176.92	0.00	177.44	0.00	177.96	0.08
176.41	0.00	176.93	0.00	177.45	0.00	177.97	0.08
176.42	0.00	176.94	0.00	177.46	0.00	177.98	0.08
176.43	0.00	176.95	0.00	177.47	0.00	177.99	0.08
176.44	0.00	176.96	0.00	177.48	0.00	178.00	0.09
176.45	0.00	176.97	0.00	177.49	0.00	178.01	0.09
176.46	0.00	176.98	0.00	177.50	0.00	178.02	0.09
176.47	0.00	176.99	0.00	177.51	0.00	178.03	0.09
176.48	0.00	177.00	0.00	177.52	0.00	178.04	0.09
176.49	0.00	177.01	0.00	177.53	0.00	178.05	0.09
176.50	0.00	177.02	0.00	177.54	0.00	178.06	0.10
176.51	0.00	177.03	0.00	177.55	0.00	178.07	0.10
176.52	0.00	177.04	0.00	177.56	0.00	178.08	0.10
176.53	0.00	177.05	0.00	177.57	0.00	178.09	0.10
176.54	0.00	177.06	0.00	177.58	0.00	178.10	0.10
176.55	0.00	177.07	0.00	177.59	0.00	178.11	0.10
176.56	0.00	177.08	0.00	177.60	0.00	178.12	0.10
176.57	0.00	177.09	0.00	177.61	0.00	178.13	0.10
176.58	0.00	177.10	0.00	177.62	0.00	178.14	0.11
176.59	0.00	177.11	0.00	177.63	0.00	178.15	0.11
176.60	0.00	177.12	0.00	177.64	0.00	178.16	0.11
176.61	0.00	177.13	0.00	177.65	0.00	178.17	0.11
176.62	0.00	177.14	0.00	177.66	0.00	178.18	0.11
176.63	0.00	177.15	0.00	177.67	0.00	178.19	0.11
176.64	0.00	177.16	0.00	177.68	0.01	178.20	0.11
176.65	0.00	177.17	0.00	177.69	0.01	178.21	0.11
176.66	0.00	177.18	0.00	177.70	0.01	178.22	0.12
176.67	0.00	177.19	0.00	177.71	0.01	178.23	0.12
176.68	0.00	177.20	0.00	177.72	0.02	178.24	0.12
176.69	0.00	177.21	0.00	177.73	0.02	178.25	0.12
176.70	0.00	177.22	0.00	177.74	0.02	178.26	0.12
176.71	0.00	177.23	0.00	177.75	0.03	178.27	0.12
176.72	0.00	177.24	0.00	177.76	0.03	178.28	0.12
176.73	0.00	177.25	0.00	177.77	0.03	178.29	0.12
176.74	0.00	177.26	0.00	177.78	0.04	178.30	0.12
176.75	0.00	177.27	0.00	177.79	0.04	178.31	0.13
176.76	0.00	177.28	0.00	177.80	0.05	178.32	0.13
176.77	0.00	177.29	0.00	177.81	0.05	178.33	0.13
176.78	0.00	177.30	0.00	177.82	0.05	178.34	0.13
176.79	0.00	177.31	0.00	177.83	0.05	178.35	0.13
176.80	0.00	177.32	0.00	177.84	0.06	178.36	0.13
176.81	0.00	177.33	0.00	177.85	0.06	178.37	0.13
176.82	0.00	177.34	0.00	177.86	0.06	178.38	0.13
176.83	0.00	177.35	0.00	177.87	0.06	178.39	0.13
176.84	0.00	177.36	0.00	177.88	0.06	178.40	0.13
176.85	0.00	177.37	0.00	177.89	0.07	178.41	0.14
176.86	0.00	177.38	0.00	177.90	0.07	178.42	0.14

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.43	0.14	178.95	3.07	179.47	10.71	179.99	14.59
178.44	0.14	178.96	3.19	179.48	10.88	180.00	14.61
178.45	0.14	178.97	3.31	179.49	11.06	180.01	14.76
178.46	0.14	178.98	3.43	179.50	11.23	180.02	14.99
178.47	0.14	178.99	3.55	179.51	11.40	180.03	15.30
178.48	0.14	179.00	3.67	179.52	11.58	180.04	15.65
178.49	0.14	179.01	3.79	179.53	11.76	180.05	16.05
178.50	0.14	179.02	3.92	179.54	11.93	180.06	16.49
178.51	0.15	179.03	4.05	179.55	12.11	180.07	16.96
178.52	0.15	179.04	4.18	179.56	12.29	180.08	17.47
178.53	0.15	179.05	4.30	179.57	12.47	180.09	18.01
178.54	0.15	179.06	4.44	179.58	12.65	180.10	18.58
178.55	0.15	179.07	4.57	179.59	12.83	180.11	19.18
178.56	0.15	179.08	4.70	179.60	13.01	180.12	19.80
178.57	0.15	179.09	4.83	179.61	13.19	180.13	20.45
178.58	0.15	179.10	4.97	179.62	13.38	180.14	21.13
178.59	0.17	179.11	5.11	179.63	13.56	180.15	21.83
178.60	0.19	179.12	5.24	179.64	13.69	180.16	22.55
178.61	0.22	179.13	5.38	179.65	13.72	180.17	23.30
178.62	0.26	179.14	5.52	179.66	13.75	180.18	24.07
178.63	0.30	179.15	5.66	179.67	13.77	180.19	24.86
178.64	0.35	179.16	5.81	179.68	13.80	180.20	25.67
178.65	0.40	179.17	5.95	179.69	13.83	180.21	26.54
178.66	0.45	179.18	6.09	179.70	13.85	180.22	27.43
178.67	0.51	179.19	6.24	179.71	13.88	180.23	28.36
178.68	0.57	179.20	6.39	179.72	13.90	180.24	29.30
178.69	0.64	179.21	6.53	179.73	13.93	180.25	30.27
178.70	0.70	179.22	6.68	179.74	13.96	180.26	31.27
178.71	0.77	179.23	6.83	179.75	13.98	180.27	32.29
178.72	0.84	179.24	6.98	179.76	14.01	180.28	33.34
178.73	0.92	179.25	7.14	179.77	14.03	180.29	34.41
178.74	1.00	179.26	7.29	179.78	14.06	180.30	35.51
178.75	1.08	179.27	7.44	179.79	14.08	180.31	36.63
178.76	1.16	179.28	7.60	179.80	14.11	180.32	37.77
178.77	1.24	179.29	7.75	179.81	14.14	180.33	38.94
178.78	1.33	179.30	7.91	179.82	14.16	180.34	40.14
178.79	1.41	179.31	8.07	179.83	14.19	180.35	41.35
178.80	1.51	179.32	8.23	179.84	14.21	180.36	42.60
178.81	1.60	179.33	8.39	179.85	14.24	180.37	43.86
178.82	1.69	179.34	8.55	179.86	14.26	180.38	45.15
178.83	1.79	179.35	8.71	179.87	14.29	180.39	46.47
178.84	1.88	179.36	8.87	179.88	14.31	180.40	47.80
178.85	1.98	179.37	9.03	179.89	14.34	180.41	49.19
178.86	2.09	179.38	9.20	179.90	14.36	180.42	50.61
178.87	2.19	179.39	9.36	179.91	14.39	180.43	52.05
178.88	2.29	179.40	9.53	179.92	14.41	180.44	53.52
178.89	2.40	179.41	9.69	179.93	14.44	180.45	55.01
178.90	2.51	179.42	9.86	179.94	14.46	180.46	56.53
178.91	2.62	179.43	10.03	179.95	14.49	180.47	58.07
178.92	2.73	179.44	10.20	179.96	14.51	180.48	59.65
178.93	2.84	179.45	10.37	179.97	14.54	180.49	61.24
178.94	2.96	179.46	10.54	179.98	14.56	180.50	62.87

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)
180.51	64.52
180.52	66.20
180.53	67.90
180.54	69.63
180.55	71.39
180.56	73.18
180.57	74.99
180.58	76.82
180.59	78.69
180.60	80.58
180.61	82.23
180.62	83.89
180.63	85.57
180.64	87.26
180.65	88.96
180.66	90.68
180.67	92.41
180.68	94.15
180.69	95.91
180.70	97.67
180.71	99.46
180.72	101.25
180.73	103.05
180.74	104.87
180.75	106.70
180.76	108.55
180.77	110.40
180.78	112.27
180.79	114.15
180.80	116.04
180.81	117.98
180.82	119.94
180.83	121.91
180.84	123.89
180.85	125.88
180.86	127.89
180.87	129.91
180.88	131.94
180.89	133.99
180.90	136.05
180.91	138.12
180.92	140.21
180.93	142.30
180.94	144.41
180.95	146.54
180.96	148.67
180.97	150.82
180.98	152.98
180.99	155.16
181.00	**157.34**

Stage-Area-Storage for Pond B-43: Basin #43

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.35	0	0	176.87	3,558	925
176.36	68	0	176.88	3,626	961
176.37	137	1	176.89	3,694	997
176.38	205	3	176.90	3,763	1,035
176.39	274	5	176.91	3,831	1,073
176.40	342	9	176.92	3,900	1,111
176.41	410	12	176.93	3,968	1,151
176.42	479	17	176.94	4,037	1,191
176.43	547	22	176.95	4,105	1,231
176.44	616	28	176.96	4,173	1,273
176.45	684	34	176.97	4,242	1,315
176.46	753	41	176.98	4,310	1,358
176.47	821	49	176.99	4,379	1,401
176.48	889	58	177.00	4,447	1,445
176.49	958	67	177.01	4,455	1,490
176.50	1,026	77	177.02	4,464	1,534
176.51	1,095	88	177.03	4,472	1,579
176.52	1,163	99	177.04	4,481	1,624
176.53	1,231	111	177.05	4,489	1,669
176.54	1,300	123	177.06	4,498	1,714
176.55	1,368	137	177.07	4,506	1,759
176.56	1,437	151	177.08	4,515	1,804
176.57	1,505	166	177.09	4,523	1,849
176.58	1,574	181	177.10	4,531	1,894
176.59	1,642	197	177.11	4,540	1,940
176.60	1,710	214	177.12	4,548	1,985
176.61	1,779	231	177.13	4,557	2,031
176.62	1,847	249	177.14	4,565	2,076
176.63	1,916	268	177.15	4,574	2,122
176.64	1,984	288	177.16	4,582	2,168
176.65	2,052	308	177.17	4,591	2,213
176.66	2,121	329	177.18	4,599	2,259
176.67	2,189	350	177.19	4,608	2,305
176.68	2,258	373	177.20	4,616	2,352
176.69	2,326	395	177.21	4,624	2,398
176.70	2,395	419	177.22	4,633	2,444
176.71	2,463	443	177.23	4,641	2,490
176.72	2,531	468	177.24	4,650	2,537
176.73	2,600	494	177.25	4,658	2,583
176.74	2,668	520	177.26	4,667	2,630
176.75	2,737	547	177.27	4,675	2,677
176.76	2,805	575	177.28	4,684	2,724
176.77	2,873	603	177.29	4,692	2,770
176.78	2,942	633	177.30	4,700	2,817
176.79	3,010	662	177.31	4,709	2,864
176.80	3,079	693	177.32	4,717	2,912
176.81	3,147	724	177.33	4,726	2,959
176.82	3,216	756	177.34	4,734	3,006
176.83	3,284	788	177.35	4,743	3,053
176.84	3,352	821	177.36	4,751	3,101
176.85	3,421	855	177.37	4,760	3,149
176.86	3,489	890	177.38	4,768	3,196

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.39	4,777	3,244	177.91	5,216	5,842
177.40	4,785	3,292	177.92	5,224	5,894
177.41	4,793	3,340	177.93	5,233	5,946
177.42	4,802	3,388	177.94	5,241	5,999
177.43	4,810	3,436	177.95	5,250	6,051
177.44	4,819	3,484	177.96	5,258	6,104
177.45	4,827	3,532	177.97	5,267	6,156
177.46	4,836	3,580	177.98	5,275	6,209
177.47	4,844	3,629	177.99	5,284	6,262
177.48	4,853	3,677	178.00	5,292	6,315
177.49	4,861	3,726	178.01	5,301	6,368
177.50	4,870	3,774	178.02	5,310	6,421
177.51	4,878	3,823	178.03	5,319	6,474
177.52	4,886	3,872	178.04	5,328	6,527
177.53	4,895	3,921	178.05	5,337	6,581
177.54	4,903	3,970	178.06	5,346	6,634
177.55	4,912	4,019	178.07	5,355	6,687
177.56	4,920	4,068	178.08	5,364	6,741
177.57	4,929	4,117	178.09	5,373	6,795
177.58	4,937	4,167	178.10	5,382	6,848
177.59	4,946	4,216	178.11	5,391	6,902
177.60	4,954	4,266	178.12	5,400	6,956
177.61	4,962	4,315	178.13	5,409	7,010
177.62	4,971	4,365	178.14	5,418	7,064
177.63	4,979	4,415	178.15	5,427	7,119
177.64	4,988	4,464	178.16	5,436	7,173
177.65	4,996	4,514	178.17	5,445	7,227
177.66	5,005	4,564	178.18	5,454	7,282
177.67	5,013	4,614	178.19	5,463	7,337
177.68	5,022	4,665	178.20	5,472	7,391
177.69	5,030	4,715	178.21	5,481	7,446
177.70	5,038	4,765	178.22	5,490	7,501
177.71	5,047	4,816	178.23	5,499	7,556
177.72	5,055	4,866	178.24	5,508	7,611
177.73	5,064	4,917	178.25	5,518	7,666
177.74	5,072	4,967	178.26	5,527	7,721
177.75	5,081	5,018	178.27	5,536	7,776
177.76	5,089	5,069	178.28	5,545	7,832
177.77	5,098	5,120	178.29	5,554	7,887
177.78	5,106	5,171	178.30	5,563	7,943
177.79	5,115	5,222	178.31	5,572	7,999
177.80	5,123	5,273	178.32	5,581	8,054
177.81	5,131	5,325	178.33	5,590	8,110
177.82	5,140	5,376	178.34	5,599	8,166
177.83	5,148	5,427	178.35	5,608	8,222
177.84	5,157	5,479	178.36	5,617	8,278
177.85	5,165	5,530	178.37	5,626	8,335
177.86	5,174	5,582	178.38	5,635	8,391
177.87	5,182	5,634	178.39	5,644	8,447
177.88	5,191	5,686	178.40	5,653	8,504
177.89	5,199	5,738	178.41	5,662	8,560
177.90	5,208	5,790	178.42	5,671	8,617

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.43	5,680	8,674	178.95	6,149	11,749
178.44	5,689	8,731	178.96	6,158	11,811
178.45	5,698	8,788	178.97	6,167	11,872
178.46	5,707	8,845	178.98	6,176	11,934
178.47	5,716	8,902	178.99	6,185	11,996
178.48	5,725	8,959	179.00	6,194	12,058
178.49	5,734	9,016	179.01	6,204	12,120
178.50	5,743	9,074	179.02	6,213	12,182
178.51	5,752	9,131	179.03	6,223	12,244
178.52	5,761	9,189	179.04	6,232	12,306
178.53	5,770	9,246	179.05	6,242	12,369
178.54	5,779	9,304	179.06	6,252	12,431
178.55	5,788	9,362	179.07	6,261	12,494
178.56	5,797	9,420	179.08	6,271	12,556
178.57	5,806	9,478	179.09	6,280	12,619
178.58	5,815	9,536	179.10	6,290	12,682
178.59	5,824	9,594	179.11	6,299	12,745
178.60	5,833	9,652	179.12	6,309	12,808
178.61	5,842	9,711	179.13	6,319	12,871
178.62	5,851	9,769	179.14	6,328	12,934
178.63	5,860	9,828	179.15	6,338	12,998
178.64	5,869	9,886	179.16	6,347	13,061
178.65	5,878	9,945	179.17	6,357	13,125
178.66	5,887	10,004	179.18	6,367	13,188
178.67	5,896	10,063	179.19	6,376	13,252
178.68	5,905	10,122	179.20	6,386	13,316
178.69	5,914	10,181	179.21	6,395	13,380
178.70	5,923	10,240	179.22	6,405	13,444
178.71	5,932	10,299	179.23	6,415	13,508
178.72	5,941	10,359	179.24	6,424	13,572
178.73	5,950	10,418	179.25	6,434	13,636
178.74	5,959	10,478	179.26	6,443	13,701
178.75	5,969	10,537	179.27	6,453	13,765
178.76	5,978	10,597	179.28	6,463	13,830
178.77	5,987	10,657	179.29	6,472	13,894
178.78	5,996	10,717	179.30	6,482	13,959
178.79	6,005	10,777	179.31	6,491	14,024
178.80	6,014	10,837	179.32	6,501	14,089
178.81	6,023	10,897	179.33	6,510	14,154
178.82	6,032	10,957	179.34	6,520	14,219
178.83	6,041	11,018	179.35	6,530	14,284
178.84	6,050	11,078	179.36	6,539	14,350
178.85	6,059	11,139	179.37	6,549	14,415
178.86	6,068	11,199	179.38	6,558	14,481
178.87	6,077	11,260	179.39	6,568	14,546
178.88	6,086	11,321	179.40	6,578	14,612
178.89	6,095	11,382	179.41	6,587	14,678
178.90	6,104	11,443	179.42	6,597	14,744
178.91	6,113	11,504	179.43	6,606	14,810
178.92	6,122	11,565	179.44	6,616	14,876
178.93	6,131	11,626	179.45	6,626	14,942
178.94	6,140	11,688	179.46	6,635	15,008

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.47	6,645	15,075	179.99	7,143	18,660
179.48	6,654	15,141	180.00	7,153	18,731
179.49	6,664	15,208	180.01	7,163	18,803
179.50	6,674	15,275	180.02	7,173	18,875
179.51	6,683	15,341	180.03	7,183	18,946
179.52	6,693	15,408	180.04	7,194	19,018
179.53	6,702	15,475	180.05	7,204	19,090
179.54	6,712	15,542	180.06	7,214	19,162
179.55	6,721	15,610	180.07	7,224	19,234
179.56	6,731	15,677	180.08	7,234	19,307
179.57	6,741	15,744	180.09	7,244	19,379
179.58	6,750	15,812	180.10	7,254	19,452
179.59	6,760	15,879	180.11	7,265	19,524
179.60	6,769	15,947	180.12	7,275	19,597
179.61	6,779	16,015	180.13	7,285	19,670
179.62	6,789	16,082	180.14	7,295	19,743
179.63	6,798	16,150	180.15	7,305	19,816
179.64	6,808	16,218	180.16	7,315	19,889
179.65	6,817	16,286	180.17	7,326	19,962
179.66	6,827	16,355	180.18	7,336	20,035
179.67	6,837	16,423	180.19	7,346	20,109
179.68	6,846	16,491	180.20	7,356	20,182
179.69	6,856	16,560	180.21	7,366	20,256
179.70	6,865	16,629	180.22	7,376	20,329
179.71	6,875	16,697	180.23	7,386	20,403
179.72	6,884	16,766	180.24	7,397	20,477
179.73	6,894	16,835	180.25	7,407	20,551
179.74	6,904	16,904	180.26	7,417	20,625
179.75	6,913	16,973	180.27	7,427	20,700
179.76	6,923	17,042	180.28	7,437	20,774
179.77	6,932	17,111	180.29	7,447	20,848
179.78	6,942	17,181	180.30	7,457	20,923
179.79	6,952	17,250	180.31	7,468	20,997
179.80	6,961	17,320	180.32	7,478	21,072
179.81	6,971	17,390	180.33	7,488	21,147
179.82	6,980	17,459	180.34	7,498	21,222
179.83	6,990	17,529	180.35	7,508	21,297
179.84	7,000	17,599	180.36	7,518	21,372
179.85	7,009	17,669	180.37	7,529	21,447
179.86	7,019	17,739	180.38	7,539	21,523
179.87	7,028	17,809	180.39	7,549	21,598
179.88	7,038	17,880	180.40	7,559	21,674
179.89	7,048	17,950	180.41	7,569	21,749
179.90	7,057	18,021	180.42	7,579	21,825
179.91	7,067	18,091	180.43	7,589	21,901
179.92	7,076	18,162	180.44	7,600	21,977
179.93	7,086	18,233	180.45	7,610	22,053
179.94	7,095	18,304	180.46	7,620	22,129
179.95	7,105	18,375	180.47	7,630	22,205
179.96	7,115	18,446	180.48	7,640	22,282
179.97	7,124	18,517	180.49	7,650	22,358
179.98	7,134	18,588	180.50	7,661	22,435

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.51	7,671	22,511
180.52	7,681	22,588
180.53	7,691	22,665
180.54	7,701	22,742
180.55	7,711	22,819
180.56	7,721	22,896
180.57	7,732	22,973
180.58	7,742	23,051
180.59	7,752	23,128
180.60	7,762	23,206
180.61	7,772	23,283
180.62	7,782	23,361
180.63	7,792	23,439
180.64	7,803	23,517
180.65	7,813	23,595
180.66	7,823	23,673
180.67	7,833	23,752
180.68	7,843	23,830
180.69	7,853	23,908
180.70	7,863	23,987
180.71	7,874	24,066
180.72	7,884	24,145
180.73	7,894	24,223
180.74	7,904	24,302
180.75	7,914	24,381
180.76	7,924	24,461
180.77	7,935	24,540
180.78	7,945	24,619
180.79	7,955	24,699
180.80	7,965	24,778
180.81	7,975	24,858
180.82	7,985	24,938
180.83	7,995	25,018
180.84	8,006	25,098
180.85	8,016	25,178
180.86	8,026	25,258
180.87	8,036	25,339
180.88	8,046	25,419
180.89	8,056	25,499
180.90	8,067	25,580
180.91	8,077	25,661
180.92	8,087	25,742
180.93	8,097	25,823
180.94	8,107	25,904
180.95	8,117	25,985
180.96	8,127	26,066
180.97	8,138	26,147
180.98	8,148	26,229
180.99	8,158	26,310
181.00	**8,168**	**26,392**

Summary for Pond B-44: Basin #44

Inflow Area = 1.184 ac, 34.71% Impervious, Inflow Depth = 6.46" for Current 100 yr event
Inflow = 7.85 cfs @ 12.17 hrs, Volume= 0.637 af
Outflow = 2.91 cfs @ 12.41 hrs, Volume= 0.516 af, Atten= 63%, Lag= 14.5 min
Primary = 2.91 cfs @ 12.41 hrs, Volume= 0.516 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 167.86' @ 12.41 hrs Surf.Area= 7,278 sf Storage= 13,995 cf

Plug-Flow detention time= 430.5 min calculated for 0.516 af (81% of inflow)
Center-of-Mass det. time= 351.3 min (1,137.6 - 786.3)

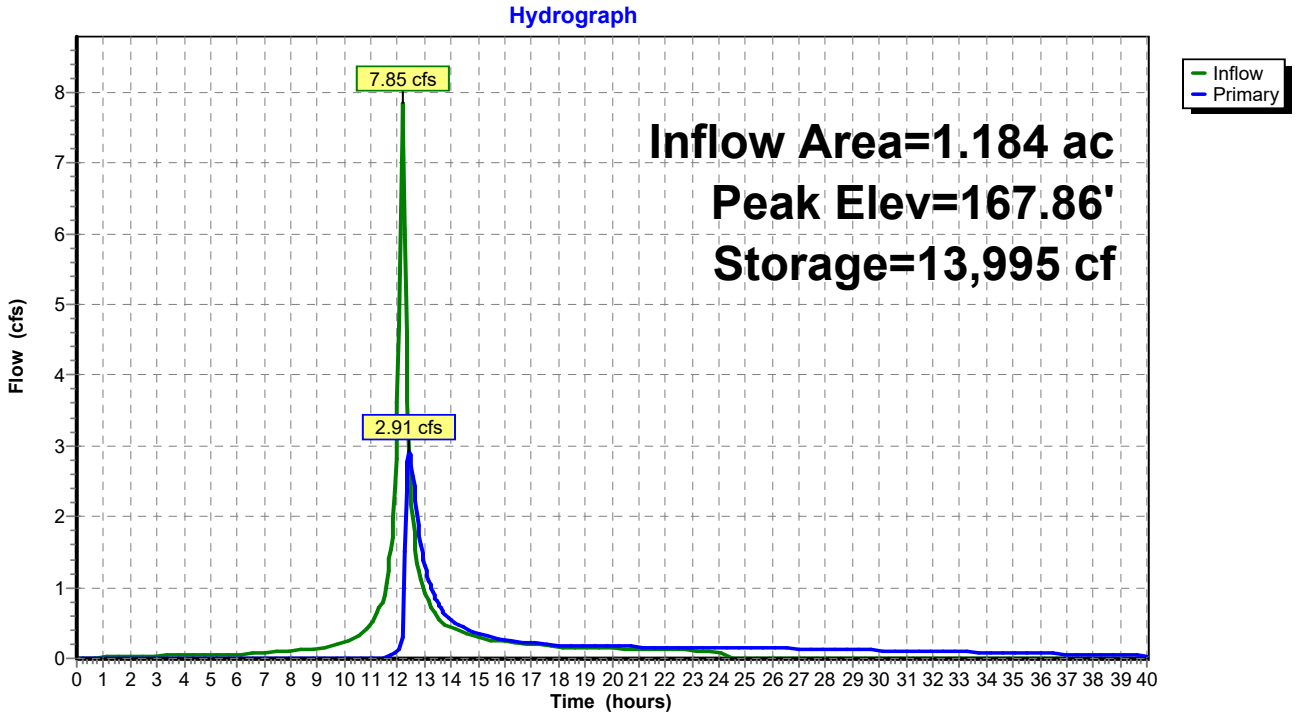
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	31,812 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	5,690	1,991	1,991
167.00	6,518	6,104	8,095
168.00	7,407	6,963	15,058
169.00	8,360	7,884	22,941
170.00	9,381	8,871	31,812

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	**18.0" Round Culvert** L= 44.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0295 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	166.41'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	167.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	168.98'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.89 cfs @ 12.41 hrs HW=167.85' (Free Discharge)
- **1=Culvert** (Passes 2.89 cfs of 11.43 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.57 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.70 cfs @ 1.94 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-44: Basin #44



Stage-Discharge for Pond B-44: Basin #44

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.10
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.10
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.10
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.10
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.10
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.10
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.10
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.11
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.11
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.11
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.11
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.11
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.11
165.43	0.00	165.95	0.00	166.47	0.01	166.99	0.11
165.44	0.00	165.96	0.00	166.48	0.01	167.00	0.11
165.45	0.00	165.97	0.00	166.49	0.01	167.01	0.12
165.46	0.00	165.98	0.00	166.50	0.01	167.02	0.12
165.47	0.00	165.99	0.00	166.51	0.02	167.03	0.12
165.48	0.00	166.00	0.00	166.52	0.02	167.04	0.12
165.49	0.00	166.01	0.00	166.53	0.02	167.05	0.12
165.50	0.00	166.02	0.00	166.54	0.03	167.06	0.12
165.51	0.00	166.03	0.00	166.55	0.03	167.07	0.12
165.52	0.00	166.04	0.00	166.56	0.03	167.08	0.12
165.53	0.00	166.05	0.00	166.57	0.04	167.09	0.12
165.54	0.00	166.06	0.00	166.58	0.04	167.10	0.13
165.55	0.00	166.07	0.00	166.59	0.05	167.11	0.13
165.56	0.00	166.08	0.00	166.60	0.05	167.12	0.13
165.57	0.00	166.09	0.00	166.61	0.05	167.13	0.13
165.58	0.00	166.10	0.00	166.62	0.05	167.14	0.13
165.59	0.00	166.11	0.00	166.63	0.06	167.15	0.13
165.60	0.00	166.12	0.00	166.64	0.06	167.16	0.13
165.61	0.00	166.13	0.00	166.65	0.06	167.17	0.13
165.62	0.00	166.14	0.00	166.66	0.06	167.18	0.13
165.63	0.00	166.15	0.00	166.67	0.06	167.19	0.13
165.64	0.00	166.16	0.00	166.68	0.07	167.20	0.14
165.65	0.00	166.17	0.00	166.69	0.07	167.21	0.14
165.66	0.00	166.18	0.00	166.70	0.07	167.22	0.14
165.67	0.00	166.19	0.00	166.71	0.07	167.23	0.14
165.68	0.00	166.20	0.00	166.72	0.07	167.24	0.14
165.69	0.00	166.21	0.00	166.73	0.08	167.25	0.14
165.70	0.00	166.22	0.00	166.74	0.08	167.26	0.14
165.71	0.00	166.23	0.00	166.75	0.08	167.27	0.14
165.72	0.00	166.24	0.00	166.76	0.08	167.28	0.14
165.73	0.00	166.25	0.00	166.77	0.08	167.29	0.14
165.74	0.00	166.26	0.00	166.78	0.08	167.30	0.15
165.75	0.00	166.27	0.00	166.79	0.09	167.31	0.15
165.76	0.00	166.28	0.00	166.80	0.09	167.32	0.15
165.77	0.00	166.29	0.00	166.81	0.09	167.33	0.15
165.78	0.00	166.30	0.00	166.82	0.09	167.34	0.15
165.79	0.00	166.31	0.00	166.83	0.09	167.35	0.15
165.80	0.00	166.32	0.00	166.84	0.09	167.36	0.15
165.81	0.00	166.33	0.00	166.85	0.10	167.37	0.15

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.15	167.90	3.44	168.42	11.24	168.94	14.46
167.39	0.15	167.91	3.56	168.43	11.41	168.95	14.49
167.40	0.15	167.92	3.68	168.44	11.59	168.96	14.51
167.41	0.16	167.93	3.80	168.45	11.76	168.97	14.54
167.42	0.16	167.94	3.93	168.46	11.94	168.98	14.56
167.43	0.16	167.95	4.06	168.47	12.12	168.99	14.71
167.44	0.16	167.96	4.18	168.48	12.30	169.00	14.95
167.45	0.16	167.97	4.31	168.49	12.48	169.01	15.25
167.46	0.16	167.98	4.44	168.50	12.66	169.02	15.60
167.47	0.16	167.99	4.58	168.51	12.84	169.03	16.00
167.48	0.16	168.00	4.71	168.52	13.02	169.04	16.44
167.49	0.16	168.01	4.84	168.53	13.20	169.05	16.91
167.50	0.16	168.02	4.98	168.54	13.38	169.06	17.42
167.51	0.18	168.03	5.12	168.55	13.45	169.07	17.96
167.52	0.20	168.04	5.25	168.56	13.48	169.08	18.53
167.53	0.23	168.05	5.39	168.57	13.51	169.09	19.13
167.54	0.27	168.06	5.53	168.58	13.53	169.10	19.75
167.55	0.31	168.07	5.67	168.59	13.56	169.11	20.40
167.56	0.36	168.08	5.82	168.60	13.59	169.12	21.08
167.57	0.41	168.09	5.96	168.61	13.61	169.13	21.78
167.58	0.46	168.10	6.10	168.62	13.64	169.14	22.50
167.59	0.52	168.11	6.25	168.63	13.67	169.15	23.25
167.60	0.58	168.12	6.40	168.64	13.69	169.16	24.02
167.61	0.65	168.13	6.54	168.65	13.72	169.17	24.81
167.62	0.71	168.14	6.69	168.66	13.75	169.18	25.62
167.63	0.78	168.15	6.84	168.67	13.77	169.19	26.49
167.64	0.85	168.16	6.99	168.68	13.80	169.20	27.39
167.65	0.93	168.17	7.14	168.69	13.83	169.21	28.31
167.66	1.01	168.18	7.30	168.70	13.85	169.22	29.25
167.67	1.09	168.19	7.45	168.71	13.88	169.23	30.23
167.68	1.17	168.20	7.61	168.72	13.90	169.24	31.22
167.69	1.25	168.21	7.76	168.73	13.93	169.25	32.25
167.70	1.34	168.22	7.92	168.74	13.96	169.26	33.29
167.71	1.43	168.23	8.08	168.75	13.98	169.27	34.36
167.72	1.52	168.24	8.23	168.76	14.01	169.28	35.46
167.73	1.61	168.25	8.39	168.77	14.03	169.29	36.58
167.74	1.70	168.26	8.55	168.78	14.06	169.30	37.73
167.75	1.80	168.27	8.72	168.79	14.08	169.31	38.90
167.76	1.89	168.28	8.88	168.80	14.11	169.32	40.09
167.77	1.99	168.29	9.04	168.81	14.14	169.33	41.31
167.78	2.10	168.30	9.20	168.82	14.16	169.34	42.55
167.79	2.20	168.31	9.37	168.83	14.19	169.35	43.81
167.80	2.30	168.32	9.53	168.84	14.21	169.36	45.10
167.81	2.41	168.33	9.70	168.85	14.24	169.37	46.42
167.82	2.52	168.34	9.87	168.86	14.26	169.38	47.76
167.83	2.63	168.35	10.04	168.87	14.29	169.39	49.15
167.84	2.74	168.36	10.21	168.88	14.31	169.40	50.56
167.85	2.85	168.37	10.38	168.89	14.34	169.41	52.00
167.86	2.96	168.38	10.55	168.90	14.36	169.42	53.47
167.87	3.08	168.39	10.72	168.91	14.39	169.43	54.96
167.88	3.20	168.40	10.89	168.92	14.41	169.44	56.48
167.89	3.32	168.41	11.06	168.93	14.44	169.45	58.03

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)
169.46	59.60
169.47	61.20
169.48	62.82
169.49	64.47
169.50	66.15
169.51	67.86
169.52	69.59
169.53	71.35
169.54	73.13
169.55	74.94
169.56	76.78
169.57	78.64
169.58	80.54
169.59	82.19
169.60	83.85
169.61	85.52
169.62	87.21
169.63	88.92
169.64	90.63
169.65	92.36
169.66	94.11
169.67	95.86
169.68	97.63
169.69	99.41
169.70	101.20
169.71	103.01
169.72	104.83
169.73	106.66
169.74	108.50
169.75	110.36
169.76	112.23
169.77	114.11
169.78	116.00
169.79	117.94
169.80	119.89
169.81	121.86
169.82	123.84
169.83	125.84
169.84	127.85
169.85	129.87
169.86	131.90
169.87	133.95
169.88	136.01
169.89	138.08
169.90	140.16
169.91	142.26
169.92	144.37
169.93	146.49
169.94	148.63
169.95	150.78
169.96	152.94
169.97	155.11
169.98	157.30
169.99	159.45
170.00	**161.60**

Stage-Area-Storage for Pond B-44: Basin #44

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0
165.31	81	0
165.32	163	2
165.33	244	4
165.34	325	7
165.35	406	10
165.36	488	15
165.37	569	20
165.38	650	26
165.39	732	33
165.40	813	41
165.41	894	49
165.42	975	59
165.43	1,057	69
165.44	1,138	80
165.45	1,219	91
165.46	1,301	104
165.47	1,382	117
165.48	1,463	132
165.49	1,544	147
165.50	1,626	163
165.51	1,707	179
165.52	1,788	197
165.53	1,870	215
165.54	1,951	234
165.55	2,032	254
165.56	2,113	275
165.57	2,195	296
165.58	2,276	319
165.59	2,357	342
165.60	2,439	366
165.61	2,520	391
165.62	2,601	416
165.63	2,682	443
165.64	2,764	470
165.65	2,845	498
165.66	2,926	527
165.67	3,008	556
165.68	3,089	587
165.69	3,170	618
165.70	3,251	650
165.71	3,333	683
165.72	3,414	717
165.73	3,495	751
165.74	3,577	787
165.75	3,658	823
165.76	3,739	860
165.77	3,820	898
165.78	3,902	936
165.79	3,983	976
165.80	4,064	1,016
165.81	4,146	1,057
165.82	4,227	1,099
165.83	4,308	1,142
165.84	4,389	1,185
165.85	4,471	1,229
165.86	4,552	1,275
165.87	4,633	1,320
165.88	4,715	1,367
165.89	4,796	1,415
165.90	4,877	1,463
165.91	4,958	1,512
165.92	5,040	1,562
165.93	5,121	1,613
165.94	5,202	1,665
165.95	5,284	1,717
165.96	5,365	1,770
165.97	5,446	1,824
165.98	5,527	1,879
165.99	5,609	1,935
166.00	5,690	1,991
166.01	5,698	2,048
166.02	5,707	2,105
166.03	5,715	2,163
166.04	5,723	2,220
166.05	5,731	2,277
166.06	5,740	2,334
166.07	5,748	2,392
166.08	5,756	2,449
166.09	5,765	2,507
166.10	5,773	2,565
166.11	5,781	2,622
166.12	5,789	2,680
166.13	5,798	2,738
166.14	5,806	2,796
166.15	5,814	2,854
166.16	5,822	2,912
166.17	5,831	2,971
166.18	5,839	3,029
166.19	5,847	3,088
166.20	5,856	3,146
166.21	5,864	3,205
166.22	5,872	3,263
166.23	5,880	3,322
166.24	5,889	3,381
166.25	5,897	3,440
166.26	5,905	3,499
166.27	5,914	3,558
166.28	5,922	3,617
166.29	5,930	3,676
166.30	5,938	3,736
166.31	5,947	3,795
166.32	5,955	3,855
166.33	5,963	3,914

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	5,972	3,974	166.86	6,402	7,191
166.35	5,980	4,034	166.87	6,410	7,255
166.36	5,988	4,094	166.88	6,419	7,319
166.37	5,996	4,153	166.89	6,427	7,384
166.38	6,005	4,213	166.90	6,435	7,448
166.39	6,013	4,274	166.91	6,443	7,512
166.40	6,021	4,334	166.92	6,452	7,577
166.41	6,029	4,394	166.93	6,460	7,641
166.42	6,038	4,454	166.94	6,468	7,706
166.43	6,046	4,515	166.95	6,477	7,771
166.44	6,054	4,575	166.96	6,485	7,835
166.45	6,063	4,636	166.97	6,493	7,900
166.46	6,071	4,697	166.98	6,501	7,965
166.47	6,079	4,757	166.99	6,510	8,030
166.48	6,087	4,818	167.00	6,518	8,095
166.49	6,096	4,879	167.01	6,527	8,161
166.50	6,104	4,940	167.02	6,536	8,226
166.51	6,112	5,001	167.03	6,545	8,291
166.52	6,121	5,062	167.04	6,554	8,357
166.53	6,129	5,123	167.05	6,562	8,423
166.54	6,137	5,185	167.06	6,571	8,488
166.55	6,145	5,246	167.07	6,580	8,554
166.56	6,154	5,308	167.08	6,589	8,620
166.57	6,162	5,369	167.09	6,598	8,686
166.58	6,170	5,431	167.10	6,607	8,752
166.59	6,179	5,493	167.11	6,616	8,818
166.60	6,187	5,555	167.12	6,625	8,884
166.61	6,195	5,616	167.13	6,634	8,950
166.62	6,203	5,678	167.14	6,642	9,017
166.63	6,212	5,741	167.15	6,651	9,083
166.64	6,220	5,803	167.16	6,660	9,150
166.65	6,228	5,865	167.17	6,669	9,216
166.66	6,236	5,927	167.18	6,678	9,283
166.67	6,245	5,990	167.19	6,687	9,350
166.68	6,253	6,052	167.20	6,696	9,417
166.69	6,261	6,115	167.21	6,705	9,484
166.70	6,270	6,177	167.22	6,714	9,551
166.71	6,278	6,240	167.23	6,722	9,618
166.72	6,286	6,303	167.24	6,731	9,685
166.73	6,294	6,366	167.25	6,740	9,753
166.74	6,303	6,429	167.26	6,749	9,820
166.75	6,311	6,492	167.27	6,758	9,888
166.76	6,319	6,555	167.28	6,767	9,955
166.77	6,328	6,618	167.29	6,776	10,023
166.78	6,336	6,682	167.30	6,785	10,091
166.79	6,344	6,745	167.31	6,794	10,159
166.80	6,352	6,808	167.32	6,802	10,227
166.81	6,361	6,872	167.33	6,811	10,295
166.82	6,369	6,936	167.34	6,820	10,363
166.83	6,377	6,999	167.35	6,829	10,431
166.84	6,386	7,063	167.36	6,838	10,500
166.85	6,394	7,127	167.37	6,847	10,568

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	6,856	10,637	167.90	7,318	14,322
167.39	6,865	10,705	167.91	7,327	14,395
167.40	6,874	10,774	167.92	7,336	14,468
167.41	6,882	10,843	167.93	7,345	14,542
167.42	6,891	10,911	167.94	7,354	14,615
167.43	6,900	10,980	167.95	7,363	14,689
167.44	6,909	11,049	167.96	7,371	14,762
167.45	6,918	11,119	167.97	7,380	14,836
167.46	6,927	11,188	167.98	7,389	14,910
167.47	6,936	11,257	167.99	7,398	14,984
167.48	6,945	11,327	168.00	7,407	15,058
167.49	6,954	11,396	168.01	7,417	15,132
167.50	6,963	11,466	168.02	7,426	15,206
167.51	6,971	11,535	168.03	7,436	15,281
167.52	6,980	11,605	168.04	7,445	15,355
167.53	6,989	11,675	168.05	7,455	15,430
167.54	6,998	11,745	168.06	7,464	15,504
167.55	7,007	11,815	168.07	7,474	15,579
167.56	7,016	11,885	168.08	7,483	15,654
167.57	7,025	11,955	168.09	7,493	15,728
167.58	7,034	12,025	168.10	7,502	15,803
167.59	7,043	12,096	168.11	7,512	15,879
167.60	7,051	12,166	168.12	7,521	15,954
167.61	7,060	12,237	168.13	7,531	16,029
167.62	7,069	12,308	168.14	7,540	16,104
167.63	7,078	12,378	168.15	7,550	16,180
167.64	7,087	12,449	168.16	7,559	16,255
167.65	7,096	12,520	168.17	7,569	16,331
167.66	7,105	12,591	168.18	7,579	16,407
167.67	7,114	12,662	168.19	7,588	16,483
167.68	7,123	12,733	168.20	7,598	16,558
167.69	7,131	12,805	168.21	7,607	16,634
167.70	7,140	12,876	168.22	7,617	16,711
167.71	7,149	12,947	168.23	7,626	16,787
167.72	7,158	13,019	168.24	7,636	16,863
167.73	7,167	13,091	168.25	7,645	16,940
167.74	7,176	13,162	168.26	7,655	17,016
167.75	7,185	13,234	168.27	7,664	17,093
167.76	7,194	13,306	168.28	7,674	17,169
167.77	7,203	13,378	168.29	7,683	17,246
167.78	7,211	13,450	168.30	7,693	17,323
167.79	7,220	13,522	168.31	7,702	17,400
167.80	7,229	13,594	168.32	7,712	17,477
167.81	7,238	13,667	168.33	7,721	17,554
167.82	7,247	13,739	168.34	7,731	17,631
167.83	7,256	13,812	168.35	7,741	17,709
167.84	7,265	13,884	168.36	7,750	17,786
167.85	7,274	13,957	168.37	7,760	17,864
167.86	7,283	14,030	168.38	7,769	17,941
167.87	7,291	14,103	168.39	7,779	18,019
167.88	7,300	14,176	168.40	7,788	18,097
167.89	7,309	14,249	168.41	7,798	18,175

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	7,807	18,253	168.94	8,303	22,442
168.43	7,817	18,331	168.95	8,312	22,525
168.44	7,826	18,409	168.96	8,322	22,608
168.45	7,836	18,488	168.97	8,331	22,691
168.46	7,845	18,566	168.98	8,341	22,774
168.47	7,855	18,645	168.99	8,350	22,858
168.48	7,864	18,723	169.00	8,360	22,941
168.49	7,874	18,802	169.01	8,370	23,025
168.50	7,884	18,881	169.02	8,380	23,109
168.51	7,893	18,960	169.03	8,391	23,193
168.52	7,903	19,038	169.04	8,401	23,277
168.53	7,912	19,118	169.05	8,411	23,361
168.54	7,922	19,197	169.06	8,421	23,445
168.55	7,931	19,276	169.07	8,431	23,529
168.56	7,941	19,355	169.08	8,442	23,614
168.57	7,950	19,435	169.09	8,452	23,698
168.58	7,960	19,514	169.10	8,462	23,783
168.59	7,969	19,594	169.11	8,472	23,867
168.60	7,979	19,674	169.12	8,483	23,952
168.61	7,988	19,754	169.13	8,493	24,037
168.62	7,998	19,834	169.14	8,503	24,122
168.63	8,007	19,914	169.15	8,513	24,207
168.64	8,017	19,994	169.16	8,523	24,292
168.65	8,026	20,074	169.17	8,534	24,377
168.66	8,036	20,154	169.18	8,544	24,463
168.67	8,046	20,235	169.19	8,554	24,548
168.68	8,055	20,315	169.20	8,564	24,634
168.69	8,065	20,396	169.21	8,574	24,720
168.70	8,074	20,476	169.22	8,585	24,805
168.71	8,084	20,557	169.23	8,595	24,891
168.72	8,093	20,638	169.24	8,605	24,977
168.73	8,103	20,719	169.25	8,615	25,063
168.74	8,112	20,800	169.26	8,625	25,150
168.75	8,122	20,881	169.27	8,636	25,236
168.76	8,131	20,963	169.28	8,646	25,322
168.77	8,141	21,044	169.29	8,656	25,409
168.78	8,150	21,125	169.30	8,666	25,495
168.79	8,160	21,207	169.31	8,677	25,582
168.80	8,169	21,289	169.32	8,687	25,669
168.81	8,179	21,370	169.33	8,697	25,756
168.82	8,188	21,452	169.34	8,707	25,843
168.83	8,198	21,534	169.35	8,717	25,930
168.84	8,208	21,616	169.36	8,728	26,017
168.85	8,217	21,698	169.37	8,738	26,105
168.86	8,227	21,780	169.38	8,748	26,192
168.87	8,236	21,863	169.39	8,758	26,280
168.88	8,246	21,945	169.40	8,768	26,367
168.89	8,255	22,028	169.41	8,779	26,455
168.90	8,265	22,110	169.42	8,789	26,543
168.91	8,274	22,193	169.43	8,799	26,631
168.92	8,284	22,276	169.44	8,809	26,719
168.93	8,293	22,359	169.45	8,819	26,807

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	8,830	26,895
169.47	8,840	26,983
169.48	8,850	27,072
169.49	8,860	27,160
169.50	8,871	27,249
169.51	8,881	27,338
169.52	8,891	27,427
169.53	8,901	27,516
169.54	8,911	27,605
169.55	8,922	27,694
169.56	8,932	27,783
169.57	8,942	27,873
169.58	8,952	27,962
169.59	8,962	28,052
169.60	8,973	28,141
169.61	8,983	28,231
169.62	8,993	28,321
169.63	9,003	28,411
169.64	9,013	28,501
169.65	9,024	28,591
169.66	9,034	28,681
169.67	9,044	28,772
169.68	9,054	28,862
169.69	9,064	28,953
169.70	9,075	29,044
169.71	9,085	29,134
169.72	9,095	29,225
169.73	9,105	29,316
169.74	9,116	29,407
169.75	9,126	29,499
169.76	9,136	29,590
169.77	9,146	29,681
169.78	9,156	29,773
169.79	9,167	29,865
169.80	9,177	29,956
169.81	9,187	30,048
169.82	9,197	30,140
169.83	9,207	30,232
169.84	9,218	30,324
169.85	9,228	30,416
169.86	9,238	30,509
169.87	9,248	30,601
169.88	9,258	30,694
169.89	9,269	30,786
169.90	9,279	30,879
169.91	9,289	30,972
169.92	9,299	31,065
169.93	9,310	31,158
169.94	9,320	31,251
169.95	9,330	31,344
169.96	9,340	31,438
169.97	9,350	31,531
169.98	9,361	31,625
169.99	9,371	31,718
170.00	**9,381**	**31,812**

Summary for Pond B-45: Basin #45

Inflow Area = 2.294 ac, 62.82% Impervious, Inflow Depth = 7.27" for Current 100 yr event
Inflow = 16.41 cfs @ 12.17 hrs, Volume= 1.391 af
Outflow = 14.18 cfs @ 12.23 hrs, Volume= 1.229 af, Atten= 14%, Lag= 3.6 min
Primary = 14.18 cfs @ 12.23 hrs, Volume= 1.229 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 169.66' @ 12.23 hrs Surf.Area= 6,013 sf Storage= 19,169 cf

Plug-Flow detention time= 239.4 min calculated for 1.229 af (88% of inflow)
Center-of-Mass det. time= 181.2 min (946.9 - 765.7)

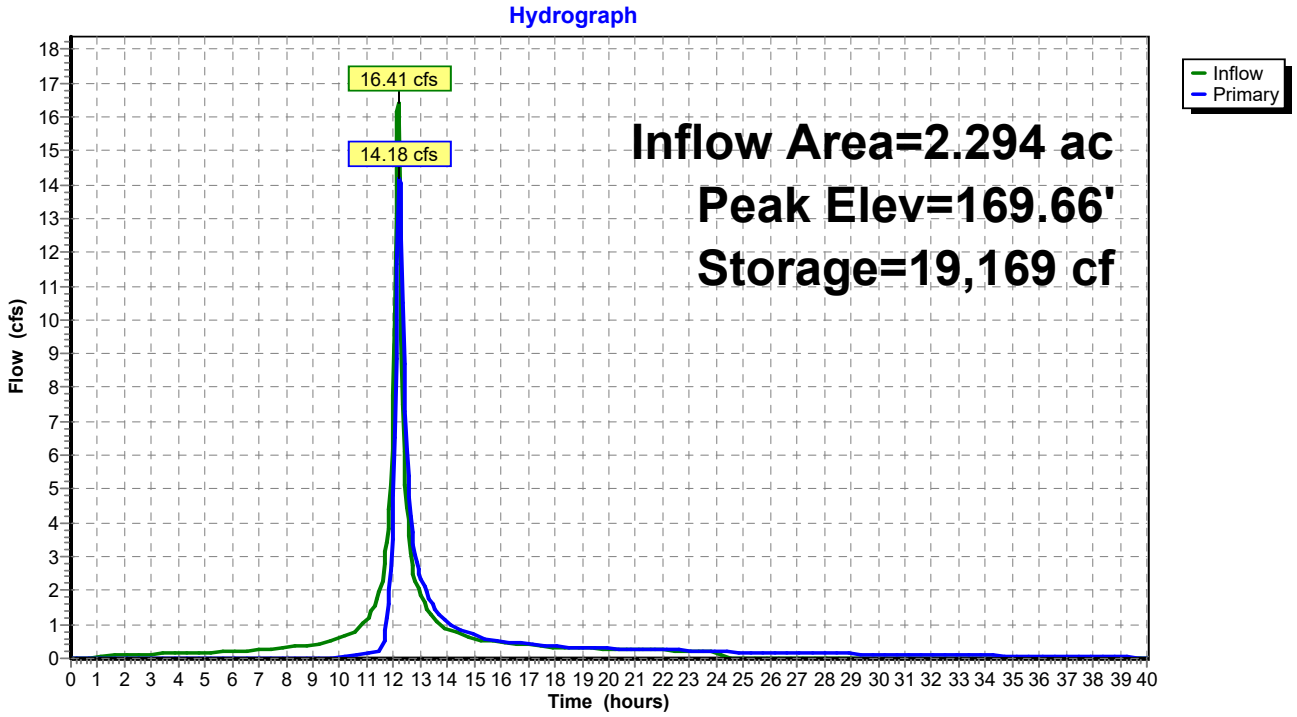
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	21,270 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	3,797	1,329	1,329
167.00	4,370	4,084	5,412
168.00	4,967	4,669	10,081
169.00	5,588	5,278	15,358
170.00	6,235	5,912	21,270

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0325 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.25'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	168.50'	**2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	169.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	169.97'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.97 cfs @ 12.23 hrs HW=169.65' (Free Discharge)
- **1=Culvert** (Passes 13.97 cfs of 16.14 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.25 cfs @ 7.29 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 7.12 cfs @ 3.50 fps)
  - **4=Sharp-Crested Rectangular Weir** (Weir Controls 6.60 cfs @ 2.63 fps)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-45: Basin #45



Stage-Discharge for Pond B-45: Basin #45

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.00
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.00
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.00
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.00
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.00
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.00
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.00
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.00
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.00
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.00
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.00
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.00
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.00
165.43	0.00	165.95	0.00	166.47	0.00	166.99	0.00
165.44	0.00	165.96	0.00	166.48	0.00	167.00	0.00
165.45	0.00	165.97	0.00	166.49	0.00	167.01	0.00
165.46	0.00	165.98	0.00	166.50	0.00	167.02	0.00
165.47	0.00	165.99	0.00	166.51	0.00	167.03	0.00
165.48	0.00	166.00	0.00	166.52	0.00	167.04	0.00
165.49	0.00	166.01	0.00	166.53	0.00	167.05	0.00
165.50	0.00	166.02	0.00	166.54	0.00	167.06	0.00
165.51	0.00	166.03	0.00	166.55	0.00	167.07	0.00
165.52	0.00	166.04	0.00	166.56	0.00	167.08	0.00
165.53	0.00	166.05	0.00	166.57	0.00	167.09	0.00
165.54	0.00	166.06	0.00	166.58	0.00	167.10	0.00
165.55	0.00	166.07	0.00	166.59	0.00	167.11	0.00
165.56	0.00	166.08	0.00	166.60	0.00	167.12	0.00
165.57	0.00	166.09	0.00	166.61	0.00	167.13	0.00
165.58	0.00	166.10	0.00	166.62	0.00	167.14	0.00
165.59	0.00	166.11	0.00	166.63	0.00	167.15	0.00
165.60	0.00	166.12	0.00	166.64	0.00	167.16	0.00
165.61	0.00	166.13	0.00	166.65	0.00	167.17	0.00
165.62	0.00	166.14	0.00	166.66	0.00	167.18	0.00
165.63	0.00	166.15	0.00	166.67	0.00	167.19	0.00
165.64	0.00	166.16	0.00	166.68	0.00	167.20	0.00
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.01
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.01
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.01
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.01
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.02
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.02
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.02

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.03	167.90	0.12	168.42	0.17	168.94	2.03
167.39	0.03	167.91	0.12	168.43	0.17	168.95	2.09
167.40	0.03	167.92	0.12	168.44	0.17	168.96	2.15
167.41	0.04	167.93	0.12	168.45	0.17	168.97	2.22
167.42	0.04	167.94	0.13	168.46	0.17	168.98	2.28
167.43	0.05	167.95	0.13	168.47	0.17	168.99	2.34
167.44	0.05	167.96	0.13	168.48	0.17	169.00	2.41
167.45	0.05	167.97	0.13	168.49	0.17	169.01	2.48
167.46	0.05	167.98	0.13	168.50	0.18	169.02	2.57
167.47	0.06	167.99	0.13	168.51	0.18	169.03	2.67
167.48	0.06	168.00	0.13	168.52	0.20	169.04	2.77
167.49	0.06	168.01	0.13	168.53	0.21	169.05	2.88
167.50	0.06	168.02	0.13	168.54	0.23	169.06	2.99
167.51	0.06	168.03	0.13	168.55	0.25	169.07	3.11
167.52	0.07	168.04	0.14	168.56	0.28	169.08	3.23
167.53	0.07	168.05	0.14	168.57	0.30	169.09	3.36
167.54	0.07	168.06	0.14	168.58	0.33	169.10	3.49
167.55	0.07	168.07	0.14	168.59	0.36	169.11	3.62
167.56	0.07	168.08	0.14	168.60	0.39	169.12	3.75
167.57	0.08	168.09	0.14	168.61	0.42	169.13	3.89
167.58	0.08	168.10	0.14	168.62	0.45	169.14	4.03
167.59	0.08	168.11	0.14	168.63	0.49	169.15	4.18
167.60	0.08	168.12	0.14	168.64	0.52	169.16	4.33
167.61	0.08	168.13	0.14	168.65	0.56	169.17	4.48
167.62	0.08	168.14	0.15	168.66	0.60	169.18	4.63
167.63	0.09	168.15	0.15	168.67	0.64	169.19	4.79
167.64	0.09	168.16	0.15	168.68	0.68	169.20	4.94
167.65	0.09	168.17	0.15	168.69	0.72	169.21	5.10
167.66	0.09	168.18	0.15	168.70	0.76	169.22	5.27
167.67	0.09	168.19	0.15	168.71	0.81	169.23	5.43
167.68	0.09	168.20	0.15	168.72	0.85	169.24	5.60
167.69	0.10	168.21	0.15	168.73	0.90	169.25	5.77
167.70	0.10	168.22	0.15	168.74	0.94	169.26	5.94
167.71	0.10	168.23	0.15	168.75	0.99	169.27	6.12
167.72	0.10	168.24	0.15	168.76	1.04	169.28	6.29
167.73	0.10	168.25	0.16	168.77	1.09	169.29	6.47
167.74	0.10	168.26	0.16	168.78	1.14	169.30	6.65
167.75	0.10	168.27	0.16	168.79	1.19	169.31	6.83
167.76	0.10	168.28	0.16	168.80	1.24	169.32	7.02
167.77	0.11	168.29	0.16	168.81	1.29	169.33	7.20
167.78	0.11	168.30	0.16	168.82	1.34	169.34	7.39
167.79	0.11	168.31	0.16	168.83	1.40	169.35	7.58
167.80	0.11	168.32	0.16	168.84	1.45	169.36	7.77
167.81	0.11	168.33	0.16	168.85	1.51	169.37	7.97
167.82	0.11	168.34	0.16	168.86	1.56	169.38	8.16
167.83	0.11	168.35	0.16	168.87	1.62	169.39	8.36
167.84	0.11	168.36	0.16	168.88	1.68	169.40	8.56
167.85	0.12	168.37	0.17	168.89	1.73	169.41	8.76
167.86	0.12	168.38	0.17	168.90	1.79	169.42	8.96
167.87	0.12	168.39	0.17	168.91	1.85	169.43	9.17
167.88	0.12	168.40	0.17	168.92	1.91	169.44	9.37
167.89	0.12	168.41	0.17	168.93	1.97	169.45	9.58

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)
169.46	9.79
169.47	10.00
169.48	10.21
169.49	10.42
169.50	10.64
169.51	10.85
169.52	11.07
169.53	11.29
169.54	11.51
169.55	11.73
169.56	11.95
169.57	12.18
169.58	12.40
169.59	12.63
169.60	12.86
169.61	13.09
169.62	13.32
169.63	13.55
169.64	13.78
169.65	14.02
169.66	14.25
169.67	14.49
169.68	14.73
169.69	14.97
169.70	15.21
169.71	15.45
169.72	15.69
169.73	15.94
169.74	16.18
169.75	16.37
169.76	16.39
169.77	16.41
169.78	16.43
169.79	16.46
169.80	16.48
169.81	16.50
169.82	16.52
169.83	16.54
169.84	16.56
169.85	16.59
169.86	16.61
169.87	16.63
169.88	16.65
169.89	16.67
169.90	16.70
169.91	16.72
169.92	16.74
169.93	16.76
169.94	16.78
169.95	16.80
169.96	16.82
169.97	16.85
169.98	16.99
169.99	17.22
170.00	**17.52**

Stage-Area-Storage for Pond B-45: Basin #45

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0	165.82	2,821	733
165.31	54	0	165.83	2,875	762
165.32	108	1	165.84	2,929	791
165.33	163	2	165.85	2,983	820
165.34	217	4	165.86	3,038	851
165.35	271	7	165.87	3,092	881
165.36	325	10	165.88	3,146	912
165.37	380	13	165.89	3,200	944
165.38	434	17	165.90	3,255	976
165.39	488	22	165.91	3,309	1,009
165.40	542	27	165.92	3,363	1,043
165.41	597	33	165.93	3,417	1,076
165.42	651	39	165.94	3,472	1,111
165.43	705	46	165.95	3,526	1,146
165.44	759	53	165.96	3,580	1,181
165.45	814	61	165.97	3,634	1,217
165.46	868	69	165.98	3,689	1,254
165.47	922	78	165.99	3,743	1,291
165.48	976	88	166.00	3,797	1,329
165.49	1,031	98	166.01	3,803	1,367
165.50	1,085	108	166.02	3,808	1,405
165.51	1,139	120	166.03	3,814	1,443
165.52	1,193	131	166.04	3,820	1,481
165.53	1,248	143	166.05	3,826	1,520
165.54	1,302	156	166.06	3,831	1,558
165.55	1,356	170	166.07	3,837	1,596
165.56	1,410	183	166.08	3,843	1,635
165.57	1,465	198	166.09	3,849	1,673
165.58	1,519	213	166.10	3,854	1,712
165.59	1,573	228	166.11	3,860	1,750
165.60	1,627	244	166.12	3,866	1,789
165.61	1,682	261	166.13	3,871	1,827
165.62	1,736	278	166.14	3,877	1,866
165.63	1,790	295	166.15	3,883	1,905
165.64	1,844	314	166.16	3,889	1,944
165.65	1,899	332	166.17	3,894	1,983
165.66	1,953	351	166.18	3,900	2,022
165.67	2,007	371	166.19	3,906	2,061
165.68	2,061	392	166.20	3,912	2,100
165.69	2,115	413	166.21	3,917	2,139
165.70	2,170	434	166.22	3,923	2,178
165.71	2,224	456	166.23	3,929	2,217
165.72	2,278	478	166.24	3,935	2,257
165.73	2,332	501	166.25	3,940	2,296
165.74	2,387	525	166.26	3,946	2,336
165.75	2,441	549	166.27	3,952	2,375
165.76	2,495	574	166.28	3,957	2,415
165.77	2,549	599	166.29	3,963	2,454
165.78	2,604	625	166.30	3,969	2,494
165.79	2,658	651	166.31	3,975	2,534
165.80	2,712	678	166.32	3,980	2,573
165.81	2,766	705	166.33	3,986	2,613

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	3,992	2,653	166.86	4,290	4,806
166.35	3,998	2,693	166.87	4,296	4,849
166.36	4,003	2,733	166.88	4,301	4,892
166.37	4,009	2,773	166.89	4,307	4,935
166.38	4,015	2,813	166.90	4,313	4,978
166.39	4,020	2,853	166.91	4,318	5,021
166.40	4,026	2,894	166.92	4,324	5,065
166.41	4,032	2,934	166.93	4,330	5,108
166.42	4,038	2,974	166.94	4,336	5,151
166.43	4,043	3,015	166.95	4,341	5,195
166.44	4,049	3,055	166.96	4,347	5,238
166.45	4,055	3,096	166.97	4,353	5,282
166.46	4,061	3,136	166.98	4,359	5,325
166.47	4,066	3,177	166.99	4,364	5,369
166.48	4,072	3,218	167.00	4,370	5,412
166.49	4,078	3,258	167.01	4,376	5,456
166.50	4,084	3,299	167.02	4,382	5,500
166.51	4,089	3,340	167.03	4,388	5,544
166.52	4,095	3,381	167.04	4,394	5,588
166.53	4,101	3,422	167.05	4,400	5,632
166.54	4,106	3,463	167.06	4,406	5,676
166.55	4,112	3,504	167.07	4,412	5,720
166.56	4,118	3,545	167.08	4,418	5,764
166.57	4,124	3,586	167.09	4,424	5,808
166.58	4,129	3,628	167.10	4,430	5,852
166.59	4,135	3,669	167.11	4,436	5,897
166.60	4,141	3,710	167.12	4,442	5,941
166.61	4,147	3,752	167.13	4,448	5,986
166.62	4,152	3,793	167.14	4,454	6,030
166.63	4,158	3,835	167.15	4,460	6,075
166.64	4,164	3,876	167.16	4,466	6,119
166.65	4,169	3,918	167.17	4,471	6,164
166.66	4,175	3,960	167.18	4,477	6,209
166.67	4,181	4,002	167.19	4,483	6,254
166.68	4,187	4,043	167.20	4,489	6,298
166.69	4,192	4,085	167.21	4,495	6,343
166.70	4,198	4,127	167.22	4,501	6,388
166.71	4,204	4,169	167.23	4,507	6,433
166.72	4,210	4,211	167.24	4,513	6,478
166.73	4,215	4,253	167.25	4,519	6,524
166.74	4,221	4,296	167.26	4,525	6,569
166.75	4,227	4,338	167.27	4,531	6,614
166.76	4,232	4,380	167.28	4,537	6,659
166.77	4,238	4,423	167.29	4,543	6,705
166.78	4,244	4,465	167.30	4,549	6,750
166.79	4,250	4,507	167.31	4,555	6,796
166.80	4,255	4,550	167.32	4,561	6,841
166.81	4,261	4,592	167.33	4,567	6,887
166.82	4,267	4,635	167.34	4,573	6,933
166.83	4,273	4,678	167.35	4,579	6,979
166.84	4,278	4,721	167.36	4,585	7,024
166.85	4,284	4,763	167.37	4,591	7,070

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	4,597	7,116	167.90	4,907	9,587
167.39	4,603	7,162	167.91	4,913	9,636
167.40	4,609	7,208	167.92	4,919	9,686
167.41	4,615	7,254	167.93	4,925	9,735
167.42	4,621	7,301	167.94	4,931	9,784
167.43	4,627	7,347	167.95	4,937	9,833
167.44	4,633	7,393	167.96	4,943	9,883
167.45	4,639	7,439	167.97	4,949	9,932
167.46	4,645	7,486	167.98	4,955	9,982
167.47	4,651	7,532	167.99	4,961	10,031
167.48	4,657	7,579	168.00	4,967	10,081
167.49	4,663	7,625	168.01	4,973	10,131
167.50	4,669	7,672	168.02	4,979	10,180
167.51	4,674	7,719	168.03	4,986	10,230
167.52	4,680	7,766	168.04	4,992	10,280
167.53	4,686	7,812	168.05	4,998	10,330
167.54	4,692	7,859	168.06	5,004	10,380
167.55	4,698	7,906	168.07	5,010	10,430
167.56	4,704	7,953	168.08	5,017	10,480
167.57	4,710	8,000	168.09	5,023	10,530
167.58	4,716	8,047	168.10	5,029	10,581
167.59	4,722	8,095	168.11	5,035	10,631
167.60	4,728	8,142	168.12	5,042	10,681
167.61	4,734	8,189	168.13	5,048	10,732
167.62	4,740	8,237	168.14	5,054	10,782
167.63	4,746	8,284	168.15	5,060	10,833
167.64	4,752	8,332	168.16	5,066	10,884
167.65	4,758	8,379	168.17	5,073	10,934
167.66	4,764	8,427	168.18	5,079	10,985
167.67	4,770	8,474	168.19	5,085	11,036
167.68	4,776	8,522	168.20	5,091	11,087
167.69	4,782	8,570	168.21	5,097	11,138
167.70	4,788	8,618	168.22	5,104	11,189
167.71	4,794	8,666	168.23	5,110	11,240
167.72	4,800	8,714	168.24	5,116	11,291
167.73	4,806	8,762	168.25	5,122	11,342
167.74	4,812	8,810	168.26	5,128	11,393
167.75	4,818	8,858	168.27	5,135	11,445
167.76	4,824	8,906	168.28	5,141	11,496
167.77	4,830	8,954	168.29	5,147	11,547
167.78	4,836	9,003	168.30	5,153	11,599
167.79	4,842	9,051	168.31	5,160	11,651
167.80	4,848	9,099	168.32	5,166	11,702
167.81	4,854	9,148	168.33	5,172	11,754
167.82	4,860	9,197	168.34	5,178	11,806
167.83	4,866	9,245	168.35	5,184	11,857
167.84	4,871	9,294	168.36	5,191	11,909
167.85	4,877	9,343	168.37	5,197	11,961
167.86	4,883	9,391	168.38	5,203	12,013
167.87	4,889	9,440	168.39	5,209	12,065
167.88	4,895	9,489	168.40	5,215	12,117
167.89	4,901	9,538	168.41	5,222	12,170

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	5,228	12,222	168.94	5,551	15,024
168.43	5,234	12,274	168.95	5,557	15,080
168.44	5,240	12,327	168.96	5,563	15,135
168.45	5,246	12,379	168.97	5,569	15,191
168.46	5,253	12,431	168.98	5,576	15,247
168.47	5,259	12,484	168.99	5,582	15,303
168.48	5,265	12,537	169.00	5,588	15,358
168.49	5,271	12,589	169.01	5,594	15,414
168.50	5,278	12,642	169.02	5,601	15,470
168.51	5,284	12,695	169.03	5,607	15,526
168.52	5,290	12,748	169.04	5,614	15,582
168.53	5,296	12,801	169.05	5,620	15,639
168.54	5,302	12,854	169.06	5,627	15,695
168.55	5,309	12,907	169.07	5,633	15,751
168.56	5,315	12,960	169.08	5,640	15,808
168.57	5,321	13,013	169.09	5,646	15,864
168.58	5,327	13,066	169.10	5,653	15,920
168.59	5,333	13,120	169.11	5,659	15,977
168.60	5,340	13,173	169.12	5,666	16,034
168.61	5,346	13,226	169.13	5,672	16,090
168.62	5,352	13,280	169.14	5,679	16,147
168.63	5,358	13,333	169.15	5,685	16,204
168.64	5,364	13,387	169.16	5,692	16,261
168.65	5,371	13,441	169.17	5,698	16,318
168.66	5,377	13,494	169.18	5,704	16,375
168.67	5,383	13,548	169.19	5,711	16,432
168.68	5,389	13,602	169.20	5,717	16,489
168.69	5,395	13,656	169.21	5,724	16,546
168.70	5,402	13,710	169.22	5,730	16,603
168.71	5,408	13,764	169.23	5,737	16,661
168.72	5,414	13,818	169.24	5,743	16,718
168.73	5,420	13,872	169.25	5,750	16,776
168.74	5,427	13,927	169.26	5,756	16,833
168.75	5,433	13,981	169.27	5,763	16,891
168.76	5,439	14,035	169.28	5,769	16,948
168.77	5,445	14,090	169.29	5,776	17,006
168.78	5,451	14,144	169.30	5,782	17,064
168.79	5,458	14,199	169.31	5,789	17,122
168.80	5,464	14,253	169.32	5,795	17,180
168.81	5,470	14,308	169.33	5,802	17,238
168.82	5,476	14,363	169.34	5,808	17,296
168.83	5,482	14,417	169.35	5,814	17,354
168.84	5,489	14,472	169.36	5,821	17,412
168.85	5,495	14,527	169.37	5,827	17,470
168.86	5,501	14,582	169.38	5,834	17,529
168.87	5,507	14,637	169.39	5,840	17,587
168.88	5,513	14,692	169.40	5,847	17,645
168.89	5,520	14,748	169.41	5,853	17,704
168.90	5,526	14,803	169.42	5,860	17,762
168.91	5,532	14,858	169.43	5,866	17,821
168.92	5,538	14,913	169.44	5,873	17,880
168.93	5,545	14,969	169.45	5,879	17,939

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	5,886	17,997
169.47	5,892	18,056
169.48	5,899	18,115
169.49	5,905	18,174
169.50	5,912	18,233
169.51	5,918	18,292
169.52	5,924	18,352
169.53	5,931	18,411
169.54	5,937	18,470
169.55	5,944	18,530
169.56	5,950	18,589
169.57	5,957	18,649
169.58	5,963	18,708
169.59	5,970	18,768
169.60	5,976	18,828
169.61	5,983	18,888
169.62	5,989	18,947
169.63	5,996	19,007
169.64	6,002	19,067
169.65	6,009	19,127
169.66	6,015	19,187
169.67	6,021	19,248
169.68	6,028	19,308
169.69	6,034	19,368
169.70	6,041	19,429
169.71	6,047	19,489
169.72	6,054	19,550
169.73	6,060	19,610
169.74	6,067	19,671
169.75	6,073	19,731
169.76	6,080	19,792
169.77	6,086	19,853
169.78	6,093	19,914
169.79	6,099	19,975
169.80	6,106	20,036
169.81	6,112	20,097
169.82	6,119	20,158
169.83	6,125	20,219
169.84	6,131	20,281
169.85	6,138	20,342
169.86	6,144	20,403
169.87	6,151	20,465
169.88	6,157	20,526
169.89	6,164	20,588
169.90	6,170	20,650
169.91	6,177	20,711
169.92	6,183	20,773
169.93	6,190	20,835
169.94	6,196	20,897
169.95	6,203	20,959
169.96	6,209	21,021
169.97	6,216	21,083
169.98	6,222	21,145
169.99	6,229	21,208
170.00	**6,235**	**21,270**

Summary for Pond B-46A: Basin #46A

Inflow Area = 2.480 ac, 46.25% Impervious, Inflow Depth = 6.79" for Current 100 yr event
Inflow = 16.97 cfs @ 12.17 hrs, Volume= 1.404 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond B-46B : Basin #46B

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 186.37' @ 24.60 hrs Surf.Area= 16,429 sf Storage= 61,168 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

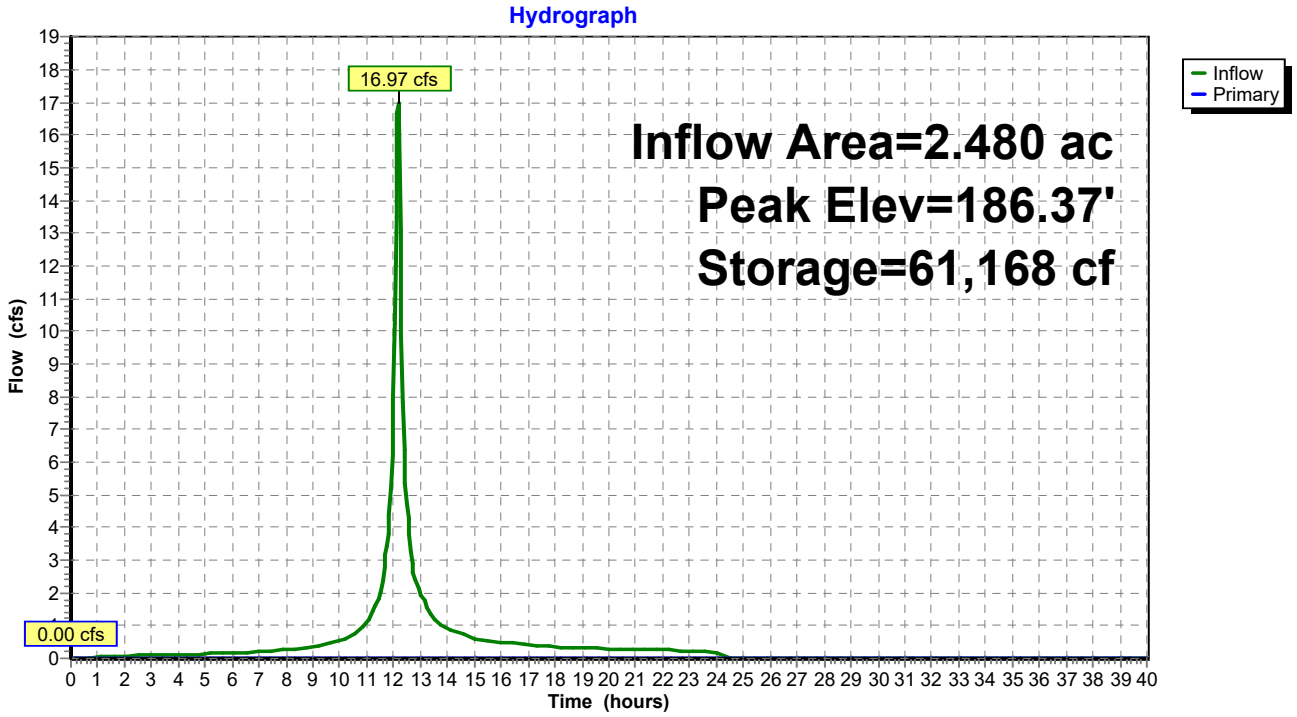
Volume	Invert	Avail.Storage	Storage Description
#1	181.00'	90,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.00	6,639	0	0
182.00	7,998	7,319	7,319
183.00	9,413	8,706	16,024
184.00	12,515	10,964	26,988
185.00	14,128	13,322	40,310
186.00	15,798	14,963	55,273
187.00	17,524	16,661	71,934
188.00	19,310	18,417	90,351

Device	Routing	Invert	Outlet Devices
#1	Primary	187.50'	**50.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=181.00' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-46A: Basin #46A



Stage-Discharge for Pond B-46A: Basin #46A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.00
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.00
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.00
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.00
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.00
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.00
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.00
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.00
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.00
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.00
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.00
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.00
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.00
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.00
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.00
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.00
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.00
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.00
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.00
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.00
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.00
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.00
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.00
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.00
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.00
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.00
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.00
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.00
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.00
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.00
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.00
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.00
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.00
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.00
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.00
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.00
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.00
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.00
181.48	0.00	182.00	0.00	182.52	0.00	183.04	0.00
181.49	0.00	182.01	0.00	182.53	0.00	183.05	0.00
181.50	0.00	182.02	0.00	182.54	0.00	183.06	0.00
181.51	0.00	182.03	0.00	182.55	0.00	183.07	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.08	0.00	183.60	0.00	184.12	0.00	184.64	0.00
183.09	0.00	183.61	0.00	184.13	0.00	184.65	0.00
183.10	0.00	183.62	0.00	184.14	0.00	184.66	0.00
183.11	0.00	183.63	0.00	184.15	0.00	184.67	0.00
183.12	0.00	183.64	0.00	184.16	0.00	184.68	0.00
183.13	0.00	183.65	0.00	184.17	0.00	184.69	0.00
183.14	0.00	183.66	0.00	184.18	0.00	184.70	0.00
183.15	0.00	183.67	0.00	184.19	0.00	184.71	0.00
183.16	0.00	183.68	0.00	184.20	0.00	184.72	0.00
183.17	0.00	183.69	0.00	184.21	0.00	184.73	0.00
183.18	0.00	183.70	0.00	184.22	0.00	184.74	0.00
183.19	0.00	183.71	0.00	184.23	0.00	184.75	0.00
183.20	0.00	183.72	0.00	184.24	0.00	184.76	0.00
183.21	0.00	183.73	0.00	184.25	0.00	184.77	0.00
183.22	0.00	183.74	0.00	184.26	0.00	184.78	0.00
183.23	0.00	183.75	0.00	184.27	0.00	184.79	0.00
183.24	0.00	183.76	0.00	184.28	0.00	184.80	0.00
183.25	0.00	183.77	0.00	184.29	0.00	184.81	0.00
183.26	0.00	183.78	0.00	184.30	0.00	184.82	0.00
183.27	0.00	183.79	0.00	184.31	0.00	184.83	0.00
183.28	0.00	183.80	0.00	184.32	0.00	184.84	0.00
183.29	0.00	183.81	0.00	184.33	0.00	184.85	0.00
183.30	0.00	183.82	0.00	184.34	0.00	184.86	0.00
183.31	0.00	183.83	0.00	184.35	0.00	184.87	0.00
183.32	0.00	183.84	0.00	184.36	0.00	184.88	0.00
183.33	0.00	183.85	0.00	184.37	0.00	184.89	0.00
183.34	0.00	183.86	0.00	184.38	0.00	184.90	0.00
183.35	0.00	183.87	0.00	184.39	0.00	184.91	0.00
183.36	0.00	183.88	0.00	184.40	0.00	184.92	0.00
183.37	0.00	183.89	0.00	184.41	0.00	184.93	0.00
183.38	0.00	183.90	0.00	184.42	0.00	184.94	0.00
183.39	0.00	183.91	0.00	184.43	0.00	184.95	0.00
183.40	0.00	183.92	0.00	184.44	0.00	184.96	0.00
183.41	0.00	183.93	0.00	184.45	0.00	184.97	0.00
183.42	0.00	183.94	0.00	184.46	0.00	184.98	0.00
183.43	0.00	183.95	0.00	184.47	0.00	184.99	0.00
183.44	0.00	183.96	0.00	184.48	0.00	185.00	0.00
183.45	0.00	183.97	0.00	184.49	0.00	185.01	0.00
183.46	0.00	183.98	0.00	184.50	0.00	185.02	0.00
183.47	0.00	183.99	0.00	184.51	0.00	185.03	0.00
183.48	0.00	184.00	0.00	184.52	0.00	185.04	0.00
183.49	0.00	184.01	0.00	184.53	0.00	185.05	0.00
183.50	0.00	184.02	0.00	184.54	0.00	185.06	0.00
183.51	0.00	184.03	0.00	184.55	0.00	185.07	0.00
183.52	0.00	184.04	0.00	184.56	0.00	185.08	0.00
183.53	0.00	184.05	0.00	184.57	0.00	185.09	0.00
183.54	0.00	184.06	0.00	184.58	0.00	185.10	0.00
183.55	0.00	184.07	0.00	184.59	0.00	185.11	0.00
183.56	0.00	184.08	0.00	184.60	0.00	185.12	0.00
183.57	0.00	184.09	0.00	184.61	0.00	185.13	0.00
183.58	0.00	184.10	0.00	184.62	0.00	185.14	0.00
183.59	0.00	184.11	0.00	184.63	0.00	185.15	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.16	0.00	185.68	0.00	186.20	0.00	186.72	0.00
185.17	0.00	185.69	0.00	186.21	0.00	186.73	0.00
185.18	0.00	185.70	0.00	186.22	0.00	186.74	0.00
185.19	0.00	185.71	0.00	186.23	0.00	186.75	0.00
185.20	0.00	185.72	0.00	186.24	0.00	186.76	0.00
185.21	0.00	185.73	0.00	186.25	0.00	186.77	0.00
185.22	0.00	185.74	0.00	186.26	0.00	186.78	0.00
185.23	0.00	185.75	0.00	186.27	0.00	186.79	0.00
185.24	0.00	185.76	0.00	186.28	0.00	186.80	0.00
185.25	0.00	185.77	0.00	186.29	0.00	186.81	0.00
185.26	0.00	185.78	0.00	186.30	0.00	186.82	0.00
185.27	0.00	185.79	0.00	186.31	0.00	186.83	0.00
185.28	0.00	185.80	0.00	186.32	0.00	186.84	0.00
185.29	0.00	185.81	0.00	186.33	0.00	186.85	0.00
185.30	0.00	185.82	0.00	186.34	0.00	186.86	0.00
185.31	0.00	185.83	0.00	186.35	0.00	186.87	0.00
185.32	0.00	185.84	0.00	186.36	0.00	186.88	0.00
185.33	0.00	185.85	0.00	186.37	0.00	186.89	0.00
185.34	0.00	185.86	0.00	186.38	0.00	186.90	0.00
185.35	0.00	185.87	0.00	186.39	0.00	186.91	0.00
185.36	0.00	185.88	0.00	186.40	0.00	186.92	0.00
185.37	0.00	185.89	0.00	186.41	0.00	186.93	0.00
185.38	0.00	185.90	0.00	186.42	0.00	186.94	0.00
185.39	0.00	185.91	0.00	186.43	0.00	186.95	0.00
185.40	0.00	185.92	0.00	186.44	0.00	186.96	0.00
185.41	0.00	185.93	0.00	186.45	0.00	186.97	0.00
185.42	0.00	185.94	0.00	186.46	0.00	186.98	0.00
185.43	0.00	185.95	0.00	186.47	0.00	186.99	0.00
185.44	0.00	185.96	0.00	186.48	0.00	187.00	0.00
185.45	0.00	185.97	0.00	186.49	0.00	187.01	0.00
185.46	0.00	185.98	0.00	186.50	0.00	187.02	0.00
185.47	0.00	185.99	0.00	186.51	0.00	187.03	0.00
185.48	0.00	186.00	0.00	186.52	0.00	187.04	0.00
185.49	0.00	186.01	0.00	186.53	0.00	187.05	0.00
185.50	0.00	186.02	0.00	186.54	0.00	187.06	0.00
185.51	0.00	186.03	0.00	186.55	0.00	187.07	0.00
185.52	0.00	186.04	0.00	186.56	0.00	187.08	0.00
185.53	0.00	186.05	0.00	186.57	0.00	187.09	0.00
185.54	0.00	186.06	0.00	186.58	0.00	187.10	0.00
185.55	0.00	186.07	0.00	186.59	0.00	187.11	0.00
185.56	0.00	186.08	0.00	186.60	0.00	187.12	0.00
185.57	0.00	186.09	0.00	186.61	0.00	187.13	0.00
185.58	0.00	186.10	0.00	186.62	0.00	187.14	0.00
185.59	0.00	186.11	0.00	186.63	0.00	187.15	0.00
185.60	0.00	186.12	0.00	186.64	0.00	187.16	0.00
185.61	0.00	186.13	0.00	186.65	0.00	187.17	0.00
185.62	0.00	186.14	0.00	186.66	0.00	187.18	0.00
185.63	0.00	186.15	0.00	186.67	0.00	187.19	0.00
185.64	0.00	186.16	0.00	186.68	0.00	187.20	0.00
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)
187.24	0.00
187.25	0.00
187.26	0.00
187.27	0.00
187.28	0.00
187.29	0.00
187.30	0.00
187.31	0.00
187.32	0.00
187.33	0.00
187.34	0.00
187.35	0.00
187.36	0.00
187.37	0.00
187.38	0.00
187.39	0.00
187.40	0.00
187.41	0.00
187.42	0.00
187.43	0.00
187.44	0.00
187.45	0.00
187.46	0.00
187.47	0.00
187.48	0.00
187.49	0.00
187.50	0.00
187.51	0.16
187.52	0.46
187.53	0.86
187.54	1.32
187.55	1.85
187.56	2.44
187.57	3.08
187.58	3.77
187.59	4.51
187.60	5.29
187.61	6.12
187.62	6.99
187.63	7.90
187.64	8.85
187.65	9.84
187.66	10.87
187.67	11.93
187.68	13.03
187.69	14.16
187.70	15.33
187.71	16.53
187.72	17.76
187.73	19.03
187.74	20.33
187.75	21.67
187.76	23.03
187.77	24.43
187.78	25.85
187.79	27.31
187.80	28.80
187.81	30.32
187.82	31.87
187.83	33.45
187.84	35.06
187.85	36.70
187.86	38.37
187.87	40.07
187.88	41.80
187.89	43.55
187.90	45.34
187.91	47.15
187.92	48.99
187.93	50.86
187.94	52.76
187.95	54.69
187.96	56.65
187.97	58.63
187.98	60.64
187.99	62.68
188.00	**64.75**

Stage-Area-Storage for Pond B-46A: Basin #46A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.00	6,639	0
181.01	6,653	66
181.02	6,666	133
181.03	6,680	200
181.04	6,693	267
181.05	6,707	334
181.06	6,721	401
181.07	6,734	468
181.08	6,748	535
181.09	6,761	603
181.10	6,775	671
181.11	6,788	739
181.12	6,802	806
181.13	6,816	875
181.14	6,829	943
181.15	6,843	1,011
181.16	6,856	1,080
181.17	6,870	1,148
181.18	6,884	1,217
181.19	6,897	1,286
181.20	6,911	1,355
181.21	6,924	1,424
181.22	6,938	1,493
181.23	6,952	1,563
181.24	6,965	1,632
181.25	6,979	1,702
181.26	6,992	1,772
181.27	7,006	1,842
181.28	7,020	1,912
181.29	7,033	1,982
181.30	7,047	2,053
181.31	7,060	2,123
181.32	7,074	2,194
181.33	7,087	2,265
181.34	7,101	2,336
181.35	7,115	2,407
181.36	7,128	2,478
181.37	7,142	2,549
181.38	7,155	2,621
181.39	7,169	2,693
181.40	7,183	2,764
181.41	7,196	2,836
181.42	7,210	2,908
181.43	7,223	2,980
181.44	7,237	3,053
181.45	7,251	3,125
181.46	7,264	3,198
181.47	7,278	3,270
181.48	7,291	3,343
181.49	7,305	3,416
181.50	7,319	3,489
181.51	7,332	3,563
181.52	7,346	3,636
181.53	7,359	3,710
181.54	7,373	3,783
181.55	7,386	3,857
181.56	7,400	3,931
181.57	7,414	4,005
181.58	7,427	4,079
181.59	7,441	4,154
181.60	7,454	4,228
181.61	7,468	4,303
181.62	7,482	4,377
181.63	7,495	4,452
181.64	7,509	4,527
181.65	7,522	4,602
181.66	7,536	4,678
181.67	7,550	4,753
181.68	7,563	4,829
181.69	7,577	4,904
181.70	7,590	4,980
181.71	7,604	5,056
181.72	7,617	5,132
181.73	7,631	5,209
181.74	7,645	5,285
181.75	7,658	5,361
181.76	7,672	5,438
181.77	7,685	5,515
181.78	7,699	5,592
181.79	7,713	5,669
181.80	7,726	5,746
181.81	7,740	5,823
181.82	7,753	5,901
181.83	7,767	5,978
181.84	7,781	6,056
181.85	7,794	6,134
181.86	7,808	6,212
181.87	7,821	6,290
181.88	7,835	6,369
181.89	7,849	6,447
181.90	7,862	6,525
181.91	7,876	6,604
181.92	7,889	6,683
181.93	7,903	6,762
181.94	7,916	6,841
181.95	7,930	6,920
181.96	7,944	7,000
181.97	7,957	7,079
181.98	7,971	7,159
181.99	7,984	7,239
182.00	7,998	7,319
182.01	8,012	7,399
182.02	8,026	7,479
182.03	8,040	7,559

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.04	8,055	7,640	182.56	8,790	12,019
182.05	8,069	7,720	182.57	8,805	12,107
182.06	8,083	7,801	182.58	8,819	12,195
182.07	8,097	7,882	182.59	8,833	12,284
182.08	8,111	7,963	182.60	8,847	12,372
182.09	8,125	8,044	182.61	8,861	12,461
182.10	8,139	8,125	182.62	8,875	12,549
182.11	8,154	8,207	182.63	8,889	12,638
182.12	8,168	8,288	182.64	8,904	12,727
182.13	8,182	8,370	182.65	8,918	12,816
182.14	8,196	8,452	182.66	8,932	12,905
182.15	8,210	8,534	182.67	8,946	12,995
182.16	8,224	8,616	182.68	8,960	13,084
182.17	8,239	8,699	182.69	8,974	13,174
182.18	8,253	8,781	182.70	8,988	13,264
182.19	8,267	8,864	182.71	9,003	13,354
182.20	8,281	8,946	182.72	9,017	13,444
182.21	8,295	9,029	182.73	9,031	13,534
182.22	8,309	9,112	182.74	9,045	13,624
182.23	8,323	9,195	182.75	9,059	13,715
182.24	8,338	9,279	182.76	9,073	13,806
182.25	8,352	9,362	182.77	9,088	13,896
182.26	8,366	9,446	182.78	9,102	13,987
182.27	8,380	9,530	182.79	9,116	14,078
182.28	8,394	9,613	182.80	9,130	14,170
182.29	8,408	9,697	182.81	9,144	14,261
182.30	8,423	9,782	182.82	9,158	14,353
182.31	8,437	9,866	182.83	9,172	14,444
182.32	8,451	9,950	182.84	9,187	14,536
182.33	8,465	10,035	182.85	9,201	14,628
182.34	8,479	10,120	182.86	9,215	14,720
182.35	8,493	10,204	182.87	9,229	14,812
182.36	8,507	10,289	182.88	9,243	14,905
182.37	8,522	10,375	182.89	9,257	14,997
182.38	8,536	10,460	182.90	9,272	15,090
182.39	8,550	10,545	182.91	9,286	15,183
182.40	8,564	10,631	182.92	9,300	15,275
182.41	8,578	10,717	182.93	9,314	15,369
182.42	8,592	10,802	182.94	9,328	15,462
182.43	8,606	10,888	182.95	9,342	15,555
182.44	8,621	10,975	182.96	9,356	15,649
182.45	8,635	11,061	182.97	9,371	15,742
182.46	8,649	11,147	182.98	9,385	15,836
182.47	8,663	11,234	182.99	9,399	15,930
182.48	8,677	11,321	183.00	9,413	16,024
182.49	8,691	11,407	183.01	9,444	16,118
182.50	8,706	11,494	183.02	9,475	16,213
182.51	8,720	11,582	183.03	9,506	16,308
182.52	8,734	11,669	183.04	9,537	16,403
182.53	8,748	11,756	183.05	9,568	16,499
182.54	8,762	11,844	183.06	9,599	16,594
182.55	8,776	11,931	183.07	9,630	16,691

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.08	9,661	16,787	183.60	11,274	22,230
183.09	9,692	16,884	183.61	11,305	22,343
183.10	9,723	16,981	183.62	11,336	22,456
183.11	9,754	17,078	183.63	11,367	22,570
183.12	9,785	17,176	183.64	11,398	22,684
183.13	9,816	17,274	183.65	11,429	22,798
183.14	9,847	17,372	183.66	11,460	22,912
183.15	9,878	17,471	183.67	11,491	23,027
183.16	9,909	17,570	183.68	11,522	23,142
183.17	9,940	17,669	183.69	11,553	23,257
183.18	9,971	17,769	183.70	11,584	23,373
183.19	10,002	17,868	183.71	11,615	23,489
183.20	10,033	17,969	183.72	11,646	23,605
183.21	10,064	18,069	183.73	11,677	23,722
183.22	10,095	18,170	183.74	11,708	23,839
183.23	10,126	18,271	183.75	11,740	23,956
183.24	10,157	18,372	183.76	11,771	24,074
183.25	10,189	18,474	183.77	11,802	24,192
183.26	10,220	18,576	183.78	11,833	24,310
183.27	10,251	18,679	183.79	11,864	24,428
183.28	10,282	18,781	183.80	11,895	24,547
183.29	10,313	18,884	183.81	11,926	24,666
183.30	10,344	18,987	183.82	11,957	24,786
183.31	10,375	19,091	183.83	11,988	24,905
183.32	10,406	19,195	183.84	12,019	25,025
183.33	10,437	19,299	183.85	12,050	25,146
183.34	10,468	19,404	183.86	12,081	25,266
183.35	10,499	19,509	183.87	12,112	25,387
183.36	10,530	19,614	183.88	12,143	25,509
183.37	10,561	19,719	183.89	12,174	25,630
183.38	10,592	19,825	183.90	12,205	25,752
183.39	10,623	19,931	183.91	12,236	25,874
183.40	10,654	20,037	183.92	12,267	25,997
183.41	10,685	20,144	183.93	12,298	26,120
183.42	10,716	20,251	183.94	12,329	26,243
183.43	10,747	20,358	183.95	12,360	26,366
183.44	10,778	20,466	183.96	12,391	26,490
183.45	10,809	20,574	183.97	12,422	26,614
183.46	10,840	20,682	183.98	12,453	26,738
183.47	10,871	20,791	183.99	12,484	26,863
183.48	10,902	20,900	184.00	12,515	26,988
183.49	10,933	21,009	184.01	12,531	27,113
183.50	10,964	21,118	184.02	12,547	27,239
183.51	10,995	21,228	184.03	12,563	27,364
183.52	11,026	21,338	184.04	12,580	27,490
183.53	11,057	21,449	184.05	12,596	27,616
183.54	11,088	21,559	184.06	12,612	27,742
183.55	11,119	21,670	184.07	12,628	27,868
183.56	11,150	21,782	184.08	12,644	27,994
183.57	11,181	21,893	184.09	12,660	28,121
183.58	11,212	22,005	184.10	12,676	28,248
183.59	11,243	22,118	184.11	12,692	28,374

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.12	12,709	28,501
184.13	12,725	28,629
184.14	12,741	28,756
184.15	12,757	28,883
184.16	12,773	29,011
184.17	12,789	29,139
184.18	12,805	29,267
184.19	12,821	29,395
184.20	12,838	29,523
184.21	12,854	29,652
184.22	12,870	29,780
184.23	12,886	29,909
184.24	12,902	30,038
184.25	12,918	30,167
184.26	12,934	30,296
184.27	12,951	30,426
184.28	12,967	30,555
184.29	12,983	30,685
184.30	12,999	30,815
184.31	13,015	30,945
184.32	13,031	31,075
184.33	13,047	31,206
184.34	13,063	31,336
184.35	13,080	31,467
184.36	13,096	31,598
184.37	13,112	31,729
184.38	13,128	31,860
184.39	13,144	31,992
184.40	13,160	32,123
184.41	13,176	32,255
184.42	13,192	32,387
184.43	13,209	32,519
184.44	13,225	32,651
184.45	13,241	32,783
184.46	13,257	32,916
184.47	13,273	33,048
184.48	13,289	33,181
184.49	13,305	33,314
184.50	13,322	33,447
184.51	13,338	33,580
184.52	13,354	33,714
184.53	13,370	33,847
184.54	13,386	33,981
184.55	13,402	34,115
184.56	13,418	34,249
184.57	13,434	34,384
184.58	13,451	34,518
184.59	13,467	34,653
184.60	13,483	34,787
184.61	13,499	34,922
184.62	13,515	35,057
184.63	13,531	35,193
184.64	13,547	35,328
184.65	13,563	35,463
184.66	13,580	35,599
184.67	13,596	35,735
184.68	13,612	35,871
184.69	13,628	36,007
184.70	13,644	36,144
184.71	13,660	36,280
184.72	13,676	36,417
184.73	13,692	36,554
184.74	13,709	36,691
184.75	13,725	36,828
184.76	13,741	36,965
184.77	13,757	37,103
184.78	13,773	37,240
184.79	13,789	37,378
184.80	13,805	37,516
184.81	13,822	37,654
184.82	13,838	37,793
184.83	13,854	37,931
184.84	13,870	38,070
184.85	13,886	38,208
184.86	13,902	38,347
184.87	13,918	38,486
184.88	13,934	38,626
184.89	13,951	38,765
184.90	13,967	38,905
184.91	13,983	39,045
184.92	13,999	39,184
184.93	14,015	39,324
184.94	14,031	39,465
184.95	14,047	39,605
184.96	14,063	39,746
184.97	14,080	39,886
184.98	14,096	40,027
184.99	14,112	40,168
185.00	14,128	40,310
185.01	14,145	40,451
185.02	14,161	40,592
185.03	14,178	40,734
185.04	14,195	40,876
185.05	14,212	41,018
185.06	14,228	41,160
185.07	14,245	41,303
185.08	14,262	41,445
185.09	14,278	41,588
185.10	14,295	41,731
185.11	14,312	41,874
185.12	14,328	42,017
185.13	14,345	42,160
185.14	14,362	42,304
185.15	14,379	42,447

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.16	14,395	42,591
185.17	14,412	42,735
185.18	14,429	42,880
185.19	14,445	43,024
185.20	14,462	43,168
185.21	14,479	43,313
185.22	14,495	43,458
185.23	14,512	43,603
185.24	14,529	43,748
185.25	14,546	43,894
185.26	14,562	44,039
185.27	14,579	44,185
185.28	14,596	44,331
185.29	14,612	44,477
185.30	14,629	44,623
185.31	14,646	44,769
185.32	14,662	44,916
185.33	14,679	45,063
185.34	14,696	45,210
185.35	14,712	45,357
185.36	14,729	45,504
185.37	14,746	45,651
185.38	14,763	45,799
185.39	14,779	45,946
185.40	14,796	46,094
185.41	14,813	46,242
185.42	14,829	46,391
185.43	14,846	46,539
185.44	14,863	46,687
185.45	14,879	46,836
185.46	14,896	46,985
185.47	14,913	47,134
185.48	14,930	47,283
185.49	14,946	47,433
185.50	14,963	47,582
185.51	14,980	47,732
185.52	14,996	47,882
185.53	15,013	48,032
185.54	15,030	48,182
185.55	15,047	48,332
185.56	15,063	48,483
185.57	15,080	48,634
185.58	15,097	48,785
185.59	15,113	48,936
185.60	15,130	49,087
185.61	15,147	49,238
185.62	15,163	49,390
185.63	15,180	49,542
185.64	15,197	49,693
185.65	15,214	49,845
185.66	15,230	49,998
185.67	15,247	50,150
185.68	15,264	50,303
185.69	15,280	50,455
185.70	15,297	50,608
185.71	15,314	50,761
185.72	15,330	50,915
185.73	15,347	51,068
185.74	15,364	51,221
185.75	15,381	51,375
185.76	15,397	51,529
185.77	15,414	51,683
185.78	15,431	51,837
185.79	15,447	51,992
185.80	15,464	52,146
185.81	15,481	52,301
185.82	15,497	52,456
185.83	15,514	52,611
185.84	15,531	52,766
185.85	15,547	52,922
185.86	15,564	53,077
185.87	15,581	53,233
185.88	15,598	53,389
185.89	15,614	53,545
185.90	15,631	53,701
185.91	15,648	53,857
185.92	15,664	54,014
185.93	15,681	54,171
185.94	15,698	54,328
185.95	15,714	54,485
185.96	15,731	54,642
185.97	15,748	54,799
185.98	15,765	54,957
185.99	15,781	55,115
186.00	15,798	55,273
186.01	15,815	55,431
186.02	15,833	55,589
186.03	15,850	55,747
186.04	15,867	55,906
186.05	15,884	56,065
186.06	15,902	56,223
186.07	15,919	56,383
186.08	15,936	56,542
186.09	15,953	56,701
186.10	15,971	56,861
186.11	15,988	57,021
186.12	16,005	57,181
186.13	16,022	57,341
186.14	16,040	57,501
186.15	16,057	57,662
186.16	16,074	57,822
186.17	16,091	57,983
186.18	16,109	58,144
186.19	16,126	58,305

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.20	16,143	58,467	186.72	17,041	67,094
186.21	16,160	58,628	186.73	17,058	67,265
186.22	16,178	58,790	186.74	17,075	67,436
186.23	16,195	58,952	186.75	17,093	67,606
186.24	16,212	59,114	186.76	17,110	67,777
186.25	16,230	59,276	186.77	17,127	67,949
186.26	16,247	59,438	186.78	17,144	68,120
186.27	16,264	59,601	186.79	17,162	68,292
186.28	16,281	59,764	186.80	17,179	68,463
186.29	16,299	59,926	186.81	17,196	68,635
186.30	16,316	60,090	186.82	17,213	68,807
186.31	16,333	60,253	186.83	17,231	68,979
186.32	16,350	60,416	186.84	17,248	69,152
186.33	16,368	60,580	186.85	17,265	69,324
186.34	16,385	60,744	186.86	17,282	69,497
186.35	16,402	60,908	186.87	17,300	69,670
186.36	16,419	61,072	186.88	17,317	69,843
186.37	16,437	61,236	186.89	17,334	70,016
186.38	16,454	61,400	186.90	17,351	70,190
186.39	16,471	61,565	186.91	17,369	70,363
186.40	16,488	61,730	186.92	17,386	70,537
186.41	16,506	61,895	186.93	17,403	70,711
186.42	16,523	62,060	186.94	17,420	70,885
186.43	16,540	62,225	186.95	17,438	71,059
186.44	16,557	62,391	186.96	17,455	71,234
186.45	16,575	62,556	186.97	17,472	71,409
186.46	16,592	62,722	186.98	17,489	71,583
186.47	16,609	62,888	186.99	17,507	71,758
186.48	16,626	63,054	187.00	17,524	71,934
186.49	16,644	63,221	187.01	17,542	72,109
186.50	16,661	63,387	187.02	17,560	72,284
186.51	16,678	63,554	187.03	17,578	72,460
186.52	16,696	63,721	187.04	17,595	72,636
186.53	16,713	63,888	187.05	17,613	72,812
186.54	16,730	64,055	187.06	17,631	72,988
186.55	16,747	64,222	187.07	17,649	73,165
186.56	16,765	64,390	187.08	17,667	73,341
186.57	16,782	64,558	187.09	17,685	73,518
186.58	16,799	64,726	187.10	17,703	73,695
186.59	16,816	64,894	187.11	17,720	73,872
186.60	16,834	65,062	187.12	17,738	74,049
186.61	16,851	65,230	187.13	17,756	74,227
186.62	16,868	65,399	187.14	17,774	74,404
186.63	16,885	65,568	187.15	17,792	74,582
186.64	16,903	65,737	187.16	17,810	74,760
186.65	16,920	65,906	187.17	17,828	74,938
186.66	16,937	66,075	187.18	17,845	75,117
186.67	16,954	66,245	187.19	17,863	75,295
186.68	16,972	66,414	187.20	17,881	75,474
186.69	16,989	66,584	187.21	17,899	75,653
186.70	17,006	66,754	187.22	17,917	75,832
186.71	17,023	66,924	187.23	17,935	76,011

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.24	17,953	76,191
187.25	17,971	76,370
187.26	17,988	76,550
187.27	18,006	76,730
187.28	18,024	76,910
187.29	18,042	77,091
187.30	18,060	77,271
187.31	18,078	77,452
187.32	18,096	77,633
187.33	18,113	77,814
187.34	18,131	77,995
187.35	18,149	78,176
187.36	18,167	78,358
187.37	18,185	78,540
187.38	18,203	78,722
187.39	18,221	78,904
187.40	18,238	79,086
187.41	18,256	79,268
187.42	18,274	79,451
187.43	18,292	79,634
187.44	18,310	79,817
187.45	18,328	80,000
187.46	18,346	80,183
187.47	18,363	80,367
187.48	18,381	80,551
187.49	18,399	80,735
187.50	18,417	80,919
187.51	18,435	81,103
187.52	18,453	81,287
187.53	18,471	81,472
187.54	18,488	81,657
187.55	18,506	81,842
187.56	18,524	82,027
187.57	18,542	82,212
187.58	18,560	82,398
187.59	18,578	82,584
187.60	18,596	82,769
187.61	18,613	82,955
187.62	18,631	83,142
187.63	18,649	83,328
187.64	18,667	83,515
187.65	18,685	83,701
187.66	18,703	83,888
187.67	18,721	84,075
187.68	18,738	84,263
187.69	18,756	84,450
187.70	18,774	84,638
187.71	18,792	84,826
187.72	18,810	85,014
187.73	18,828	85,202
187.74	18,846	85,390
187.75	18,864	85,579
187.76	18,881	85,768
187.77	18,899	85,956
187.78	18,917	86,146
187.79	18,935	86,335
187.80	18,953	86,524
187.81	18,971	86,714
187.82	18,989	86,904
187.83	19,006	87,094
187.84	19,024	87,284
187.85	19,042	87,474
187.86	19,060	87,665
187.87	19,078	87,855
187.88	19,096	88,046
187.89	19,114	88,237
187.90	19,131	88,428
187.91	19,149	88,620
187.92	19,167	88,811
187.93	19,185	89,003
187.94	19,203	89,195
187.95	19,221	89,387
187.96	19,239	89,580
187.97	19,256	89,772
187.98	19,274	89,965
187.99	19,292	90,157
188.00	**19,310**	**90,351**

Summary for Pond B-46B: Basin #46B

Inflow Area = 2.931 ac, 39.13% Impervious, Inflow Depth = 0.84" for Current 100 yr event
Inflow = 3.54 cfs @ 12.05 hrs, Volume= 0.205 af
Outflow = 0.09 cfs @ 15.67 hrs, Volume= 0.137 af, Atten= 98%, Lag= 217.4 min
Primary = 0.09 cfs @ 15.67 hrs, Volume= 0.137 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.21' @ 15.67 hrs Surf.Area= 11,345 sf Storage= 6,253 cf

Plug-Flow detention time= 660.2 min calculated for 0.137 af (67% of inflow)
Center-of-Mass det. time= 559.3 min (1,370.2 - 810.9)

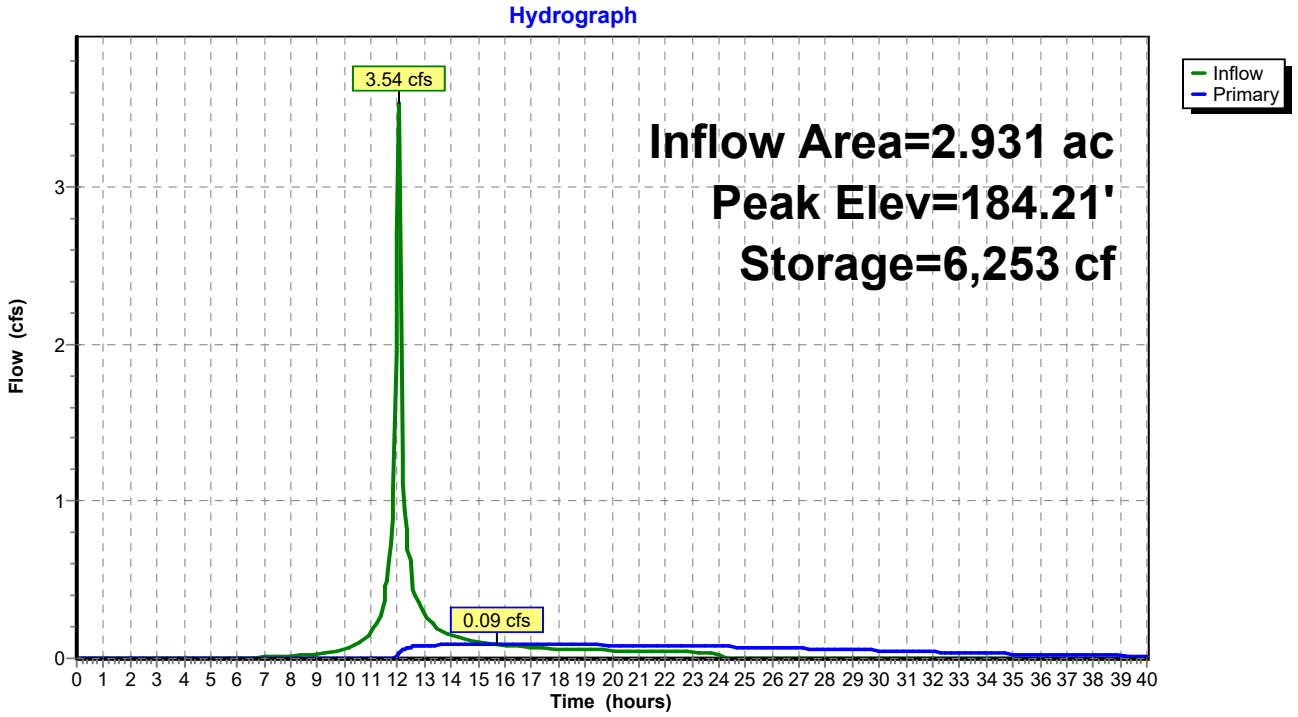
Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	59,250 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	11,059	3,871	3,871
185.00	12,402	11,731	15,601
186.00	13,803	13,103	28,704
187.00	15,259	14,531	43,235
188.00	16,772	16,016	59,250

Device	Routing	Invert	Outlet Devices
#1	Primary	182.65'	**18.0" Round Culvert** L= 65.0' Ke= 0.500 Inlet / Outlet Invert= 182.65' / 176.00' S= 0.1023 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.82'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.45'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.75'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.09 cfs @ 15.67 hrs HW=184.21' (Free Discharge)
- **1=Culvert** (Passes 0.09 cfs of 7.67 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.09 cfs @ 2.59 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-46B: Basin #46B



Stage-Discharge for Pond B-46B: Basin #46B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.30	0.00	183.82	0.00	184.34	0.11	184.86	3.52
183.31	0.00	183.83	0.00	184.35	0.11	184.87	3.65
183.32	0.00	183.84	0.00	184.36	0.11	184.88	3.77
183.33	0.00	183.85	0.00	184.37	0.11	184.89	3.89
183.34	0.00	183.86	0.00	184.38	0.11	184.90	4.02
183.35	0.00	183.87	0.00	184.39	0.11	184.91	4.15
183.36	0.00	183.88	0.01	184.40	0.11	184.92	4.28
183.37	0.00	183.89	0.01	184.41	0.11	184.93	4.41
183.38	0.00	183.90	0.01	184.42	0.12	184.94	4.54
183.39	0.00	183.91	0.01	184.43	0.12	184.95	4.68
183.40	0.00	183.92	0.02	184.44	0.12	184.96	4.81
183.41	0.00	183.93	0.02	184.45	0.12	184.97	4.95
183.42	0.00	183.94	0.02	184.46	0.13	184.98	5.08
183.43	0.00	183.95	0.03	184.47	0.16	184.99	5.22
183.44	0.00	183.96	0.03	184.48	0.19	185.00	5.36
183.45	0.00	183.97	0.03	184.49	0.23	185.01	5.50
183.46	0.00	183.98	0.04	184.50	0.27	185.02	5.64
183.47	0.00	183.99	0.04	184.51	0.32	185.03	5.78
183.48	0.00	184.00	0.05	184.52	0.37	185.04	5.93
183.49	0.00	184.01	0.05	184.53	0.42	185.05	6.07
183.50	0.00	184.02	0.05	184.54	0.48	185.06	6.22
183.51	0.00	184.03	0.05	184.55	0.54	185.07	6.36
183.52	0.00	184.04	0.06	184.56	0.61	185.08	6.51
183.53	0.00	184.05	0.06	184.57	0.67	185.09	6.66
183.54	0.00	184.06	0.06	184.58	0.74	185.10	6.81
183.55	0.00	184.07	0.06	184.59	0.81	185.11	6.96
183.56	0.00	184.08	0.06	184.60	0.89	185.12	7.11
183.57	0.00	184.09	0.07	184.61	0.97	185.13	7.27
183.58	0.00	184.10	0.07	184.62	1.05	185.14	7.42
183.59	0.00	184.11	0.07	184.63	1.13	185.15	7.57
183.60	0.00	184.12	0.07	184.64	1.21	185.16	7.73
183.61	0.00	184.13	0.07	184.65	1.30	185.17	7.89
183.62	0.00	184.14	0.08	184.66	1.39	185.18	8.04
183.63	0.00	184.15	0.08	184.67	1.48	185.19	8.20
183.64	0.00	184.16	0.08	184.68	1.57	185.20	8.36
183.65	0.00	184.17	0.08	184.69	1.66	185.21	8.52
183.66	0.00	184.18	0.08	184.70	1.76	185.22	8.68
183.67	0.00	184.19	0.08	184.71	1.86	185.23	8.85
183.68	0.00	184.20	0.09	184.72	1.96	185.24	9.01
183.69	0.00	184.21	0.09	184.73	2.06	185.25	9.17
183.70	0.00	184.22	0.09	184.74	2.16	185.26	9.34
183.71	0.00	184.23	0.09	184.75	2.27	185.27	9.50
183.72	0.00	184.24	0.09	184.76	2.37	185.28	9.67
183.73	0.00	184.25	0.09	184.77	2.48	185.29	9.84
183.74	0.00	184.26	0.10	184.78	2.59	185.30	10.01
183.75	0.00	184.27	0.10	184.79	2.70	185.31	10.18
183.76	0.00	184.28	0.10	184.80	2.81	185.32	10.35
183.77	0.00	184.29	0.10	184.81	2.93	185.33	10.52
183.78	0.00	184.30	0.10	184.82	3.04	185.34	10.69
183.79	0.00	184.31	0.10	184.83	3.16	185.35	10.86
183.80	0.00	184.32	0.10	184.84	3.28	185.36	11.03
183.81	0.00	184.33	0.10	184.85	3.40	185.37	11.21

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.38	11.38	185.90	20.30	186.42	91.01	186.94	198.59
185.39	11.56	185.91	21.03	186.43	92.75	186.95	200.94
185.40	11.74	185.92	21.78	186.44	94.51	186.96	203.32
185.41	11.91	185.93	22.55	186.45	96.28	186.97	205.72
185.42	12.09	185.94	23.34	186.46	98.06	186.98	208.13
185.43	12.12	185.95	24.15	186.47	99.86	186.99	210.55
185.44	12.15	185.96	25.03	186.48	101.66	187.00	212.98
185.45	12.18	185.97	25.92	186.49	103.49	187.01	215.43
185.46	12.21	185.98	26.85	186.50	105.32	187.02	217.88
185.47	12.24	185.99	27.80	186.51	107.16	187.03	220.34
185.48	12.27	186.00	28.77	186.52	109.02	187.04	222.82
185.49	12.30	186.01	29.77	186.53	110.89	187.05	225.30
185.50	12.33	186.02	30.80	186.54	112.77	187.06	227.79
185.51	12.36	186.03	31.85	186.55	114.67	187.07	230.30
185.52	12.39	186.04	32.92	186.56	116.61	187.08	232.82
185.53	12.42	186.05	34.02	186.57	118.57	187.09	235.34
185.54	12.45	186.06	35.14	186.58	120.54	187.10	237.88
185.55	12.48	186.07	36.29	186.59	122.52	187.11	240.42
185.56	12.51	186.08	37.46	186.60	124.52	187.12	242.98
185.57	12.53	186.09	38.66	186.61	126.53	187.13	245.55
185.58	12.56	186.10	39.88	186.62	128.55	187.14	248.13
185.59	12.59	186.11	41.12	186.63	130.58	187.15	250.71
185.60	12.62	186.12	42.39	186.64	132.63	187.16	253.36
185.61	12.65	186.13	43.68	186.65	134.69	187.17	256.01
185.62	12.68	186.14	45.00	186.66	136.77	187.18	258.67
185.63	12.71	186.15	46.34	186.67	138.85	187.19	261.35
185.64	12.73	186.16	47.73	186.68	140.95	187.20	264.04
185.65	12.76	186.17	49.15	186.69	143.07	187.21	266.74
185.66	12.79	186.18	50.59	186.70	145.19	187.22	269.45
185.67	12.82	186.19	52.06	186.71	147.33	187.23	272.17
185.68	12.85	186.20	53.56	186.72	149.48	187.24	274.90
185.69	12.88	186.21	55.08	186.73	151.64	187.25	277.64
185.70	12.90	186.22	56.63	186.74	153.82	187.26	280.39
185.71	12.93	186.23	58.20	186.75	156.01	187.27	283.16
185.72	12.96	186.24	59.80	186.76	158.15	187.28	285.93
185.73	12.99	186.25	61.43	186.77	160.31	187.29	288.72
185.74	13.02	186.26	63.08	186.78	162.48	187.30	291.52
185.75	13.04	186.27	64.76	186.79	164.66	187.31	294.32
185.76	13.19	186.28	66.47	186.80	166.85	187.32	297.14
185.77	13.43	186.29	68.20	186.81	169.05	187.33	299.97
185.78	13.74	186.30	69.96	186.82	171.26	187.34	302.81
185.79	14.09	186.31	71.75	186.83	173.48	187.35	305.67
185.80	14.49	186.32	73.56	186.84	175.71	187.36	308.53
185.81	14.93	186.33	75.40	186.85	177.95	187.37	311.40
185.82	15.41	186.34	77.27	186.86	180.21	187.38	314.29
185.83	15.92	186.35	79.16	186.87	182.47	187.39	317.18
185.84	16.46	186.36	80.82	186.88	184.74	187.40	320.09
185.85	17.04	186.37	82.48	186.89	187.03	187.41	323.00
185.86	17.64	186.38	84.16	186.90	189.32	187.42	325.93
185.87	18.26	186.39	85.85	186.91	191.62	187.43	328.87
185.88	18.92	186.40	87.56	186.92	193.94	187.44	331.82
185.89	19.60	186.41	89.27	186.93	196.26	187.45	334.78

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)
187.46	337.75
187.47	340.73
187.48	343.72
187.49	346.72
187.50	349.74
187.51	352.76
187.52	355.79
187.53	358.84
187.54	361.90
187.55	364.96
187.56	368.04
187.57	371.13
187.58	374.22
187.59	377.33
187.60	380.45
187.61	383.58
187.62	386.72
187.63	389.87
187.64	393.03
187.65	396.20
187.66	399.38
187.67	402.58
187.68	405.78
187.69	408.99
187.70	412.22
187.71	415.45
187.72	418.69
187.73	421.95
187.74	425.21
187.75	428.49
187.76	431.84
187.77	435.20
187.78	438.57
187.79	441.95
187.80	445.35
187.81	448.75
187.82	452.17
187.83	455.60
187.84	459.04
187.85	462.49
187.86	465.95
187.87	469.42
187.88	472.91
187.89	476.40
187.90	479.91
187.91	483.43
187.92	486.96
187.93	490.50
187.94	494.05
187.95	497.61
187.96	501.19
187.97	504.78
187.98	508.37
187.99	511.98
188.00	**515.60**

Stage-Area-Storage for Pond B-46B: Basin #46B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.30	0	0
183.31	158	1
183.32	316	3
183.33	474	7
183.34	632	13
183.35	790	20
183.36	948	28
183.37	1,106	39
183.38	1,264	51
183.39	1,422	64
183.40	1,580	79
183.41	1,738	96
183.42	1,896	114
183.43	2,054	133
183.44	2,212	155
183.45	2,370	178
183.46	2,528	202
183.47	2,686	228
183.48	2,844	256
183.49	3,002	285
183.50	3,160	316
183.51	3,318	348
183.52	3,476	382
183.53	3,634	418
183.54	3,792	455
183.55	3,950	494
183.56	4,108	534
183.57	4,266	576
183.58	4,424	619
183.59	4,582	664
183.60	4,740	711
183.61	4,898	759
183.62	5,056	809
183.63	5,214	860
183.64	5,372	913
183.65	5,530	968
183.66	5,687	1,024
183.67	5,845	1,081
183.68	6,003	1,141
183.69	6,161	1,201
183.70	6,319	1,264
183.71	6,477	1,328
183.72	6,635	1,393
183.73	6,793	1,461
183.74	6,951	1,529
183.75	7,109	1,600
183.76	7,267	1,671
183.77	7,425	1,745
183.78	7,583	1,820
183.79	7,741	1,897
183.80	7,899	1,975
183.81	8,057	2,055
183.82	8,215	2,136
183.83	8,373	2,219
183.84	8,531	2,303
183.85	8,689	2,390
183.86	8,847	2,477
183.87	9,005	2,566
183.88	9,163	2,657
183.89	9,321	2,750
183.90	9,479	2,844
183.91	9,637	2,939
183.92	9,795	3,036
183.93	9,953	3,135
183.94	10,111	3,236
183.95	10,269	3,337
183.96	10,427	3,441
183.97	10,585	3,546
183.98	10,743	3,653
183.99	10,901	3,761
184.00	11,059	3,871
184.01	11,072	3,981
184.02	11,086	4,092
184.03	11,099	4,203
184.04	11,113	4,314
184.05	11,126	4,425
184.06	11,140	4,537
184.07	11,153	4,648
184.08	11,166	4,760
184.09	11,180	4,871
184.10	11,193	4,983
184.11	11,207	5,095
184.12	11,220	5,207
184.13	11,234	5,320
184.14	11,247	5,432
184.15	11,260	5,545
184.16	11,274	5,657
184.17	11,287	5,770
184.18	11,301	5,883
184.19	11,314	5,996
184.20	11,328	6,109
184.21	11,341	6,223
184.22	11,354	6,336
184.23	11,368	6,450
184.24	11,381	6,563
184.25	11,395	6,677
184.26	11,408	6,791
184.27	11,422	6,906
184.28	11,435	7,020
184.29	11,448	7,134
184.30	11,462	7,249
184.31	11,475	7,363
184.32	11,489	7,478
184.33	11,502	7,593

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.34	11,516	7,708	184.86	12,214	13,878
184.35	11,529	7,824	184.87	12,227	14,000
184.36	11,542	7,939	184.88	12,241	14,123
184.37	11,556	8,054	184.89	12,254	14,245
184.38	11,569	8,170	184.90	12,268	14,368
184.39	11,583	8,286	184.91	12,281	14,490
184.40	11,596	8,402	184.92	12,295	14,613
184.41	11,610	8,518	184.93	12,308	14,736
184.42	11,623	8,634	184.94	12,321	14,859
184.43	11,636	8,750	184.95	12,335	14,983
184.44	11,650	8,867	184.96	12,348	15,106
184.45	11,663	8,983	184.97	12,362	15,230
184.46	11,677	9,100	184.98	12,375	15,353
184.47	11,690	9,217	184.99	12,389	15,477
184.48	11,704	9,334	185.00	12,402	15,601
184.49	11,717	9,451	185.01	12,416	15,725
184.50	11,731	9,568	185.02	12,430	15,849
184.51	11,744	9,685	185.03	12,444	15,974
184.52	11,757	9,803	185.04	12,458	16,098
184.53	11,771	9,921	185.05	12,472	16,223
184.54	11,784	10,038	185.06	12,486	16,348
184.55	11,798	10,156	185.07	12,500	16,473
184.56	11,811	10,274	185.08	12,514	16,598
184.57	11,825	10,392	185.09	12,528	16,723
184.58	11,838	10,511	185.10	12,542	16,848
184.59	11,851	10,629	185.11	12,556	16,974
184.60	11,865	10,748	185.12	12,570	17,099
184.61	11,878	10,867	185.13	12,584	17,225
184.62	11,892	10,985	185.14	12,598	17,351
184.63	11,905	11,104	185.15	12,612	17,477
184.64	11,919	11,223	185.16	12,626	17,603
184.65	11,932	11,343	185.17	12,640	17,730
184.66	11,945	11,462	185.18	12,654	17,856
184.67	11,959	11,582	185.19	12,668	17,983
184.68	11,972	11,701	185.20	12,682	18,110
184.69	11,986	11,821	185.21	12,696	18,236
184.70	11,999	11,941	185.22	12,710	18,363
184.71	12,013	12,061	185.23	12,724	18,491
184.72	12,026	12,181	185.24	12,738	18,618
184.73	12,039	12,302	185.25	12,752	18,745
184.74	12,053	12,422	185.26	12,766	18,873
184.75	12,066	12,543	185.27	12,780	19,001
184.76	12,080	12,663	185.28	12,794	19,129
184.77	12,093	12,784	185.29	12,808	19,257
184.78	12,107	12,905	185.30	12,822	19,385
184.79	12,120	13,026	185.31	12,836	19,513
184.80	12,133	13,148	185.32	12,850	19,642
184.81	12,147	13,269	185.33	12,864	19,770
184.82	12,160	13,391	185.34	12,878	19,899
184.83	12,174	13,512	185.35	12,892	20,028
184.84	12,187	13,634	185.36	12,906	20,157
184.85	12,201	13,756	185.37	12,920	20,286

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.38	12,934	20,415	185.90	13,663	27,330
185.39	12,948	20,544	185.91	13,677	27,467
185.40	12,962	20,674	185.92	13,691	27,604
185.41	12,976	20,804	185.93	13,705	27,741
185.42	12,990	20,934	185.94	13,719	27,878
185.43	13,004	21,064	185.95	13,733	28,015
185.44	13,018	21,194	185.96	13,747	28,153
185.45	13,032	21,324	185.97	13,761	28,290
185.46	13,046	21,454	185.98	13,775	28,428
185.47	13,060	21,585	185.99	13,789	28,566
185.48	13,074	21,716	186.00	13,803	28,704
185.49	13,088	21,846	186.01	13,818	28,842
185.50	13,103	21,977	186.02	13,832	28,980
185.51	13,117	22,108	186.03	13,847	29,118
185.52	13,131	22,240	186.04	13,861	29,257
185.53	13,145	22,371	186.05	13,876	29,396
185.54	13,159	22,502	186.06	13,890	29,534
185.55	13,173	22,634	186.07	13,905	29,673
185.56	13,187	22,766	186.08	13,919	29,813
185.57	13,201	22,898	186.09	13,934	29,952
185.58	13,215	23,030	186.10	13,949	30,091
185.59	13,229	23,162	186.11	13,963	30,231
185.60	13,243	23,295	186.12	13,978	30,370
185.61	13,257	23,427	186.13	13,992	30,510
185.62	13,271	23,560	186.14	14,007	30,650
185.63	13,285	23,692	186.15	14,021	30,790
185.64	13,299	23,825	186.16	14,036	30,931
185.65	13,313	23,958	186.17	14,051	31,071
185.66	13,327	24,092	186.18	14,065	31,212
185.67	13,341	24,225	186.19	14,080	31,353
185.68	13,355	24,358	186.20	14,094	31,493
185.69	13,369	24,492	186.21	14,109	31,634
185.70	13,383	24,626	186.22	14,123	31,776
185.71	13,397	24,760	186.23	14,138	31,917
185.72	13,411	24,894	186.24	14,152	32,058
185.73	13,425	25,028	186.25	14,167	32,200
185.74	13,439	25,162	186.26	14,182	32,342
185.75	13,453	25,297	186.27	14,196	32,484
185.76	13,467	25,431	186.28	14,211	32,626
185.77	13,481	25,566	186.29	14,225	32,768
185.78	13,495	25,701	186.30	14,240	32,910
185.79	13,509	25,836	186.31	14,254	33,053
185.80	13,523	25,971	186.32	14,269	33,195
185.81	13,537	26,106	186.33	14,283	33,338
185.82	13,551	26,242	186.34	14,298	33,481
185.83	13,565	26,377	186.35	14,313	33,624
185.84	13,579	26,513	186.36	14,327	33,767
185.85	13,593	26,649	186.37	14,342	33,910
185.86	13,607	26,785	186.38	14,356	34,054
185.87	13,621	26,921	186.39	14,371	34,198
185.88	13,635	27,057	186.40	14,385	34,341
185.89	13,649	27,194	186.41	14,400	34,485

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.42	14,415	34,629
186.43	14,429	34,774
186.44	14,444	34,918
186.45	14,458	35,062
186.46	14,473	35,207
186.47	14,487	35,352
186.48	14,502	35,497
186.49	14,516	35,642
186.50	14,531	35,787
186.51	14,546	35,933
186.52	14,560	36,078
186.53	14,575	36,224
186.54	14,589	36,370
186.55	14,604	36,516
186.56	14,618	36,662
186.57	14,633	36,808
186.58	14,647	36,954
186.59	14,662	37,101
186.60	14,677	37,248
186.61	14,691	37,394
186.62	14,706	37,541
186.63	14,720	37,688
186.64	14,735	37,836
186.65	14,749	37,983
186.66	14,764	38,131
186.67	14,779	38,278
186.68	14,793	38,426
186.69	14,808	38,574
186.70	14,822	38,722
186.71	14,837	38,871
186.72	14,851	39,019
186.73	14,866	39,168
186.74	14,880	39,317
186.75	14,895	39,465
186.76	14,910	39,614
186.77	14,924	39,764
186.78	14,939	39,913
186.79	14,953	40,062
186.80	14,968	40,212
186.81	14,982	40,362
186.82	14,997	40,512
186.83	15,011	40,662
186.84	15,026	40,812
186.85	15,041	40,962
186.86	15,055	41,113
186.87	15,070	41,263
186.88	15,084	41,414
186.89	15,099	41,565
186.90	15,113	41,716
186.91	15,128	41,867
186.92	15,143	42,019
186.93	15,157	42,170
186.94	15,172	42,322
186.95	15,186	42,474
186.96	15,201	42,625
186.97	15,215	42,778
186.98	15,230	42,930
186.99	15,244	43,082
187.00	15,259	43,235
187.01	15,274	43,387
187.02	15,289	43,540
187.03	15,304	43,693
187.04	15,320	43,846
187.05	15,335	43,999
187.06	15,350	44,153
187.07	15,365	44,306
187.08	15,380	44,460
187.09	15,395	44,614
187.10	15,410	44,768
187.11	15,425	44,922
187.12	15,441	45,077
187.13	15,456	45,231
187.14	15,471	45,386
187.15	15,486	45,541
187.16	15,501	45,695
187.17	15,516	45,851
187.18	15,531	46,006
187.19	15,546	46,161
187.20	15,562	46,317
187.21	15,577	46,472
187.22	15,592	46,628
187.23	15,607	46,784
187.24	15,622	46,940
187.25	15,637	47,097
187.26	15,652	47,253
187.27	15,668	47,410
187.28	15,683	47,566
187.29	15,698	47,723
187.30	15,713	47,880
187.31	15,728	48,038
187.32	15,743	48,195
187.33	15,758	48,353
187.34	15,773	48,510
187.35	15,789	48,668
187.36	15,804	48,826
187.37	15,819	48,984
187.38	15,834	49,142
187.39	15,849	49,301
187.40	15,864	49,459
187.41	15,879	49,618
187.42	15,894	49,777
187.43	15,910	49,936
187.44	15,925	50,095
187.45	15,940	50,254

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.46	15,955	50,414
187.47	15,970	50,573
187.48	15,985	50,733
187.49	16,000	50,893
187.50	16,016	51,053
187.51	16,031	51,214
187.52	16,046	51,374
187.53	16,061	51,534
187.54	16,076	51,695
187.55	16,091	51,856
187.56	16,106	52,017
187.57	16,121	52,178
187.58	16,137	52,339
187.59	16,152	52,501
187.60	16,167	52,662
187.61	16,182	52,824
187.62	16,197	52,986
187.63	16,212	53,148
187.64	16,227	53,310
187.65	16,242	53,473
187.66	16,258	53,635
187.67	16,273	53,798
187.68	16,288	53,961
187.69	16,303	54,124
187.70	16,318	54,287
187.71	16,333	54,450
187.72	16,348	54,613
187.73	16,363	54,777
187.74	16,379	54,941
187.75	16,394	55,104
187.76	16,409	55,268
187.77	16,424	55,433
187.78	16,439	55,597
187.79	16,454	55,761
187.80	16,469	55,926
187.81	16,485	56,091
187.82	16,500	56,256
187.83	16,515	56,421
187.84	16,530	56,586
187.85	16,545	56,751
187.86	16,560	56,917
187.87	16,575	57,083
187.88	16,590	57,248
187.89	16,606	57,414
187.90	16,621	57,581
187.91	16,636	57,747
187.92	16,651	57,913
187.93	16,666	58,080
187.94	16,681	58,247
187.95	16,696	58,413
187.96	16,711	58,580
187.97	16,727	58,748
187.98	16,742	58,915
187.99	16,757	59,083
188.00	**16,772**	**59,250**

Summary for Pond B-47: Basin #47

Inflow Area = 2.436 ac, 30.62% Impervious, Inflow Depth = 6.34" for Current 100 yr event
Inflow = 15.96 cfs @ 12.17 hrs, Volume= 1.288 af
Outflow = 4.12 cfs @ 12.54 hrs, Volume= 0.986 af, Atten= 74%, Lag= 22.4 min
Primary = 4.12 cfs @ 12.54 hrs, Volume= 0.986 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 189.98' @ 12.54 hrs Surf.Area= 23,208 sf Storage= 29,216 cf

Plug-Flow detention time= 354.9 min calculated for 0.984 af (76% of inflow)
Center-of-Mass det. time= 268.3 min (1,058.0 - 789.7)

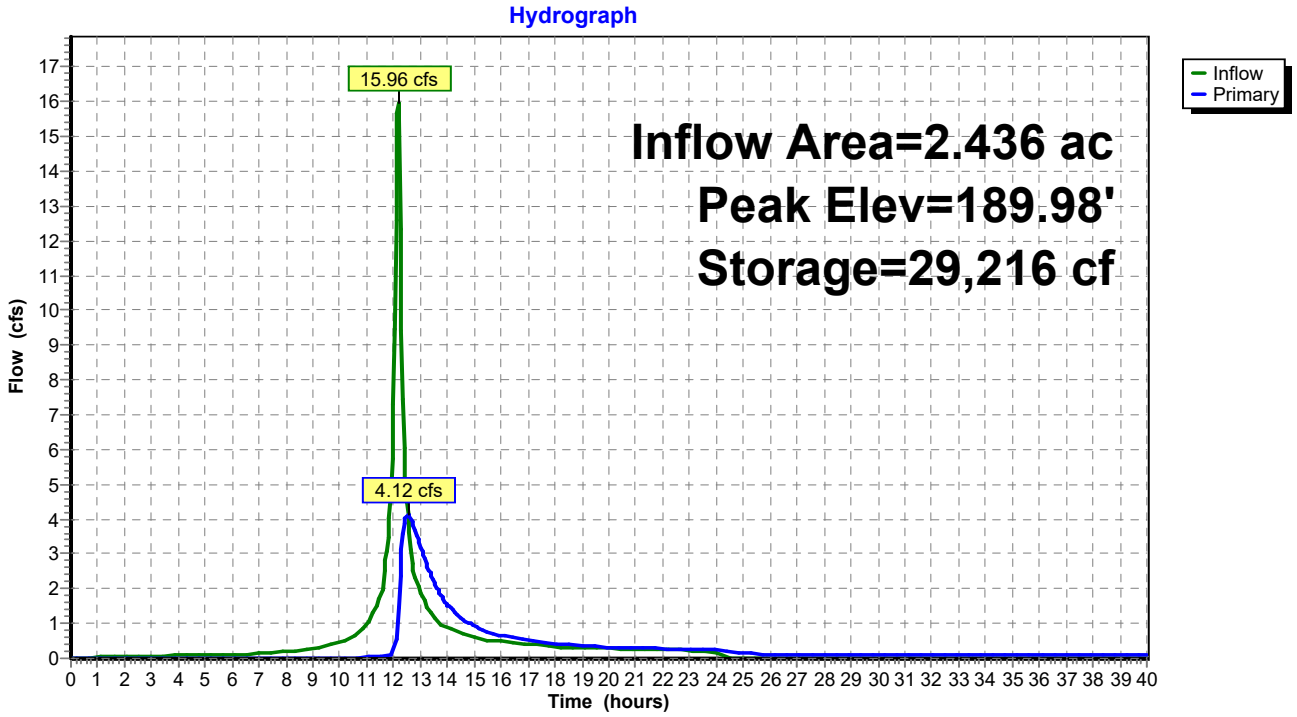
Volume	Invert	Avail.Storage	Storage Description
#1	188.30'	80,305 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
188.30	0	0	0
189.00	21,318	7,461	7,461
190.00	23,252	22,285	29,746
191.00	25,242	24,247	53,993
192.00	27,382	26,312	80,305

Device	Routing	Invert	Outlet Devices
#1	Primary	187.65'	**18.0" Round Culvert** L= 62.0' Ke= 0.500 Inlet / Outlet Invert= 187.65' / 184.00' S= 0.0589 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.84'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.52'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.51'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.12 cfs @ 12.54 hrs HW=189.98' (Free Discharge)
- **1=Culvert** (Passes 4.12 cfs of 10.69 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 4.89 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.95 cfs @ 2.21 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-47: Basin #47



Stage-Discharge for Pond B-47: Basin #47

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.30	0.00	188.82	0.00	189.34	0.10	189.86	2.71
188.31	0.00	188.83	0.00	189.35	0.10	189.87	2.82
188.32	0.00	188.84	0.00	189.36	0.11	189.88	2.93
188.33	0.00	188.85	0.00	189.37	0.11	189.89	3.05
188.34	0.00	188.86	0.00	189.38	0.11	189.90	3.17
188.35	0.00	188.87	0.00	189.39	0.11	189.91	3.28
188.36	0.00	188.88	0.00	189.40	0.11	189.92	3.40
188.37	0.00	188.89	0.00	189.41	0.11	189.93	3.53
188.38	0.00	188.90	0.01	189.42	0.11	189.94	3.65
188.39	0.00	188.91	0.01	189.43	0.11	189.95	3.77
188.40	0.00	188.92	0.01	189.44	0.12	189.96	3.90
188.41	0.00	188.93	0.01	189.45	0.12	189.97	4.03
188.42	0.00	188.94	0.02	189.46	0.12	189.98	4.15
188.43	0.00	188.95	0.02	189.47	0.12	189.99	4.28
188.44	0.00	188.96	0.02	189.48	0.12	190.00	4.41
188.45	0.00	188.97	0.03	189.49	0.12	190.01	4.55
188.46	0.00	188.98	0.03	189.50	0.12	190.02	4.68
188.47	0.00	188.99	0.03	189.51	0.12	190.03	4.81
188.48	0.00	189.00	0.04	189.52	0.12	190.04	4.95
188.49	0.00	189.01	0.04	189.53	0.14	190.05	5.09
188.50	0.00	189.02	0.05	189.54	0.16	190.06	5.22
188.51	0.00	189.03	0.05	189.55	0.20	190.07	5.36
188.52	0.00	189.04	0.05	189.56	0.23	190.08	5.50
188.53	0.00	189.05	0.05	189.57	0.28	190.09	5.64
188.54	0.00	189.06	0.06	189.58	0.32	190.10	5.79
188.55	0.00	189.07	0.06	189.59	0.37	190.11	5.93
188.56	0.00	189.08	0.06	189.60	0.43	190.12	6.07
188.57	0.00	189.09	0.06	189.61	0.49	190.13	6.22
188.58	0.00	189.10	0.06	189.62	0.55	190.14	6.37
188.59	0.00	189.11	0.07	189.63	0.61	190.15	6.51
188.60	0.00	189.12	0.07	189.64	0.68	190.16	6.66
188.61	0.00	189.13	0.07	189.65	0.75	190.17	6.81
188.62	0.00	189.14	0.07	189.66	0.82	190.18	6.96
188.63	0.00	189.15	0.07	189.67	0.89	190.19	7.12
188.64	0.00	189.16	0.08	189.68	0.97	190.20	7.27
188.65	0.00	189.17	0.08	189.69	1.05	190.21	7.42
188.66	0.00	189.18	0.08	189.70	1.13	190.22	7.58
188.67	0.00	189.19	0.08	189.71	1.22	190.23	7.73
188.68	0.00	189.20	0.08	189.72	1.30	190.24	7.89
188.69	0.00	189.21	0.08	189.73	1.39	190.25	8.05
188.70	0.00	189.22	0.09	189.74	1.48	190.26	8.21
188.71	0.00	189.23	0.09	189.75	1.57	190.27	8.37
188.72	0.00	189.24	0.09	189.76	1.67	190.28	8.53
188.73	0.00	189.25	0.09	189.77	1.76	190.29	8.69
188.74	0.00	189.26	0.09	189.78	1.86	190.30	8.85
188.75	0.00	189.27	0.09	189.79	1.96	190.31	9.01
188.76	0.00	189.28	0.10	189.80	2.06	190.32	9.18
188.77	0.00	189.29	0.10	189.81	2.17	190.33	9.34
188.78	0.00	189.30	0.10	189.82	2.27	190.34	9.51
188.79	0.00	189.31	0.10	189.83	2.38	190.35	9.67
188.80	0.00	189.32	0.10	189.84	2.49	190.36	9.84
188.81	0.00	189.33	0.10	189.85	2.59	190.37	10.01

Stage-Discharge for Pond B-47: Basin #47 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.38	10.18	190.90	44.37	191.42	136.19	191.94	258.14
190.39	10.35	190.91	45.71	191.43	138.28	191.95	260.82
190.40	10.52	190.92	47.10	191.44	140.38	191.96	263.51
190.41	10.69	190.93	48.52	191.45	142.49	191.97	266.20
190.42	10.86	190.94	49.97	191.46	144.62	191.98	268.91
190.43	11.04	190.95	51.44	191.47	146.76	191.99	271.64
190.44	11.21	190.96	52.93	191.48	148.91	192.00	**274.37**
190.45	11.39	190.97	54.46	191.49	151.07		
190.46	11.56	190.98	56.01	191.50	153.25		
190.47	11.74	190.99	57.58	191.51	155.44		
190.48	11.92	191.00	59.18	191.52	157.59		
190.49	12.09	191.01	60.81	191.53	159.74		
190.50	12.27	191.02	62.47	191.54	161.91		
190.51	12.36	191.03	64.15	191.55	164.09		
190.52	12.51	191.04	65.85	191.56	166.28		
190.53	12.75	191.05	67.59	191.57	168.49		
190.54	13.06	191.06	69.35	191.58	170.70		
190.55	13.41	191.07	71.14	191.59	172.92		
190.56	13.82	191.08	72.95	191.60	175.15		
190.57	14.26	191.09	74.79	191.61	177.39		
190.58	14.74	191.10	76.66	191.62	179.65		
190.59	15.25	191.11	78.56	191.63	181.91		
190.60	15.79	191.12	80.21	191.64	184.18		
190.61	16.37	191.13	81.88	191.65	186.47		
190.62	16.97	191.14	83.55	191.66	188.76		
190.63	17.60	191.15	85.25	191.67	191.07		
190.64	18.25	191.16	86.95	191.68	193.38		
190.65	18.93	191.17	88.67	191.69	195.71		
190.66	19.64	191.18	90.41	191.70	198.04		
190.67	20.37	191.19	92.15	191.71	200.38		
190.68	21.12	191.20	93.91	191.72	202.77		
190.69	21.89	191.21	95.68	191.73	205.17		
190.70	22.68	191.22	97.47	191.74	207.58		
190.71	23.50	191.23	99.26	191.75	210.01		
190.72	24.37	191.24	101.07	191.76	212.44		
190.73	25.27	191.25	102.89	191.77	214.88		
190.74	26.20	191.26	104.73	191.78	217.33		
190.75	27.15	191.27	106.57	191.79	219.80		
190.76	28.12	191.28	108.43	191.80	222.27		
190.77	29.13	191.29	110.30	191.81	224.76		
190.78	30.15	191.30	112.18	191.82	227.25		
190.79	31.20	191.31	114.08	191.83	229.76		
190.80	32.28	191.32	116.02	191.84	232.27		
190.81	33.38	191.33	117.98	191.85	234.80		
190.82	34.50	191.34	119.95	191.86	237.34		
190.83	35.65	191.35	121.94	191.87	239.88		
190.84	36.82	191.36	123.93	191.88	242.44		
190.85	38.02	191.37	125.94	191.89	245.01		
190.86	39.24	191.38	127.97	191.90	247.59		
190.87	40.49	191.39	130.00	191.91	250.18		
190.88	41.76	191.40	132.05	191.92	252.82		
190.89	43.05	191.41	134.12	191.93	255.48		

Stage-Area-Storage for Pond B-47: Basin #47

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.30	0	0	188.82	15,836	4,117
188.31	305	2	188.83	16,141	4,277
188.32	609	6	188.84	16,445	4,440
188.33	914	14	188.85	16,750	4,606
188.34	1,218	24	188.86	17,054	4,775
188.35	1,523	38	188.87	17,359	4,947
188.36	1,827	55	188.88	17,663	5,122
188.37	2,132	75	188.89	17,968	5,301
188.38	2,436	97	188.90	18,273	5,482
188.39	2,741	123	188.91	18,577	5,666
188.40	3,045	152	188.92	18,882	5,853
188.41	3,350	184	188.93	19,186	6,044
188.42	3,655	219	188.94	19,491	6,237
188.43	3,959	257	188.95	19,795	6,433
188.44	4,264	298	188.96	20,100	6,633
188.45	4,568	343	188.97	20,404	6,835
188.46	4,873	390	188.98	20,709	7,041
188.47	5,177	440	188.99	21,013	7,250
188.48	5,482	493	189.00	21,318	7,461
188.49	5,786	550	189.01	21,337	7,675
188.50	6,091	609	189.02	21,357	7,888
188.51	6,395	672	189.03	21,376	8,102
188.52	6,700	737	189.04	21,395	8,316
188.53	7,004	806	189.05	21,415	8,530
188.54	7,309	877	189.06	21,434	8,744
188.55	7,614	952	189.07	21,453	8,958
188.56	7,918	1,029	189.08	21,473	9,173
188.57	8,223	1,110	189.09	21,492	9,388
188.58	8,527	1,194	189.10	21,511	9,603
188.59	8,832	1,281	189.11	21,531	9,818
188.60	9,136	1,370	189.12	21,550	10,033
188.61	9,441	1,463	189.13	21,569	10,249
188.62	9,745	1,559	189.14	21,589	10,465
188.63	10,050	1,658	189.15	21,608	10,681
188.64	10,354	1,760	189.16	21,627	10,897
188.65	10,659	1,865	189.17	21,647	11,113
188.66	10,964	1,973	189.18	21,666	11,330
188.67	11,268	2,085	189.19	21,685	11,547
188.68	11,573	2,199	189.20	21,705	11,764
188.69	11,877	2,316	189.21	21,724	11,981
188.70	12,182	2,436	189.22	21,743	12,198
188.71	12,486	2,560	189.23	21,763	12,416
188.72	12,791	2,686	189.24	21,782	12,633
188.73	13,095	2,815	189.25	21,802	12,851
188.74	13,400	2,948	189.26	21,821	13,069
188.75	13,704	3,083	189.27	21,840	13,288
188.76	14,009	3,222	189.28	21,860	13,506
188.77	14,314	3,364	189.29	21,879	13,725
188.78	14,618	3,508	189.30	21,898	13,944
188.79	14,923	3,656	189.31	21,918	14,163
188.80	15,227	3,807	189.32	21,937	14,382
188.81	15,532	3,961	189.33	21,956	14,602

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.34	21,976	14,821	189.86	22,981	26,510
189.35	21,995	15,041	189.87	23,001	26,740
189.36	22,014	15,261	189.88	23,020	26,970
189.37	22,034	15,481	189.89	23,039	27,200
189.38	22,053	15,702	189.90	23,059	27,431
189.39	22,072	15,922	189.91	23,078	27,661
189.40	22,092	16,143	189.92	23,097	27,892
189.41	22,111	16,364	189.93	23,117	28,123
189.42	22,130	16,585	189.94	23,136	28,355
189.43	22,150	16,807	189.95	23,155	28,586
189.44	22,169	17,028	189.96	23,175	28,818
189.45	22,188	17,250	189.97	23,194	29,050
189.46	22,208	17,472	189.98	23,213	29,282
189.47	22,227	17,694	189.99	23,233	29,514
189.48	22,246	17,917	190.00	23,252	29,746
189.49	22,266	18,139	190.01	23,272	29,979
189.50	22,285	18,362	190.02	23,292	30,212
189.51	22,304	18,585	190.03	23,312	30,445
189.52	22,324	18,808	190.04	23,332	30,678
189.53	22,343	19,031	190.05	23,352	30,911
189.54	22,362	19,255	190.06	23,371	31,145
189.55	22,382	19,479	190.07	23,391	31,379
189.56	22,401	19,703	190.08	23,411	31,613
189.57	22,420	19,927	190.09	23,431	31,847
189.58	22,440	20,151	190.10	23,451	32,081
189.59	22,459	20,376	190.11	23,471	32,316
189.60	22,478	20,600	190.12	23,491	32,551
189.61	22,498	20,825	190.13	23,511	32,786
189.62	22,517	21,050	190.14	23,531	33,021
189.63	22,536	21,275	190.15	23,551	33,256
189.64	22,556	21,501	190.16	23,570	33,492
189.65	22,575	21,727	190.17	23,590	33,728
189.66	22,594	21,952	190.18	23,610	33,964
189.67	22,614	22,178	190.19	23,630	34,200
189.68	22,633	22,405	190.20	23,650	34,437
189.69	22,652	22,631	190.21	23,670	34,673
189.70	22,672	22,858	190.22	23,690	34,910
189.71	22,691	23,085	190.23	23,710	35,147
189.72	22,710	23,312	190.24	23,730	35,384
189.73	22,730	23,539	190.25	23,750	35,621
189.74	22,749	23,766	190.26	23,769	35,859
189.75	22,769	23,994	190.27	23,789	36,097
189.76	22,788	24,222	190.28	23,809	36,335
189.77	22,807	24,449	190.29	23,829	36,573
189.78	22,827	24,678	190.30	23,849	36,811
189.79	22,846	24,906	190.31	23,869	37,050
189.80	22,865	25,135	190.32	23,889	37,289
189.81	22,885	25,363	190.33	23,909	37,528
189.82	22,904	25,592	190.34	23,929	37,767
189.83	22,923	25,821	190.35	23,949	38,006
189.84	22,943	26,051	190.36	23,968	38,246
189.85	22,962	26,280	190.37	23,988	38,486

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.38	24,008	38,726
190.39	24,028	38,966
190.40	24,048	39,206
190.41	24,068	39,447
190.42	24,088	39,688
190.43	24,108	39,929
190.44	24,128	40,170
190.45	24,148	40,411
190.46	24,167	40,653
190.47	24,187	40,895
190.48	24,207	41,137
190.49	24,227	41,379
190.50	24,247	41,621
190.51	24,267	41,864
190.52	24,287	42,106
190.53	24,307	42,349
190.54	24,327	42,593
190.55	24,347	42,836
190.56	24,366	43,079
190.57	24,386	43,323
190.58	24,406	43,567
190.59	24,426	43,811
190.60	24,446	44,056
190.61	24,466	44,300
190.62	24,486	44,545
190.63	24,506	44,790
190.64	24,526	45,035
190.65	24,546	45,280
190.66	24,565	45,526
190.67	24,585	45,772
190.68	24,605	46,018
190.69	24,625	46,264
190.70	24,645	46,510
190.71	24,665	46,757
190.72	24,685	47,004
190.73	24,705	47,250
190.74	24,725	47,498
190.75	24,745	47,745
190.76	24,764	47,993
190.77	24,784	48,240
190.78	24,804	48,488
190.79	24,824	48,736
190.80	24,844	48,985
190.81	24,864	49,233
190.82	24,884	49,482
190.83	24,904	49,731
190.84	24,924	49,980
190.85	24,944	50,229
190.86	24,963	50,479
190.87	24,983	50,729
190.88	25,003	50,979
190.89	25,023	51,229
190.90	25,043	51,479
190.91	25,063	51,730
190.92	25,083	51,980
190.93	25,103	52,231
190.94	25,123	52,482
190.95	25,143	52,734
190.96	25,162	52,985
190.97	25,182	53,237
190.98	25,202	53,489
190.99	25,222	53,741
191.00	25,242	53,993
191.01	25,263	54,246
191.02	25,285	54,499
191.03	25,306	54,752
191.04	25,328	55,005
191.05	25,349	55,258
191.06	25,370	55,512
191.07	25,392	55,765
191.08	25,413	56,020
191.09	25,435	56,274
191.10	25,456	56,528
191.11	25,477	56,783
191.12	25,499	57,038
191.13	25,520	57,293
191.14	25,542	57,548
191.15	25,563	57,804
191.16	25,584	58,059
191.17	25,606	58,315
191.18	25,627	58,572
191.19	25,649	58,828
191.20	25,670	59,085
191.21	25,691	59,341
191.22	25,713	59,598
191.23	25,734	59,856
191.24	25,756	60,113
191.25	25,777	60,371
191.26	25,798	60,629
191.27	25,820	60,887
191.28	25,841	61,145
191.29	25,863	61,403
191.30	25,884	61,662
191.31	25,905	61,921
191.32	25,927	62,180
191.33	25,948	62,440
191.34	25,970	62,699
191.35	25,991	62,959
191.36	26,012	63,219
191.37	26,034	63,479
191.38	26,055	63,740
191.39	26,077	64,000
191.40	26,098	64,261
191.41	26,119	64,522

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

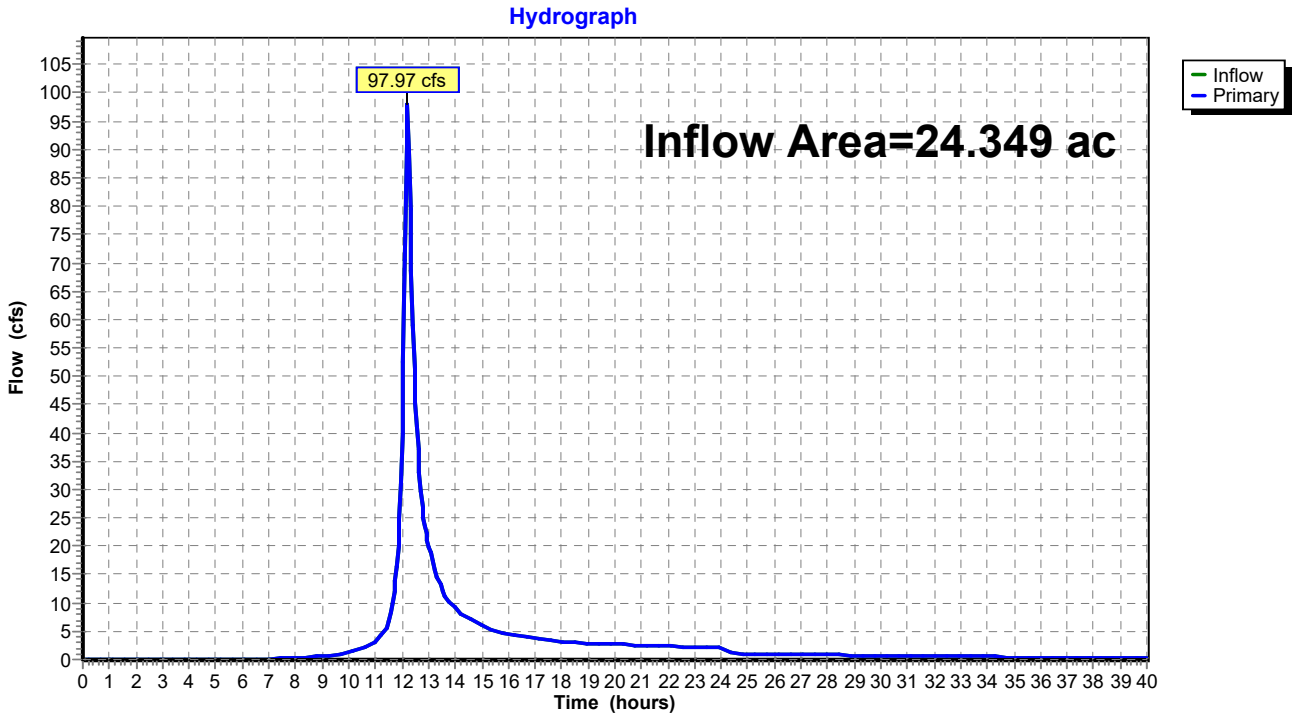
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.42	26,141	64,784
191.43	26,162	65,045
191.44	26,184	65,307
191.45	26,205	65,569
191.46	26,226	65,831
191.47	26,248	66,093
191.48	26,269	66,356
191.49	26,291	66,619
191.50	26,312	66,882
191.51	26,333	67,145
191.52	26,355	67,408
191.53	26,376	67,672
191.54	26,398	67,936
191.55	26,419	68,200
191.56	26,440	68,464
191.57	26,462	68,729
191.58	26,483	68,994
191.59	26,505	69,259
191.60	26,526	69,524
191.61	26,547	69,789
191.62	26,569	70,055
191.63	26,590	70,320
191.64	26,612	70,586
191.65	26,633	70,853
191.66	26,654	71,119
191.67	26,676	71,386
191.68	26,697	71,653
191.69	26,719	71,920
191.70	26,740	72,187
191.71	26,761	72,455
191.72	26,783	72,722
191.73	26,804	72,990
191.74	26,826	73,258
191.75	26,847	73,527
191.76	26,868	73,795
191.77	26,890	74,064
191.78	26,911	74,333
191.79	26,933	74,602
191.80	26,954	74,872
191.81	26,975	75,141
191.82	26,997	75,411
191.83	27,018	75,681
191.84	27,040	75,952
191.85	27,061	76,222
191.86	27,082	76,493
191.87	27,104	76,764
191.88	27,125	77,035
191.89	27,147	77,306
191.90	27,168	77,578
191.91	27,189	77,850
191.92	27,211	78,122
191.93	27,232	78,394
191.94	27,254	78,666
191.95	27,275	78,939
191.96	27,296	79,212
191.97	27,318	79,485
191.98	27,339	79,758
191.99	27,361	80,032
192.00	**27,382**	**80,305**

Summary for Link PDA-4: Proposed Drainage Area #4

Inflow Area = 24.349 ac, 23.20% Impervious, Inflow Depth > 4.98" for Current 100 yr event
Inflow = 97.97 cfs @ 12.20 hrs, Volume= 10.105 af
Primary = 97.97 cfs @ 12.20 hrs, Volume= 10.105 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-4: Proposed Drainage Area #4



Summary for Subcatchment 41I: PDA-41 (impervious)

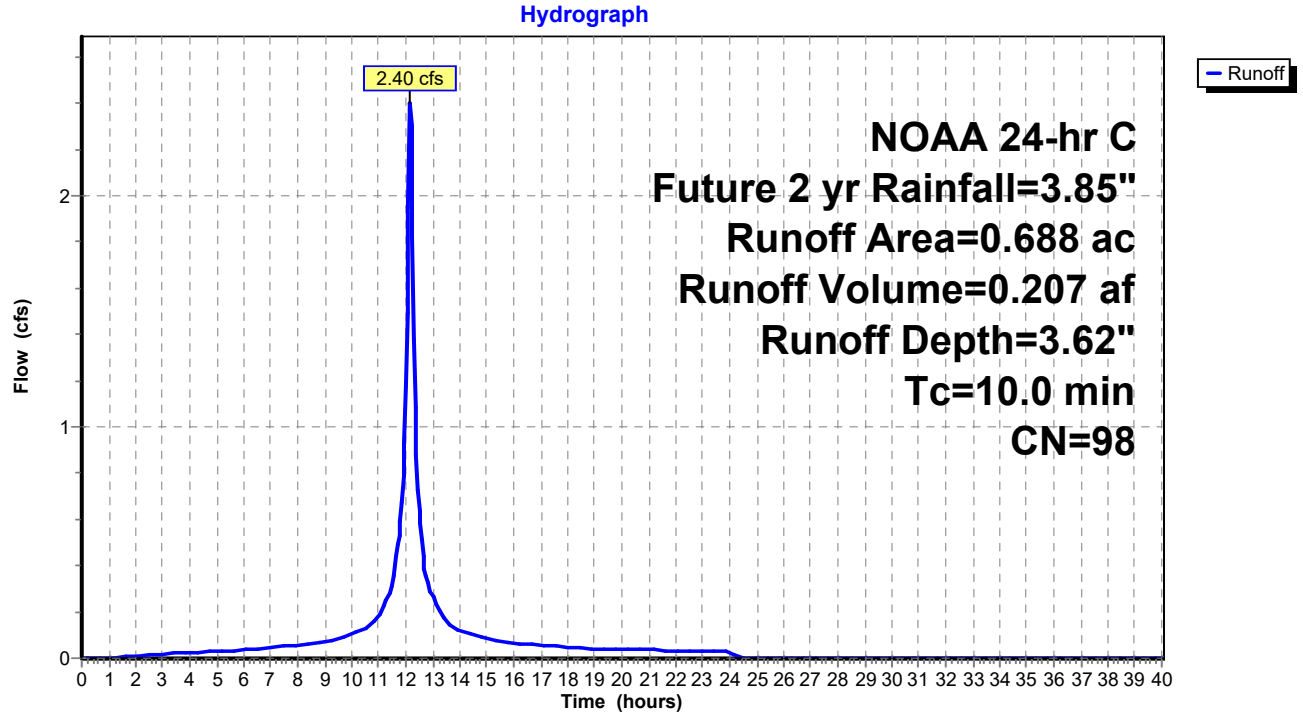
Runoff = 2.40 cfs @ 12.17 hrs, Volume= 0.207 af, Depth= 3.62"
Routed to Pond B-41 : Basin #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.136	98	Pavement, HSG C
*	0.514	98	Roof, HSG C
*	0.038	98	Concrete, HSC C
	0.688	98	Weighted Average
	0.688		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 41I: PDA-41 (impervious)



Summary for Subcatchment 41P: PDA-41 (pervious)

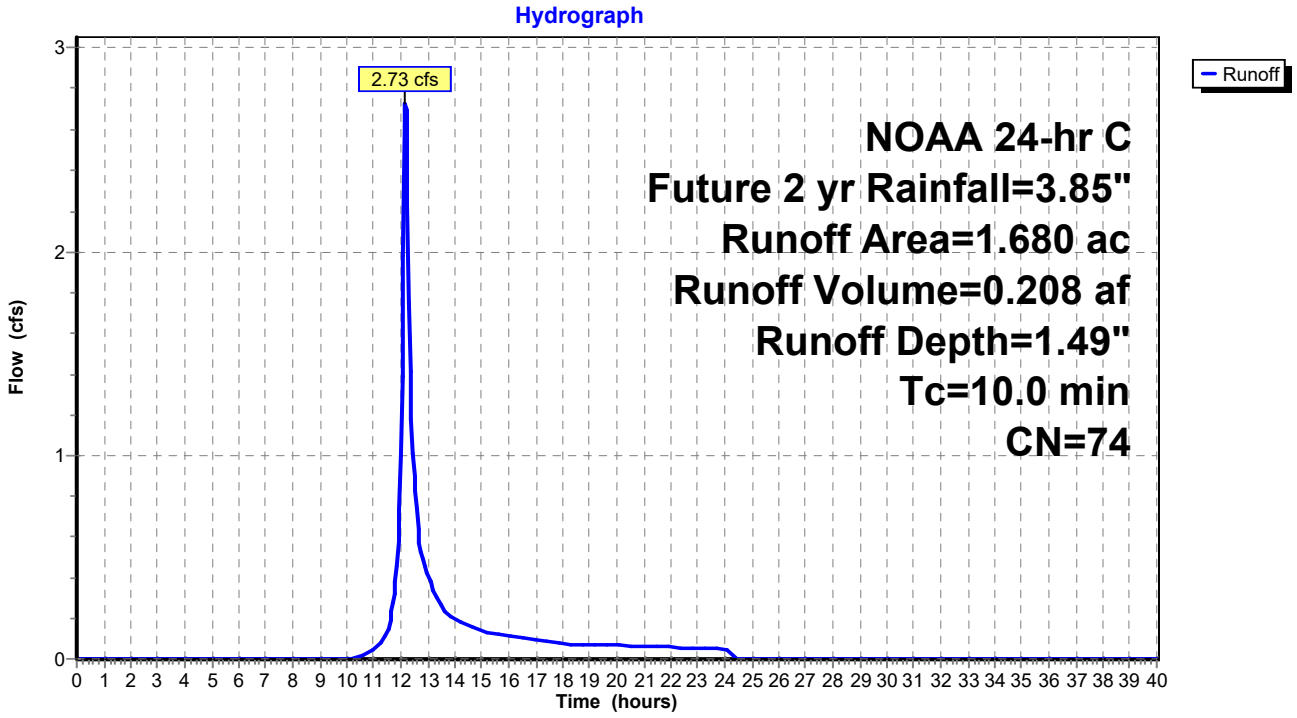
Runoff = 2.73 cfs @ 12.18 hrs, Volume= 0.208 af, Depth= 1.49"
Routed to Pond B-41 : Basin #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.680	74	>75% Grass cover, Good, HSG C
1.680		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 41P: PDA-41 (pervious)



Summary for Subcatchment 42l: PDA-42 (impervious)

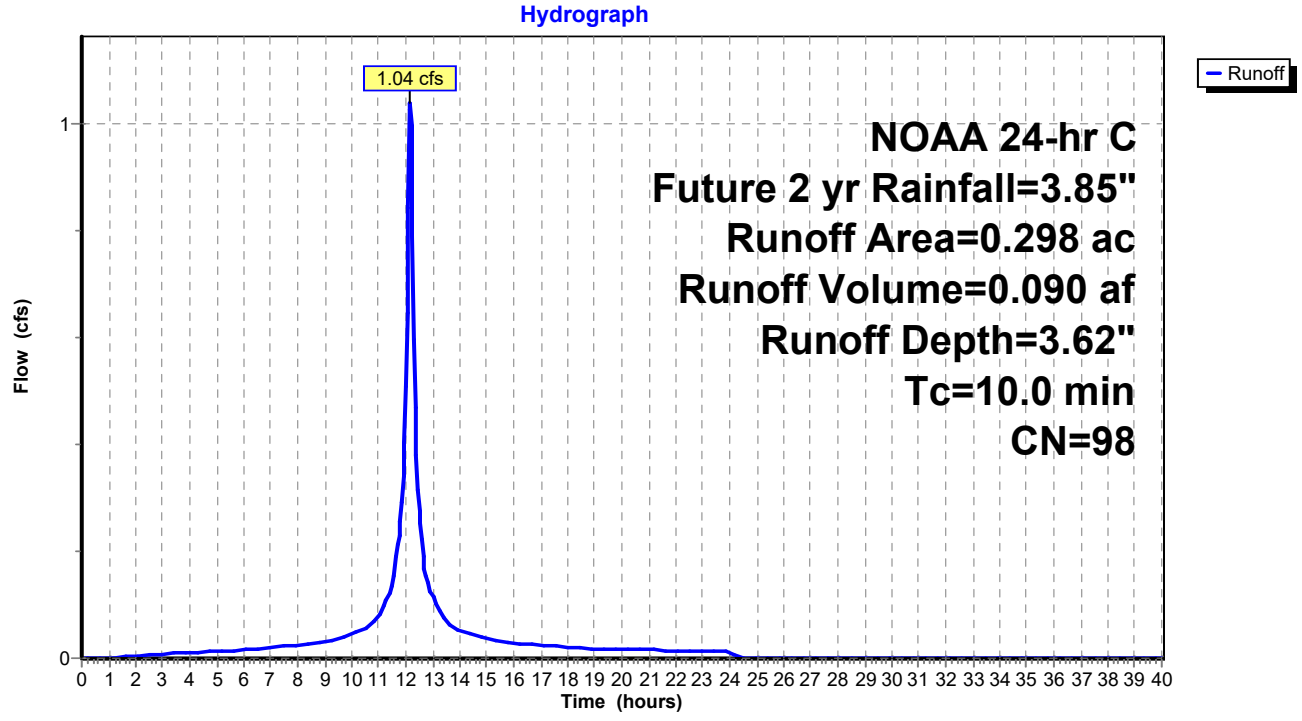
Runoff = 1.04 cfs @ 12.17 hrs, Volume= 0.090 af, Depth= 3.62"
Routed to Pond B-42 : Basin #42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.298	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.298	98	Weighted Average
	0.298		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 42l: PDA-42 (impervious)



Summary for Subcatchment 42P: PDA-42 (pervious)

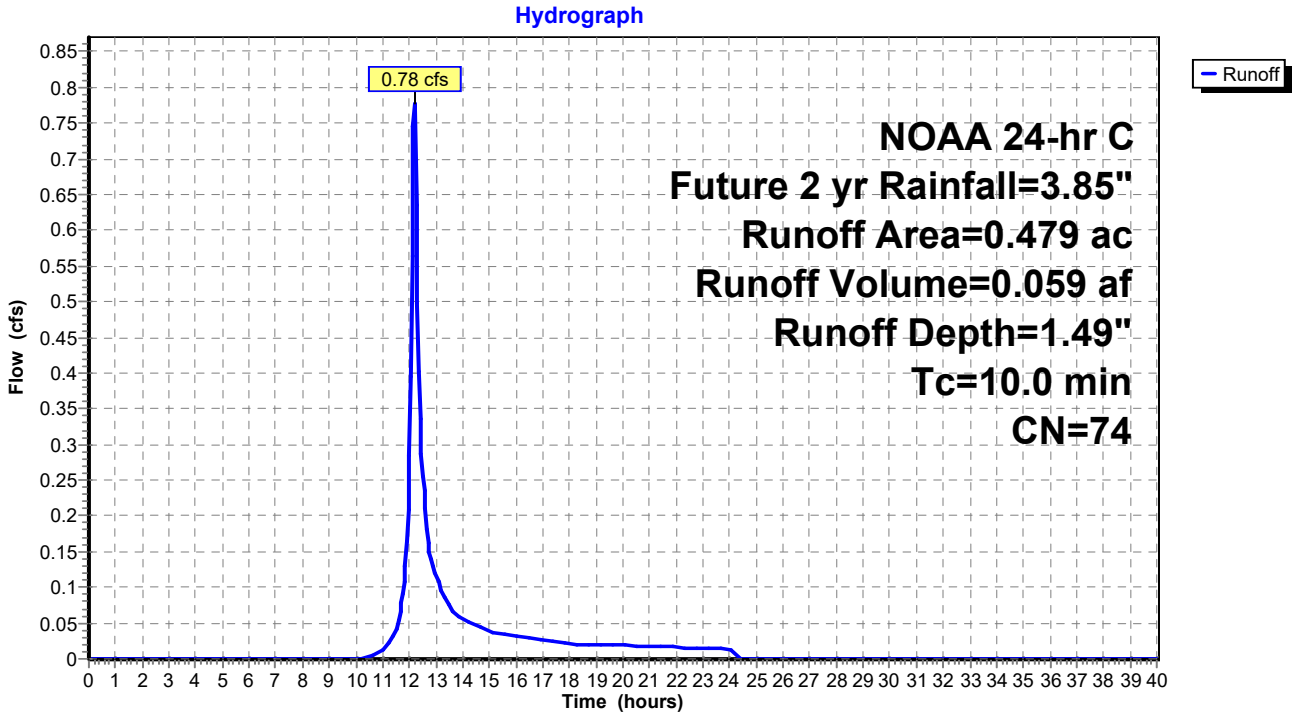
Runoff = 0.78 cfs @ 12.18 hrs, Volume= 0.059 af, Depth= 1.49"
Routed to Pond B-42 : Basin #42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.479	74	>75% Grass cover, Good, HSG C
0.479		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 42P: PDA-42 (pervious)



Summary for Subcatchment 43I: PDA-43 (impervious)

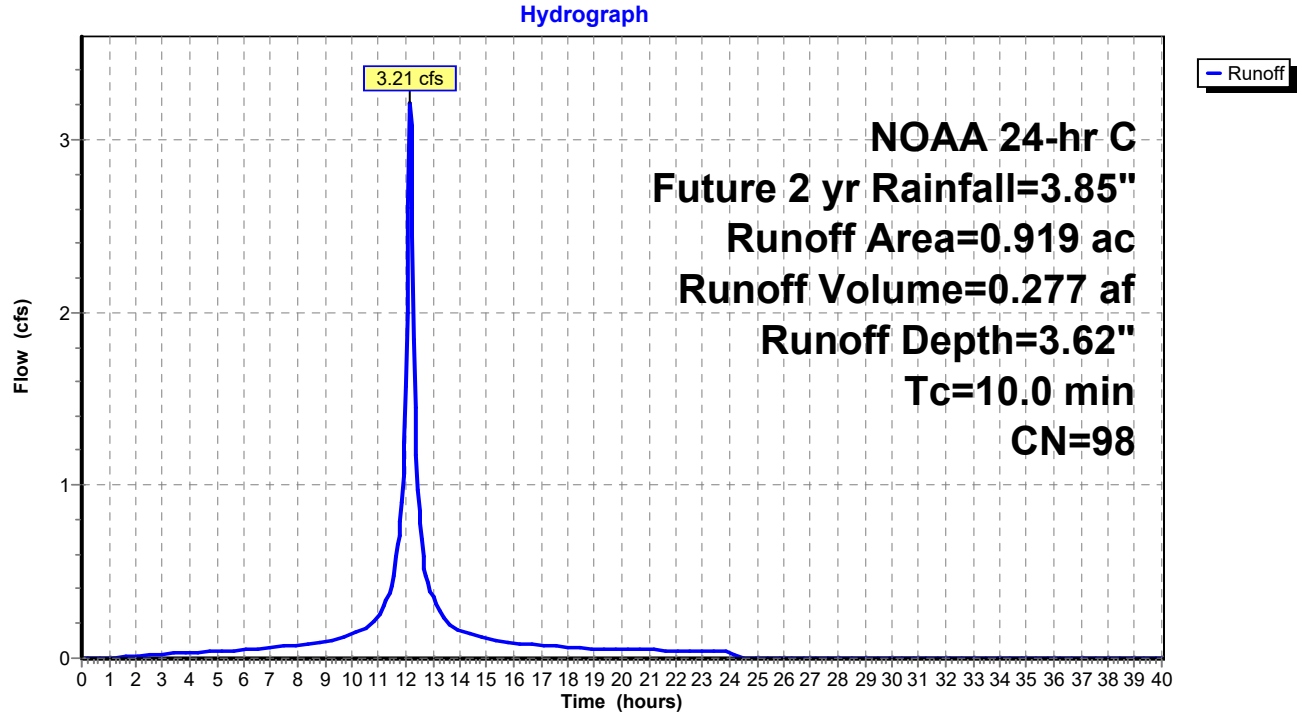
Runoff = 3.21 cfs @ 12.17 hrs, Volume= 0.277 af, Depth= 3.62"
Routed to Pond B-43 : Basin #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.326	98	Pavement, HSG C
*	0.522	98	Roof, HSG C
*	0.071	98	Concrete, HSC C
	0.919	98	Weighted Average
	0.919		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 43I: PDA-43 (impervious)



Summary for Subcatchment 43P: PDA-43 (pervious)

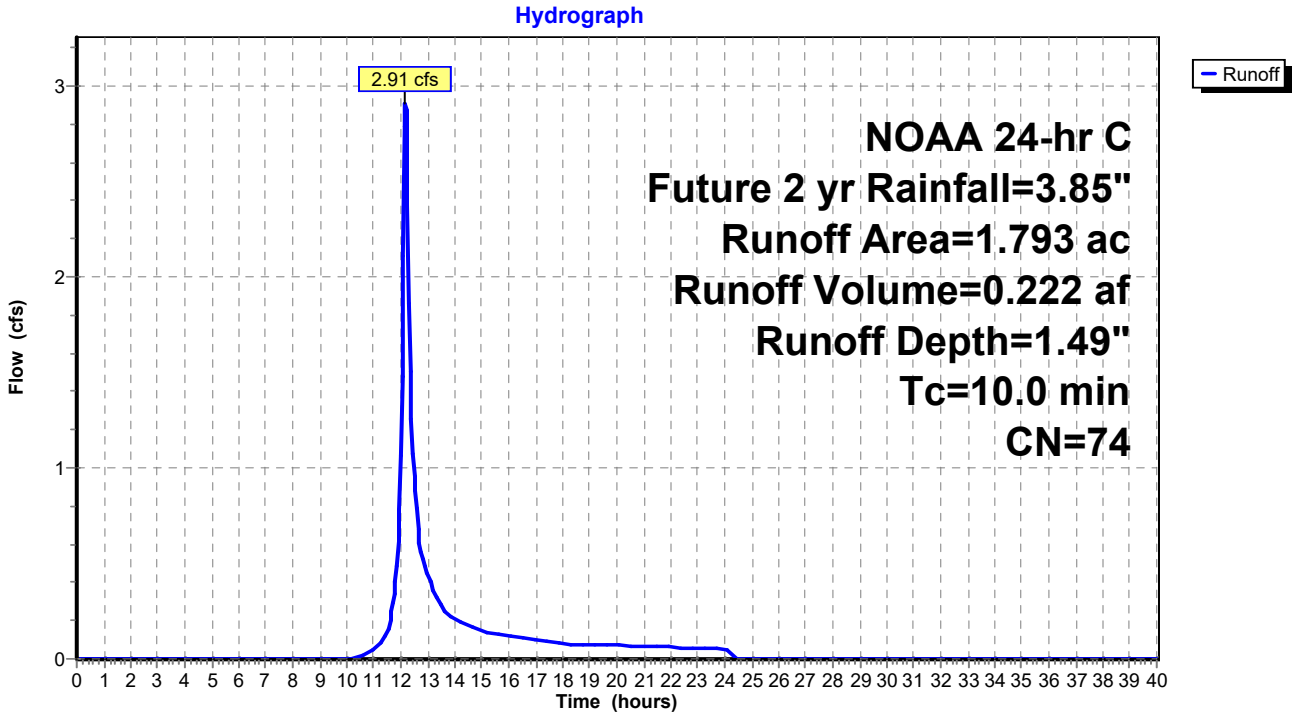
Runoff = 2.91 cfs @ 12.18 hrs, Volume= 0.222 af, Depth= 1.49"
Routed to Pond B-43 : Basin #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.793	74	>75% Grass cover, Good, HSG C
1.793		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 43P: PDA-43 (pervious)



Summary for Subcatchment 44I: PDA-44 (impervious)

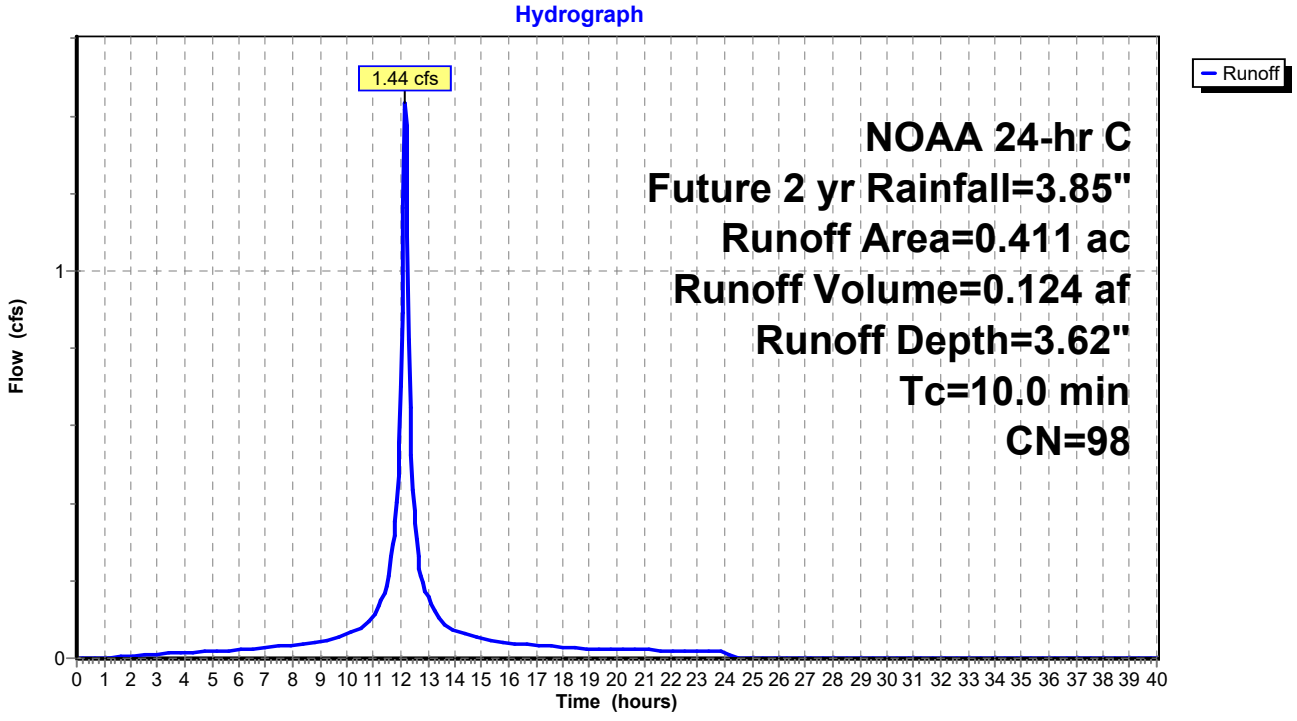
Runoff = 1.44 cfs @ 12.17 hrs, Volume= 0.124 af, Depth= 3.62"
Routed to Pond B-44 : Basin #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.283	98	Pavement, HSG C
*	0.104	98	Roof, HSG C
*	0.024	98	Concrete, HSC C
	0.411	98	Weighted Average
	0.411		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 44I: PDA-44 (impervious)



Summary for Subcatchment 44P: PDA-44 (pervious)

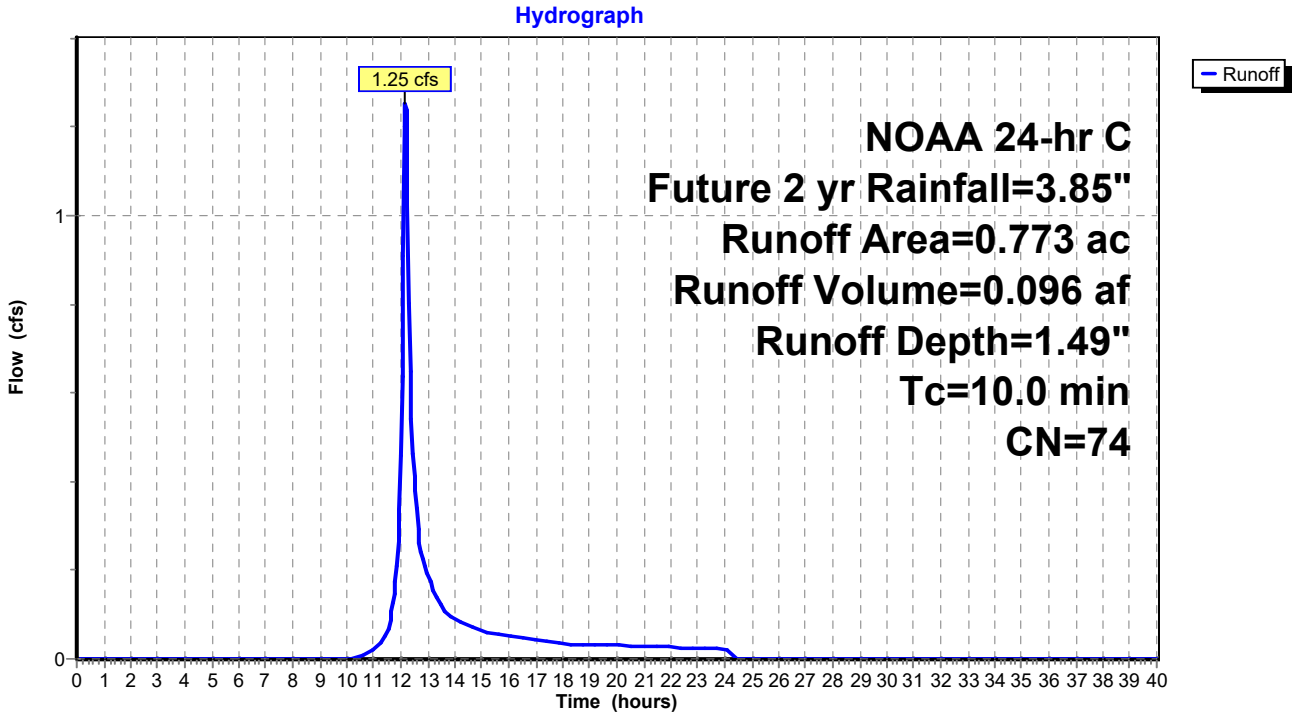
Runoff = 1.25 cfs @ 12.18 hrs, Volume= 0.096 af, Depth= 1.49"
Routed to Pond B-44 : Basin #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.773	74	>75% Grass cover, Good, HSG C
0.773		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 44P: PDA-44 (pervious)



Summary for Subcatchment 45l: PDA-45 (impervious)

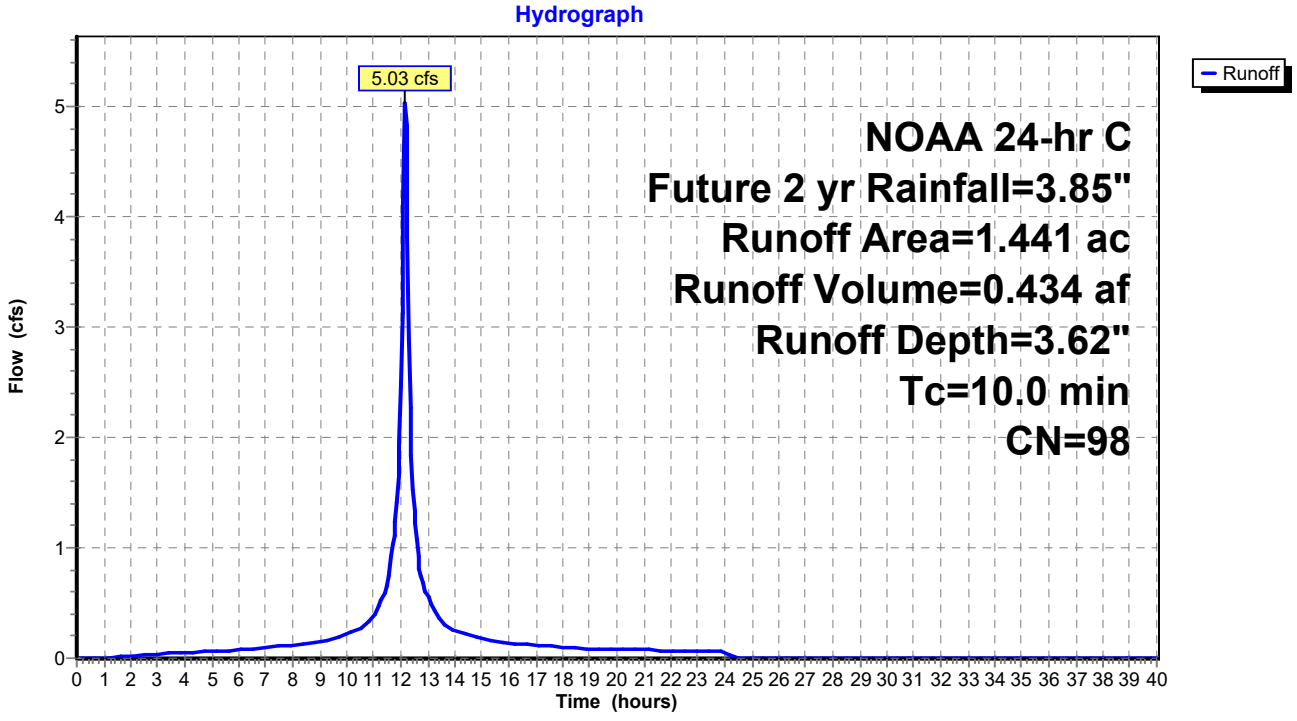
Runoff = 5.03 cfs @ 12.17 hrs, Volume= 0.434 af, Depth= 3.62"
Routed to Pond B-45 : Basin #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.394	98	Pavement, HSG C
*	1.045	98	Roof, HSG C
*	0.002	98	Concrete, HSG C
	1.441	98	Weighted Average
	1.441		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 45l: PDA-45 (impervious)



Summary for Subcatchment 45P: PDA-45 (pervious)

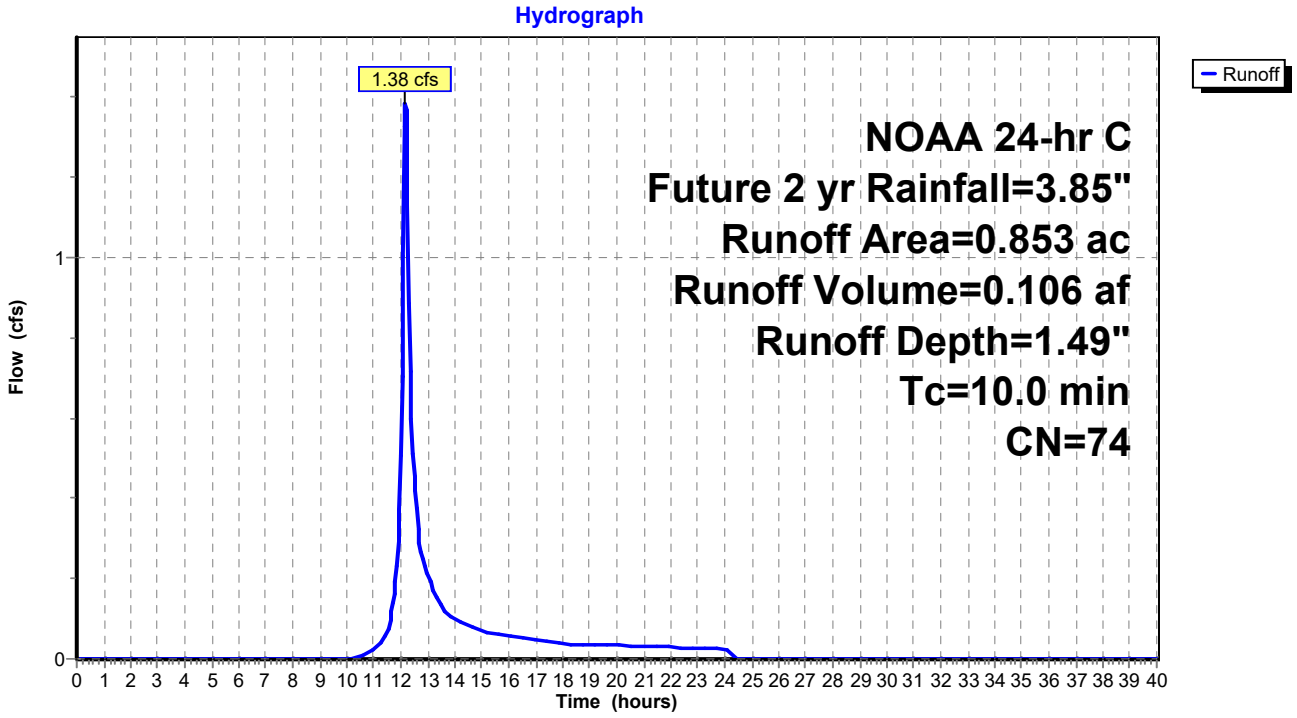
Runoff = 1.38 cfs @ 12.18 hrs, Volume= 0.106 af, Depth= 1.49"
Routed to Pond B-45 : Basin #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.853	74	>75% Grass cover, Good, HSG C
0.853		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 45P: PDA-45 (pervious)



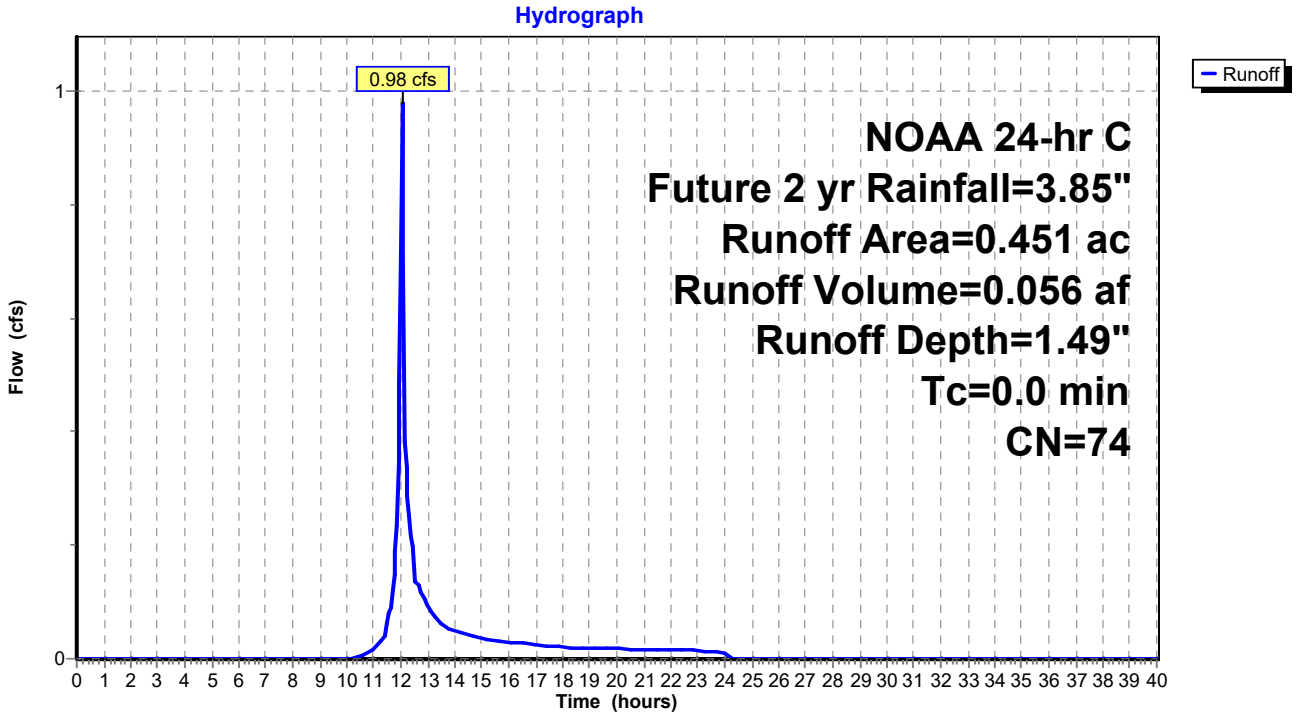
Summary for Subcatchment 46BP: PDA-46B (pervious)

Runoff = 0.98 cfs @ 12.05 hrs, Volume= 0.056 af, Depth= 1.49"
Routed to Pond B-46B : Basin #46B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.451	74	>75% Grass cover, Good, HSG C
0.451		100.00% Pervious Area

Subcatchment 46BP: PDA-46B (pervious)



Summary for Subcatchment 46I: PDA-46 (impervious)

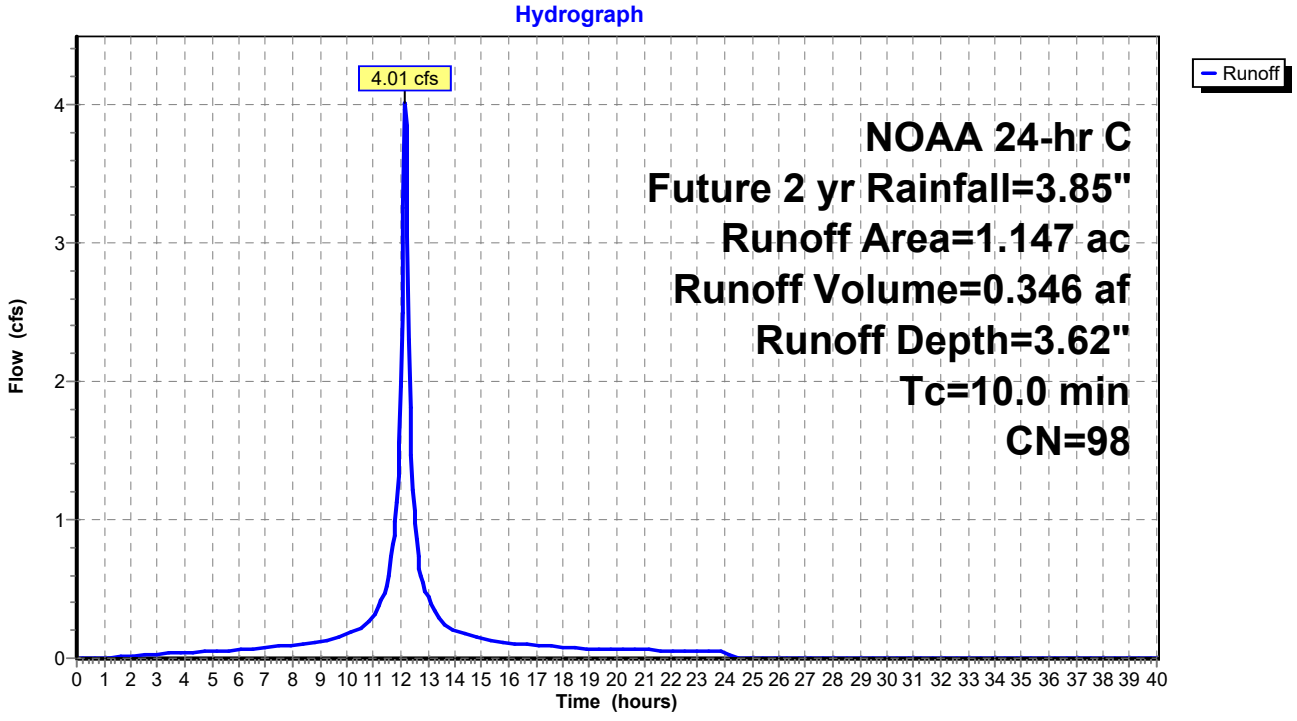
Runoff = 4.01 cfs @ 12.17 hrs, Volume= 0.346 af, Depth= 3.62"
Routed to Pond B-46A : Basin #46A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.430	98	Pavement, HSG C
*	0.653	98	Roof, HSG C
*	0.064	98	Concrete, HSG C
	1.147	98	Weighted Average
	1.147		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 46I: PDA-46 (impervious)



Summary for Subcatchment 46P: PDA-46 (pervious)

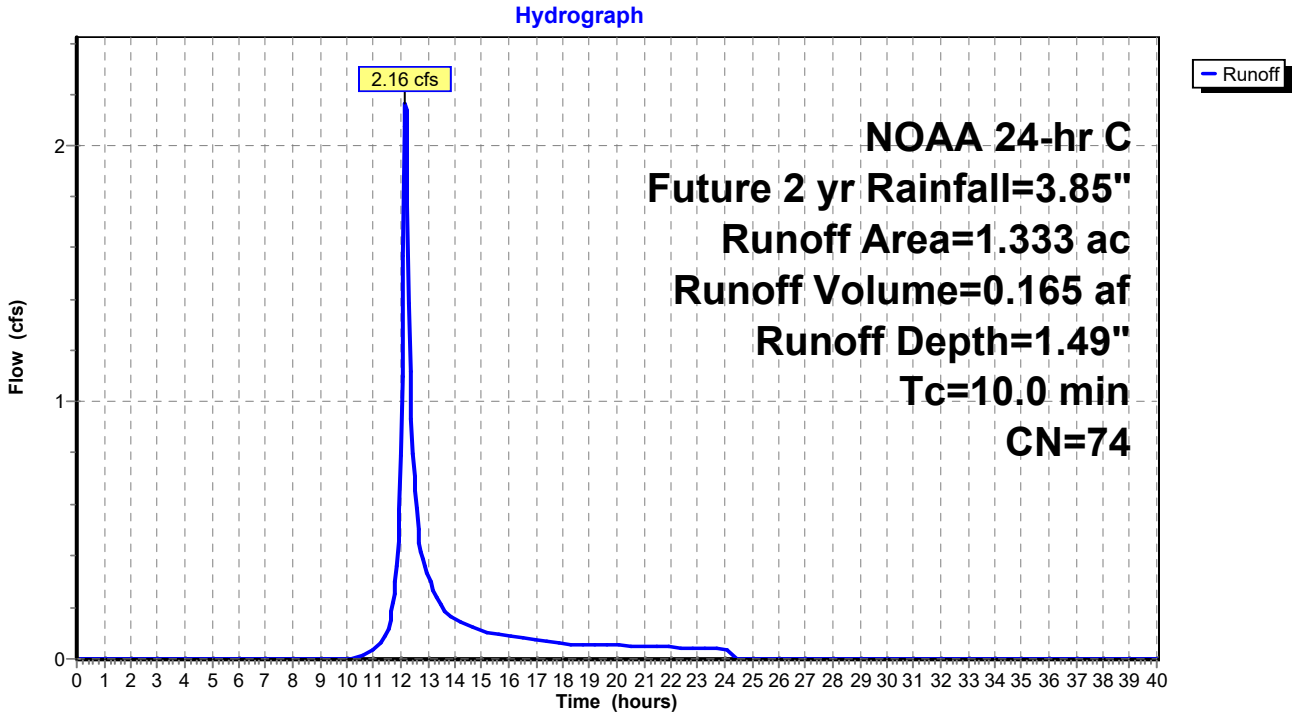
Runoff = 2.16 cfs @ 12.18 hrs, Volume= 0.165 af, Depth= 1.49"
Routed to Pond B-46A : Basin #46A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.333	74	>75% Grass cover, Good, HSG C
1.333		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 46P: PDA-46 (pervious)



Summary for Subcatchment 47l: PDA-47 (impervious)

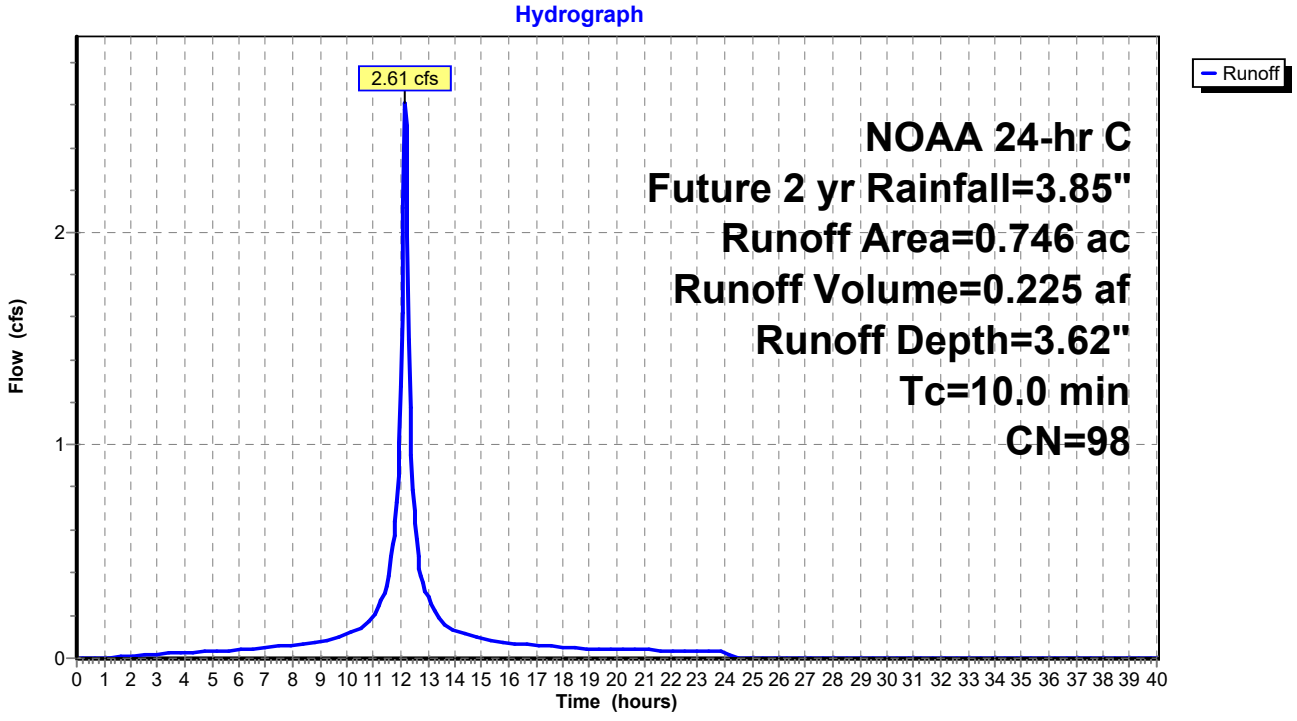
Runoff = 2.61 cfs @ 12.17 hrs, Volume= 0.225 af, Depth= 3.62"
Routed to Pond B-47 : Basin #47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.244	98	Pavement, HSG C
*	0.484	98	Roof, HSG C
*	0.018	98	Concrete, HSG C
	0.746	98	Weighted Average
	0.746		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 47l: PDA-47 (impervious)



Summary for Subcatchment 47P: PDA-47 (pervious)

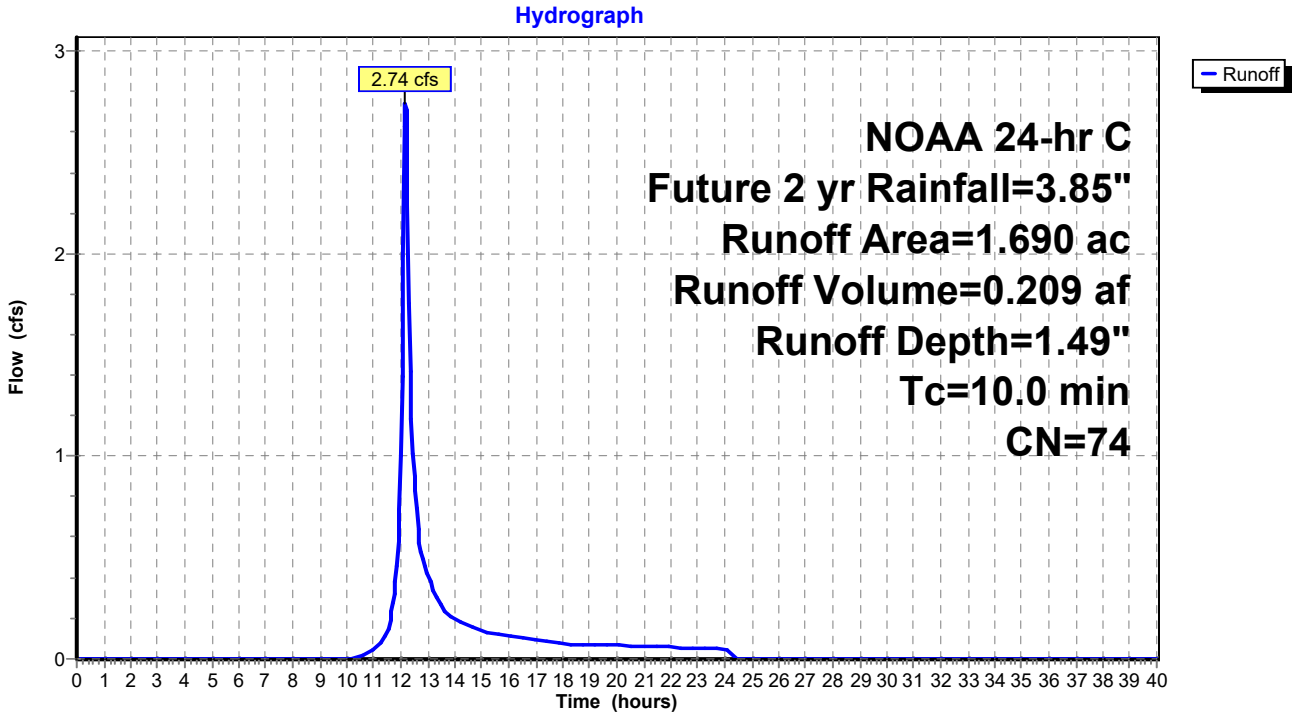
Runoff = 2.74 cfs @ 12.18 hrs, Volume= 0.209 af, Depth= 1.49"
Routed to Pond B-47 : Basin #47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.690	74	>75% Grass cover, Good, HSG C
1.690		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 47P: PDA-47 (pervious)



Summary for Subcatchment UPDA-4: PDA-4 (undetained)

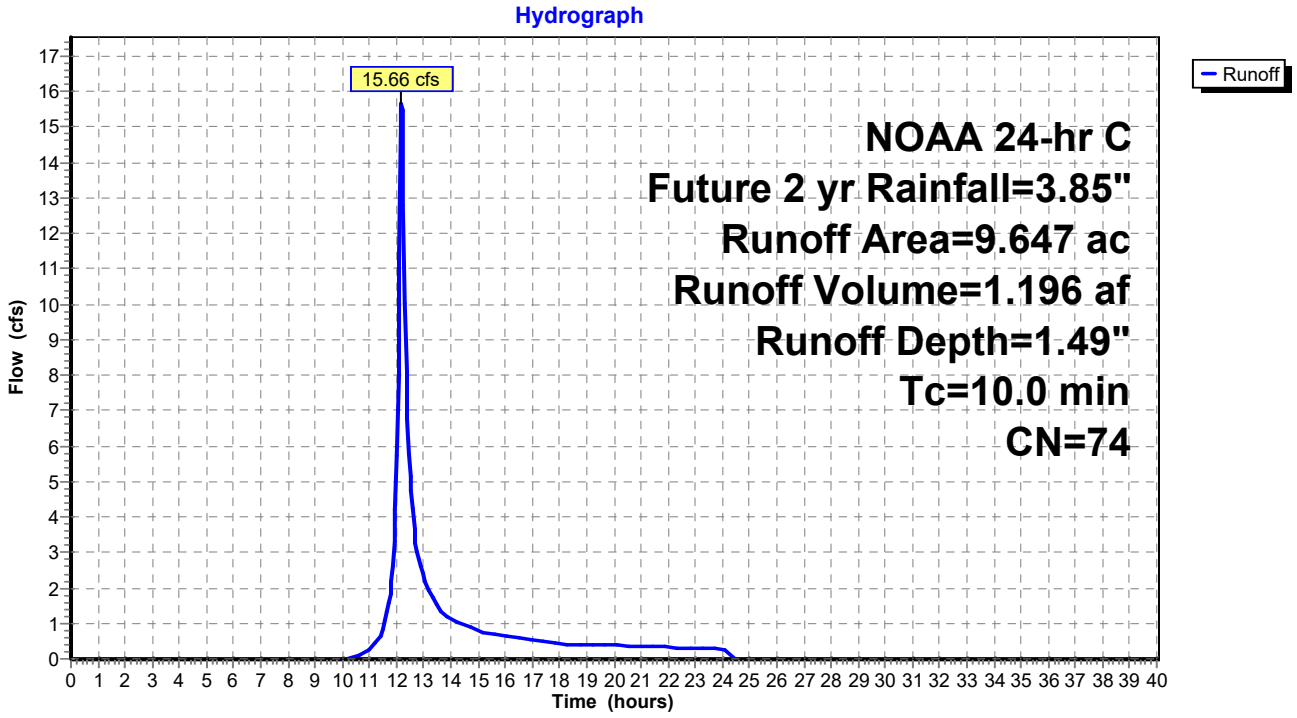
Runoff = 15.66 cfs @ 12.18 hrs, Volume= 1.196 af, Depth= 1.49"
Routed to Link PDA-4 : Proposed Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
9.647	74	>75% Grass cover, Good, HSG C
9.647		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-4: PDA-4 (undetained)



Summary for Pond B-41: Basin #41

Inflow Area = 2.368 ac, 29.05% Impervious, Inflow Depth = 2.11" for Future 2 yr event
Inflow = 5.11 cfs @ 12.18 hrs, Volume= 0.415 af
Outflow = 0.79 cfs @ 12.85 hrs, Volume= 0.358 af, Atten= 85%, Lag= 40.4 min
Primary = 0.79 cfs @ 12.85 hrs, Volume= 0.358 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.25' @ 12.85 hrs Surf.Area= 5,032 sf Storage= 10,085 cf

Plug-Flow detention time= 493.2 min calculated for 0.358 af (86% of inflow)
Center-of-Mass det. time= 426.9 min (1,234.8 - 808.0)

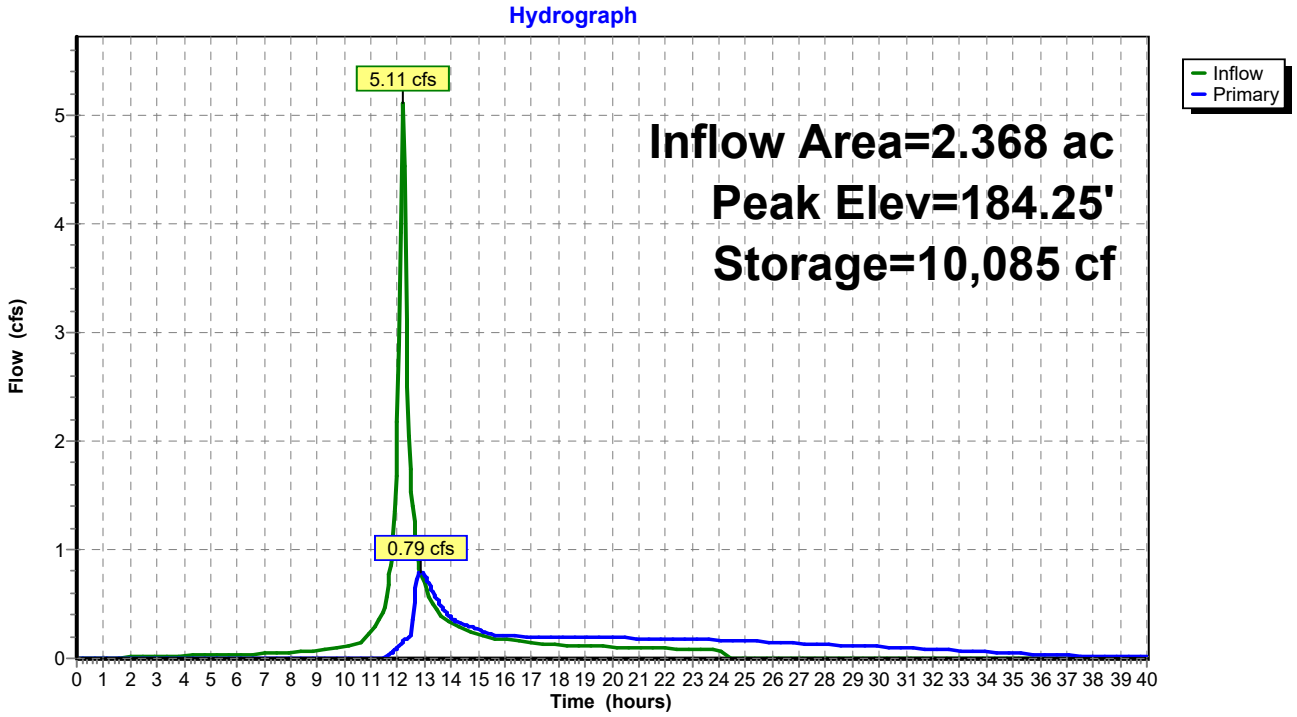
Volume	Invert	Avail.Storage	Storage Description
#1	181.85'	23,005 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.85	0	0	0
182.00	3,695	277	277
183.00	4,265	3,980	4,257
184.00	4,870	4,568	8,825
185.00	5,505	5,188	14,012
186.00	6,153	5,829	19,841
186.50	6,502	3,164	23,005

Device	Routing	Invert	Outlet Devices
#1	Primary	181.85'	**18.0" Round Culvert** L= 59.0' Ke= 0.500 Inlet / Outlet Invert= 181.85' / 181.55' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	182.50'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.13'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.39'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.78 cfs @ 12.85 hrs HW=184.25' (Free Discharge)
- **1=Culvert** (Passes 0.78 cfs of 9.69 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.21 cfs @ 6.19 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.57 cfs @ 1.15 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-41: Basin #41



Stage-Discharge for Pond B-41: Basin #41

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.85	0.00	182.37	0.00	182.89	0.09	183.41	0.15
181.86	0.00	182.38	0.00	182.90	0.09	183.42	0.15
181.87	0.00	182.39	0.00	182.91	0.09	183.43	0.15
181.88	0.00	182.40	0.00	182.92	0.09	183.44	0.15
181.89	0.00	182.41	0.00	182.93	0.09	183.45	0.15
181.90	0.00	182.42	0.00	182.94	0.10	183.46	0.15
181.91	0.00	182.43	0.00	182.95	0.10	183.47	0.15
181.92	0.00	182.44	0.00	182.96	0.10	183.48	0.15
181.93	0.00	182.45	0.00	182.97	0.10	183.49	0.15
181.94	0.00	182.46	0.00	182.98	0.10	183.50	0.16
181.95	0.00	182.47	0.00	182.99	0.10	183.51	0.16
181.96	0.00	182.48	0.00	183.00	0.10	183.52	0.16
181.97	0.00	182.49	0.00	183.01	0.10	183.53	0.16
181.98	0.00	182.50	0.00	183.02	0.11	183.54	0.16
181.99	0.00	182.51	0.00	183.03	0.11	183.55	0.16
182.00	0.00	182.52	0.00	183.04	0.11	183.56	0.16
182.01	0.00	182.53	0.00	183.05	0.11	183.57	0.16
182.02	0.00	182.54	0.00	183.06	0.11	183.58	0.16
182.03	0.00	182.55	0.00	183.07	0.11	183.59	0.16
182.04	0.00	182.56	0.01	183.08	0.11	183.60	0.16
182.05	0.00	182.57	0.01	183.09	0.11	183.61	0.16
182.06	0.00	182.58	0.01	183.10	0.12	183.62	0.17
182.07	0.00	182.59	0.01	183.11	0.12	183.63	0.17
182.08	0.00	182.60	0.02	183.12	0.12	183.64	0.17
182.09	0.00	182.61	0.02	183.13	0.12	183.65	0.17
182.10	0.00	182.62	0.02	183.14	0.12	183.66	0.17
182.11	0.00	182.63	0.03	183.15	0.12	183.67	0.17
182.12	0.00	182.64	0.03	183.16	0.12	183.68	0.17
182.13	0.00	182.65	0.03	183.17	0.12	183.69	0.17
182.14	0.00	182.66	0.04	183.18	0.12	183.70	0.17
182.15	0.00	182.67	0.04	183.19	0.13	183.71	0.17
182.16	0.00	182.68	0.05	183.20	0.13	183.72	0.17
182.17	0.00	182.69	0.05	183.21	0.13	183.73	0.17
182.18	0.00	182.70	0.05	183.22	0.13	183.74	0.17
182.19	0.00	182.71	0.05	183.23	0.13	183.75	0.18
182.20	0.00	182.72	0.06	183.24	0.13	183.76	0.18
182.21	0.00	182.73	0.06	183.25	0.13	183.77	0.18
182.22	0.00	182.74	0.06	183.26	0.13	183.78	0.18
182.23	0.00	182.75	0.06	183.27	0.13	183.79	0.18
182.24	0.00	182.76	0.06	183.28	0.13	183.80	0.18
182.25	0.00	182.77	0.07	183.29	0.14	183.81	0.18
182.26	0.00	182.78	0.07	183.30	0.14	183.82	0.18
182.27	0.00	182.79	0.07	183.31	0.14	183.83	0.18
182.28	0.00	182.80	0.07	183.32	0.14	183.84	0.18
182.29	0.00	182.81	0.07	183.33	0.14	183.85	0.18
182.30	0.00	182.82	0.08	183.34	0.14	183.86	0.18
182.31	0.00	182.83	0.08	183.35	0.14	183.87	0.18
182.32	0.00	182.84	0.08	183.36	0.14	183.88	0.19
182.33	0.00	182.85	0.08	183.37	0.14	183.89	0.19
182.34	0.00	182.86	0.08	183.38	0.14	183.90	0.19
182.35	0.00	182.87	0.08	183.39	0.15	183.91	0.19
182.36	0.00	182.88	0.09	183.40	0.15	183.92	0.19

Stage-Discharge for Pond B-41: Basin #41 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.93	0.19	184.45	2.55	184.97	9.90	185.49	17.51
183.94	0.19	184.46	2.66	184.98	10.07	185.50	18.11
183.95	0.19	184.47	2.77	184.99	10.24	185.51	18.74
183.96	0.19	184.48	2.89	185.00	10.41	185.52	19.40
183.97	0.19	184.49	3.00	185.01	10.58	185.53	20.08
183.98	0.19	184.50	3.12	185.02	10.75	185.54	20.78
183.99	0.19	184.51	3.23	185.03	10.92	185.55	21.51
184.00	0.19	184.52	3.35	185.04	11.09	185.56	22.26
184.01	0.19	184.53	3.47	185.05	11.27	185.57	23.03
184.02	0.20	184.54	3.59	185.06	11.44	185.58	23.82
184.03	0.20	184.55	3.71	185.07	11.62	185.59	24.64
184.04	0.20	184.56	3.84	185.08	11.79	185.60	25.51
184.05	0.20	184.57	3.96	185.09	11.97	185.61	26.41
184.06	0.20	184.58	4.09	185.10	12.15	185.62	27.34
184.07	0.20	184.59	4.22	185.11	12.33	185.63	28.29
184.08	0.20	184.60	4.35	185.12	12.51	185.64	29.27
184.09	0.20	184.61	4.48	185.13	12.69	185.65	30.27
184.10	0.20	184.62	4.61	185.14	12.77	185.66	31.29
184.11	0.20	184.63	4.74	185.15	12.80	185.67	32.34
184.12	0.20	184.64	4.88	185.16	12.83	185.68	33.42
184.13	0.20	184.65	5.01	185.17	12.86	185.69	34.52
184.14	0.22	184.66	5.15	185.18	12.89	185.70	35.64
184.15	0.24	184.67	5.29	185.19	12.92	185.71	36.79
184.16	0.27	184.68	5.42	185.20	12.95	185.72	37.96
184.17	0.31	184.69	5.56	185.21	12.98	185.73	39.16
184.18	0.35	184.70	5.71	185.22	13.01	185.74	40.38
184.19	0.40	184.71	5.85	185.23	13.04	185.75	41.63
184.20	0.45	184.72	5.99	185.24	13.07	185.76	42.89
184.21	0.50	184.73	6.14	185.25	13.10	185.77	44.19
184.22	0.56	184.74	6.28	185.26	13.13	185.78	45.51
184.23	0.62	184.75	6.43	185.27	13.16	185.79	46.85
184.24	0.68	184.76	6.58	185.28	13.19	185.80	48.24
184.25	0.75	184.77	6.72	185.29	13.22	185.81	49.66
184.26	0.82	184.78	6.87	185.30	13.25	185.82	51.10
184.27	0.89	184.79	7.02	185.31	13.28	185.83	52.57
184.28	0.97	184.80	7.18	185.32	13.30	185.84	54.07
184.29	1.04	184.81	7.33	185.33	13.33	185.85	55.59
184.30	1.12	184.82	7.48	185.34	13.36	185.86	57.14
184.31	1.20	184.83	7.64	185.35	13.39	185.87	58.72
184.32	1.29	184.84	7.79	185.36	13.42	185.88	60.32
184.33	1.37	184.85	7.95	185.37	13.45	185.89	61.95
184.34	1.46	184.86	8.11	185.38	13.48	185.90	63.60
184.35	1.55	184.87	8.27	185.39	13.51	185.91	65.28
184.36	1.64	184.88	8.42	185.40	13.65	185.92	66.99
184.37	1.74	184.89	8.59	185.41	13.90	185.93	68.72
184.38	1.83	184.90	8.75	185.42	14.20	185.94	70.48
184.39	1.93	184.91	8.91	185.43	14.56	185.95	72.27
184.40	2.03	184.92	9.07	185.44	14.96	185.96	74.09
184.41	2.13	184.93	9.24	185.45	15.40	185.97	75.93
184.42	2.23	184.94	9.40	185.46	15.88	185.98	77.80
184.43	2.34	184.95	9.57	185.47	16.39	185.99	79.69
184.44	2.45	184.96	9.73	185.48	16.94	186.00	81.34

Stage-Discharge for Pond B-41: Basin #41 (continued)

Elevation (feet)	Primary (cfs)
186.01	83.01
186.02	84.69
186.03	86.38
186.04	88.09
186.05	89.81
186.06	91.54
186.07	93.29
186.08	95.04
186.09	96.81
186.10	98.60
186.11	100.40
186.12	102.20
186.13	104.03
186.14	105.86
186.15	107.71
186.16	109.56
186.17	111.44
186.18	113.32
186.19	115.21
186.20	117.16
186.21	119.11
186.22	121.09
186.23	123.07
186.24	125.07
186.25	127.08
186.26	129.10
186.27	131.14
186.28	133.19
186.29	135.25
186.30	137.32
186.31	139.41
186.32	141.51
186.33	143.63
186.34	145.75
186.35	147.89
186.36	150.04
186.37	152.21
186.38	154.38
186.39	156.57
186.40	158.72
186.41	160.88
186.42	163.05
186.43	165.23
186.44	167.42
186.45	169.62
186.46	171.83
186.47	174.05
186.48	176.29
186.49	178.53
186.50	**180.78**

Stage-Area-Storage for Pond B-41: Basin #41

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.85	0	0	182.37	3,906	1,683
181.86	246	1	182.38	3,912	1,722
181.87	493	5	182.39	3,917	1,762
181.88	739	11	182.40	3,923	1,801
181.89	985	20	182.41	3,929	1,840
181.90	1,232	31	182.42	3,934	1,879
181.91	1,478	44	182.43	3,940	1,919
181.92	1,724	60	182.44	3,946	1,958
181.93	1,971	79	182.45	3,951	1,998
181.94	2,217	100	182.46	3,957	2,037
181.95	2,463	123	182.47	3,963	2,077
181.96	2,710	149	182.48	3,969	2,116
181.97	2,956	177	182.49	3,974	2,156
181.98	3,202	208	182.50	3,980	2,196
181.99	3,449	241	182.51	3,986	2,236
182.00	3,695	277	182.52	3,991	2,276
182.01	3,701	314	182.53	3,997	2,316
182.02	3,706	351	182.54	4,003	2,356
182.03	3,712	388	182.55	4,008	2,396
182.04	3,718	425	182.56	4,014	2,436
182.05	3,723	463	182.57	4,020	2,476
182.06	3,729	500	182.58	4,026	2,516
182.07	3,735	537	182.59	4,031	2,556
182.08	3,741	575	182.60	4,037	2,597
182.09	3,746	612	182.61	4,043	2,637
182.10	3,752	649	182.62	4,048	2,678
182.11	3,758	687	182.63	4,054	2,718
182.12	3,763	725	182.64	4,060	2,759
182.13	3,769	762	182.65	4,066	2,799
182.14	3,775	800	182.66	4,071	2,840
182.15	3,781	838	182.67	4,077	2,881
182.16	3,786	876	182.68	4,083	2,922
182.17	3,792	914	182.69	4,088	2,962
182.18	3,798	951	182.70	4,094	3,003
182.19	3,803	989	182.71	4,100	3,044
182.20	3,809	1,028	182.72	4,105	3,085
182.21	3,815	1,066	182.73	4,111	3,126
182.22	3,820	1,104	182.74	4,117	3,167
182.23	3,826	1,142	182.75	4,123	3,209
182.24	3,832	1,180	182.76	4,128	3,250
182.25	3,838	1,219	182.77	4,134	3,291
182.26	3,843	1,257	182.78	4,140	3,333
182.27	3,849	1,296	182.79	4,145	3,374
182.28	3,855	1,334	182.80	4,151	3,416
182.29	3,860	1,373	182.81	4,157	3,457
182.30	3,866	1,411	182.82	4,162	3,499
182.31	3,872	1,450	182.83	4,168	3,540
182.32	3,877	1,489	182.84	4,174	3,582
182.33	3,883	1,528	182.85	4,179	3,624
182.34	3,889	1,566	182.86	4,185	3,666
182.35	3,894	1,605	182.87	4,191	3,707
182.36	3,900	1,644	182.88	4,197	3,749

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.89	4,202	3,791	183.41	4,513	6,057
182.90	4,208	3,833	183.42	4,519	6,102
182.91	4,214	3,876	183.43	4,525	6,147
182.92	4,219	3,918	183.44	4,531	6,192
182.93	4,225	3,960	183.45	4,537	6,238
182.94	4,231	4,002	183.46	4,543	6,283
182.95	4,236	4,045	183.47	4,549	6,328
182.96	4,242	4,087	183.48	4,555	6,374
182.97	4,248	4,129	183.49	4,561	6,420
182.98	4,254	4,172	183.50	4,568	6,465
182.99	4,259	4,215	183.51	4,574	6,511
183.00	4,265	4,257	183.52	4,580	6,557
183.01	4,271	4,300	183.53	4,586	6,603
183.02	4,277	4,343	183.54	4,592	6,648
183.03	4,283	4,385	183.55	4,598	6,694
183.04	4,289	4,428	183.56	4,604	6,740
183.05	4,295	4,471	183.57	4,610	6,786
183.06	4,301	4,514	183.58	4,616	6,833
183.07	4,307	4,557	183.59	4,622	6,879
183.08	4,313	4,600	183.60	4,628	6,925
183.09	4,319	4,643	183.61	4,634	6,971
183.10	4,325	4,687	183.62	4,640	7,018
183.11	4,332	4,730	183.63	4,646	7,064
183.12	4,338	4,773	183.64	4,652	7,111
183.13	4,344	4,817	183.65	4,658	7,157
183.14	4,350	4,860	183.66	4,664	7,204
183.15	4,356	4,904	183.67	4,670	7,250
183.16	4,362	4,947	183.68	4,676	7,297
183.17	4,368	4,991	183.69	4,682	7,344
183.18	4,374	5,035	183.70	4,688	7,391
183.19	4,380	5,078	183.71	4,695	7,438
183.20	4,386	5,122	183.72	4,701	7,485
183.21	4,392	5,166	183.73	4,707	7,532
183.22	4,398	5,210	183.74	4,713	7,579
183.23	4,404	5,254	183.75	4,719	7,626
183.24	4,410	5,298	183.76	4,725	7,673
183.25	4,416	5,342	183.77	4,731	7,721
183.26	4,422	5,386	183.78	4,737	7,768
183.27	4,428	5,431	183.79	4,743	7,815
183.28	4,434	5,475	183.80	4,749	7,863
183.29	4,440	5,519	183.81	4,755	7,910
183.30	4,446	5,564	183.82	4,761	7,958
183.31	4,453	5,608	183.83	4,767	8,005
183.32	4,459	5,653	183.84	4,773	8,053
183.33	4,465	5,698	183.85	4,779	8,101
183.34	4,471	5,742	183.86	4,785	8,149
183.35	4,477	5,787	183.87	4,791	8,197
183.36	4,483	5,832	183.88	4,797	8,245
183.37	4,489	5,877	183.89	4,803	8,293
183.38	4,495	5,922	183.90	4,810	8,341
183.39	4,501	5,966	183.91	4,816	8,389
183.40	4,507	6,012	183.92	4,822	8,437

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.93	4,828	8,485	184.45	5,156	11,080
183.94	4,834	8,534	184.46	5,162	11,132
183.95	4,840	8,582	184.47	5,168	11,184
183.96	4,846	8,630	184.48	5,175	11,235
183.97	4,852	8,679	184.49	5,181	11,287
183.98	4,858	8,727	184.50	5,188	11,339
183.99	4,864	8,776	184.51	5,194	11,391
184.00	4,870	8,825	184.52	5,200	11,443
184.01	4,876	8,873	184.53	5,207	11,495
184.02	4,883	8,922	184.54	5,213	11,547
184.03	4,889	8,971	184.55	5,219	11,599
184.04	4,895	9,020	184.56	5,226	11,651
184.05	4,902	9,069	184.57	5,232	11,704
184.06	4,908	9,118	184.58	5,238	11,756
184.07	4,914	9,167	184.59	5,245	11,808
184.08	4,921	9,216	184.60	5,251	11,861
184.09	4,927	9,265	184.61	5,257	11,913
184.10	4,933	9,315	184.62	5,264	11,966
184.11	4,940	9,364	184.63	5,270	12,019
184.12	4,946	9,414	184.64	5,276	12,071
184.13	4,953	9,463	184.65	5,283	12,124
184.14	4,959	9,513	184.66	5,289	12,177
184.15	4,965	9,562	184.67	5,295	12,230
184.16	4,972	9,612	184.68	5,302	12,283
184.17	4,978	9,662	184.69	5,308	12,336
184.18	4,984	9,712	184.70	5,314	12,389
184.19	4,991	9,761	184.71	5,321	12,442
184.20	4,997	9,811	184.72	5,327	12,496
184.21	5,003	9,861	184.73	5,334	12,549
184.22	5,010	9,911	184.74	5,340	12,602
184.23	5,016	9,962	184.75	5,346	12,656
184.24	5,022	10,012	184.76	5,353	12,709
184.25	5,029	10,062	184.77	5,359	12,763
184.26	5,035	10,112	184.78	5,365	12,816
184.27	5,041	10,163	184.79	5,372	12,870
184.28	5,048	10,213	184.80	5,378	12,924
184.29	5,054	10,264	184.81	5,384	12,978
184.30	5,060	10,314	184.82	5,391	13,032
184.31	5,067	10,365	184.83	5,397	13,085
184.32	5,073	10,416	184.84	5,403	13,139
184.33	5,080	10,466	184.85	5,410	13,194
184.34	5,086	10,517	184.86	5,416	13,248
184.35	5,092	10,568	184.87	5,422	13,302
184.36	5,099	10,619	184.88	5,429	13,356
184.37	5,105	10,670	184.89	5,435	13,410
184.38	5,111	10,721	184.90	5,442	13,465
184.39	5,118	10,772	184.91	5,448	13,519
184.40	5,124	10,823	184.92	5,454	13,574
184.41	5,130	10,875	184.93	5,461	13,628
184.42	5,137	10,926	184.94	5,467	13,683
184.43	5,143	10,977	184.95	5,473	13,738
184.44	5,149	11,029	184.96	5,480	13,792

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.97	5,486	13,847	185.49	5,823	16,787
184.98	5,492	13,902	185.50	5,829	16,846
184.99	5,499	13,957	185.51	5,835	16,904
185.00	5,505	14,012	185.52	5,842	16,962
185.01	5,511	14,067	185.53	5,848	17,021
185.02	5,518	14,122	185.54	5,855	17,079
185.03	5,524	14,178	185.55	5,861	17,138
185.04	5,531	14,233	185.56	5,868	17,197
185.05	5,537	14,288	185.57	5,874	17,255
185.06	5,544	14,344	185.58	5,881	17,314
185.07	5,550	14,399	185.59	5,887	17,373
185.08	5,557	14,455	185.60	5,894	17,432
185.09	5,563	14,510	185.61	5,900	17,491
185.10	5,570	14,566	185.62	5,907	17,550
185.11	5,576	14,622	185.63	5,913	17,609
185.12	5,583	14,677	185.64	5,920	17,668
185.13	5,589	14,733	185.65	5,926	17,727
185.14	5,596	14,789	185.66	5,933	17,787
185.15	5,602	14,845	185.67	5,939	17,846
185.16	5,609	14,901	185.68	5,946	17,905
185.17	5,615	14,957	185.69	5,952	17,965
185.18	5,622	15,014	185.70	5,959	18,024
185.19	5,628	15,070	185.71	5,965	18,084
185.20	5,635	15,126	185.72	5,972	18,144
185.21	5,641	15,182	185.73	5,978	18,203
185.22	5,648	15,239	185.74	5,985	18,263
185.23	5,654	15,295	185.75	5,991	18,323
185.24	5,661	15,352	185.76	5,997	18,383
185.25	5,667	15,409	185.77	6,004	18,443
185.26	5,673	15,465	185.78	6,010	18,503
185.27	5,680	15,522	185.79	6,017	18,563
185.28	5,686	15,579	185.80	6,023	18,623
185.29	5,693	15,636	185.81	6,030	18,684
185.30	5,699	15,693	185.82	6,036	18,744
185.31	5,706	15,750	185.83	6,043	18,804
185.32	5,712	15,807	185.84	6,049	18,865
185.33	5,719	15,864	185.85	6,056	18,925
185.34	5,725	15,921	185.86	6,062	18,986
185.35	5,732	15,979	185.87	6,069	19,047
185.36	5,738	16,036	185.88	6,075	19,107
185.37	5,745	16,093	185.89	6,082	19,168
185.38	5,751	16,151	185.90	6,088	19,229
185.39	5,758	16,208	185.91	6,095	19,290
185.40	5,764	16,266	185.92	6,101	19,351
185.41	5,771	16,324	185.93	6,108	19,412
185.42	5,777	16,381	185.94	6,114	19,473
185.43	5,784	16,439	185.95	6,121	19,534
185.44	5,790	16,497	185.96	6,127	19,596
185.45	5,797	16,555	185.97	6,134	19,657
185.46	5,803	16,613	185.98	6,140	19,718
185.47	5,810	16,671	185.99	6,147	19,780
185.48	5,816	16,729	186.00	6,153	19,841

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.01	6,160	19,903
186.02	6,167	19,964
186.03	6,174	20,026
186.04	6,181	20,088
186.05	6,188	20,150
186.06	6,195	20,212
186.07	6,202	20,274
186.08	6,209	20,336
186.09	6,216	20,398
186.10	6,223	20,460
186.11	6,230	20,522
186.12	6,237	20,585
186.13	6,244	20,647
186.14	6,251	20,709
186.15	6,258	20,772
186.16	6,265	20,835
186.17	6,272	20,897
186.18	6,279	20,960
186.19	6,286	21,023
186.20	6,293	21,086
186.21	6,300	21,149
186.22	6,307	21,212
186.23	6,314	21,275
186.24	6,321	21,338
186.25	6,328	21,401
186.26	6,334	21,464
186.27	6,341	21,528
186.28	6,348	21,591
186.29	6,355	21,655
186.30	6,362	21,718
186.31	6,369	21,782
186.32	6,376	21,846
186.33	6,383	21,910
186.34	6,390	21,973
186.35	6,397	22,037
186.36	6,404	22,101
186.37	6,411	22,166
186.38	6,418	22,230
186.39	6,425	22,294
186.40	6,432	22,358
186.41	6,439	22,423
186.42	6,446	22,487
186.43	6,453	22,551
186.44	6,460	22,616
186.45	6,467	22,681
186.46	6,474	22,745
186.47	6,481	22,810
186.48	6,488	22,875
186.49	6,495	22,940
186.50	**6,502**	**23,005**

Summary for Pond B-42: Basin #42

Inflow Area = 0.777 ac, 38.35% Impervious, Inflow Depth = 2.30" for Future 2 yr event
Inflow = 1.82 cfs @ 12.17 hrs, Volume= 0.149 af
Outflow = 0.06 cfs @ 15.68 hrs, Volume= 0.055 af, Atten= 97%, Lag= 210.3 min
Primary = 0.06 cfs @ 15.68 hrs, Volume= 0.055 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 182.85' @ 15.68 hrs Surf.Area= 3,044 sf Storage= 4,832 cf

Plug-Flow detention time= 546.6 min calculated for 0.055 af (37% of inflow)
Center-of-Mass det. time= 391.5 min (1,189.0 - 797.6)

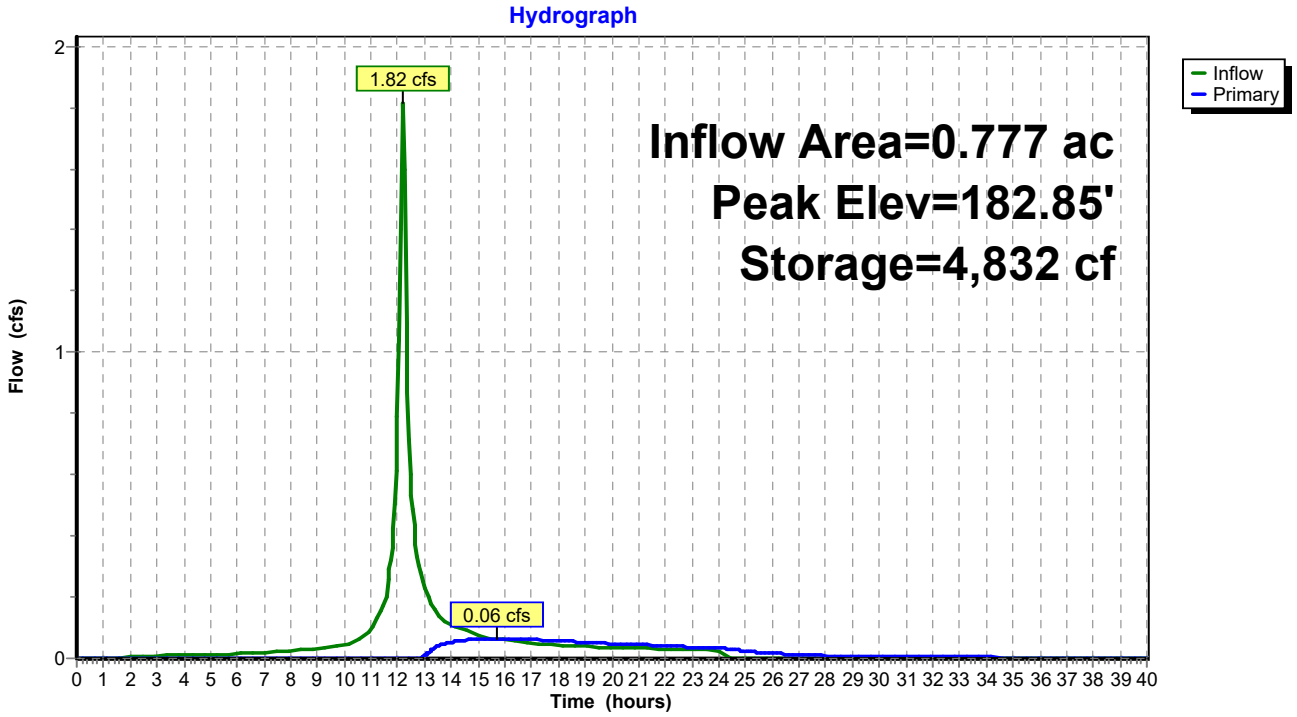
Volume	Invert	Avail.Storage	Storage Description
#1	180.96'	22,293 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.96	0	0	0
181.00	2,142	43	43
182.00	2,613	2,378	2,420
183.00	3,118	2,866	5,286
184.00	3,656	3,387	8,673
185.00	4,227	3,942	12,614
186.00	4,831	4,529	17,143
187.00	5,468	5,150	22,293

Device	Routing	Invert	Outlet Devices
#1	Primary	181.96'	**18.0" Round Culvert** L= 192.0' Ke= 0.500 Inlet / Outlet Invert= 181.96' / 181.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	182.60'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.01'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.06 cfs @ 15.68 hrs HW=182.85' (Free Discharge)
- **1=Culvert** (Passes 0.06 cfs of 2.87 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.06 cfs @ 1.85 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-42: Basin #42



Stage-Discharge for Pond B-42: Basin #42

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
180.96	0.00	181.48	0.00	182.00	0.00	182.52	0.00
180.97	0.00	181.49	0.00	182.01	0.00	182.53	0.00
180.98	0.00	181.50	0.00	182.02	0.00	182.54	0.00
180.99	0.00	181.51	0.00	182.03	0.00	182.55	0.00
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.01
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.01
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.01
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.01
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.02
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.02
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.02
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.03
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.03
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.03
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.04
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.04
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.05
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.05
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.05
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.05
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.06
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.06
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.06
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.06
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.06
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.07
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.07
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.07
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.07
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.07
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.08
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.08
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.08
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.08
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.08
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.08
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.09
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.09
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.09
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.09
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.09
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.09

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.04	0.10	183.56	0.15	184.08	0.43	184.60	5.98
183.05	0.10	183.57	0.15	184.09	0.49	184.61	6.12
183.06	0.10	183.58	0.15	184.10	0.55	184.62	6.27
183.07	0.10	183.59	0.15	184.11	0.61	184.63	6.42
183.08	0.10	183.60	0.16	184.12	0.67	184.64	6.56
183.09	0.10	183.61	0.16	184.13	0.74	184.65	6.71
183.10	0.10	183.62	0.16	184.14	0.81	184.66	6.86
183.11	0.10	183.63	0.16	184.15	0.88	184.67	7.01
183.12	0.11	183.64	0.16	184.16	0.95	184.68	7.16
183.13	0.11	183.65	0.16	184.17	1.03	184.69	7.32
183.14	0.11	183.66	0.16	184.18	1.11	184.70	7.47
183.15	0.11	183.67	0.16	184.19	1.19	184.71	7.62
183.16	0.11	183.68	0.16	184.20	1.27	184.72	7.78
183.17	0.11	183.69	0.16	184.21	1.36	184.73	7.94
183.18	0.11	183.70	0.16	184.22	1.45	184.74	8.09
183.19	0.11	183.71	0.16	184.23	1.54	184.75	8.25
183.20	0.12	183.72	0.17	184.24	1.63	184.76	8.41
183.21	0.12	183.73	0.17	184.25	1.72	184.77	8.57
183.22	0.12	183.74	0.17	184.26	1.82	184.78	8.73
183.23	0.12	183.75	0.17	184.27	1.92	184.79	8.90
183.24	0.12	183.76	0.17	184.28	2.02	184.80	9.06
183.25	0.12	183.77	0.17	184.29	2.12	184.81	9.22
183.26	0.12	183.78	0.17	184.30	2.22	184.82	9.39
183.27	0.12	183.79	0.17	184.31	2.33	184.83	9.55
183.28	0.12	183.80	0.17	184.32	2.43	184.84	9.69
183.29	0.13	183.81	0.17	184.33	2.54	184.85	9.71
183.30	0.13	183.82	0.17	184.34	2.65	184.86	9.73
183.31	0.13	183.83	0.17	184.35	2.76	184.87	9.75
183.32	0.13	183.84	0.17	184.36	2.87	184.88	9.77
183.33	0.13	183.85	0.18	184.37	2.99	184.89	9.79
183.34	0.13	183.86	0.18	184.38	3.10	184.90	9.81
183.35	0.13	183.87	0.18	184.39	3.22	184.91	9.83
183.36	0.13	183.88	0.18	184.40	3.34	184.92	9.85
183.37	0.13	183.89	0.18	184.41	3.46	184.93	9.88
183.38	0.13	183.90	0.18	184.42	3.58	184.94	9.90
183.39	0.14	183.91	0.18	184.43	3.70	184.95	9.92
183.40	0.14	183.92	0.18	184.44	3.83	184.96	9.94
183.41	0.14	183.93	0.18	184.45	3.95	184.97	9.96
183.42	0.14	183.94	0.18	184.46	4.08	184.98	9.98
183.43	0.14	183.95	0.18	184.47	4.21	184.99	10.00
183.44	0.14	183.96	0.18	184.48	4.33	185.00	10.02
183.45	0.14	183.97	0.18	184.49	4.46	185.01	10.04
183.46	0.14	183.98	0.19	184.50	4.60	185.02	10.06
183.47	0.14	183.99	0.19	184.51	4.73	185.03	10.08
183.48	0.14	184.00	0.19	184.52	4.86	185.04	10.10
183.49	0.15	184.01	0.19	184.53	5.00	185.05	10.12
183.50	0.15	184.02	0.20	184.54	5.14	185.06	10.14
183.51	0.15	184.03	0.23	184.55	5.27	185.07	10.16
183.52	0.15	184.04	0.26	184.56	5.41	185.08	10.18
183.53	0.15	184.05	0.29	184.57	5.55	185.09	10.20
183.54	0.15	184.06	0.34	184.58	5.69	185.10	10.21
183.55	0.15	184.07	0.38	184.59	5.84	185.11	10.23

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.12	10.25	185.64	11.23	186.16	20.39	186.68	92.62
185.13	10.27	185.65	11.24	186.17	21.15	186.69	94.39
185.14	10.29	185.66	11.26	186.18	21.93	186.70	96.16
185.15	10.31	185.67	11.28	186.19	22.73	186.71	97.95
185.16	10.33	185.68	11.30	186.20	23.60	186.72	99.75
185.17	10.35	185.69	11.31	186.21	24.49	186.73	101.56
185.18	10.37	185.70	11.33	186.22	25.40	186.74	103.38
185.19	10.39	185.71	11.35	186.23	26.34	186.75	105.22
185.20	10.41	185.72	11.37	186.24	27.30	186.76	107.07
185.21	10.43	185.73	11.39	186.25	28.29	186.77	108.93
185.22	10.45	185.74	11.40	186.26	29.31	186.78	110.80
185.23	10.47	185.75	11.42	186.27	30.35	186.79	112.69
185.24	10.49	185.76	11.44	186.28	31.41	186.80	114.62
185.25	10.51	185.77	11.46	186.29	32.50	186.81	116.57
185.26	10.52	185.78	11.47	186.30	33.61	186.82	118.53
185.27	10.54	185.79	11.49	186.31	34.75	186.83	120.50
185.28	10.56	185.80	11.51	186.32	35.91	186.84	122.49
185.29	10.58	185.81	11.53	186.33	37.10	186.85	124.49
185.30	10.60	185.82	11.54	186.34	38.31	186.86	126.51
185.31	10.62	185.83	11.56	186.35	39.54	186.87	128.53
185.32	10.64	185.84	11.58	186.36	40.80	186.88	130.57
185.33	10.66	185.85	11.59	186.37	42.09	186.89	132.63
185.34	10.68	185.86	11.61	186.38	43.39	186.90	134.69
185.35	10.69	185.87	11.63	186.39	44.72	186.91	136.77
185.36	10.71	185.88	11.65	186.40	46.11	186.92	138.86
185.37	10.73	185.89	11.66	186.41	47.51	186.93	140.97
185.38	10.75	185.90	11.68	186.42	48.95	186.94	143.08
185.39	10.77	185.91	11.70	186.43	50.41	186.95	145.21
185.40	10.79	185.92	11.72	186.44	51.89	186.96	147.35
185.41	10.81	185.93	11.73	186.45	53.41	186.97	149.51
185.42	10.83	185.94	11.75	186.46	54.95	186.98	151.68
185.43	10.84	185.95	11.77	186.47	56.51	186.99	153.86
185.44	10.86	185.96	11.78	186.48	58.10	187.00	**155.99**
185.45	10.88	185.97	11.80	186.49	59.72		
185.46	10.90	185.98	11.82	186.50	61.36		
185.47	10.92	185.99	11.83	186.51	63.03		
185.48	10.94	186.00	11.97	186.52	64.73		
185.49	10.95	186.01	12.20	186.53	66.45		
185.50	10.97	186.02	12.49	186.54	68.21		
185.51	10.99	186.03	12.84	186.55	69.98		
185.52	11.01	186.04	13.23	186.56	71.79		
185.53	11.03	186.05	13.66	186.57	73.62		
185.54	11.05	186.06	14.13	186.58	75.48		
185.55	11.06	186.07	14.63	186.59	77.36		
185.56	11.08	186.08	15.16	186.60	79.00		
185.57	11.10	186.09	15.72	186.61	80.66		
185.58	11.12	186.10	16.31	186.62	82.33		
185.59	11.14	186.11	16.93	186.63	84.01		
185.60	11.15	186.12	17.57	186.64	85.71		
185.61	11.17	186.13	18.24	186.65	87.42		
185.62	11.19	186.14	18.93	186.66	89.14		
185.63	11.21	186.15	19.65	186.67	90.88		

Stage-Area-Storage for Pond B-42: Basin #42

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.96	0	0	181.48	2,368	1,125
180.97	535	3	181.49	2,373	1,149
180.98	1,071	11	181.50	2,378	1,173
180.99	1,607	24	181.51	2,382	1,197
181.00	2,142	43	181.52	2,387	1,220
181.01	2,147	64	181.53	2,392	1,244
181.02	2,151	86	181.54	2,396	1,268
181.03	2,156	107	181.55	2,401	1,292
181.04	2,161	129	181.56	2,406	1,316
181.05	2,166	151	181.57	2,410	1,340
181.06	2,170	172	181.58	2,415	1,364
181.07	2,175	194	181.59	2,420	1,389
181.08	2,180	216	181.60	2,425	1,413
181.09	2,184	238	181.61	2,429	1,437
181.10	2,189	259	181.62	2,434	1,461
181.11	2,194	281	181.63	2,439	1,486
181.12	2,199	303	181.64	2,443	1,510
181.13	2,203	325	181.65	2,448	1,535
181.14	2,208	347	181.66	2,453	1,559
181.15	2,213	369	181.67	2,458	1,584
181.16	2,217	392	181.68	2,462	1,608
181.17	2,222	414	181.69	2,467	1,633
181.18	2,227	436	181.70	2,472	1,658
181.19	2,231	458	181.71	2,476	1,682
181.20	2,236	481	181.72	2,481	1,707
181.21	2,241	503	181.73	2,486	1,732
181.22	2,246	525	181.74	2,491	1,757
181.23	2,250	548	181.75	2,495	1,782
181.24	2,255	570	181.76	2,500	1,807
181.25	2,260	593	181.77	2,505	1,832
181.26	2,264	616	181.78	2,509	1,857
181.27	2,269	638	181.79	2,514	1,882
181.28	2,274	661	181.80	2,519	1,907
181.29	2,279	684	181.81	2,524	1,932
181.30	2,283	707	181.82	2,528	1,958
181.31	2,288	729	181.83	2,533	1,983
181.32	2,293	752	181.84	2,538	2,008
181.33	2,297	775	181.85	2,542	2,034
181.34	2,302	798	181.86	2,547	2,059
181.35	2,307	821	181.87	2,552	2,085
181.36	2,312	844	181.88	2,556	2,110
181.37	2,316	868	181.89	2,561	2,136
181.38	2,321	891	181.90	2,566	2,161
181.39	2,326	914	181.91	2,571	2,187
181.40	2,330	937	181.92	2,575	2,213
181.41	2,335	961	181.93	2,580	2,239
181.42	2,340	984	181.94	2,585	2,264
181.43	2,345	1,007	181.95	2,589	2,290
181.44	2,349	1,031	181.96	2,594	2,316
181.45	2,354	1,054	181.97	2,599	2,342
181.46	2,359	1,078	181.98	2,604	2,368
181.47	2,363	1,102	181.99	2,608	2,394

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.00	2,613	2,420	182.52	2,876	3,847
182.01	2,618	2,446	182.53	2,881	3,876
182.02	2,623	2,473	182.54	2,886	3,905
182.03	2,628	2,499	182.55	2,891	3,934
182.04	2,633	2,525	182.56	2,896	3,963
182.05	2,638	2,552	182.57	2,901	3,992
182.06	2,643	2,578	182.58	2,906	4,021
182.07	2,648	2,604	182.59	2,911	4,050
182.08	2,653	2,631	182.60	2,916	4,079
182.09	2,658	2,658	182.61	2,921	4,108
182.10	2,663	2,684	182.62	2,926	4,137
182.11	2,669	2,711	182.63	2,931	4,167
182.12	2,674	2,738	182.64	2,936	4,196
182.13	2,679	2,764	182.65	2,941	4,225
182.14	2,684	2,791	182.66	2,946	4,255
182.15	2,689	2,818	182.67	2,951	4,284
182.16	2,694	2,845	182.68	2,956	4,314
182.17	2,699	2,872	182.69	2,961	4,344
182.18	2,704	2,899	182.70	2,967	4,373
182.19	2,709	2,926	182.71	2,972	4,403
182.20	2,714	2,953	182.72	2,977	4,433
182.21	2,719	2,980	182.73	2,982	4,462
182.22	2,724	3,007	182.74	2,987	4,492
182.23	2,729	3,035	182.75	2,992	4,522
182.24	2,734	3,062	182.76	2,997	4,552
182.25	2,739	3,089	182.77	3,002	4,582
182.26	2,744	3,117	182.78	3,007	4,612
182.27	2,749	3,144	182.79	3,012	4,642
182.28	2,754	3,172	182.80	3,017	4,672
182.29	2,759	3,199	182.81	3,022	4,703
182.30	2,765	3,227	182.82	3,027	4,733
182.31	2,770	3,255	182.83	3,032	4,763
182.32	2,775	3,282	182.84	3,037	4,793
182.33	2,780	3,310	182.85	3,042	4,824
182.34	2,785	3,338	182.86	3,047	4,854
182.35	2,790	3,366	182.87	3,052	4,885
182.36	2,795	3,394	182.88	3,057	4,915
182.37	2,800	3,422	182.89	3,062	4,946
182.38	2,805	3,450	182.90	3,068	4,977
182.39	2,810	3,478	182.91	3,073	5,007
182.40	2,815	3,506	182.92	3,078	5,038
182.41	2,820	3,534	182.93	3,083	5,069
182.42	2,825	3,562	182.94	3,088	5,100
182.43	2,830	3,591	182.95	3,093	5,131
182.44	2,835	3,619	182.96	3,098	5,162
182.45	2,840	3,647	182.97	3,103	5,193
182.46	2,845	3,676	182.98	3,108	5,224
182.47	2,850	3,704	182.99	3,113	5,255
182.48	2,855	3,733	183.00	3,118	5,286
182.49	2,860	3,761	183.01	3,123	5,317
182.50	2,866	3,790	183.02	3,129	5,348
182.51	2,871	3,819	183.03	3,134	5,380

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.04	3,140	5,411	183.56	3,419	7,116
183.05	3,145	5,442	183.57	3,425	7,150
183.06	3,150	5,474	183.58	3,430	7,185
183.07	3,156	5,505	183.59	3,435	7,219
183.08	3,161	5,537	183.60	3,441	7,253
183.09	3,166	5,569	183.61	3,446	7,288
183.10	3,172	5,600	183.62	3,452	7,322
183.11	3,177	5,632	183.63	3,457	7,357
183.12	3,183	5,664	183.64	3,462	7,392
183.13	3,188	5,696	183.65	3,468	7,426
183.14	3,193	5,728	183.66	3,473	7,461
183.15	3,199	5,760	183.67	3,478	7,496
183.16	3,204	5,792	183.68	3,484	7,530
183.17	3,209	5,824	183.69	3,489	7,565
183.18	3,215	5,856	183.70	3,495	7,600
183.19	3,220	5,888	183.71	3,500	7,635
183.20	3,226	5,920	183.72	3,505	7,670
183.21	3,231	5,952	183.73	3,511	7,705
183.22	3,236	5,985	183.74	3,516	7,740
183.23	3,242	6,017	183.75	3,522	7,776
183.24	3,247	6,050	183.76	3,527	7,811
183.25	3,253	6,082	183.77	3,532	7,846
183.26	3,258	6,115	183.78	3,538	7,882
183.27	3,263	6,147	183.79	3,543	7,917
183.28	3,269	6,180	183.80	3,548	7,952
183.29	3,274	6,213	183.81	3,554	7,988
183.30	3,279	6,245	183.82	3,559	8,023
183.31	3,285	6,278	183.83	3,565	8,059
183.32	3,290	6,311	183.84	3,570	8,095
183.33	3,296	6,344	183.85	3,575	8,130
183.34	3,301	6,377	183.86	3,581	8,166
183.35	3,306	6,410	183.87	3,586	8,202
183.36	3,312	6,443	183.88	3,591	8,238
183.37	3,317	6,476	183.89	3,597	8,274
183.38	3,322	6,510	183.90	3,602	8,310
183.39	3,328	6,543	183.91	3,608	8,346
183.40	3,333	6,576	183.92	3,613	8,382
183.41	3,339	6,609	183.93	3,618	8,418
183.42	3,344	6,643	183.94	3,624	8,454
183.43	3,349	6,676	183.95	3,629	8,491
183.44	3,355	6,710	183.96	3,634	8,527
183.45	3,360	6,743	183.97	3,640	8,563
183.46	3,365	6,777	183.98	3,645	8,600
183.47	3,371	6,811	183.99	3,651	8,636
183.48	3,376	6,844	184.00	3,656	8,673
183.49	3,382	6,878	184.01	3,662	8,709
183.50	3,387	6,912	184.02	3,667	8,746
183.51	3,392	6,946	184.03	3,673	8,783
183.52	3,398	6,980	184.04	3,679	8,820
183.53	3,403	7,014	184.05	3,685	8,856
183.54	3,409	7,048	184.06	3,690	8,893
183.55	3,414	7,082	184.07	3,696	8,930

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.08	3,702	8,967	184.60	3,999	10,969
184.09	3,707	9,004	184.61	4,004	11,009
184.10	3,713	9,041	184.62	4,010	11,049
184.11	3,719	9,078	184.63	4,016	11,089
184.12	3,725	9,116	184.64	4,021	11,130
184.13	3,730	9,153	184.65	4,027	11,170
184.14	3,736	9,190	184.66	4,033	11,210
184.15	3,742	9,228	184.67	4,039	11,251
184.16	3,747	9,265	184.68	4,044	11,291
184.17	3,753	9,303	184.69	4,050	11,331
184.18	3,759	9,340	184.70	4,056	11,372
184.19	3,764	9,378	184.71	4,061	11,413
184.20	3,770	9,415	184.72	4,067	11,453
184.21	3,776	9,453	184.73	4,073	11,494
184.22	3,782	9,491	184.74	4,079	11,535
184.23	3,787	9,529	184.75	4,084	11,575
184.24	3,793	9,567	184.76	4,090	11,616
184.25	3,799	9,605	184.77	4,096	11,657
184.26	3,804	9,643	184.78	4,101	11,698
184.27	3,810	9,681	184.79	4,107	11,739
184.28	3,816	9,719	184.80	4,113	11,780
184.29	3,822	9,757	184.81	4,119	11,822
184.30	3,827	9,795	184.82	4,124	11,863
184.31	3,833	9,834	184.83	4,130	11,904
184.32	3,839	9,872	184.84	4,136	11,945
184.33	3,844	9,910	184.85	4,141	11,987
184.34	3,850	9,949	184.86	4,147	12,028
184.35	3,856	9,987	184.87	4,153	12,070
184.36	3,862	10,026	184.88	4,158	12,111
184.37	3,867	10,065	184.89	4,164	12,153
184.38	3,873	10,103	184.90	4,170	12,194
184.39	3,879	10,142	184.91	4,176	12,236
184.40	3,884	10,181	184.92	4,181	12,278
184.41	3,890	10,220	184.93	4,187	12,320
184.42	3,896	10,259	184.94	4,193	12,362
184.43	3,902	10,298	184.95	4,198	12,404
184.44	3,907	10,337	184.96	4,204	12,446
184.45	3,913	10,376	184.97	4,210	12,488
184.46	3,919	10,415	184.98	4,216	12,530
184.47	3,924	10,454	184.99	4,221	12,572
184.48	3,930	10,493	185.00	4,227	12,614
184.49	3,936	10,533	185.01	4,233	12,657
184.50	3,942	10,572	185.02	4,239	12,699
184.51	3,947	10,612	185.03	4,245	12,741
184.52	3,953	10,651	185.04	4,251	12,784
184.53	3,959	10,691	185.05	4,257	12,826
184.54	3,964	10,730	185.06	4,263	12,869
184.55	3,970	10,770	185.07	4,269	12,912
184.56	3,976	10,810	185.08	4,275	12,954
184.57	3,981	10,850	185.09	4,281	12,997
184.58	3,987	10,889	185.10	4,287	13,040
184.59	3,993	10,929	185.11	4,293	13,083

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.12	4,299	13,126	185.64	4,614	15,443
185.13	4,306	13,169	185.65	4,620	15,489
185.14	4,312	13,212	185.66	4,626	15,536
185.15	4,318	13,255	185.67	4,632	15,582
185.16	4,324	13,298	185.68	4,638	15,628
185.17	4,330	13,342	185.69	4,644	15,675
185.18	4,336	13,385	185.70	4,650	15,721
185.19	4,342	13,428	185.71	4,656	15,768
185.20	4,348	13,472	185.72	4,662	15,814
185.21	4,354	13,515	185.73	4,668	15,861
185.22	4,360	13,559	185.74	4,674	15,908
185.23	4,366	13,603	185.75	4,680	15,954
185.24	4,372	13,646	185.76	4,686	16,001
185.25	4,378	13,690	185.77	4,692	16,048
185.26	4,384	13,734	185.78	4,698	16,095
185.27	4,390	13,778	185.79	4,704	16,142
185.28	4,396	13,822	185.80	4,710	16,189
185.29	4,402	13,866	185.81	4,716	16,236
185.30	4,408	13,910	185.82	4,722	16,284
185.31	4,414	13,954	185.83	4,728	16,331
185.32	4,420	13,998	185.84	4,734	16,378
185.33	4,426	14,042	185.85	4,740	16,425
185.34	4,432	14,086	185.86	4,746	16,473
185.35	4,438	14,131	185.87	4,752	16,520
185.36	4,444	14,175	185.88	4,759	16,568
185.37	4,450	14,220	185.89	4,765	16,616
185.38	4,457	14,264	185.90	4,771	16,663
185.39	4,463	14,309	185.91	4,777	16,711
185.40	4,469	14,353	185.92	4,783	16,759
185.41	4,475	14,398	185.93	4,789	16,807
185.42	4,481	14,443	185.94	4,795	16,855
185.43	4,487	14,488	185.95	4,801	16,903
185.44	4,493	14,533	185.96	4,807	16,951
185.45	4,499	14,578	185.97	4,813	16,999
185.46	4,505	14,623	185.98	4,819	17,047
185.47	4,511	14,668	185.99	4,825	17,095
185.48	4,517	14,713	186.00	4,831	17,143
185.49	4,523	14,758	186.01	4,837	17,192
185.50	4,529	14,803	186.02	4,844	17,240
185.51	4,535	14,849	186.03	4,850	17,289
185.52	4,541	14,894	186.04	4,856	17,337
185.53	4,547	14,939	186.05	4,863	17,386
185.54	4,553	14,985	186.06	4,869	17,434
185.55	4,559	15,031	186.07	4,876	17,483
185.56	4,565	15,076	186.08	4,882	17,532
185.57	4,571	15,122	186.09	4,888	17,581
185.58	4,577	15,168	186.10	4,895	17,630
185.59	4,583	15,213	186.11	4,901	17,679
185.60	4,589	15,259	186.12	4,907	17,728
185.61	4,595	15,305	186.13	4,914	17,777
185.62	4,601	15,351	186.14	4,920	17,826
185.63	4,608	15,397	186.15	4,927	17,875

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.16	4,933	17,924
186.17	4,939	17,974
186.18	4,946	18,023
186.19	4,952	18,073
186.20	4,958	18,122
186.21	4,965	18,172
186.22	4,971	18,222
186.23	4,978	18,271
186.24	4,984	18,321
186.25	4,990	18,371
186.26	4,997	18,421
186.27	5,003	18,471
186.28	5,009	18,521
186.29	5,016	18,571
186.30	5,022	18,621
186.31	5,028	18,672
186.32	5,035	18,722
186.33	5,041	18,772
186.34	5,048	18,823
186.35	5,054	18,873
186.36	5,060	18,924
186.37	5,067	18,974
186.38	5,073	19,025
186.39	5,079	19,076
186.40	5,086	19,127
186.41	5,092	19,178
186.42	5,099	19,229
186.43	5,105	19,280
186.44	5,111	19,331
186.45	5,118	19,382
186.46	5,124	19,433
186.47	5,130	19,484
186.48	5,137	19,536
186.49	5,143	19,587
186.50	5,150	19,638
186.51	5,156	19,690
186.52	5,162	19,742
186.53	5,169	19,793
186.54	5,175	19,845
186.55	5,181	19,897
186.56	5,188	19,949
186.57	5,194	20,000
186.58	5,200	20,052
186.59	5,207	20,104
186.60	5,213	20,157
186.61	5,220	20,209
186.62	5,226	20,261
186.63	5,232	20,313
186.64	5,239	20,366
186.65	5,245	20,418
186.66	5,251	20,471
186.67	5,258	20,523
186.68	5,264	20,576
186.69	5,271	20,628
186.70	5,277	20,681
186.71	5,283	20,734
186.72	5,290	20,787
186.73	5,296	20,840
186.74	5,302	20,893
186.75	5,309	20,946
186.76	5,315	20,999
186.77	5,321	21,052
186.78	5,328	21,105
186.79	5,334	21,159
186.80	5,341	21,212
186.81	5,347	21,265
186.82	5,353	21,319
186.83	5,360	21,372
186.84	5,366	21,426
186.85	5,372	21,480
186.86	5,379	21,534
186.87	5,385	21,587
186.88	5,392	21,641
186.89	5,398	21,695
186.90	5,404	21,749
186.91	5,411	21,803
186.92	5,417	21,857
186.93	5,423	21,912
186.94	5,430	21,966
186.95	5,436	22,020
186.96	5,443	22,075
186.97	5,449	22,129
186.98	5,455	22,184
186.99	5,462	22,238
187.00	**5,468**	**22,293**

Summary for Pond B-43: Basin #43

Inflow Area = 2.712 ac, 33.89% Impervious, Inflow Depth = 2.21" for Future 2 yr event
Inflow = 6.11 cfs @ 12.17 hrs, Volume= 0.499 af
Outflow = 1.73 cfs @ 12.53 hrs, Volume= 0.389 af, Atten= 72%, Lag= 21.1 min
Primary = 1.73 cfs @ 12.53 hrs, Volume= 0.389 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 178.82' @ 12.53 hrs Surf.Area= 6,035 sf Storage= 10,982 cf

Plug-Flow detention time= 425.2 min calculated for 0.389 af (78% of inflow)
Center-of-Mass det. time= 337.7 min (1,140.0 - 802.3)

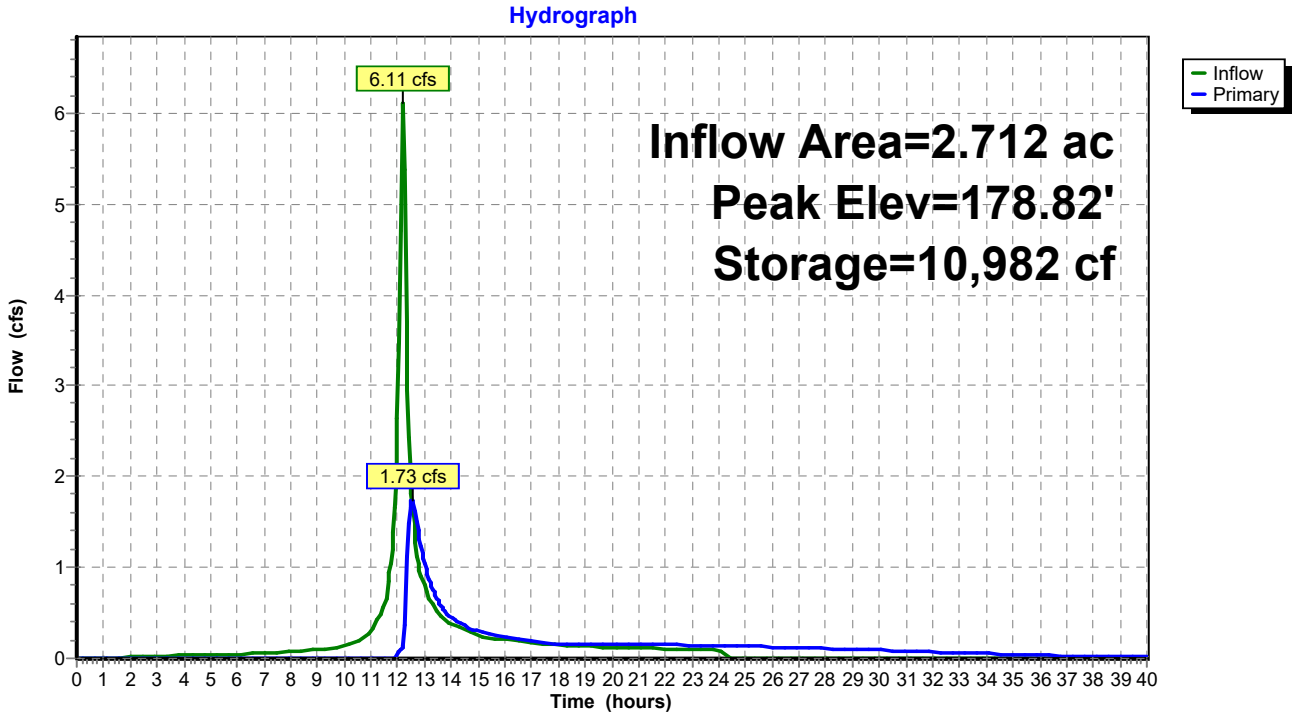
Volume	Invert	Avail.Storage	Storage Description
#1	176.35'	26,392 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
176.35	0	0	0
177.00	4,447	1,445	1,445
178.00	5,292	4,870	6,315
179.00	6,194	5,743	12,058
180.00	7,153	6,674	18,731
181.00	8,168	7,661	26,392

Device	Routing	Invert	Outlet Devices
#1	Primary	176.30'	**18.0" Round Culvert** L= 200.0' Ke= 0.500 Inlet / Outlet Invert= 176.30' / 166.10' S= 0.0510 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	177.62'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	178.58'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.00'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.72 cfs @ 12.53 hrs HW=178.82' (Free Discharge)
- **1=Culvert** (Passes 1.72 cfs of 11.33 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 5.05 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.55 cfs @ 1.61 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-43: Basin #43



Stage-Discharge for Pond B-43: Basin #43

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
176.35	0.00	176.87	0.00	177.39	0.00	177.91	0.07
176.36	0.00	176.88	0.00	177.40	0.00	177.92	0.07
176.37	0.00	176.89	0.00	177.41	0.00	177.93	0.07
176.38	0.00	176.90	0.00	177.42	0.00	177.94	0.08
176.39	0.00	176.91	0.00	177.43	0.00	177.95	0.08
176.40	0.00	176.92	0.00	177.44	0.00	177.96	0.08
176.41	0.00	176.93	0.00	177.45	0.00	177.97	0.08
176.42	0.00	176.94	0.00	177.46	0.00	177.98	0.08
176.43	0.00	176.95	0.00	177.47	0.00	177.99	0.08
176.44	0.00	176.96	0.00	177.48	0.00	178.00	0.09
176.45	0.00	176.97	0.00	177.49	0.00	178.01	0.09
176.46	0.00	176.98	0.00	177.50	0.00	178.02	0.09
176.47	0.00	176.99	0.00	177.51	0.00	178.03	0.09
176.48	0.00	177.00	0.00	177.52	0.00	178.04	0.09
176.49	0.00	177.01	0.00	177.53	0.00	178.05	0.09
176.50	0.00	177.02	0.00	177.54	0.00	178.06	0.10
176.51	0.00	177.03	0.00	177.55	0.00	178.07	0.10
176.52	0.00	177.04	0.00	177.56	0.00	178.08	0.10
176.53	0.00	177.05	0.00	177.57	0.00	178.09	0.10
176.54	0.00	177.06	0.00	177.58	0.00	178.10	0.10
176.55	0.00	177.07	0.00	177.59	0.00	178.11	0.10
176.56	0.00	177.08	0.00	177.60	0.00	178.12	0.10
176.57	0.00	177.09	0.00	177.61	0.00	178.13	0.10
176.58	0.00	177.10	0.00	177.62	0.00	178.14	0.11
176.59	0.00	177.11	0.00	177.63	0.00	178.15	0.11
176.60	0.00	177.12	0.00	177.64	0.00	178.16	0.11
176.61	0.00	177.13	0.00	177.65	0.00	178.17	0.11
176.62	0.00	177.14	0.00	177.66	0.00	178.18	0.11
176.63	0.00	177.15	0.00	177.67	0.00	178.19	0.11
176.64	0.00	177.16	0.00	177.68	0.01	178.20	0.11
176.65	0.00	177.17	0.00	177.69	0.01	178.21	0.11
176.66	0.00	177.18	0.00	177.70	0.01	178.22	0.12
176.67	0.00	177.19	0.00	177.71	0.01	178.23	0.12
176.68	0.00	177.20	0.00	177.72	0.02	178.24	0.12
176.69	0.00	177.21	0.00	177.73	0.02	178.25	0.12
176.70	0.00	177.22	0.00	177.74	0.02	178.26	0.12
176.71	0.00	177.23	0.00	177.75	0.03	178.27	0.12
176.72	0.00	177.24	0.00	177.76	0.03	178.28	0.12
176.73	0.00	177.25	0.00	177.77	0.03	178.29	0.12
176.74	0.00	177.26	0.00	177.78	0.04	178.30	0.12
176.75	0.00	177.27	0.00	177.79	0.04	178.31	0.13
176.76	0.00	177.28	0.00	177.80	0.05	178.32	0.13
176.77	0.00	177.29	0.00	177.81	0.05	178.33	0.13
176.78	0.00	177.30	0.00	177.82	0.05	178.34	0.13
176.79	0.00	177.31	0.00	177.83	0.05	178.35	0.13
176.80	0.00	177.32	0.00	177.84	0.06	178.36	0.13
176.81	0.00	177.33	0.00	177.85	0.06	178.37	0.13
176.82	0.00	177.34	0.00	177.86	0.06	178.38	0.13
176.83	0.00	177.35	0.00	177.87	0.06	178.39	0.13
176.84	0.00	177.36	0.00	177.88	0.06	178.40	0.13
176.85	0.00	177.37	0.00	177.89	0.07	178.41	0.14
176.86	0.00	177.38	0.00	177.90	0.07	178.42	0.14

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.43	0.14	178.95	3.07	179.47	10.71	179.99	14.59
178.44	0.14	178.96	3.19	179.48	10.88	180.00	14.61
178.45	0.14	178.97	3.31	179.49	11.06	180.01	14.76
178.46	0.14	178.98	3.43	179.50	11.23	180.02	14.99
178.47	0.14	178.99	3.55	179.51	11.40	180.03	15.30
178.48	0.14	179.00	3.67	179.52	11.58	180.04	15.65
178.49	0.14	179.01	3.79	179.53	11.76	180.05	16.05
178.50	0.14	179.02	3.92	179.54	11.93	180.06	16.49
178.51	0.15	179.03	4.05	179.55	12.11	180.07	16.96
178.52	0.15	179.04	4.18	179.56	12.29	180.08	17.47
178.53	0.15	179.05	4.30	179.57	12.47	180.09	18.01
178.54	0.15	179.06	4.44	179.58	12.65	180.10	18.58
178.55	0.15	179.07	4.57	179.59	12.83	180.11	19.18
178.56	0.15	179.08	4.70	179.60	13.01	180.12	19.80
178.57	0.15	179.09	4.83	179.61	13.19	180.13	20.45
178.58	0.15	179.10	4.97	179.62	13.38	180.14	21.13
178.59	0.17	179.11	5.11	179.63	13.56	180.15	21.83
178.60	0.19	179.12	5.24	179.64	13.69	180.16	22.55
178.61	0.22	179.13	5.38	179.65	13.72	180.17	23.30
178.62	0.26	179.14	5.52	179.66	13.75	180.18	24.07
178.63	0.30	179.15	5.66	179.67	13.77	180.19	24.86
178.64	0.35	179.16	5.81	179.68	13.80	180.20	25.67
178.65	0.40	179.17	5.95	179.69	13.83	180.21	26.54
178.66	0.45	179.18	6.09	179.70	13.85	180.22	27.43
178.67	0.51	179.19	6.24	179.71	13.88	180.23	28.36
178.68	0.57	179.20	6.39	179.72	13.90	180.24	29.30
178.69	0.64	179.21	6.53	179.73	13.93	180.25	30.27
178.70	0.70	179.22	6.68	179.74	13.96	180.26	31.27
178.71	0.77	179.23	6.83	179.75	13.98	180.27	32.29
178.72	0.84	179.24	6.98	179.76	14.01	180.28	33.34
178.73	0.92	179.25	7.14	179.77	14.03	180.29	34.41
178.74	1.00	179.26	7.29	179.78	14.06	180.30	35.51
178.75	1.08	179.27	7.44	179.79	14.08	180.31	36.63
178.76	1.16	179.28	7.60	179.80	14.11	180.32	37.77
178.77	1.24	179.29	7.75	179.81	14.14	180.33	38.94
178.78	1.33	179.30	7.91	179.82	14.16	180.34	40.14
178.79	1.41	179.31	8.07	179.83	14.19	180.35	41.35
178.80	1.51	179.32	8.23	179.84	14.21	180.36	42.60
178.81	1.60	179.33	8.39	179.85	14.24	180.37	43.86
178.82	1.69	179.34	8.55	179.86	14.26	180.38	45.15
178.83	1.79	179.35	8.71	179.87	14.29	180.39	46.47
178.84	1.88	179.36	8.87	179.88	14.31	180.40	47.80
178.85	1.98	179.37	9.03	179.89	14.34	180.41	49.19
178.86	2.09	179.38	9.20	179.90	14.36	180.42	50.61
178.87	2.19	179.39	9.36	179.91	14.39	180.43	52.05
178.88	2.29	179.40	9.53	179.92	14.41	180.44	53.52
178.89	2.40	179.41	9.69	179.93	14.44	180.45	55.01
178.90	2.51	179.42	9.86	179.94	14.46	180.46	56.53
178.91	2.62	179.43	10.03	179.95	14.49	180.47	58.07
178.92	2.73	179.44	10.20	179.96	14.51	180.48	59.65
178.93	2.84	179.45	10.37	179.97	14.54	180.49	61.24
178.94	2.96	179.46	10.54	179.98	14.56	180.50	62.87

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)
180.51	64.52
180.52	66.20
180.53	67.90
180.54	69.63
180.55	71.39
180.56	73.18
180.57	74.99
180.58	76.82
180.59	78.69
180.60	80.58
180.61	82.23
180.62	83.89
180.63	85.57
180.64	87.26
180.65	88.96
180.66	90.68
180.67	92.41
180.68	94.15
180.69	95.91
180.70	97.67
180.71	99.46
180.72	101.25
180.73	103.05
180.74	104.87
180.75	106.70
180.76	108.55
180.77	110.40
180.78	112.27
180.79	114.15
180.80	116.04
180.81	117.98
180.82	119.94
180.83	121.91
180.84	123.89
180.85	125.88
180.86	127.89
180.87	129.91
180.88	131.94
180.89	133.99
180.90	136.05
180.91	138.12
180.92	140.21
180.93	142.30
180.94	144.41
180.95	146.54
180.96	148.67
180.97	150.82
180.98	152.98
180.99	155.16
181.00	**157.34**

Stage-Area-Storage for Pond B-43: Basin #43

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.35	0	0	176.87	3,558	925
176.36	68	0	176.88	3,626	961
176.37	137	1	176.89	3,694	997
176.38	205	3	176.90	3,763	1,035
176.39	274	5	176.91	3,831	1,073
176.40	342	9	176.92	3,900	1,111
176.41	410	12	176.93	3,968	1,151
176.42	479	17	176.94	4,037	1,191
176.43	547	22	176.95	4,105	1,231
176.44	616	28	176.96	4,173	1,273
176.45	684	34	176.97	4,242	1,315
176.46	753	41	176.98	4,310	1,358
176.47	821	49	176.99	4,379	1,401
176.48	889	58	177.00	4,447	1,445
176.49	958	67	177.01	4,455	1,490
176.50	1,026	77	177.02	4,464	1,534
176.51	1,095	88	177.03	4,472	1,579
176.52	1,163	99	177.04	4,481	1,624
176.53	1,231	111	177.05	4,489	1,669
176.54	1,300	123	177.06	4,498	1,714
176.55	1,368	137	177.07	4,506	1,759
176.56	1,437	151	177.08	4,515	1,804
176.57	1,505	166	177.09	4,523	1,849
176.58	1,574	181	177.10	4,531	1,894
176.59	1,642	197	177.11	4,540	1,940
176.60	1,710	214	177.12	4,548	1,985
176.61	1,779	231	177.13	4,557	2,031
176.62	1,847	249	177.14	4,565	2,076
176.63	1,916	268	177.15	4,574	2,122
176.64	1,984	288	177.16	4,582	2,168
176.65	2,052	308	177.17	4,591	2,213
176.66	2,121	329	177.18	4,599	2,259
176.67	2,189	350	177.19	4,608	2,305
176.68	2,258	373	177.20	4,616	2,352
176.69	2,326	395	177.21	4,624	2,398
176.70	2,395	419	177.22	4,633	2,444
176.71	2,463	443	177.23	4,641	2,490
176.72	2,531	468	177.24	4,650	2,537
176.73	2,600	494	177.25	4,658	2,583
176.74	2,668	520	177.26	4,667	2,630
176.75	2,737	547	177.27	4,675	2,677
176.76	2,805	575	177.28	4,684	2,724
176.77	2,873	603	177.29	4,692	2,770
176.78	2,942	633	177.30	4,700	2,817
176.79	3,010	662	177.31	4,709	2,864
176.80	3,079	693	177.32	4,717	2,912
176.81	3,147	724	177.33	4,726	2,959
176.82	3,216	756	177.34	4,734	3,006
176.83	3,284	788	177.35	4,743	3,053
176.84	3,352	821	177.36	4,751	3,101
176.85	3,421	855	177.37	4,760	3,149
176.86	3,489	890	177.38	4,768	3,196

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.39	4,777	3,244	177.91	5,216	5,842
177.40	4,785	3,292	177.92	5,224	5,894
177.41	4,793	3,340	177.93	5,233	5,946
177.42	4,802	3,388	177.94	5,241	5,999
177.43	4,810	3,436	177.95	5,250	6,051
177.44	4,819	3,484	177.96	5,258	6,104
177.45	4,827	3,532	177.97	5,267	6,156
177.46	4,836	3,580	177.98	5,275	6,209
177.47	4,844	3,629	177.99	5,284	6,262
177.48	4,853	3,677	178.00	5,292	6,315
177.49	4,861	3,726	178.01	5,301	6,368
177.50	4,870	3,774	178.02	5,310	6,421
177.51	4,878	3,823	178.03	5,319	6,474
177.52	4,886	3,872	178.04	5,328	6,527
177.53	4,895	3,921	178.05	5,337	6,581
177.54	4,903	3,970	178.06	5,346	6,634
177.55	4,912	4,019	178.07	5,355	6,687
177.56	4,920	4,068	178.08	5,364	6,741
177.57	4,929	4,117	178.09	5,373	6,795
177.58	4,937	4,167	178.10	5,382	6,848
177.59	4,946	4,216	178.11	5,391	6,902
177.60	4,954	4,266	178.12	5,400	6,956
177.61	4,962	4,315	178.13	5,409	7,010
177.62	4,971	4,365	178.14	5,418	7,064
177.63	4,979	4,415	178.15	5,427	7,119
177.64	4,988	4,464	178.16	5,436	7,173
177.65	4,996	4,514	178.17	5,445	7,227
177.66	5,005	4,564	178.18	5,454	7,282
177.67	5,013	4,614	178.19	5,463	7,337
177.68	5,022	4,665	178.20	5,472	7,391
177.69	5,030	4,715	178.21	5,481	7,446
177.70	5,038	4,765	178.22	5,490	7,501
177.71	5,047	4,816	178.23	5,499	7,556
177.72	5,055	4,866	178.24	5,508	7,611
177.73	5,064	4,917	178.25	5,518	7,666
177.74	5,072	4,967	178.26	5,527	7,721
177.75	5,081	5,018	178.27	5,536	7,776
177.76	5,089	5,069	178.28	5,545	7,832
177.77	5,098	5,120	178.29	5,554	7,887
177.78	5,106	5,171	178.30	5,563	7,943
177.79	5,115	5,222	178.31	5,572	7,999
177.80	5,123	5,273	178.32	5,581	8,054
177.81	5,131	5,325	178.33	5,590	8,110
177.82	5,140	5,376	178.34	5,599	8,166
177.83	5,148	5,427	178.35	5,608	8,222
177.84	5,157	5,479	178.36	5,617	8,278
177.85	5,165	5,530	178.37	5,626	8,335
177.86	5,174	5,582	178.38	5,635	8,391
177.87	5,182	5,634	178.39	5,644	8,447
177.88	5,191	5,686	178.40	5,653	8,504
177.89	5,199	5,738	178.41	5,662	8,560
177.90	5,208	5,790	178.42	5,671	8,617

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.43	5,680	8,674	178.95	6,149	11,749
178.44	5,689	8,731	178.96	6,158	11,811
178.45	5,698	8,788	178.97	6,167	11,872
178.46	5,707	8,845	178.98	6,176	11,934
178.47	5,716	8,902	178.99	6,185	11,996
178.48	5,725	8,959	179.00	6,194	12,058
178.49	5,734	9,016	179.01	6,204	12,120
178.50	5,743	9,074	179.02	6,213	12,182
178.51	5,752	9,131	179.03	6,223	12,244
178.52	5,761	9,189	179.04	6,232	12,306
178.53	5,770	9,246	179.05	6,242	12,369
178.54	5,779	9,304	179.06	6,252	12,431
178.55	5,788	9,362	179.07	6,261	12,494
178.56	5,797	9,420	179.08	6,271	12,556
178.57	5,806	9,478	179.09	6,280	12,619
178.58	5,815	9,536	179.10	6,290	12,682
178.59	5,824	9,594	179.11	6,299	12,745
178.60	5,833	9,652	179.12	6,309	12,808
178.61	5,842	9,711	179.13	6,319	12,871
178.62	5,851	9,769	179.14	6,328	12,934
178.63	5,860	9,828	179.15	6,338	12,998
178.64	5,869	9,886	179.16	6,347	13,061
178.65	5,878	9,945	179.17	6,357	13,125
178.66	5,887	10,004	179.18	6,367	13,188
178.67	5,896	10,063	179.19	6,376	13,252
178.68	5,905	10,122	179.20	6,386	13,316
178.69	5,914	10,181	179.21	6,395	13,380
178.70	5,923	10,240	179.22	6,405	13,444
178.71	5,932	10,299	179.23	6,415	13,508
178.72	5,941	10,359	179.24	6,424	13,572
178.73	5,950	10,418	179.25	6,434	13,636
178.74	5,959	10,478	179.26	6,443	13,701
178.75	5,969	10,537	179.27	6,453	13,765
178.76	5,978	10,597	179.28	6,463	13,830
178.77	5,987	10,657	179.29	6,472	13,894
178.78	5,996	10,717	179.30	6,482	13,959
178.79	6,005	10,777	179.31	6,491	14,024
178.80	6,014	10,837	179.32	6,501	14,089
178.81	6,023	10,897	179.33	6,510	14,154
178.82	6,032	10,957	179.34	6,520	14,219
178.83	6,041	11,018	179.35	6,530	14,284
178.84	6,050	11,078	179.36	6,539	14,350
178.85	6,059	11,139	179.37	6,549	14,415
178.86	6,068	11,199	179.38	6,558	14,481
178.87	6,077	11,260	179.39	6,568	14,546
178.88	6,086	11,321	179.40	6,578	14,612
178.89	6,095	11,382	179.41	6,587	14,678
178.90	6,104	11,443	179.42	6,597	14,744
178.91	6,113	11,504	179.43	6,606	14,810
178.92	6,122	11,565	179.44	6,616	14,876
178.93	6,131	11,626	179.45	6,626	14,942
178.94	6,140	11,688	179.46	6,635	15,008

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.47	6,645	15,075	179.99	7,143	18,660
179.48	6,654	15,141	180.00	7,153	18,731
179.49	6,664	15,208	180.01	7,163	18,803
179.50	6,674	15,275	180.02	7,173	18,875
179.51	6,683	15,341	180.03	7,183	18,946
179.52	6,693	15,408	180.04	7,194	19,018
179.53	6,702	15,475	180.05	7,204	19,090
179.54	6,712	15,542	180.06	7,214	19,162
179.55	6,721	15,610	180.07	7,224	19,234
179.56	6,731	15,677	180.08	7,234	19,307
179.57	6,741	15,744	180.09	7,244	19,379
179.58	6,750	15,812	180.10	7,254	19,452
179.59	6,760	15,879	180.11	7,265	19,524
179.60	6,769	15,947	180.12	7,275	19,597
179.61	6,779	16,015	180.13	7,285	19,670
179.62	6,789	16,082	180.14	7,295	19,743
179.63	6,798	16,150	180.15	7,305	19,816
179.64	6,808	16,218	180.16	7,315	19,889
179.65	6,817	16,286	180.17	7,326	19,962
179.66	6,827	16,355	180.18	7,336	20,035
179.67	6,837	16,423	180.19	7,346	20,109
179.68	6,846	16,491	180.20	7,356	20,182
179.69	6,856	16,560	180.21	7,366	20,256
179.70	6,865	16,629	180.22	7,376	20,329
179.71	6,875	16,697	180.23	7,386	20,403
179.72	6,884	16,766	180.24	7,397	20,477
179.73	6,894	16,835	180.25	7,407	20,551
179.74	6,904	16,904	180.26	7,417	20,625
179.75	6,913	16,973	180.27	7,427	20,700
179.76	6,923	17,042	180.28	7,437	20,774
179.77	6,932	17,111	180.29	7,447	20,848
179.78	6,942	17,181	180.30	7,457	20,923
179.79	6,952	17,250	180.31	7,468	20,997
179.80	6,961	17,320	180.32	7,478	21,072
179.81	6,971	17,390	180.33	7,488	21,147
179.82	6,980	17,459	180.34	7,498	21,222
179.83	6,990	17,529	180.35	7,508	21,297
179.84	7,000	17,599	180.36	7,518	21,372
179.85	7,009	17,669	180.37	7,529	21,447
179.86	7,019	17,739	180.38	7,539	21,523
179.87	7,028	17,809	180.39	7,549	21,598
179.88	7,038	17,880	180.40	7,559	21,674
179.89	7,048	17,950	180.41	7,569	21,749
179.90	7,057	18,021	180.42	7,579	21,825
179.91	7,067	18,091	180.43	7,589	21,901
179.92	7,076	18,162	180.44	7,600	21,977
179.93	7,086	18,233	180.45	7,610	22,053
179.94	7,095	18,304	180.46	7,620	22,129
179.95	7,105	18,375	180.47	7,630	22,205
179.96	7,115	18,446	180.48	7,640	22,282
179.97	7,124	18,517	180.49	7,650	22,358
179.98	7,134	18,588	180.50	7,661	22,435

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.51	7,671	22,511
180.52	7,681	22,588
180.53	7,691	22,665
180.54	7,701	22,742
180.55	7,711	22,819
180.56	7,721	22,896
180.57	7,732	22,973
180.58	7,742	23,051
180.59	7,752	23,128
180.60	7,762	23,206
180.61	7,772	23,283
180.62	7,782	23,361
180.63	7,792	23,439
180.64	7,803	23,517
180.65	7,813	23,595
180.66	7,823	23,673
180.67	7,833	23,752
180.68	7,843	23,830
180.69	7,853	23,908
180.70	7,863	23,987
180.71	7,874	24,066
180.72	7,884	24,145
180.73	7,894	24,223
180.74	7,904	24,302
180.75	7,914	24,381
180.76	7,924	24,461
180.77	7,935	24,540
180.78	7,945	24,619
180.79	7,955	24,699
180.80	7,965	24,778
180.81	7,975	24,858
180.82	7,985	24,938
180.83	7,995	25,018
180.84	8,006	25,098
180.85	8,016	25,178
180.86	8,026	25,258
180.87	8,036	25,339
180.88	8,046	25,419
180.89	8,056	25,499
180.90	8,067	25,580
180.91	8,077	25,661
180.92	8,087	25,742
180.93	8,097	25,823
180.94	8,107	25,904
180.95	8,117	25,985
180.96	8,127	26,066
180.97	8,138	26,147
180.98	8,148	26,229
180.99	8,158	26,310
181.00	**8,168**	**26,392**

Summary for Pond B-44: Basin #44

Inflow Area = 1.184 ac, 34.71% Impervious, Inflow Depth = 2.23" for Future 2 yr event
Inflow = 2.69 cfs @ 12.17 hrs, Volume= 0.220 af
Outflow = 0.09 cfs @ 16.03 hrs, Volume= 0.112 af, Atten= 97%, Lag= 231.5 min
Primary = 0.09 cfs @ 16.03 hrs, Volume= 0.112 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 166.81' @ 16.03 hrs Surf.Area= 6,363 sf Storage= 6,888 cf

Plug-Flow detention time= 608.8 min calculated for 0.112 af (51% of inflow)
Center-of-Mass det. time= 479.5 min (1,280.9 - 801.4)

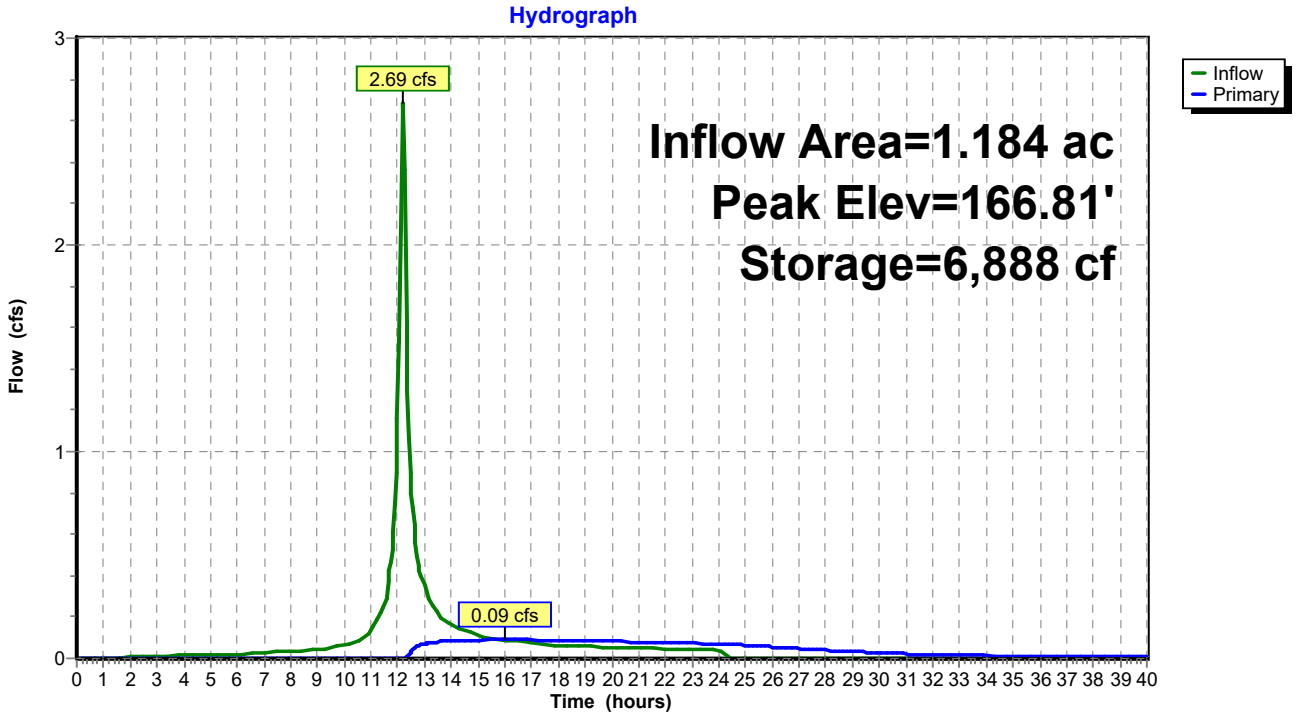
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	31,812 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	5,690	1,991	1,991
167.00	6,518	6,104	8,095
168.00	7,407	6,963	15,058
169.00	8,360	7,884	22,941
170.00	9,381	8,871	31,812

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	**18.0" Round Culvert** L= 44.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0295 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	166.41'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	167.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	168.98'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.09 cfs @ 16.03 hrs HW=166.81' (Free Discharge)
- **1=Culvert** (Passes 0.09 cfs of 7.43 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.09 cfs @ 2.63 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-44: Basin #44



Stage-Discharge for Pond B-44: Basin #44

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.10
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.10
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.10
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.10
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.10
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.10
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.10
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.11
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.11
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.11
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.11
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.11
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.11
165.43	0.00	165.95	0.00	166.47	0.01	166.99	0.11
165.44	0.00	165.96	0.00	166.48	0.01	167.00	0.11
165.45	0.00	165.97	0.00	166.49	0.01	167.01	0.12
165.46	0.00	165.98	0.00	166.50	0.01	167.02	0.12
165.47	0.00	165.99	0.00	166.51	0.02	167.03	0.12
165.48	0.00	166.00	0.00	166.52	0.02	167.04	0.12
165.49	0.00	166.01	0.00	166.53	0.02	167.05	0.12
165.50	0.00	166.02	0.00	166.54	0.03	167.06	0.12
165.51	0.00	166.03	0.00	166.55	0.03	167.07	0.12
165.52	0.00	166.04	0.00	166.56	0.03	167.08	0.12
165.53	0.00	166.05	0.00	166.57	0.04	167.09	0.12
165.54	0.00	166.06	0.00	166.58	0.04	167.10	0.13
165.55	0.00	166.07	0.00	166.59	0.05	167.11	0.13
165.56	0.00	166.08	0.00	166.60	0.05	167.12	0.13
165.57	0.00	166.09	0.00	166.61	0.05	167.13	0.13
165.58	0.00	166.10	0.00	166.62	0.05	167.14	0.13
165.59	0.00	166.11	0.00	166.63	0.06	167.15	0.13
165.60	0.00	166.12	0.00	166.64	0.06	167.16	0.13
165.61	0.00	166.13	0.00	166.65	0.06	167.17	0.13
165.62	0.00	166.14	0.00	166.66	0.06	167.18	0.13
165.63	0.00	166.15	0.00	166.67	0.06	167.19	0.13
165.64	0.00	166.16	0.00	166.68	0.07	167.20	0.14
165.65	0.00	166.17	0.00	166.69	0.07	167.21	0.14
165.66	0.00	166.18	0.00	166.70	0.07	167.22	0.14
165.67	0.00	166.19	0.00	166.71	0.07	167.23	0.14
165.68	0.00	166.20	0.00	166.72	0.07	167.24	0.14
165.69	0.00	166.21	0.00	166.73	0.08	167.25	0.14
165.70	0.00	166.22	0.00	166.74	0.08	167.26	0.14
165.71	0.00	166.23	0.00	166.75	0.08	167.27	0.14
165.72	0.00	166.24	0.00	166.76	0.08	167.28	0.14
165.73	0.00	166.25	0.00	166.77	0.08	167.29	0.14
165.74	0.00	166.26	0.00	166.78	0.08	167.30	0.15
165.75	0.00	166.27	0.00	166.79	0.09	167.31	0.15
165.76	0.00	166.28	0.00	166.80	0.09	167.32	0.15
165.77	0.00	166.29	0.00	166.81	0.09	167.33	0.15
165.78	0.00	166.30	0.00	166.82	0.09	167.34	0.15
165.79	0.00	166.31	0.00	166.83	0.09	167.35	0.15
165.80	0.00	166.32	0.00	166.84	0.09	167.36	0.15
165.81	0.00	166.33	0.00	166.85	0.10	167.37	0.15

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.15	167.90	3.44	168.42	11.24	168.94	14.46
167.39	0.15	167.91	3.56	168.43	11.41	168.95	14.49
167.40	0.15	167.92	3.68	168.44	11.59	168.96	14.51
167.41	0.16	167.93	3.80	168.45	11.76	168.97	14.54
167.42	0.16	167.94	3.93	168.46	11.94	168.98	14.56
167.43	0.16	167.95	4.06	168.47	12.12	168.99	14.71
167.44	0.16	167.96	4.18	168.48	12.30	169.00	14.95
167.45	0.16	167.97	4.31	168.49	12.48	169.01	15.25
167.46	0.16	167.98	4.44	168.50	12.66	169.02	15.60
167.47	0.16	167.99	4.58	168.51	12.84	169.03	16.00
167.48	0.16	168.00	4.71	168.52	13.02	169.04	16.44
167.49	0.16	168.01	4.84	168.53	13.20	169.05	16.91
167.50	0.16	168.02	4.98	168.54	13.38	169.06	17.42
167.51	0.18	168.03	5.12	168.55	13.45	169.07	17.96
167.52	0.20	168.04	5.25	168.56	13.48	169.08	18.53
167.53	0.23	168.05	5.39	168.57	13.51	169.09	19.13
167.54	0.27	168.06	5.53	168.58	13.53	169.10	19.75
167.55	0.31	168.07	5.67	168.59	13.56	169.11	20.40
167.56	0.36	168.08	5.82	168.60	13.59	169.12	21.08
167.57	0.41	168.09	5.96	168.61	13.61	169.13	21.78
167.58	0.46	168.10	6.10	168.62	13.64	169.14	22.50
167.59	0.52	168.11	6.25	168.63	13.67	169.15	23.25
167.60	0.58	168.12	6.40	168.64	13.69	169.16	24.02
167.61	0.65	168.13	6.54	168.65	13.72	169.17	24.81
167.62	0.71	168.14	6.69	168.66	13.75	169.18	25.62
167.63	0.78	168.15	6.84	168.67	13.77	169.19	26.49
167.64	0.85	168.16	6.99	168.68	13.80	169.20	27.39
167.65	0.93	168.17	7.14	168.69	13.83	169.21	28.31
167.66	1.01	168.18	7.30	168.70	13.85	169.22	29.25
167.67	1.09	168.19	7.45	168.71	13.88	169.23	30.23
167.68	1.17	168.20	7.61	168.72	13.90	169.24	31.22
167.69	1.25	168.21	7.76	168.73	13.93	169.25	32.25
167.70	1.34	168.22	7.92	168.74	13.96	169.26	33.29
167.71	1.43	168.23	8.08	168.75	13.98	169.27	34.36
167.72	1.52	168.24	8.23	168.76	14.01	169.28	35.46
167.73	1.61	168.25	8.39	168.77	14.03	169.29	36.58
167.74	1.70	168.26	8.55	168.78	14.06	169.30	37.73
167.75	1.80	168.27	8.72	168.79	14.08	169.31	38.90
167.76	1.89	168.28	8.88	168.80	14.11	169.32	40.09
167.77	1.99	168.29	9.04	168.81	14.14	169.33	41.31
167.78	2.10	168.30	9.20	168.82	14.16	169.34	42.55
167.79	2.20	168.31	9.37	168.83	14.19	169.35	43.81
167.80	2.30	168.32	9.53	168.84	14.21	169.36	45.10
167.81	2.41	168.33	9.70	168.85	14.24	169.37	46.42
167.82	2.52	168.34	9.87	168.86	14.26	169.38	47.76
167.83	2.63	168.35	10.04	168.87	14.29	169.39	49.15
167.84	2.74	168.36	10.21	168.88	14.31	169.40	50.56
167.85	2.85	168.37	10.38	168.89	14.34	169.41	52.00
167.86	2.96	168.38	10.55	168.90	14.36	169.42	53.47
167.87	3.08	168.39	10.72	168.91	14.39	169.43	54.96
167.88	3.20	168.40	10.89	168.92	14.41	169.44	56.48
167.89	3.32	168.41	11.06	168.93	14.44	169.45	58.03

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)
169.46	59.60
169.47	61.20
169.48	62.82
169.49	64.47
169.50	66.15
169.51	67.86
169.52	69.59
169.53	71.35
169.54	73.13
169.55	74.94
169.56	76.78
169.57	78.64
169.58	80.54
169.59	82.19
169.60	83.85
169.61	85.52
169.62	87.21
169.63	88.92
169.64	90.63
169.65	92.36
169.66	94.11
169.67	95.86
169.68	97.63
169.69	99.41
169.70	101.20
169.71	103.01
169.72	104.83
169.73	106.66
169.74	108.50
169.75	110.36
169.76	112.23
169.77	114.11
169.78	116.00
169.79	117.94
169.80	119.89
169.81	121.86
169.82	123.84
169.83	125.84
169.84	127.85
169.85	129.87
169.86	131.90
169.87	133.95
169.88	136.01
169.89	138.08
169.90	140.16
169.91	142.26
169.92	144.37
169.93	146.49
169.94	148.63
169.95	150.78
169.96	152.94
169.97	155.11
169.98	157.30
169.99	159.45
170.00	**161.60**

Stage-Area-Storage for Pond B-44: Basin #44

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0
165.31	81	0
165.32	163	2
165.33	244	4
165.34	325	7
165.35	406	10
165.36	488	15
165.37	569	20
165.38	650	26
165.39	732	33
165.40	813	41
165.41	894	49
165.42	975	59
165.43	1,057	69
165.44	1,138	80
165.45	1,219	91
165.46	1,301	104
165.47	1,382	117
165.48	1,463	132
165.49	1,544	147
165.50	1,626	163
165.51	1,707	179
165.52	1,788	197
165.53	1,870	215
165.54	1,951	234
165.55	2,032	254
165.56	2,113	275
165.57	2,195	296
165.58	2,276	319
165.59	2,357	342
165.60	2,439	366
165.61	2,520	391
165.62	2,601	416
165.63	2,682	443
165.64	2,764	470
165.65	2,845	498
165.66	2,926	527
165.67	3,008	556
165.68	3,089	587
165.69	3,170	618
165.70	3,251	650
165.71	3,333	683
165.72	3,414	717
165.73	3,495	751
165.74	3,577	787
165.75	3,658	823
165.76	3,739	860
165.77	3,820	898
165.78	3,902	936
165.79	3,983	976
165.80	4,064	1,016
165.81	4,146	1,057
165.82	4,227	1,099
165.83	4,308	1,142
165.84	4,389	1,185
165.85	4,471	1,229
165.86	4,552	1,275
165.87	4,633	1,320
165.88	4,715	1,367
165.89	4,796	1,415
165.90	4,877	1,463
165.91	4,958	1,512
165.92	5,040	1,562
165.93	5,121	1,613
165.94	5,202	1,665
165.95	5,284	1,717
165.96	5,365	1,770
165.97	5,446	1,824
165.98	5,527	1,879
165.99	5,609	1,935
166.00	5,690	1,991
166.01	5,698	2,048
166.02	5,707	2,105
166.03	5,715	2,163
166.04	5,723	2,220
166.05	5,731	2,277
166.06	5,740	2,334
166.07	5,748	2,392
166.08	5,756	2,449
166.09	5,765	2,507
166.10	5,773	2,565
166.11	5,781	2,622
166.12	5,789	2,680
166.13	5,798	2,738
166.14	5,806	2,796
166.15	5,814	2,854
166.16	5,822	2,912
166.17	5,831	2,971
166.18	5,839	3,029
166.19	5,847	3,088
166.20	5,856	3,146
166.21	5,864	3,205
166.22	5,872	3,263
166.23	5,880	3,322
166.24	5,889	3,381
166.25	5,897	3,440
166.26	5,905	3,499
166.27	5,914	3,558
166.28	5,922	3,617
166.29	5,930	3,676
166.30	5,938	3,736
166.31	5,947	3,795
166.32	5,955	3,855
166.33	5,963	3,914

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	5,972	3,974	166.86	6,402	7,191
166.35	5,980	4,034	166.87	6,410	7,255
166.36	5,988	4,094	166.88	6,419	7,319
166.37	5,996	4,153	166.89	6,427	7,384
166.38	6,005	4,213	166.90	6,435	7,448
166.39	6,013	4,274	166.91	6,443	7,512
166.40	6,021	4,334	166.92	6,452	7,577
166.41	6,029	4,394	166.93	6,460	7,641
166.42	6,038	4,454	166.94	6,468	7,706
166.43	6,046	4,515	166.95	6,477	7,771
166.44	6,054	4,575	166.96	6,485	7,835
166.45	6,063	4,636	166.97	6,493	7,900
166.46	6,071	4,697	166.98	6,501	7,965
166.47	6,079	4,757	166.99	6,510	8,030
166.48	6,087	4,818	167.00	6,518	8,095
166.49	6,096	4,879	167.01	6,527	8,161
166.50	6,104	4,940	167.02	6,536	8,226
166.51	6,112	5,001	167.03	6,545	8,291
166.52	6,121	5,062	167.04	6,554	8,357
166.53	6,129	5,123	167.05	6,562	8,423
166.54	6,137	5,185	167.06	6,571	8,488
166.55	6,145	5,246	167.07	6,580	8,554
166.56	6,154	5,308	167.08	6,589	8,620
166.57	6,162	5,369	167.09	6,598	8,686
166.58	6,170	5,431	167.10	6,607	8,752
166.59	6,179	5,493	167.11	6,616	8,818
166.60	6,187	5,555	167.12	6,625	8,884
166.61	6,195	5,616	167.13	6,634	8,950
166.62	6,203	5,678	167.14	6,642	9,017
166.63	6,212	5,741	167.15	6,651	9,083
166.64	6,220	5,803	167.16	6,660	9,150
166.65	6,228	5,865	167.17	6,669	9,216
166.66	6,236	5,927	167.18	6,678	9,283
166.67	6,245	5,990	167.19	6,687	9,350
166.68	6,253	6,052	167.20	6,696	9,417
166.69	6,261	6,115	167.21	6,705	9,484
166.70	6,270	6,177	167.22	6,714	9,551
166.71	6,278	6,240	167.23	6,722	9,618
166.72	6,286	6,303	167.24	6,731	9,685
166.73	6,294	6,366	167.25	6,740	9,753
166.74	6,303	6,429	167.26	6,749	9,820
166.75	6,311	6,492	167.27	6,758	9,888
166.76	6,319	6,555	167.28	6,767	9,955
166.77	6,328	6,618	167.29	6,776	10,023
166.78	6,336	6,682	167.30	6,785	10,091
166.79	6,344	6,745	167.31	6,794	10,159
166.80	6,352	6,808	167.32	6,802	10,227
166.81	6,361	6,872	167.33	6,811	10,295
166.82	6,369	6,936	167.34	6,820	10,363
166.83	6,377	6,999	167.35	6,829	10,431
166.84	6,386	7,063	167.36	6,838	10,500
166.85	6,394	7,127	167.37	6,847	10,568

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	6,856	10,637	167.90	7,318	14,322
167.39	6,865	10,705	167.91	7,327	14,395
167.40	6,874	10,774	167.92	7,336	14,468
167.41	6,882	10,843	167.93	7,345	14,542
167.42	6,891	10,911	167.94	7,354	14,615
167.43	6,900	10,980	167.95	7,363	14,689
167.44	6,909	11,049	167.96	7,371	14,762
167.45	6,918	11,119	167.97	7,380	14,836
167.46	6,927	11,188	167.98	7,389	14,910
167.47	6,936	11,257	167.99	7,398	14,984
167.48	6,945	11,327	168.00	7,407	15,058
167.49	6,954	11,396	168.01	7,417	15,132
167.50	6,963	11,466	168.02	7,426	15,206
167.51	6,971	11,535	168.03	7,436	15,281
167.52	6,980	11,605	168.04	7,445	15,355
167.53	6,989	11,675	168.05	7,455	15,430
167.54	6,998	11,745	168.06	7,464	15,504
167.55	7,007	11,815	168.07	7,474	15,579
167.56	7,016	11,885	168.08	7,483	15,654
167.57	7,025	11,955	168.09	7,493	15,728
167.58	7,034	12,025	168.10	7,502	15,803
167.59	7,043	12,096	168.11	7,512	15,879
167.60	7,051	12,166	168.12	7,521	15,954
167.61	7,060	12,237	168.13	7,531	16,029
167.62	7,069	12,308	168.14	7,540	16,104
167.63	7,078	12,378	168.15	7,550	16,180
167.64	7,087	12,449	168.16	7,559	16,255
167.65	7,096	12,520	168.17	7,569	16,331
167.66	7,105	12,591	168.18	7,579	16,407
167.67	7,114	12,662	168.19	7,588	16,483
167.68	7,123	12,733	168.20	7,598	16,558
167.69	7,131	12,805	168.21	7,607	16,634
167.70	7,140	12,876	168.22	7,617	16,711
167.71	7,149	12,947	168.23	7,626	16,787
167.72	7,158	13,019	168.24	7,636	16,863
167.73	7,167	13,091	168.25	7,645	16,940
167.74	7,176	13,162	168.26	7,655	17,016
167.75	7,185	13,234	168.27	7,664	17,093
167.76	7,194	13,306	168.28	7,674	17,169
167.77	7,203	13,378	168.29	7,683	17,246
167.78	7,211	13,450	168.30	7,693	17,323
167.79	7,220	13,522	168.31	7,702	17,400
167.80	7,229	13,594	168.32	7,712	17,477
167.81	7,238	13,667	168.33	7,721	17,554
167.82	7,247	13,739	168.34	7,731	17,631
167.83	7,256	13,812	168.35	7,741	17,709
167.84	7,265	13,884	168.36	7,750	17,786
167.85	7,274	13,957	168.37	7,760	17,864
167.86	7,283	14,030	168.38	7,769	17,941
167.87	7,291	14,103	168.39	7,779	18,019
167.88	7,300	14,176	168.40	7,788	18,097
167.89	7,309	14,249	168.41	7,798	18,175

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	7,807	18,253	168.94	8,303	22,442
168.43	7,817	18,331	168.95	8,312	22,525
168.44	7,826	18,409	168.96	8,322	22,608
168.45	7,836	18,488	168.97	8,331	22,691
168.46	7,845	18,566	168.98	8,341	22,774
168.47	7,855	18,645	168.99	8,350	22,858
168.48	7,864	18,723	169.00	8,360	22,941
168.49	7,874	18,802	169.01	8,370	23,025
168.50	7,884	18,881	169.02	8,380	23,109
168.51	7,893	18,960	169.03	8,391	23,193
168.52	7,903	19,038	169.04	8,401	23,277
168.53	7,912	19,118	169.05	8,411	23,361
168.54	7,922	19,197	169.06	8,421	23,445
168.55	7,931	19,276	169.07	8,431	23,529
168.56	7,941	19,355	169.08	8,442	23,614
168.57	7,950	19,435	169.09	8,452	23,698
168.58	7,960	19,514	169.10	8,462	23,783
168.59	7,969	19,594	169.11	8,472	23,867
168.60	7,979	19,674	169.12	8,483	23,952
168.61	7,988	19,754	169.13	8,493	24,037
168.62	7,998	19,834	169.14	8,503	24,122
168.63	8,007	19,914	169.15	8,513	24,207
168.64	8,017	19,994	169.16	8,523	24,292
168.65	8,026	20,074	169.17	8,534	24,377
168.66	8,036	20,154	169.18	8,544	24,463
168.67	8,046	20,235	169.19	8,554	24,548
168.68	8,055	20,315	169.20	8,564	24,634
168.69	8,065	20,396	169.21	8,574	24,720
168.70	8,074	20,476	169.22	8,585	24,805
168.71	8,084	20,557	169.23	8,595	24,891
168.72	8,093	20,638	169.24	8,605	24,977
168.73	8,103	20,719	169.25	8,615	25,063
168.74	8,112	20,800	169.26	8,625	25,150
168.75	8,122	20,881	169.27	8,636	25,236
168.76	8,131	20,963	169.28	8,646	25,322
168.77	8,141	21,044	169.29	8,656	25,409
168.78	8,150	21,125	169.30	8,666	25,495
168.79	8,160	21,207	169.31	8,677	25,582
168.80	8,169	21,289	169.32	8,687	25,669
168.81	8,179	21,370	169.33	8,697	25,756
168.82	8,188	21,452	169.34	8,707	25,843
168.83	8,198	21,534	169.35	8,717	25,930
168.84	8,208	21,616	169.36	8,728	26,017
168.85	8,217	21,698	169.37	8,738	26,105
168.86	8,227	21,780	169.38	8,748	26,192
168.87	8,236	21,863	169.39	8,758	26,280
168.88	8,246	21,945	169.40	8,768	26,367
168.89	8,255	22,028	169.41	8,779	26,455
168.90	8,265	22,110	169.42	8,789	26,543
168.91	8,274	22,193	169.43	8,799	26,631
168.92	8,284	22,276	169.44	8,809	26,719
168.93	8,293	22,359	169.45	8,819	26,807

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	8,830	26,895
169.47	8,840	26,983
169.48	8,850	27,072
169.49	8,860	27,160
169.50	8,871	27,249
169.51	8,881	27,338
169.52	8,891	27,427
169.53	8,901	27,516
169.54	8,911	27,605
169.55	8,922	27,694
169.56	8,932	27,783
169.57	8,942	27,873
169.58	8,952	27,962
169.59	8,962	28,052
169.60	8,973	28,141
169.61	8,983	28,231
169.62	8,993	28,321
169.63	9,003	28,411
169.64	9,013	28,501
169.65	9,024	28,591
169.66	9,034	28,681
169.67	9,044	28,772
169.68	9,054	28,862
169.69	9,064	28,953
169.70	9,075	29,044
169.71	9,085	29,134
169.72	9,095	29,225
169.73	9,105	29,316
169.74	9,116	29,407
169.75	9,126	29,499
169.76	9,136	29,590
169.77	9,146	29,681
169.78	9,156	29,773
169.79	9,167	29,865
169.80	9,177	29,956
169.81	9,187	30,048
169.82	9,197	30,140
169.83	9,207	30,232
169.84	9,218	30,324
169.85	9,228	30,416
169.86	9,238	30,509
169.87	9,248	30,601
169.88	9,258	30,694
169.89	9,269	30,786
169.90	9,279	30,879
169.91	9,289	30,972
169.92	9,299	31,065
169.93	9,310	31,158
169.94	9,320	31,251
169.95	9,330	31,344
169.96	9,340	31,438
169.97	9,350	31,531
169.98	9,361	31,625
169.99	9,371	31,718
170.00	**9,381**	**31,812**

Summary for Pond B-45: Basin #45

Inflow Area = 2.294 ac, 62.82% Impervious, Inflow Depth = 2.82" for Future 2 yr event
Inflow = 6.41 cfs @ 12.17 hrs, Volume= 0.540 af
Outflow = 1.13 cfs @ 12.70 hrs, Volume= 0.382 af, Atten= 82%, Lag= 31.5 min
Primary = 1.13 cfs @ 12.70 hrs, Volume= 0.382 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 168.78' @ 12.70 hrs Surf.Area= 5,450 sf Storage= 14,132 cf

Plug-Flow detention time= 504.4 min calculated for 0.382 af (71% of inflow)
Center-of-Mass det. time= 405.3 min (1,182.5 - 777.2)

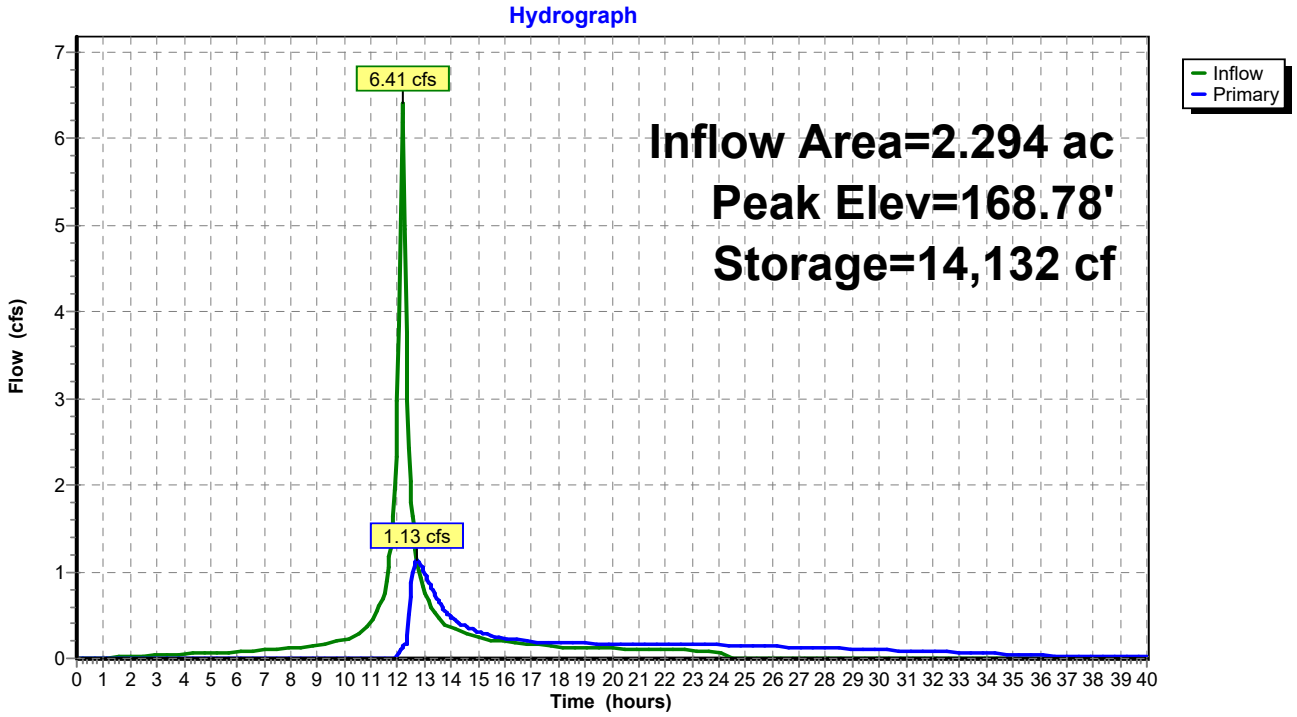
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	21,270 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	3,797	1,329	1,329
167.00	4,370	4,084	5,412
168.00	4,967	4,669	10,081
169.00	5,588	5,278	15,358
170.00	6,235	5,912	21,270

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0325 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.25'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	168.50'	**2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	169.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	169.97'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.13 cfs @ 12.70 hrs HW=168.78' (Free Discharge)
- **1=Culvert** (Passes 1.13 cfs of 14.05 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.74 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.93 cfs @ 1.72 fps)
  - **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-45: Basin #45



Stage-Discharge for Pond B-45: Basin #45

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.00
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.00
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.00
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.00
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.00
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.00
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.00
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.00
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.00
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.00
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.00
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.00
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.00
165.43	0.00	165.95	0.00	166.47	0.00	166.99	0.00
165.44	0.00	165.96	0.00	166.48	0.00	167.00	0.00
165.45	0.00	165.97	0.00	166.49	0.00	167.01	0.00
165.46	0.00	165.98	0.00	166.50	0.00	167.02	0.00
165.47	0.00	165.99	0.00	166.51	0.00	167.03	0.00
165.48	0.00	166.00	0.00	166.52	0.00	167.04	0.00
165.49	0.00	166.01	0.00	166.53	0.00	167.05	0.00
165.50	0.00	166.02	0.00	166.54	0.00	167.06	0.00
165.51	0.00	166.03	0.00	166.55	0.00	167.07	0.00
165.52	0.00	166.04	0.00	166.56	0.00	167.08	0.00
165.53	0.00	166.05	0.00	166.57	0.00	167.09	0.00
165.54	0.00	166.06	0.00	166.58	0.00	167.10	0.00
165.55	0.00	166.07	0.00	166.59	0.00	167.11	0.00
165.56	0.00	166.08	0.00	166.60	0.00	167.12	0.00
165.57	0.00	166.09	0.00	166.61	0.00	167.13	0.00
165.58	0.00	166.10	0.00	166.62	0.00	167.14	0.00
165.59	0.00	166.11	0.00	166.63	0.00	167.15	0.00
165.60	0.00	166.12	0.00	166.64	0.00	167.16	0.00
165.61	0.00	166.13	0.00	166.65	0.00	167.17	0.00
165.62	0.00	166.14	0.00	166.66	0.00	167.18	0.00
165.63	0.00	166.15	0.00	166.67	0.00	167.19	0.00
165.64	0.00	166.16	0.00	166.68	0.00	167.20	0.00
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.01
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.01
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.01
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.01
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.02
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.02
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.02

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.03	167.90	0.12	168.42	0.17	168.94	2.03
167.39	0.03	167.91	0.12	168.43	0.17	168.95	2.09
167.40	0.03	167.92	0.12	168.44	0.17	168.96	2.15
167.41	0.04	167.93	0.12	168.45	0.17	168.97	2.22
167.42	0.04	167.94	0.13	168.46	0.17	168.98	2.28
167.43	0.05	167.95	0.13	168.47	0.17	168.99	2.34
167.44	0.05	167.96	0.13	168.48	0.17	169.00	2.41
167.45	0.05	167.97	0.13	168.49	0.17	169.01	2.48
167.46	0.05	167.98	0.13	168.50	0.18	169.02	2.57
167.47	0.06	167.99	0.13	168.51	0.18	169.03	2.67
167.48	0.06	168.00	0.13	168.52	0.20	169.04	2.77
167.49	0.06	168.01	0.13	168.53	0.21	169.05	2.88
167.50	0.06	168.02	0.13	168.54	0.23	169.06	2.99
167.51	0.06	168.03	0.13	168.55	0.25	169.07	3.11
167.52	0.07	168.04	0.14	168.56	0.28	169.08	3.23
167.53	0.07	168.05	0.14	168.57	0.30	169.09	3.36
167.54	0.07	168.06	0.14	168.58	0.33	169.10	3.49
167.55	0.07	168.07	0.14	168.59	0.36	169.11	3.62
167.56	0.07	168.08	0.14	168.60	0.39	169.12	3.75
167.57	0.08	168.09	0.14	168.61	0.42	169.13	3.89
167.58	0.08	168.10	0.14	168.62	0.45	169.14	4.03
167.59	0.08	168.11	0.14	168.63	0.49	169.15	4.18
167.60	0.08	168.12	0.14	168.64	0.52	169.16	4.33
167.61	0.08	168.13	0.14	168.65	0.56	169.17	4.48
167.62	0.08	168.14	0.15	168.66	0.60	169.18	4.63
167.63	0.09	168.15	0.15	168.67	0.64	169.19	4.79
167.64	0.09	168.16	0.15	168.68	0.68	169.20	4.94
167.65	0.09	168.17	0.15	168.69	0.72	169.21	5.10
167.66	0.09	168.18	0.15	168.70	0.76	169.22	5.27
167.67	0.09	168.19	0.15	168.71	0.81	169.23	5.43
167.68	0.09	168.20	0.15	168.72	0.85	169.24	5.60
167.69	0.10	168.21	0.15	168.73	0.90	169.25	5.77
167.70	0.10	168.22	0.15	168.74	0.94	169.26	5.94
167.71	0.10	168.23	0.15	168.75	0.99	169.27	6.12
167.72	0.10	168.24	0.15	168.76	1.04	169.28	6.29
167.73	0.10	168.25	0.16	168.77	1.09	169.29	6.47
167.74	0.10	168.26	0.16	168.78	1.14	169.30	6.65
167.75	0.10	168.27	0.16	168.79	1.19	169.31	6.83
167.76	0.10	168.28	0.16	168.80	1.24	169.32	7.02
167.77	0.11	168.29	0.16	168.81	1.29	169.33	7.20
167.78	0.11	168.30	0.16	168.82	1.34	169.34	7.39
167.79	0.11	168.31	0.16	168.83	1.40	169.35	7.58
167.80	0.11	168.32	0.16	168.84	1.45	169.36	7.77
167.81	0.11	168.33	0.16	168.85	1.51	169.37	7.97
167.82	0.11	168.34	0.16	168.86	1.56	169.38	8.16
167.83	0.11	168.35	0.16	168.87	1.62	169.39	8.36
167.84	0.11	168.36	0.16	168.88	1.68	169.40	8.56
167.85	0.12	168.37	0.17	168.89	1.73	169.41	8.76
167.86	0.12	168.38	0.17	168.90	1.79	169.42	8.96
167.87	0.12	168.39	0.17	168.91	1.85	169.43	9.17
167.88	0.12	168.40	0.17	168.92	1.91	169.44	9.37
167.89	0.12	168.41	0.17	168.93	1.97	169.45	9.58

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)
169.46	9.79
169.47	10.00
169.48	10.21
169.49	10.42
169.50	10.64
169.51	10.85
169.52	11.07
169.53	11.29
169.54	11.51
169.55	11.73
169.56	11.95
169.57	12.18
169.58	12.40
169.59	12.63
169.60	12.86
169.61	13.09
169.62	13.32
169.63	13.55
169.64	13.78
169.65	14.02
169.66	14.25
169.67	14.49
169.68	14.73
169.69	14.97
169.70	15.21
169.71	15.45
169.72	15.69
169.73	15.94
169.74	16.18
169.75	16.37
169.76	16.39
169.77	16.41
169.78	16.43
169.79	16.46
169.80	16.48
169.81	16.50
169.82	16.52
169.83	16.54
169.84	16.56
169.85	16.59
169.86	16.61
169.87	16.63
169.88	16.65
169.89	16.67
169.90	16.70
169.91	16.72
169.92	16.74
169.93	16.76
169.94	16.78
169.95	16.80
169.96	16.82
169.97	16.85
169.98	16.99
169.99	17.22
170.00	**17.52**

Stage-Area-Storage for Pond B-45: Basin #45

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0	165.82	2,821	733
165.31	54	0	165.83	2,875	762
165.32	108	1	165.84	2,929	791
165.33	163	2	165.85	2,983	820
165.34	217	4	165.86	3,038	851
165.35	271	7	165.87	3,092	881
165.36	325	10	165.88	3,146	912
165.37	380	13	165.89	3,200	944
165.38	434	17	165.90	3,255	976
165.39	488	22	165.91	3,309	1,009
165.40	542	27	165.92	3,363	1,043
165.41	597	33	165.93	3,417	1,076
165.42	651	39	165.94	3,472	1,111
165.43	705	46	165.95	3,526	1,146
165.44	759	53	165.96	3,580	1,181
165.45	814	61	165.97	3,634	1,217
165.46	868	69	165.98	3,689	1,254
165.47	922	78	165.99	3,743	1,291
165.48	976	88	166.00	3,797	1,329
165.49	1,031	98	166.01	3,803	1,367
165.50	1,085	108	166.02	3,808	1,405
165.51	1,139	120	166.03	3,814	1,443
165.52	1,193	131	166.04	3,820	1,481
165.53	1,248	143	166.05	3,826	1,520
165.54	1,302	156	166.06	3,831	1,558
165.55	1,356	170	166.07	3,837	1,596
165.56	1,410	183	166.08	3,843	1,635
165.57	1,465	198	166.09	3,849	1,673
165.58	1,519	213	166.10	3,854	1,712
165.59	1,573	228	166.11	3,860	1,750
165.60	1,627	244	166.12	3,866	1,789
165.61	1,682	261	166.13	3,871	1,827
165.62	1,736	278	166.14	3,877	1,866
165.63	1,790	295	166.15	3,883	1,905
165.64	1,844	314	166.16	3,889	1,944
165.65	1,899	332	166.17	3,894	1,983
165.66	1,953	351	166.18	3,900	2,022
165.67	2,007	371	166.19	3,906	2,061
165.68	2,061	392	166.20	3,912	2,100
165.69	2,115	413	166.21	3,917	2,139
165.70	2,170	434	166.22	3,923	2,178
165.71	2,224	456	166.23	3,929	2,217
165.72	2,278	478	166.24	3,935	2,257
165.73	2,332	501	166.25	3,940	2,296
165.74	2,387	525	166.26	3,946	2,336
165.75	2,441	549	166.27	3,952	2,375
165.76	2,495	574	166.28	3,957	2,415
165.77	2,549	599	166.29	3,963	2,454
165.78	2,604	625	166.30	3,969	2,494
165.79	2,658	651	166.31	3,975	2,534
165.80	2,712	678	166.32	3,980	2,573
165.81	2,766	705	166.33	3,986	2,613

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	3,992	2,653	166.86	4,290	4,806
166.35	3,998	2,693	166.87	4,296	4,849
166.36	4,003	2,733	166.88	4,301	4,892
166.37	4,009	2,773	166.89	4,307	4,935
166.38	4,015	2,813	166.90	4,313	4,978
166.39	4,020	2,853	166.91	4,318	5,021
166.40	4,026	2,894	166.92	4,324	5,065
166.41	4,032	2,934	166.93	4,330	5,108
166.42	4,038	2,974	166.94	4,336	5,151
166.43	4,043	3,015	166.95	4,341	5,195
166.44	4,049	3,055	166.96	4,347	5,238
166.45	4,055	3,096	166.97	4,353	5,282
166.46	4,061	3,136	166.98	4,359	5,325
166.47	4,066	3,177	166.99	4,364	5,369
166.48	4,072	3,218	167.00	4,370	5,412
166.49	4,078	3,258	167.01	4,376	5,456
166.50	4,084	3,299	167.02	4,382	5,500
166.51	4,089	3,340	167.03	4,388	5,544
166.52	4,095	3,381	167.04	4,394	5,588
166.53	4,101	3,422	167.05	4,400	5,632
166.54	4,106	3,463	167.06	4,406	5,676
166.55	4,112	3,504	167.07	4,412	5,720
166.56	4,118	3,545	167.08	4,418	5,764
166.57	4,124	3,586	167.09	4,424	5,808
166.58	4,129	3,628	167.10	4,430	5,852
166.59	4,135	3,669	167.11	4,436	5,897
166.60	4,141	3,710	167.12	4,442	5,941
166.61	4,147	3,752	167.13	4,448	5,986
166.62	4,152	3,793	167.14	4,454	6,030
166.63	4,158	3,835	167.15	4,460	6,075
166.64	4,164	3,876	167.16	4,466	6,119
166.65	4,169	3,918	167.17	4,471	6,164
166.66	4,175	3,960	167.18	4,477	6,209
166.67	4,181	4,002	167.19	4,483	6,254
166.68	4,187	4,043	167.20	4,489	6,298
166.69	4,192	4,085	167.21	4,495	6,343
166.70	4,198	4,127	167.22	4,501	6,388
166.71	4,204	4,169	167.23	4,507	6,433
166.72	4,210	4,211	167.24	4,513	6,478
166.73	4,215	4,253	167.25	4,519	6,524
166.74	4,221	4,296	167.26	4,525	6,569
166.75	4,227	4,338	167.27	4,531	6,614
166.76	4,232	4,380	167.28	4,537	6,659
166.77	4,238	4,423	167.29	4,543	6,705
166.78	4,244	4,465	167.30	4,549	6,750
166.79	4,250	4,507	167.31	4,555	6,796
166.80	4,255	4,550	167.32	4,561	6,841
166.81	4,261	4,592	167.33	4,567	6,887
166.82	4,267	4,635	167.34	4,573	6,933
166.83	4,273	4,678	167.35	4,579	6,979
166.84	4,278	4,721	167.36	4,585	7,024
166.85	4,284	4,763	167.37	4,591	7,070

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	4,597	7,116	167.90	4,907	9,587
167.39	4,603	7,162	167.91	4,913	9,636
167.40	4,609	7,208	167.92	4,919	9,686
167.41	4,615	7,254	167.93	4,925	9,735
167.42	4,621	7,301	167.94	4,931	9,784
167.43	4,627	7,347	167.95	4,937	9,833
167.44	4,633	7,393	167.96	4,943	9,883
167.45	4,639	7,439	167.97	4,949	9,932
167.46	4,645	7,486	167.98	4,955	9,982
167.47	4,651	7,532	167.99	4,961	10,031
167.48	4,657	7,579	168.00	4,967	10,081
167.49	4,663	7,625	168.01	4,973	10,131
167.50	4,669	7,672	168.02	4,979	10,180
167.51	4,674	7,719	168.03	4,986	10,230
167.52	4,680	7,766	168.04	4,992	10,280
167.53	4,686	7,812	168.05	4,998	10,330
167.54	4,692	7,859	168.06	5,004	10,380
167.55	4,698	7,906	168.07	5,010	10,430
167.56	4,704	7,953	168.08	5,017	10,480
167.57	4,710	8,000	168.09	5,023	10,530
167.58	4,716	8,047	168.10	5,029	10,581
167.59	4,722	8,095	168.11	5,035	10,631
167.60	4,728	8,142	168.12	5,042	10,681
167.61	4,734	8,189	168.13	5,048	10,732
167.62	4,740	8,237	168.14	5,054	10,782
167.63	4,746	8,284	168.15	5,060	10,833
167.64	4,752	8,332	168.16	5,066	10,884
167.65	4,758	8,379	168.17	5,073	10,934
167.66	4,764	8,427	168.18	5,079	10,985
167.67	4,770	8,474	168.19	5,085	11,036
167.68	4,776	8,522	168.20	5,091	11,087
167.69	4,782	8,570	168.21	5,097	11,138
167.70	4,788	8,618	168.22	5,104	11,189
167.71	4,794	8,666	168.23	5,110	11,240
167.72	4,800	8,714	168.24	5,116	11,291
167.73	4,806	8,762	168.25	5,122	11,342
167.74	4,812	8,810	168.26	5,128	11,393
167.75	4,818	8,858	168.27	5,135	11,445
167.76	4,824	8,906	168.28	5,141	11,496
167.77	4,830	8,954	168.29	5,147	11,547
167.78	4,836	9,003	168.30	5,153	11,599
167.79	4,842	9,051	168.31	5,160	11,651
167.80	4,848	9,099	168.32	5,166	11,702
167.81	4,854	9,148	168.33	5,172	11,754
167.82	4,860	9,197	168.34	5,178	11,806
167.83	4,866	9,245	168.35	5,184	11,857
167.84	4,871	9,294	168.36	5,191	11,909
167.85	4,877	9,343	168.37	5,197	11,961
167.86	4,883	9,391	168.38	5,203	12,013
167.87	4,889	9,440	168.39	5,209	12,065
167.88	4,895	9,489	168.40	5,215	12,117
167.89	4,901	9,538	168.41	5,222	12,170

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	5,228	12,222	168.94	5,551	15,024
168.43	5,234	12,274	168.95	5,557	15,080
168.44	5,240	12,327	168.96	5,563	15,135
168.45	5,246	12,379	168.97	5,569	15,191
168.46	5,253	12,431	168.98	5,576	15,247
168.47	5,259	12,484	168.99	5,582	15,303
168.48	5,265	12,537	169.00	5,588	15,358
168.49	5,271	12,589	169.01	5,594	15,414
168.50	5,278	12,642	169.02	5,601	15,470
168.51	5,284	12,695	169.03	5,607	15,526
168.52	5,290	12,748	169.04	5,614	15,582
168.53	5,296	12,801	169.05	5,620	15,639
168.54	5,302	12,854	169.06	5,627	15,695
168.55	5,309	12,907	169.07	5,633	15,751
168.56	5,315	12,960	169.08	5,640	15,808
168.57	5,321	13,013	169.09	5,646	15,864
168.58	5,327	13,066	169.10	5,653	15,920
168.59	5,333	13,120	169.11	5,659	15,977
168.60	5,340	13,173	169.12	5,666	16,034
168.61	5,346	13,226	169.13	5,672	16,090
168.62	5,352	13,280	169.14	5,679	16,147
168.63	5,358	13,333	169.15	5,685	16,204
168.64	5,364	13,387	169.16	5,692	16,261
168.65	5,371	13,441	169.17	5,698	16,318
168.66	5,377	13,494	169.18	5,704	16,375
168.67	5,383	13,548	169.19	5,711	16,432
168.68	5,389	13,602	169.20	5,717	16,489
168.69	5,395	13,656	169.21	5,724	16,546
168.70	5,402	13,710	169.22	5,730	16,603
168.71	5,408	13,764	169.23	5,737	16,661
168.72	5,414	13,818	169.24	5,743	16,718
168.73	5,420	13,872	169.25	5,750	16,776
168.74	5,427	13,927	169.26	5,756	16,833
168.75	5,433	13,981	169.27	5,763	16,891
168.76	5,439	14,035	169.28	5,769	16,948
168.77	5,445	14,090	169.29	5,776	17,006
168.78	5,451	14,144	169.30	5,782	17,064
168.79	5,458	14,199	169.31	5,789	17,122
168.80	5,464	14,253	169.32	5,795	17,180
168.81	5,470	14,308	169.33	5,802	17,238
168.82	5,476	14,363	169.34	5,808	17,296
168.83	5,482	14,417	169.35	5,814	17,354
168.84	5,489	14,472	169.36	5,821	17,412
168.85	5,495	14,527	169.37	5,827	17,470
168.86	5,501	14,582	169.38	5,834	17,529
168.87	5,507	14,637	169.39	5,840	17,587
168.88	5,513	14,692	169.40	5,847	17,645
168.89	5,520	14,748	169.41	5,853	17,704
168.90	5,526	14,803	169.42	5,860	17,762
168.91	5,532	14,858	169.43	5,866	17,821
168.92	5,538	14,913	169.44	5,873	17,880
168.93	5,545	14,969	169.45	5,879	17,939

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	5,886	17,997
169.47	5,892	18,056
169.48	5,899	18,115
169.49	5,905	18,174
169.50	5,912	18,233
169.51	5,918	18,292
169.52	5,924	18,352
169.53	5,931	18,411
169.54	5,937	18,470
169.55	5,944	18,530
169.56	5,950	18,589
169.57	5,957	18,649
169.58	5,963	18,708
169.59	5,970	18,768
169.60	5,976	18,828
169.61	5,983	18,888
169.62	5,989	18,947
169.63	5,996	19,007
169.64	6,002	19,067
169.65	6,009	19,127
169.66	6,015	19,187
169.67	6,021	19,248
169.68	6,028	19,308
169.69	6,034	19,368
169.70	6,041	19,429
169.71	6,047	19,489
169.72	6,054	19,550
169.73	6,060	19,610
169.74	6,067	19,671
169.75	6,073	19,731
169.76	6,080	19,792
169.77	6,086	19,853
169.78	6,093	19,914
169.79	6,099	19,975
169.80	6,106	20,036
169.81	6,112	20,097
169.82	6,119	20,158
169.83	6,125	20,219
169.84	6,131	20,281
169.85	6,138	20,342
169.86	6,144	20,403
169.87	6,151	20,465
169.88	6,157	20,526
169.89	6,164	20,588
169.90	6,170	20,650
169.91	6,177	20,711
169.92	6,183	20,773
169.93	6,190	20,835
169.94	6,196	20,897
169.95	6,203	20,959
169.96	6,209	21,021
169.97	6,216	21,083
169.98	6,222	21,145
169.99	6,229	21,208
170.00	**6,235**	**21,270**

Summary for Pond B-46A: Basin #46A

Inflow Area = 2.480 ac, 46.25% Impervious, Inflow Depth = 2.47" for Future 2 yr event
Inflow = 6.16 cfs @ 12.17 hrs, Volume= 0.511 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond B-46B : Basin #46B

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 183.60' @ 24.60 hrs Surf.Area= 11,279 sf Storage= 22,248 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

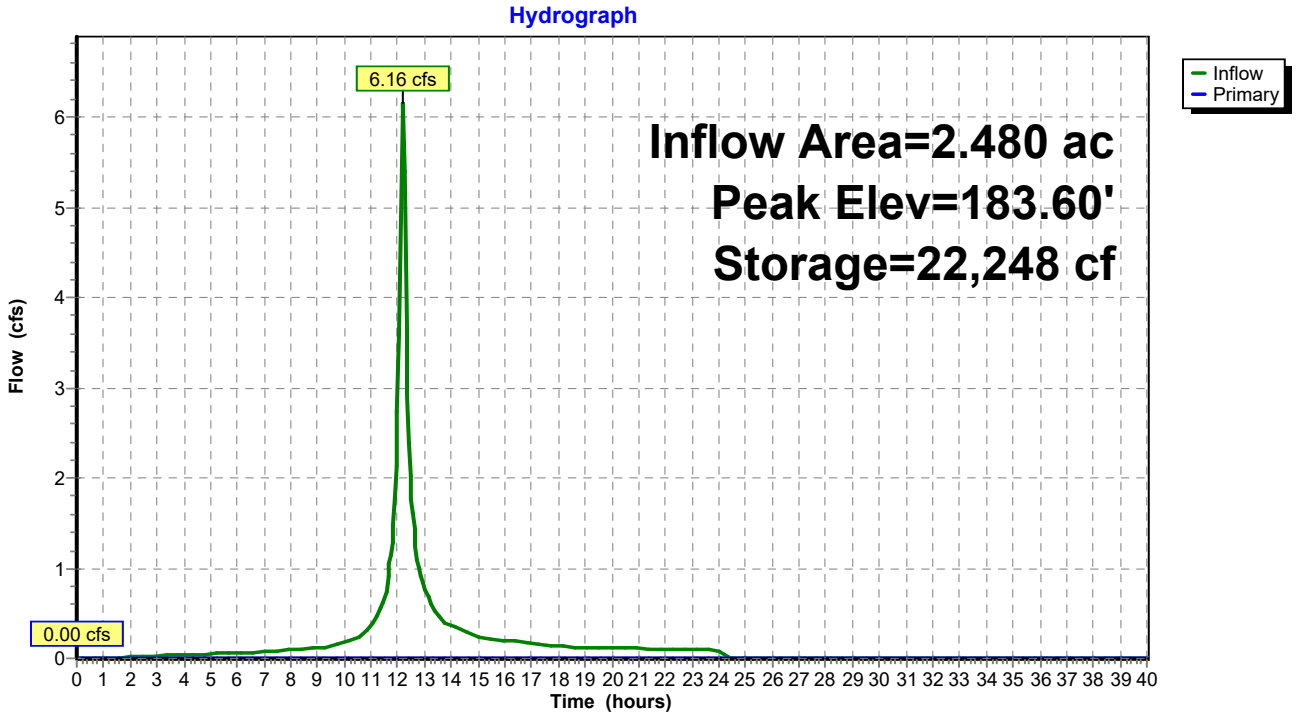
Volume	Invert	Avail.Storage	Storage Description
#1	181.00'	90,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.00	6,639	0	0
182.00	7,998	7,319	7,319
183.00	9,413	8,706	16,024
184.00	12,515	10,964	26,988
185.00	14,128	13,322	40,310
186.00	15,798	14,963	55,273
187.00	17,524	16,661	71,934
188.00	19,310	18,417	90,351

Device	Routing	Invert	Outlet Devices
#1	Primary	187.50'	**50.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=181.00' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-46A: Basin #46A



Stage-Discharge for Pond B-46A: Basin #46A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.00
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.00
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.00
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.00
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.00
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.00
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.00
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.00
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.00
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.00
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.00
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.00
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.00
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.00
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.00
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.00
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.00
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.00
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.00
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.00
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.00
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.00
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.00
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.00
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.00
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.00
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.00
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.00
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.00
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.00
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.00
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.00
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.00
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.00
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.00
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.00
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.00
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.00
181.48	0.00	182.00	0.00	182.52	0.00	183.04	0.00
181.49	0.00	182.01	0.00	182.53	0.00	183.05	0.00
181.50	0.00	182.02	0.00	182.54	0.00	183.06	0.00
181.51	0.00	182.03	0.00	182.55	0.00	183.07	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.08	0.00	183.60	0.00	184.12	0.00	184.64	0.00
183.09	0.00	183.61	0.00	184.13	0.00	184.65	0.00
183.10	0.00	183.62	0.00	184.14	0.00	184.66	0.00
183.11	0.00	183.63	0.00	184.15	0.00	184.67	0.00
183.12	0.00	183.64	0.00	184.16	0.00	184.68	0.00
183.13	0.00	183.65	0.00	184.17	0.00	184.69	0.00
183.14	0.00	183.66	0.00	184.18	0.00	184.70	0.00
183.15	0.00	183.67	0.00	184.19	0.00	184.71	0.00
183.16	0.00	183.68	0.00	184.20	0.00	184.72	0.00
183.17	0.00	183.69	0.00	184.21	0.00	184.73	0.00
183.18	0.00	183.70	0.00	184.22	0.00	184.74	0.00
183.19	0.00	183.71	0.00	184.23	0.00	184.75	0.00
183.20	0.00	183.72	0.00	184.24	0.00	184.76	0.00
183.21	0.00	183.73	0.00	184.25	0.00	184.77	0.00
183.22	0.00	183.74	0.00	184.26	0.00	184.78	0.00
183.23	0.00	183.75	0.00	184.27	0.00	184.79	0.00
183.24	0.00	183.76	0.00	184.28	0.00	184.80	0.00
183.25	0.00	183.77	0.00	184.29	0.00	184.81	0.00
183.26	0.00	183.78	0.00	184.30	0.00	184.82	0.00
183.27	0.00	183.79	0.00	184.31	0.00	184.83	0.00
183.28	0.00	183.80	0.00	184.32	0.00	184.84	0.00
183.29	0.00	183.81	0.00	184.33	0.00	184.85	0.00
183.30	0.00	183.82	0.00	184.34	0.00	184.86	0.00
183.31	0.00	183.83	0.00	184.35	0.00	184.87	0.00
183.32	0.00	183.84	0.00	184.36	0.00	184.88	0.00
183.33	0.00	183.85	0.00	184.37	0.00	184.89	0.00
183.34	0.00	183.86	0.00	184.38	0.00	184.90	0.00
183.35	0.00	183.87	0.00	184.39	0.00	184.91	0.00
183.36	0.00	183.88	0.00	184.40	0.00	184.92	0.00
183.37	0.00	183.89	0.00	184.41	0.00	184.93	0.00
183.38	0.00	183.90	0.00	184.42	0.00	184.94	0.00
183.39	0.00	183.91	0.00	184.43	0.00	184.95	0.00
183.40	0.00	183.92	0.00	184.44	0.00	184.96	0.00
183.41	0.00	183.93	0.00	184.45	0.00	184.97	0.00
183.42	0.00	183.94	0.00	184.46	0.00	184.98	0.00
183.43	0.00	183.95	0.00	184.47	0.00	184.99	0.00
183.44	0.00	183.96	0.00	184.48	0.00	185.00	0.00
183.45	0.00	183.97	0.00	184.49	0.00	185.01	0.00
183.46	0.00	183.98	0.00	184.50	0.00	185.02	0.00
183.47	0.00	183.99	0.00	184.51	0.00	185.03	0.00
183.48	0.00	184.00	0.00	184.52	0.00	185.04	0.00
183.49	0.00	184.01	0.00	184.53	0.00	185.05	0.00
183.50	0.00	184.02	0.00	184.54	0.00	185.06	0.00
183.51	0.00	184.03	0.00	184.55	0.00	185.07	0.00
183.52	0.00	184.04	0.00	184.56	0.00	185.08	0.00
183.53	0.00	184.05	0.00	184.57	0.00	185.09	0.00
183.54	0.00	184.06	0.00	184.58	0.00	185.10	0.00
183.55	0.00	184.07	0.00	184.59	0.00	185.11	0.00
183.56	0.00	184.08	0.00	184.60	0.00	185.12	0.00
183.57	0.00	184.09	0.00	184.61	0.00	185.13	0.00
183.58	0.00	184.10	0.00	184.62	0.00	185.14	0.00
183.59	0.00	184.11	0.00	184.63	0.00	185.15	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.16	0.00	185.68	0.00	186.20	0.00	186.72	0.00
185.17	0.00	185.69	0.00	186.21	0.00	186.73	0.00
185.18	0.00	185.70	0.00	186.22	0.00	186.74	0.00
185.19	0.00	185.71	0.00	186.23	0.00	186.75	0.00
185.20	0.00	185.72	0.00	186.24	0.00	186.76	0.00
185.21	0.00	185.73	0.00	186.25	0.00	186.77	0.00
185.22	0.00	185.74	0.00	186.26	0.00	186.78	0.00
185.23	0.00	185.75	0.00	186.27	0.00	186.79	0.00
185.24	0.00	185.76	0.00	186.28	0.00	186.80	0.00
185.25	0.00	185.77	0.00	186.29	0.00	186.81	0.00
185.26	0.00	185.78	0.00	186.30	0.00	186.82	0.00
185.27	0.00	185.79	0.00	186.31	0.00	186.83	0.00
185.28	0.00	185.80	0.00	186.32	0.00	186.84	0.00
185.29	0.00	185.81	0.00	186.33	0.00	186.85	0.00
185.30	0.00	185.82	0.00	186.34	0.00	186.86	0.00
185.31	0.00	185.83	0.00	186.35	0.00	186.87	0.00
185.32	0.00	185.84	0.00	186.36	0.00	186.88	0.00
185.33	0.00	185.85	0.00	186.37	0.00	186.89	0.00
185.34	0.00	185.86	0.00	186.38	0.00	186.90	0.00
185.35	0.00	185.87	0.00	186.39	0.00	186.91	0.00
185.36	0.00	185.88	0.00	186.40	0.00	186.92	0.00
185.37	0.00	185.89	0.00	186.41	0.00	186.93	0.00
185.38	0.00	185.90	0.00	186.42	0.00	186.94	0.00
185.39	0.00	185.91	0.00	186.43	0.00	186.95	0.00
185.40	0.00	185.92	0.00	186.44	0.00	186.96	0.00
185.41	0.00	185.93	0.00	186.45	0.00	186.97	0.00
185.42	0.00	185.94	0.00	186.46	0.00	186.98	0.00
185.43	0.00	185.95	0.00	186.47	0.00	186.99	0.00
185.44	0.00	185.96	0.00	186.48	0.00	187.00	0.00
185.45	0.00	185.97	0.00	186.49	0.00	187.01	0.00
185.46	0.00	185.98	0.00	186.50	0.00	187.02	0.00
185.47	0.00	185.99	0.00	186.51	0.00	187.03	0.00
185.48	0.00	186.00	0.00	186.52	0.00	187.04	0.00
185.49	0.00	186.01	0.00	186.53	0.00	187.05	0.00
185.50	0.00	186.02	0.00	186.54	0.00	187.06	0.00
185.51	0.00	186.03	0.00	186.55	0.00	187.07	0.00
185.52	0.00	186.04	0.00	186.56	0.00	187.08	0.00
185.53	0.00	186.05	0.00	186.57	0.00	187.09	0.00
185.54	0.00	186.06	0.00	186.58	0.00	187.10	0.00
185.55	0.00	186.07	0.00	186.59	0.00	187.11	0.00
185.56	0.00	186.08	0.00	186.60	0.00	187.12	0.00
185.57	0.00	186.09	0.00	186.61	0.00	187.13	0.00
185.58	0.00	186.10	0.00	186.62	0.00	187.14	0.00
185.59	0.00	186.11	0.00	186.63	0.00	187.15	0.00
185.60	0.00	186.12	0.00	186.64	0.00	187.16	0.00
185.61	0.00	186.13	0.00	186.65	0.00	187.17	0.00
185.62	0.00	186.14	0.00	186.66	0.00	187.18	0.00
185.63	0.00	186.15	0.00	186.67	0.00	187.19	0.00
185.64	0.00	186.16	0.00	186.68	0.00	187.20	0.00
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)
187.24	0.00
187.25	0.00
187.26	0.00
187.27	0.00
187.28	0.00
187.29	0.00
187.30	0.00
187.31	0.00
187.32	0.00
187.33	0.00
187.34	0.00
187.35	0.00
187.36	0.00
187.37	0.00
187.38	0.00
187.39	0.00
187.40	0.00
187.41	0.00
187.42	0.00
187.43	0.00
187.44	0.00
187.45	0.00
187.46	0.00
187.47	0.00
187.48	0.00
187.49	0.00
187.50	0.00
187.51	0.16
187.52	0.46
187.53	0.86
187.54	1.32
187.55	1.85
187.56	2.44
187.57	3.08
187.58	3.77
187.59	4.51
187.60	5.29
187.61	6.12
187.62	6.99
187.63	7.90
187.64	8.85
187.65	9.84
187.66	10.87
187.67	11.93
187.68	13.03
187.69	14.16
187.70	15.33
187.71	16.53
187.72	17.76
187.73	19.03
187.74	20.33
187.75	21.67
187.76	23.03
187.77	24.43
187.78	25.85
187.79	27.31
187.80	28.80
187.81	30.32
187.82	31.87
187.83	33.45
187.84	35.06
187.85	36.70
187.86	38.37
187.87	40.07
187.88	41.80
187.89	43.55
187.90	45.34
187.91	47.15
187.92	48.99
187.93	50.86
187.94	52.76
187.95	54.69
187.96	56.65
187.97	58.63
187.98	60.64
187.99	62.68
188.00	**64.75**

Stage-Area-Storage for Pond B-46A: Basin #46A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.00	6,639	0	181.52	7,346	3,636
181.01	6,653	66	181.53	7,359	3,710
181.02	6,666	133	181.54	7,373	3,783
181.03	6,680	200	181.55	7,386	3,857
181.04	6,693	267	181.56	7,400	3,931
181.05	6,707	334	181.57	7,414	4,005
181.06	6,721	401	181.58	7,427	4,079
181.07	6,734	468	181.59	7,441	4,154
181.08	6,748	535	181.60	7,454	4,228
181.09	6,761	603	181.61	7,468	4,303
181.10	6,775	671	181.62	7,482	4,377
181.11	6,788	739	181.63	7,495	4,452
181.12	6,802	806	181.64	7,509	4,527
181.13	6,816	875	181.65	7,522	4,602
181.14	6,829	943	181.66	7,536	4,678
181.15	6,843	1,011	181.67	7,550	4,753
181.16	6,856	1,080	181.68	7,563	4,829
181.17	6,870	1,148	181.69	7,577	4,904
181.18	6,884	1,217	181.70	7,590	4,980
181.19	6,897	1,286	181.71	7,604	5,056
181.20	6,911	1,355	181.72	7,617	5,132
181.21	6,924	1,424	181.73	7,631	5,209
181.22	6,938	1,493	181.74	7,645	5,285
181.23	6,952	1,563	181.75	7,658	5,361
181.24	6,965	1,632	181.76	7,672	5,438
181.25	6,979	1,702	181.77	7,685	5,515
181.26	6,992	1,772	181.78	7,699	5,592
181.27	7,006	1,842	181.79	7,713	5,669
181.28	7,020	1,912	181.80	7,726	5,746
181.29	7,033	1,982	181.81	7,740	5,823
181.30	7,047	2,053	181.82	7,753	5,901
181.31	7,060	2,123	181.83	7,767	5,978
181.32	7,074	2,194	181.84	7,781	6,056
181.33	7,087	2,265	181.85	7,794	6,134
181.34	7,101	2,336	181.86	7,808	6,212
181.35	7,115	2,407	181.87	7,821	6,290
181.36	7,128	2,478	181.88	7,835	6,369
181.37	7,142	2,549	181.89	7,849	6,447
181.38	7,155	2,621	181.90	7,862	6,525
181.39	7,169	2,693	181.91	7,876	6,604
181.40	7,183	2,764	181.92	7,889	6,683
181.41	7,196	2,836	181.93	7,903	6,762
181.42	7,210	2,908	181.94	7,916	6,841
181.43	7,223	2,980	181.95	7,930	6,920
181.44	7,237	3,053	181.96	7,944	7,000
181.45	7,251	3,125	181.97	7,957	7,079
181.46	7,264	3,198	181.98	7,971	7,159
181.47	7,278	3,270	181.99	7,984	7,239
181.48	7,291	3,343	182.00	7,998	7,319
181.49	7,305	3,416	182.01	8,012	7,399
181.50	7,319	3,489	182.02	8,026	7,479
181.51	7,332	3,563	182.03	8,040	7,559

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.04	8,055	7,640	182.56	8,790	12,019
182.05	8,069	7,720	182.57	8,805	12,107
182.06	8,083	7,801	182.58	8,819	12,195
182.07	8,097	7,882	182.59	8,833	12,284
182.08	8,111	7,963	182.60	8,847	12,372
182.09	8,125	8,044	182.61	8,861	12,461
182.10	8,139	8,125	182.62	8,875	12,549
182.11	8,154	8,207	182.63	8,889	12,638
182.12	8,168	8,288	182.64	8,904	12,727
182.13	8,182	8,370	182.65	8,918	12,816
182.14	8,196	8,452	182.66	8,932	12,905
182.15	8,210	8,534	182.67	8,946	12,995
182.16	8,224	8,616	182.68	8,960	13,084
182.17	8,239	8,699	182.69	8,974	13,174
182.18	8,253	8,781	182.70	8,988	13,264
182.19	8,267	8,864	182.71	9,003	13,354
182.20	8,281	8,946	182.72	9,017	13,444
182.21	8,295	9,029	182.73	9,031	13,534
182.22	8,309	9,112	182.74	9,045	13,624
182.23	8,323	9,195	182.75	9,059	13,715
182.24	8,338	9,279	182.76	9,073	13,806
182.25	8,352	9,362	182.77	9,088	13,896
182.26	8,366	9,446	182.78	9,102	13,987
182.27	8,380	9,530	182.79	9,116	14,078
182.28	8,394	9,613	182.80	9,130	14,170
182.29	8,408	9,697	182.81	9,144	14,261
182.30	8,423	9,782	182.82	9,158	14,353
182.31	8,437	9,866	182.83	9,172	14,444
182.32	8,451	9,950	182.84	9,187	14,536
182.33	8,465	10,035	182.85	9,201	14,628
182.34	8,479	10,120	182.86	9,215	14,720
182.35	8,493	10,204	182.87	9,229	14,812
182.36	8,507	10,289	182.88	9,243	14,905
182.37	8,522	10,375	182.89	9,257	14,997
182.38	8,536	10,460	182.90	9,272	15,090
182.39	8,550	10,545	182.91	9,286	15,183
182.40	8,564	10,631	182.92	9,300	15,275
182.41	8,578	10,717	182.93	9,314	15,369
182.42	8,592	10,802	182.94	9,328	15,462
182.43	8,606	10,888	182.95	9,342	15,555
182.44	8,621	10,975	182.96	9,356	15,649
182.45	8,635	11,061	182.97	9,371	15,742
182.46	8,649	11,147	182.98	9,385	15,836
182.47	8,663	11,234	182.99	9,399	15,930
182.48	8,677	11,321	183.00	9,413	16,024
182.49	8,691	11,407	183.01	9,444	16,118
182.50	8,706	11,494	183.02	9,475	16,213
182.51	8,720	11,582	183.03	9,506	16,308
182.52	8,734	11,669	183.04	9,537	16,403
182.53	8,748	11,756	183.05	9,568	16,499
182.54	8,762	11,844	183.06	9,599	16,594
182.55	8,776	11,931	183.07	9,630	16,691

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.08	9,661	16,787	183.60	11,274	22,230
183.09	9,692	16,884	183.61	11,305	22,343
183.10	9,723	16,981	183.62	11,336	22,456
183.11	9,754	17,078	183.63	11,367	22,570
183.12	9,785	17,176	183.64	11,398	22,684
183.13	9,816	17,274	183.65	11,429	22,798
183.14	9,847	17,372	183.66	11,460	22,912
183.15	9,878	17,471	183.67	11,491	23,027
183.16	9,909	17,570	183.68	11,522	23,142
183.17	9,940	17,669	183.69	11,553	23,257
183.18	9,971	17,769	183.70	11,584	23,373
183.19	10,002	17,868	183.71	11,615	23,489
183.20	10,033	17,969	183.72	11,646	23,605
183.21	10,064	18,069	183.73	11,677	23,722
183.22	10,095	18,170	183.74	11,708	23,839
183.23	10,126	18,271	183.75	11,740	23,956
183.24	10,157	18,372	183.76	11,771	24,074
183.25	10,189	18,474	183.77	11,802	24,192
183.26	10,220	18,576	183.78	11,833	24,310
183.27	10,251	18,679	183.79	11,864	24,428
183.28	10,282	18,781	183.80	11,895	24,547
183.29	10,313	18,884	183.81	11,926	24,666
183.30	10,344	18,987	183.82	11,957	24,786
183.31	10,375	19,091	183.83	11,988	24,905
183.32	10,406	19,195	183.84	12,019	25,025
183.33	10,437	19,299	183.85	12,050	25,146
183.34	10,468	19,404	183.86	12,081	25,266
183.35	10,499	19,509	183.87	12,112	25,387
183.36	10,530	19,614	183.88	12,143	25,509
183.37	10,561	19,719	183.89	12,174	25,630
183.38	10,592	19,825	183.90	12,205	25,752
183.39	10,623	19,931	183.91	12,236	25,874
183.40	10,654	20,037	183.92	12,267	25,997
183.41	10,685	20,144	183.93	12,298	26,120
183.42	10,716	20,251	183.94	12,329	26,243
183.43	10,747	20,358	183.95	12,360	26,366
183.44	10,778	20,466	183.96	12,391	26,490
183.45	10,809	20,574	183.97	12,422	26,614
183.46	10,840	20,682	183.98	12,453	26,738
183.47	10,871	20,791	183.99	12,484	26,863
183.48	10,902	20,900	184.00	12,515	26,988
183.49	10,933	21,009	184.01	12,531	27,113
183.50	10,964	21,118	184.02	12,547	27,239
183.51	10,995	21,228	184.03	12,563	27,364
183.52	11,026	21,338	184.04	12,580	27,490
183.53	11,057	21,449	184.05	12,596	27,616
183.54	11,088	21,559	184.06	12,612	27,742
183.55	11,119	21,670	184.07	12,628	27,868
183.56	11,150	21,782	184.08	12,644	27,994
183.57	11,181	21,893	184.09	12,660	28,121
183.58	11,212	22,005	184.10	12,676	28,248
183.59	11,243	22,118	184.11	12,692	28,374

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.12	12,709	28,501
184.13	12,725	28,629
184.14	12,741	28,756
184.15	12,757	28,883
184.16	12,773	29,011
184.17	12,789	29,139
184.18	12,805	29,267
184.19	12,821	29,395
184.20	12,838	29,523
184.21	12,854	29,652
184.22	12,870	29,780
184.23	12,886	29,909
184.24	12,902	30,038
184.25	12,918	30,167
184.26	12,934	30,296
184.27	12,951	30,426
184.28	12,967	30,555
184.29	12,983	30,685
184.30	12,999	30,815
184.31	13,015	30,945
184.32	13,031	31,075
184.33	13,047	31,206
184.34	13,063	31,336
184.35	13,080	31,467
184.36	13,096	31,598
184.37	13,112	31,729
184.38	13,128	31,860
184.39	13,144	31,992
184.40	13,160	32,123
184.41	13,176	32,255
184.42	13,192	32,387
184.43	13,209	32,519
184.44	13,225	32,651
184.45	13,241	32,783
184.46	13,257	32,916
184.47	13,273	33,048
184.48	13,289	33,181
184.49	13,305	33,314
184.50	13,322	33,447
184.51	13,338	33,580
184.52	13,354	33,714
184.53	13,370	33,847
184.54	13,386	33,981
184.55	13,402	34,115
184.56	13,418	34,249
184.57	13,434	34,384
184.58	13,451	34,518
184.59	13,467	34,653
184.60	13,483	34,787
184.61	13,499	34,922
184.62	13,515	35,057
184.63	13,531	35,193
184.64	13,547	35,328
184.65	13,563	35,463
184.66	13,580	35,599
184.67	13,596	35,735
184.68	13,612	35,871
184.69	13,628	36,007
184.70	13,644	36,144
184.71	13,660	36,280
184.72	13,676	36,417
184.73	13,692	36,554
184.74	13,709	36,691
184.75	13,725	36,828
184.76	13,741	36,965
184.77	13,757	37,103
184.78	13,773	37,240
184.79	13,789	37,378
184.80	13,805	37,516
184.81	13,822	37,654
184.82	13,838	37,793
184.83	13,854	37,931
184.84	13,870	38,070
184.85	13,886	38,208
184.86	13,902	38,347
184.87	13,918	38,486
184.88	13,934	38,626
184.89	13,951	38,765
184.90	13,967	38,905
184.91	13,983	39,045
184.92	13,999	39,184
184.93	14,015	39,324
184.94	14,031	39,465
184.95	14,047	39,605
184.96	14,063	39,746
184.97	14,080	39,886
184.98	14,096	40,027
184.99	14,112	40,168
185.00	14,128	40,310
185.01	14,145	40,451
185.02	14,161	40,592
185.03	14,178	40,734
185.04	14,195	40,876
185.05	14,212	41,018
185.06	14,228	41,160
185.07	14,245	41,303
185.08	14,262	41,445
185.09	14,278	41,588
185.10	14,295	41,731
185.11	14,312	41,874
185.12	14,328	42,017
185.13	14,345	42,160
185.14	14,362	42,304
185.15	14,379	42,447

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.16	14,395	42,591
185.17	14,412	42,735
185.18	14,429	42,880
185.19	14,445	43,024
185.20	14,462	43,168
185.21	14,479	43,313
185.22	14,495	43,458
185.23	14,512	43,603
185.24	14,529	43,748
185.25	14,546	43,894
185.26	14,562	44,039
185.27	14,579	44,185
185.28	14,596	44,331
185.29	14,612	44,477
185.30	14,629	44,623
185.31	14,646	44,769
185.32	14,662	44,916
185.33	14,679	45,063
185.34	14,696	45,210
185.35	14,712	45,357
185.36	14,729	45,504
185.37	14,746	45,651
185.38	14,763	45,799
185.39	14,779	45,946
185.40	14,796	46,094
185.41	14,813	46,242
185.42	14,829	46,391
185.43	14,846	46,539
185.44	14,863	46,687
185.45	14,879	46,836
185.46	14,896	46,985
185.47	14,913	47,134
185.48	14,930	47,283
185.49	14,946	47,433
185.50	14,963	47,582
185.51	14,980	47,732
185.52	14,996	47,882
185.53	15,013	48,032
185.54	15,030	48,182
185.55	15,047	48,332
185.56	15,063	48,483
185.57	15,080	48,634
185.58	15,097	48,785
185.59	15,113	48,936
185.60	15,130	49,087
185.61	15,147	49,238
185.62	15,163	49,390
185.63	15,180	49,542
185.64	15,197	49,693
185.65	15,214	49,845
185.66	15,230	49,998
185.67	15,247	50,150
185.68	15,264	50,303
185.69	15,280	50,455
185.70	15,297	50,608
185.71	15,314	50,761
185.72	15,330	50,915
185.73	15,347	51,068
185.74	15,364	51,221
185.75	15,381	51,375
185.76	15,397	51,529
185.77	15,414	51,683
185.78	15,431	51,837
185.79	15,447	51,992
185.80	15,464	52,146
185.81	15,481	52,301
185.82	15,497	52,456
185.83	15,514	52,611
185.84	15,531	52,766
185.85	15,547	52,922
185.86	15,564	53,077
185.87	15,581	53,233
185.88	15,598	53,389
185.89	15,614	53,545
185.90	15,631	53,701
185.91	15,648	53,857
185.92	15,664	54,014
185.93	15,681	54,171
185.94	15,698	54,328
185.95	15,714	54,485
185.96	15,731	54,642
185.97	15,748	54,799
185.98	15,765	54,957
185.99	15,781	55,115
186.00	15,798	55,273
186.01	15,815	55,431
186.02	15,833	55,589
186.03	15,850	55,747
186.04	15,867	55,906
186.05	15,884	56,065
186.06	15,902	56,223
186.07	15,919	56,383
186.08	15,936	56,542
186.09	15,953	56,701
186.10	15,971	56,861
186.11	15,988	57,021
186.12	16,005	57,181
186.13	16,022	57,341
186.14	16,040	57,501
186.15	16,057	57,662
186.16	16,074	57,822
186.17	16,091	57,983
186.18	16,109	58,144
186.19	16,126	58,305

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.20	16,143	58,467	186.72	17,041	67,094
186.21	16,160	58,628	186.73	17,058	67,265
186.22	16,178	58,790	186.74	17,075	67,436
186.23	16,195	58,952	186.75	17,093	67,606
186.24	16,212	59,114	186.76	17,110	67,777
186.25	16,230	59,276	186.77	17,127	67,949
186.26	16,247	59,438	186.78	17,144	68,120
186.27	16,264	59,601	186.79	17,162	68,292
186.28	16,281	59,764	186.80	17,179	68,463
186.29	16,299	59,926	186.81	17,196	68,635
186.30	16,316	60,090	186.82	17,213	68,807
186.31	16,333	60,253	186.83	17,231	68,979
186.32	16,350	60,416	186.84	17,248	69,152
186.33	16,368	60,580	186.85	17,265	69,324
186.34	16,385	60,744	186.86	17,282	69,497
186.35	16,402	60,908	186.87	17,300	69,670
186.36	16,419	61,072	186.88	17,317	69,843
186.37	16,437	61,236	186.89	17,334	70,016
186.38	16,454	61,400	186.90	17,351	70,190
186.39	16,471	61,565	186.91	17,369	70,363
186.40	16,488	61,730	186.92	17,386	70,537
186.41	16,506	61,895	186.93	17,403	70,711
186.42	16,523	62,060	186.94	17,420	70,885
186.43	16,540	62,225	186.95	17,438	71,059
186.44	16,557	62,391	186.96	17,455	71,234
186.45	16,575	62,556	186.97	17,472	71,409
186.46	16,592	62,722	186.98	17,489	71,583
186.47	16,609	62,888	186.99	17,507	71,758
186.48	16,626	63,054	187.00	17,524	71,934
186.49	16,644	63,221	187.01	17,542	72,109
186.50	16,661	63,387	187.02	17,560	72,284
186.51	16,678	63,554	187.03	17,578	72,460
186.52	16,696	63,721	187.04	17,595	72,636
186.53	16,713	63,888	187.05	17,613	72,812
186.54	16,730	64,055	187.06	17,631	72,988
186.55	16,747	64,222	187.07	17,649	73,165
186.56	16,765	64,390	187.08	17,667	73,341
186.57	16,782	64,558	187.09	17,685	73,518
186.58	16,799	64,726	187.10	17,703	73,695
186.59	16,816	64,894	187.11	17,720	73,872
186.60	16,834	65,062	187.12	17,738	74,049
186.61	16,851	65,230	187.13	17,756	74,227
186.62	16,868	65,399	187.14	17,774	74,404
186.63	16,885	65,568	187.15	17,792	74,582
186.64	16,903	65,737	187.16	17,810	74,760
186.65	16,920	65,906	187.17	17,828	74,938
186.66	16,937	66,075	187.18	17,845	75,117
186.67	16,954	66,245	187.19	17,863	75,295
186.68	16,972	66,414	187.20	17,881	75,474
186.69	16,989	66,584	187.21	17,899	75,653
186.70	17,006	66,754	187.22	17,917	75,832
186.71	17,023	66,924	187.23	17,935	76,011

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.24	17,953	76,191
187.25	17,971	76,370
187.26	17,988	76,550
187.27	18,006	76,730
187.28	18,024	76,910
187.29	18,042	77,091
187.30	18,060	77,271
187.31	18,078	77,452
187.32	18,096	77,633
187.33	18,113	77,814
187.34	18,131	77,995
187.35	18,149	78,176
187.36	18,167	78,358
187.37	18,185	78,540
187.38	18,203	78,722
187.39	18,221	78,904
187.40	18,238	79,086
187.41	18,256	79,268
187.42	18,274	79,451
187.43	18,292	79,634
187.44	18,310	79,817
187.45	18,328	80,000
187.46	18,346	80,183
187.47	18,363	80,367
187.48	18,381	80,551
187.49	18,399	80,735
187.50	18,417	80,919
187.51	18,435	81,103
187.52	18,453	81,287
187.53	18,471	81,472
187.54	18,488	81,657
187.55	18,506	81,842
187.56	18,524	82,027
187.57	18,542	82,212
187.58	18,560	82,398
187.59	18,578	82,584
187.60	18,596	82,769
187.61	18,613	82,955
187.62	18,631	83,142
187.63	18,649	83,328
187.64	18,667	83,515
187.65	18,685	83,701
187.66	18,703	83,888
187.67	18,721	84,075
187.68	18,738	84,263
187.69	18,756	84,450
187.70	18,774	84,638
187.71	18,792	84,826
187.72	18,810	85,014
187.73	18,828	85,202
187.74	18,846	85,390
187.75	18,864	85,579
187.76	18,881	85,768
187.77	18,899	85,956
187.78	18,917	86,146
187.79	18,935	86,335
187.80	18,953	86,524
187.81	18,971	86,714
187.82	18,989	86,904
187.83	19,006	87,094
187.84	19,024	87,284
187.85	19,042	87,474
187.86	19,060	87,665
187.87	19,078	87,855
187.88	19,096	88,046
187.89	19,114	88,237
187.90	19,131	88,428
187.91	19,149	88,620
187.92	19,167	88,811
187.93	19,185	89,003
187.94	19,203	89,195
187.95	19,221	89,387
187.96	19,239	89,580
187.97	19,256	89,772
187.98	19,274	89,965
187.99	19,292	90,157
188.00	**19,310**	**90,351**

Summary for Pond B-46B: Basin #46B

Inflow Area = 2.931 ac, 39.13% Impervious, Inflow Depth = 0.23" for Future 2 yr event
Inflow = 0.98 cfs @ 12.05 hrs, Volume= 0.056 af
Outflow = 0.00 cfs @ 24.04 hrs, Volume= 0.003 af, Atten= 100%, Lag= 719.5 min
Primary = 0.00 cfs @ 24.04 hrs, Volume= 0.003 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 183.85' @ 24.04 hrs Surf.Area= 8,714 sf Storage= 2,403 cf

Plug-Flow detention time= 1,089.7 min calculated for 0.003 af (6% of inflow)
Center-of-Mass det. time= 923.1 min (1,772.1 - 849.0)

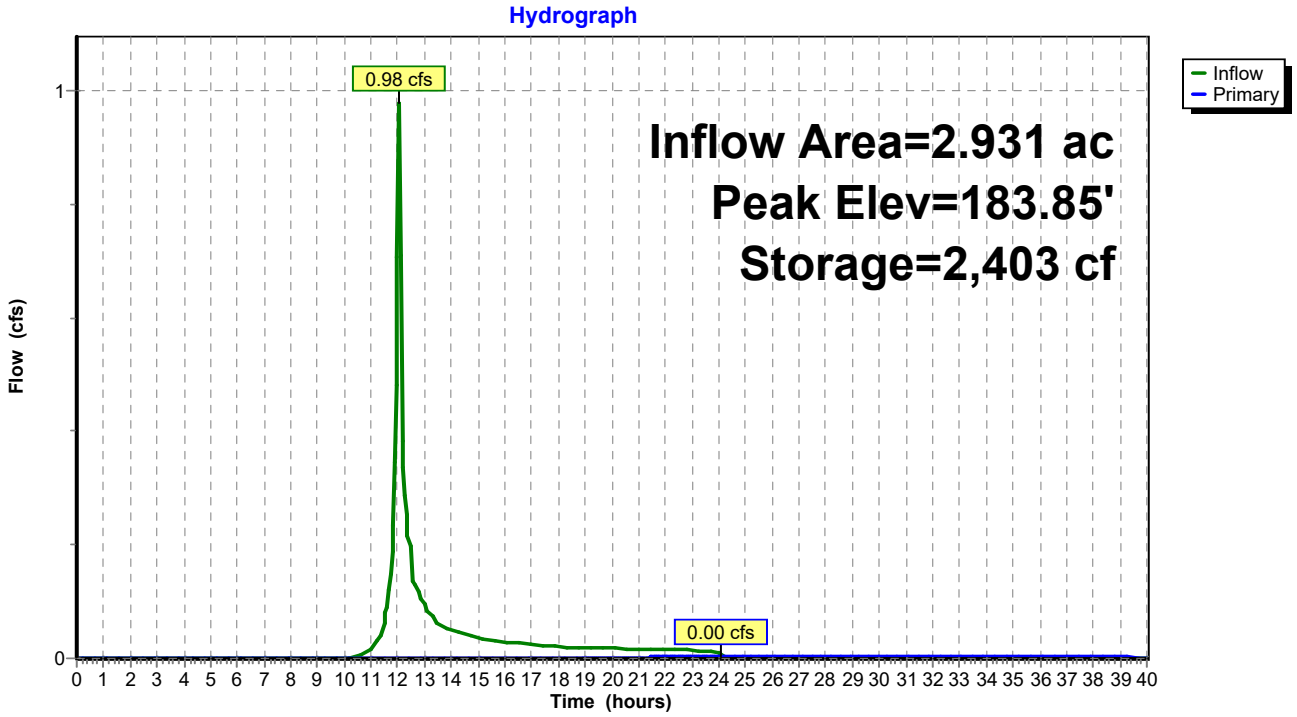
Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	59,250 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	11,059	3,871	3,871
185.00	12,402	11,731	15,601
186.00	13,803	13,103	28,704
187.00	15,259	14,531	43,235
188.00	16,772	16,016	59,250

Device	Routing	Invert	Outlet Devices
#1	Primary	182.65'	**18.0" Round Culvert** L= 65.0' Ke= 0.500 Inlet / Outlet Invert= 182.65' / 176.00' S= 0.1023 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.82'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.45'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.75'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 24.04 hrs HW=183.85' (Free Discharge)
- **1=Culvert** (Passes 0.00 cfs of 5.66 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.00 cfs @ 0.61 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-46B: Basin #46B



Stage-Discharge for Pond B-46B: Basin #46B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.30	0.00	183.82	0.00	184.34	0.11	184.86	3.52
183.31	0.00	183.83	0.00	184.35	0.11	184.87	3.65
183.32	0.00	183.84	0.00	184.36	0.11	184.88	3.77
183.33	0.00	183.85	0.00	184.37	0.11	184.89	3.89
183.34	0.00	183.86	0.00	184.38	0.11	184.90	4.02
183.35	0.00	183.87	0.00	184.39	0.11	184.91	4.15
183.36	0.00	183.88	0.01	184.40	0.11	184.92	4.28
183.37	0.00	183.89	0.01	184.41	0.11	184.93	4.41
183.38	0.00	183.90	0.01	184.42	0.12	184.94	4.54
183.39	0.00	183.91	0.01	184.43	0.12	184.95	4.68
183.40	0.00	183.92	0.02	184.44	0.12	184.96	4.81
183.41	0.00	183.93	0.02	184.45	0.12	184.97	4.95
183.42	0.00	183.94	0.02	184.46	0.13	184.98	5.08
183.43	0.00	183.95	0.03	184.47	0.16	184.99	5.22
183.44	0.00	183.96	0.03	184.48	0.19	185.00	5.36
183.45	0.00	183.97	0.03	184.49	0.23	185.01	5.50
183.46	0.00	183.98	0.04	184.50	0.27	185.02	5.64
183.47	0.00	183.99	0.04	184.51	0.32	185.03	5.78
183.48	0.00	184.00	0.05	184.52	0.37	185.04	5.93
183.49	0.00	184.01	0.05	184.53	0.42	185.05	6.07
183.50	0.00	184.02	0.05	184.54	0.48	185.06	6.22
183.51	0.00	184.03	0.05	184.55	0.54	185.07	6.36
183.52	0.00	184.04	0.06	184.56	0.61	185.08	6.51
183.53	0.00	184.05	0.06	184.57	0.67	185.09	6.66
183.54	0.00	184.06	0.06	184.58	0.74	185.10	6.81
183.55	0.00	184.07	0.06	184.59	0.81	185.11	6.96
183.56	0.00	184.08	0.06	184.60	0.89	185.12	7.11
183.57	0.00	184.09	0.07	184.61	0.97	185.13	7.27
183.58	0.00	184.10	0.07	184.62	1.05	185.14	7.42
183.59	0.00	184.11	0.07	184.63	1.13	185.15	7.57
183.60	0.00	184.12	0.07	184.64	1.21	185.16	7.73
183.61	0.00	184.13	0.07	184.65	1.30	185.17	7.89
183.62	0.00	184.14	0.08	184.66	1.39	185.18	8.04
183.63	0.00	184.15	0.08	184.67	1.48	185.19	8.20
183.64	0.00	184.16	0.08	184.68	1.57	185.20	8.36
183.65	0.00	184.17	0.08	184.69	1.66	185.21	8.52
183.66	0.00	184.18	0.08	184.70	1.76	185.22	8.68
183.67	0.00	184.19	0.08	184.71	1.86	185.23	8.85
183.68	0.00	184.20	0.09	184.72	1.96	185.24	9.01
183.69	0.00	184.21	0.09	184.73	2.06	185.25	9.17
183.70	0.00	184.22	0.09	184.74	2.16	185.26	9.34
183.71	0.00	184.23	0.09	184.75	2.27	185.27	9.50
183.72	0.00	184.24	0.09	184.76	2.37	185.28	9.67
183.73	0.00	184.25	0.09	184.77	2.48	185.29	9.84
183.74	0.00	184.26	0.10	184.78	2.59	185.30	10.01
183.75	0.00	184.27	0.10	184.79	2.70	185.31	10.18
183.76	0.00	184.28	0.10	184.80	2.81	185.32	10.35
183.77	0.00	184.29	0.10	184.81	2.93	185.33	10.52
183.78	0.00	184.30	0.10	184.82	3.04	185.34	10.69
183.79	0.00	184.31	0.10	184.83	3.16	185.35	10.86
183.80	0.00	184.32	0.10	184.84	3.28	185.36	11.03
183.81	0.00	184.33	0.10	184.85	3.40	185.37	11.21

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.38	11.38	185.90	20.30	186.42	91.01	186.94	198.59
185.39	11.56	185.91	21.03	186.43	92.75	186.95	200.94
185.40	11.74	185.92	21.78	186.44	94.51	186.96	203.32
185.41	11.91	185.93	22.55	186.45	96.28	186.97	205.72
185.42	12.09	185.94	23.34	186.46	98.06	186.98	208.13
185.43	12.12	185.95	24.15	186.47	99.86	186.99	210.55
185.44	12.15	185.96	25.03	186.48	101.66	187.00	212.98
185.45	12.18	185.97	25.92	186.49	103.49	187.01	215.43
185.46	12.21	185.98	26.85	186.50	105.32	187.02	217.88
185.47	12.24	185.99	27.80	186.51	107.16	187.03	220.34
185.48	12.27	186.00	28.77	186.52	109.02	187.04	222.82
185.49	12.30	186.01	29.77	186.53	110.89	187.05	225.30
185.50	12.33	186.02	30.80	186.54	112.77	187.06	227.79
185.51	12.36	186.03	31.85	186.55	114.67	187.07	230.30
185.52	12.39	186.04	32.92	186.56	116.61	187.08	232.82
185.53	12.42	186.05	34.02	186.57	118.57	187.09	235.34
185.54	12.45	186.06	35.14	186.58	120.54	187.10	237.88
185.55	12.48	186.07	36.29	186.59	122.52	187.11	240.42
185.56	12.51	186.08	37.46	186.60	124.52	187.12	242.98
185.57	12.53	186.09	38.66	186.61	126.53	187.13	245.55
185.58	12.56	186.10	39.88	186.62	128.55	187.14	248.13
185.59	12.59	186.11	41.12	186.63	130.58	187.15	250.71
185.60	12.62	186.12	42.39	186.64	132.63	187.16	253.36
185.61	12.65	186.13	43.68	186.65	134.69	187.17	256.01
185.62	12.68	186.14	45.00	186.66	136.77	187.18	258.67
185.63	12.71	186.15	46.34	186.67	138.85	187.19	261.35
185.64	12.73	186.16	47.73	186.68	140.95	187.20	264.04
185.65	12.76	186.17	49.15	186.69	143.07	187.21	266.74
185.66	12.79	186.18	50.59	186.70	145.19	187.22	269.45
185.67	12.82	186.19	52.06	186.71	147.33	187.23	272.17
185.68	12.85	186.20	53.56	186.72	149.48	187.24	274.90
185.69	12.88	186.21	55.08	186.73	151.64	187.25	277.64
185.70	12.90	186.22	56.63	186.74	153.82	187.26	280.39
185.71	12.93	186.23	58.20	186.75	156.01	187.27	283.16
185.72	12.96	186.24	59.80	186.76	158.15	187.28	285.93
185.73	12.99	186.25	61.43	186.77	160.31	187.29	288.72
185.74	13.02	186.26	63.08	186.78	162.48	187.30	291.52
185.75	13.04	186.27	64.76	186.79	164.66	187.31	294.32
185.76	13.19	186.28	66.47	186.80	166.85	187.32	297.14
185.77	13.43	186.29	68.20	186.81	169.05	187.33	299.97
185.78	13.74	186.30	69.96	186.82	171.26	187.34	302.81
185.79	14.09	186.31	71.75	186.83	173.48	187.35	305.67
185.80	14.49	186.32	73.56	186.84	175.71	187.36	308.53
185.81	14.93	186.33	75.40	186.85	177.95	187.37	311.40
185.82	15.41	186.34	77.27	186.86	180.21	187.38	314.29
185.83	15.92	186.35	79.16	186.87	182.47	187.39	317.18
185.84	16.46	186.36	80.82	186.88	184.74	187.40	320.09
185.85	17.04	186.37	82.48	186.89	187.03	187.41	323.00
185.86	17.64	186.38	84.16	186.90	189.32	187.42	325.93
185.87	18.26	186.39	85.85	186.91	191.62	187.43	328.87
185.88	18.92	186.40	87.56	186.92	193.94	187.44	331.82
185.89	19.60	186.41	89.27	186.93	196.26	187.45	334.78

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)
187.46	337.75
187.47	340.73
187.48	343.72
187.49	346.72
187.50	349.74
187.51	352.76
187.52	355.79
187.53	358.84
187.54	361.90
187.55	364.96
187.56	368.04
187.57	371.13
187.58	374.22
187.59	377.33
187.60	380.45
187.61	383.58
187.62	386.72
187.63	389.87
187.64	393.03
187.65	396.20
187.66	399.38
187.67	402.58
187.68	405.78
187.69	408.99
187.70	412.22
187.71	415.45
187.72	418.69
187.73	421.95
187.74	425.21
187.75	428.49
187.76	431.84
187.77	435.20
187.78	438.57
187.79	441.95
187.80	445.35
187.81	448.75
187.82	452.17
187.83	455.60
187.84	459.04
187.85	462.49
187.86	465.95
187.87	469.42
187.88	472.91
187.89	476.40
187.90	479.91
187.91	483.43
187.92	486.96
187.93	490.50
187.94	494.05
187.95	497.61
187.96	501.19
187.97	504.78
187.98	508.37
187.99	511.98
188.00	**515.60**

Stage-Area-Storage for Pond B-46B: Basin #46B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.30	0	0	183.82	8,215	2,136
183.31	158	1	183.83	8,373	2,219
183.32	316	3	183.84	8,531	2,303
183.33	474	7	183.85	8,689	2,390
183.34	632	13	183.86	8,847	2,477
183.35	790	20	183.87	9,005	2,566
183.36	948	28	183.88	9,163	2,657
183.37	1,106	39	183.89	9,321	2,750
183.38	1,264	51	183.90	9,479	2,844
183.39	1,422	64	183.91	9,637	2,939
183.40	1,580	79	183.92	9,795	3,036
183.41	1,738	96	183.93	9,953	3,135
183.42	1,896	114	183.94	10,111	3,236
183.43	2,054	133	183.95	10,269	3,337
183.44	2,212	155	183.96	10,427	3,441
183.45	2,370	178	183.97	10,585	3,546
183.46	2,528	202	183.98	10,743	3,653
183.47	2,686	228	183.99	10,901	3,761
183.48	2,844	256	184.00	11,059	3,871
183.49	3,002	285	184.01	11,072	3,981
183.50	3,160	316	184.02	11,086	4,092
183.51	3,318	348	184.03	11,099	4,203
183.52	3,476	382	184.04	11,113	4,314
183.53	3,634	418	184.05	11,126	4,425
183.54	3,792	455	184.06	11,140	4,537
183.55	3,950	494	184.07	11,153	4,648
183.56	4,108	534	184.08	11,166	4,760
183.57	4,266	576	184.09	11,180	4,871
183.58	4,424	619	184.10	11,193	4,983
183.59	4,582	664	184.11	11,207	5,095
183.60	4,740	711	184.12	11,220	5,207
183.61	4,898	759	184.13	11,234	5,320
183.62	5,056	809	184.14	11,247	5,432
183.63	5,214	860	184.15	11,260	5,545
183.64	5,372	913	184.16	11,274	5,657
183.65	5,530	968	184.17	11,287	5,770
183.66	5,687	1,024	184.18	11,301	5,883
183.67	5,845	1,081	184.19	11,314	5,996
183.68	6,003	1,141	184.20	11,328	6,109
183.69	6,161	1,201	184.21	11,341	6,223
183.70	6,319	1,264	184.22	11,354	6,336
183.71	6,477	1,328	184.23	11,368	6,450
183.72	6,635	1,393	184.24	11,381	6,563
183.73	6,793	1,461	184.25	11,395	6,677
183.74	6,951	1,529	184.26	11,408	6,791
183.75	7,109	1,600	184.27	11,422	6,906
183.76	7,267	1,671	184.28	11,435	7,020
183.77	7,425	1,745	184.29	11,448	7,134
183.78	7,583	1,820	184.30	11,462	7,249
183.79	7,741	1,897	184.31	11,475	7,363
183.80	7,899	1,975	184.32	11,489	7,478
183.81	8,057	2,055	184.33	11,502	7,593

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.34	11,516	7,708	184.86	12,214	13,878
184.35	11,529	7,824	184.87	12,227	14,000
184.36	11,542	7,939	184.88	12,241	14,123
184.37	11,556	8,054	184.89	12,254	14,245
184.38	11,569	8,170	184.90	12,268	14,368
184.39	11,583	8,286	184.91	12,281	14,490
184.40	11,596	8,402	184.92	12,295	14,613
184.41	11,610	8,518	184.93	12,308	14,736
184.42	11,623	8,634	184.94	12,321	14,859
184.43	11,636	8,750	184.95	12,335	14,983
184.44	11,650	8,867	184.96	12,348	15,106
184.45	11,663	8,983	184.97	12,362	15,230
184.46	11,677	9,100	184.98	12,375	15,353
184.47	11,690	9,217	184.99	12,389	15,477
184.48	11,704	9,334	185.00	12,402	15,601
184.49	11,717	9,451	185.01	12,416	15,725
184.50	11,731	9,568	185.02	12,430	15,849
184.51	11,744	9,685	185.03	12,444	15,974
184.52	11,757	9,803	185.04	12,458	16,098
184.53	11,771	9,921	185.05	12,472	16,223
184.54	11,784	10,038	185.06	12,486	16,348
184.55	11,798	10,156	185.07	12,500	16,473
184.56	11,811	10,274	185.08	12,514	16,598
184.57	11,825	10,392	185.09	12,528	16,723
184.58	11,838	10,511	185.10	12,542	16,848
184.59	11,851	10,629	185.11	12,556	16,974
184.60	11,865	10,748	185.12	12,570	17,099
184.61	11,878	10,867	185.13	12,584	17,225
184.62	11,892	10,985	185.14	12,598	17,351
184.63	11,905	11,104	185.15	12,612	17,477
184.64	11,919	11,223	185.16	12,626	17,603
184.65	11,932	11,343	185.17	12,640	17,730
184.66	11,945	11,462	185.18	12,654	17,856
184.67	11,959	11,582	185.19	12,668	17,983
184.68	11,972	11,701	185.20	12,682	18,110
184.69	11,986	11,821	185.21	12,696	18,236
184.70	11,999	11,941	185.22	12,710	18,363
184.71	12,013	12,061	185.23	12,724	18,491
184.72	12,026	12,181	185.24	12,738	18,618
184.73	12,039	12,302	185.25	12,752	18,745
184.74	12,053	12,422	185.26	12,766	18,873
184.75	12,066	12,543	185.27	12,780	19,001
184.76	12,080	12,663	185.28	12,794	19,129
184.77	12,093	12,784	185.29	12,808	19,257
184.78	12,107	12,905	185.30	12,822	19,385
184.79	12,120	13,026	185.31	12,836	19,513
184.80	12,133	13,148	185.32	12,850	19,642
184.81	12,147	13,269	185.33	12,864	19,770
184.82	12,160	13,391	185.34	12,878	19,899
184.83	12,174	13,512	185.35	12,892	20,028
184.84	12,187	13,634	185.36	12,906	20,157
184.85	12,201	13,756	185.37	12,920	20,286

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.38	12,934	20,415	185.90	13,663	27,330
185.39	12,948	20,544	185.91	13,677	27,467
185.40	12,962	20,674	185.92	13,691	27,604
185.41	12,976	20,804	185.93	13,705	27,741
185.42	12,990	20,934	185.94	13,719	27,878
185.43	13,004	21,064	185.95	13,733	28,015
185.44	13,018	21,194	185.96	13,747	28,153
185.45	13,032	21,324	185.97	13,761	28,290
185.46	13,046	21,454	185.98	13,775	28,428
185.47	13,060	21,585	185.99	13,789	28,566
185.48	13,074	21,716	186.00	13,803	28,704
185.49	13,088	21,846	186.01	13,818	28,842
185.50	13,103	21,977	186.02	13,832	28,980
185.51	13,117	22,108	186.03	13,847	29,118
185.52	13,131	22,240	186.04	13,861	29,257
185.53	13,145	22,371	186.05	13,876	29,396
185.54	13,159	22,502	186.06	13,890	29,534
185.55	13,173	22,634	186.07	13,905	29,673
185.56	13,187	22,766	186.08	13,919	29,813
185.57	13,201	22,898	186.09	13,934	29,952
185.58	13,215	23,030	186.10	13,949	30,091
185.59	13,229	23,162	186.11	13,963	30,231
185.60	13,243	23,295	186.12	13,978	30,370
185.61	13,257	23,427	186.13	13,992	30,510
185.62	13,271	23,560	186.14	14,007	30,650
185.63	13,285	23,692	186.15	14,021	30,790
185.64	13,299	23,825	186.16	14,036	30,931
185.65	13,313	23,958	186.17	14,051	31,071
185.66	13,327	24,092	186.18	14,065	31,212
185.67	13,341	24,225	186.19	14,080	31,353
185.68	13,355	24,358	186.20	14,094	31,493
185.69	13,369	24,492	186.21	14,109	31,634
185.70	13,383	24,626	186.22	14,123	31,776
185.71	13,397	24,760	186.23	14,138	31,917
185.72	13,411	24,894	186.24	14,152	32,058
185.73	13,425	25,028	186.25	14,167	32,200
185.74	13,439	25,162	186.26	14,182	32,342
185.75	13,453	25,297	186.27	14,196	32,484
185.76	13,467	25,431	186.28	14,211	32,626
185.77	13,481	25,566	186.29	14,225	32,768
185.78	13,495	25,701	186.30	14,240	32,910
185.79	13,509	25,836	186.31	14,254	33,053
185.80	13,523	25,971	186.32	14,269	33,195
185.81	13,537	26,106	186.33	14,283	33,338
185.82	13,551	26,242	186.34	14,298	33,481
185.83	13,565	26,377	186.35	14,313	33,624
185.84	13,579	26,513	186.36	14,327	33,767
185.85	13,593	26,649	186.37	14,342	33,910
185.86	13,607	26,785	186.38	14,356	34,054
185.87	13,621	26,921	186.39	14,371	34,198
185.88	13,635	27,057	186.40	14,385	34,341
185.89	13,649	27,194	186.41	14,400	34,485

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.42	14,415	34,629	186.94	15,172	42,322
186.43	14,429	34,774	186.95	15,186	42,474
186.44	14,444	34,918	186.96	15,201	42,625
186.45	14,458	35,062	186.97	15,215	42,778
186.46	14,473	35,207	186.98	15,230	42,930
186.47	14,487	35,352	186.99	15,244	43,082
186.48	14,502	35,497	187.00	15,259	43,235
186.49	14,516	35,642	187.01	15,274	43,387
186.50	14,531	35,787	187.02	15,289	43,540
186.51	14,546	35,933	187.03	15,304	43,693
186.52	14,560	36,078	187.04	15,320	43,846
186.53	14,575	36,224	187.05	15,335	43,999
186.54	14,589	36,370	187.06	15,350	44,153
186.55	14,604	36,516	187.07	15,365	44,306
186.56	14,618	36,662	187.08	15,380	44,460
186.57	14,633	36,808	187.09	15,395	44,614
186.58	14,647	36,954	187.10	15,410	44,768
186.59	14,662	37,101	187.11	15,425	44,922
186.60	14,677	37,248	187.12	15,441	45,077
186.61	14,691	37,394	187.13	15,456	45,231
186.62	14,706	37,541	187.14	15,471	45,386
186.63	14,720	37,688	187.15	15,486	45,541
186.64	14,735	37,836	187.16	15,501	45,695
186.65	14,749	37,983	187.17	15,516	45,851
186.66	14,764	38,131	187.18	15,531	46,006
186.67	14,779	38,278	187.19	15,546	46,161
186.68	14,793	38,426	187.20	15,562	46,317
186.69	14,808	38,574	187.21	15,577	46,472
186.70	14,822	38,722	187.22	15,592	46,628
186.71	14,837	38,871	187.23	15,607	46,784
186.72	14,851	39,019	187.24	15,622	46,940
186.73	14,866	39,168	187.25	15,637	47,097
186.74	14,880	39,317	187.26	15,652	47,253
186.75	14,895	39,465	187.27	15,668	47,410
186.76	14,910	39,614	187.28	15,683	47,566
186.77	14,924	39,764	187.29	15,698	47,723
186.78	14,939	39,913	187.30	15,713	47,880
186.79	14,953	40,062	187.31	15,728	48,038
186.80	14,968	40,212	187.32	15,743	48,195
186.81	14,982	40,362	187.33	15,758	48,353
186.82	14,997	40,512	187.34	15,773	48,510
186.83	15,011	40,662	187.35	15,789	48,668
186.84	15,026	40,812	187.36	15,804	48,826
186.85	15,041	40,962	187.37	15,819	48,984
186.86	15,055	41,113	187.38	15,834	49,142
186.87	15,070	41,263	187.39	15,849	49,301
186.88	15,084	41,414	187.40	15,864	49,459
186.89	15,099	41,565	187.41	15,879	49,618
186.90	15,113	41,716	187.42	15,894	49,777
186.91	15,128	41,867	187.43	15,910	49,936
186.92	15,143	42,019	187.44	15,925	50,095
186.93	15,157	42,170	187.45	15,940	50,254

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.46	15,955	50,414
187.47	15,970	50,573
187.48	15,985	50,733
187.49	16,000	50,893
187.50	16,016	51,053
187.51	16,031	51,214
187.52	16,046	51,374
187.53	16,061	51,534
187.54	16,076	51,695
187.55	16,091	51,856
187.56	16,106	52,017
187.57	16,121	52,178
187.58	16,137	52,339
187.59	16,152	52,501
187.60	16,167	52,662
187.61	16,182	52,824
187.62	16,197	52,986
187.63	16,212	53,148
187.64	16,227	53,310
187.65	16,242	53,473
187.66	16,258	53,635
187.67	16,273	53,798
187.68	16,288	53,961
187.69	16,303	54,124
187.70	16,318	54,287
187.71	16,333	54,450
187.72	16,348	54,613
187.73	16,363	54,777
187.74	16,379	54,941
187.75	16,394	55,104
187.76	16,409	55,268
187.77	16,424	55,433
187.78	16,439	55,597
187.79	16,454	55,761
187.80	16,469	55,926
187.81	16,485	56,091
187.82	16,500	56,256
187.83	16,515	56,421
187.84	16,530	56,586
187.85	16,545	56,751
187.86	16,560	56,917
187.87	16,575	57,083
187.88	16,590	57,248
187.89	16,606	57,414
187.90	16,621	57,581
187.91	16,636	57,747
187.92	16,651	57,913
187.93	16,666	58,080
187.94	16,681	58,247
187.95	16,696	58,413
187.96	16,711	58,580
187.97	16,727	58,748
187.98	16,742	58,915
187.99	16,757	59,083
188.00	**16,772**	**59,250**

Summary for Pond B-47: Basin #47

Inflow Area = 2.436 ac, 30.62% Impervious, Inflow Depth = 2.14" for Future 2 yr event
Inflow = 5.33 cfs @ 12.18 hrs, Volume= 0.434 af
Outflow = 0.10 cfs @ 20.65 hrs, Volume= 0.209 af, Atten= 98%, Lag= 508.4 min
Primary = 0.10 cfs @ 20.65 hrs, Volume= 0.209 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 189.34' @ 20.65 hrs Surf.Area= 21,974 sf Storage= 14,808 cf

Plug-Flow detention time= 849.2 min calculated for 0.209 af (48% of inflow)
Center-of-Mass det. time= 716.2 min (1,522.2 - 806.1)

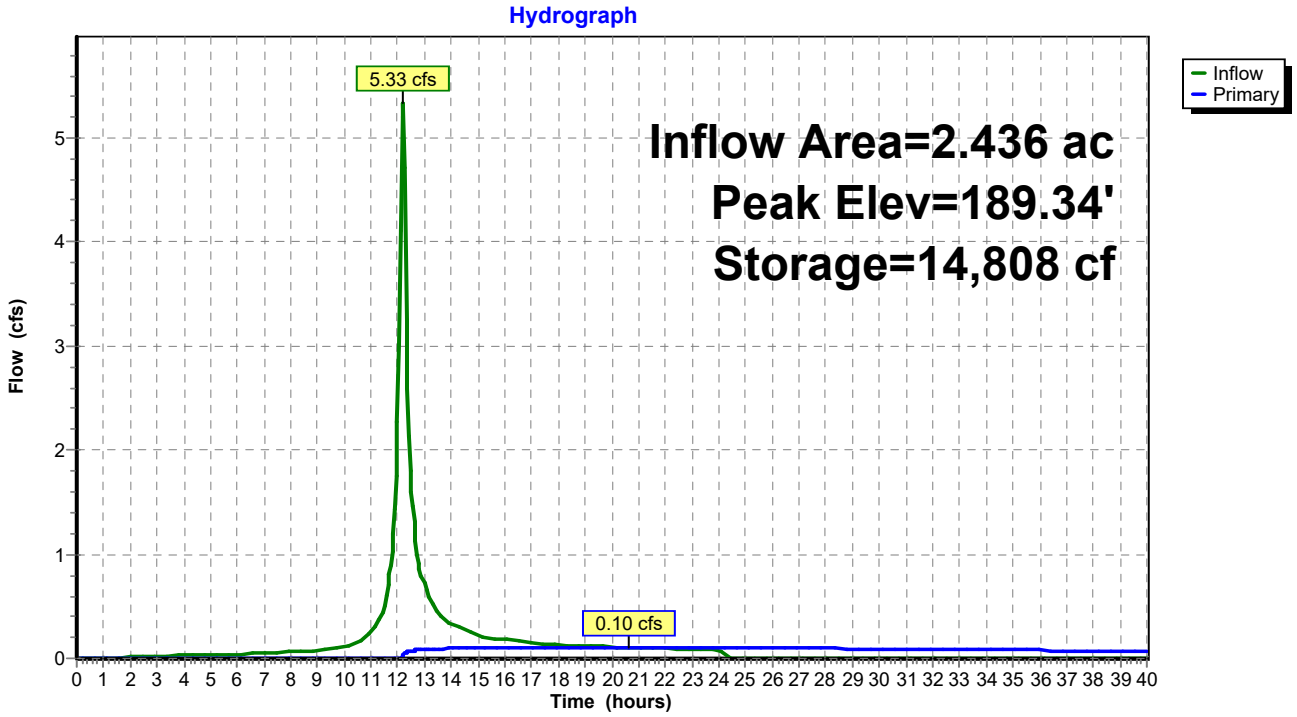
Volume	Invert	Avail.Storage	Storage Description
#1	188.30'	80,305 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
188.30	0	0	0
189.00	21,318	7,461	7,461
190.00	23,252	22,285	29,746
191.00	25,242	24,247	53,993
192.00	27,382	26,312	80,305

Device	Routing	Invert	Outlet Devices
#1	Primary	187.65'	**18.0" Round Culvert** L= 62.0' Ke= 0.500 Inlet / Outlet Invert= 187.65' / 184.00' S= 0.0589 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.84'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.52'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.51'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.10 cfs @ 20.65 hrs HW=189.34' (Free Discharge)
- **1=Culvert** (Passes 0.10 cfs of 8.25 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.10 cfs @ 3.03 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-47: Basin #47



Stage-Discharge for Pond B-47: Basin #47

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.30	0.00	188.82	0.00	189.34	0.10	189.86	2.71
188.31	0.00	188.83	0.00	189.35	0.10	189.87	2.82
188.32	0.00	188.84	0.00	189.36	0.11	189.88	2.93
188.33	0.00	188.85	0.00	189.37	0.11	189.89	3.05
188.34	0.00	188.86	0.00	189.38	0.11	189.90	3.17
188.35	0.00	188.87	0.00	189.39	0.11	189.91	3.28
188.36	0.00	188.88	0.00	189.40	0.11	189.92	3.40
188.37	0.00	188.89	0.00	189.41	0.11	189.93	3.53
188.38	0.00	188.90	0.01	189.42	0.11	189.94	3.65
188.39	0.00	188.91	0.01	189.43	0.11	189.95	3.77
188.40	0.00	188.92	0.01	189.44	0.12	189.96	3.90
188.41	0.00	188.93	0.01	189.45	0.12	189.97	4.03
188.42	0.00	188.94	0.02	189.46	0.12	189.98	4.15
188.43	0.00	188.95	0.02	189.47	0.12	189.99	4.28
188.44	0.00	188.96	0.02	189.48	0.12	190.00	4.41
188.45	0.00	188.97	0.03	189.49	0.12	190.01	4.55
188.46	0.00	188.98	0.03	189.50	0.12	190.02	4.68
188.47	0.00	188.99	0.03	189.51	0.12	190.03	4.81
188.48	0.00	189.00	0.04	189.52	0.12	190.04	4.95
188.49	0.00	189.01	0.04	189.53	0.14	190.05	5.09
188.50	0.00	189.02	0.05	189.54	0.16	190.06	5.22
188.51	0.00	189.03	0.05	189.55	0.20	190.07	5.36
188.52	0.00	189.04	0.05	189.56	0.23	190.08	5.50
188.53	0.00	189.05	0.05	189.57	0.28	190.09	5.64
188.54	0.00	189.06	0.06	189.58	0.32	190.10	5.79
188.55	0.00	189.07	0.06	189.59	0.37	190.11	5.93
188.56	0.00	189.08	0.06	189.60	0.43	190.12	6.07
188.57	0.00	189.09	0.06	189.61	0.49	190.13	6.22
188.58	0.00	189.10	0.06	189.62	0.55	190.14	6.37
188.59	0.00	189.11	0.07	189.63	0.61	190.15	6.51
188.60	0.00	189.12	0.07	189.64	0.68	190.16	6.66
188.61	0.00	189.13	0.07	189.65	0.75	190.17	6.81
188.62	0.00	189.14	0.07	189.66	0.82	190.18	6.96
188.63	0.00	189.15	0.07	189.67	0.89	190.19	7.12
188.64	0.00	189.16	0.08	189.68	0.97	190.20	7.27
188.65	0.00	189.17	0.08	189.69	1.05	190.21	7.42
188.66	0.00	189.18	0.08	189.70	1.13	190.22	7.58
188.67	0.00	189.19	0.08	189.71	1.22	190.23	7.73
188.68	0.00	189.20	0.08	189.72	1.30	190.24	7.89
188.69	0.00	189.21	0.08	189.73	1.39	190.25	8.05
188.70	0.00	189.22	0.09	189.74	1.48	190.26	8.21
188.71	0.00	189.23	0.09	189.75	1.57	190.27	8.37
188.72	0.00	189.24	0.09	189.76	1.67	190.28	8.53
188.73	0.00	189.25	0.09	189.77	1.76	190.29	8.69
188.74	0.00	189.26	0.09	189.78	1.86	190.30	8.85
188.75	0.00	189.27	0.09	189.79	1.96	190.31	9.01
188.76	0.00	189.28	0.10	189.80	2.06	190.32	9.18
188.77	0.00	189.29	0.10	189.81	2.17	190.33	9.34
188.78	0.00	189.30	0.10	189.82	2.27	190.34	9.51
188.79	0.00	189.31	0.10	189.83	2.38	190.35	9.67
188.80	0.00	189.32	0.10	189.84	2.49	190.36	9.84
188.81	0.00	189.33	0.10	189.85	2.59	190.37	10.01

Stage-Discharge for Pond B-47: Basin #47 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.38	10.18	190.90	44.37	191.42	136.19	191.94	258.14
190.39	10.35	190.91	45.71	191.43	138.28	191.95	260.82
190.40	10.52	190.92	47.10	191.44	140.38	191.96	263.51
190.41	10.69	190.93	48.52	191.45	142.49	191.97	266.20
190.42	10.86	190.94	49.97	191.46	144.62	191.98	268.91
190.43	11.04	190.95	51.44	191.47	146.76	191.99	271.64
190.44	11.21	190.96	52.93	191.48	148.91	192.00	**274.37**
190.45	11.39	190.97	54.46	191.49	151.07		
190.46	11.56	190.98	56.01	191.50	153.25		
190.47	11.74	190.99	57.58	191.51	155.44		
190.48	11.92	191.00	59.18	191.52	157.59		
190.49	12.09	191.01	60.81	191.53	159.74		
190.50	12.27	191.02	62.47	191.54	161.91		
190.51	12.36	191.03	64.15	191.55	164.09		
190.52	12.51	191.04	65.85	191.56	166.28		
190.53	12.75	191.05	67.59	191.57	168.49		
190.54	13.06	191.06	69.35	191.58	170.70		
190.55	13.41	191.07	71.14	191.59	172.92		
190.56	13.82	191.08	72.95	191.60	175.15		
190.57	14.26	191.09	74.79	191.61	177.39		
190.58	14.74	191.10	76.66	191.62	179.65		
190.59	15.25	191.11	78.56	191.63	181.91		
190.60	15.79	191.12	80.21	191.64	184.18		
190.61	16.37	191.13	81.88	191.65	186.47		
190.62	16.97	191.14	83.55	191.66	188.76		
190.63	17.60	191.15	85.25	191.67	191.07		
190.64	18.25	191.16	86.95	191.68	193.38		
190.65	18.93	191.17	88.67	191.69	195.71		
190.66	19.64	191.18	90.41	191.70	198.04		
190.67	20.37	191.19	92.15	191.71	200.38		
190.68	21.12	191.20	93.91	191.72	202.77		
190.69	21.89	191.21	95.68	191.73	205.17		
190.70	22.68	191.22	97.47	191.74	207.58		
190.71	23.50	191.23	99.26	191.75	210.01		
190.72	24.37	191.24	101.07	191.76	212.44		
190.73	25.27	191.25	102.89	191.77	214.88		
190.74	26.20	191.26	104.73	191.78	217.33		
190.75	27.15	191.27	106.57	191.79	219.80		
190.76	28.12	191.28	108.43	191.80	222.27		
190.77	29.13	191.29	110.30	191.81	224.76		
190.78	30.15	191.30	112.18	191.82	227.25		
190.79	31.20	191.31	114.08	191.83	229.76		
190.80	32.28	191.32	116.02	191.84	232.27		
190.81	33.38	191.33	117.98	191.85	234.80		
190.82	34.50	191.34	119.95	191.86	237.34		
190.83	35.65	191.35	121.94	191.87	239.88		
190.84	36.82	191.36	123.93	191.88	242.44		
190.85	38.02	191.37	125.94	191.89	245.01		
190.86	39.24	191.38	127.97	191.90	247.59		
190.87	40.49	191.39	130.00	191.91	250.18		
190.88	41.76	191.40	132.05	191.92	252.82		
190.89	43.05	191.41	134.12	191.93	255.48		

Stage-Area-Storage for Pond B-47: Basin #47

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.30	0	0	188.82	15,836	4,117
188.31	305	2	188.83	16,141	4,277
188.32	609	6	188.84	16,445	4,440
188.33	914	14	188.85	16,750	4,606
188.34	1,218	24	188.86	17,054	4,775
188.35	1,523	38	188.87	17,359	4,947
188.36	1,827	55	188.88	17,663	5,122
188.37	2,132	75	188.89	17,968	5,301
188.38	2,436	97	188.90	18,273	5,482
188.39	2,741	123	188.91	18,577	5,666
188.40	3,045	152	188.92	18,882	5,853
188.41	3,350	184	188.93	19,186	6,044
188.42	3,655	219	188.94	19,491	6,237
188.43	3,959	257	188.95	19,795	6,433
188.44	4,264	298	188.96	20,100	6,633
188.45	4,568	343	188.97	20,404	6,835
188.46	4,873	390	188.98	20,709	7,041
188.47	5,177	440	188.99	21,013	7,250
188.48	5,482	493	189.00	21,318	7,461
188.49	5,786	550	189.01	21,337	7,675
188.50	6,091	609	189.02	21,357	7,888
188.51	6,395	672	189.03	21,376	8,102
188.52	6,700	737	189.04	21,395	8,316
188.53	7,004	806	189.05	21,415	8,530
188.54	7,309	877	189.06	21,434	8,744
188.55	7,614	952	189.07	21,453	8,958
188.56	7,918	1,029	189.08	21,473	9,173
188.57	8,223	1,110	189.09	21,492	9,388
188.58	8,527	1,194	189.10	21,511	9,603
188.59	8,832	1,281	189.11	21,531	9,818
188.60	9,136	1,370	189.12	21,550	10,033
188.61	9,441	1,463	189.13	21,569	10,249
188.62	9,745	1,559	189.14	21,589	10,465
188.63	10,050	1,658	189.15	21,608	10,681
188.64	10,354	1,760	189.16	21,627	10,897
188.65	10,659	1,865	189.17	21,647	11,113
188.66	10,964	1,973	189.18	21,666	11,330
188.67	11,268	2,085	189.19	21,685	11,547
188.68	11,573	2,199	189.20	21,705	11,764
188.69	11,877	2,316	189.21	21,724	11,981
188.70	12,182	2,436	189.22	21,743	12,198
188.71	12,486	2,560	189.23	21,763	12,416
188.72	12,791	2,686	189.24	21,782	12,633
188.73	13,095	2,815	189.25	21,802	12,851
188.74	13,400	2,948	189.26	21,821	13,069
188.75	13,704	3,083	189.27	21,840	13,288
188.76	14,009	3,222	189.28	21,860	13,506
188.77	14,314	3,364	189.29	21,879	13,725
188.78	14,618	3,508	189.30	21,898	13,944
188.79	14,923	3,656	189.31	21,918	14,163
188.80	15,227	3,807	189.32	21,937	14,382
188.81	15,532	3,961	189.33	21,956	14,602

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.34	21,976	14,821	189.86	22,981	26,510
189.35	21,995	15,041	189.87	23,001	26,740
189.36	22,014	15,261	189.88	23,020	26,970
189.37	22,034	15,481	189.89	23,039	27,200
189.38	22,053	15,702	189.90	23,059	27,431
189.39	22,072	15,922	189.91	23,078	27,661
189.40	22,092	16,143	189.92	23,097	27,892
189.41	22,111	16,364	189.93	23,117	28,123
189.42	22,130	16,585	189.94	23,136	28,355
189.43	22,150	16,807	189.95	23,155	28,586
189.44	22,169	17,028	189.96	23,175	28,818
189.45	22,188	17,250	189.97	23,194	29,050
189.46	22,208	17,472	189.98	23,213	29,282
189.47	22,227	17,694	189.99	23,233	29,514
189.48	22,246	17,917	190.00	23,252	29,746
189.49	22,266	18,139	190.01	23,272	29,979
189.50	22,285	18,362	190.02	23,292	30,212
189.51	22,304	18,585	190.03	23,312	30,445
189.52	22,324	18,808	190.04	23,332	30,678
189.53	22,343	19,031	190.05	23,352	30,911
189.54	22,362	19,255	190.06	23,371	31,145
189.55	22,382	19,479	190.07	23,391	31,379
189.56	22,401	19,703	190.08	23,411	31,613
189.57	22,420	19,927	190.09	23,431	31,847
189.58	22,440	20,151	190.10	23,451	32,081
189.59	22,459	20,376	190.11	23,471	32,316
189.60	22,478	20,600	190.12	23,491	32,551
189.61	22,498	20,825	190.13	23,511	32,786
189.62	22,517	21,050	190.14	23,531	33,021
189.63	22,536	21,275	190.15	23,551	33,256
189.64	22,556	21,501	190.16	23,570	33,492
189.65	22,575	21,727	190.17	23,590	33,728
189.66	22,594	21,952	190.18	23,610	33,964
189.67	22,614	22,178	190.19	23,630	34,200
189.68	22,633	22,405	190.20	23,650	34,437
189.69	22,652	22,631	190.21	23,670	34,673
189.70	22,672	22,858	190.22	23,690	34,910
189.71	22,691	23,085	190.23	23,710	35,147
189.72	22,710	23,312	190.24	23,730	35,384
189.73	22,730	23,539	190.25	23,750	35,621
189.74	22,749	23,766	190.26	23,769	35,859
189.75	22,769	23,994	190.27	23,789	36,097
189.76	22,788	24,222	190.28	23,809	36,335
189.77	22,807	24,449	190.29	23,829	36,573
189.78	22,827	24,678	190.30	23,849	36,811
189.79	22,846	24,906	190.31	23,869	37,050
189.80	22,865	25,135	190.32	23,889	37,289
189.81	22,885	25,363	190.33	23,909	37,528
189.82	22,904	25,592	190.34	23,929	37,767
189.83	22,923	25,821	190.35	23,949	38,006
189.84	22,943	26,051	190.36	23,968	38,246
189.85	22,962	26,280	190.37	23,988	38,486

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.38	24,008	38,726	190.90	25,043	51,479
190.39	24,028	38,966	190.91	25,063	51,730
190.40	24,048	39,206	190.92	25,083	51,980
190.41	24,068	39,447	190.93	25,103	52,231
190.42	24,088	39,688	190.94	25,123	52,482
190.43	24,108	39,929	190.95	25,143	52,734
190.44	24,128	40,170	190.96	25,162	52,985
190.45	24,148	40,411	190.97	25,182	53,237
190.46	24,167	40,653	190.98	25,202	53,489
190.47	24,187	40,895	190.99	25,222	53,741
190.48	24,207	41,137	191.00	25,242	53,993
190.49	24,227	41,379	191.01	25,263	54,246
190.50	24,247	41,621	191.02	25,285	54,499
190.51	24,267	41,864	191.03	25,306	54,752
190.52	24,287	42,106	191.04	25,328	55,005
190.53	24,307	42,349	191.05	25,349	55,258
190.54	24,327	42,593	191.06	25,370	55,512
190.55	24,347	42,836	191.07	25,392	55,765
190.56	24,366	43,079	191.08	25,413	56,020
190.57	24,386	43,323	191.09	25,435	56,274
190.58	24,406	43,567	191.10	25,456	56,528
190.59	24,426	43,811	191.11	25,477	56,783
190.60	24,446	44,056	191.12	25,499	57,038
190.61	24,466	44,300	191.13	25,520	57,293
190.62	24,486	44,545	191.14	25,542	57,548
190.63	24,506	44,790	191.15	25,563	57,804
190.64	24,526	45,035	191.16	25,584	58,059
190.65	24,546	45,280	191.17	25,606	58,315
190.66	24,565	45,526	191.18	25,627	58,572
190.67	24,585	45,772	191.19	25,649	58,828
190.68	24,605	46,018	191.20	25,670	59,085
190.69	24,625	46,264	191.21	25,691	59,341
190.70	24,645	46,510	191.22	25,713	59,598
190.71	24,665	46,757	191.23	25,734	59,856
190.72	24,685	47,004	191.24	25,756	60,113
190.73	24,705	47,250	191.25	25,777	60,371
190.74	24,725	47,498	191.26	25,798	60,629
190.75	24,745	47,745	191.27	25,820	60,887
190.76	24,764	47,993	191.28	25,841	61,145
190.77	24,784	48,240	191.29	25,863	61,403
190.78	24,804	48,488	191.30	25,884	61,662
190.79	24,824	48,736	191.31	25,905	61,921
190.80	24,844	48,985	191.32	25,927	62,180
190.81	24,864	49,233	191.33	25,948	62,440
190.82	24,884	49,482	191.34	25,970	62,699
190.83	24,904	49,731	191.35	25,991	62,959
190.84	24,924	49,980	191.36	26,012	63,219
190.85	24,944	50,229	191.37	26,034	63,479
190.86	24,963	50,479	191.38	26,055	63,740
190.87	24,983	50,729	191.39	26,077	64,000
190.88	25,003	50,979	191.40	26,098	64,261
190.89	25,023	51,229	191.41	26,119	64,522

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

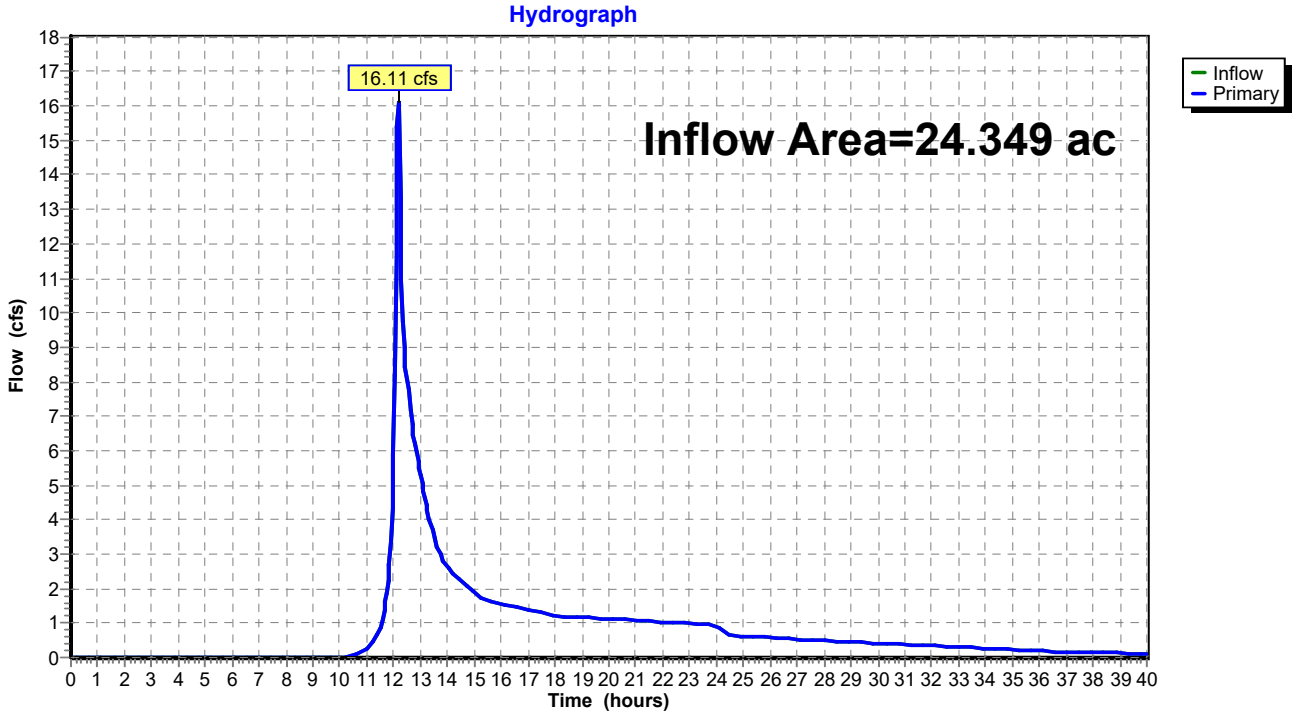
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.42	26,141	64,784
191.43	26,162	65,045
191.44	26,184	65,307
191.45	26,205	65,569
191.46	26,226	65,831
191.47	26,248	66,093
191.48	26,269	66,356
191.49	26,291	66,619
191.50	26,312	66,882
191.51	26,333	67,145
191.52	26,355	67,408
191.53	26,376	67,672
191.54	26,398	67,936
191.55	26,419	68,200
191.56	26,440	68,464
191.57	26,462	68,729
191.58	26,483	68,994
191.59	26,505	69,259
191.60	26,526	69,524
191.61	26,547	69,789
191.62	26,569	70,055
191.63	26,590	70,320
191.64	26,612	70,586
191.65	26,633	70,853
191.66	26,654	71,119
191.67	26,676	71,386
191.68	26,697	71,653
191.69	26,719	71,920
191.70	26,740	72,187
191.71	26,761	72,455
191.72	26,783	72,722
191.73	26,804	72,990
191.74	26,826	73,258
191.75	26,847	73,527
191.76	26,868	73,795
191.77	26,890	74,064
191.78	26,911	74,333
191.79	26,933	74,602
191.80	26,954	74,872
191.81	26,975	75,141
191.82	26,997	75,411
191.83	27,018	75,681
191.84	27,040	75,952
191.85	27,061	76,222
191.86	27,082	76,493
191.87	27,104	76,764
191.88	27,125	77,035
191.89	27,147	77,306
191.90	27,168	77,578
191.91	27,189	77,850
191.92	27,211	78,122
191.93	27,232	78,394
191.94	27,254	78,666
191.95	27,275	78,939
191.96	27,296	79,212
191.97	27,318	79,485
191.98	27,339	79,758
191.99	27,361	80,032
192.00	**27,382**	**80,305**

Summary for Link PDA-4: Proposed Drainage Area #4

Inflow Area = 24.349 ac, 23.20% Impervious, Inflow Depth > 1.33" for Future 2 yr event
Inflow = 16.11 cfs @ 12.18 hrs, Volume= 2.702 af
Primary = 16.11 cfs @ 12.18 hrs, Volume= 2.702 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-4: Proposed Drainage Area #4



Summary for Subcatchment 41I: PDA-41 (impervious)

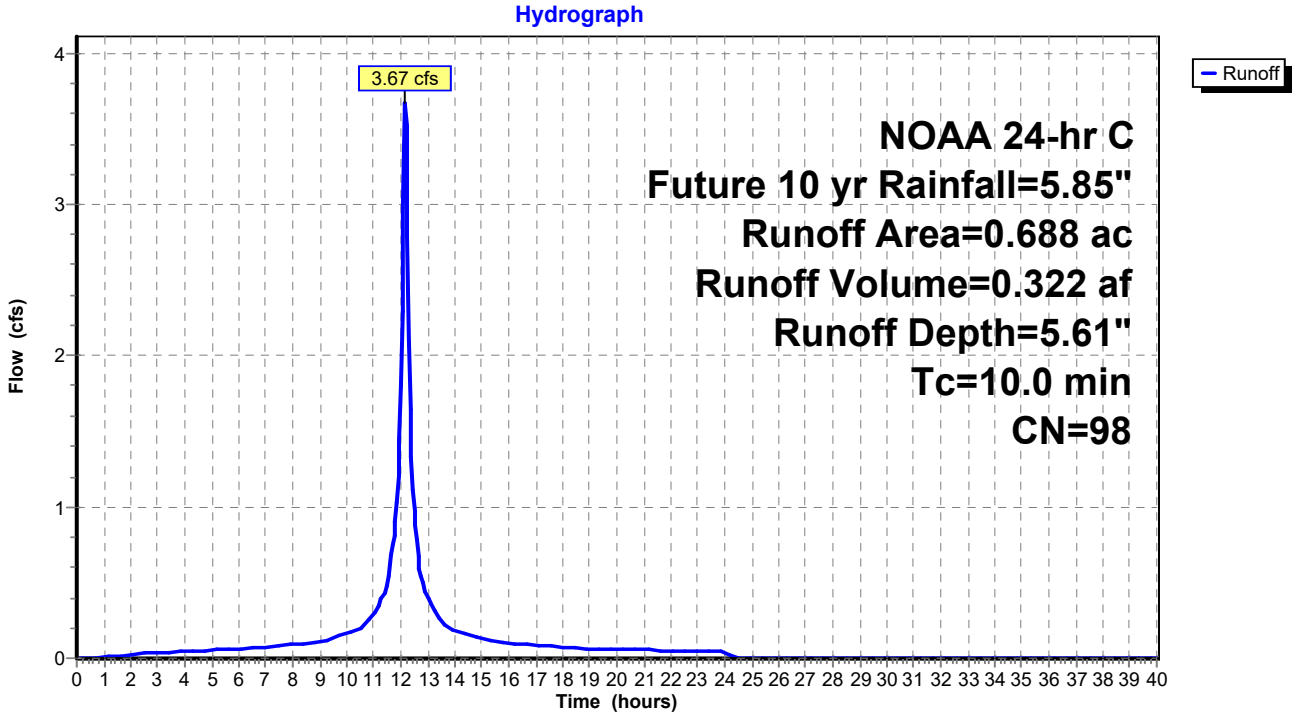
Runoff = 3.67 cfs @ 12.17 hrs, Volume= 0.322 af, Depth= 5.61"
Routed to Pond B-41 : Basin #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.136	98	Pavement, HSG C
*	0.514	98	Roof, HSG C
*	0.038	98	Concrete, HSC C
	0.688	98	Weighted Average
	0.688		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 41I: PDA-41 (impervious)



Summary for Subcatchment 41P: PDA-41 (pervious)

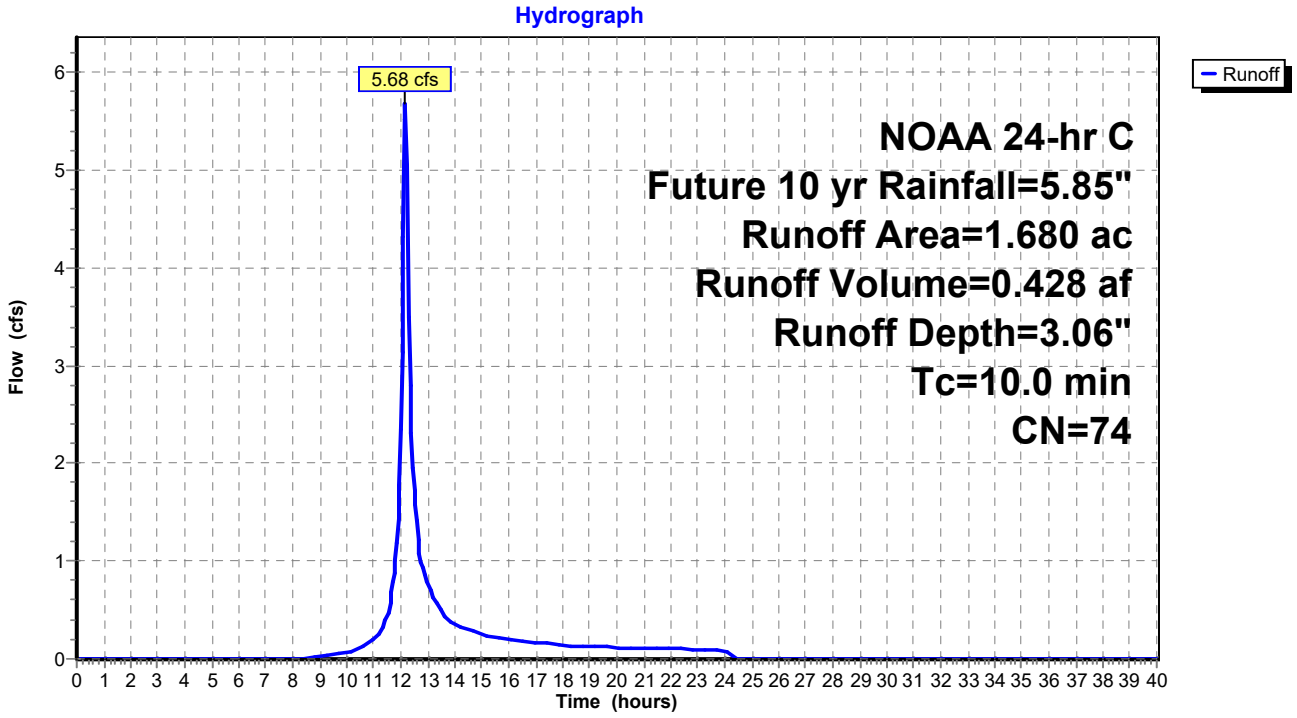
Runoff = 5.68 cfs @ 12.18 hrs, Volume= 0.428 af, Depth= 3.06"
Routed to Pond B-41 : Basin #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.680	74	>75% Grass cover, Good, HSG C
1.680		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 41P: PDA-41 (pervious)



Summary for Subcatchment 42l: PDA-42 (impervious)

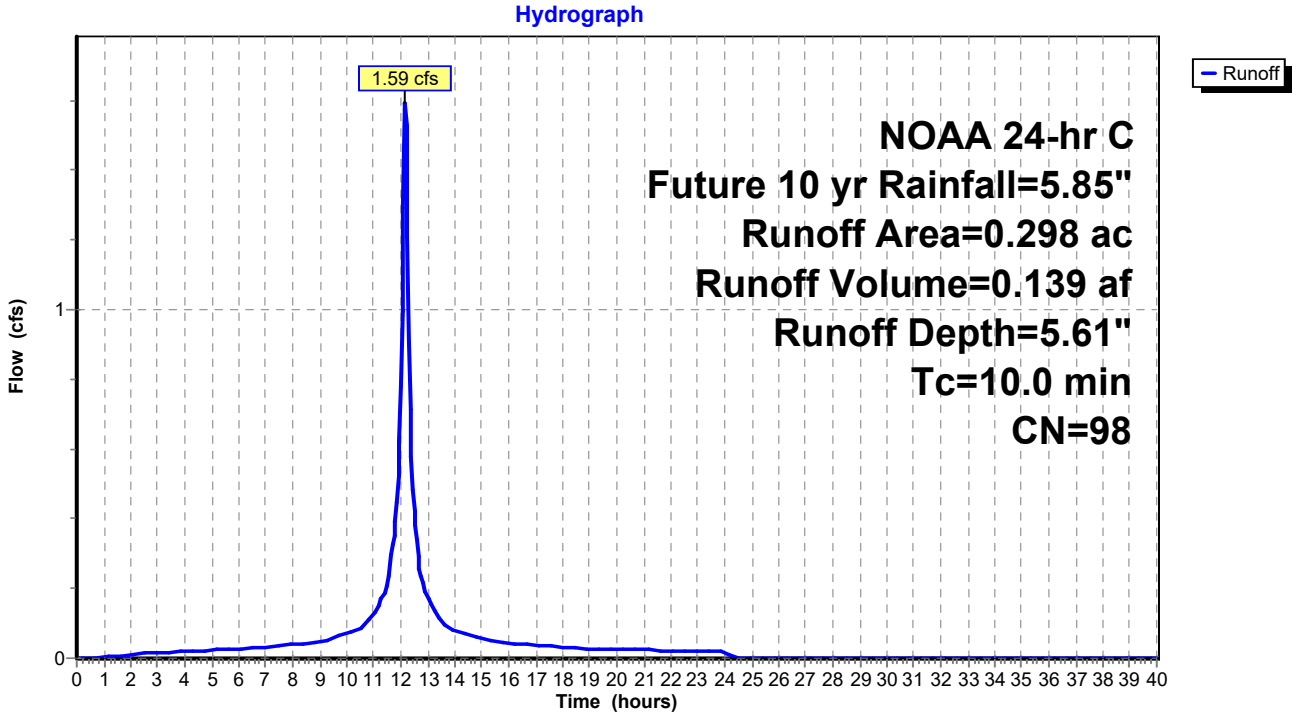
Runoff = 1.59 cfs @ 12.17 hrs, Volume= 0.139 af, Depth= 5.61"
Routed to Pond B-42 : Basin #42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.298	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.298	98	Weighted Average
	0.298		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 42l: PDA-42 (impervious)



Summary for Subcatchment 42P: PDA-42 (pervious)

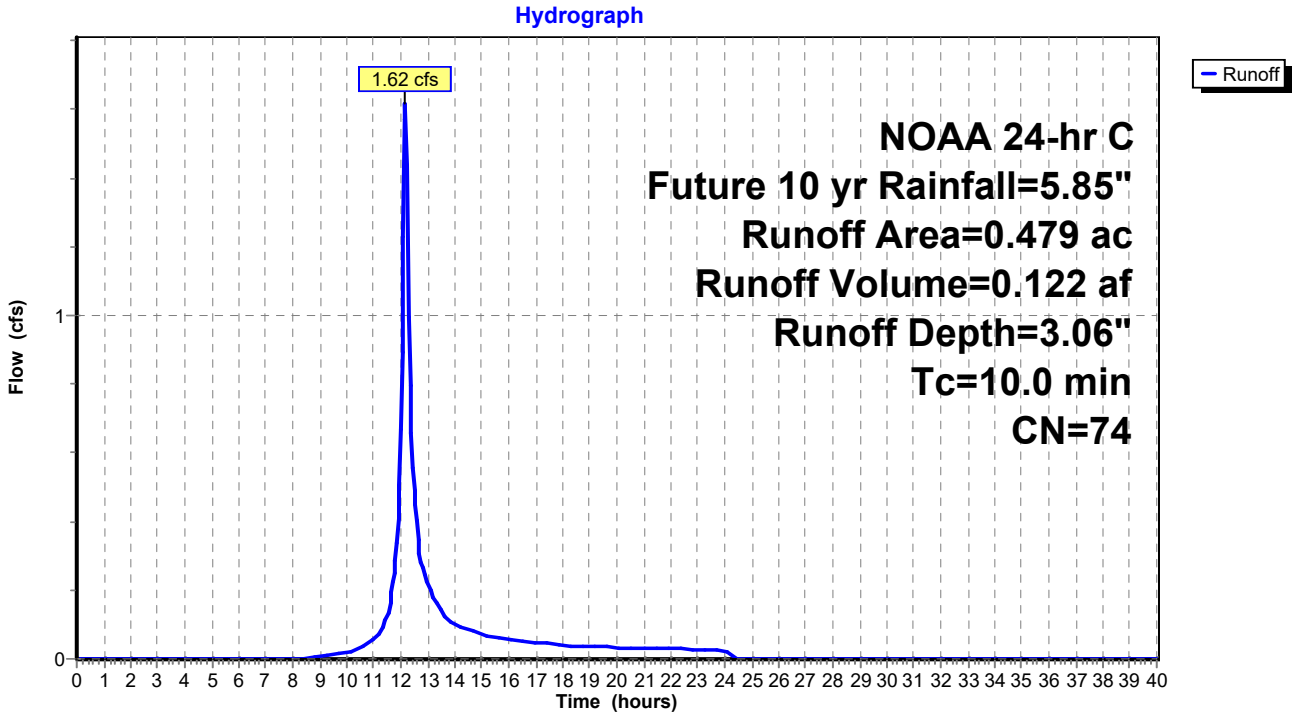
Runoff = 1.62 cfs @ 12.18 hrs, Volume= 0.122 af, Depth= 3.06"
Routed to Pond B-42 : Basin #42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.479	74	>75% Grass cover, Good, HSG C
0.479		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 42P: PDA-42 (pervious)



Summary for Subcatchment 43I: PDA-43 (impervious)

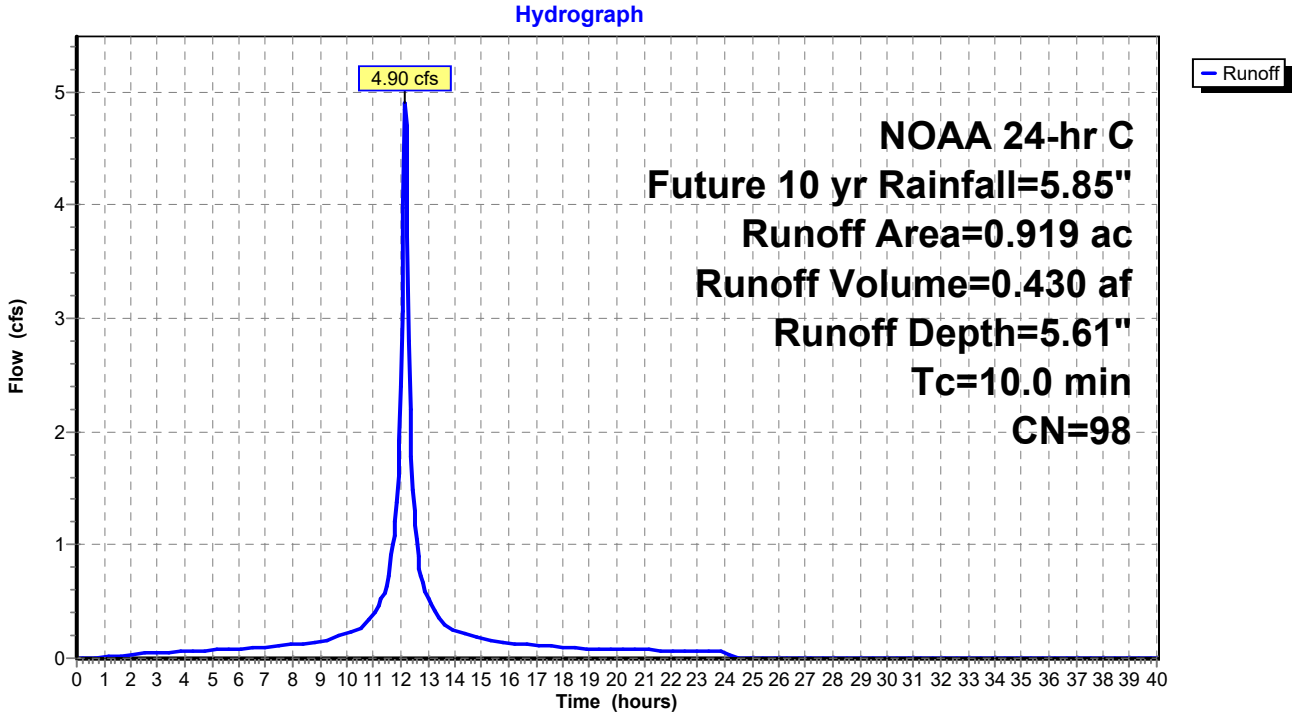
Runoff = 4.90 cfs @ 12.17 hrs, Volume= 0.430 af, Depth= 5.61"
Routed to Pond B-43 : Basin #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.326	98	Pavement, HSG C
*	0.522	98	Roof, HSG C
*	0.071	98	Concrete, HSC C
	0.919	98	Weighted Average
	0.919		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 43I: PDA-43 (impervious)



Summary for Subcatchment 43P: PDA-43 (pervious)

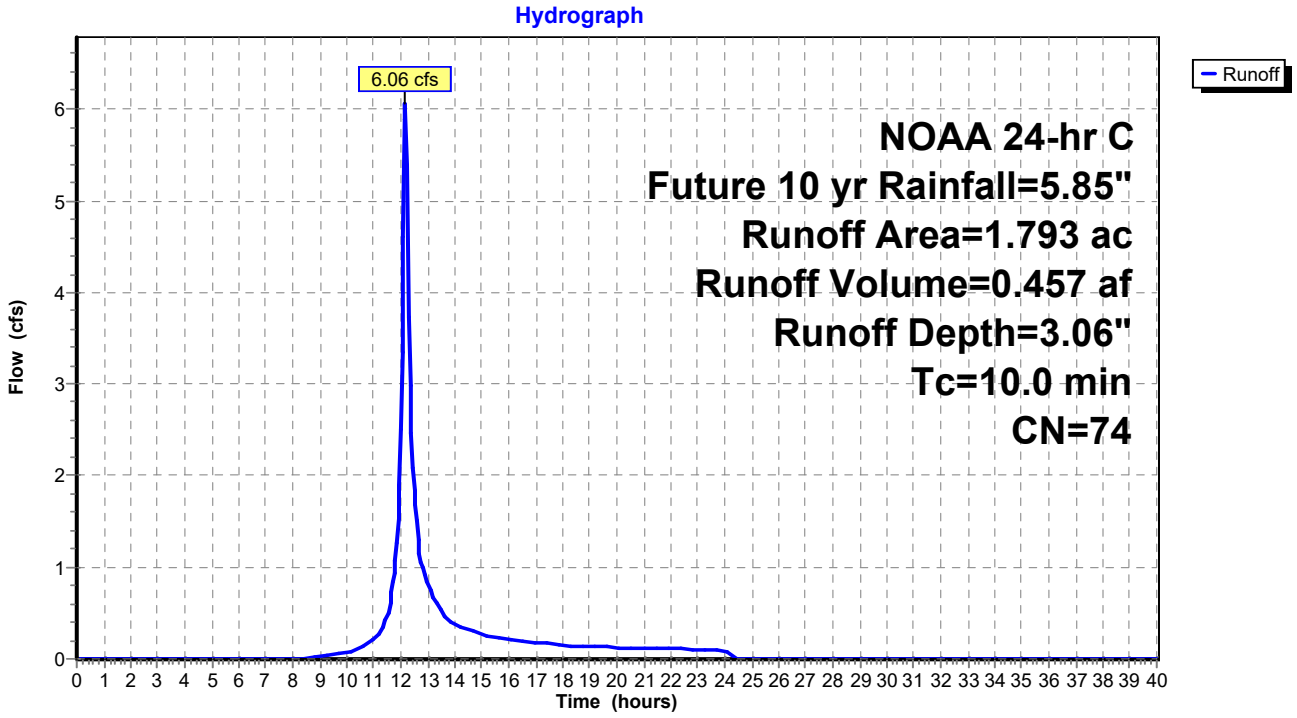
Runoff = 6.06 cfs @ 12.18 hrs, Volume= 0.457 af, Depth= 3.06"
Routed to Pond B-43 : Basin #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.793	74	>75% Grass cover, Good, HSG C
1.793		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 43P: PDA-43 (pervious)



Summary for Subcatchment 44I: PDA-44 (impervious)

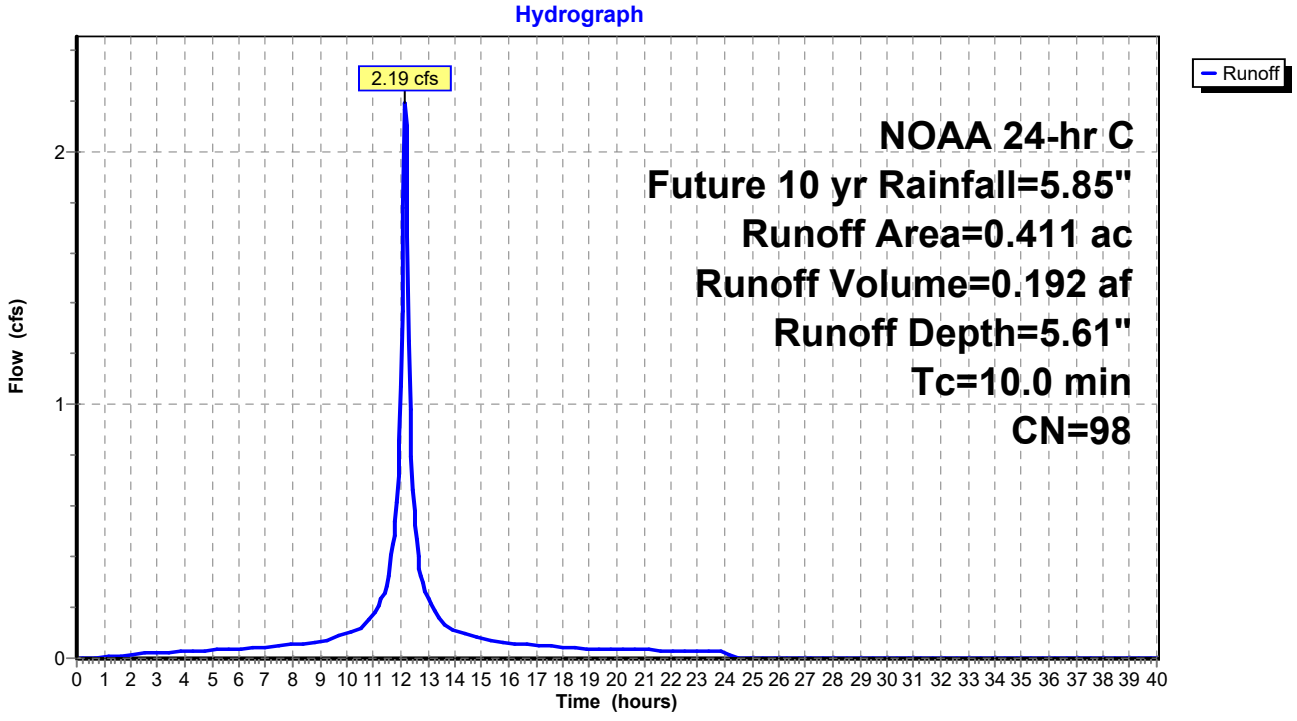
Runoff = 2.19 cfs @ 12.17 hrs, Volume= 0.192 af, Depth= 5.61"
Routed to Pond B-44 : Basin #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.283	98	Pavement, HSG C
*	0.104	98	Roof, HSG C
*	0.024	98	Concrete, HSC C
	0.411	98	Weighted Average
	0.411		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 44I: PDA-44 (impervious)



Summary for Subcatchment 44P: PDA-44 (pervious)

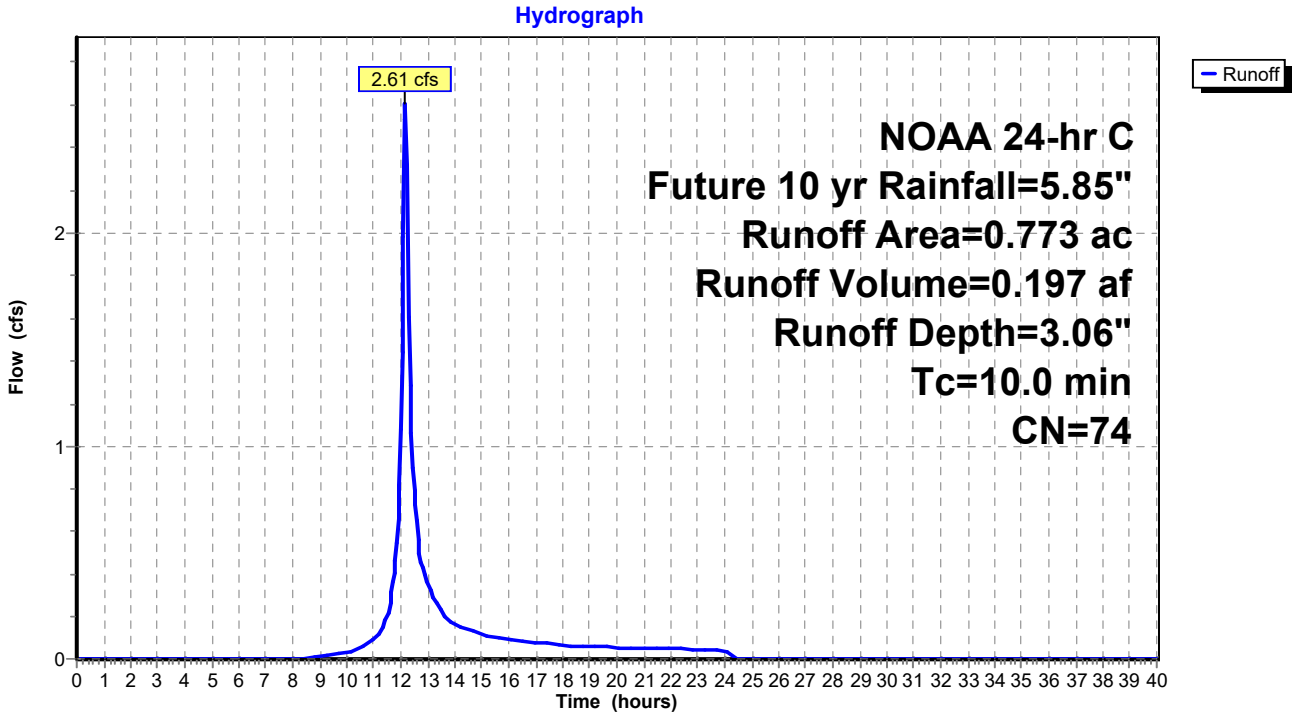
Runoff = 2.61 cfs @ 12.18 hrs, Volume= 0.197 af, Depth= 3.06"
Routed to Pond B-44 : Basin #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.773	74	>75% Grass cover, Good, HSG C
0.773		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 44P: PDA-44 (pervious)



Summary for Subcatchment 45l: PDA-45 (impervious)

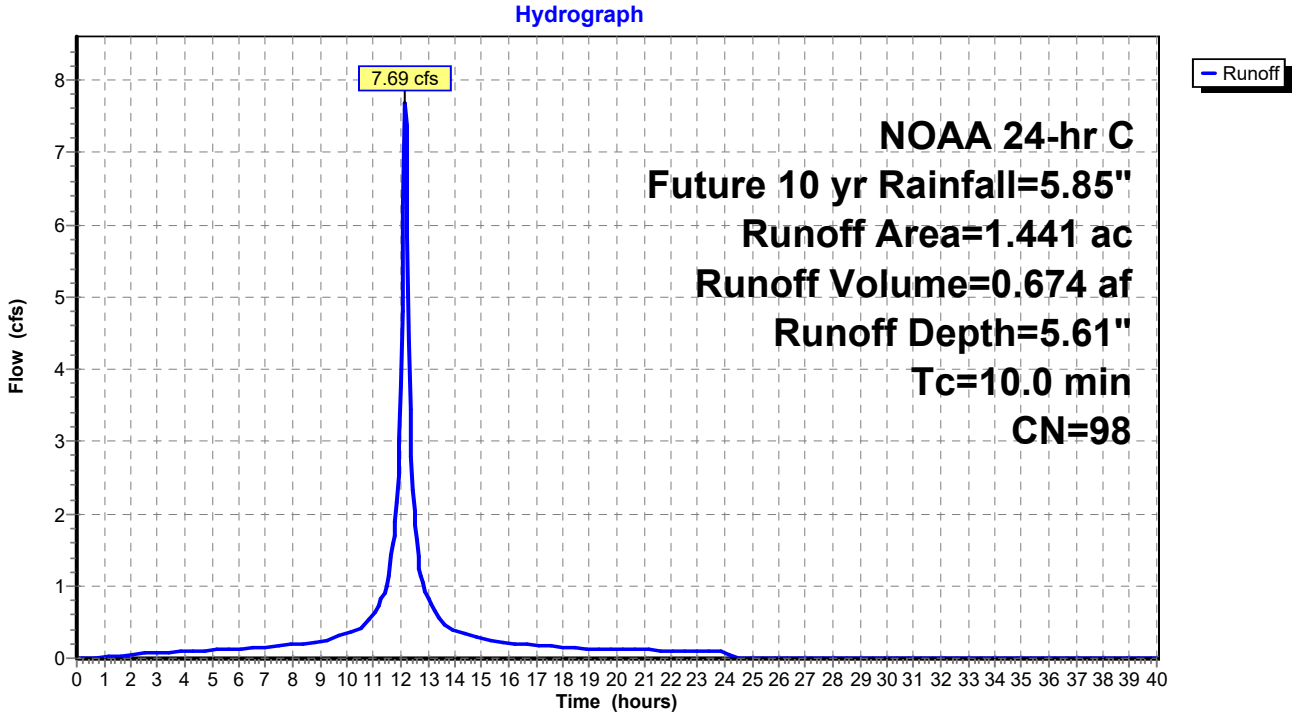
Runoff = 7.69 cfs @ 12.17 hrs, Volume= 0.674 af, Depth= 5.61"
Routed to Pond B-45 : Basin #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.394	98	Pavement, HSG C
*	1.045	98	Roof, HSG C
*	0.002	98	Concrete, HSG C
	1.441	98	Weighted Average
	1.441		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 45l: PDA-45 (impervious)



Summary for Subcatchment 45P: PDA-45 (pervious)

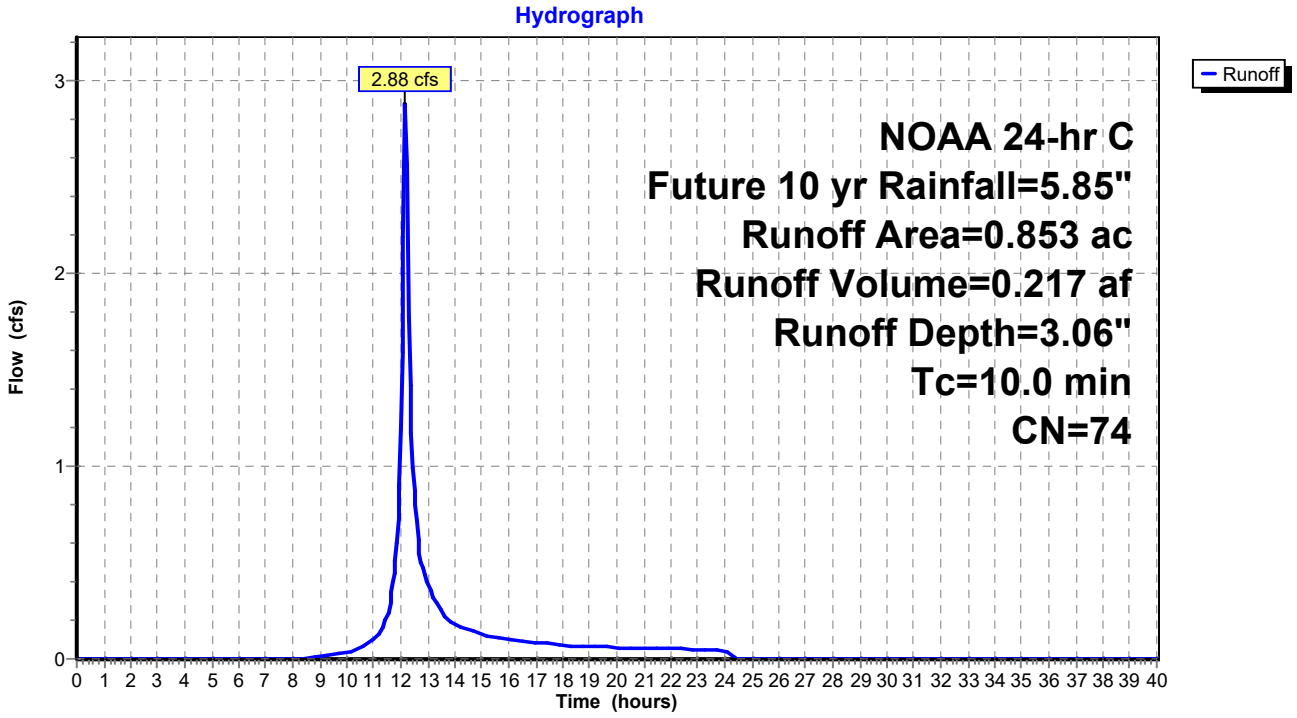
Runoff = 2.88 cfs @ 12.18 hrs, Volume= 0.217 af, Depth= 3.06"
Routed to Pond B-45 : Basin #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.853	74	>75% Grass cover, Good, HSG C
0.853		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 45P: PDA-45 (pervious)



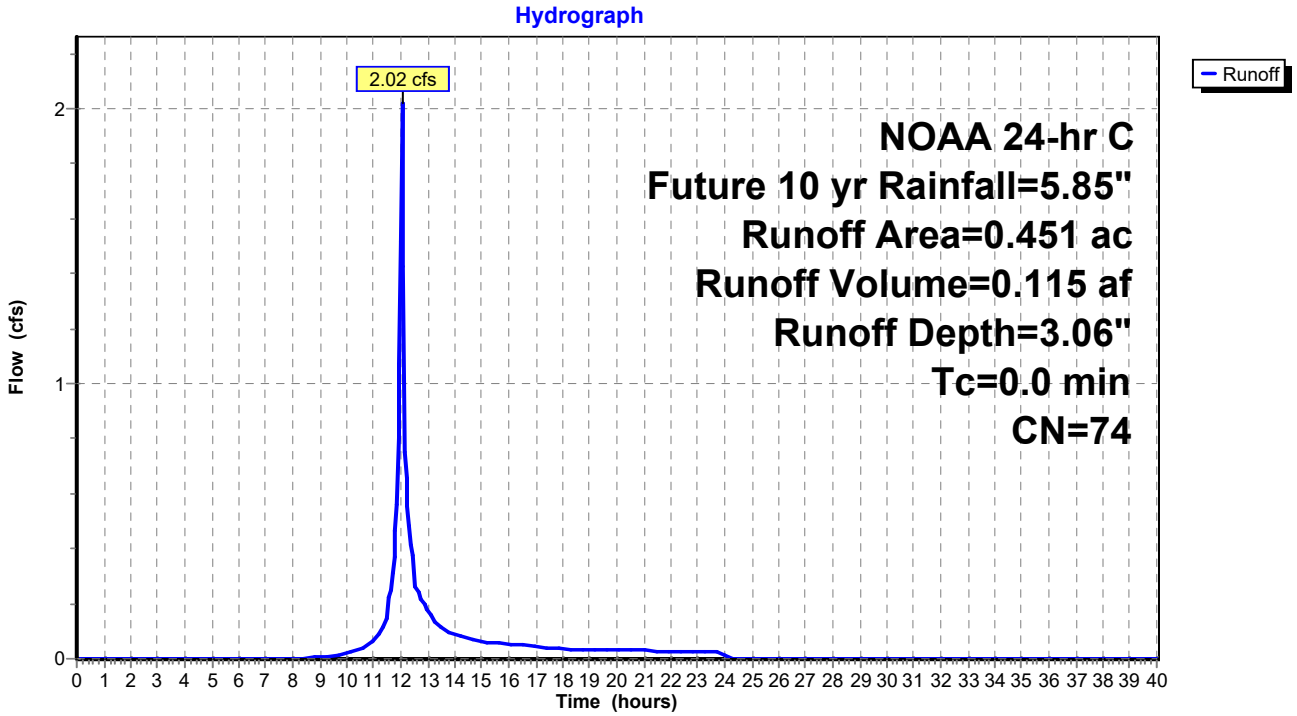
Summary for Subcatchment 46BP: PDA-46B (pervious)

Runoff = 2.02 cfs @ 12.05 hrs, Volume= 0.115 af, Depth= 3.06"
Routed to Pond B-46B : Basin #46B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.451	74	>75% Grass cover, Good, HSG C
0.451		100.00% Pervious Area

Subcatchment 46BP: PDA-46B (pervious)



Summary for Subcatchment 46I: PDA-46 (impervious)

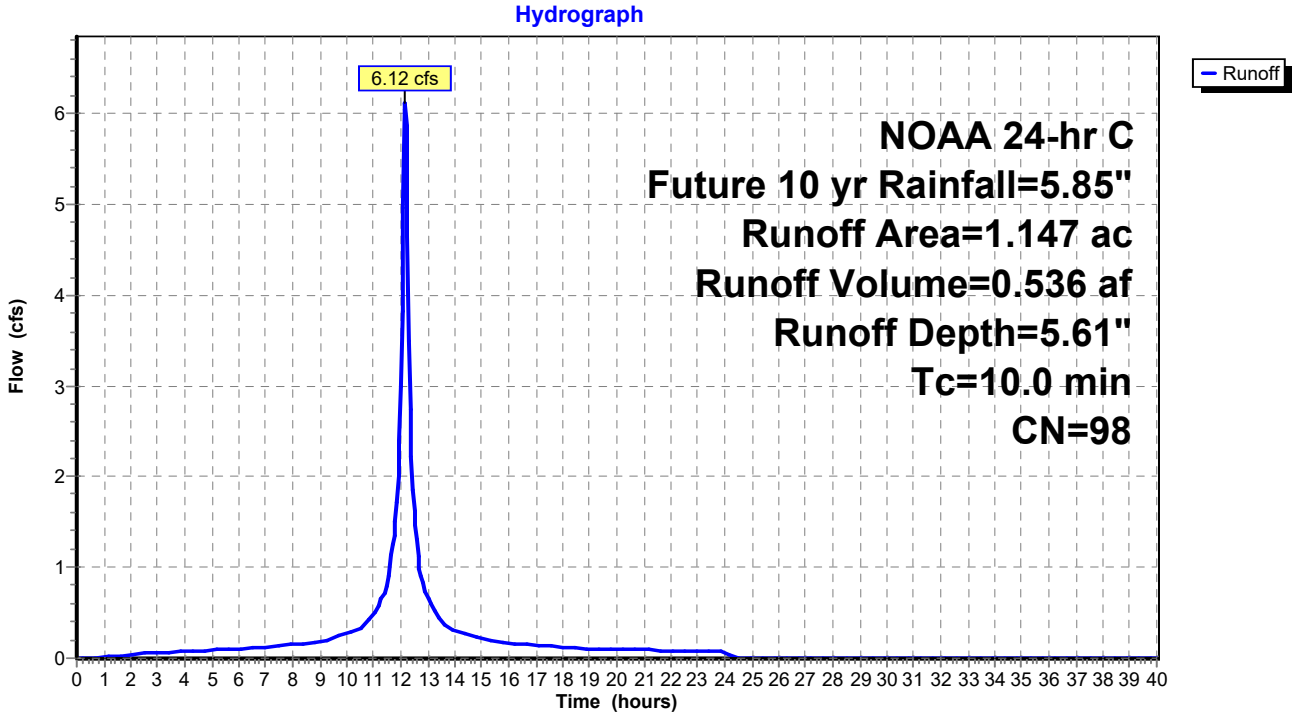
Runoff = 6.12 cfs @ 12.17 hrs, Volume= 0.536 af, Depth= 5.61"
Routed to Pond B-46A : Basin #46A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.430	98	Pavement, HSG C
*	0.653	98	Roof, HSG C
*	0.064	98	Concrete, HSG C
	1.147	98	Weighted Average
	1.147		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 46I: PDA-46 (impervious)



Summary for Subcatchment 46P: PDA-46 (pervious)

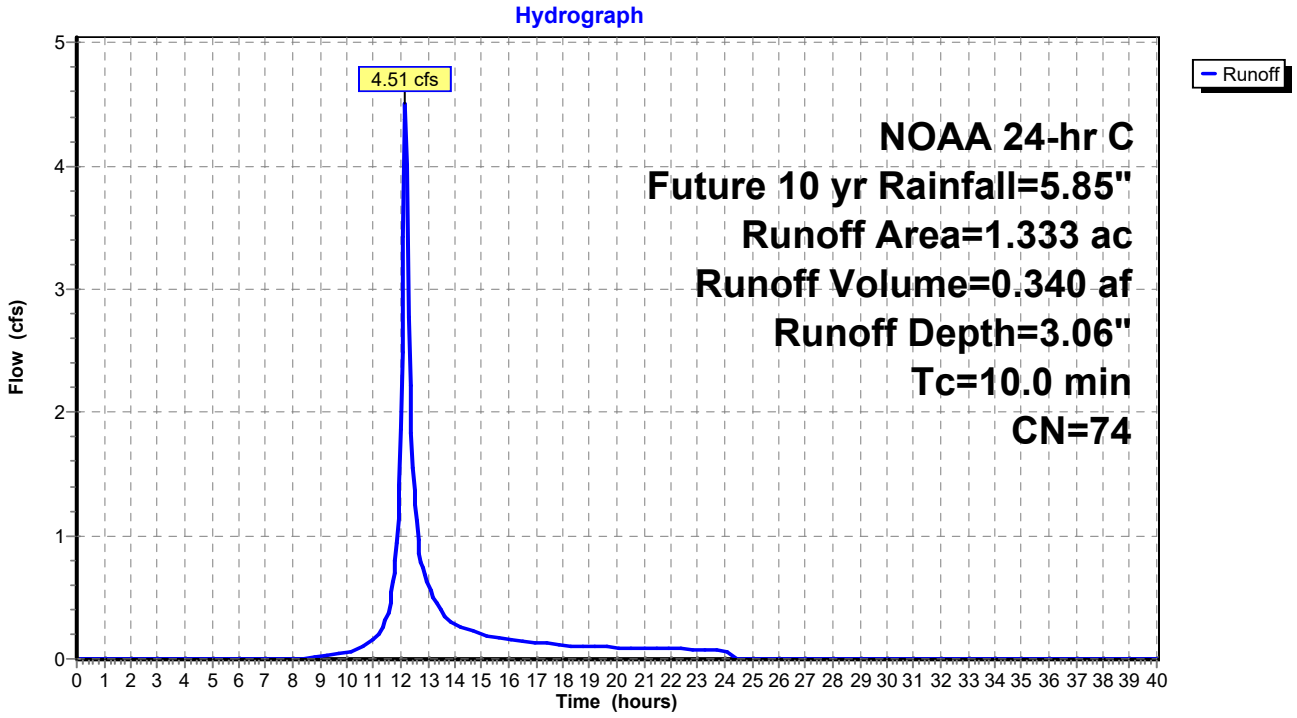
Runoff = 4.51 cfs @ 12.18 hrs, Volume= 0.340 af, Depth= 3.06"
Routed to Pond B-46A : Basin #46A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.333	74	>75% Grass cover, Good, HSG C
1.333		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 46P: PDA-46 (pervious)



Summary for Subcatchment 47I: PDA-47 (impervious)

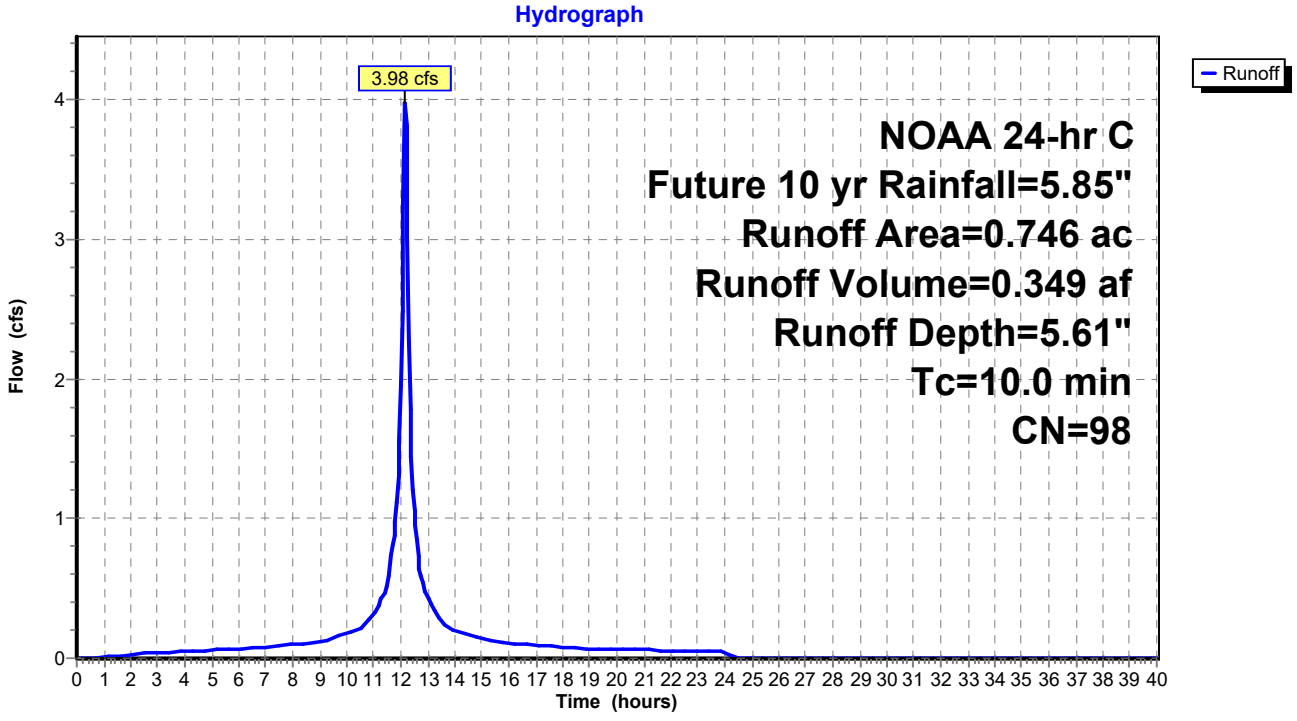
Runoff = 3.98 cfs @ 12.17 hrs, Volume= 0.349 af, Depth= 5.61"
Routed to Pond B-47 : Basin #47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.244	98	Pavement, HSG C
*	0.484	98	Roof, HSG C
*	0.018	98	Concrete, HSG C
	0.746	98	Weighted Average
	0.746		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 47I: PDA-47 (impervious)



Summary for Subcatchment 47P: PDA-47 (pervious)

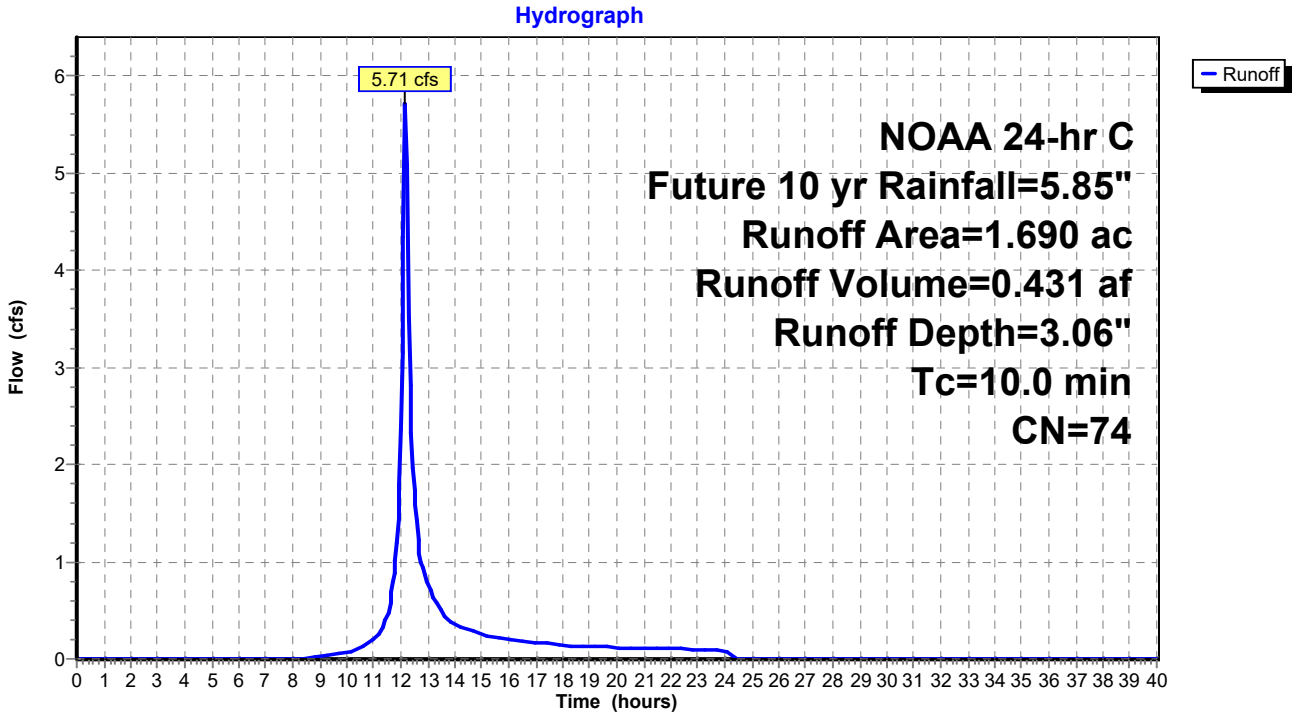
Runoff = 5.71 cfs @ 12.18 hrs, Volume= 0.431 af, Depth= 3.06"
Routed to Pond B-47 : Basin #47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.690	74	>75% Grass cover, Good, HSG C
1.690		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 47P: PDA-47 (pervious)



Summary for Subcatchment UPDA-4: PDA-4 (undetained)

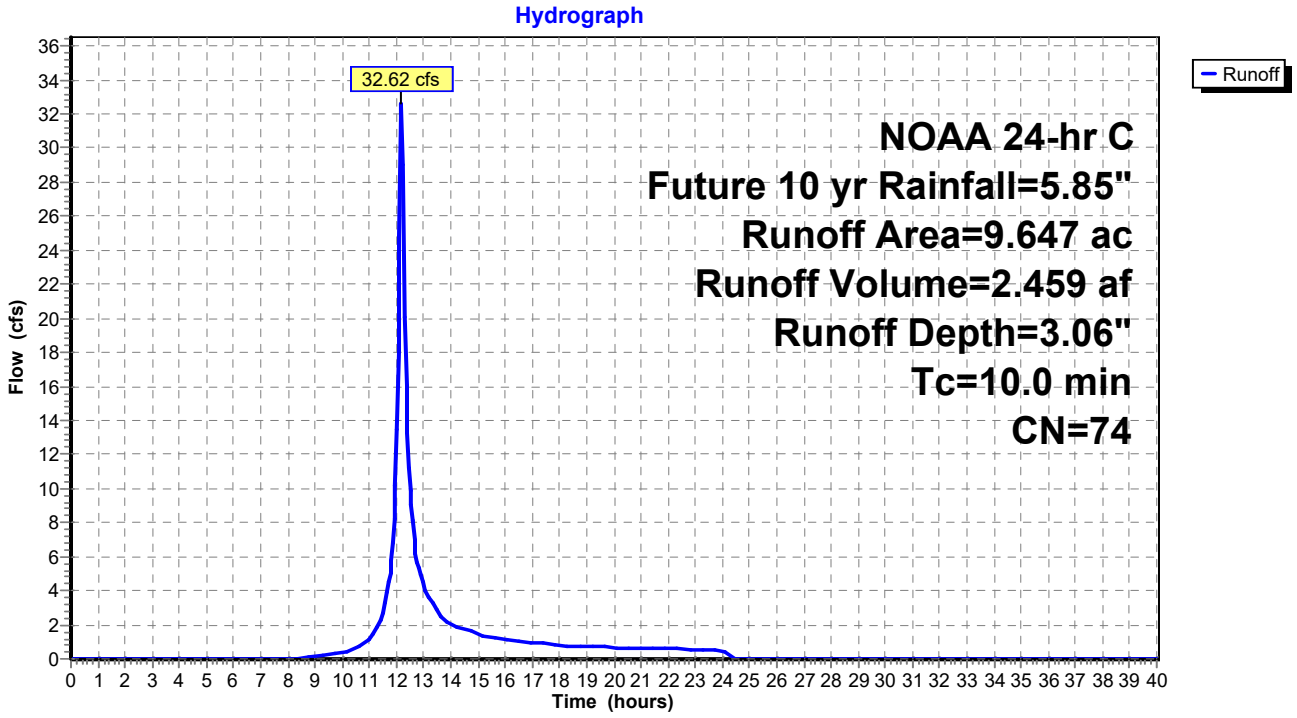
Runoff = 32.62 cfs @ 12.18 hrs, Volume= 2.459 af, Depth= 3.06"
Routed to Link PDA-4 : Proposed Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
9.647	74	>75% Grass cover, Good, HSG C
9.647		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-4: PDA-4 (undetained)



Summary for Pond B-41: Basin #41

Inflow Area = 2.368 ac, 29.05% Impervious, Inflow Depth = 3.80" for Future 10 yr event
Inflow = 9.36 cfs @ 12.17 hrs, Volume= 0.750 af
Outflow = 6.07 cfs @ 12.29 hrs, Volume= 0.690 af, Atten= 35%, Lag= 7.2 min
Primary = 6.07 cfs @ 12.29 hrs, Volume= 0.690 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.73' @ 12.29 hrs Surf.Area= 5,331 sf Storage= 12,525 cf

Plug-Flow detention time= 314.8 min calculated for 0.689 af (92% of inflow)
Center-of-Mass det. time= 272.6 min (1,072.2 - 799.7)

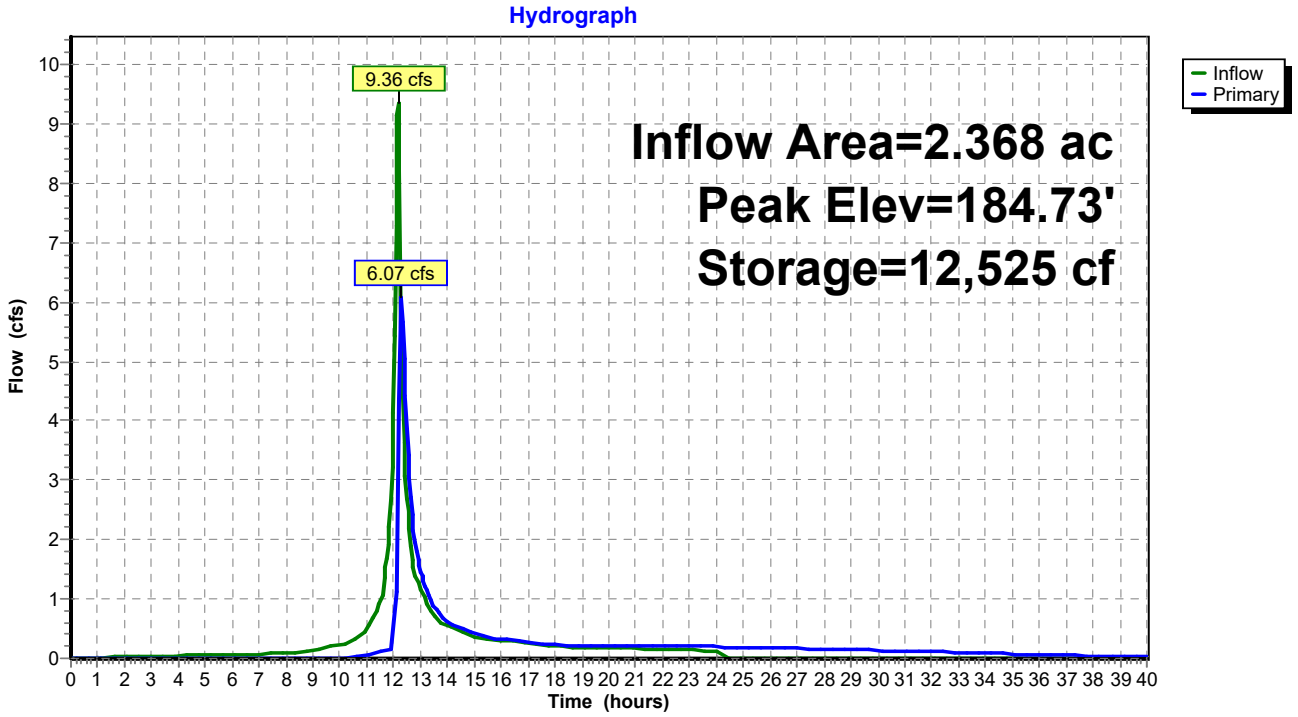
Volume	Invert	Avail.Storage	Storage Description
#1	181.85'	23,005 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.85	0	0	0
182.00	3,695	277	277
183.00	4,265	3,980	4,257
184.00	4,870	4,568	8,825
185.00	5,505	5,188	14,012
186.00	6,153	5,829	19,841
186.50	6,502	3,164	23,005

Device	Routing	Invert	Outlet Devices
#1	Primary	181.85'	**18.0" Round Culvert** L= 59.0' Ke= 0.500 Inlet / Outlet Invert= 181.85' / 181.55' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	182.50'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.13'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.39'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.04 cfs @ 12.29 hrs HW=184.72' (Free Discharge)
- **1=Culvert** (Passes 6.04 cfs of 11.42 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.24 cfs @ 7.01 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 5.80 cfs @ 2.52 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-41: Basin #41



Stage-Discharge for Pond B-41: Basin #41

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.85	0.00	182.37	0.00	182.89	0.09	183.41	0.15
181.86	0.00	182.38	0.00	182.90	0.09	183.42	0.15
181.87	0.00	182.39	0.00	182.91	0.09	183.43	0.15
181.88	0.00	182.40	0.00	182.92	0.09	183.44	0.15
181.89	0.00	182.41	0.00	182.93	0.09	183.45	0.15
181.90	0.00	182.42	0.00	182.94	0.10	183.46	0.15
181.91	0.00	182.43	0.00	182.95	0.10	183.47	0.15
181.92	0.00	182.44	0.00	182.96	0.10	183.48	0.15
181.93	0.00	182.45	0.00	182.97	0.10	183.49	0.15
181.94	0.00	182.46	0.00	182.98	0.10	183.50	0.16
181.95	0.00	182.47	0.00	182.99	0.10	183.51	0.16
181.96	0.00	182.48	0.00	183.00	0.10	183.52	0.16
181.97	0.00	182.49	0.00	183.01	0.10	183.53	0.16
181.98	0.00	182.50	0.00	183.02	0.11	183.54	0.16
181.99	0.00	182.51	0.00	183.03	0.11	183.55	0.16
182.00	0.00	182.52	0.00	183.04	0.11	183.56	0.16
182.01	0.00	182.53	0.00	183.05	0.11	183.57	0.16
182.02	0.00	182.54	0.00	183.06	0.11	183.58	0.16
182.03	0.00	182.55	0.00	183.07	0.11	183.59	0.16
182.04	0.00	182.56	0.01	183.08	0.11	183.60	0.16
182.05	0.00	182.57	0.01	183.09	0.11	183.61	0.16
182.06	0.00	182.58	0.01	183.10	0.12	183.62	0.17
182.07	0.00	182.59	0.01	183.11	0.12	183.63	0.17
182.08	0.00	182.60	0.02	183.12	0.12	183.64	0.17
182.09	0.00	182.61	0.02	183.13	0.12	183.65	0.17
182.10	0.00	182.62	0.02	183.14	0.12	183.66	0.17
182.11	0.00	182.63	0.03	183.15	0.12	183.67	0.17
182.12	0.00	182.64	0.03	183.16	0.12	183.68	0.17
182.13	0.00	182.65	0.03	183.17	0.12	183.69	0.17
182.14	0.00	182.66	0.04	183.18	0.12	183.70	0.17
182.15	0.00	182.67	0.04	183.19	0.13	183.71	0.17
182.16	0.00	182.68	0.05	183.20	0.13	183.72	0.17
182.17	0.00	182.69	0.05	183.21	0.13	183.73	0.17
182.18	0.00	182.70	0.05	183.22	0.13	183.74	0.17
182.19	0.00	182.71	0.05	183.23	0.13	183.75	0.18
182.20	0.00	182.72	0.06	183.24	0.13	183.76	0.18
182.21	0.00	182.73	0.06	183.25	0.13	183.77	0.18
182.22	0.00	182.74	0.06	183.26	0.13	183.78	0.18
182.23	0.00	182.75	0.06	183.27	0.13	183.79	0.18
182.24	0.00	182.76	0.06	183.28	0.13	183.80	0.18
182.25	0.00	182.77	0.07	183.29	0.14	183.81	0.18
182.26	0.00	182.78	0.07	183.30	0.14	183.82	0.18
182.27	0.00	182.79	0.07	183.31	0.14	183.83	0.18
182.28	0.00	182.80	0.07	183.32	0.14	183.84	0.18
182.29	0.00	182.81	0.07	183.33	0.14	183.85	0.18
182.30	0.00	182.82	0.08	183.34	0.14	183.86	0.18
182.31	0.00	182.83	0.08	183.35	0.14	183.87	0.18
182.32	0.00	182.84	0.08	183.36	0.14	183.88	0.19
182.33	0.00	182.85	0.08	183.37	0.14	183.89	0.19
182.34	0.00	182.86	0.08	183.38	0.14	183.90	0.19
182.35	0.00	182.87	0.08	183.39	0.15	183.91	0.19
182.36	0.00	182.88	0.09	183.40	0.15	183.92	0.19

Stage-Discharge for Pond B-41: Basin #41 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.93	0.19	184.45	2.55	184.97	9.90	185.49	17.51
183.94	0.19	184.46	2.66	184.98	10.07	185.50	18.11
183.95	0.19	184.47	2.77	184.99	10.24	185.51	18.74
183.96	0.19	184.48	2.89	185.00	10.41	185.52	19.40
183.97	0.19	184.49	3.00	185.01	10.58	185.53	20.08
183.98	0.19	184.50	3.12	185.02	10.75	185.54	20.78
183.99	0.19	184.51	3.23	185.03	10.92	185.55	21.51
184.00	0.19	184.52	3.35	185.04	11.09	185.56	22.26
184.01	0.19	184.53	3.47	185.05	11.27	185.57	23.03
184.02	0.20	184.54	3.59	185.06	11.44	185.58	23.82
184.03	0.20	184.55	3.71	185.07	11.62	185.59	24.64
184.04	0.20	184.56	3.84	185.08	11.79	185.60	25.51
184.05	0.20	184.57	3.96	185.09	11.97	185.61	26.41
184.06	0.20	184.58	4.09	185.10	12.15	185.62	27.34
184.07	0.20	184.59	4.22	185.11	12.33	185.63	28.29
184.08	0.20	184.60	4.35	185.12	12.51	185.64	29.27
184.09	0.20	184.61	4.48	185.13	12.69	185.65	30.27
184.10	0.20	184.62	4.61	185.14	12.77	185.66	31.29
184.11	0.20	184.63	4.74	185.15	12.80	185.67	32.34
184.12	0.20	184.64	4.88	185.16	12.83	185.68	33.42
184.13	0.20	184.65	5.01	185.17	12.86	185.69	34.52
184.14	0.22	184.66	5.15	185.18	12.89	185.70	35.64
184.15	0.24	184.67	5.29	185.19	12.92	185.71	36.79
184.16	0.27	184.68	5.42	185.20	12.95	185.72	37.96
184.17	0.31	184.69	5.56	185.21	12.98	185.73	39.16
184.18	0.35	184.70	5.71	185.22	13.01	185.74	40.38
184.19	0.40	184.71	5.85	185.23	13.04	185.75	41.63
184.20	0.45	184.72	5.99	185.24	13.07	185.76	42.89
184.21	0.50	184.73	6.14	185.25	13.10	185.77	44.19
184.22	0.56	184.74	6.28	185.26	13.13	185.78	45.51
184.23	0.62	184.75	6.43	185.27	13.16	185.79	46.85
184.24	0.68	184.76	6.58	185.28	13.19	185.80	48.24
184.25	0.75	184.77	6.72	185.29	13.22	185.81	49.66
184.26	0.82	184.78	6.87	185.30	13.25	185.82	51.10
184.27	0.89	184.79	7.02	185.31	13.28	185.83	52.57
184.28	0.97	184.80	7.18	185.32	13.30	185.84	54.07
184.29	1.04	184.81	7.33	185.33	13.33	185.85	55.59
184.30	1.12	184.82	7.48	185.34	13.36	185.86	57.14
184.31	1.20	184.83	7.64	185.35	13.39	185.87	58.72
184.32	1.29	184.84	7.79	185.36	13.42	185.88	60.32
184.33	1.37	184.85	7.95	185.37	13.45	185.89	61.95
184.34	1.46	184.86	8.11	185.38	13.48	185.90	63.60
184.35	1.55	184.87	8.27	185.39	13.51	185.91	65.28
184.36	1.64	184.88	8.42	185.40	13.65	185.92	66.99
184.37	1.74	184.89	8.59	185.41	13.90	185.93	68.72
184.38	1.83	184.90	8.75	185.42	14.20	185.94	70.48
184.39	1.93	184.91	8.91	185.43	14.56	185.95	72.27
184.40	2.03	184.92	9.07	185.44	14.96	185.96	74.09
184.41	2.13	184.93	9.24	185.45	15.40	185.97	75.93
184.42	2.23	184.94	9.40	185.46	15.88	185.98	77.80
184.43	2.34	184.95	9.57	185.47	16.39	185.99	79.69
184.44	2.45	184.96	9.73	185.48	16.94	186.00	81.34

Stage-Discharge for Pond B-41: Basin #41 (continued)

Elevation (feet)	Primary (cfs)
186.01	83.01
186.02	84.69
186.03	86.38
186.04	88.09
186.05	89.81
186.06	91.54
186.07	93.29
186.08	95.04
186.09	96.81
186.10	98.60
186.11	100.40
186.12	102.20
186.13	104.03
186.14	105.86
186.15	107.71
186.16	109.56
186.17	111.44
186.18	113.32
186.19	115.21
186.20	117.16
186.21	119.11
186.22	121.09
186.23	123.07
186.24	125.07
186.25	127.08
186.26	129.10
186.27	131.14
186.28	133.19
186.29	135.25
186.30	137.32
186.31	139.41
186.32	141.51
186.33	143.63
186.34	145.75
186.35	147.89
186.36	150.04
186.37	152.21
186.38	154.38
186.39	156.57
186.40	158.72
186.41	160.88
186.42	163.05
186.43	165.23
186.44	167.42
186.45	169.62
186.46	171.83
186.47	174.05
186.48	176.29
186.49	178.53
186.50	**180.78**

Stage-Area-Storage for Pond B-41: Basin #41

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.85	0	0	182.37	3,906	1,683
181.86	246	1	182.38	3,912	1,722
181.87	493	5	182.39	3,917	1,762
181.88	739	11	182.40	3,923	1,801
181.89	985	20	182.41	3,929	1,840
181.90	1,232	31	182.42	3,934	1,879
181.91	1,478	44	182.43	3,940	1,919
181.92	1,724	60	182.44	3,946	1,958
181.93	1,971	79	182.45	3,951	1,998
181.94	2,217	100	182.46	3,957	2,037
181.95	2,463	123	182.47	3,963	2,077
181.96	2,710	149	182.48	3,969	2,116
181.97	2,956	177	182.49	3,974	2,156
181.98	3,202	208	182.50	3,980	2,196
181.99	3,449	241	182.51	3,986	2,236
182.00	3,695	277	182.52	3,991	2,276
182.01	3,701	314	182.53	3,997	2,316
182.02	3,706	351	182.54	4,003	2,356
182.03	3,712	388	182.55	4,008	2,396
182.04	3,718	425	182.56	4,014	2,436
182.05	3,723	463	182.57	4,020	2,476
182.06	3,729	500	182.58	4,026	2,516
182.07	3,735	537	182.59	4,031	2,556
182.08	3,741	575	182.60	4,037	2,597
182.09	3,746	612	182.61	4,043	2,637
182.10	3,752	649	182.62	4,048	2,678
182.11	3,758	687	182.63	4,054	2,718
182.12	3,763	725	182.64	4,060	2,759
182.13	3,769	762	182.65	4,066	2,799
182.14	3,775	800	182.66	4,071	2,840
182.15	3,781	838	182.67	4,077	2,881
182.16	3,786	876	182.68	4,083	2,922
182.17	3,792	914	182.69	4,088	2,962
182.18	3,798	951	182.70	4,094	3,003
182.19	3,803	989	182.71	4,100	3,044
182.20	3,809	1,028	182.72	4,105	3,085
182.21	3,815	1,066	182.73	4,111	3,126
182.22	3,820	1,104	182.74	4,117	3,167
182.23	3,826	1,142	182.75	4,123	3,209
182.24	3,832	1,180	182.76	4,128	3,250
182.25	3,838	1,219	182.77	4,134	3,291
182.26	3,843	1,257	182.78	4,140	3,333
182.27	3,849	1,296	182.79	4,145	3,374
182.28	3,855	1,334	182.80	4,151	3,416
182.29	3,860	1,373	182.81	4,157	3,457
182.30	3,866	1,411	182.82	4,162	3,499
182.31	3,872	1,450	182.83	4,168	3,540
182.32	3,877	1,489	182.84	4,174	3,582
182.33	3,883	1,528	182.85	4,179	3,624
182.34	3,889	1,566	182.86	4,185	3,666
182.35	3,894	1,605	182.87	4,191	3,707
182.36	3,900	1,644	182.88	4,197	3,749

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.89	4,202	3,791	183.41	4,513	6,057
182.90	4,208	3,833	183.42	4,519	6,102
182.91	4,214	3,876	183.43	4,525	6,147
182.92	4,219	3,918	183.44	4,531	6,192
182.93	4,225	3,960	183.45	4,537	6,238
182.94	4,231	4,002	183.46	4,543	6,283
182.95	4,236	4,045	183.47	4,549	6,328
182.96	4,242	4,087	183.48	4,555	6,374
182.97	4,248	4,129	183.49	4,561	6,420
182.98	4,254	4,172	183.50	4,568	6,465
182.99	4,259	4,215	183.51	4,574	6,511
183.00	4,265	4,257	183.52	4,580	6,557
183.01	4,271	4,300	183.53	4,586	6,603
183.02	4,277	4,343	183.54	4,592	6,648
183.03	4,283	4,385	183.55	4,598	6,694
183.04	4,289	4,428	183.56	4,604	6,740
183.05	4,295	4,471	183.57	4,610	6,786
183.06	4,301	4,514	183.58	4,616	6,833
183.07	4,307	4,557	183.59	4,622	6,879
183.08	4,313	4,600	183.60	4,628	6,925
183.09	4,319	4,643	183.61	4,634	6,971
183.10	4,325	4,687	183.62	4,640	7,018
183.11	4,332	4,730	183.63	4,646	7,064
183.12	4,338	4,773	183.64	4,652	7,111
183.13	4,344	4,817	183.65	4,658	7,157
183.14	4,350	4,860	183.66	4,664	7,204
183.15	4,356	4,904	183.67	4,670	7,250
183.16	4,362	4,947	183.68	4,676	7,297
183.17	4,368	4,991	183.69	4,682	7,344
183.18	4,374	5,035	183.70	4,688	7,391
183.19	4,380	5,078	183.71	4,695	7,438
183.20	4,386	5,122	183.72	4,701	7,485
183.21	4,392	5,166	183.73	4,707	7,532
183.22	4,398	5,210	183.74	4,713	7,579
183.23	4,404	5,254	183.75	4,719	7,626
183.24	4,410	5,298	183.76	4,725	7,673
183.25	4,416	5,342	183.77	4,731	7,721
183.26	4,422	5,386	183.78	4,737	7,768
183.27	4,428	5,431	183.79	4,743	7,815
183.28	4,434	5,475	183.80	4,749	7,863
183.29	4,440	5,519	183.81	4,755	7,910
183.30	4,446	5,564	183.82	4,761	7,958
183.31	4,453	5,608	183.83	4,767	8,005
183.32	4,459	5,653	183.84	4,773	8,053
183.33	4,465	5,698	183.85	4,779	8,101
183.34	4,471	5,742	183.86	4,785	8,149
183.35	4,477	5,787	183.87	4,791	8,197
183.36	4,483	5,832	183.88	4,797	8,245
183.37	4,489	5,877	183.89	4,803	8,293
183.38	4,495	5,922	183.90	4,810	8,341
183.39	4,501	5,966	183.91	4,816	8,389
183.40	4,507	6,012	183.92	4,822	8,437

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.93	4,828	8,485	184.45	5,156	11,080
183.94	4,834	8,534	184.46	5,162	11,132
183.95	4,840	8,582	184.47	5,168	11,184
183.96	4,846	8,630	184.48	5,175	11,235
183.97	4,852	8,679	184.49	5,181	11,287
183.98	4,858	8,727	184.50	5,188	11,339
183.99	4,864	8,776	184.51	5,194	11,391
184.00	4,870	8,825	184.52	5,200	11,443
184.01	4,876	8,873	184.53	5,207	11,495
184.02	4,883	8,922	184.54	5,213	11,547
184.03	4,889	8,971	184.55	5,219	11,599
184.04	4,895	9,020	184.56	5,226	11,651
184.05	4,902	9,069	184.57	5,232	11,704
184.06	4,908	9,118	184.58	5,238	11,756
184.07	4,914	9,167	184.59	5,245	11,808
184.08	4,921	9,216	184.60	5,251	11,861
184.09	4,927	9,265	184.61	5,257	11,913
184.10	4,933	9,315	184.62	5,264	11,966
184.11	4,940	9,364	184.63	5,270	12,019
184.12	4,946	9,414	184.64	5,276	12,071
184.13	4,953	9,463	184.65	5,283	12,124
184.14	4,959	9,513	184.66	5,289	12,177
184.15	4,965	9,562	184.67	5,295	12,230
184.16	4,972	9,612	184.68	5,302	12,283
184.17	4,978	9,662	184.69	5,308	12,336
184.18	4,984	9,712	184.70	5,314	12,389
184.19	4,991	9,761	184.71	5,321	12,442
184.20	4,997	9,811	184.72	5,327	12,496
184.21	5,003	9,861	184.73	5,334	12,549
184.22	5,010	9,911	184.74	5,340	12,602
184.23	5,016	9,962	184.75	5,346	12,656
184.24	5,022	10,012	184.76	5,353	12,709
184.25	5,029	10,062	184.77	5,359	12,763
184.26	5,035	10,112	184.78	5,365	12,816
184.27	5,041	10,163	184.79	5,372	12,870
184.28	5,048	10,213	184.80	5,378	12,924
184.29	5,054	10,264	184.81	5,384	12,978
184.30	5,060	10,314	184.82	5,391	13,032
184.31	5,067	10,365	184.83	5,397	13,085
184.32	5,073	10,416	184.84	5,403	13,139
184.33	5,080	10,466	184.85	5,410	13,194
184.34	5,086	10,517	184.86	5,416	13,248
184.35	5,092	10,568	184.87	5,422	13,302
184.36	5,099	10,619	184.88	5,429	13,356
184.37	5,105	10,670	184.89	5,435	13,410
184.38	5,111	10,721	184.90	5,442	13,465
184.39	5,118	10,772	184.91	5,448	13,519
184.40	5,124	10,823	184.92	5,454	13,574
184.41	5,130	10,875	184.93	5,461	13,628
184.42	5,137	10,926	184.94	5,467	13,683
184.43	5,143	10,977	184.95	5,473	13,738
184.44	5,149	11,029	184.96	5,480	13,792

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.97	5,486	13,847	185.49	5,823	16,787
184.98	5,492	13,902	185.50	5,829	16,846
184.99	5,499	13,957	185.51	5,835	16,904
185.00	5,505	14,012	185.52	5,842	16,962
185.01	5,511	14,067	185.53	5,848	17,021
185.02	5,518	14,122	185.54	5,855	17,079
185.03	5,524	14,178	185.55	5,861	17,138
185.04	5,531	14,233	185.56	5,868	17,197
185.05	5,537	14,288	185.57	5,874	17,255
185.06	5,544	14,344	185.58	5,881	17,314
185.07	5,550	14,399	185.59	5,887	17,373
185.08	5,557	14,455	185.60	5,894	17,432
185.09	5,563	14,510	185.61	5,900	17,491
185.10	5,570	14,566	185.62	5,907	17,550
185.11	5,576	14,622	185.63	5,913	17,609
185.12	5,583	14,677	185.64	5,920	17,668
185.13	5,589	14,733	185.65	5,926	17,727
185.14	5,596	14,789	185.66	5,933	17,787
185.15	5,602	14,845	185.67	5,939	17,846
185.16	5,609	14,901	185.68	5,946	17,905
185.17	5,615	14,957	185.69	5,952	17,965
185.18	5,622	15,014	185.70	5,959	18,024
185.19	5,628	15,070	185.71	5,965	18,084
185.20	5,635	15,126	185.72	5,972	18,144
185.21	5,641	15,182	185.73	5,978	18,203
185.22	5,648	15,239	185.74	5,985	18,263
185.23	5,654	15,295	185.75	5,991	18,323
185.24	5,661	15,352	185.76	5,997	18,383
185.25	5,667	15,409	185.77	6,004	18,443
185.26	5,673	15,465	185.78	6,010	18,503
185.27	5,680	15,522	185.79	6,017	18,563
185.28	5,686	15,579	185.80	6,023	18,623
185.29	5,693	15,636	185.81	6,030	18,684
185.30	5,699	15,693	185.82	6,036	18,744
185.31	5,706	15,750	185.83	6,043	18,804
185.32	5,712	15,807	185.84	6,049	18,865
185.33	5,719	15,864	185.85	6,056	18,925
185.34	5,725	15,921	185.86	6,062	18,986
185.35	5,732	15,979	185.87	6,069	19,047
185.36	5,738	16,036	185.88	6,075	19,107
185.37	5,745	16,093	185.89	6,082	19,168
185.38	5,751	16,151	185.90	6,088	19,229
185.39	5,758	16,208	185.91	6,095	19,290
185.40	5,764	16,266	185.92	6,101	19,351
185.41	5,771	16,324	185.93	6,108	19,412
185.42	5,777	16,381	185.94	6,114	19,473
185.43	5,784	16,439	185.95	6,121	19,534
185.44	5,790	16,497	185.96	6,127	19,596
185.45	5,797	16,555	185.97	6,134	19,657
185.46	5,803	16,613	185.98	6,140	19,718
185.47	5,810	16,671	185.99	6,147	19,780
185.48	5,816	16,729	186.00	6,153	19,841

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.01	6,160	19,903
186.02	6,167	19,964
186.03	6,174	20,026
186.04	6,181	20,088
186.05	6,188	20,150
186.06	6,195	20,212
186.07	6,202	20,274
186.08	6,209	20,336
186.09	6,216	20,398
186.10	6,223	20,460
186.11	6,230	20,522
186.12	6,237	20,585
186.13	6,244	20,647
186.14	6,251	20,709
186.15	6,258	20,772
186.16	6,265	20,835
186.17	6,272	20,897
186.18	6,279	20,960
186.19	6,286	21,023
186.20	6,293	21,086
186.21	6,300	21,149
186.22	6,307	21,212
186.23	6,314	21,275
186.24	6,321	21,338
186.25	6,328	21,401
186.26	6,334	21,464
186.27	6,341	21,528
186.28	6,348	21,591
186.29	6,355	21,655
186.30	6,362	21,718
186.31	6,369	21,782
186.32	6,376	21,846
186.33	6,383	21,910
186.34	6,390	21,973
186.35	6,397	22,037
186.36	6,404	22,101
186.37	6,411	22,166
186.38	6,418	22,230
186.39	6,425	22,294
186.40	6,432	22,358
186.41	6,439	22,423
186.42	6,446	22,487
186.43	6,453	22,551
186.44	6,460	22,616
186.45	6,467	22,681
186.46	6,474	22,745
186.47	6,481	22,810
186.48	6,488	22,875
186.49	6,495	22,940
186.50	**6,502**	**23,005**

Summary for Pond B-42: Basin #42

Inflow Area = 0.777 ac, 38.35% Impervious, Inflow Depth = 4.04" for Future 10 yr event
Inflow = 3.21 cfs @ 12.17 hrs, Volume= 0.261 af
Outflow = 0.17 cfs @ 14.31 hrs, Volume= 0.166 af, Atten= 95%, Lag= 128.2 min
Primary = 0.17 cfs @ 14.31 hrs, Volume= 0.166 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 183.72' @ 14.31 hrs Surf.Area= 3,504 sf Storage= 7,660 cf

Plug-Flow detention time= 483.3 min calculated for 0.166 af (63% of inflow)
Center-of-Mass det. time= 375.4 min (1,166.0 - 790.6)

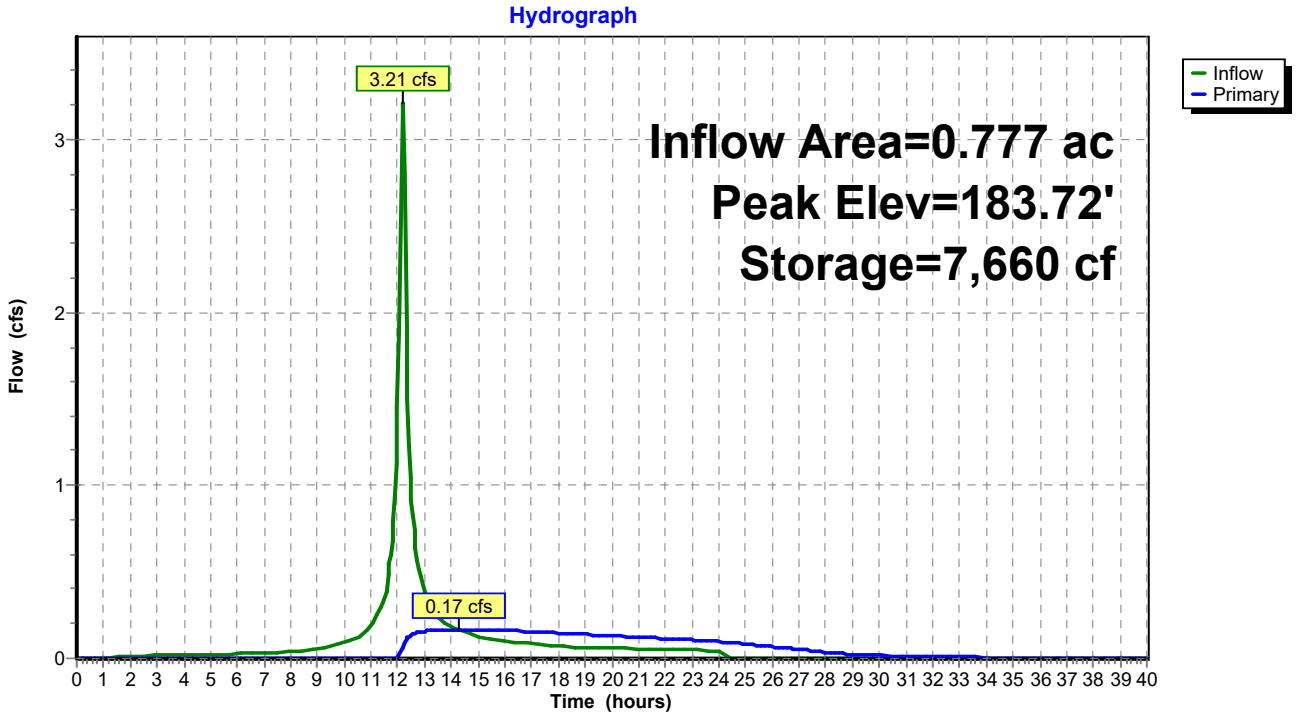
Volume	Invert	Avail.Storage	Storage Description
#1	180.96'	22,293 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.96	0	0	0
181.00	2,142	43	43
182.00	2,613	2,378	2,420
183.00	3,118	2,866	5,286
184.00	3,656	3,387	8,673
185.00	4,227	3,942	12,614
186.00	4,831	4,529	17,143
187.00	5,468	5,150	22,293

Device	Routing	Invert	Outlet Devices
#1	Primary	181.96'	**18.0" Round Culvert** L= 192.0' Ke= 0.500 Inlet / Outlet Invert= 181.96' / 181.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	182.60'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.01'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.17 cfs @ 14.31 hrs HW=183.72' (Free Discharge)
- **1=Culvert** (Passes 0.17 cfs of 7.58 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 4.85 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-42: Basin #42



Stage-Discharge for Pond B-42: Basin #42

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
180.96	0.00	181.48	0.00	182.00	0.00	182.52	0.00
180.97	0.00	181.49	0.00	182.01	0.00	182.53	0.00
180.98	0.00	181.50	0.00	182.02	0.00	182.54	0.00
180.99	0.00	181.51	0.00	182.03	0.00	182.55	0.00
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.01
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.01
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.01
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.01
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.02
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.02
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.02
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.03
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.03
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.03
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.04
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.04
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.05
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.05
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.05
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.05
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.06
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.06
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.06
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.06
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.06
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.07
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.07
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.07
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.07
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.07
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.08
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.08
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.08
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.08
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.08
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.08
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.09
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.09
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.09
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.09
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.09
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.09

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.04	0.10	183.56	0.15	184.08	0.43	184.60	5.98
183.05	0.10	183.57	0.15	184.09	0.49	184.61	6.12
183.06	0.10	183.58	0.15	184.10	0.55	184.62	6.27
183.07	0.10	183.59	0.15	184.11	0.61	184.63	6.42
183.08	0.10	183.60	0.16	184.12	0.67	184.64	6.56
183.09	0.10	183.61	0.16	184.13	0.74	184.65	6.71
183.10	0.10	183.62	0.16	184.14	0.81	184.66	6.86
183.11	0.10	183.63	0.16	184.15	0.88	184.67	7.01
183.12	0.11	183.64	0.16	184.16	0.95	184.68	7.16
183.13	0.11	183.65	0.16	184.17	1.03	184.69	7.32
183.14	0.11	183.66	0.16	184.18	1.11	184.70	7.47
183.15	0.11	183.67	0.16	184.19	1.19	184.71	7.62
183.16	0.11	183.68	0.16	184.20	1.27	184.72	7.78
183.17	0.11	183.69	0.16	184.21	1.36	184.73	7.94
183.18	0.11	183.70	0.16	184.22	1.45	184.74	8.09
183.19	0.11	183.71	0.16	184.23	1.54	184.75	8.25
183.20	0.12	183.72	0.17	184.24	1.63	184.76	8.41
183.21	0.12	183.73	0.17	184.25	1.72	184.77	8.57
183.22	0.12	183.74	0.17	184.26	1.82	184.78	8.73
183.23	0.12	183.75	0.17	184.27	1.92	184.79	8.90
183.24	0.12	183.76	0.17	184.28	2.02	184.80	9.06
183.25	0.12	183.77	0.17	184.29	2.12	184.81	9.22
183.26	0.12	183.78	0.17	184.30	2.22	184.82	9.39
183.27	0.12	183.79	0.17	184.31	2.33	184.83	9.55
183.28	0.12	183.80	0.17	184.32	2.43	184.84	9.69
183.29	0.13	183.81	0.17	184.33	2.54	184.85	9.71
183.30	0.13	183.82	0.17	184.34	2.65	184.86	9.73
183.31	0.13	183.83	0.17	184.35	2.76	184.87	9.75
183.32	0.13	183.84	0.17	184.36	2.87	184.88	9.77
183.33	0.13	183.85	0.18	184.37	2.99	184.89	9.79
183.34	0.13	183.86	0.18	184.38	3.10	184.90	9.81
183.35	0.13	183.87	0.18	184.39	3.22	184.91	9.83
183.36	0.13	183.88	0.18	184.40	3.34	184.92	9.85
183.37	0.13	183.89	0.18	184.41	3.46	184.93	9.88
183.38	0.13	183.90	0.18	184.42	3.58	184.94	9.90
183.39	0.14	183.91	0.18	184.43	3.70	184.95	9.92
183.40	0.14	183.92	0.18	184.44	3.83	184.96	9.94
183.41	0.14	183.93	0.18	184.45	3.95	184.97	9.96
183.42	0.14	183.94	0.18	184.46	4.08	184.98	9.98
183.43	0.14	183.95	0.18	184.47	4.21	184.99	10.00
183.44	0.14	183.96	0.18	184.48	4.33	185.00	10.02
183.45	0.14	183.97	0.18	184.49	4.46	185.01	10.04
183.46	0.14	183.98	0.19	184.50	4.60	185.02	10.06
183.47	0.14	183.99	0.19	184.51	4.73	185.03	10.08
183.48	0.14	184.00	0.19	184.52	4.86	185.04	10.10
183.49	0.15	184.01	0.19	184.53	5.00	185.05	10.12
183.50	0.15	184.02	0.20	184.54	5.14	185.06	10.14
183.51	0.15	184.03	0.23	184.55	5.27	185.07	10.16
183.52	0.15	184.04	0.26	184.56	5.41	185.08	10.18
183.53	0.15	184.05	0.29	184.57	5.55	185.09	10.20
183.54	0.15	184.06	0.34	184.58	5.69	185.10	10.21
183.55	0.15	184.07	0.38	184.59	5.84	185.11	10.23

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.12	10.25	185.64	11.23	186.16	20.39	186.68	92.62
185.13	10.27	185.65	11.24	186.17	21.15	186.69	94.39
185.14	10.29	185.66	11.26	186.18	21.93	186.70	96.16
185.15	10.31	185.67	11.28	186.19	22.73	186.71	97.95
185.16	10.33	185.68	11.30	186.20	23.60	186.72	99.75
185.17	10.35	185.69	11.31	186.21	24.49	186.73	101.56
185.18	10.37	185.70	11.33	186.22	25.40	186.74	103.38
185.19	10.39	185.71	11.35	186.23	26.34	186.75	105.22
185.20	10.41	185.72	11.37	186.24	27.30	186.76	107.07
185.21	10.43	185.73	11.39	186.25	28.29	186.77	108.93
185.22	10.45	185.74	11.40	186.26	29.31	186.78	110.80
185.23	10.47	185.75	11.42	186.27	30.35	186.79	112.69
185.24	10.49	185.76	11.44	186.28	31.41	186.80	114.62
185.25	10.51	185.77	11.46	186.29	32.50	186.81	116.57
185.26	10.52	185.78	11.47	186.30	33.61	186.82	118.53
185.27	10.54	185.79	11.49	186.31	34.75	186.83	120.50
185.28	10.56	185.80	11.51	186.32	35.91	186.84	122.49
185.29	10.58	185.81	11.53	186.33	37.10	186.85	124.49
185.30	10.60	185.82	11.54	186.34	38.31	186.86	126.51
185.31	10.62	185.83	11.56	186.35	39.54	186.87	128.53
185.32	10.64	185.84	11.58	186.36	40.80	186.88	130.57
185.33	10.66	185.85	11.59	186.37	42.09	186.89	132.63
185.34	10.68	185.86	11.61	186.38	43.39	186.90	134.69
185.35	10.69	185.87	11.63	186.39	44.72	186.91	136.77
185.36	10.71	185.88	11.65	186.40	46.11	186.92	138.86
185.37	10.73	185.89	11.66	186.41	47.51	186.93	140.97
185.38	10.75	185.90	11.68	186.42	48.95	186.94	143.08
185.39	10.77	185.91	11.70	186.43	50.41	186.95	145.21
185.40	10.79	185.92	11.72	186.44	51.89	186.96	147.35
185.41	10.81	185.93	11.73	186.45	53.41	186.97	149.51
185.42	10.83	185.94	11.75	186.46	54.95	186.98	151.68
185.43	10.84	185.95	11.77	186.47	56.51	186.99	153.86
185.44	10.86	185.96	11.78	186.48	58.10	187.00	**155.99**
185.45	10.88	185.97	11.80	186.49	59.72		
185.46	10.90	185.98	11.82	186.50	61.36		
185.47	10.92	185.99	11.83	186.51	63.03		
185.48	10.94	186.00	11.97	186.52	64.73		
185.49	10.95	186.01	12.20	186.53	66.45		
185.50	10.97	186.02	12.49	186.54	68.21		
185.51	10.99	186.03	12.84	186.55	69.98		
185.52	11.01	186.04	13.23	186.56	71.79		
185.53	11.03	186.05	13.66	186.57	73.62		
185.54	11.05	186.06	14.13	186.58	75.48		
185.55	11.06	186.07	14.63	186.59	77.36		
185.56	11.08	186.08	15.16	186.60	79.00		
185.57	11.10	186.09	15.72	186.61	80.66		
185.58	11.12	186.10	16.31	186.62	82.33		
185.59	11.14	186.11	16.93	186.63	84.01		
185.60	11.15	186.12	17.57	186.64	85.71		
185.61	11.17	186.13	18.24	186.65	87.42		
185.62	11.19	186.14	18.93	186.66	89.14		
185.63	11.21	186.15	19.65	186.67	90.88		

Stage-Area-Storage for Pond B-42: Basin #42

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.96	0	0
180.97	535	3
180.98	1,071	11
180.99	1,607	24
181.00	2,142	43
181.01	2,147	64
181.02	2,151	86
181.03	2,156	107
181.04	2,161	129
181.05	2,166	151
181.06	2,170	172
181.07	2,175	194
181.08	2,180	216
181.09	2,184	238
181.10	2,189	259
181.11	2,194	281
181.12	2,199	303
181.13	2,203	325
181.14	2,208	347
181.15	2,213	369
181.16	2,217	392
181.17	2,222	414
181.18	2,227	436
181.19	2,231	458
181.20	2,236	481
181.21	2,241	503
181.22	2,246	525
181.23	2,250	548
181.24	2,255	570
181.25	2,260	593
181.26	2,264	616
181.27	2,269	638
181.28	2,274	661
181.29	2,279	684
181.30	2,283	707
181.31	2,288	729
181.32	2,293	752
181.33	2,297	775
181.34	2,302	798
181.35	2,307	821
181.36	2,312	844
181.37	2,316	868
181.38	2,321	891
181.39	2,326	914
181.40	2,330	937
181.41	2,335	961
181.42	2,340	984
181.43	2,345	1,007
181.44	2,349	1,031
181.45	2,354	1,054
181.46	2,359	1,078
181.47	2,363	1,102
181.48	2,368	1,125
181.49	2,373	1,149
181.50	2,378	1,173
181.51	2,382	1,197
181.52	2,387	1,220
181.53	2,392	1,244
181.54	2,396	1,268
181.55	2,401	1,292
181.56	2,406	1,316
181.57	2,410	1,340
181.58	2,415	1,364
181.59	2,420	1,389
181.60	2,425	1,413
181.61	2,429	1,437
181.62	2,434	1,461
181.63	2,439	1,486
181.64	2,443	1,510
181.65	2,448	1,535
181.66	2,453	1,559
181.67	2,458	1,584
181.68	2,462	1,608
181.69	2,467	1,633
181.70	2,472	1,658
181.71	2,476	1,682
181.72	2,481	1,707
181.73	2,486	1,732
181.74	2,491	1,757
181.75	2,495	1,782
181.76	2,500	1,807
181.77	2,505	1,832
181.78	2,509	1,857
181.79	2,514	1,882
181.80	2,519	1,907
181.81	2,524	1,932
181.82	2,528	1,958
181.83	2,533	1,983
181.84	2,538	2,008
181.85	2,542	2,034
181.86	2,547	2,059
181.87	2,552	2,085
181.88	2,556	2,110
181.89	2,561	2,136
181.90	2,566	2,161
181.91	2,571	2,187
181.92	2,575	2,213
181.93	2,580	2,239
181.94	2,585	2,264
181.95	2,589	2,290
181.96	2,594	2,316
181.97	2,599	2,342
181.98	2,604	2,368
181.99	2,608	2,394

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.00	2,613	2,420	182.52	2,876	3,847
182.01	2,618	2,446	182.53	2,881	3,876
182.02	2,623	2,473	182.54	2,886	3,905
182.03	2,628	2,499	182.55	2,891	3,934
182.04	2,633	2,525	182.56	2,896	3,963
182.05	2,638	2,552	182.57	2,901	3,992
182.06	2,643	2,578	182.58	2,906	4,021
182.07	2,648	2,604	182.59	2,911	4,050
182.08	2,653	2,631	182.60	2,916	4,079
182.09	2,658	2,658	182.61	2,921	4,108
182.10	2,663	2,684	182.62	2,926	4,137
182.11	2,669	2,711	182.63	2,931	4,167
182.12	2,674	2,738	182.64	2,936	4,196
182.13	2,679	2,764	182.65	2,941	4,225
182.14	2,684	2,791	182.66	2,946	4,255
182.15	2,689	2,818	182.67	2,951	4,284
182.16	2,694	2,845	182.68	2,956	4,314
182.17	2,699	2,872	182.69	2,961	4,344
182.18	2,704	2,899	182.70	2,967	4,373
182.19	2,709	2,926	182.71	2,972	4,403
182.20	2,714	2,953	182.72	2,977	4,433
182.21	2,719	2,980	182.73	2,982	4,462
182.22	2,724	3,007	182.74	2,987	4,492
182.23	2,729	3,035	182.75	2,992	4,522
182.24	2,734	3,062	182.76	2,997	4,552
182.25	2,739	3,089	182.77	3,002	4,582
182.26	2,744	3,117	182.78	3,007	4,612
182.27	2,749	3,144	182.79	3,012	4,642
182.28	2,754	3,172	182.80	3,017	4,672
182.29	2,759	3,199	182.81	3,022	4,703
182.30	2,765	3,227	182.82	3,027	4,733
182.31	2,770	3,255	182.83	3,032	4,763
182.32	2,775	3,282	182.84	3,037	4,793
182.33	2,780	3,310	182.85	3,042	4,824
182.34	2,785	3,338	182.86	3,047	4,854
182.35	2,790	3,366	182.87	3,052	4,885
182.36	2,795	3,394	182.88	3,057	4,915
182.37	2,800	3,422	182.89	3,062	4,946
182.38	2,805	3,450	182.90	3,068	4,977
182.39	2,810	3,478	182.91	3,073	5,007
182.40	2,815	3,506	182.92	3,078	5,038
182.41	2,820	3,534	182.93	3,083	5,069
182.42	2,825	3,562	182.94	3,088	5,100
182.43	2,830	3,591	182.95	3,093	5,131
182.44	2,835	3,619	182.96	3,098	5,162
182.45	2,840	3,647	182.97	3,103	5,193
182.46	2,845	3,676	182.98	3,108	5,224
182.47	2,850	3,704	182.99	3,113	5,255
182.48	2,855	3,733	183.00	3,118	5,286
182.49	2,860	3,761	183.01	3,123	5,317
182.50	2,866	3,790	183.02	3,129	5,348
182.51	2,871	3,819	183.03	3,134	5,380

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.04	3,140	5,411	183.56	3,419	7,116
183.05	3,145	5,442	183.57	3,425	7,150
183.06	3,150	5,474	183.58	3,430	7,185
183.07	3,156	5,505	183.59	3,435	7,219
183.08	3,161	5,537	183.60	3,441	7,253
183.09	3,166	5,569	183.61	3,446	7,288
183.10	3,172	5,600	183.62	3,452	7,322
183.11	3,177	5,632	183.63	3,457	7,357
183.12	3,183	5,664	183.64	3,462	7,392
183.13	3,188	5,696	183.65	3,468	7,426
183.14	3,193	5,728	183.66	3,473	7,461
183.15	3,199	5,760	183.67	3,478	7,496
183.16	3,204	5,792	183.68	3,484	7,530
183.17	3,209	5,824	183.69	3,489	7,565
183.18	3,215	5,856	183.70	3,495	7,600
183.19	3,220	5,888	183.71	3,500	7,635
183.20	3,226	5,920	183.72	3,505	7,670
183.21	3,231	5,952	183.73	3,511	7,705
183.22	3,236	5,985	183.74	3,516	7,740
183.23	3,242	6,017	183.75	3,522	7,776
183.24	3,247	6,050	183.76	3,527	7,811
183.25	3,253	6,082	183.77	3,532	7,846
183.26	3,258	6,115	183.78	3,538	7,882
183.27	3,263	6,147	183.79	3,543	7,917
183.28	3,269	6,180	183.80	3,548	7,952
183.29	3,274	6,213	183.81	3,554	7,988
183.30	3,279	6,245	183.82	3,559	8,023
183.31	3,285	6,278	183.83	3,565	8,059
183.32	3,290	6,311	183.84	3,570	8,095
183.33	3,296	6,344	183.85	3,575	8,130
183.34	3,301	6,377	183.86	3,581	8,166
183.35	3,306	6,410	183.87	3,586	8,202
183.36	3,312	6,443	183.88	3,591	8,238
183.37	3,317	6,476	183.89	3,597	8,274
183.38	3,322	6,510	183.90	3,602	8,310
183.39	3,328	6,543	183.91	3,608	8,346
183.40	3,333	6,576	183.92	3,613	8,382
183.41	3,339	6,609	183.93	3,618	8,418
183.42	3,344	6,643	183.94	3,624	8,454
183.43	3,349	6,676	183.95	3,629	8,491
183.44	3,355	6,710	183.96	3,634	8,527
183.45	3,360	6,743	183.97	3,640	8,563
183.46	3,365	6,777	183.98	3,645	8,600
183.47	3,371	6,811	183.99	3,651	8,636
183.48	3,376	6,844	184.00	3,656	8,673
183.49	3,382	6,878	184.01	3,662	8,709
183.50	3,387	6,912	184.02	3,667	8,746
183.51	3,392	6,946	184.03	3,673	8,783
183.52	3,398	6,980	184.04	3,679	8,820
183.53	3,403	7,014	184.05	3,685	8,856
183.54	3,409	7,048	184.06	3,690	8,893
183.55	3,414	7,082	184.07	3,696	8,930

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.08	3,702	8,967	184.60	3,999	10,969
184.09	3,707	9,004	184.61	4,004	11,009
184.10	3,713	9,041	184.62	4,010	11,049
184.11	3,719	9,078	184.63	4,016	11,089
184.12	3,725	9,116	184.64	4,021	11,130
184.13	3,730	9,153	184.65	4,027	11,170
184.14	3,736	9,190	184.66	4,033	11,210
184.15	3,742	9,228	184.67	4,039	11,251
184.16	3,747	9,265	184.68	4,044	11,291
184.17	3,753	9,303	184.69	4,050	11,331
184.18	3,759	9,340	184.70	4,056	11,372
184.19	3,764	9,378	184.71	4,061	11,413
184.20	3,770	9,415	184.72	4,067	11,453
184.21	3,776	9,453	184.73	4,073	11,494
184.22	3,782	9,491	184.74	4,079	11,535
184.23	3,787	9,529	184.75	4,084	11,575
184.24	3,793	9,567	184.76	4,090	11,616
184.25	3,799	9,605	184.77	4,096	11,657
184.26	3,804	9,643	184.78	4,101	11,698
184.27	3,810	9,681	184.79	4,107	11,739
184.28	3,816	9,719	184.80	4,113	11,780
184.29	3,822	9,757	184.81	4,119	11,822
184.30	3,827	9,795	184.82	4,124	11,863
184.31	3,833	9,834	184.83	4,130	11,904
184.32	3,839	9,872	184.84	4,136	11,945
184.33	3,844	9,910	184.85	4,141	11,987
184.34	3,850	9,949	184.86	4,147	12,028
184.35	3,856	9,987	184.87	4,153	12,070
184.36	3,862	10,026	184.88	4,158	12,111
184.37	3,867	10,065	184.89	4,164	12,153
184.38	3,873	10,103	184.90	4,170	12,194
184.39	3,879	10,142	184.91	4,176	12,236
184.40	3,884	10,181	184.92	4,181	12,278
184.41	3,890	10,220	184.93	4,187	12,320
184.42	3,896	10,259	184.94	4,193	12,362
184.43	3,902	10,298	184.95	4,198	12,404
184.44	3,907	10,337	184.96	4,204	12,446
184.45	3,913	10,376	184.97	4,210	12,488
184.46	3,919	10,415	184.98	4,216	12,530
184.47	3,924	10,454	184.99	4,221	12,572
184.48	3,930	10,493	185.00	4,227	12,614
184.49	3,936	10,533	185.01	4,233	12,657
184.50	3,942	10,572	185.02	4,239	12,699
184.51	3,947	10,612	185.03	4,245	12,741
184.52	3,953	10,651	185.04	4,251	12,784
184.53	3,959	10,691	185.05	4,257	12,826
184.54	3,964	10,730	185.06	4,263	12,869
184.55	3,970	10,770	185.07	4,269	12,912
184.56	3,976	10,810	185.08	4,275	12,954
184.57	3,981	10,850	185.09	4,281	12,997
184.58	3,987	10,889	185.10	4,287	13,040
184.59	3,993	10,929	185.11	4,293	13,083

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.12	4,299	13,126	185.64	4,614	15,443
185.13	4,306	13,169	185.65	4,620	15,489
185.14	4,312	13,212	185.66	4,626	15,536
185.15	4,318	13,255	185.67	4,632	15,582
185.16	4,324	13,298	185.68	4,638	15,628
185.17	4,330	13,342	185.69	4,644	15,675
185.18	4,336	13,385	185.70	4,650	15,721
185.19	4,342	13,428	185.71	4,656	15,768
185.20	4,348	13,472	185.72	4,662	15,814
185.21	4,354	13,515	185.73	4,668	15,861
185.22	4,360	13,559	185.74	4,674	15,908
185.23	4,366	13,603	185.75	4,680	15,954
185.24	4,372	13,646	185.76	4,686	16,001
185.25	4,378	13,690	185.77	4,692	16,048
185.26	4,384	13,734	185.78	4,698	16,095
185.27	4,390	13,778	185.79	4,704	16,142
185.28	4,396	13,822	185.80	4,710	16,189
185.29	4,402	13,866	185.81	4,716	16,236
185.30	4,408	13,910	185.82	4,722	16,284
185.31	4,414	13,954	185.83	4,728	16,331
185.32	4,420	13,998	185.84	4,734	16,378
185.33	4,426	14,042	185.85	4,740	16,425
185.34	4,432	14,086	185.86	4,746	16,473
185.35	4,438	14,131	185.87	4,752	16,520
185.36	4,444	14,175	185.88	4,759	16,568
185.37	4,450	14,220	185.89	4,765	16,616
185.38	4,457	14,264	185.90	4,771	16,663
185.39	4,463	14,309	185.91	4,777	16,711
185.40	4,469	14,353	185.92	4,783	16,759
185.41	4,475	14,398	185.93	4,789	16,807
185.42	4,481	14,443	185.94	4,795	16,855
185.43	4,487	14,488	185.95	4,801	16,903
185.44	4,493	14,533	185.96	4,807	16,951
185.45	4,499	14,578	185.97	4,813	16,999
185.46	4,505	14,623	185.98	4,819	17,047
185.47	4,511	14,668	185.99	4,825	17,095
185.48	4,517	14,713	186.00	4,831	17,143
185.49	4,523	14,758	186.01	4,837	17,192
185.50	4,529	14,803	186.02	4,844	17,240
185.51	4,535	14,849	186.03	4,850	17,289
185.52	4,541	14,894	186.04	4,856	17,337
185.53	4,547	14,939	186.05	4,863	17,386
185.54	4,553	14,985	186.06	4,869	17,434
185.55	4,559	15,031	186.07	4,876	17,483
185.56	4,565	15,076	186.08	4,882	17,532
185.57	4,571	15,122	186.09	4,888	17,581
185.58	4,577	15,168	186.10	4,895	17,630
185.59	4,583	15,213	186.11	4,901	17,679
185.60	4,589	15,259	186.12	4,907	17,728
185.61	4,595	15,305	186.13	4,914	17,777
185.62	4,601	15,351	186.14	4,920	17,826
185.63	4,608	15,397	186.15	4,927	17,875

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.16	4,933	17,924
186.17	4,939	17,974
186.18	4,946	18,023
186.19	4,952	18,073
186.20	4,958	18,122
186.21	4,965	18,172
186.22	4,971	18,222
186.23	4,978	18,271
186.24	4,984	18,321
186.25	4,990	18,371
186.26	4,997	18,421
186.27	5,003	18,471
186.28	5,009	18,521
186.29	5,016	18,571
186.30	5,022	18,621
186.31	5,028	18,672
186.32	5,035	18,722
186.33	5,041	18,772
186.34	5,048	18,823
186.35	5,054	18,873
186.36	5,060	18,924
186.37	5,067	18,974
186.38	5,073	19,025
186.39	5,079	19,076
186.40	5,086	19,127
186.41	5,092	19,178
186.42	5,099	19,229
186.43	5,105	19,280
186.44	5,111	19,331
186.45	5,118	19,382
186.46	5,124	19,433
186.47	5,130	19,484
186.48	5,137	19,536
186.49	5,143	19,587
186.50	5,150	19,638
186.51	5,156	19,690
186.52	5,162	19,742
186.53	5,169	19,793
186.54	5,175	19,845
186.55	5,181	19,897
186.56	5,188	19,949
186.57	5,194	20,000
186.58	5,200	20,052
186.59	5,207	20,104
186.60	5,213	20,157
186.61	5,220	20,209
186.62	5,226	20,261
186.63	5,232	20,313
186.64	5,239	20,366
186.65	5,245	20,418
186.66	5,251	20,471
186.67	5,258	20,523
186.68	5,264	20,576
186.69	5,271	20,628
186.70	5,277	20,681
186.71	5,283	20,734
186.72	5,290	20,787
186.73	5,296	20,840
186.74	5,302	20,893
186.75	5,309	20,946
186.76	5,315	20,999
186.77	5,321	21,052
186.78	5,328	21,105
186.79	5,334	21,159
186.80	5,341	21,212
186.81	5,347	21,265
186.82	5,353	21,319
186.83	5,360	21,372
186.84	5,366	21,426
186.85	5,372	21,480
186.86	5,379	21,534
186.87	5,385	21,587
186.88	5,392	21,641
186.89	5,398	21,695
186.90	5,404	21,749
186.91	5,411	21,803
186.92	5,417	21,857
186.93	5,423	21,912
186.94	5,430	21,966
186.95	5,436	22,020
186.96	5,443	22,075
186.97	5,449	22,129
186.98	5,455	22,184
186.99	5,462	22,238
187.00	**5,468**	**22,293**

Summary for Pond B-43: Basin #43

Inflow Area = 2.712 ac, 33.89% Impervious, Inflow Depth = 3.92" for Future 10 yr event
Inflow = 10.97 cfs @ 12.17 hrs, Volume= 0.887 af
Outflow = 7.92 cfs @ 12.27 hrs, Volume= 0.775 af, Atten= 28%, Lag= 5.8 min
Primary = 7.92 cfs @ 12.27 hrs, Volume= 0.775 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 179.30' @ 12.27 hrs Surf.Area= 6,482 sf Storage= 13,964 cf

Plug-Flow detention time= 263.1 min calculated for 0.775 af (87% of inflow)
Center-of-Mass det. time= 201.8 min (996.6 - 794.8)

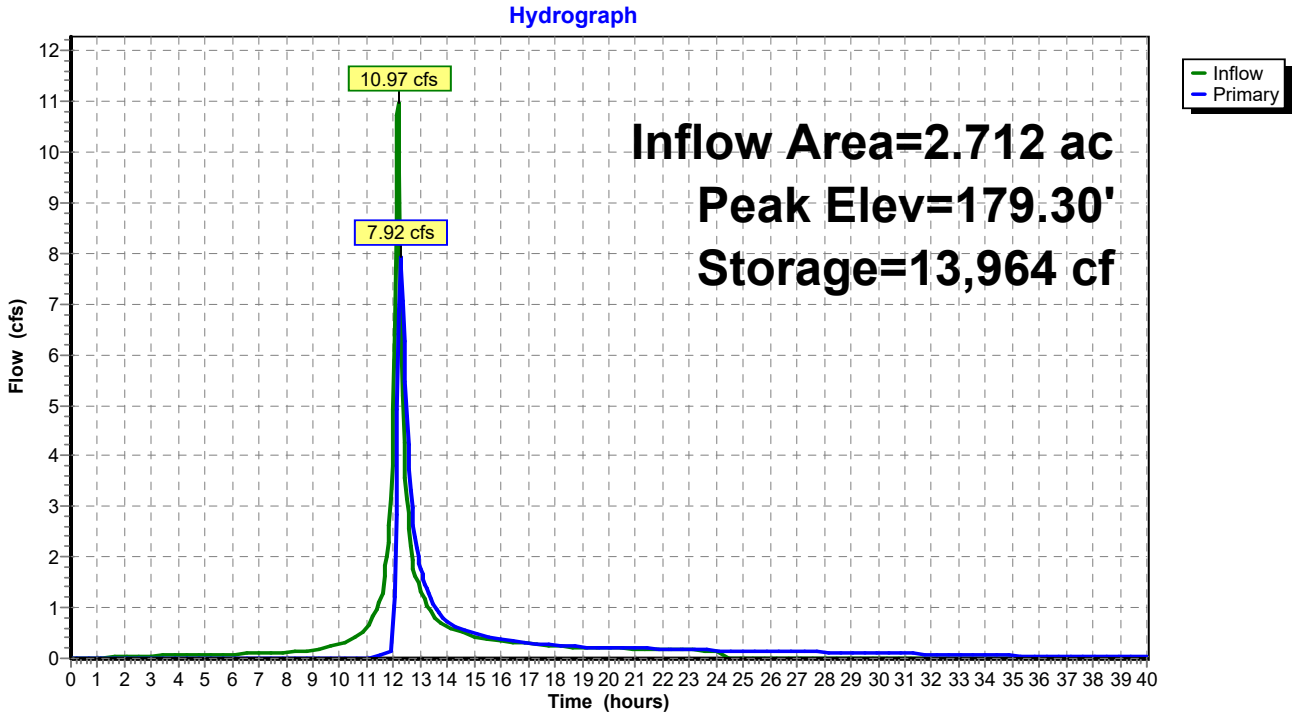
Volume	Invert	Avail.Storage	Storage Description
#1	176.35'	26,392 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
176.35	0	0	0
177.00	4,447	1,445	1,445
178.00	5,292	4,870	6,315
179.00	6,194	5,743	12,058
180.00	7,153	6,674	18,731
181.00	8,168	7,661	26,392

Device	Routing	Invert	Outlet Devices
#1	Primary	176.30'	**18.0" Round Culvert** L= 200.0' Ke= 0.500 Inlet / Outlet Invert= 176.30' / 166.10' S= 0.0510 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	177.62'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	178.58'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.00'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.79 cfs @ 12.27 hrs HW=179.29' (Free Discharge)
- **1=Culvert** (Passes 7.79 cfs of 12.74 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.21 cfs @ 6.03 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 7.59 cfs @ 2.76 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-43: Basin #43



Stage-Discharge for Pond B-43: Basin #43

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
176.35	0.00	176.87	0.00	177.39	0.00	177.91	0.07
176.36	0.00	176.88	0.00	177.40	0.00	177.92	0.07
176.37	0.00	176.89	0.00	177.41	0.00	177.93	0.07
176.38	0.00	176.90	0.00	177.42	0.00	177.94	0.08
176.39	0.00	176.91	0.00	177.43	0.00	177.95	0.08
176.40	0.00	176.92	0.00	177.44	0.00	177.96	0.08
176.41	0.00	176.93	0.00	177.45	0.00	177.97	0.08
176.42	0.00	176.94	0.00	177.46	0.00	177.98	0.08
176.43	0.00	176.95	0.00	177.47	0.00	177.99	0.08
176.44	0.00	176.96	0.00	177.48	0.00	178.00	0.09
176.45	0.00	176.97	0.00	177.49	0.00	178.01	0.09
176.46	0.00	176.98	0.00	177.50	0.00	178.02	0.09
176.47	0.00	176.99	0.00	177.51	0.00	178.03	0.09
176.48	0.00	177.00	0.00	177.52	0.00	178.04	0.09
176.49	0.00	177.01	0.00	177.53	0.00	178.05	0.09
176.50	0.00	177.02	0.00	177.54	0.00	178.06	0.10
176.51	0.00	177.03	0.00	177.55	0.00	178.07	0.10
176.52	0.00	177.04	0.00	177.56	0.00	178.08	0.10
176.53	0.00	177.05	0.00	177.57	0.00	178.09	0.10
176.54	0.00	177.06	0.00	177.58	0.00	178.10	0.10
176.55	0.00	177.07	0.00	177.59	0.00	178.11	0.10
176.56	0.00	177.08	0.00	177.60	0.00	178.12	0.10
176.57	0.00	177.09	0.00	177.61	0.00	178.13	0.10
176.58	0.00	177.10	0.00	177.62	0.00	178.14	0.11
176.59	0.00	177.11	0.00	177.63	0.00	178.15	0.11
176.60	0.00	177.12	0.00	177.64	0.00	178.16	0.11
176.61	0.00	177.13	0.00	177.65	0.00	178.17	0.11
176.62	0.00	177.14	0.00	177.66	0.00	178.18	0.11
176.63	0.00	177.15	0.00	177.67	0.00	178.19	0.11
176.64	0.00	177.16	0.00	177.68	0.01	178.20	0.11
176.65	0.00	177.17	0.00	177.69	0.01	178.21	0.11
176.66	0.00	177.18	0.00	177.70	0.01	178.22	0.12
176.67	0.00	177.19	0.00	177.71	0.01	178.23	0.12
176.68	0.00	177.20	0.00	177.72	0.02	178.24	0.12
176.69	0.00	177.21	0.00	177.73	0.02	178.25	0.12
176.70	0.00	177.22	0.00	177.74	0.02	178.26	0.12
176.71	0.00	177.23	0.00	177.75	0.03	178.27	0.12
176.72	0.00	177.24	0.00	177.76	0.03	178.28	0.12
176.73	0.00	177.25	0.00	177.77	0.03	178.29	0.12
176.74	0.00	177.26	0.00	177.78	0.04	178.30	0.12
176.75	0.00	177.27	0.00	177.79	0.04	178.31	0.13
176.76	0.00	177.28	0.00	177.80	0.05	178.32	0.13
176.77	0.00	177.29	0.00	177.81	0.05	178.33	0.13
176.78	0.00	177.30	0.00	177.82	0.05	178.34	0.13
176.79	0.00	177.31	0.00	177.83	0.05	178.35	0.13
176.80	0.00	177.32	0.00	177.84	0.06	178.36	0.13
176.81	0.00	177.33	0.00	177.85	0.06	178.37	0.13
176.82	0.00	177.34	0.00	177.86	0.06	178.38	0.13
176.83	0.00	177.35	0.00	177.87	0.06	178.39	0.13
176.84	0.00	177.36	0.00	177.88	0.06	178.40	0.13
176.85	0.00	177.37	0.00	177.89	0.07	178.41	0.14
176.86	0.00	177.38	0.00	177.90	0.07	178.42	0.14

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.43	0.14	178.95	3.07	179.47	10.71	179.99	14.59
178.44	0.14	178.96	3.19	179.48	10.88	180.00	14.61
178.45	0.14	178.97	3.31	179.49	11.06	180.01	14.76
178.46	0.14	178.98	3.43	179.50	11.23	180.02	14.99
178.47	0.14	178.99	3.55	179.51	11.40	180.03	15.30
178.48	0.14	179.00	3.67	179.52	11.58	180.04	15.65
178.49	0.14	179.01	3.79	179.53	11.76	180.05	16.05
178.50	0.14	179.02	3.92	179.54	11.93	180.06	16.49
178.51	0.15	179.03	4.05	179.55	12.11	180.07	16.96
178.52	0.15	179.04	4.18	179.56	12.29	180.08	17.47
178.53	0.15	179.05	4.30	179.57	12.47	180.09	18.01
178.54	0.15	179.06	4.44	179.58	12.65	180.10	18.58
178.55	0.15	179.07	4.57	179.59	12.83	180.11	19.18
178.56	0.15	179.08	4.70	179.60	13.01	180.12	19.80
178.57	0.15	179.09	4.83	179.61	13.19	180.13	20.45
178.58	0.15	179.10	4.97	179.62	13.38	180.14	21.13
178.59	0.17	179.11	5.11	179.63	13.56	180.15	21.83
178.60	0.19	179.12	5.24	179.64	13.69	180.16	22.55
178.61	0.22	179.13	5.38	179.65	13.72	180.17	23.30
178.62	0.26	179.14	5.52	179.66	13.75	180.18	24.07
178.63	0.30	179.15	5.66	179.67	13.77	180.19	24.86
178.64	0.35	179.16	5.81	179.68	13.80	180.20	25.67
178.65	0.40	179.17	5.95	179.69	13.83	180.21	26.54
178.66	0.45	179.18	6.09	179.70	13.85	180.22	27.43
178.67	0.51	179.19	6.24	179.71	13.88	180.23	28.36
178.68	0.57	179.20	6.39	179.72	13.90	180.24	29.30
178.69	0.64	179.21	6.53	179.73	13.93	180.25	30.27
178.70	0.70	179.22	6.68	179.74	13.96	180.26	31.27
178.71	0.77	179.23	6.83	179.75	13.98	180.27	32.29
178.72	0.84	179.24	6.98	179.76	14.01	180.28	33.34
178.73	0.92	179.25	7.14	179.77	14.03	180.29	34.41
178.74	1.00	179.26	7.29	179.78	14.06	180.30	35.51
178.75	1.08	179.27	7.44	179.79	14.08	180.31	36.63
178.76	1.16	179.28	7.60	179.80	14.11	180.32	37.77
178.77	1.24	179.29	7.75	179.81	14.14	180.33	38.94
178.78	1.33	179.30	7.91	179.82	14.16	180.34	40.14
178.79	1.41	179.31	8.07	179.83	14.19	180.35	41.35
178.80	1.51	179.32	8.23	179.84	14.21	180.36	42.60
178.81	1.60	179.33	8.39	179.85	14.24	180.37	43.86
178.82	1.69	179.34	8.55	179.86	14.26	180.38	45.15
178.83	1.79	179.35	8.71	179.87	14.29	180.39	46.47
178.84	1.88	179.36	8.87	179.88	14.31	180.40	47.80
178.85	1.98	179.37	9.03	179.89	14.34	180.41	49.19
178.86	2.09	179.38	9.20	179.90	14.36	180.42	50.61
178.87	2.19	179.39	9.36	179.91	14.39	180.43	52.05
178.88	2.29	179.40	9.53	179.92	14.41	180.44	53.52
178.89	2.40	179.41	9.69	179.93	14.44	180.45	55.01
178.90	2.51	179.42	9.86	179.94	14.46	180.46	56.53
178.91	2.62	179.43	10.03	179.95	14.49	180.47	58.07
178.92	2.73	179.44	10.20	179.96	14.51	180.48	59.65
178.93	2.84	179.45	10.37	179.97	14.54	180.49	61.24
178.94	2.96	179.46	10.54	179.98	14.56	180.50	62.87

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)
180.51	64.52
180.52	66.20
180.53	67.90
180.54	69.63
180.55	71.39
180.56	73.18
180.57	74.99
180.58	76.82
180.59	78.69
180.60	80.58
180.61	82.23
180.62	83.89
180.63	85.57
180.64	87.26
180.65	88.96
180.66	90.68
180.67	92.41
180.68	94.15
180.69	95.91
180.70	97.67
180.71	99.46
180.72	101.25
180.73	103.05
180.74	104.87
180.75	106.70
180.76	108.55
180.77	110.40
180.78	112.27
180.79	114.15
180.80	116.04
180.81	117.98
180.82	119.94
180.83	121.91
180.84	123.89
180.85	125.88
180.86	127.89
180.87	129.91
180.88	131.94
180.89	133.99
180.90	136.05
180.91	138.12
180.92	140.21
180.93	142.30
180.94	144.41
180.95	146.54
180.96	148.67
180.97	150.82
180.98	152.98
180.99	155.16
181.00	**157.34**

Stage-Area-Storage for Pond B-43: Basin #43

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.35	0	0	176.87	3,558	925
176.36	68	0	176.88	3,626	961
176.37	137	1	176.89	3,694	997
176.38	205	3	176.90	3,763	1,035
176.39	274	5	176.91	3,831	1,073
176.40	342	9	176.92	3,900	1,111
176.41	410	12	176.93	3,968	1,151
176.42	479	17	176.94	4,037	1,191
176.43	547	22	176.95	4,105	1,231
176.44	616	28	176.96	4,173	1,273
176.45	684	34	176.97	4,242	1,315
176.46	753	41	176.98	4,310	1,358
176.47	821	49	176.99	4,379	1,401
176.48	889	58	177.00	4,447	1,445
176.49	958	67	177.01	4,455	1,490
176.50	1,026	77	177.02	4,464	1,534
176.51	1,095	88	177.03	4,472	1,579
176.52	1,163	99	177.04	4,481	1,624
176.53	1,231	111	177.05	4,489	1,669
176.54	1,300	123	177.06	4,498	1,714
176.55	1,368	137	177.07	4,506	1,759
176.56	1,437	151	177.08	4,515	1,804
176.57	1,505	166	177.09	4,523	1,849
176.58	1,574	181	177.10	4,531	1,894
176.59	1,642	197	177.11	4,540	1,940
176.60	1,710	214	177.12	4,548	1,985
176.61	1,779	231	177.13	4,557	2,031
176.62	1,847	249	177.14	4,565	2,076
176.63	1,916	268	177.15	4,574	2,122
176.64	1,984	288	177.16	4,582	2,168
176.65	2,052	308	177.17	4,591	2,213
176.66	2,121	329	177.18	4,599	2,259
176.67	2,189	350	177.19	4,608	2,305
176.68	2,258	373	177.20	4,616	2,352
176.69	2,326	395	177.21	4,624	2,398
176.70	2,395	419	177.22	4,633	2,444
176.71	2,463	443	177.23	4,641	2,490
176.72	2,531	468	177.24	4,650	2,537
176.73	2,600	494	177.25	4,658	2,583
176.74	2,668	520	177.26	4,667	2,630
176.75	2,737	547	177.27	4,675	2,677
176.76	2,805	575	177.28	4,684	2,724
176.77	2,873	603	177.29	4,692	2,770
176.78	2,942	633	177.30	4,700	2,817
176.79	3,010	662	177.31	4,709	2,864
176.80	3,079	693	177.32	4,717	2,912
176.81	3,147	724	177.33	4,726	2,959
176.82	3,216	756	177.34	4,734	3,006
176.83	3,284	788	177.35	4,743	3,053
176.84	3,352	821	177.36	4,751	3,101
176.85	3,421	855	177.37	4,760	3,149
176.86	3,489	890	177.38	4,768	3,196

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.39	4,777	3,244	177.91	5,216	5,842
177.40	4,785	3,292	177.92	5,224	5,894
177.41	4,793	3,340	177.93	5,233	5,946
177.42	4,802	3,388	177.94	5,241	5,999
177.43	4,810	3,436	177.95	5,250	6,051
177.44	4,819	3,484	177.96	5,258	6,104
177.45	4,827	3,532	177.97	5,267	6,156
177.46	4,836	3,580	177.98	5,275	6,209
177.47	4,844	3,629	177.99	5,284	6,262
177.48	4,853	3,677	178.00	5,292	6,315
177.49	4,861	3,726	178.01	5,301	6,368
177.50	4,870	3,774	178.02	5,310	6,421
177.51	4,878	3,823	178.03	5,319	6,474
177.52	4,886	3,872	178.04	5,328	6,527
177.53	4,895	3,921	178.05	5,337	6,581
177.54	4,903	3,970	178.06	5,346	6,634
177.55	4,912	4,019	178.07	5,355	6,687
177.56	4,920	4,068	178.08	5,364	6,741
177.57	4,929	4,117	178.09	5,373	6,795
177.58	4,937	4,167	178.10	5,382	6,848
177.59	4,946	4,216	178.11	5,391	6,902
177.60	4,954	4,266	178.12	5,400	6,956
177.61	4,962	4,315	178.13	5,409	7,010
177.62	4,971	4,365	178.14	5,418	7,064
177.63	4,979	4,415	178.15	5,427	7,119
177.64	4,988	4,464	178.16	5,436	7,173
177.65	4,996	4,514	178.17	5,445	7,227
177.66	5,005	4,564	178.18	5,454	7,282
177.67	5,013	4,614	178.19	5,463	7,337
177.68	5,022	4,665	178.20	5,472	7,391
177.69	5,030	4,715	178.21	5,481	7,446
177.70	5,038	4,765	178.22	5,490	7,501
177.71	5,047	4,816	178.23	5,499	7,556
177.72	5,055	4,866	178.24	5,508	7,611
177.73	5,064	4,917	178.25	5,518	7,666
177.74	5,072	4,967	178.26	5,527	7,721
177.75	5,081	5,018	178.27	5,536	7,776
177.76	5,089	5,069	178.28	5,545	7,832
177.77	5,098	5,120	178.29	5,554	7,887
177.78	5,106	5,171	178.30	5,563	7,943
177.79	5,115	5,222	178.31	5,572	7,999
177.80	5,123	5,273	178.32	5,581	8,054
177.81	5,131	5,325	178.33	5,590	8,110
177.82	5,140	5,376	178.34	5,599	8,166
177.83	5,148	5,427	178.35	5,608	8,222
177.84	5,157	5,479	178.36	5,617	8,278
177.85	5,165	5,530	178.37	5,626	8,335
177.86	5,174	5,582	178.38	5,635	8,391
177.87	5,182	5,634	178.39	5,644	8,447
177.88	5,191	5,686	178.40	5,653	8,504
177.89	5,199	5,738	178.41	5,662	8,560
177.90	5,208	5,790	178.42	5,671	8,617

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.43	5,680	8,674	178.95	6,149	11,749
178.44	5,689	8,731	178.96	6,158	11,811
178.45	5,698	8,788	178.97	6,167	11,872
178.46	5,707	8,845	178.98	6,176	11,934
178.47	5,716	8,902	178.99	6,185	11,996
178.48	5,725	8,959	179.00	6,194	12,058
178.49	5,734	9,016	179.01	6,204	12,120
178.50	5,743	9,074	179.02	6,213	12,182
178.51	5,752	9,131	179.03	6,223	12,244
178.52	5,761	9,189	179.04	6,232	12,306
178.53	5,770	9,246	179.05	6,242	12,369
178.54	5,779	9,304	179.06	6,252	12,431
178.55	5,788	9,362	179.07	6,261	12,494
178.56	5,797	9,420	179.08	6,271	12,556
178.57	5,806	9,478	179.09	6,280	12,619
178.58	5,815	9,536	179.10	6,290	12,682
178.59	5,824	9,594	179.11	6,299	12,745
178.60	5,833	9,652	179.12	6,309	12,808
178.61	5,842	9,711	179.13	6,319	12,871
178.62	5,851	9,769	179.14	6,328	12,934
178.63	5,860	9,828	179.15	6,338	12,998
178.64	5,869	9,886	179.16	6,347	13,061
178.65	5,878	9,945	179.17	6,357	13,125
178.66	5,887	10,004	179.18	6,367	13,188
178.67	5,896	10,063	179.19	6,376	13,252
178.68	5,905	10,122	179.20	6,386	13,316
178.69	5,914	10,181	179.21	6,395	13,380
178.70	5,923	10,240	179.22	6,405	13,444
178.71	5,932	10,299	179.23	6,415	13,508
178.72	5,941	10,359	179.24	6,424	13,572
178.73	5,950	10,418	179.25	6,434	13,636
178.74	5,959	10,478	179.26	6,443	13,701
178.75	5,969	10,537	179.27	6,453	13,765
178.76	5,978	10,597	179.28	6,463	13,830
178.77	5,987	10,657	179.29	6,472	13,894
178.78	5,996	10,717	179.30	6,482	13,959
178.79	6,005	10,777	179.31	6,491	14,024
178.80	6,014	10,837	179.32	6,501	14,089
178.81	6,023	10,897	179.33	6,510	14,154
178.82	6,032	10,957	179.34	6,520	14,219
178.83	6,041	11,018	179.35	6,530	14,284
178.84	6,050	11,078	179.36	6,539	14,350
178.85	6,059	11,139	179.37	6,549	14,415
178.86	6,068	11,199	179.38	6,558	14,481
178.87	6,077	11,260	179.39	6,568	14,546
178.88	6,086	11,321	179.40	6,578	14,612
178.89	6,095	11,382	179.41	6,587	14,678
178.90	6,104	11,443	179.42	6,597	14,744
178.91	6,113	11,504	179.43	6,606	14,810
178.92	6,122	11,565	179.44	6,616	14,876
178.93	6,131	11,626	179.45	6,626	14,942
178.94	6,140	11,688	179.46	6,635	15,008

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.47	6,645	15,075	179.99	7,143	18,660
179.48	6,654	15,141	180.00	7,153	18,731
179.49	6,664	15,208	180.01	7,163	18,803
179.50	6,674	15,275	180.02	7,173	18,875
179.51	6,683	15,341	180.03	7,183	18,946
179.52	6,693	15,408	180.04	7,194	19,018
179.53	6,702	15,475	180.05	7,204	19,090
179.54	6,712	15,542	180.06	7,214	19,162
179.55	6,721	15,610	180.07	7,224	19,234
179.56	6,731	15,677	180.08	7,234	19,307
179.57	6,741	15,744	180.09	7,244	19,379
179.58	6,750	15,812	180.10	7,254	19,452
179.59	6,760	15,879	180.11	7,265	19,524
179.60	6,769	15,947	180.12	7,275	19,597
179.61	6,779	16,015	180.13	7,285	19,670
179.62	6,789	16,082	180.14	7,295	19,743
179.63	6,798	16,150	180.15	7,305	19,816
179.64	6,808	16,218	180.16	7,315	19,889
179.65	6,817	16,286	180.17	7,326	19,962
179.66	6,827	16,355	180.18	7,336	20,035
179.67	6,837	16,423	180.19	7,346	20,109
179.68	6,846	16,491	180.20	7,356	20,182
179.69	6,856	16,560	180.21	7,366	20,256
179.70	6,865	16,629	180.22	7,376	20,329
179.71	6,875	16,697	180.23	7,386	20,403
179.72	6,884	16,766	180.24	7,397	20,477
179.73	6,894	16,835	180.25	7,407	20,551
179.74	6,904	16,904	180.26	7,417	20,625
179.75	6,913	16,973	180.27	7,427	20,700
179.76	6,923	17,042	180.28	7,437	20,774
179.77	6,932	17,111	180.29	7,447	20,848
179.78	6,942	17,181	180.30	7,457	20,923
179.79	6,952	17,250	180.31	7,468	20,997
179.80	6,961	17,320	180.32	7,478	21,072
179.81	6,971	17,390	180.33	7,488	21,147
179.82	6,980	17,459	180.34	7,498	21,222
179.83	6,990	17,529	180.35	7,508	21,297
179.84	7,000	17,599	180.36	7,518	21,372
179.85	7,009	17,669	180.37	7,529	21,447
179.86	7,019	17,739	180.38	7,539	21,523
179.87	7,028	17,809	180.39	7,549	21,598
179.88	7,038	17,880	180.40	7,559	21,674
179.89	7,048	17,950	180.41	7,569	21,749
179.90	7,057	18,021	180.42	7,579	21,825
179.91	7,067	18,091	180.43	7,589	21,901
179.92	7,076	18,162	180.44	7,600	21,977
179.93	7,086	18,233	180.45	7,610	22,053
179.94	7,095	18,304	180.46	7,620	22,129
179.95	7,105	18,375	180.47	7,630	22,205
179.96	7,115	18,446	180.48	7,640	22,282
179.97	7,124	18,517	180.49	7,650	22,358
179.98	7,134	18,588	180.50	7,661	22,435

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.51	7,671	22,511
180.52	7,681	22,588
180.53	7,691	22,665
180.54	7,701	22,742
180.55	7,711	22,819
180.56	7,721	22,896
180.57	7,732	22,973
180.58	7,742	23,051
180.59	7,752	23,128
180.60	7,762	23,206
180.61	7,772	23,283
180.62	7,782	23,361
180.63	7,792	23,439
180.64	7,803	23,517
180.65	7,813	23,595
180.66	7,823	23,673
180.67	7,833	23,752
180.68	7,843	23,830
180.69	7,853	23,908
180.70	7,863	23,987
180.71	7,874	24,066
180.72	7,884	24,145
180.73	7,894	24,223
180.74	7,904	24,302
180.75	7,914	24,381
180.76	7,924	24,461
180.77	7,935	24,540
180.78	7,945	24,619
180.79	7,955	24,699
180.80	7,965	24,778
180.81	7,975	24,858
180.82	7,985	24,938
180.83	7,995	25,018
180.84	8,006	25,098
180.85	8,016	25,178
180.86	8,026	25,258
180.87	8,036	25,339
180.88	8,046	25,419
180.89	8,056	25,499
180.90	8,067	25,580
180.91	8,077	25,661
180.92	8,087	25,742
180.93	8,097	25,823
180.94	8,107	25,904
180.95	8,117	25,985
180.96	8,127	26,066
180.97	8,138	26,147
180.98	8,148	26,229
180.99	8,158	26,310
181.00	**8,168**	**26,392**

Summary for Pond B-44: Basin #44

Inflow Area = 1.184 ac, 34.71% Impervious, Inflow Depth = 3.95" for Future 10 yr event
Inflow = 4.81 cfs @ 12.17 hrs, Volume= 0.389 af
Outflow = 0.25 cfs @ 14.27 hrs, Volume= 0.272 af, Atten= 95%, Lag= 125.7 min
Primary = 0.25 cfs @ 14.27 hrs, Volume= 0.272 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 167.53' @ 14.27 hrs Surf.Area= 6,990 sf Storage= 11,683 cf

Plug-Flow detention time= 662.8 min calculated for 0.272 af (70% of inflow)
Center-of-Mass det. time= 563.1 min (1,357.1 - 794.0)

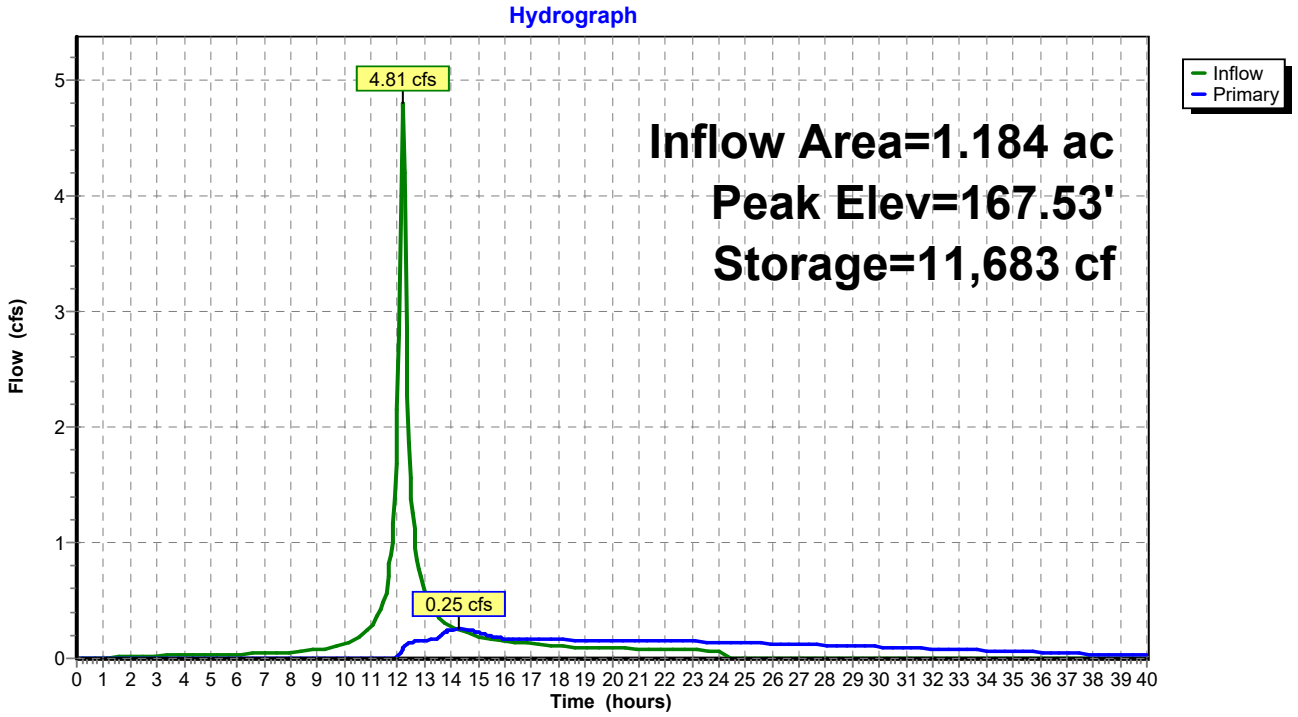
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	31,812 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	5,690	1,991	1,991
167.00	6,518	6,104	8,095
168.00	7,407	6,963	15,058
169.00	8,360	7,884	22,941
170.00	9,381	8,871	31,812

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	**18.0" Round Culvert** L= 44.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0295 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	166.41'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	167.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	168.98'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.24 cfs @ 14.27 hrs HW=167.53' (Free Discharge)
- **1=Culvert** (Passes 0.24 cfs of 10.36 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 4.86 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.07 cfs @ 0.58 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-44: Basin #44



Stage-Discharge for Pond B-44: Basin #44

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.10
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.10
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.10
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.10
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.10
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.10
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.10
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.11
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.11
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.11
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.11
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.11
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.11
165.43	0.00	165.95	0.00	166.47	0.01	166.99	0.11
165.44	0.00	165.96	0.00	166.48	0.01	167.00	0.11
165.45	0.00	165.97	0.00	166.49	0.01	167.01	0.12
165.46	0.00	165.98	0.00	166.50	0.01	167.02	0.12
165.47	0.00	165.99	0.00	166.51	0.02	167.03	0.12
165.48	0.00	166.00	0.00	166.52	0.02	167.04	0.12
165.49	0.00	166.01	0.00	166.53	0.02	167.05	0.12
165.50	0.00	166.02	0.00	166.54	0.03	167.06	0.12
165.51	0.00	166.03	0.00	166.55	0.03	167.07	0.12
165.52	0.00	166.04	0.00	166.56	0.03	167.08	0.12
165.53	0.00	166.05	0.00	166.57	0.04	167.09	0.12
165.54	0.00	166.06	0.00	166.58	0.04	167.10	0.13
165.55	0.00	166.07	0.00	166.59	0.05	167.11	0.13
165.56	0.00	166.08	0.00	166.60	0.05	167.12	0.13
165.57	0.00	166.09	0.00	166.61	0.05	167.13	0.13
165.58	0.00	166.10	0.00	166.62	0.05	167.14	0.13
165.59	0.00	166.11	0.00	166.63	0.06	167.15	0.13
165.60	0.00	166.12	0.00	166.64	0.06	167.16	0.13
165.61	0.00	166.13	0.00	166.65	0.06	167.17	0.13
165.62	0.00	166.14	0.00	166.66	0.06	167.18	0.13
165.63	0.00	166.15	0.00	166.67	0.06	167.19	0.13
165.64	0.00	166.16	0.00	166.68	0.07	167.20	0.14
165.65	0.00	166.17	0.00	166.69	0.07	167.21	0.14
165.66	0.00	166.18	0.00	166.70	0.07	167.22	0.14
165.67	0.00	166.19	0.00	166.71	0.07	167.23	0.14
165.68	0.00	166.20	0.00	166.72	0.07	167.24	0.14
165.69	0.00	166.21	0.00	166.73	0.08	167.25	0.14
165.70	0.00	166.22	0.00	166.74	0.08	167.26	0.14
165.71	0.00	166.23	0.00	166.75	0.08	167.27	0.14
165.72	0.00	166.24	0.00	166.76	0.08	167.28	0.14
165.73	0.00	166.25	0.00	166.77	0.08	167.29	0.14
165.74	0.00	166.26	0.00	166.78	0.08	167.30	0.15
165.75	0.00	166.27	0.00	166.79	0.09	167.31	0.15
165.76	0.00	166.28	0.00	166.80	0.09	167.32	0.15
165.77	0.00	166.29	0.00	166.81	0.09	167.33	0.15
165.78	0.00	166.30	0.00	166.82	0.09	167.34	0.15
165.79	0.00	166.31	0.00	166.83	0.09	167.35	0.15
165.80	0.00	166.32	0.00	166.84	0.09	167.36	0.15
165.81	0.00	166.33	0.00	166.85	0.10	167.37	0.15

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.15	167.90	3.44	168.42	11.24	168.94	14.46
167.39	0.15	167.91	3.56	168.43	11.41	168.95	14.49
167.40	0.15	167.92	3.68	168.44	11.59	168.96	14.51
167.41	0.16	167.93	3.80	168.45	11.76	168.97	14.54
167.42	0.16	167.94	3.93	168.46	11.94	168.98	14.56
167.43	0.16	167.95	4.06	168.47	12.12	168.99	14.71
167.44	0.16	167.96	4.18	168.48	12.30	169.00	14.95
167.45	0.16	167.97	4.31	168.49	12.48	169.01	15.25
167.46	0.16	167.98	4.44	168.50	12.66	169.02	15.60
167.47	0.16	167.99	4.58	168.51	12.84	169.03	16.00
167.48	0.16	168.00	4.71	168.52	13.02	169.04	16.44
167.49	0.16	168.01	4.84	168.53	13.20	169.05	16.91
167.50	0.16	168.02	4.98	168.54	13.38	169.06	17.42
167.51	0.18	168.03	5.12	168.55	13.45	169.07	17.96
167.52	0.20	168.04	5.25	168.56	13.48	169.08	18.53
167.53	0.23	168.05	5.39	168.57	13.51	169.09	19.13
167.54	0.27	168.06	5.53	168.58	13.53	169.10	19.75
167.55	0.31	168.07	5.67	168.59	13.56	169.11	20.40
167.56	0.36	168.08	5.82	168.60	13.59	169.12	21.08
167.57	0.41	168.09	5.96	168.61	13.61	169.13	21.78
167.58	0.46	168.10	6.10	168.62	13.64	169.14	22.50
167.59	0.52	168.11	6.25	168.63	13.67	169.15	23.25
167.60	0.58	168.12	6.40	168.64	13.69	169.16	24.02
167.61	0.65	168.13	6.54	168.65	13.72	169.17	24.81
167.62	0.71	168.14	6.69	168.66	13.75	169.18	25.62
167.63	0.78	168.15	6.84	168.67	13.77	169.19	26.49
167.64	0.85	168.16	6.99	168.68	13.80	169.20	27.39
167.65	0.93	168.17	7.14	168.69	13.83	169.21	28.31
167.66	1.01	168.18	7.30	168.70	13.85	169.22	29.25
167.67	1.09	168.19	7.45	168.71	13.88	169.23	30.23
167.68	1.17	168.20	7.61	168.72	13.90	169.24	31.22
167.69	1.25	168.21	7.76	168.73	13.93	169.25	32.25
167.70	1.34	168.22	7.92	168.74	13.96	169.26	33.29
167.71	1.43	168.23	8.08	168.75	13.98	169.27	34.36
167.72	1.52	168.24	8.23	168.76	14.01	169.28	35.46
167.73	1.61	168.25	8.39	168.77	14.03	169.29	36.58
167.74	1.70	168.26	8.55	168.78	14.06	169.30	37.73
167.75	1.80	168.27	8.72	168.79	14.08	169.31	38.90
167.76	1.89	168.28	8.88	168.80	14.11	169.32	40.09
167.77	1.99	168.29	9.04	168.81	14.14	169.33	41.31
167.78	2.10	168.30	9.20	168.82	14.16	169.34	42.55
167.79	2.20	168.31	9.37	168.83	14.19	169.35	43.81
167.80	2.30	168.32	9.53	168.84	14.21	169.36	45.10
167.81	2.41	168.33	9.70	168.85	14.24	169.37	46.42
167.82	2.52	168.34	9.87	168.86	14.26	169.38	47.76
167.83	2.63	168.35	10.04	168.87	14.29	169.39	49.15
167.84	2.74	168.36	10.21	168.88	14.31	169.40	50.56
167.85	2.85	168.37	10.38	168.89	14.34	169.41	52.00
167.86	2.96	168.38	10.55	168.90	14.36	169.42	53.47
167.87	3.08	168.39	10.72	168.91	14.39	169.43	54.96
167.88	3.20	168.40	10.89	168.92	14.41	169.44	56.48
167.89	3.32	168.41	11.06	168.93	14.44	169.45	58.03

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)
169.46	59.60
169.47	61.20
169.48	62.82
169.49	64.47
169.50	66.15
169.51	67.86
169.52	69.59
169.53	71.35
169.54	73.13
169.55	74.94
169.56	76.78
169.57	78.64
169.58	80.54
169.59	82.19
169.60	83.85
169.61	85.52
169.62	87.21
169.63	88.92
169.64	90.63
169.65	92.36
169.66	94.11
169.67	95.86
169.68	97.63
169.69	99.41
169.70	101.20
169.71	103.01
169.72	104.83
169.73	106.66
169.74	108.50
169.75	110.36
169.76	112.23
169.77	114.11
169.78	116.00
169.79	117.94
169.80	119.89
169.81	121.86
169.82	123.84
169.83	125.84
169.84	127.85
169.85	129.87
169.86	131.90
169.87	133.95
169.88	136.01
169.89	138.08
169.90	140.16
169.91	142.26
169.92	144.37
169.93	146.49
169.94	148.63
169.95	150.78
169.96	152.94
169.97	155.11
169.98	157.30
169.99	159.45
170.00	**161.60**

Stage-Area-Storage for Pond B-44: Basin #44

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0	165.82	4,227	1,099
165.31	81	0	165.83	4,308	1,142
165.32	163	2	165.84	4,389	1,185
165.33	244	4	165.85	4,471	1,229
165.34	325	7	165.86	4,552	1,275
165.35	406	10	165.87	4,633	1,320
165.36	488	15	165.88	4,715	1,367
165.37	569	20	165.89	4,796	1,415
165.38	650	26	165.90	4,877	1,463
165.39	732	33	165.91	4,958	1,512
165.40	813	41	165.92	5,040	1,562
165.41	894	49	165.93	5,121	1,613
165.42	975	59	165.94	5,202	1,665
165.43	1,057	69	165.95	5,284	1,717
165.44	1,138	80	165.96	5,365	1,770
165.45	1,219	91	165.97	5,446	1,824
165.46	1,301	104	165.98	5,527	1,879
165.47	1,382	117	165.99	5,609	1,935
165.48	1,463	132	166.00	5,690	1,991
165.49	1,544	147	166.01	5,698	2,048
165.50	1,626	163	166.02	5,707	2,105
165.51	1,707	179	166.03	5,715	2,163
165.52	1,788	197	166.04	5,723	2,220
165.53	1,870	215	166.05	5,731	2,277
165.54	1,951	234	166.06	5,740	2,334
165.55	2,032	254	166.07	5,748	2,392
165.56	2,113	275	166.08	5,756	2,449
165.57	2,195	296	166.09	5,765	2,507
165.58	2,276	319	166.10	5,773	2,565
165.59	2,357	342	166.11	5,781	2,622
165.60	2,439	366	166.12	5,789	2,680
165.61	2,520	391	166.13	5,798	2,738
165.62	2,601	416	166.14	5,806	2,796
165.63	2,682	443	166.15	5,814	2,854
165.64	2,764	470	166.16	5,822	2,912
165.65	2,845	498	166.17	5,831	2,971
165.66	2,926	527	166.18	5,839	3,029
165.67	3,008	556	166.19	5,847	3,088
165.68	3,089	587	166.20	5,856	3,146
165.69	3,170	618	166.21	5,864	3,205
165.70	3,251	650	166.22	5,872	3,263
165.71	3,333	683	166.23	5,880	3,322
165.72	3,414	717	166.24	5,889	3,381
165.73	3,495	751	166.25	5,897	3,440
165.74	3,577	787	166.26	5,905	3,499
165.75	3,658	823	166.27	5,914	3,558
165.76	3,739	860	166.28	5,922	3,617
165.77	3,820	898	166.29	5,930	3,676
165.78	3,902	936	166.30	5,938	3,736
165.79	3,983	976	166.31	5,947	3,795
165.80	4,064	1,016	166.32	5,955	3,855
165.81	4,146	1,057	166.33	5,963	3,914

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	5,972	3,974	166.86	6,402	7,191
166.35	5,980	4,034	166.87	6,410	7,255
166.36	5,988	4,094	166.88	6,419	7,319
166.37	5,996	4,153	166.89	6,427	7,384
166.38	6,005	4,213	166.90	6,435	7,448
166.39	6,013	4,274	166.91	6,443	7,512
166.40	6,021	4,334	166.92	6,452	7,577
166.41	6,029	4,394	166.93	6,460	7,641
166.42	6,038	4,454	166.94	6,468	7,706
166.43	6,046	4,515	166.95	6,477	7,771
166.44	6,054	4,575	166.96	6,485	7,835
166.45	6,063	4,636	166.97	6,493	7,900
166.46	6,071	4,697	166.98	6,501	7,965
166.47	6,079	4,757	166.99	6,510	8,030
166.48	6,087	4,818	167.00	6,518	8,095
166.49	6,096	4,879	167.01	6,527	8,161
166.50	6,104	4,940	167.02	6,536	8,226
166.51	6,112	5,001	167.03	6,545	8,291
166.52	6,121	5,062	167.04	6,554	8,357
166.53	6,129	5,123	167.05	6,562	8,423
166.54	6,137	5,185	167.06	6,571	8,488
166.55	6,145	5,246	167.07	6,580	8,554
166.56	6,154	5,308	167.08	6,589	8,620
166.57	6,162	5,369	167.09	6,598	8,686
166.58	6,170	5,431	167.10	6,607	8,752
166.59	6,179	5,493	167.11	6,616	8,818
166.60	6,187	5,555	167.12	6,625	8,884
166.61	6,195	5,616	167.13	6,634	8,950
166.62	6,203	5,678	167.14	6,642	9,017
166.63	6,212	5,741	167.15	6,651	9,083
166.64	6,220	5,803	167.16	6,660	9,150
166.65	6,228	5,865	167.17	6,669	9,216
166.66	6,236	5,927	167.18	6,678	9,283
166.67	6,245	5,990	167.19	6,687	9,350
166.68	6,253	6,052	167.20	6,696	9,417
166.69	6,261	6,115	167.21	6,705	9,484
166.70	6,270	6,177	167.22	6,714	9,551
166.71	6,278	6,240	167.23	6,722	9,618
166.72	6,286	6,303	167.24	6,731	9,685
166.73	6,294	6,366	167.25	6,740	9,753
166.74	6,303	6,429	167.26	6,749	9,820
166.75	6,311	6,492	167.27	6,758	9,888
166.76	6,319	6,555	167.28	6,767	9,955
166.77	6,328	6,618	167.29	6,776	10,023
166.78	6,336	6,682	167.30	6,785	10,091
166.79	6,344	6,745	167.31	6,794	10,159
166.80	6,352	6,808	167.32	6,802	10,227
166.81	6,361	6,872	167.33	6,811	10,295
166.82	6,369	6,936	167.34	6,820	10,363
166.83	6,377	6,999	167.35	6,829	10,431
166.84	6,386	7,063	167.36	6,838	10,500
166.85	6,394	7,127	167.37	6,847	10,568

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	6,856	10,637	167.90	7,318	14,322
167.39	6,865	10,705	167.91	7,327	14,395
167.40	6,874	10,774	167.92	7,336	14,468
167.41	6,882	10,843	167.93	7,345	14,542
167.42	6,891	10,911	167.94	7,354	14,615
167.43	6,900	10,980	167.95	7,363	14,689
167.44	6,909	11,049	167.96	7,371	14,762
167.45	6,918	11,119	167.97	7,380	14,836
167.46	6,927	11,188	167.98	7,389	14,910
167.47	6,936	11,257	167.99	7,398	14,984
167.48	6,945	11,327	168.00	7,407	15,058
167.49	6,954	11,396	168.01	7,417	15,132
167.50	6,963	11,466	168.02	7,426	15,206
167.51	6,971	11,535	168.03	7,436	15,281
167.52	6,980	11,605	168.04	7,445	15,355
167.53	6,989	11,675	168.05	7,455	15,430
167.54	6,998	11,745	168.06	7,464	15,504
167.55	7,007	11,815	168.07	7,474	15,579
167.56	7,016	11,885	168.08	7,483	15,654
167.57	7,025	11,955	168.09	7,493	15,728
167.58	7,034	12,025	168.10	7,502	15,803
167.59	7,043	12,096	168.11	7,512	15,879
167.60	7,051	12,166	168.12	7,521	15,954
167.61	7,060	12,237	168.13	7,531	16,029
167.62	7,069	12,308	168.14	7,540	16,104
167.63	7,078	12,378	168.15	7,550	16,180
167.64	7,087	12,449	168.16	7,559	16,255
167.65	7,096	12,520	168.17	7,569	16,331
167.66	7,105	12,591	168.18	7,579	16,407
167.67	7,114	12,662	168.19	7,588	16,483
167.68	7,123	12,733	168.20	7,598	16,558
167.69	7,131	12,805	168.21	7,607	16,634
167.70	7,140	12,876	168.22	7,617	16,711
167.71	7,149	12,947	168.23	7,626	16,787
167.72	7,158	13,019	168.24	7,636	16,863
167.73	7,167	13,091	168.25	7,645	16,940
167.74	7,176	13,162	168.26	7,655	17,016
167.75	7,185	13,234	168.27	7,664	17,093
167.76	7,194	13,306	168.28	7,674	17,169
167.77	7,203	13,378	168.29	7,683	17,246
167.78	7,211	13,450	168.30	7,693	17,323
167.79	7,220	13,522	168.31	7,702	17,400
167.80	7,229	13,594	168.32	7,712	17,477
167.81	7,238	13,667	168.33	7,721	17,554
167.82	7,247	13,739	168.34	7,731	17,631
167.83	7,256	13,812	168.35	7,741	17,709
167.84	7,265	13,884	168.36	7,750	17,786
167.85	7,274	13,957	168.37	7,760	17,864
167.86	7,283	14,030	168.38	7,769	17,941
167.87	7,291	14,103	168.39	7,779	18,019
167.88	7,300	14,176	168.40	7,788	18,097
167.89	7,309	14,249	168.41	7,798	18,175

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	7,807	18,253	168.94	8,303	22,442
168.43	7,817	18,331	168.95	8,312	22,525
168.44	7,826	18,409	168.96	8,322	22,608
168.45	7,836	18,488	168.97	8,331	22,691
168.46	7,845	18,566	168.98	8,341	22,774
168.47	7,855	18,645	168.99	8,350	22,858
168.48	7,864	18,723	169.00	8,360	22,941
168.49	7,874	18,802	169.01	8,370	23,025
168.50	7,884	18,881	169.02	8,380	23,109
168.51	7,893	18,960	169.03	8,391	23,193
168.52	7,903	19,038	169.04	8,401	23,277
168.53	7,912	19,118	169.05	8,411	23,361
168.54	7,922	19,197	169.06	8,421	23,445
168.55	7,931	19,276	169.07	8,431	23,529
168.56	7,941	19,355	169.08	8,442	23,614
168.57	7,950	19,435	169.09	8,452	23,698
168.58	7,960	19,514	169.10	8,462	23,783
168.59	7,969	19,594	169.11	8,472	23,867
168.60	7,979	19,674	169.12	8,483	23,952
168.61	7,988	19,754	169.13	8,493	24,037
168.62	7,998	19,834	169.14	8,503	24,122
168.63	8,007	19,914	169.15	8,513	24,207
168.64	8,017	19,994	169.16	8,523	24,292
168.65	8,026	20,074	169.17	8,534	24,377
168.66	8,036	20,154	169.18	8,544	24,463
168.67	8,046	20,235	169.19	8,554	24,548
168.68	8,055	20,315	169.20	8,564	24,634
168.69	8,065	20,396	169.21	8,574	24,720
168.70	8,074	20,476	169.22	8,585	24,805
168.71	8,084	20,557	169.23	8,595	24,891
168.72	8,093	20,638	169.24	8,605	24,977
168.73	8,103	20,719	169.25	8,615	25,063
168.74	8,112	20,800	169.26	8,625	25,150
168.75	8,122	20,881	169.27	8,636	25,236
168.76	8,131	20,963	169.28	8,646	25,322
168.77	8,141	21,044	169.29	8,656	25,409
168.78	8,150	21,125	169.30	8,666	25,495
168.79	8,160	21,207	169.31	8,677	25,582
168.80	8,169	21,289	169.32	8,687	25,669
168.81	8,179	21,370	169.33	8,697	25,756
168.82	8,188	21,452	169.34	8,707	25,843
168.83	8,198	21,534	169.35	8,717	25,930
168.84	8,208	21,616	169.36	8,728	26,017
168.85	8,217	21,698	169.37	8,738	26,105
168.86	8,227	21,780	169.38	8,748	26,192
168.87	8,236	21,863	169.39	8,758	26,280
168.88	8,246	21,945	169.40	8,768	26,367
168.89	8,255	22,028	169.41	8,779	26,455
168.90	8,265	22,110	169.42	8,789	26,543
168.91	8,274	22,193	169.43	8,799	26,631
168.92	8,284	22,276	169.44	8,809	26,719
168.93	8,293	22,359	169.45	8,819	26,807

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	8,830	26,895
169.47	8,840	26,983
169.48	8,850	27,072
169.49	8,860	27,160
169.50	8,871	27,249
169.51	8,881	27,338
169.52	8,891	27,427
169.53	8,901	27,516
169.54	8,911	27,605
169.55	8,922	27,694
169.56	8,932	27,783
169.57	8,942	27,873
169.58	8,952	27,962
169.59	8,962	28,052
169.60	8,973	28,141
169.61	8,983	28,231
169.62	8,993	28,321
169.63	9,003	28,411
169.64	9,013	28,501
169.65	9,024	28,591
169.66	9,034	28,681
169.67	9,044	28,772
169.68	9,054	28,862
169.69	9,064	28,953
169.70	9,075	29,044
169.71	9,085	29,134
169.72	9,095	29,225
169.73	9,105	29,316
169.74	9,116	29,407
169.75	9,126	29,499
169.76	9,136	29,590
169.77	9,146	29,681
169.78	9,156	29,773
169.79	9,167	29,865
169.80	9,177	29,956
169.81	9,187	30,048
169.82	9,197	30,140
169.83	9,207	30,232
169.84	9,218	30,324
169.85	9,228	30,416
169.86	9,238	30,509
169.87	9,248	30,601
169.88	9,258	30,694
169.89	9,269	30,786
169.90	9,279	30,879
169.91	9,289	30,972
169.92	9,299	31,065
169.93	9,310	31,158
169.94	9,320	31,251
169.95	9,330	31,344
169.96	9,340	31,438
169.97	9,350	31,531
169.98	9,361	31,625
169.99	9,371	31,718
170.00	**9,381**	**31,812**

Summary for Pond B-45: Basin #45

Inflow Area = 2.294 ac, 62.82% Impervious, Inflow Depth = 4.66" for Future 10 yr event
Inflow = 10.57 cfs @ 12.17 hrs, Volume= 0.891 af
Outflow = 7.14 cfs @ 12.28 hrs, Volume= 0.731 af, Atten= 32%, Lag= 6.5 min
Primary = 7.14 cfs @ 12.28 hrs, Volume= 0.731 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 169.33' @ 12.28 hrs Surf.Area= 5,799 sf Storage= 17,216 cf

Plug-Flow detention time= 336.6 min calculated for 0.730 af (82% of inflow)
Center-of-Mass det. time= 261.0 min (1,032.2 - 771.2)

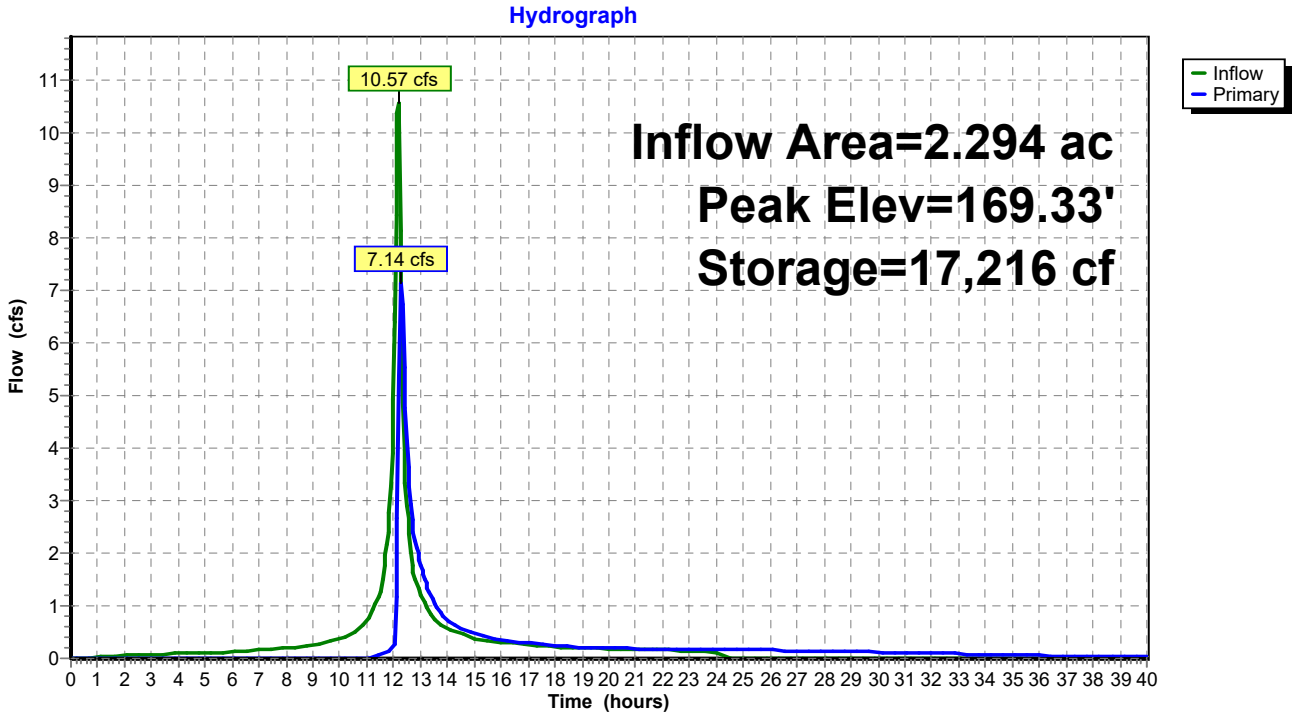
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	21,270 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	3,797	1,329	1,329
167.00	4,370	4,084	5,412
168.00	4,967	4,669	10,081
169.00	5,588	5,278	15,358
170.00	6,235	5,912	21,270

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0325 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.25'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	168.50'	**2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	169.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	169.97'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.04 cfs @ 12.28 hrs HW=169.32' (Free Discharge)
- **1=Culvert** (Passes 7.04 cfs of 15.39 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.75 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.47 cfs @ 2.96 fps)
  - **4=Sharp-Crested Rectangular Weir** (Weir Controls 2.34 cfs @ 1.85 fps)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-45: Basin #45



Stage-Discharge for Pond B-45: Basin #45

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.00
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.00
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.00
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.00
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.00
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.00
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.00
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.00
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.00
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.00
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.00
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.00
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.00
165.43	0.00	165.95	0.00	166.47	0.00	166.99	0.00
165.44	0.00	165.96	0.00	166.48	0.00	167.00	0.00
165.45	0.00	165.97	0.00	166.49	0.00	167.01	0.00
165.46	0.00	165.98	0.00	166.50	0.00	167.02	0.00
165.47	0.00	165.99	0.00	166.51	0.00	167.03	0.00
165.48	0.00	166.00	0.00	166.52	0.00	167.04	0.00
165.49	0.00	166.01	0.00	166.53	0.00	167.05	0.00
165.50	0.00	166.02	0.00	166.54	0.00	167.06	0.00
165.51	0.00	166.03	0.00	166.55	0.00	167.07	0.00
165.52	0.00	166.04	0.00	166.56	0.00	167.08	0.00
165.53	0.00	166.05	0.00	166.57	0.00	167.09	0.00
165.54	0.00	166.06	0.00	166.58	0.00	167.10	0.00
165.55	0.00	166.07	0.00	166.59	0.00	167.11	0.00
165.56	0.00	166.08	0.00	166.60	0.00	167.12	0.00
165.57	0.00	166.09	0.00	166.61	0.00	167.13	0.00
165.58	0.00	166.10	0.00	166.62	0.00	167.14	0.00
165.59	0.00	166.11	0.00	166.63	0.00	167.15	0.00
165.60	0.00	166.12	0.00	166.64	0.00	167.16	0.00
165.61	0.00	166.13	0.00	166.65	0.00	167.17	0.00
165.62	0.00	166.14	0.00	166.66	0.00	167.18	0.00
165.63	0.00	166.15	0.00	166.67	0.00	167.19	0.00
165.64	0.00	166.16	0.00	166.68	0.00	167.20	0.00
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.01
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.01
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.01
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.01
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.02
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.02
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.02

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.03	167.90	0.12	168.42	0.17	168.94	2.03
167.39	0.03	167.91	0.12	168.43	0.17	168.95	2.09
167.40	0.03	167.92	0.12	168.44	0.17	168.96	2.15
167.41	0.04	167.93	0.12	168.45	0.17	168.97	2.22
167.42	0.04	167.94	0.13	168.46	0.17	168.98	2.28
167.43	0.05	167.95	0.13	168.47	0.17	168.99	2.34
167.44	0.05	167.96	0.13	168.48	0.17	169.00	2.41
167.45	0.05	167.97	0.13	168.49	0.17	169.01	2.48
167.46	0.05	167.98	0.13	168.50	0.18	169.02	2.57
167.47	0.06	167.99	0.13	168.51	0.18	169.03	2.67
167.48	0.06	168.00	0.13	168.52	0.20	169.04	2.77
167.49	0.06	168.01	0.13	168.53	0.21	169.05	2.88
167.50	0.06	168.02	0.13	168.54	0.23	169.06	2.99
167.51	0.06	168.03	0.13	168.55	0.25	169.07	3.11
167.52	0.07	168.04	0.14	168.56	0.28	169.08	3.23
167.53	0.07	168.05	0.14	168.57	0.30	169.09	3.36
167.54	0.07	168.06	0.14	168.58	0.33	169.10	3.49
167.55	0.07	168.07	0.14	168.59	0.36	169.11	3.62
167.56	0.07	168.08	0.14	168.60	0.39	169.12	3.75
167.57	0.08	168.09	0.14	168.61	0.42	169.13	3.89
167.58	0.08	168.10	0.14	168.62	0.45	169.14	4.03
167.59	0.08	168.11	0.14	168.63	0.49	169.15	4.18
167.60	0.08	168.12	0.14	168.64	0.52	169.16	4.33
167.61	0.08	168.13	0.14	168.65	0.56	169.17	4.48
167.62	0.08	168.14	0.15	168.66	0.60	169.18	4.63
167.63	0.09	168.15	0.15	168.67	0.64	169.19	4.79
167.64	0.09	168.16	0.15	168.68	0.68	169.20	4.94
167.65	0.09	168.17	0.15	168.69	0.72	169.21	5.10
167.66	0.09	168.18	0.15	168.70	0.76	169.22	5.27
167.67	0.09	168.19	0.15	168.71	0.81	169.23	5.43
167.68	0.09	168.20	0.15	168.72	0.85	169.24	5.60
167.69	0.10	168.21	0.15	168.73	0.90	169.25	5.77
167.70	0.10	168.22	0.15	168.74	0.94	169.26	5.94
167.71	0.10	168.23	0.15	168.75	0.99	169.27	6.12
167.72	0.10	168.24	0.15	168.76	1.04	169.28	6.29
167.73	0.10	168.25	0.16	168.77	1.09	169.29	6.47
167.74	0.10	168.26	0.16	168.78	1.14	169.30	6.65
167.75	0.10	168.27	0.16	168.79	1.19	169.31	6.83
167.76	0.10	168.28	0.16	168.80	1.24	169.32	7.02
167.77	0.11	168.29	0.16	168.81	1.29	169.33	7.20
167.78	0.11	168.30	0.16	168.82	1.34	169.34	7.39
167.79	0.11	168.31	0.16	168.83	1.40	169.35	7.58
167.80	0.11	168.32	0.16	168.84	1.45	169.36	7.77
167.81	0.11	168.33	0.16	168.85	1.51	169.37	7.97
167.82	0.11	168.34	0.16	168.86	1.56	169.38	8.16
167.83	0.11	168.35	0.16	168.87	1.62	169.39	8.36
167.84	0.11	168.36	0.16	168.88	1.68	169.40	8.56
167.85	0.12	168.37	0.17	168.89	1.73	169.41	8.76
167.86	0.12	168.38	0.17	168.90	1.79	169.42	8.96
167.87	0.12	168.39	0.17	168.91	1.85	169.43	9.17
167.88	0.12	168.40	0.17	168.92	1.91	169.44	9.37
167.89	0.12	168.41	0.17	168.93	1.97	169.45	9.58

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)
169.46	9.79
169.47	10.00
169.48	10.21
169.49	10.42
169.50	10.64
169.51	10.85
169.52	11.07
169.53	11.29
169.54	11.51
169.55	11.73
169.56	11.95
169.57	12.18
169.58	12.40
169.59	12.63
169.60	12.86
169.61	13.09
169.62	13.32
169.63	13.55
169.64	13.78
169.65	14.02
169.66	14.25
169.67	14.49
169.68	14.73
169.69	14.97
169.70	15.21
169.71	15.45
169.72	15.69
169.73	15.94
169.74	16.18
169.75	16.37
169.76	16.39
169.77	16.41
169.78	16.43
169.79	16.46
169.80	16.48
169.81	16.50
169.82	16.52
169.83	16.54
169.84	16.56
169.85	16.59
169.86	16.61
169.87	16.63
169.88	16.65
169.89	16.67
169.90	16.70
169.91	16.72
169.92	16.74
169.93	16.76
169.94	16.78
169.95	16.80
169.96	16.82
169.97	16.85
169.98	16.99
169.99	17.22
170.00	**17.52**

Stage-Area-Storage for Pond B-45: Basin #45

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0	165.82	2,821	733
165.31	54	0	165.83	2,875	762
165.32	108	1	165.84	2,929	791
165.33	163	2	165.85	2,983	820
165.34	217	4	165.86	3,038	851
165.35	271	7	165.87	3,092	881
165.36	325	10	165.88	3,146	912
165.37	380	13	165.89	3,200	944
165.38	434	17	165.90	3,255	976
165.39	488	22	165.91	3,309	1,009
165.40	542	27	165.92	3,363	1,043
165.41	597	33	165.93	3,417	1,076
165.42	651	39	165.94	3,472	1,111
165.43	705	46	165.95	3,526	1,146
165.44	759	53	165.96	3,580	1,181
165.45	814	61	165.97	3,634	1,217
165.46	868	69	165.98	3,689	1,254
165.47	922	78	165.99	3,743	1,291
165.48	976	88	166.00	3,797	1,329
165.49	1,031	98	166.01	3,803	1,367
165.50	1,085	108	166.02	3,808	1,405
165.51	1,139	120	166.03	3,814	1,443
165.52	1,193	131	166.04	3,820	1,481
165.53	1,248	143	166.05	3,826	1,520
165.54	1,302	156	166.06	3,831	1,558
165.55	1,356	170	166.07	3,837	1,596
165.56	1,410	183	166.08	3,843	1,635
165.57	1,465	198	166.09	3,849	1,673
165.58	1,519	213	166.10	3,854	1,712
165.59	1,573	228	166.11	3,860	1,750
165.60	1,627	244	166.12	3,866	1,789
165.61	1,682	261	166.13	3,871	1,827
165.62	1,736	278	166.14	3,877	1,866
165.63	1,790	295	166.15	3,883	1,905
165.64	1,844	314	166.16	3,889	1,944
165.65	1,899	332	166.17	3,894	1,983
165.66	1,953	351	166.18	3,900	2,022
165.67	2,007	371	166.19	3,906	2,061
165.68	2,061	392	166.20	3,912	2,100
165.69	2,115	413	166.21	3,917	2,139
165.70	2,170	434	166.22	3,923	2,178
165.71	2,224	456	166.23	3,929	2,217
165.72	2,278	478	166.24	3,935	2,257
165.73	2,332	501	166.25	3,940	2,296
165.74	2,387	525	166.26	3,946	2,336
165.75	2,441	549	166.27	3,952	2,375
165.76	2,495	574	166.28	3,957	2,415
165.77	2,549	599	166.29	3,963	2,454
165.78	2,604	625	166.30	3,969	2,494
165.79	2,658	651	166.31	3,975	2,534
165.80	2,712	678	166.32	3,980	2,573
165.81	2,766	705	166.33	3,986	2,613

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	3,992	2,653	166.86	4,290	4,806
166.35	3,998	2,693	166.87	4,296	4,849
166.36	4,003	2,733	166.88	4,301	4,892
166.37	4,009	2,773	166.89	4,307	4,935
166.38	4,015	2,813	166.90	4,313	4,978
166.39	4,020	2,853	166.91	4,318	5,021
166.40	4,026	2,894	166.92	4,324	5,065
166.41	4,032	2,934	166.93	4,330	5,108
166.42	4,038	2,974	166.94	4,336	5,151
166.43	4,043	3,015	166.95	4,341	5,195
166.44	4,049	3,055	166.96	4,347	5,238
166.45	4,055	3,096	166.97	4,353	5,282
166.46	4,061	3,136	166.98	4,359	5,325
166.47	4,066	3,177	166.99	4,364	5,369
166.48	4,072	3,218	167.00	4,370	5,412
166.49	4,078	3,258	167.01	4,376	5,456
166.50	4,084	3,299	167.02	4,382	5,500
166.51	4,089	3,340	167.03	4,388	5,544
166.52	4,095	3,381	167.04	4,394	5,588
166.53	4,101	3,422	167.05	4,400	5,632
166.54	4,106	3,463	167.06	4,406	5,676
166.55	4,112	3,504	167.07	4,412	5,720
166.56	4,118	3,545	167.08	4,418	5,764
166.57	4,124	3,586	167.09	4,424	5,808
166.58	4,129	3,628	167.10	4,430	5,852
166.59	4,135	3,669	167.11	4,436	5,897
166.60	4,141	3,710	167.12	4,442	5,941
166.61	4,147	3,752	167.13	4,448	5,986
166.62	4,152	3,793	167.14	4,454	6,030
166.63	4,158	3,835	167.15	4,460	6,075
166.64	4,164	3,876	167.16	4,466	6,119
166.65	4,169	3,918	167.17	4,471	6,164
166.66	4,175	3,960	167.18	4,477	6,209
166.67	4,181	4,002	167.19	4,483	6,254
166.68	4,187	4,043	167.20	4,489	6,298
166.69	4,192	4,085	167.21	4,495	6,343
166.70	4,198	4,127	167.22	4,501	6,388
166.71	4,204	4,169	167.23	4,507	6,433
166.72	4,210	4,211	167.24	4,513	6,478
166.73	4,215	4,253	167.25	4,519	6,524
166.74	4,221	4,296	167.26	4,525	6,569
166.75	4,227	4,338	167.27	4,531	6,614
166.76	4,232	4,380	167.28	4,537	6,659
166.77	4,238	4,423	167.29	4,543	6,705
166.78	4,244	4,465	167.30	4,549	6,750
166.79	4,250	4,507	167.31	4,555	6,796
166.80	4,255	4,550	167.32	4,561	6,841
166.81	4,261	4,592	167.33	4,567	6,887
166.82	4,267	4,635	167.34	4,573	6,933
166.83	4,273	4,678	167.35	4,579	6,979
166.84	4,278	4,721	167.36	4,585	7,024
166.85	4,284	4,763	167.37	4,591	7,070

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	4,597	7,116	167.90	4,907	9,587
167.39	4,603	7,162	167.91	4,913	9,636
167.40	4,609	7,208	167.92	4,919	9,686
167.41	4,615	7,254	167.93	4,925	9,735
167.42	4,621	7,301	167.94	4,931	9,784
167.43	4,627	7,347	167.95	4,937	9,833
167.44	4,633	7,393	167.96	4,943	9,883
167.45	4,639	7,439	167.97	4,949	9,932
167.46	4,645	7,486	167.98	4,955	9,982
167.47	4,651	7,532	167.99	4,961	10,031
167.48	4,657	7,579	168.00	4,967	10,081
167.49	4,663	7,625	168.01	4,973	10,131
167.50	4,669	7,672	168.02	4,979	10,180
167.51	4,674	7,719	168.03	4,986	10,230
167.52	4,680	7,766	168.04	4,992	10,280
167.53	4,686	7,812	168.05	4,998	10,330
167.54	4,692	7,859	168.06	5,004	10,380
167.55	4,698	7,906	168.07	5,010	10,430
167.56	4,704	7,953	168.08	5,017	10,480
167.57	4,710	8,000	168.09	5,023	10,530
167.58	4,716	8,047	168.10	5,029	10,581
167.59	4,722	8,095	168.11	5,035	10,631
167.60	4,728	8,142	168.12	5,042	10,681
167.61	4,734	8,189	168.13	5,048	10,732
167.62	4,740	8,237	168.14	5,054	10,782
167.63	4,746	8,284	168.15	5,060	10,833
167.64	4,752	8,332	168.16	5,066	10,884
167.65	4,758	8,379	168.17	5,073	10,934
167.66	4,764	8,427	168.18	5,079	10,985
167.67	4,770	8,474	168.19	5,085	11,036
167.68	4,776	8,522	168.20	5,091	11,087
167.69	4,782	8,570	168.21	5,097	11,138
167.70	4,788	8,618	168.22	5,104	11,189
167.71	4,794	8,666	168.23	5,110	11,240
167.72	4,800	8,714	168.24	5,116	11,291
167.73	4,806	8,762	168.25	5,122	11,342
167.74	4,812	8,810	168.26	5,128	11,393
167.75	4,818	8,858	168.27	5,135	11,445
167.76	4,824	8,906	168.28	5,141	11,496
167.77	4,830	8,954	168.29	5,147	11,547
167.78	4,836	9,003	168.30	5,153	11,599
167.79	4,842	9,051	168.31	5,160	11,651
167.80	4,848	9,099	168.32	5,166	11,702
167.81	4,854	9,148	168.33	5,172	11,754
167.82	4,860	9,197	168.34	5,178	11,806
167.83	4,866	9,245	168.35	5,184	11,857
167.84	4,871	9,294	168.36	5,191	11,909
167.85	4,877	9,343	168.37	5,197	11,961
167.86	4,883	9,391	168.38	5,203	12,013
167.87	4,889	9,440	168.39	5,209	12,065
167.88	4,895	9,489	168.40	5,215	12,117
167.89	4,901	9,538	168.41	5,222	12,170

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	5,228	12,222	168.94	5,551	15,024
168.43	5,234	12,274	168.95	5,557	15,080
168.44	5,240	12,327	168.96	5,563	15,135
168.45	5,246	12,379	168.97	5,569	15,191
168.46	5,253	12,431	168.98	5,576	15,247
168.47	5,259	12,484	168.99	5,582	15,303
168.48	5,265	12,537	169.00	5,588	15,358
168.49	5,271	12,589	169.01	5,594	15,414
168.50	5,278	12,642	169.02	5,601	15,470
168.51	5,284	12,695	169.03	5,607	15,526
168.52	5,290	12,748	169.04	5,614	15,582
168.53	5,296	12,801	169.05	5,620	15,639
168.54	5,302	12,854	169.06	5,627	15,695
168.55	5,309	12,907	169.07	5,633	15,751
168.56	5,315	12,960	169.08	5,640	15,808
168.57	5,321	13,013	169.09	5,646	15,864
168.58	5,327	13,066	169.10	5,653	15,920
168.59	5,333	13,120	169.11	5,659	15,977
168.60	5,340	13,173	169.12	5,666	16,034
168.61	5,346	13,226	169.13	5,672	16,090
168.62	5,352	13,280	169.14	5,679	16,147
168.63	5,358	13,333	169.15	5,685	16,204
168.64	5,364	13,387	169.16	5,692	16,261
168.65	5,371	13,441	169.17	5,698	16,318
168.66	5,377	13,494	169.18	5,704	16,375
168.67	5,383	13,548	169.19	5,711	16,432
168.68	5,389	13,602	169.20	5,717	16,489
168.69	5,395	13,656	169.21	5,724	16,546
168.70	5,402	13,710	169.22	5,730	16,603
168.71	5,408	13,764	169.23	5,737	16,661
168.72	5,414	13,818	169.24	5,743	16,718
168.73	5,420	13,872	169.25	5,750	16,776
168.74	5,427	13,927	169.26	5,756	16,833
168.75	5,433	13,981	169.27	5,763	16,891
168.76	5,439	14,035	169.28	5,769	16,948
168.77	5,445	14,090	169.29	5,776	17,006
168.78	5,451	14,144	169.30	5,782	17,064
168.79	5,458	14,199	169.31	5,789	17,122
168.80	5,464	14,253	169.32	5,795	17,180
168.81	5,470	14,308	169.33	5,802	17,238
168.82	5,476	14,363	169.34	5,808	17,296
168.83	5,482	14,417	169.35	5,814	17,354
168.84	5,489	14,472	169.36	5,821	17,412
168.85	5,495	14,527	169.37	5,827	17,470
168.86	5,501	14,582	169.38	5,834	17,529
168.87	5,507	14,637	169.39	5,840	17,587
168.88	5,513	14,692	169.40	5,847	17,645
168.89	5,520	14,748	169.41	5,853	17,704
168.90	5,526	14,803	169.42	5,860	17,762
168.91	5,532	14,858	169.43	5,866	17,821
168.92	5,538	14,913	169.44	5,873	17,880
168.93	5,545	14,969	169.45	5,879	17,939

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	5,886	17,997
169.47	5,892	18,056
169.48	5,899	18,115
169.49	5,905	18,174
169.50	5,912	18,233
169.51	5,918	18,292
169.52	5,924	18,352
169.53	5,931	18,411
169.54	5,937	18,470
169.55	5,944	18,530
169.56	5,950	18,589
169.57	5,957	18,649
169.58	5,963	18,708
169.59	5,970	18,768
169.60	5,976	18,828
169.61	5,983	18,888
169.62	5,989	18,947
169.63	5,996	19,007
169.64	6,002	19,067
169.65	6,009	19,127
169.66	6,015	19,187
169.67	6,021	19,248
169.68	6,028	19,308
169.69	6,034	19,368
169.70	6,041	19,429
169.71	6,047	19,489
169.72	6,054	19,550
169.73	6,060	19,610
169.74	6,067	19,671
169.75	6,073	19,731
169.76	6,080	19,792
169.77	6,086	19,853
169.78	6,093	19,914
169.79	6,099	19,975
169.80	6,106	20,036
169.81	6,112	20,097
169.82	6,119	20,158
169.83	6,125	20,219
169.84	6,131	20,281
169.85	6,138	20,342
169.86	6,144	20,403
169.87	6,151	20,465
169.88	6,157	20,526
169.89	6,164	20,588
169.90	6,170	20,650
169.91	6,177	20,711
169.92	6,183	20,773
169.93	6,190	20,835
169.94	6,196	20,897
169.95	6,203	20,959
169.96	6,209	21,021
169.97	6,216	21,083
169.98	6,222	21,145
169.99	6,229	21,208
170.00	**6,235**	**21,270**

Summary for Pond B-46A: Basin #46A

Inflow Area = 2.480 ac, 46.25% Impervious, Inflow Depth = 4.24" for Future 10 yr event
Inflow = 10.63 cfs @ 12.17 hrs, Volume= 0.876 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond B-46B : Basin #46B

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.85' @ 24.60 hrs Surf.Area= 13,881 sf Storage= 38,169 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

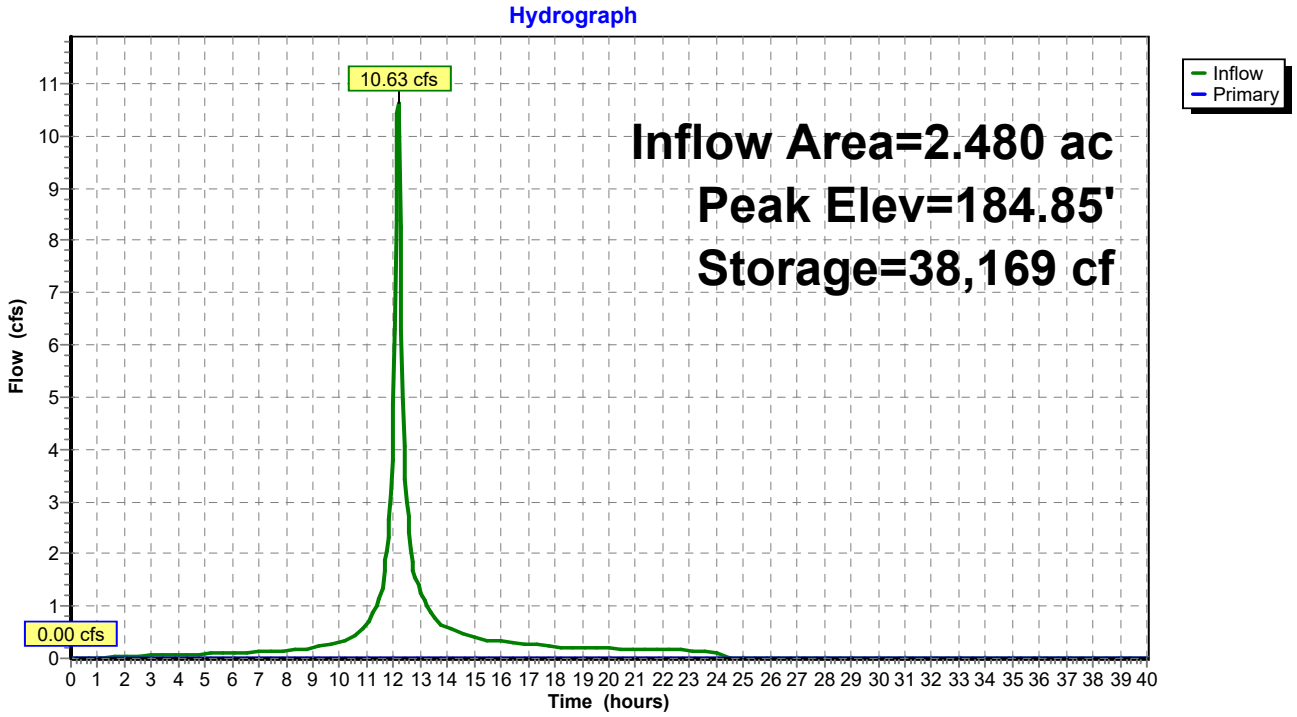
Volume	Invert	Avail.Storage	Storage Description
#1	181.00'	90,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.00	6,639	0	0
182.00	7,998	7,319	7,319
183.00	9,413	8,706	16,024
184.00	12,515	10,964	26,988
185.00	14,128	13,322	40,310
186.00	15,798	14,963	55,273
187.00	17,524	16,661	71,934
188.00	19,310	18,417	90,351

Device	Routing	Invert	Outlet Devices
#1	Primary	187.50'	**50.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=181.00' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond B-46A: Basin #46A



Stage-Discharge for Pond B-46A: Basin #46A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.00
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.00
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.00
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.00
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.00
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.00
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.00
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.00
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.00
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.00
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.00
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.00
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.00
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.00
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.00
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.00
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.00
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.00
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.00
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.00
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.00
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.00
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.00
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.00
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.00
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.00
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.00
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.00
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.00
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.00
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.00
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.00
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.00
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.00
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.00
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.00
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.00
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.00
181.48	0.00	182.00	0.00	182.52	0.00	183.04	0.00
181.49	0.00	182.01	0.00	182.53	0.00	183.05	0.00
181.50	0.00	182.02	0.00	182.54	0.00	183.06	0.00
181.51	0.00	182.03	0.00	182.55	0.00	183.07	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.08	0.00	183.60	0.00	184.12	0.00	184.64	0.00
183.09	0.00	183.61	0.00	184.13	0.00	184.65	0.00
183.10	0.00	183.62	0.00	184.14	0.00	184.66	0.00
183.11	0.00	183.63	0.00	184.15	0.00	184.67	0.00
183.12	0.00	183.64	0.00	184.16	0.00	184.68	0.00
183.13	0.00	183.65	0.00	184.17	0.00	184.69	0.00
183.14	0.00	183.66	0.00	184.18	0.00	184.70	0.00
183.15	0.00	183.67	0.00	184.19	0.00	184.71	0.00
183.16	0.00	183.68	0.00	184.20	0.00	184.72	0.00
183.17	0.00	183.69	0.00	184.21	0.00	184.73	0.00
183.18	0.00	183.70	0.00	184.22	0.00	184.74	0.00
183.19	0.00	183.71	0.00	184.23	0.00	184.75	0.00
183.20	0.00	183.72	0.00	184.24	0.00	184.76	0.00
183.21	0.00	183.73	0.00	184.25	0.00	184.77	0.00
183.22	0.00	183.74	0.00	184.26	0.00	184.78	0.00
183.23	0.00	183.75	0.00	184.27	0.00	184.79	0.00
183.24	0.00	183.76	0.00	184.28	0.00	184.80	0.00
183.25	0.00	183.77	0.00	184.29	0.00	184.81	0.00
183.26	0.00	183.78	0.00	184.30	0.00	184.82	0.00
183.27	0.00	183.79	0.00	184.31	0.00	184.83	0.00
183.28	0.00	183.80	0.00	184.32	0.00	184.84	0.00
183.29	0.00	183.81	0.00	184.33	0.00	184.85	0.00
183.30	0.00	183.82	0.00	184.34	0.00	184.86	0.00
183.31	0.00	183.83	0.00	184.35	0.00	184.87	0.00
183.32	0.00	183.84	0.00	184.36	0.00	184.88	0.00
183.33	0.00	183.85	0.00	184.37	0.00	184.89	0.00
183.34	0.00	183.86	0.00	184.38	0.00	184.90	0.00
183.35	0.00	183.87	0.00	184.39	0.00	184.91	0.00
183.36	0.00	183.88	0.00	184.40	0.00	184.92	0.00
183.37	0.00	183.89	0.00	184.41	0.00	184.93	0.00
183.38	0.00	183.90	0.00	184.42	0.00	184.94	0.00
183.39	0.00	183.91	0.00	184.43	0.00	184.95	0.00
183.40	0.00	183.92	0.00	184.44	0.00	184.96	0.00
183.41	0.00	183.93	0.00	184.45	0.00	184.97	0.00
183.42	0.00	183.94	0.00	184.46	0.00	184.98	0.00
183.43	0.00	183.95	0.00	184.47	0.00	184.99	0.00
183.44	0.00	183.96	0.00	184.48	0.00	185.00	0.00
183.45	0.00	183.97	0.00	184.49	0.00	185.01	0.00
183.46	0.00	183.98	0.00	184.50	0.00	185.02	0.00
183.47	0.00	183.99	0.00	184.51	0.00	185.03	0.00
183.48	0.00	184.00	0.00	184.52	0.00	185.04	0.00
183.49	0.00	184.01	0.00	184.53	0.00	185.05	0.00
183.50	0.00	184.02	0.00	184.54	0.00	185.06	0.00
183.51	0.00	184.03	0.00	184.55	0.00	185.07	0.00
183.52	0.00	184.04	0.00	184.56	0.00	185.08	0.00
183.53	0.00	184.05	0.00	184.57	0.00	185.09	0.00
183.54	0.00	184.06	0.00	184.58	0.00	185.10	0.00
183.55	0.00	184.07	0.00	184.59	0.00	185.11	0.00
183.56	0.00	184.08	0.00	184.60	0.00	185.12	0.00
183.57	0.00	184.09	0.00	184.61	0.00	185.13	0.00
183.58	0.00	184.10	0.00	184.62	0.00	185.14	0.00
183.59	0.00	184.11	0.00	184.63	0.00	185.15	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.16	0.00	185.68	0.00	186.20	0.00	186.72	0.00
185.17	0.00	185.69	0.00	186.21	0.00	186.73	0.00
185.18	0.00	185.70	0.00	186.22	0.00	186.74	0.00
185.19	0.00	185.71	0.00	186.23	0.00	186.75	0.00
185.20	0.00	185.72	0.00	186.24	0.00	186.76	0.00
185.21	0.00	185.73	0.00	186.25	0.00	186.77	0.00
185.22	0.00	185.74	0.00	186.26	0.00	186.78	0.00
185.23	0.00	185.75	0.00	186.27	0.00	186.79	0.00
185.24	0.00	185.76	0.00	186.28	0.00	186.80	0.00
185.25	0.00	185.77	0.00	186.29	0.00	186.81	0.00
185.26	0.00	185.78	0.00	186.30	0.00	186.82	0.00
185.27	0.00	185.79	0.00	186.31	0.00	186.83	0.00
185.28	0.00	185.80	0.00	186.32	0.00	186.84	0.00
185.29	0.00	185.81	0.00	186.33	0.00	186.85	0.00
185.30	0.00	185.82	0.00	186.34	0.00	186.86	0.00
185.31	0.00	185.83	0.00	186.35	0.00	186.87	0.00
185.32	0.00	185.84	0.00	186.36	0.00	186.88	0.00
185.33	0.00	185.85	0.00	186.37	0.00	186.89	0.00
185.34	0.00	185.86	0.00	186.38	0.00	186.90	0.00
185.35	0.00	185.87	0.00	186.39	0.00	186.91	0.00
185.36	0.00	185.88	0.00	186.40	0.00	186.92	0.00
185.37	0.00	185.89	0.00	186.41	0.00	186.93	0.00
185.38	0.00	185.90	0.00	186.42	0.00	186.94	0.00
185.39	0.00	185.91	0.00	186.43	0.00	186.95	0.00
185.40	0.00	185.92	0.00	186.44	0.00	186.96	0.00
185.41	0.00	185.93	0.00	186.45	0.00	186.97	0.00
185.42	0.00	185.94	0.00	186.46	0.00	186.98	0.00
185.43	0.00	185.95	0.00	186.47	0.00	186.99	0.00
185.44	0.00	185.96	0.00	186.48	0.00	187.00	0.00
185.45	0.00	185.97	0.00	186.49	0.00	187.01	0.00
185.46	0.00	185.98	0.00	186.50	0.00	187.02	0.00
185.47	0.00	185.99	0.00	186.51	0.00	187.03	0.00
185.48	0.00	186.00	0.00	186.52	0.00	187.04	0.00
185.49	0.00	186.01	0.00	186.53	0.00	187.05	0.00
185.50	0.00	186.02	0.00	186.54	0.00	187.06	0.00
185.51	0.00	186.03	0.00	186.55	0.00	187.07	0.00
185.52	0.00	186.04	0.00	186.56	0.00	187.08	0.00
185.53	0.00	186.05	0.00	186.57	0.00	187.09	0.00
185.54	0.00	186.06	0.00	186.58	0.00	187.10	0.00
185.55	0.00	186.07	0.00	186.59	0.00	187.11	0.00
185.56	0.00	186.08	0.00	186.60	0.00	187.12	0.00
185.57	0.00	186.09	0.00	186.61	0.00	187.13	0.00
185.58	0.00	186.10	0.00	186.62	0.00	187.14	0.00
185.59	0.00	186.11	0.00	186.63	0.00	187.15	0.00
185.60	0.00	186.12	0.00	186.64	0.00	187.16	0.00
185.61	0.00	186.13	0.00	186.65	0.00	187.17	0.00
185.62	0.00	186.14	0.00	186.66	0.00	187.18	0.00
185.63	0.00	186.15	0.00	186.67	0.00	187.19	0.00
185.64	0.00	186.16	0.00	186.68	0.00	187.20	0.00
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)
187.24	0.00
187.25	0.00
187.26	0.00
187.27	0.00
187.28	0.00
187.29	0.00
187.30	0.00
187.31	0.00
187.32	0.00
187.33	0.00
187.34	0.00
187.35	0.00
187.36	0.00
187.37	0.00
187.38	0.00
187.39	0.00
187.40	0.00
187.41	0.00
187.42	0.00
187.43	0.00
187.44	0.00
187.45	0.00
187.46	0.00
187.47	0.00
187.48	0.00
187.49	0.00
187.50	0.00
187.51	0.16
187.52	0.46
187.53	0.86
187.54	1.32
187.55	1.85
187.56	2.44
187.57	3.08
187.58	3.77
187.59	4.51
187.60	5.29
187.61	6.12
187.62	6.99
187.63	7.90
187.64	8.85
187.65	9.84
187.66	10.87
187.67	11.93
187.68	13.03
187.69	14.16
187.70	15.33
187.71	16.53
187.72	17.76
187.73	19.03
187.74	20.33
187.75	21.67
187.76	23.03
187.77	24.43
187.78	25.85
187.79	27.31
187.80	28.80
187.81	30.32
187.82	31.87
187.83	33.45
187.84	35.06
187.85	36.70
187.86	38.37
187.87	40.07
187.88	41.80
187.89	43.55
187.90	45.34
187.91	47.15
187.92	48.99
187.93	50.86
187.94	52.76
187.95	54.69
187.96	56.65
187.97	58.63
187.98	60.64
187.99	62.68
188.00	**64.75**

Stage-Area-Storage for Pond B-46A: Basin #46A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.00	6,639	0	181.52	7,346	3,636
181.01	6,653	66	181.53	7,359	3,710
181.02	6,666	133	181.54	7,373	3,783
181.03	6,680	200	181.55	7,386	3,857
181.04	6,693	267	181.56	7,400	3,931
181.05	6,707	334	181.57	7,414	4,005
181.06	6,721	401	181.58	7,427	4,079
181.07	6,734	468	181.59	7,441	4,154
181.08	6,748	535	181.60	7,454	4,228
181.09	6,761	603	181.61	7,468	4,303
181.10	6,775	671	181.62	7,482	4,377
181.11	6,788	739	181.63	7,495	4,452
181.12	6,802	806	181.64	7,509	4,527
181.13	6,816	875	181.65	7,522	4,602
181.14	6,829	943	181.66	7,536	4,678
181.15	6,843	1,011	181.67	7,550	4,753
181.16	6,856	1,080	181.68	7,563	4,829
181.17	6,870	1,148	181.69	7,577	4,904
181.18	6,884	1,217	181.70	7,590	4,980
181.19	6,897	1,286	181.71	7,604	5,056
181.20	6,911	1,355	181.72	7,617	5,132
181.21	6,924	1,424	181.73	7,631	5,209
181.22	6,938	1,493	181.74	7,645	5,285
181.23	6,952	1,563	181.75	7,658	5,361
181.24	6,965	1,632	181.76	7,672	5,438
181.25	6,979	1,702	181.77	7,685	5,515
181.26	6,992	1,772	181.78	7,699	5,592
181.27	7,006	1,842	181.79	7,713	5,669
181.28	7,020	1,912	181.80	7,726	5,746
181.29	7,033	1,982	181.81	7,740	5,823
181.30	7,047	2,053	181.82	7,753	5,901
181.31	7,060	2,123	181.83	7,767	5,978
181.32	7,074	2,194	181.84	7,781	6,056
181.33	7,087	2,265	181.85	7,794	6,134
181.34	7,101	2,336	181.86	7,808	6,212
181.35	7,115	2,407	181.87	7,821	6,290
181.36	7,128	2,478	181.88	7,835	6,369
181.37	7,142	2,549	181.89	7,849	6,447
181.38	7,155	2,621	181.90	7,862	6,525
181.39	7,169	2,693	181.91	7,876	6,604
181.40	7,183	2,764	181.92	7,889	6,683
181.41	7,196	2,836	181.93	7,903	6,762
181.42	7,210	2,908	181.94	7,916	6,841
181.43	7,223	2,980	181.95	7,930	6,920
181.44	7,237	3,053	181.96	7,944	7,000
181.45	7,251	3,125	181.97	7,957	7,079
181.46	7,264	3,198	181.98	7,971	7,159
181.47	7,278	3,270	181.99	7,984	7,239
181.48	7,291	3,343	182.00	7,998	7,319
181.49	7,305	3,416	182.01	8,012	7,399
181.50	7,319	3,489	182.02	8,026	7,479
181.51	7,332	3,563	182.03	8,040	7,559

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.04	8,055	7,640	182.56	8,790	12,019
182.05	8,069	7,720	182.57	8,805	12,107
182.06	8,083	7,801	182.58	8,819	12,195
182.07	8,097	7,882	182.59	8,833	12,284
182.08	8,111	7,963	182.60	8,847	12,372
182.09	8,125	8,044	182.61	8,861	12,461
182.10	8,139	8,125	182.62	8,875	12,549
182.11	8,154	8,207	182.63	8,889	12,638
182.12	8,168	8,288	182.64	8,904	12,727
182.13	8,182	8,370	182.65	8,918	12,816
182.14	8,196	8,452	182.66	8,932	12,905
182.15	8,210	8,534	182.67	8,946	12,995
182.16	8,224	8,616	182.68	8,960	13,084
182.17	8,239	8,699	182.69	8,974	13,174
182.18	8,253	8,781	182.70	8,988	13,264
182.19	8,267	8,864	182.71	9,003	13,354
182.20	8,281	8,946	182.72	9,017	13,444
182.21	8,295	9,029	182.73	9,031	13,534
182.22	8,309	9,112	182.74	9,045	13,624
182.23	8,323	9,195	182.75	9,059	13,715
182.24	8,338	9,279	182.76	9,073	13,806
182.25	8,352	9,362	182.77	9,088	13,896
182.26	8,366	9,446	182.78	9,102	13,987
182.27	8,380	9,530	182.79	9,116	14,078
182.28	8,394	9,613	182.80	9,130	14,170
182.29	8,408	9,697	182.81	9,144	14,261
182.30	8,423	9,782	182.82	9,158	14,353
182.31	8,437	9,866	182.83	9,172	14,444
182.32	8,451	9,950	182.84	9,187	14,536
182.33	8,465	10,035	182.85	9,201	14,628
182.34	8,479	10,120	182.86	9,215	14,720
182.35	8,493	10,204	182.87	9,229	14,812
182.36	8,507	10,289	182.88	9,243	14,905
182.37	8,522	10,375	182.89	9,257	14,997
182.38	8,536	10,460	182.90	9,272	15,090
182.39	8,550	10,545	182.91	9,286	15,183
182.40	8,564	10,631	182.92	9,300	15,275
182.41	8,578	10,717	182.93	9,314	15,369
182.42	8,592	10,802	182.94	9,328	15,462
182.43	8,606	10,888	182.95	9,342	15,555
182.44	8,621	10,975	182.96	9,356	15,649
182.45	8,635	11,061	182.97	9,371	15,742
182.46	8,649	11,147	182.98	9,385	15,836
182.47	8,663	11,234	182.99	9,399	15,930
182.48	8,677	11,321	183.00	9,413	16,024
182.49	8,691	11,407	183.01	9,444	16,118
182.50	8,706	11,494	183.02	9,475	16,213
182.51	8,720	11,582	183.03	9,506	16,308
182.52	8,734	11,669	183.04	9,537	16,403
182.53	8,748	11,756	183.05	9,568	16,499
182.54	8,762	11,844	183.06	9,599	16,594
182.55	8,776	11,931	183.07	9,630	16,691

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.08	9,661	16,787	183.60	11,274	22,230
183.09	9,692	16,884	183.61	11,305	22,343
183.10	9,723	16,981	183.62	11,336	22,456
183.11	9,754	17,078	183.63	11,367	22,570
183.12	9,785	17,176	183.64	11,398	22,684
183.13	9,816	17,274	183.65	11,429	22,798
183.14	9,847	17,372	183.66	11,460	22,912
183.15	9,878	17,471	183.67	11,491	23,027
183.16	9,909	17,570	183.68	11,522	23,142
183.17	9,940	17,669	183.69	11,553	23,257
183.18	9,971	17,769	183.70	11,584	23,373
183.19	10,002	17,868	183.71	11,615	23,489
183.20	10,033	17,969	183.72	11,646	23,605
183.21	10,064	18,069	183.73	11,677	23,722
183.22	10,095	18,170	183.74	11,708	23,839
183.23	10,126	18,271	183.75	11,740	23,956
183.24	10,157	18,372	183.76	11,771	24,074
183.25	10,189	18,474	183.77	11,802	24,192
183.26	10,220	18,576	183.78	11,833	24,310
183.27	10,251	18,679	183.79	11,864	24,428
183.28	10,282	18,781	183.80	11,895	24,547
183.29	10,313	18,884	183.81	11,926	24,666
183.30	10,344	18,987	183.82	11,957	24,786
183.31	10,375	19,091	183.83	11,988	24,905
183.32	10,406	19,195	183.84	12,019	25,025
183.33	10,437	19,299	183.85	12,050	25,146
183.34	10,468	19,404	183.86	12,081	25,266
183.35	10,499	19,509	183.87	12,112	25,387
183.36	10,530	19,614	183.88	12,143	25,509
183.37	10,561	19,719	183.89	12,174	25,630
183.38	10,592	19,825	183.90	12,205	25,752
183.39	10,623	19,931	183.91	12,236	25,874
183.40	10,654	20,037	183.92	12,267	25,997
183.41	10,685	20,144	183.93	12,298	26,120
183.42	10,716	20,251	183.94	12,329	26,243
183.43	10,747	20,358	183.95	12,360	26,366
183.44	10,778	20,466	183.96	12,391	26,490
183.45	10,809	20,574	183.97	12,422	26,614
183.46	10,840	20,682	183.98	12,453	26,738
183.47	10,871	20,791	183.99	12,484	26,863
183.48	10,902	20,900	184.00	12,515	26,988
183.49	10,933	21,009	184.01	12,531	27,113
183.50	10,964	21,118	184.02	12,547	27,239
183.51	10,995	21,228	184.03	12,563	27,364
183.52	11,026	21,338	184.04	12,580	27,490
183.53	11,057	21,449	184.05	12,596	27,616
183.54	11,088	21,559	184.06	12,612	27,742
183.55	11,119	21,670	184.07	12,628	27,868
183.56	11,150	21,782	184.08	12,644	27,994
183.57	11,181	21,893	184.09	12,660	28,121
183.58	11,212	22,005	184.10	12,676	28,248
183.59	11,243	22,118	184.11	12,692	28,374

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.12	12,709	28,501	184.64	13,547	35,328
184.13	12,725	28,629	184.65	13,563	35,463
184.14	12,741	28,756	184.66	13,580	35,599
184.15	12,757	28,883	184.67	13,596	35,735
184.16	12,773	29,011	184.68	13,612	35,871
184.17	12,789	29,139	184.69	13,628	36,007
184.18	12,805	29,267	184.70	13,644	36,144
184.19	12,821	29,395	184.71	13,660	36,280
184.20	12,838	29,523	184.72	13,676	36,417
184.21	12,854	29,652	184.73	13,692	36,554
184.22	12,870	29,780	184.74	13,709	36,691
184.23	12,886	29,909	184.75	13,725	36,828
184.24	12,902	30,038	184.76	13,741	36,965
184.25	12,918	30,167	184.77	13,757	37,103
184.26	12,934	30,296	184.78	13,773	37,240
184.27	12,951	30,426	184.79	13,789	37,378
184.28	12,967	30,555	184.80	13,805	37,516
184.29	12,983	30,685	184.81	13,822	37,654
184.30	12,999	30,815	184.82	13,838	37,793
184.31	13,015	30,945	184.83	13,854	37,931
184.32	13,031	31,075	184.84	13,870	38,070
184.33	13,047	31,206	184.85	13,886	38,208
184.34	13,063	31,336	184.86	13,902	38,347
184.35	13,080	31,467	184.87	13,918	38,486
184.36	13,096	31,598	184.88	13,934	38,626
184.37	13,112	31,729	184.89	13,951	38,765
184.38	13,128	31,860	184.90	13,967	38,905
184.39	13,144	31,992	184.91	13,983	39,045
184.40	13,160	32,123	184.92	13,999	39,184
184.41	13,176	32,255	184.93	14,015	39,324
184.42	13,192	32,387	184.94	14,031	39,465
184.43	13,209	32,519	184.95	14,047	39,605
184.44	13,225	32,651	184.96	14,063	39,746
184.45	13,241	32,783	184.97	14,080	39,886
184.46	13,257	32,916	184.98	14,096	40,027
184.47	13,273	33,048	184.99	14,112	40,168
184.48	13,289	33,181	185.00	14,128	40,310
184.49	13,305	33,314	185.01	14,145	40,451
184.50	13,322	33,447	185.02	14,161	40,592
184.51	13,338	33,580	185.03	14,178	40,734
184.52	13,354	33,714	185.04	14,195	40,876
184.53	13,370	33,847	185.05	14,212	41,018
184.54	13,386	33,981	185.06	14,228	41,160
184.55	13,402	34,115	185.07	14,245	41,303
184.56	13,418	34,249	185.08	14,262	41,445
184.57	13,434	34,384	185.09	14,278	41,588
184.58	13,451	34,518	185.10	14,295	41,731
184.59	13,467	34,653	185.11	14,312	41,874
184.60	13,483	34,787	185.12	14,328	42,017
184.61	13,499	34,922	185.13	14,345	42,160
184.62	13,515	35,057	185.14	14,362	42,304
184.63	13,531	35,193	185.15	14,379	42,447

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.16	14,395	42,591	185.68	15,264	50,303
185.17	14,412	42,735	185.69	15,280	50,455
185.18	14,429	42,880	185.70	15,297	50,608
185.19	14,445	43,024	185.71	15,314	50,761
185.20	14,462	43,168	185.72	15,330	50,915
185.21	14,479	43,313	185.73	15,347	51,068
185.22	14,495	43,458	185.74	15,364	51,221
185.23	14,512	43,603	185.75	15,381	51,375
185.24	14,529	43,748	185.76	15,397	51,529
185.25	14,546	43,894	185.77	15,414	51,683
185.26	14,562	44,039	185.78	15,431	51,837
185.27	14,579	44,185	185.79	15,447	51,992
185.28	14,596	44,331	185.80	15,464	52,146
185.29	14,612	44,477	185.81	15,481	52,301
185.30	14,629	44,623	185.82	15,497	52,456
185.31	14,646	44,769	185.83	15,514	52,611
185.32	14,662	44,916	185.84	15,531	52,766
185.33	14,679	45,063	185.85	15,547	52,922
185.34	14,696	45,210	185.86	15,564	53,077
185.35	14,712	45,357	185.87	15,581	53,233
185.36	14,729	45,504	185.88	15,598	53,389
185.37	14,746	45,651	185.89	15,614	53,545
185.38	14,763	45,799	185.90	15,631	53,701
185.39	14,779	45,946	185.91	15,648	53,857
185.40	14,796	46,094	185.92	15,664	54,014
185.41	14,813	46,242	185.93	15,681	54,171
185.42	14,829	46,391	185.94	15,698	54,328
185.43	14,846	46,539	185.95	15,714	54,485
185.44	14,863	46,687	185.96	15,731	54,642
185.45	14,879	46,836	185.97	15,748	54,799
185.46	14,896	46,985	185.98	15,765	54,957
185.47	14,913	47,134	185.99	15,781	55,115
185.48	14,930	47,283	186.00	15,798	55,273
185.49	14,946	47,433	186.01	15,815	55,431
185.50	14,963	47,582	186.02	15,833	55,589
185.51	14,980	47,732	186.03	15,850	55,747
185.52	14,996	47,882	186.04	15,867	55,906
185.53	15,013	48,032	186.05	15,884	56,065
185.54	15,030	48,182	186.06	15,902	56,223
185.55	15,047	48,332	186.07	15,919	56,383
185.56	15,063	48,483	186.08	15,936	56,542
185.57	15,080	48,634	186.09	15,953	56,701
185.58	15,097	48,785	186.10	15,971	56,861
185.59	15,113	48,936	186.11	15,988	57,021
185.60	15,130	49,087	186.12	16,005	57,181
185.61	15,147	49,238	186.13	16,022	57,341
185.62	15,163	49,390	186.14	16,040	57,501
185.63	15,180	49,542	186.15	16,057	57,662
185.64	15,197	49,693	186.16	16,074	57,822
185.65	15,214	49,845	186.17	16,091	57,983
185.66	15,230	49,998	186.18	16,109	58,144
185.67	15,247	50,150	186.19	16,126	58,305

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.20	16,143	58,467	186.72	17,041	67,094
186.21	16,160	58,628	186.73	17,058	67,265
186.22	16,178	58,790	186.74	17,075	67,436
186.23	16,195	58,952	186.75	17,093	67,606
186.24	16,212	59,114	186.76	17,110	67,777
186.25	16,230	59,276	186.77	17,127	67,949
186.26	16,247	59,438	186.78	17,144	68,120
186.27	16,264	59,601	186.79	17,162	68,292
186.28	16,281	59,764	186.80	17,179	68,463
186.29	16,299	59,926	186.81	17,196	68,635
186.30	16,316	60,090	186.82	17,213	68,807
186.31	16,333	60,253	186.83	17,231	68,979
186.32	16,350	60,416	186.84	17,248	69,152
186.33	16,368	60,580	186.85	17,265	69,324
186.34	16,385	60,744	186.86	17,282	69,497
186.35	16,402	60,908	186.87	17,300	69,670
186.36	16,419	61,072	186.88	17,317	69,843
186.37	16,437	61,236	186.89	17,334	70,016
186.38	16,454	61,400	186.90	17,351	70,190
186.39	16,471	61,565	186.91	17,369	70,363
186.40	16,488	61,730	186.92	17,386	70,537
186.41	16,506	61,895	186.93	17,403	70,711
186.42	16,523	62,060	186.94	17,420	70,885
186.43	16,540	62,225	186.95	17,438	71,059
186.44	16,557	62,391	186.96	17,455	71,234
186.45	16,575	62,556	186.97	17,472	71,409
186.46	16,592	62,722	186.98	17,489	71,583
186.47	16,609	62,888	186.99	17,507	71,758
186.48	16,626	63,054	187.00	17,524	71,934
186.49	16,644	63,221	187.01	17,542	72,109
186.50	16,661	63,387	187.02	17,560	72,284
186.51	16,678	63,554	187.03	17,578	72,460
186.52	16,696	63,721	187.04	17,595	72,636
186.53	16,713	63,888	187.05	17,613	72,812
186.54	16,730	64,055	187.06	17,631	72,988
186.55	16,747	64,222	187.07	17,649	73,165
186.56	16,765	64,390	187.08	17,667	73,341
186.57	16,782	64,558	187.09	17,685	73,518
186.58	16,799	64,726	187.10	17,703	73,695
186.59	16,816	64,894	187.11	17,720	73,872
186.60	16,834	65,062	187.12	17,738	74,049
186.61	16,851	65,230	187.13	17,756	74,227
186.62	16,868	65,399	187.14	17,774	74,404
186.63	16,885	65,568	187.15	17,792	74,582
186.64	16,903	65,737	187.16	17,810	74,760
186.65	16,920	65,906	187.17	17,828	74,938
186.66	16,937	66,075	187.18	17,845	75,117
186.67	16,954	66,245	187.19	17,863	75,295
186.68	16,972	66,414	187.20	17,881	75,474
186.69	16,989	66,584	187.21	17,899	75,653
186.70	17,006	66,754	187.22	17,917	75,832
186.71	17,023	66,924	187.23	17,935	76,011

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.24	17,953	76,191
187.25	17,971	76,370
187.26	17,988	76,550
187.27	18,006	76,730
187.28	18,024	76,910
187.29	18,042	77,091
187.30	18,060	77,271
187.31	18,078	77,452
187.32	18,096	77,633
187.33	18,113	77,814
187.34	18,131	77,995
187.35	18,149	78,176
187.36	18,167	78,358
187.37	18,185	78,540
187.38	18,203	78,722
187.39	18,221	78,904
187.40	18,238	79,086
187.41	18,256	79,268
187.42	18,274	79,451
187.43	18,292	79,634
187.44	18,310	79,817
187.45	18,328	80,000
187.46	18,346	80,183
187.47	18,363	80,367
187.48	18,381	80,551
187.49	18,399	80,735
187.50	18,417	80,919
187.51	18,435	81,103
187.52	18,453	81,287
187.53	18,471	81,472
187.54	18,488	81,657
187.55	18,506	81,842
187.56	18,524	82,027
187.57	18,542	82,212
187.58	18,560	82,398
187.59	18,578	82,584
187.60	18,596	82,769
187.61	18,613	82,955
187.62	18,631	83,142
187.63	18,649	83,328
187.64	18,667	83,515
187.65	18,685	83,701
187.66	18,703	83,888
187.67	18,721	84,075
187.68	18,738	84,263
187.69	18,756	84,450
187.70	18,774	84,638
187.71	18,792	84,826
187.72	18,810	85,014
187.73	18,828	85,202
187.74	18,846	85,390
187.75	18,864	85,579
187.76	18,881	85,768
187.77	18,899	85,956
187.78	18,917	86,146
187.79	18,935	86,335
187.80	18,953	86,524
187.81	18,971	86,714
187.82	18,989	86,904
187.83	19,006	87,094
187.84	19,024	87,284
187.85	19,042	87,474
187.86	19,060	87,665
187.87	19,078	87,855
187.88	19,096	88,046
187.89	19,114	88,237
187.90	19,131	88,428
187.91	19,149	88,620
187.92	19,167	88,811
187.93	19,185	89,003
187.94	19,203	89,195
187.95	19,221	89,387
187.96	19,239	89,580
187.97	19,256	89,772
187.98	19,274	89,965
187.99	19,292	90,157
188.00	**19,310**	**90,351**

Summary for Pond B-46B: Basin #46B

Inflow Area = 2.931 ac, 39.13% Impervious, Inflow Depth = 0.47" for Future 10 yr event
Inflow = 2.02 cfs @ 12.05 hrs, Volume= 0.115 af
Outflow = 0.04 cfs @ 17.47 hrs, Volume= 0.055 af, Atten= 98%, Lag= 325.2 min
Primary = 0.04 cfs @ 17.47 hrs, Volume= 0.055 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 183.99' @ 17.47 hrs Surf.Area= 10,822 sf Storage= 3,707 cf

Plug-Flow detention time= 659.1 min calculated for 0.055 af (48% of inflow)
Center-of-Mass det. time= 539.9 min (1,367.6 - 827.7)

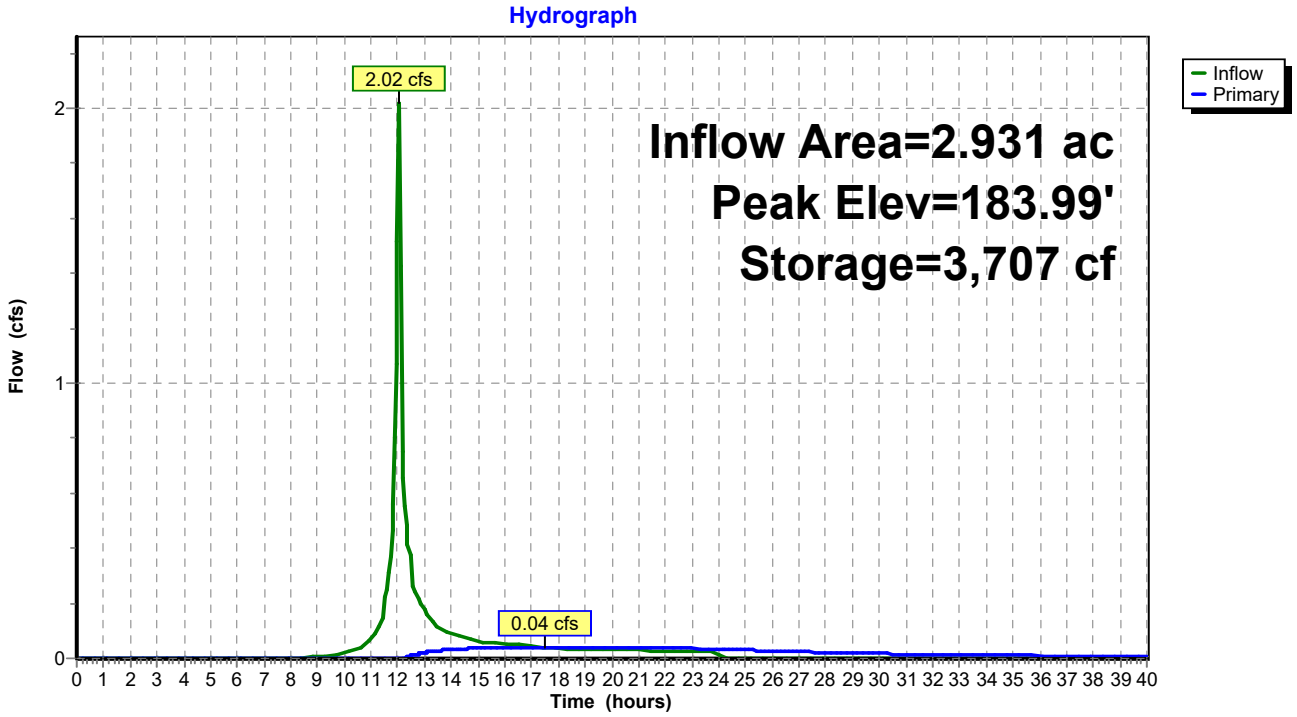
Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	59,250 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	11,059	3,871	3,871
185.00	12,402	11,731	15,601
186.00	13,803	13,103	28,704
187.00	15,259	14,531	43,235
188.00	16,772	16,016	59,250

Device	Routing	Invert	Outlet Devices
#1	Primary	182.65'	**18.0" Round Culvert** L= 65.0' Ke= 0.500 Inlet / Outlet Invert= 182.65' / 176.00' S= 0.1023 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.82'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.45'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.75'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.04 cfs @ 17.47 hrs HW=183.99' (Free Discharge)
- **1=Culvert** (Passes 0.04 cfs of 6.54 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.04 cfs @ 1.38 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-46B: Basin #46B



Stage-Discharge for Pond B-46B: Basin #46B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.30	0.00	183.82	0.00	184.34	0.11	184.86	3.52
183.31	0.00	183.83	0.00	184.35	0.11	184.87	3.65
183.32	0.00	183.84	0.00	184.36	0.11	184.88	3.77
183.33	0.00	183.85	0.00	184.37	0.11	184.89	3.89
183.34	0.00	183.86	0.00	184.38	0.11	184.90	4.02
183.35	0.00	183.87	0.00	184.39	0.11	184.91	4.15
183.36	0.00	183.88	0.01	184.40	0.11	184.92	4.28
183.37	0.00	183.89	0.01	184.41	0.11	184.93	4.41
183.38	0.00	183.90	0.01	184.42	0.12	184.94	4.54
183.39	0.00	183.91	0.01	184.43	0.12	184.95	4.68
183.40	0.00	183.92	0.02	184.44	0.12	184.96	4.81
183.41	0.00	183.93	0.02	184.45	0.12	184.97	4.95
183.42	0.00	183.94	0.02	184.46	0.13	184.98	5.08
183.43	0.00	183.95	0.03	184.47	0.16	184.99	5.22
183.44	0.00	183.96	0.03	184.48	0.19	185.00	5.36
183.45	0.00	183.97	0.03	184.49	0.23	185.01	5.50
183.46	0.00	183.98	0.04	184.50	0.27	185.02	5.64
183.47	0.00	183.99	0.04	184.51	0.32	185.03	5.78
183.48	0.00	184.00	0.05	184.52	0.37	185.04	5.93
183.49	0.00	184.01	0.05	184.53	0.42	185.05	6.07
183.50	0.00	184.02	0.05	184.54	0.48	185.06	6.22
183.51	0.00	184.03	0.05	184.55	0.54	185.07	6.36
183.52	0.00	184.04	0.06	184.56	0.61	185.08	6.51
183.53	0.00	184.05	0.06	184.57	0.67	185.09	6.66
183.54	0.00	184.06	0.06	184.58	0.74	185.10	6.81
183.55	0.00	184.07	0.06	184.59	0.81	185.11	6.96
183.56	0.00	184.08	0.06	184.60	0.89	185.12	7.11
183.57	0.00	184.09	0.07	184.61	0.97	185.13	7.27
183.58	0.00	184.10	0.07	184.62	1.05	185.14	7.42
183.59	0.00	184.11	0.07	184.63	1.13	185.15	7.57
183.60	0.00	184.12	0.07	184.64	1.21	185.16	7.73
183.61	0.00	184.13	0.07	184.65	1.30	185.17	7.89
183.62	0.00	184.14	0.08	184.66	1.39	185.18	8.04
183.63	0.00	184.15	0.08	184.67	1.48	185.19	8.20
183.64	0.00	184.16	0.08	184.68	1.57	185.20	8.36
183.65	0.00	184.17	0.08	184.69	1.66	185.21	8.52
183.66	0.00	184.18	0.08	184.70	1.76	185.22	8.68
183.67	0.00	184.19	0.08	184.71	1.86	185.23	8.85
183.68	0.00	184.20	0.09	184.72	1.96	185.24	9.01
183.69	0.00	184.21	0.09	184.73	2.06	185.25	9.17
183.70	0.00	184.22	0.09	184.74	2.16	185.26	9.34
183.71	0.00	184.23	0.09	184.75	2.27	185.27	9.50
183.72	0.00	184.24	0.09	184.76	2.37	185.28	9.67
183.73	0.00	184.25	0.09	184.77	2.48	185.29	9.84
183.74	0.00	184.26	0.10	184.78	2.59	185.30	10.01
183.75	0.00	184.27	0.10	184.79	2.70	185.31	10.18
183.76	0.00	184.28	0.10	184.80	2.81	185.32	10.35
183.77	0.00	184.29	0.10	184.81	2.93	185.33	10.52
183.78	0.00	184.30	0.10	184.82	3.04	185.34	10.69
183.79	0.00	184.31	0.10	184.83	3.16	185.35	10.86
183.80	0.00	184.32	0.10	184.84	3.28	185.36	11.03
183.81	0.00	184.33	0.10	184.85	3.40	185.37	11.21

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.38	11.38	185.90	20.30	186.42	91.01	186.94	198.59
185.39	11.56	185.91	21.03	186.43	92.75	186.95	200.94
185.40	11.74	185.92	21.78	186.44	94.51	186.96	203.32
185.41	11.91	185.93	22.55	186.45	96.28	186.97	205.72
185.42	12.09	185.94	23.34	186.46	98.06	186.98	208.13
185.43	12.12	185.95	24.15	186.47	99.86	186.99	210.55
185.44	12.15	185.96	25.03	186.48	101.66	187.00	212.98
185.45	12.18	185.97	25.92	186.49	103.49	187.01	215.43
185.46	12.21	185.98	26.85	186.50	105.32	187.02	217.88
185.47	12.24	185.99	27.80	186.51	107.16	187.03	220.34
185.48	12.27	186.00	28.77	186.52	109.02	187.04	222.82
185.49	12.30	186.01	29.77	186.53	110.89	187.05	225.30
185.50	12.33	186.02	30.80	186.54	112.77	187.06	227.79
185.51	12.36	186.03	31.85	186.55	114.67	187.07	230.30
185.52	12.39	186.04	32.92	186.56	116.61	187.08	232.82
185.53	12.42	186.05	34.02	186.57	118.57	187.09	235.34
185.54	12.45	186.06	35.14	186.58	120.54	187.10	237.88
185.55	12.48	186.07	36.29	186.59	122.52	187.11	240.42
185.56	12.51	186.08	37.46	186.60	124.52	187.12	242.98
185.57	12.53	186.09	38.66	186.61	126.53	187.13	245.55
185.58	12.56	186.10	39.88	186.62	128.55	187.14	248.13
185.59	12.59	186.11	41.12	186.63	130.58	187.15	250.71
185.60	12.62	186.12	42.39	186.64	132.63	187.16	253.36
185.61	12.65	186.13	43.68	186.65	134.69	187.17	256.01
185.62	12.68	186.14	45.00	186.66	136.77	187.18	258.67
185.63	12.71	186.15	46.34	186.67	138.85	187.19	261.35
185.64	12.73	186.16	47.73	186.68	140.95	187.20	264.04
185.65	12.76	186.17	49.15	186.69	143.07	187.21	266.74
185.66	12.79	186.18	50.59	186.70	145.19	187.22	269.45
185.67	12.82	186.19	52.06	186.71	147.33	187.23	272.17
185.68	12.85	186.20	53.56	186.72	149.48	187.24	274.90
185.69	12.88	186.21	55.08	186.73	151.64	187.25	277.64
185.70	12.90	186.22	56.63	186.74	153.82	187.26	280.39
185.71	12.93	186.23	58.20	186.75	156.01	187.27	283.16
185.72	12.96	186.24	59.80	186.76	158.15	187.28	285.93
185.73	12.99	186.25	61.43	186.77	160.31	187.29	288.72
185.74	13.02	186.26	63.08	186.78	162.48	187.30	291.52
185.75	13.04	186.27	64.76	186.79	164.66	187.31	294.32
185.76	13.19	186.28	66.47	186.80	166.85	187.32	297.14
185.77	13.43	186.29	68.20	186.81	169.05	187.33	299.97
185.78	13.74	186.30	69.96	186.82	171.26	187.34	302.81
185.79	14.09	186.31	71.75	186.83	173.48	187.35	305.67
185.80	14.49	186.32	73.56	186.84	175.71	187.36	308.53
185.81	14.93	186.33	75.40	186.85	177.95	187.37	311.40
185.82	15.41	186.34	77.27	186.86	180.21	187.38	314.29
185.83	15.92	186.35	79.16	186.87	182.47	187.39	317.18
185.84	16.46	186.36	80.82	186.88	184.74	187.40	320.09
185.85	17.04	186.37	82.48	186.89	187.03	187.41	323.00
185.86	17.64	186.38	84.16	186.90	189.32	187.42	325.93
185.87	18.26	186.39	85.85	186.91	191.62	187.43	328.87
185.88	18.92	186.40	87.56	186.92	193.94	187.44	331.82
185.89	19.60	186.41	89.27	186.93	196.26	187.45	334.78

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)
187.46	337.75
187.47	340.73
187.48	343.72
187.49	346.72
187.50	349.74
187.51	352.76
187.52	355.79
187.53	358.84
187.54	361.90
187.55	364.96
187.56	368.04
187.57	371.13
187.58	374.22
187.59	377.33
187.60	380.45
187.61	383.58
187.62	386.72
187.63	389.87
187.64	393.03
187.65	396.20
187.66	399.38
187.67	402.58
187.68	405.78
187.69	408.99
187.70	412.22
187.71	415.45
187.72	418.69
187.73	421.95
187.74	425.21
187.75	428.49
187.76	431.84
187.77	435.20
187.78	438.57
187.79	441.95
187.80	445.35
187.81	448.75
187.82	452.17
187.83	455.60
187.84	459.04
187.85	462.49
187.86	465.95
187.87	469.42
187.88	472.91
187.89	476.40
187.90	479.91
187.91	483.43
187.92	486.96
187.93	490.50
187.94	494.05
187.95	497.61
187.96	501.19
187.97	504.78
187.98	508.37
187.99	511.98
188.00	**515.60**

Stage-Area-Storage for Pond B-46B: Basin #46B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.30	0	0	183.82	8,215	2,136
183.31	158	1	183.83	8,373	2,219
183.32	316	3	183.84	8,531	2,303
183.33	474	7	183.85	8,689	2,390
183.34	632	13	183.86	8,847	2,477
183.35	790	20	183.87	9,005	2,566
183.36	948	28	183.88	9,163	2,657
183.37	1,106	39	183.89	9,321	2,750
183.38	1,264	51	183.90	9,479	2,844
183.39	1,422	64	183.91	9,637	2,939
183.40	1,580	79	183.92	9,795	3,036
183.41	1,738	96	183.93	9,953	3,135
183.42	1,896	114	183.94	10,111	3,236
183.43	2,054	133	183.95	10,269	3,337
183.44	2,212	155	183.96	10,427	3,441
183.45	2,370	178	183.97	10,585	3,546
183.46	2,528	202	183.98	10,743	3,653
183.47	2,686	228	183.99	10,901	3,761
183.48	2,844	256	184.00	11,059	3,871
183.49	3,002	285	184.01	11,072	3,981
183.50	3,160	316	184.02	11,086	4,092
183.51	3,318	348	184.03	11,099	4,203
183.52	3,476	382	184.04	11,113	4,314
183.53	3,634	418	184.05	11,126	4,425
183.54	3,792	455	184.06	11,140	4,537
183.55	3,950	494	184.07	11,153	4,648
183.56	4,108	534	184.08	11,166	4,760
183.57	4,266	576	184.09	11,180	4,871
183.58	4,424	619	184.10	11,193	4,983
183.59	4,582	664	184.11	11,207	5,095
183.60	4,740	711	184.12	11,220	5,207
183.61	4,898	759	184.13	11,234	5,320
183.62	5,056	809	184.14	11,247	5,432
183.63	5,214	860	184.15	11,260	5,545
183.64	5,372	913	184.16	11,274	5,657
183.65	5,530	968	184.17	11,287	5,770
183.66	5,687	1,024	184.18	11,301	5,883
183.67	5,845	1,081	184.19	11,314	5,996
183.68	6,003	1,141	184.20	11,328	6,109
183.69	6,161	1,201	184.21	11,341	6,223
183.70	6,319	1,264	184.22	11,354	6,336
183.71	6,477	1,328	184.23	11,368	6,450
183.72	6,635	1,393	184.24	11,381	6,563
183.73	6,793	1,461	184.25	11,395	6,677
183.74	6,951	1,529	184.26	11,408	6,791
183.75	7,109	1,600	184.27	11,422	6,906
183.76	7,267	1,671	184.28	11,435	7,020
183.77	7,425	1,745	184.29	11,448	7,134
183.78	7,583	1,820	184.30	11,462	7,249
183.79	7,741	1,897	184.31	11,475	7,363
183.80	7,899	1,975	184.32	11,489	7,478
183.81	8,057	2,055	184.33	11,502	7,593

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.34	11,516	7,708	184.86	12,214	13,878
184.35	11,529	7,824	184.87	12,227	14,000
184.36	11,542	7,939	184.88	12,241	14,123
184.37	11,556	8,054	184.89	12,254	14,245
184.38	11,569	8,170	184.90	12,268	14,368
184.39	11,583	8,286	184.91	12,281	14,490
184.40	11,596	8,402	184.92	12,295	14,613
184.41	11,610	8,518	184.93	12,308	14,736
184.42	11,623	8,634	184.94	12,321	14,859
184.43	11,636	8,750	184.95	12,335	14,983
184.44	11,650	8,867	184.96	12,348	15,106
184.45	11,663	8,983	184.97	12,362	15,230
184.46	11,677	9,100	184.98	12,375	15,353
184.47	11,690	9,217	184.99	12,389	15,477
184.48	11,704	9,334	185.00	12,402	15,601
184.49	11,717	9,451	185.01	12,416	15,725
184.50	11,731	9,568	185.02	12,430	15,849
184.51	11,744	9,685	185.03	12,444	15,974
184.52	11,757	9,803	185.04	12,458	16,098
184.53	11,771	9,921	185.05	12,472	16,223
184.54	11,784	10,038	185.06	12,486	16,348
184.55	11,798	10,156	185.07	12,500	16,473
184.56	11,811	10,274	185.08	12,514	16,598
184.57	11,825	10,392	185.09	12,528	16,723
184.58	11,838	10,511	185.10	12,542	16,848
184.59	11,851	10,629	185.11	12,556	16,974
184.60	11,865	10,748	185.12	12,570	17,099
184.61	11,878	10,867	185.13	12,584	17,225
184.62	11,892	10,985	185.14	12,598	17,351
184.63	11,905	11,104	185.15	12,612	17,477
184.64	11,919	11,223	185.16	12,626	17,603
184.65	11,932	11,343	185.17	12,640	17,730
184.66	11,945	11,462	185.18	12,654	17,856
184.67	11,959	11,582	185.19	12,668	17,983
184.68	11,972	11,701	185.20	12,682	18,110
184.69	11,986	11,821	185.21	12,696	18,236
184.70	11,999	11,941	185.22	12,710	18,363
184.71	12,013	12,061	185.23	12,724	18,491
184.72	12,026	12,181	185.24	12,738	18,618
184.73	12,039	12,302	185.25	12,752	18,745
184.74	12,053	12,422	185.26	12,766	18,873
184.75	12,066	12,543	185.27	12,780	19,001
184.76	12,080	12,663	185.28	12,794	19,129
184.77	12,093	12,784	185.29	12,808	19,257
184.78	12,107	12,905	185.30	12,822	19,385
184.79	12,120	13,026	185.31	12,836	19,513
184.80	12,133	13,148	185.32	12,850	19,642
184.81	12,147	13,269	185.33	12,864	19,770
184.82	12,160	13,391	185.34	12,878	19,899
184.83	12,174	13,512	185.35	12,892	20,028
184.84	12,187	13,634	185.36	12,906	20,157
184.85	12,201	13,756	185.37	12,920	20,286

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.38	12,934	20,415	185.90	13,663	27,330
185.39	12,948	20,544	185.91	13,677	27,467
185.40	12,962	20,674	185.92	13,691	27,604
185.41	12,976	20,804	185.93	13,705	27,741
185.42	12,990	20,934	185.94	13,719	27,878
185.43	13,004	21,064	185.95	13,733	28,015
185.44	13,018	21,194	185.96	13,747	28,153
185.45	13,032	21,324	185.97	13,761	28,290
185.46	13,046	21,454	185.98	13,775	28,428
185.47	13,060	21,585	185.99	13,789	28,566
185.48	13,074	21,716	186.00	13,803	28,704
185.49	13,088	21,846	186.01	13,818	28,842
185.50	13,103	21,977	186.02	13,832	28,980
185.51	13,117	22,108	186.03	13,847	29,118
185.52	13,131	22,240	186.04	13,861	29,257
185.53	13,145	22,371	186.05	13,876	29,396
185.54	13,159	22,502	186.06	13,890	29,534
185.55	13,173	22,634	186.07	13,905	29,673
185.56	13,187	22,766	186.08	13,919	29,813
185.57	13,201	22,898	186.09	13,934	29,952
185.58	13,215	23,030	186.10	13,949	30,091
185.59	13,229	23,162	186.11	13,963	30,231
185.60	13,243	23,295	186.12	13,978	30,370
185.61	13,257	23,427	186.13	13,992	30,510
185.62	13,271	23,560	186.14	14,007	30,650
185.63	13,285	23,692	186.15	14,021	30,790
185.64	13,299	23,825	186.16	14,036	30,931
185.65	13,313	23,958	186.17	14,051	31,071
185.66	13,327	24,092	186.18	14,065	31,212
185.67	13,341	24,225	186.19	14,080	31,353
185.68	13,355	24,358	186.20	14,094	31,493
185.69	13,369	24,492	186.21	14,109	31,634
185.70	13,383	24,626	186.22	14,123	31,776
185.71	13,397	24,760	186.23	14,138	31,917
185.72	13,411	24,894	186.24	14,152	32,058
185.73	13,425	25,028	186.25	14,167	32,200
185.74	13,439	25,162	186.26	14,182	32,342
185.75	13,453	25,297	186.27	14,196	32,484
185.76	13,467	25,431	186.28	14,211	32,626
185.77	13,481	25,566	186.29	14,225	32,768
185.78	13,495	25,701	186.30	14,240	32,910
185.79	13,509	25,836	186.31	14,254	33,053
185.80	13,523	25,971	186.32	14,269	33,195
185.81	13,537	26,106	186.33	14,283	33,338
185.82	13,551	26,242	186.34	14,298	33,481
185.83	13,565	26,377	186.35	14,313	33,624
185.84	13,579	26,513	186.36	14,327	33,767
185.85	13,593	26,649	186.37	14,342	33,910
185.86	13,607	26,785	186.38	14,356	34,054
185.87	13,621	26,921	186.39	14,371	34,198
185.88	13,635	27,057	186.40	14,385	34,341
185.89	13,649	27,194	186.41	14,400	34,485

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.42	14,415	34,629	186.94	15,172	42,322
186.43	14,429	34,774	186.95	15,186	42,474
186.44	14,444	34,918	186.96	15,201	42,625
186.45	14,458	35,062	186.97	15,215	42,778
186.46	14,473	35,207	186.98	15,230	42,930
186.47	14,487	35,352	186.99	15,244	43,082
186.48	14,502	35,497	187.00	15,259	43,235
186.49	14,516	35,642	187.01	15,274	43,387
186.50	14,531	35,787	187.02	15,289	43,540
186.51	14,546	35,933	187.03	15,304	43,693
186.52	14,560	36,078	187.04	15,320	43,846
186.53	14,575	36,224	187.05	15,335	43,999
186.54	14,589	36,370	187.06	15,350	44,153
186.55	14,604	36,516	187.07	15,365	44,306
186.56	14,618	36,662	187.08	15,380	44,460
186.57	14,633	36,808	187.09	15,395	44,614
186.58	14,647	36,954	187.10	15,410	44,768
186.59	14,662	37,101	187.11	15,425	44,922
186.60	14,677	37,248	187.12	15,441	45,077
186.61	14,691	37,394	187.13	15,456	45,231
186.62	14,706	37,541	187.14	15,471	45,386
186.63	14,720	37,688	187.15	15,486	45,541
186.64	14,735	37,836	187.16	15,501	45,695
186.65	14,749	37,983	187.17	15,516	45,851
186.66	14,764	38,131	187.18	15,531	46,006
186.67	14,779	38,278	187.19	15,546	46,161
186.68	14,793	38,426	187.20	15,562	46,317
186.69	14,808	38,574	187.21	15,577	46,472
186.70	14,822	38,722	187.22	15,592	46,628
186.71	14,837	38,871	187.23	15,607	46,784
186.72	14,851	39,019	187.24	15,622	46,940
186.73	14,866	39,168	187.25	15,637	47,097
186.74	14,880	39,317	187.26	15,652	47,253
186.75	14,895	39,465	187.27	15,668	47,410
186.76	14,910	39,614	187.28	15,683	47,566
186.77	14,924	39,764	187.29	15,698	47,723
186.78	14,939	39,913	187.30	15,713	47,880
186.79	14,953	40,062	187.31	15,728	48,038
186.80	14,968	40,212	187.32	15,743	48,195
186.81	14,982	40,362	187.33	15,758	48,353
186.82	14,997	40,512	187.34	15,773	48,510
186.83	15,011	40,662	187.35	15,789	48,668
186.84	15,026	40,812	187.36	15,804	48,826
186.85	15,041	40,962	187.37	15,819	48,984
186.86	15,055	41,113	187.38	15,834	49,142
186.87	15,070	41,263	187.39	15,849	49,301
186.88	15,084	41,414	187.40	15,864	49,459
186.89	15,099	41,565	187.41	15,879	49,618
186.90	15,113	41,716	187.42	15,894	49,777
186.91	15,128	41,867	187.43	15,910	49,936
186.92	15,143	42,019	187.44	15,925	50,095
186.93	15,157	42,170	187.45	15,940	50,254

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.46	15,955	50,414
187.47	15,970	50,573
187.48	15,985	50,733
187.49	16,000	50,893
187.50	16,016	51,053
187.51	16,031	51,214
187.52	16,046	51,374
187.53	16,061	51,534
187.54	16,076	51,695
187.55	16,091	51,856
187.56	16,106	52,017
187.57	16,121	52,178
187.58	16,137	52,339
187.59	16,152	52,501
187.60	16,167	52,662
187.61	16,182	52,824
187.62	16,197	52,986
187.63	16,212	53,148
187.64	16,227	53,310
187.65	16,242	53,473
187.66	16,258	53,635
187.67	16,273	53,798
187.68	16,288	53,961
187.69	16,303	54,124
187.70	16,318	54,287
187.71	16,333	54,450
187.72	16,348	54,613
187.73	16,363	54,777
187.74	16,379	54,941
187.75	16,394	55,104
187.76	16,409	55,268
187.77	16,424	55,433
187.78	16,439	55,597
187.79	16,454	55,761
187.80	16,469	55,926
187.81	16,485	56,091
187.82	16,500	56,256
187.83	16,515	56,421
187.84	16,530	56,586
187.85	16,545	56,751
187.86	16,560	56,917
187.87	16,575	57,083
187.88	16,590	57,248
187.89	16,606	57,414
187.90	16,621	57,581
187.91	16,636	57,747
187.92	16,651	57,913
187.93	16,666	58,080
187.94	16,681	58,247
187.95	16,696	58,413
187.96	16,711	58,580
187.97	16,727	58,748
187.98	16,742	58,915
187.99	16,757	59,083
188.00	**16,772**	**59,250**

Summary for Pond B-47: Basin #47

Inflow Area = 2.436 ac, 30.62% Impervious, Inflow Depth = 3.84" for Future 10 yr event
Inflow = 9.70 cfs @ 12.17 hrs, Volume= 0.780 af
Outflow = 0.80 cfs @ 13.44 hrs, Volume= 0.484 af, Atten= 92%, Lag= 75.8 min
Primary = 0.80 cfs @ 13.44 hrs, Volume= 0.484 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 189.66' @ 13.44 hrs Surf.Area= 22,588 sf Storage= 21,875 cf

Plug-Flow detention time= 577.1 min calculated for 0.484 af (62% of inflow)
Center-of-Mass det. time= 465.8 min (1,263.9 - 798.0)

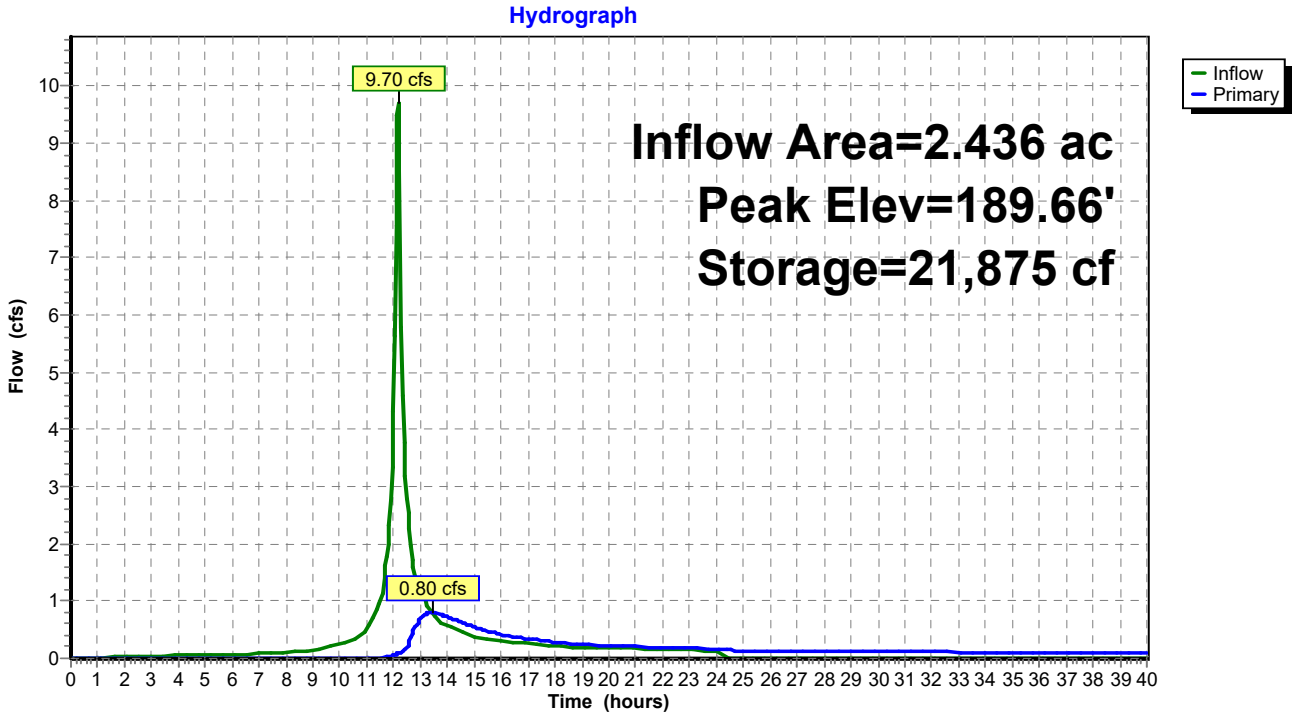
Volume	Invert	Avail.Storage	Storage Description
#1	188.30'	80,305 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
188.30	0	0	0
189.00	21,318	7,461	7,461
190.00	23,252	22,285	29,746
191.00	25,242	24,247	53,993
192.00	27,382	26,312	80,305

Device	Routing	Invert	Outlet Devices
#1	Primary	187.65'	**18.0" Round Culvert** L= 62.0' Ke= 0.500 Inlet / Outlet Invert= 187.65' / 184.00' S= 0.0589 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.84'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.52'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.51'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.79 cfs @ 13.44 hrs HW=189.66' (Free Discharge)
- **1=Culvert** (Passes 0.79 cfs of 9.54 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.14 cfs @ 4.06 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.66 cfs @ 1.21 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-47: Basin #47



Stage-Discharge for Pond B-47: Basin #47

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.30	0.00	188.82	0.00	189.34	0.10	189.86	2.71
188.31	0.00	188.83	0.00	189.35	0.10	189.87	2.82
188.32	0.00	188.84	0.00	189.36	0.11	189.88	2.93
188.33	0.00	188.85	0.00	189.37	0.11	189.89	3.05
188.34	0.00	188.86	0.00	189.38	0.11	189.90	3.17
188.35	0.00	188.87	0.00	189.39	0.11	189.91	3.28
188.36	0.00	188.88	0.00	189.40	0.11	189.92	3.40
188.37	0.00	188.89	0.00	189.41	0.11	189.93	3.53
188.38	0.00	188.90	0.01	189.42	0.11	189.94	3.65
188.39	0.00	188.91	0.01	189.43	0.11	189.95	3.77
188.40	0.00	188.92	0.01	189.44	0.12	189.96	3.90
188.41	0.00	188.93	0.01	189.45	0.12	189.97	4.03
188.42	0.00	188.94	0.02	189.46	0.12	189.98	4.15
188.43	0.00	188.95	0.02	189.47	0.12	189.99	4.28
188.44	0.00	188.96	0.02	189.48	0.12	190.00	4.41
188.45	0.00	188.97	0.03	189.49	0.12	190.01	4.55
188.46	0.00	188.98	0.03	189.50	0.12	190.02	4.68
188.47	0.00	188.99	0.03	189.51	0.12	190.03	4.81
188.48	0.00	189.00	0.04	189.52	0.12	190.04	4.95
188.49	0.00	189.01	0.04	189.53	0.14	190.05	5.09
188.50	0.00	189.02	0.05	189.54	0.16	190.06	5.22
188.51	0.00	189.03	0.05	189.55	0.20	190.07	5.36
188.52	0.00	189.04	0.05	189.56	0.23	190.08	5.50
188.53	0.00	189.05	0.05	189.57	0.28	190.09	5.64
188.54	0.00	189.06	0.06	189.58	0.32	190.10	5.79
188.55	0.00	189.07	0.06	189.59	0.37	190.11	5.93
188.56	0.00	189.08	0.06	189.60	0.43	190.12	6.07
188.57	0.00	189.09	0.06	189.61	0.49	190.13	6.22
188.58	0.00	189.10	0.06	189.62	0.55	190.14	6.37
188.59	0.00	189.11	0.07	189.63	0.61	190.15	6.51
188.60	0.00	189.12	0.07	189.64	0.68	190.16	6.66
188.61	0.00	189.13	0.07	189.65	0.75	190.17	6.81
188.62	0.00	189.14	0.07	189.66	0.82	190.18	6.96
188.63	0.00	189.15	0.07	189.67	0.89	190.19	7.12
188.64	0.00	189.16	0.08	189.68	0.97	190.20	7.27
188.65	0.00	189.17	0.08	189.69	1.05	190.21	7.42
188.66	0.00	189.18	0.08	189.70	1.13	190.22	7.58
188.67	0.00	189.19	0.08	189.71	1.22	190.23	7.73
188.68	0.00	189.20	0.08	189.72	1.30	190.24	7.89
188.69	0.00	189.21	0.08	189.73	1.39	190.25	8.05
188.70	0.00	189.22	0.09	189.74	1.48	190.26	8.21
188.71	0.00	189.23	0.09	189.75	1.57	190.27	8.37
188.72	0.00	189.24	0.09	189.76	1.67	190.28	8.53
188.73	0.00	189.25	0.09	189.77	1.76	190.29	8.69
188.74	0.00	189.26	0.09	189.78	1.86	190.30	8.85
188.75	0.00	189.27	0.09	189.79	1.96	190.31	9.01
188.76	0.00	189.28	0.10	189.80	2.06	190.32	9.18
188.77	0.00	189.29	0.10	189.81	2.17	190.33	9.34
188.78	0.00	189.30	0.10	189.82	2.27	190.34	9.51
188.79	0.00	189.31	0.10	189.83	2.38	190.35	9.67
188.80	0.00	189.32	0.10	189.84	2.49	190.36	9.84
188.81	0.00	189.33	0.10	189.85	2.59	190.37	10.01

Stage-Discharge for Pond B-47: Basin #47 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.38	10.18	190.90	44.37	191.42	136.19	191.94	258.14
190.39	10.35	190.91	45.71	191.43	138.28	191.95	260.82
190.40	10.52	190.92	47.10	191.44	140.38	191.96	263.51
190.41	10.69	190.93	48.52	191.45	142.49	191.97	266.20
190.42	10.86	190.94	49.97	191.46	144.62	191.98	268.91
190.43	11.04	190.95	51.44	191.47	146.76	191.99	271.64
190.44	11.21	190.96	52.93	191.48	148.91	192.00	**274.37**
190.45	11.39	190.97	54.46	191.49	151.07		
190.46	11.56	190.98	56.01	191.50	153.25		
190.47	11.74	190.99	57.58	191.51	155.44		
190.48	11.92	191.00	59.18	191.52	157.59		
190.49	12.09	191.01	60.81	191.53	159.74		
190.50	12.27	191.02	62.47	191.54	161.91		
190.51	12.36	191.03	64.15	191.55	164.09		
190.52	12.51	191.04	65.85	191.56	166.28		
190.53	12.75	191.05	67.59	191.57	168.49		
190.54	13.06	191.06	69.35	191.58	170.70		
190.55	13.41	191.07	71.14	191.59	172.92		
190.56	13.82	191.08	72.95	191.60	175.15		
190.57	14.26	191.09	74.79	191.61	177.39		
190.58	14.74	191.10	76.66	191.62	179.65		
190.59	15.25	191.11	78.56	191.63	181.91		
190.60	15.79	191.12	80.21	191.64	184.18		
190.61	16.37	191.13	81.88	191.65	186.47		
190.62	16.97	191.14	83.55	191.66	188.76		
190.63	17.60	191.15	85.25	191.67	191.07		
190.64	18.25	191.16	86.95	191.68	193.38		
190.65	18.93	191.17	88.67	191.69	195.71		
190.66	19.64	191.18	90.41	191.70	198.04		
190.67	20.37	191.19	92.15	191.71	200.38		
190.68	21.12	191.20	93.91	191.72	202.77		
190.69	21.89	191.21	95.68	191.73	205.17		
190.70	22.68	191.22	97.47	191.74	207.58		
190.71	23.50	191.23	99.26	191.75	210.01		
190.72	24.37	191.24	101.07	191.76	212.44		
190.73	25.27	191.25	102.89	191.77	214.88		
190.74	26.20	191.26	104.73	191.78	217.33		
190.75	27.15	191.27	106.57	191.79	219.80		
190.76	28.12	191.28	108.43	191.80	222.27		
190.77	29.13	191.29	110.30	191.81	224.76		
190.78	30.15	191.30	112.18	191.82	227.25		
190.79	31.20	191.31	114.08	191.83	229.76		
190.80	32.28	191.32	116.02	191.84	232.27		
190.81	33.38	191.33	117.98	191.85	234.80		
190.82	34.50	191.34	119.95	191.86	237.34		
190.83	35.65	191.35	121.94	191.87	239.88		
190.84	36.82	191.36	123.93	191.88	242.44		
190.85	38.02	191.37	125.94	191.89	245.01		
190.86	39.24	191.38	127.97	191.90	247.59		
190.87	40.49	191.39	130.00	191.91	250.18		
190.88	41.76	191.40	132.05	191.92	252.82		
190.89	43.05	191.41	134.12	191.93	255.48		

Stage-Area-Storage for Pond B-47: Basin #47

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.30	0	0	188.82	15,836	4,117
188.31	305	2	188.83	16,141	4,277
188.32	609	6	188.84	16,445	4,440
188.33	914	14	188.85	16,750	4,606
188.34	1,218	24	188.86	17,054	4,775
188.35	1,523	38	188.87	17,359	4,947
188.36	1,827	55	188.88	17,663	5,122
188.37	2,132	75	188.89	17,968	5,301
188.38	2,436	97	188.90	18,273	5,482
188.39	2,741	123	188.91	18,577	5,666
188.40	3,045	152	188.92	18,882	5,853
188.41	3,350	184	188.93	19,186	6,044
188.42	3,655	219	188.94	19,491	6,237
188.43	3,959	257	188.95	19,795	6,433
188.44	4,264	298	188.96	20,100	6,633
188.45	4,568	343	188.97	20,404	6,835
188.46	4,873	390	188.98	20,709	7,041
188.47	5,177	440	188.99	21,013	7,250
188.48	5,482	493	189.00	21,318	7,461
188.49	5,786	550	189.01	21,337	7,675
188.50	6,091	609	189.02	21,357	7,888
188.51	6,395	672	189.03	21,376	8,102
188.52	6,700	737	189.04	21,395	8,316
188.53	7,004	806	189.05	21,415	8,530
188.54	7,309	877	189.06	21,434	8,744
188.55	7,614	952	189.07	21,453	8,958
188.56	7,918	1,029	189.08	21,473	9,173
188.57	8,223	1,110	189.09	21,492	9,388
188.58	8,527	1,194	189.10	21,511	9,603
188.59	8,832	1,281	189.11	21,531	9,818
188.60	9,136	1,370	189.12	21,550	10,033
188.61	9,441	1,463	189.13	21,569	10,249
188.62	9,745	1,559	189.14	21,589	10,465
188.63	10,050	1,658	189.15	21,608	10,681
188.64	10,354	1,760	189.16	21,627	10,897
188.65	10,659	1,865	189.17	21,647	11,113
188.66	10,964	1,973	189.18	21,666	11,330
188.67	11,268	2,085	189.19	21,685	11,547
188.68	11,573	2,199	189.20	21,705	11,764
188.69	11,877	2,316	189.21	21,724	11,981
188.70	12,182	2,436	189.22	21,743	12,198
188.71	12,486	2,560	189.23	21,763	12,416
188.72	12,791	2,686	189.24	21,782	12,633
188.73	13,095	2,815	189.25	21,802	12,851
188.74	13,400	2,948	189.26	21,821	13,069
188.75	13,704	3,083	189.27	21,840	13,288
188.76	14,009	3,222	189.28	21,860	13,506
188.77	14,314	3,364	189.29	21,879	13,725
188.78	14,618	3,508	189.30	21,898	13,944
188.79	14,923	3,656	189.31	21,918	14,163
188.80	15,227	3,807	189.32	21,937	14,382
188.81	15,532	3,961	189.33	21,956	14,602

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.34	21,976	14,821	189.86	22,981	26,510
189.35	21,995	15,041	189.87	23,001	26,740
189.36	22,014	15,261	189.88	23,020	26,970
189.37	22,034	15,481	189.89	23,039	27,200
189.38	22,053	15,702	189.90	23,059	27,431
189.39	22,072	15,922	189.91	23,078	27,661
189.40	22,092	16,143	189.92	23,097	27,892
189.41	22,111	16,364	189.93	23,117	28,123
189.42	22,130	16,585	189.94	23,136	28,355
189.43	22,150	16,807	189.95	23,155	28,586
189.44	22,169	17,028	189.96	23,175	28,818
189.45	22,188	17,250	189.97	23,194	29,050
189.46	22,208	17,472	189.98	23,213	29,282
189.47	22,227	17,694	189.99	23,233	29,514
189.48	22,246	17,917	190.00	23,252	29,746
189.49	22,266	18,139	190.01	23,272	29,979
189.50	22,285	18,362	190.02	23,292	30,212
189.51	22,304	18,585	190.03	23,312	30,445
189.52	22,324	18,808	190.04	23,332	30,678
189.53	22,343	19,031	190.05	23,352	30,911
189.54	22,362	19,255	190.06	23,371	31,145
189.55	22,382	19,479	190.07	23,391	31,379
189.56	22,401	19,703	190.08	23,411	31,613
189.57	22,420	19,927	190.09	23,431	31,847
189.58	22,440	20,151	190.10	23,451	32,081
189.59	22,459	20,376	190.11	23,471	32,316
189.60	22,478	20,600	190.12	23,491	32,551
189.61	22,498	20,825	190.13	23,511	32,786
189.62	22,517	21,050	190.14	23,531	33,021
189.63	22,536	21,275	190.15	23,551	33,256
189.64	22,556	21,501	190.16	23,570	33,492
189.65	22,575	21,727	190.17	23,590	33,728
189.66	22,594	21,952	190.18	23,610	33,964
189.67	22,614	22,178	190.19	23,630	34,200
189.68	22,633	22,405	190.20	23,650	34,437
189.69	22,652	22,631	190.21	23,670	34,673
189.70	22,672	22,858	190.22	23,690	34,910
189.71	22,691	23,085	190.23	23,710	35,147
189.72	22,710	23,312	190.24	23,730	35,384
189.73	22,730	23,539	190.25	23,750	35,621
189.74	22,749	23,766	190.26	23,769	35,859
189.75	22,769	23,994	190.27	23,789	36,097
189.76	22,788	24,222	190.28	23,809	36,335
189.77	22,807	24,449	190.29	23,829	36,573
189.78	22,827	24,678	190.30	23,849	36,811
189.79	22,846	24,906	190.31	23,869	37,050
189.80	22,865	25,135	190.32	23,889	37,289
189.81	22,885	25,363	190.33	23,909	37,528
189.82	22,904	25,592	190.34	23,929	37,767
189.83	22,923	25,821	190.35	23,949	38,006
189.84	22,943	26,051	190.36	23,968	38,246
189.85	22,962	26,280	190.37	23,988	38,486

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.38	24,008	38,726	190.90	25,043	51,479
190.39	24,028	38,966	190.91	25,063	51,730
190.40	24,048	39,206	190.92	25,083	51,980
190.41	24,068	39,447	190.93	25,103	52,231
190.42	24,088	39,688	190.94	25,123	52,482
190.43	24,108	39,929	190.95	25,143	52,734
190.44	24,128	40,170	190.96	25,162	52,985
190.45	24,148	40,411	190.97	25,182	53,237
190.46	24,167	40,653	190.98	25,202	53,489
190.47	24,187	40,895	190.99	25,222	53,741
190.48	24,207	41,137	191.00	25,242	53,993
190.49	24,227	41,379	191.01	25,263	54,246
190.50	24,247	41,621	191.02	25,285	54,499
190.51	24,267	41,864	191.03	25,306	54,752
190.52	24,287	42,106	191.04	25,328	55,005
190.53	24,307	42,349	191.05	25,349	55,258
190.54	24,327	42,593	191.06	25,370	55,512
190.55	24,347	42,836	191.07	25,392	55,765
190.56	24,366	43,079	191.08	25,413	56,020
190.57	24,386	43,323	191.09	25,435	56,274
190.58	24,406	43,567	191.10	25,456	56,528
190.59	24,426	43,811	191.11	25,477	56,783
190.60	24,446	44,056	191.12	25,499	57,038
190.61	24,466	44,300	191.13	25,520	57,293
190.62	24,486	44,545	191.14	25,542	57,548
190.63	24,506	44,790	191.15	25,563	57,804
190.64	24,526	45,035	191.16	25,584	58,059
190.65	24,546	45,280	191.17	25,606	58,315
190.66	24,565	45,526	191.18	25,627	58,572
190.67	24,585	45,772	191.19	25,649	58,828
190.68	24,605	46,018	191.20	25,670	59,085
190.69	24,625	46,264	191.21	25,691	59,341
190.70	24,645	46,510	191.22	25,713	59,598
190.71	24,665	46,757	191.23	25,734	59,856
190.72	24,685	47,004	191.24	25,756	60,113
190.73	24,705	47,250	191.25	25,777	60,371
190.74	24,725	47,498	191.26	25,798	60,629
190.75	24,745	47,745	191.27	25,820	60,887
190.76	24,764	47,993	191.28	25,841	61,145
190.77	24,784	48,240	191.29	25,863	61,403
190.78	24,804	48,488	191.30	25,884	61,662
190.79	24,824	48,736	191.31	25,905	61,921
190.80	24,844	48,985	191.32	25,927	62,180
190.81	24,864	49,233	191.33	25,948	62,440
190.82	24,884	49,482	191.34	25,970	62,699
190.83	24,904	49,731	191.35	25,991	62,959
190.84	24,924	49,980	191.36	26,012	63,219
190.85	24,944	50,229	191.37	26,034	63,479
190.86	24,963	50,479	191.38	26,055	63,740
190.87	24,983	50,729	191.39	26,077	64,000
190.88	25,003	50,979	191.40	26,098	64,261
190.89	25,023	51,229	191.41	26,119	64,522

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

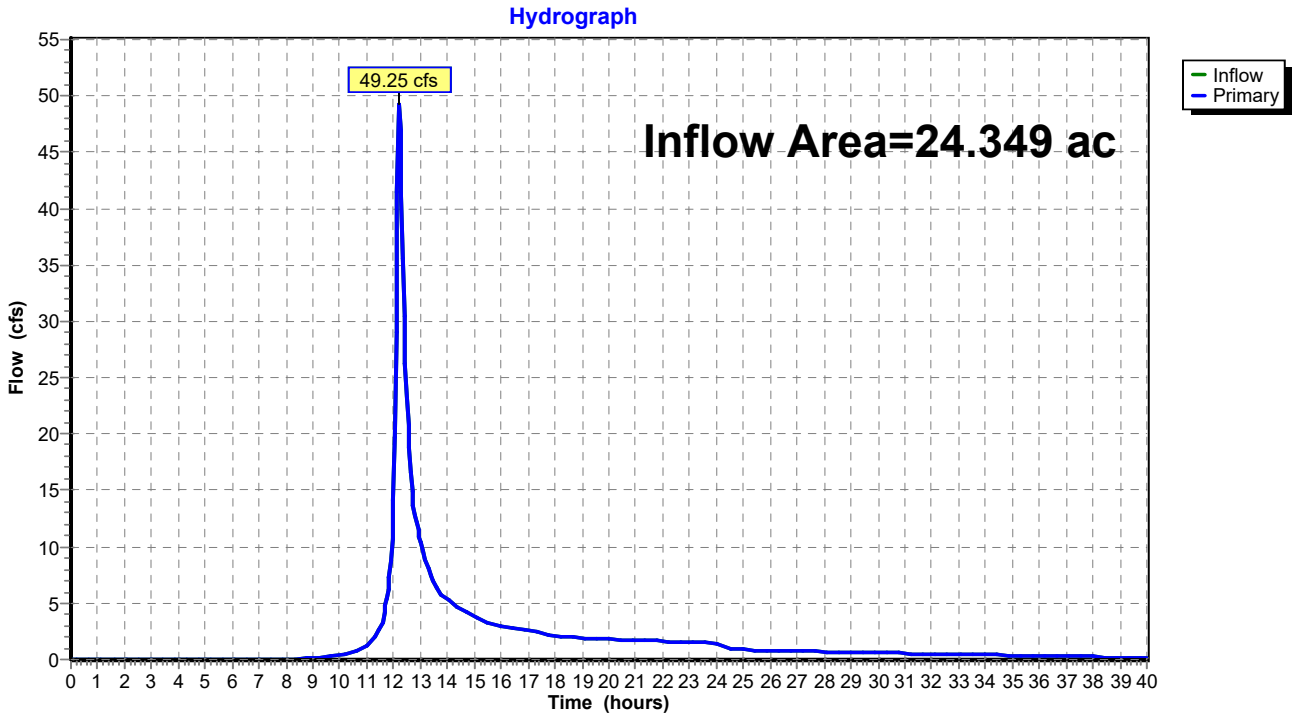
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.42	26,141	64,784
191.43	26,162	65,045
191.44	26,184	65,307
191.45	26,205	65,569
191.46	26,226	65,831
191.47	26,248	66,093
191.48	26,269	66,356
191.49	26,291	66,619
191.50	26,312	66,882
191.51	26,333	67,145
191.52	26,355	67,408
191.53	26,376	67,672
191.54	26,398	67,936
191.55	26,419	68,200
191.56	26,440	68,464
191.57	26,462	68,729
191.58	26,483	68,994
191.59	26,505	69,259
191.60	26,526	69,524
191.61	26,547	69,789
191.62	26,569	70,055
191.63	26,590	70,320
191.64	26,612	70,586
191.65	26,633	70,853
191.66	26,654	71,119
191.67	26,676	71,386
191.68	26,697	71,653
191.69	26,719	71,920
191.70	26,740	72,187
191.71	26,761	72,455
191.72	26,783	72,722
191.73	26,804	72,990
191.74	26,826	73,258
191.75	26,847	73,527
191.76	26,868	73,795
191.77	26,890	74,064
191.78	26,911	74,333
191.79	26,933	74,602
191.80	26,954	74,872
191.81	26,975	75,141
191.82	26,997	75,411
191.83	27,018	75,681
191.84	27,040	75,952
191.85	27,061	76,222
191.86	27,082	76,493
191.87	27,104	76,764
191.88	27,125	77,035
191.89	27,147	77,306
191.90	27,168	77,578
191.91	27,189	77,850
191.92	27,211	78,122
191.93	27,232	78,394
191.94	27,254	78,666
191.95	27,275	78,939
191.96	27,296	79,212
191.97	27,318	79,485
191.98	27,339	79,758
191.99	27,361	80,032
192.00	**27,382**	**80,305**

Summary for Link PDA-4: Proposed Drainage Area #4

Inflow Area = 24.349 ac, 23.20% Impervious, Inflow Depth > 2.78" for Future 10 yr event
Inflow = 49.25 cfs @ 12.21 hrs, Volume= 5.632 af
Primary = 49.25 cfs @ 12.21 hrs, Volume= 5.632 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-4: Proposed Drainage Area #4



Summary for Subcatchment 41I: PDA-41 (impervious)

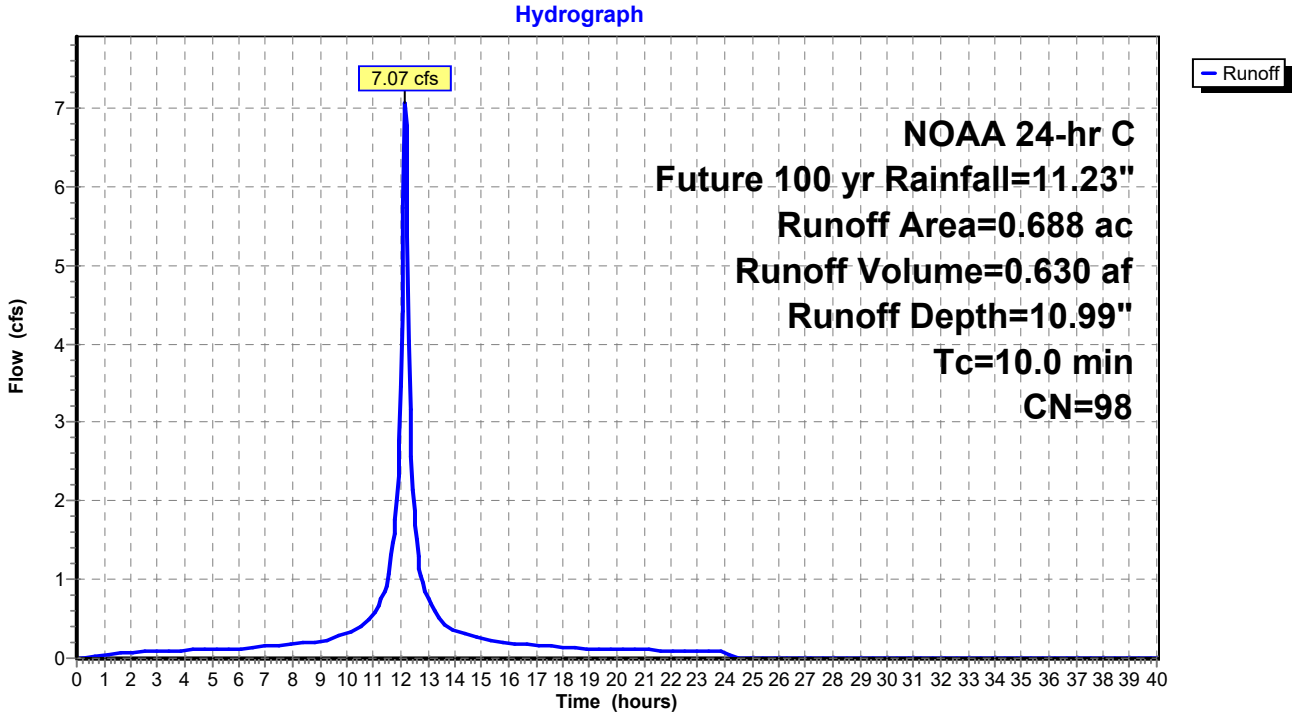
Runoff = 7.07 cfs @ 12.17 hrs, Volume= 0.630 af, Depth=10.99"
Routed to Pond B-41 : Basin #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.136	98	Pavement, HSG C
*	0.514	98	Roof, HSG C
*	0.038	98	Concrete, HSC C
	0.688	98	Weighted Average
	0.688		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 41I: PDA-41 (impervious)



Summary for Subcatchment 41P: PDA-41 (pervious)

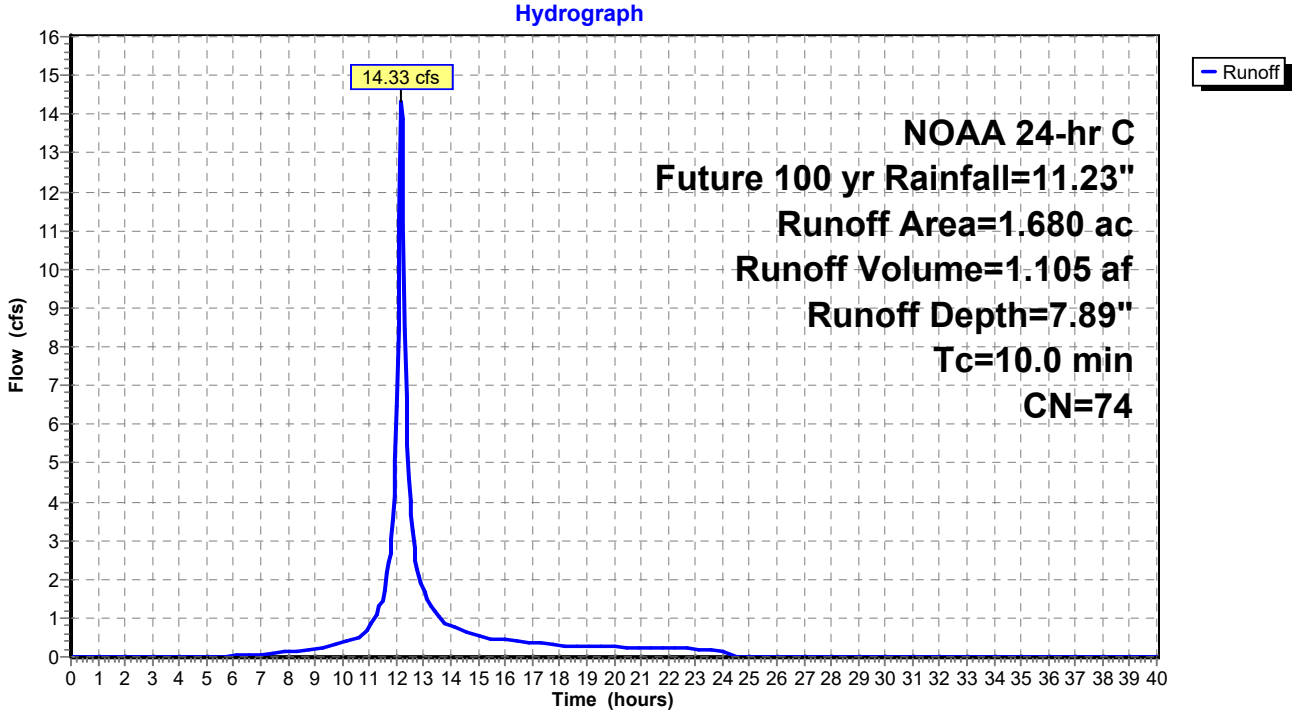
Runoff = 14.33 cfs @ 12.17 hrs, Volume= 1.105 af, Depth= 7.89"
Routed to Pond B-41 : Basin #41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.680	74	>75% Grass cover, Good, HSG C
1.680		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 41P: PDA-41 (pervious)



Summary for Subcatchment 42l: PDA-42 (impervious)

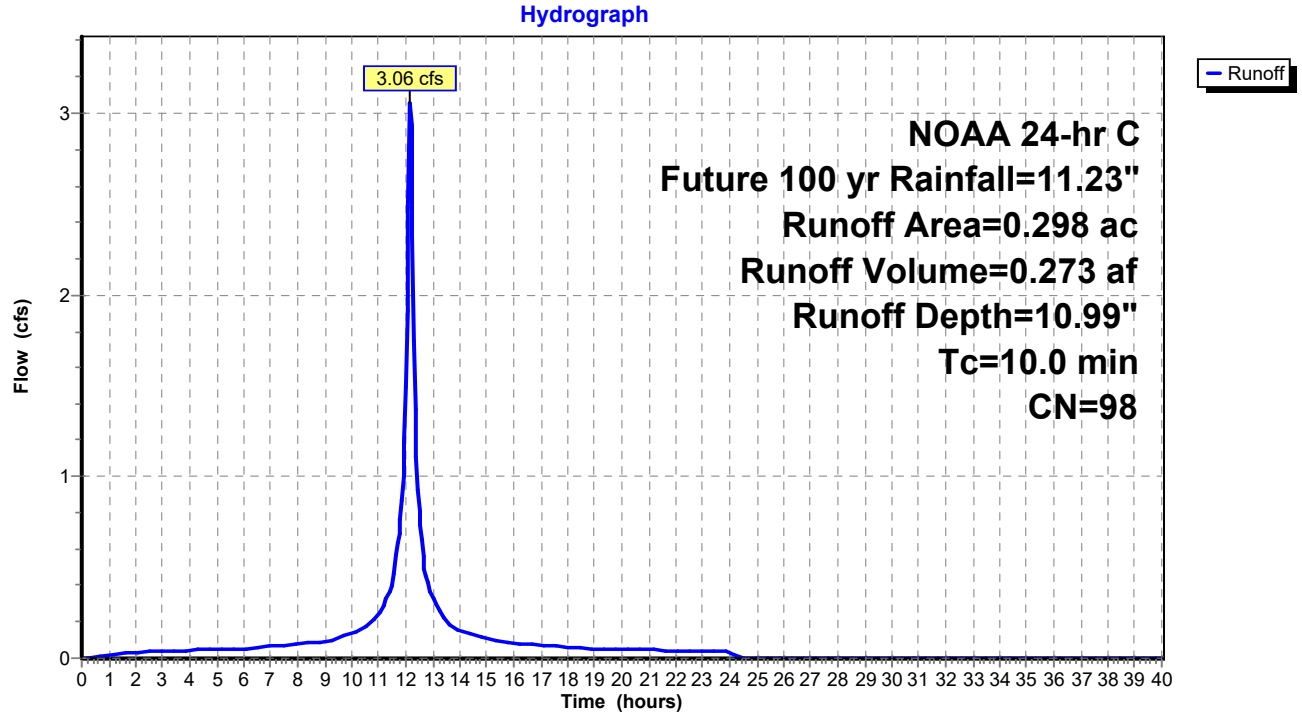
Runoff = 3.06 cfs @ 12.17 hrs, Volume= 0.273 af, Depth=10.99"
Routed to Pond B-42 : Basin #42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.000	98	Pavement, HSG C
*	0.298	98	Roof, HSG C
*	0.000	98	Concrete, HSC C
	0.298	98	Weighted Average
	0.298		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 42l: PDA-42 (impervious)



Summary for Subcatchment 42P: PDA-42 (pervious)

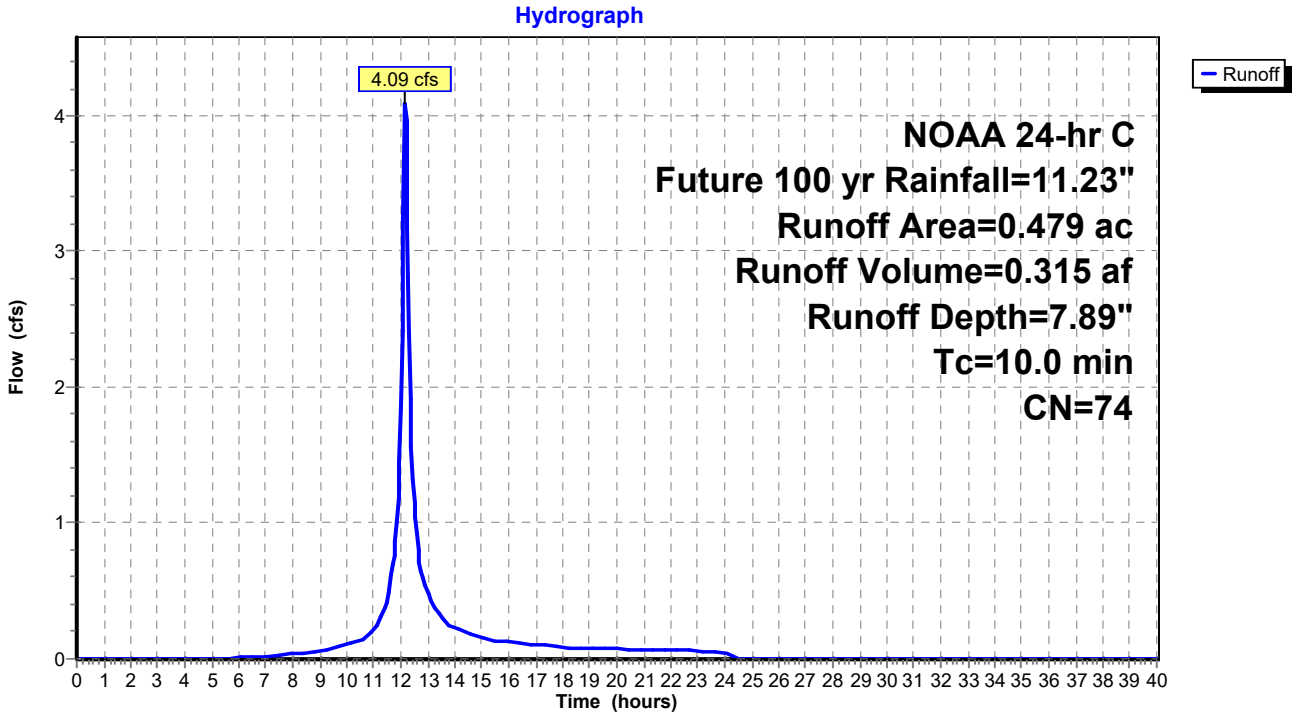
Runoff = 4.09 cfs @ 12.17 hrs, Volume= 0.315 af, Depth= 7.89"
Routed to Pond B-42 : Basin #42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.479	74	>75% Grass cover, Good, HSG C
0.479		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 42P: PDA-42 (pervious)



Summary for Subcatchment 43I: PDA-43 (impervious)

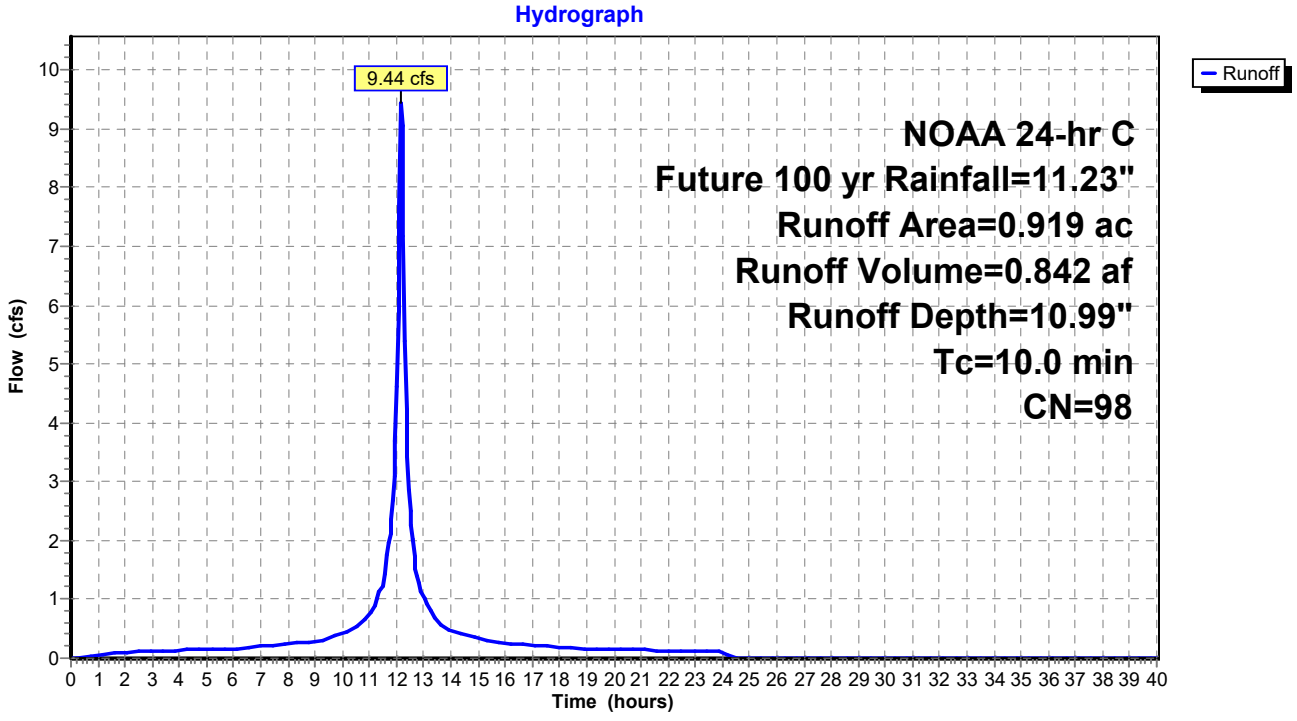
Runoff = 9.44 cfs @ 12.17 hrs, Volume= 0.842 af, Depth=10.99"
Routed to Pond B-43 : Basin #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.326	98	Pavement, HSG C
*	0.522	98	Roof, HSG C
*	0.071	98	Concrete, HSC C
	0.919	98	Weighted Average
	0.919		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 43I: PDA-43 (impervious)



Summary for Subcatchment 43P: PDA-43 (pervious)

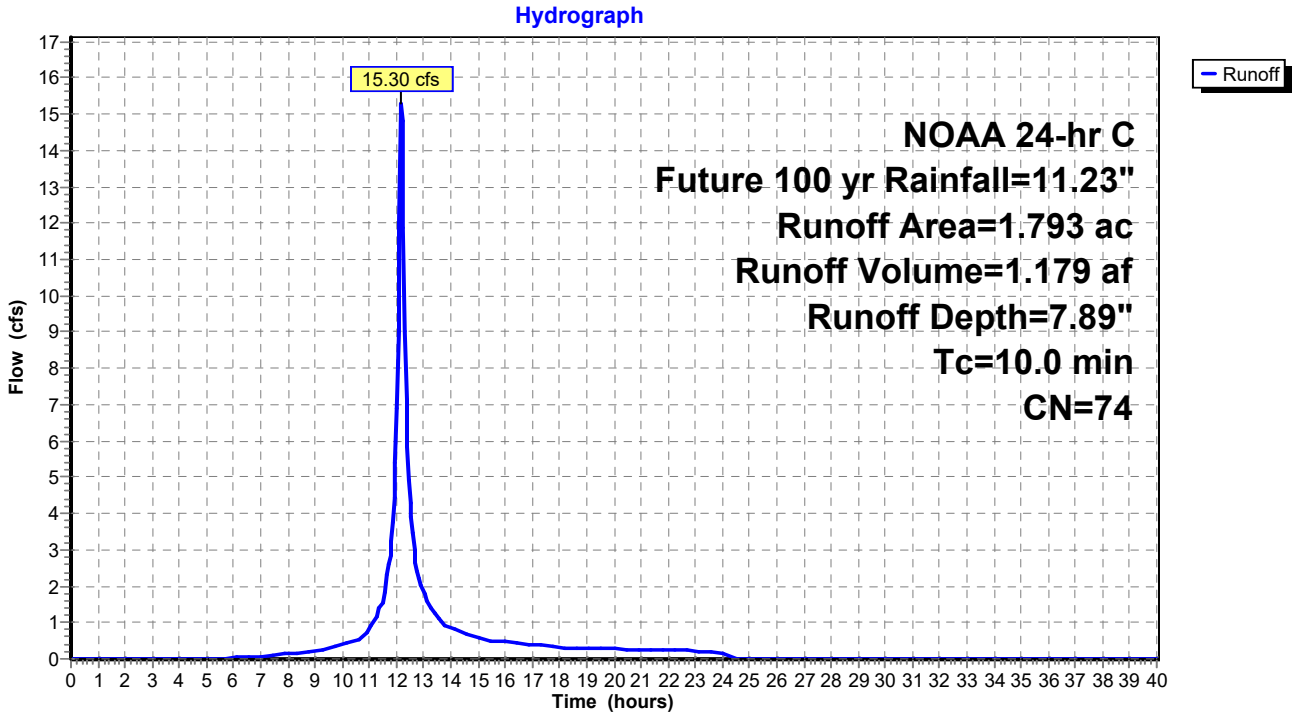
Runoff = 15.30 cfs @ 12.17 hrs, Volume= 1.179 af, Depth= 7.89"
Routed to Pond B-43 : Basin #43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.793	74	>75% Grass cover, Good, HSG C
1.793		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 43P: PDA-43 (pervious)



Summary for Subcatchment 44I: PDA-44 (impervious)

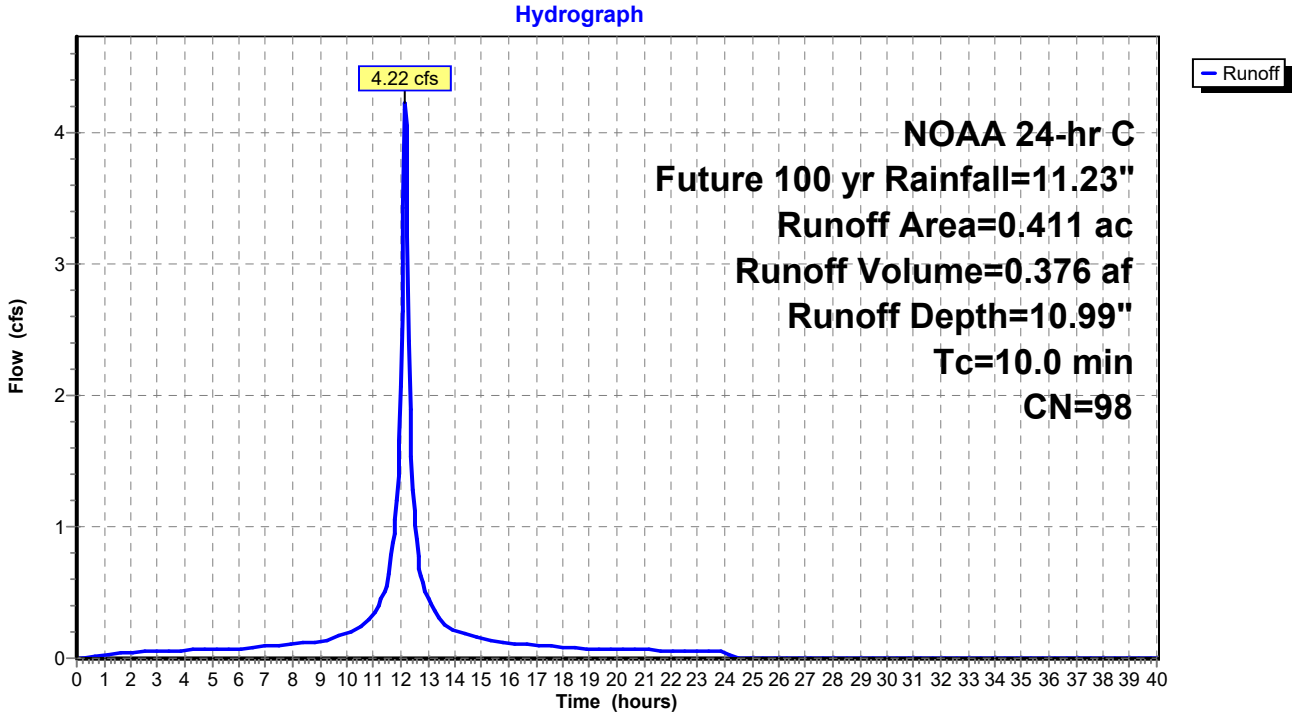
Runoff = 4.22 cfs @ 12.17 hrs, Volume= 0.376 af, Depth=10.99"
Routed to Pond B-44 : Basin #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.283	98	Pavement, HSG C
*	0.104	98	Roof, HSG C
*	0.024	98	Concrete, HSC C
	0.411	98	Weighted Average
	0.411		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 44I: PDA-44 (impervious)



Summary for Subcatchment 44P: PDA-44 (pervious)

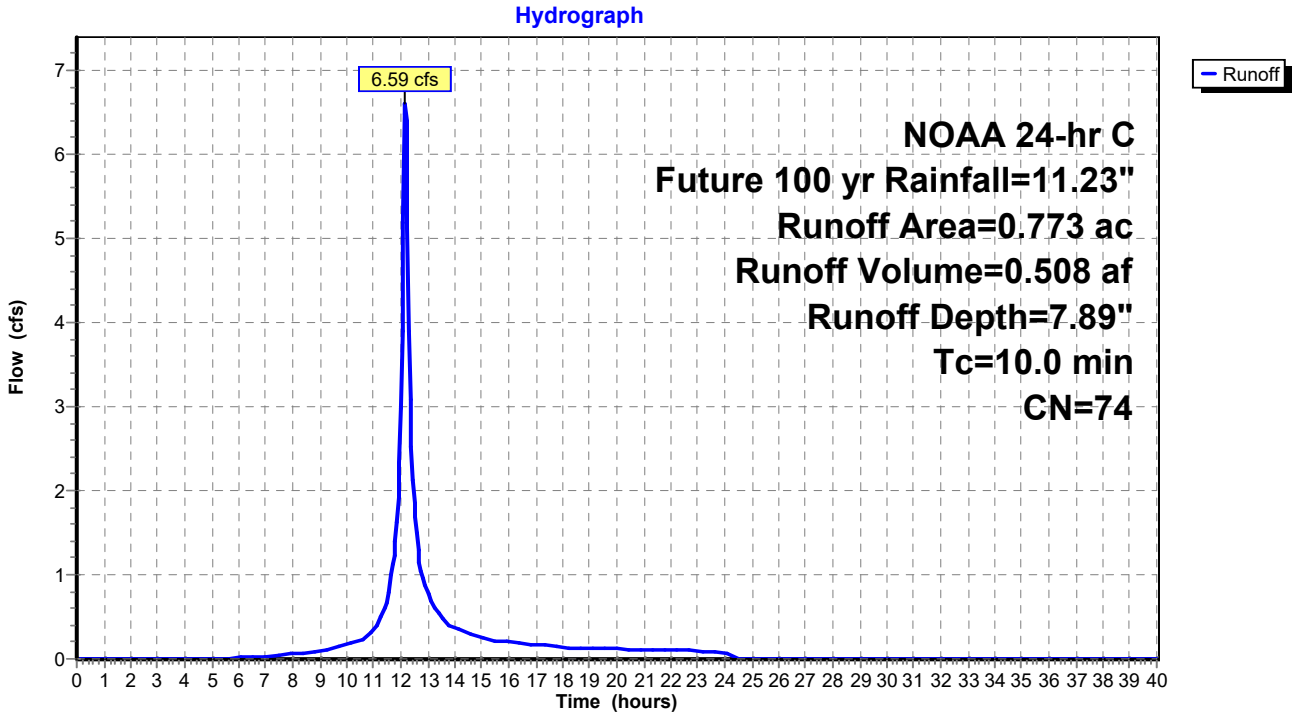
Runoff = 6.59 cfs @ 12.17 hrs, Volume= 0.508 af, Depth= 7.89"
Routed to Pond B-44 : Basin #44

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.773	74	>75% Grass cover, Good, HSG C
0.773		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 44P: PDA-44 (pervious)



Summary for Subcatchment 45l: PDA-45 (impervious)

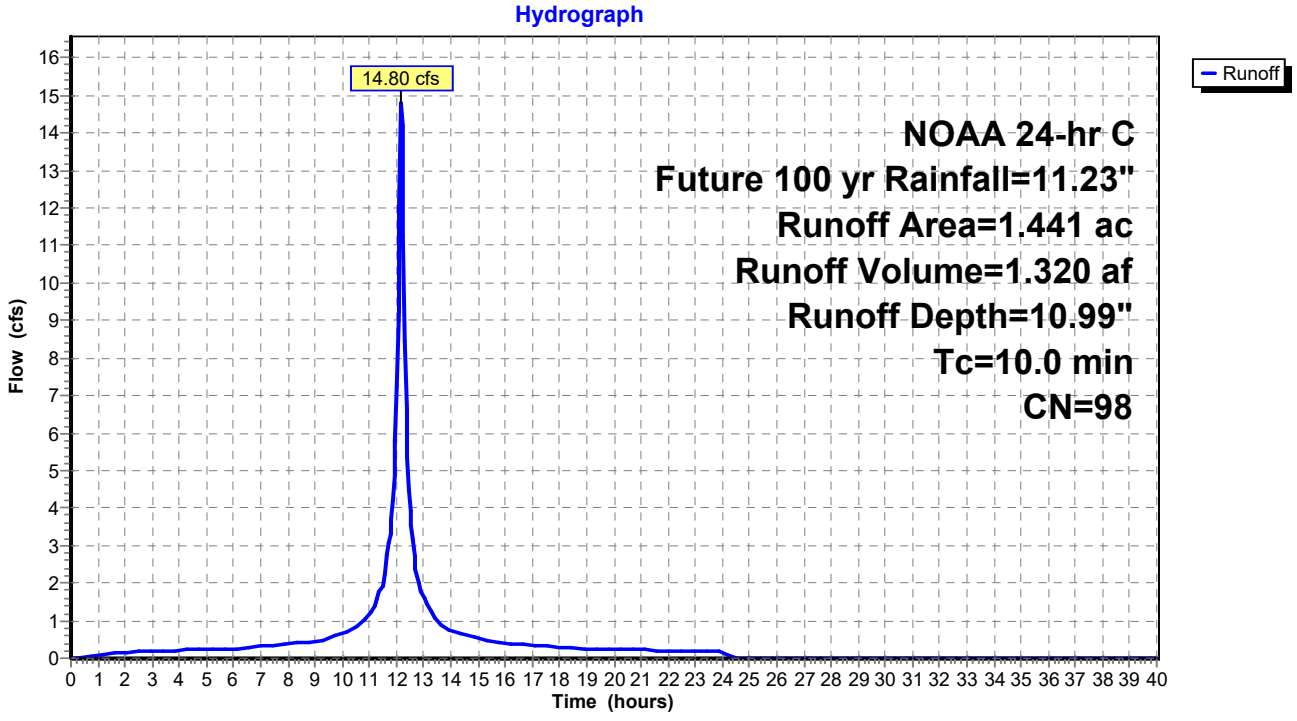
Runoff = 14.80 cfs @ 12.17 hrs, Volume= 1.320 af, Depth=10.99"
Routed to Pond B-45 : Basin #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.394	98	Pavement, HSG C
*	1.045	98	Roof, HSG C
*	0.002	98	Concrete, HSG C
	1.441	98	Weighted Average
	1.441		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 45l: PDA-45 (impervious)



Summary for Subcatchment 45P: PDA-45 (pervious)

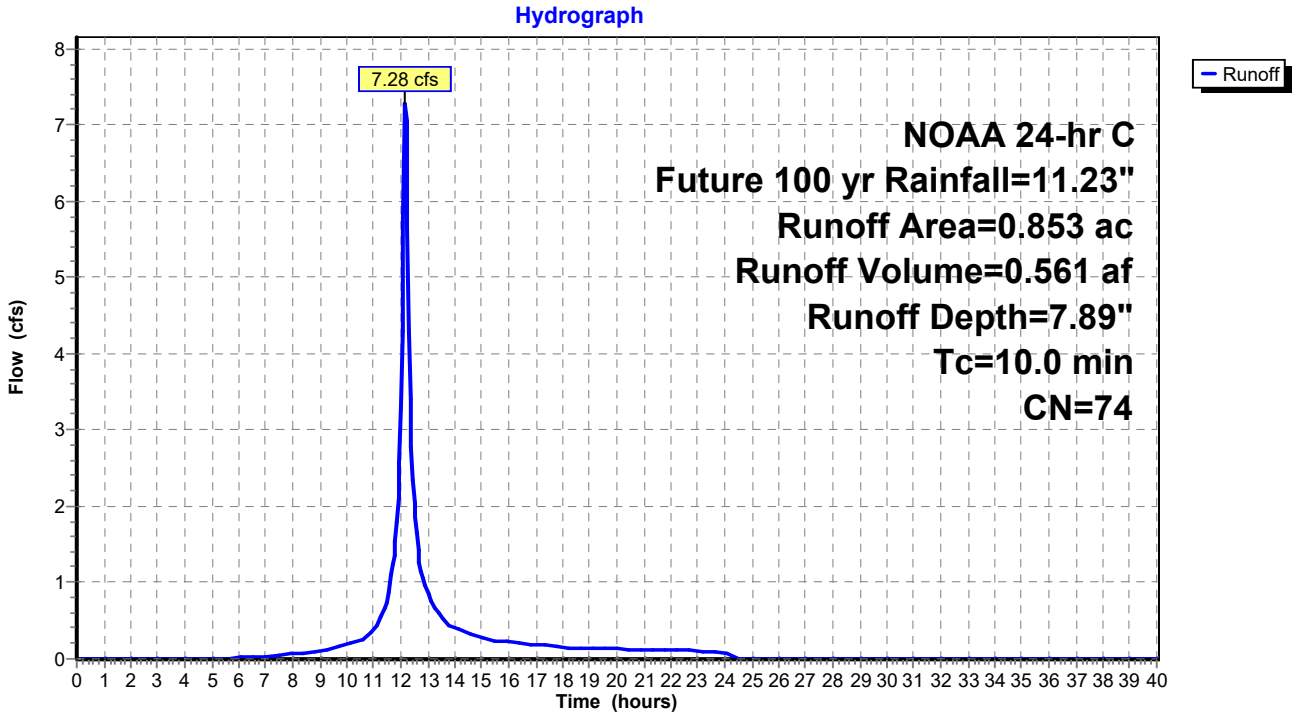
Runoff = 7.28 cfs @ 12.17 hrs, Volume= 0.561 af, Depth= 7.89"
Routed to Pond B-45 : Basin #45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.853	74	>75% Grass cover, Good, HSG C
0.853		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 45P: PDA-45 (pervious)



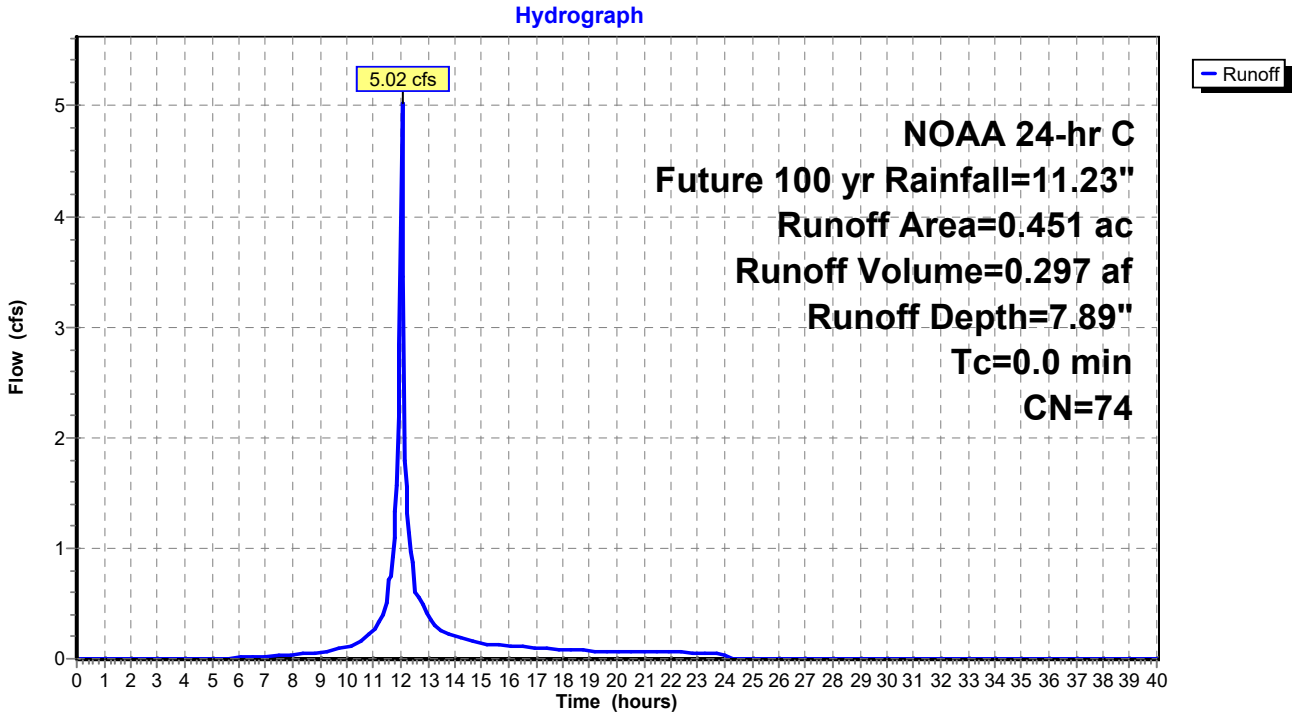
Summary for Subcatchment 46BP: PDA-46B (pervious)

Runoff = 5.02 cfs @ 12.05 hrs, Volume= 0.297 af, Depth= 7.89"
Routed to Pond B-46B : Basin #46B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.451	74	>75% Grass cover, Good, HSG C
0.451		100.00% Pervious Area

Subcatchment 46BP: PDA-46B (pervious)



Summary for Subcatchment 46I: PDA-46 (impervious)

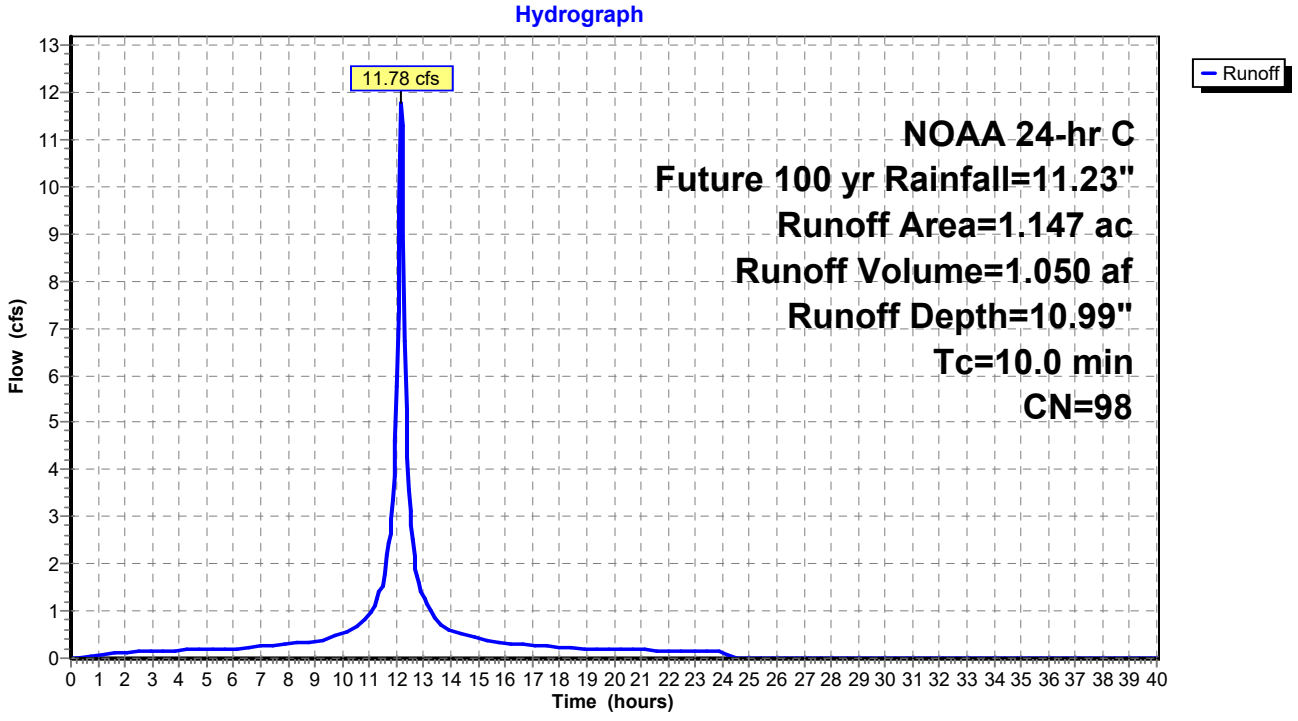
Runoff = 11.78 cfs @ 12.17 hrs, Volume= 1.050 af, Depth=10.99"
Routed to Pond B-46A : Basin #46A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.430	98	Pavement, HSG C
*	0.653	98	Roof, HSG C
*	0.064	98	Concrete, HSG C
	1.147	98	Weighted Average
	1.147		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 46I: PDA-46 (impervious)



Summary for Subcatchment 46P: PDA-46 (pervious)

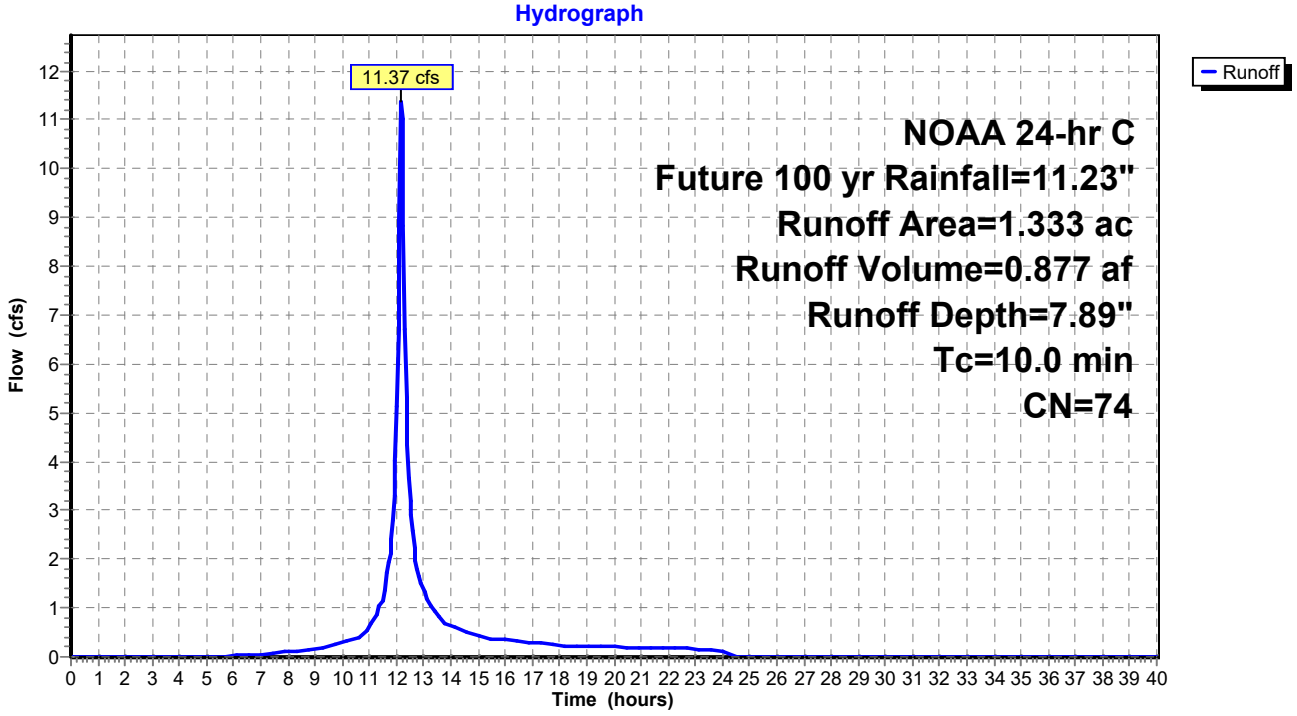
Runoff = 11.37 cfs @ 12.17 hrs, Volume= 0.877 af, Depth= 7.89"
Routed to Pond B-46A : Basin #46A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.333	74	>75% Grass cover, Good, HSG C
1.333		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 46P: PDA-46 (pervious)



Summary for Subcatchment 47I: PDA-47 (impervious)

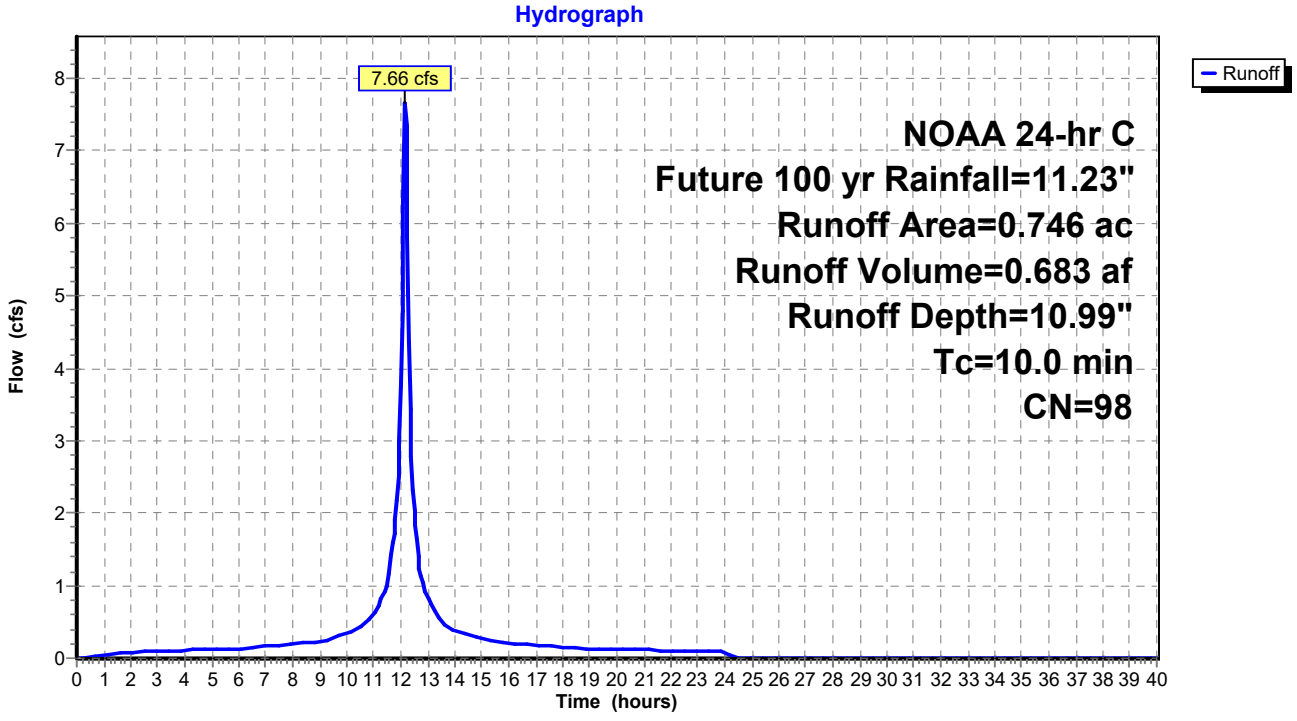
Runoff = 7.66 cfs @ 12.17 hrs, Volume= 0.683 af, Depth=10.99"
Routed to Pond B-47 : Basin #47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.244	98	Pavement, HSG C
*	0.484	98	Roof, HSG C
*	0.018	98	Concrete, HSG C
	0.746	98	Weighted Average
	0.746		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 47I: PDA-47 (impervious)



Summary for Subcatchment 47P: PDA-47 (pervious)

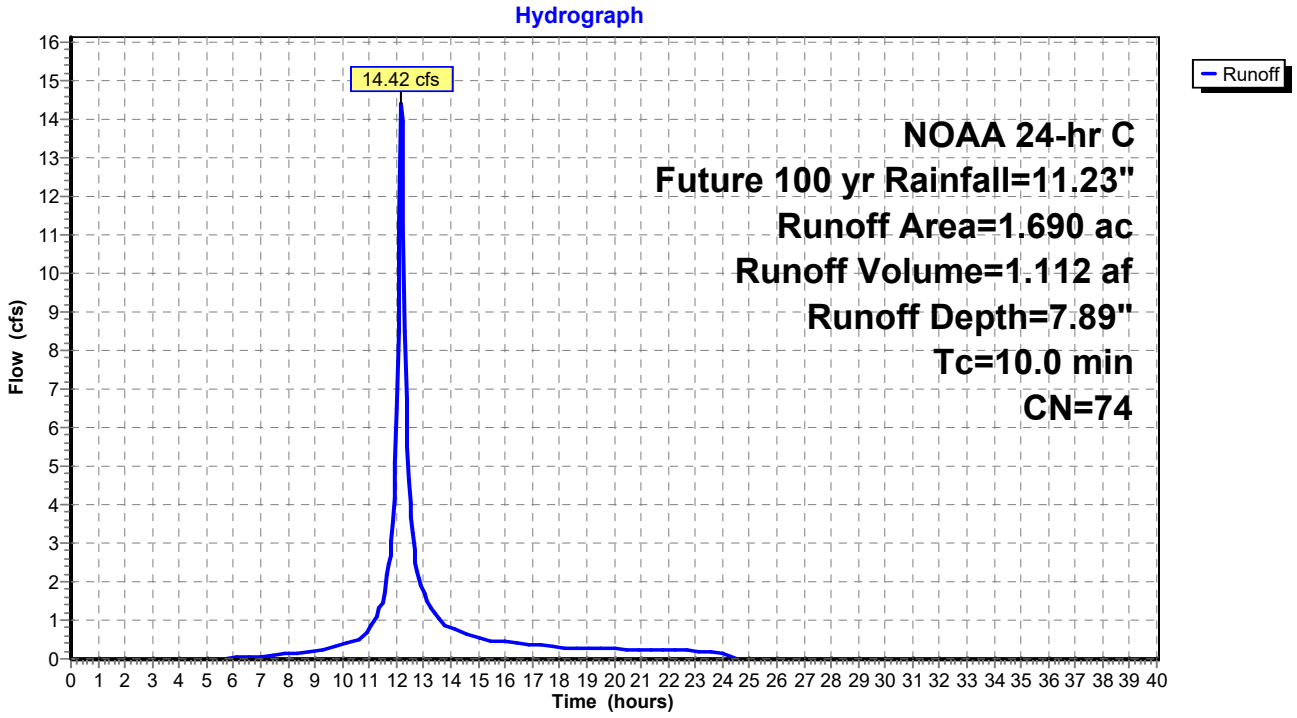
Runoff = 14.42 cfs @ 12.17 hrs, Volume= 1.112 af, Depth= 7.89"
Routed to Pond B-47 : Basin #47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.690	74	>75% Grass cover, Good, HSG C
1.690		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 47P: PDA-47 (pervious)



Summary for Subcatchment UPDA-4: PDA-4 (undetained)

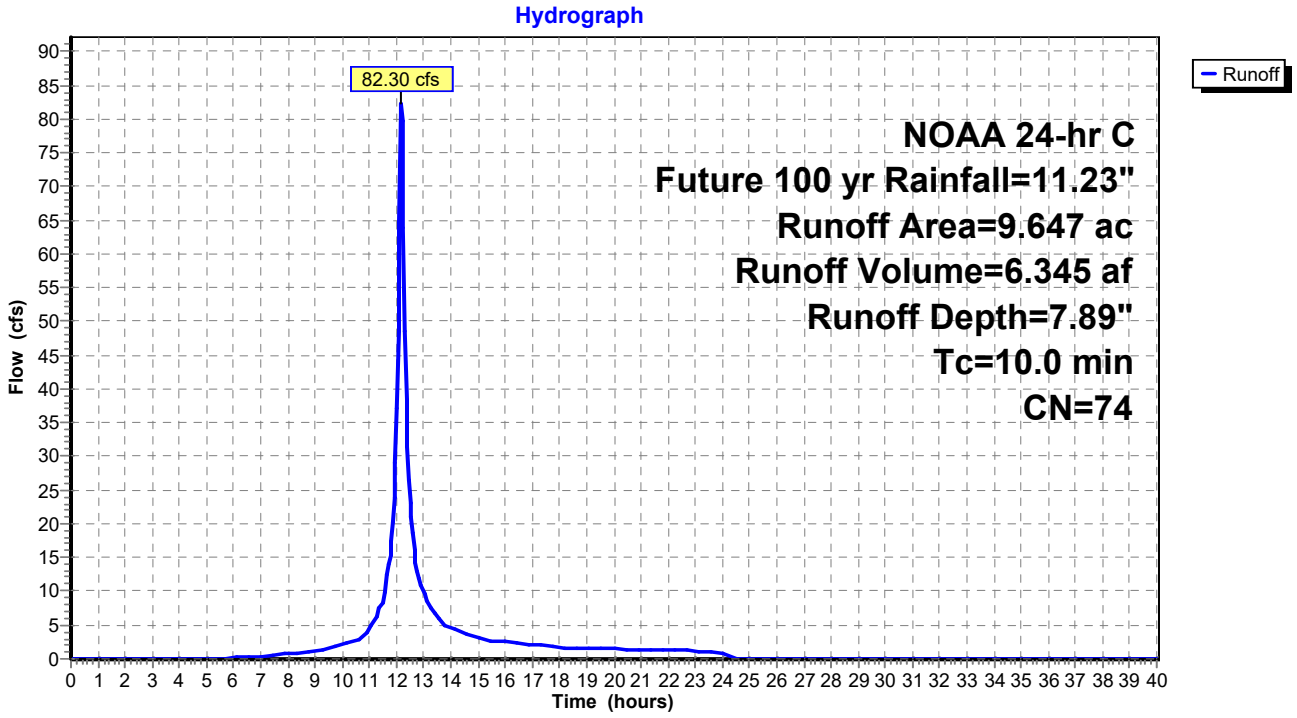
Runoff = 82.30 cfs @ 12.17 hrs, Volume= 6.345 af, Depth= 7.89"
Routed to Link PDA-4 : Proposed Drainage Area #4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
9.647	74	>75% Grass cover, Good, HSG C
9.647		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-4: PDA-4 (undetained)



Summary for Pond B-41: Basin #41

Inflow Area = 2.368 ac, 29.05% Impervious, Inflow Depth = 8.79" for Future 100 yr event
Inflow = 21.40 cfs @ 12.17 hrs, Volume= 1.735 af
Outflow = 18.49 cfs @ 12.24 hrs, Volume= 1.672 af, Atten= 14%, Lag= 4.4 min
Primary = 18.49 cfs @ 12.24 hrs, Volume= 1.672 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 185.51' @ 12.24 hrs Surf.Area= 5,832 sf Storage= 16,876 cf

Plug-Flow detention time= 161.0 min calculated for 1.672 af (96% of inflow)
Center-of-Mass det. time= 139.1 min (924.0 - 784.8)

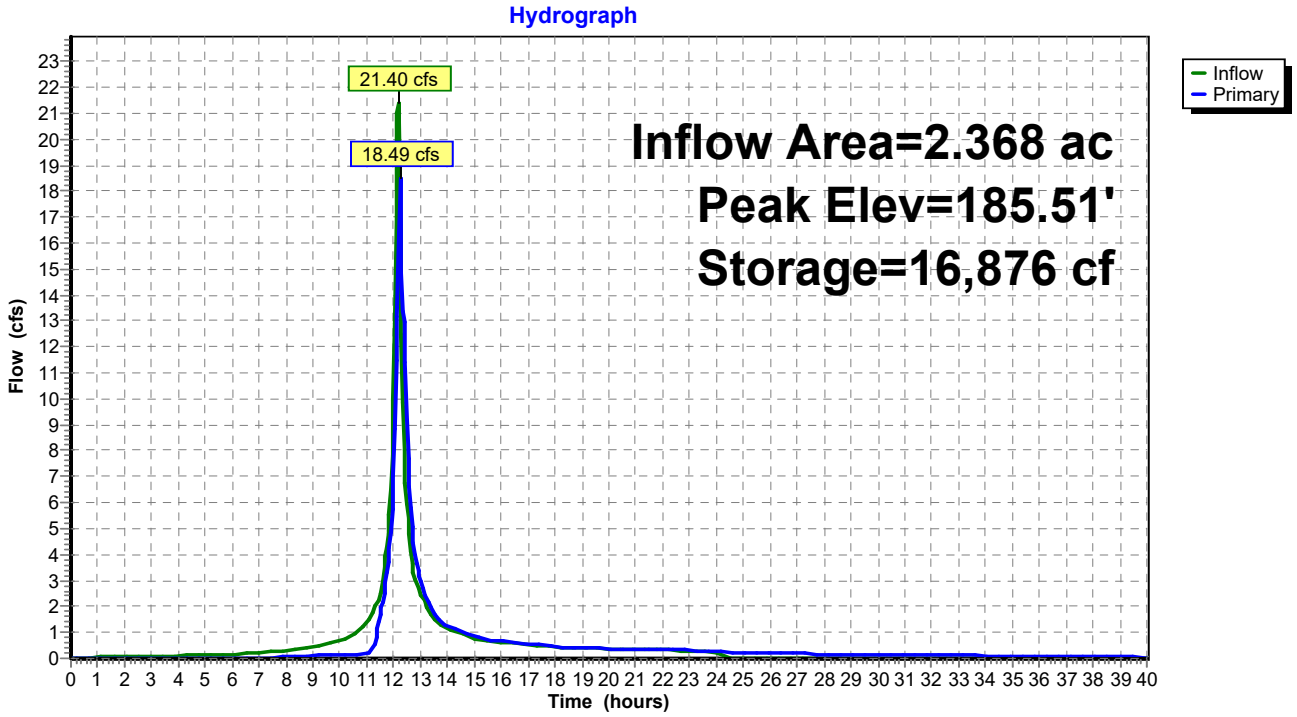
Volume	Invert	Avail.Storage	Storage Description
#1	181.85'	23,005 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.85	0	0	0
182.00	3,695	277	277
183.00	4,265	3,980	4,257
184.00	4,870	4,568	8,825
185.00	5,505	5,188	14,012
186.00	6,153	5,829	19,841
186.50	6,502	3,164	23,005

Device	Routing	Invert	Outlet Devices
#1	Primary	181.85'	**18.0" Round Culvert** L= 59.0' Ke= 0.500 Inlet / Outlet Invert= 181.85' / 181.55' S= 0.0051 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	182.50'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.13'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.39'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=18.08 cfs @ 12.24 hrs HW=185.50' (Free Discharge)
- **1=Culvert** (Barrel Controls 13.82 cfs @ 7.82 fps)
  - **2=Orifice/Grate** (Passes < 0.28 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 19.53 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 4.26 cfs @ 0.77 fps)

Pond B-41: Basin #41



Stage-Discharge for Pond B-41: Basin #41

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.85	0.00	182.37	0.00	182.89	0.09	183.41	0.15
181.86	0.00	182.38	0.00	182.90	0.09	183.42	0.15
181.87	0.00	182.39	0.00	182.91	0.09	183.43	0.15
181.88	0.00	182.40	0.00	182.92	0.09	183.44	0.15
181.89	0.00	182.41	0.00	182.93	0.09	183.45	0.15
181.90	0.00	182.42	0.00	182.94	0.10	183.46	0.15
181.91	0.00	182.43	0.00	182.95	0.10	183.47	0.15
181.92	0.00	182.44	0.00	182.96	0.10	183.48	0.15
181.93	0.00	182.45	0.00	182.97	0.10	183.49	0.15
181.94	0.00	182.46	0.00	182.98	0.10	183.50	0.16
181.95	0.00	182.47	0.00	182.99	0.10	183.51	0.16
181.96	0.00	182.48	0.00	183.00	0.10	183.52	0.16
181.97	0.00	182.49	0.00	183.01	0.10	183.53	0.16
181.98	0.00	182.50	0.00	183.02	0.11	183.54	0.16
181.99	0.00	182.51	0.00	183.03	0.11	183.55	0.16
182.00	0.00	182.52	0.00	183.04	0.11	183.56	0.16
182.01	0.00	182.53	0.00	183.05	0.11	183.57	0.16
182.02	0.00	182.54	0.00	183.06	0.11	183.58	0.16
182.03	0.00	182.55	0.00	183.07	0.11	183.59	0.16
182.04	0.00	182.56	0.01	183.08	0.11	183.60	0.16
182.05	0.00	182.57	0.01	183.09	0.11	183.61	0.16
182.06	0.00	182.58	0.01	183.10	0.12	183.62	0.17
182.07	0.00	182.59	0.01	183.11	0.12	183.63	0.17
182.08	0.00	182.60	0.02	183.12	0.12	183.64	0.17
182.09	0.00	182.61	0.02	183.13	0.12	183.65	0.17
182.10	0.00	182.62	0.02	183.14	0.12	183.66	0.17
182.11	0.00	182.63	0.03	183.15	0.12	183.67	0.17
182.12	0.00	182.64	0.03	183.16	0.12	183.68	0.17
182.13	0.00	182.65	0.03	183.17	0.12	183.69	0.17
182.14	0.00	182.66	0.04	183.18	0.12	183.70	0.17
182.15	0.00	182.67	0.04	183.19	0.13	183.71	0.17
182.16	0.00	182.68	0.05	183.20	0.13	183.72	0.17
182.17	0.00	182.69	0.05	183.21	0.13	183.73	0.17
182.18	0.00	182.70	0.05	183.22	0.13	183.74	0.17
182.19	0.00	182.71	0.05	183.23	0.13	183.75	0.18
182.20	0.00	182.72	0.06	183.24	0.13	183.76	0.18
182.21	0.00	182.73	0.06	183.25	0.13	183.77	0.18
182.22	0.00	182.74	0.06	183.26	0.13	183.78	0.18
182.23	0.00	182.75	0.06	183.27	0.13	183.79	0.18
182.24	0.00	182.76	0.06	183.28	0.13	183.80	0.18
182.25	0.00	182.77	0.07	183.29	0.14	183.81	0.18
182.26	0.00	182.78	0.07	183.30	0.14	183.82	0.18
182.27	0.00	182.79	0.07	183.31	0.14	183.83	0.18
182.28	0.00	182.80	0.07	183.32	0.14	183.84	0.18
182.29	0.00	182.81	0.07	183.33	0.14	183.85	0.18
182.30	0.00	182.82	0.08	183.34	0.14	183.86	0.18
182.31	0.00	182.83	0.08	183.35	0.14	183.87	0.18
182.32	0.00	182.84	0.08	183.36	0.14	183.88	0.19
182.33	0.00	182.85	0.08	183.37	0.14	183.89	0.19
182.34	0.00	182.86	0.08	183.38	0.14	183.90	0.19
182.35	0.00	182.87	0.08	183.39	0.15	183.91	0.19
182.36	0.00	182.88	0.09	183.40	0.15	183.92	0.19

Stage-Discharge for Pond B-41: Basin #41 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.93	0.19	184.45	2.55	184.97	9.90	185.49	17.51
183.94	0.19	184.46	2.66	184.98	10.07	185.50	18.11
183.95	0.19	184.47	2.77	184.99	10.24	185.51	18.74
183.96	0.19	184.48	2.89	185.00	10.41	185.52	19.40
183.97	0.19	184.49	3.00	185.01	10.58	185.53	20.08
183.98	0.19	184.50	3.12	185.02	10.75	185.54	20.78
183.99	0.19	184.51	3.23	185.03	10.92	185.55	21.51
184.00	0.19	184.52	3.35	185.04	11.09	185.56	22.26
184.01	0.19	184.53	3.47	185.05	11.27	185.57	23.03
184.02	0.20	184.54	3.59	185.06	11.44	185.58	23.82
184.03	0.20	184.55	3.71	185.07	11.62	185.59	24.64
184.04	0.20	184.56	3.84	185.08	11.79	185.60	25.51
184.05	0.20	184.57	3.96	185.09	11.97	185.61	26.41
184.06	0.20	184.58	4.09	185.10	12.15	185.62	27.34
184.07	0.20	184.59	4.22	185.11	12.33	185.63	28.29
184.08	0.20	184.60	4.35	185.12	12.51	185.64	29.27
184.09	0.20	184.61	4.48	185.13	12.69	185.65	30.27
184.10	0.20	184.62	4.61	185.14	12.77	185.66	31.29
184.11	0.20	184.63	4.74	185.15	12.80	185.67	32.34
184.12	0.20	184.64	4.88	185.16	12.83	185.68	33.42
184.13	0.20	184.65	5.01	185.17	12.86	185.69	34.52
184.14	0.22	184.66	5.15	185.18	12.89	185.70	35.64
184.15	0.24	184.67	5.29	185.19	12.92	185.71	36.79
184.16	0.27	184.68	5.42	185.20	12.95	185.72	37.96
184.17	0.31	184.69	5.56	185.21	12.98	185.73	39.16
184.18	0.35	184.70	5.71	185.22	13.01	185.74	40.38
184.19	0.40	184.71	5.85	185.23	13.04	185.75	41.63
184.20	0.45	184.72	5.99	185.24	13.07	185.76	42.89
184.21	0.50	184.73	6.14	185.25	13.10	185.77	44.19
184.22	0.56	184.74	6.28	185.26	13.13	185.78	45.51
184.23	0.62	184.75	6.43	185.27	13.16	185.79	46.85
184.24	0.68	184.76	6.58	185.28	13.19	185.80	48.24
184.25	0.75	184.77	6.72	185.29	13.22	185.81	49.66
184.26	0.82	184.78	6.87	185.30	13.25	185.82	51.10
184.27	0.89	184.79	7.02	185.31	13.28	185.83	52.57
184.28	0.97	184.80	7.18	185.32	13.30	185.84	54.07
184.29	1.04	184.81	7.33	185.33	13.33	185.85	55.59
184.30	1.12	184.82	7.48	185.34	13.36	185.86	57.14
184.31	1.20	184.83	7.64	185.35	13.39	185.87	58.72
184.32	1.29	184.84	7.79	185.36	13.42	185.88	60.32
184.33	1.37	184.85	7.95	185.37	13.45	185.89	61.95
184.34	1.46	184.86	8.11	185.38	13.48	185.90	63.60
184.35	1.55	184.87	8.27	185.39	13.51	185.91	65.28
184.36	1.64	184.88	8.42	185.40	13.65	185.92	66.99
184.37	1.74	184.89	8.59	185.41	13.90	185.93	68.72
184.38	1.83	184.90	8.75	185.42	14.20	185.94	70.48
184.39	1.93	184.91	8.91	185.43	14.56	185.95	72.27
184.40	2.03	184.92	9.07	185.44	14.96	185.96	74.09
184.41	2.13	184.93	9.24	185.45	15.40	185.97	75.93
184.42	2.23	184.94	9.40	185.46	15.88	185.98	77.80
184.43	2.34	184.95	9.57	185.47	16.39	185.99	79.69
184.44	2.45	184.96	9.73	185.48	16.94	186.00	81.34

Stage-Discharge for Pond B-41: Basin #41 (continued)

Elevation (feet)	Primary (cfs)
186.01	83.01
186.02	84.69
186.03	86.38
186.04	88.09
186.05	89.81
186.06	91.54
186.07	93.29
186.08	95.04
186.09	96.81
186.10	98.60
186.11	100.40
186.12	102.20
186.13	104.03
186.14	105.86
186.15	107.71
186.16	109.56
186.17	111.44
186.18	113.32
186.19	115.21
186.20	117.16
186.21	119.11
186.22	121.09
186.23	123.07
186.24	125.07
186.25	127.08
186.26	129.10
186.27	131.14
186.28	133.19
186.29	135.25
186.30	137.32
186.31	139.41
186.32	141.51
186.33	143.63
186.34	145.75
186.35	147.89
186.36	150.04
186.37	152.21
186.38	154.38
186.39	156.57
186.40	158.72
186.41	160.88
186.42	163.05
186.43	165.23
186.44	167.42
186.45	169.62
186.46	171.83
186.47	174.05
186.48	176.29
186.49	178.53
186.50	**180.78**

Stage-Area-Storage for Pond B-41: Basin #41

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.85	0	0	182.37	3,906	1,683
181.86	246	1	182.38	3,912	1,722
181.87	493	5	182.39	3,917	1,762
181.88	739	11	182.40	3,923	1,801
181.89	985	20	182.41	3,929	1,840
181.90	1,232	31	182.42	3,934	1,879
181.91	1,478	44	182.43	3,940	1,919
181.92	1,724	60	182.44	3,946	1,958
181.93	1,971	79	182.45	3,951	1,998
181.94	2,217	100	182.46	3,957	2,037
181.95	2,463	123	182.47	3,963	2,077
181.96	2,710	149	182.48	3,969	2,116
181.97	2,956	177	182.49	3,974	2,156
181.98	3,202	208	182.50	3,980	2,196
181.99	3,449	241	182.51	3,986	2,236
182.00	3,695	277	182.52	3,991	2,276
182.01	3,701	314	182.53	3,997	2,316
182.02	3,706	351	182.54	4,003	2,356
182.03	3,712	388	182.55	4,008	2,396
182.04	3,718	425	182.56	4,014	2,436
182.05	3,723	463	182.57	4,020	2,476
182.06	3,729	500	182.58	4,026	2,516
182.07	3,735	537	182.59	4,031	2,556
182.08	3,741	575	182.60	4,037	2,597
182.09	3,746	612	182.61	4,043	2,637
182.10	3,752	649	182.62	4,048	2,678
182.11	3,758	687	182.63	4,054	2,718
182.12	3,763	725	182.64	4,060	2,759
182.13	3,769	762	182.65	4,066	2,799
182.14	3,775	800	182.66	4,071	2,840
182.15	3,781	838	182.67	4,077	2,881
182.16	3,786	876	182.68	4,083	2,922
182.17	3,792	914	182.69	4,088	2,962
182.18	3,798	951	182.70	4,094	3,003
182.19	3,803	989	182.71	4,100	3,044
182.20	3,809	1,028	182.72	4,105	3,085
182.21	3,815	1,066	182.73	4,111	3,126
182.22	3,820	1,104	182.74	4,117	3,167
182.23	3,826	1,142	182.75	4,123	3,209
182.24	3,832	1,180	182.76	4,128	3,250
182.25	3,838	1,219	182.77	4,134	3,291
182.26	3,843	1,257	182.78	4,140	3,333
182.27	3,849	1,296	182.79	4,145	3,374
182.28	3,855	1,334	182.80	4,151	3,416
182.29	3,860	1,373	182.81	4,157	3,457
182.30	3,866	1,411	182.82	4,162	3,499
182.31	3,872	1,450	182.83	4,168	3,540
182.32	3,877	1,489	182.84	4,174	3,582
182.33	3,883	1,528	182.85	4,179	3,624
182.34	3,889	1,566	182.86	4,185	3,666
182.35	3,894	1,605	182.87	4,191	3,707
182.36	3,900	1,644	182.88	4,197	3,749

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.89	4,202	3,791	183.41	4,513	6,057
182.90	4,208	3,833	183.42	4,519	6,102
182.91	4,214	3,876	183.43	4,525	6,147
182.92	4,219	3,918	183.44	4,531	6,192
182.93	4,225	3,960	183.45	4,537	6,238
182.94	4,231	4,002	183.46	4,543	6,283
182.95	4,236	4,045	183.47	4,549	6,328
182.96	4,242	4,087	183.48	4,555	6,374
182.97	4,248	4,129	183.49	4,561	6,420
182.98	4,254	4,172	183.50	4,568	6,465
182.99	4,259	4,215	183.51	4,574	6,511
183.00	4,265	4,257	183.52	4,580	6,557
183.01	4,271	4,300	183.53	4,586	6,603
183.02	4,277	4,343	183.54	4,592	6,648
183.03	4,283	4,385	183.55	4,598	6,694
183.04	4,289	4,428	183.56	4,604	6,740
183.05	4,295	4,471	183.57	4,610	6,786
183.06	4,301	4,514	183.58	4,616	6,833
183.07	4,307	4,557	183.59	4,622	6,879
183.08	4,313	4,600	183.60	4,628	6,925
183.09	4,319	4,643	183.61	4,634	6,971
183.10	4,325	4,687	183.62	4,640	7,018
183.11	4,332	4,730	183.63	4,646	7,064
183.12	4,338	4,773	183.64	4,652	7,111
183.13	4,344	4,817	183.65	4,658	7,157
183.14	4,350	4,860	183.66	4,664	7,204
183.15	4,356	4,904	183.67	4,670	7,250
183.16	4,362	4,947	183.68	4,676	7,297
183.17	4,368	4,991	183.69	4,682	7,344
183.18	4,374	5,035	183.70	4,688	7,391
183.19	4,380	5,078	183.71	4,695	7,438
183.20	4,386	5,122	183.72	4,701	7,485
183.21	4,392	5,166	183.73	4,707	7,532
183.22	4,398	5,210	183.74	4,713	7,579
183.23	4,404	5,254	183.75	4,719	7,626
183.24	4,410	5,298	183.76	4,725	7,673
183.25	4,416	5,342	183.77	4,731	7,721
183.26	4,422	5,386	183.78	4,737	7,768
183.27	4,428	5,431	183.79	4,743	7,815
183.28	4,434	5,475	183.80	4,749	7,863
183.29	4,440	5,519	183.81	4,755	7,910
183.30	4,446	5,564	183.82	4,761	7,958
183.31	4,453	5,608	183.83	4,767	8,005
183.32	4,459	5,653	183.84	4,773	8,053
183.33	4,465	5,698	183.85	4,779	8,101
183.34	4,471	5,742	183.86	4,785	8,149
183.35	4,477	5,787	183.87	4,791	8,197
183.36	4,483	5,832	183.88	4,797	8,245
183.37	4,489	5,877	183.89	4,803	8,293
183.38	4,495	5,922	183.90	4,810	8,341
183.39	4,501	5,966	183.91	4,816	8,389
183.40	4,507	6,012	183.92	4,822	8,437

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.93	4,828	8,485	184.45	5,156	11,080
183.94	4,834	8,534	184.46	5,162	11,132
183.95	4,840	8,582	184.47	5,168	11,184
183.96	4,846	8,630	184.48	5,175	11,235
183.97	4,852	8,679	184.49	5,181	11,287
183.98	4,858	8,727	184.50	5,188	11,339
183.99	4,864	8,776	184.51	5,194	11,391
184.00	4,870	8,825	184.52	5,200	11,443
184.01	4,876	8,873	184.53	5,207	11,495
184.02	4,883	8,922	184.54	5,213	11,547
184.03	4,889	8,971	184.55	5,219	11,599
184.04	4,895	9,020	184.56	5,226	11,651
184.05	4,902	9,069	184.57	5,232	11,704
184.06	4,908	9,118	184.58	5,238	11,756
184.07	4,914	9,167	184.59	5,245	11,808
184.08	4,921	9,216	184.60	5,251	11,861
184.09	4,927	9,265	184.61	5,257	11,913
184.10	4,933	9,315	184.62	5,264	11,966
184.11	4,940	9,364	184.63	5,270	12,019
184.12	4,946	9,414	184.64	5,276	12,071
184.13	4,953	9,463	184.65	5,283	12,124
184.14	4,959	9,513	184.66	5,289	12,177
184.15	4,965	9,562	184.67	5,295	12,230
184.16	4,972	9,612	184.68	5,302	12,283
184.17	4,978	9,662	184.69	5,308	12,336
184.18	4,984	9,712	184.70	5,314	12,389
184.19	4,991	9,761	184.71	5,321	12,442
184.20	4,997	9,811	184.72	5,327	12,496
184.21	5,003	9,861	184.73	5,334	12,549
184.22	5,010	9,911	184.74	5,340	12,602
184.23	5,016	9,962	184.75	5,346	12,656
184.24	5,022	10,012	184.76	5,353	12,709
184.25	5,029	10,062	184.77	5,359	12,763
184.26	5,035	10,112	184.78	5,365	12,816
184.27	5,041	10,163	184.79	5,372	12,870
184.28	5,048	10,213	184.80	5,378	12,924
184.29	5,054	10,264	184.81	5,384	12,978
184.30	5,060	10,314	184.82	5,391	13,032
184.31	5,067	10,365	184.83	5,397	13,085
184.32	5,073	10,416	184.84	5,403	13,139
184.33	5,080	10,466	184.85	5,410	13,194
184.34	5,086	10,517	184.86	5,416	13,248
184.35	5,092	10,568	184.87	5,422	13,302
184.36	5,099	10,619	184.88	5,429	13,356
184.37	5,105	10,670	184.89	5,435	13,410
184.38	5,111	10,721	184.90	5,442	13,465
184.39	5,118	10,772	184.91	5,448	13,519
184.40	5,124	10,823	184.92	5,454	13,574
184.41	5,130	10,875	184.93	5,461	13,628
184.42	5,137	10,926	184.94	5,467	13,683
184.43	5,143	10,977	184.95	5,473	13,738
184.44	5,149	11,029	184.96	5,480	13,792

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.97	5,486	13,847	185.49	5,823	16,787
184.98	5,492	13,902	185.50	5,829	16,846
184.99	5,499	13,957	185.51	5,835	16,904
185.00	5,505	14,012	185.52	5,842	16,962
185.01	5,511	14,067	185.53	5,848	17,021
185.02	5,518	14,122	185.54	5,855	17,079
185.03	5,524	14,178	185.55	5,861	17,138
185.04	5,531	14,233	185.56	5,868	17,197
185.05	5,537	14,288	185.57	5,874	17,255
185.06	5,544	14,344	185.58	5,881	17,314
185.07	5,550	14,399	185.59	5,887	17,373
185.08	5,557	14,455	185.60	5,894	17,432
185.09	5,563	14,510	185.61	5,900	17,491
185.10	5,570	14,566	185.62	5,907	17,550
185.11	5,576	14,622	185.63	5,913	17,609
185.12	5,583	14,677	185.64	5,920	17,668
185.13	5,589	14,733	185.65	5,926	17,727
185.14	5,596	14,789	185.66	5,933	17,787
185.15	5,602	14,845	185.67	5,939	17,846
185.16	5,609	14,901	185.68	5,946	17,905
185.17	5,615	14,957	185.69	5,952	17,965
185.18	5,622	15,014	185.70	5,959	18,024
185.19	5,628	15,070	185.71	5,965	18,084
185.20	5,635	15,126	185.72	5,972	18,144
185.21	5,641	15,182	185.73	5,978	18,203
185.22	5,648	15,239	185.74	5,985	18,263
185.23	5,654	15,295	185.75	5,991	18,323
185.24	5,661	15,352	185.76	5,997	18,383
185.25	5,667	15,409	185.77	6,004	18,443
185.26	5,673	15,465	185.78	6,010	18,503
185.27	5,680	15,522	185.79	6,017	18,563
185.28	5,686	15,579	185.80	6,023	18,623
185.29	5,693	15,636	185.81	6,030	18,684
185.30	5,699	15,693	185.82	6,036	18,744
185.31	5,706	15,750	185.83	6,043	18,804
185.32	5,712	15,807	185.84	6,049	18,865
185.33	5,719	15,864	185.85	6,056	18,925
185.34	5,725	15,921	185.86	6,062	18,986
185.35	5,732	15,979	185.87	6,069	19,047
185.36	5,738	16,036	185.88	6,075	19,107
185.37	5,745	16,093	185.89	6,082	19,168
185.38	5,751	16,151	185.90	6,088	19,229
185.39	5,758	16,208	185.91	6,095	19,290
185.40	5,764	16,266	185.92	6,101	19,351
185.41	5,771	16,324	185.93	6,108	19,412
185.42	5,777	16,381	185.94	6,114	19,473
185.43	5,784	16,439	185.95	6,121	19,534
185.44	5,790	16,497	185.96	6,127	19,596
185.45	5,797	16,555	185.97	6,134	19,657
185.46	5,803	16,613	185.98	6,140	19,718
185.47	5,810	16,671	185.99	6,147	19,780
185.48	5,816	16,729	186.00	6,153	19,841

Stage-Area-Storage for Pond B-41: Basin #41 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.01	6,160	19,903
186.02	6,167	19,964
186.03	6,174	20,026
186.04	6,181	20,088
186.05	6,188	20,150
186.06	6,195	20,212
186.07	6,202	20,274
186.08	6,209	20,336
186.09	6,216	20,398
186.10	6,223	20,460
186.11	6,230	20,522
186.12	6,237	20,585
186.13	6,244	20,647
186.14	6,251	20,709
186.15	6,258	20,772
186.16	6,265	20,835
186.17	6,272	20,897
186.18	6,279	20,960
186.19	6,286	21,023
186.20	6,293	21,086
186.21	6,300	21,149
186.22	6,307	21,212
186.23	6,314	21,275
186.24	6,321	21,338
186.25	6,328	21,401
186.26	6,334	21,464
186.27	6,341	21,528
186.28	6,348	21,591
186.29	6,355	21,655
186.30	6,362	21,718
186.31	6,369	21,782
186.32	6,376	21,846
186.33	6,383	21,910
186.34	6,390	21,973
186.35	6,397	22,037
186.36	6,404	22,101
186.37	6,411	22,166
186.38	6,418	22,230
186.39	6,425	22,294
186.40	6,432	22,358
186.41	6,439	22,423
186.42	6,446	22,487
186.43	6,453	22,551
186.44	6,460	22,616
186.45	6,467	22,681
186.46	6,474	22,745
186.47	6,481	22,810
186.48	6,488	22,875
186.49	6,495	22,940
186.50	**6,502**	**23,005**

Summary for Pond B-42: Basin #42

Inflow Area = 0.777 ac, 38.35% Impervious, Inflow Depth = 9.08" for Future 100 yr event
Inflow = 7.15 cfs @ 12.17 hrs, Volume= 0.588 af
Outflow = 5.30 cfs @ 12.27 hrs, Volume= 0.492 af, Atten= 26%, Lag= 5.7 min
Primary = 5.30 cfs @ 12.27 hrs, Volume= 0.492 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.55' @ 12.27 hrs Surf.Area= 3,971 sf Storage= 10,777 cf

Plug-Flow detention time= 305.7 min calculated for 0.492 af (84% of inflow)
Center-of-Mass det. time= 233.7 min (1,011.7 - 778.0)

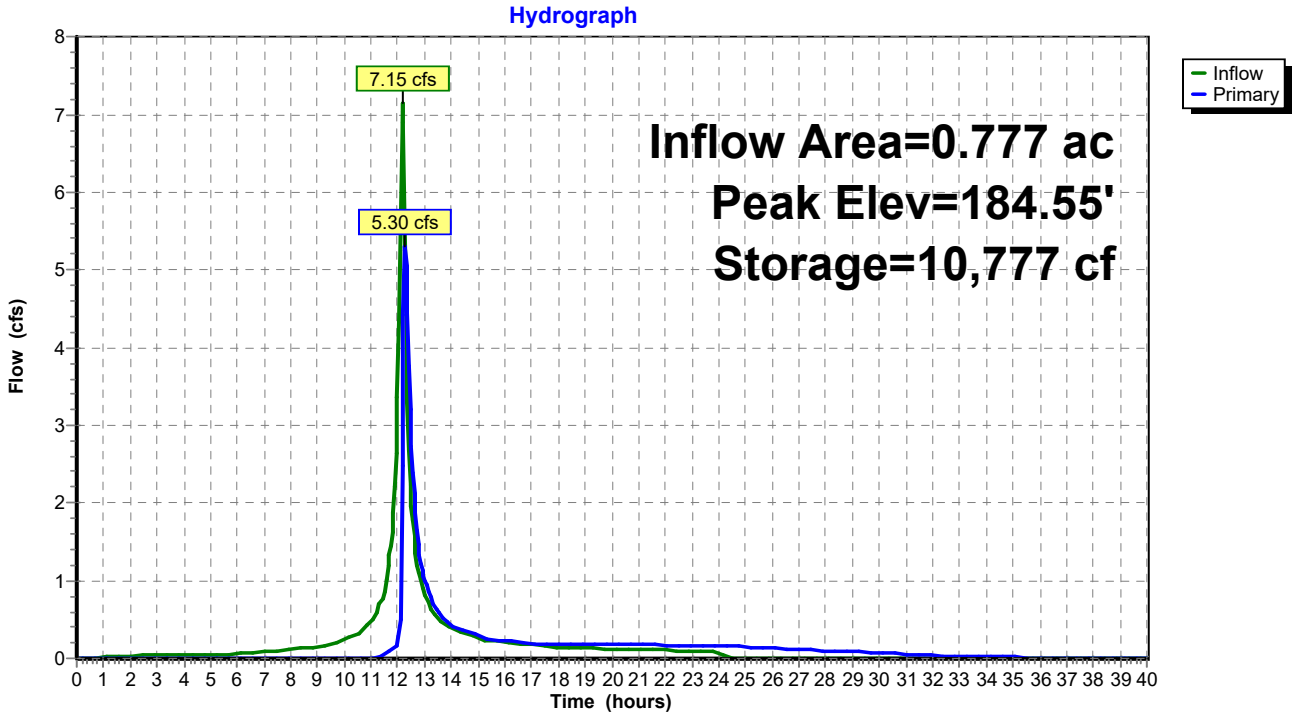
Volume	Invert	Avail.Storage	Storage Description
#1	180.96'	22,293 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
180.96	0	0	0
181.00	2,142	43	43
182.00	2,613	2,378	2,420
183.00	3,118	2,866	5,286
184.00	3,656	3,387	8,673
185.00	4,227	3,942	12,614
186.00	4,831	4,529	17,143
187.00	5,468	5,150	22,293

Device	Routing	Invert	Outlet Devices
#1	Primary	181.96'	**18.0" Round Culvert** L= 192.0' Ke= 0.500 Inlet / Outlet Invert= 181.96' / 181.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	182.60'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.01'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.19 cfs @ 12.27 hrs HW=184.54' (Free Discharge)
- **1=Culvert** (Passes 5.19 cfs of 9.06 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.22 cfs @ 6.53 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.96 cfs @ 2.39 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-42: Basin #42



Stage-Discharge for Pond B-42: Basin #42

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
180.96	0.00	181.48	0.00	182.00	0.00	182.52	0.00
180.97	0.00	181.49	0.00	182.01	0.00	182.53	0.00
180.98	0.00	181.50	0.00	182.02	0.00	182.54	0.00
180.99	0.00	181.51	0.00	182.03	0.00	182.55	0.00
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.01
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.01
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.01
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.01
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.02
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.02
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.02
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.03
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.03
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.03
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.04
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.04
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.05
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.05
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.05
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.05
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.06
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.06
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.06
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.06
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.06
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.07
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.07
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.07
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.07
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.07
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.08
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.08
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.08
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.08
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.08
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.08
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.09
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.09
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.09
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.09
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.09
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.09

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.04	0.10	183.56	0.15	184.08	0.43	184.60	5.98
183.05	0.10	183.57	0.15	184.09	0.49	184.61	6.12
183.06	0.10	183.58	0.15	184.10	0.55	184.62	6.27
183.07	0.10	183.59	0.15	184.11	0.61	184.63	6.42
183.08	0.10	183.60	0.16	184.12	0.67	184.64	6.56
183.09	0.10	183.61	0.16	184.13	0.74	184.65	6.71
183.10	0.10	183.62	0.16	184.14	0.81	184.66	6.86
183.11	0.10	183.63	0.16	184.15	0.88	184.67	7.01
183.12	0.11	183.64	0.16	184.16	0.95	184.68	7.16
183.13	0.11	183.65	0.16	184.17	1.03	184.69	7.32
183.14	0.11	183.66	0.16	184.18	1.11	184.70	7.47
183.15	0.11	183.67	0.16	184.19	1.19	184.71	7.62
183.16	0.11	183.68	0.16	184.20	1.27	184.72	7.78
183.17	0.11	183.69	0.16	184.21	1.36	184.73	7.94
183.18	0.11	183.70	0.16	184.22	1.45	184.74	8.09
183.19	0.11	183.71	0.16	184.23	1.54	184.75	8.25
183.20	0.12	183.72	0.17	184.24	1.63	184.76	8.41
183.21	0.12	183.73	0.17	184.25	1.72	184.77	8.57
183.22	0.12	183.74	0.17	184.26	1.82	184.78	8.73
183.23	0.12	183.75	0.17	184.27	1.92	184.79	8.90
183.24	0.12	183.76	0.17	184.28	2.02	184.80	9.06
183.25	0.12	183.77	0.17	184.29	2.12	184.81	9.22
183.26	0.12	183.78	0.17	184.30	2.22	184.82	9.39
183.27	0.12	183.79	0.17	184.31	2.33	184.83	9.55
183.28	0.12	183.80	0.17	184.32	2.43	184.84	9.69
183.29	0.13	183.81	0.17	184.33	2.54	184.85	9.71
183.30	0.13	183.82	0.17	184.34	2.65	184.86	9.73
183.31	0.13	183.83	0.17	184.35	2.76	184.87	9.75
183.32	0.13	183.84	0.17	184.36	2.87	184.88	9.77
183.33	0.13	183.85	0.18	184.37	2.99	184.89	9.79
183.34	0.13	183.86	0.18	184.38	3.10	184.90	9.81
183.35	0.13	183.87	0.18	184.39	3.22	184.91	9.83
183.36	0.13	183.88	0.18	184.40	3.34	184.92	9.85
183.37	0.13	183.89	0.18	184.41	3.46	184.93	9.88
183.38	0.13	183.90	0.18	184.42	3.58	184.94	9.90
183.39	0.14	183.91	0.18	184.43	3.70	184.95	9.92
183.40	0.14	183.92	0.18	184.44	3.83	184.96	9.94
183.41	0.14	183.93	0.18	184.45	3.95	184.97	9.96
183.42	0.14	183.94	0.18	184.46	4.08	184.98	9.98
183.43	0.14	183.95	0.18	184.47	4.21	184.99	10.00
183.44	0.14	183.96	0.18	184.48	4.33	185.00	10.02
183.45	0.14	183.97	0.18	184.49	4.46	185.01	10.04
183.46	0.14	183.98	0.19	184.50	4.60	185.02	10.06
183.47	0.14	183.99	0.19	184.51	4.73	185.03	10.08
183.48	0.14	184.00	0.19	184.52	4.86	185.04	10.10
183.49	0.15	184.01	0.19	184.53	5.00	185.05	10.12
183.50	0.15	184.02	0.20	184.54	5.14	185.06	10.14
183.51	0.15	184.03	0.23	184.55	5.27	185.07	10.16
183.52	0.15	184.04	0.26	184.56	5.41	185.08	10.18
183.53	0.15	184.05	0.29	184.57	5.55	185.09	10.20
183.54	0.15	184.06	0.34	184.58	5.69	185.10	10.21
183.55	0.15	184.07	0.38	184.59	5.84	185.11	10.23

Stage-Discharge for Pond B-42: Basin #42 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.12	10.25	185.64	11.23	186.16	20.39	186.68	92.62
185.13	10.27	185.65	11.24	186.17	21.15	186.69	94.39
185.14	10.29	185.66	11.26	186.18	21.93	186.70	96.16
185.15	10.31	185.67	11.28	186.19	22.73	186.71	97.95
185.16	10.33	185.68	11.30	186.20	23.60	186.72	99.75
185.17	10.35	185.69	11.31	186.21	24.49	186.73	101.56
185.18	10.37	185.70	11.33	186.22	25.40	186.74	103.38
185.19	10.39	185.71	11.35	186.23	26.34	186.75	105.22
185.20	10.41	185.72	11.37	186.24	27.30	186.76	107.07
185.21	10.43	185.73	11.39	186.25	28.29	186.77	108.93
185.22	10.45	185.74	11.40	186.26	29.31	186.78	110.80
185.23	10.47	185.75	11.42	186.27	30.35	186.79	112.69
185.24	10.49	185.76	11.44	186.28	31.41	186.80	114.62
185.25	10.51	185.77	11.46	186.29	32.50	186.81	116.57
185.26	10.52	185.78	11.47	186.30	33.61	186.82	118.53
185.27	10.54	185.79	11.49	186.31	34.75	186.83	120.50
185.28	10.56	185.80	11.51	186.32	35.91	186.84	122.49
185.29	10.58	185.81	11.53	186.33	37.10	186.85	124.49
185.30	10.60	185.82	11.54	186.34	38.31	186.86	126.51
185.31	10.62	185.83	11.56	186.35	39.54	186.87	128.53
185.32	10.64	185.84	11.58	186.36	40.80	186.88	130.57
185.33	10.66	185.85	11.59	186.37	42.09	186.89	132.63
185.34	10.68	185.86	11.61	186.38	43.39	186.90	134.69
185.35	10.69	185.87	11.63	186.39	44.72	186.91	136.77
185.36	10.71	185.88	11.65	186.40	46.11	186.92	138.86
185.37	10.73	185.89	11.66	186.41	47.51	186.93	140.97
185.38	10.75	185.90	11.68	186.42	48.95	186.94	143.08
185.39	10.77	185.91	11.70	186.43	50.41	186.95	145.21
185.40	10.79	185.92	11.72	186.44	51.89	186.96	147.35
185.41	10.81	185.93	11.73	186.45	53.41	186.97	149.51
185.42	10.83	185.94	11.75	186.46	54.95	186.98	151.68
185.43	10.84	185.95	11.77	186.47	56.51	186.99	153.86
185.44	10.86	185.96	11.78	186.48	58.10	187.00	**155.99**
185.45	10.88	185.97	11.80	186.49	59.72		
185.46	10.90	185.98	11.82	186.50	61.36		
185.47	10.92	185.99	11.83	186.51	63.03		
185.48	10.94	186.00	11.97	186.52	64.73		
185.49	10.95	186.01	12.20	186.53	66.45		
185.50	10.97	186.02	12.49	186.54	68.21		
185.51	10.99	186.03	12.84	186.55	69.98		
185.52	11.01	186.04	13.23	186.56	71.79		
185.53	11.03	186.05	13.66	186.57	73.62		
185.54	11.05	186.06	14.13	186.58	75.48		
185.55	11.06	186.07	14.63	186.59	77.36		
185.56	11.08	186.08	15.16	186.60	79.00		
185.57	11.10	186.09	15.72	186.61	80.66		
185.58	11.12	186.10	16.31	186.62	82.33		
185.59	11.14	186.11	16.93	186.63	84.01		
185.60	11.15	186.12	17.57	186.64	85.71		
185.61	11.17	186.13	18.24	186.65	87.42		
185.62	11.19	186.14	18.93	186.66	89.14		
185.63	11.21	186.15	19.65	186.67	90.88		

Stage-Area-Storage for Pond B-42: Basin #42

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.96	0	0	181.48	2,368	1,125
180.97	535	3	181.49	2,373	1,149
180.98	1,071	11	181.50	2,378	1,173
180.99	1,607	24	181.51	2,382	1,197
181.00	2,142	43	181.52	2,387	1,220
181.01	2,147	64	181.53	2,392	1,244
181.02	2,151	86	181.54	2,396	1,268
181.03	2,156	107	181.55	2,401	1,292
181.04	2,161	129	181.56	2,406	1,316
181.05	2,166	151	181.57	2,410	1,340
181.06	2,170	172	181.58	2,415	1,364
181.07	2,175	194	181.59	2,420	1,389
181.08	2,180	216	181.60	2,425	1,413
181.09	2,184	238	181.61	2,429	1,437
181.10	2,189	259	181.62	2,434	1,461
181.11	2,194	281	181.63	2,439	1,486
181.12	2,199	303	181.64	2,443	1,510
181.13	2,203	325	181.65	2,448	1,535
181.14	2,208	347	181.66	2,453	1,559
181.15	2,213	369	181.67	2,458	1,584
181.16	2,217	392	181.68	2,462	1,608
181.17	2,222	414	181.69	2,467	1,633
181.18	2,227	436	181.70	2,472	1,658
181.19	2,231	458	181.71	2,476	1,682
181.20	2,236	481	181.72	2,481	1,707
181.21	2,241	503	181.73	2,486	1,732
181.22	2,246	525	181.74	2,491	1,757
181.23	2,250	548	181.75	2,495	1,782
181.24	2,255	570	181.76	2,500	1,807
181.25	2,260	593	181.77	2,505	1,832
181.26	2,264	616	181.78	2,509	1,857
181.27	2,269	638	181.79	2,514	1,882
181.28	2,274	661	181.80	2,519	1,907
181.29	2,279	684	181.81	2,524	1,932
181.30	2,283	707	181.82	2,528	1,958
181.31	2,288	729	181.83	2,533	1,983
181.32	2,293	752	181.84	2,538	2,008
181.33	2,297	775	181.85	2,542	2,034
181.34	2,302	798	181.86	2,547	2,059
181.35	2,307	821	181.87	2,552	2,085
181.36	2,312	844	181.88	2,556	2,110
181.37	2,316	868	181.89	2,561	2,136
181.38	2,321	891	181.90	2,566	2,161
181.39	2,326	914	181.91	2,571	2,187
181.40	2,330	937	181.92	2,575	2,213
181.41	2,335	961	181.93	2,580	2,239
181.42	2,340	984	181.94	2,585	2,264
181.43	2,345	1,007	181.95	2,589	2,290
181.44	2,349	1,031	181.96	2,594	2,316
181.45	2,354	1,054	181.97	2,599	2,342
181.46	2,359	1,078	181.98	2,604	2,368
181.47	2,363	1,102	181.99	2,608	2,394

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.00	2,613	2,420	182.52	2,876	3,847
182.01	2,618	2,446	182.53	2,881	3,876
182.02	2,623	2,473	182.54	2,886	3,905
182.03	2,628	2,499	182.55	2,891	3,934
182.04	2,633	2,525	182.56	2,896	3,963
182.05	2,638	2,552	182.57	2,901	3,992
182.06	2,643	2,578	182.58	2,906	4,021
182.07	2,648	2,604	182.59	2,911	4,050
182.08	2,653	2,631	182.60	2,916	4,079
182.09	2,658	2,658	182.61	2,921	4,108
182.10	2,663	2,684	182.62	2,926	4,137
182.11	2,669	2,711	182.63	2,931	4,167
182.12	2,674	2,738	182.64	2,936	4,196
182.13	2,679	2,764	182.65	2,941	4,225
182.14	2,684	2,791	182.66	2,946	4,255
182.15	2,689	2,818	182.67	2,951	4,284
182.16	2,694	2,845	182.68	2,956	4,314
182.17	2,699	2,872	182.69	2,961	4,344
182.18	2,704	2,899	182.70	2,967	4,373
182.19	2,709	2,926	182.71	2,972	4,403
182.20	2,714	2,953	182.72	2,977	4,433
182.21	2,719	2,980	182.73	2,982	4,462
182.22	2,724	3,007	182.74	2,987	4,492
182.23	2,729	3,035	182.75	2,992	4,522
182.24	2,734	3,062	182.76	2,997	4,552
182.25	2,739	3,089	182.77	3,002	4,582
182.26	2,744	3,117	182.78	3,007	4,612
182.27	2,749	3,144	182.79	3,012	4,642
182.28	2,754	3,172	182.80	3,017	4,672
182.29	2,759	3,199	182.81	3,022	4,703
182.30	2,765	3,227	182.82	3,027	4,733
182.31	2,770	3,255	182.83	3,032	4,763
182.32	2,775	3,282	182.84	3,037	4,793
182.33	2,780	3,310	182.85	3,042	4,824
182.34	2,785	3,338	182.86	3,047	4,854
182.35	2,790	3,366	182.87	3,052	4,885
182.36	2,795	3,394	182.88	3,057	4,915
182.37	2,800	3,422	182.89	3,062	4,946
182.38	2,805	3,450	182.90	3,068	4,977
182.39	2,810	3,478	182.91	3,073	5,007
182.40	2,815	3,506	182.92	3,078	5,038
182.41	2,820	3,534	182.93	3,083	5,069
182.42	2,825	3,562	182.94	3,088	5,100
182.43	2,830	3,591	182.95	3,093	5,131
182.44	2,835	3,619	182.96	3,098	5,162
182.45	2,840	3,647	182.97	3,103	5,193
182.46	2,845	3,676	182.98	3,108	5,224
182.47	2,850	3,704	182.99	3,113	5,255
182.48	2,855	3,733	183.00	3,118	5,286
182.49	2,860	3,761	183.01	3,123	5,317
182.50	2,866	3,790	183.02	3,129	5,348
182.51	2,871	3,819	183.03	3,134	5,380

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.04	3,140	5,411	183.56	3,419	7,116
183.05	3,145	5,442	183.57	3,425	7,150
183.06	3,150	5,474	183.58	3,430	7,185
183.07	3,156	5,505	183.59	3,435	7,219
183.08	3,161	5,537	183.60	3,441	7,253
183.09	3,166	5,569	183.61	3,446	7,288
183.10	3,172	5,600	183.62	3,452	7,322
183.11	3,177	5,632	183.63	3,457	7,357
183.12	3,183	5,664	183.64	3,462	7,392
183.13	3,188	5,696	183.65	3,468	7,426
183.14	3,193	5,728	183.66	3,473	7,461
183.15	3,199	5,760	183.67	3,478	7,496
183.16	3,204	5,792	183.68	3,484	7,530
183.17	3,209	5,824	183.69	3,489	7,565
183.18	3,215	5,856	183.70	3,495	7,600
183.19	3,220	5,888	183.71	3,500	7,635
183.20	3,226	5,920	183.72	3,505	7,670
183.21	3,231	5,952	183.73	3,511	7,705
183.22	3,236	5,985	183.74	3,516	7,740
183.23	3,242	6,017	183.75	3,522	7,776
183.24	3,247	6,050	183.76	3,527	7,811
183.25	3,253	6,082	183.77	3,532	7,846
183.26	3,258	6,115	183.78	3,538	7,882
183.27	3,263	6,147	183.79	3,543	7,917
183.28	3,269	6,180	183.80	3,548	7,952
183.29	3,274	6,213	183.81	3,554	7,988
183.30	3,279	6,245	183.82	3,559	8,023
183.31	3,285	6,278	183.83	3,565	8,059
183.32	3,290	6,311	183.84	3,570	8,095
183.33	3,296	6,344	183.85	3,575	8,130
183.34	3,301	6,377	183.86	3,581	8,166
183.35	3,306	6,410	183.87	3,586	8,202
183.36	3,312	6,443	183.88	3,591	8,238
183.37	3,317	6,476	183.89	3,597	8,274
183.38	3,322	6,510	183.90	3,602	8,310
183.39	3,328	6,543	183.91	3,608	8,346
183.40	3,333	6,576	183.92	3,613	8,382
183.41	3,339	6,609	183.93	3,618	8,418
183.42	3,344	6,643	183.94	3,624	8,454
183.43	3,349	6,676	183.95	3,629	8,491
183.44	3,355	6,710	183.96	3,634	8,527
183.45	3,360	6,743	183.97	3,640	8,563
183.46	3,365	6,777	183.98	3,645	8,600
183.47	3,371	6,811	183.99	3,651	8,636
183.48	3,376	6,844	184.00	3,656	8,673
183.49	3,382	6,878	184.01	3,662	8,709
183.50	3,387	6,912	184.02	3,667	8,746
183.51	3,392	6,946	184.03	3,673	8,783
183.52	3,398	6,980	184.04	3,679	8,820
183.53	3,403	7,014	184.05	3,685	8,856
183.54	3,409	7,048	184.06	3,690	8,893
183.55	3,414	7,082	184.07	3,696	8,930

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.08	3,702	8,967	184.60	3,999	10,969
184.09	3,707	9,004	184.61	4,004	11,009
184.10	3,713	9,041	184.62	4,010	11,049
184.11	3,719	9,078	184.63	4,016	11,089
184.12	3,725	9,116	184.64	4,021	11,130
184.13	3,730	9,153	184.65	4,027	11,170
184.14	3,736	9,190	184.66	4,033	11,210
184.15	3,742	9,228	184.67	4,039	11,251
184.16	3,747	9,265	184.68	4,044	11,291
184.17	3,753	9,303	184.69	4,050	11,331
184.18	3,759	9,340	184.70	4,056	11,372
184.19	3,764	9,378	184.71	4,061	11,413
184.20	3,770	9,415	184.72	4,067	11,453
184.21	3,776	9,453	184.73	4,073	11,494
184.22	3,782	9,491	184.74	4,079	11,535
184.23	3,787	9,529	184.75	4,084	11,575
184.24	3,793	9,567	184.76	4,090	11,616
184.25	3,799	9,605	184.77	4,096	11,657
184.26	3,804	9,643	184.78	4,101	11,698
184.27	3,810	9,681	184.79	4,107	11,739
184.28	3,816	9,719	184.80	4,113	11,780
184.29	3,822	9,757	184.81	4,119	11,822
184.30	3,827	9,795	184.82	4,124	11,863
184.31	3,833	9,834	184.83	4,130	11,904
184.32	3,839	9,872	184.84	4,136	11,945
184.33	3,844	9,910	184.85	4,141	11,987
184.34	3,850	9,949	184.86	4,147	12,028
184.35	3,856	9,987	184.87	4,153	12,070
184.36	3,862	10,026	184.88	4,158	12,111
184.37	3,867	10,065	184.89	4,164	12,153
184.38	3,873	10,103	184.90	4,170	12,194
184.39	3,879	10,142	184.91	4,176	12,236
184.40	3,884	10,181	184.92	4,181	12,278
184.41	3,890	10,220	184.93	4,187	12,320
184.42	3,896	10,259	184.94	4,193	12,362
184.43	3,902	10,298	184.95	4,198	12,404
184.44	3,907	10,337	184.96	4,204	12,446
184.45	3,913	10,376	184.97	4,210	12,488
184.46	3,919	10,415	184.98	4,216	12,530
184.47	3,924	10,454	184.99	4,221	12,572
184.48	3,930	10,493	185.00	4,227	12,614
184.49	3,936	10,533	185.01	4,233	12,657
184.50	3,942	10,572	185.02	4,239	12,699
184.51	3,947	10,612	185.03	4,245	12,741
184.52	3,953	10,651	185.04	4,251	12,784
184.53	3,959	10,691	185.05	4,257	12,826
184.54	3,964	10,730	185.06	4,263	12,869
184.55	3,970	10,770	185.07	4,269	12,912
184.56	3,976	10,810	185.08	4,275	12,954
184.57	3,981	10,850	185.09	4,281	12,997
184.58	3,987	10,889	185.10	4,287	13,040
184.59	3,993	10,929	185.11	4,293	13,083

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.12	4,299	13,126	185.64	4,614	15,443
185.13	4,306	13,169	185.65	4,620	15,489
185.14	4,312	13,212	185.66	4,626	15,536
185.15	4,318	13,255	185.67	4,632	15,582
185.16	4,324	13,298	185.68	4,638	15,628
185.17	4,330	13,342	185.69	4,644	15,675
185.18	4,336	13,385	185.70	4,650	15,721
185.19	4,342	13,428	185.71	4,656	15,768
185.20	4,348	13,472	185.72	4,662	15,814
185.21	4,354	13,515	185.73	4,668	15,861
185.22	4,360	13,559	185.74	4,674	15,908
185.23	4,366	13,603	185.75	4,680	15,954
185.24	4,372	13,646	185.76	4,686	16,001
185.25	4,378	13,690	185.77	4,692	16,048
185.26	4,384	13,734	185.78	4,698	16,095
185.27	4,390	13,778	185.79	4,704	16,142
185.28	4,396	13,822	185.80	4,710	16,189
185.29	4,402	13,866	185.81	4,716	16,236
185.30	4,408	13,910	185.82	4,722	16,284
185.31	4,414	13,954	185.83	4,728	16,331
185.32	4,420	13,998	185.84	4,734	16,378
185.33	4,426	14,042	185.85	4,740	16,425
185.34	4,432	14,086	185.86	4,746	16,473
185.35	4,438	14,131	185.87	4,752	16,520
185.36	4,444	14,175	185.88	4,759	16,568
185.37	4,450	14,220	185.89	4,765	16,616
185.38	4,457	14,264	185.90	4,771	16,663
185.39	4,463	14,309	185.91	4,777	16,711
185.40	4,469	14,353	185.92	4,783	16,759
185.41	4,475	14,398	185.93	4,789	16,807
185.42	4,481	14,443	185.94	4,795	16,855
185.43	4,487	14,488	185.95	4,801	16,903
185.44	4,493	14,533	185.96	4,807	16,951
185.45	4,499	14,578	185.97	4,813	16,999
185.46	4,505	14,623	185.98	4,819	17,047
185.47	4,511	14,668	185.99	4,825	17,095
185.48	4,517	14,713	186.00	4,831	17,143
185.49	4,523	14,758	186.01	4,837	17,192
185.50	4,529	14,803	186.02	4,844	17,240
185.51	4,535	14,849	186.03	4,850	17,289
185.52	4,541	14,894	186.04	4,856	17,337
185.53	4,547	14,939	186.05	4,863	17,386
185.54	4,553	14,985	186.06	4,869	17,434
185.55	4,559	15,031	186.07	4,876	17,483
185.56	4,565	15,076	186.08	4,882	17,532
185.57	4,571	15,122	186.09	4,888	17,581
185.58	4,577	15,168	186.10	4,895	17,630
185.59	4,583	15,213	186.11	4,901	17,679
185.60	4,589	15,259	186.12	4,907	17,728
185.61	4,595	15,305	186.13	4,914	17,777
185.62	4,601	15,351	186.14	4,920	17,826
185.63	4,608	15,397	186.15	4,927	17,875

Stage-Area-Storage for Pond B-42: Basin #42 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.16	4,933	17,924
186.17	4,939	17,974
186.18	4,946	18,023
186.19	4,952	18,073
186.20	4,958	18,122
186.21	4,965	18,172
186.22	4,971	18,222
186.23	4,978	18,271
186.24	4,984	18,321
186.25	4,990	18,371
186.26	4,997	18,421
186.27	5,003	18,471
186.28	5,009	18,521
186.29	5,016	18,571
186.30	5,022	18,621
186.31	5,028	18,672
186.32	5,035	18,722
186.33	5,041	18,772
186.34	5,048	18,823
186.35	5,054	18,873
186.36	5,060	18,924
186.37	5,067	18,974
186.38	5,073	19,025
186.39	5,079	19,076
186.40	5,086	19,127
186.41	5,092	19,178
186.42	5,099	19,229
186.43	5,105	19,280
186.44	5,111	19,331
186.45	5,118	19,382
186.46	5,124	19,433
186.47	5,130	19,484
186.48	5,137	19,536
186.49	5,143	19,587
186.50	5,150	19,638
186.51	5,156	19,690
186.52	5,162	19,742
186.53	5,169	19,793
186.54	5,175	19,845
186.55	5,181	19,897
186.56	5,188	19,949
186.57	5,194	20,000
186.58	5,200	20,052
186.59	5,207	20,104
186.60	5,213	20,157
186.61	5,220	20,209
186.62	5,226	20,261
186.63	5,232	20,313
186.64	5,239	20,366
186.65	5,245	20,418
186.66	5,251	20,471
186.67	5,258	20,523
186.68	5,264	20,576
186.69	5,271	20,628
186.70	5,277	20,681
186.71	5,283	20,734
186.72	5,290	20,787
186.73	5,296	20,840
186.74	5,302	20,893
186.75	5,309	20,946
186.76	5,315	20,999
186.77	5,321	21,052
186.78	5,328	21,105
186.79	5,334	21,159
186.80	5,341	21,212
186.81	5,347	21,265
186.82	5,353	21,319
186.83	5,360	21,372
186.84	5,366	21,426
186.85	5,372	21,480
186.86	5,379	21,534
186.87	5,385	21,587
186.88	5,392	21,641
186.89	5,398	21,695
186.90	5,404	21,749
186.91	5,411	21,803
186.92	5,417	21,857
186.93	5,423	21,912
186.94	5,430	21,966
186.95	5,436	22,020
186.96	5,443	22,075
186.97	5,449	22,129
186.98	5,455	22,184
186.99	5,462	22,238
187.00	**5,468**	**22,293**

Summary for Pond B-43: Basin #43

Inflow Area = 2.712 ac, 33.89% Impervious, Inflow Depth = 8.94" for Future 100 yr event
Inflow = 24.73 cfs @ 12.17 hrs, Volume= 2.021 af
Outflow = 20.26 cfs @ 12.26 hrs, Volume= 1.909 af, Atten= 18%, Lag= 5.1 min
Primary = 20.26 cfs @ 12.26 hrs, Volume= 1.909 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 180.13' @ 12.26 hrs Surf.Area= 7,282 sf Storage= 19,648 cf

Plug-Flow detention time= 137.2 min calculated for 1.909 af (94% of inflow)
Center-of-Mass det. time= 105.3 min (886.5 - 781.2)

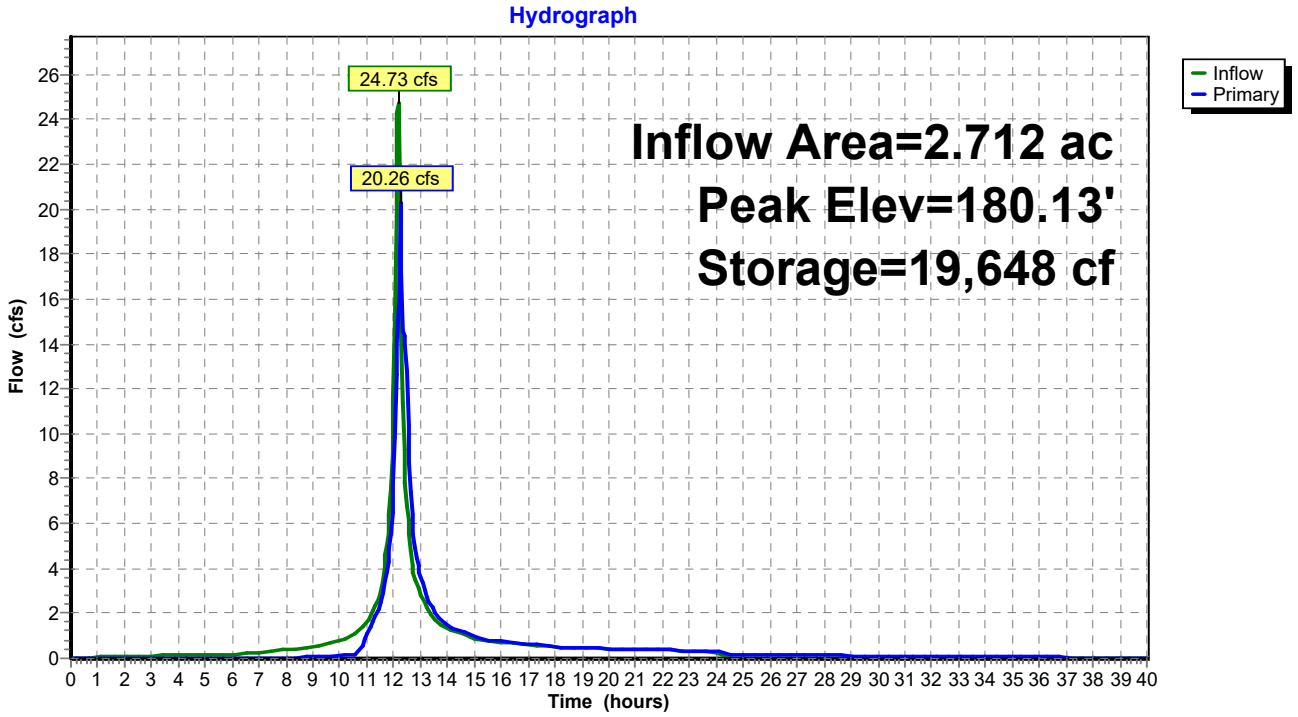
Volume	Invert	Avail.Storage	Storage Description
#1	176.35'	26,392 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
176.35	0	0	0
177.00	4,447	1,445	1,445
178.00	5,292	4,870	6,315
179.00	6,194	5,743	12,058
180.00	7,153	6,674	18,731
181.00	8,168	7,661	26,392

Device	Routing	Invert	Outlet Devices
#1	Primary	176.30'	**18.0" Round Culvert** L= 200.0' Ke= 0.500 Inlet / Outlet Invert= 176.30' / 166.10' S= 0.0510 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	177.62'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	178.58'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	180.00'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=19.83 cfs @ 12.26 hrs HW=180.12' (Free Discharge)
- **1=Culvert** (Inlet Controls 14.91 cfs @ 8.44 fps)
  - **2=Orifice/Grate** (Passes < 0.25 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 23.08 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 4.92 cfs @ 0.81 fps)

Pond B-43: Basin #43



Stage-Discharge for Pond B-43: Basin #43

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
176.35	0.00	176.87	0.00	177.39	0.00	177.91	0.07
176.36	0.00	176.88	0.00	177.40	0.00	177.92	0.07
176.37	0.00	176.89	0.00	177.41	0.00	177.93	0.07
176.38	0.00	176.90	0.00	177.42	0.00	177.94	0.08
176.39	0.00	176.91	0.00	177.43	0.00	177.95	0.08
176.40	0.00	176.92	0.00	177.44	0.00	177.96	0.08
176.41	0.00	176.93	0.00	177.45	0.00	177.97	0.08
176.42	0.00	176.94	0.00	177.46	0.00	177.98	0.08
176.43	0.00	176.95	0.00	177.47	0.00	177.99	0.08
176.44	0.00	176.96	0.00	177.48	0.00	178.00	0.09
176.45	0.00	176.97	0.00	177.49	0.00	178.01	0.09
176.46	0.00	176.98	0.00	177.50	0.00	178.02	0.09
176.47	0.00	176.99	0.00	177.51	0.00	178.03	0.09
176.48	0.00	177.00	0.00	177.52	0.00	178.04	0.09
176.49	0.00	177.01	0.00	177.53	0.00	178.05	0.09
176.50	0.00	177.02	0.00	177.54	0.00	178.06	0.10
176.51	0.00	177.03	0.00	177.55	0.00	178.07	0.10
176.52	0.00	177.04	0.00	177.56	0.00	178.08	0.10
176.53	0.00	177.05	0.00	177.57	0.00	178.09	0.10
176.54	0.00	177.06	0.00	177.58	0.00	178.10	0.10
176.55	0.00	177.07	0.00	177.59	0.00	178.11	0.10
176.56	0.00	177.08	0.00	177.60	0.00	178.12	0.10
176.57	0.00	177.09	0.00	177.61	0.00	178.13	0.10
176.58	0.00	177.10	0.00	177.62	0.00	178.14	0.11
176.59	0.00	177.11	0.00	177.63	0.00	178.15	0.11
176.60	0.00	177.12	0.00	177.64	0.00	178.16	0.11
176.61	0.00	177.13	0.00	177.65	0.00	178.17	0.11
176.62	0.00	177.14	0.00	177.66	0.00	178.18	0.11
176.63	0.00	177.15	0.00	177.67	0.00	178.19	0.11
176.64	0.00	177.16	0.00	177.68	0.01	178.20	0.11
176.65	0.00	177.17	0.00	177.69	0.01	178.21	0.11
176.66	0.00	177.18	0.00	177.70	0.01	178.22	0.12
176.67	0.00	177.19	0.00	177.71	0.01	178.23	0.12
176.68	0.00	177.20	0.00	177.72	0.02	178.24	0.12
176.69	0.00	177.21	0.00	177.73	0.02	178.25	0.12
176.70	0.00	177.22	0.00	177.74	0.02	178.26	0.12
176.71	0.00	177.23	0.00	177.75	0.03	178.27	0.12
176.72	0.00	177.24	0.00	177.76	0.03	178.28	0.12
176.73	0.00	177.25	0.00	177.77	0.03	178.29	0.12
176.74	0.00	177.26	0.00	177.78	0.04	178.30	0.12
176.75	0.00	177.27	0.00	177.79	0.04	178.31	0.13
176.76	0.00	177.28	0.00	177.80	0.05	178.32	0.13
176.77	0.00	177.29	0.00	177.81	0.05	178.33	0.13
176.78	0.00	177.30	0.00	177.82	0.05	178.34	0.13
176.79	0.00	177.31	0.00	177.83	0.05	178.35	0.13
176.80	0.00	177.32	0.00	177.84	0.06	178.36	0.13
176.81	0.00	177.33	0.00	177.85	0.06	178.37	0.13
176.82	0.00	177.34	0.00	177.86	0.06	178.38	0.13
176.83	0.00	177.35	0.00	177.87	0.06	178.39	0.13
176.84	0.00	177.36	0.00	177.88	0.06	178.40	0.13
176.85	0.00	177.37	0.00	177.89	0.07	178.41	0.14
176.86	0.00	177.38	0.00	177.90	0.07	178.42	0.14

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
178.43	0.14	178.95	3.07	179.47	10.71	179.99	14.59
178.44	0.14	178.96	3.19	179.48	10.88	180.00	14.61
178.45	0.14	178.97	3.31	179.49	11.06	180.01	14.76
178.46	0.14	178.98	3.43	179.50	11.23	180.02	14.99
178.47	0.14	178.99	3.55	179.51	11.40	180.03	15.30
178.48	0.14	179.00	3.67	179.52	11.58	180.04	15.65
178.49	0.14	179.01	3.79	179.53	11.76	180.05	16.05
178.50	0.14	179.02	3.92	179.54	11.93	180.06	16.49
178.51	0.15	179.03	4.05	179.55	12.11	180.07	16.96
178.52	0.15	179.04	4.18	179.56	12.29	180.08	17.47
178.53	0.15	179.05	4.30	179.57	12.47	180.09	18.01
178.54	0.15	179.06	4.44	179.58	12.65	180.10	18.58
178.55	0.15	179.07	4.57	179.59	12.83	180.11	19.18
178.56	0.15	179.08	4.70	179.60	13.01	180.12	19.80
178.57	0.15	179.09	4.83	179.61	13.19	180.13	20.45
178.58	0.15	179.10	4.97	179.62	13.38	180.14	21.13
178.59	0.17	179.11	5.11	179.63	13.56	180.15	21.83
178.60	0.19	179.12	5.24	179.64	13.69	180.16	22.55
178.61	0.22	179.13	5.38	179.65	13.72	180.17	23.30
178.62	0.26	179.14	5.52	179.66	13.75	180.18	24.07
178.63	0.30	179.15	5.66	179.67	13.77	180.19	24.86
178.64	0.35	179.16	5.81	179.68	13.80	180.20	25.67
178.65	0.40	179.17	5.95	179.69	13.83	180.21	26.54
178.66	0.45	179.18	6.09	179.70	13.85	180.22	27.43
178.67	0.51	179.19	6.24	179.71	13.88	180.23	28.36
178.68	0.57	179.20	6.39	179.72	13.90	180.24	29.30
178.69	0.64	179.21	6.53	179.73	13.93	180.25	30.27
178.70	0.70	179.22	6.68	179.74	13.96	180.26	31.27
178.71	0.77	179.23	6.83	179.75	13.98	180.27	32.29
178.72	0.84	179.24	6.98	179.76	14.01	180.28	33.34
178.73	0.92	179.25	7.14	179.77	14.03	180.29	34.41
178.74	1.00	179.26	7.29	179.78	14.06	180.30	35.51
178.75	1.08	179.27	7.44	179.79	14.08	180.31	36.63
178.76	1.16	179.28	7.60	179.80	14.11	180.32	37.77
178.77	1.24	179.29	7.75	179.81	14.14	180.33	38.94
178.78	1.33	179.30	7.91	179.82	14.16	180.34	40.14
178.79	1.41	179.31	8.07	179.83	14.19	180.35	41.35
178.80	1.51	179.32	8.23	179.84	14.21	180.36	42.60
178.81	1.60	179.33	8.39	179.85	14.24	180.37	43.86
178.82	1.69	179.34	8.55	179.86	14.26	180.38	45.15
178.83	1.79	179.35	8.71	179.87	14.29	180.39	46.47
178.84	1.88	179.36	8.87	179.88	14.31	180.40	47.80
178.85	1.98	179.37	9.03	179.89	14.34	180.41	49.19
178.86	2.09	179.38	9.20	179.90	14.36	180.42	50.61
178.87	2.19	179.39	9.36	179.91	14.39	180.43	52.05
178.88	2.29	179.40	9.53	179.92	14.41	180.44	53.52
178.89	2.40	179.41	9.69	179.93	14.44	180.45	55.01
178.90	2.51	179.42	9.86	179.94	14.46	180.46	56.53
178.91	2.62	179.43	10.03	179.95	14.49	180.47	58.07
178.92	2.73	179.44	10.20	179.96	14.51	180.48	59.65
178.93	2.84	179.45	10.37	179.97	14.54	180.49	61.24
178.94	2.96	179.46	10.54	179.98	14.56	180.50	62.87

Stage-Discharge for Pond B-43: Basin #43 (continued)

Elevation (feet)	Primary (cfs)
180.51	64.52
180.52	66.20
180.53	67.90
180.54	69.63
180.55	71.39
180.56	73.18
180.57	74.99
180.58	76.82
180.59	78.69
180.60	80.58
180.61	82.23
180.62	83.89
180.63	85.57
180.64	87.26
180.65	88.96
180.66	90.68
180.67	92.41
180.68	94.15
180.69	95.91
180.70	97.67
180.71	99.46
180.72	101.25
180.73	103.05
180.74	104.87
180.75	106.70
180.76	108.55
180.77	110.40
180.78	112.27
180.79	114.15
180.80	116.04
180.81	117.98
180.82	119.94
180.83	121.91
180.84	123.89
180.85	125.88
180.86	127.89
180.87	129.91
180.88	131.94
180.89	133.99
180.90	136.05
180.91	138.12
180.92	140.21
180.93	142.30
180.94	144.41
180.95	146.54
180.96	148.67
180.97	150.82
180.98	152.98
180.99	155.16
181.00	**157.34**

Stage-Area-Storage for Pond B-43: Basin #43

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.35	0	0
176.36	68	0
176.37	137	1
176.38	205	3
176.39	274	5
176.40	342	9
176.41	410	12
176.42	479	17
176.43	547	22
176.44	616	28
176.45	684	34
176.46	753	41
176.47	821	49
176.48	889	58
176.49	958	67
176.50	1,026	77
176.51	1,095	88
176.52	1,163	99
176.53	1,231	111
176.54	1,300	123
176.55	1,368	137
176.56	1,437	151
176.57	1,505	166
176.58	1,574	181
176.59	1,642	197
176.60	1,710	214
176.61	1,779	231
176.62	1,847	249
176.63	1,916	268
176.64	1,984	288
176.65	2,052	308
176.66	2,121	329
176.67	2,189	350
176.68	2,258	373
176.69	2,326	395
176.70	2,395	419
176.71	2,463	443
176.72	2,531	468
176.73	2,600	494
176.74	2,668	520
176.75	2,737	547
176.76	2,805	575
176.77	2,873	603
176.78	2,942	633
176.79	3,010	662
176.80	3,079	693
176.81	3,147	724
176.82	3,216	756
176.83	3,284	788
176.84	3,352	821
176.85	3,421	855
176.86	3,489	890
176.87	3,558	925
176.88	3,626	961
176.89	3,694	997
176.90	3,763	1,035
176.91	3,831	1,073
176.92	3,900	1,111
176.93	3,968	1,151
176.94	4,037	1,191
176.95	4,105	1,231
176.96	4,173	1,273
176.97	4,242	1,315
176.98	4,310	1,358
176.99	4,379	1,401
177.00	4,447	1,445
177.01	4,455	1,490
177.02	4,464	1,534
177.03	4,472	1,579
177.04	4,481	1,624
177.05	4,489	1,669
177.06	4,498	1,714
177.07	4,506	1,759
177.08	4,515	1,804
177.09	4,523	1,849
177.10	4,531	1,894
177.11	4,540	1,940
177.12	4,548	1,985
177.13	4,557	2,031
177.14	4,565	2,076
177.15	4,574	2,122
177.16	4,582	2,168
177.17	4,591	2,213
177.18	4,599	2,259
177.19	4,608	2,305
177.20	4,616	2,352
177.21	4,624	2,398
177.22	4,633	2,444
177.23	4,641	2,490
177.24	4,650	2,537
177.25	4,658	2,583
177.26	4,667	2,630
177.27	4,675	2,677
177.28	4,684	2,724
177.29	4,692	2,770
177.30	4,700	2,817
177.31	4,709	2,864
177.32	4,717	2,912
177.33	4,726	2,959
177.34	4,734	3,006
177.35	4,743	3,053
177.36	4,751	3,101
177.37	4,760	3,149
177.38	4,768	3,196

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.39	4,777	3,244	177.91	5,216	5,842
177.40	4,785	3,292	177.92	5,224	5,894
177.41	4,793	3,340	177.93	5,233	5,946
177.42	4,802	3,388	177.94	5,241	5,999
177.43	4,810	3,436	177.95	5,250	6,051
177.44	4,819	3,484	177.96	5,258	6,104
177.45	4,827	3,532	177.97	5,267	6,156
177.46	4,836	3,580	177.98	5,275	6,209
177.47	4,844	3,629	177.99	5,284	6,262
177.48	4,853	3,677	178.00	5,292	6,315
177.49	4,861	3,726	178.01	5,301	6,368
177.50	4,870	3,774	178.02	5,310	6,421
177.51	4,878	3,823	178.03	5,319	6,474
177.52	4,886	3,872	178.04	5,328	6,527
177.53	4,895	3,921	178.05	5,337	6,581
177.54	4,903	3,970	178.06	5,346	6,634
177.55	4,912	4,019	178.07	5,355	6,687
177.56	4,920	4,068	178.08	5,364	6,741
177.57	4,929	4,117	178.09	5,373	6,795
177.58	4,937	4,167	178.10	5,382	6,848
177.59	4,946	4,216	178.11	5,391	6,902
177.60	4,954	4,266	178.12	5,400	6,956
177.61	4,962	4,315	178.13	5,409	7,010
177.62	4,971	4,365	178.14	5,418	7,064
177.63	4,979	4,415	178.15	5,427	7,119
177.64	4,988	4,464	178.16	5,436	7,173
177.65	4,996	4,514	178.17	5,445	7,227
177.66	5,005	4,564	178.18	5,454	7,282
177.67	5,013	4,614	178.19	5,463	7,337
177.68	5,022	4,665	178.20	5,472	7,391
177.69	5,030	4,715	178.21	5,481	7,446
177.70	5,038	4,765	178.22	5,490	7,501
177.71	5,047	4,816	178.23	5,499	7,556
177.72	5,055	4,866	178.24	5,508	7,611
177.73	5,064	4,917	178.25	5,518	7,666
177.74	5,072	4,967	178.26	5,527	7,721
177.75	5,081	5,018	178.27	5,536	7,776
177.76	5,089	5,069	178.28	5,545	7,832
177.77	5,098	5,120	178.29	5,554	7,887
177.78	5,106	5,171	178.30	5,563	7,943
177.79	5,115	5,222	178.31	5,572	7,999
177.80	5,123	5,273	178.32	5,581	8,054
177.81	5,131	5,325	178.33	5,590	8,110
177.82	5,140	5,376	178.34	5,599	8,166
177.83	5,148	5,427	178.35	5,608	8,222
177.84	5,157	5,479	178.36	5,617	8,278
177.85	5,165	5,530	178.37	5,626	8,335
177.86	5,174	5,582	178.38	5,635	8,391
177.87	5,182	5,634	178.39	5,644	8,447
177.88	5,191	5,686	178.40	5,653	8,504
177.89	5,199	5,738	178.41	5,662	8,560
177.90	5,208	5,790	178.42	5,671	8,617

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.43	5,680	8,674	178.95	6,149	11,749
178.44	5,689	8,731	178.96	6,158	11,811
178.45	5,698	8,788	178.97	6,167	11,872
178.46	5,707	8,845	178.98	6,176	11,934
178.47	5,716	8,902	178.99	6,185	11,996
178.48	5,725	8,959	179.00	6,194	12,058
178.49	5,734	9,016	179.01	6,204	12,120
178.50	5,743	9,074	179.02	6,213	12,182
178.51	5,752	9,131	179.03	6,223	12,244
178.52	5,761	9,189	179.04	6,232	12,306
178.53	5,770	9,246	179.05	6,242	12,369
178.54	5,779	9,304	179.06	6,252	12,431
178.55	5,788	9,362	179.07	6,261	12,494
178.56	5,797	9,420	179.08	6,271	12,556
178.57	5,806	9,478	179.09	6,280	12,619
178.58	5,815	9,536	179.10	6,290	12,682
178.59	5,824	9,594	179.11	6,299	12,745
178.60	5,833	9,652	179.12	6,309	12,808
178.61	5,842	9,711	179.13	6,319	12,871
178.62	5,851	9,769	179.14	6,328	12,934
178.63	5,860	9,828	179.15	6,338	12,998
178.64	5,869	9,886	179.16	6,347	13,061
178.65	5,878	9,945	179.17	6,357	13,125
178.66	5,887	10,004	179.18	6,367	13,188
178.67	5,896	10,063	179.19	6,376	13,252
178.68	5,905	10,122	179.20	6,386	13,316
178.69	5,914	10,181	179.21	6,395	13,380
178.70	5,923	10,240	179.22	6,405	13,444
178.71	5,932	10,299	179.23	6,415	13,508
178.72	5,941	10,359	179.24	6,424	13,572
178.73	5,950	10,418	179.25	6,434	13,636
178.74	5,959	10,478	179.26	6,443	13,701
178.75	5,969	10,537	179.27	6,453	13,765
178.76	5,978	10,597	179.28	6,463	13,830
178.77	5,987	10,657	179.29	6,472	13,894
178.78	5,996	10,717	179.30	6,482	13,959
178.79	6,005	10,777	179.31	6,491	14,024
178.80	6,014	10,837	179.32	6,501	14,089
178.81	6,023	10,897	179.33	6,510	14,154
178.82	6,032	10,957	179.34	6,520	14,219
178.83	6,041	11,018	179.35	6,530	14,284
178.84	6,050	11,078	179.36	6,539	14,350
178.85	6,059	11,139	179.37	6,549	14,415
178.86	6,068	11,199	179.38	6,558	14,481
178.87	6,077	11,260	179.39	6,568	14,546
178.88	6,086	11,321	179.40	6,578	14,612
178.89	6,095	11,382	179.41	6,587	14,678
178.90	6,104	11,443	179.42	6,597	14,744
178.91	6,113	11,504	179.43	6,606	14,810
178.92	6,122	11,565	179.44	6,616	14,876
178.93	6,131	11,626	179.45	6,626	14,942
178.94	6,140	11,688	179.46	6,635	15,008

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.47	6,645	15,075	179.99	7,143	18,660
179.48	6,654	15,141	180.00	7,153	18,731
179.49	6,664	15,208	180.01	7,163	18,803
179.50	6,674	15,275	180.02	7,173	18,875
179.51	6,683	15,341	180.03	7,183	18,946
179.52	6,693	15,408	180.04	7,194	19,018
179.53	6,702	15,475	180.05	7,204	19,090
179.54	6,712	15,542	180.06	7,214	19,162
179.55	6,721	15,610	180.07	7,224	19,234
179.56	6,731	15,677	180.08	7,234	19,307
179.57	6,741	15,744	180.09	7,244	19,379
179.58	6,750	15,812	180.10	7,254	19,452
179.59	6,760	15,879	180.11	7,265	19,524
179.60	6,769	15,947	180.12	7,275	19,597
179.61	6,779	16,015	180.13	7,285	19,670
179.62	6,789	16,082	180.14	7,295	19,743
179.63	6,798	16,150	180.15	7,305	19,816
179.64	6,808	16,218	180.16	7,315	19,889
179.65	6,817	16,286	180.17	7,326	19,962
179.66	6,827	16,355	180.18	7,336	20,035
179.67	6,837	16,423	180.19	7,346	20,109
179.68	6,846	16,491	180.20	7,356	20,182
179.69	6,856	16,560	180.21	7,366	20,256
179.70	6,865	16,629	180.22	7,376	20,329
179.71	6,875	16,697	180.23	7,386	20,403
179.72	6,884	16,766	180.24	7,397	20,477
179.73	6,894	16,835	180.25	7,407	20,551
179.74	6,904	16,904	180.26	7,417	20,625
179.75	6,913	16,973	180.27	7,427	20,700
179.76	6,923	17,042	180.28	7,437	20,774
179.77	6,932	17,111	180.29	7,447	20,848
179.78	6,942	17,181	180.30	7,457	20,923
179.79	6,952	17,250	180.31	7,468	20,997
179.80	6,961	17,320	180.32	7,478	21,072
179.81	6,971	17,390	180.33	7,488	21,147
179.82	6,980	17,459	180.34	7,498	21,222
179.83	6,990	17,529	180.35	7,508	21,297
179.84	7,000	17,599	180.36	7,518	21,372
179.85	7,009	17,669	180.37	7,529	21,447
179.86	7,019	17,739	180.38	7,539	21,523
179.87	7,028	17,809	180.39	7,549	21,598
179.88	7,038	17,880	180.40	7,559	21,674
179.89	7,048	17,950	180.41	7,569	21,749
179.90	7,057	18,021	180.42	7,579	21,825
179.91	7,067	18,091	180.43	7,589	21,901
179.92	7,076	18,162	180.44	7,600	21,977
179.93	7,086	18,233	180.45	7,610	22,053
179.94	7,095	18,304	180.46	7,620	22,129
179.95	7,105	18,375	180.47	7,630	22,205
179.96	7,115	18,446	180.48	7,640	22,282
179.97	7,124	18,517	180.49	7,650	22,358
179.98	7,134	18,588	180.50	7,661	22,435

Stage-Area-Storage for Pond B-43: Basin #43 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.51	7,671	22,511
180.52	7,681	22,588
180.53	7,691	22,665
180.54	7,701	22,742
180.55	7,711	22,819
180.56	7,721	22,896
180.57	7,732	22,973
180.58	7,742	23,051
180.59	7,752	23,128
180.60	7,762	23,206
180.61	7,772	23,283
180.62	7,782	23,361
180.63	7,792	23,439
180.64	7,803	23,517
180.65	7,813	23,595
180.66	7,823	23,673
180.67	7,833	23,752
180.68	7,843	23,830
180.69	7,853	23,908
180.70	7,863	23,987
180.71	7,874	24,066
180.72	7,884	24,145
180.73	7,894	24,223
180.74	7,904	24,302
180.75	7,914	24,381
180.76	7,924	24,461
180.77	7,935	24,540
180.78	7,945	24,619
180.79	7,955	24,699
180.80	7,965	24,778
180.81	7,975	24,858
180.82	7,985	24,938
180.83	7,995	25,018
180.84	8,006	25,098
180.85	8,016	25,178
180.86	8,026	25,258
180.87	8,036	25,339
180.88	8,046	25,419
180.89	8,056	25,499
180.90	8,067	25,580
180.91	8,077	25,661
180.92	8,087	25,742
180.93	8,097	25,823
180.94	8,107	25,904
180.95	8,117	25,985
180.96	8,127	26,066
180.97	8,138	26,147
180.98	8,148	26,229
180.99	8,158	26,310
181.00	**8,168**	**26,392**

Summary for Pond B-44: Basin #44

Inflow Area = 1.184 ac, 34.71% Impervious, Inflow Depth = 8.97" for Future 100 yr event
Inflow = 10.81 cfs @ 12.17 hrs, Volume= 0.885 af
Outflow = 6.89 cfs @ 12.29 hrs, Volume= 0.760 af, Atten= 36%, Lag= 7.3 min
Primary = 6.89 cfs @ 12.29 hrs, Volume= 0.760 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 168.15' @ 12.29 hrs Surf.Area= 7,553 sf Storage= 16,205 cf

Plug-Flow detention time= 326.1 min calculated for 0.759 af (86% of inflow)
Center-of-Mass det. time= 261.8 min (1,042.4 - 780.6)

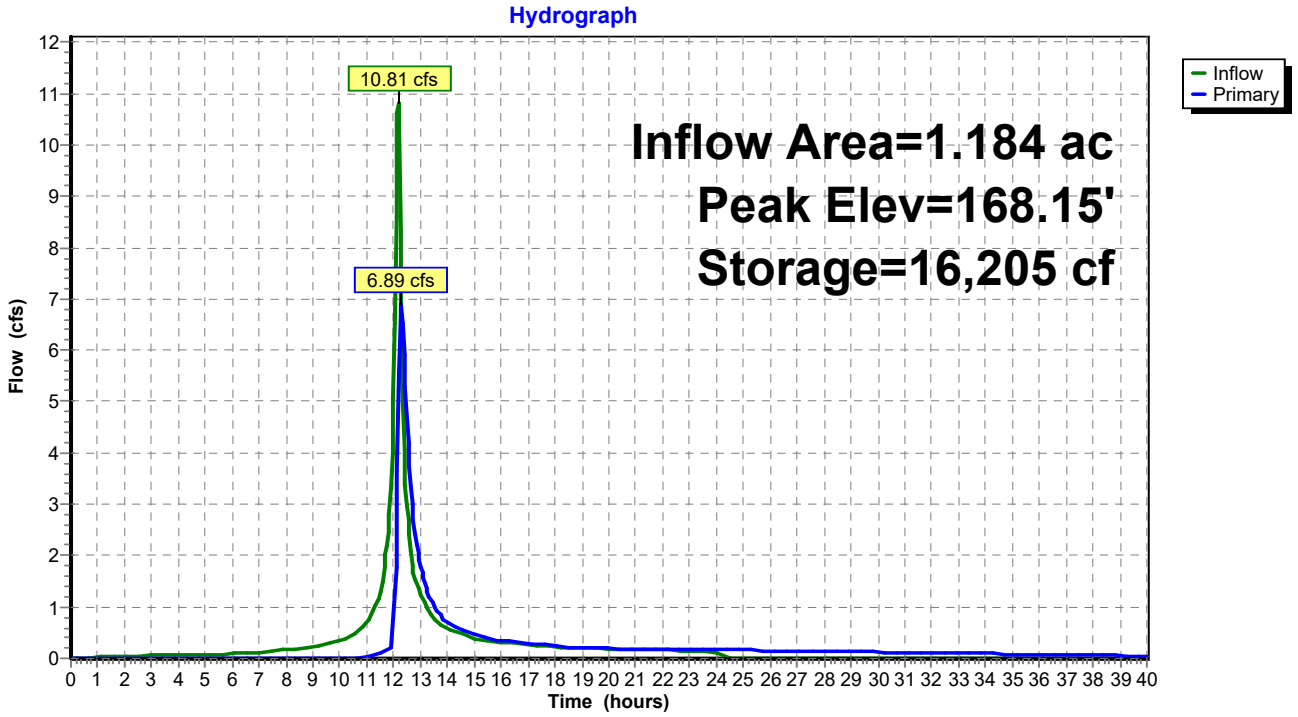
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	31,812 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	5,690	1,991	1,991
167.00	6,518	6,104	8,095
168.00	7,407	6,963	15,058
169.00	8,360	7,884	22,941
170.00	9,381	8,871	31,812

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	**18.0" Round Culvert** L= 44.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0295 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	166.41'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	167.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	168.98'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.85 cfs @ 12.29 hrs HW=168.15' (Free Discharge)
- **1=Culvert** (Passes 6.85 cfs of 12.33 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.21 cfs @ 6.16 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 6.64 cfs @ 2.64 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-44: Basin #44



Stage-Discharge for Pond B-44: Basin #44

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.10
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.10
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.10
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.10
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.10
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.10
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.10
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.11
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.11
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.11
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.11
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.11
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.11
165.43	0.00	165.95	0.00	166.47	0.01	166.99	0.11
165.44	0.00	165.96	0.00	166.48	0.01	167.00	0.11
165.45	0.00	165.97	0.00	166.49	0.01	167.01	0.12
165.46	0.00	165.98	0.00	166.50	0.01	167.02	0.12
165.47	0.00	165.99	0.00	166.51	0.02	167.03	0.12
165.48	0.00	166.00	0.00	166.52	0.02	167.04	0.12
165.49	0.00	166.01	0.00	166.53	0.02	167.05	0.12
165.50	0.00	166.02	0.00	166.54	0.03	167.06	0.12
165.51	0.00	166.03	0.00	166.55	0.03	167.07	0.12
165.52	0.00	166.04	0.00	166.56	0.03	167.08	0.12
165.53	0.00	166.05	0.00	166.57	0.04	167.09	0.12
165.54	0.00	166.06	0.00	166.58	0.04	167.10	0.13
165.55	0.00	166.07	0.00	166.59	0.05	167.11	0.13
165.56	0.00	166.08	0.00	166.60	0.05	167.12	0.13
165.57	0.00	166.09	0.00	166.61	0.05	167.13	0.13
165.58	0.00	166.10	0.00	166.62	0.05	167.14	0.13
165.59	0.00	166.11	0.00	166.63	0.06	167.15	0.13
165.60	0.00	166.12	0.00	166.64	0.06	167.16	0.13
165.61	0.00	166.13	0.00	166.65	0.06	167.17	0.13
165.62	0.00	166.14	0.00	166.66	0.06	167.18	0.13
165.63	0.00	166.15	0.00	166.67	0.06	167.19	0.13
165.64	0.00	166.16	0.00	166.68	0.07	167.20	0.14
165.65	0.00	166.17	0.00	166.69	0.07	167.21	0.14
165.66	0.00	166.18	0.00	166.70	0.07	167.22	0.14
165.67	0.00	166.19	0.00	166.71	0.07	167.23	0.14
165.68	0.00	166.20	0.00	166.72	0.07	167.24	0.14
165.69	0.00	166.21	0.00	166.73	0.08	167.25	0.14
165.70	0.00	166.22	0.00	166.74	0.08	167.26	0.14
165.71	0.00	166.23	0.00	166.75	0.08	167.27	0.14
165.72	0.00	166.24	0.00	166.76	0.08	167.28	0.14
165.73	0.00	166.25	0.00	166.77	0.08	167.29	0.14
165.74	0.00	166.26	0.00	166.78	0.08	167.30	0.15
165.75	0.00	166.27	0.00	166.79	0.09	167.31	0.15
165.76	0.00	166.28	0.00	166.80	0.09	167.32	0.15
165.77	0.00	166.29	0.00	166.81	0.09	167.33	0.15
165.78	0.00	166.30	0.00	166.82	0.09	167.34	0.15
165.79	0.00	166.31	0.00	166.83	0.09	167.35	0.15
165.80	0.00	166.32	0.00	166.84	0.09	167.36	0.15
165.81	0.00	166.33	0.00	166.85	0.10	167.37	0.15

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.15	167.90	3.44	168.42	11.24	168.94	14.46
167.39	0.15	167.91	3.56	168.43	11.41	168.95	14.49
167.40	0.15	167.92	3.68	168.44	11.59	168.96	14.51
167.41	0.16	167.93	3.80	168.45	11.76	168.97	14.54
167.42	0.16	167.94	3.93	168.46	11.94	168.98	14.56
167.43	0.16	167.95	4.06	168.47	12.12	168.99	14.71
167.44	0.16	167.96	4.18	168.48	12.30	169.00	14.95
167.45	0.16	167.97	4.31	168.49	12.48	169.01	15.25
167.46	0.16	167.98	4.44	168.50	12.66	169.02	15.60
167.47	0.16	167.99	4.58	168.51	12.84	169.03	16.00
167.48	0.16	168.00	4.71	168.52	13.02	169.04	16.44
167.49	0.16	168.01	4.84	168.53	13.20	169.05	16.91
167.50	0.16	168.02	4.98	168.54	13.38	169.06	17.42
167.51	0.18	168.03	5.12	168.55	13.45	169.07	17.96
167.52	0.20	168.04	5.25	168.56	13.48	169.08	18.53
167.53	0.23	168.05	5.39	168.57	13.51	169.09	19.13
167.54	0.27	168.06	5.53	168.58	13.53	169.10	19.75
167.55	0.31	168.07	5.67	168.59	13.56	169.11	20.40
167.56	0.36	168.08	5.82	168.60	13.59	169.12	21.08
167.57	0.41	168.09	5.96	168.61	13.61	169.13	21.78
167.58	0.46	168.10	6.10	168.62	13.64	169.14	22.50
167.59	0.52	168.11	6.25	168.63	13.67	169.15	23.25
167.60	0.58	168.12	6.40	168.64	13.69	169.16	24.02
167.61	0.65	168.13	6.54	168.65	13.72	169.17	24.81
167.62	0.71	168.14	6.69	168.66	13.75	169.18	25.62
167.63	0.78	168.15	6.84	168.67	13.77	169.19	26.49
167.64	0.85	168.16	6.99	168.68	13.80	169.20	27.39
167.65	0.93	168.17	7.14	168.69	13.83	169.21	28.31
167.66	1.01	168.18	7.30	168.70	13.85	169.22	29.25
167.67	1.09	168.19	7.45	168.71	13.88	169.23	30.23
167.68	1.17	168.20	7.61	168.72	13.90	169.24	31.22
167.69	1.25	168.21	7.76	168.73	13.93	169.25	32.25
167.70	1.34	168.22	7.92	168.74	13.96	169.26	33.29
167.71	1.43	168.23	8.08	168.75	13.98	169.27	34.36
167.72	1.52	168.24	8.23	168.76	14.01	169.28	35.46
167.73	1.61	168.25	8.39	168.77	14.03	169.29	36.58
167.74	1.70	168.26	8.55	168.78	14.06	169.30	37.73
167.75	1.80	168.27	8.72	168.79	14.08	169.31	38.90
167.76	1.89	168.28	8.88	168.80	14.11	169.32	40.09
167.77	1.99	168.29	9.04	168.81	14.14	169.33	41.31
167.78	2.10	168.30	9.20	168.82	14.16	169.34	42.55
167.79	2.20	168.31	9.37	168.83	14.19	169.35	43.81
167.80	2.30	168.32	9.53	168.84	14.21	169.36	45.10
167.81	2.41	168.33	9.70	168.85	14.24	169.37	46.42
167.82	2.52	168.34	9.87	168.86	14.26	169.38	47.76
167.83	2.63	168.35	10.04	168.87	14.29	169.39	49.15
167.84	2.74	168.36	10.21	168.88	14.31	169.40	50.56
167.85	2.85	168.37	10.38	168.89	14.34	169.41	52.00
167.86	2.96	168.38	10.55	168.90	14.36	169.42	53.47
167.87	3.08	168.39	10.72	168.91	14.39	169.43	54.96
167.88	3.20	168.40	10.89	168.92	14.41	169.44	56.48
167.89	3.32	168.41	11.06	168.93	14.44	169.45	58.03

Stage-Discharge for Pond B-44: Basin #44 (continued)

Elevation (feet)	Primary (cfs)
169.46	59.60
169.47	61.20
169.48	62.82
169.49	64.47
169.50	66.15
169.51	67.86
169.52	69.59
169.53	71.35
169.54	73.13
169.55	74.94
169.56	76.78
169.57	78.64
169.58	80.54
169.59	82.19
169.60	83.85
169.61	85.52
169.62	87.21
169.63	88.92
169.64	90.63
169.65	92.36
169.66	94.11
169.67	95.86
169.68	97.63
169.69	99.41
169.70	101.20
169.71	103.01
169.72	104.83
169.73	106.66
169.74	108.50
169.75	110.36
169.76	112.23
169.77	114.11
169.78	116.00
169.79	117.94
169.80	119.89
169.81	121.86
169.82	123.84
169.83	125.84
169.84	127.85
169.85	129.87
169.86	131.90
169.87	133.95
169.88	136.01
169.89	138.08
169.90	140.16
169.91	142.26
169.92	144.37
169.93	146.49
169.94	148.63
169.95	150.78
169.96	152.94
169.97	155.11
169.98	157.30
169.99	159.45
170.00	**161.60**

Stage-Area-Storage for Pond B-44: Basin #44

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0	165.82	4,227	1,099
165.31	81	0	165.83	4,308	1,142
165.32	163	2	165.84	4,389	1,185
165.33	244	4	165.85	4,471	1,229
165.34	325	7	165.86	4,552	1,275
165.35	406	10	165.87	4,633	1,320
165.36	488	15	165.88	4,715	1,367
165.37	569	20	165.89	4,796	1,415
165.38	650	26	165.90	4,877	1,463
165.39	732	33	165.91	4,958	1,512
165.40	813	41	165.92	5,040	1,562
165.41	894	49	165.93	5,121	1,613
165.42	975	59	165.94	5,202	1,665
165.43	1,057	69	165.95	5,284	1,717
165.44	1,138	80	165.96	5,365	1,770
165.45	1,219	91	165.97	5,446	1,824
165.46	1,301	104	165.98	5,527	1,879
165.47	1,382	117	165.99	5,609	1,935
165.48	1,463	132	166.00	5,690	1,991
165.49	1,544	147	166.01	5,698	2,048
165.50	1,626	163	166.02	5,707	2,105
165.51	1,707	179	166.03	5,715	2,163
165.52	1,788	197	166.04	5,723	2,220
165.53	1,870	215	166.05	5,731	2,277
165.54	1,951	234	166.06	5,740	2,334
165.55	2,032	254	166.07	5,748	2,392
165.56	2,113	275	166.08	5,756	2,449
165.57	2,195	296	166.09	5,765	2,507
165.58	2,276	319	166.10	5,773	2,565
165.59	2,357	342	166.11	5,781	2,622
165.60	2,439	366	166.12	5,789	2,680
165.61	2,520	391	166.13	5,798	2,738
165.62	2,601	416	166.14	5,806	2,796
165.63	2,682	443	166.15	5,814	2,854
165.64	2,764	470	166.16	5,822	2,912
165.65	2,845	498	166.17	5,831	2,971
165.66	2,926	527	166.18	5,839	3,029
165.67	3,008	556	166.19	5,847	3,088
165.68	3,089	587	166.20	5,856	3,146
165.69	3,170	618	166.21	5,864	3,205
165.70	3,251	650	166.22	5,872	3,263
165.71	3,333	683	166.23	5,880	3,322
165.72	3,414	717	166.24	5,889	3,381
165.73	3,495	751	166.25	5,897	3,440
165.74	3,577	787	166.26	5,905	3,499
165.75	3,658	823	166.27	5,914	3,558
165.76	3,739	860	166.28	5,922	3,617
165.77	3,820	898	166.29	5,930	3,676
165.78	3,902	936	166.30	5,938	3,736
165.79	3,983	976	166.31	5,947	3,795
165.80	4,064	1,016	166.32	5,955	3,855
165.81	4,146	1,057	166.33	5,963	3,914

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	5,972	3,974	166.86	6,402	7,191
166.35	5,980	4,034	166.87	6,410	7,255
166.36	5,988	4,094	166.88	6,419	7,319
166.37	5,996	4,153	166.89	6,427	7,384
166.38	6,005	4,213	166.90	6,435	7,448
166.39	6,013	4,274	166.91	6,443	7,512
166.40	6,021	4,334	166.92	6,452	7,577
166.41	6,029	4,394	166.93	6,460	7,641
166.42	6,038	4,454	166.94	6,468	7,706
166.43	6,046	4,515	166.95	6,477	7,771
166.44	6,054	4,575	166.96	6,485	7,835
166.45	6,063	4,636	166.97	6,493	7,900
166.46	6,071	4,697	166.98	6,501	7,965
166.47	6,079	4,757	166.99	6,510	8,030
166.48	6,087	4,818	167.00	6,518	8,095
166.49	6,096	4,879	167.01	6,527	8,161
166.50	6,104	4,940	167.02	6,536	8,226
166.51	6,112	5,001	167.03	6,545	8,291
166.52	6,121	5,062	167.04	6,554	8,357
166.53	6,129	5,123	167.05	6,562	8,423
166.54	6,137	5,185	167.06	6,571	8,488
166.55	6,145	5,246	167.07	6,580	8,554
166.56	6,154	5,308	167.08	6,589	8,620
166.57	6,162	5,369	167.09	6,598	8,686
166.58	6,170	5,431	167.10	6,607	8,752
166.59	6,179	5,493	167.11	6,616	8,818
166.60	6,187	5,555	167.12	6,625	8,884
166.61	6,195	5,616	167.13	6,634	8,950
166.62	6,203	5,678	167.14	6,642	9,017
166.63	6,212	5,741	167.15	6,651	9,083
166.64	6,220	5,803	167.16	6,660	9,150
166.65	6,228	5,865	167.17	6,669	9,216
166.66	6,236	5,927	167.18	6,678	9,283
166.67	6,245	5,990	167.19	6,687	9,350
166.68	6,253	6,052	167.20	6,696	9,417
166.69	6,261	6,115	167.21	6,705	9,484
166.70	6,270	6,177	167.22	6,714	9,551
166.71	6,278	6,240	167.23	6,722	9,618
166.72	6,286	6,303	167.24	6,731	9,685
166.73	6,294	6,366	167.25	6,740	9,753
166.74	6,303	6,429	167.26	6,749	9,820
166.75	6,311	6,492	167.27	6,758	9,888
166.76	6,319	6,555	167.28	6,767	9,955
166.77	6,328	6,618	167.29	6,776	10,023
166.78	6,336	6,682	167.30	6,785	10,091
166.79	6,344	6,745	167.31	6,794	10,159
166.80	6,352	6,808	167.32	6,802	10,227
166.81	6,361	6,872	167.33	6,811	10,295
166.82	6,369	6,936	167.34	6,820	10,363
166.83	6,377	6,999	167.35	6,829	10,431
166.84	6,386	7,063	167.36	6,838	10,500
166.85	6,394	7,127	167.37	6,847	10,568

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	6,856	10,637	167.90	7,318	14,322
167.39	6,865	10,705	167.91	7,327	14,395
167.40	6,874	10,774	167.92	7,336	14,468
167.41	6,882	10,843	167.93	7,345	14,542
167.42	6,891	10,911	167.94	7,354	14,615
167.43	6,900	10,980	167.95	7,363	14,689
167.44	6,909	11,049	167.96	7,371	14,762
167.45	6,918	11,119	167.97	7,380	14,836
167.46	6,927	11,188	167.98	7,389	14,910
167.47	6,936	11,257	167.99	7,398	14,984
167.48	6,945	11,327	168.00	7,407	15,058
167.49	6,954	11,396	168.01	7,417	15,132
167.50	6,963	11,466	168.02	7,426	15,206
167.51	6,971	11,535	168.03	7,436	15,281
167.52	6,980	11,605	168.04	7,445	15,355
167.53	6,989	11,675	168.05	7,455	15,430
167.54	6,998	11,745	168.06	7,464	15,504
167.55	7,007	11,815	168.07	7,474	15,579
167.56	7,016	11,885	168.08	7,483	15,654
167.57	7,025	11,955	168.09	7,493	15,728
167.58	7,034	12,025	168.10	7,502	15,803
167.59	7,043	12,096	168.11	7,512	15,879
167.60	7,051	12,166	168.12	7,521	15,954
167.61	7,060	12,237	168.13	7,531	16,029
167.62	7,069	12,308	168.14	7,540	16,104
167.63	7,078	12,378	168.15	7,550	16,180
167.64	7,087	12,449	168.16	7,559	16,255
167.65	7,096	12,520	168.17	7,569	16,331
167.66	7,105	12,591	168.18	7,579	16,407
167.67	7,114	12,662	168.19	7,588	16,483
167.68	7,123	12,733	168.20	7,598	16,558
167.69	7,131	12,805	168.21	7,607	16,634
167.70	7,140	12,876	168.22	7,617	16,711
167.71	7,149	12,947	168.23	7,626	16,787
167.72	7,158	13,019	168.24	7,636	16,863
167.73	7,167	13,091	168.25	7,645	16,940
167.74	7,176	13,162	168.26	7,655	17,016
167.75	7,185	13,234	168.27	7,664	17,093
167.76	7,194	13,306	168.28	7,674	17,169
167.77	7,203	13,378	168.29	7,683	17,246
167.78	7,211	13,450	168.30	7,693	17,323
167.79	7,220	13,522	168.31	7,702	17,400
167.80	7,229	13,594	168.32	7,712	17,477
167.81	7,238	13,667	168.33	7,721	17,554
167.82	7,247	13,739	168.34	7,731	17,631
167.83	7,256	13,812	168.35	7,741	17,709
167.84	7,265	13,884	168.36	7,750	17,786
167.85	7,274	13,957	168.37	7,760	17,864
167.86	7,283	14,030	168.38	7,769	17,941
167.87	7,291	14,103	168.39	7,779	18,019
167.88	7,300	14,176	168.40	7,788	18,097
167.89	7,309	14,249	168.41	7,798	18,175

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	7,807	18,253	168.94	8,303	22,442
168.43	7,817	18,331	168.95	8,312	22,525
168.44	7,826	18,409	168.96	8,322	22,608
168.45	7,836	18,488	168.97	8,331	22,691
168.46	7,845	18,566	168.98	8,341	22,774
168.47	7,855	18,645	168.99	8,350	22,858
168.48	7,864	18,723	169.00	8,360	22,941
168.49	7,874	18,802	169.01	8,370	23,025
168.50	7,884	18,881	169.02	8,380	23,109
168.51	7,893	18,960	169.03	8,391	23,193
168.52	7,903	19,038	169.04	8,401	23,277
168.53	7,912	19,118	169.05	8,411	23,361
168.54	7,922	19,197	169.06	8,421	23,445
168.55	7,931	19,276	169.07	8,431	23,529
168.56	7,941	19,355	169.08	8,442	23,614
168.57	7,950	19,435	169.09	8,452	23,698
168.58	7,960	19,514	169.10	8,462	23,783
168.59	7,969	19,594	169.11	8,472	23,867
168.60	7,979	19,674	169.12	8,483	23,952
168.61	7,988	19,754	169.13	8,493	24,037
168.62	7,998	19,834	169.14	8,503	24,122
168.63	8,007	19,914	169.15	8,513	24,207
168.64	8,017	19,994	169.16	8,523	24,292
168.65	8,026	20,074	169.17	8,534	24,377
168.66	8,036	20,154	169.18	8,544	24,463
168.67	8,046	20,235	169.19	8,554	24,548
168.68	8,055	20,315	169.20	8,564	24,634
168.69	8,065	20,396	169.21	8,574	24,720
168.70	8,074	20,476	169.22	8,585	24,805
168.71	8,084	20,557	169.23	8,595	24,891
168.72	8,093	20,638	169.24	8,605	24,977
168.73	8,103	20,719	169.25	8,615	25,063
168.74	8,112	20,800	169.26	8,625	25,150
168.75	8,122	20,881	169.27	8,636	25,236
168.76	8,131	20,963	169.28	8,646	25,322
168.77	8,141	21,044	169.29	8,656	25,409
168.78	8,150	21,125	169.30	8,666	25,495
168.79	8,160	21,207	169.31	8,677	25,582
168.80	8,169	21,289	169.32	8,687	25,669
168.81	8,179	21,370	169.33	8,697	25,756
168.82	8,188	21,452	169.34	8,707	25,843
168.83	8,198	21,534	169.35	8,717	25,930
168.84	8,208	21,616	169.36	8,728	26,017
168.85	8,217	21,698	169.37	8,738	26,105
168.86	8,227	21,780	169.38	8,748	26,192
168.87	8,236	21,863	169.39	8,758	26,280
168.88	8,246	21,945	169.40	8,768	26,367
168.89	8,255	22,028	169.41	8,779	26,455
168.90	8,265	22,110	169.42	8,789	26,543
168.91	8,274	22,193	169.43	8,799	26,631
168.92	8,284	22,276	169.44	8,809	26,719
168.93	8,293	22,359	169.45	8,819	26,807

Stage-Area-Storage for Pond B-44: Basin #44 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	8,830	26,895
169.47	8,840	26,983
169.48	8,850	27,072
169.49	8,860	27,160
169.50	8,871	27,249
169.51	8,881	27,338
169.52	8,891	27,427
169.53	8,901	27,516
169.54	8,911	27,605
169.55	8,922	27,694
169.56	8,932	27,783
169.57	8,942	27,873
169.58	8,952	27,962
169.59	8,962	28,052
169.60	8,973	28,141
169.61	8,983	28,231
169.62	8,993	28,321
169.63	9,003	28,411
169.64	9,013	28,501
169.65	9,024	28,591
169.66	9,034	28,681
169.67	9,044	28,772
169.68	9,054	28,862
169.69	9,064	28,953
169.70	9,075	29,044
169.71	9,085	29,134
169.72	9,095	29,225
169.73	9,105	29,316
169.74	9,116	29,407
169.75	9,126	29,499
169.76	9,136	29,590
169.77	9,146	29,681
169.78	9,156	29,773
169.79	9,167	29,865
169.80	9,177	29,956
169.81	9,187	30,048
169.82	9,197	30,140
169.83	9,207	30,232
169.84	9,218	30,324
169.85	9,228	30,416
169.86	9,238	30,509
169.87	9,248	30,601
169.88	9,258	30,694
169.89	9,269	30,786
169.90	9,279	30,879
169.91	9,289	30,972
169.92	9,299	31,065
169.93	9,310	31,158
169.94	9,320	31,251
169.95	9,330	31,344
169.96	9,340	31,438
169.97	9,350	31,531
169.98	9,361	31,625
169.99	9,371	31,718
170.00	**9,381**	**31,812**

Summary for Pond B-45: Basin #45

Inflow Area = 2.294 ac, 62.82% Impervious, Inflow Depth = 9.84" for Future 100 yr event
Inflow = 22.08 cfs @ 12.17 hrs, Volume= 1.881 af
Outflow = 16.84 cfs @ 12.25 hrs, Volume= 1.718 af, Atten= 24%, Lag= 5.0 min
Primary = 16.84 cfs @ 12.25 hrs, Volume= 1.718 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 169.97' @ 12.25 hrs Surf.Area= 6,213 sf Storage= 21,061 cf

Plug-Flow detention time= 191.2 min calculated for 1.718 af (91% of inflow)
Center-of-Mass det. time= 144.4 min (906.3 - 761.9)

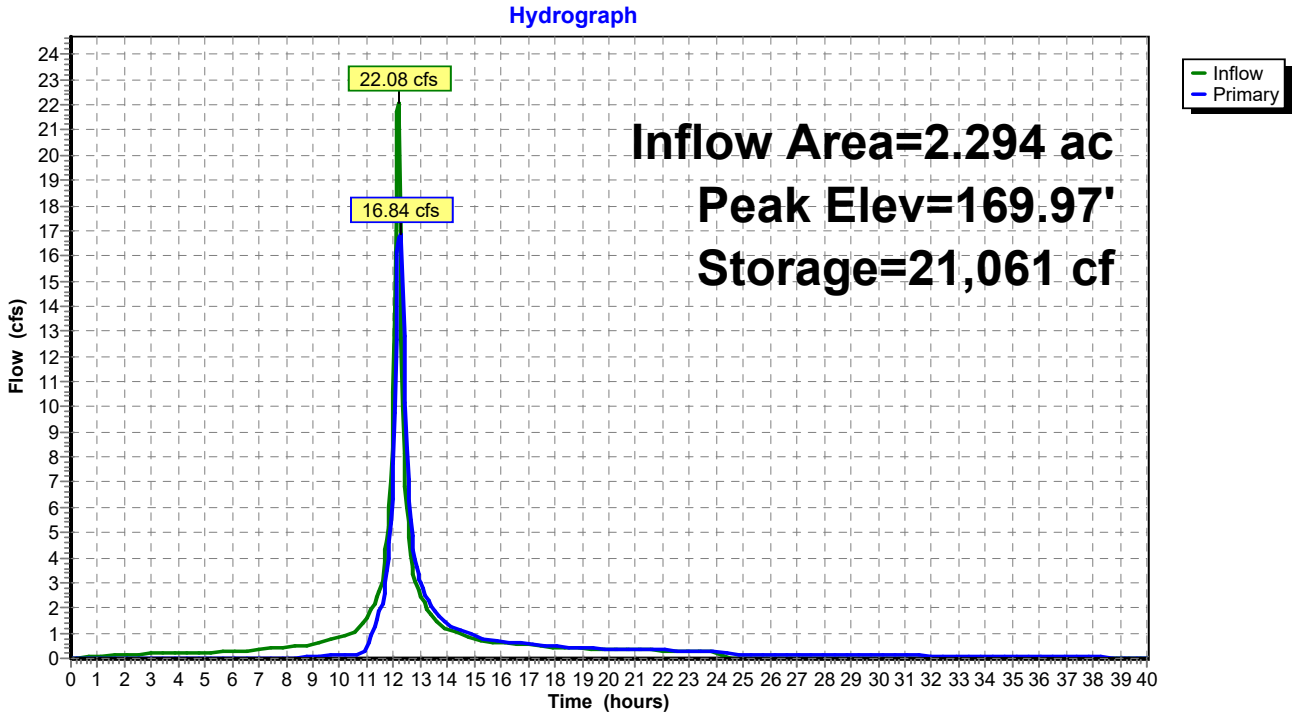
Volume	Invert	Avail.Storage	Storage Description
#1	165.30'	21,270 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
165.30	0	0	0
166.00	3,797	1,329	1,329
167.00	4,370	4,084	5,412
168.00	4,967	4,669	10,081
169.00	5,588	5,278	15,358
170.00	6,235	5,912	21,270

Device	Routing	Invert	Outlet Devices
#1	Primary	165.30'	**18.0" Round Culvert** L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 165.30' / 164.00' S= 0.0325 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	167.25'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	168.50'	**2.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	169.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#5	Primary	169.97'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=16.83 cfs @ 12.25 hrs HW=169.96' (Free Discharge)
- **1=Culvert** (Inlet Controls 16.83 cfs @ 9.53 fps)
  - **2=Orifice/Grate** (Passes < 0.27 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 9.89 cfs potential flow)
  - **4=Sharp-Crested Rectangular Weir** (Passes < 11.78 cfs potential flow)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-45: Basin #45



Stage-Discharge for Pond B-45: Basin #45

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
165.30	0.00	165.82	0.00	166.34	0.00	166.86	0.00
165.31	0.00	165.83	0.00	166.35	0.00	166.87	0.00
165.32	0.00	165.84	0.00	166.36	0.00	166.88	0.00
165.33	0.00	165.85	0.00	166.37	0.00	166.89	0.00
165.34	0.00	165.86	0.00	166.38	0.00	166.90	0.00
165.35	0.00	165.87	0.00	166.39	0.00	166.91	0.00
165.36	0.00	165.88	0.00	166.40	0.00	166.92	0.00
165.37	0.00	165.89	0.00	166.41	0.00	166.93	0.00
165.38	0.00	165.90	0.00	166.42	0.00	166.94	0.00
165.39	0.00	165.91	0.00	166.43	0.00	166.95	0.00
165.40	0.00	165.92	0.00	166.44	0.00	166.96	0.00
165.41	0.00	165.93	0.00	166.45	0.00	166.97	0.00
165.42	0.00	165.94	0.00	166.46	0.00	166.98	0.00
165.43	0.00	165.95	0.00	166.47	0.00	166.99	0.00
165.44	0.00	165.96	0.00	166.48	0.00	167.00	0.00
165.45	0.00	165.97	0.00	166.49	0.00	167.01	0.00
165.46	0.00	165.98	0.00	166.50	0.00	167.02	0.00
165.47	0.00	165.99	0.00	166.51	0.00	167.03	0.00
165.48	0.00	166.00	0.00	166.52	0.00	167.04	0.00
165.49	0.00	166.01	0.00	166.53	0.00	167.05	0.00
165.50	0.00	166.02	0.00	166.54	0.00	167.06	0.00
165.51	0.00	166.03	0.00	166.55	0.00	167.07	0.00
165.52	0.00	166.04	0.00	166.56	0.00	167.08	0.00
165.53	0.00	166.05	0.00	166.57	0.00	167.09	0.00
165.54	0.00	166.06	0.00	166.58	0.00	167.10	0.00
165.55	0.00	166.07	0.00	166.59	0.00	167.11	0.00
165.56	0.00	166.08	0.00	166.60	0.00	167.12	0.00
165.57	0.00	166.09	0.00	166.61	0.00	167.13	0.00
165.58	0.00	166.10	0.00	166.62	0.00	167.14	0.00
165.59	0.00	166.11	0.00	166.63	0.00	167.15	0.00
165.60	0.00	166.12	0.00	166.64	0.00	167.16	0.00
165.61	0.00	166.13	0.00	166.65	0.00	167.17	0.00
165.62	0.00	166.14	0.00	166.66	0.00	167.18	0.00
165.63	0.00	166.15	0.00	166.67	0.00	167.19	0.00
165.64	0.00	166.16	0.00	166.68	0.00	167.20	0.00
165.65	0.00	166.17	0.00	166.69	0.00	167.21	0.00
165.66	0.00	166.18	0.00	166.70	0.00	167.22	0.00
165.67	0.00	166.19	0.00	166.71	0.00	167.23	0.00
165.68	0.00	166.20	0.00	166.72	0.00	167.24	0.00
165.69	0.00	166.21	0.00	166.73	0.00	167.25	0.00
165.70	0.00	166.22	0.00	166.74	0.00	167.26	0.00
165.71	0.00	166.23	0.00	166.75	0.00	167.27	0.00
165.72	0.00	166.24	0.00	166.76	0.00	167.28	0.00
165.73	0.00	166.25	0.00	166.77	0.00	167.29	0.00
165.74	0.00	166.26	0.00	166.78	0.00	167.30	0.00
165.75	0.00	166.27	0.00	166.79	0.00	167.31	0.01
165.76	0.00	166.28	0.00	166.80	0.00	167.32	0.01
165.77	0.00	166.29	0.00	166.81	0.00	167.33	0.01
165.78	0.00	166.30	0.00	166.82	0.00	167.34	0.01
165.79	0.00	166.31	0.00	166.83	0.00	167.35	0.02
165.80	0.00	166.32	0.00	166.84	0.00	167.36	0.02
165.81	0.00	166.33	0.00	166.85	0.00	167.37	0.02

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
167.38	0.03	167.90	0.12	168.42	0.17	168.94	2.03
167.39	0.03	167.91	0.12	168.43	0.17	168.95	2.09
167.40	0.03	167.92	0.12	168.44	0.17	168.96	2.15
167.41	0.04	167.93	0.12	168.45	0.17	168.97	2.22
167.42	0.04	167.94	0.13	168.46	0.17	168.98	2.28
167.43	0.05	167.95	0.13	168.47	0.17	168.99	2.34
167.44	0.05	167.96	0.13	168.48	0.17	169.00	2.41
167.45	0.05	167.97	0.13	168.49	0.17	169.01	2.48
167.46	0.05	167.98	0.13	168.50	0.18	169.02	2.57
167.47	0.06	167.99	0.13	168.51	0.18	169.03	2.67
167.48	0.06	168.00	0.13	168.52	0.20	169.04	2.77
167.49	0.06	168.01	0.13	168.53	0.21	169.05	2.88
167.50	0.06	168.02	0.13	168.54	0.23	169.06	2.99
167.51	0.06	168.03	0.13	168.55	0.25	169.07	3.11
167.52	0.07	168.04	0.14	168.56	0.28	169.08	3.23
167.53	0.07	168.05	0.14	168.57	0.30	169.09	3.36
167.54	0.07	168.06	0.14	168.58	0.33	169.10	3.49
167.55	0.07	168.07	0.14	168.59	0.36	169.11	3.62
167.56	0.07	168.08	0.14	168.60	0.39	169.12	3.75
167.57	0.08	168.09	0.14	168.61	0.42	169.13	3.89
167.58	0.08	168.10	0.14	168.62	0.45	169.14	4.03
167.59	0.08	168.11	0.14	168.63	0.49	169.15	4.18
167.60	0.08	168.12	0.14	168.64	0.52	169.16	4.33
167.61	0.08	168.13	0.14	168.65	0.56	169.17	4.48
167.62	0.08	168.14	0.15	168.66	0.60	169.18	4.63
167.63	0.09	168.15	0.15	168.67	0.64	169.19	4.79
167.64	0.09	168.16	0.15	168.68	0.68	169.20	4.94
167.65	0.09	168.17	0.15	168.69	0.72	169.21	5.10
167.66	0.09	168.18	0.15	168.70	0.76	169.22	5.27
167.67	0.09	168.19	0.15	168.71	0.81	169.23	5.43
167.68	0.09	168.20	0.15	168.72	0.85	169.24	5.60
167.69	0.10	168.21	0.15	168.73	0.90	169.25	5.77
167.70	0.10	168.22	0.15	168.74	0.94	169.26	5.94
167.71	0.10	168.23	0.15	168.75	0.99	169.27	6.12
167.72	0.10	168.24	0.15	168.76	1.04	169.28	6.29
167.73	0.10	168.25	0.16	168.77	1.09	169.29	6.47
167.74	0.10	168.26	0.16	168.78	1.14	169.30	6.65
167.75	0.10	168.27	0.16	168.79	1.19	169.31	6.83
167.76	0.10	168.28	0.16	168.80	1.24	169.32	7.02
167.77	0.11	168.29	0.16	168.81	1.29	169.33	7.20
167.78	0.11	168.30	0.16	168.82	1.34	169.34	7.39
167.79	0.11	168.31	0.16	168.83	1.40	169.35	7.58
167.80	0.11	168.32	0.16	168.84	1.45	169.36	7.77
167.81	0.11	168.33	0.16	168.85	1.51	169.37	7.97
167.82	0.11	168.34	0.16	168.86	1.56	169.38	8.16
167.83	0.11	168.35	0.16	168.87	1.62	169.39	8.36
167.84	0.11	168.36	0.16	168.88	1.68	169.40	8.56
167.85	0.12	168.37	0.17	168.89	1.73	169.41	8.76
167.86	0.12	168.38	0.17	168.90	1.79	169.42	8.96
167.87	0.12	168.39	0.17	168.91	1.85	169.43	9.17
167.88	0.12	168.40	0.17	168.92	1.91	169.44	9.37
167.89	0.12	168.41	0.17	168.93	1.97	169.45	9.58

Stage-Discharge for Pond B-45: Basin #45 (continued)

Elevation (feet)	Primary (cfs)
169.46	9.79
169.47	10.00
169.48	10.21
169.49	10.42
169.50	10.64
169.51	10.85
169.52	11.07
169.53	11.29
169.54	11.51
169.55	11.73
169.56	11.95
169.57	12.18
169.58	12.40
169.59	12.63
169.60	12.86
169.61	13.09
169.62	13.32
169.63	13.55
169.64	13.78
169.65	14.02
169.66	14.25
169.67	14.49
169.68	14.73
169.69	14.97
169.70	15.21
169.71	15.45
169.72	15.69
169.73	15.94
169.74	16.18
169.75	16.37
169.76	16.39
169.77	16.41
169.78	16.43
169.79	16.46
169.80	16.48
169.81	16.50
169.82	16.52
169.83	16.54
169.84	16.56
169.85	16.59
169.86	16.61
169.87	16.63
169.88	16.65
169.89	16.67
169.90	16.70
169.91	16.72
169.92	16.74
169.93	16.76
169.94	16.78
169.95	16.80
169.96	16.82
169.97	16.85
169.98	16.99
169.99	17.22
170.00	**17.52**

Stage-Area-Storage for Pond B-45: Basin #45

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
165.30	0	0	165.82	2,821	733
165.31	54	0	165.83	2,875	762
165.32	108	1	165.84	2,929	791
165.33	163	2	165.85	2,983	820
165.34	217	4	165.86	3,038	851
165.35	271	7	165.87	3,092	881
165.36	325	10	165.88	3,146	912
165.37	380	13	165.89	3,200	944
165.38	434	17	165.90	3,255	976
165.39	488	22	165.91	3,309	1,009
165.40	542	27	165.92	3,363	1,043
165.41	597	33	165.93	3,417	1,076
165.42	651	39	165.94	3,472	1,111
165.43	705	46	165.95	3,526	1,146
165.44	759	53	165.96	3,580	1,181
165.45	814	61	165.97	3,634	1,217
165.46	868	69	165.98	3,689	1,254
165.47	922	78	165.99	3,743	1,291
165.48	976	88	166.00	3,797	1,329
165.49	1,031	98	166.01	3,803	1,367
165.50	1,085	108	166.02	3,808	1,405
165.51	1,139	120	166.03	3,814	1,443
165.52	1,193	131	166.04	3,820	1,481
165.53	1,248	143	166.05	3,826	1,520
165.54	1,302	156	166.06	3,831	1,558
165.55	1,356	170	166.07	3,837	1,596
165.56	1,410	183	166.08	3,843	1,635
165.57	1,465	198	166.09	3,849	1,673
165.58	1,519	213	166.10	3,854	1,712
165.59	1,573	228	166.11	3,860	1,750
165.60	1,627	244	166.12	3,866	1,789
165.61	1,682	261	166.13	3,871	1,827
165.62	1,736	278	166.14	3,877	1,866
165.63	1,790	295	166.15	3,883	1,905
165.64	1,844	314	166.16	3,889	1,944
165.65	1,899	332	166.17	3,894	1,983
165.66	1,953	351	166.18	3,900	2,022
165.67	2,007	371	166.19	3,906	2,061
165.68	2,061	392	166.20	3,912	2,100
165.69	2,115	413	166.21	3,917	2,139
165.70	2,170	434	166.22	3,923	2,178
165.71	2,224	456	166.23	3,929	2,217
165.72	2,278	478	166.24	3,935	2,257
165.73	2,332	501	166.25	3,940	2,296
165.74	2,387	525	166.26	3,946	2,336
165.75	2,441	549	166.27	3,952	2,375
165.76	2,495	574	166.28	3,957	2,415
165.77	2,549	599	166.29	3,963	2,454
165.78	2,604	625	166.30	3,969	2,494
165.79	2,658	651	166.31	3,975	2,534
165.80	2,712	678	166.32	3,980	2,573
165.81	2,766	705	166.33	3,986	2,613

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
166.34	3,992	2,653	166.86	4,290	4,806
166.35	3,998	2,693	166.87	4,296	4,849
166.36	4,003	2,733	166.88	4,301	4,892
166.37	4,009	2,773	166.89	4,307	4,935
166.38	4,015	2,813	166.90	4,313	4,978
166.39	4,020	2,853	166.91	4,318	5,021
166.40	4,026	2,894	166.92	4,324	5,065
166.41	4,032	2,934	166.93	4,330	5,108
166.42	4,038	2,974	166.94	4,336	5,151
166.43	4,043	3,015	166.95	4,341	5,195
166.44	4,049	3,055	166.96	4,347	5,238
166.45	4,055	3,096	166.97	4,353	5,282
166.46	4,061	3,136	166.98	4,359	5,325
166.47	4,066	3,177	166.99	4,364	5,369
166.48	4,072	3,218	167.00	4,370	5,412
166.49	4,078	3,258	167.01	4,376	5,456
166.50	4,084	3,299	167.02	4,382	5,500
166.51	4,089	3,340	167.03	4,388	5,544
166.52	4,095	3,381	167.04	4,394	5,588
166.53	4,101	3,422	167.05	4,400	5,632
166.54	4,106	3,463	167.06	4,406	5,676
166.55	4,112	3,504	167.07	4,412	5,720
166.56	4,118	3,545	167.08	4,418	5,764
166.57	4,124	3,586	167.09	4,424	5,808
166.58	4,129	3,628	167.10	4,430	5,852
166.59	4,135	3,669	167.11	4,436	5,897
166.60	4,141	3,710	167.12	4,442	5,941
166.61	4,147	3,752	167.13	4,448	5,986
166.62	4,152	3,793	167.14	4,454	6,030
166.63	4,158	3,835	167.15	4,460	6,075
166.64	4,164	3,876	167.16	4,466	6,119
166.65	4,169	3,918	167.17	4,471	6,164
166.66	4,175	3,960	167.18	4,477	6,209
166.67	4,181	4,002	167.19	4,483	6,254
166.68	4,187	4,043	167.20	4,489	6,298
166.69	4,192	4,085	167.21	4,495	6,343
166.70	4,198	4,127	167.22	4,501	6,388
166.71	4,204	4,169	167.23	4,507	6,433
166.72	4,210	4,211	167.24	4,513	6,478
166.73	4,215	4,253	167.25	4,519	6,524
166.74	4,221	4,296	167.26	4,525	6,569
166.75	4,227	4,338	167.27	4,531	6,614
166.76	4,232	4,380	167.28	4,537	6,659
166.77	4,238	4,423	167.29	4,543	6,705
166.78	4,244	4,465	167.30	4,549	6,750
166.79	4,250	4,507	167.31	4,555	6,796
166.80	4,255	4,550	167.32	4,561	6,841
166.81	4,261	4,592	167.33	4,567	6,887
166.82	4,267	4,635	167.34	4,573	6,933
166.83	4,273	4,678	167.35	4,579	6,979
166.84	4,278	4,721	167.36	4,585	7,024
166.85	4,284	4,763	167.37	4,591	7,070

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
167.38	4,597	7,116	167.90	4,907	9,587
167.39	4,603	7,162	167.91	4,913	9,636
167.40	4,609	7,208	167.92	4,919	9,686
167.41	4,615	7,254	167.93	4,925	9,735
167.42	4,621	7,301	167.94	4,931	9,784
167.43	4,627	7,347	167.95	4,937	9,833
167.44	4,633	7,393	167.96	4,943	9,883
167.45	4,639	7,439	167.97	4,949	9,932
167.46	4,645	7,486	167.98	4,955	9,982
167.47	4,651	7,532	167.99	4,961	10,031
167.48	4,657	7,579	168.00	4,967	10,081
167.49	4,663	7,625	168.01	4,973	10,131
167.50	4,669	7,672	168.02	4,979	10,180
167.51	4,674	7,719	168.03	4,986	10,230
167.52	4,680	7,766	168.04	4,992	10,280
167.53	4,686	7,812	168.05	4,998	10,330
167.54	4,692	7,859	168.06	5,004	10,380
167.55	4,698	7,906	168.07	5,010	10,430
167.56	4,704	7,953	168.08	5,017	10,480
167.57	4,710	8,000	168.09	5,023	10,530
167.58	4,716	8,047	168.10	5,029	10,581
167.59	4,722	8,095	168.11	5,035	10,631
167.60	4,728	8,142	168.12	5,042	10,681
167.61	4,734	8,189	168.13	5,048	10,732
167.62	4,740	8,237	168.14	5,054	10,782
167.63	4,746	8,284	168.15	5,060	10,833
167.64	4,752	8,332	168.16	5,066	10,884
167.65	4,758	8,379	168.17	5,073	10,934
167.66	4,764	8,427	168.18	5,079	10,985
167.67	4,770	8,474	168.19	5,085	11,036
167.68	4,776	8,522	168.20	5,091	11,087
167.69	4,782	8,570	168.21	5,097	11,138
167.70	4,788	8,618	168.22	5,104	11,189
167.71	4,794	8,666	168.23	5,110	11,240
167.72	4,800	8,714	168.24	5,116	11,291
167.73	4,806	8,762	168.25	5,122	11,342
167.74	4,812	8,810	168.26	5,128	11,393
167.75	4,818	8,858	168.27	5,135	11,445
167.76	4,824	8,906	168.28	5,141	11,496
167.77	4,830	8,954	168.29	5,147	11,547
167.78	4,836	9,003	168.30	5,153	11,599
167.79	4,842	9,051	168.31	5,160	11,651
167.80	4,848	9,099	168.32	5,166	11,702
167.81	4,854	9,148	168.33	5,172	11,754
167.82	4,860	9,197	168.34	5,178	11,806
167.83	4,866	9,245	168.35	5,184	11,857
167.84	4,871	9,294	168.36	5,191	11,909
167.85	4,877	9,343	168.37	5,197	11,961
167.86	4,883	9,391	168.38	5,203	12,013
167.87	4,889	9,440	168.39	5,209	12,065
167.88	4,895	9,489	168.40	5,215	12,117
167.89	4,901	9,538	168.41	5,222	12,170

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
168.42	5,228	12,222	168.94	5,551	15,024
168.43	5,234	12,274	168.95	5,557	15,080
168.44	5,240	12,327	168.96	5,563	15,135
168.45	5,246	12,379	168.97	5,569	15,191
168.46	5,253	12,431	168.98	5,576	15,247
168.47	5,259	12,484	168.99	5,582	15,303
168.48	5,265	12,537	169.00	5,588	15,358
168.49	5,271	12,589	169.01	5,594	15,414
168.50	5,278	12,642	169.02	5,601	15,470
168.51	5,284	12,695	169.03	5,607	15,526
168.52	5,290	12,748	169.04	5,614	15,582
168.53	5,296	12,801	169.05	5,620	15,639
168.54	5,302	12,854	169.06	5,627	15,695
168.55	5,309	12,907	169.07	5,633	15,751
168.56	5,315	12,960	169.08	5,640	15,808
168.57	5,321	13,013	169.09	5,646	15,864
168.58	5,327	13,066	169.10	5,653	15,920
168.59	5,333	13,120	169.11	5,659	15,977
168.60	5,340	13,173	169.12	5,666	16,034
168.61	5,346	13,226	169.13	5,672	16,090
168.62	5,352	13,280	169.14	5,679	16,147
168.63	5,358	13,333	169.15	5,685	16,204
168.64	5,364	13,387	169.16	5,692	16,261
168.65	5,371	13,441	169.17	5,698	16,318
168.66	5,377	13,494	169.18	5,704	16,375
168.67	5,383	13,548	169.19	5,711	16,432
168.68	5,389	13,602	169.20	5,717	16,489
168.69	5,395	13,656	169.21	5,724	16,546
168.70	5,402	13,710	169.22	5,730	16,603
168.71	5,408	13,764	169.23	5,737	16,661
168.72	5,414	13,818	169.24	5,743	16,718
168.73	5,420	13,872	169.25	5,750	16,776
168.74	5,427	13,927	169.26	5,756	16,833
168.75	5,433	13,981	169.27	5,763	16,891
168.76	5,439	14,035	169.28	5,769	16,948
168.77	5,445	14,090	169.29	5,776	17,006
168.78	5,451	14,144	169.30	5,782	17,064
168.79	5,458	14,199	169.31	5,789	17,122
168.80	5,464	14,253	169.32	5,795	17,180
168.81	5,470	14,308	169.33	5,802	17,238
168.82	5,476	14,363	169.34	5,808	17,296
168.83	5,482	14,417	169.35	5,814	17,354
168.84	5,489	14,472	169.36	5,821	17,412
168.85	5,495	14,527	169.37	5,827	17,470
168.86	5,501	14,582	169.38	5,834	17,529
168.87	5,507	14,637	169.39	5,840	17,587
168.88	5,513	14,692	169.40	5,847	17,645
168.89	5,520	14,748	169.41	5,853	17,704
168.90	5,526	14,803	169.42	5,860	17,762
168.91	5,532	14,858	169.43	5,866	17,821
168.92	5,538	14,913	169.44	5,873	17,880
168.93	5,545	14,969	169.45	5,879	17,939

Stage-Area-Storage for Pond B-45: Basin #45 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
169.46	5,886	17,997
169.47	5,892	18,056
169.48	5,899	18,115
169.49	5,905	18,174
169.50	5,912	18,233
169.51	5,918	18,292
169.52	5,924	18,352
169.53	5,931	18,411
169.54	5,937	18,470
169.55	5,944	18,530
169.56	5,950	18,589
169.57	5,957	18,649
169.58	5,963	18,708
169.59	5,970	18,768
169.60	5,976	18,828
169.61	5,983	18,888
169.62	5,989	18,947
169.63	5,996	19,007
169.64	6,002	19,067
169.65	6,009	19,127
169.66	6,015	19,187
169.67	6,021	19,248
169.68	6,028	19,308
169.69	6,034	19,368
169.70	6,041	19,429
169.71	6,047	19,489
169.72	6,054	19,550
169.73	6,060	19,610
169.74	6,067	19,671
169.75	6,073	19,731
169.76	6,080	19,792
169.77	6,086	19,853
169.78	6,093	19,914
169.79	6,099	19,975
169.80	6,106	20,036
169.81	6,112	20,097
169.82	6,119	20,158
169.83	6,125	20,219
169.84	6,131	20,281
169.85	6,138	20,342
169.86	6,144	20,403
169.87	6,151	20,465
169.88	6,157	20,526
169.89	6,164	20,588
169.90	6,170	20,650
169.91	6,177	20,711
169.92	6,183	20,773
169.93	6,190	20,835
169.94	6,196	20,897
169.95	6,203	20,959
169.96	6,209	21,021
169.97	6,216	21,083
169.98	6,222	21,145
169.99	6,229	21,208
170.00	**6,235**	**21,270**

Summary for Pond B-46A: Basin #46A

Inflow Area = 2.480 ac, 46.25% Impervious, Inflow Depth = 9.32" for Future 100 yr event
Inflow = 23.15 cfs @ 12.17 hrs, Volume= 1.927 af
Outflow = 0.33 cfs @ 22.09 hrs, Volume= 0.069 af, Atten= 99%, Lag= 595.3 min
Primary = 0.33 cfs @ 22.09 hrs, Volume= 0.069 af
Routed to Pond B-46B : Basin #46B

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 187.51' @ 22.09 hrs Surf.Area= 18,441 sf Storage= 81,163 cf

Plug-Flow detention time= 1,140.0 min calculated for 0.069 af (4% of inflow)
Center-of-Mass det. time= 607.7 min (1,380.2 - 772.5)

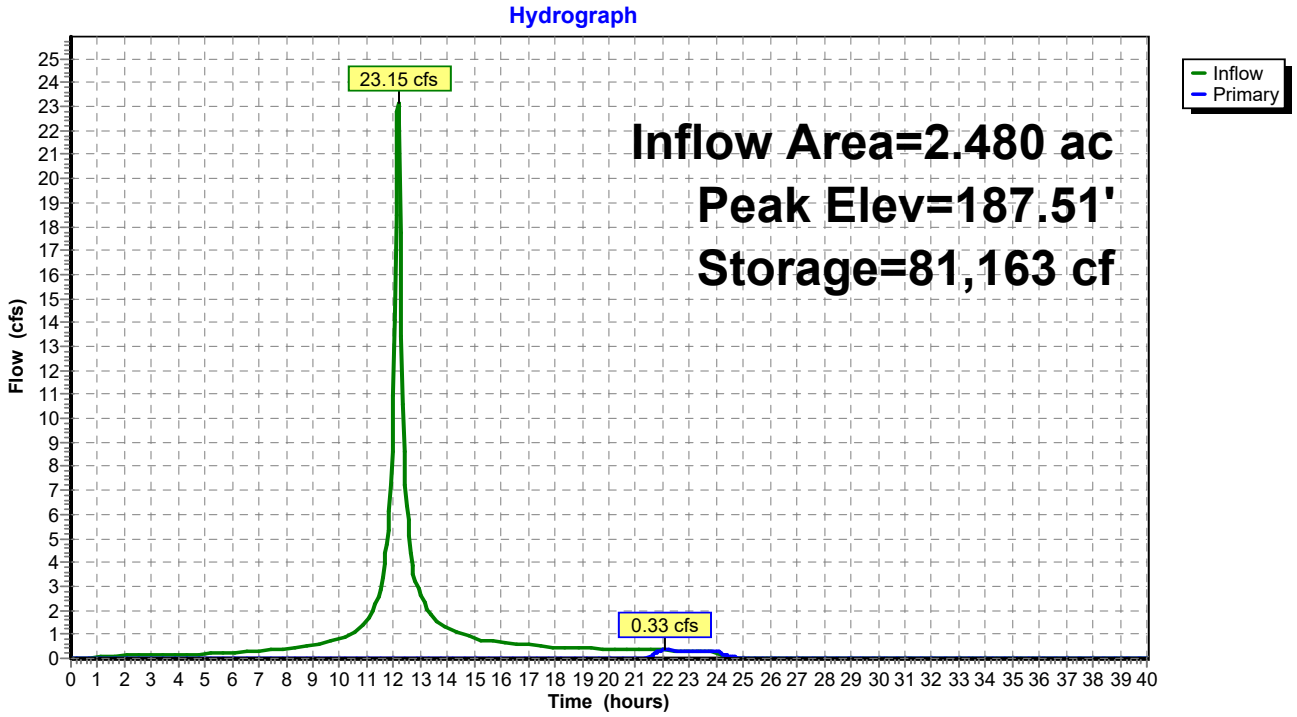
Volume	Invert	Avail.Storage	Storage Description
#1	181.00'	90,351 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
181.00	6,639	0	0
182.00	7,998	7,319	7,319
183.00	9,413	8,706	16,024
184.00	12,515	10,964	26,988
185.00	14,128	13,322	40,310
186.00	15,798	14,963	55,273
187.00	17,524	16,661	71,934
188.00	19,310	18,417	90,351

Device	Routing	Invert	Outlet Devices
#1	Primary	187.50'	**50.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.25 cfs @ 22.09 hrs HW=187.51' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Weir Controls 0.25 cfs @ 0.38 fps)

Pond B-46A: Basin #46A



Stage-Discharge for Pond B-46A: Basin #46A

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
181.00	0.00	181.52	0.00	182.04	0.00	182.56	0.00
181.01	0.00	181.53	0.00	182.05	0.00	182.57	0.00
181.02	0.00	181.54	0.00	182.06	0.00	182.58	0.00
181.03	0.00	181.55	0.00	182.07	0.00	182.59	0.00
181.04	0.00	181.56	0.00	182.08	0.00	182.60	0.00
181.05	0.00	181.57	0.00	182.09	0.00	182.61	0.00
181.06	0.00	181.58	0.00	182.10	0.00	182.62	0.00
181.07	0.00	181.59	0.00	182.11	0.00	182.63	0.00
181.08	0.00	181.60	0.00	182.12	0.00	182.64	0.00
181.09	0.00	181.61	0.00	182.13	0.00	182.65	0.00
181.10	0.00	181.62	0.00	182.14	0.00	182.66	0.00
181.11	0.00	181.63	0.00	182.15	0.00	182.67	0.00
181.12	0.00	181.64	0.00	182.16	0.00	182.68	0.00
181.13	0.00	181.65	0.00	182.17	0.00	182.69	0.00
181.14	0.00	181.66	0.00	182.18	0.00	182.70	0.00
181.15	0.00	181.67	0.00	182.19	0.00	182.71	0.00
181.16	0.00	181.68	0.00	182.20	0.00	182.72	0.00
181.17	0.00	181.69	0.00	182.21	0.00	182.73	0.00
181.18	0.00	181.70	0.00	182.22	0.00	182.74	0.00
181.19	0.00	181.71	0.00	182.23	0.00	182.75	0.00
181.20	0.00	181.72	0.00	182.24	0.00	182.76	0.00
181.21	0.00	181.73	0.00	182.25	0.00	182.77	0.00
181.22	0.00	181.74	0.00	182.26	0.00	182.78	0.00
181.23	0.00	181.75	0.00	182.27	0.00	182.79	0.00
181.24	0.00	181.76	0.00	182.28	0.00	182.80	0.00
181.25	0.00	181.77	0.00	182.29	0.00	182.81	0.00
181.26	0.00	181.78	0.00	182.30	0.00	182.82	0.00
181.27	0.00	181.79	0.00	182.31	0.00	182.83	0.00
181.28	0.00	181.80	0.00	182.32	0.00	182.84	0.00
181.29	0.00	181.81	0.00	182.33	0.00	182.85	0.00
181.30	0.00	181.82	0.00	182.34	0.00	182.86	0.00
181.31	0.00	181.83	0.00	182.35	0.00	182.87	0.00
181.32	0.00	181.84	0.00	182.36	0.00	182.88	0.00
181.33	0.00	181.85	0.00	182.37	0.00	182.89	0.00
181.34	0.00	181.86	0.00	182.38	0.00	182.90	0.00
181.35	0.00	181.87	0.00	182.39	0.00	182.91	0.00
181.36	0.00	181.88	0.00	182.40	0.00	182.92	0.00
181.37	0.00	181.89	0.00	182.41	0.00	182.93	0.00
181.38	0.00	181.90	0.00	182.42	0.00	182.94	0.00
181.39	0.00	181.91	0.00	182.43	0.00	182.95	0.00
181.40	0.00	181.92	0.00	182.44	0.00	182.96	0.00
181.41	0.00	181.93	0.00	182.45	0.00	182.97	0.00
181.42	0.00	181.94	0.00	182.46	0.00	182.98	0.00
181.43	0.00	181.95	0.00	182.47	0.00	182.99	0.00
181.44	0.00	181.96	0.00	182.48	0.00	183.00	0.00
181.45	0.00	181.97	0.00	182.49	0.00	183.01	0.00
181.46	0.00	181.98	0.00	182.50	0.00	183.02	0.00
181.47	0.00	181.99	0.00	182.51	0.00	183.03	0.00
181.48	0.00	182.00	0.00	182.52	0.00	183.04	0.00
181.49	0.00	182.01	0.00	182.53	0.00	183.05	0.00
181.50	0.00	182.02	0.00	182.54	0.00	183.06	0.00
181.51	0.00	182.03	0.00	182.55	0.00	183.07	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.08	0.00	183.60	0.00	184.12	0.00	184.64	0.00
183.09	0.00	183.61	0.00	184.13	0.00	184.65	0.00
183.10	0.00	183.62	0.00	184.14	0.00	184.66	0.00
183.11	0.00	183.63	0.00	184.15	0.00	184.67	0.00
183.12	0.00	183.64	0.00	184.16	0.00	184.68	0.00
183.13	0.00	183.65	0.00	184.17	0.00	184.69	0.00
183.14	0.00	183.66	0.00	184.18	0.00	184.70	0.00
183.15	0.00	183.67	0.00	184.19	0.00	184.71	0.00
183.16	0.00	183.68	0.00	184.20	0.00	184.72	0.00
183.17	0.00	183.69	0.00	184.21	0.00	184.73	0.00
183.18	0.00	183.70	0.00	184.22	0.00	184.74	0.00
183.19	0.00	183.71	0.00	184.23	0.00	184.75	0.00
183.20	0.00	183.72	0.00	184.24	0.00	184.76	0.00
183.21	0.00	183.73	0.00	184.25	0.00	184.77	0.00
183.22	0.00	183.74	0.00	184.26	0.00	184.78	0.00
183.23	0.00	183.75	0.00	184.27	0.00	184.79	0.00
183.24	0.00	183.76	0.00	184.28	0.00	184.80	0.00
183.25	0.00	183.77	0.00	184.29	0.00	184.81	0.00
183.26	0.00	183.78	0.00	184.30	0.00	184.82	0.00
183.27	0.00	183.79	0.00	184.31	0.00	184.83	0.00
183.28	0.00	183.80	0.00	184.32	0.00	184.84	0.00
183.29	0.00	183.81	0.00	184.33	0.00	184.85	0.00
183.30	0.00	183.82	0.00	184.34	0.00	184.86	0.00
183.31	0.00	183.83	0.00	184.35	0.00	184.87	0.00
183.32	0.00	183.84	0.00	184.36	0.00	184.88	0.00
183.33	0.00	183.85	0.00	184.37	0.00	184.89	0.00
183.34	0.00	183.86	0.00	184.38	0.00	184.90	0.00
183.35	0.00	183.87	0.00	184.39	0.00	184.91	0.00
183.36	0.00	183.88	0.00	184.40	0.00	184.92	0.00
183.37	0.00	183.89	0.00	184.41	0.00	184.93	0.00
183.38	0.00	183.90	0.00	184.42	0.00	184.94	0.00
183.39	0.00	183.91	0.00	184.43	0.00	184.95	0.00
183.40	0.00	183.92	0.00	184.44	0.00	184.96	0.00
183.41	0.00	183.93	0.00	184.45	0.00	184.97	0.00
183.42	0.00	183.94	0.00	184.46	0.00	184.98	0.00
183.43	0.00	183.95	0.00	184.47	0.00	184.99	0.00
183.44	0.00	183.96	0.00	184.48	0.00	185.00	0.00
183.45	0.00	183.97	0.00	184.49	0.00	185.01	0.00
183.46	0.00	183.98	0.00	184.50	0.00	185.02	0.00
183.47	0.00	183.99	0.00	184.51	0.00	185.03	0.00
183.48	0.00	184.00	0.00	184.52	0.00	185.04	0.00
183.49	0.00	184.01	0.00	184.53	0.00	185.05	0.00
183.50	0.00	184.02	0.00	184.54	0.00	185.06	0.00
183.51	0.00	184.03	0.00	184.55	0.00	185.07	0.00
183.52	0.00	184.04	0.00	184.56	0.00	185.08	0.00
183.53	0.00	184.05	0.00	184.57	0.00	185.09	0.00
183.54	0.00	184.06	0.00	184.58	0.00	185.10	0.00
183.55	0.00	184.07	0.00	184.59	0.00	185.11	0.00
183.56	0.00	184.08	0.00	184.60	0.00	185.12	0.00
183.57	0.00	184.09	0.00	184.61	0.00	185.13	0.00
183.58	0.00	184.10	0.00	184.62	0.00	185.14	0.00
183.59	0.00	184.11	0.00	184.63	0.00	185.15	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.16	0.00	185.68	0.00	186.20	0.00	186.72	0.00
185.17	0.00	185.69	0.00	186.21	0.00	186.73	0.00
185.18	0.00	185.70	0.00	186.22	0.00	186.74	0.00
185.19	0.00	185.71	0.00	186.23	0.00	186.75	0.00
185.20	0.00	185.72	0.00	186.24	0.00	186.76	0.00
185.21	0.00	185.73	0.00	186.25	0.00	186.77	0.00
185.22	0.00	185.74	0.00	186.26	0.00	186.78	0.00
185.23	0.00	185.75	0.00	186.27	0.00	186.79	0.00
185.24	0.00	185.76	0.00	186.28	0.00	186.80	0.00
185.25	0.00	185.77	0.00	186.29	0.00	186.81	0.00
185.26	0.00	185.78	0.00	186.30	0.00	186.82	0.00
185.27	0.00	185.79	0.00	186.31	0.00	186.83	0.00
185.28	0.00	185.80	0.00	186.32	0.00	186.84	0.00
185.29	0.00	185.81	0.00	186.33	0.00	186.85	0.00
185.30	0.00	185.82	0.00	186.34	0.00	186.86	0.00
185.31	0.00	185.83	0.00	186.35	0.00	186.87	0.00
185.32	0.00	185.84	0.00	186.36	0.00	186.88	0.00
185.33	0.00	185.85	0.00	186.37	0.00	186.89	0.00
185.34	0.00	185.86	0.00	186.38	0.00	186.90	0.00
185.35	0.00	185.87	0.00	186.39	0.00	186.91	0.00
185.36	0.00	185.88	0.00	186.40	0.00	186.92	0.00
185.37	0.00	185.89	0.00	186.41	0.00	186.93	0.00
185.38	0.00	185.90	0.00	186.42	0.00	186.94	0.00
185.39	0.00	185.91	0.00	186.43	0.00	186.95	0.00
185.40	0.00	185.92	0.00	186.44	0.00	186.96	0.00
185.41	0.00	185.93	0.00	186.45	0.00	186.97	0.00
185.42	0.00	185.94	0.00	186.46	0.00	186.98	0.00
185.43	0.00	185.95	0.00	186.47	0.00	186.99	0.00
185.44	0.00	185.96	0.00	186.48	0.00	187.00	0.00
185.45	0.00	185.97	0.00	186.49	0.00	187.01	0.00
185.46	0.00	185.98	0.00	186.50	0.00	187.02	0.00
185.47	0.00	185.99	0.00	186.51	0.00	187.03	0.00
185.48	0.00	186.00	0.00	186.52	0.00	187.04	0.00
185.49	0.00	186.01	0.00	186.53	0.00	187.05	0.00
185.50	0.00	186.02	0.00	186.54	0.00	187.06	0.00
185.51	0.00	186.03	0.00	186.55	0.00	187.07	0.00
185.52	0.00	186.04	0.00	186.56	0.00	187.08	0.00
185.53	0.00	186.05	0.00	186.57	0.00	187.09	0.00
185.54	0.00	186.06	0.00	186.58	0.00	187.10	0.00
185.55	0.00	186.07	0.00	186.59	0.00	187.11	0.00
185.56	0.00	186.08	0.00	186.60	0.00	187.12	0.00
185.57	0.00	186.09	0.00	186.61	0.00	187.13	0.00
185.58	0.00	186.10	0.00	186.62	0.00	187.14	0.00
185.59	0.00	186.11	0.00	186.63	0.00	187.15	0.00
185.60	0.00	186.12	0.00	186.64	0.00	187.16	0.00
185.61	0.00	186.13	0.00	186.65	0.00	187.17	0.00
185.62	0.00	186.14	0.00	186.66	0.00	187.18	0.00
185.63	0.00	186.15	0.00	186.67	0.00	187.19	0.00
185.64	0.00	186.16	0.00	186.68	0.00	187.20	0.00
185.65	0.00	186.17	0.00	186.69	0.00	187.21	0.00
185.66	0.00	186.18	0.00	186.70	0.00	187.22	0.00
185.67	0.00	186.19	0.00	186.71	0.00	187.23	0.00

Stage-Discharge for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Primary (cfs)
187.24	0.00
187.25	0.00
187.26	0.00
187.27	0.00
187.28	0.00
187.29	0.00
187.30	0.00
187.31	0.00
187.32	0.00
187.33	0.00
187.34	0.00
187.35	0.00
187.36	0.00
187.37	0.00
187.38	0.00
187.39	0.00
187.40	0.00
187.41	0.00
187.42	0.00
187.43	0.00
187.44	0.00
187.45	0.00
187.46	0.00
187.47	0.00
187.48	0.00
187.49	0.00
187.50	0.00
187.51	0.16
187.52	0.46
187.53	0.86
187.54	1.32
187.55	1.85
187.56	2.44
187.57	3.08
187.58	3.77
187.59	4.51
187.60	5.29
187.61	6.12
187.62	6.99
187.63	7.90
187.64	8.85
187.65	9.84
187.66	10.87
187.67	11.93
187.68	13.03
187.69	14.16
187.70	15.33
187.71	16.53
187.72	17.76
187.73	19.03
187.74	20.33
187.75	21.67
187.76	23.03
187.77	24.43
187.78	25.85
187.79	27.31
187.80	28.80
187.81	30.32
187.82	31.87
187.83	33.45
187.84	35.06
187.85	36.70
187.86	38.37
187.87	40.07
187.88	41.80
187.89	43.55
187.90	45.34
187.91	47.15
187.92	48.99
187.93	50.86
187.94	52.76
187.95	54.69
187.96	56.65
187.97	58.63
187.98	60.64
187.99	62.68
188.00	**64.75**

Stage-Area-Storage for Pond B-46A: Basin #46A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
181.00	6,639	0
181.01	6,653	66
181.02	6,666	133
181.03	6,680	200
181.04	6,693	267
181.05	6,707	334
181.06	6,721	401
181.07	6,734	468
181.08	6,748	535
181.09	6,761	603
181.10	6,775	671
181.11	6,788	739
181.12	6,802	806
181.13	6,816	875
181.14	6,829	943
181.15	6,843	1,011
181.16	6,856	1,080
181.17	6,870	1,148
181.18	6,884	1,217
181.19	6,897	1,286
181.20	6,911	1,355
181.21	6,924	1,424
181.22	6,938	1,493
181.23	6,952	1,563
181.24	6,965	1,632
181.25	6,979	1,702
181.26	6,992	1,772
181.27	7,006	1,842
181.28	7,020	1,912
181.29	7,033	1,982
181.30	7,047	2,053
181.31	7,060	2,123
181.32	7,074	2,194
181.33	7,087	2,265
181.34	7,101	2,336
181.35	7,115	2,407
181.36	7,128	2,478
181.37	7,142	2,549
181.38	7,155	2,621
181.39	7,169	2,693
181.40	7,183	2,764
181.41	7,196	2,836
181.42	7,210	2,908
181.43	7,223	2,980
181.44	7,237	3,053
181.45	7,251	3,125
181.46	7,264	3,198
181.47	7,278	3,270
181.48	7,291	3,343
181.49	7,305	3,416
181.50	7,319	3,489
181.51	7,332	3,563
181.52	7,346	3,636
181.53	7,359	3,710
181.54	7,373	3,783
181.55	7,386	3,857
181.56	7,400	3,931
181.57	7,414	4,005
181.58	7,427	4,079
181.59	7,441	4,154
181.60	7,454	4,228
181.61	7,468	4,303
181.62	7,482	4,377
181.63	7,495	4,452
181.64	7,509	4,527
181.65	7,522	4,602
181.66	7,536	4,678
181.67	7,550	4,753
181.68	7,563	4,829
181.69	7,577	4,904
181.70	7,590	4,980
181.71	7,604	5,056
181.72	7,617	5,132
181.73	7,631	5,209
181.74	7,645	5,285
181.75	7,658	5,361
181.76	7,672	5,438
181.77	7,685	5,515
181.78	7,699	5,592
181.79	7,713	5,669
181.80	7,726	5,746
181.81	7,740	5,823
181.82	7,753	5,901
181.83	7,767	5,978
181.84	7,781	6,056
181.85	7,794	6,134
181.86	7,808	6,212
181.87	7,821	6,290
181.88	7,835	6,369
181.89	7,849	6,447
181.90	7,862	6,525
181.91	7,876	6,604
181.92	7,889	6,683
181.93	7,903	6,762
181.94	7,916	6,841
181.95	7,930	6,920
181.96	7,944	7,000
181.97	7,957	7,079
181.98	7,971	7,159
181.99	7,984	7,239
182.00	7,998	7,319
182.01	8,012	7,399
182.02	8,026	7,479
182.03	8,040	7,559

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
182.04	8,055	7,640	182.56	8,790	12,019
182.05	8,069	7,720	182.57	8,805	12,107
182.06	8,083	7,801	182.58	8,819	12,195
182.07	8,097	7,882	182.59	8,833	12,284
182.08	8,111	7,963	182.60	8,847	12,372
182.09	8,125	8,044	182.61	8,861	12,461
182.10	8,139	8,125	182.62	8,875	12,549
182.11	8,154	8,207	182.63	8,889	12,638
182.12	8,168	8,288	182.64	8,904	12,727
182.13	8,182	8,370	182.65	8,918	12,816
182.14	8,196	8,452	182.66	8,932	12,905
182.15	8,210	8,534	182.67	8,946	12,995
182.16	8,224	8,616	182.68	8,960	13,084
182.17	8,239	8,699	182.69	8,974	13,174
182.18	8,253	8,781	182.70	8,988	13,264
182.19	8,267	8,864	182.71	9,003	13,354
182.20	8,281	8,946	182.72	9,017	13,444
182.21	8,295	9,029	182.73	9,031	13,534
182.22	8,309	9,112	182.74	9,045	13,624
182.23	8,323	9,195	182.75	9,059	13,715
182.24	8,338	9,279	182.76	9,073	13,806
182.25	8,352	9,362	182.77	9,088	13,896
182.26	8,366	9,446	182.78	9,102	13,987
182.27	8,380	9,530	182.79	9,116	14,078
182.28	8,394	9,613	182.80	9,130	14,170
182.29	8,408	9,697	182.81	9,144	14,261
182.30	8,423	9,782	182.82	9,158	14,353
182.31	8,437	9,866	182.83	9,172	14,444
182.32	8,451	9,950	182.84	9,187	14,536
182.33	8,465	10,035	182.85	9,201	14,628
182.34	8,479	10,120	182.86	9,215	14,720
182.35	8,493	10,204	182.87	9,229	14,812
182.36	8,507	10,289	182.88	9,243	14,905
182.37	8,522	10,375	182.89	9,257	14,997
182.38	8,536	10,460	182.90	9,272	15,090
182.39	8,550	10,545	182.91	9,286	15,183
182.40	8,564	10,631	182.92	9,300	15,275
182.41	8,578	10,717	182.93	9,314	15,369
182.42	8,592	10,802	182.94	9,328	15,462
182.43	8,606	10,888	182.95	9,342	15,555
182.44	8,621	10,975	182.96	9,356	15,649
182.45	8,635	11,061	182.97	9,371	15,742
182.46	8,649	11,147	182.98	9,385	15,836
182.47	8,663	11,234	182.99	9,399	15,930
182.48	8,677	11,321	183.00	9,413	16,024
182.49	8,691	11,407	183.01	9,444	16,118
182.50	8,706	11,494	183.02	9,475	16,213
182.51	8,720	11,582	183.03	9,506	16,308
182.52	8,734	11,669	183.04	9,537	16,403
182.53	8,748	11,756	183.05	9,568	16,499
182.54	8,762	11,844	183.06	9,599	16,594
182.55	8,776	11,931	183.07	9,630	16,691

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.08	9,661	16,787	183.60	11,274	22,230
183.09	9,692	16,884	183.61	11,305	22,343
183.10	9,723	16,981	183.62	11,336	22,456
183.11	9,754	17,078	183.63	11,367	22,570
183.12	9,785	17,176	183.64	11,398	22,684
183.13	9,816	17,274	183.65	11,429	22,798
183.14	9,847	17,372	183.66	11,460	22,912
183.15	9,878	17,471	183.67	11,491	23,027
183.16	9,909	17,570	183.68	11,522	23,142
183.17	9,940	17,669	183.69	11,553	23,257
183.18	9,971	17,769	183.70	11,584	23,373
183.19	10,002	17,868	183.71	11,615	23,489
183.20	10,033	17,969	183.72	11,646	23,605
183.21	10,064	18,069	183.73	11,677	23,722
183.22	10,095	18,170	183.74	11,708	23,839
183.23	10,126	18,271	183.75	11,740	23,956
183.24	10,157	18,372	183.76	11,771	24,074
183.25	10,189	18,474	183.77	11,802	24,192
183.26	10,220	18,576	183.78	11,833	24,310
183.27	10,251	18,679	183.79	11,864	24,428
183.28	10,282	18,781	183.80	11,895	24,547
183.29	10,313	18,884	183.81	11,926	24,666
183.30	10,344	18,987	183.82	11,957	24,786
183.31	10,375	19,091	183.83	11,988	24,905
183.32	10,406	19,195	183.84	12,019	25,025
183.33	10,437	19,299	183.85	12,050	25,146
183.34	10,468	19,404	183.86	12,081	25,266
183.35	10,499	19,509	183.87	12,112	25,387
183.36	10,530	19,614	183.88	12,143	25,509
183.37	10,561	19,719	183.89	12,174	25,630
183.38	10,592	19,825	183.90	12,205	25,752
183.39	10,623	19,931	183.91	12,236	25,874
183.40	10,654	20,037	183.92	12,267	25,997
183.41	10,685	20,144	183.93	12,298	26,120
183.42	10,716	20,251	183.94	12,329	26,243
183.43	10,747	20,358	183.95	12,360	26,366
183.44	10,778	20,466	183.96	12,391	26,490
183.45	10,809	20,574	183.97	12,422	26,614
183.46	10,840	20,682	183.98	12,453	26,738
183.47	10,871	20,791	183.99	12,484	26,863
183.48	10,902	20,900	184.00	12,515	26,988
183.49	10,933	21,009	184.01	12,531	27,113
183.50	10,964	21,118	184.02	12,547	27,239
183.51	10,995	21,228	184.03	12,563	27,364
183.52	11,026	21,338	184.04	12,580	27,490
183.53	11,057	21,449	184.05	12,596	27,616
183.54	11,088	21,559	184.06	12,612	27,742
183.55	11,119	21,670	184.07	12,628	27,868
183.56	11,150	21,782	184.08	12,644	27,994
183.57	11,181	21,893	184.09	12,660	28,121
183.58	11,212	22,005	184.10	12,676	28,248
183.59	11,243	22,118	184.11	12,692	28,374

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.12	12,709	28,501	184.64	13,547	35,328
184.13	12,725	28,629	184.65	13,563	35,463
184.14	12,741	28,756	184.66	13,580	35,599
184.15	12,757	28,883	184.67	13,596	35,735
184.16	12,773	29,011	184.68	13,612	35,871
184.17	12,789	29,139	184.69	13,628	36,007
184.18	12,805	29,267	184.70	13,644	36,144
184.19	12,821	29,395	184.71	13,660	36,280
184.20	12,838	29,523	184.72	13,676	36,417
184.21	12,854	29,652	184.73	13,692	36,554
184.22	12,870	29,780	184.74	13,709	36,691
184.23	12,886	29,909	184.75	13,725	36,828
184.24	12,902	30,038	184.76	13,741	36,965
184.25	12,918	30,167	184.77	13,757	37,103
184.26	12,934	30,296	184.78	13,773	37,240
184.27	12,951	30,426	184.79	13,789	37,378
184.28	12,967	30,555	184.80	13,805	37,516
184.29	12,983	30,685	184.81	13,822	37,654
184.30	12,999	30,815	184.82	13,838	37,793
184.31	13,015	30,945	184.83	13,854	37,931
184.32	13,031	31,075	184.84	13,870	38,070
184.33	13,047	31,206	184.85	13,886	38,208
184.34	13,063	31,336	184.86	13,902	38,347
184.35	13,080	31,467	184.87	13,918	38,486
184.36	13,096	31,598	184.88	13,934	38,626
184.37	13,112	31,729	184.89	13,951	38,765
184.38	13,128	31,860	184.90	13,967	38,905
184.39	13,144	31,992	184.91	13,983	39,045
184.40	13,160	32,123	184.92	13,999	39,184
184.41	13,176	32,255	184.93	14,015	39,324
184.42	13,192	32,387	184.94	14,031	39,465
184.43	13,209	32,519	184.95	14,047	39,605
184.44	13,225	32,651	184.96	14,063	39,746
184.45	13,241	32,783	184.97	14,080	39,886
184.46	13,257	32,916	184.98	14,096	40,027
184.47	13,273	33,048	184.99	14,112	40,168
184.48	13,289	33,181	185.00	14,128	40,310
184.49	13,305	33,314	185.01	14,145	40,451
184.50	13,322	33,447	185.02	14,161	40,592
184.51	13,338	33,580	185.03	14,178	40,734
184.52	13,354	33,714	185.04	14,195	40,876
184.53	13,370	33,847	185.05	14,212	41,018
184.54	13,386	33,981	185.06	14,228	41,160
184.55	13,402	34,115	185.07	14,245	41,303
184.56	13,418	34,249	185.08	14,262	41,445
184.57	13,434	34,384	185.09	14,278	41,588
184.58	13,451	34,518	185.10	14,295	41,731
184.59	13,467	34,653	185.11	14,312	41,874
184.60	13,483	34,787	185.12	14,328	42,017
184.61	13,499	34,922	185.13	14,345	42,160
184.62	13,515	35,057	185.14	14,362	42,304
184.63	13,531	35,193	185.15	14,379	42,447

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.16	14,395	42,591
185.17	14,412	42,735
185.18	14,429	42,880
185.19	14,445	43,024
185.20	14,462	43,168
185.21	14,479	43,313
185.22	14,495	43,458
185.23	14,512	43,603
185.24	14,529	43,748
185.25	14,546	43,894
185.26	14,562	44,039
185.27	14,579	44,185
185.28	14,596	44,331
185.29	14,612	44,477
185.30	14,629	44,623
185.31	14,646	44,769
185.32	14,662	44,916
185.33	14,679	45,063
185.34	14,696	45,210
185.35	14,712	45,357
185.36	14,729	45,504
185.37	14,746	45,651
185.38	14,763	45,799
185.39	14,779	45,946
185.40	14,796	46,094
185.41	14,813	46,242
185.42	14,829	46,391
185.43	14,846	46,539
185.44	14,863	46,687
185.45	14,879	46,836
185.46	14,896	46,985
185.47	14,913	47,134
185.48	14,930	47,283
185.49	14,946	47,433
185.50	14,963	47,582
185.51	14,980	47,732
185.52	14,996	47,882
185.53	15,013	48,032
185.54	15,030	48,182
185.55	15,047	48,332
185.56	15,063	48,483
185.57	15,080	48,634
185.58	15,097	48,785
185.59	15,113	48,936
185.60	15,130	49,087
185.61	15,147	49,238
185.62	15,163	49,390
185.63	15,180	49,542
185.64	15,197	49,693
185.65	15,214	49,845
185.66	15,230	49,998
185.67	15,247	50,150
185.68	15,264	50,303
185.69	15,280	50,455
185.70	15,297	50,608
185.71	15,314	50,761
185.72	15,330	50,915
185.73	15,347	51,068
185.74	15,364	51,221
185.75	15,381	51,375
185.76	15,397	51,529
185.77	15,414	51,683
185.78	15,431	51,837
185.79	15,447	51,992
185.80	15,464	52,146
185.81	15,481	52,301
185.82	15,497	52,456
185.83	15,514	52,611
185.84	15,531	52,766
185.85	15,547	52,922
185.86	15,564	53,077
185.87	15,581	53,233
185.88	15,598	53,389
185.89	15,614	53,545
185.90	15,631	53,701
185.91	15,648	53,857
185.92	15,664	54,014
185.93	15,681	54,171
185.94	15,698	54,328
185.95	15,714	54,485
185.96	15,731	54,642
185.97	15,748	54,799
185.98	15,765	54,957
185.99	15,781	55,115
186.00	15,798	55,273
186.01	15,815	55,431
186.02	15,833	55,589
186.03	15,850	55,747
186.04	15,867	55,906
186.05	15,884	56,065
186.06	15,902	56,223
186.07	15,919	56,383
186.08	15,936	56,542
186.09	15,953	56,701
186.10	15,971	56,861
186.11	15,988	57,021
186.12	16,005	57,181
186.13	16,022	57,341
186.14	16,040	57,501
186.15	16,057	57,662
186.16	16,074	57,822
186.17	16,091	57,983
186.18	16,109	58,144
186.19	16,126	58,305

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.20	16,143	58,467
186.21	16,160	58,628
186.22	16,178	58,790
186.23	16,195	58,952
186.24	16,212	59,114
186.25	16,230	59,276
186.26	16,247	59,438
186.27	16,264	59,601
186.28	16,281	59,764
186.29	16,299	59,926
186.30	16,316	60,090
186.31	16,333	60,253
186.32	16,350	60,416
186.33	16,368	60,580
186.34	16,385	60,744
186.35	16,402	60,908
186.36	16,419	61,072
186.37	16,437	61,236
186.38	16,454	61,400
186.39	16,471	61,565
186.40	16,488	61,730
186.41	16,506	61,895
186.42	16,523	62,060
186.43	16,540	62,225
186.44	16,557	62,391
186.45	16,575	62,556
186.46	16,592	62,722
186.47	16,609	62,888
186.48	16,626	63,054
186.49	16,644	63,221
186.50	16,661	63,387
186.51	16,678	63,554
186.52	16,696	63,721
186.53	16,713	63,888
186.54	16,730	64,055
186.55	16,747	64,222
186.56	16,765	64,390
186.57	16,782	64,558
186.58	16,799	64,726
186.59	16,816	64,894
186.60	16,834	65,062
186.61	16,851	65,230
186.62	16,868	65,399
186.63	16,885	65,568
186.64	16,903	65,737
186.65	16,920	65,906
186.66	16,937	66,075
186.67	16,954	66,245
186.68	16,972	66,414
186.69	16,989	66,584
186.70	17,006	66,754
186.71	17,023	66,924
186.72	17,041	67,094
186.73	17,058	67,265
186.74	17,075	67,436
186.75	17,093	67,606
186.76	17,110	67,777
186.77	17,127	67,949
186.78	17,144	68,120
186.79	17,162	68,292
186.80	17,179	68,463
186.81	17,196	68,635
186.82	17,213	68,807
186.83	17,231	68,979
186.84	17,248	69,152
186.85	17,265	69,324
186.86	17,282	69,497
186.87	17,300	69,670
186.88	17,317	69,843
186.89	17,334	70,016
186.90	17,351	70,190
186.91	17,369	70,363
186.92	17,386	70,537
186.93	17,403	70,711
186.94	17,420	70,885
186.95	17,438	71,059
186.96	17,455	71,234
186.97	17,472	71,409
186.98	17,489	71,583
186.99	17,507	71,758
187.00	17,524	71,934
187.01	17,542	72,109
187.02	17,560	72,284
187.03	17,578	72,460
187.04	17,595	72,636
187.05	17,613	72,812
187.06	17,631	72,988
187.07	17,649	73,165
187.08	17,667	73,341
187.09	17,685	73,518
187.10	17,703	73,695
187.11	17,720	73,872
187.12	17,738	74,049
187.13	17,756	74,227
187.14	17,774	74,404
187.15	17,792	74,582
187.16	17,810	74,760
187.17	17,828	74,938
187.18	17,845	75,117
187.19	17,863	75,295
187.20	17,881	75,474
187.21	17,899	75,653
187.22	17,917	75,832
187.23	17,935	76,011

Stage-Area-Storage for Pond B-46A: Basin #46A (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.24	17,953	76,191
187.25	17,971	76,370
187.26	17,988	76,550
187.27	18,006	76,730
187.28	18,024	76,910
187.29	18,042	77,091
187.30	18,060	77,271
187.31	18,078	77,452
187.32	18,096	77,633
187.33	18,113	77,814
187.34	18,131	77,995
187.35	18,149	78,176
187.36	18,167	78,358
187.37	18,185	78,540
187.38	18,203	78,722
187.39	18,221	78,904
187.40	18,238	79,086
187.41	18,256	79,268
187.42	18,274	79,451
187.43	18,292	79,634
187.44	18,310	79,817
187.45	18,328	80,000
187.46	18,346	80,183
187.47	18,363	80,367
187.48	18,381	80,551
187.49	18,399	80,735
187.50	18,417	80,919
187.51	18,435	81,103
187.52	18,453	81,287
187.53	18,471	81,472
187.54	18,488	81,657
187.55	18,506	81,842
187.56	18,524	82,027
187.57	18,542	82,212
187.58	18,560	82,398
187.59	18,578	82,584
187.60	18,596	82,769
187.61	18,613	82,955
187.62	18,631	83,142
187.63	18,649	83,328
187.64	18,667	83,515
187.65	18,685	83,701
187.66	18,703	83,888
187.67	18,721	84,075
187.68	18,738	84,263
187.69	18,756	84,450
187.70	18,774	84,638
187.71	18,792	84,826
187.72	18,810	85,014
187.73	18,828	85,202
187.74	18,846	85,390
187.75	18,864	85,579
187.76	18,881	85,768
187.77	18,899	85,956
187.78	18,917	86,146
187.79	18,935	86,335
187.80	18,953	86,524
187.81	18,971	86,714
187.82	18,989	86,904
187.83	19,006	87,094
187.84	19,024	87,284
187.85	19,042	87,474
187.86	19,060	87,665
187.87	19,078	87,855
187.88	19,096	88,046
187.89	19,114	88,237
187.90	19,131	88,428
187.91	19,149	88,620
187.92	19,167	88,811
187.93	19,185	89,003
187.94	19,203	89,195
187.95	19,221	89,387
187.96	19,239	89,580
187.97	19,256	89,772
187.98	19,274	89,965
187.99	19,292	90,157
188.00	**19,310**	**90,351**

Summary for Pond B-46B: Basin #46B

Inflow Area = 2.931 ac, 39.13% Impervious, Inflow Depth = 1.50" for Future 100 yr event
Inflow = 5.02 cfs @ 12.05 hrs, Volume= 0.366 af
Outflow = 0.31 cfs @ 24.01 hrs, Volume= 0.266 af, Atten= 94%, Lag= 717.9 min
Primary = 0.31 cfs @ 24.01 hrs, Volume= 0.266 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.51' @ 24.01 hrs Surf.Area= 11,740 sf Storage= 9,651 cf

Plug-Flow detention time= 717.5 min calculated for 0.266 af (73% of inflow)
Center-of-Mass det. time= 555.9 min (1,466.2 - 910.3)

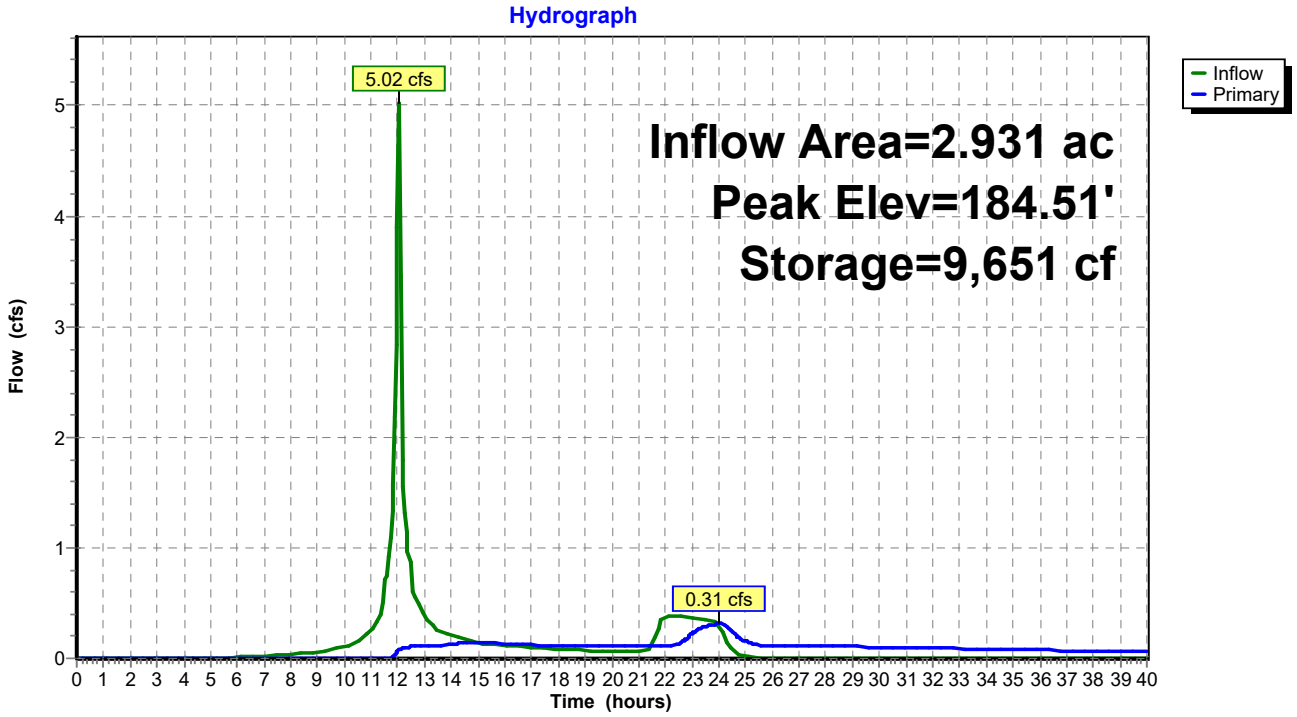
Volume	Invert	Avail.Storage	Storage Description
#1	183.30'	59,250 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.30	0	0	0
184.00	11,059	3,871	3,871
185.00	12,402	11,731	15,601
186.00	13,803	13,103	28,704
187.00	15,259	14,531	43,235
188.00	16,772	16,016	59,250

Device	Routing	Invert	Outlet Devices
#1	Primary	182.65'	**18.0" Round Culvert** L= 65.0' Ke= 0.500 Inlet / Outlet Invert= 182.65' / 176.00' S= 0.1023 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	183.82'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.45'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	185.75'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.30 cfs @ 24.01 hrs HW=184.51' (Free Discharge)
- **1=Culvert** (Passes 0.30 cfs of 8.95 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.68 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.18 cfs @ 0.78 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-46B: Basin #46B



Stage-Discharge for Pond B-46B: Basin #46B

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.30	0.00	183.82	0.00	184.34	0.11	184.86	3.52
183.31	0.00	183.83	0.00	184.35	0.11	184.87	3.65
183.32	0.00	183.84	0.00	184.36	0.11	184.88	3.77
183.33	0.00	183.85	0.00	184.37	0.11	184.89	3.89
183.34	0.00	183.86	0.00	184.38	0.11	184.90	4.02
183.35	0.00	183.87	0.00	184.39	0.11	184.91	4.15
183.36	0.00	183.88	0.01	184.40	0.11	184.92	4.28
183.37	0.00	183.89	0.01	184.41	0.11	184.93	4.41
183.38	0.00	183.90	0.01	184.42	0.12	184.94	4.54
183.39	0.00	183.91	0.01	184.43	0.12	184.95	4.68
183.40	0.00	183.92	0.02	184.44	0.12	184.96	4.81
183.41	0.00	183.93	0.02	184.45	0.12	184.97	4.95
183.42	0.00	183.94	0.02	184.46	0.13	184.98	5.08
183.43	0.00	183.95	0.03	184.47	0.16	184.99	5.22
183.44	0.00	183.96	0.03	184.48	0.19	185.00	5.36
183.45	0.00	183.97	0.03	184.49	0.23	185.01	5.50
183.46	0.00	183.98	0.04	184.50	0.27	185.02	5.64
183.47	0.00	183.99	0.04	184.51	0.32	185.03	5.78
183.48	0.00	184.00	0.05	184.52	0.37	185.04	5.93
183.49	0.00	184.01	0.05	184.53	0.42	185.05	6.07
183.50	0.00	184.02	0.05	184.54	0.48	185.06	6.22
183.51	0.00	184.03	0.05	184.55	0.54	185.07	6.36
183.52	0.00	184.04	0.06	184.56	0.61	185.08	6.51
183.53	0.00	184.05	0.06	184.57	0.67	185.09	6.66
183.54	0.00	184.06	0.06	184.58	0.74	185.10	6.81
183.55	0.00	184.07	0.06	184.59	0.81	185.11	6.96
183.56	0.00	184.08	0.06	184.60	0.89	185.12	7.11
183.57	0.00	184.09	0.07	184.61	0.97	185.13	7.27
183.58	0.00	184.10	0.07	184.62	1.05	185.14	7.42
183.59	0.00	184.11	0.07	184.63	1.13	185.15	7.57
183.60	0.00	184.12	0.07	184.64	1.21	185.16	7.73
183.61	0.00	184.13	0.07	184.65	1.30	185.17	7.89
183.62	0.00	184.14	0.08	184.66	1.39	185.18	8.04
183.63	0.00	184.15	0.08	184.67	1.48	185.19	8.20
183.64	0.00	184.16	0.08	184.68	1.57	185.20	8.36
183.65	0.00	184.17	0.08	184.69	1.66	185.21	8.52
183.66	0.00	184.18	0.08	184.70	1.76	185.22	8.68
183.67	0.00	184.19	0.08	184.71	1.86	185.23	8.85
183.68	0.00	184.20	0.09	184.72	1.96	185.24	9.01
183.69	0.00	184.21	0.09	184.73	2.06	185.25	9.17
183.70	0.00	184.22	0.09	184.74	2.16	185.26	9.34
183.71	0.00	184.23	0.09	184.75	2.27	185.27	9.50
183.72	0.00	184.24	0.09	184.76	2.37	185.28	9.67
183.73	0.00	184.25	0.09	184.77	2.48	185.29	9.84
183.74	0.00	184.26	0.10	184.78	2.59	185.30	10.01
183.75	0.00	184.27	0.10	184.79	2.70	185.31	10.18
183.76	0.00	184.28	0.10	184.80	2.81	185.32	10.35
183.77	0.00	184.29	0.10	184.81	2.93	185.33	10.52
183.78	0.00	184.30	0.10	184.82	3.04	185.34	10.69
183.79	0.00	184.31	0.10	184.83	3.16	185.35	10.86
183.80	0.00	184.32	0.10	184.84	3.28	185.36	11.03
183.81	0.00	184.33	0.10	184.85	3.40	185.37	11.21

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.38	11.38	185.90	20.30	186.42	91.01	186.94	198.59
185.39	11.56	185.91	21.03	186.43	92.75	186.95	200.94
185.40	11.74	185.92	21.78	186.44	94.51	186.96	203.32
185.41	11.91	185.93	22.55	186.45	96.28	186.97	205.72
185.42	12.09	185.94	23.34	186.46	98.06	186.98	208.13
185.43	12.12	185.95	24.15	186.47	99.86	186.99	210.55
185.44	12.15	185.96	25.03	186.48	101.66	187.00	212.98
185.45	12.18	185.97	25.92	186.49	103.49	187.01	215.43
185.46	12.21	185.98	26.85	186.50	105.32	187.02	217.88
185.47	12.24	185.99	27.80	186.51	107.16	187.03	220.34
185.48	12.27	186.00	28.77	186.52	109.02	187.04	222.82
185.49	12.30	186.01	29.77	186.53	110.89	187.05	225.30
185.50	12.33	186.02	30.80	186.54	112.77	187.06	227.79
185.51	12.36	186.03	31.85	186.55	114.67	187.07	230.30
185.52	12.39	186.04	32.92	186.56	116.61	187.08	232.82
185.53	12.42	186.05	34.02	186.57	118.57	187.09	235.34
185.54	12.45	186.06	35.14	186.58	120.54	187.10	237.88
185.55	12.48	186.07	36.29	186.59	122.52	187.11	240.42
185.56	12.51	186.08	37.46	186.60	124.52	187.12	242.98
185.57	12.53	186.09	38.66	186.61	126.53	187.13	245.55
185.58	12.56	186.10	39.88	186.62	128.55	187.14	248.13
185.59	12.59	186.11	41.12	186.63	130.58	187.15	250.71
185.60	12.62	186.12	42.39	186.64	132.63	187.16	253.36
185.61	12.65	186.13	43.68	186.65	134.69	187.17	256.01
185.62	12.68	186.14	45.00	186.66	136.77	187.18	258.67
185.63	12.71	186.15	46.34	186.67	138.85	187.19	261.35
185.64	12.73	186.16	47.73	186.68	140.95	187.20	264.04
185.65	12.76	186.17	49.15	186.69	143.07	187.21	266.74
185.66	12.79	186.18	50.59	186.70	145.19	187.22	269.45
185.67	12.82	186.19	52.06	186.71	147.33	187.23	272.17
185.68	12.85	186.20	53.56	186.72	149.48	187.24	274.90
185.69	12.88	186.21	55.08	186.73	151.64	187.25	277.64
185.70	12.90	186.22	56.63	186.74	153.82	187.26	280.39
185.71	12.93	186.23	58.20	186.75	156.01	187.27	283.16
185.72	12.96	186.24	59.80	186.76	158.15	187.28	285.93
185.73	12.99	186.25	61.43	186.77	160.31	187.29	288.72
185.74	13.02	186.26	63.08	186.78	162.48	187.30	291.52
185.75	13.04	186.27	64.76	186.79	164.66	187.31	294.32
185.76	13.19	186.28	66.47	186.80	166.85	187.32	297.14
185.77	13.43	186.29	68.20	186.81	169.05	187.33	299.97
185.78	13.74	186.30	69.96	186.82	171.26	187.34	302.81
185.79	14.09	186.31	71.75	186.83	173.48	187.35	305.67
185.80	14.49	186.32	73.56	186.84	175.71	187.36	308.53
185.81	14.93	186.33	75.40	186.85	177.95	187.37	311.40
185.82	15.41	186.34	77.27	186.86	180.21	187.38	314.29
185.83	15.92	186.35	79.16	186.87	182.47	187.39	317.18
185.84	16.46	186.36	80.82	186.88	184.74	187.40	320.09
185.85	17.04	186.37	82.48	186.89	187.03	187.41	323.00
185.86	17.64	186.38	84.16	186.90	189.32	187.42	325.93
185.87	18.26	186.39	85.85	186.91	191.62	187.43	328.87
185.88	18.92	186.40	87.56	186.92	193.94	187.44	331.82
185.89	19.60	186.41	89.27	186.93	196.26	187.45	334.78

Stage-Discharge for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Primary (cfs)
187.46	337.75
187.47	340.73
187.48	343.72
187.49	346.72
187.50	349.74
187.51	352.76
187.52	355.79
187.53	358.84
187.54	361.90
187.55	364.96
187.56	368.04
187.57	371.13
187.58	374.22
187.59	377.33
187.60	380.45
187.61	383.58
187.62	386.72
187.63	389.87
187.64	393.03
187.65	396.20
187.66	399.38
187.67	402.58
187.68	405.78
187.69	408.99
187.70	412.22
187.71	415.45
187.72	418.69
187.73	421.95
187.74	425.21
187.75	428.49
187.76	431.84
187.77	435.20
187.78	438.57
187.79	441.95
187.80	445.35
187.81	448.75
187.82	452.17
187.83	455.60
187.84	459.04
187.85	462.49
187.86	465.95
187.87	469.42
187.88	472.91
187.89	476.40
187.90	479.91
187.91	483.43
187.92	486.96
187.93	490.50
187.94	494.05
187.95	497.61
187.96	501.19
187.97	504.78
187.98	508.37
187.99	511.98
188.00	**515.60**

Stage-Area-Storage for Pond B-46B: Basin #46B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.30	0	0
183.31	158	1
183.32	316	3
183.33	474	7
183.34	632	13
183.35	790	20
183.36	948	28
183.37	1,106	39
183.38	1,264	51
183.39	1,422	64
183.40	1,580	79
183.41	1,738	96
183.42	1,896	114
183.43	2,054	133
183.44	2,212	155
183.45	2,370	178
183.46	2,528	202
183.47	2,686	228
183.48	2,844	256
183.49	3,002	285
183.50	3,160	316
183.51	3,318	348
183.52	3,476	382
183.53	3,634	418
183.54	3,792	455
183.55	3,950	494
183.56	4,108	534
183.57	4,266	576
183.58	4,424	619
183.59	4,582	664
183.60	4,740	711
183.61	4,898	759
183.62	5,056	809
183.63	5,214	860
183.64	5,372	913
183.65	5,530	968
183.66	5,687	1,024
183.67	5,845	1,081
183.68	6,003	1,141
183.69	6,161	1,201
183.70	6,319	1,264
183.71	6,477	1,328
183.72	6,635	1,393
183.73	6,793	1,461
183.74	6,951	1,529
183.75	7,109	1,600
183.76	7,267	1,671
183.77	7,425	1,745
183.78	7,583	1,820
183.79	7,741	1,897
183.80	7,899	1,975
183.81	8,057	2,055
183.82	8,215	2,136
183.83	8,373	2,219
183.84	8,531	2,303
183.85	8,689	2,390
183.86	8,847	2,477
183.87	9,005	2,566
183.88	9,163	2,657
183.89	9,321	2,750
183.90	9,479	2,844
183.91	9,637	2,939
183.92	9,795	3,036
183.93	9,953	3,135
183.94	10,111	3,236
183.95	10,269	3,337
183.96	10,427	3,441
183.97	10,585	3,546
183.98	10,743	3,653
183.99	10,901	3,761
184.00	11,059	3,871
184.01	11,072	3,981
184.02	11,086	4,092
184.03	11,099	4,203
184.04	11,113	4,314
184.05	11,126	4,425
184.06	11,140	4,537
184.07	11,153	4,648
184.08	11,166	4,760
184.09	11,180	4,871
184.10	11,193	4,983
184.11	11,207	5,095
184.12	11,220	5,207
184.13	11,234	5,320
184.14	11,247	5,432
184.15	11,260	5,545
184.16	11,274	5,657
184.17	11,287	5,770
184.18	11,301	5,883
184.19	11,314	5,996
184.20	11,328	6,109
184.21	11,341	6,223
184.22	11,354	6,336
184.23	11,368	6,450
184.24	11,381	6,563
184.25	11,395	6,677
184.26	11,408	6,791
184.27	11,422	6,906
184.28	11,435	7,020
184.29	11,448	7,134
184.30	11,462	7,249
184.31	11,475	7,363
184.32	11,489	7,478
184.33	11,502	7,593

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.34	11,516	7,708	184.86	12,214	13,878
184.35	11,529	7,824	184.87	12,227	14,000
184.36	11,542	7,939	184.88	12,241	14,123
184.37	11,556	8,054	184.89	12,254	14,245
184.38	11,569	8,170	184.90	12,268	14,368
184.39	11,583	8,286	184.91	12,281	14,490
184.40	11,596	8,402	184.92	12,295	14,613
184.41	11,610	8,518	184.93	12,308	14,736
184.42	11,623	8,634	184.94	12,321	14,859
184.43	11,636	8,750	184.95	12,335	14,983
184.44	11,650	8,867	184.96	12,348	15,106
184.45	11,663	8,983	184.97	12,362	15,230
184.46	11,677	9,100	184.98	12,375	15,353
184.47	11,690	9,217	184.99	12,389	15,477
184.48	11,704	9,334	185.00	12,402	15,601
184.49	11,717	9,451	185.01	12,416	15,725
184.50	11,731	9,568	185.02	12,430	15,849
184.51	11,744	9,685	185.03	12,444	15,974
184.52	11,757	9,803	185.04	12,458	16,098
184.53	11,771	9,921	185.05	12,472	16,223
184.54	11,784	10,038	185.06	12,486	16,348
184.55	11,798	10,156	185.07	12,500	16,473
184.56	11,811	10,274	185.08	12,514	16,598
184.57	11,825	10,392	185.09	12,528	16,723
184.58	11,838	10,511	185.10	12,542	16,848
184.59	11,851	10,629	185.11	12,556	16,974
184.60	11,865	10,748	185.12	12,570	17,099
184.61	11,878	10,867	185.13	12,584	17,225
184.62	11,892	10,985	185.14	12,598	17,351
184.63	11,905	11,104	185.15	12,612	17,477
184.64	11,919	11,223	185.16	12,626	17,603
184.65	11,932	11,343	185.17	12,640	17,730
184.66	11,945	11,462	185.18	12,654	17,856
184.67	11,959	11,582	185.19	12,668	17,983
184.68	11,972	11,701	185.20	12,682	18,110
184.69	11,986	11,821	185.21	12,696	18,236
184.70	11,999	11,941	185.22	12,710	18,363
184.71	12,013	12,061	185.23	12,724	18,491
184.72	12,026	12,181	185.24	12,738	18,618
184.73	12,039	12,302	185.25	12,752	18,745
184.74	12,053	12,422	185.26	12,766	18,873
184.75	12,066	12,543	185.27	12,780	19,001
184.76	12,080	12,663	185.28	12,794	19,129
184.77	12,093	12,784	185.29	12,808	19,257
184.78	12,107	12,905	185.30	12,822	19,385
184.79	12,120	13,026	185.31	12,836	19,513
184.80	12,133	13,148	185.32	12,850	19,642
184.81	12,147	13,269	185.33	12,864	19,770
184.82	12,160	13,391	185.34	12,878	19,899
184.83	12,174	13,512	185.35	12,892	20,028
184.84	12,187	13,634	185.36	12,906	20,157
184.85	12,201	13,756	185.37	12,920	20,286

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.38	12,934	20,415	185.90	13,663	27,330
185.39	12,948	20,544	185.91	13,677	27,467
185.40	12,962	20,674	185.92	13,691	27,604
185.41	12,976	20,804	185.93	13,705	27,741
185.42	12,990	20,934	185.94	13,719	27,878
185.43	13,004	21,064	185.95	13,733	28,015
185.44	13,018	21,194	185.96	13,747	28,153
185.45	13,032	21,324	185.97	13,761	28,290
185.46	13,046	21,454	185.98	13,775	28,428
185.47	13,060	21,585	185.99	13,789	28,566
185.48	13,074	21,716	186.00	13,803	28,704
185.49	13,088	21,846	186.01	13,818	28,842
185.50	13,103	21,977	186.02	13,832	28,980
185.51	13,117	22,108	186.03	13,847	29,118
185.52	13,131	22,240	186.04	13,861	29,257
185.53	13,145	22,371	186.05	13,876	29,396
185.54	13,159	22,502	186.06	13,890	29,534
185.55	13,173	22,634	186.07	13,905	29,673
185.56	13,187	22,766	186.08	13,919	29,813
185.57	13,201	22,898	186.09	13,934	29,952
185.58	13,215	23,030	186.10	13,949	30,091
185.59	13,229	23,162	186.11	13,963	30,231
185.60	13,243	23,295	186.12	13,978	30,370
185.61	13,257	23,427	186.13	13,992	30,510
185.62	13,271	23,560	186.14	14,007	30,650
185.63	13,285	23,692	186.15	14,021	30,790
185.64	13,299	23,825	186.16	14,036	30,931
185.65	13,313	23,958	186.17	14,051	31,071
185.66	13,327	24,092	186.18	14,065	31,212
185.67	13,341	24,225	186.19	14,080	31,353
185.68	13,355	24,358	186.20	14,094	31,493
185.69	13,369	24,492	186.21	14,109	31,634
185.70	13,383	24,626	186.22	14,123	31,776
185.71	13,397	24,760	186.23	14,138	31,917
185.72	13,411	24,894	186.24	14,152	32,058
185.73	13,425	25,028	186.25	14,167	32,200
185.74	13,439	25,162	186.26	14,182	32,342
185.75	13,453	25,297	186.27	14,196	32,484
185.76	13,467	25,431	186.28	14,211	32,626
185.77	13,481	25,566	186.29	14,225	32,768
185.78	13,495	25,701	186.30	14,240	32,910
185.79	13,509	25,836	186.31	14,254	33,053
185.80	13,523	25,971	186.32	14,269	33,195
185.81	13,537	26,106	186.33	14,283	33,338
185.82	13,551	26,242	186.34	14,298	33,481
185.83	13,565	26,377	186.35	14,313	33,624
185.84	13,579	26,513	186.36	14,327	33,767
185.85	13,593	26,649	186.37	14,342	33,910
185.86	13,607	26,785	186.38	14,356	34,054
185.87	13,621	26,921	186.39	14,371	34,198
185.88	13,635	27,057	186.40	14,385	34,341
185.89	13,649	27,194	186.41	14,400	34,485

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.42	14,415	34,629	186.94	15,172	42,322
186.43	14,429	34,774	186.95	15,186	42,474
186.44	14,444	34,918	186.96	15,201	42,625
186.45	14,458	35,062	186.97	15,215	42,778
186.46	14,473	35,207	186.98	15,230	42,930
186.47	14,487	35,352	186.99	15,244	43,082
186.48	14,502	35,497	187.00	15,259	43,235
186.49	14,516	35,642	187.01	15,274	43,387
186.50	14,531	35,787	187.02	15,289	43,540
186.51	14,546	35,933	187.03	15,304	43,693
186.52	14,560	36,078	187.04	15,320	43,846
186.53	14,575	36,224	187.05	15,335	43,999
186.54	14,589	36,370	187.06	15,350	44,153
186.55	14,604	36,516	187.07	15,365	44,306
186.56	14,618	36,662	187.08	15,380	44,460
186.57	14,633	36,808	187.09	15,395	44,614
186.58	14,647	36,954	187.10	15,410	44,768
186.59	14,662	37,101	187.11	15,425	44,922
186.60	14,677	37,248	187.12	15,441	45,077
186.61	14,691	37,394	187.13	15,456	45,231
186.62	14,706	37,541	187.14	15,471	45,386
186.63	14,720	37,688	187.15	15,486	45,541
186.64	14,735	37,836	187.16	15,501	45,695
186.65	14,749	37,983	187.17	15,516	45,851
186.66	14,764	38,131	187.18	15,531	46,006
186.67	14,779	38,278	187.19	15,546	46,161
186.68	14,793	38,426	187.20	15,562	46,317
186.69	14,808	38,574	187.21	15,577	46,472
186.70	14,822	38,722	187.22	15,592	46,628
186.71	14,837	38,871	187.23	15,607	46,784
186.72	14,851	39,019	187.24	15,622	46,940
186.73	14,866	39,168	187.25	15,637	47,097
186.74	14,880	39,317	187.26	15,652	47,253
186.75	14,895	39,465	187.27	15,668	47,410
186.76	14,910	39,614	187.28	15,683	47,566
186.77	14,924	39,764	187.29	15,698	47,723
186.78	14,939	39,913	187.30	15,713	47,880
186.79	14,953	40,062	187.31	15,728	48,038
186.80	14,968	40,212	187.32	15,743	48,195
186.81	14,982	40,362	187.33	15,758	48,353
186.82	14,997	40,512	187.34	15,773	48,510
186.83	15,011	40,662	187.35	15,789	48,668
186.84	15,026	40,812	187.36	15,804	48,826
186.85	15,041	40,962	187.37	15,819	48,984
186.86	15,055	41,113	187.38	15,834	49,142
186.87	15,070	41,263	187.39	15,849	49,301
186.88	15,084	41,414	187.40	15,864	49,459
186.89	15,099	41,565	187.41	15,879	49,618
186.90	15,113	41,716	187.42	15,894	49,777
186.91	15,128	41,867	187.43	15,910	49,936
186.92	15,143	42,019	187.44	15,925	50,095
186.93	15,157	42,170	187.45	15,940	50,254

Stage-Area-Storage for Pond B-46B: Basin #46B (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.46	15,955	50,414
187.47	15,970	50,573
187.48	15,985	50,733
187.49	16,000	50,893
187.50	16,016	51,053
187.51	16,031	51,214
187.52	16,046	51,374
187.53	16,061	51,534
187.54	16,076	51,695
187.55	16,091	51,856
187.56	16,106	52,017
187.57	16,121	52,178
187.58	16,137	52,339
187.59	16,152	52,501
187.60	16,167	52,662
187.61	16,182	52,824
187.62	16,197	52,986
187.63	16,212	53,148
187.64	16,227	53,310
187.65	16,242	53,473
187.66	16,258	53,635
187.67	16,273	53,798
187.68	16,288	53,961
187.69	16,303	54,124
187.70	16,318	54,287
187.71	16,333	54,450
187.72	16,348	54,613
187.73	16,363	54,777
187.74	16,379	54,941
187.75	16,394	55,104
187.76	16,409	55,268
187.77	16,424	55,433
187.78	16,439	55,597
187.79	16,454	55,761
187.80	16,469	55,926
187.81	16,485	56,091
187.82	16,500	56,256
187.83	16,515	56,421
187.84	16,530	56,586
187.85	16,545	56,751
187.86	16,560	56,917
187.87	16,575	57,083
187.88	16,590	57,248
187.89	16,606	57,414
187.90	16,621	57,581
187.91	16,636	57,747
187.92	16,651	57,913
187.93	16,666	58,080
187.94	16,681	58,247
187.95	16,696	58,413
187.96	16,711	58,580
187.97	16,727	58,748
187.98	16,742	58,915
187.99	16,757	59,083
188.00	**16,772**	**59,250**

Summary for Pond B-47: Basin #47

Inflow Area = 2.436 ac, 30.62% Impervious, Inflow Depth = 8.84" for Future 100 yr event
Inflow = 22.08 cfs @ 12.17 hrs, Volume= 1.795 af
Outflow = 8.62 cfs @ 12.40 hrs, Volume= 1.490 af, Atten= 61%, Lag= 13.5 min
Primary = 8.62 cfs @ 12.40 hrs, Volume= 1.490 af
Routed to Link PDA-4 : Proposed Drainage Area #4

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 190.29' @ 12.40 hrs Surf.Area= 23,820 sf Storage= 36,470 cf

Plug-Flow detention time= 273.0 min calculated for 1.488 af (83% of inflow)
Center-of-Mass det. time= 201.0 min (984.7 - 783.6)

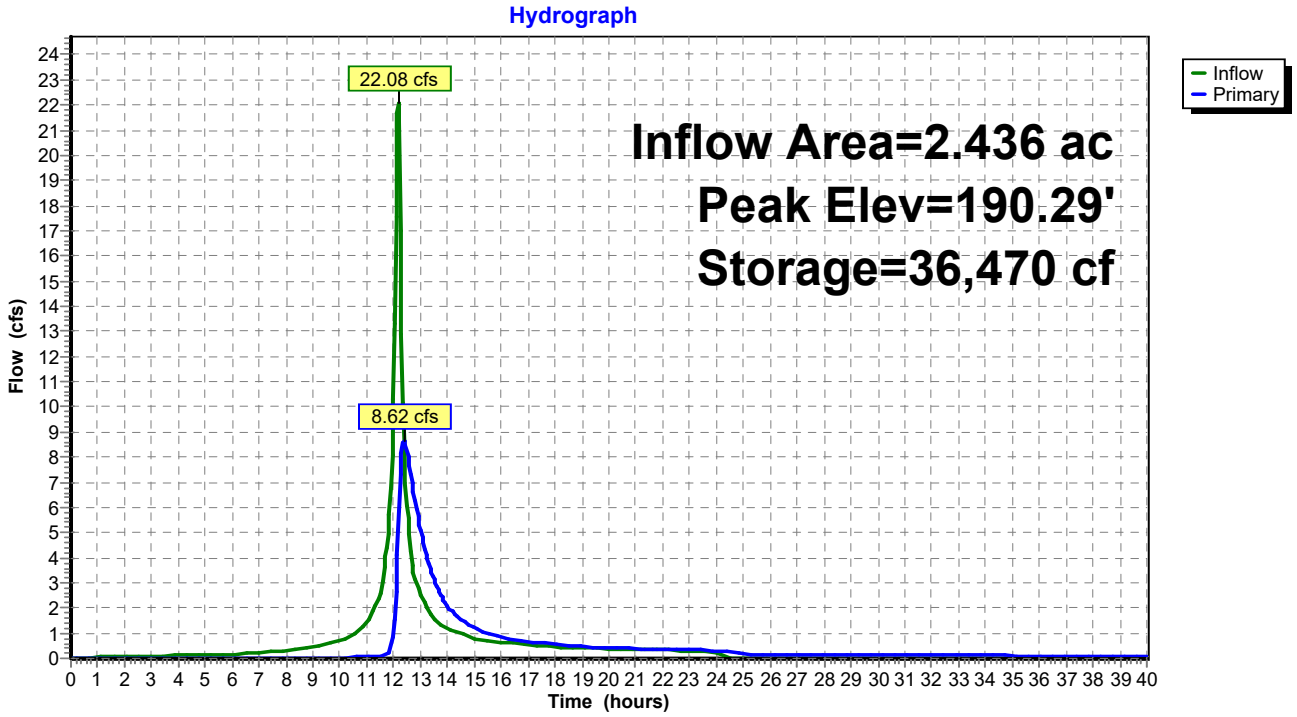
Volume	Invert	Avail.Storage	Storage Description
#1	188.30'	80,305 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
188.30	0	0	0
189.00	21,318	7,461	7,461
190.00	23,252	22,285	29,746
191.00	25,242	24,247	53,993
192.00	27,382	26,312	80,305

Device	Routing	Invert	Outlet Devices
#1	Primary	187.65'	**18.0" Round Culvert** L= 62.0' Ke= 0.500 Inlet / Outlet Invert= 187.65' / 184.00' S= 0.0589 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	188.84'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	189.52'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	190.51'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.61 cfs @ 12.40 hrs HW=190.29' (Free Discharge)
- **1=Culvert** (Passes 8.61 cfs of 11.68 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.58 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 8.42 cfs @ 2.86 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-47: Basin #47



Stage-Discharge for Pond B-47: Basin #47

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.30	0.00	188.82	0.00	189.34	0.10	189.86	2.71
188.31	0.00	188.83	0.00	189.35	0.10	189.87	2.82
188.32	0.00	188.84	0.00	189.36	0.11	189.88	2.93
188.33	0.00	188.85	0.00	189.37	0.11	189.89	3.05
188.34	0.00	188.86	0.00	189.38	0.11	189.90	3.17
188.35	0.00	188.87	0.00	189.39	0.11	189.91	3.28
188.36	0.00	188.88	0.00	189.40	0.11	189.92	3.40
188.37	0.00	188.89	0.00	189.41	0.11	189.93	3.53
188.38	0.00	188.90	0.01	189.42	0.11	189.94	3.65
188.39	0.00	188.91	0.01	189.43	0.11	189.95	3.77
188.40	0.00	188.92	0.01	189.44	0.12	189.96	3.90
188.41	0.00	188.93	0.01	189.45	0.12	189.97	4.03
188.42	0.00	188.94	0.02	189.46	0.12	189.98	4.15
188.43	0.00	188.95	0.02	189.47	0.12	189.99	4.28
188.44	0.00	188.96	0.02	189.48	0.12	190.00	4.41
188.45	0.00	188.97	0.03	189.49	0.12	190.01	4.55
188.46	0.00	188.98	0.03	189.50	0.12	190.02	4.68
188.47	0.00	188.99	0.03	189.51	0.12	190.03	4.81
188.48	0.00	189.00	0.04	189.52	0.12	190.04	4.95
188.49	0.00	189.01	0.04	189.53	0.14	190.05	5.09
188.50	0.00	189.02	0.05	189.54	0.16	190.06	5.22
188.51	0.00	189.03	0.05	189.55	0.20	190.07	5.36
188.52	0.00	189.04	0.05	189.56	0.23	190.08	5.50
188.53	0.00	189.05	0.05	189.57	0.28	190.09	5.64
188.54	0.00	189.06	0.06	189.58	0.32	190.10	5.79
188.55	0.00	189.07	0.06	189.59	0.37	190.11	5.93
188.56	0.00	189.08	0.06	189.60	0.43	190.12	6.07
188.57	0.00	189.09	0.06	189.61	0.49	190.13	6.22
188.58	0.00	189.10	0.06	189.62	0.55	190.14	6.37
188.59	0.00	189.11	0.07	189.63	0.61	190.15	6.51
188.60	0.00	189.12	0.07	189.64	0.68	190.16	6.66
188.61	0.00	189.13	0.07	189.65	0.75	190.17	6.81
188.62	0.00	189.14	0.07	189.66	0.82	190.18	6.96
188.63	0.00	189.15	0.07	189.67	0.89	190.19	7.12
188.64	0.00	189.16	0.08	189.68	0.97	190.20	7.27
188.65	0.00	189.17	0.08	189.69	1.05	190.21	7.42
188.66	0.00	189.18	0.08	189.70	1.13	190.22	7.58
188.67	0.00	189.19	0.08	189.71	1.22	190.23	7.73
188.68	0.00	189.20	0.08	189.72	1.30	190.24	7.89
188.69	0.00	189.21	0.08	189.73	1.39	190.25	8.05
188.70	0.00	189.22	0.09	189.74	1.48	190.26	8.21
188.71	0.00	189.23	0.09	189.75	1.57	190.27	8.37
188.72	0.00	189.24	0.09	189.76	1.67	190.28	8.53
188.73	0.00	189.25	0.09	189.77	1.76	190.29	8.69
188.74	0.00	189.26	0.09	189.78	1.86	190.30	8.85
188.75	0.00	189.27	0.09	189.79	1.96	190.31	9.01
188.76	0.00	189.28	0.10	189.80	2.06	190.32	9.18
188.77	0.00	189.29	0.10	189.81	2.17	190.33	9.34
188.78	0.00	189.30	0.10	189.82	2.27	190.34	9.51
188.79	0.00	189.31	0.10	189.83	2.38	190.35	9.67
188.80	0.00	189.32	0.10	189.84	2.49	190.36	9.84
188.81	0.00	189.33	0.10	189.85	2.59	190.37	10.01

Stage-Discharge for Pond B-47: Basin #47 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
190.38	10.18	190.90	44.37	191.42	136.19	191.94	258.14
190.39	10.35	190.91	45.71	191.43	138.28	191.95	260.82
190.40	10.52	190.92	47.10	191.44	140.38	191.96	263.51
190.41	10.69	190.93	48.52	191.45	142.49	191.97	266.20
190.42	10.86	190.94	49.97	191.46	144.62	191.98	268.91
190.43	11.04	190.95	51.44	191.47	146.76	191.99	271.64
190.44	11.21	190.96	52.93	191.48	148.91	192.00	**274.37**
190.45	11.39	190.97	54.46	191.49	151.07		
190.46	11.56	190.98	56.01	191.50	153.25		
190.47	11.74	190.99	57.58	191.51	155.44		
190.48	11.92	191.00	59.18	191.52	157.59		
190.49	12.09	191.01	60.81	191.53	159.74		
190.50	12.27	191.02	62.47	191.54	161.91		
190.51	12.36	191.03	64.15	191.55	164.09		
190.52	12.51	191.04	65.85	191.56	166.28		
190.53	12.75	191.05	67.59	191.57	168.49		
190.54	13.06	191.06	69.35	191.58	170.70		
190.55	13.41	191.07	71.14	191.59	172.92		
190.56	13.82	191.08	72.95	191.60	175.15		
190.57	14.26	191.09	74.79	191.61	177.39		
190.58	14.74	191.10	76.66	191.62	179.65		
190.59	15.25	191.11	78.56	191.63	181.91		
190.60	15.79	191.12	80.21	191.64	184.18		
190.61	16.37	191.13	81.88	191.65	186.47		
190.62	16.97	191.14	83.55	191.66	188.76		
190.63	17.60	191.15	85.25	191.67	191.07		
190.64	18.25	191.16	86.95	191.68	193.38		
190.65	18.93	191.17	88.67	191.69	195.71		
190.66	19.64	191.18	90.41	191.70	198.04		
190.67	20.37	191.19	92.15	191.71	200.38		
190.68	21.12	191.20	93.91	191.72	202.77		
190.69	21.89	191.21	95.68	191.73	205.17		
190.70	22.68	191.22	97.47	191.74	207.58		
190.71	23.50	191.23	99.26	191.75	210.01		
190.72	24.37	191.24	101.07	191.76	212.44		
190.73	25.27	191.25	102.89	191.77	214.88		
190.74	26.20	191.26	104.73	191.78	217.33		
190.75	27.15	191.27	106.57	191.79	219.80		
190.76	28.12	191.28	108.43	191.80	222.27		
190.77	29.13	191.29	110.30	191.81	224.76		
190.78	30.15	191.30	112.18	191.82	227.25		
190.79	31.20	191.31	114.08	191.83	229.76		
190.80	32.28	191.32	116.02	191.84	232.27		
190.81	33.38	191.33	117.98	191.85	234.80		
190.82	34.50	191.34	119.95	191.86	237.34		
190.83	35.65	191.35	121.94	191.87	239.88		
190.84	36.82	191.36	123.93	191.88	242.44		
190.85	38.02	191.37	125.94	191.89	245.01		
190.86	39.24	191.38	127.97	191.90	247.59		
190.87	40.49	191.39	130.00	191.91	250.18		
190.88	41.76	191.40	132.05	191.92	252.82		
190.89	43.05	191.41	134.12	191.93	255.48		

Stage-Area-Storage for Pond B-47: Basin #47

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.30	0	0	188.82	15,836	4,117
188.31	305	2	188.83	16,141	4,277
188.32	609	6	188.84	16,445	4,440
188.33	914	14	188.85	16,750	4,606
188.34	1,218	24	188.86	17,054	4,775
188.35	1,523	38	188.87	17,359	4,947
188.36	1,827	55	188.88	17,663	5,122
188.37	2,132	75	188.89	17,968	5,301
188.38	2,436	97	188.90	18,273	5,482
188.39	2,741	123	188.91	18,577	5,666
188.40	3,045	152	188.92	18,882	5,853
188.41	3,350	184	188.93	19,186	6,044
188.42	3,655	219	188.94	19,491	6,237
188.43	3,959	257	188.95	19,795	6,433
188.44	4,264	298	188.96	20,100	6,633
188.45	4,568	343	188.97	20,404	6,835
188.46	4,873	390	188.98	20,709	7,041
188.47	5,177	440	188.99	21,013	7,250
188.48	5,482	493	189.00	21,318	7,461
188.49	5,786	550	189.01	21,337	7,675
188.50	6,091	609	189.02	21,357	7,888
188.51	6,395	672	189.03	21,376	8,102
188.52	6,700	737	189.04	21,395	8,316
188.53	7,004	806	189.05	21,415	8,530
188.54	7,309	877	189.06	21,434	8,744
188.55	7,614	952	189.07	21,453	8,958
188.56	7,918	1,029	189.08	21,473	9,173
188.57	8,223	1,110	189.09	21,492	9,388
188.58	8,527	1,194	189.10	21,511	9,603
188.59	8,832	1,281	189.11	21,531	9,818
188.60	9,136	1,370	189.12	21,550	10,033
188.61	9,441	1,463	189.13	21,569	10,249
188.62	9,745	1,559	189.14	21,589	10,465
188.63	10,050	1,658	189.15	21,608	10,681
188.64	10,354	1,760	189.16	21,627	10,897
188.65	10,659	1,865	189.17	21,647	11,113
188.66	10,964	1,973	189.18	21,666	11,330
188.67	11,268	2,085	189.19	21,685	11,547
188.68	11,573	2,199	189.20	21,705	11,764
188.69	11,877	2,316	189.21	21,724	11,981
188.70	12,182	2,436	189.22	21,743	12,198
188.71	12,486	2,560	189.23	21,763	12,416
188.72	12,791	2,686	189.24	21,782	12,633
188.73	13,095	2,815	189.25	21,802	12,851
188.74	13,400	2,948	189.26	21,821	13,069
188.75	13,704	3,083	189.27	21,840	13,288
188.76	14,009	3,222	189.28	21,860	13,506
188.77	14,314	3,364	189.29	21,879	13,725
188.78	14,618	3,508	189.30	21,898	13,944
188.79	14,923	3,656	189.31	21,918	14,163
188.80	15,227	3,807	189.32	21,937	14,382
188.81	15,532	3,961	189.33	21,956	14,602

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.34	21,976	14,821	189.86	22,981	26,510
189.35	21,995	15,041	189.87	23,001	26,740
189.36	22,014	15,261	189.88	23,020	26,970
189.37	22,034	15,481	189.89	23,039	27,200
189.38	22,053	15,702	189.90	23,059	27,431
189.39	22,072	15,922	189.91	23,078	27,661
189.40	22,092	16,143	189.92	23,097	27,892
189.41	22,111	16,364	189.93	23,117	28,123
189.42	22,130	16,585	189.94	23,136	28,355
189.43	22,150	16,807	189.95	23,155	28,586
189.44	22,169	17,028	189.96	23,175	28,818
189.45	22,188	17,250	189.97	23,194	29,050
189.46	22,208	17,472	189.98	23,213	29,282
189.47	22,227	17,694	189.99	23,233	29,514
189.48	22,246	17,917	190.00	23,252	29,746
189.49	22,266	18,139	190.01	23,272	29,979
189.50	22,285	18,362	190.02	23,292	30,212
189.51	22,304	18,585	190.03	23,312	30,445
189.52	22,324	18,808	190.04	23,332	30,678
189.53	22,343	19,031	190.05	23,352	30,911
189.54	22,362	19,255	190.06	23,371	31,145
189.55	22,382	19,479	190.07	23,391	31,379
189.56	22,401	19,703	190.08	23,411	31,613
189.57	22,420	19,927	190.09	23,431	31,847
189.58	22,440	20,151	190.10	23,451	32,081
189.59	22,459	20,376	190.11	23,471	32,316
189.60	22,478	20,600	190.12	23,491	32,551
189.61	22,498	20,825	190.13	23,511	32,786
189.62	22,517	21,050	190.14	23,531	33,021
189.63	22,536	21,275	190.15	23,551	33,256
189.64	22,556	21,501	190.16	23,570	33,492
189.65	22,575	21,727	190.17	23,590	33,728
189.66	22,594	21,952	190.18	23,610	33,964
189.67	22,614	22,178	190.19	23,630	34,200
189.68	22,633	22,405	190.20	23,650	34,437
189.69	22,652	22,631	190.21	23,670	34,673
189.70	22,672	22,858	190.22	23,690	34,910
189.71	22,691	23,085	190.23	23,710	35,147
189.72	22,710	23,312	190.24	23,730	35,384
189.73	22,730	23,539	190.25	23,750	35,621
189.74	22,749	23,766	190.26	23,769	35,859
189.75	22,769	23,994	190.27	23,789	36,097
189.76	22,788	24,222	190.28	23,809	36,335
189.77	22,807	24,449	190.29	23,829	36,573
189.78	22,827	24,678	190.30	23,849	36,811
189.79	22,846	24,906	190.31	23,869	37,050
189.80	22,865	25,135	190.32	23,889	37,289
189.81	22,885	25,363	190.33	23,909	37,528
189.82	22,904	25,592	190.34	23,929	37,767
189.83	22,923	25,821	190.35	23,949	38,006
189.84	22,943	26,051	190.36	23,968	38,246
189.85	22,962	26,280	190.37	23,988	38,486

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
190.38	24,008	38,726	190.90	25,043	51,479
190.39	24,028	38,966	190.91	25,063	51,730
190.40	24,048	39,206	190.92	25,083	51,980
190.41	24,068	39,447	190.93	25,103	52,231
190.42	24,088	39,688	190.94	25,123	52,482
190.43	24,108	39,929	190.95	25,143	52,734
190.44	24,128	40,170	190.96	25,162	52,985
190.45	24,148	40,411	190.97	25,182	53,237
190.46	24,167	40,653	190.98	25,202	53,489
190.47	24,187	40,895	190.99	25,222	53,741
190.48	24,207	41,137	191.00	25,242	53,993
190.49	24,227	41,379	191.01	25,263	54,246
190.50	24,247	41,621	191.02	25,285	54,499
190.51	24,267	41,864	191.03	25,306	54,752
190.52	24,287	42,106	191.04	25,328	55,005
190.53	24,307	42,349	191.05	25,349	55,258
190.54	24,327	42,593	191.06	25,370	55,512
190.55	24,347	42,836	191.07	25,392	55,765
190.56	24,366	43,079	191.08	25,413	56,020
190.57	24,386	43,323	191.09	25,435	56,274
190.58	24,406	43,567	191.10	25,456	56,528
190.59	24,426	43,811	191.11	25,477	56,783
190.60	24,446	44,056	191.12	25,499	57,038
190.61	24,466	44,300	191.13	25,520	57,293
190.62	24,486	44,545	191.14	25,542	57,548
190.63	24,506	44,790	191.15	25,563	57,804
190.64	24,526	45,035	191.16	25,584	58,059
190.65	24,546	45,280	191.17	25,606	58,315
190.66	24,565	45,526	191.18	25,627	58,572
190.67	24,585	45,772	191.19	25,649	58,828
190.68	24,605	46,018	191.20	25,670	59,085
190.69	24,625	46,264	191.21	25,691	59,341
190.70	24,645	46,510	191.22	25,713	59,598
190.71	24,665	46,757	191.23	25,734	59,856
190.72	24,685	47,004	191.24	25,756	60,113
190.73	24,705	47,250	191.25	25,777	60,371
190.74	24,725	47,498	191.26	25,798	60,629
190.75	24,745	47,745	191.27	25,820	60,887
190.76	24,764	47,993	191.28	25,841	61,145
190.77	24,784	48,240	191.29	25,863	61,403
190.78	24,804	48,488	191.30	25,884	61,662
190.79	24,824	48,736	191.31	25,905	61,921
190.80	24,844	48,985	191.32	25,927	62,180
190.81	24,864	49,233	191.33	25,948	62,440
190.82	24,884	49,482	191.34	25,970	62,699
190.83	24,904	49,731	191.35	25,991	62,959
190.84	24,924	49,980	191.36	26,012	63,219
190.85	24,944	50,229	191.37	26,034	63,479
190.86	24,963	50,479	191.38	26,055	63,740
190.87	24,983	50,729	191.39	26,077	64,000
190.88	25,003	50,979	191.40	26,098	64,261
190.89	25,023	51,229	191.41	26,119	64,522

Stage-Area-Storage for Pond B-47: Basin #47 (continued)

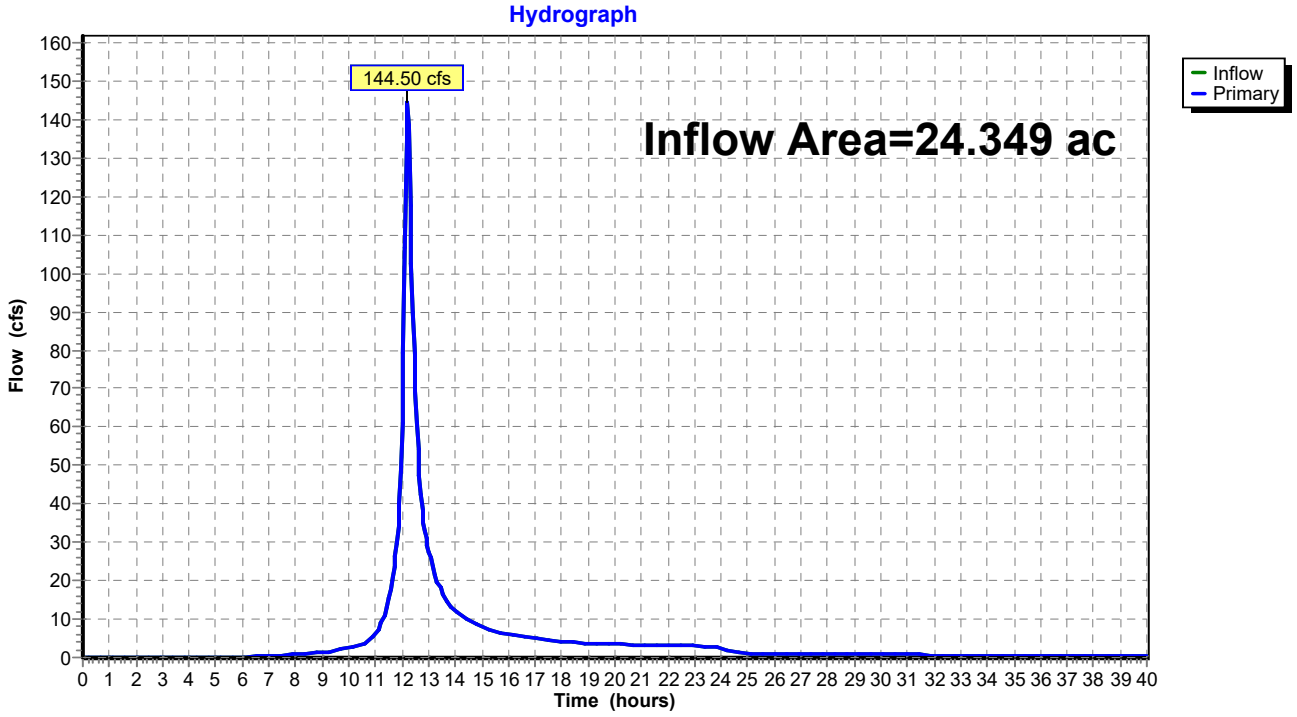
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.42	26,141	64,784
191.43	26,162	65,045
191.44	26,184	65,307
191.45	26,205	65,569
191.46	26,226	65,831
191.47	26,248	66,093
191.48	26,269	66,356
191.49	26,291	66,619
191.50	26,312	66,882
191.51	26,333	67,145
191.52	26,355	67,408
191.53	26,376	67,672
191.54	26,398	67,936
191.55	26,419	68,200
191.56	26,440	68,464
191.57	26,462	68,729
191.58	26,483	68,994
191.59	26,505	69,259
191.60	26,526	69,524
191.61	26,547	69,789
191.62	26,569	70,055
191.63	26,590	70,320
191.64	26,612	70,586
191.65	26,633	70,853
191.66	26,654	71,119
191.67	26,676	71,386
191.68	26,697	71,653
191.69	26,719	71,920
191.70	26,740	72,187
191.71	26,761	72,455
191.72	26,783	72,722
191.73	26,804	72,990
191.74	26,826	73,258
191.75	26,847	73,527
191.76	26,868	73,795
191.77	26,890	74,064
191.78	26,911	74,333
191.79	26,933	74,602
191.80	26,954	74,872
191.81	26,975	75,141
191.82	26,997	75,411
191.83	27,018	75,681
191.84	27,040	75,952
191.85	27,061	76,222
191.86	27,082	76,493
191.87	27,104	76,764
191.88	27,125	77,035
191.89	27,147	77,306
191.90	27,168	77,578
191.91	27,189	77,850
191.92	27,211	78,122
191.93	27,232	78,394
191.94	27,254	78,666
191.95	27,275	78,939
191.96	27,296	79,212
191.97	27,318	79,485
191.98	27,339	79,758
191.99	27,361	80,032
192.00	**27,382**	**80,305**

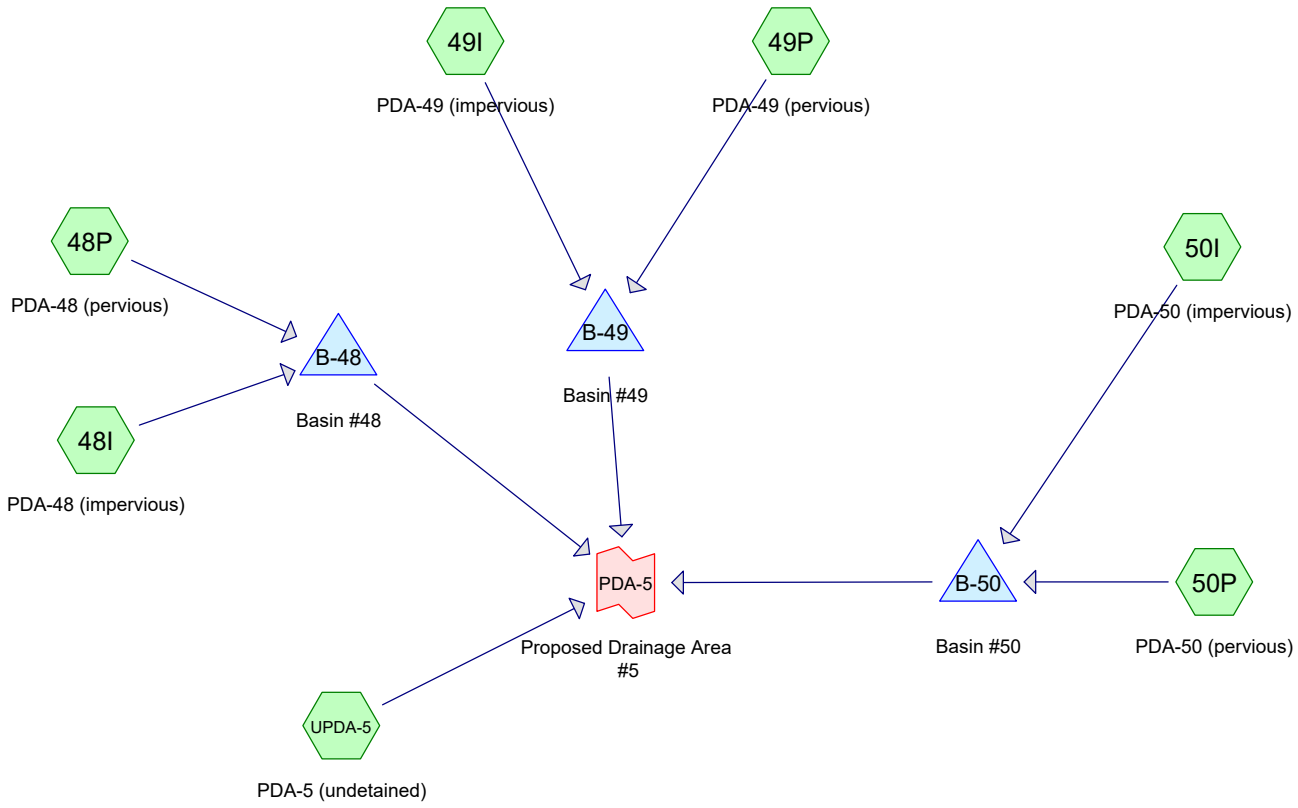
Summary for Link PDA-4: Proposed Drainage Area #4

Inflow Area = 24.349 ac, 23.20% Impervious, Inflow Depth > 7.22" for Future 100 yr event
Inflow = 144.50 cfs @ 12.21 hrs, Volume= 14.652 af
Primary = 144.50 cfs @ 12.21 hrs, Volume= 14.652 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-2

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-4: Proposed Drainage Area #4





Subcat Reach Pond Link

Routing Diagram for 2024-12-17 Proposed- 081391_5
Prepared by Bowman Consulting Group, Printed 12/19/2024
HydroCAD® 10.20-5c s/n 09435 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 48I: PDA-48 (impervious)

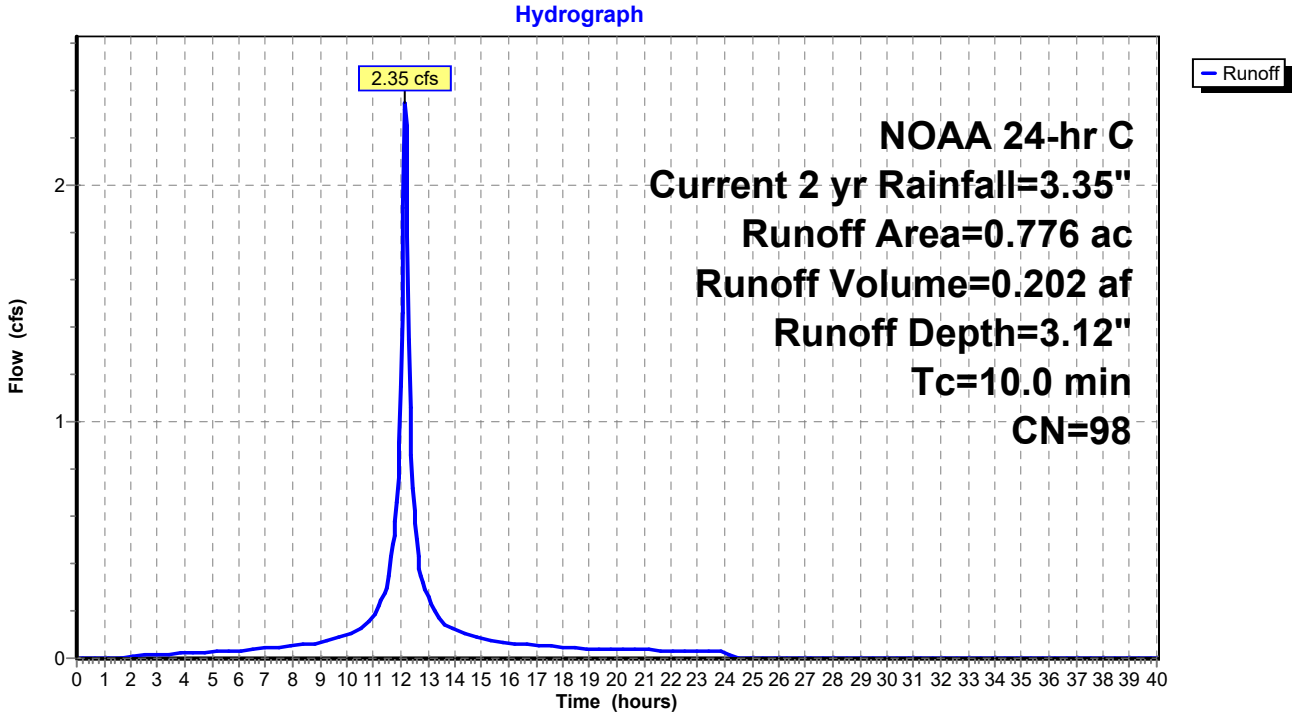
Runoff = 2.35 cfs @ 12.17 hrs, Volume= 0.202 af, Depth= 3.12"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.235	98	Pavement, HSG C
*	0.522	98	Roof, HSG C
*	0.019	98	Concrete, HSG C
	0.776	98	Weighted Average
	0.776		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 48I: PDA-48 (impervious)



Summary for Subcatchment 48P: PDA-48 (pervious)

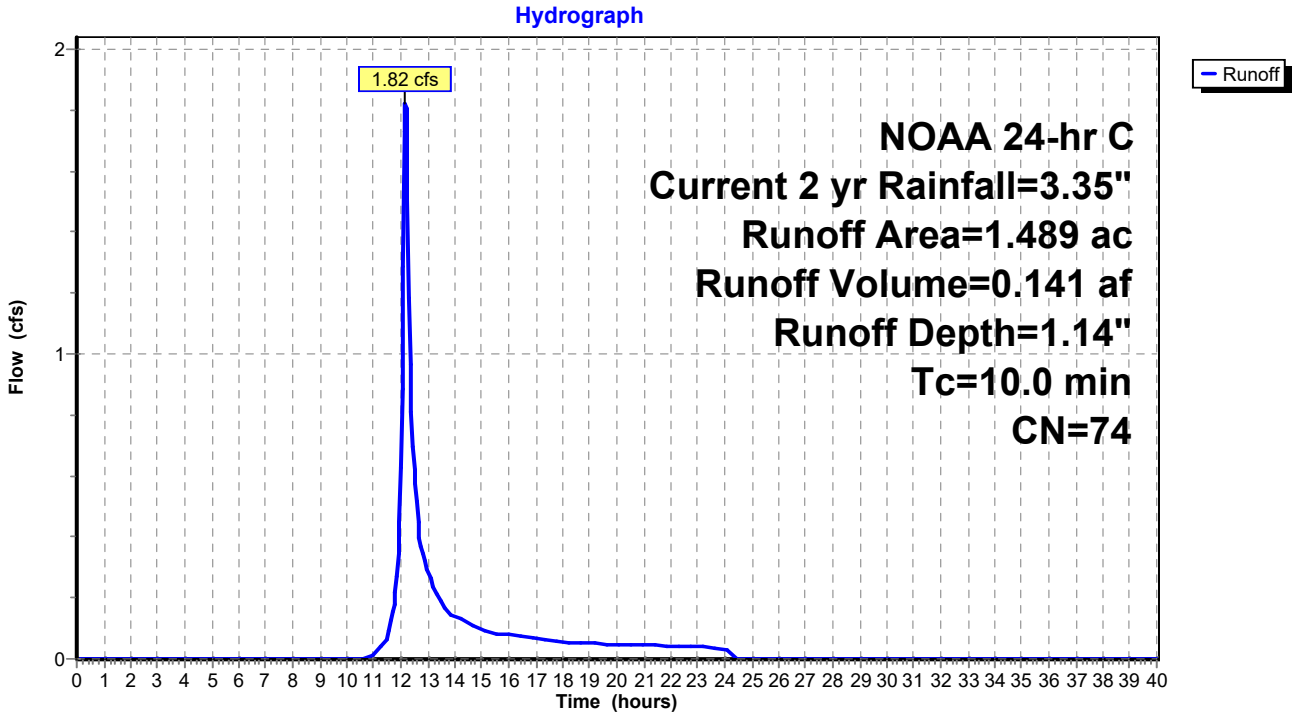
Runoff = 1.82 cfs @ 12.18 hrs, Volume= 0.141 af, Depth= 1.14"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.489	74	>75% Grass cover, Good, HSG C
1.489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 48P: PDA-48 (pervious)



Summary for Subcatchment 49l: PDA-49 (impervious)

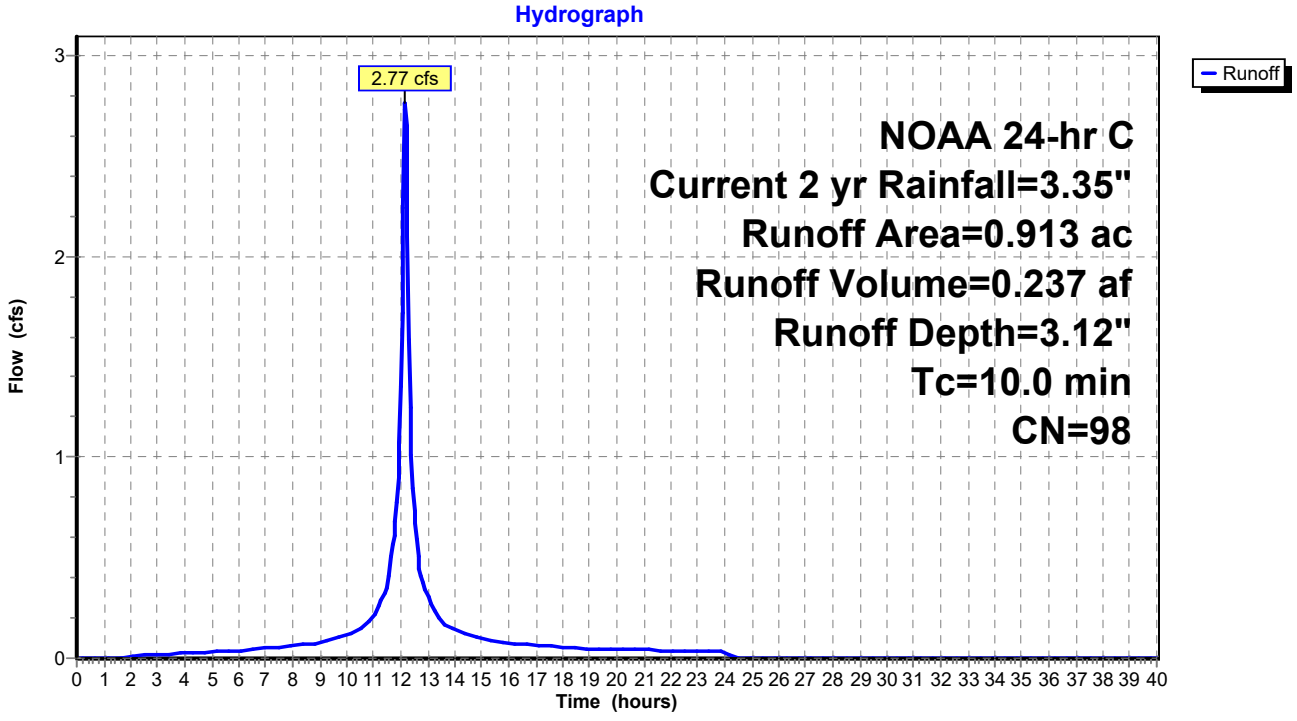
Runoff = 2.77 cfs @ 12.17 hrs, Volume= 0.237 af, Depth= 3.12"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.434	98	Pavement, HSG C
*	0.418	98	Roof, HSG C
*	0.061	98	Concrete, HSG C
	0.913	98	Weighted Average
	0.913		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 49l: PDA-49 (impervious)



Summary for Subcatchment 49P: PDA-49 (pervious)

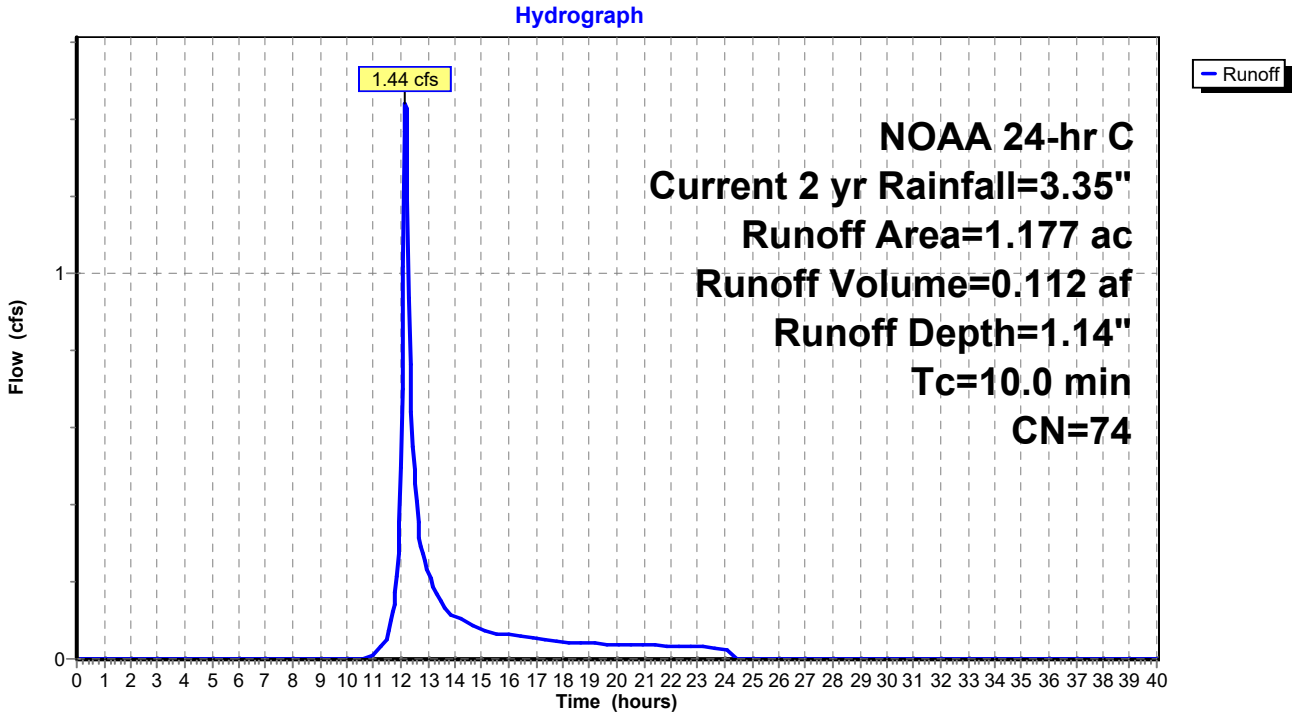
Runoff = 1.44 cfs @ 12.18 hrs, Volume= 0.112 af, Depth= 1.14"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.177	74	>75% Grass cover, Good, HSG C
1.177		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 49P: PDA-49 (pervious)



Summary for Subcatchment 50l: PDA-50 (impervious)

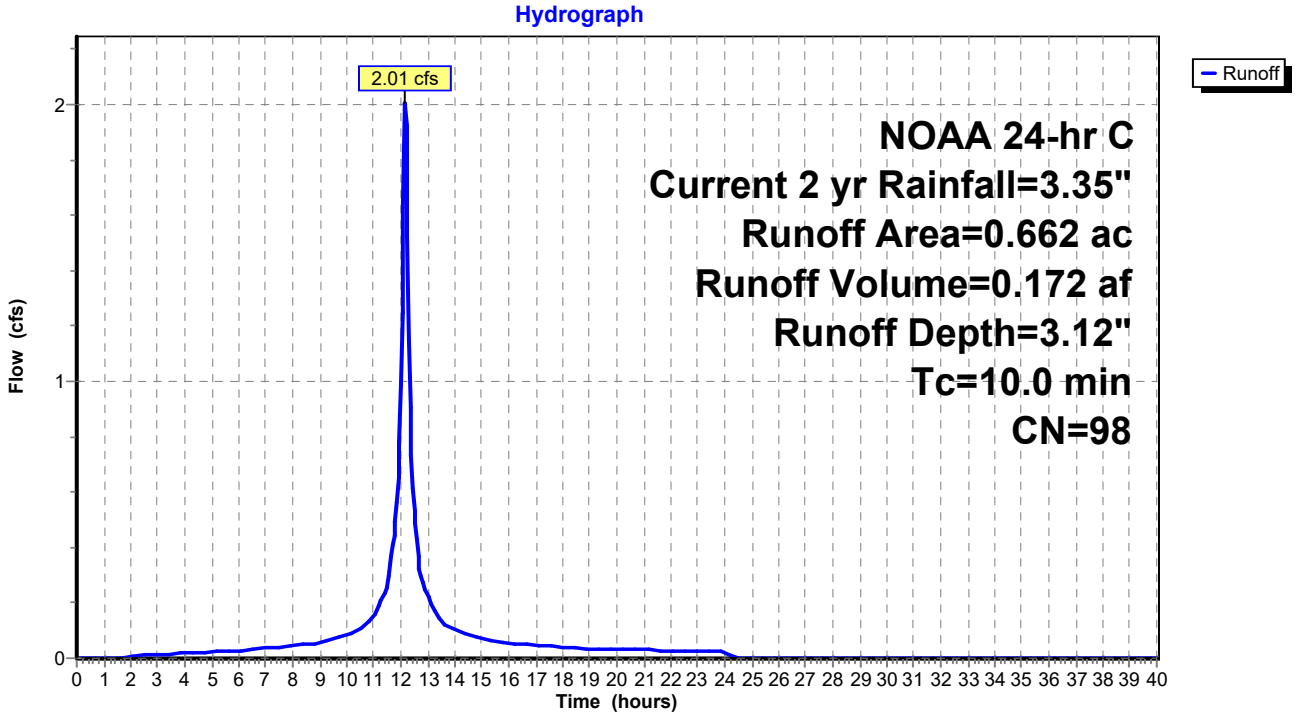
Runoff = 2.01 cfs @ 12.17 hrs, Volume= 0.172 af, Depth= 3.12"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.291	98	Pavement, HSG C
*	0.325	98	Roof, HSG C
*	0.046	98	Concrete, HSG C
	0.662	98	Weighted Average
	0.662		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 50l: PDA-50 (impervious)



Summary for Subcatchment 50P: PDA-50 (pervious)

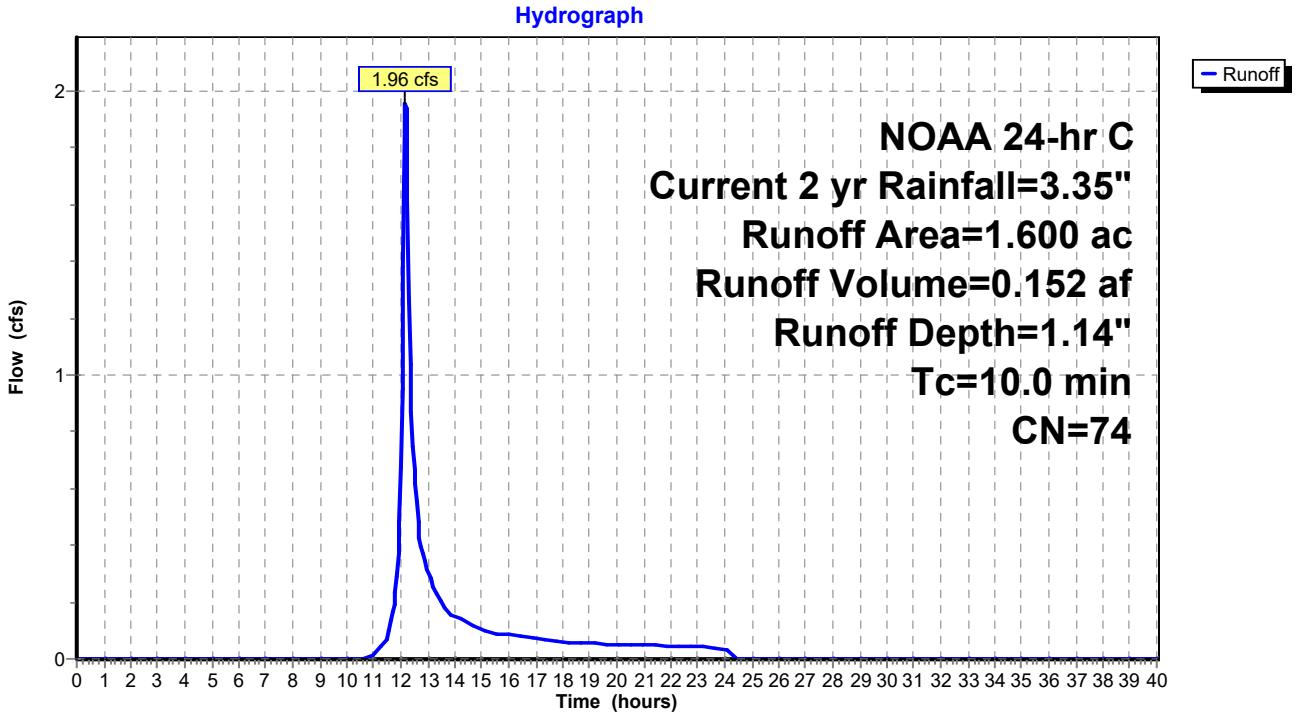
Runoff = 1.96 cfs @ 12.18 hrs, Volume= 0.152 af, Depth= 1.14"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.600	74	>75% Grass cover, Good, HSG C
1.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 50P: PDA-50 (pervious)



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

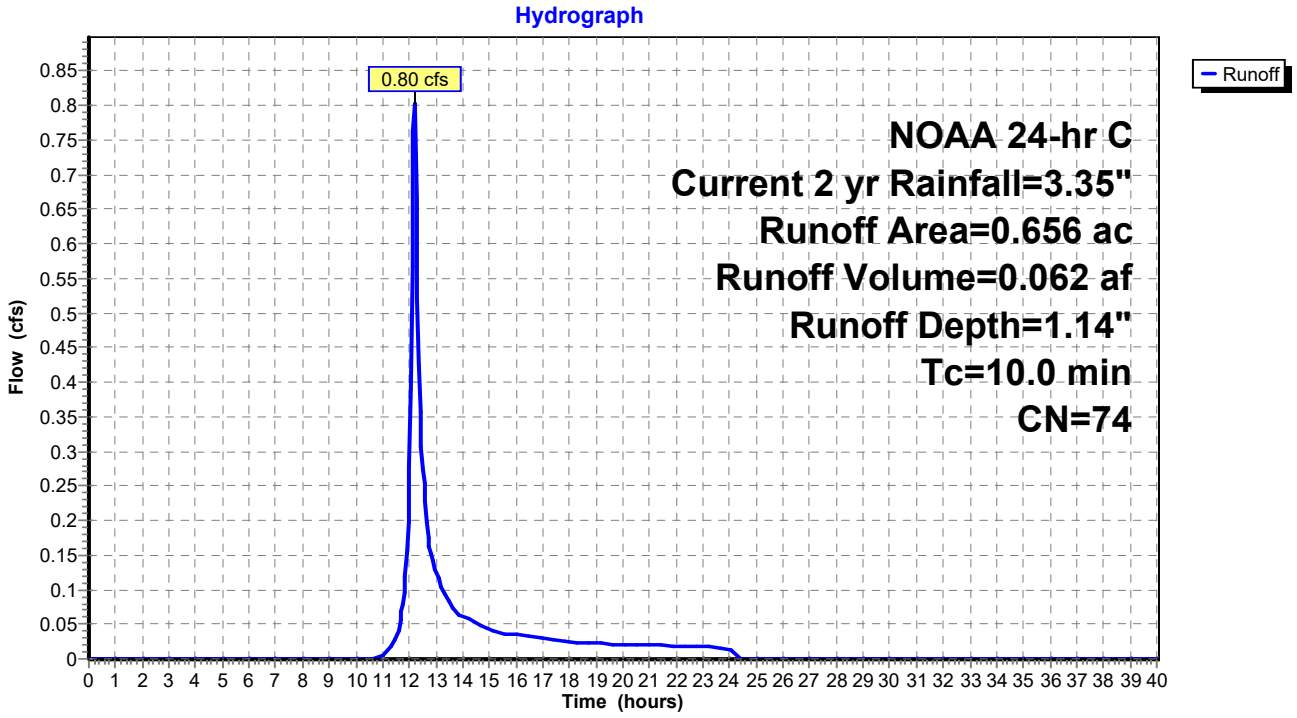
Runoff = 0.80 cfs @ 12.18 hrs, Volume= 0.062 af, Depth= 1.14"
Routed to Link PDA-5 : Proposed Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.656	74	>75% Grass cover, Good, HSG C
0.656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-5: PDA-5 (undetained)



Summary for Pond B-48: Basin #48

Inflow Area = 2.265 ac, 34.26% Impervious, Inflow Depth = 1.82" for Current 2 yr event
Inflow = 4.15 cfs @ 12.18 hrs, Volume= 0.343 af
Outflow = 0.13 cfs @ 16.68 hrs, Volume= 0.224 af, Atten= 97%, Lag= 270.1 min
Primary = 0.13 cfs @ 16.68 hrs, Volume= 0.224 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 192.12' @ 16.68 hrs Surf.Area= 10,251 sf Storage= 10,682 cf

Plug-Flow detention time= 744.5 min calculated for 0.224 af (65% of inflow)
Center-of-Mass det. time= 633.0 min (1,437.1 - 804.0)

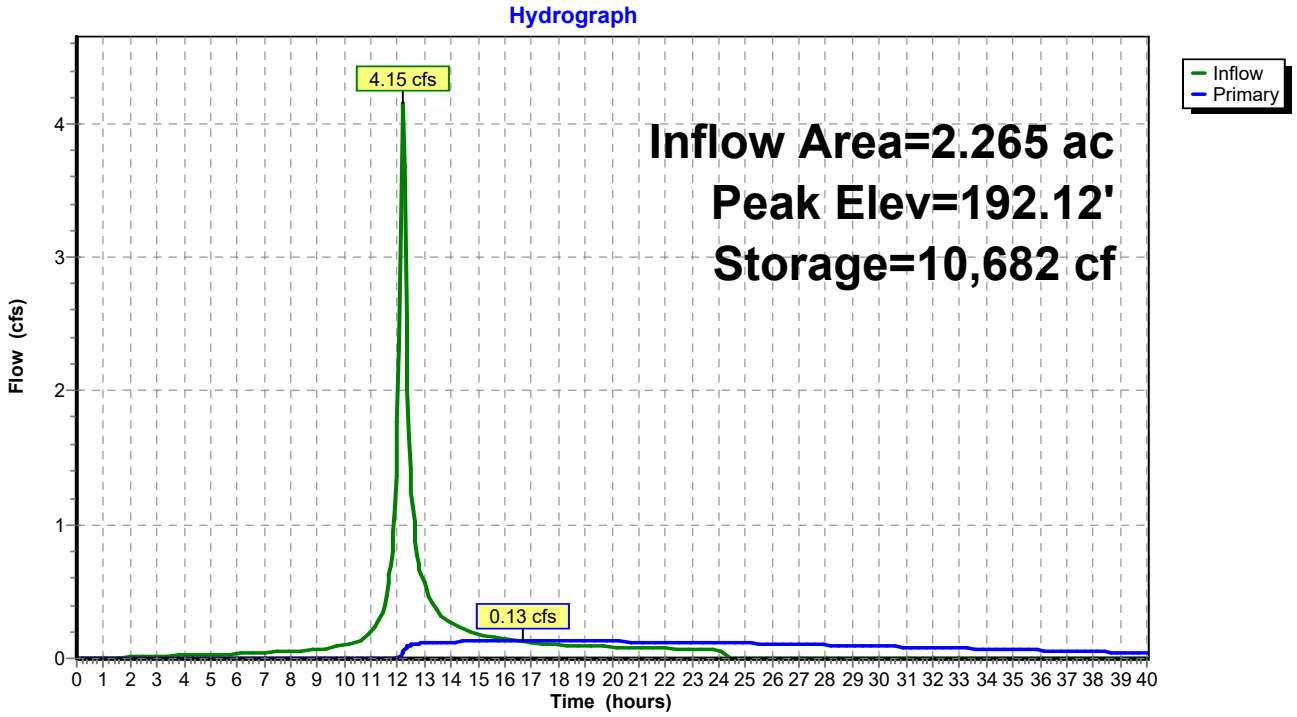
Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	32,287 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.00	8,869	0	0
192.00	10,100	9,485	9,485
193.00	11,387	10,744	20,228
194.00	12,731	12,059	32,287

Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	**18.0" Round Culvert** L= 185.0' Ke= 0.500 Inlet / Outlet Invert= 191.00' / 188.45' S= 0.0138 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.40'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	193.99'	**50.0' long + 3.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.13 cfs @ 16.68 hrs HW=192.12' (Free Discharge)
- **1=Culvert** (Passes 0.13 cfs of 5.08 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.77 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-48: Basin #48



Stage-Discharge for Pond B-48: Basin #48

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.00	0.00	191.52	0.02	192.04	0.12	192.56	0.17
191.01	0.00	191.53	0.03	192.05	0.12	192.57	0.17
191.02	0.00	191.54	0.03	192.06	0.12	192.58	0.17
191.03	0.00	191.55	0.03	192.07	0.12	192.59	0.17
191.04	0.00	191.56	0.04	192.08	0.12	192.60	0.17
191.05	0.00	191.57	0.04	192.09	0.13	192.61	0.17
191.06	0.00	191.58	0.05	192.10	0.13	192.62	0.17
191.07	0.00	191.59	0.05	192.11	0.13	192.63	0.17
191.08	0.00	191.60	0.05	192.12	0.13	192.64	0.17
191.09	0.00	191.61	0.05	192.13	0.13	192.65	0.18
191.10	0.00	191.62	0.06	192.14	0.13	192.66	0.18
191.11	0.00	191.63	0.06	192.15	0.13	192.67	0.18
191.12	0.00	191.64	0.06	192.16	0.13	192.68	0.18
191.13	0.00	191.65	0.06	192.17	0.13	192.69	0.18
191.14	0.00	191.66	0.06	192.18	0.13	192.70	0.18
191.15	0.00	191.67	0.07	192.19	0.14	192.71	0.18
191.16	0.00	191.68	0.07	192.20	0.14	192.72	0.18
191.17	0.00	191.69	0.07	192.21	0.14	192.73	0.18
191.18	0.00	191.70	0.07	192.22	0.14	192.74	0.18
191.19	0.00	191.71	0.07	192.23	0.14	192.75	0.18
191.20	0.00	191.72	0.08	192.24	0.14	192.76	0.18
191.21	0.00	191.73	0.08	192.25	0.14	192.77	0.18
191.22	0.00	191.74	0.08	192.26	0.14	192.78	0.19
191.23	0.00	191.75	0.08	192.27	0.14	192.79	0.19
191.24	0.00	191.76	0.08	192.28	0.14	192.80	0.19
191.25	0.00	191.77	0.08	192.29	0.15	192.81	0.19
191.26	0.00	191.78	0.09	192.30	0.15	192.82	0.19
191.27	0.00	191.79	0.09	192.31	0.15	192.83	0.19
191.28	0.00	191.80	0.09	192.32	0.15	192.84	0.19
191.29	0.00	191.81	0.09	192.33	0.15	192.85	0.19
191.30	0.00	191.82	0.09	192.34	0.15	192.86	0.19
191.31	0.00	191.83	0.09	192.35	0.15	192.87	0.19
191.32	0.00	191.84	0.10	192.36	0.15	192.88	0.19
191.33	0.00	191.85	0.10	192.37	0.15	192.89	0.19
191.34	0.00	191.86	0.10	192.38	0.15	192.90	0.19
191.35	0.00	191.87	0.10	192.39	0.15	192.91	0.19
191.36	0.00	191.88	0.10	192.40	0.16	192.92	0.20
191.37	0.00	191.89	0.10	192.41	0.16	192.93	0.20
191.38	0.00	191.90	0.10	192.42	0.16	192.94	0.20
191.39	0.00	191.91	0.10	192.43	0.16	192.95	0.20
191.40	0.00	191.92	0.11	192.44	0.16	192.96	0.20
191.41	0.00	191.93	0.11	192.45	0.16	192.97	0.20
191.42	0.00	191.94	0.11	192.46	0.16	192.98	0.20
191.43	0.00	191.95	0.11	192.47	0.16	192.99	0.20
191.44	0.00	191.96	0.11	192.48	0.16	193.00	0.20
191.45	0.00	191.97	0.11	192.49	0.16	193.01	0.21
191.46	0.01	191.98	0.11	192.50	0.16	193.02	0.24
191.47	0.01	191.99	0.11	192.51	0.16	193.03	0.27
191.48	0.01	192.00	0.12	192.52	0.17	193.04	0.31
191.49	0.01	192.01	0.12	192.53	0.17	193.05	0.35
191.50	0.02	192.02	0.12	192.54	0.17	193.06	0.40
191.51	0.02	192.03	0.12	192.55	0.17	193.07	0.45

Stage-Discharge for Pond B-48: Basin #48 (continued)

Elevation (feet)	Primary (cfs)
193.08	0.50
193.09	0.56
193.10	0.62
193.11	0.68
193.12	0.75
193.13	0.82
193.14	0.89
193.15	0.96
193.16	1.04
193.17	1.12
193.18	1.20
193.19	1.29
193.20	1.37
193.21	1.46
193.22	1.55
193.23	1.64
193.24	1.74
193.25	1.83
193.26	1.93
193.27	2.03
193.28	2.13
193.29	2.23
193.30	2.34
193.31	2.44
193.32	2.55
193.33	2.66
193.34	2.77
193.35	2.88
193.36	3.00
193.37	3.11
193.38	3.23
193.39	3.35
193.40	3.47
193.41	3.59
193.42	3.71
193.43	3.84
193.44	3.96
193.45	4.09
193.46	4.22
193.47	4.35
193.48	4.48
193.49	4.61
193.50	4.74
193.51	4.87
193.52	5.01
193.53	5.15
193.54	5.28
193.55	5.42
193.56	5.56
193.57	5.70
193.58	5.85
193.59	5.99
193.60	6.13
193.61	6.28
193.62	6.43
193.63	6.57
193.64	6.72
193.65	6.87
193.66	7.02
193.67	7.17
193.68	7.33
193.69	7.48
193.70	7.64
193.71	7.79
193.72	7.95
193.73	8.11
193.74	8.26
193.75	8.42
193.76	8.58
193.77	8.74
193.78	8.91
193.79	9.07
193.80	9.23
193.81	9.40
193.82	9.56
193.83	9.73
193.84	9.90
193.85	10.07
193.86	10.24
193.87	10.40
193.88	10.58
193.89	10.75
193.90	10.92
193.91	11.09
193.92	11.27
193.93	11.44
193.94	11.62
193.95	11.79
193.96	11.97
193.97	12.15
193.98	12.33
193.99	12.51
194.00	**12.81**

Stage-Area-Storage for Pond B-48: Basin #48

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.00	8,869	0	191.52	9,509	4,778
191.01	8,881	89	191.53	9,521	4,873
191.02	8,894	178	191.54	9,534	4,969
191.03	8,906	267	191.55	9,546	5,064
191.04	8,918	356	191.56	9,558	5,160
191.05	8,931	445	191.57	9,571	5,255
191.06	8,943	534	191.58	9,583	5,351
191.07	8,955	624	191.59	9,595	5,447
191.08	8,967	713	191.60	9,608	5,543
191.09	8,980	803	191.61	9,620	5,639
191.10	8,992	893	191.62	9,632	5,735
191.11	9,004	983	191.63	9,645	5,832
191.12	9,017	1,073	191.64	9,657	5,928
191.13	9,029	1,163	191.65	9,669	6,025
191.14	9,041	1,254	191.66	9,681	6,122
191.15	9,054	1,344	191.67	9,694	6,219
191.16	9,066	1,435	191.68	9,706	6,316
191.17	9,078	1,526	191.69	9,718	6,413
191.18	9,091	1,616	191.70	9,731	6,510
191.19	9,103	1,707	191.71	9,743	6,607
191.20	9,115	1,798	191.72	9,755	6,705
191.21	9,128	1,890	191.73	9,768	6,802
191.22	9,140	1,981	191.74	9,780	6,900
191.23	9,152	2,072	191.75	9,792	6,998
191.24	9,164	2,164	191.76	9,805	7,096
191.25	9,177	2,256	191.77	9,817	7,194
191.26	9,189	2,348	191.78	9,829	7,292
191.27	9,201	2,439	191.79	9,841	7,391
191.28	9,214	2,532	191.80	9,854	7,489
191.29	9,226	2,624	191.81	9,866	7,588
191.30	9,238	2,716	191.82	9,878	7,686
191.31	9,251	2,809	191.83	9,891	7,785
191.32	9,263	2,901	191.84	9,903	7,884
191.33	9,275	2,994	191.85	9,915	7,983
191.34	9,288	3,087	191.86	9,928	8,083
191.35	9,300	3,180	191.87	9,940	8,182
191.36	9,312	3,273	191.88	9,952	8,281
191.37	9,324	3,366	191.89	9,965	8,381
191.38	9,337	3,459	191.90	9,977	8,481
191.39	9,349	3,553	191.91	9,989	8,580
191.40	9,361	3,646	191.92	10,002	8,680
191.41	9,374	3,740	191.93	10,014	8,781
191.42	9,386	3,834	191.94	10,026	8,881
191.43	9,398	3,927	191.95	10,038	8,981
191.44	9,411	4,022	191.96	10,051	9,081
191.45	9,423	4,116	191.97	10,063	9,182
191.46	9,435	4,210	191.98	10,075	9,283
191.47	9,448	4,304	191.99	10,088	9,384
191.48	9,460	4,399	192.00	10,100	9,485
191.49	9,472	4,494	192.01	10,113	9,586
191.50	9,485	4,588	192.02	10,126	9,687
191.51	9,497	4,683	192.03	10,139	9,788

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.04	10,151	9,890	192.56	10,821	15,342
192.05	10,164	9,991	192.57	10,834	15,451
192.06	10,177	10,093	192.58	10,846	15,559
192.07	10,190	10,195	192.59	10,859	15,668
192.08	10,203	10,297	192.60	10,872	15,776
192.09	10,216	10,399	192.61	10,885	15,885
192.10	10,229	10,501	192.62	10,898	15,994
192.11	10,242	10,603	192.63	10,911	16,103
192.12	10,254	10,706	192.64	10,924	16,212
192.13	10,267	10,808	192.65	10,937	16,321
192.14	10,280	10,911	192.66	10,949	16,431
192.15	10,293	11,014	192.67	10,962	16,540
192.16	10,306	11,117	192.68	10,975	16,650
192.17	10,319	11,220	192.69	10,988	16,760
192.18	10,332	11,323	192.70	11,001	16,870
192.19	10,345	11,427	192.71	11,014	16,980
192.20	10,357	11,530	192.72	11,027	17,090
192.21	10,370	11,634	192.73	11,040	17,200
192.22	10,383	11,738	192.74	11,052	17,311
192.23	10,396	11,842	192.75	11,065	17,421
192.24	10,409	11,946	192.76	11,078	17,532
192.25	10,422	12,050	192.77	11,091	17,643
192.26	10,435	12,154	192.78	11,104	17,754
192.27	10,447	12,258	192.79	11,117	17,865
192.28	10,460	12,363	192.80	11,130	17,976
192.29	10,473	12,468	192.81	11,142	18,088
192.30	10,486	12,572	192.82	11,155	18,199
192.31	10,499	12,677	192.83	11,168	18,311
192.32	10,512	12,782	192.84	11,181	18,423
192.33	10,525	12,888	192.85	11,194	18,534
192.34	10,538	12,993	192.86	11,207	18,646
192.35	10,550	13,098	192.87	11,220	18,759
192.36	10,563	13,204	192.88	11,233	18,871
192.37	10,576	13,310	192.89	11,245	18,983
192.38	10,589	13,415	192.90	11,258	19,096
192.39	10,602	13,521	192.91	11,271	19,208
192.40	10,615	13,627	192.92	11,284	19,321
192.41	10,628	13,734	192.93	11,297	19,434
192.42	10,641	13,840	192.94	11,310	19,547
192.43	10,653	13,946	192.95	11,323	19,660
192.44	10,666	14,053	192.96	11,336	19,774
192.45	10,679	14,160	192.97	11,348	19,887
192.46	10,692	14,267	192.98	11,361	20,001
192.47	10,705	14,374	192.99	11,374	20,114
192.48	10,718	14,481	193.00	11,387	20,228
192.49	10,731	14,588	193.01	11,400	20,342
192.50	10,744	14,695	193.02	11,414	20,456
192.51	10,756	14,803	193.03	11,427	20,570
192.52	10,769	14,911	193.04	11,441	20,685
192.53	10,782	15,018	193.05	11,454	20,799
192.54	10,795	15,126	193.06	11,468	20,914
192.55	10,808	15,234	193.07	11,481	21,028

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.08	11,495	21,143
193.09	11,508	21,258
193.10	11,521	21,373
193.11	11,535	21,489
193.12	11,548	21,604
193.13	11,562	21,720
193.14	11,575	21,835
193.15	11,589	21,951
193.16	11,602	22,067
193.17	11,615	22,183
193.18	11,629	22,299
193.19	11,642	22,416
193.20	11,656	22,532
193.21	11,669	22,649
193.22	11,683	22,766
193.23	11,696	22,883
193.24	11,710	23,000
193.25	11,723	23,117
193.26	11,736	23,234
193.27	11,750	23,351
193.28	11,763	23,469
193.29	11,777	23,587
193.30	11,790	23,705
193.31	11,804	23,823
193.32	11,817	23,941
193.33	11,831	24,059
193.34	11,844	24,177
193.35	11,857	24,296
193.36	11,871	24,414
193.37	11,884	24,533
193.38	11,898	24,652
193.39	11,911	24,771
193.40	11,925	24,890
193.41	11,938	25,010
193.42	11,951	25,129
193.43	11,965	25,249
193.44	11,978	25,368
193.45	11,992	25,488
193.46	12,005	25,608
193.47	12,019	25,728
193.48	12,032	25,849
193.49	12,046	25,969
193.50	12,059	26,090
193.51	12,072	26,210
193.52	12,086	26,331
193.53	12,099	26,452
193.54	12,113	26,573
193.55	12,126	26,694
193.56	12,140	26,815
193.57	12,153	26,937
193.58	12,167	27,059
193.59	12,180	27,180
193.60	12,193	27,302
193.61	12,207	27,424
193.62	12,220	27,546
193.63	12,234	27,669
193.64	12,247	27,791
193.65	12,261	27,913
193.66	12,274	28,036
193.67	12,287	28,159
193.68	12,301	28,282
193.69	12,314	28,405
193.70	12,328	28,528
193.71	12,341	28,652
193.72	12,355	28,775
193.73	12,368	28,899
193.74	12,382	29,022
193.75	12,395	29,146
193.76	12,408	29,270
193.77	12,422	29,394
193.78	12,435	29,519
193.79	12,449	29,643
193.80	12,462	29,768
193.81	12,476	29,892
193.82	12,489	30,017
193.83	12,503	30,142
193.84	12,516	30,267
193.85	12,529	30,392
193.86	12,543	30,518
193.87	12,556	30,643
193.88	12,570	30,769
193.89	12,583	30,895
193.90	12,597	31,021
193.91	12,610	31,147
193.92	12,623	31,273
193.93	12,637	31,399
193.94	12,650	31,526
193.95	12,664	31,652
193.96	12,677	31,779
193.97	12,691	31,906
193.98	12,704	32,033
193.99	12,718	32,160
194.00	**12,731**	**32,287**

Summary for Pond B-49: Basin #49

Inflow Area = 2.090 ac, 43.68% Impervious, Inflow Depth = 2.00" for Current 2 yr event
Inflow = 4.20 cfs @ 12.17 hrs, Volume= 0.349 af
Outflow = 0.15 cfs @ 15.56 hrs, Volume= 0.241 af, Atten= 96%, Lag= 203.0 min
Primary = 0.15 cfs @ 15.56 hrs, Volume= 0.241 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.46' @ 15.56 hrs Surf.Area= 8,130 sf Storage= 10,737 cf

Plug-Flow detention time= 707.2 min calculated for 0.240 af (69% of inflow)
Center-of-Mass det. time= 603.6 min (1,397.9 - 794.3)

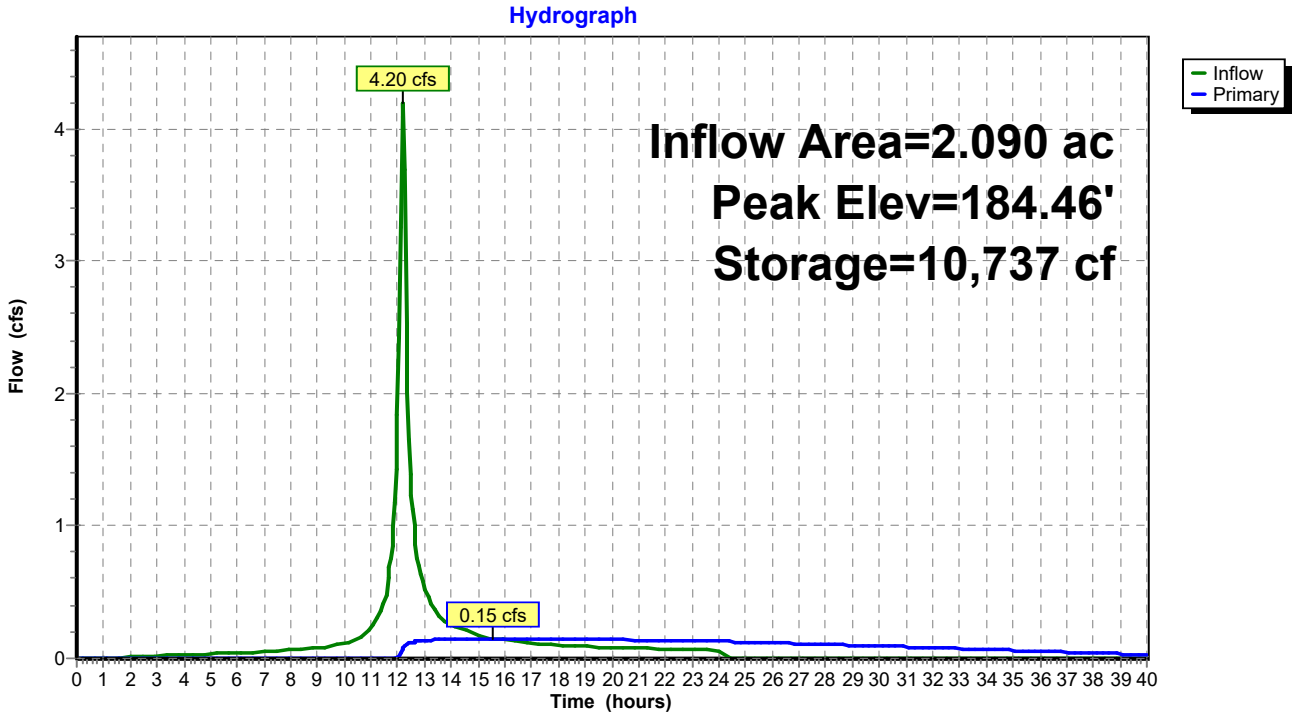
Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	52,993 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	6,565	0	0
184.00	7,625	7,095	7,095
185.00	8,717	8,171	15,266
186.00	9,853	9,285	24,551
187.00	11,027	10,440	34,991
188.00	12,333	11,680	46,671
188.50	12,956	6,322	52,993

Device	Routing	Invert	Outlet Devices
#1	Primary	183.00'	**15.0" Round Culvert** L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.81' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	183.55'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.74'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.25'	**100.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=0.15 cfs @ 15.56 hrs HW=184.46' (Free Discharge)
- **1=Culvert** (Passes 0.15 cfs of 4.88 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.15 cfs @ 4.33 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-49: Basin #49



Stage-Discharge for Pond B-49: Basin #49

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.00	0.00	183.52	0.00	184.04	0.10	184.56	0.16
183.01	0.00	183.53	0.00	184.05	0.10	184.57	0.16
183.02	0.00	183.54	0.00	184.06	0.10	184.58	0.16
183.03	0.00	183.55	0.00	184.07	0.11	184.59	0.16
183.04	0.00	183.56	0.00	184.08	0.11	184.60	0.16
183.05	0.00	183.57	0.00	184.09	0.11	184.61	0.16
183.06	0.00	183.58	0.00	184.10	0.11	184.62	0.16
183.07	0.00	183.59	0.00	184.11	0.11	184.63	0.16
183.08	0.00	183.60	0.00	184.12	0.11	184.64	0.16
183.09	0.00	183.61	0.01	184.13	0.11	184.65	0.16
183.10	0.00	183.62	0.01	184.14	0.11	184.66	0.16
183.11	0.00	183.63	0.01	184.15	0.12	184.67	0.17
183.12	0.00	183.64	0.01	184.16	0.12	184.68	0.17
183.13	0.00	183.65	0.02	184.17	0.12	184.69	0.17
183.14	0.00	183.66	0.02	184.18	0.12	184.70	0.17
183.15	0.00	183.67	0.02	184.19	0.12	184.71	0.17
183.16	0.00	183.68	0.03	184.20	0.12	184.72	0.17
183.17	0.00	183.69	0.03	184.21	0.12	184.73	0.17
183.18	0.00	183.70	0.03	184.22	0.12	184.74	0.17
183.19	0.00	183.71	0.04	184.23	0.12	184.75	0.18
183.20	0.00	183.72	0.04	184.24	0.13	184.76	0.21
183.21	0.00	183.73	0.05	184.25	0.13	184.77	0.24
183.22	0.00	183.74	0.05	184.26	0.13	184.78	0.28
183.23	0.00	183.75	0.05	184.27	0.13	184.79	0.32
183.24	0.00	183.76	0.05	184.28	0.13	184.80	0.37
183.25	0.00	183.77	0.06	184.29	0.13	184.81	0.42
183.26	0.00	183.78	0.06	184.30	0.13	184.82	0.47
183.27	0.00	183.79	0.06	184.31	0.13	184.83	0.53
183.28	0.00	183.80	0.06	184.32	0.13	184.84	0.59
183.29	0.00	183.81	0.06	184.33	0.13	184.85	0.65
183.30	0.00	183.82	0.07	184.34	0.14	184.86	0.72
183.31	0.00	183.83	0.07	184.35	0.14	184.87	0.79
183.32	0.00	183.84	0.07	184.36	0.14	184.88	0.86
183.33	0.00	183.85	0.07	184.37	0.14	184.89	0.94
183.34	0.00	183.86	0.07	184.38	0.14	184.90	1.01
183.35	0.00	183.87	0.08	184.39	0.14	184.91	1.09
183.36	0.00	183.88	0.08	184.40	0.14	184.92	1.17
183.37	0.00	183.89	0.08	184.41	0.14	184.93	1.26
183.38	0.00	183.90	0.08	184.42	0.14	184.94	1.34
183.39	0.00	183.91	0.08	184.43	0.14	184.95	1.43
183.40	0.00	183.92	0.08	184.44	0.15	184.96	1.52
183.41	0.00	183.93	0.09	184.45	0.15	184.97	1.61
183.42	0.00	183.94	0.09	184.46	0.15	184.98	1.71
183.43	0.00	183.95	0.09	184.47	0.15	184.99	1.80
183.44	0.00	183.96	0.09	184.48	0.15	185.00	1.90
183.45	0.00	183.97	0.09	184.49	0.15	185.01	2.00
183.46	0.00	183.98	0.09	184.50	0.15	185.02	2.10
183.47	0.00	183.99	0.10	184.51	0.15	185.03	2.21
183.48	0.00	184.00	0.10	184.52	0.15	185.04	2.31
183.49	0.00	184.01	0.10	184.53	0.15	185.05	2.42
183.50	0.00	184.02	0.10	184.54	0.15	185.06	2.52
183.51	0.00	184.03	0.10	184.55	0.16	185.07	2.63

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.08	2.75	185.60	8.30	186.12	9.33	186.64	10.26
185.09	2.86	185.61	8.33	186.13	9.35	186.65	10.28
185.10	2.97	185.62	8.35	186.14	9.37	186.66	10.29
185.11	3.09	185.63	8.37	186.15	9.39	186.67	10.31
185.12	3.20	185.64	8.39	186.16	9.41	186.68	10.33
185.13	3.32	185.65	8.41	186.17	9.43	186.69	10.34
185.14	3.44	185.66	8.43	186.18	9.44	186.70	10.36
185.15	3.56	185.67	8.45	186.19	9.46	186.71	10.38
185.16	3.69	185.68	8.47	186.20	9.48	186.72	10.40
185.17	3.81	185.69	8.49	186.21	9.50	186.73	10.41
185.18	3.94	185.70	8.51	186.22	9.52	186.74	10.43
185.19	4.06	185.71	8.53	186.23	9.54	186.75	10.45
185.20	4.19	185.72	8.55	186.24	9.56	186.76	10.46
185.21	4.32	185.73	8.57	186.25	9.57	186.77	10.48
185.22	4.45	185.74	8.59	186.26	9.59	186.78	10.50
185.23	4.58	185.75	8.61	186.27	9.61	186.79	10.51
185.24	4.72	185.76	8.63	186.28	9.63	186.80	10.53
185.25	4.85	185.77	8.65	186.29	9.65	186.81	10.55
185.26	4.99	185.78	8.67	186.30	9.66	186.82	10.56
185.27	5.12	185.79	8.69	186.31	9.68	186.83	10.58
185.28	5.26	185.80	8.71	186.32	9.70	186.84	10.59
185.29	5.40	185.81	8.73	186.33	9.72	186.85	10.61
185.30	5.54	185.82	8.75	186.34	9.74	186.86	10.63
185.31	5.68	185.83	8.77	186.35	9.75	186.87	10.64
185.32	5.82	185.84	8.79	186.36	9.77	186.88	10.66
185.33	5.97	185.85	8.81	186.37	9.79	186.89	10.68
185.34	6.11	185.86	8.83	186.38	9.81	186.90	10.69
185.35	6.26	185.87	8.85	186.39	9.83	186.91	10.71
185.36	6.40	185.88	8.87	186.40	9.84	186.92	10.73
185.37	6.55	185.89	8.89	186.41	9.86	186.93	10.74
185.38	6.70	185.90	8.91	186.42	9.88	186.94	10.76
185.39	6.85	185.91	8.93	186.43	9.90	186.95	10.77
185.40	7.00	185.92	8.95	186.44	9.91	186.96	10.79
185.41	7.15	185.93	8.97	186.45	9.93	186.97	10.81
185.42	7.30	185.94	8.99	186.46	9.95	186.98	10.82
185.43	7.46	185.95	9.01	186.47	9.97	186.99	10.84
185.44	7.61	185.96	9.03	186.48	9.98	187.00	10.86
185.45	7.77	185.97	9.05	186.49	10.00	187.01	10.87
185.46	7.92	185.98	9.07	186.50	10.02	187.02	10.89
185.47	8.03	185.99	9.09	186.51	10.04	187.03	10.90
185.48	8.05	186.00	9.11	186.52	10.05	187.04	10.92
185.49	8.07	186.01	9.13	186.53	10.07	187.05	10.94
185.50	8.09	186.02	9.14	186.54	10.09	187.06	10.95
185.51	8.11	186.03	9.16	186.55	10.11	187.07	10.97
185.52	8.13	186.04	9.18	186.56	10.12	187.08	10.98
185.53	8.16	186.05	9.20	186.57	10.14	187.09	11.00
185.54	8.18	186.06	9.22	186.58	10.16	187.10	11.01
185.55	8.20	186.07	9.24	186.59	10.17	187.11	11.03
185.56	8.22	186.08	9.26	186.60	10.19	187.12	11.05
185.57	8.24	186.09	9.28	186.61	10.21	187.13	11.06
185.58	8.26	186.10	9.30	186.62	10.23	187.14	11.08
185.59	8.28	186.11	9.31	186.63	10.24	187.15	11.09

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.16	11.11	187.68	11.90	188.20	12.64
187.17	11.13	187.69	11.91	188.21	12.65
187.18	11.14	187.70	11.93	188.22	12.67
187.19	11.16	187.71	11.94	188.23	12.68
187.20	11.17	187.72	11.96	188.24	12.69
187.21	11.19	187.73	11.97	188.25	12.71
187.22	11.20	187.74	11.99	188.26	13.05
187.23	11.22	187.75	12.00	188.27	13.66
187.24	11.23	187.76	12.02	188.28	14.45
187.25	11.25	187.77	12.03	188.29	15.38
187.26	11.27	187.78	12.04	188.30	16.43
187.27	11.28	187.79	12.06	188.31	17.59
187.28	11.30	187.80	12.07	188.32	18.86
187.29	11.31	187.81	12.09	188.33	20.21
187.30	11.33	187.82	12.10	188.34	21.66
187.31	11.34	187.83	12.12	188.35	23.18
187.32	11.36	187.84	12.13	188.36	24.78
187.33	11.37	187.85	12.15	188.37	26.46
187.34	11.39	187.86	12.16	188.38	28.21
187.35	11.40	187.87	12.17	188.39	30.02
187.36	11.42	187.88	12.19	188.40	31.90
187.37	11.43	187.89	12.20	188.41	33.85
187.38	11.45	187.90	12.22	188.42	35.85
187.39	11.47	187.91	12.23	188.43	37.92
187.40	11.48	187.92	12.25	188.44	40.04
187.41	11.50	187.93	12.26	188.45	42.22
187.42	11.51	187.94	12.27	188.46	44.45
187.43	11.53	187.95	12.29	188.47	46.73
187.44	11.54	187.96	12.30	188.48	49.07
187.45	11.56	187.97	12.32	188.49	51.46
187.46	11.57	187.98	12.33	188.50	**53.90**
187.47	11.59	187.99	12.35		
187.48	11.60	188.00	12.36		
187.49	11.62	188.01	12.37		
187.50	11.63	188.02	12.39		
187.51	11.65	188.03	12.40		
187.52	11.66	188.04	12.42		
187.53	11.68	188.05	12.43		
187.54	11.69	188.06	12.44		
187.55	11.71	188.07	12.46		
187.56	11.72	188.08	12.47		
187.57	11.74	188.09	12.49		
187.58	11.75	188.10	12.50		
187.59	11.77	188.11	12.51		
187.60	11.78	188.12	12.53		
187.61	11.80	188.13	12.54		
187.62	11.81	188.14	12.56		
187.63	11.83	188.15	12.57		
187.64	11.84	188.16	12.58		
187.65	11.85	188.17	12.60		
187.66	11.87	188.18	12.61		
187.67	11.88	188.19	12.62		

Stage-Area-Storage for Pond B-49: Basin #49

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	6,565	0	183.52	7,116	3,557
183.01	6,576	66	183.53	7,127	3,628
183.02	6,586	132	183.54	7,137	3,700
183.03	6,597	197	183.55	7,148	3,771
183.04	6,607	263	183.56	7,159	3,843
183.05	6,618	330	183.57	7,169	3,914
183.06	6,629	396	183.58	7,180	3,986
183.07	6,639	462	183.59	7,190	4,058
183.08	6,650	529	183.60	7,201	4,130
183.09	6,660	595	183.61	7,212	4,202
183.10	6,671	662	183.62	7,222	4,274
183.11	6,682	729	183.63	7,233	4,346
183.12	6,692	795	183.64	7,243	4,419
183.13	6,703	862	183.65	7,254	4,491
183.14	6,713	929	183.66	7,265	4,564
183.15	6,724	997	183.67	7,275	4,636
183.16	6,735	1,064	183.68	7,286	4,709
183.17	6,745	1,131	183.69	7,296	4,782
183.18	6,756	1,199	183.70	7,307	4,855
183.19	6,766	1,266	183.71	7,318	4,928
183.20	6,777	1,334	183.72	7,328	5,002
183.21	6,788	1,402	183.73	7,339	5,075
183.22	6,798	1,470	183.74	7,349	5,148
183.23	6,809	1,538	183.75	7,360	5,222
183.24	6,819	1,606	183.76	7,371	5,296
183.25	6,830	1,674	183.77	7,381	5,369
183.26	6,841	1,743	183.78	7,392	5,443
183.27	6,851	1,811	183.79	7,402	5,517
183.28	6,862	1,880	183.80	7,413	5,591
183.29	6,872	1,948	183.81	7,424	5,665
183.30	6,883	2,017	183.82	7,434	5,740
183.31	6,894	2,086	183.83	7,445	5,814
183.32	6,904	2,155	183.84	7,455	5,889
183.33	6,915	2,224	183.85	7,466	5,963
183.34	6,925	2,293	183.86	7,477	6,038
183.35	6,936	2,363	183.87	7,487	6,113
183.36	6,947	2,432	183.88	7,498	6,188
183.37	6,957	2,502	183.89	7,508	6,263
183.38	6,968	2,571	183.90	7,519	6,338
183.39	6,978	2,641	183.91	7,530	6,413
183.40	6,989	2,711	183.92	7,540	6,488
183.41	7,000	2,781	183.93	7,551	6,564
183.42	7,010	2,851	183.94	7,561	6,639
183.43	7,021	2,921	183.95	7,572	6,715
183.44	7,031	2,991	183.96	7,583	6,791
183.45	7,042	3,062	183.97	7,593	6,867
183.46	7,053	3,132	183.98	7,604	6,943
183.47	7,063	3,203	183.99	7,614	7,019
183.48	7,074	3,273	184.00	7,625	7,095
183.49	7,084	3,344	184.01	7,636	7,171
183.50	7,095	3,415	184.02	7,647	7,248
183.51	7,106	3,486	184.03	7,658	7,324

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	7,669	7,401	184.56	8,237	11,536
184.05	7,680	7,478	184.57	8,247	11,619
184.06	7,691	7,554	184.58	8,258	11,701
184.07	7,701	7,631	184.59	8,269	11,784
184.08	7,712	7,708	184.60	8,280	11,867
184.09	7,723	7,786	184.61	8,291	11,949
184.10	7,734	7,863	184.62	8,302	12,032
184.11	7,745	7,940	184.63	8,313	12,115
184.12	7,756	8,018	184.64	8,324	12,199
184.13	7,767	8,095	184.65	8,335	12,282
184.14	7,778	8,173	184.66	8,346	12,365
184.15	7,789	8,251	184.67	8,357	12,449
184.16	7,800	8,329	184.68	8,368	12,532
184.17	7,811	8,407	184.69	8,378	12,616
184.18	7,822	8,485	184.70	8,389	12,700
184.19	7,832	8,563	184.71	8,400	12,784
184.20	7,843	8,642	184.72	8,411	12,868
184.21	7,854	8,720	184.73	8,422	12,952
184.22	7,865	8,799	184.74	8,433	13,036
184.23	7,876	8,878	184.75	8,444	13,121
184.24	7,887	8,956	184.76	8,455	13,205
184.25	7,898	9,035	184.77	8,466	13,290
184.26	7,909	9,114	184.78	8,477	13,375
184.27	7,920	9,194	184.79	8,488	13,460
184.28	7,931	9,273	184.80	8,499	13,544
184.29	7,942	9,352	184.81	8,510	13,629
184.30	7,953	9,432	184.82	8,520	13,715
184.31	7,964	9,511	184.83	8,531	13,800
184.32	7,974	9,591	184.84	8,542	13,885
184.33	7,985	9,671	184.85	8,553	13,971
184.34	7,996	9,751	184.86	8,564	14,056
184.35	8,007	9,831	184.87	8,575	14,142
184.36	8,018	9,911	184.88	8,586	14,228
184.37	8,029	9,991	184.89	8,597	14,314
184.38	8,040	10,071	184.90	8,608	14,400
184.39	8,051	10,152	184.91	8,619	14,486
184.40	8,062	10,232	184.92	8,630	14,572
184.41	8,073	10,313	184.93	8,641	14,658
184.42	8,084	10,394	184.94	8,651	14,745
184.43	8,095	10,475	184.95	8,662	14,832
184.44	8,105	10,556	184.96	8,673	14,918
184.45	8,116	10,637	184.97	8,684	15,005
184.46	8,127	10,718	184.98	8,695	15,092
184.47	8,138	10,799	184.99	8,706	15,179
184.48	8,149	10,881	185.00	8,717	15,266
184.49	8,160	10,962	185.01	8,728	15,353
184.50	8,171	11,044	185.02	8,740	15,441
184.51	8,182	11,126	185.03	8,751	15,528
184.52	8,193	11,208	185.04	8,762	15,616
184.53	8,204	11,290	185.05	8,774	15,703
184.54	8,215	11,372	185.06	8,785	15,791
184.55	8,226	11,454	185.07	8,797	15,879

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	8,808	15,967	185.60	9,399	20,701
185.09	8,819	16,055	185.61	9,410	20,795
185.10	8,831	16,143	185.62	9,421	20,889
185.11	8,842	16,232	185.63	9,433	20,983
185.12	8,853	16,320	185.64	9,444	21,078
185.13	8,865	16,409	185.65	9,455	21,172
185.14	8,876	16,498	185.66	9,467	21,267
185.15	8,887	16,586	185.67	9,478	21,361
185.16	8,899	16,675	185.68	9,489	21,456
185.17	8,910	16,764	185.69	9,501	21,551
185.18	8,921	16,853	185.70	9,512	21,646
185.19	8,933	16,943	185.71	9,524	21,741
185.20	8,944	17,032	185.72	9,535	21,837
185.21	8,956	17,122	185.73	9,546	21,932
185.22	8,967	17,211	185.74	9,558	22,028
185.23	8,978	17,301	185.75	9,569	22,123
185.24	8,990	17,391	185.76	9,580	22,219
185.25	9,001	17,481	185.77	9,592	22,315
185.26	9,012	17,571	185.78	9,603	22,411
185.27	9,024	17,661	185.79	9,614	22,507
185.28	9,035	17,751	185.80	9,626	22,603
185.29	9,046	17,842	185.81	9,637	22,699
185.30	9,058	17,932	185.82	9,649	22,796
185.31	9,069	18,023	185.83	9,660	22,892
185.32	9,081	18,114	185.84	9,671	22,989
185.33	9,092	18,204	185.85	9,683	23,086
185.34	9,103	18,295	185.86	9,694	23,183
185.35	9,115	18,387	185.87	9,705	23,280
185.36	9,126	18,478	185.88	9,717	23,377
185.37	9,137	18,569	185.89	9,728	23,474
185.38	9,149	18,660	185.90	9,739	23,571
185.39	9,160	18,752	185.91	9,751	23,669
185.40	9,171	18,844	185.92	9,762	23,766
185.41	9,183	18,935	185.93	9,773	23,864
185.42	9,194	19,027	185.94	9,785	23,962
185.43	9,205	19,119	185.95	9,796	24,060
185.44	9,217	19,211	185.96	9,808	24,158
185.45	9,228	19,304	185.97	9,819	24,256
185.46	9,240	19,396	185.98	9,830	24,354
185.47	9,251	19,488	185.99	9,842	24,453
185.48	9,262	19,581	186.00	9,853	24,551
185.49	9,274	19,674	186.01	9,865	24,650
185.50	9,285	19,767	186.02	9,876	24,748
185.51	9,296	19,859	186.03	9,888	24,847
185.52	9,308	19,952	186.04	9,900	24,946
185.53	9,319	20,046	186.05	9,912	25,045
185.54	9,330	20,139	186.06	9,923	25,144
185.55	9,342	20,232	186.07	9,935	25,244
185.56	9,353	20,326	186.08	9,947	25,343
185.57	9,365	20,419	186.09	9,959	25,443
185.58	9,376	20,513	186.10	9,970	25,542
185.59	9,387	20,607	186.11	9,982	25,642

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.12	9,994	25,742	186.64	10,604	31,097
186.13	10,006	25,842	186.65	10,616	31,203
186.14	10,017	25,942	186.66	10,628	31,310
186.15	10,029	26,042	186.67	10,640	31,416
186.16	10,041	26,143	186.68	10,651	31,522
186.17	10,053	26,243	186.69	10,663	31,629
186.18	10,064	26,344	186.70	10,675	31,736
186.19	10,076	26,444	186.71	10,687	31,843
186.20	10,088	26,545	186.72	10,698	31,949
186.21	10,100	26,646	186.73	10,710	32,057
186.22	10,111	26,747	186.74	10,722	32,164
186.23	10,123	26,848	186.75	10,734	32,271
186.24	10,135	26,950	186.76	10,745	32,378
186.25	10,147	27,051	186.77	10,757	32,486
186.26	10,158	27,152	186.78	10,769	32,593
186.27	10,170	27,254	186.79	10,780	32,701
186.28	10,182	27,356	186.80	10,792	32,809
186.29	10,193	27,458	186.81	10,804	32,917
186.30	10,205	27,560	186.82	10,816	33,025
186.31	10,217	27,662	186.83	10,827	33,133
186.32	10,229	27,764	186.84	10,839	33,242
186.33	10,240	27,866	186.85	10,851	33,350
186.34	10,252	27,969	186.86	10,863	33,459
186.35	10,264	28,071	186.87	10,874	33,567
186.36	10,276	28,174	186.88	10,886	33,676
186.37	10,287	28,277	186.89	10,898	33,785
186.38	10,299	28,380	186.90	10,910	33,894
186.39	10,311	28,483	186.91	10,921	34,003
186.40	10,323	28,586	186.92	10,933	34,113
186.41	10,334	28,689	186.93	10,945	34,222
186.42	10,346	28,793	186.94	10,957	34,331
186.43	10,358	28,896	186.95	10,968	34,441
186.44	10,370	29,000	186.96	10,980	34,551
186.45	10,381	29,104	186.97	10,992	34,661
186.46	10,393	29,208	186.98	11,004	34,771
186.47	10,405	29,312	186.99	11,015	34,881
186.48	10,417	29,416	187.00	11,027	34,991
186.49	10,428	29,520	187.01	11,040	35,101
186.50	10,440	29,624	187.02	11,053	35,212
186.51	10,452	29,729	187.03	11,066	35,322
186.52	10,463	29,833	187.04	11,079	35,433
186.53	10,475	29,938	187.05	11,092	35,544
186.54	10,487	30,043	187.06	11,105	35,655
186.55	10,499	30,148	187.07	11,118	35,766
186.56	10,510	30,253	187.08	11,131	35,877
186.57	10,522	30,358	187.09	11,145	35,989
186.58	10,534	30,463	187.10	11,158	36,100
186.59	10,546	30,569	187.11	11,171	36,212
186.60	10,557	30,674	187.12	11,184	36,324
186.61	10,569	30,780	187.13	11,197	36,436
186.62	10,581	30,886	187.14	11,210	36,548
186.63	10,593	30,991	187.15	11,223	36,660

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.16	11,236	36,772
187.17	11,249	36,884
187.18	11,262	36,997
187.19	11,275	37,110
187.20	11,288	37,223
187.21	11,301	37,335
187.22	11,314	37,449
187.23	11,327	37,562
187.24	11,340	37,675
187.25	11,354	37,789
187.26	11,367	37,902
187.27	11,380	38,016
187.28	11,393	38,130
187.29	11,406	38,244
187.30	11,419	38,358
187.31	11,432	38,472
187.32	11,445	38,587
187.33	11,458	38,701
187.34	11,471	38,816
187.35	11,484	38,930
187.36	11,497	39,045
187.37	11,510	39,160
187.38	11,523	39,276
187.39	11,536	39,391
187.40	11,549	39,506
187.41	11,562	39,622
187.42	11,576	39,738
187.43	11,589	39,853
187.44	11,602	39,969
187.45	11,615	40,085
187.46	11,628	40,202
187.47	11,641	40,318
187.48	11,654	40,434
187.49	11,667	40,551
187.50	11,680	40,668
187.51	11,693	40,785
187.52	11,706	40,902
187.53	11,719	41,019
187.54	11,732	41,136
187.55	11,745	41,253
187.56	11,758	41,371
187.57	11,771	41,489
187.58	11,784	41,606
187.59	11,798	41,724
187.60	11,811	41,842
187.61	11,824	41,960
187.62	11,837	42,079
187.63	11,850	42,197
187.64	11,863	42,316
187.65	11,876	42,434
187.66	11,889	42,553
187.67	11,902	42,672
187.68	11,915	42,791
187.69	11,928	42,911
187.70	11,941	43,030
187.71	11,954	43,149
187.72	11,967	43,269
187.73	11,980	43,389
187.74	11,993	43,509
187.75	12,007	43,629
187.76	12,020	43,749
187.77	12,033	43,869
187.78	12,046	43,989
187.79	12,059	44,110
187.80	12,072	44,231
187.81	12,085	44,351
187.82	12,098	44,472
187.83	12,111	44,593
187.84	12,124	44,714
187.85	12,137	44,836
187.86	12,150	44,957
187.87	12,163	45,079
187.88	12,176	45,200
187.89	12,189	45,322
187.90	12,202	45,444
187.91	12,215	45,566
187.92	12,229	45,689
187.93	12,242	45,811
187.94	12,255	45,933
187.95	12,268	46,056
187.96	12,281	46,179
187.97	12,294	46,302
187.98	12,307	46,425
187.99	12,320	46,548
188.00	12,333	46,671
188.01	12,345	46,794
188.02	12,358	46,918
188.03	12,370	47,042
188.04	12,383	47,165
188.05	12,395	47,289
188.06	12,408	47,413
188.07	12,420	47,537
188.08	12,433	47,662
188.09	12,445	47,786
188.10	12,458	47,911
188.11	12,470	48,035
188.12	12,483	48,160
188.13	12,495	48,285
188.14	12,507	48,410
188.15	12,520	48,535
188.16	12,532	48,660
188.17	12,545	48,786
188.18	12,557	48,911
188.19	12,570	49,037

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.20	12,582	49,163
188.21	12,595	49,288
188.22	12,607	49,414
188.23	12,620	49,541
188.24	12,632	49,667
188.25	12,645	49,793
188.26	12,657	49,920
188.27	12,669	50,046
188.28	12,682	50,173
188.29	12,694	50,300
188.30	12,707	50,427
188.31	12,719	50,554
188.32	12,732	50,681
188.33	12,744	50,809
188.34	12,757	50,936
188.35	12,769	51,064
188.36	12,782	51,192
188.37	12,794	51,319
188.38	12,806	51,448
188.39	12,819	51,576
188.40	12,831	51,704
188.41	12,844	51,832
188.42	12,856	51,961
188.43	12,869	52,089
188.44	12,881	52,218
188.45	12,894	52,347
188.46	12,906	52,476
188.47	12,919	52,605
188.48	12,931	52,734
188.49	12,944	52,864
188.50	**12,956**	**52,993**

Summary for Pond B-50: Basin #50

Inflow Area = 2.262 ac, 29.27% Impervious, Inflow Depth = 1.72" for Current 2 yr event
Inflow = 3.95 cfs @ 12.18 hrs, Volume= 0.324 af
Outflow = 0.13 cfs @ 16.50 hrs, Volume= 0.224 af, Atten= 97%, Lag= 259.4 min
Primary = 0.13 cfs @ 16.50 hrs, Volume= 0.224 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 185.04' @ 16.50 hrs Surf.Area= 10,164 sf Storage= 9,882 cf

Plug-Flow detention time= 729.5 min calculated for 0.224 af (69% of inflow)
Center-of-Mass det. time= 622.7 min (1,432.7 - 810.1)

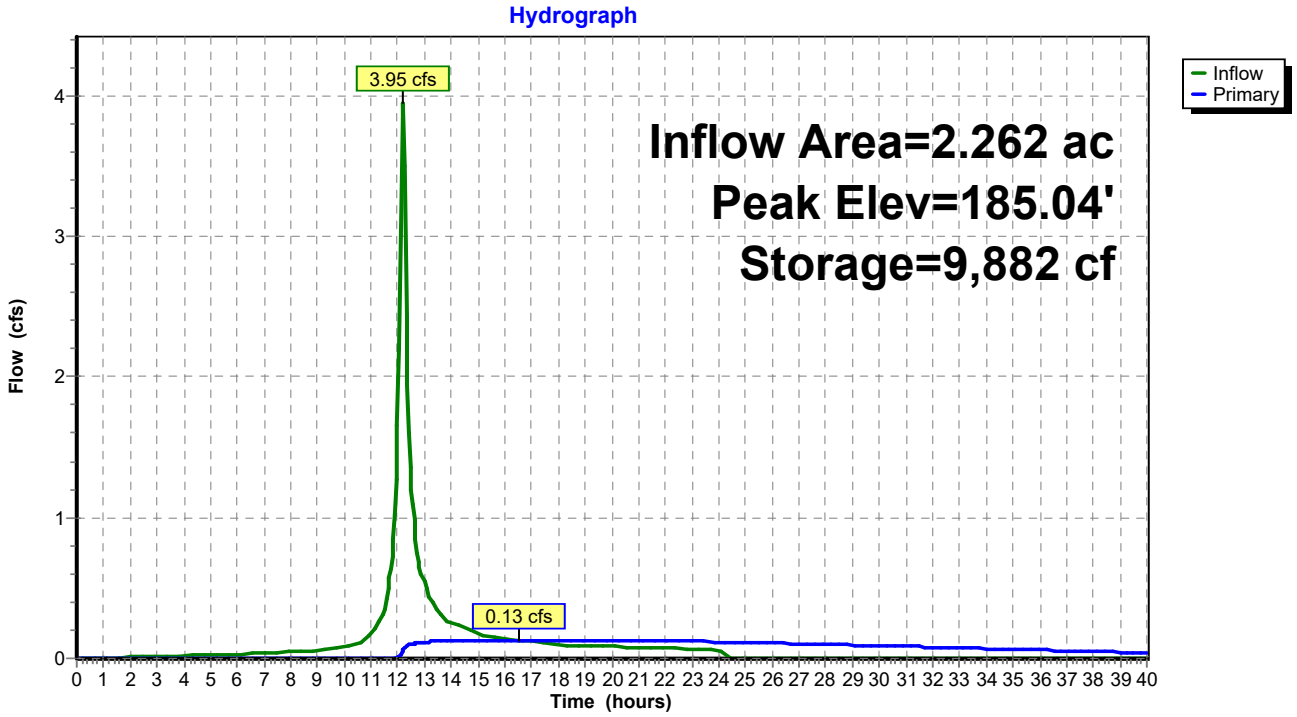
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	53,209 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	8,805	0	0
185.00	10,108	9,457	9,457
186.00	11,448	10,778	20,235
187.00	12,826	12,137	32,372
188.00	14,244	13,535	45,907
188.50	14,966	7,303	53,209

Device	Routing	Invert	Outlet Devices
#1	Primary	180.50'	**18.0" Round Culvert** L= 83.0' Ke= 0.500 Inlet / Outlet Invert= 180.50' / 179.67' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.32'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.30'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.13 cfs @ 16.50 hrs HW=185.04' (Free Discharge)
- **1=Culvert** (Passes 0.13 cfs of 16.06 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.78 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-50: Basin #50



Stage-Discharge for Pond B-50: Basin #50

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	0.05	185.04	0.13	185.56	1.89
184.01	0.00	184.53	0.05	185.05	0.13	185.57	1.99
184.02	0.00	184.54	0.06	185.06	0.13	185.58	2.09
184.03	0.00	184.55	0.06	185.07	0.13	185.59	2.19
184.04	0.00	184.56	0.06	185.08	0.13	185.60	2.30
184.05	0.00	184.57	0.06	185.09	0.13	185.61	2.40
184.06	0.00	184.58	0.06	185.10	0.13	185.62	2.51
184.07	0.00	184.59	0.07	185.11	0.14	185.63	2.62
184.08	0.00	184.60	0.07	185.12	0.14	185.64	2.73
184.09	0.00	184.61	0.07	185.13	0.14	185.65	2.84
184.10	0.00	184.62	0.07	185.14	0.14	185.66	2.96
184.11	0.00	184.63	0.07	185.15	0.14	185.67	3.07
184.12	0.00	184.64	0.08	185.16	0.14	185.68	3.19
184.13	0.00	184.65	0.08	185.17	0.14	185.69	3.31
184.14	0.00	184.66	0.08	185.18	0.14	185.70	3.43
184.15	0.00	184.67	0.08	185.19	0.14	185.71	3.55
184.16	0.00	184.68	0.08	185.20	0.14	185.72	3.67
184.17	0.00	184.69	0.08	185.21	0.15	185.73	3.80
184.18	0.00	184.70	0.09	185.22	0.15	185.74	3.92
184.19	0.00	184.71	0.09	185.23	0.15	185.75	4.05
184.20	0.00	184.72	0.09	185.24	0.15	185.76	4.18
184.21	0.00	184.73	0.09	185.25	0.15	185.77	4.31
184.22	0.00	184.74	0.09	185.26	0.15	185.78	4.44
184.23	0.00	184.75	0.09	185.27	0.15	185.79	4.57
184.24	0.00	184.76	0.10	185.28	0.15	185.80	4.70
184.25	0.00	184.77	0.10	185.29	0.15	185.81	4.84
184.26	0.00	184.78	0.10	185.30	0.15	185.82	4.97
184.27	0.00	184.79	0.10	185.31	0.17	185.83	5.11
184.28	0.00	184.80	0.10	185.32	0.19	185.84	5.25
184.29	0.00	184.81	0.10	185.33	0.22	185.85	5.38
184.30	0.00	184.82	0.10	185.34	0.26	185.86	5.52
184.31	0.00	184.83	0.10	185.35	0.30	185.87	5.67
184.32	0.00	184.84	0.11	185.36	0.35	185.88	5.81
184.33	0.00	184.85	0.11	185.37	0.40	185.89	5.95
184.34	0.00	184.86	0.11	185.38	0.46	185.90	6.10
184.35	0.00	184.87	0.11	185.39	0.51	185.91	6.24
184.36	0.00	184.88	0.11	185.40	0.57	185.92	6.39
184.37	0.00	184.89	0.11	185.41	0.64	185.93	6.54
184.38	0.01	184.90	0.11	185.42	0.70	185.94	6.68
184.39	0.01	184.91	0.11	185.43	0.77	185.95	6.83
184.40	0.01	184.92	0.12	185.44	0.85	185.96	6.99
184.41	0.01	184.93	0.12	185.45	0.92	185.97	7.14
184.42	0.02	184.94	0.12	185.46	1.00	185.98	7.29
184.43	0.02	184.95	0.12	185.47	1.08	185.99	7.44
184.44	0.02	184.96	0.12	185.48	1.16	186.00	7.60
184.45	0.03	184.97	0.12	185.49	1.24	186.01	7.75
184.46	0.03	184.98	0.12	185.50	1.33	186.02	7.91
184.47	0.03	184.99	0.12	185.51	1.42	186.03	8.07
184.48	0.04	185.00	0.12	185.52	1.51	186.04	8.23
184.49	0.04	185.01	0.13	185.53	1.60	186.05	8.39
184.50	0.05	185.02	0.13	185.54	1.69	186.06	8.55
184.51	0.05	185.03	0.13	185.55	1.79	186.07	8.71

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	8.87	186.60	18.37	187.12	19.91	187.64	20.76
186.09	9.03	186.61	18.57	187.13	19.93	187.65	20.78
186.10	9.20	186.62	18.77	187.14	19.95	187.66	20.80
186.11	9.36	186.63	18.97	187.15	19.96	187.67	20.81
186.12	9.53	186.64	19.09	187.16	19.98	187.68	20.83
186.13	9.69	186.65	19.11	187.17	20.00	187.69	20.84
186.14	9.86	186.66	19.13	187.18	20.01	187.70	20.86
186.15	10.03	186.67	19.14	187.19	20.03	187.71	20.88
186.16	10.20	186.68	19.16	187.20	20.05	187.72	20.89
186.17	10.37	186.69	19.18	187.21	20.06	187.73	20.91
186.18	10.54	186.70	19.20	187.22	20.08	187.74	20.92
186.19	10.71	186.71	19.21	187.23	20.10	187.75	20.94
186.20	10.88	186.72	19.23	187.24	20.11	187.76	20.96
186.21	11.06	186.73	19.25	187.25	20.13	187.77	20.97
186.22	11.23	186.74	19.27	187.26	20.15	187.78	20.99
186.23	11.41	186.75	19.28	187.27	20.16	187.79	21.00
186.24	11.58	186.76	19.30	187.28	20.18	187.80	21.02
186.25	11.76	186.77	19.32	187.29	20.19	187.81	21.04
186.26	11.93	186.78	19.33	187.30	20.21	187.82	21.05
186.27	12.11	186.79	19.35	187.31	20.23	187.83	21.07
186.28	12.29	186.80	19.37	187.32	20.24	187.84	21.08
186.29	12.47	186.81	19.39	187.33	20.26	187.85	21.10
186.30	12.65	186.82	19.40	187.34	20.28	187.86	21.11
186.31	12.83	186.83	19.42	187.35	20.29	187.87	21.13
186.32	13.01	186.84	19.44	187.36	20.31	187.88	21.15
186.33	13.20	186.85	19.46	187.37	20.33	187.89	21.16
186.34	13.38	186.86	19.47	187.38	20.34	187.90	21.18
186.35	13.56	186.87	19.49	187.39	20.36	187.91	21.19
186.36	13.75	186.88	19.51	187.40	20.38	187.92	21.21
186.37	13.93	186.89	19.52	187.41	20.39	187.93	21.22
186.38	14.12	186.90	19.54	187.42	20.41	187.94	21.24
186.39	14.30	186.91	19.56	187.43	20.42	187.95	21.26
186.40	14.49	186.92	19.57	187.44	20.44	187.96	21.27
186.41	14.68	186.93	19.59	187.45	20.46	187.97	21.29
186.42	14.87	186.94	19.61	187.46	20.47	187.98	21.30
186.43	15.06	186.95	19.63	187.47	20.49	187.99	21.32
186.44	15.25	186.96	19.64	187.48	20.51	188.00	21.33
186.45	15.44	186.97	19.66	187.49	20.52	188.01	21.35
186.46	15.63	186.98	19.68	187.50	20.54	188.02	21.37
186.47	15.82	186.99	19.69	187.51	20.55	188.03	21.38
186.48	16.01	187.00	19.71	187.52	20.57	188.04	21.40
186.49	16.21	187.01	19.73	187.53	20.59	188.05	21.41
186.50	16.40	187.02	19.74	187.54	20.60	188.06	21.43
186.51	16.59	187.03	19.76	187.55	20.62	188.07	21.44
186.52	16.79	187.04	19.78	187.56	20.64	188.08	21.46
186.53	16.98	187.05	19.79	187.57	20.65	188.09	21.47
186.54	17.18	187.06	19.81	187.58	20.67	188.10	21.49
186.55	17.38	187.07	19.83	187.59	20.68	188.11	21.51
186.56	17.57	187.08	19.85	187.60	20.70	188.12	21.52
186.57	17.77	187.09	19.86	187.61	20.72	188.13	21.54
186.58	17.97	187.10	19.88	187.62	20.73	188.14	21.55
186.59	18.17	187.11	19.90	187.63	20.75	188.15	21.57

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)
188.16	21.58
188.17	21.60
188.18	21.61
188.19	21.63
188.20	21.64
188.21	21.66
188.22	21.67
188.23	21.69
188.24	21.71
188.25	21.72
188.26	21.74
188.27	21.75
188.28	21.77
188.29	21.78
188.30	21.80
188.31	21.81
188.32	21.83
188.33	21.84
188.34	21.86
188.35	21.87
188.36	21.89
188.37	21.90
188.38	21.92
188.39	21.93
188.40	21.95
188.41	21.97
188.42	21.98
188.43	22.00
188.44	22.01
188.45	22.03
188.46	22.16
188.47	22.39
188.48	22.68
188.49	23.02
188.50	**23.41**

Stage-Area-Storage for Pond B-50: Basin #50

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	8,805	0	184.52	9,483	4,755
184.01	8,818	88	184.53	9,496	4,850
184.02	8,831	176	184.54	9,509	4,945
184.03	8,844	265	184.55	9,522	5,040
184.04	8,857	353	184.56	9,535	5,135
184.05	8,870	442	184.57	9,548	5,231
184.06	8,883	531	184.58	9,561	5,326
184.07	8,896	620	184.59	9,574	5,422
184.08	8,909	709	184.60	9,587	5,518
184.09	8,922	798	184.61	9,600	5,613
184.10	8,935	887	184.62	9,613	5,710
184.11	8,948	976	184.63	9,626	5,806
184.12	8,961	1,066	184.64	9,639	5,902
184.13	8,974	1,156	184.65	9,652	5,999
184.14	8,987	1,245	184.66	9,665	6,095
184.15	9,000	1,335	184.67	9,678	6,192
184.16	9,013	1,425	184.68	9,691	6,289
184.17	9,027	1,516	184.69	9,704	6,386
184.18	9,040	1,606	184.70	9,717	6,483
184.19	9,053	1,696	184.71	9,730	6,580
184.20	9,066	1,787	184.72	9,743	6,677
184.21	9,079	1,878	184.73	9,756	6,775
184.22	9,092	1,969	184.74	9,769	6,872
184.23	9,105	2,060	184.75	9,782	6,970
184.24	9,118	2,151	184.76	9,795	7,068
184.25	9,131	2,242	184.77	9,808	7,166
184.26	9,144	2,333	184.78	9,821	7,264
184.27	9,157	2,425	184.79	9,834	7,363
184.28	9,170	2,516	184.80	9,847	7,461
184.29	9,183	2,608	184.81	9,860	7,559
184.30	9,196	2,700	184.82	9,873	7,658
184.31	9,209	2,792	184.83	9,886	7,757
184.32	9,222	2,884	184.84	9,900	7,856
184.33	9,235	2,977	184.85	9,913	7,955
184.34	9,248	3,069	184.86	9,926	8,054
184.35	9,261	3,162	184.87	9,939	8,153
184.36	9,274	3,254	184.88	9,952	8,253
184.37	9,287	3,347	184.89	9,965	8,353
184.38	9,300	3,440	184.90	9,978	8,452
184.39	9,313	3,533	184.91	9,991	8,552
184.40	9,326	3,626	184.92	10,004	8,652
184.41	9,339	3,720	184.93	10,017	8,752
184.42	9,352	3,813	184.94	10,030	8,852
184.43	9,365	3,907	184.95	10,043	8,953
184.44	9,378	4,000	184.96	10,056	9,053
184.45	9,391	4,094	184.97	10,069	9,154
184.46	9,404	4,188	184.98	10,082	9,255
184.47	9,417	4,282	184.99	10,095	9,355
184.48	9,430	4,377	185.00	10,108	9,457
184.49	9,443	4,471	185.01	10,121	9,558
184.50	9,457	4,565	185.02	10,135	9,659
184.51	9,470	4,660	185.03	10,148	9,760

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	10,162	9,862	185.56	10,858	15,327
185.05	10,175	9,964	185.57	10,872	15,436
185.06	10,188	10,065	185.58	10,885	15,545
185.07	10,202	10,167	185.59	10,899	15,653
185.08	10,215	10,269	185.60	10,912	15,762
185.09	10,229	10,372	185.61	10,925	15,872
185.10	10,242	10,474	185.62	10,939	15,981
185.11	10,255	10,576	185.63	10,952	16,090
185.12	10,269	10,679	185.64	10,966	16,200
185.13	10,282	10,782	185.65	10,979	16,310
185.14	10,296	10,885	185.66	10,992	16,420
185.15	10,309	10,988	185.67	11,006	16,530
185.16	10,322	11,091	185.68	11,019	16,640
185.17	10,336	11,194	185.69	11,033	16,750
185.18	10,349	11,298	185.70	11,046	16,860
185.19	10,363	11,401	185.71	11,059	16,971
185.20	10,376	11,505	185.72	11,073	17,082
185.21	10,389	11,609	185.73	11,086	17,192
185.22	10,403	11,713	185.74	11,100	17,303
185.23	10,416	11,817	185.75	11,113	17,414
185.24	10,430	11,921	185.76	11,126	17,526
185.25	10,443	12,025	185.77	11,140	17,637
185.26	10,456	12,130	185.78	11,153	17,748
185.27	10,470	12,235	185.79	11,167	17,860
185.28	10,483	12,339	185.80	11,180	17,972
185.29	10,497	12,444	185.81	11,193	18,084
185.30	10,510	12,549	185.82	11,207	18,196
185.31	10,523	12,654	185.83	11,220	18,308
185.32	10,537	12,760	185.84	11,234	18,420
185.33	10,550	12,865	185.85	11,247	18,532
185.34	10,564	12,971	185.86	11,260	18,645
185.35	10,577	13,076	185.87	11,274	18,758
185.36	10,590	13,182	185.88	11,287	18,870
185.37	10,604	13,288	185.89	11,301	18,983
185.38	10,617	13,394	185.90	11,314	19,096
185.39	10,631	13,501	185.91	11,327	19,210
185.40	10,644	13,607	185.92	11,341	19,323
185.41	10,657	13,713	185.93	11,354	19,436
185.42	10,671	13,820	185.94	11,368	19,550
185.43	10,684	13,927	185.95	11,381	19,664
185.44	10,698	14,034	185.96	11,394	19,778
185.45	10,711	14,141	185.97	11,408	19,892
185.46	10,724	14,248	185.98	11,421	20,006
185.47	10,738	14,355	185.99	11,435	20,120
185.48	10,751	14,463	186.00	11,448	20,235
185.49	10,765	14,570	186.01	11,462	20,349
185.50	10,778	14,678	186.02	11,476	20,464
185.51	10,791	14,786	186.03	11,489	20,579
185.52	10,805	14,894	186.04	11,503	20,694
185.53	10,818	15,002	186.05	11,517	20,809
185.54	10,832	15,110	186.06	11,531	20,924
185.55	10,845	15,219	186.07	11,544	21,039

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	11,558	21,155	186.60	12,275	27,351
186.09	11,572	21,270	186.61	12,289	27,474
186.10	11,586	21,386	186.62	12,302	27,597
186.11	11,600	21,502	186.63	12,316	27,720
186.12	11,613	21,618	186.64	12,330	27,843
186.13	11,627	21,734	186.65	12,344	27,967
186.14	11,641	21,851	186.66	12,357	28,090
186.15	11,655	21,967	186.67	12,371	28,214
186.16	11,668	22,084	186.68	12,385	28,338
186.17	11,682	22,201	186.69	12,399	28,462
186.18	11,696	22,317	186.70	12,413	28,586
186.19	11,710	22,434	186.71	12,426	28,710
186.20	11,724	22,552	186.72	12,440	28,834
186.21	11,737	22,669	186.73	12,454	28,959
186.22	11,751	22,786	186.74	12,468	29,083
186.23	11,765	22,904	186.75	12,482	29,208
186.24	11,779	23,022	186.76	12,495	29,333
186.25	11,793	23,140	186.77	12,509	29,458
186.26	11,806	23,258	186.78	12,523	29,583
186.27	11,820	23,376	186.79	12,537	29,708
186.28	11,834	23,494	186.80	12,550	29,834
186.29	11,848	23,612	186.81	12,564	29,959
186.30	11,861	23,731	186.82	12,578	30,085
186.31	11,875	23,850	186.83	12,592	30,211
186.32	11,889	23,968	186.84	12,606	30,337
186.33	11,903	24,087	186.85	12,619	30,463
186.34	11,917	24,206	186.86	12,633	30,589
186.35	11,930	24,326	186.87	12,647	30,716
186.36	11,944	24,445	186.88	12,661	30,842
186.37	11,958	24,565	186.89	12,674	30,969
186.38	11,972	24,684	186.90	12,688	31,096
186.39	11,985	24,804	186.91	12,702	31,223
186.40	11,999	24,924	186.92	12,716	31,350
186.41	12,013	25,044	186.93	12,730	31,477
186.42	12,027	25,164	186.94	12,743	31,604
186.43	12,041	25,285	186.95	12,757	31,732
186.44	12,054	25,405	186.96	12,771	31,860
186.45	12,068	25,526	186.97	12,785	31,987
186.46	12,082	25,646	186.98	12,798	32,115
186.47	12,096	25,767	186.99	12,812	32,243
186.48	12,109	25,888	187.00	12,826	32,372
186.49	12,123	26,009	187.01	12,840	32,500
186.50	12,137	26,131	187.02	12,854	32,628
186.51	12,151	26,252	187.03	12,869	32,757
186.52	12,165	26,374	187.04	12,883	32,886
186.53	12,178	26,495	187.05	12,897	33,015
186.54	12,192	26,617	187.06	12,911	33,144
186.55	12,206	26,739	187.07	12,925	33,273
186.56	12,220	26,861	187.08	12,939	33,402
186.57	12,233	26,984	187.09	12,954	33,532
186.58	12,247	27,106	187.10	12,968	33,661
186.59	12,261	27,229	187.11	12,982	33,791

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	12,996	33,921	187.64	13,734	40,871
187.13	13,010	34,051	187.65	13,748	41,008
187.14	13,025	34,181	187.66	13,762	41,146
187.15	13,039	34,311	187.67	13,776	41,283
187.16	13,053	34,442	187.68	13,790	41,421
187.17	13,067	34,572	187.69	13,804	41,559
187.18	13,081	34,703	187.70	13,819	41,697
187.19	13,095	34,834	187.71	13,833	41,835
187.20	13,110	34,965	187.72	13,847	41,974
187.21	13,124	35,096	187.73	13,861	42,112
187.22	13,138	35,228	187.74	13,875	42,251
187.23	13,152	35,359	187.75	13,890	42,390
187.24	13,166	35,491	187.76	13,904	42,529
187.25	13,181	35,622	187.77	13,918	42,668
187.26	13,195	35,754	187.78	13,932	42,807
187.27	13,209	35,886	187.79	13,946	42,947
187.28	13,223	36,018	187.80	13,960	43,086
187.29	13,237	36,151	187.81	13,975	43,226
187.30	13,251	36,283	187.82	13,989	43,366
187.31	13,266	36,416	187.83	14,003	43,506
187.32	13,280	36,548	187.84	14,017	43,646
187.33	13,294	36,681	187.85	14,031	43,786
187.34	13,308	36,814	187.86	14,045	43,926
187.35	13,322	36,947	187.87	14,060	44,067
187.36	13,336	37,081	187.88	14,074	44,207
187.37	13,351	37,214	187.89	14,088	44,348
187.38	13,365	37,348	187.90	14,102	44,489
187.39	13,379	37,481	187.91	14,116	44,630
187.40	13,393	37,615	187.92	14,131	44,772
187.41	13,407	37,749	187.93	14,145	44,913
187.42	13,422	37,883	187.94	14,159	45,054
187.43	13,436	38,018	187.95	14,173	45,196
187.44	13,450	38,152	187.96	14,187	45,338
187.45	13,464	38,287	187.97	14,201	45,480
187.46	13,478	38,421	187.98	14,216	45,622
187.47	13,492	38,556	187.99	14,230	45,764
187.48	13,507	38,691	188.00	14,244	45,907
187.49	13,521	38,826	188.01	14,258	46,049
187.50	13,535	38,962	188.02	14,273	46,192
187.51	13,549	39,097	188.03	14,287	46,334
187.52	13,563	39,233	188.04	14,302	46,477
187.53	13,578	39,368	188.05	14,316	46,621
187.54	13,592	39,504	188.06	14,331	46,764
187.55	13,606	39,640	188.07	14,345	46,907
187.56	13,620	39,776	188.08	14,360	47,051
187.57	13,634	39,913	188.09	14,374	47,194
187.58	13,648	40,049	188.10	14,388	47,338
187.59	13,663	40,186	188.11	14,403	47,482
187.60	13,677	40,322	188.12	14,417	47,626
187.61	13,691	40,459	188.13	14,432	47,770
187.62	13,705	40,596	188.14	14,446	47,915
187.63	13,719	40,733	188.15	14,461	48,059

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

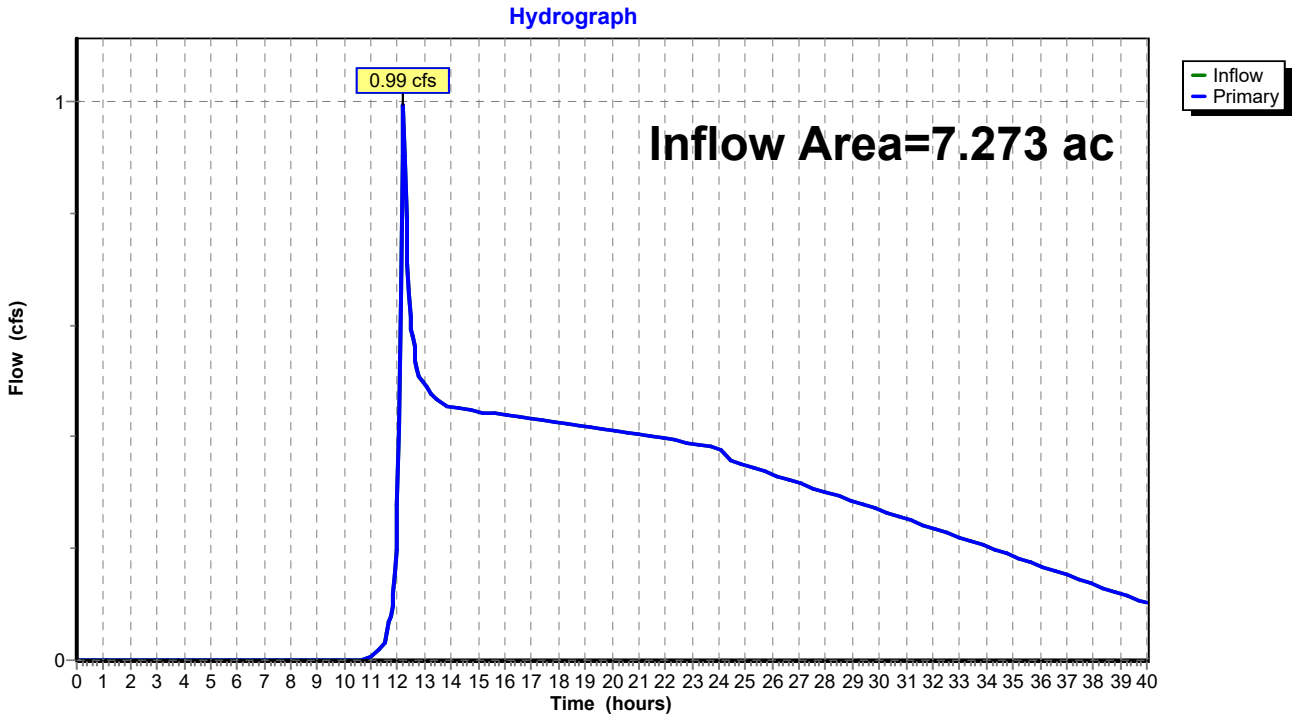
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	14,475	48,204
188.17	14,489	48,349
188.18	14,504	48,494
188.19	14,518	48,639
188.20	14,533	48,784
188.21	14,547	48,930
188.22	14,562	49,075
188.23	14,576	49,221
188.24	14,591	49,367
188.25	14,605	49,513
188.26	14,619	49,659
188.27	14,634	49,805
188.28	14,648	49,951
188.29	14,663	50,098
188.30	14,677	50,245
188.31	14,692	50,392
188.32	14,706	50,539
188.33	14,721	50,686
188.34	14,735	50,833
188.35	14,749	50,980
188.36	14,764	51,128
188.37	14,778	51,276
188.38	14,793	51,423
188.39	14,807	51,571
188.40	14,822	51,720
188.41	14,836	51,868
188.42	14,850	52,016
188.43	14,865	52,165
188.44	14,879	52,314
188.45	14,894	52,463
188.46	14,908	52,612
188.47	14,923	52,761
188.48	14,937	52,910
188.49	14,952	53,059
188.50	**14,966**	**53,209**

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 7.273 ac, 32.33% Impervious, Inflow Depth > 1.24" for Current 2 yr event
Inflow = 0.99 cfs @ 12.20 hrs, Volume= 0.751 af
Primary = 0.99 cfs @ 12.20 hrs, Volume= 0.751 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5



Summary for Subcatchment 48I: PDA-48 (impervious)

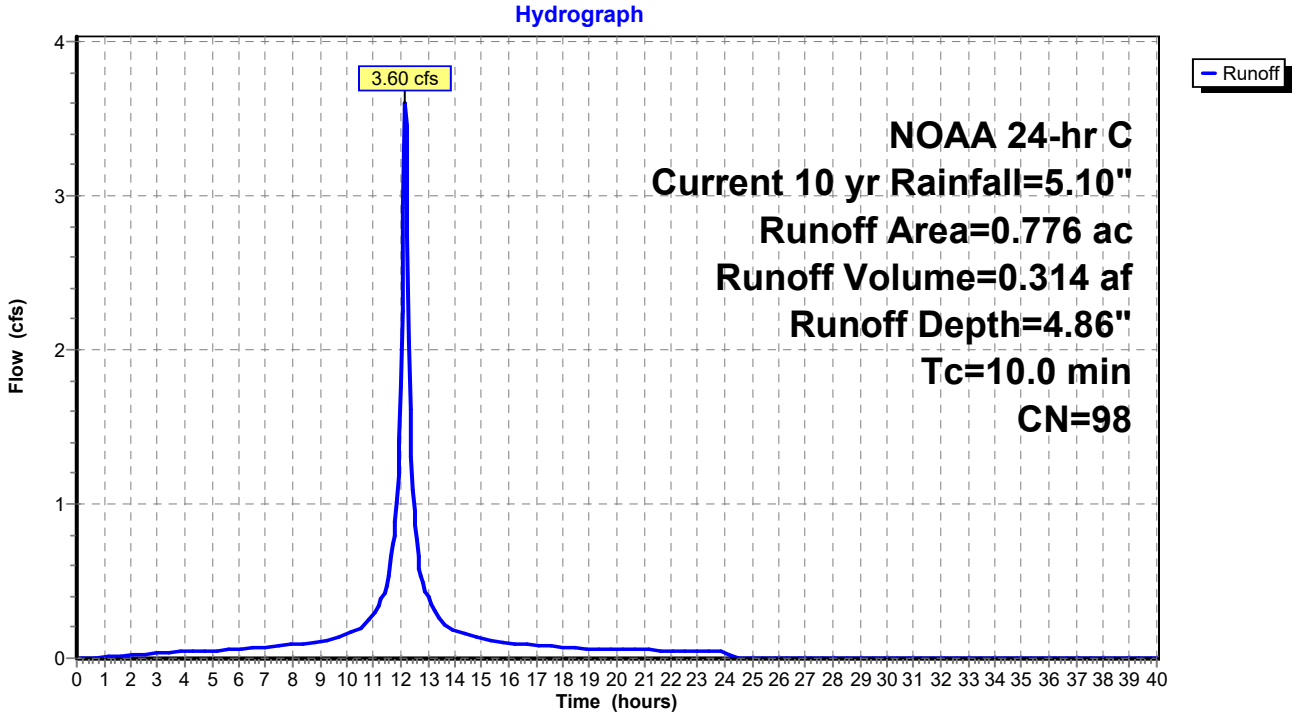
Runoff = 3.60 cfs @ 12.17 hrs, Volume= 0.314 af, Depth= 4.86"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.235	98	Pavement, HSG C
*	0.522	98	Roof, HSG C
*	0.019	98	Concrete, HSG C
	0.776	98	Weighted Average
	0.776		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 48I: PDA-48 (impervious)



Summary for Subcatchment 48P: PDA-48 (pervious)

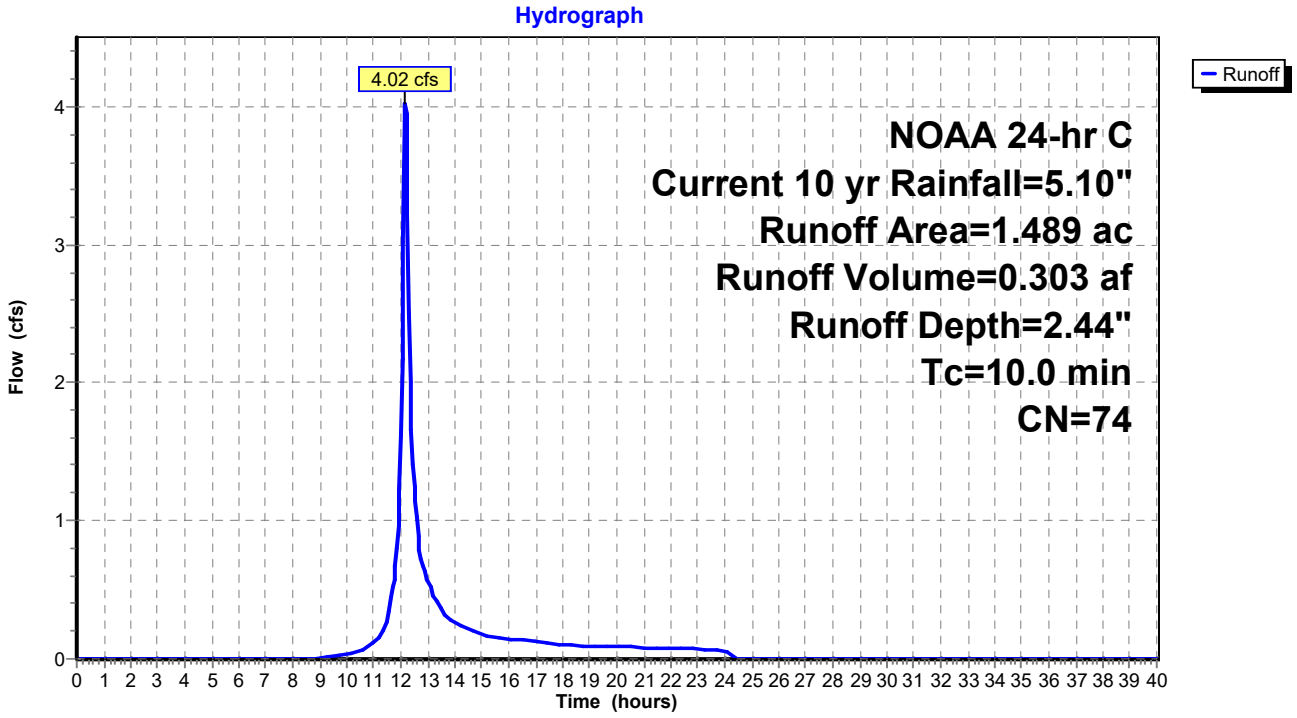
Runoff = 4.02 cfs @ 12.18 hrs, Volume= 0.303 af, Depth= 2.44"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.489	74	>75% Grass cover, Good, HSG C
1.489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 48P: PDA-48 (pervious)



Summary for Subcatchment 49I: PDA-49 (impervious)

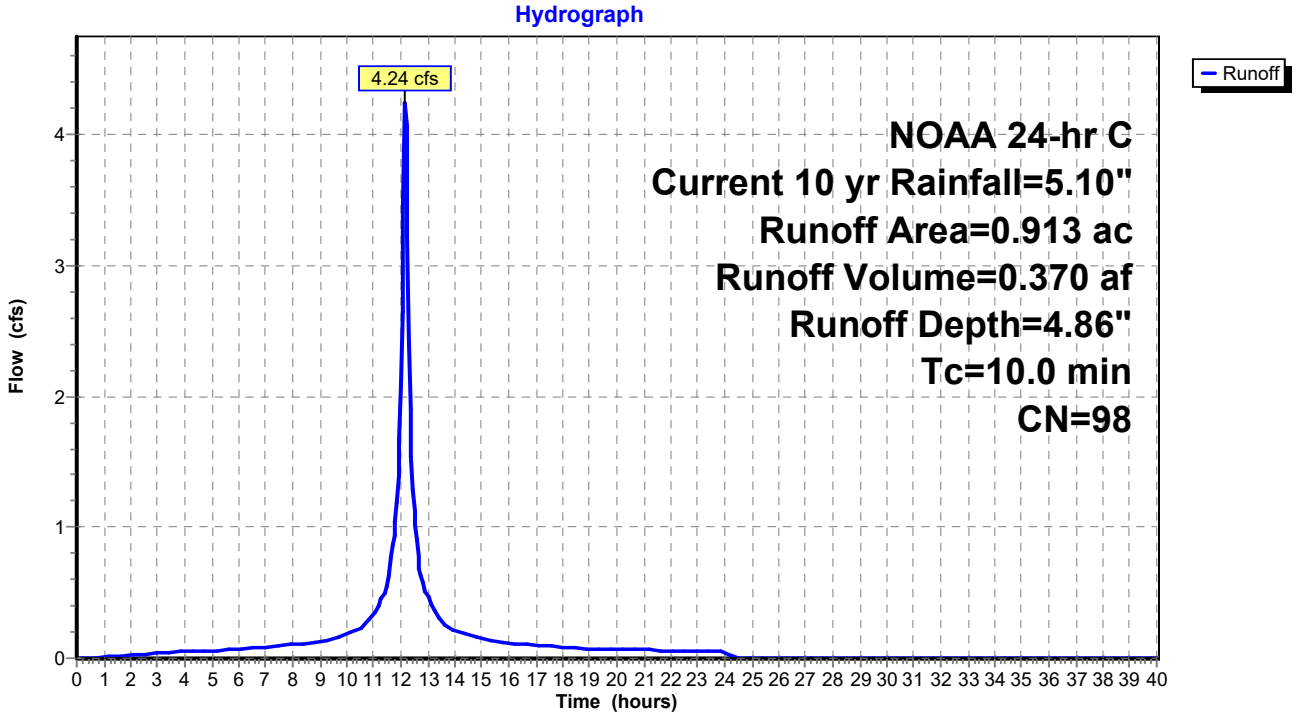
Runoff = 4.24 cfs @ 12.17 hrs, Volume= 0.370 af, Depth= 4.86"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.434	98	Pavement, HSG C
*	0.418	98	Roof, HSG C
*	0.061	98	Concrete, HSG C
	0.913	98	Weighted Average
	0.913		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 49I: PDA-49 (impervious)



Summary for Subcatchment 49P: PDA-49 (pervious)

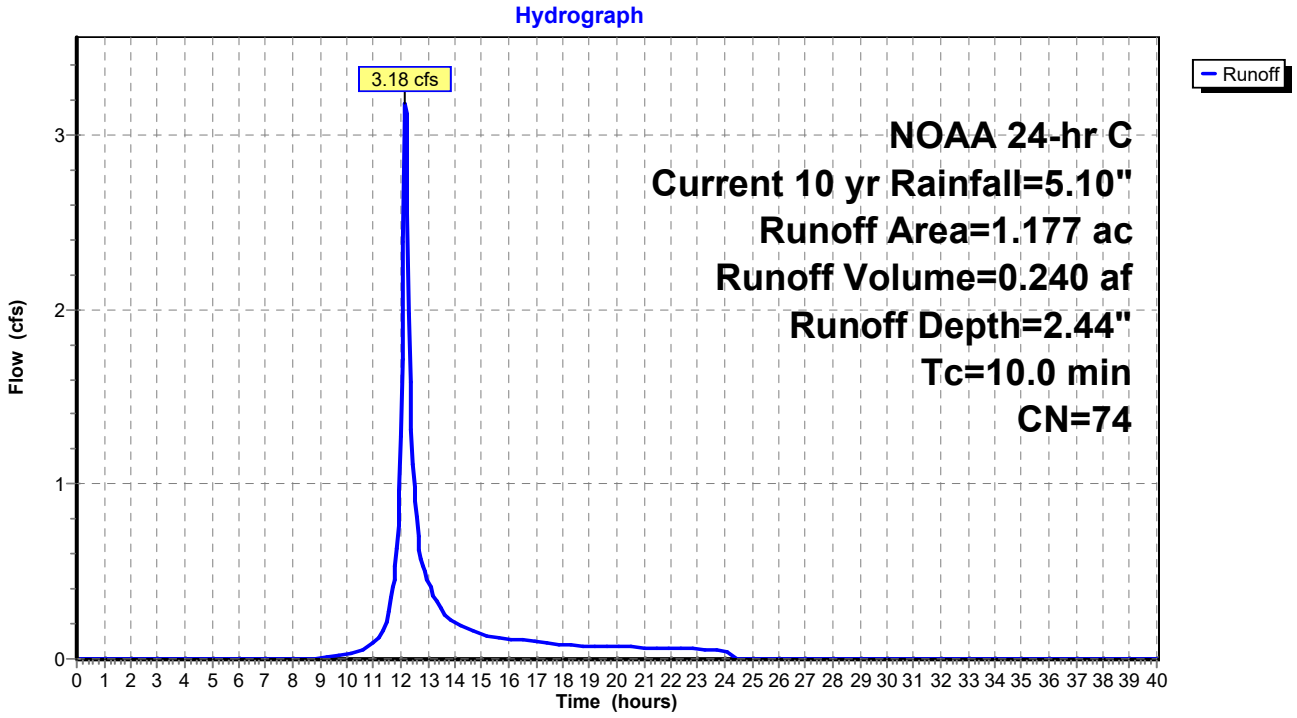
Runoff = 3.18 cfs @ 12.18 hrs, Volume= 0.240 af, Depth= 2.44"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.177	74	>75% Grass cover, Good, HSG C
1.177		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 49P: PDA-49 (pervious)



Summary for Subcatchment 50l: PDA-50 (impervious)

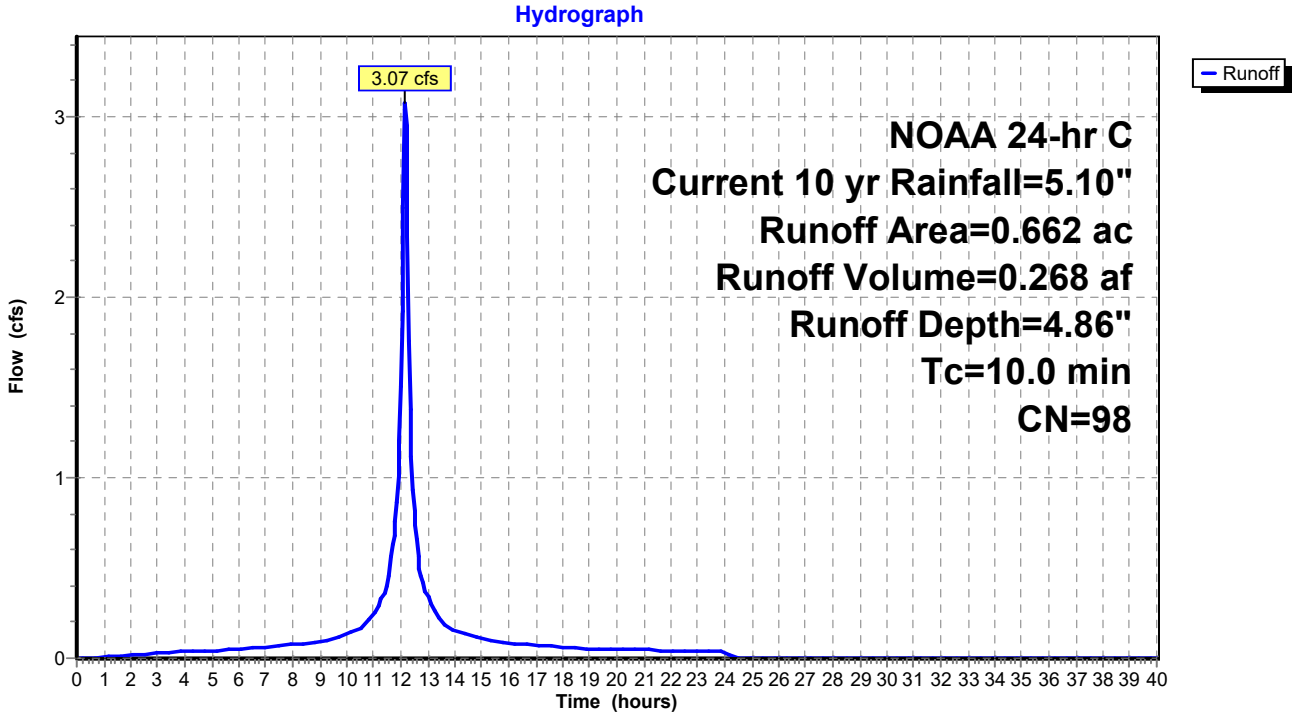
Runoff = 3.07 cfs @ 12.17 hrs, Volume= 0.268 af, Depth= 4.86"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.291	98	Pavement, HSG C
*	0.325	98	Roof, HSG C
*	0.046	98	Concrete, HSG C
	0.662	98	Weighted Average
	0.662		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 50l: PDA-50 (impervious)



Summary for Subcatchment 50P: PDA-50 (pervious)

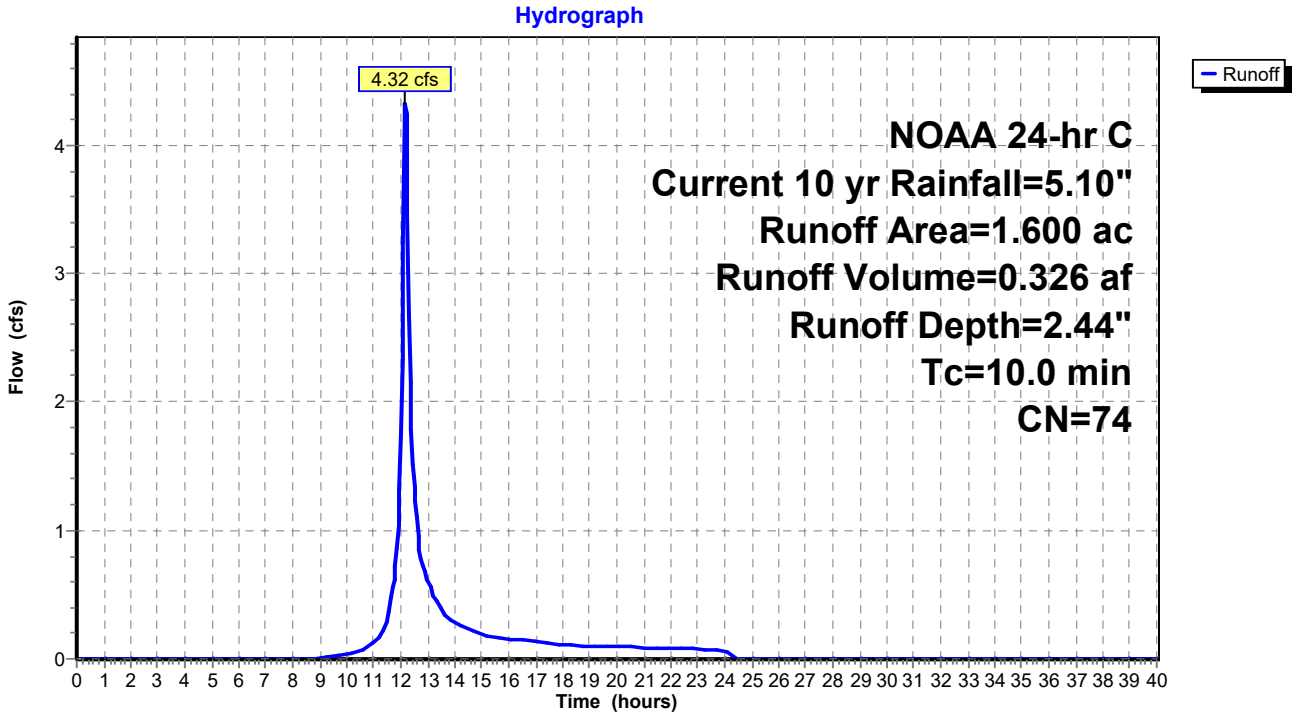
Runoff = 4.32 cfs @ 12.18 hrs, Volume= 0.326 af, Depth= 2.44"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.600	74	>75% Grass cover, Good, HSG C
1.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 50P: PDA-50 (pervious)



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

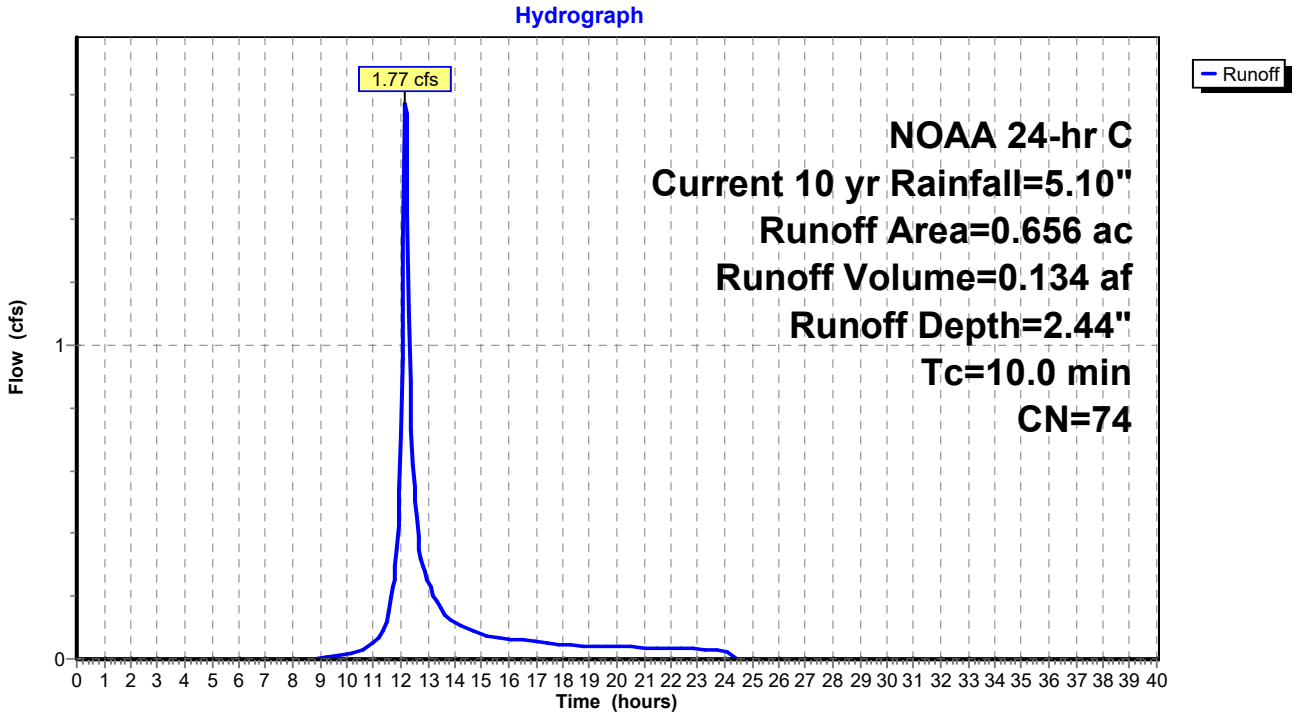
Runoff = 1.77 cfs @ 12.18 hrs, Volume= 0.134 af, Depth= 2.44"
Routed to Link PDA-5 : Proposed Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.656	74	>75% Grass cover, Good, HSG C
0.656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-5: PDA-5 (undetained)



Summary for Pond B-48: Basin #48

Inflow Area = 2.265 ac, 34.26% Impervious, Inflow Depth = 3.27" for Current 10 yr event
Inflow = 7.62 cfs @ 12.17 hrs, Volume= 0.618 af
Outflow = 0.20 cfs @ 17.23 hrs, Volume= 0.396 af, Atten= 97%, Lag= 303.2 min
Primary = 0.20 cfs @ 17.23 hrs, Volume= 0.396 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 192.97' @ 17.23 hrs Surf.Area= 11,345 sf Storage= 19,859 cf

Plug-Flow detention time= 808.0 min calculated for 0.396 af (64% of inflow)
Center-of-Mass det. time= 699.3 min (1,496.4 - 797.0)

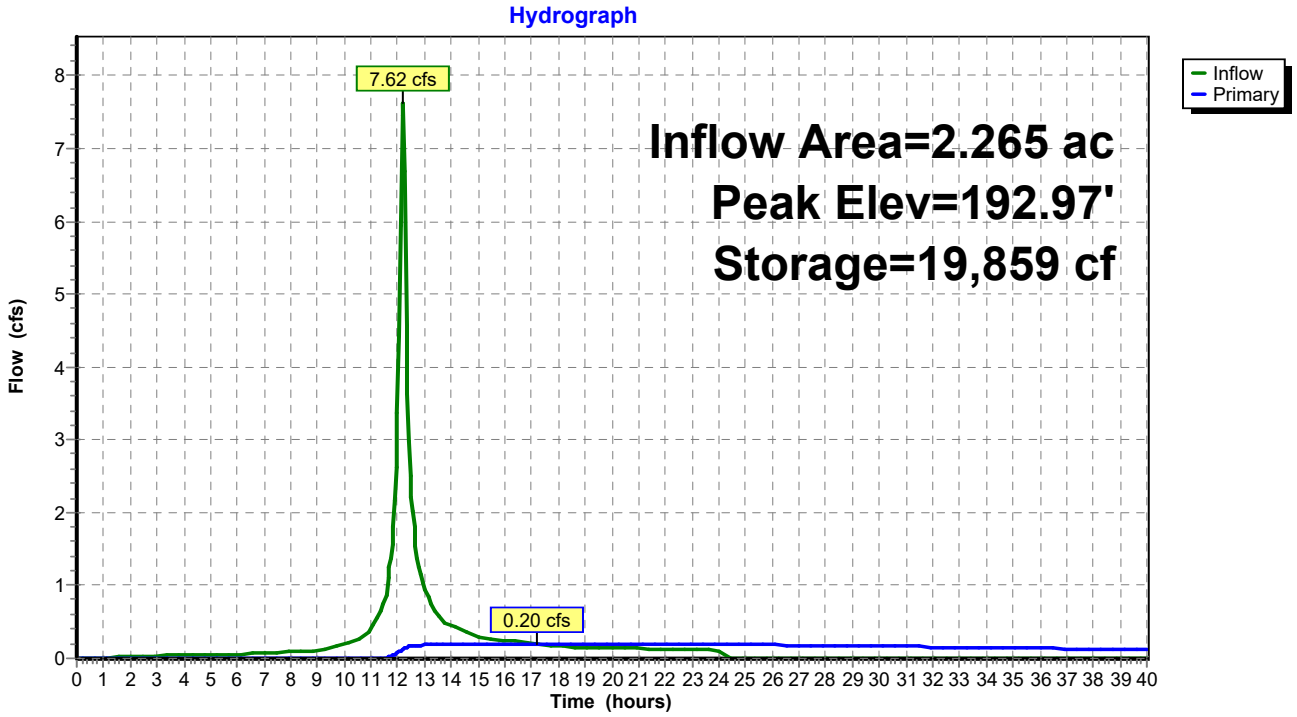
Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	32,287 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.00	8,869	0	0
192.00	10,100	9,485	9,485
193.00	11,387	10,744	20,228
194.00	12,731	12,059	32,287

Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	**18.0" Round Culvert** L= 185.0' Ke= 0.500 Inlet / Outlet Invert= 191.00' / 188.45' S= 0.0138 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.40'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	193.99'	**50.0' long + 3.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.20 cfs @ 17.23 hrs HW=192.97' (Free Discharge)
- **1=Culvert** (Passes 0.20 cfs of 9.39 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.82 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-48: Basin #48



Stage-Discharge for Pond B-48: Basin #48

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.00	0.00	191.52	0.02	192.04	0.12	192.56	0.17
191.01	0.00	191.53	0.03	192.05	0.12	192.57	0.17
191.02	0.00	191.54	0.03	192.06	0.12	192.58	0.17
191.03	0.00	191.55	0.03	192.07	0.12	192.59	0.17
191.04	0.00	191.56	0.04	192.08	0.12	192.60	0.17
191.05	0.00	191.57	0.04	192.09	0.13	192.61	0.17
191.06	0.00	191.58	0.05	192.10	0.13	192.62	0.17
191.07	0.00	191.59	0.05	192.11	0.13	192.63	0.17
191.08	0.00	191.60	0.05	192.12	0.13	192.64	0.17
191.09	0.00	191.61	0.05	192.13	0.13	192.65	0.18
191.10	0.00	191.62	0.06	192.14	0.13	192.66	0.18
191.11	0.00	191.63	0.06	192.15	0.13	192.67	0.18
191.12	0.00	191.64	0.06	192.16	0.13	192.68	0.18
191.13	0.00	191.65	0.06	192.17	0.13	192.69	0.18
191.14	0.00	191.66	0.06	192.18	0.13	192.70	0.18
191.15	0.00	191.67	0.07	192.19	0.14	192.71	0.18
191.16	0.00	191.68	0.07	192.20	0.14	192.72	0.18
191.17	0.00	191.69	0.07	192.21	0.14	192.73	0.18
191.18	0.00	191.70	0.07	192.22	0.14	192.74	0.18
191.19	0.00	191.71	0.07	192.23	0.14	192.75	0.18
191.20	0.00	191.72	0.08	192.24	0.14	192.76	0.18
191.21	0.00	191.73	0.08	192.25	0.14	192.77	0.18
191.22	0.00	191.74	0.08	192.26	0.14	192.78	0.19
191.23	0.00	191.75	0.08	192.27	0.14	192.79	0.19
191.24	0.00	191.76	0.08	192.28	0.14	192.80	0.19
191.25	0.00	191.77	0.08	192.29	0.15	192.81	0.19
191.26	0.00	191.78	0.09	192.30	0.15	192.82	0.19
191.27	0.00	191.79	0.09	192.31	0.15	192.83	0.19
191.28	0.00	191.80	0.09	192.32	0.15	192.84	0.19
191.29	0.00	191.81	0.09	192.33	0.15	192.85	0.19
191.30	0.00	191.82	0.09	192.34	0.15	192.86	0.19
191.31	0.00	191.83	0.09	192.35	0.15	192.87	0.19
191.32	0.00	191.84	0.10	192.36	0.15	192.88	0.19
191.33	0.00	191.85	0.10	192.37	0.15	192.89	0.19
191.34	0.00	191.86	0.10	192.38	0.15	192.90	0.19
191.35	0.00	191.87	0.10	192.39	0.15	192.91	0.19
191.36	0.00	191.88	0.10	192.40	0.16	192.92	0.20
191.37	0.00	191.89	0.10	192.41	0.16	192.93	0.20
191.38	0.00	191.90	0.10	192.42	0.16	192.94	0.20
191.39	0.00	191.91	0.10	192.43	0.16	192.95	0.20
191.40	0.00	191.92	0.11	192.44	0.16	192.96	0.20
191.41	0.00	191.93	0.11	192.45	0.16	192.97	0.20
191.42	0.00	191.94	0.11	192.46	0.16	192.98	0.20
191.43	0.00	191.95	0.11	192.47	0.16	192.99	0.20
191.44	0.00	191.96	0.11	192.48	0.16	193.00	0.20
191.45	0.00	191.97	0.11	192.49	0.16	193.01	0.21
191.46	0.01	191.98	0.11	192.50	0.16	193.02	0.24
191.47	0.01	191.99	0.11	192.51	0.16	193.03	0.27
191.48	0.01	192.00	0.12	192.52	0.17	193.04	0.31
191.49	0.01	192.01	0.12	192.53	0.17	193.05	0.35
191.50	0.02	192.02	0.12	192.54	0.17	193.06	0.40
191.51	0.02	192.03	0.12	192.55	0.17	193.07	0.45

Stage-Discharge for Pond B-48: Basin #48 (continued)

Elevation (feet)	Primary (cfs)
193.08	0.50
193.09	0.56
193.10	0.62
193.11	0.68
193.12	0.75
193.13	0.82
193.14	0.89
193.15	0.96
193.16	1.04
193.17	1.12
193.18	1.20
193.19	1.29
193.20	1.37
193.21	1.46
193.22	1.55
193.23	1.64
193.24	1.74
193.25	1.83
193.26	1.93
193.27	2.03
193.28	2.13
193.29	2.23
193.30	2.34
193.31	2.44
193.32	2.55
193.33	2.66
193.34	2.77
193.35	2.88
193.36	3.00
193.37	3.11
193.38	3.23
193.39	3.35
193.40	3.47
193.41	3.59
193.42	3.71
193.43	3.84
193.44	3.96
193.45	4.09
193.46	4.22
193.47	4.35
193.48	4.48
193.49	4.61
193.50	4.74
193.51	4.87
193.52	5.01
193.53	5.15
193.54	5.28
193.55	5.42
193.56	5.56
193.57	5.70
193.58	5.85
193.59	5.99
193.60	6.13
193.61	6.28
193.62	6.43
193.63	6.57
193.64	6.72
193.65	6.87
193.66	7.02
193.67	7.17
193.68	7.33
193.69	7.48
193.70	7.64
193.71	7.79
193.72	7.95
193.73	8.11
193.74	8.26
193.75	8.42
193.76	8.58
193.77	8.74
193.78	8.91
193.79	9.07
193.80	9.23
193.81	9.40
193.82	9.56
193.83	9.73
193.84	9.90
193.85	10.07
193.86	10.24
193.87	10.40
193.88	10.58
193.89	10.75
193.90	10.92
193.91	11.09
193.92	11.27
193.93	11.44
193.94	11.62
193.95	11.79
193.96	11.97
193.97	12.15
193.98	12.33
193.99	12.51
194.00	**12.81**

Stage-Area-Storage for Pond B-48: Basin #48

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.00	8,869	0	191.52	9,509	4,778
191.01	8,881	89	191.53	9,521	4,873
191.02	8,894	178	191.54	9,534	4,969
191.03	8,906	267	191.55	9,546	5,064
191.04	8,918	356	191.56	9,558	5,160
191.05	8,931	445	191.57	9,571	5,255
191.06	8,943	534	191.58	9,583	5,351
191.07	8,955	624	191.59	9,595	5,447
191.08	8,967	713	191.60	9,608	5,543
191.09	8,980	803	191.61	9,620	5,639
191.10	8,992	893	191.62	9,632	5,735
191.11	9,004	983	191.63	9,645	5,832
191.12	9,017	1,073	191.64	9,657	5,928
191.13	9,029	1,163	191.65	9,669	6,025
191.14	9,041	1,254	191.66	9,681	6,122
191.15	9,054	1,344	191.67	9,694	6,219
191.16	9,066	1,435	191.68	9,706	6,316
191.17	9,078	1,526	191.69	9,718	6,413
191.18	9,091	1,616	191.70	9,731	6,510
191.19	9,103	1,707	191.71	9,743	6,607
191.20	9,115	1,798	191.72	9,755	6,705
191.21	9,128	1,890	191.73	9,768	6,802
191.22	9,140	1,981	191.74	9,780	6,900
191.23	9,152	2,072	191.75	9,792	6,998
191.24	9,164	2,164	191.76	9,805	7,096
191.25	9,177	2,256	191.77	9,817	7,194
191.26	9,189	2,348	191.78	9,829	7,292
191.27	9,201	2,439	191.79	9,841	7,391
191.28	9,214	2,532	191.80	9,854	7,489
191.29	9,226	2,624	191.81	9,866	7,588
191.30	9,238	2,716	191.82	9,878	7,686
191.31	9,251	2,809	191.83	9,891	7,785
191.32	9,263	2,901	191.84	9,903	7,884
191.33	9,275	2,994	191.85	9,915	7,983
191.34	9,288	3,087	191.86	9,928	8,083
191.35	9,300	3,180	191.87	9,940	8,182
191.36	9,312	3,273	191.88	9,952	8,281
191.37	9,324	3,366	191.89	9,965	8,381
191.38	9,337	3,459	191.90	9,977	8,481
191.39	9,349	3,553	191.91	9,989	8,580
191.40	9,361	3,646	191.92	10,002	8,680
191.41	9,374	3,740	191.93	10,014	8,781
191.42	9,386	3,834	191.94	10,026	8,881
191.43	9,398	3,927	191.95	10,038	8,981
191.44	9,411	4,022	191.96	10,051	9,081
191.45	9,423	4,116	191.97	10,063	9,182
191.46	9,435	4,210	191.98	10,075	9,283
191.47	9,448	4,304	191.99	10,088	9,384
191.48	9,460	4,399	192.00	10,100	9,485
191.49	9,472	4,494	192.01	10,113	9,586
191.50	9,485	4,588	192.02	10,126	9,687
191.51	9,497	4,683	192.03	10,139	9,788

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.04	10,151	9,890
192.05	10,164	9,991
192.06	10,177	10,093
192.07	10,190	10,195
192.08	10,203	10,297
192.09	10,216	10,399
192.10	10,229	10,501
192.11	10,242	10,603
192.12	10,254	10,706
192.13	10,267	10,808
192.14	10,280	10,911
192.15	10,293	11,014
192.16	10,306	11,117
192.17	10,319	11,220
192.18	10,332	11,323
192.19	10,345	11,427
192.20	10,357	11,530
192.21	10,370	11,634
192.22	10,383	11,738
192.23	10,396	11,842
192.24	10,409	11,946
192.25	10,422	12,050
192.26	10,435	12,154
192.27	10,447	12,258
192.28	10,460	12,363
192.29	10,473	12,468
192.30	10,486	12,572
192.31	10,499	12,677
192.32	10,512	12,782
192.33	10,525	12,888
192.34	10,538	12,993
192.35	10,550	13,098
192.36	10,563	13,204
192.37	10,576	13,310
192.38	10,589	13,415
192.39	10,602	13,521
192.40	10,615	13,627
192.41	10,628	13,734
192.42	10,641	13,840
192.43	10,653	13,946
192.44	10,666	14,053
192.45	10,679	14,160
192.46	10,692	14,267
192.47	10,705	14,374
192.48	10,718	14,481
192.49	10,731	14,588
192.50	10,744	14,695
192.51	10,756	14,803
192.52	10,769	14,911
192.53	10,782	15,018
192.54	10,795	15,126
192.55	10,808	15,234
192.56	10,821	15,342
192.57	10,834	15,451
192.58	10,846	15,559
192.59	10,859	15,668
192.60	10,872	15,776
192.61	10,885	15,885
192.62	10,898	15,994
192.63	10,911	16,103
192.64	10,924	16,212
192.65	10,937	16,321
192.66	10,949	16,431
192.67	10,962	16,540
192.68	10,975	16,650
192.69	10,988	16,760
192.70	11,001	16,870
192.71	11,014	16,980
192.72	11,027	17,090
192.73	11,040	17,200
192.74	11,052	17,311
192.75	11,065	17,421
192.76	11,078	17,532
192.77	11,091	17,643
192.78	11,104	17,754
192.79	11,117	17,865
192.80	11,130	17,976
192.81	11,142	18,088
192.82	11,155	18,199
192.83	11,168	18,311
192.84	11,181	18,423
192.85	11,194	18,534
192.86	11,207	18,646
192.87	11,220	18,759
192.88	11,233	18,871
192.89	11,245	18,983
192.90	11,258	19,096
192.91	11,271	19,208
192.92	11,284	19,321
192.93	11,297	19,434
192.94	11,310	19,547
192.95	11,323	19,660
192.96	11,336	19,774
192.97	11,348	19,887
192.98	11,361	20,001
192.99	11,374	20,114
193.00	11,387	20,228
193.01	11,400	20,342
193.02	11,414	20,456
193.03	11,427	20,570
193.04	11,441	20,685
193.05	11,454	20,799
193.06	11,468	20,914
193.07	11,481	21,028

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.08	11,495	21,143
193.09	11,508	21,258
193.10	11,521	21,373
193.11	11,535	21,489
193.12	11,548	21,604
193.13	11,562	21,720
193.14	11,575	21,835
193.15	11,589	21,951
193.16	11,602	22,067
193.17	11,615	22,183
193.18	11,629	22,299
193.19	11,642	22,416
193.20	11,656	22,532
193.21	11,669	22,649
193.22	11,683	22,766
193.23	11,696	22,883
193.24	11,710	23,000
193.25	11,723	23,117
193.26	11,736	23,234
193.27	11,750	23,351
193.28	11,763	23,469
193.29	11,777	23,587
193.30	11,790	23,705
193.31	11,804	23,823
193.32	11,817	23,941
193.33	11,831	24,059
193.34	11,844	24,177
193.35	11,857	24,296
193.36	11,871	24,414
193.37	11,884	24,533
193.38	11,898	24,652
193.39	11,911	24,771
193.40	11,925	24,890
193.41	11,938	25,010
193.42	11,951	25,129
193.43	11,965	25,249
193.44	11,978	25,368
193.45	11,992	25,488
193.46	12,005	25,608
193.47	12,019	25,728
193.48	12,032	25,849
193.49	12,046	25,969
193.50	12,059	26,090
193.51	12,072	26,210
193.52	12,086	26,331
193.53	12,099	26,452
193.54	12,113	26,573
193.55	12,126	26,694
193.56	12,140	26,815
193.57	12,153	26,937
193.58	12,167	27,059
193.59	12,180	27,180
193.60	12,193	27,302
193.61	12,207	27,424
193.62	12,220	27,546
193.63	12,234	27,669
193.64	12,247	27,791
193.65	12,261	27,913
193.66	12,274	28,036
193.67	12,287	28,159
193.68	12,301	28,282
193.69	12,314	28,405
193.70	12,328	28,528
193.71	12,341	28,652
193.72	12,355	28,775
193.73	12,368	28,899
193.74	12,382	29,022
193.75	12,395	29,146
193.76	12,408	29,270
193.77	12,422	29,394
193.78	12,435	29,519
193.79	12,449	29,643
193.80	12,462	29,768
193.81	12,476	29,892
193.82	12,489	30,017
193.83	12,503	30,142
193.84	12,516	30,267
193.85	12,529	30,392
193.86	12,543	30,518
193.87	12,556	30,643
193.88	12,570	30,769
193.89	12,583	30,895
193.90	12,597	31,021
193.91	12,610	31,147
193.92	12,623	31,273
193.93	12,637	31,399
193.94	12,650	31,526
193.95	12,664	31,652
193.96	12,677	31,779
193.97	12,691	31,906
193.98	12,704	32,033
193.99	12,718	32,160
194.00	**12,731**	**32,287**

Summary for Pond B-49: Basin #49

Inflow Area = 2.090 ac, 43.68% Impervious, Inflow Depth = 3.50" for Current 10 yr event
Inflow = 7.42 cfs @ 12.17 hrs, Volume= 0.610 af
Outflow = 1.54 cfs @ 12.64 hrs, Volume= 0.480 af, Atten= 79%, Lag= 28.1 min
Primary = 1.54 cfs @ 12.64 hrs, Volume= 0.480 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.96' @ 12.64 hrs Surf.Area= 8,675 sf Storage= 14,929 cf

Plug-Flow detention time= 532.3 min calculated for 0.480 af (79% of inflow)
Center-of-Mass det. time= 446.9 min (1,235.0 - 788.1)

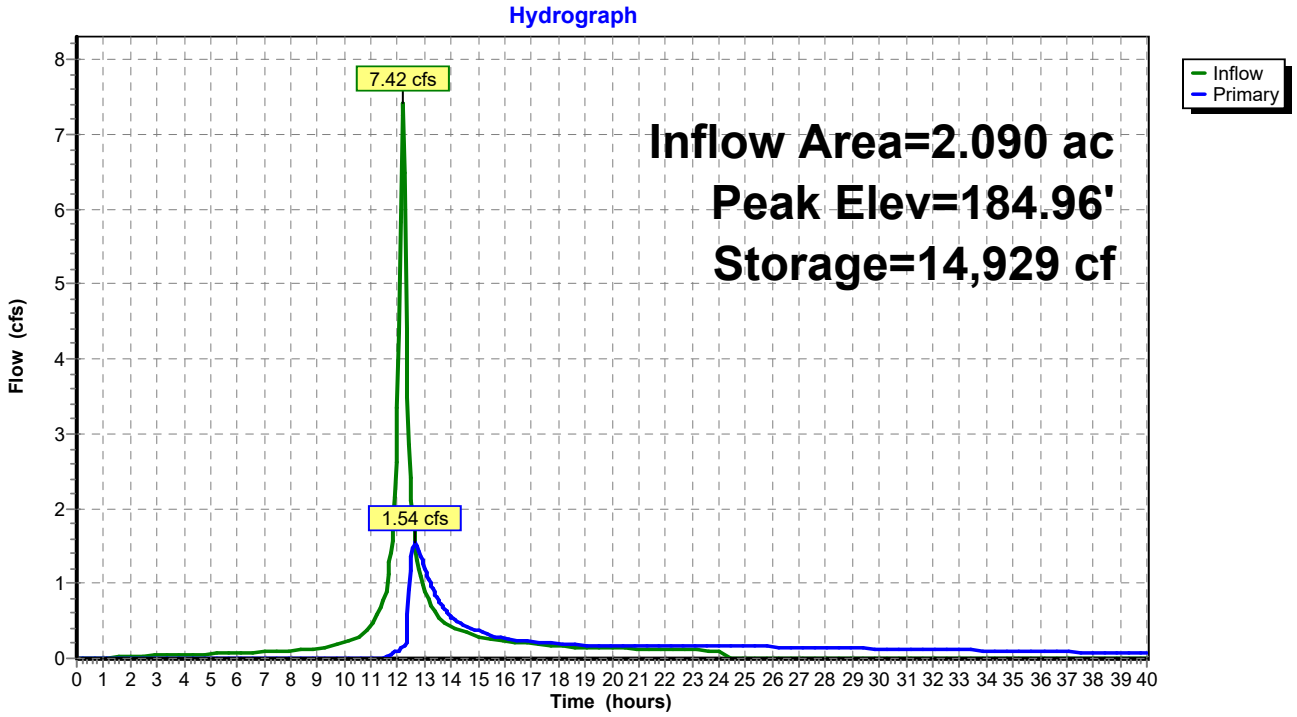
Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	52,993 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	6,565	0	0
184.00	7,625	7,095	7,095
185.00	8,717	8,171	15,266
186.00	9,853	9,285	24,551
187.00	11,027	10,440	34,991
188.00	12,333	11,680	46,671
188.50	12,956	6,322	52,993

Device	Routing	Invert	Outlet Devices
#1	Primary	183.00'	**15.0" Round Culvert** L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.81' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	183.55'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.74'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.25'	**100.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=1.53 cfs @ 12.64 hrs HW=184.96' (Free Discharge)
- **1=Culvert** (Passes 1.53 cfs of 6.48 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.50 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.34 cfs @ 1.54 fps)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-49: Basin #49



Stage-Discharge for Pond B-49: Basin #49

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.00	0.00	183.52	0.00	184.04	0.10	184.56	0.16
183.01	0.00	183.53	0.00	184.05	0.10	184.57	0.16
183.02	0.00	183.54	0.00	184.06	0.10	184.58	0.16
183.03	0.00	183.55	0.00	184.07	0.11	184.59	0.16
183.04	0.00	183.56	0.00	184.08	0.11	184.60	0.16
183.05	0.00	183.57	0.00	184.09	0.11	184.61	0.16
183.06	0.00	183.58	0.00	184.10	0.11	184.62	0.16
183.07	0.00	183.59	0.00	184.11	0.11	184.63	0.16
183.08	0.00	183.60	0.00	184.12	0.11	184.64	0.16
183.09	0.00	183.61	0.01	184.13	0.11	184.65	0.16
183.10	0.00	183.62	0.01	184.14	0.11	184.66	0.16
183.11	0.00	183.63	0.01	184.15	0.12	184.67	0.17
183.12	0.00	183.64	0.01	184.16	0.12	184.68	0.17
183.13	0.00	183.65	0.02	184.17	0.12	184.69	0.17
183.14	0.00	183.66	0.02	184.18	0.12	184.70	0.17
183.15	0.00	183.67	0.02	184.19	0.12	184.71	0.17
183.16	0.00	183.68	0.03	184.20	0.12	184.72	0.17
183.17	0.00	183.69	0.03	184.21	0.12	184.73	0.17
183.18	0.00	183.70	0.03	184.22	0.12	184.74	0.17
183.19	0.00	183.71	0.04	184.23	0.12	184.75	0.18
183.20	0.00	183.72	0.04	184.24	0.13	184.76	0.21
183.21	0.00	183.73	0.05	184.25	0.13	184.77	0.24
183.22	0.00	183.74	0.05	184.26	0.13	184.78	0.28
183.23	0.00	183.75	0.05	184.27	0.13	184.79	0.32
183.24	0.00	183.76	0.05	184.28	0.13	184.80	0.37
183.25	0.00	183.77	0.06	184.29	0.13	184.81	0.42
183.26	0.00	183.78	0.06	184.30	0.13	184.82	0.47
183.27	0.00	183.79	0.06	184.31	0.13	184.83	0.53
183.28	0.00	183.80	0.06	184.32	0.13	184.84	0.59
183.29	0.00	183.81	0.06	184.33	0.13	184.85	0.65
183.30	0.00	183.82	0.07	184.34	0.14	184.86	0.72
183.31	0.00	183.83	0.07	184.35	0.14	184.87	0.79
183.32	0.00	183.84	0.07	184.36	0.14	184.88	0.86
183.33	0.00	183.85	0.07	184.37	0.14	184.89	0.94
183.34	0.00	183.86	0.07	184.38	0.14	184.90	1.01
183.35	0.00	183.87	0.08	184.39	0.14	184.91	1.09
183.36	0.00	183.88	0.08	184.40	0.14	184.92	1.17
183.37	0.00	183.89	0.08	184.41	0.14	184.93	1.26
183.38	0.00	183.90	0.08	184.42	0.14	184.94	1.34
183.39	0.00	183.91	0.08	184.43	0.14	184.95	1.43
183.40	0.00	183.92	0.08	184.44	0.15	184.96	1.52
183.41	0.00	183.93	0.09	184.45	0.15	184.97	1.61
183.42	0.00	183.94	0.09	184.46	0.15	184.98	1.71
183.43	0.00	183.95	0.09	184.47	0.15	184.99	1.80
183.44	0.00	183.96	0.09	184.48	0.15	185.00	1.90
183.45	0.00	183.97	0.09	184.49	0.15	185.01	2.00
183.46	0.00	183.98	0.09	184.50	0.15	185.02	2.10
183.47	0.00	183.99	0.10	184.51	0.15	185.03	2.21
183.48	0.00	184.00	0.10	184.52	0.15	185.04	2.31
183.49	0.00	184.01	0.10	184.53	0.15	185.05	2.42
183.50	0.00	184.02	0.10	184.54	0.15	185.06	2.52
183.51	0.00	184.03	0.10	184.55	0.16	185.07	2.63

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.08	2.75	185.60	8.30	186.12	9.33	186.64	10.26
185.09	2.86	185.61	8.33	186.13	9.35	186.65	10.28
185.10	2.97	185.62	8.35	186.14	9.37	186.66	10.29
185.11	3.09	185.63	8.37	186.15	9.39	186.67	10.31
185.12	3.20	185.64	8.39	186.16	9.41	186.68	10.33
185.13	3.32	185.65	8.41	186.17	9.43	186.69	10.34
185.14	3.44	185.66	8.43	186.18	9.44	186.70	10.36
185.15	3.56	185.67	8.45	186.19	9.46	186.71	10.38
185.16	3.69	185.68	8.47	186.20	9.48	186.72	10.40
185.17	3.81	185.69	8.49	186.21	9.50	186.73	10.41
185.18	3.94	185.70	8.51	186.22	9.52	186.74	10.43
185.19	4.06	185.71	8.53	186.23	9.54	186.75	10.45
185.20	4.19	185.72	8.55	186.24	9.56	186.76	10.46
185.21	4.32	185.73	8.57	186.25	9.57	186.77	10.48
185.22	4.45	185.74	8.59	186.26	9.59	186.78	10.50
185.23	4.58	185.75	8.61	186.27	9.61	186.79	10.51
185.24	4.72	185.76	8.63	186.28	9.63	186.80	10.53
185.25	4.85	185.77	8.65	186.29	9.65	186.81	10.55
185.26	4.99	185.78	8.67	186.30	9.66	186.82	10.56
185.27	5.12	185.79	8.69	186.31	9.68	186.83	10.58
185.28	5.26	185.80	8.71	186.32	9.70	186.84	10.59
185.29	5.40	185.81	8.73	186.33	9.72	186.85	10.61
185.30	5.54	185.82	8.75	186.34	9.74	186.86	10.63
185.31	5.68	185.83	8.77	186.35	9.75	186.87	10.64
185.32	5.82	185.84	8.79	186.36	9.77	186.88	10.66
185.33	5.97	185.85	8.81	186.37	9.79	186.89	10.68
185.34	6.11	185.86	8.83	186.38	9.81	186.90	10.69
185.35	6.26	185.87	8.85	186.39	9.83	186.91	10.71
185.36	6.40	185.88	8.87	186.40	9.84	186.92	10.73
185.37	6.55	185.89	8.89	186.41	9.86	186.93	10.74
185.38	6.70	185.90	8.91	186.42	9.88	186.94	10.76
185.39	6.85	185.91	8.93	186.43	9.90	186.95	10.77
185.40	7.00	185.92	8.95	186.44	9.91	186.96	10.79
185.41	7.15	185.93	8.97	186.45	9.93	186.97	10.81
185.42	7.30	185.94	8.99	186.46	9.95	186.98	10.82
185.43	7.46	185.95	9.01	186.47	9.97	186.99	10.84
185.44	7.61	185.96	9.03	186.48	9.98	187.00	10.86
185.45	7.77	185.97	9.05	186.49	10.00	187.01	10.87
185.46	7.92	185.98	9.07	186.50	10.02	187.02	10.89
185.47	8.03	185.99	9.09	186.51	10.04	187.03	10.90
185.48	8.05	186.00	9.11	186.52	10.05	187.04	10.92
185.49	8.07	186.01	9.13	186.53	10.07	187.05	10.94
185.50	8.09	186.02	9.14	186.54	10.09	187.06	10.95
185.51	8.11	186.03	9.16	186.55	10.11	187.07	10.97
185.52	8.13	186.04	9.18	186.56	10.12	187.08	10.98
185.53	8.16	186.05	9.20	186.57	10.14	187.09	11.00
185.54	8.18	186.06	9.22	186.58	10.16	187.10	11.01
185.55	8.20	186.07	9.24	186.59	10.17	187.11	11.03
185.56	8.22	186.08	9.26	186.60	10.19	187.12	11.05
185.57	8.24	186.09	9.28	186.61	10.21	187.13	11.06
185.58	8.26	186.10	9.30	186.62	10.23	187.14	11.08
185.59	8.28	186.11	9.31	186.63	10.24	187.15	11.09

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.16	11.11	187.68	11.90	188.20	12.64
187.17	11.13	187.69	11.91	188.21	12.65
187.18	11.14	187.70	11.93	188.22	12.67
187.19	11.16	187.71	11.94	188.23	12.68
187.20	11.17	187.72	11.96	188.24	12.69
187.21	11.19	187.73	11.97	188.25	12.71
187.22	11.20	187.74	11.99	188.26	13.05
187.23	11.22	187.75	12.00	188.27	13.66
187.24	11.23	187.76	12.02	188.28	14.45
187.25	11.25	187.77	12.03	188.29	15.38
187.26	11.27	187.78	12.04	188.30	16.43
187.27	11.28	187.79	12.06	188.31	17.59
187.28	11.30	187.80	12.07	188.32	18.86
187.29	11.31	187.81	12.09	188.33	20.21
187.30	11.33	187.82	12.10	188.34	21.66
187.31	11.34	187.83	12.12	188.35	23.18
187.32	11.36	187.84	12.13	188.36	24.78
187.33	11.37	187.85	12.15	188.37	26.46
187.34	11.39	187.86	12.16	188.38	28.21
187.35	11.40	187.87	12.17	188.39	30.02
187.36	11.42	187.88	12.19	188.40	31.90
187.37	11.43	187.89	12.20	188.41	33.85
187.38	11.45	187.90	12.22	188.42	35.85
187.39	11.47	187.91	12.23	188.43	37.92
187.40	11.48	187.92	12.25	188.44	40.04
187.41	11.50	187.93	12.26	188.45	42.22
187.42	11.51	187.94	12.27	188.46	44.45
187.43	11.53	187.95	12.29	188.47	46.73
187.44	11.54	187.96	12.30	188.48	49.07
187.45	11.56	187.97	12.32	188.49	51.46
187.46	11.57	187.98	12.33	188.50	**53.90**
187.47	11.59	187.99	12.35		
187.48	11.60	188.00	12.36		
187.49	11.62	188.01	12.37		
187.50	11.63	188.02	12.39		
187.51	11.65	188.03	12.40		
187.52	11.66	188.04	12.42		
187.53	11.68	188.05	12.43		
187.54	11.69	188.06	12.44		
187.55	11.71	188.07	12.46		
187.56	11.72	188.08	12.47		
187.57	11.74	188.09	12.49		
187.58	11.75	188.10	12.50		
187.59	11.77	188.11	12.51		
187.60	11.78	188.12	12.53		
187.61	11.80	188.13	12.54		
187.62	11.81	188.14	12.56		
187.63	11.83	188.15	12.57		
187.64	11.84	188.16	12.58		
187.65	11.85	188.17	12.60		
187.66	11.87	188.18	12.61		
187.67	11.88	188.19	12.62		

Stage-Area-Storage for Pond B-49: Basin #49

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	6,565	0
183.01	6,576	66
183.02	6,586	132
183.03	6,597	197
183.04	6,607	263
183.05	6,618	330
183.06	6,629	396
183.07	6,639	462
183.08	6,650	529
183.09	6,660	595
183.10	6,671	662
183.11	6,682	729
183.12	6,692	795
183.13	6,703	862
183.14	6,713	929
183.15	6,724	997
183.16	6,735	1,064
183.17	6,745	1,131
183.18	6,756	1,199
183.19	6,766	1,266
183.20	6,777	1,334
183.21	6,788	1,402
183.22	6,798	1,470
183.23	6,809	1,538
183.24	6,819	1,606
183.25	6,830	1,674
183.26	6,841	1,743
183.27	6,851	1,811
183.28	6,862	1,880
183.29	6,872	1,948
183.30	6,883	2,017
183.31	6,894	2,086
183.32	6,904	2,155
183.33	6,915	2,224
183.34	6,925	2,293
183.35	6,936	2,363
183.36	6,947	2,432
183.37	6,957	2,502
183.38	6,968	2,571
183.39	6,978	2,641
183.40	6,989	2,711
183.41	7,000	2,781
183.42	7,010	2,851
183.43	7,021	2,921
183.44	7,031	2,991
183.45	7,042	3,062
183.46	7,053	3,132
183.47	7,063	3,203
183.48	7,074	3,273
183.49	7,084	3,344
183.50	7,095	3,415
183.51	7,106	3,486
183.52	7,116	3,557
183.53	7,127	3,628
183.54	7,137	3,700
183.55	7,148	3,771
183.56	7,159	3,843
183.57	7,169	3,914
183.58	7,180	3,986
183.59	7,190	4,058
183.60	7,201	4,130
183.61	7,212	4,202
183.62	7,222	4,274
183.63	7,233	4,346
183.64	7,243	4,419
183.65	7,254	4,491
183.66	7,265	4,564
183.67	7,275	4,636
183.68	7,286	4,709
183.69	7,296	4,782
183.70	7,307	4,855
183.71	7,318	4,928
183.72	7,328	5,002
183.73	7,339	5,075
183.74	7,349	5,148
183.75	7,360	5,222
183.76	7,371	5,296
183.77	7,381	5,369
183.78	7,392	5,443
183.79	7,402	5,517
183.80	7,413	5,591
183.81	7,424	5,665
183.82	7,434	5,740
183.83	7,445	5,814
183.84	7,455	5,889
183.85	7,466	5,963
183.86	7,477	6,038
183.87	7,487	6,113
183.88	7,498	6,188
183.89	7,508	6,263
183.90	7,519	6,338
183.91	7,530	6,413
183.92	7,540	6,488
183.93	7,551	6,564
183.94	7,561	6,639
183.95	7,572	6,715
183.96	7,583	6,791
183.97	7,593	6,867
183.98	7,604	6,943
183.99	7,614	7,019
184.00	7,625	7,095
184.01	7,636	7,171
184.02	7,647	7,248
184.03	7,658	7,324

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	7,669	7,401	184.56	8,237	11,536
184.05	7,680	7,478	184.57	8,247	11,619
184.06	7,691	7,554	184.58	8,258	11,701
184.07	7,701	7,631	184.59	8,269	11,784
184.08	7,712	7,708	184.60	8,280	11,867
184.09	7,723	7,786	184.61	8,291	11,949
184.10	7,734	7,863	184.62	8,302	12,032
184.11	7,745	7,940	184.63	8,313	12,115
184.12	7,756	8,018	184.64	8,324	12,199
184.13	7,767	8,095	184.65	8,335	12,282
184.14	7,778	8,173	184.66	8,346	12,365
184.15	7,789	8,251	184.67	8,357	12,449
184.16	7,800	8,329	184.68	8,368	12,532
184.17	7,811	8,407	184.69	8,378	12,616
184.18	7,822	8,485	184.70	8,389	12,700
184.19	7,832	8,563	184.71	8,400	12,784
184.20	7,843	8,642	184.72	8,411	12,868
184.21	7,854	8,720	184.73	8,422	12,952
184.22	7,865	8,799	184.74	8,433	13,036
184.23	7,876	8,878	184.75	8,444	13,121
184.24	7,887	8,956	184.76	8,455	13,205
184.25	7,898	9,035	184.77	8,466	13,290
184.26	7,909	9,114	184.78	8,477	13,375
184.27	7,920	9,194	184.79	8,488	13,460
184.28	7,931	9,273	184.80	8,499	13,544
184.29	7,942	9,352	184.81	8,510	13,629
184.30	7,953	9,432	184.82	8,520	13,715
184.31	7,964	9,511	184.83	8,531	13,800
184.32	7,974	9,591	184.84	8,542	13,885
184.33	7,985	9,671	184.85	8,553	13,971
184.34	7,996	9,751	184.86	8,564	14,056
184.35	8,007	9,831	184.87	8,575	14,142
184.36	8,018	9,911	184.88	8,586	14,228
184.37	8,029	9,991	184.89	8,597	14,314
184.38	8,040	10,071	184.90	8,608	14,400
184.39	8,051	10,152	184.91	8,619	14,486
184.40	8,062	10,232	184.92	8,630	14,572
184.41	8,073	10,313	184.93	8,641	14,658
184.42	8,084	10,394	184.94	8,651	14,745
184.43	8,095	10,475	184.95	8,662	14,832
184.44	8,105	10,556	184.96	8,673	14,918
184.45	8,116	10,637	184.97	8,684	15,005
184.46	8,127	10,718	184.98	8,695	15,092
184.47	8,138	10,799	184.99	8,706	15,179
184.48	8,149	10,881	185.00	8,717	15,266
184.49	8,160	10,962	185.01	8,728	15,353
184.50	8,171	11,044	185.02	8,740	15,441
184.51	8,182	11,126	185.03	8,751	15,528
184.52	8,193	11,208	185.04	8,762	15,616
184.53	8,204	11,290	185.05	8,774	15,703
184.54	8,215	11,372	185.06	8,785	15,791
184.55	8,226	11,454	185.07	8,797	15,879

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	8,808	15,967	185.60	9,399	20,701
185.09	8,819	16,055	185.61	9,410	20,795
185.10	8,831	16,143	185.62	9,421	20,889
185.11	8,842	16,232	185.63	9,433	20,983
185.12	8,853	16,320	185.64	9,444	21,078
185.13	8,865	16,409	185.65	9,455	21,172
185.14	8,876	16,498	185.66	9,467	21,267
185.15	8,887	16,586	185.67	9,478	21,361
185.16	8,899	16,675	185.68	9,489	21,456
185.17	8,910	16,764	185.69	9,501	21,551
185.18	8,921	16,853	185.70	9,512	21,646
185.19	8,933	16,943	185.71	9,524	21,741
185.20	8,944	17,032	185.72	9,535	21,837
185.21	8,956	17,122	185.73	9,546	21,932
185.22	8,967	17,211	185.74	9,558	22,028
185.23	8,978	17,301	185.75	9,569	22,123
185.24	8,990	17,391	185.76	9,580	22,219
185.25	9,001	17,481	185.77	9,592	22,315
185.26	9,012	17,571	185.78	9,603	22,411
185.27	9,024	17,661	185.79	9,614	22,507
185.28	9,035	17,751	185.80	9,626	22,603
185.29	9,046	17,842	185.81	9,637	22,699
185.30	9,058	17,932	185.82	9,649	22,796
185.31	9,069	18,023	185.83	9,660	22,892
185.32	9,081	18,114	185.84	9,671	22,989
185.33	9,092	18,204	185.85	9,683	23,086
185.34	9,103	18,295	185.86	9,694	23,183
185.35	9,115	18,387	185.87	9,705	23,280
185.36	9,126	18,478	185.88	9,717	23,377
185.37	9,137	18,569	185.89	9,728	23,474
185.38	9,149	18,660	185.90	9,739	23,571
185.39	9,160	18,752	185.91	9,751	23,669
185.40	9,171	18,844	185.92	9,762	23,766
185.41	9,183	18,935	185.93	9,773	23,864
185.42	9,194	19,027	185.94	9,785	23,962
185.43	9,205	19,119	185.95	9,796	24,060
185.44	9,217	19,211	185.96	9,808	24,158
185.45	9,228	19,304	185.97	9,819	24,256
185.46	9,240	19,396	185.98	9,830	24,354
185.47	9,251	19,488	185.99	9,842	24,453
185.48	9,262	19,581	186.00	9,853	24,551
185.49	9,274	19,674	186.01	9,865	24,650
185.50	9,285	19,767	186.02	9,876	24,748
185.51	9,296	19,859	186.03	9,888	24,847
185.52	9,308	19,952	186.04	9,900	24,946
185.53	9,319	20,046	186.05	9,912	25,045
185.54	9,330	20,139	186.06	9,923	25,144
185.55	9,342	20,232	186.07	9,935	25,244
185.56	9,353	20,326	186.08	9,947	25,343
185.57	9,365	20,419	186.09	9,959	25,443
185.58	9,376	20,513	186.10	9,970	25,542
185.59	9,387	20,607	186.11	9,982	25,642

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.12	9,994	25,742	186.64	10,604	31,097
186.13	10,006	25,842	186.65	10,616	31,203
186.14	10,017	25,942	186.66	10,628	31,310
186.15	10,029	26,042	186.67	10,640	31,416
186.16	10,041	26,143	186.68	10,651	31,522
186.17	10,053	26,243	186.69	10,663	31,629
186.18	10,064	26,344	186.70	10,675	31,736
186.19	10,076	26,444	186.71	10,687	31,843
186.20	10,088	26,545	186.72	10,698	31,949
186.21	10,100	26,646	186.73	10,710	32,057
186.22	10,111	26,747	186.74	10,722	32,164
186.23	10,123	26,848	186.75	10,734	32,271
186.24	10,135	26,950	186.76	10,745	32,378
186.25	10,147	27,051	186.77	10,757	32,486
186.26	10,158	27,152	186.78	10,769	32,593
186.27	10,170	27,254	186.79	10,780	32,701
186.28	10,182	27,356	186.80	10,792	32,809
186.29	10,193	27,458	186.81	10,804	32,917
186.30	10,205	27,560	186.82	10,816	33,025
186.31	10,217	27,662	186.83	10,827	33,133
186.32	10,229	27,764	186.84	10,839	33,242
186.33	10,240	27,866	186.85	10,851	33,350
186.34	10,252	27,969	186.86	10,863	33,459
186.35	10,264	28,071	186.87	10,874	33,567
186.36	10,276	28,174	186.88	10,886	33,676
186.37	10,287	28,277	186.89	10,898	33,785
186.38	10,299	28,380	186.90	10,910	33,894
186.39	10,311	28,483	186.91	10,921	34,003
186.40	10,323	28,586	186.92	10,933	34,113
186.41	10,334	28,689	186.93	10,945	34,222
186.42	10,346	28,793	186.94	10,957	34,331
186.43	10,358	28,896	186.95	10,968	34,441
186.44	10,370	29,000	186.96	10,980	34,551
186.45	10,381	29,104	186.97	10,992	34,661
186.46	10,393	29,208	186.98	11,004	34,771
186.47	10,405	29,312	186.99	11,015	34,881
186.48	10,417	29,416	187.00	11,027	34,991
186.49	10,428	29,520	187.01	11,040	35,101
186.50	10,440	29,624	187.02	11,053	35,212
186.51	10,452	29,729	187.03	11,066	35,322
186.52	10,463	29,833	187.04	11,079	35,433
186.53	10,475	29,938	187.05	11,092	35,544
186.54	10,487	30,043	187.06	11,105	35,655
186.55	10,499	30,148	187.07	11,118	35,766
186.56	10,510	30,253	187.08	11,131	35,877
186.57	10,522	30,358	187.09	11,145	35,989
186.58	10,534	30,463	187.10	11,158	36,100
186.59	10,546	30,569	187.11	11,171	36,212
186.60	10,557	30,674	187.12	11,184	36,324
186.61	10,569	30,780	187.13	11,197	36,436
186.62	10,581	30,886	187.14	11,210	36,548
186.63	10,593	30,991	187.15	11,223	36,660

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.16	11,236	36,772
187.17	11,249	36,884
187.18	11,262	36,997
187.19	11,275	37,110
187.20	11,288	37,223
187.21	11,301	37,335
187.22	11,314	37,449
187.23	11,327	37,562
187.24	11,340	37,675
187.25	11,354	37,789
187.26	11,367	37,902
187.27	11,380	38,016
187.28	11,393	38,130
187.29	11,406	38,244
187.30	11,419	38,358
187.31	11,432	38,472
187.32	11,445	38,587
187.33	11,458	38,701
187.34	11,471	38,816
187.35	11,484	38,930
187.36	11,497	39,045
187.37	11,510	39,160
187.38	11,523	39,276
187.39	11,536	39,391
187.40	11,549	39,506
187.41	11,562	39,622
187.42	11,576	39,738
187.43	11,589	39,853
187.44	11,602	39,969
187.45	11,615	40,085
187.46	11,628	40,202
187.47	11,641	40,318
187.48	11,654	40,434
187.49	11,667	40,551
187.50	11,680	40,668
187.51	11,693	40,785
187.52	11,706	40,902
187.53	11,719	41,019
187.54	11,732	41,136
187.55	11,745	41,253
187.56	11,758	41,371
187.57	11,771	41,489
187.58	11,784	41,606
187.59	11,798	41,724
187.60	11,811	41,842
187.61	11,824	41,960
187.62	11,837	42,079
187.63	11,850	42,197
187.64	11,863	42,316
187.65	11,876	42,434
187.66	11,889	42,553
187.67	11,902	42,672
187.68	11,915	42,791
187.69	11,928	42,911
187.70	11,941	43,030
187.71	11,954	43,149
187.72	11,967	43,269
187.73	11,980	43,389
187.74	11,993	43,509
187.75	12,007	43,629
187.76	12,020	43,749
187.77	12,033	43,869
187.78	12,046	43,989
187.79	12,059	44,110
187.80	12,072	44,231
187.81	12,085	44,351
187.82	12,098	44,472
187.83	12,111	44,593
187.84	12,124	44,714
187.85	12,137	44,836
187.86	12,150	44,957
187.87	12,163	45,079
187.88	12,176	45,200
187.89	12,189	45,322
187.90	12,202	45,444
187.91	12,215	45,566
187.92	12,229	45,689
187.93	12,242	45,811
187.94	12,255	45,933
187.95	12,268	46,056
187.96	12,281	46,179
187.97	12,294	46,302
187.98	12,307	46,425
187.99	12,320	46,548
188.00	12,333	46,671
188.01	12,345	46,794
188.02	12,358	46,918
188.03	12,370	47,042
188.04	12,383	47,165
188.05	12,395	47,289
188.06	12,408	47,413
188.07	12,420	47,537
188.08	12,433	47,662
188.09	12,445	47,786
188.10	12,458	47,911
188.11	12,470	48,035
188.12	12,483	48,160
188.13	12,495	48,285
188.14	12,507	48,410
188.15	12,520	48,535
188.16	12,532	48,660
188.17	12,545	48,786
188.18	12,557	48,911
188.19	12,570	49,037

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.20	12,582	49,163
188.21	12,595	49,288
188.22	12,607	49,414
188.23	12,620	49,541
188.24	12,632	49,667
188.25	12,645	49,793
188.26	12,657	49,920
188.27	12,669	50,046
188.28	12,682	50,173
188.29	12,694	50,300
188.30	12,707	50,427
188.31	12,719	50,554
188.32	12,732	50,681
188.33	12,744	50,809
188.34	12,757	50,936
188.35	12,769	51,064
188.36	12,782	51,192
188.37	12,794	51,319
188.38	12,806	51,448
188.39	12,819	51,576
188.40	12,831	51,704
188.41	12,844	51,832
188.42	12,856	51,961
188.43	12,869	52,089
188.44	12,881	52,218
188.45	12,894	52,347
188.46	12,906	52,476
188.47	12,919	52,605
188.48	12,931	52,734
188.49	12,944	52,864
188.50	**12,956**	**52,993**

Summary for Pond B-50: Basin #50

Inflow Area = 2.262 ac, 29.27% Impervious, Inflow Depth = 3.15" for Current 10 yr event
Inflow = 7.40 cfs @ 12.17 hrs, Volume= 0.594 af
Outflow = 1.21 cfs @ 12.77 hrs, Volume= 0.463 af, Atten= 84%, Lag= 35.6 min
Primary = 1.21 cfs @ 12.77 hrs, Volume= 0.463 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 185.49' @ 12.77 hrs Surf.Area= 10,759 sf Storage= 14,524 cf

Plug-Flow detention time= 533.9 min calculated for 0.463 af (78% of inflow)
Center-of-Mass det. time= 445.9 min (1,248.2 - 802.3)

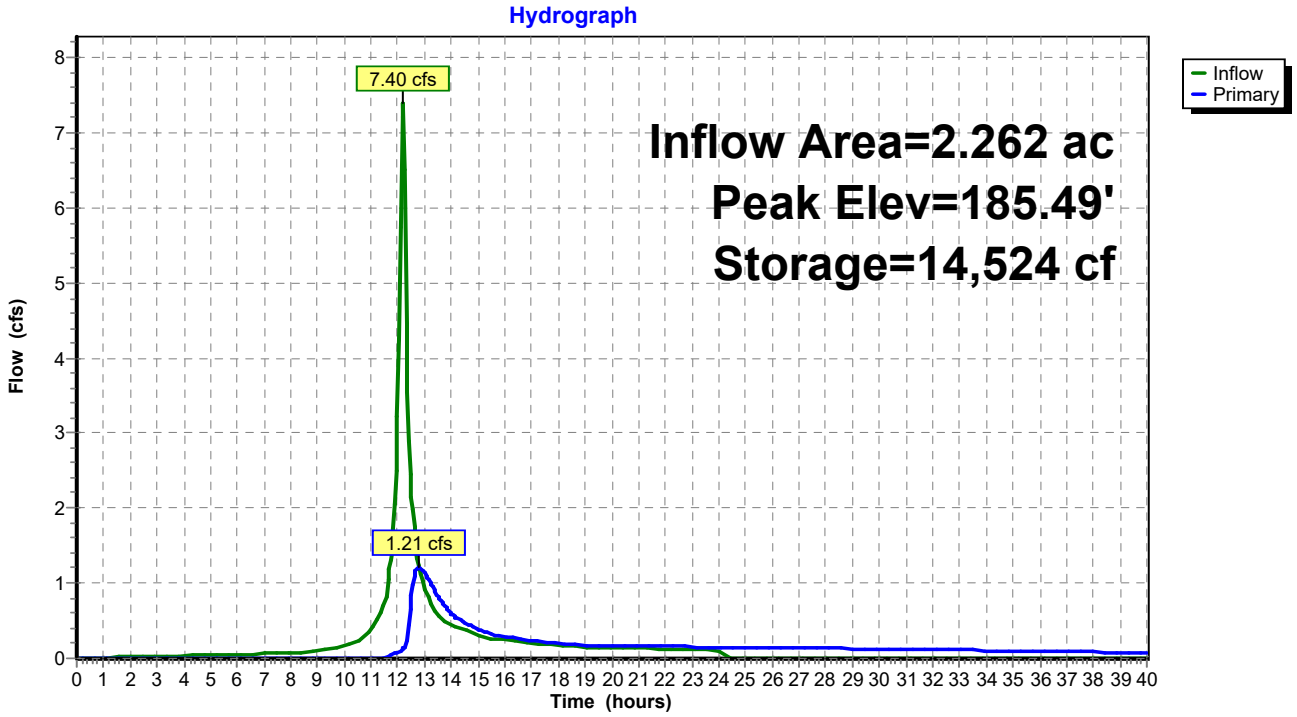
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	53,209 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	8,805	0	0
185.00	10,108	9,457	9,457
186.00	11,448	10,778	20,235
187.00	12,826	12,137	32,372
188.00	14,244	13,535	45,907
188.50	14,966	7,303	53,209

Device	Routing	Invert	Outlet Devices
#1	Primary	180.50'	**18.0" Round Culvert** L= 83.0' Ke= 0.500 Inlet / Outlet Invert= 180.50' / 179.67' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.32'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.30'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.20 cfs @ 12.77 hrs HW=185.49' (Free Discharge)
- **1=Culvert** (Passes 1.20 cfs of 16.96 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 4.96 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.04 cfs @ 1.41 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-50: Basin #50



Stage-Discharge for Pond B-50: Basin #50

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	0.05	185.04	0.13	185.56	1.89
184.01	0.00	184.53	0.05	185.05	0.13	185.57	1.99
184.02	0.00	184.54	0.06	185.06	0.13	185.58	2.09
184.03	0.00	184.55	0.06	185.07	0.13	185.59	2.19
184.04	0.00	184.56	0.06	185.08	0.13	185.60	2.30
184.05	0.00	184.57	0.06	185.09	0.13	185.61	2.40
184.06	0.00	184.58	0.06	185.10	0.13	185.62	2.51
184.07	0.00	184.59	0.07	185.11	0.14	185.63	2.62
184.08	0.00	184.60	0.07	185.12	0.14	185.64	2.73
184.09	0.00	184.61	0.07	185.13	0.14	185.65	2.84
184.10	0.00	184.62	0.07	185.14	0.14	185.66	2.96
184.11	0.00	184.63	0.07	185.15	0.14	185.67	3.07
184.12	0.00	184.64	0.08	185.16	0.14	185.68	3.19
184.13	0.00	184.65	0.08	185.17	0.14	185.69	3.31
184.14	0.00	184.66	0.08	185.18	0.14	185.70	3.43
184.15	0.00	184.67	0.08	185.19	0.14	185.71	3.55
184.16	0.00	184.68	0.08	185.20	0.14	185.72	3.67
184.17	0.00	184.69	0.08	185.21	0.15	185.73	3.80
184.18	0.00	184.70	0.09	185.22	0.15	185.74	3.92
184.19	0.00	184.71	0.09	185.23	0.15	185.75	4.05
184.20	0.00	184.72	0.09	185.24	0.15	185.76	4.18
184.21	0.00	184.73	0.09	185.25	0.15	185.77	4.31
184.22	0.00	184.74	0.09	185.26	0.15	185.78	4.44
184.23	0.00	184.75	0.09	185.27	0.15	185.79	4.57
184.24	0.00	184.76	0.10	185.28	0.15	185.80	4.70
184.25	0.00	184.77	0.10	185.29	0.15	185.81	4.84
184.26	0.00	184.78	0.10	185.30	0.15	185.82	4.97
184.27	0.00	184.79	0.10	185.31	0.17	185.83	5.11
184.28	0.00	184.80	0.10	185.32	0.19	185.84	5.25
184.29	0.00	184.81	0.10	185.33	0.22	185.85	5.38
184.30	0.00	184.82	0.10	185.34	0.26	185.86	5.52
184.31	0.00	184.83	0.10	185.35	0.30	185.87	5.67
184.32	0.00	184.84	0.11	185.36	0.35	185.88	5.81
184.33	0.00	184.85	0.11	185.37	0.40	185.89	5.95
184.34	0.00	184.86	0.11	185.38	0.46	185.90	6.10
184.35	0.00	184.87	0.11	185.39	0.51	185.91	6.24
184.36	0.00	184.88	0.11	185.40	0.57	185.92	6.39
184.37	0.00	184.89	0.11	185.41	0.64	185.93	6.54
184.38	0.01	184.90	0.11	185.42	0.70	185.94	6.68
184.39	0.01	184.91	0.11	185.43	0.77	185.95	6.83
184.40	0.01	184.92	0.12	185.44	0.85	185.96	6.99
184.41	0.01	184.93	0.12	185.45	0.92	185.97	7.14
184.42	0.02	184.94	0.12	185.46	1.00	185.98	7.29
184.43	0.02	184.95	0.12	185.47	1.08	185.99	7.44
184.44	0.02	184.96	0.12	185.48	1.16	186.00	7.60
184.45	0.03	184.97	0.12	185.49	1.24	186.01	7.75
184.46	0.03	184.98	0.12	185.50	1.33	186.02	7.91
184.47	0.03	184.99	0.12	185.51	1.42	186.03	8.07
184.48	0.04	185.00	0.12	185.52	1.51	186.04	8.23
184.49	0.04	185.01	0.13	185.53	1.60	186.05	8.39
184.50	0.05	185.02	0.13	185.54	1.69	186.06	8.55
184.51	0.05	185.03	0.13	185.55	1.79	186.07	8.71

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	8.87	186.60	18.37	187.12	19.91	187.64	20.76
186.09	9.03	186.61	18.57	187.13	19.93	187.65	20.78
186.10	9.20	186.62	18.77	187.14	19.95	187.66	20.80
186.11	9.36	186.63	18.97	187.15	19.96	187.67	20.81
186.12	9.53	186.64	19.09	187.16	19.98	187.68	20.83
186.13	9.69	186.65	19.11	187.17	20.00	187.69	20.84
186.14	9.86	186.66	19.13	187.18	20.01	187.70	20.86
186.15	10.03	186.67	19.14	187.19	20.03	187.71	20.88
186.16	10.20	186.68	19.16	187.20	20.05	187.72	20.89
186.17	10.37	186.69	19.18	187.21	20.06	187.73	20.91
186.18	10.54	186.70	19.20	187.22	20.08	187.74	20.92
186.19	10.71	186.71	19.21	187.23	20.10	187.75	20.94
186.20	10.88	186.72	19.23	187.24	20.11	187.76	20.96
186.21	11.06	186.73	19.25	187.25	20.13	187.77	20.97
186.22	11.23	186.74	19.27	187.26	20.15	187.78	20.99
186.23	11.41	186.75	19.28	187.27	20.16	187.79	21.00
186.24	11.58	186.76	19.30	187.28	20.18	187.80	21.02
186.25	11.76	186.77	19.32	187.29	20.19	187.81	21.04
186.26	11.93	186.78	19.33	187.30	20.21	187.82	21.05
186.27	12.11	186.79	19.35	187.31	20.23	187.83	21.07
186.28	12.29	186.80	19.37	187.32	20.24	187.84	21.08
186.29	12.47	186.81	19.39	187.33	20.26	187.85	21.10
186.30	12.65	186.82	19.40	187.34	20.28	187.86	21.11
186.31	12.83	186.83	19.42	187.35	20.29	187.87	21.13
186.32	13.01	186.84	19.44	187.36	20.31	187.88	21.15
186.33	13.20	186.85	19.46	187.37	20.33	187.89	21.16
186.34	13.38	186.86	19.47	187.38	20.34	187.90	21.18
186.35	13.56	186.87	19.49	187.39	20.36	187.91	21.19
186.36	13.75	186.88	19.51	187.40	20.38	187.92	21.21
186.37	13.93	186.89	19.52	187.41	20.39	187.93	21.22
186.38	14.12	186.90	19.54	187.42	20.41	187.94	21.24
186.39	14.30	186.91	19.56	187.43	20.42	187.95	21.26
186.40	14.49	186.92	19.57	187.44	20.44	187.96	21.27
186.41	14.68	186.93	19.59	187.45	20.46	187.97	21.29
186.42	14.87	186.94	19.61	187.46	20.47	187.98	21.30
186.43	15.06	186.95	19.63	187.47	20.49	187.99	21.32
186.44	15.25	186.96	19.64	187.48	20.51	188.00	21.33
186.45	15.44	186.97	19.66	187.49	20.52	188.01	21.35
186.46	15.63	186.98	19.68	187.50	20.54	188.02	21.37
186.47	15.82	186.99	19.69	187.51	20.55	188.03	21.38
186.48	16.01	187.00	19.71	187.52	20.57	188.04	21.40
186.49	16.21	187.01	19.73	187.53	20.59	188.05	21.41
186.50	16.40	187.02	19.74	187.54	20.60	188.06	21.43
186.51	16.59	187.03	19.76	187.55	20.62	188.07	21.44
186.52	16.79	187.04	19.78	187.56	20.64	188.08	21.46
186.53	16.98	187.05	19.79	187.57	20.65	188.09	21.47
186.54	17.18	187.06	19.81	187.58	20.67	188.10	21.49
186.55	17.38	187.07	19.83	187.59	20.68	188.11	21.51
186.56	17.57	187.08	19.85	187.60	20.70	188.12	21.52
186.57	17.77	187.09	19.86	187.61	20.72	188.13	21.54
186.58	17.97	187.10	19.88	187.62	20.73	188.14	21.55
186.59	18.17	187.11	19.90	187.63	20.75	188.15	21.57

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)
188.16	21.58
188.17	21.60
188.18	21.61
188.19	21.63
188.20	21.64
188.21	21.66
188.22	21.67
188.23	21.69
188.24	21.71
188.25	21.72
188.26	21.74
188.27	21.75
188.28	21.77
188.29	21.78
188.30	21.80
188.31	21.81
188.32	21.83
188.33	21.84
188.34	21.86
188.35	21.87
188.36	21.89
188.37	21.90
188.38	21.92
188.39	21.93
188.40	21.95
188.41	21.97
188.42	21.98
188.43	22.00
188.44	22.01
188.45	22.03
188.46	22.16
188.47	22.39
188.48	22.68
188.49	23.02
188.50	**23.41**

Stage-Area-Storage for Pond B-50: Basin #50

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	8,805	0	184.52	9,483	4,755
184.01	8,818	88	184.53	9,496	4,850
184.02	8,831	176	184.54	9,509	4,945
184.03	8,844	265	184.55	9,522	5,040
184.04	8,857	353	184.56	9,535	5,135
184.05	8,870	442	184.57	9,548	5,231
184.06	8,883	531	184.58	9,561	5,326
184.07	8,896	620	184.59	9,574	5,422
184.08	8,909	709	184.60	9,587	5,518
184.09	8,922	798	184.61	9,600	5,613
184.10	8,935	887	184.62	9,613	5,710
184.11	8,948	976	184.63	9,626	5,806
184.12	8,961	1,066	184.64	9,639	5,902
184.13	8,974	1,156	184.65	9,652	5,999
184.14	8,987	1,245	184.66	9,665	6,095
184.15	9,000	1,335	184.67	9,678	6,192
184.16	9,013	1,425	184.68	9,691	6,289
184.17	9,027	1,516	184.69	9,704	6,386
184.18	9,040	1,606	184.70	9,717	6,483
184.19	9,053	1,696	184.71	9,730	6,580
184.20	9,066	1,787	184.72	9,743	6,677
184.21	9,079	1,878	184.73	9,756	6,775
184.22	9,092	1,969	184.74	9,769	6,872
184.23	9,105	2,060	184.75	9,782	6,970
184.24	9,118	2,151	184.76	9,795	7,068
184.25	9,131	2,242	184.77	9,808	7,166
184.26	9,144	2,333	184.78	9,821	7,264
184.27	9,157	2,425	184.79	9,834	7,363
184.28	9,170	2,516	184.80	9,847	7,461
184.29	9,183	2,608	184.81	9,860	7,559
184.30	9,196	2,700	184.82	9,873	7,658
184.31	9,209	2,792	184.83	9,886	7,757
184.32	9,222	2,884	184.84	9,900	7,856
184.33	9,235	2,977	184.85	9,913	7,955
184.34	9,248	3,069	184.86	9,926	8,054
184.35	9,261	3,162	184.87	9,939	8,153
184.36	9,274	3,254	184.88	9,952	8,253
184.37	9,287	3,347	184.89	9,965	8,353
184.38	9,300	3,440	184.90	9,978	8,452
184.39	9,313	3,533	184.91	9,991	8,552
184.40	9,326	3,626	184.92	10,004	8,652
184.41	9,339	3,720	184.93	10,017	8,752
184.42	9,352	3,813	184.94	10,030	8,852
184.43	9,365	3,907	184.95	10,043	8,953
184.44	9,378	4,000	184.96	10,056	9,053
184.45	9,391	4,094	184.97	10,069	9,154
184.46	9,404	4,188	184.98	10,082	9,255
184.47	9,417	4,282	184.99	10,095	9,355
184.48	9,430	4,377	185.00	10,108	9,457
184.49	9,443	4,471	185.01	10,121	9,558
184.50	9,457	4,565	185.02	10,135	9,659
184.51	9,470	4,660	185.03	10,148	9,760

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	10,162	9,862	185.56	10,858	15,327
185.05	10,175	9,964	185.57	10,872	15,436
185.06	10,188	10,065	185.58	10,885	15,545
185.07	10,202	10,167	185.59	10,899	15,653
185.08	10,215	10,269	185.60	10,912	15,762
185.09	10,229	10,372	185.61	10,925	15,872
185.10	10,242	10,474	185.62	10,939	15,981
185.11	10,255	10,576	185.63	10,952	16,090
185.12	10,269	10,679	185.64	10,966	16,200
185.13	10,282	10,782	185.65	10,979	16,310
185.14	10,296	10,885	185.66	10,992	16,420
185.15	10,309	10,988	185.67	11,006	16,530
185.16	10,322	11,091	185.68	11,019	16,640
185.17	10,336	11,194	185.69	11,033	16,750
185.18	10,349	11,298	185.70	11,046	16,860
185.19	10,363	11,401	185.71	11,059	16,971
185.20	10,376	11,505	185.72	11,073	17,082
185.21	10,389	11,609	185.73	11,086	17,192
185.22	10,403	11,713	185.74	11,100	17,303
185.23	10,416	11,817	185.75	11,113	17,414
185.24	10,430	11,921	185.76	11,126	17,526
185.25	10,443	12,025	185.77	11,140	17,637
185.26	10,456	12,130	185.78	11,153	17,748
185.27	10,470	12,235	185.79	11,167	17,860
185.28	10,483	12,339	185.80	11,180	17,972
185.29	10,497	12,444	185.81	11,193	18,084
185.30	10,510	12,549	185.82	11,207	18,196
185.31	10,523	12,654	185.83	11,220	18,308
185.32	10,537	12,760	185.84	11,234	18,420
185.33	10,550	12,865	185.85	11,247	18,532
185.34	10,564	12,971	185.86	11,260	18,645
185.35	10,577	13,076	185.87	11,274	18,758
185.36	10,590	13,182	185.88	11,287	18,870
185.37	10,604	13,288	185.89	11,301	18,983
185.38	10,617	13,394	185.90	11,314	19,096
185.39	10,631	13,501	185.91	11,327	19,210
185.40	10,644	13,607	185.92	11,341	19,323
185.41	10,657	13,713	185.93	11,354	19,436
185.42	10,671	13,820	185.94	11,368	19,550
185.43	10,684	13,927	185.95	11,381	19,664
185.44	10,698	14,034	185.96	11,394	19,778
185.45	10,711	14,141	185.97	11,408	19,892
185.46	10,724	14,248	185.98	11,421	20,006
185.47	10,738	14,355	185.99	11,435	20,120
185.48	10,751	14,463	186.00	11,448	20,235
185.49	10,765	14,570	186.01	11,462	20,349
185.50	10,778	14,678	186.02	11,476	20,464
185.51	10,791	14,786	186.03	11,489	20,579
185.52	10,805	14,894	186.04	11,503	20,694
185.53	10,818	15,002	186.05	11,517	20,809
185.54	10,832	15,110	186.06	11,531	20,924
185.55	10,845	15,219	186.07	11,544	21,039

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	11,558	21,155	186.60	12,275	27,351
186.09	11,572	21,270	186.61	12,289	27,474
186.10	11,586	21,386	186.62	12,302	27,597
186.11	11,600	21,502	186.63	12,316	27,720
186.12	11,613	21,618	186.64	12,330	27,843
186.13	11,627	21,734	186.65	12,344	27,967
186.14	11,641	21,851	186.66	12,357	28,090
186.15	11,655	21,967	186.67	12,371	28,214
186.16	11,668	22,084	186.68	12,385	28,338
186.17	11,682	22,201	186.69	12,399	28,462
186.18	11,696	22,317	186.70	12,413	28,586
186.19	11,710	22,434	186.71	12,426	28,710
186.20	11,724	22,552	186.72	12,440	28,834
186.21	11,737	22,669	186.73	12,454	28,959
186.22	11,751	22,786	186.74	12,468	29,083
186.23	11,765	22,904	186.75	12,482	29,208
186.24	11,779	23,022	186.76	12,495	29,333
186.25	11,793	23,140	186.77	12,509	29,458
186.26	11,806	23,258	186.78	12,523	29,583
186.27	11,820	23,376	186.79	12,537	29,708
186.28	11,834	23,494	186.80	12,550	29,834
186.29	11,848	23,612	186.81	12,564	29,959
186.30	11,861	23,731	186.82	12,578	30,085
186.31	11,875	23,850	186.83	12,592	30,211
186.32	11,889	23,968	186.84	12,606	30,337
186.33	11,903	24,087	186.85	12,619	30,463
186.34	11,917	24,206	186.86	12,633	30,589
186.35	11,930	24,326	186.87	12,647	30,716
186.36	11,944	24,445	186.88	12,661	30,842
186.37	11,958	24,565	186.89	12,674	30,969
186.38	11,972	24,684	186.90	12,688	31,096
186.39	11,985	24,804	186.91	12,702	31,223
186.40	11,999	24,924	186.92	12,716	31,350
186.41	12,013	25,044	186.93	12,730	31,477
186.42	12,027	25,164	186.94	12,743	31,604
186.43	12,041	25,285	186.95	12,757	31,732
186.44	12,054	25,405	186.96	12,771	31,860
186.45	12,068	25,526	186.97	12,785	31,987
186.46	12,082	25,646	186.98	12,798	32,115
186.47	12,096	25,767	186.99	12,812	32,243
186.48	12,109	25,888	187.00	12,826	32,372
186.49	12,123	26,009	187.01	12,840	32,500
186.50	12,137	26,131	187.02	12,854	32,628
186.51	12,151	26,252	187.03	12,869	32,757
186.52	12,165	26,374	187.04	12,883	32,886
186.53	12,178	26,495	187.05	12,897	33,015
186.54	12,192	26,617	187.06	12,911	33,144
186.55	12,206	26,739	187.07	12,925	33,273
186.56	12,220	26,861	187.08	12,939	33,402
186.57	12,233	26,984	187.09	12,954	33,532
186.58	12,247	27,106	187.10	12,968	33,661
186.59	12,261	27,229	187.11	12,982	33,791

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	12,996	33,921	187.64	13,734	40,871
187.13	13,010	34,051	187.65	13,748	41,008
187.14	13,025	34,181	187.66	13,762	41,146
187.15	13,039	34,311	187.67	13,776	41,283
187.16	13,053	34,442	187.68	13,790	41,421
187.17	13,067	34,572	187.69	13,804	41,559
187.18	13,081	34,703	187.70	13,819	41,697
187.19	13,095	34,834	187.71	13,833	41,835
187.20	13,110	34,965	187.72	13,847	41,974
187.21	13,124	35,096	187.73	13,861	42,112
187.22	13,138	35,228	187.74	13,875	42,251
187.23	13,152	35,359	187.75	13,890	42,390
187.24	13,166	35,491	187.76	13,904	42,529
187.25	13,181	35,622	187.77	13,918	42,668
187.26	13,195	35,754	187.78	13,932	42,807
187.27	13,209	35,886	187.79	13,946	42,947
187.28	13,223	36,018	187.80	13,960	43,086
187.29	13,237	36,151	187.81	13,975	43,226
187.30	13,251	36,283	187.82	13,989	43,366
187.31	13,266	36,416	187.83	14,003	43,506
187.32	13,280	36,548	187.84	14,017	43,646
187.33	13,294	36,681	187.85	14,031	43,786
187.34	13,308	36,814	187.86	14,045	43,926
187.35	13,322	36,947	187.87	14,060	44,067
187.36	13,336	37,081	187.88	14,074	44,207
187.37	13,351	37,214	187.89	14,088	44,348
187.38	13,365	37,348	187.90	14,102	44,489
187.39	13,379	37,481	187.91	14,116	44,630
187.40	13,393	37,615	187.92	14,131	44,772
187.41	13,407	37,749	187.93	14,145	44,913
187.42	13,422	37,883	187.94	14,159	45,054
187.43	13,436	38,018	187.95	14,173	45,196
187.44	13,450	38,152	187.96	14,187	45,338
187.45	13,464	38,287	187.97	14,201	45,480
187.46	13,478	38,421	187.98	14,216	45,622
187.47	13,492	38,556	187.99	14,230	45,764
187.48	13,507	38,691	188.00	14,244	45,907
187.49	13,521	38,826	188.01	14,258	46,049
187.50	13,535	38,962	188.02	14,273	46,192
187.51	13,549	39,097	188.03	14,287	46,334
187.52	13,563	39,233	188.04	14,302	46,477
187.53	13,578	39,368	188.05	14,316	46,621
187.54	13,592	39,504	188.06	14,331	46,764
187.55	13,606	39,640	188.07	14,345	46,907
187.56	13,620	39,776	188.08	14,360	47,051
187.57	13,634	39,913	188.09	14,374	47,194
187.58	13,648	40,049	188.10	14,388	47,338
187.59	13,663	40,186	188.11	14,403	47,482
187.60	13,677	40,322	188.12	14,417	47,626
187.61	13,691	40,459	188.13	14,432	47,770
187.62	13,705	40,596	188.14	14,446	47,915
187.63	13,719	40,733	188.15	14,461	48,059

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

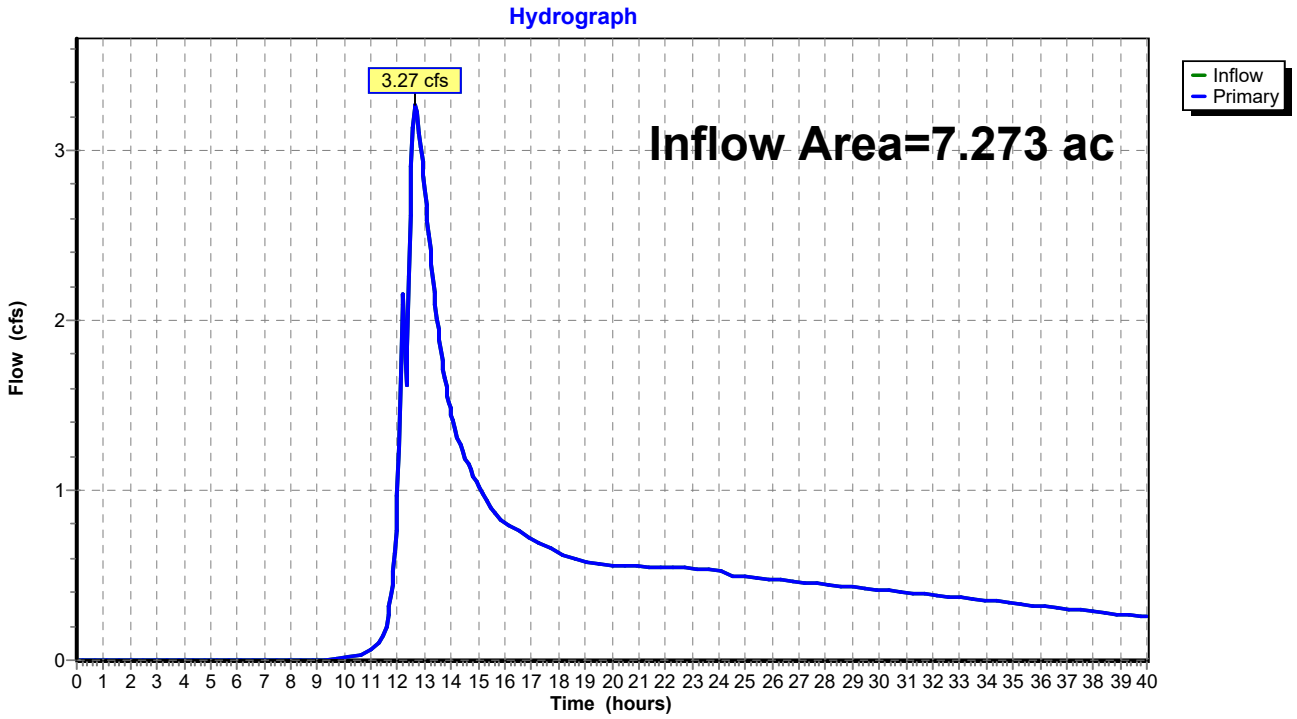
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	14,475	48,204
188.17	14,489	48,349
188.18	14,504	48,494
188.19	14,518	48,639
188.20	14,533	48,784
188.21	14,547	48,930
188.22	14,562	49,075
188.23	14,576	49,221
188.24	14,591	49,367
188.25	14,605	49,513
188.26	14,619	49,659
188.27	14,634	49,805
188.28	14,648	49,951
188.29	14,663	50,098
188.30	14,677	50,245
188.31	14,692	50,392
188.32	14,706	50,539
188.33	14,721	50,686
188.34	14,735	50,833
188.35	14,749	50,980
188.36	14,764	51,128
188.37	14,778	51,276
188.38	14,793	51,423
188.39	14,807	51,571
188.40	14,822	51,720
188.41	14,836	51,868
188.42	14,850	52,016
188.43	14,865	52,165
188.44	14,879	52,314
188.45	14,894	52,463
188.46	14,908	52,612
188.47	14,923	52,761
188.48	14,937	52,910
188.49	14,952	53,059
188.50	**14,966**	**53,209**

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 7.273 ac, 32.33% Impervious, Inflow Depth > 2.43" for Current 10 yr event
Inflow = 3.27 cfs @ 12.64 hrs, Volume= 1.473 af
Primary = 3.27 cfs @ 12.64 hrs, Volume= 1.473 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5



Summary for Subcatchment 48I: PDA-48 (impervious)

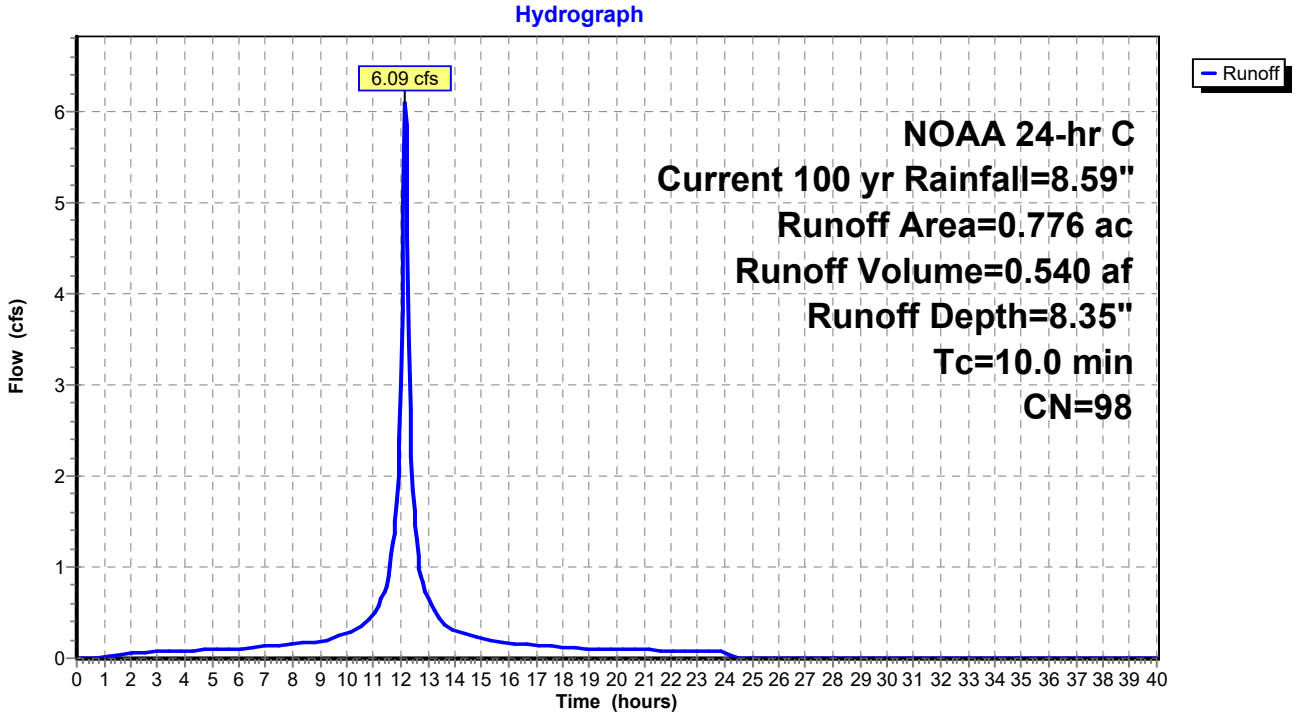
Runoff = 6.09 cfs @ 12.17 hrs, Volume= 0.540 af, Depth= 8.35"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.235	98	Pavement, HSG C
*	0.522	98	Roof, HSG C
*	0.019	98	Concrete, HSG C
	0.776	98	Weighted Average
	0.776		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 48I: PDA-48 (impervious)



Summary for Subcatchment 48P: PDA-48 (pervious)

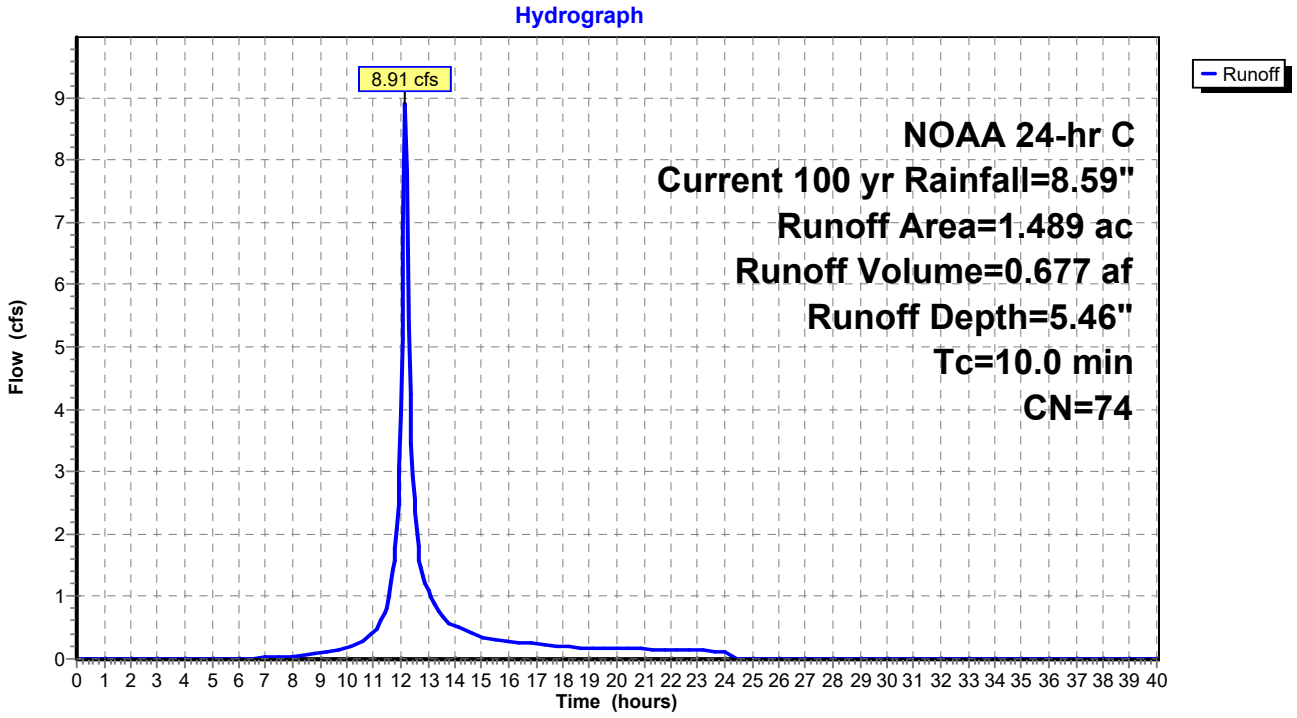
Runoff = 8.91 cfs @ 12.17 hrs, Volume= 0.677 af, Depth= 5.46"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.489	74	>75% Grass cover, Good, HSG C
1.489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 48P: PDA-48 (pervious)



Summary for Subcatchment 49l: PDA-49 (impervious)

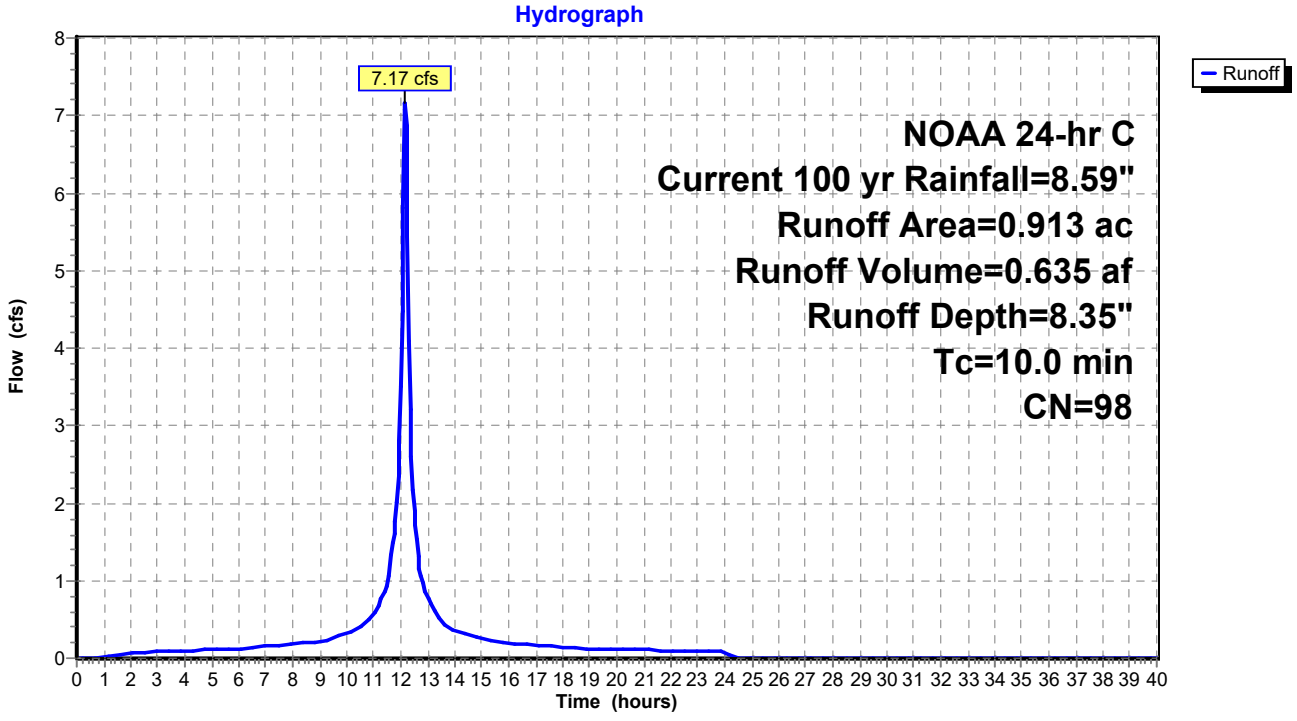
Runoff = 7.17 cfs @ 12.17 hrs, Volume= 0.635 af, Depth= 8.35"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.434	98	Pavement, HSG C
*	0.418	98	Roof, HSG C
*	0.061	98	Concrete, HSG C
	0.913	98	Weighted Average
	0.913		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 49l: PDA-49 (impervious)



Summary for Subcatchment 49P: PDA-49 (pervious)

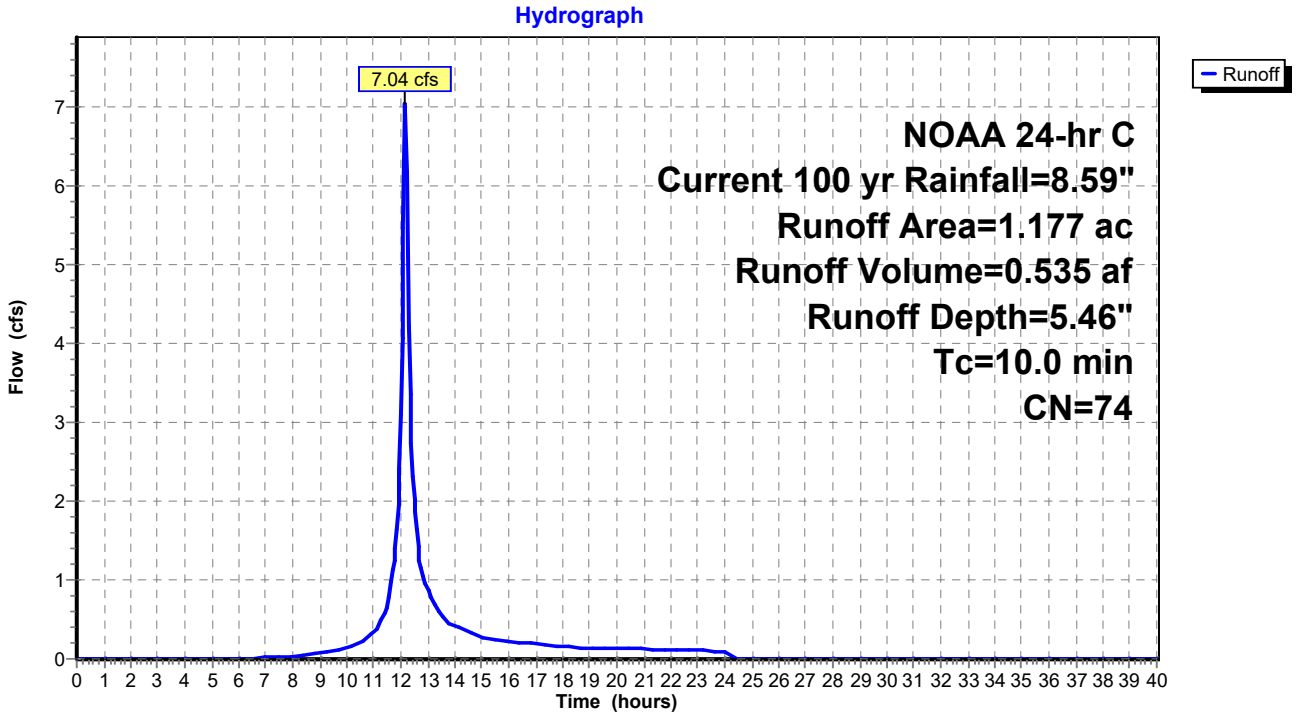
Runoff = 7.04 cfs @ 12.17 hrs, Volume= 0.535 af, Depth= 5.46"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.177	74	>75% Grass cover, Good, HSG C
1.177		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 49P: PDA-49 (pervious)



Summary for Subcatchment 50l: PDA-50 (impervious)

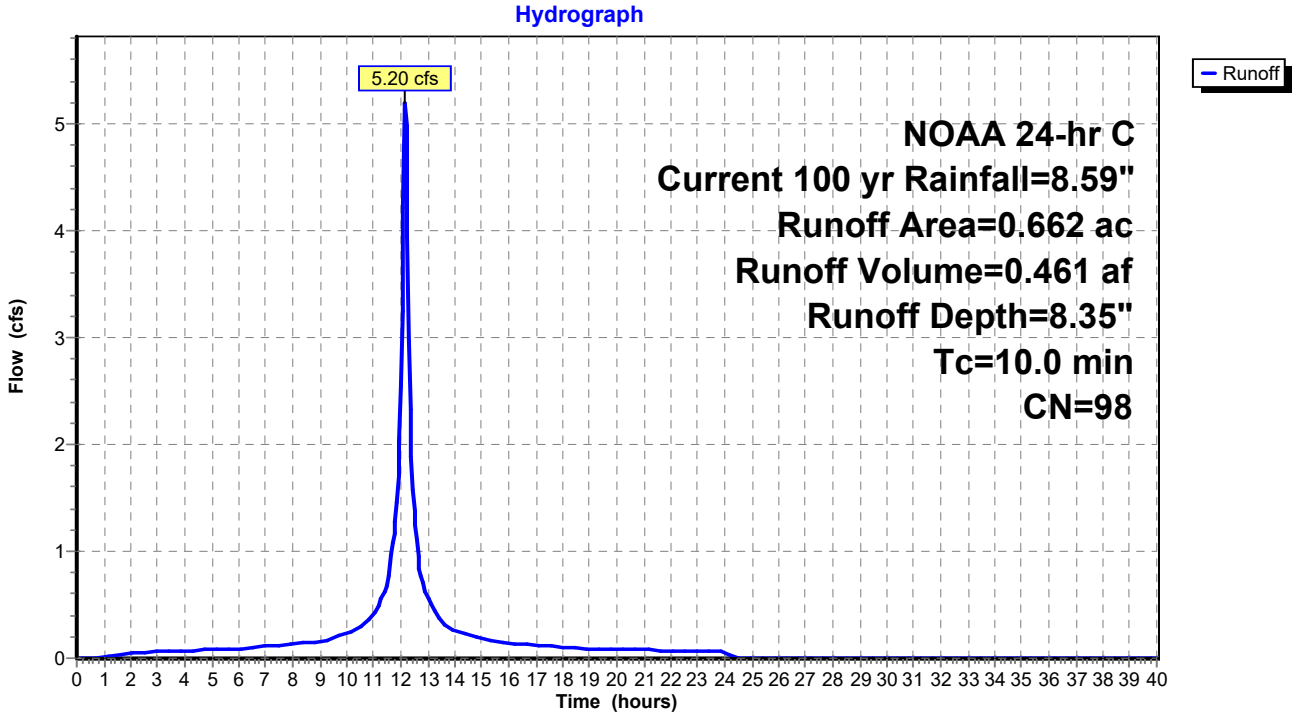
Runoff = 5.20 cfs @ 12.17 hrs, Volume= 0.461 af, Depth= 8.35"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.291	98	Pavement, HSG C
*	0.325	98	Roof, HSG C
*	0.046	98	Concrete, HSG C
	0.662	98	Weighted Average
	0.662		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 50l: PDA-50 (impervious)



Summary for Subcatchment 50P: PDA-50 (pervious)

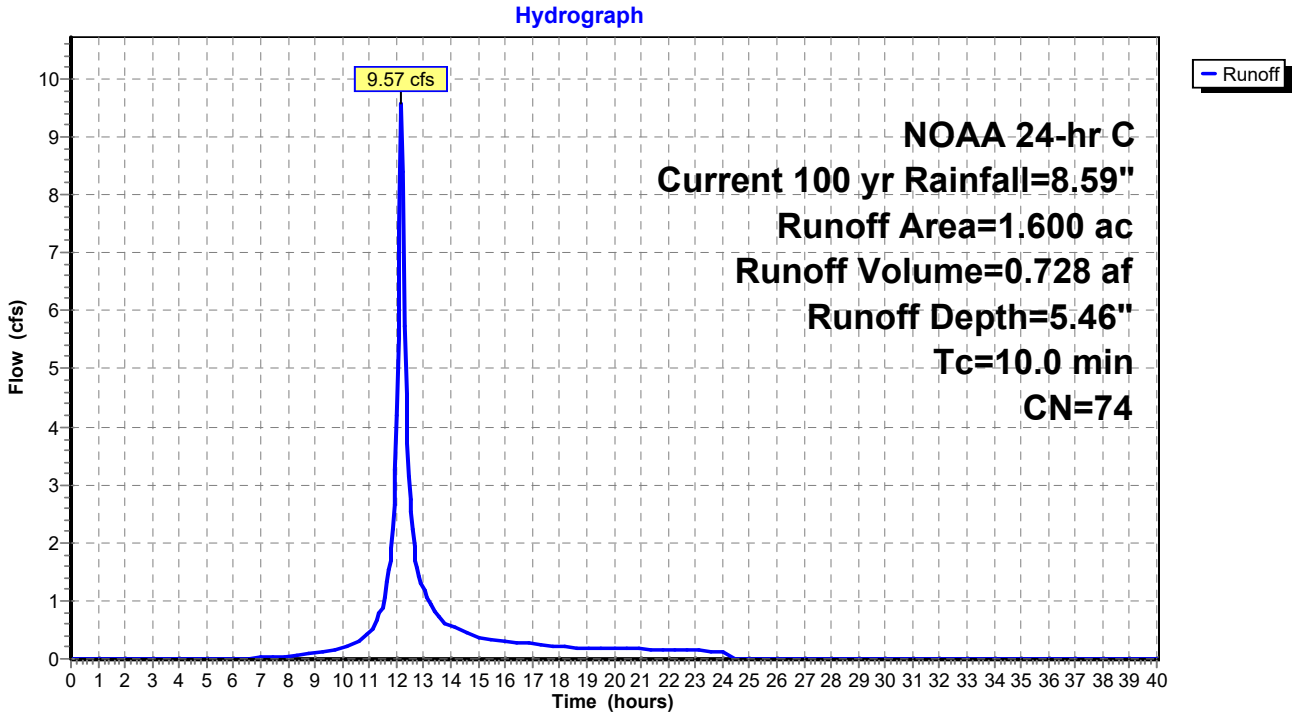
Runoff = 9.57 cfs @ 12.17 hrs, Volume= 0.728 af, Depth= 5.46"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.600	74	>75% Grass cover, Good, HSG C
1.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 50P: PDA-50 (pervious)



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

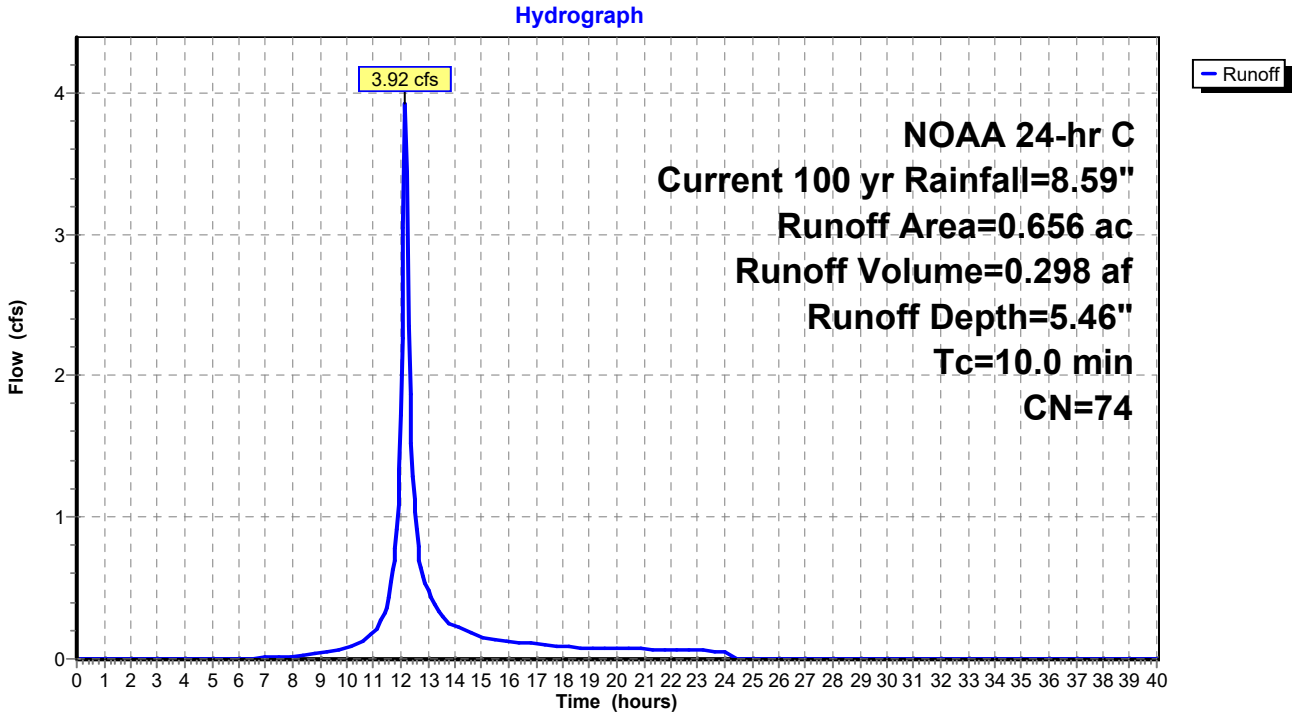
Runoff = 3.92 cfs @ 12.17 hrs, Volume= 0.298 af, Depth= 5.46"
Routed to Link PDA-5 : Proposed Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.656	74	>75% Grass cover, Good, HSG C
0.656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-5: PDA-5 (undetained)



Summary for Pond B-48: Basin #48

Inflow Area = 2.265 ac, 34.26% Impervious, Inflow Depth = 6.45" for Current 100 yr event
Inflow = 14.99 cfs @ 12.17 hrs, Volume= 1.217 af
Outflow = 5.15 cfs @ 12.43 hrs, Volume= 0.969 af, Atten= 66%, Lag= 15.6 min
Primary = 5.15 cfs @ 12.43 hrs, Volume= 0.969 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.53' @ 12.43 hrs Surf.Area= 12,099 sf Storage= 26,452 cf

Plug-Flow detention time= 416.3 min calculated for 0.967 af (79% of inflow)
Center-of-Mass det. time= 335.6 min (1,122.2 - 786.6)

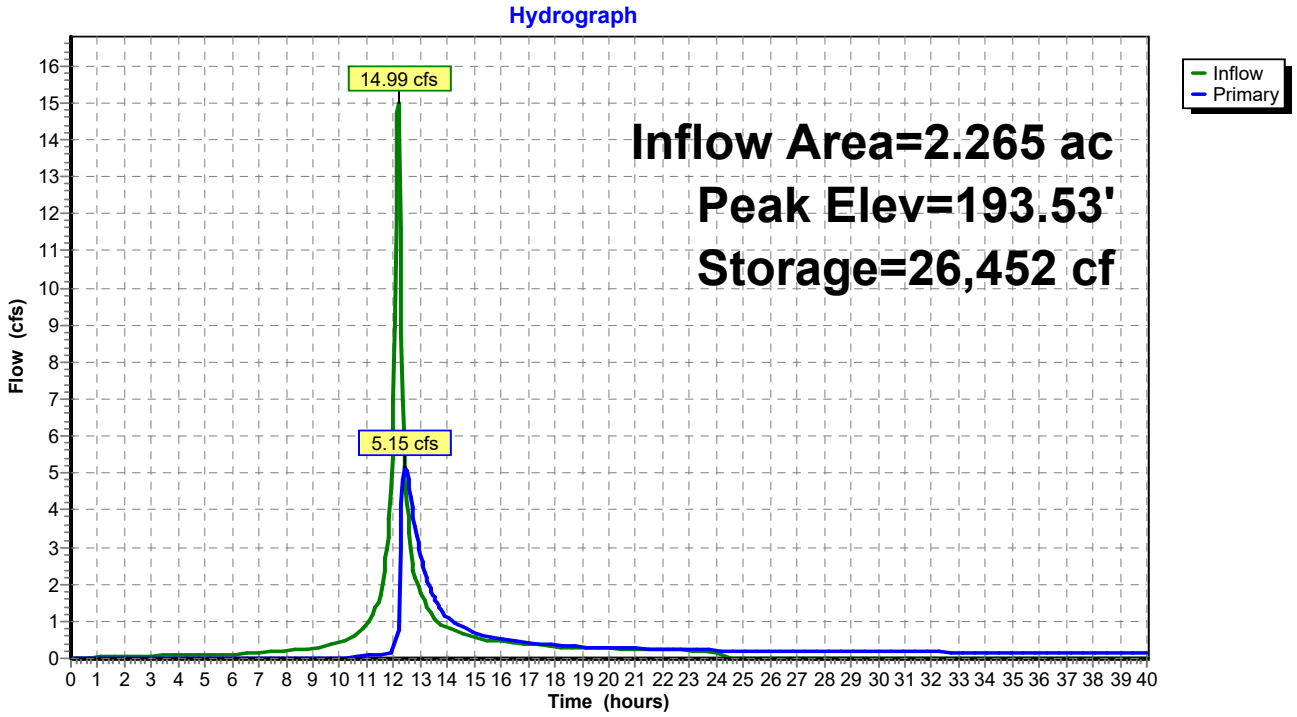
Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	32,287 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.00	8,869	0	0
192.00	10,100	9,485	9,485
193.00	11,387	10,744	20,228
194.00	12,731	12,059	32,287

Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	**18.0" Round Culvert** L= 185.0' Ke= 0.500 Inlet / Outlet Invert= 191.00' / 188.45' S= 0.0138 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.40'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	193.99'	**50.0' long + 3.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=5.13 cfs @ 12.43 hrs HW=193.53' (Free Discharge)
- **1=Culvert** (Passes 5.13 cfs of 11.35 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.85 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.90 cfs @ 2.38 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-48: Basin #48



Stage-Discharge for Pond B-48: Basin #48

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.00	0.00	191.52	0.02	192.04	0.12	192.56	0.17
191.01	0.00	191.53	0.03	192.05	0.12	192.57	0.17
191.02	0.00	191.54	0.03	192.06	0.12	192.58	0.17
191.03	0.00	191.55	0.03	192.07	0.12	192.59	0.17
191.04	0.00	191.56	0.04	192.08	0.12	192.60	0.17
191.05	0.00	191.57	0.04	192.09	0.13	192.61	0.17
191.06	0.00	191.58	0.05	192.10	0.13	192.62	0.17
191.07	0.00	191.59	0.05	192.11	0.13	192.63	0.17
191.08	0.00	191.60	0.05	192.12	0.13	192.64	0.17
191.09	0.00	191.61	0.05	192.13	0.13	192.65	0.18
191.10	0.00	191.62	0.06	192.14	0.13	192.66	0.18
191.11	0.00	191.63	0.06	192.15	0.13	192.67	0.18
191.12	0.00	191.64	0.06	192.16	0.13	192.68	0.18
191.13	0.00	191.65	0.06	192.17	0.13	192.69	0.18
191.14	0.00	191.66	0.06	192.18	0.13	192.70	0.18
191.15	0.00	191.67	0.07	192.19	0.14	192.71	0.18
191.16	0.00	191.68	0.07	192.20	0.14	192.72	0.18
191.17	0.00	191.69	0.07	192.21	0.14	192.73	0.18
191.18	0.00	191.70	0.07	192.22	0.14	192.74	0.18
191.19	0.00	191.71	0.07	192.23	0.14	192.75	0.18
191.20	0.00	191.72	0.08	192.24	0.14	192.76	0.18
191.21	0.00	191.73	0.08	192.25	0.14	192.77	0.18
191.22	0.00	191.74	0.08	192.26	0.14	192.78	0.19
191.23	0.00	191.75	0.08	192.27	0.14	192.79	0.19
191.24	0.00	191.76	0.08	192.28	0.14	192.80	0.19
191.25	0.00	191.77	0.08	192.29	0.15	192.81	0.19
191.26	0.00	191.78	0.09	192.30	0.15	192.82	0.19
191.27	0.00	191.79	0.09	192.31	0.15	192.83	0.19
191.28	0.00	191.80	0.09	192.32	0.15	192.84	0.19
191.29	0.00	191.81	0.09	192.33	0.15	192.85	0.19
191.30	0.00	191.82	0.09	192.34	0.15	192.86	0.19
191.31	0.00	191.83	0.09	192.35	0.15	192.87	0.19
191.32	0.00	191.84	0.10	192.36	0.15	192.88	0.19
191.33	0.00	191.85	0.10	192.37	0.15	192.89	0.19
191.34	0.00	191.86	0.10	192.38	0.15	192.90	0.19
191.35	0.00	191.87	0.10	192.39	0.15	192.91	0.19
191.36	0.00	191.88	0.10	192.40	0.16	192.92	0.20
191.37	0.00	191.89	0.10	192.41	0.16	192.93	0.20
191.38	0.00	191.90	0.10	192.42	0.16	192.94	0.20
191.39	0.00	191.91	0.10	192.43	0.16	192.95	0.20
191.40	0.00	191.92	0.11	192.44	0.16	192.96	0.20
191.41	0.00	191.93	0.11	192.45	0.16	192.97	0.20
191.42	0.00	191.94	0.11	192.46	0.16	192.98	0.20
191.43	0.00	191.95	0.11	192.47	0.16	192.99	0.20
191.44	0.00	191.96	0.11	192.48	0.16	193.00	0.20
191.45	0.00	191.97	0.11	192.49	0.16	193.01	0.21
191.46	0.01	191.98	0.11	192.50	0.16	193.02	0.24
191.47	0.01	191.99	0.11	192.51	0.16	193.03	0.27
191.48	0.01	192.00	0.12	192.52	0.17	193.04	0.31
191.49	0.01	192.01	0.12	192.53	0.17	193.05	0.35
191.50	0.02	192.02	0.12	192.54	0.17	193.06	0.40
191.51	0.02	192.03	0.12	192.55	0.17	193.07	0.45

Stage-Discharge for Pond B-48: Basin #48 (continued)

Elevation (feet)	Primary (cfs)
193.08	0.50
193.09	0.56
193.10	0.62
193.11	0.68
193.12	0.75
193.13	0.82
193.14	0.89
193.15	0.96
193.16	1.04
193.17	1.12
193.18	1.20
193.19	1.29
193.20	1.37
193.21	1.46
193.22	1.55
193.23	1.64
193.24	1.74
193.25	1.83
193.26	1.93
193.27	2.03
193.28	2.13
193.29	2.23
193.30	2.34
193.31	2.44
193.32	2.55
193.33	2.66
193.34	2.77
193.35	2.88
193.36	3.00
193.37	3.11
193.38	3.23
193.39	3.35
193.40	3.47
193.41	3.59
193.42	3.71
193.43	3.84
193.44	3.96
193.45	4.09
193.46	4.22
193.47	4.35
193.48	4.48
193.49	4.61
193.50	4.74
193.51	4.87
193.52	5.01
193.53	5.15
193.54	5.28
193.55	5.42
193.56	5.56
193.57	5.70
193.58	5.85
193.59	5.99
193.60	6.13
193.61	6.28
193.62	6.43
193.63	6.57
193.64	6.72
193.65	6.87
193.66	7.02
193.67	7.17
193.68	7.33
193.69	7.48
193.70	7.64
193.71	7.79
193.72	7.95
193.73	8.11
193.74	8.26
193.75	8.42
193.76	8.58
193.77	8.74
193.78	8.91
193.79	9.07
193.80	9.23
193.81	9.40
193.82	9.56
193.83	9.73
193.84	9.90
193.85	10.07
193.86	10.24
193.87	10.40
193.88	10.58
193.89	10.75
193.90	10.92
193.91	11.09
193.92	11.27
193.93	11.44
193.94	11.62
193.95	11.79
193.96	11.97
193.97	12.15
193.98	12.33
193.99	12.51
194.00	**12.81**

Stage-Area-Storage for Pond B-48: Basin #48

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.00	8,869	0	191.52	9,509	4,778
191.01	8,881	89	191.53	9,521	4,873
191.02	8,894	178	191.54	9,534	4,969
191.03	8,906	267	191.55	9,546	5,064
191.04	8,918	356	191.56	9,558	5,160
191.05	8,931	445	191.57	9,571	5,255
191.06	8,943	534	191.58	9,583	5,351
191.07	8,955	624	191.59	9,595	5,447
191.08	8,967	713	191.60	9,608	5,543
191.09	8,980	803	191.61	9,620	5,639
191.10	8,992	893	191.62	9,632	5,735
191.11	9,004	983	191.63	9,645	5,832
191.12	9,017	1,073	191.64	9,657	5,928
191.13	9,029	1,163	191.65	9,669	6,025
191.14	9,041	1,254	191.66	9,681	6,122
191.15	9,054	1,344	191.67	9,694	6,219
191.16	9,066	1,435	191.68	9,706	6,316
191.17	9,078	1,526	191.69	9,718	6,413
191.18	9,091	1,616	191.70	9,731	6,510
191.19	9,103	1,707	191.71	9,743	6,607
191.20	9,115	1,798	191.72	9,755	6,705
191.21	9,128	1,890	191.73	9,768	6,802
191.22	9,140	1,981	191.74	9,780	6,900
191.23	9,152	2,072	191.75	9,792	6,998
191.24	9,164	2,164	191.76	9,805	7,096
191.25	9,177	2,256	191.77	9,817	7,194
191.26	9,189	2,348	191.78	9,829	7,292
191.27	9,201	2,439	191.79	9,841	7,391
191.28	9,214	2,532	191.80	9,854	7,489
191.29	9,226	2,624	191.81	9,866	7,588
191.30	9,238	2,716	191.82	9,878	7,686
191.31	9,251	2,809	191.83	9,891	7,785
191.32	9,263	2,901	191.84	9,903	7,884
191.33	9,275	2,994	191.85	9,915	7,983
191.34	9,288	3,087	191.86	9,928	8,083
191.35	9,300	3,180	191.87	9,940	8,182
191.36	9,312	3,273	191.88	9,952	8,281
191.37	9,324	3,366	191.89	9,965	8,381
191.38	9,337	3,459	191.90	9,977	8,481
191.39	9,349	3,553	191.91	9,989	8,580
191.40	9,361	3,646	191.92	10,002	8,680
191.41	9,374	3,740	191.93	10,014	8,781
191.42	9,386	3,834	191.94	10,026	8,881
191.43	9,398	3,927	191.95	10,038	8,981
191.44	9,411	4,022	191.96	10,051	9,081
191.45	9,423	4,116	191.97	10,063	9,182
191.46	9,435	4,210	191.98	10,075	9,283
191.47	9,448	4,304	191.99	10,088	9,384
191.48	9,460	4,399	192.00	10,100	9,485
191.49	9,472	4,494	192.01	10,113	9,586
191.50	9,485	4,588	192.02	10,126	9,687
191.51	9,497	4,683	192.03	10,139	9,788

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.04	10,151	9,890
192.05	10,164	9,991
192.06	10,177	10,093
192.07	10,190	10,195
192.08	10,203	10,297
192.09	10,216	10,399
192.10	10,229	10,501
192.11	10,242	10,603
192.12	10,254	10,706
192.13	10,267	10,808
192.14	10,280	10,911
192.15	10,293	11,014
192.16	10,306	11,117
192.17	10,319	11,220
192.18	10,332	11,323
192.19	10,345	11,427
192.20	10,357	11,530
192.21	10,370	11,634
192.22	10,383	11,738
192.23	10,396	11,842
192.24	10,409	11,946
192.25	10,422	12,050
192.26	10,435	12,154
192.27	10,447	12,258
192.28	10,460	12,363
192.29	10,473	12,468
192.30	10,486	12,572
192.31	10,499	12,677
192.32	10,512	12,782
192.33	10,525	12,888
192.34	10,538	12,993
192.35	10,550	13,098
192.36	10,563	13,204
192.37	10,576	13,310
192.38	10,589	13,415
192.39	10,602	13,521
192.40	10,615	13,627
192.41	10,628	13,734
192.42	10,641	13,840
192.43	10,653	13,946
192.44	10,666	14,053
192.45	10,679	14,160
192.46	10,692	14,267
192.47	10,705	14,374
192.48	10,718	14,481
192.49	10,731	14,588
192.50	10,744	14,695
192.51	10,756	14,803
192.52	10,769	14,911
192.53	10,782	15,018
192.54	10,795	15,126
192.55	10,808	15,234
192.56	10,821	15,342
192.57	10,834	15,451
192.58	10,846	15,559
192.59	10,859	15,668
192.60	10,872	15,776
192.61	10,885	15,885
192.62	10,898	15,994
192.63	10,911	16,103
192.64	10,924	16,212
192.65	10,937	16,321
192.66	10,949	16,431
192.67	10,962	16,540
192.68	10,975	16,650
192.69	10,988	16,760
192.70	11,001	16,870
192.71	11,014	16,980
192.72	11,027	17,090
192.73	11,040	17,200
192.74	11,052	17,311
192.75	11,065	17,421
192.76	11,078	17,532
192.77	11,091	17,643
192.78	11,104	17,754
192.79	11,117	17,865
192.80	11,130	17,976
192.81	11,142	18,088
192.82	11,155	18,199
192.83	11,168	18,311
192.84	11,181	18,423
192.85	11,194	18,534
192.86	11,207	18,646
192.87	11,220	18,759
192.88	11,233	18,871
192.89	11,245	18,983
192.90	11,258	19,096
192.91	11,271	19,208
192.92	11,284	19,321
192.93	11,297	19,434
192.94	11,310	19,547
192.95	11,323	19,660
192.96	11,336	19,774
192.97	11,348	19,887
192.98	11,361	20,001
192.99	11,374	20,114
193.00	11,387	20,228
193.01	11,400	20,342
193.02	11,414	20,456
193.03	11,427	20,570
193.04	11,441	20,685
193.05	11,454	20,799
193.06	11,468	20,914
193.07	11,481	21,028

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.08	11,495	21,143
193.09	11,508	21,258
193.10	11,521	21,373
193.11	11,535	21,489
193.12	11,548	21,604
193.13	11,562	21,720
193.14	11,575	21,835
193.15	11,589	21,951
193.16	11,602	22,067
193.17	11,615	22,183
193.18	11,629	22,299
193.19	11,642	22,416
193.20	11,656	22,532
193.21	11,669	22,649
193.22	11,683	22,766
193.23	11,696	22,883
193.24	11,710	23,000
193.25	11,723	23,117
193.26	11,736	23,234
193.27	11,750	23,351
193.28	11,763	23,469
193.29	11,777	23,587
193.30	11,790	23,705
193.31	11,804	23,823
193.32	11,817	23,941
193.33	11,831	24,059
193.34	11,844	24,177
193.35	11,857	24,296
193.36	11,871	24,414
193.37	11,884	24,533
193.38	11,898	24,652
193.39	11,911	24,771
193.40	11,925	24,890
193.41	11,938	25,010
193.42	11,951	25,129
193.43	11,965	25,249
193.44	11,978	25,368
193.45	11,992	25,488
193.46	12,005	25,608
193.47	12,019	25,728
193.48	12,032	25,849
193.49	12,046	25,969
193.50	12,059	26,090
193.51	12,072	26,210
193.52	12,086	26,331
193.53	12,099	26,452
193.54	12,113	26,573
193.55	12,126	26,694
193.56	12,140	26,815
193.57	12,153	26,937
193.58	12,167	27,059
193.59	12,180	27,180
193.60	12,193	27,302
193.61	12,207	27,424
193.62	12,220	27,546
193.63	12,234	27,669
193.64	12,247	27,791
193.65	12,261	27,913
193.66	12,274	28,036
193.67	12,287	28,159
193.68	12,301	28,282
193.69	12,314	28,405
193.70	12,328	28,528
193.71	12,341	28,652
193.72	12,355	28,775
193.73	12,368	28,899
193.74	12,382	29,022
193.75	12,395	29,146
193.76	12,408	29,270
193.77	12,422	29,394
193.78	12,435	29,519
193.79	12,449	29,643
193.80	12,462	29,768
193.81	12,476	29,892
193.82	12,489	30,017
193.83	12,503	30,142
193.84	12,516	30,267
193.85	12,529	30,392
193.86	12,543	30,518
193.87	12,556	30,643
193.88	12,570	30,769
193.89	12,583	30,895
193.90	12,597	31,021
193.91	12,610	31,147
193.92	12,623	31,273
193.93	12,637	31,399
193.94	12,650	31,526
193.95	12,664	31,652
193.96	12,677	31,779
193.97	12,691	31,906
193.98	12,704	32,033
193.99	12,718	32,160
194.00	**12,731**	**32,287**

Summary for Pond B-49: Basin #49

Inflow Area = 2.090 ac, 43.68% Impervious, Inflow Depth = 6.72" for Current 100 yr event
Inflow = 14.20 cfs @ 12.17 hrs, Volume= 1.170 af
Outflow = 8.24 cfs @ 12.31 hrs, Volume= 1.032 af, Atten= 42%, Lag= 8.2 min
Primary = 8.24 cfs @ 12.31 hrs, Volume= 1.032 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 185.57' @ 12.31 hrs Surf.Area= 9,363 sf Storage= 20,404 cf

Plug-Flow detention time= 299.8 min calculated for 1.032 af (88% of inflow)
Center-of-Mass det. time= 241.2 min (1,020.3 - 779.2)

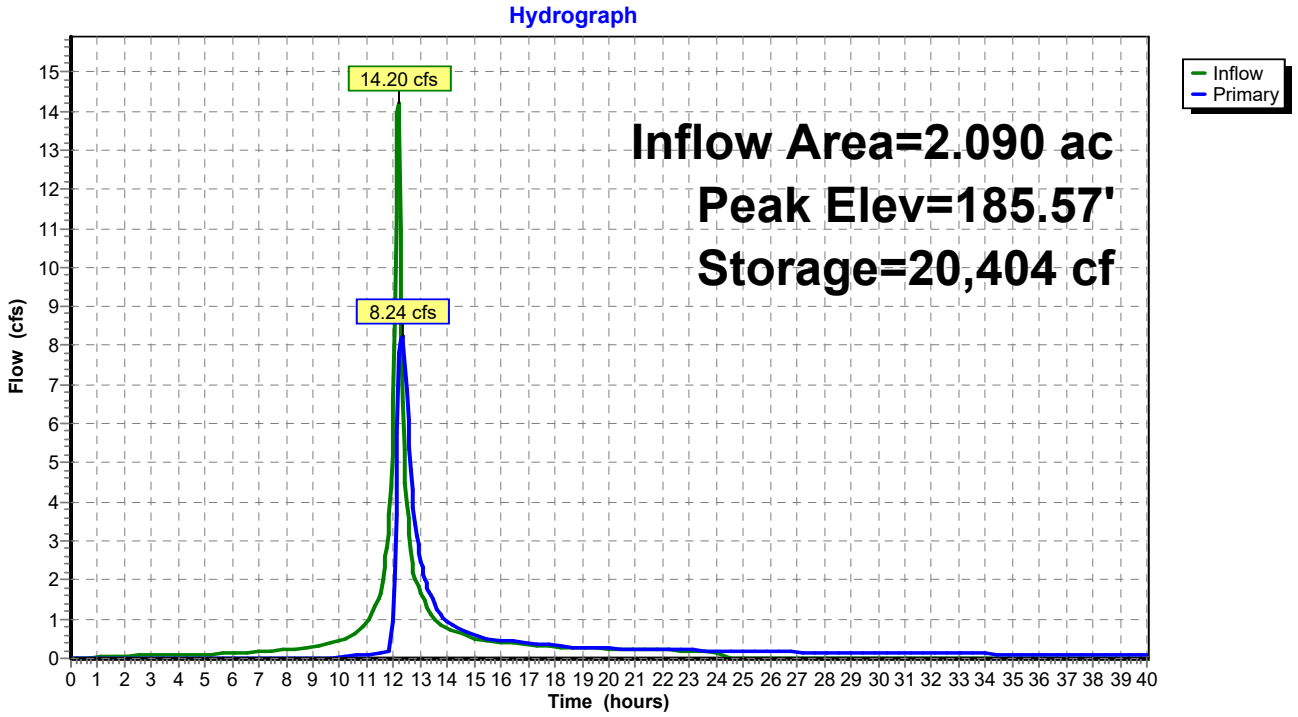
Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	52,993 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	6,565	0	0
184.00	7,625	7,095	7,095
185.00	8,717	8,171	15,266
186.00	9,853	9,285	24,551
187.00	11,027	10,440	34,991
188.00	12,333	11,680	46,671
188.50	12,956	6,322	52,993

Device	Routing	Invert	Outlet Devices
#1	Primary	183.00'	**15.0" Round Culvert** L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.81' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	183.55'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.74'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.25'	**100.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=8.23 cfs @ 12.31 hrs HW=185.57' (Free Discharge)
- **1=Culvert** (Inlet Controls 8.23 cfs @ 6.71 fps)
  - **2=Orifice/Grate** (Passes < 0.23 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 9.41 cfs potential flow)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-49: Basin #49



Stage-Discharge for Pond B-49: Basin #49

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.00	0.00	183.52	0.00	184.04	0.10	184.56	0.16
183.01	0.00	183.53	0.00	184.05	0.10	184.57	0.16
183.02	0.00	183.54	0.00	184.06	0.10	184.58	0.16
183.03	0.00	183.55	0.00	184.07	0.11	184.59	0.16
183.04	0.00	183.56	0.00	184.08	0.11	184.60	0.16
183.05	0.00	183.57	0.00	184.09	0.11	184.61	0.16
183.06	0.00	183.58	0.00	184.10	0.11	184.62	0.16
183.07	0.00	183.59	0.00	184.11	0.11	184.63	0.16
183.08	0.00	183.60	0.00	184.12	0.11	184.64	0.16
183.09	0.00	183.61	0.01	184.13	0.11	184.65	0.16
183.10	0.00	183.62	0.01	184.14	0.11	184.66	0.16
183.11	0.00	183.63	0.01	184.15	0.12	184.67	0.17
183.12	0.00	183.64	0.01	184.16	0.12	184.68	0.17
183.13	0.00	183.65	0.02	184.17	0.12	184.69	0.17
183.14	0.00	183.66	0.02	184.18	0.12	184.70	0.17
183.15	0.00	183.67	0.02	184.19	0.12	184.71	0.17
183.16	0.00	183.68	0.03	184.20	0.12	184.72	0.17
183.17	0.00	183.69	0.03	184.21	0.12	184.73	0.17
183.18	0.00	183.70	0.03	184.22	0.12	184.74	0.17
183.19	0.00	183.71	0.04	184.23	0.12	184.75	0.18
183.20	0.00	183.72	0.04	184.24	0.13	184.76	0.21
183.21	0.00	183.73	0.05	184.25	0.13	184.77	0.24
183.22	0.00	183.74	0.05	184.26	0.13	184.78	0.28
183.23	0.00	183.75	0.05	184.27	0.13	184.79	0.32
183.24	0.00	183.76	0.05	184.28	0.13	184.80	0.37
183.25	0.00	183.77	0.06	184.29	0.13	184.81	0.42
183.26	0.00	183.78	0.06	184.30	0.13	184.82	0.47
183.27	0.00	183.79	0.06	184.31	0.13	184.83	0.53
183.28	0.00	183.80	0.06	184.32	0.13	184.84	0.59
183.29	0.00	183.81	0.06	184.33	0.13	184.85	0.65
183.30	0.00	183.82	0.07	184.34	0.14	184.86	0.72
183.31	0.00	183.83	0.07	184.35	0.14	184.87	0.79
183.32	0.00	183.84	0.07	184.36	0.14	184.88	0.86
183.33	0.00	183.85	0.07	184.37	0.14	184.89	0.94
183.34	0.00	183.86	0.07	184.38	0.14	184.90	1.01
183.35	0.00	183.87	0.08	184.39	0.14	184.91	1.09
183.36	0.00	183.88	0.08	184.40	0.14	184.92	1.17
183.37	0.00	183.89	0.08	184.41	0.14	184.93	1.26
183.38	0.00	183.90	0.08	184.42	0.14	184.94	1.34
183.39	0.00	183.91	0.08	184.43	0.14	184.95	1.43
183.40	0.00	183.92	0.08	184.44	0.15	184.96	1.52
183.41	0.00	183.93	0.09	184.45	0.15	184.97	1.61
183.42	0.00	183.94	0.09	184.46	0.15	184.98	1.71
183.43	0.00	183.95	0.09	184.47	0.15	184.99	1.80
183.44	0.00	183.96	0.09	184.48	0.15	185.00	1.90
183.45	0.00	183.97	0.09	184.49	0.15	185.01	2.00
183.46	0.00	183.98	0.09	184.50	0.15	185.02	2.10
183.47	0.00	183.99	0.10	184.51	0.15	185.03	2.21
183.48	0.00	184.00	0.10	184.52	0.15	185.04	2.31
183.49	0.00	184.01	0.10	184.53	0.15	185.05	2.42
183.50	0.00	184.02	0.10	184.54	0.15	185.06	2.52
183.51	0.00	184.03	0.10	184.55	0.16	185.07	2.63

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.08	2.75	185.60	8.30	186.12	9.33	186.64	10.26
185.09	2.86	185.61	8.33	186.13	9.35	186.65	10.28
185.10	2.97	185.62	8.35	186.14	9.37	186.66	10.29
185.11	3.09	185.63	8.37	186.15	9.39	186.67	10.31
185.12	3.20	185.64	8.39	186.16	9.41	186.68	10.33
185.13	3.32	185.65	8.41	186.17	9.43	186.69	10.34
185.14	3.44	185.66	8.43	186.18	9.44	186.70	10.36
185.15	3.56	185.67	8.45	186.19	9.46	186.71	10.38
185.16	3.69	185.68	8.47	186.20	9.48	186.72	10.40
185.17	3.81	185.69	8.49	186.21	9.50	186.73	10.41
185.18	3.94	185.70	8.51	186.22	9.52	186.74	10.43
185.19	4.06	185.71	8.53	186.23	9.54	186.75	10.45
185.20	4.19	185.72	8.55	186.24	9.56	186.76	10.46
185.21	4.32	185.73	8.57	186.25	9.57	186.77	10.48
185.22	4.45	185.74	8.59	186.26	9.59	186.78	10.50
185.23	4.58	185.75	8.61	186.27	9.61	186.79	10.51
185.24	4.72	185.76	8.63	186.28	9.63	186.80	10.53
185.25	4.85	185.77	8.65	186.29	9.65	186.81	10.55
185.26	4.99	185.78	8.67	186.30	9.66	186.82	10.56
185.27	5.12	185.79	8.69	186.31	9.68	186.83	10.58
185.28	5.26	185.80	8.71	186.32	9.70	186.84	10.59
185.29	5.40	185.81	8.73	186.33	9.72	186.85	10.61
185.30	5.54	185.82	8.75	186.34	9.74	186.86	10.63
185.31	5.68	185.83	8.77	186.35	9.75	186.87	10.64
185.32	5.82	185.84	8.79	186.36	9.77	186.88	10.66
185.33	5.97	185.85	8.81	186.37	9.79	186.89	10.68
185.34	6.11	185.86	8.83	186.38	9.81	186.90	10.69
185.35	6.26	185.87	8.85	186.39	9.83	186.91	10.71
185.36	6.40	185.88	8.87	186.40	9.84	186.92	10.73
185.37	6.55	185.89	8.89	186.41	9.86	186.93	10.74
185.38	6.70	185.90	8.91	186.42	9.88	186.94	10.76
185.39	6.85	185.91	8.93	186.43	9.90	186.95	10.77
185.40	7.00	185.92	8.95	186.44	9.91	186.96	10.79
185.41	7.15	185.93	8.97	186.45	9.93	186.97	10.81
185.42	7.30	185.94	8.99	186.46	9.95	186.98	10.82
185.43	7.46	185.95	9.01	186.47	9.97	186.99	10.84
185.44	7.61	185.96	9.03	186.48	9.98	187.00	10.86
185.45	7.77	185.97	9.05	186.49	10.00	187.01	10.87
185.46	7.92	185.98	9.07	186.50	10.02	187.02	10.89
185.47	8.03	185.99	9.09	186.51	10.04	187.03	10.90
185.48	8.05	186.00	9.11	186.52	10.05	187.04	10.92
185.49	8.07	186.01	9.13	186.53	10.07	187.05	10.94
185.50	8.09	186.02	9.14	186.54	10.09	187.06	10.95
185.51	8.11	186.03	9.16	186.55	10.11	187.07	10.97
185.52	8.13	186.04	9.18	186.56	10.12	187.08	10.98
185.53	8.16	186.05	9.20	186.57	10.14	187.09	11.00
185.54	8.18	186.06	9.22	186.58	10.16	187.10	11.01
185.55	8.20	186.07	9.24	186.59	10.17	187.11	11.03
185.56	8.22	186.08	9.26	186.60	10.19	187.12	11.05
185.57	8.24	186.09	9.28	186.61	10.21	187.13	11.06
185.58	8.26	186.10	9.30	186.62	10.23	187.14	11.08
185.59	8.28	186.11	9.31	186.63	10.24	187.15	11.09

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.16	11.11	187.68	11.90	188.20	12.64
187.17	11.13	187.69	11.91	188.21	12.65
187.18	11.14	187.70	11.93	188.22	12.67
187.19	11.16	187.71	11.94	188.23	12.68
187.20	11.17	187.72	11.96	188.24	12.69
187.21	11.19	187.73	11.97	188.25	12.71
187.22	11.20	187.74	11.99	188.26	13.05
187.23	11.22	187.75	12.00	188.27	13.66
187.24	11.23	187.76	12.02	188.28	14.45
187.25	11.25	187.77	12.03	188.29	15.38
187.26	11.27	187.78	12.04	188.30	16.43
187.27	11.28	187.79	12.06	188.31	17.59
187.28	11.30	187.80	12.07	188.32	18.86
187.29	11.31	187.81	12.09	188.33	20.21
187.30	11.33	187.82	12.10	188.34	21.66
187.31	11.34	187.83	12.12	188.35	23.18
187.32	11.36	187.84	12.13	188.36	24.78
187.33	11.37	187.85	12.15	188.37	26.46
187.34	11.39	187.86	12.16	188.38	28.21
187.35	11.40	187.87	12.17	188.39	30.02
187.36	11.42	187.88	12.19	188.40	31.90
187.37	11.43	187.89	12.20	188.41	33.85
187.38	11.45	187.90	12.22	188.42	35.85
187.39	11.47	187.91	12.23	188.43	37.92
187.40	11.48	187.92	12.25	188.44	40.04
187.41	11.50	187.93	12.26	188.45	42.22
187.42	11.51	187.94	12.27	188.46	44.45
187.43	11.53	187.95	12.29	188.47	46.73
187.44	11.54	187.96	12.30	188.48	49.07
187.45	11.56	187.97	12.32	188.49	51.46
187.46	11.57	187.98	12.33	188.50	**53.90**
187.47	11.59	187.99	12.35		
187.48	11.60	188.00	12.36		
187.49	11.62	188.01	12.37		
187.50	11.63	188.02	12.39		
187.51	11.65	188.03	12.40		
187.52	11.66	188.04	12.42		
187.53	11.68	188.05	12.43		
187.54	11.69	188.06	12.44		
187.55	11.71	188.07	12.46		
187.56	11.72	188.08	12.47		
187.57	11.74	188.09	12.49		
187.58	11.75	188.10	12.50		
187.59	11.77	188.11	12.51		
187.60	11.78	188.12	12.53		
187.61	11.80	188.13	12.54		
187.62	11.81	188.14	12.56		
187.63	11.83	188.15	12.57		
187.64	11.84	188.16	12.58		
187.65	11.85	188.17	12.60		
187.66	11.87	188.18	12.61		
187.67	11.88	188.19	12.62		

Stage-Area-Storage for Pond B-49: Basin #49

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	6,565	0	183.52	7,116	3,557
183.01	6,576	66	183.53	7,127	3,628
183.02	6,586	132	183.54	7,137	3,700
183.03	6,597	197	183.55	7,148	3,771
183.04	6,607	263	183.56	7,159	3,843
183.05	6,618	330	183.57	7,169	3,914
183.06	6,629	396	183.58	7,180	3,986
183.07	6,639	462	183.59	7,190	4,058
183.08	6,650	529	183.60	7,201	4,130
183.09	6,660	595	183.61	7,212	4,202
183.10	6,671	662	183.62	7,222	4,274
183.11	6,682	729	183.63	7,233	4,346
183.12	6,692	795	183.64	7,243	4,419
183.13	6,703	862	183.65	7,254	4,491
183.14	6,713	929	183.66	7,265	4,564
183.15	6,724	997	183.67	7,275	4,636
183.16	6,735	1,064	183.68	7,286	4,709
183.17	6,745	1,131	183.69	7,296	4,782
183.18	6,756	1,199	183.70	7,307	4,855
183.19	6,766	1,266	183.71	7,318	4,928
183.20	6,777	1,334	183.72	7,328	5,002
183.21	6,788	1,402	183.73	7,339	5,075
183.22	6,798	1,470	183.74	7,349	5,148
183.23	6,809	1,538	183.75	7,360	5,222
183.24	6,819	1,606	183.76	7,371	5,296
183.25	6,830	1,674	183.77	7,381	5,369
183.26	6,841	1,743	183.78	7,392	5,443
183.27	6,851	1,811	183.79	7,402	5,517
183.28	6,862	1,880	183.80	7,413	5,591
183.29	6,872	1,948	183.81	7,424	5,665
183.30	6,883	2,017	183.82	7,434	5,740
183.31	6,894	2,086	183.83	7,445	5,814
183.32	6,904	2,155	183.84	7,455	5,889
183.33	6,915	2,224	183.85	7,466	5,963
183.34	6,925	2,293	183.86	7,477	6,038
183.35	6,936	2,363	183.87	7,487	6,113
183.36	6,947	2,432	183.88	7,498	6,188
183.37	6,957	2,502	183.89	7,508	6,263
183.38	6,968	2,571	183.90	7,519	6,338
183.39	6,978	2,641	183.91	7,530	6,413
183.40	6,989	2,711	183.92	7,540	6,488
183.41	7,000	2,781	183.93	7,551	6,564
183.42	7,010	2,851	183.94	7,561	6,639
183.43	7,021	2,921	183.95	7,572	6,715
183.44	7,031	2,991	183.96	7,583	6,791
183.45	7,042	3,062	183.97	7,593	6,867
183.46	7,053	3,132	183.98	7,604	6,943
183.47	7,063	3,203	183.99	7,614	7,019
183.48	7,074	3,273	184.00	7,625	7,095
183.49	7,084	3,344	184.01	7,636	7,171
183.50	7,095	3,415	184.02	7,647	7,248
183.51	7,106	3,486	184.03	7,658	7,324

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	7,669	7,401	184.56	8,237	11,536
184.05	7,680	7,478	184.57	8,247	11,619
184.06	7,691	7,554	184.58	8,258	11,701
184.07	7,701	7,631	184.59	8,269	11,784
184.08	7,712	7,708	184.60	8,280	11,867
184.09	7,723	7,786	184.61	8,291	11,949
184.10	7,734	7,863	184.62	8,302	12,032
184.11	7,745	7,940	184.63	8,313	12,115
184.12	7,756	8,018	184.64	8,324	12,199
184.13	7,767	8,095	184.65	8,335	12,282
184.14	7,778	8,173	184.66	8,346	12,365
184.15	7,789	8,251	184.67	8,357	12,449
184.16	7,800	8,329	184.68	8,368	12,532
184.17	7,811	8,407	184.69	8,378	12,616
184.18	7,822	8,485	184.70	8,389	12,700
184.19	7,832	8,563	184.71	8,400	12,784
184.20	7,843	8,642	184.72	8,411	12,868
184.21	7,854	8,720	184.73	8,422	12,952
184.22	7,865	8,799	184.74	8,433	13,036
184.23	7,876	8,878	184.75	8,444	13,121
184.24	7,887	8,956	184.76	8,455	13,205
184.25	7,898	9,035	184.77	8,466	13,290
184.26	7,909	9,114	184.78	8,477	13,375
184.27	7,920	9,194	184.79	8,488	13,460
184.28	7,931	9,273	184.80	8,499	13,544
184.29	7,942	9,352	184.81	8,510	13,629
184.30	7,953	9,432	184.82	8,520	13,715
184.31	7,964	9,511	184.83	8,531	13,800
184.32	7,974	9,591	184.84	8,542	13,885
184.33	7,985	9,671	184.85	8,553	13,971
184.34	7,996	9,751	184.86	8,564	14,056
184.35	8,007	9,831	184.87	8,575	14,142
184.36	8,018	9,911	184.88	8,586	14,228
184.37	8,029	9,991	184.89	8,597	14,314
184.38	8,040	10,071	184.90	8,608	14,400
184.39	8,051	10,152	184.91	8,619	14,486
184.40	8,062	10,232	184.92	8,630	14,572
184.41	8,073	10,313	184.93	8,641	14,658
184.42	8,084	10,394	184.94	8,651	14,745
184.43	8,095	10,475	184.95	8,662	14,832
184.44	8,105	10,556	184.96	8,673	14,918
184.45	8,116	10,637	184.97	8,684	15,005
184.46	8,127	10,718	184.98	8,695	15,092
184.47	8,138	10,799	184.99	8,706	15,179
184.48	8,149	10,881	185.00	8,717	15,266
184.49	8,160	10,962	185.01	8,728	15,353
184.50	8,171	11,044	185.02	8,740	15,441
184.51	8,182	11,126	185.03	8,751	15,528
184.52	8,193	11,208	185.04	8,762	15,616
184.53	8,204	11,290	185.05	8,774	15,703
184.54	8,215	11,372	185.06	8,785	15,791
184.55	8,226	11,454	185.07	8,797	15,879

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	8,808	15,967	185.60	9,399	20,701
185.09	8,819	16,055	185.61	9,410	20,795
185.10	8,831	16,143	185.62	9,421	20,889
185.11	8,842	16,232	185.63	9,433	20,983
185.12	8,853	16,320	185.64	9,444	21,078
185.13	8,865	16,409	185.65	9,455	21,172
185.14	8,876	16,498	185.66	9,467	21,267
185.15	8,887	16,586	185.67	9,478	21,361
185.16	8,899	16,675	185.68	9,489	21,456
185.17	8,910	16,764	185.69	9,501	21,551
185.18	8,921	16,853	185.70	9,512	21,646
185.19	8,933	16,943	185.71	9,524	21,741
185.20	8,944	17,032	185.72	9,535	21,837
185.21	8,956	17,122	185.73	9,546	21,932
185.22	8,967	17,211	185.74	9,558	22,028
185.23	8,978	17,301	185.75	9,569	22,123
185.24	8,990	17,391	185.76	9,580	22,219
185.25	9,001	17,481	185.77	9,592	22,315
185.26	9,012	17,571	185.78	9,603	22,411
185.27	9,024	17,661	185.79	9,614	22,507
185.28	9,035	17,751	185.80	9,626	22,603
185.29	9,046	17,842	185.81	9,637	22,699
185.30	9,058	17,932	185.82	9,649	22,796
185.31	9,069	18,023	185.83	9,660	22,892
185.32	9,081	18,114	185.84	9,671	22,989
185.33	9,092	18,204	185.85	9,683	23,086
185.34	9,103	18,295	185.86	9,694	23,183
185.35	9,115	18,387	185.87	9,705	23,280
185.36	9,126	18,478	185.88	9,717	23,377
185.37	9,137	18,569	185.89	9,728	23,474
185.38	9,149	18,660	185.90	9,739	23,571
185.39	9,160	18,752	185.91	9,751	23,669
185.40	9,171	18,844	185.92	9,762	23,766
185.41	9,183	18,935	185.93	9,773	23,864
185.42	9,194	19,027	185.94	9,785	23,962
185.43	9,205	19,119	185.95	9,796	24,060
185.44	9,217	19,211	185.96	9,808	24,158
185.45	9,228	19,304	185.97	9,819	24,256
185.46	9,240	19,396	185.98	9,830	24,354
185.47	9,251	19,488	185.99	9,842	24,453
185.48	9,262	19,581	186.00	9,853	24,551
185.49	9,274	19,674	186.01	9,865	24,650
185.50	9,285	19,767	186.02	9,876	24,748
185.51	9,296	19,859	186.03	9,888	24,847
185.52	9,308	19,952	186.04	9,900	24,946
185.53	9,319	20,046	186.05	9,912	25,045
185.54	9,330	20,139	186.06	9,923	25,144
185.55	9,342	20,232	186.07	9,935	25,244
185.56	9,353	20,326	186.08	9,947	25,343
185.57	9,365	20,419	186.09	9,959	25,443
185.58	9,376	20,513	186.10	9,970	25,542
185.59	9,387	20,607	186.11	9,982	25,642

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.12	9,994	25,742	186.64	10,604	31,097
186.13	10,006	25,842	186.65	10,616	31,203
186.14	10,017	25,942	186.66	10,628	31,310
186.15	10,029	26,042	186.67	10,640	31,416
186.16	10,041	26,143	186.68	10,651	31,522
186.17	10,053	26,243	186.69	10,663	31,629
186.18	10,064	26,344	186.70	10,675	31,736
186.19	10,076	26,444	186.71	10,687	31,843
186.20	10,088	26,545	186.72	10,698	31,949
186.21	10,100	26,646	186.73	10,710	32,057
186.22	10,111	26,747	186.74	10,722	32,164
186.23	10,123	26,848	186.75	10,734	32,271
186.24	10,135	26,950	186.76	10,745	32,378
186.25	10,147	27,051	186.77	10,757	32,486
186.26	10,158	27,152	186.78	10,769	32,593
186.27	10,170	27,254	186.79	10,780	32,701
186.28	10,182	27,356	186.80	10,792	32,809
186.29	10,193	27,458	186.81	10,804	32,917
186.30	10,205	27,560	186.82	10,816	33,025
186.31	10,217	27,662	186.83	10,827	33,133
186.32	10,229	27,764	186.84	10,839	33,242
186.33	10,240	27,866	186.85	10,851	33,350
186.34	10,252	27,969	186.86	10,863	33,459
186.35	10,264	28,071	186.87	10,874	33,567
186.36	10,276	28,174	186.88	10,886	33,676
186.37	10,287	28,277	186.89	10,898	33,785
186.38	10,299	28,380	186.90	10,910	33,894
186.39	10,311	28,483	186.91	10,921	34,003
186.40	10,323	28,586	186.92	10,933	34,113
186.41	10,334	28,689	186.93	10,945	34,222
186.42	10,346	28,793	186.94	10,957	34,331
186.43	10,358	28,896	186.95	10,968	34,441
186.44	10,370	29,000	186.96	10,980	34,551
186.45	10,381	29,104	186.97	10,992	34,661
186.46	10,393	29,208	186.98	11,004	34,771
186.47	10,405	29,312	186.99	11,015	34,881
186.48	10,417	29,416	187.00	11,027	34,991
186.49	10,428	29,520	187.01	11,040	35,101
186.50	10,440	29,624	187.02	11,053	35,212
186.51	10,452	29,729	187.03	11,066	35,322
186.52	10,463	29,833	187.04	11,079	35,433
186.53	10,475	29,938	187.05	11,092	35,544
186.54	10,487	30,043	187.06	11,105	35,655
186.55	10,499	30,148	187.07	11,118	35,766
186.56	10,510	30,253	187.08	11,131	35,877
186.57	10,522	30,358	187.09	11,145	35,989
186.58	10,534	30,463	187.10	11,158	36,100
186.59	10,546	30,569	187.11	11,171	36,212
186.60	10,557	30,674	187.12	11,184	36,324
186.61	10,569	30,780	187.13	11,197	36,436
186.62	10,581	30,886	187.14	11,210	36,548
186.63	10,593	30,991	187.15	11,223	36,660

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.16	11,236	36,772
187.17	11,249	36,884
187.18	11,262	36,997
187.19	11,275	37,110
187.20	11,288	37,223
187.21	11,301	37,335
187.22	11,314	37,449
187.23	11,327	37,562
187.24	11,340	37,675
187.25	11,354	37,789
187.26	11,367	37,902
187.27	11,380	38,016
187.28	11,393	38,130
187.29	11,406	38,244
187.30	11,419	38,358
187.31	11,432	38,472
187.32	11,445	38,587
187.33	11,458	38,701
187.34	11,471	38,816
187.35	11,484	38,930
187.36	11,497	39,045
187.37	11,510	39,160
187.38	11,523	39,276
187.39	11,536	39,391
187.40	11,549	39,506
187.41	11,562	39,622
187.42	11,576	39,738
187.43	11,589	39,853
187.44	11,602	39,969
187.45	11,615	40,085
187.46	11,628	40,202
187.47	11,641	40,318
187.48	11,654	40,434
187.49	11,667	40,551
187.50	11,680	40,668
187.51	11,693	40,785
187.52	11,706	40,902
187.53	11,719	41,019
187.54	11,732	41,136
187.55	11,745	41,253
187.56	11,758	41,371
187.57	11,771	41,489
187.58	11,784	41,606
187.59	11,798	41,724
187.60	11,811	41,842
187.61	11,824	41,960
187.62	11,837	42,079
187.63	11,850	42,197
187.64	11,863	42,316
187.65	11,876	42,434
187.66	11,889	42,553
187.67	11,902	42,672
187.68	11,915	42,791
187.69	11,928	42,911
187.70	11,941	43,030
187.71	11,954	43,149
187.72	11,967	43,269
187.73	11,980	43,389
187.74	11,993	43,509
187.75	12,007	43,629
187.76	12,020	43,749
187.77	12,033	43,869
187.78	12,046	43,989
187.79	12,059	44,110
187.80	12,072	44,231
187.81	12,085	44,351
187.82	12,098	44,472
187.83	12,111	44,593
187.84	12,124	44,714
187.85	12,137	44,836
187.86	12,150	44,957
187.87	12,163	45,079
187.88	12,176	45,200
187.89	12,189	45,322
187.90	12,202	45,444
187.91	12,215	45,566
187.92	12,229	45,689
187.93	12,242	45,811
187.94	12,255	45,933
187.95	12,268	46,056
187.96	12,281	46,179
187.97	12,294	46,302
187.98	12,307	46,425
187.99	12,320	46,548
188.00	12,333	46,671
188.01	12,345	46,794
188.02	12,358	46,918
188.03	12,370	47,042
188.04	12,383	47,165
188.05	12,395	47,289
188.06	12,408	47,413
188.07	12,420	47,537
188.08	12,433	47,662
188.09	12,445	47,786
188.10	12,458	47,911
188.11	12,470	48,035
188.12	12,483	48,160
188.13	12,495	48,285
188.14	12,507	48,410
188.15	12,520	48,535
188.16	12,532	48,660
188.17	12,545	48,786
188.18	12,557	48,911
188.19	12,570	49,037

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.20	12,582	49,163
188.21	12,595	49,288
188.22	12,607	49,414
188.23	12,620	49,541
188.24	12,632	49,667
188.25	12,645	49,793
188.26	12,657	49,920
188.27	12,669	50,046
188.28	12,682	50,173
188.29	12,694	50,300
188.30	12,707	50,427
188.31	12,719	50,554
188.32	12,732	50,681
188.33	12,744	50,809
188.34	12,757	50,936
188.35	12,769	51,064
188.36	12,782	51,192
188.37	12,794	51,319
188.38	12,806	51,448
188.39	12,819	51,576
188.40	12,831	51,704
188.41	12,844	51,832
188.42	12,856	51,961
188.43	12,869	52,089
188.44	12,881	52,218
188.45	12,894	52,347
188.46	12,906	52,476
188.47	12,919	52,605
188.48	12,931	52,734
188.49	12,944	52,864
188.50	**12,956**	**52,993**

Summary for Pond B-50: Basin #50

Inflow Area = 2.262 ac, 29.27% Impervious, Inflow Depth = 6.30" for Current 100 yr event
Inflow = 14.76 cfs @ 12.17 hrs, Volume= 1.188 af
Outflow = 8.40 cfs @ 12.31 hrs, Volume= 1.050 af, Atten= 43%, Lag= 8.6 min
Primary = 8.40 cfs @ 12.31 hrs, Volume= 1.050 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 186.05' @ 12.31 hrs Surf.Area= 11,518 sf Storage= 20,816 cf

Plug-Flow detention time= 284.2 min calculated for 1.050 af (88% of inflow)
Center-of-Mass det. time= 226.6 min (1,017.4 - 790.9)

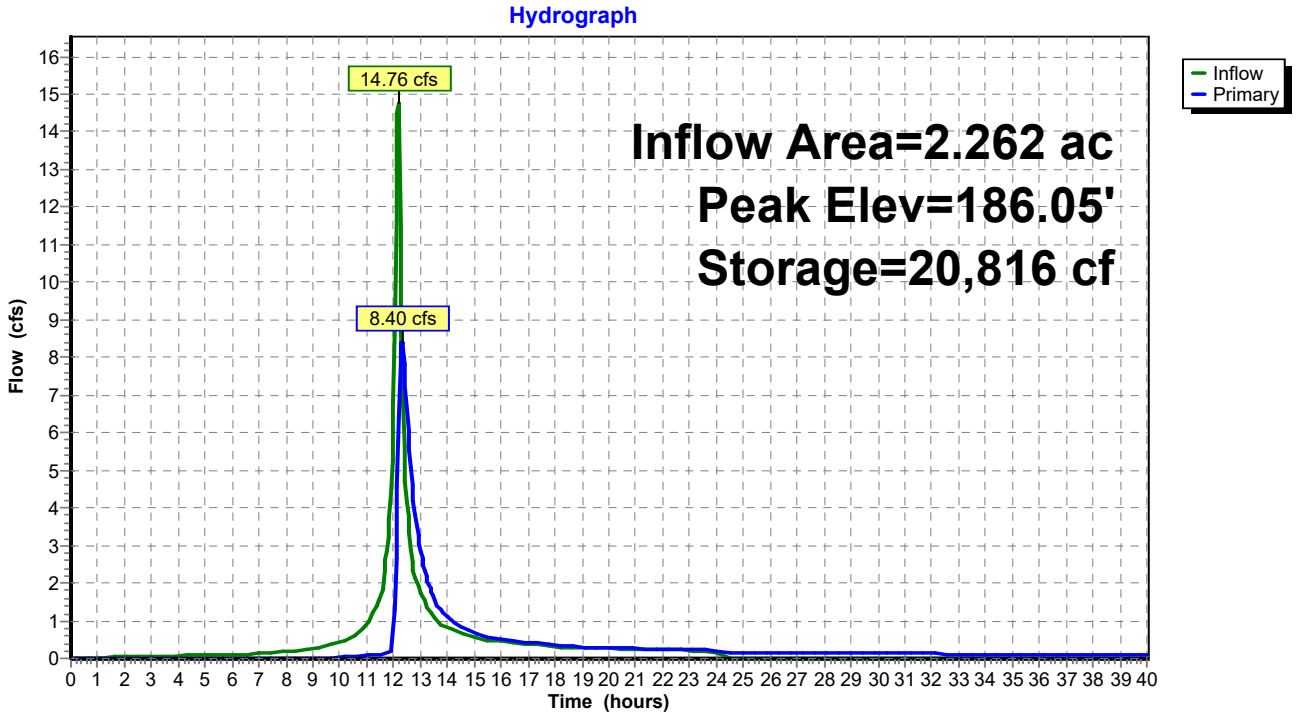
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	53,209 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	8,805	0	0
185.00	10,108	9,457	9,457
186.00	11,448	10,778	20,235
187.00	12,826	12,137	32,372
188.00	14,244	13,535	45,907
188.50	14,966	7,303	53,209

Device	Routing	Invert	Outlet Devices
#1	Primary	180.50'	**18.0" Round Culvert** L= 83.0' Ke= 0.500 Inlet / Outlet Invert= 180.50' / 179.67' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.32'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.30'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.33 cfs @ 12.31 hrs HW=186.05' (Free Discharge)
- **1=Culvert** (Passes 8.33 cfs of 18.03 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.21 cfs @ 6.13 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 8.13 cfs @ 2.83 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-50: Basin #50



Stage-Discharge for Pond B-50: Basin #50

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	0.05	185.04	0.13	185.56	1.89
184.01	0.00	184.53	0.05	185.05	0.13	185.57	1.99
184.02	0.00	184.54	0.06	185.06	0.13	185.58	2.09
184.03	0.00	184.55	0.06	185.07	0.13	185.59	2.19
184.04	0.00	184.56	0.06	185.08	0.13	185.60	2.30
184.05	0.00	184.57	0.06	185.09	0.13	185.61	2.40
184.06	0.00	184.58	0.06	185.10	0.13	185.62	2.51
184.07	0.00	184.59	0.07	185.11	0.14	185.63	2.62
184.08	0.00	184.60	0.07	185.12	0.14	185.64	2.73
184.09	0.00	184.61	0.07	185.13	0.14	185.65	2.84
184.10	0.00	184.62	0.07	185.14	0.14	185.66	2.96
184.11	0.00	184.63	0.07	185.15	0.14	185.67	3.07
184.12	0.00	184.64	0.08	185.16	0.14	185.68	3.19
184.13	0.00	184.65	0.08	185.17	0.14	185.69	3.31
184.14	0.00	184.66	0.08	185.18	0.14	185.70	3.43
184.15	0.00	184.67	0.08	185.19	0.14	185.71	3.55
184.16	0.00	184.68	0.08	185.20	0.14	185.72	3.67
184.17	0.00	184.69	0.08	185.21	0.15	185.73	3.80
184.18	0.00	184.70	0.09	185.22	0.15	185.74	3.92
184.19	0.00	184.71	0.09	185.23	0.15	185.75	4.05
184.20	0.00	184.72	0.09	185.24	0.15	185.76	4.18
184.21	0.00	184.73	0.09	185.25	0.15	185.77	4.31
184.22	0.00	184.74	0.09	185.26	0.15	185.78	4.44
184.23	0.00	184.75	0.09	185.27	0.15	185.79	4.57
184.24	0.00	184.76	0.10	185.28	0.15	185.80	4.70
184.25	0.00	184.77	0.10	185.29	0.15	185.81	4.84
184.26	0.00	184.78	0.10	185.30	0.15	185.82	4.97
184.27	0.00	184.79	0.10	185.31	0.17	185.83	5.11
184.28	0.00	184.80	0.10	185.32	0.19	185.84	5.25
184.29	0.00	184.81	0.10	185.33	0.22	185.85	5.38
184.30	0.00	184.82	0.10	185.34	0.26	185.86	5.52
184.31	0.00	184.83	0.10	185.35	0.30	185.87	5.67
184.32	0.00	184.84	0.11	185.36	0.35	185.88	5.81
184.33	0.00	184.85	0.11	185.37	0.40	185.89	5.95
184.34	0.00	184.86	0.11	185.38	0.46	185.90	6.10
184.35	0.00	184.87	0.11	185.39	0.51	185.91	6.24
184.36	0.00	184.88	0.11	185.40	0.57	185.92	6.39
184.37	0.00	184.89	0.11	185.41	0.64	185.93	6.54
184.38	0.01	184.90	0.11	185.42	0.70	185.94	6.68
184.39	0.01	184.91	0.11	185.43	0.77	185.95	6.83
184.40	0.01	184.92	0.12	185.44	0.85	185.96	6.99
184.41	0.01	184.93	0.12	185.45	0.92	185.97	7.14
184.42	0.02	184.94	0.12	185.46	1.00	185.98	7.29
184.43	0.02	184.95	0.12	185.47	1.08	185.99	7.44
184.44	0.02	184.96	0.12	185.48	1.16	186.00	7.60
184.45	0.03	184.97	0.12	185.49	1.24	186.01	7.75
184.46	0.03	184.98	0.12	185.50	1.33	186.02	7.91
184.47	0.03	184.99	0.12	185.51	1.42	186.03	8.07
184.48	0.04	185.00	0.12	185.52	1.51	186.04	8.23
184.49	0.04	185.01	0.13	185.53	1.60	186.05	8.39
184.50	0.05	185.02	0.13	185.54	1.69	186.06	8.55
184.51	0.05	185.03	0.13	185.55	1.79	186.07	8.71

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	8.87	186.60	18.37	187.12	19.91	187.64	20.76
186.09	9.03	186.61	18.57	187.13	19.93	187.65	20.78
186.10	9.20	186.62	18.77	187.14	19.95	187.66	20.80
186.11	9.36	186.63	18.97	187.15	19.96	187.67	20.81
186.12	9.53	186.64	19.09	187.16	19.98	187.68	20.83
186.13	9.69	186.65	19.11	187.17	20.00	187.69	20.84
186.14	9.86	186.66	19.13	187.18	20.01	187.70	20.86
186.15	10.03	186.67	19.14	187.19	20.03	187.71	20.88
186.16	10.20	186.68	19.16	187.20	20.05	187.72	20.89
186.17	10.37	186.69	19.18	187.21	20.06	187.73	20.91
186.18	10.54	186.70	19.20	187.22	20.08	187.74	20.92
186.19	10.71	186.71	19.21	187.23	20.10	187.75	20.94
186.20	10.88	186.72	19.23	187.24	20.11	187.76	20.96
186.21	11.06	186.73	19.25	187.25	20.13	187.77	20.97
186.22	11.23	186.74	19.27	187.26	20.15	187.78	20.99
186.23	11.41	186.75	19.28	187.27	20.16	187.79	21.00
186.24	11.58	186.76	19.30	187.28	20.18	187.80	21.02
186.25	11.76	186.77	19.32	187.29	20.19	187.81	21.04
186.26	11.93	186.78	19.33	187.30	20.21	187.82	21.05
186.27	12.11	186.79	19.35	187.31	20.23	187.83	21.07
186.28	12.29	186.80	19.37	187.32	20.24	187.84	21.08
186.29	12.47	186.81	19.39	187.33	20.26	187.85	21.10
186.30	12.65	186.82	19.40	187.34	20.28	187.86	21.11
186.31	12.83	186.83	19.42	187.35	20.29	187.87	21.13
186.32	13.01	186.84	19.44	187.36	20.31	187.88	21.15
186.33	13.20	186.85	19.46	187.37	20.33	187.89	21.16
186.34	13.38	186.86	19.47	187.38	20.34	187.90	21.18
186.35	13.56	186.87	19.49	187.39	20.36	187.91	21.19
186.36	13.75	186.88	19.51	187.40	20.38	187.92	21.21
186.37	13.93	186.89	19.52	187.41	20.39	187.93	21.22
186.38	14.12	186.90	19.54	187.42	20.41	187.94	21.24
186.39	14.30	186.91	19.56	187.43	20.42	187.95	21.26
186.40	14.49	186.92	19.57	187.44	20.44	187.96	21.27
186.41	14.68	186.93	19.59	187.45	20.46	187.97	21.29
186.42	14.87	186.94	19.61	187.46	20.47	187.98	21.30
186.43	15.06	186.95	19.63	187.47	20.49	187.99	21.32
186.44	15.25	186.96	19.64	187.48	20.51	188.00	21.33
186.45	15.44	186.97	19.66	187.49	20.52	188.01	21.35
186.46	15.63	186.98	19.68	187.50	20.54	188.02	21.37
186.47	15.82	186.99	19.69	187.51	20.55	188.03	21.38
186.48	16.01	187.00	19.71	187.52	20.57	188.04	21.40
186.49	16.21	187.01	19.73	187.53	20.59	188.05	21.41
186.50	16.40	187.02	19.74	187.54	20.60	188.06	21.43
186.51	16.59	187.03	19.76	187.55	20.62	188.07	21.44
186.52	16.79	187.04	19.78	187.56	20.64	188.08	21.46
186.53	16.98	187.05	19.79	187.57	20.65	188.09	21.47
186.54	17.18	187.06	19.81	187.58	20.67	188.10	21.49
186.55	17.38	187.07	19.83	187.59	20.68	188.11	21.51
186.56	17.57	187.08	19.85	187.60	20.70	188.12	21.52
186.57	17.77	187.09	19.86	187.61	20.72	188.13	21.54
186.58	17.97	187.10	19.88	187.62	20.73	188.14	21.55
186.59	18.17	187.11	19.90	187.63	20.75	188.15	21.57

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)
188.16	21.58
188.17	21.60
188.18	21.61
188.19	21.63
188.20	21.64
188.21	21.66
188.22	21.67
188.23	21.69
188.24	21.71
188.25	21.72
188.26	21.74
188.27	21.75
188.28	21.77
188.29	21.78
188.30	21.80
188.31	21.81
188.32	21.83
188.33	21.84
188.34	21.86
188.35	21.87
188.36	21.89
188.37	21.90
188.38	21.92
188.39	21.93
188.40	21.95
188.41	21.97
188.42	21.98
188.43	22.00
188.44	22.01
188.45	22.03
188.46	22.16
188.47	22.39
188.48	22.68
188.49	23.02
188.50	**23.41**

Stage-Area-Storage for Pond B-50: Basin #50

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	8,805	0	184.52	9,483	4,755
184.01	8,818	88	184.53	9,496	4,850
184.02	8,831	176	184.54	9,509	4,945
184.03	8,844	265	184.55	9,522	5,040
184.04	8,857	353	184.56	9,535	5,135
184.05	8,870	442	184.57	9,548	5,231
184.06	8,883	531	184.58	9,561	5,326
184.07	8,896	620	184.59	9,574	5,422
184.08	8,909	709	184.60	9,587	5,518
184.09	8,922	798	184.61	9,600	5,613
184.10	8,935	887	184.62	9,613	5,710
184.11	8,948	976	184.63	9,626	5,806
184.12	8,961	1,066	184.64	9,639	5,902
184.13	8,974	1,156	184.65	9,652	5,999
184.14	8,987	1,245	184.66	9,665	6,095
184.15	9,000	1,335	184.67	9,678	6,192
184.16	9,013	1,425	184.68	9,691	6,289
184.17	9,027	1,516	184.69	9,704	6,386
184.18	9,040	1,606	184.70	9,717	6,483
184.19	9,053	1,696	184.71	9,730	6,580
184.20	9,066	1,787	184.72	9,743	6,677
184.21	9,079	1,878	184.73	9,756	6,775
184.22	9,092	1,969	184.74	9,769	6,872
184.23	9,105	2,060	184.75	9,782	6,970
184.24	9,118	2,151	184.76	9,795	7,068
184.25	9,131	2,242	184.77	9,808	7,166
184.26	9,144	2,333	184.78	9,821	7,264
184.27	9,157	2,425	184.79	9,834	7,363
184.28	9,170	2,516	184.80	9,847	7,461
184.29	9,183	2,608	184.81	9,860	7,559
184.30	9,196	2,700	184.82	9,873	7,658
184.31	9,209	2,792	184.83	9,886	7,757
184.32	9,222	2,884	184.84	9,900	7,856
184.33	9,235	2,977	184.85	9,913	7,955
184.34	9,248	3,069	184.86	9,926	8,054
184.35	9,261	3,162	184.87	9,939	8,153
184.36	9,274	3,254	184.88	9,952	8,253
184.37	9,287	3,347	184.89	9,965	8,353
184.38	9,300	3,440	184.90	9,978	8,452
184.39	9,313	3,533	184.91	9,991	8,552
184.40	9,326	3,626	184.92	10,004	8,652
184.41	9,339	3,720	184.93	10,017	8,752
184.42	9,352	3,813	184.94	10,030	8,852
184.43	9,365	3,907	184.95	10,043	8,953
184.44	9,378	4,000	184.96	10,056	9,053
184.45	9,391	4,094	184.97	10,069	9,154
184.46	9,404	4,188	184.98	10,082	9,255
184.47	9,417	4,282	184.99	10,095	9,355
184.48	9,430	4,377	185.00	10,108	9,457
184.49	9,443	4,471	185.01	10,121	9,558
184.50	9,457	4,565	185.02	10,135	9,659
184.51	9,470	4,660	185.03	10,148	9,760

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	10,162	9,862	185.56	10,858	15,327
185.05	10,175	9,964	185.57	10,872	15,436
185.06	10,188	10,065	185.58	10,885	15,545
185.07	10,202	10,167	185.59	10,899	15,653
185.08	10,215	10,269	185.60	10,912	15,762
185.09	10,229	10,372	185.61	10,925	15,872
185.10	10,242	10,474	185.62	10,939	15,981
185.11	10,255	10,576	185.63	10,952	16,090
185.12	10,269	10,679	185.64	10,966	16,200
185.13	10,282	10,782	185.65	10,979	16,310
185.14	10,296	10,885	185.66	10,992	16,420
185.15	10,309	10,988	185.67	11,006	16,530
185.16	10,322	11,091	185.68	11,019	16,640
185.17	10,336	11,194	185.69	11,033	16,750
185.18	10,349	11,298	185.70	11,046	16,860
185.19	10,363	11,401	185.71	11,059	16,971
185.20	10,376	11,505	185.72	11,073	17,082
185.21	10,389	11,609	185.73	11,086	17,192
185.22	10,403	11,713	185.74	11,100	17,303
185.23	10,416	11,817	185.75	11,113	17,414
185.24	10,430	11,921	185.76	11,126	17,526
185.25	10,443	12,025	185.77	11,140	17,637
185.26	10,456	12,130	185.78	11,153	17,748
185.27	10,470	12,235	185.79	11,167	17,860
185.28	10,483	12,339	185.80	11,180	17,972
185.29	10,497	12,444	185.81	11,193	18,084
185.30	10,510	12,549	185.82	11,207	18,196
185.31	10,523	12,654	185.83	11,220	18,308
185.32	10,537	12,760	185.84	11,234	18,420
185.33	10,550	12,865	185.85	11,247	18,532
185.34	10,564	12,971	185.86	11,260	18,645
185.35	10,577	13,076	185.87	11,274	18,758
185.36	10,590	13,182	185.88	11,287	18,870
185.37	10,604	13,288	185.89	11,301	18,983
185.38	10,617	13,394	185.90	11,314	19,096
185.39	10,631	13,501	185.91	11,327	19,210
185.40	10,644	13,607	185.92	11,341	19,323
185.41	10,657	13,713	185.93	11,354	19,436
185.42	10,671	13,820	185.94	11,368	19,550
185.43	10,684	13,927	185.95	11,381	19,664
185.44	10,698	14,034	185.96	11,394	19,778
185.45	10,711	14,141	185.97	11,408	19,892
185.46	10,724	14,248	185.98	11,421	20,006
185.47	10,738	14,355	185.99	11,435	20,120
185.48	10,751	14,463	186.00	11,448	20,235
185.49	10,765	14,570	186.01	11,462	20,349
185.50	10,778	14,678	186.02	11,476	20,464
185.51	10,791	14,786	186.03	11,489	20,579
185.52	10,805	14,894	186.04	11,503	20,694
185.53	10,818	15,002	186.05	11,517	20,809
185.54	10,832	15,110	186.06	11,531	20,924
185.55	10,845	15,219	186.07	11,544	21,039

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	11,558	21,155	186.60	12,275	27,351
186.09	11,572	21,270	186.61	12,289	27,474
186.10	11,586	21,386	186.62	12,302	27,597
186.11	11,600	21,502	186.63	12,316	27,720
186.12	11,613	21,618	186.64	12,330	27,843
186.13	11,627	21,734	186.65	12,344	27,967
186.14	11,641	21,851	186.66	12,357	28,090
186.15	11,655	21,967	186.67	12,371	28,214
186.16	11,668	22,084	186.68	12,385	28,338
186.17	11,682	22,201	186.69	12,399	28,462
186.18	11,696	22,317	186.70	12,413	28,586
186.19	11,710	22,434	186.71	12,426	28,710
186.20	11,724	22,552	186.72	12,440	28,834
186.21	11,737	22,669	186.73	12,454	28,959
186.22	11,751	22,786	186.74	12,468	29,083
186.23	11,765	22,904	186.75	12,482	29,208
186.24	11,779	23,022	186.76	12,495	29,333
186.25	11,793	23,140	186.77	12,509	29,458
186.26	11,806	23,258	186.78	12,523	29,583
186.27	11,820	23,376	186.79	12,537	29,708
186.28	11,834	23,494	186.80	12,550	29,834
186.29	11,848	23,612	186.81	12,564	29,959
186.30	11,861	23,731	186.82	12,578	30,085
186.31	11,875	23,850	186.83	12,592	30,211
186.32	11,889	23,968	186.84	12,606	30,337
186.33	11,903	24,087	186.85	12,619	30,463
186.34	11,917	24,206	186.86	12,633	30,589
186.35	11,930	24,326	186.87	12,647	30,716
186.36	11,944	24,445	186.88	12,661	30,842
186.37	11,958	24,565	186.89	12,674	30,969
186.38	11,972	24,684	186.90	12,688	31,096
186.39	11,985	24,804	186.91	12,702	31,223
186.40	11,999	24,924	186.92	12,716	31,350
186.41	12,013	25,044	186.93	12,730	31,477
186.42	12,027	25,164	186.94	12,743	31,604
186.43	12,041	25,285	186.95	12,757	31,732
186.44	12,054	25,405	186.96	12,771	31,860
186.45	12,068	25,526	186.97	12,785	31,987
186.46	12,082	25,646	186.98	12,798	32,115
186.47	12,096	25,767	186.99	12,812	32,243
186.48	12,109	25,888	187.00	12,826	32,372
186.49	12,123	26,009	187.01	12,840	32,500
186.50	12,137	26,131	187.02	12,854	32,628
186.51	12,151	26,252	187.03	12,869	32,757
186.52	12,165	26,374	187.04	12,883	32,886
186.53	12,178	26,495	187.05	12,897	33,015
186.54	12,192	26,617	187.06	12,911	33,144
186.55	12,206	26,739	187.07	12,925	33,273
186.56	12,220	26,861	187.08	12,939	33,402
186.57	12,233	26,984	187.09	12,954	33,532
186.58	12,247	27,106	187.10	12,968	33,661
186.59	12,261	27,229	187.11	12,982	33,791

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	12,996	33,921
187.13	13,010	34,051
187.14	13,025	34,181
187.15	13,039	34,311
187.16	13,053	34,442
187.17	13,067	34,572
187.18	13,081	34,703
187.19	13,095	34,834
187.20	13,110	34,965
187.21	13,124	35,096
187.22	13,138	35,228
187.23	13,152	35,359
187.24	13,166	35,491
187.25	13,181	35,622
187.26	13,195	35,754
187.27	13,209	35,886
187.28	13,223	36,018
187.29	13,237	36,151
187.30	13,251	36,283
187.31	13,266	36,416
187.32	13,280	36,548
187.33	13,294	36,681
187.34	13,308	36,814
187.35	13,322	36,947
187.36	13,336	37,081
187.37	13,351	37,214
187.38	13,365	37,348
187.39	13,379	37,481
187.40	13,393	37,615
187.41	13,407	37,749
187.42	13,422	37,883
187.43	13,436	38,018
187.44	13,450	38,152
187.45	13,464	38,287
187.46	13,478	38,421
187.47	13,492	38,556
187.48	13,507	38,691
187.49	13,521	38,826
187.50	13,535	38,962
187.51	13,549	39,097
187.52	13,563	39,233
187.53	13,578	39,368
187.54	13,592	39,504
187.55	13,606	39,640
187.56	13,620	39,776
187.57	13,634	39,913
187.58	13,648	40,049
187.59	13,663	40,186
187.60	13,677	40,322
187.61	13,691	40,459
187.62	13,705	40,596
187.63	13,719	40,733
187.64	13,734	40,871
187.65	13,748	41,008
187.66	13,762	41,146
187.67	13,776	41,283
187.68	13,790	41,421
187.69	13,804	41,559
187.70	13,819	41,697
187.71	13,833	41,835
187.72	13,847	41,974
187.73	13,861	42,112
187.74	13,875	42,251
187.75	13,890	42,390
187.76	13,904	42,529
187.77	13,918	42,668
187.78	13,932	42,807
187.79	13,946	42,947
187.80	13,960	43,086
187.81	13,975	43,226
187.82	13,989	43,366
187.83	14,003	43,506
187.84	14,017	43,646
187.85	14,031	43,786
187.86	14,045	43,926
187.87	14,060	44,067
187.88	14,074	44,207
187.89	14,088	44,348
187.90	14,102	44,489
187.91	14,116	44,630
187.92	14,131	44,772
187.93	14,145	44,913
187.94	14,159	45,054
187.95	14,173	45,196
187.96	14,187	45,338
187.97	14,201	45,480
187.98	14,216	45,622
187.99	14,230	45,764
188.00	14,244	45,907
188.01	14,258	46,049
188.02	14,273	46,192
188.03	14,287	46,334
188.04	14,302	46,477
188.05	14,316	46,621
188.06	14,331	46,764
188.07	14,345	46,907
188.08	14,360	47,051
188.09	14,374	47,194
188.10	14,388	47,338
188.11	14,403	47,482
188.12	14,417	47,626
188.13	14,432	47,770
188.14	14,446	47,915
188.15	14,461	48,059

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

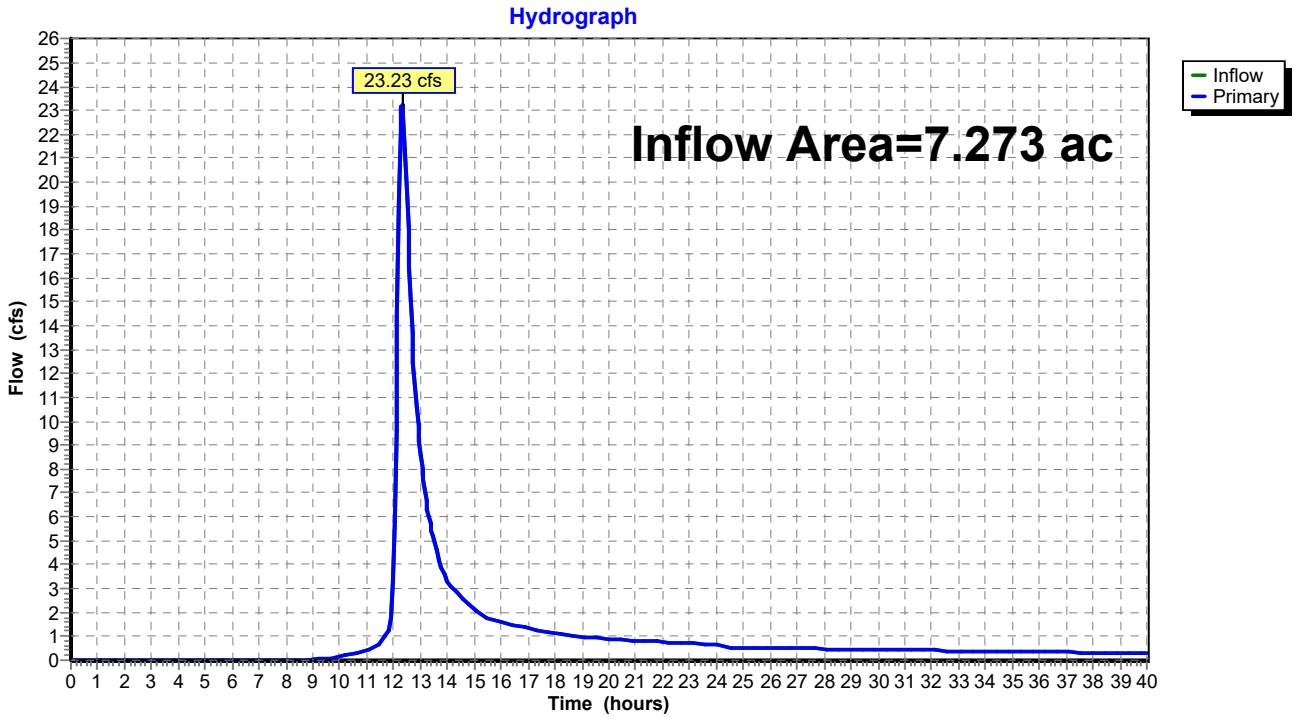
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	14,475	48,204
188.17	14,489	48,349
188.18	14,504	48,494
188.19	14,518	48,639
188.20	14,533	48,784
188.21	14,547	48,930
188.22	14,562	49,075
188.23	14,576	49,221
188.24	14,591	49,367
188.25	14,605	49,513
188.26	14,619	49,659
188.27	14,634	49,805
188.28	14,648	49,951
188.29	14,663	50,098
188.30	14,677	50,245
188.31	14,692	50,392
188.32	14,706	50,539
188.33	14,721	50,686
188.34	14,735	50,833
188.35	14,749	50,980
188.36	14,764	51,128
188.37	14,778	51,276
188.38	14,793	51,423
188.39	14,807	51,571
188.40	14,822	51,720
188.41	14,836	51,868
188.42	14,850	52,016
188.43	14,865	52,165
188.44	14,879	52,314
188.45	14,894	52,463
188.46	14,908	52,612
188.47	14,923	52,761
188.48	14,937	52,910
188.49	14,952	53,059
188.50	**14,966**	**53,209**

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 7.273 ac, 32.33% Impervious, Inflow Depth > 5.52" for Current 100 yr event
Inflow = 23.23 cfs @ 12.33 hrs, Volume= 3.348 af
Primary = 23.23 cfs @ 12.33 hrs, Volume= 3.348 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5



Summary for Subcatchment 48I: PDA-48 (impervious)

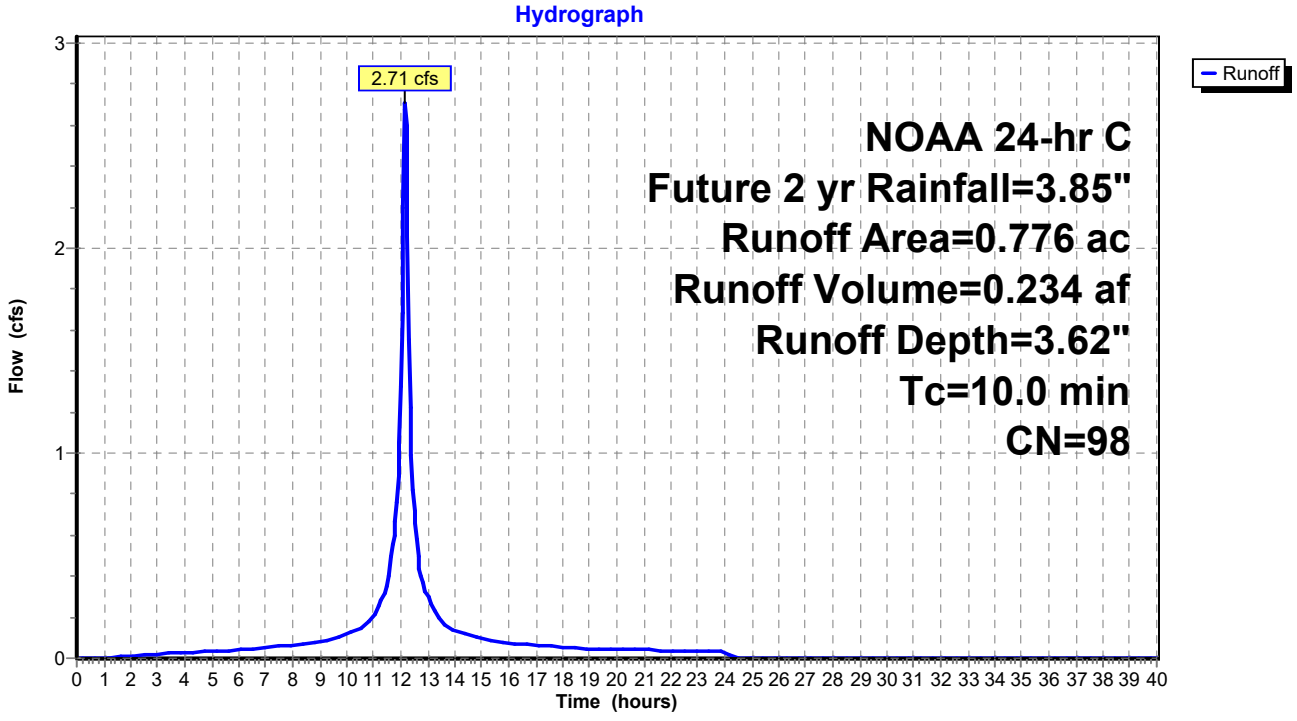
Runoff = 2.71 cfs @ 12.17 hrs, Volume= 0.234 af, Depth= 3.62"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.235	98	Pavement, HSG C
*	0.522	98	Roof, HSG C
*	0.019	98	Concrete, HSG C
	0.776	98	Weighted Average
	0.776		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 48I: PDA-48 (impervious)



Summary for Subcatchment 48P: PDA-48 (pervious)

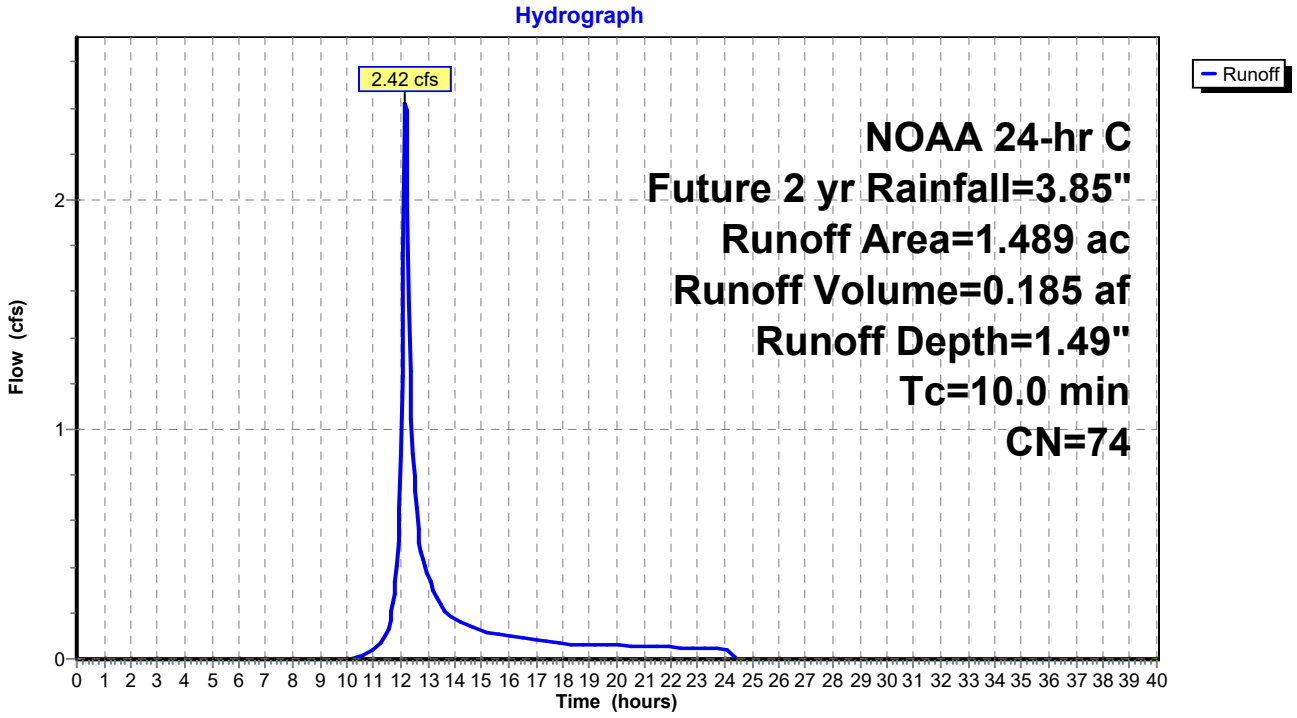
Runoff = 2.42 cfs @ 12.18 hrs, Volume= 0.185 af, Depth= 1.49"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.489	74	>75% Grass cover, Good, HSG C
1.489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 48P: PDA-48 (pervious)



Summary for Subcatchment 49l: PDA-49 (impervious)

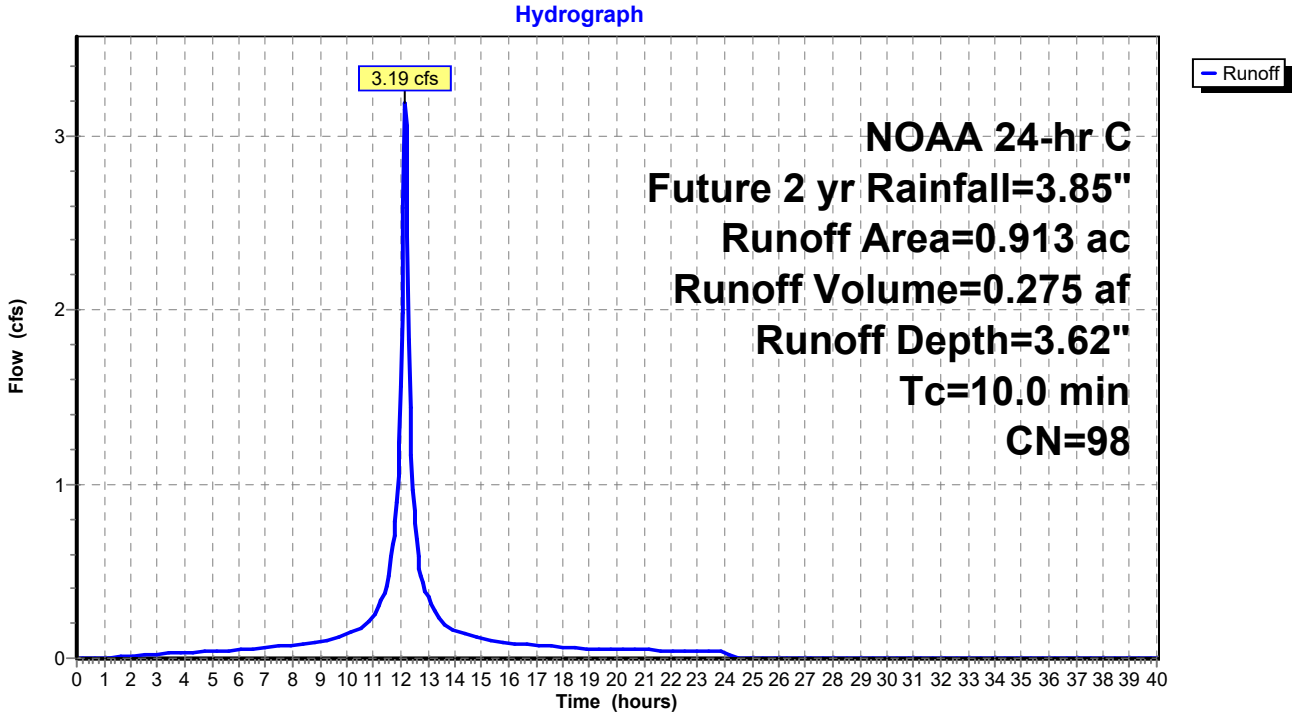
Runoff = 3.19 cfs @ 12.17 hrs, Volume= 0.275 af, Depth= 3.62"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.434	98	Pavement, HSG C
*	0.418	98	Roof, HSG C
*	0.061	98	Concrete, HSG C
	0.913	98	Weighted Average
	0.913		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 49l: PDA-49 (impervious)



Summary for Subcatchment 49P: PDA-49 (pervious)

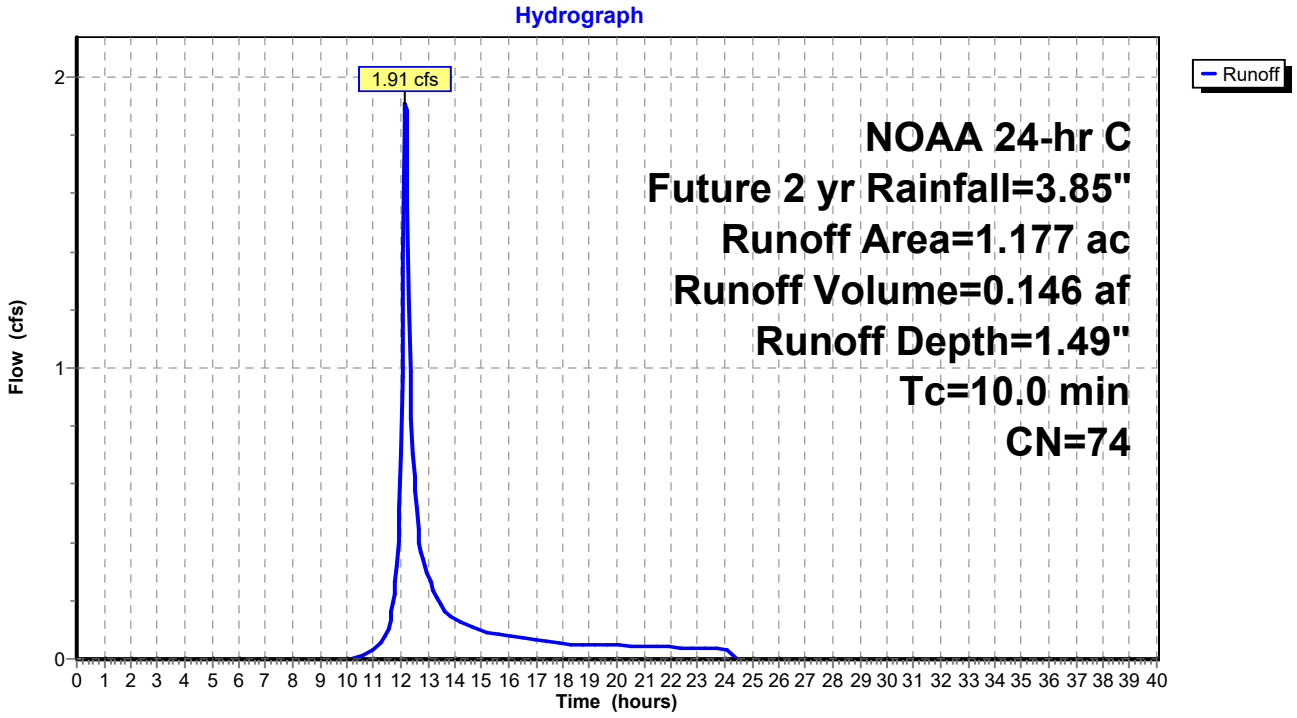
Runoff = 1.91 cfs @ 12.18 hrs, Volume= 0.146 af, Depth= 1.49"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.177	74	>75% Grass cover, Good, HSG C
1.177		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 49P: PDA-49 (pervious)



Summary for Subcatchment 50l: PDA-50 (impervious)

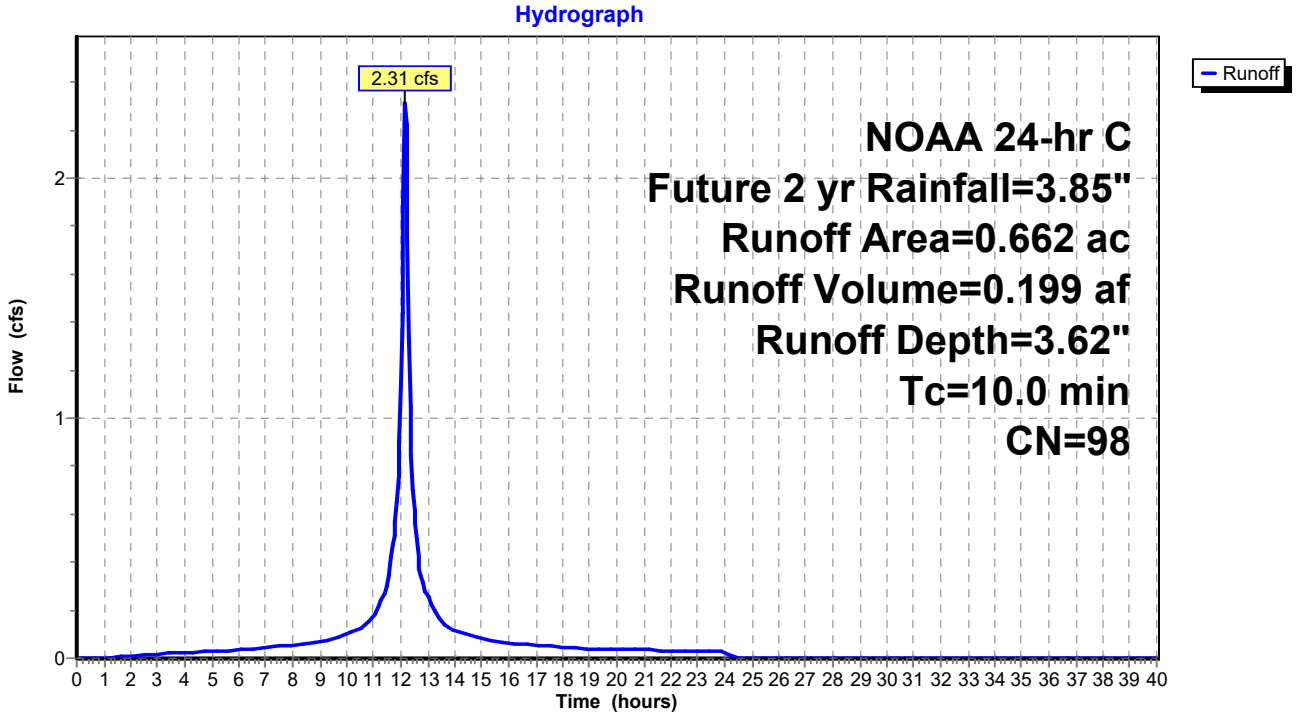
Runoff = 2.31 cfs @ 12.17 hrs, Volume= 0.199 af, Depth= 3.62"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.291	98	Pavement, HSG C
*	0.325	98	Roof, HSG C
*	0.046	98	Concrete, HSG C
	0.662	98	Weighted Average
	0.662		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 50l: PDA-50 (impervious)



Summary for Subcatchment 50P: PDA-50 (pervious)

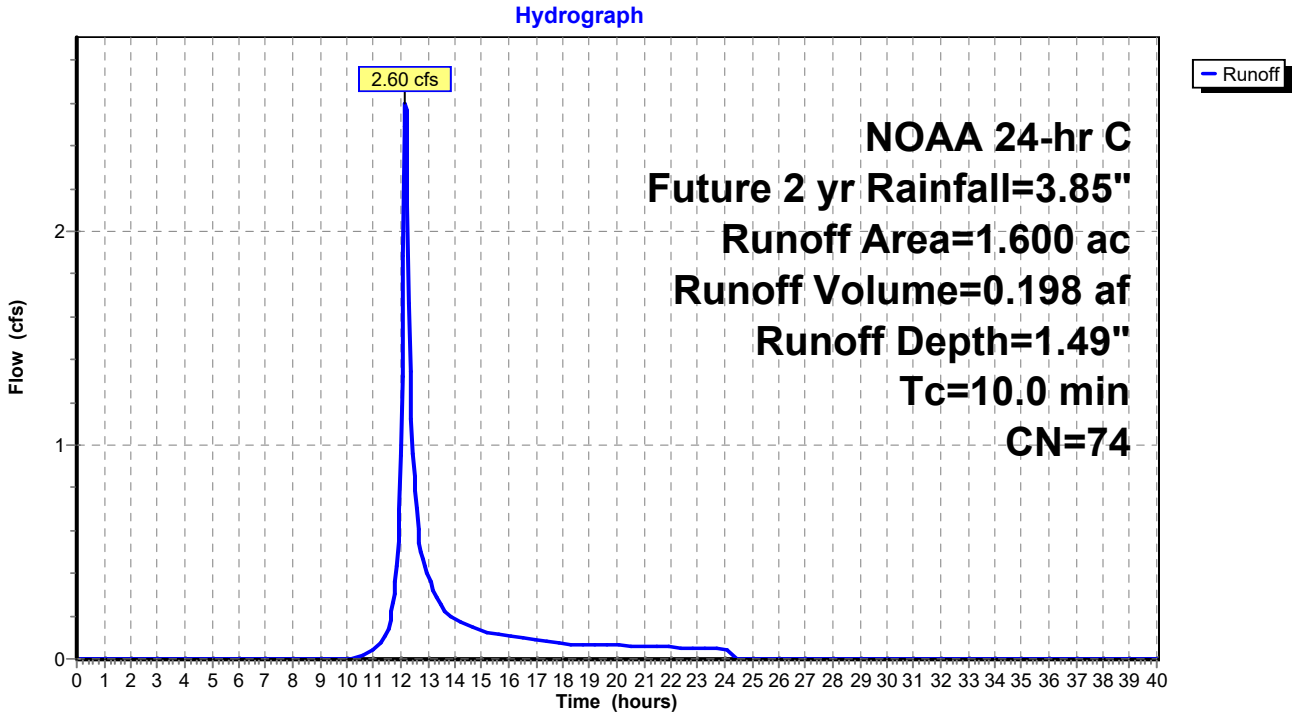
Runoff = 2.60 cfs @ 12.18 hrs, Volume= 0.198 af, Depth= 1.49"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.600	74	>75% Grass cover, Good, HSG C
1.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 50P: PDA-50 (pervious)



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

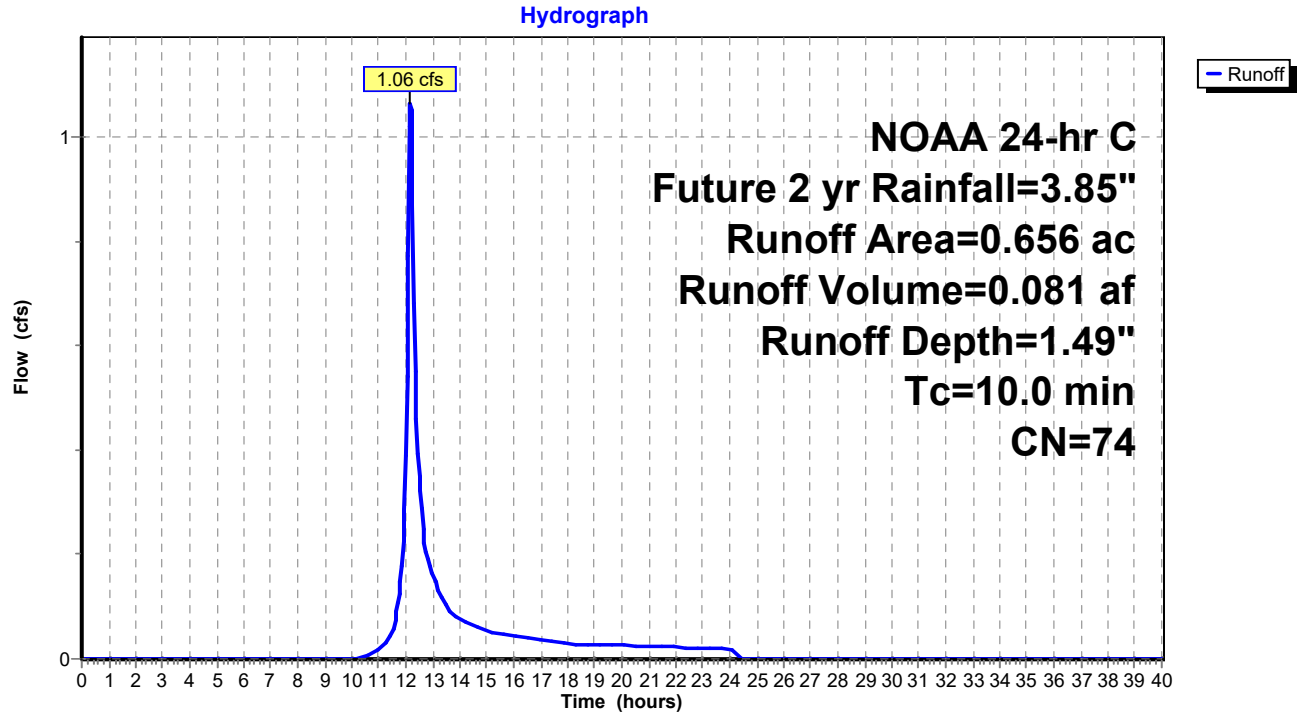
Runoff = 1.06 cfs @ 12.18 hrs, Volume= 0.081 af, Depth= 1.49"
Routed to Link PDA-5 : Proposed Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.656	74	>75% Grass cover, Good, HSG C
0.656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-5: PDA-5 (undetained)



Summary for Pond B-48: Basin #48

Inflow Area = 2.265 ac, 34.26% Impervious, Inflow Depth = 2.22" for Future 2 yr event
Inflow = 5.12 cfs @ 12.17 hrs, Volume= 0.418 af
Outflow = 0.15 cfs @ 16.79 hrs, Volume= 0.279 af, Atten= 97%, Lag= 276.8 min
Primary = 0.15 cfs @ 16.79 hrs, Volume= 0.279 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 192.35' @ 16.79 hrs Surf.Area= 10,555 sf Storage= 13,137 cf

Plug-Flow detention time= 769.5 min calculated for 0.279 af (67% of inflow)
Center-of-Mass det. time= 662.0 min (1,463.9 - 801.9)

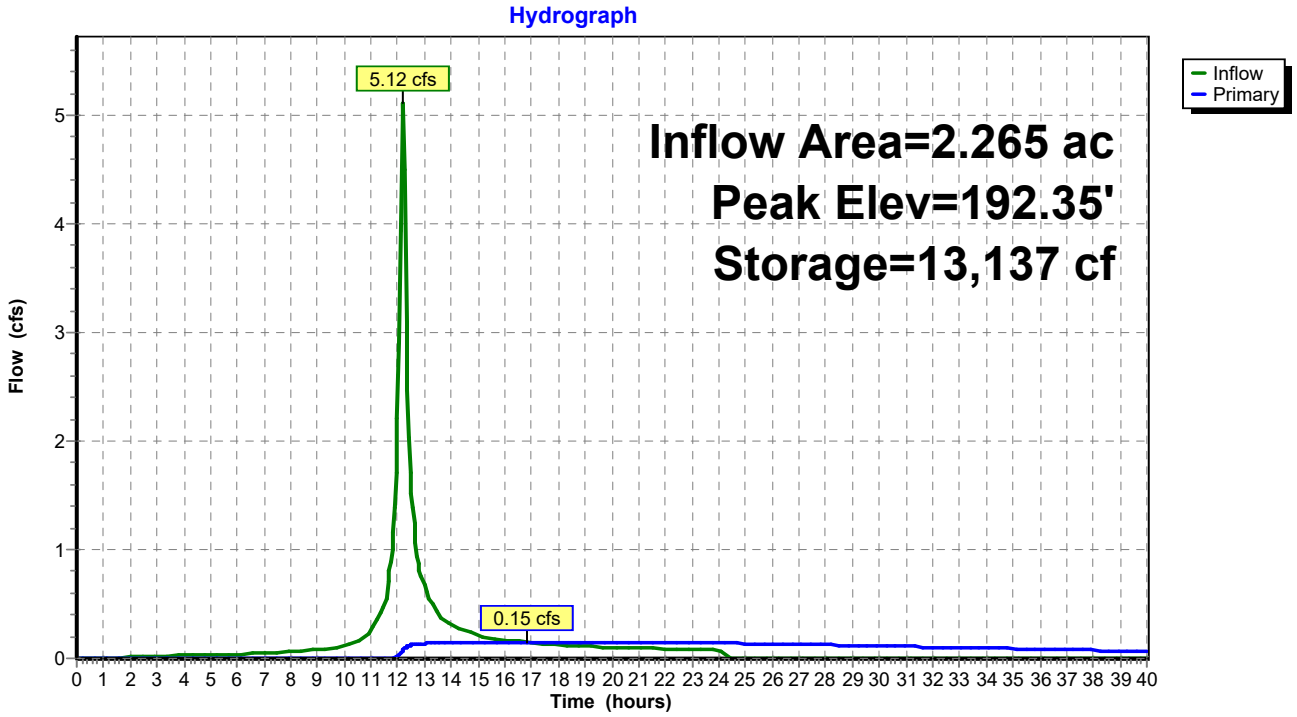
Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	32,287 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.00	8,869	0	0
192.00	10,100	9,485	9,485
193.00	11,387	10,744	20,228
194.00	12,731	12,059	32,287

Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	**18.0" Round Culvert** L= 185.0' Ke= 0.500 Inlet / Outlet Invert= 191.00' / 188.45' S= 0.0138 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.40'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	193.99'	**50.0' long + 3.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.15 cfs @ 16.79 hrs HW=192.35' (Free Discharge)
- **1=Culvert** (Passes 0.15 cfs of 6.65 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.15 cfs @ 4.44 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-48: Basin #48



Stage-Discharge for Pond B-48: Basin #48

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.00	0.00	191.52	0.02	192.04	0.12	192.56	0.17
191.01	0.00	191.53	0.03	192.05	0.12	192.57	0.17
191.02	0.00	191.54	0.03	192.06	0.12	192.58	0.17
191.03	0.00	191.55	0.03	192.07	0.12	192.59	0.17
191.04	0.00	191.56	0.04	192.08	0.12	192.60	0.17
191.05	0.00	191.57	0.04	192.09	0.13	192.61	0.17
191.06	0.00	191.58	0.05	192.10	0.13	192.62	0.17
191.07	0.00	191.59	0.05	192.11	0.13	192.63	0.17
191.08	0.00	191.60	0.05	192.12	0.13	192.64	0.17
191.09	0.00	191.61	0.05	192.13	0.13	192.65	0.18
191.10	0.00	191.62	0.06	192.14	0.13	192.66	0.18
191.11	0.00	191.63	0.06	192.15	0.13	192.67	0.18
191.12	0.00	191.64	0.06	192.16	0.13	192.68	0.18
191.13	0.00	191.65	0.06	192.17	0.13	192.69	0.18
191.14	0.00	191.66	0.06	192.18	0.13	192.70	0.18
191.15	0.00	191.67	0.07	192.19	0.14	192.71	0.18
191.16	0.00	191.68	0.07	192.20	0.14	192.72	0.18
191.17	0.00	191.69	0.07	192.21	0.14	192.73	0.18
191.18	0.00	191.70	0.07	192.22	0.14	192.74	0.18
191.19	0.00	191.71	0.07	192.23	0.14	192.75	0.18
191.20	0.00	191.72	0.08	192.24	0.14	192.76	0.18
191.21	0.00	191.73	0.08	192.25	0.14	192.77	0.18
191.22	0.00	191.74	0.08	192.26	0.14	192.78	0.19
191.23	0.00	191.75	0.08	192.27	0.14	192.79	0.19
191.24	0.00	191.76	0.08	192.28	0.14	192.80	0.19
191.25	0.00	191.77	0.08	192.29	0.15	192.81	0.19
191.26	0.00	191.78	0.09	192.30	0.15	192.82	0.19
191.27	0.00	191.79	0.09	192.31	0.15	192.83	0.19
191.28	0.00	191.80	0.09	192.32	0.15	192.84	0.19
191.29	0.00	191.81	0.09	192.33	0.15	192.85	0.19
191.30	0.00	191.82	0.09	192.34	0.15	192.86	0.19
191.31	0.00	191.83	0.09	192.35	0.15	192.87	0.19
191.32	0.00	191.84	0.10	192.36	0.15	192.88	0.19
191.33	0.00	191.85	0.10	192.37	0.15	192.89	0.19
191.34	0.00	191.86	0.10	192.38	0.15	192.90	0.19
191.35	0.00	191.87	0.10	192.39	0.15	192.91	0.19
191.36	0.00	191.88	0.10	192.40	0.16	192.92	0.20
191.37	0.00	191.89	0.10	192.41	0.16	192.93	0.20
191.38	0.00	191.90	0.10	192.42	0.16	192.94	0.20
191.39	0.00	191.91	0.10	192.43	0.16	192.95	0.20
191.40	0.00	191.92	0.11	192.44	0.16	192.96	0.20
191.41	0.00	191.93	0.11	192.45	0.16	192.97	0.20
191.42	0.00	191.94	0.11	192.46	0.16	192.98	0.20
191.43	0.00	191.95	0.11	192.47	0.16	192.99	0.20
191.44	0.00	191.96	0.11	192.48	0.16	193.00	0.20
191.45	0.00	191.97	0.11	192.49	0.16	193.01	0.21
191.46	0.01	191.98	0.11	192.50	0.16	193.02	0.24
191.47	0.01	191.99	0.11	192.51	0.16	193.03	0.27
191.48	0.01	192.00	0.12	192.52	0.17	193.04	0.31
191.49	0.01	192.01	0.12	192.53	0.17	193.05	0.35
191.50	0.02	192.02	0.12	192.54	0.17	193.06	0.40
191.51	0.02	192.03	0.12	192.55	0.17	193.07	0.45

Stage-Discharge for Pond B-48: Basin #48 (continued)

Elevation (feet)	Primary (cfs)
193.08	0.50
193.09	0.56
193.10	0.62
193.11	0.68
193.12	0.75
193.13	0.82
193.14	0.89
193.15	0.96
193.16	1.04
193.17	1.12
193.18	1.20
193.19	1.29
193.20	1.37
193.21	1.46
193.22	1.55
193.23	1.64
193.24	1.74
193.25	1.83
193.26	1.93
193.27	2.03
193.28	2.13
193.29	2.23
193.30	2.34
193.31	2.44
193.32	2.55
193.33	2.66
193.34	2.77
193.35	2.88
193.36	3.00
193.37	3.11
193.38	3.23
193.39	3.35
193.40	3.47
193.41	3.59
193.42	3.71
193.43	3.84
193.44	3.96
193.45	4.09
193.46	4.22
193.47	4.35
193.48	4.48
193.49	4.61
193.50	4.74
193.51	4.87
193.52	5.01
193.53	5.15
193.54	5.28
193.55	5.42
193.56	5.56
193.57	5.70
193.58	5.85
193.59	5.99
193.60	6.13
193.61	6.28
193.62	6.43
193.63	6.57
193.64	6.72
193.65	6.87
193.66	7.02
193.67	7.17
193.68	7.33
193.69	7.48
193.70	7.64
193.71	7.79
193.72	7.95
193.73	8.11
193.74	8.26
193.75	8.42
193.76	8.58
193.77	8.74
193.78	8.91
193.79	9.07
193.80	9.23
193.81	9.40
193.82	9.56
193.83	9.73
193.84	9.90
193.85	10.07
193.86	10.24
193.87	10.40
193.88	10.58
193.89	10.75
193.90	10.92
193.91	11.09
193.92	11.27
193.93	11.44
193.94	11.62
193.95	11.79
193.96	11.97
193.97	12.15
193.98	12.33
193.99	12.51
194.00	**12.81**

Stage-Area-Storage for Pond B-48: Basin #48

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.00	8,869	0	191.52	9,509	4,778
191.01	8,881	89	191.53	9,521	4,873
191.02	8,894	178	191.54	9,534	4,969
191.03	8,906	267	191.55	9,546	5,064
191.04	8,918	356	191.56	9,558	5,160
191.05	8,931	445	191.57	9,571	5,255
191.06	8,943	534	191.58	9,583	5,351
191.07	8,955	624	191.59	9,595	5,447
191.08	8,967	713	191.60	9,608	5,543
191.09	8,980	803	191.61	9,620	5,639
191.10	8,992	893	191.62	9,632	5,735
191.11	9,004	983	191.63	9,645	5,832
191.12	9,017	1,073	191.64	9,657	5,928
191.13	9,029	1,163	191.65	9,669	6,025
191.14	9,041	1,254	191.66	9,681	6,122
191.15	9,054	1,344	191.67	9,694	6,219
191.16	9,066	1,435	191.68	9,706	6,316
191.17	9,078	1,526	191.69	9,718	6,413
191.18	9,091	1,616	191.70	9,731	6,510
191.19	9,103	1,707	191.71	9,743	6,607
191.20	9,115	1,798	191.72	9,755	6,705
191.21	9,128	1,890	191.73	9,768	6,802
191.22	9,140	1,981	191.74	9,780	6,900
191.23	9,152	2,072	191.75	9,792	6,998
191.24	9,164	2,164	191.76	9,805	7,096
191.25	9,177	2,256	191.77	9,817	7,194
191.26	9,189	2,348	191.78	9,829	7,292
191.27	9,201	2,439	191.79	9,841	7,391
191.28	9,214	2,532	191.80	9,854	7,489
191.29	9,226	2,624	191.81	9,866	7,588
191.30	9,238	2,716	191.82	9,878	7,686
191.31	9,251	2,809	191.83	9,891	7,785
191.32	9,263	2,901	191.84	9,903	7,884
191.33	9,275	2,994	191.85	9,915	7,983
191.34	9,288	3,087	191.86	9,928	8,083
191.35	9,300	3,180	191.87	9,940	8,182
191.36	9,312	3,273	191.88	9,952	8,281
191.37	9,324	3,366	191.89	9,965	8,381
191.38	9,337	3,459	191.90	9,977	8,481
191.39	9,349	3,553	191.91	9,989	8,580
191.40	9,361	3,646	191.92	10,002	8,680
191.41	9,374	3,740	191.93	10,014	8,781
191.42	9,386	3,834	191.94	10,026	8,881
191.43	9,398	3,927	191.95	10,038	8,981
191.44	9,411	4,022	191.96	10,051	9,081
191.45	9,423	4,116	191.97	10,063	9,182
191.46	9,435	4,210	191.98	10,075	9,283
191.47	9,448	4,304	191.99	10,088	9,384
191.48	9,460	4,399	192.00	10,100	9,485
191.49	9,472	4,494	192.01	10,113	9,586
191.50	9,485	4,588	192.02	10,126	9,687
191.51	9,497	4,683	192.03	10,139	9,788

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.04	10,151	9,890	192.56	10,821	15,342
192.05	10,164	9,991	192.57	10,834	15,451
192.06	10,177	10,093	192.58	10,846	15,559
192.07	10,190	10,195	192.59	10,859	15,668
192.08	10,203	10,297	192.60	10,872	15,776
192.09	10,216	10,399	192.61	10,885	15,885
192.10	10,229	10,501	192.62	10,898	15,994
192.11	10,242	10,603	192.63	10,911	16,103
192.12	10,254	10,706	192.64	10,924	16,212
192.13	10,267	10,808	192.65	10,937	16,321
192.14	10,280	10,911	192.66	10,949	16,431
192.15	10,293	11,014	192.67	10,962	16,540
192.16	10,306	11,117	192.68	10,975	16,650
192.17	10,319	11,220	192.69	10,988	16,760
192.18	10,332	11,323	192.70	11,001	16,870
192.19	10,345	11,427	192.71	11,014	16,980
192.20	10,357	11,530	192.72	11,027	17,090
192.21	10,370	11,634	192.73	11,040	17,200
192.22	10,383	11,738	192.74	11,052	17,311
192.23	10,396	11,842	192.75	11,065	17,421
192.24	10,409	11,946	192.76	11,078	17,532
192.25	10,422	12,050	192.77	11,091	17,643
192.26	10,435	12,154	192.78	11,104	17,754
192.27	10,447	12,258	192.79	11,117	17,865
192.28	10,460	12,363	192.80	11,130	17,976
192.29	10,473	12,468	192.81	11,142	18,088
192.30	10,486	12,572	192.82	11,155	18,199
192.31	10,499	12,677	192.83	11,168	18,311
192.32	10,512	12,782	192.84	11,181	18,423
192.33	10,525	12,888	192.85	11,194	18,534
192.34	10,538	12,993	192.86	11,207	18,646
192.35	10,550	13,098	192.87	11,220	18,759
192.36	10,563	13,204	192.88	11,233	18,871
192.37	10,576	13,310	192.89	11,245	18,983
192.38	10,589	13,415	192.90	11,258	19,096
192.39	10,602	13,521	192.91	11,271	19,208
192.40	10,615	13,627	192.92	11,284	19,321
192.41	10,628	13,734	192.93	11,297	19,434
192.42	10,641	13,840	192.94	11,310	19,547
192.43	10,653	13,946	192.95	11,323	19,660
192.44	10,666	14,053	192.96	11,336	19,774
192.45	10,679	14,160	192.97	11,348	19,887
192.46	10,692	14,267	192.98	11,361	20,001
192.47	10,705	14,374	192.99	11,374	20,114
192.48	10,718	14,481	193.00	11,387	20,228
192.49	10,731	14,588	193.01	11,400	20,342
192.50	10,744	14,695	193.02	11,414	20,456
192.51	10,756	14,803	193.03	11,427	20,570
192.52	10,769	14,911	193.04	11,441	20,685
192.53	10,782	15,018	193.05	11,454	20,799
192.54	10,795	15,126	193.06	11,468	20,914
192.55	10,808	15,234	193.07	11,481	21,028

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.08	11,495	21,143
193.09	11,508	21,258
193.10	11,521	21,373
193.11	11,535	21,489
193.12	11,548	21,604
193.13	11,562	21,720
193.14	11,575	21,835
193.15	11,589	21,951
193.16	11,602	22,067
193.17	11,615	22,183
193.18	11,629	22,299
193.19	11,642	22,416
193.20	11,656	22,532
193.21	11,669	22,649
193.22	11,683	22,766
193.23	11,696	22,883
193.24	11,710	23,000
193.25	11,723	23,117
193.26	11,736	23,234
193.27	11,750	23,351
193.28	11,763	23,469
193.29	11,777	23,587
193.30	11,790	23,705
193.31	11,804	23,823
193.32	11,817	23,941
193.33	11,831	24,059
193.34	11,844	24,177
193.35	11,857	24,296
193.36	11,871	24,414
193.37	11,884	24,533
193.38	11,898	24,652
193.39	11,911	24,771
193.40	11,925	24,890
193.41	11,938	25,010
193.42	11,951	25,129
193.43	11,965	25,249
193.44	11,978	25,368
193.45	11,992	25,488
193.46	12,005	25,608
193.47	12,019	25,728
193.48	12,032	25,849
193.49	12,046	25,969
193.50	12,059	26,090
193.51	12,072	26,210
193.52	12,086	26,331
193.53	12,099	26,452
193.54	12,113	26,573
193.55	12,126	26,694
193.56	12,140	26,815
193.57	12,153	26,937
193.58	12,167	27,059
193.59	12,180	27,180
193.60	12,193	27,302
193.61	12,207	27,424
193.62	12,220	27,546
193.63	12,234	27,669
193.64	12,247	27,791
193.65	12,261	27,913
193.66	12,274	28,036
193.67	12,287	28,159
193.68	12,301	28,282
193.69	12,314	28,405
193.70	12,328	28,528
193.71	12,341	28,652
193.72	12,355	28,775
193.73	12,368	28,899
193.74	12,382	29,022
193.75	12,395	29,146
193.76	12,408	29,270
193.77	12,422	29,394
193.78	12,435	29,519
193.79	12,449	29,643
193.80	12,462	29,768
193.81	12,476	29,892
193.82	12,489	30,017
193.83	12,503	30,142
193.84	12,516	30,267
193.85	12,529	30,392
193.86	12,543	30,518
193.87	12,556	30,643
193.88	12,570	30,769
193.89	12,583	30,895
193.90	12,597	31,021
193.91	12,610	31,147
193.92	12,623	31,273
193.93	12,637	31,399
193.94	12,650	31,526
193.95	12,664	31,652
193.96	12,677	31,779
193.97	12,691	31,906
193.98	12,704	32,033
193.99	12,718	32,160
194.00	**12,731**	**32,287**

Summary for Pond B-49: Basin #49

Inflow Area = 2.090 ac, 43.68% Impervious, Inflow Depth = 2.42" for Future 2 yr event
Inflow = 5.09 cfs @ 12.17 hrs, Volume= 0.421 af
Outflow = 0.17 cfs @ 15.67 hrs, Volume= 0.299 af, Atten= 97%, Lag= 209.9 min
Primary = 0.17 cfs @ 15.67 hrs, Volume= 0.299 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.74' @ 15.67 hrs Surf.Area= 8,434 sf Storage= 13,046 cf

Plug-Flow detention time= 741.6 min calculated for 0.299 af (71% of inflow)
Center-of-Mass det. time= 640.9 min (1,433.2 - 792.4)

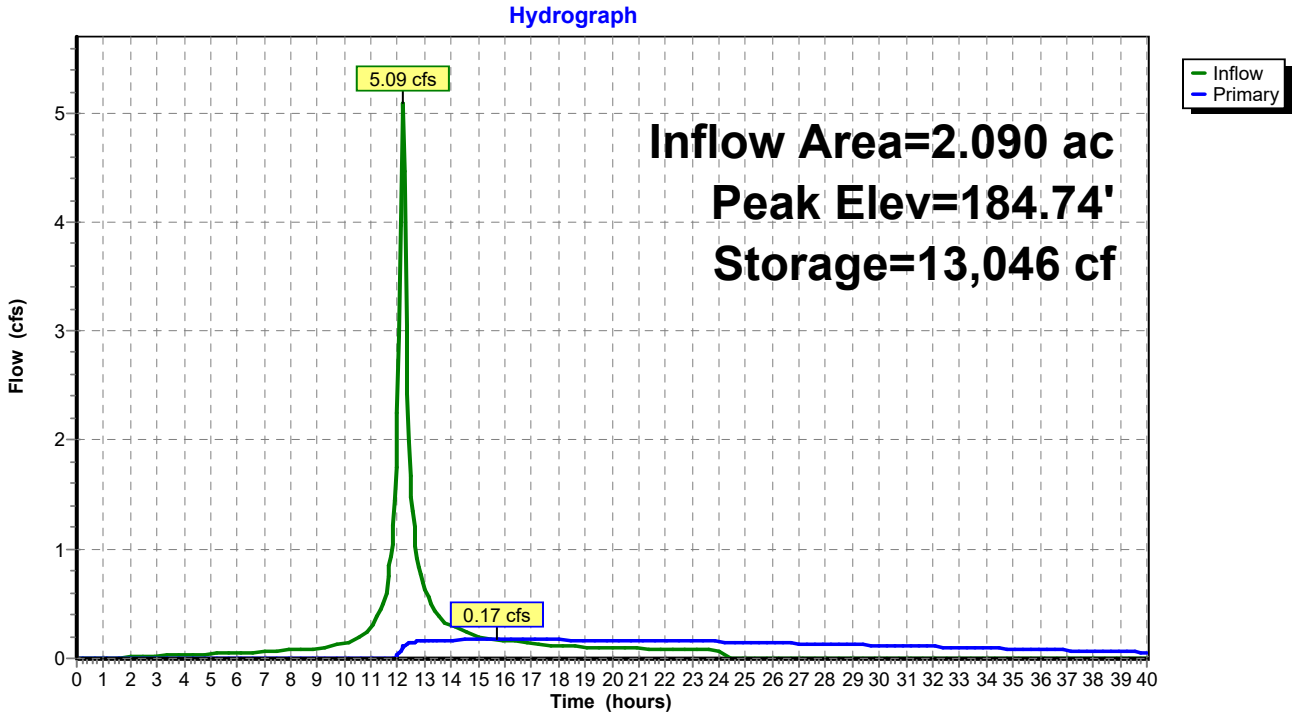
Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	52,993 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	6,565	0	0
184.00	7,625	7,095	7,095
185.00	8,717	8,171	15,266
186.00	9,853	9,285	24,551
187.00	11,027	10,440	34,991
188.00	12,333	11,680	46,671
188.50	12,956	6,322	52,993

Device	Routing	Invert	Outlet Devices
#1	Primary	183.00'	**15.0" Round Culvert** L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.81' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	183.55'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.74'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.25'	**100.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=0.17 cfs @ 15.67 hrs HW=184.74' (Free Discharge)
- **1=Culvert** (Passes 0.17 cfs of 5.63 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 5.02 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.11 fps)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-49: Basin #49



Stage-Discharge for Pond B-49: Basin #49

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.00	0.00	183.52	0.00	184.04	0.10	184.56	0.16
183.01	0.00	183.53	0.00	184.05	0.10	184.57	0.16
183.02	0.00	183.54	0.00	184.06	0.10	184.58	0.16
183.03	0.00	183.55	0.00	184.07	0.11	184.59	0.16
183.04	0.00	183.56	0.00	184.08	0.11	184.60	0.16
183.05	0.00	183.57	0.00	184.09	0.11	184.61	0.16
183.06	0.00	183.58	0.00	184.10	0.11	184.62	0.16
183.07	0.00	183.59	0.00	184.11	0.11	184.63	0.16
183.08	0.00	183.60	0.00	184.12	0.11	184.64	0.16
183.09	0.00	183.61	0.01	184.13	0.11	184.65	0.16
183.10	0.00	183.62	0.01	184.14	0.11	184.66	0.16
183.11	0.00	183.63	0.01	184.15	0.12	184.67	0.17
183.12	0.00	183.64	0.01	184.16	0.12	184.68	0.17
183.13	0.00	183.65	0.02	184.17	0.12	184.69	0.17
183.14	0.00	183.66	0.02	184.18	0.12	184.70	0.17
183.15	0.00	183.67	0.02	184.19	0.12	184.71	0.17
183.16	0.00	183.68	0.03	184.20	0.12	184.72	0.17
183.17	0.00	183.69	0.03	184.21	0.12	184.73	0.17
183.18	0.00	183.70	0.03	184.22	0.12	184.74	0.17
183.19	0.00	183.71	0.04	184.23	0.12	184.75	0.18
183.20	0.00	183.72	0.04	184.24	0.13	184.76	0.21
183.21	0.00	183.73	0.05	184.25	0.13	184.77	0.24
183.22	0.00	183.74	0.05	184.26	0.13	184.78	0.28
183.23	0.00	183.75	0.05	184.27	0.13	184.79	0.32
183.24	0.00	183.76	0.05	184.28	0.13	184.80	0.37
183.25	0.00	183.77	0.06	184.29	0.13	184.81	0.42
183.26	0.00	183.78	0.06	184.30	0.13	184.82	0.47
183.27	0.00	183.79	0.06	184.31	0.13	184.83	0.53
183.28	0.00	183.80	0.06	184.32	0.13	184.84	0.59
183.29	0.00	183.81	0.06	184.33	0.13	184.85	0.65
183.30	0.00	183.82	0.07	184.34	0.14	184.86	0.72
183.31	0.00	183.83	0.07	184.35	0.14	184.87	0.79
183.32	0.00	183.84	0.07	184.36	0.14	184.88	0.86
183.33	0.00	183.85	0.07	184.37	0.14	184.89	0.94
183.34	0.00	183.86	0.07	184.38	0.14	184.90	1.01
183.35	0.00	183.87	0.08	184.39	0.14	184.91	1.09
183.36	0.00	183.88	0.08	184.40	0.14	184.92	1.17
183.37	0.00	183.89	0.08	184.41	0.14	184.93	1.26
183.38	0.00	183.90	0.08	184.42	0.14	184.94	1.34
183.39	0.00	183.91	0.08	184.43	0.14	184.95	1.43
183.40	0.00	183.92	0.08	184.44	0.15	184.96	1.52
183.41	0.00	183.93	0.09	184.45	0.15	184.97	1.61
183.42	0.00	183.94	0.09	184.46	0.15	184.98	1.71
183.43	0.00	183.95	0.09	184.47	0.15	184.99	1.80
183.44	0.00	183.96	0.09	184.48	0.15	185.00	1.90
183.45	0.00	183.97	0.09	184.49	0.15	185.01	2.00
183.46	0.00	183.98	0.09	184.50	0.15	185.02	2.10
183.47	0.00	183.99	0.10	184.51	0.15	185.03	2.21
183.48	0.00	184.00	0.10	184.52	0.15	185.04	2.31
183.49	0.00	184.01	0.10	184.53	0.15	185.05	2.42
183.50	0.00	184.02	0.10	184.54	0.15	185.06	2.52
183.51	0.00	184.03	0.10	184.55	0.16	185.07	2.63

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.08	2.75	185.60	8.30	186.12	9.33	186.64	10.26
185.09	2.86	185.61	8.33	186.13	9.35	186.65	10.28
185.10	2.97	185.62	8.35	186.14	9.37	186.66	10.29
185.11	3.09	185.63	8.37	186.15	9.39	186.67	10.31
185.12	3.20	185.64	8.39	186.16	9.41	186.68	10.33
185.13	3.32	185.65	8.41	186.17	9.43	186.69	10.34
185.14	3.44	185.66	8.43	186.18	9.44	186.70	10.36
185.15	3.56	185.67	8.45	186.19	9.46	186.71	10.38
185.16	3.69	185.68	8.47	186.20	9.48	186.72	10.40
185.17	3.81	185.69	8.49	186.21	9.50	186.73	10.41
185.18	3.94	185.70	8.51	186.22	9.52	186.74	10.43
185.19	4.06	185.71	8.53	186.23	9.54	186.75	10.45
185.20	4.19	185.72	8.55	186.24	9.56	186.76	10.46
185.21	4.32	185.73	8.57	186.25	9.57	186.77	10.48
185.22	4.45	185.74	8.59	186.26	9.59	186.78	10.50
185.23	4.58	185.75	8.61	186.27	9.61	186.79	10.51
185.24	4.72	185.76	8.63	186.28	9.63	186.80	10.53
185.25	4.85	185.77	8.65	186.29	9.65	186.81	10.55
185.26	4.99	185.78	8.67	186.30	9.66	186.82	10.56
185.27	5.12	185.79	8.69	186.31	9.68	186.83	10.58
185.28	5.26	185.80	8.71	186.32	9.70	186.84	10.59
185.29	5.40	185.81	8.73	186.33	9.72	186.85	10.61
185.30	5.54	185.82	8.75	186.34	9.74	186.86	10.63
185.31	5.68	185.83	8.77	186.35	9.75	186.87	10.64
185.32	5.82	185.84	8.79	186.36	9.77	186.88	10.66
185.33	5.97	185.85	8.81	186.37	9.79	186.89	10.68
185.34	6.11	185.86	8.83	186.38	9.81	186.90	10.69
185.35	6.26	185.87	8.85	186.39	9.83	186.91	10.71
185.36	6.40	185.88	8.87	186.40	9.84	186.92	10.73
185.37	6.55	185.89	8.89	186.41	9.86	186.93	10.74
185.38	6.70	185.90	8.91	186.42	9.88	186.94	10.76
185.39	6.85	185.91	8.93	186.43	9.90	186.95	10.77
185.40	7.00	185.92	8.95	186.44	9.91	186.96	10.79
185.41	7.15	185.93	8.97	186.45	9.93	186.97	10.81
185.42	7.30	185.94	8.99	186.46	9.95	186.98	10.82
185.43	7.46	185.95	9.01	186.47	9.97	186.99	10.84
185.44	7.61	185.96	9.03	186.48	9.98	187.00	10.86
185.45	7.77	185.97	9.05	186.49	10.00	187.01	10.87
185.46	7.92	185.98	9.07	186.50	10.02	187.02	10.89
185.47	8.03	185.99	9.09	186.51	10.04	187.03	10.90
185.48	8.05	186.00	9.11	186.52	10.05	187.04	10.92
185.49	8.07	186.01	9.13	186.53	10.07	187.05	10.94
185.50	8.09	186.02	9.14	186.54	10.09	187.06	10.95
185.51	8.11	186.03	9.16	186.55	10.11	187.07	10.97
185.52	8.13	186.04	9.18	186.56	10.12	187.08	10.98
185.53	8.16	186.05	9.20	186.57	10.14	187.09	11.00
185.54	8.18	186.06	9.22	186.58	10.16	187.10	11.01
185.55	8.20	186.07	9.24	186.59	10.17	187.11	11.03
185.56	8.22	186.08	9.26	186.60	10.19	187.12	11.05
185.57	8.24	186.09	9.28	186.61	10.21	187.13	11.06
185.58	8.26	186.10	9.30	186.62	10.23	187.14	11.08
185.59	8.28	186.11	9.31	186.63	10.24	187.15	11.09

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.16	11.11	187.68	11.90	188.20	12.64
187.17	11.13	187.69	11.91	188.21	12.65
187.18	11.14	187.70	11.93	188.22	12.67
187.19	11.16	187.71	11.94	188.23	12.68
187.20	11.17	187.72	11.96	188.24	12.69
187.21	11.19	187.73	11.97	188.25	12.71
187.22	11.20	187.74	11.99	188.26	13.05
187.23	11.22	187.75	12.00	188.27	13.66
187.24	11.23	187.76	12.02	188.28	14.45
187.25	11.25	187.77	12.03	188.29	15.38
187.26	11.27	187.78	12.04	188.30	16.43
187.27	11.28	187.79	12.06	188.31	17.59
187.28	11.30	187.80	12.07	188.32	18.86
187.29	11.31	187.81	12.09	188.33	20.21
187.30	11.33	187.82	12.10	188.34	21.66
187.31	11.34	187.83	12.12	188.35	23.18
187.32	11.36	187.84	12.13	188.36	24.78
187.33	11.37	187.85	12.15	188.37	26.46
187.34	11.39	187.86	12.16	188.38	28.21
187.35	11.40	187.87	12.17	188.39	30.02
187.36	11.42	187.88	12.19	188.40	31.90
187.37	11.43	187.89	12.20	188.41	33.85
187.38	11.45	187.90	12.22	188.42	35.85
187.39	11.47	187.91	12.23	188.43	37.92
187.40	11.48	187.92	12.25	188.44	40.04
187.41	11.50	187.93	12.26	188.45	42.22
187.42	11.51	187.94	12.27	188.46	44.45
187.43	11.53	187.95	12.29	188.47	46.73
187.44	11.54	187.96	12.30	188.48	49.07
187.45	11.56	187.97	12.32	188.49	51.46
187.46	11.57	187.98	12.33	188.50	**53.90**
187.47	11.59	187.99	12.35		
187.48	11.60	188.00	12.36		
187.49	11.62	188.01	12.37		
187.50	11.63	188.02	12.39		
187.51	11.65	188.03	12.40		
187.52	11.66	188.04	12.42		
187.53	11.68	188.05	12.43		
187.54	11.69	188.06	12.44		
187.55	11.71	188.07	12.46		
187.56	11.72	188.08	12.47		
187.57	11.74	188.09	12.49		
187.58	11.75	188.10	12.50		
187.59	11.77	188.11	12.51		
187.60	11.78	188.12	12.53		
187.61	11.80	188.13	12.54		
187.62	11.81	188.14	12.56		
187.63	11.83	188.15	12.57		
187.64	11.84	188.16	12.58		
187.65	11.85	188.17	12.60		
187.66	11.87	188.18	12.61		
187.67	11.88	188.19	12.62		

Stage-Area-Storage for Pond B-49: Basin #49

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	6,565	0	183.52	7,116	3,557
183.01	6,576	66	183.53	7,127	3,628
183.02	6,586	132	183.54	7,137	3,700
183.03	6,597	197	183.55	7,148	3,771
183.04	6,607	263	183.56	7,159	3,843
183.05	6,618	330	183.57	7,169	3,914
183.06	6,629	396	183.58	7,180	3,986
183.07	6,639	462	183.59	7,190	4,058
183.08	6,650	529	183.60	7,201	4,130
183.09	6,660	595	183.61	7,212	4,202
183.10	6,671	662	183.62	7,222	4,274
183.11	6,682	729	183.63	7,233	4,346
183.12	6,692	795	183.64	7,243	4,419
183.13	6,703	862	183.65	7,254	4,491
183.14	6,713	929	183.66	7,265	4,564
183.15	6,724	997	183.67	7,275	4,636
183.16	6,735	1,064	183.68	7,286	4,709
183.17	6,745	1,131	183.69	7,296	4,782
183.18	6,756	1,199	183.70	7,307	4,855
183.19	6,766	1,266	183.71	7,318	4,928
183.20	6,777	1,334	183.72	7,328	5,002
183.21	6,788	1,402	183.73	7,339	5,075
183.22	6,798	1,470	183.74	7,349	5,148
183.23	6,809	1,538	183.75	7,360	5,222
183.24	6,819	1,606	183.76	7,371	5,296
183.25	6,830	1,674	183.77	7,381	5,369
183.26	6,841	1,743	183.78	7,392	5,443
183.27	6,851	1,811	183.79	7,402	5,517
183.28	6,862	1,880	183.80	7,413	5,591
183.29	6,872	1,948	183.81	7,424	5,665
183.30	6,883	2,017	183.82	7,434	5,740
183.31	6,894	2,086	183.83	7,445	5,814
183.32	6,904	2,155	183.84	7,455	5,889
183.33	6,915	2,224	183.85	7,466	5,963
183.34	6,925	2,293	183.86	7,477	6,038
183.35	6,936	2,363	183.87	7,487	6,113
183.36	6,947	2,432	183.88	7,498	6,188
183.37	6,957	2,502	183.89	7,508	6,263
183.38	6,968	2,571	183.90	7,519	6,338
183.39	6,978	2,641	183.91	7,530	6,413
183.40	6,989	2,711	183.92	7,540	6,488
183.41	7,000	2,781	183.93	7,551	6,564
183.42	7,010	2,851	183.94	7,561	6,639
183.43	7,021	2,921	183.95	7,572	6,715
183.44	7,031	2,991	183.96	7,583	6,791
183.45	7,042	3,062	183.97	7,593	6,867
183.46	7,053	3,132	183.98	7,604	6,943
183.47	7,063	3,203	183.99	7,614	7,019
183.48	7,074	3,273	184.00	7,625	7,095
183.49	7,084	3,344	184.01	7,636	7,171
183.50	7,095	3,415	184.02	7,647	7,248
183.51	7,106	3,486	184.03	7,658	7,324

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	7,669	7,401	184.56	8,237	11,536
184.05	7,680	7,478	184.57	8,247	11,619
184.06	7,691	7,554	184.58	8,258	11,701
184.07	7,701	7,631	184.59	8,269	11,784
184.08	7,712	7,708	184.60	8,280	11,867
184.09	7,723	7,786	184.61	8,291	11,949
184.10	7,734	7,863	184.62	8,302	12,032
184.11	7,745	7,940	184.63	8,313	12,115
184.12	7,756	8,018	184.64	8,324	12,199
184.13	7,767	8,095	184.65	8,335	12,282
184.14	7,778	8,173	184.66	8,346	12,365
184.15	7,789	8,251	184.67	8,357	12,449
184.16	7,800	8,329	184.68	8,368	12,532
184.17	7,811	8,407	184.69	8,378	12,616
184.18	7,822	8,485	184.70	8,389	12,700
184.19	7,832	8,563	184.71	8,400	12,784
184.20	7,843	8,642	184.72	8,411	12,868
184.21	7,854	8,720	184.73	8,422	12,952
184.22	7,865	8,799	184.74	8,433	13,036
184.23	7,876	8,878	184.75	8,444	13,121
184.24	7,887	8,956	184.76	8,455	13,205
184.25	7,898	9,035	184.77	8,466	13,290
184.26	7,909	9,114	184.78	8,477	13,375
184.27	7,920	9,194	184.79	8,488	13,460
184.28	7,931	9,273	184.80	8,499	13,544
184.29	7,942	9,352	184.81	8,510	13,629
184.30	7,953	9,432	184.82	8,520	13,715
184.31	7,964	9,511	184.83	8,531	13,800
184.32	7,974	9,591	184.84	8,542	13,885
184.33	7,985	9,671	184.85	8,553	13,971
184.34	7,996	9,751	184.86	8,564	14,056
184.35	8,007	9,831	184.87	8,575	14,142
184.36	8,018	9,911	184.88	8,586	14,228
184.37	8,029	9,991	184.89	8,597	14,314
184.38	8,040	10,071	184.90	8,608	14,400
184.39	8,051	10,152	184.91	8,619	14,486
184.40	8,062	10,232	184.92	8,630	14,572
184.41	8,073	10,313	184.93	8,641	14,658
184.42	8,084	10,394	184.94	8,651	14,745
184.43	8,095	10,475	184.95	8,662	14,832
184.44	8,105	10,556	184.96	8,673	14,918
184.45	8,116	10,637	184.97	8,684	15,005
184.46	8,127	10,718	184.98	8,695	15,092
184.47	8,138	10,799	184.99	8,706	15,179
184.48	8,149	10,881	185.00	8,717	15,266
184.49	8,160	10,962	185.01	8,728	15,353
184.50	8,171	11,044	185.02	8,740	15,441
184.51	8,182	11,126	185.03	8,751	15,528
184.52	8,193	11,208	185.04	8,762	15,616
184.53	8,204	11,290	185.05	8,774	15,703
184.54	8,215	11,372	185.06	8,785	15,791
184.55	8,226	11,454	185.07	8,797	15,879

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	8,808	15,967	185.60	9,399	20,701
185.09	8,819	16,055	185.61	9,410	20,795
185.10	8,831	16,143	185.62	9,421	20,889
185.11	8,842	16,232	185.63	9,433	20,983
185.12	8,853	16,320	185.64	9,444	21,078
185.13	8,865	16,409	185.65	9,455	21,172
185.14	8,876	16,498	185.66	9,467	21,267
185.15	8,887	16,586	185.67	9,478	21,361
185.16	8,899	16,675	185.68	9,489	21,456
185.17	8,910	16,764	185.69	9,501	21,551
185.18	8,921	16,853	185.70	9,512	21,646
185.19	8,933	16,943	185.71	9,524	21,741
185.20	8,944	17,032	185.72	9,535	21,837
185.21	8,956	17,122	185.73	9,546	21,932
185.22	8,967	17,211	185.74	9,558	22,028
185.23	8,978	17,301	185.75	9,569	22,123
185.24	8,990	17,391	185.76	9,580	22,219
185.25	9,001	17,481	185.77	9,592	22,315
185.26	9,012	17,571	185.78	9,603	22,411
185.27	9,024	17,661	185.79	9,614	22,507
185.28	9,035	17,751	185.80	9,626	22,603
185.29	9,046	17,842	185.81	9,637	22,699
185.30	9,058	17,932	185.82	9,649	22,796
185.31	9,069	18,023	185.83	9,660	22,892
185.32	9,081	18,114	185.84	9,671	22,989
185.33	9,092	18,204	185.85	9,683	23,086
185.34	9,103	18,295	185.86	9,694	23,183
185.35	9,115	18,387	185.87	9,705	23,280
185.36	9,126	18,478	185.88	9,717	23,377
185.37	9,137	18,569	185.89	9,728	23,474
185.38	9,149	18,660	185.90	9,739	23,571
185.39	9,160	18,752	185.91	9,751	23,669
185.40	9,171	18,844	185.92	9,762	23,766
185.41	9,183	18,935	185.93	9,773	23,864
185.42	9,194	19,027	185.94	9,785	23,962
185.43	9,205	19,119	185.95	9,796	24,060
185.44	9,217	19,211	185.96	9,808	24,158
185.45	9,228	19,304	185.97	9,819	24,256
185.46	9,240	19,396	185.98	9,830	24,354
185.47	9,251	19,488	185.99	9,842	24,453
185.48	9,262	19,581	186.00	9,853	24,551
185.49	9,274	19,674	186.01	9,865	24,650
185.50	9,285	19,767	186.02	9,876	24,748
185.51	9,296	19,859	186.03	9,888	24,847
185.52	9,308	19,952	186.04	9,900	24,946
185.53	9,319	20,046	186.05	9,912	25,045
185.54	9,330	20,139	186.06	9,923	25,144
185.55	9,342	20,232	186.07	9,935	25,244
185.56	9,353	20,326	186.08	9,947	25,343
185.57	9,365	20,419	186.09	9,959	25,443
185.58	9,376	20,513	186.10	9,970	25,542
185.59	9,387	20,607	186.11	9,982	25,642

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.12	9,994	25,742	186.64	10,604	31,097
186.13	10,006	25,842	186.65	10,616	31,203
186.14	10,017	25,942	186.66	10,628	31,310
186.15	10,029	26,042	186.67	10,640	31,416
186.16	10,041	26,143	186.68	10,651	31,522
186.17	10,053	26,243	186.69	10,663	31,629
186.18	10,064	26,344	186.70	10,675	31,736
186.19	10,076	26,444	186.71	10,687	31,843
186.20	10,088	26,545	186.72	10,698	31,949
186.21	10,100	26,646	186.73	10,710	32,057
186.22	10,111	26,747	186.74	10,722	32,164
186.23	10,123	26,848	186.75	10,734	32,271
186.24	10,135	26,950	186.76	10,745	32,378
186.25	10,147	27,051	186.77	10,757	32,486
186.26	10,158	27,152	186.78	10,769	32,593
186.27	10,170	27,254	186.79	10,780	32,701
186.28	10,182	27,356	186.80	10,792	32,809
186.29	10,193	27,458	186.81	10,804	32,917
186.30	10,205	27,560	186.82	10,816	33,025
186.31	10,217	27,662	186.83	10,827	33,133
186.32	10,229	27,764	186.84	10,839	33,242
186.33	10,240	27,866	186.85	10,851	33,350
186.34	10,252	27,969	186.86	10,863	33,459
186.35	10,264	28,071	186.87	10,874	33,567
186.36	10,276	28,174	186.88	10,886	33,676
186.37	10,287	28,277	186.89	10,898	33,785
186.38	10,299	28,380	186.90	10,910	33,894
186.39	10,311	28,483	186.91	10,921	34,003
186.40	10,323	28,586	186.92	10,933	34,113
186.41	10,334	28,689	186.93	10,945	34,222
186.42	10,346	28,793	186.94	10,957	34,331
186.43	10,358	28,896	186.95	10,968	34,441
186.44	10,370	29,000	186.96	10,980	34,551
186.45	10,381	29,104	186.97	10,992	34,661
186.46	10,393	29,208	186.98	11,004	34,771
186.47	10,405	29,312	186.99	11,015	34,881
186.48	10,417	29,416	187.00	11,027	34,991
186.49	10,428	29,520	187.01	11,040	35,101
186.50	10,440	29,624	187.02	11,053	35,212
186.51	10,452	29,729	187.03	11,066	35,322
186.52	10,463	29,833	187.04	11,079	35,433
186.53	10,475	29,938	187.05	11,092	35,544
186.54	10,487	30,043	187.06	11,105	35,655
186.55	10,499	30,148	187.07	11,118	35,766
186.56	10,510	30,253	187.08	11,131	35,877
186.57	10,522	30,358	187.09	11,145	35,989
186.58	10,534	30,463	187.10	11,158	36,100
186.59	10,546	30,569	187.11	11,171	36,212
186.60	10,557	30,674	187.12	11,184	36,324
186.61	10,569	30,780	187.13	11,197	36,436
186.62	10,581	30,886	187.14	11,210	36,548
186.63	10,593	30,991	187.15	11,223	36,660

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.16	11,236	36,772	187.68	11,915	42,791
187.17	11,249	36,884	187.69	11,928	42,911
187.18	11,262	36,997	187.70	11,941	43,030
187.19	11,275	37,110	187.71	11,954	43,149
187.20	11,288	37,223	187.72	11,967	43,269
187.21	11,301	37,335	187.73	11,980	43,389
187.22	11,314	37,449	187.74	11,993	43,509
187.23	11,327	37,562	187.75	12,007	43,629
187.24	11,340	37,675	187.76	12,020	43,749
187.25	11,354	37,789	187.77	12,033	43,869
187.26	11,367	37,902	187.78	12,046	43,989
187.27	11,380	38,016	187.79	12,059	44,110
187.28	11,393	38,130	187.80	12,072	44,231
187.29	11,406	38,244	187.81	12,085	44,351
187.30	11,419	38,358	187.82	12,098	44,472
187.31	11,432	38,472	187.83	12,111	44,593
187.32	11,445	38,587	187.84	12,124	44,714
187.33	11,458	38,701	187.85	12,137	44,836
187.34	11,471	38,816	187.86	12,150	44,957
187.35	11,484	38,930	187.87	12,163	45,079
187.36	11,497	39,045	187.88	12,176	45,200
187.37	11,510	39,160	187.89	12,189	45,322
187.38	11,523	39,276	187.90	12,202	45,444
187.39	11,536	39,391	187.91	12,215	45,566
187.40	11,549	39,506	187.92	12,229	45,689
187.41	11,562	39,622	187.93	12,242	45,811
187.42	11,576	39,738	187.94	12,255	45,933
187.43	11,589	39,853	187.95	12,268	46,056
187.44	11,602	39,969	187.96	12,281	46,179
187.45	11,615	40,085	187.97	12,294	46,302
187.46	11,628	40,202	187.98	12,307	46,425
187.47	11,641	40,318	187.99	12,320	46,548
187.48	11,654	40,434	188.00	12,333	46,671
187.49	11,667	40,551	188.01	12,345	46,794
187.50	11,680	40,668	188.02	12,358	46,918
187.51	11,693	40,785	188.03	12,370	47,042
187.52	11,706	40,902	188.04	12,383	47,165
187.53	11,719	41,019	188.05	12,395	47,289
187.54	11,732	41,136	188.06	12,408	47,413
187.55	11,745	41,253	188.07	12,420	47,537
187.56	11,758	41,371	188.08	12,433	47,662
187.57	11,771	41,489	188.09	12,445	47,786
187.58	11,784	41,606	188.10	12,458	47,911
187.59	11,798	41,724	188.11	12,470	48,035
187.60	11,811	41,842	188.12	12,483	48,160
187.61	11,824	41,960	188.13	12,495	48,285
187.62	11,837	42,079	188.14	12,507	48,410
187.63	11,850	42,197	188.15	12,520	48,535
187.64	11,863	42,316	188.16	12,532	48,660
187.65	11,876	42,434	188.17	12,545	48,786
187.66	11,889	42,553	188.18	12,557	48,911
187.67	11,902	42,672	188.19	12,570	49,037

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.20	12,582	49,163
188.21	12,595	49,288
188.22	12,607	49,414
188.23	12,620	49,541
188.24	12,632	49,667
188.25	12,645	49,793
188.26	12,657	49,920
188.27	12,669	50,046
188.28	12,682	50,173
188.29	12,694	50,300
188.30	12,707	50,427
188.31	12,719	50,554
188.32	12,732	50,681
188.33	12,744	50,809
188.34	12,757	50,936
188.35	12,769	51,064
188.36	12,782	51,192
188.37	12,794	51,319
188.38	12,806	51,448
188.39	12,819	51,576
188.40	12,831	51,704
188.41	12,844	51,832
188.42	12,856	51,961
188.43	12,869	52,089
188.44	12,881	52,218
188.45	12,894	52,347
188.46	12,906	52,476
188.47	12,919	52,605
188.48	12,931	52,734
188.49	12,944	52,864
188.50	**12,956**	**52,993**

Summary for Pond B-50: Basin #50

Inflow Area = 2.262 ac, 29.27% Impervious, Inflow Depth = 2.11" for Future 2 yr event
Inflow = 4.89 cfs @ 12.18 hrs, Volume= 0.398 af
Outflow = 0.15 cfs @ 16.67 hrs, Volume= 0.278 af, Atten= 97%, Lag= 269.4 min
Primary = 0.15 cfs @ 16.67 hrs, Volume= 0.278 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 185.27' @ 16.67 hrs Surf.Area= 10,475 sf Storage= 12,276 cf

Plug-Flow detention time= 756.4 min calculated for 0.278 af (70% of inflow)
Center-of-Mass det. time= 653.0 min (1,460.7 - 807.7)

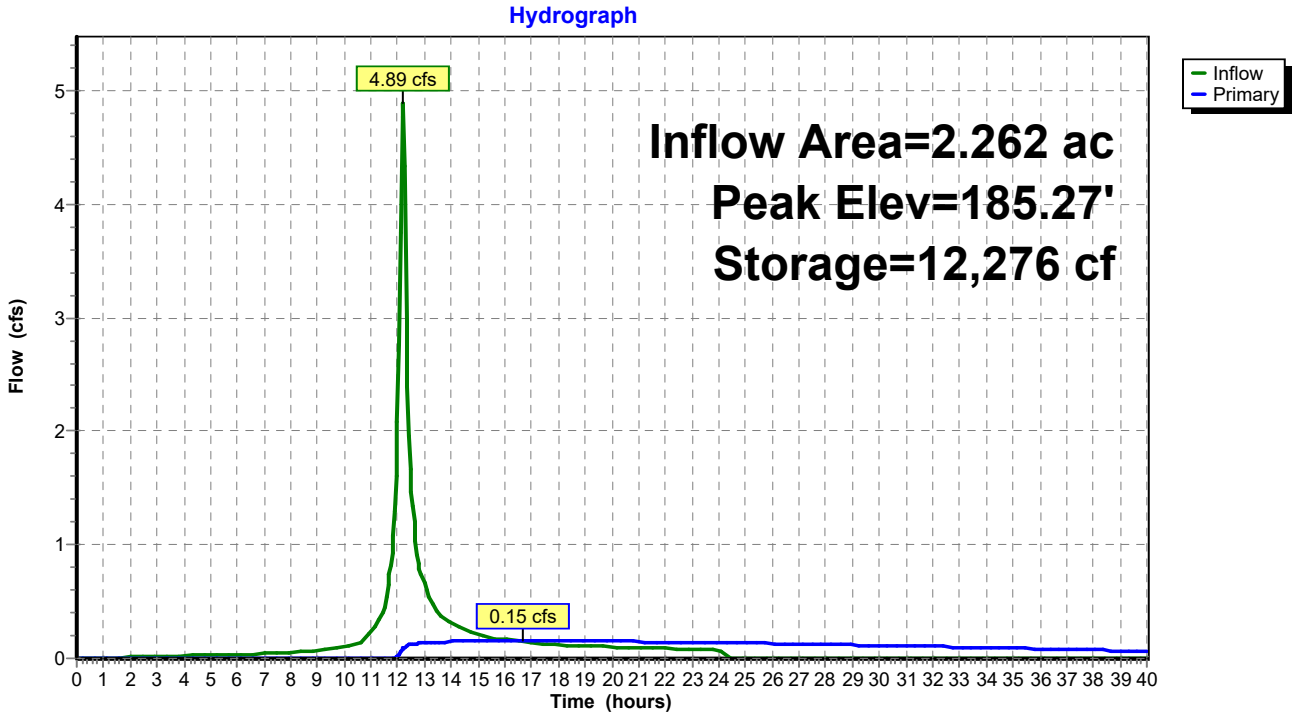
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	53,209 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	8,805	0	0
185.00	10,108	9,457	9,457
186.00	11,448	10,778	20,235
187.00	12,826	12,137	32,372
188.00	14,244	13,535	45,907
188.50	14,966	7,303	53,209

Device	Routing	Invert	Outlet Devices
#1	Primary	180.50'	**18.0" Round Culvert** L= 83.0' Ke= 0.500 Inlet / Outlet Invert= 180.50' / 179.67' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.32'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.30'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.15 cfs @ 16.67 hrs HW=185.27' (Free Discharge)
- **1=Culvert** (Passes 0.15 cfs of 16.54 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.15 cfs @ 4.44 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-50: Basin #50



Stage-Discharge for Pond B-50: Basin #50

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	0.05	185.04	0.13	185.56	1.89
184.01	0.00	184.53	0.05	185.05	0.13	185.57	1.99
184.02	0.00	184.54	0.06	185.06	0.13	185.58	2.09
184.03	0.00	184.55	0.06	185.07	0.13	185.59	2.19
184.04	0.00	184.56	0.06	185.08	0.13	185.60	2.30
184.05	0.00	184.57	0.06	185.09	0.13	185.61	2.40
184.06	0.00	184.58	0.06	185.10	0.13	185.62	2.51
184.07	0.00	184.59	0.07	185.11	0.14	185.63	2.62
184.08	0.00	184.60	0.07	185.12	0.14	185.64	2.73
184.09	0.00	184.61	0.07	185.13	0.14	185.65	2.84
184.10	0.00	184.62	0.07	185.14	0.14	185.66	2.96
184.11	0.00	184.63	0.07	185.15	0.14	185.67	3.07
184.12	0.00	184.64	0.08	185.16	0.14	185.68	3.19
184.13	0.00	184.65	0.08	185.17	0.14	185.69	3.31
184.14	0.00	184.66	0.08	185.18	0.14	185.70	3.43
184.15	0.00	184.67	0.08	185.19	0.14	185.71	3.55
184.16	0.00	184.68	0.08	185.20	0.14	185.72	3.67
184.17	0.00	184.69	0.08	185.21	0.15	185.73	3.80
184.18	0.00	184.70	0.09	185.22	0.15	185.74	3.92
184.19	0.00	184.71	0.09	185.23	0.15	185.75	4.05
184.20	0.00	184.72	0.09	185.24	0.15	185.76	4.18
184.21	0.00	184.73	0.09	185.25	0.15	185.77	4.31
184.22	0.00	184.74	0.09	185.26	0.15	185.78	4.44
184.23	0.00	184.75	0.09	185.27	0.15	185.79	4.57
184.24	0.00	184.76	0.10	185.28	0.15	185.80	4.70
184.25	0.00	184.77	0.10	185.29	0.15	185.81	4.84
184.26	0.00	184.78	0.10	185.30	0.15	185.82	4.97
184.27	0.00	184.79	0.10	185.31	0.17	185.83	5.11
184.28	0.00	184.80	0.10	185.32	0.19	185.84	5.25
184.29	0.00	184.81	0.10	185.33	0.22	185.85	5.38
184.30	0.00	184.82	0.10	185.34	0.26	185.86	5.52
184.31	0.00	184.83	0.10	185.35	0.30	185.87	5.67
184.32	0.00	184.84	0.11	185.36	0.35	185.88	5.81
184.33	0.00	184.85	0.11	185.37	0.40	185.89	5.95
184.34	0.00	184.86	0.11	185.38	0.46	185.90	6.10
184.35	0.00	184.87	0.11	185.39	0.51	185.91	6.24
184.36	0.00	184.88	0.11	185.40	0.57	185.92	6.39
184.37	0.00	184.89	0.11	185.41	0.64	185.93	6.54
184.38	0.01	184.90	0.11	185.42	0.70	185.94	6.68
184.39	0.01	184.91	0.11	185.43	0.77	185.95	6.83
184.40	0.01	184.92	0.12	185.44	0.85	185.96	6.99
184.41	0.01	184.93	0.12	185.45	0.92	185.97	7.14
184.42	0.02	184.94	0.12	185.46	1.00	185.98	7.29
184.43	0.02	184.95	0.12	185.47	1.08	185.99	7.44
184.44	0.02	184.96	0.12	185.48	1.16	186.00	7.60
184.45	0.03	184.97	0.12	185.49	1.24	186.01	7.75
184.46	0.03	184.98	0.12	185.50	1.33	186.02	7.91
184.47	0.03	184.99	0.12	185.51	1.42	186.03	8.07
184.48	0.04	185.00	0.12	185.52	1.51	186.04	8.23
184.49	0.04	185.01	0.13	185.53	1.60	186.05	8.39
184.50	0.05	185.02	0.13	185.54	1.69	186.06	8.55
184.51	0.05	185.03	0.13	185.55	1.79	186.07	8.71

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	8.87	186.60	18.37	187.12	19.91	187.64	20.76
186.09	9.03	186.61	18.57	187.13	19.93	187.65	20.78
186.10	9.20	186.62	18.77	187.14	19.95	187.66	20.80
186.11	9.36	186.63	18.97	187.15	19.96	187.67	20.81
186.12	9.53	186.64	19.09	187.16	19.98	187.68	20.83
186.13	9.69	186.65	19.11	187.17	20.00	187.69	20.84
186.14	9.86	186.66	19.13	187.18	20.01	187.70	20.86
186.15	10.03	186.67	19.14	187.19	20.03	187.71	20.88
186.16	10.20	186.68	19.16	187.20	20.05	187.72	20.89
186.17	10.37	186.69	19.18	187.21	20.06	187.73	20.91
186.18	10.54	186.70	19.20	187.22	20.08	187.74	20.92
186.19	10.71	186.71	19.21	187.23	20.10	187.75	20.94
186.20	10.88	186.72	19.23	187.24	20.11	187.76	20.96
186.21	11.06	186.73	19.25	187.25	20.13	187.77	20.97
186.22	11.23	186.74	19.27	187.26	20.15	187.78	20.99
186.23	11.41	186.75	19.28	187.27	20.16	187.79	21.00
186.24	11.58	186.76	19.30	187.28	20.18	187.80	21.02
186.25	11.76	186.77	19.32	187.29	20.19	187.81	21.04
186.26	11.93	186.78	19.33	187.30	20.21	187.82	21.05
186.27	12.11	186.79	19.35	187.31	20.23	187.83	21.07
186.28	12.29	186.80	19.37	187.32	20.24	187.84	21.08
186.29	12.47	186.81	19.39	187.33	20.26	187.85	21.10
186.30	12.65	186.82	19.40	187.34	20.28	187.86	21.11
186.31	12.83	186.83	19.42	187.35	20.29	187.87	21.13
186.32	13.01	186.84	19.44	187.36	20.31	187.88	21.15
186.33	13.20	186.85	19.46	187.37	20.33	187.89	21.16
186.34	13.38	186.86	19.47	187.38	20.34	187.90	21.18
186.35	13.56	186.87	19.49	187.39	20.36	187.91	21.19
186.36	13.75	186.88	19.51	187.40	20.38	187.92	21.21
186.37	13.93	186.89	19.52	187.41	20.39	187.93	21.22
186.38	14.12	186.90	19.54	187.42	20.41	187.94	21.24
186.39	14.30	186.91	19.56	187.43	20.42	187.95	21.26
186.40	14.49	186.92	19.57	187.44	20.44	187.96	21.27
186.41	14.68	186.93	19.59	187.45	20.46	187.97	21.29
186.42	14.87	186.94	19.61	187.46	20.47	187.98	21.30
186.43	15.06	186.95	19.63	187.47	20.49	187.99	21.32
186.44	15.25	186.96	19.64	187.48	20.51	188.00	21.33
186.45	15.44	186.97	19.66	187.49	20.52	188.01	21.35
186.46	15.63	186.98	19.68	187.50	20.54	188.02	21.37
186.47	15.82	186.99	19.69	187.51	20.55	188.03	21.38
186.48	16.01	187.00	19.71	187.52	20.57	188.04	21.40
186.49	16.21	187.01	19.73	187.53	20.59	188.05	21.41
186.50	16.40	187.02	19.74	187.54	20.60	188.06	21.43
186.51	16.59	187.03	19.76	187.55	20.62	188.07	21.44
186.52	16.79	187.04	19.78	187.56	20.64	188.08	21.46
186.53	16.98	187.05	19.79	187.57	20.65	188.09	21.47
186.54	17.18	187.06	19.81	187.58	20.67	188.10	21.49
186.55	17.38	187.07	19.83	187.59	20.68	188.11	21.51
186.56	17.57	187.08	19.85	187.60	20.70	188.12	21.52
186.57	17.77	187.09	19.86	187.61	20.72	188.13	21.54
186.58	17.97	187.10	19.88	187.62	20.73	188.14	21.55
186.59	18.17	187.11	19.90	187.63	20.75	188.15	21.57

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)
188.16	21.58
188.17	21.60
188.18	21.61
188.19	21.63
188.20	21.64
188.21	21.66
188.22	21.67
188.23	21.69
188.24	21.71
188.25	21.72
188.26	21.74
188.27	21.75
188.28	21.77
188.29	21.78
188.30	21.80
188.31	21.81
188.32	21.83
188.33	21.84
188.34	21.86
188.35	21.87
188.36	21.89
188.37	21.90
188.38	21.92
188.39	21.93
188.40	21.95
188.41	21.97
188.42	21.98
188.43	22.00
188.44	22.01
188.45	22.03
188.46	22.16
188.47	22.39
188.48	22.68
188.49	23.02
188.50	**23.41**

Stage-Area-Storage for Pond B-50: Basin #50

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	8,805	0	184.52	9,483	4,755
184.01	8,818	88	184.53	9,496	4,850
184.02	8,831	176	184.54	9,509	4,945
184.03	8,844	265	184.55	9,522	5,040
184.04	8,857	353	184.56	9,535	5,135
184.05	8,870	442	184.57	9,548	5,231
184.06	8,883	531	184.58	9,561	5,326
184.07	8,896	620	184.59	9,574	5,422
184.08	8,909	709	184.60	9,587	5,518
184.09	8,922	798	184.61	9,600	5,613
184.10	8,935	887	184.62	9,613	5,710
184.11	8,948	976	184.63	9,626	5,806
184.12	8,961	1,066	184.64	9,639	5,902
184.13	8,974	1,156	184.65	9,652	5,999
184.14	8,987	1,245	184.66	9,665	6,095
184.15	9,000	1,335	184.67	9,678	6,192
184.16	9,013	1,425	184.68	9,691	6,289
184.17	9,027	1,516	184.69	9,704	6,386
184.18	9,040	1,606	184.70	9,717	6,483
184.19	9,053	1,696	184.71	9,730	6,580
184.20	9,066	1,787	184.72	9,743	6,677
184.21	9,079	1,878	184.73	9,756	6,775
184.22	9,092	1,969	184.74	9,769	6,872
184.23	9,105	2,060	184.75	9,782	6,970
184.24	9,118	2,151	184.76	9,795	7,068
184.25	9,131	2,242	184.77	9,808	7,166
184.26	9,144	2,333	184.78	9,821	7,264
184.27	9,157	2,425	184.79	9,834	7,363
184.28	9,170	2,516	184.80	9,847	7,461
184.29	9,183	2,608	184.81	9,860	7,559
184.30	9,196	2,700	184.82	9,873	7,658
184.31	9,209	2,792	184.83	9,886	7,757
184.32	9,222	2,884	184.84	9,900	7,856
184.33	9,235	2,977	184.85	9,913	7,955
184.34	9,248	3,069	184.86	9,926	8,054
184.35	9,261	3,162	184.87	9,939	8,153
184.36	9,274	3,254	184.88	9,952	8,253
184.37	9,287	3,347	184.89	9,965	8,353
184.38	9,300	3,440	184.90	9,978	8,452
184.39	9,313	3,533	184.91	9,991	8,552
184.40	9,326	3,626	184.92	10,004	8,652
184.41	9,339	3,720	184.93	10,017	8,752
184.42	9,352	3,813	184.94	10,030	8,852
184.43	9,365	3,907	184.95	10,043	8,953
184.44	9,378	4,000	184.96	10,056	9,053
184.45	9,391	4,094	184.97	10,069	9,154
184.46	9,404	4,188	184.98	10,082	9,255
184.47	9,417	4,282	184.99	10,095	9,355
184.48	9,430	4,377	185.00	10,108	9,457
184.49	9,443	4,471	185.01	10,121	9,558
184.50	9,457	4,565	185.02	10,135	9,659
184.51	9,470	4,660	185.03	10,148	9,760

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	10,162	9,862	185.56	10,858	15,327
185.05	10,175	9,964	185.57	10,872	15,436
185.06	10,188	10,065	185.58	10,885	15,545
185.07	10,202	10,167	185.59	10,899	15,653
185.08	10,215	10,269	185.60	10,912	15,762
185.09	10,229	10,372	185.61	10,925	15,872
185.10	10,242	10,474	185.62	10,939	15,981
185.11	10,255	10,576	185.63	10,952	16,090
185.12	10,269	10,679	185.64	10,966	16,200
185.13	10,282	10,782	185.65	10,979	16,310
185.14	10,296	10,885	185.66	10,992	16,420
185.15	10,309	10,988	185.67	11,006	16,530
185.16	10,322	11,091	185.68	11,019	16,640
185.17	10,336	11,194	185.69	11,033	16,750
185.18	10,349	11,298	185.70	11,046	16,860
185.19	10,363	11,401	185.71	11,059	16,971
185.20	10,376	11,505	185.72	11,073	17,082
185.21	10,389	11,609	185.73	11,086	17,192
185.22	10,403	11,713	185.74	11,100	17,303
185.23	10,416	11,817	185.75	11,113	17,414
185.24	10,430	11,921	185.76	11,126	17,526
185.25	10,443	12,025	185.77	11,140	17,637
185.26	10,456	12,130	185.78	11,153	17,748
185.27	10,470	12,235	185.79	11,167	17,860
185.28	10,483	12,339	185.80	11,180	17,972
185.29	10,497	12,444	185.81	11,193	18,084
185.30	10,510	12,549	185.82	11,207	18,196
185.31	10,523	12,654	185.83	11,220	18,308
185.32	10,537	12,760	185.84	11,234	18,420
185.33	10,550	12,865	185.85	11,247	18,532
185.34	10,564	12,971	185.86	11,260	18,645
185.35	10,577	13,076	185.87	11,274	18,758
185.36	10,590	13,182	185.88	11,287	18,870
185.37	10,604	13,288	185.89	11,301	18,983
185.38	10,617	13,394	185.90	11,314	19,096
185.39	10,631	13,501	185.91	11,327	19,210
185.40	10,644	13,607	185.92	11,341	19,323
185.41	10,657	13,713	185.93	11,354	19,436
185.42	10,671	13,820	185.94	11,368	19,550
185.43	10,684	13,927	185.95	11,381	19,664
185.44	10,698	14,034	185.96	11,394	19,778
185.45	10,711	14,141	185.97	11,408	19,892
185.46	10,724	14,248	185.98	11,421	20,006
185.47	10,738	14,355	185.99	11,435	20,120
185.48	10,751	14,463	186.00	11,448	20,235
185.49	10,765	14,570	186.01	11,462	20,349
185.50	10,778	14,678	186.02	11,476	20,464
185.51	10,791	14,786	186.03	11,489	20,579
185.52	10,805	14,894	186.04	11,503	20,694
185.53	10,818	15,002	186.05	11,517	20,809
185.54	10,832	15,110	186.06	11,531	20,924
185.55	10,845	15,219	186.07	11,544	21,039

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	11,558	21,155	186.60	12,275	27,351
186.09	11,572	21,270	186.61	12,289	27,474
186.10	11,586	21,386	186.62	12,302	27,597
186.11	11,600	21,502	186.63	12,316	27,720
186.12	11,613	21,618	186.64	12,330	27,843
186.13	11,627	21,734	186.65	12,344	27,967
186.14	11,641	21,851	186.66	12,357	28,090
186.15	11,655	21,967	186.67	12,371	28,214
186.16	11,668	22,084	186.68	12,385	28,338
186.17	11,682	22,201	186.69	12,399	28,462
186.18	11,696	22,317	186.70	12,413	28,586
186.19	11,710	22,434	186.71	12,426	28,710
186.20	11,724	22,552	186.72	12,440	28,834
186.21	11,737	22,669	186.73	12,454	28,959
186.22	11,751	22,786	186.74	12,468	29,083
186.23	11,765	22,904	186.75	12,482	29,208
186.24	11,779	23,022	186.76	12,495	29,333
186.25	11,793	23,140	186.77	12,509	29,458
186.26	11,806	23,258	186.78	12,523	29,583
186.27	11,820	23,376	186.79	12,537	29,708
186.28	11,834	23,494	186.80	12,550	29,834
186.29	11,848	23,612	186.81	12,564	29,959
186.30	11,861	23,731	186.82	12,578	30,085
186.31	11,875	23,850	186.83	12,592	30,211
186.32	11,889	23,968	186.84	12,606	30,337
186.33	11,903	24,087	186.85	12,619	30,463
186.34	11,917	24,206	186.86	12,633	30,589
186.35	11,930	24,326	186.87	12,647	30,716
186.36	11,944	24,445	186.88	12,661	30,842
186.37	11,958	24,565	186.89	12,674	30,969
186.38	11,972	24,684	186.90	12,688	31,096
186.39	11,985	24,804	186.91	12,702	31,223
186.40	11,999	24,924	186.92	12,716	31,350
186.41	12,013	25,044	186.93	12,730	31,477
186.42	12,027	25,164	186.94	12,743	31,604
186.43	12,041	25,285	186.95	12,757	31,732
186.44	12,054	25,405	186.96	12,771	31,860
186.45	12,068	25,526	186.97	12,785	31,987
186.46	12,082	25,646	186.98	12,798	32,115
186.47	12,096	25,767	186.99	12,812	32,243
186.48	12,109	25,888	187.00	12,826	32,372
186.49	12,123	26,009	187.01	12,840	32,500
186.50	12,137	26,131	187.02	12,854	32,628
186.51	12,151	26,252	187.03	12,869	32,757
186.52	12,165	26,374	187.04	12,883	32,886
186.53	12,178	26,495	187.05	12,897	33,015
186.54	12,192	26,617	187.06	12,911	33,144
186.55	12,206	26,739	187.07	12,925	33,273
186.56	12,220	26,861	187.08	12,939	33,402
186.57	12,233	26,984	187.09	12,954	33,532
186.58	12,247	27,106	187.10	12,968	33,661
186.59	12,261	27,229	187.11	12,982	33,791

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	12,996	33,921	187.64	13,734	40,871
187.13	13,010	34,051	187.65	13,748	41,008
187.14	13,025	34,181	187.66	13,762	41,146
187.15	13,039	34,311	187.67	13,776	41,283
187.16	13,053	34,442	187.68	13,790	41,421
187.17	13,067	34,572	187.69	13,804	41,559
187.18	13,081	34,703	187.70	13,819	41,697
187.19	13,095	34,834	187.71	13,833	41,835
187.20	13,110	34,965	187.72	13,847	41,974
187.21	13,124	35,096	187.73	13,861	42,112
187.22	13,138	35,228	187.74	13,875	42,251
187.23	13,152	35,359	187.75	13,890	42,390
187.24	13,166	35,491	187.76	13,904	42,529
187.25	13,181	35,622	187.77	13,918	42,668
187.26	13,195	35,754	187.78	13,932	42,807
187.27	13,209	35,886	187.79	13,946	42,947
187.28	13,223	36,018	187.80	13,960	43,086
187.29	13,237	36,151	187.81	13,975	43,226
187.30	13,251	36,283	187.82	13,989	43,366
187.31	13,266	36,416	187.83	14,003	43,506
187.32	13,280	36,548	187.84	14,017	43,646
187.33	13,294	36,681	187.85	14,031	43,786
187.34	13,308	36,814	187.86	14,045	43,926
187.35	13,322	36,947	187.87	14,060	44,067
187.36	13,336	37,081	187.88	14,074	44,207
187.37	13,351	37,214	187.89	14,088	44,348
187.38	13,365	37,348	187.90	14,102	44,489
187.39	13,379	37,481	187.91	14,116	44,630
187.40	13,393	37,615	187.92	14,131	44,772
187.41	13,407	37,749	187.93	14,145	44,913
187.42	13,422	37,883	187.94	14,159	45,054
187.43	13,436	38,018	187.95	14,173	45,196
187.44	13,450	38,152	187.96	14,187	45,338
187.45	13,464	38,287	187.97	14,201	45,480
187.46	13,478	38,421	187.98	14,216	45,622
187.47	13,492	38,556	187.99	14,230	45,764
187.48	13,507	38,691	188.00	14,244	45,907
187.49	13,521	38,826	188.01	14,258	46,049
187.50	13,535	38,962	188.02	14,273	46,192
187.51	13,549	39,097	188.03	14,287	46,334
187.52	13,563	39,233	188.04	14,302	46,477
187.53	13,578	39,368	188.05	14,316	46,621
187.54	13,592	39,504	188.06	14,331	46,764
187.55	13,606	39,640	188.07	14,345	46,907
187.56	13,620	39,776	188.08	14,360	47,051
187.57	13,634	39,913	188.09	14,374	47,194
187.58	13,648	40,049	188.10	14,388	47,338
187.59	13,663	40,186	188.11	14,403	47,482
187.60	13,677	40,322	188.12	14,417	47,626
187.61	13,691	40,459	188.13	14,432	47,770
187.62	13,705	40,596	188.14	14,446	47,915
187.63	13,719	40,733	188.15	14,461	48,059

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

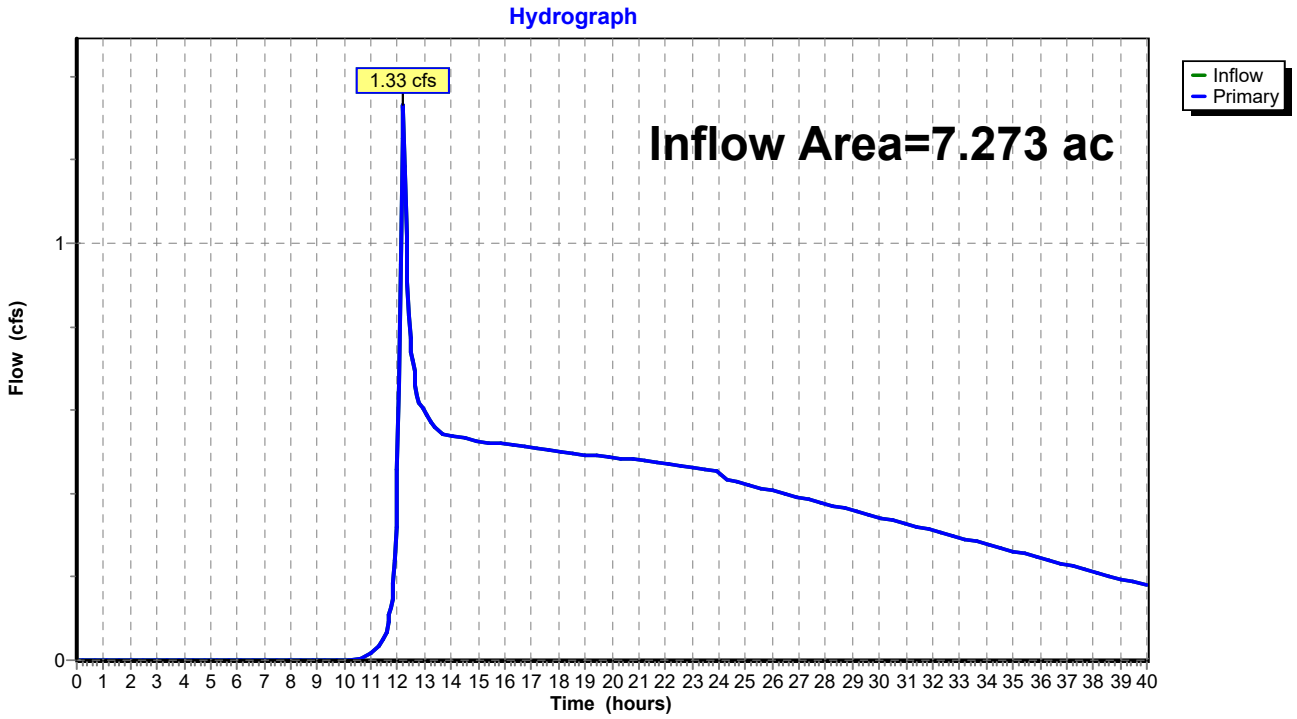
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	14,475	48,204
188.17	14,489	48,349
188.18	14,504	48,494
188.19	14,518	48,639
188.20	14,533	48,784
188.21	14,547	48,930
188.22	14,562	49,075
188.23	14,576	49,221
188.24	14,591	49,367
188.25	14,605	49,513
188.26	14,619	49,659
188.27	14,634	49,805
188.28	14,648	49,951
188.29	14,663	50,098
188.30	14,677	50,245
188.31	14,692	50,392
188.32	14,706	50,539
188.33	14,721	50,686
188.34	14,735	50,833
188.35	14,749	50,980
188.36	14,764	51,128
188.37	14,778	51,276
188.38	14,793	51,423
188.39	14,807	51,571
188.40	14,822	51,720
188.41	14,836	51,868
188.42	14,850	52,016
188.43	14,865	52,165
188.44	14,879	52,314
188.45	14,894	52,463
188.46	14,908	52,612
188.47	14,923	52,761
188.48	14,937	52,910
188.49	14,952	53,059
188.50	**14,966**	**53,209**

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 7.273 ac, 32.33% Impervious, Inflow Depth > 1.55" for Future 2 yr event
Inflow = 1.33 cfs @ 12.19 hrs, Volume= 0.938 af
Primary = 1.33 cfs @ 12.19 hrs, Volume= 0.938 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5



Summary for Subcatchment 48I: PDA-48 (impervious)

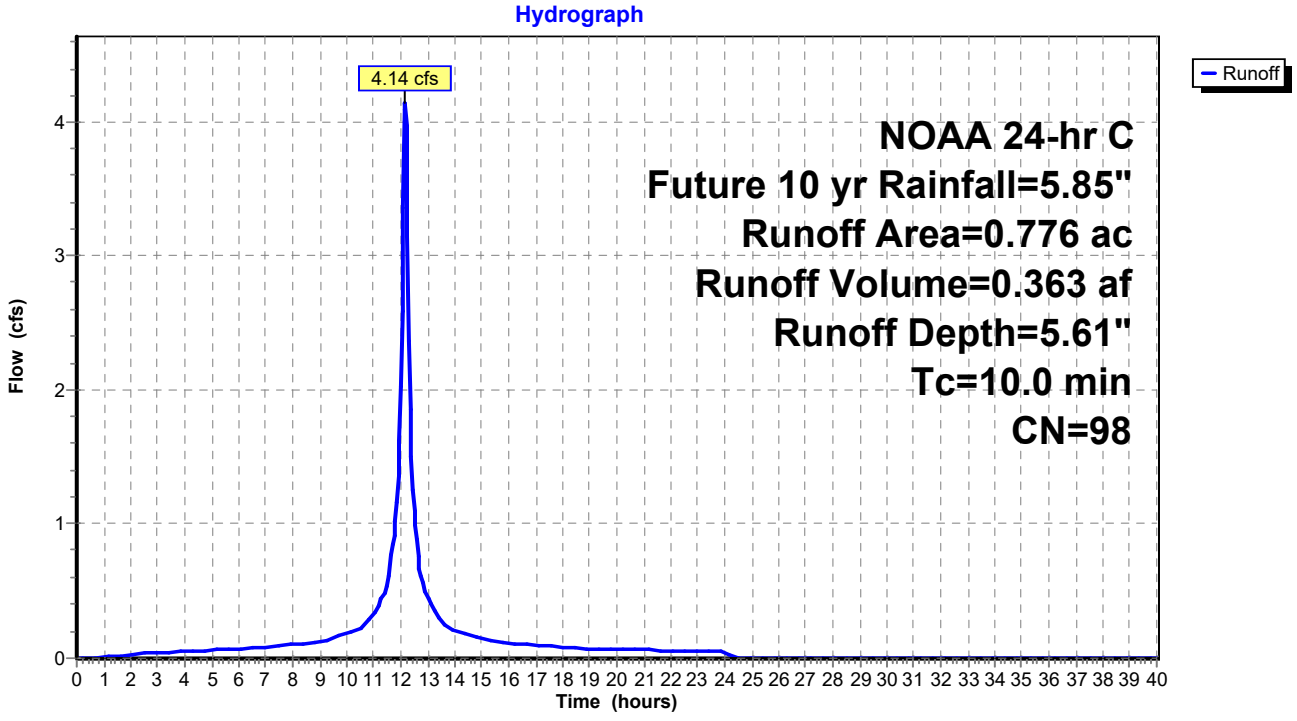
Runoff = 4.14 cfs @ 12.17 hrs, Volume= 0.363 af, Depth= 5.61"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.235	98	Pavement, HSG C
*	0.522	98	Roof, HSG C
*	0.019	98	Concrete, HSG C
	0.776	98	Weighted Average
	0.776		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 48I: PDA-48 (impervious)



Summary for Subcatchment 48P: PDA-48 (pervious)

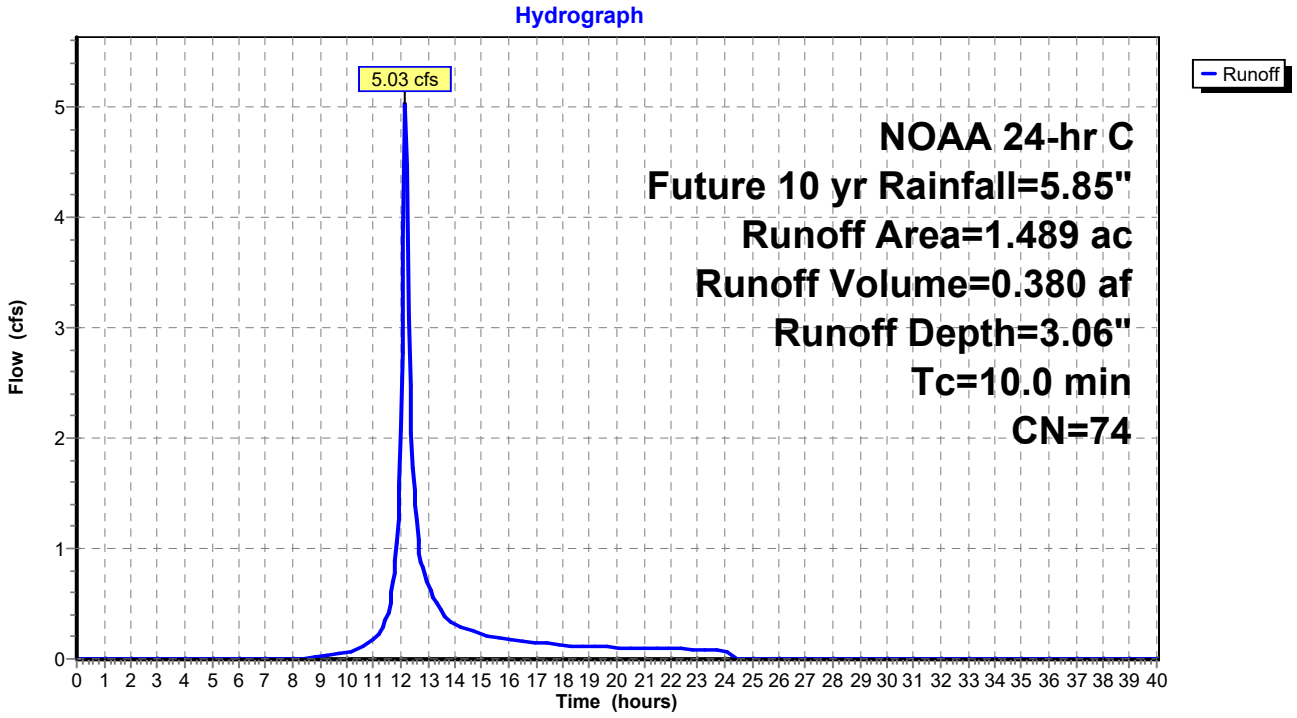
Runoff = 5.03 cfs @ 12.18 hrs, Volume= 0.380 af, Depth= 3.06"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.489	74	>75% Grass cover, Good, HSG C
1.489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 48P: PDA-48 (pervious)



Summary for Subcatchment 49I: PDA-49 (impervious)

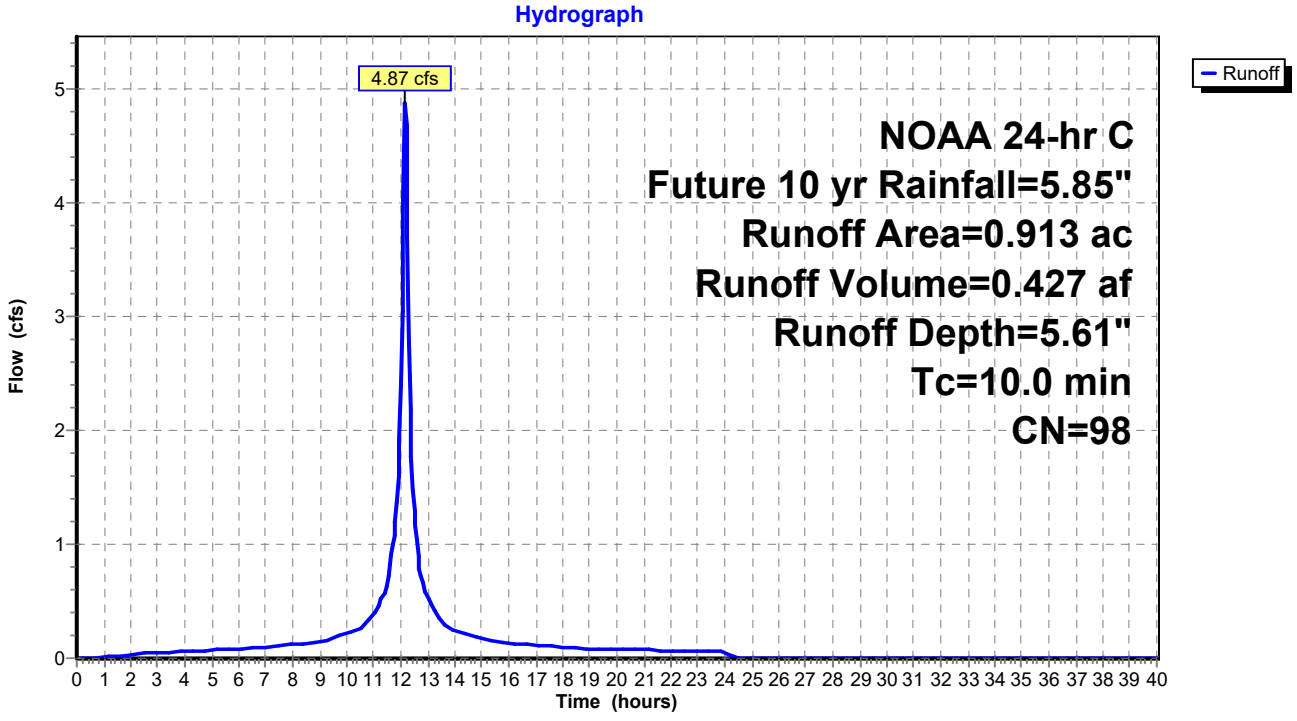
Runoff = 4.87 cfs @ 12.17 hrs, Volume= 0.427 af, Depth= 5.61"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.434	98	Pavement, HSG C
*	0.418	98	Roof, HSG C
*	0.061	98	Concrete, HSG C
	0.913	98	Weighted Average
	0.913		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 49I: PDA-49 (impervious)



Summary for Subcatchment 49P: PDA-49 (pervious)

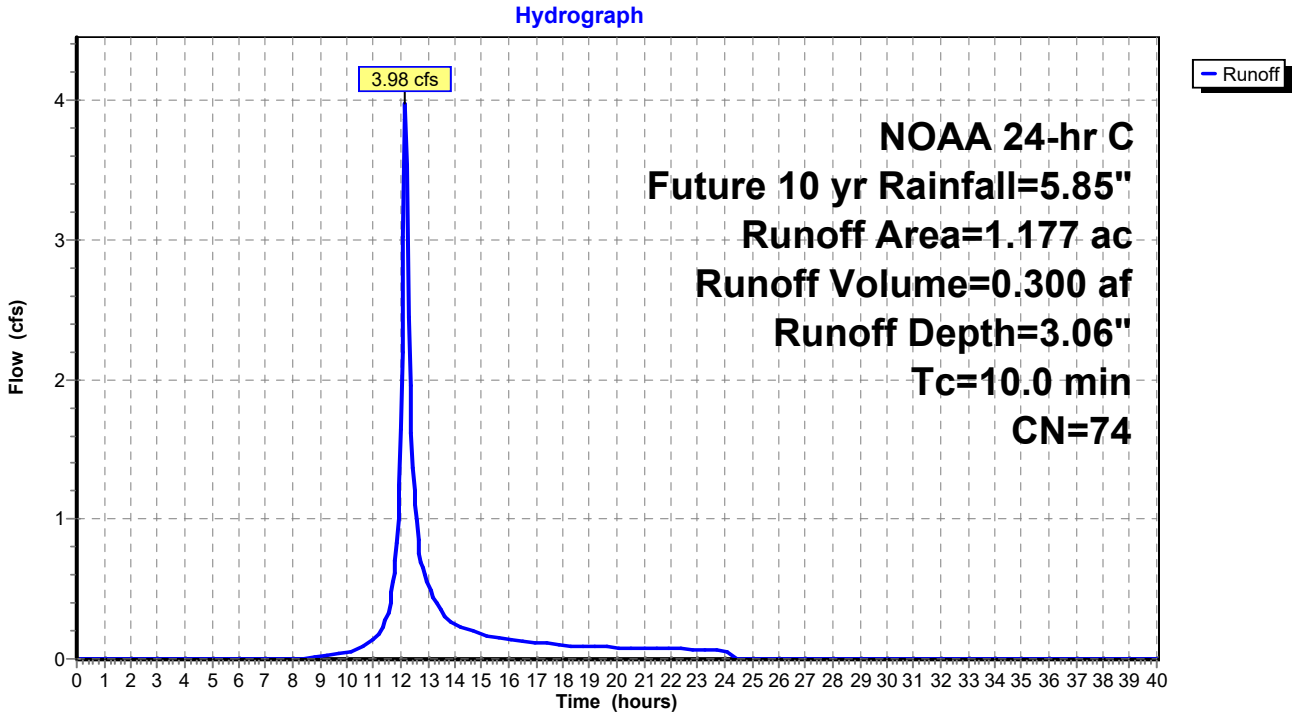
Runoff = 3.98 cfs @ 12.18 hrs, Volume= 0.300 af, Depth= 3.06"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.177	74	>75% Grass cover, Good, HSG C
1.177		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 49P: PDA-49 (pervious)



Summary for Subcatchment 50l: PDA-50 (impervious)

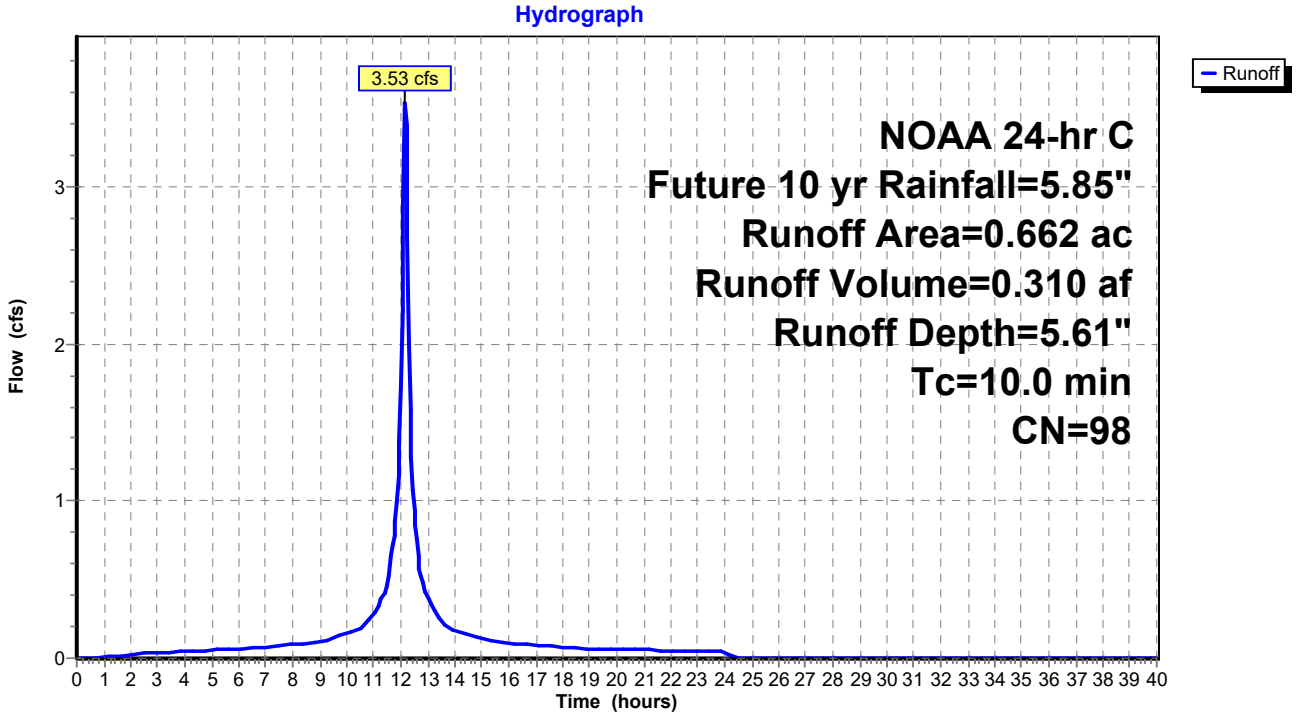
Runoff = 3.53 cfs @ 12.17 hrs, Volume= 0.310 af, Depth= 5.61"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.291	98	Pavement, HSG C
*	0.325	98	Roof, HSG C
*	0.046	98	Concrete, HSG C
	0.662	98	Weighted Average
	0.662		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 50l: PDA-50 (impervious)



Summary for Subcatchment 50P: PDA-50 (pervious)

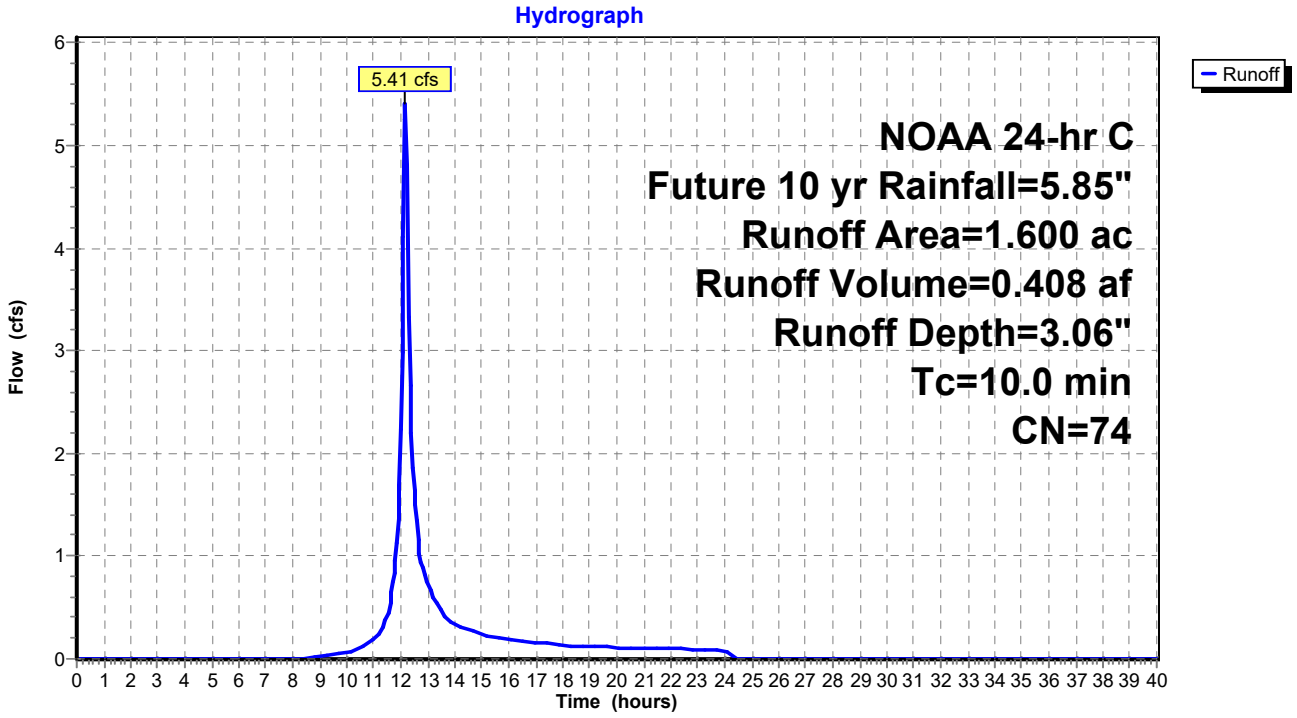
Runoff = 5.41 cfs @ 12.18 hrs, Volume= 0.408 af, Depth= 3.06"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.600	74	>75% Grass cover, Good, HSG C
1.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 50P: PDA-50 (pervious)



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

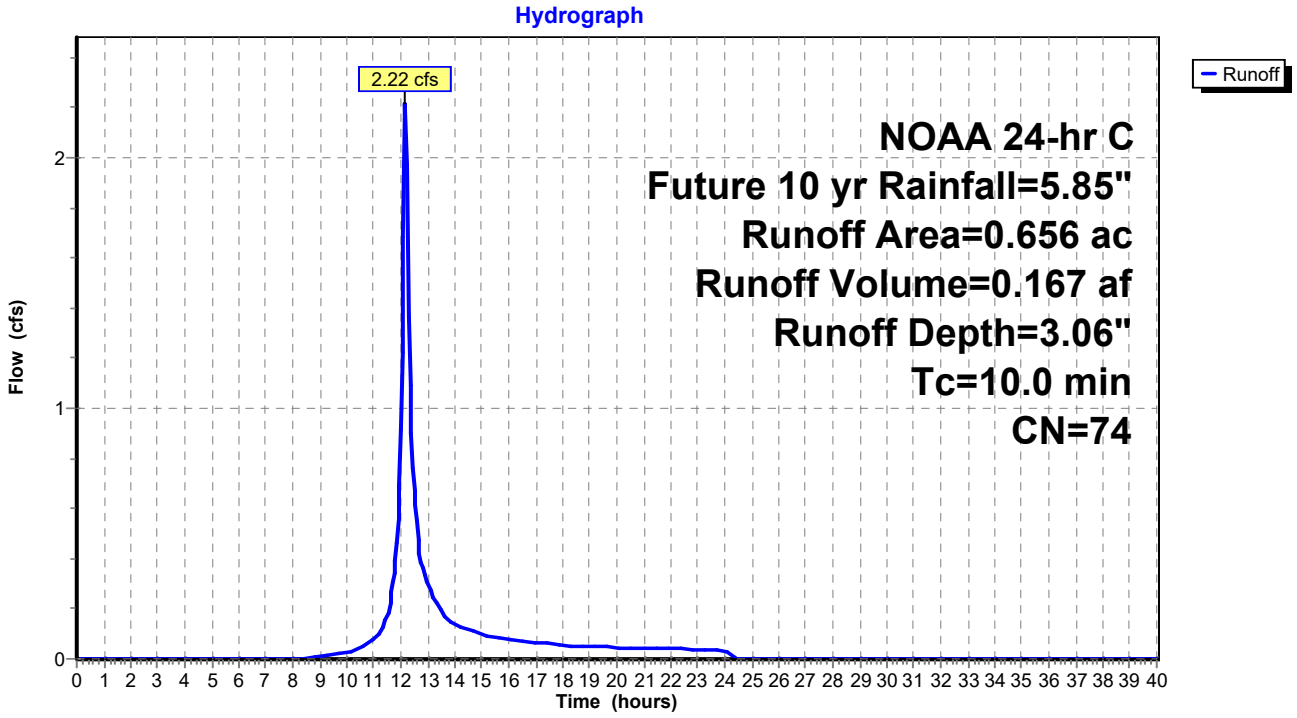
Runoff = 2.22 cfs @ 12.18 hrs, Volume= 0.167 af, Depth= 3.06"
Routed to Link PDA-5 : Proposed Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.656	74	>75% Grass cover, Good, HSG C
0.656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-5: PDA-5 (undetained)



Summary for Pond B-48: Basin #48

Inflow Area = 2.265 ac, 34.26% Impervious, Inflow Depth = 3.93" for Future 10 yr event
Inflow = 9.18 cfs @ 12.17 hrs, Volume= 0.742 af
Outflow = 0.67 cfs @ 13.56 hrs, Volume= 0.507 af, Atten= 93%, Lag= 83.3 min
Primary = 0.67 cfs @ 13.56 hrs, Volume= 0.507 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.11' @ 13.56 hrs Surf.Area= 11,532 sf Storage= 21,462 cf

Plug-Flow detention time= 688.8 min calculated for 0.507 af (68% of inflow)
Center-of-Mass det. time= 585.7 min (1,380.1 - 794.5)

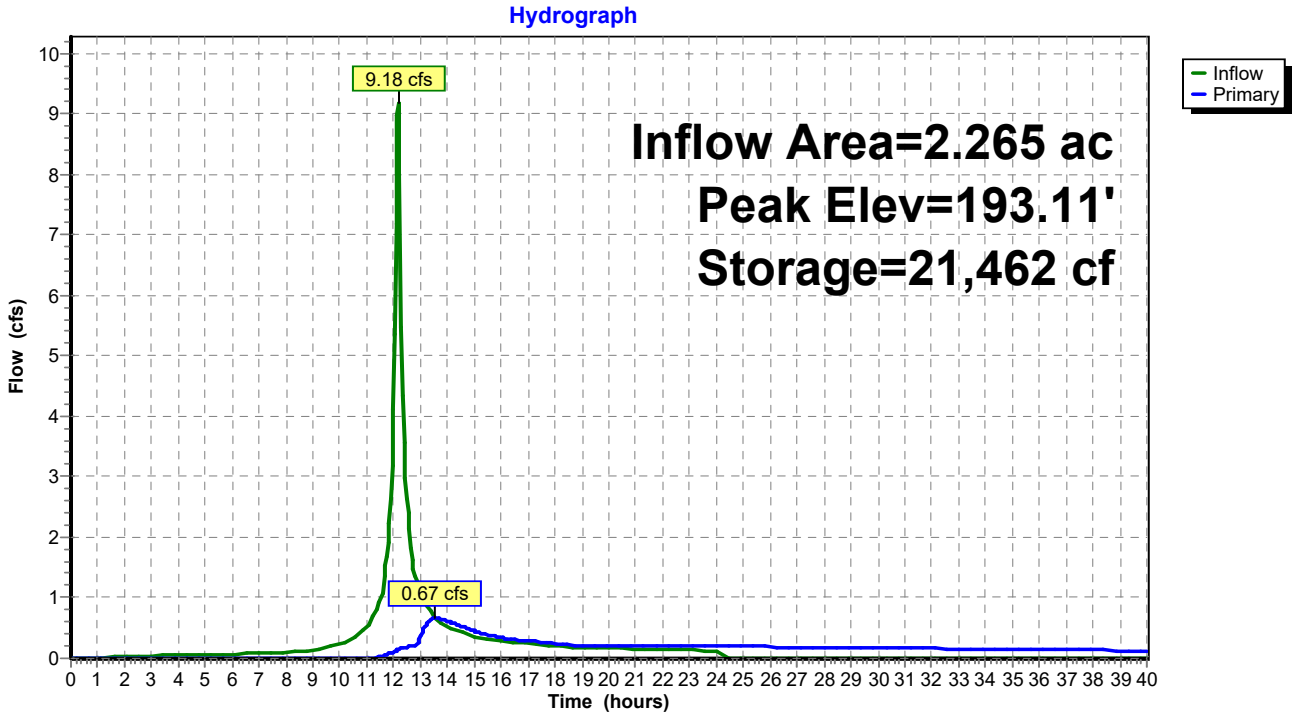
Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	32,287 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.00	8,869	0	0
192.00	10,100	9,485	9,485
193.00	11,387	10,744	20,228
194.00	12,731	12,059	32,287

Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	**18.0" Round Culvert** L= 185.0' Ke= 0.500 Inlet / Outlet Invert= 191.00' / 188.45' S= 0.0138 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.40'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	193.99'	**50.0' long + 3.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.67 cfs @ 13.56 hrs HW=193.11' (Free Discharge)
- **1=Culvert** (Passes 0.67 cfs of 9.91 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.21 cfs @ 6.10 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.46 cfs @ 1.07 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-48: Basin #48



Stage-Discharge for Pond B-48: Basin #48

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.00	0.00	191.52	0.02	192.04	0.12	192.56	0.17
191.01	0.00	191.53	0.03	192.05	0.12	192.57	0.17
191.02	0.00	191.54	0.03	192.06	0.12	192.58	0.17
191.03	0.00	191.55	0.03	192.07	0.12	192.59	0.17
191.04	0.00	191.56	0.04	192.08	0.12	192.60	0.17
191.05	0.00	191.57	0.04	192.09	0.13	192.61	0.17
191.06	0.00	191.58	0.05	192.10	0.13	192.62	0.17
191.07	0.00	191.59	0.05	192.11	0.13	192.63	0.17
191.08	0.00	191.60	0.05	192.12	0.13	192.64	0.17
191.09	0.00	191.61	0.05	192.13	0.13	192.65	0.18
191.10	0.00	191.62	0.06	192.14	0.13	192.66	0.18
191.11	0.00	191.63	0.06	192.15	0.13	192.67	0.18
191.12	0.00	191.64	0.06	192.16	0.13	192.68	0.18
191.13	0.00	191.65	0.06	192.17	0.13	192.69	0.18
191.14	0.00	191.66	0.06	192.18	0.13	192.70	0.18
191.15	0.00	191.67	0.07	192.19	0.14	192.71	0.18
191.16	0.00	191.68	0.07	192.20	0.14	192.72	0.18
191.17	0.00	191.69	0.07	192.21	0.14	192.73	0.18
191.18	0.00	191.70	0.07	192.22	0.14	192.74	0.18
191.19	0.00	191.71	0.07	192.23	0.14	192.75	0.18
191.20	0.00	191.72	0.08	192.24	0.14	192.76	0.18
191.21	0.00	191.73	0.08	192.25	0.14	192.77	0.18
191.22	0.00	191.74	0.08	192.26	0.14	192.78	0.19
191.23	0.00	191.75	0.08	192.27	0.14	192.79	0.19
191.24	0.00	191.76	0.08	192.28	0.14	192.80	0.19
191.25	0.00	191.77	0.08	192.29	0.15	192.81	0.19
191.26	0.00	191.78	0.09	192.30	0.15	192.82	0.19
191.27	0.00	191.79	0.09	192.31	0.15	192.83	0.19
191.28	0.00	191.80	0.09	192.32	0.15	192.84	0.19
191.29	0.00	191.81	0.09	192.33	0.15	192.85	0.19
191.30	0.00	191.82	0.09	192.34	0.15	192.86	0.19
191.31	0.00	191.83	0.09	192.35	0.15	192.87	0.19
191.32	0.00	191.84	0.10	192.36	0.15	192.88	0.19
191.33	0.00	191.85	0.10	192.37	0.15	192.89	0.19
191.34	0.00	191.86	0.10	192.38	0.15	192.90	0.19
191.35	0.00	191.87	0.10	192.39	0.15	192.91	0.19
191.36	0.00	191.88	0.10	192.40	0.16	192.92	0.20
191.37	0.00	191.89	0.10	192.41	0.16	192.93	0.20
191.38	0.00	191.90	0.10	192.42	0.16	192.94	0.20
191.39	0.00	191.91	0.10	192.43	0.16	192.95	0.20
191.40	0.00	191.92	0.11	192.44	0.16	192.96	0.20
191.41	0.00	191.93	0.11	192.45	0.16	192.97	0.20
191.42	0.00	191.94	0.11	192.46	0.16	192.98	0.20
191.43	0.00	191.95	0.11	192.47	0.16	192.99	0.20
191.44	0.00	191.96	0.11	192.48	0.16	193.00	0.20
191.45	0.00	191.97	0.11	192.49	0.16	193.01	0.21
191.46	0.01	191.98	0.11	192.50	0.16	193.02	0.24
191.47	0.01	191.99	0.11	192.51	0.16	193.03	0.27
191.48	0.01	192.00	0.12	192.52	0.17	193.04	0.31
191.49	0.01	192.01	0.12	192.53	0.17	193.05	0.35
191.50	0.02	192.02	0.12	192.54	0.17	193.06	0.40
191.51	0.02	192.03	0.12	192.55	0.17	193.07	0.45

Stage-Discharge for Pond B-48: Basin #48 (continued)

Elevation (feet)	Primary (cfs)
193.08	0.50
193.09	0.56
193.10	0.62
193.11	0.68
193.12	0.75
193.13	0.82
193.14	0.89
193.15	0.96
193.16	1.04
193.17	1.12
193.18	1.20
193.19	1.29
193.20	1.37
193.21	1.46
193.22	1.55
193.23	1.64
193.24	1.74
193.25	1.83
193.26	1.93
193.27	2.03
193.28	2.13
193.29	2.23
193.30	2.34
193.31	2.44
193.32	2.55
193.33	2.66
193.34	2.77
193.35	2.88
193.36	3.00
193.37	3.11
193.38	3.23
193.39	3.35
193.40	3.47
193.41	3.59
193.42	3.71
193.43	3.84
193.44	3.96
193.45	4.09
193.46	4.22
193.47	4.35
193.48	4.48
193.49	4.61
193.50	4.74
193.51	4.87
193.52	5.01
193.53	5.15
193.54	5.28
193.55	5.42
193.56	5.56
193.57	5.70
193.58	5.85
193.59	5.99
193.60	6.13
193.61	6.28
193.62	6.43
193.63	6.57
193.64	6.72
193.65	6.87
193.66	7.02
193.67	7.17
193.68	7.33
193.69	7.48
193.70	7.64
193.71	7.79
193.72	7.95
193.73	8.11
193.74	8.26
193.75	8.42
193.76	8.58
193.77	8.74
193.78	8.91
193.79	9.07
193.80	9.23
193.81	9.40
193.82	9.56
193.83	9.73
193.84	9.90
193.85	10.07
193.86	10.24
193.87	10.40
193.88	10.58
193.89	10.75
193.90	10.92
193.91	11.09
193.92	11.27
193.93	11.44
193.94	11.62
193.95	11.79
193.96	11.97
193.97	12.15
193.98	12.33
193.99	12.51
194.00	**12.81**

Stage-Area-Storage for Pond B-48: Basin #48

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.00	8,869	0	191.52	9,509	4,778
191.01	8,881	89	191.53	9,521	4,873
191.02	8,894	178	191.54	9,534	4,969
191.03	8,906	267	191.55	9,546	5,064
191.04	8,918	356	191.56	9,558	5,160
191.05	8,931	445	191.57	9,571	5,255
191.06	8,943	534	191.58	9,583	5,351
191.07	8,955	624	191.59	9,595	5,447
191.08	8,967	713	191.60	9,608	5,543
191.09	8,980	803	191.61	9,620	5,639
191.10	8,992	893	191.62	9,632	5,735
191.11	9,004	983	191.63	9,645	5,832
191.12	9,017	1,073	191.64	9,657	5,928
191.13	9,029	1,163	191.65	9,669	6,025
191.14	9,041	1,254	191.66	9,681	6,122
191.15	9,054	1,344	191.67	9,694	6,219
191.16	9,066	1,435	191.68	9,706	6,316
191.17	9,078	1,526	191.69	9,718	6,413
191.18	9,091	1,616	191.70	9,731	6,510
191.19	9,103	1,707	191.71	9,743	6,607
191.20	9,115	1,798	191.72	9,755	6,705
191.21	9,128	1,890	191.73	9,768	6,802
191.22	9,140	1,981	191.74	9,780	6,900
191.23	9,152	2,072	191.75	9,792	6,998
191.24	9,164	2,164	191.76	9,805	7,096
191.25	9,177	2,256	191.77	9,817	7,194
191.26	9,189	2,348	191.78	9,829	7,292
191.27	9,201	2,439	191.79	9,841	7,391
191.28	9,214	2,532	191.80	9,854	7,489
191.29	9,226	2,624	191.81	9,866	7,588
191.30	9,238	2,716	191.82	9,878	7,686
191.31	9,251	2,809	191.83	9,891	7,785
191.32	9,263	2,901	191.84	9,903	7,884
191.33	9,275	2,994	191.85	9,915	7,983
191.34	9,288	3,087	191.86	9,928	8,083
191.35	9,300	3,180	191.87	9,940	8,182
191.36	9,312	3,273	191.88	9,952	8,281
191.37	9,324	3,366	191.89	9,965	8,381
191.38	9,337	3,459	191.90	9,977	8,481
191.39	9,349	3,553	191.91	9,989	8,580
191.40	9,361	3,646	191.92	10,002	8,680
191.41	9,374	3,740	191.93	10,014	8,781
191.42	9,386	3,834	191.94	10,026	8,881
191.43	9,398	3,927	191.95	10,038	8,981
191.44	9,411	4,022	191.96	10,051	9,081
191.45	9,423	4,116	191.97	10,063	9,182
191.46	9,435	4,210	191.98	10,075	9,283
191.47	9,448	4,304	191.99	10,088	9,384
191.48	9,460	4,399	192.00	10,100	9,485
191.49	9,472	4,494	192.01	10,113	9,586
191.50	9,485	4,588	192.02	10,126	9,687
191.51	9,497	4,683	192.03	10,139	9,788

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.04	10,151	9,890	192.56	10,821	15,342
192.05	10,164	9,991	192.57	10,834	15,451
192.06	10,177	10,093	192.58	10,846	15,559
192.07	10,190	10,195	192.59	10,859	15,668
192.08	10,203	10,297	192.60	10,872	15,776
192.09	10,216	10,399	192.61	10,885	15,885
192.10	10,229	10,501	192.62	10,898	15,994
192.11	10,242	10,603	192.63	10,911	16,103
192.12	10,254	10,706	192.64	10,924	16,212
192.13	10,267	10,808	192.65	10,937	16,321
192.14	10,280	10,911	192.66	10,949	16,431
192.15	10,293	11,014	192.67	10,962	16,540
192.16	10,306	11,117	192.68	10,975	16,650
192.17	10,319	11,220	192.69	10,988	16,760
192.18	10,332	11,323	192.70	11,001	16,870
192.19	10,345	11,427	192.71	11,014	16,980
192.20	10,357	11,530	192.72	11,027	17,090
192.21	10,370	11,634	192.73	11,040	17,200
192.22	10,383	11,738	192.74	11,052	17,311
192.23	10,396	11,842	192.75	11,065	17,421
192.24	10,409	11,946	192.76	11,078	17,532
192.25	10,422	12,050	192.77	11,091	17,643
192.26	10,435	12,154	192.78	11,104	17,754
192.27	10,447	12,258	192.79	11,117	17,865
192.28	10,460	12,363	192.80	11,130	17,976
192.29	10,473	12,468	192.81	11,142	18,088
192.30	10,486	12,572	192.82	11,155	18,199
192.31	10,499	12,677	192.83	11,168	18,311
192.32	10,512	12,782	192.84	11,181	18,423
192.33	10,525	12,888	192.85	11,194	18,534
192.34	10,538	12,993	192.86	11,207	18,646
192.35	10,550	13,098	192.87	11,220	18,759
192.36	10,563	13,204	192.88	11,233	18,871
192.37	10,576	13,310	192.89	11,245	18,983
192.38	10,589	13,415	192.90	11,258	19,096
192.39	10,602	13,521	192.91	11,271	19,208
192.40	10,615	13,627	192.92	11,284	19,321
192.41	10,628	13,734	192.93	11,297	19,434
192.42	10,641	13,840	192.94	11,310	19,547
192.43	10,653	13,946	192.95	11,323	19,660
192.44	10,666	14,053	192.96	11,336	19,774
192.45	10,679	14,160	192.97	11,348	19,887
192.46	10,692	14,267	192.98	11,361	20,001
192.47	10,705	14,374	192.99	11,374	20,114
192.48	10,718	14,481	193.00	11,387	20,228
192.49	10,731	14,588	193.01	11,400	20,342
192.50	10,744	14,695	193.02	11,414	20,456
192.51	10,756	14,803	193.03	11,427	20,570
192.52	10,769	14,911	193.04	11,441	20,685
192.53	10,782	15,018	193.05	11,454	20,799
192.54	10,795	15,126	193.06	11,468	20,914
192.55	10,808	15,234	193.07	11,481	21,028

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.08	11,495	21,143
193.09	11,508	21,258
193.10	11,521	21,373
193.11	11,535	21,489
193.12	11,548	21,604
193.13	11,562	21,720
193.14	11,575	21,835
193.15	11,589	21,951
193.16	11,602	22,067
193.17	11,615	22,183
193.18	11,629	22,299
193.19	11,642	22,416
193.20	11,656	22,532
193.21	11,669	22,649
193.22	11,683	22,766
193.23	11,696	22,883
193.24	11,710	23,000
193.25	11,723	23,117
193.26	11,736	23,234
193.27	11,750	23,351
193.28	11,763	23,469
193.29	11,777	23,587
193.30	11,790	23,705
193.31	11,804	23,823
193.32	11,817	23,941
193.33	11,831	24,059
193.34	11,844	24,177
193.35	11,857	24,296
193.36	11,871	24,414
193.37	11,884	24,533
193.38	11,898	24,652
193.39	11,911	24,771
193.40	11,925	24,890
193.41	11,938	25,010
193.42	11,951	25,129
193.43	11,965	25,249
193.44	11,978	25,368
193.45	11,992	25,488
193.46	12,005	25,608
193.47	12,019	25,728
193.48	12,032	25,849
193.49	12,046	25,969
193.50	12,059	26,090
193.51	12,072	26,210
193.52	12,086	26,331
193.53	12,099	26,452
193.54	12,113	26,573
193.55	12,126	26,694
193.56	12,140	26,815
193.57	12,153	26,937
193.58	12,167	27,059
193.59	12,180	27,180
193.60	12,193	27,302
193.61	12,207	27,424
193.62	12,220	27,546
193.63	12,234	27,669
193.64	12,247	27,791
193.65	12,261	27,913
193.66	12,274	28,036
193.67	12,287	28,159
193.68	12,301	28,282
193.69	12,314	28,405
193.70	12,328	28,528
193.71	12,341	28,652
193.72	12,355	28,775
193.73	12,368	28,899
193.74	12,382	29,022
193.75	12,395	29,146
193.76	12,408	29,270
193.77	12,422	29,394
193.78	12,435	29,519
193.79	12,449	29,643
193.80	12,462	29,768
193.81	12,476	29,892
193.82	12,489	30,017
193.83	12,503	30,142
193.84	12,516	30,267
193.85	12,529	30,392
193.86	12,543	30,518
193.87	12,556	30,643
193.88	12,570	30,769
193.89	12,583	30,895
193.90	12,597	31,021
193.91	12,610	31,147
193.92	12,623	31,273
193.93	12,637	31,399
193.94	12,650	31,526
193.95	12,664	31,652
193.96	12,677	31,779
193.97	12,691	31,906
193.98	12,704	32,033
193.99	12,718	32,160
194.00	**12,731**	**32,287**

Summary for Pond B-49: Basin #49

Inflow Area = 2.090 ac, 43.68% Impervious, Inflow Depth = 4.17" for Future 10 yr event
Inflow = 8.85 cfs @ 12.17 hrs, Volume= 0.727 af
Outflow = 2.92 cfs @ 12.45 hrs, Volume= 0.594 af, Atten= 67%, Lag= 16.7 min
Primary = 2.92 cfs @ 12.45 hrs, Volume= 0.594 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 185.10' @ 12.45 hrs Surf.Area= 8,825 sf Storage= 16,103 cf

Plug-Flow detention time= 454.3 min calculated for 0.594 af (82% of inflow)
Center-of-Mass det. time= 376.0 min (1,161.9 - 785.9)

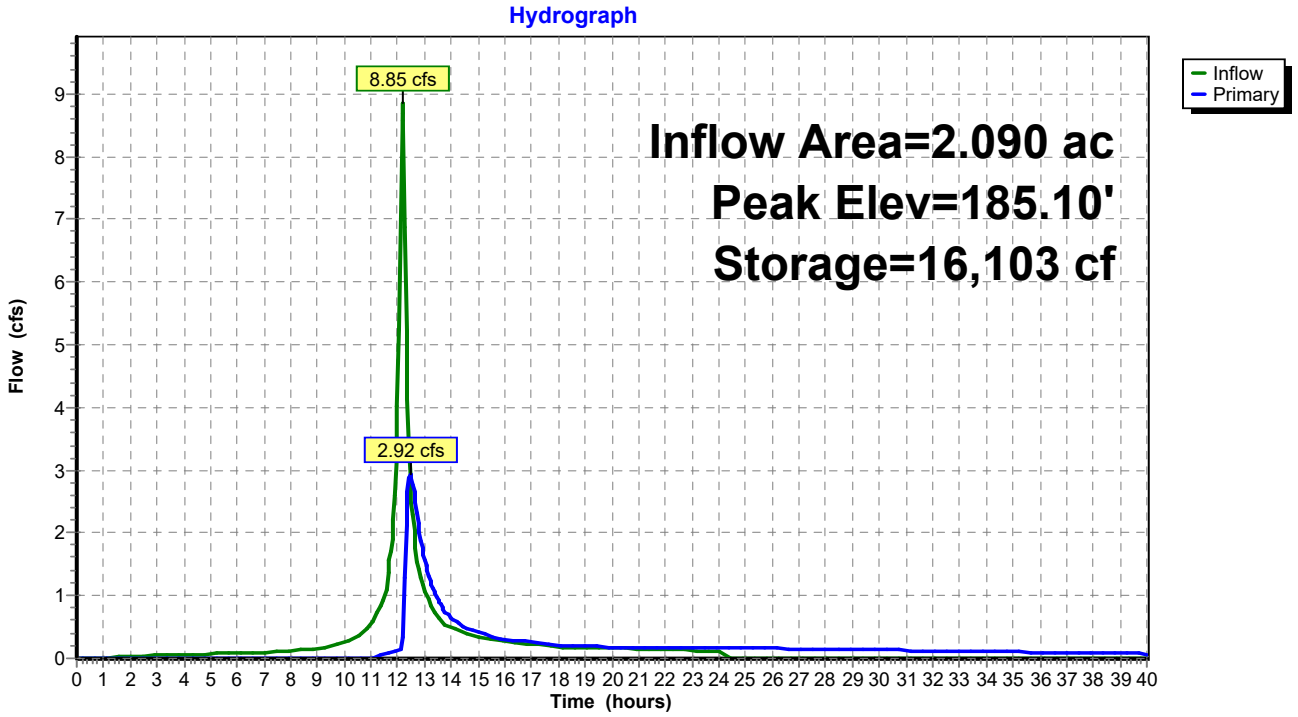
Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	52,993 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	6,565	0	0
184.00	7,625	7,095	7,095
185.00	8,717	8,171	15,266
186.00	9,853	9,285	24,551
187.00	11,027	10,440	34,991
188.00	12,333	11,680	46,671
188.50	12,956	6,322	52,993

Device	Routing	Invert	Outlet Devices
#1	Primary	183.00'	**15.0" Round Culvert** L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.81' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	183.55'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.74'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.25'	**100.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=2.92 cfs @ 12.45 hrs HW=185.10' (Free Discharge)
- **1=Culvert** (Passes 2.92 cfs of 6.94 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.78 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.72 cfs @ 1.95 fps)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-49: Basin #49



Stage-Discharge for Pond B-49: Basin #49

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.00	0.00	183.52	0.00	184.04	0.10	184.56	0.16
183.01	0.00	183.53	0.00	184.05	0.10	184.57	0.16
183.02	0.00	183.54	0.00	184.06	0.10	184.58	0.16
183.03	0.00	183.55	0.00	184.07	0.11	184.59	0.16
183.04	0.00	183.56	0.00	184.08	0.11	184.60	0.16
183.05	0.00	183.57	0.00	184.09	0.11	184.61	0.16
183.06	0.00	183.58	0.00	184.10	0.11	184.62	0.16
183.07	0.00	183.59	0.00	184.11	0.11	184.63	0.16
183.08	0.00	183.60	0.00	184.12	0.11	184.64	0.16
183.09	0.00	183.61	0.01	184.13	0.11	184.65	0.16
183.10	0.00	183.62	0.01	184.14	0.11	184.66	0.16
183.11	0.00	183.63	0.01	184.15	0.12	184.67	0.17
183.12	0.00	183.64	0.01	184.16	0.12	184.68	0.17
183.13	0.00	183.65	0.02	184.17	0.12	184.69	0.17
183.14	0.00	183.66	0.02	184.18	0.12	184.70	0.17
183.15	0.00	183.67	0.02	184.19	0.12	184.71	0.17
183.16	0.00	183.68	0.03	184.20	0.12	184.72	0.17
183.17	0.00	183.69	0.03	184.21	0.12	184.73	0.17
183.18	0.00	183.70	0.03	184.22	0.12	184.74	0.17
183.19	0.00	183.71	0.04	184.23	0.12	184.75	0.18
183.20	0.00	183.72	0.04	184.24	0.13	184.76	0.21
183.21	0.00	183.73	0.05	184.25	0.13	184.77	0.24
183.22	0.00	183.74	0.05	184.26	0.13	184.78	0.28
183.23	0.00	183.75	0.05	184.27	0.13	184.79	0.32
183.24	0.00	183.76	0.05	184.28	0.13	184.80	0.37
183.25	0.00	183.77	0.06	184.29	0.13	184.81	0.42
183.26	0.00	183.78	0.06	184.30	0.13	184.82	0.47
183.27	0.00	183.79	0.06	184.31	0.13	184.83	0.53
183.28	0.00	183.80	0.06	184.32	0.13	184.84	0.59
183.29	0.00	183.81	0.06	184.33	0.13	184.85	0.65
183.30	0.00	183.82	0.07	184.34	0.14	184.86	0.72
183.31	0.00	183.83	0.07	184.35	0.14	184.87	0.79
183.32	0.00	183.84	0.07	184.36	0.14	184.88	0.86
183.33	0.00	183.85	0.07	184.37	0.14	184.89	0.94
183.34	0.00	183.86	0.07	184.38	0.14	184.90	1.01
183.35	0.00	183.87	0.08	184.39	0.14	184.91	1.09
183.36	0.00	183.88	0.08	184.40	0.14	184.92	1.17
183.37	0.00	183.89	0.08	184.41	0.14	184.93	1.26
183.38	0.00	183.90	0.08	184.42	0.14	184.94	1.34
183.39	0.00	183.91	0.08	184.43	0.14	184.95	1.43
183.40	0.00	183.92	0.08	184.44	0.15	184.96	1.52
183.41	0.00	183.93	0.09	184.45	0.15	184.97	1.61
183.42	0.00	183.94	0.09	184.46	0.15	184.98	1.71
183.43	0.00	183.95	0.09	184.47	0.15	184.99	1.80
183.44	0.00	183.96	0.09	184.48	0.15	185.00	1.90
183.45	0.00	183.97	0.09	184.49	0.15	185.01	2.00
183.46	0.00	183.98	0.09	184.50	0.15	185.02	2.10
183.47	0.00	183.99	0.10	184.51	0.15	185.03	2.21
183.48	0.00	184.00	0.10	184.52	0.15	185.04	2.31
183.49	0.00	184.01	0.10	184.53	0.15	185.05	2.42
183.50	0.00	184.02	0.10	184.54	0.15	185.06	2.52
183.51	0.00	184.03	0.10	184.55	0.16	185.07	2.63

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.08	2.75	185.60	8.30	186.12	9.33	186.64	10.26
185.09	2.86	185.61	8.33	186.13	9.35	186.65	10.28
185.10	2.97	185.62	8.35	186.14	9.37	186.66	10.29
185.11	3.09	185.63	8.37	186.15	9.39	186.67	10.31
185.12	3.20	185.64	8.39	186.16	9.41	186.68	10.33
185.13	3.32	185.65	8.41	186.17	9.43	186.69	10.34
185.14	3.44	185.66	8.43	186.18	9.44	186.70	10.36
185.15	3.56	185.67	8.45	186.19	9.46	186.71	10.38
185.16	3.69	185.68	8.47	186.20	9.48	186.72	10.40
185.17	3.81	185.69	8.49	186.21	9.50	186.73	10.41
185.18	3.94	185.70	8.51	186.22	9.52	186.74	10.43
185.19	4.06	185.71	8.53	186.23	9.54	186.75	10.45
185.20	4.19	185.72	8.55	186.24	9.56	186.76	10.46
185.21	4.32	185.73	8.57	186.25	9.57	186.77	10.48
185.22	4.45	185.74	8.59	186.26	9.59	186.78	10.50
185.23	4.58	185.75	8.61	186.27	9.61	186.79	10.51
185.24	4.72	185.76	8.63	186.28	9.63	186.80	10.53
185.25	4.85	185.77	8.65	186.29	9.65	186.81	10.55
185.26	4.99	185.78	8.67	186.30	9.66	186.82	10.56
185.27	5.12	185.79	8.69	186.31	9.68	186.83	10.58
185.28	5.26	185.80	8.71	186.32	9.70	186.84	10.59
185.29	5.40	185.81	8.73	186.33	9.72	186.85	10.61
185.30	5.54	185.82	8.75	186.34	9.74	186.86	10.63
185.31	5.68	185.83	8.77	186.35	9.75	186.87	10.64
185.32	5.82	185.84	8.79	186.36	9.77	186.88	10.66
185.33	5.97	185.85	8.81	186.37	9.79	186.89	10.68
185.34	6.11	185.86	8.83	186.38	9.81	186.90	10.69
185.35	6.26	185.87	8.85	186.39	9.83	186.91	10.71
185.36	6.40	185.88	8.87	186.40	9.84	186.92	10.73
185.37	6.55	185.89	8.89	186.41	9.86	186.93	10.74
185.38	6.70	185.90	8.91	186.42	9.88	186.94	10.76
185.39	6.85	185.91	8.93	186.43	9.90	186.95	10.77
185.40	7.00	185.92	8.95	186.44	9.91	186.96	10.79
185.41	7.15	185.93	8.97	186.45	9.93	186.97	10.81
185.42	7.30	185.94	8.99	186.46	9.95	186.98	10.82
185.43	7.46	185.95	9.01	186.47	9.97	186.99	10.84
185.44	7.61	185.96	9.03	186.48	9.98	187.00	10.86
185.45	7.77	185.97	9.05	186.49	10.00	187.01	10.87
185.46	7.92	185.98	9.07	186.50	10.02	187.02	10.89
185.47	8.03	185.99	9.09	186.51	10.04	187.03	10.90
185.48	8.05	186.00	9.11	186.52	10.05	187.04	10.92
185.49	8.07	186.01	9.13	186.53	10.07	187.05	10.94
185.50	8.09	186.02	9.14	186.54	10.09	187.06	10.95
185.51	8.11	186.03	9.16	186.55	10.11	187.07	10.97
185.52	8.13	186.04	9.18	186.56	10.12	187.08	10.98
185.53	8.16	186.05	9.20	186.57	10.14	187.09	11.00
185.54	8.18	186.06	9.22	186.58	10.16	187.10	11.01
185.55	8.20	186.07	9.24	186.59	10.17	187.11	11.03
185.56	8.22	186.08	9.26	186.60	10.19	187.12	11.05
185.57	8.24	186.09	9.28	186.61	10.21	187.13	11.06
185.58	8.26	186.10	9.30	186.62	10.23	187.14	11.08
185.59	8.28	186.11	9.31	186.63	10.24	187.15	11.09

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.16	11.11	187.68	11.90	188.20	12.64
187.17	11.13	187.69	11.91	188.21	12.65
187.18	11.14	187.70	11.93	188.22	12.67
187.19	11.16	187.71	11.94	188.23	12.68
187.20	11.17	187.72	11.96	188.24	12.69
187.21	11.19	187.73	11.97	188.25	12.71
187.22	11.20	187.74	11.99	188.26	13.05
187.23	11.22	187.75	12.00	188.27	13.66
187.24	11.23	187.76	12.02	188.28	14.45
187.25	11.25	187.77	12.03	188.29	15.38
187.26	11.27	187.78	12.04	188.30	16.43
187.27	11.28	187.79	12.06	188.31	17.59
187.28	11.30	187.80	12.07	188.32	18.86
187.29	11.31	187.81	12.09	188.33	20.21
187.30	11.33	187.82	12.10	188.34	21.66
187.31	11.34	187.83	12.12	188.35	23.18
187.32	11.36	187.84	12.13	188.36	24.78
187.33	11.37	187.85	12.15	188.37	26.46
187.34	11.39	187.86	12.16	188.38	28.21
187.35	11.40	187.87	12.17	188.39	30.02
187.36	11.42	187.88	12.19	188.40	31.90
187.37	11.43	187.89	12.20	188.41	33.85
187.38	11.45	187.90	12.22	188.42	35.85
187.39	11.47	187.91	12.23	188.43	37.92
187.40	11.48	187.92	12.25	188.44	40.04
187.41	11.50	187.93	12.26	188.45	42.22
187.42	11.51	187.94	12.27	188.46	44.45
187.43	11.53	187.95	12.29	188.47	46.73
187.44	11.54	187.96	12.30	188.48	49.07
187.45	11.56	187.97	12.32	188.49	51.46
187.46	11.57	187.98	12.33	188.50	**53.90**
187.47	11.59	187.99	12.35		
187.48	11.60	188.00	12.36		
187.49	11.62	188.01	12.37		
187.50	11.63	188.02	12.39		
187.51	11.65	188.03	12.40		
187.52	11.66	188.04	12.42		
187.53	11.68	188.05	12.43		
187.54	11.69	188.06	12.44		
187.55	11.71	188.07	12.46		
187.56	11.72	188.08	12.47		
187.57	11.74	188.09	12.49		
187.58	11.75	188.10	12.50		
187.59	11.77	188.11	12.51		
187.60	11.78	188.12	12.53		
187.61	11.80	188.13	12.54		
187.62	11.81	188.14	12.56		
187.63	11.83	188.15	12.57		
187.64	11.84	188.16	12.58		
187.65	11.85	188.17	12.60		
187.66	11.87	188.18	12.61		
187.67	11.88	188.19	12.62		

Stage-Area-Storage for Pond B-49: Basin #49

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	6,565	0	183.52	7,116	3,557
183.01	6,576	66	183.53	7,127	3,628
183.02	6,586	132	183.54	7,137	3,700
183.03	6,597	197	183.55	7,148	3,771
183.04	6,607	263	183.56	7,159	3,843
183.05	6,618	330	183.57	7,169	3,914
183.06	6,629	396	183.58	7,180	3,986
183.07	6,639	462	183.59	7,190	4,058
183.08	6,650	529	183.60	7,201	4,130
183.09	6,660	595	183.61	7,212	4,202
183.10	6,671	662	183.62	7,222	4,274
183.11	6,682	729	183.63	7,233	4,346
183.12	6,692	795	183.64	7,243	4,419
183.13	6,703	862	183.65	7,254	4,491
183.14	6,713	929	183.66	7,265	4,564
183.15	6,724	997	183.67	7,275	4,636
183.16	6,735	1,064	183.68	7,286	4,709
183.17	6,745	1,131	183.69	7,296	4,782
183.18	6,756	1,199	183.70	7,307	4,855
183.19	6,766	1,266	183.71	7,318	4,928
183.20	6,777	1,334	183.72	7,328	5,002
183.21	6,788	1,402	183.73	7,339	5,075
183.22	6,798	1,470	183.74	7,349	5,148
183.23	6,809	1,538	183.75	7,360	5,222
183.24	6,819	1,606	183.76	7,371	5,296
183.25	6,830	1,674	183.77	7,381	5,369
183.26	6,841	1,743	183.78	7,392	5,443
183.27	6,851	1,811	183.79	7,402	5,517
183.28	6,862	1,880	183.80	7,413	5,591
183.29	6,872	1,948	183.81	7,424	5,665
183.30	6,883	2,017	183.82	7,434	5,740
183.31	6,894	2,086	183.83	7,445	5,814
183.32	6,904	2,155	183.84	7,455	5,889
183.33	6,915	2,224	183.85	7,466	5,963
183.34	6,925	2,293	183.86	7,477	6,038
183.35	6,936	2,363	183.87	7,487	6,113
183.36	6,947	2,432	183.88	7,498	6,188
183.37	6,957	2,502	183.89	7,508	6,263
183.38	6,968	2,571	183.90	7,519	6,338
183.39	6,978	2,641	183.91	7,530	6,413
183.40	6,989	2,711	183.92	7,540	6,488
183.41	7,000	2,781	183.93	7,551	6,564
183.42	7,010	2,851	183.94	7,561	6,639
183.43	7,021	2,921	183.95	7,572	6,715
183.44	7,031	2,991	183.96	7,583	6,791
183.45	7,042	3,062	183.97	7,593	6,867
183.46	7,053	3,132	183.98	7,604	6,943
183.47	7,063	3,203	183.99	7,614	7,019
183.48	7,074	3,273	184.00	7,625	7,095
183.49	7,084	3,344	184.01	7,636	7,171
183.50	7,095	3,415	184.02	7,647	7,248
183.51	7,106	3,486	184.03	7,658	7,324

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	7,669	7,401	184.56	8,237	11,536
184.05	7,680	7,478	184.57	8,247	11,619
184.06	7,691	7,554	184.58	8,258	11,701
184.07	7,701	7,631	184.59	8,269	11,784
184.08	7,712	7,708	184.60	8,280	11,867
184.09	7,723	7,786	184.61	8,291	11,949
184.10	7,734	7,863	184.62	8,302	12,032
184.11	7,745	7,940	184.63	8,313	12,115
184.12	7,756	8,018	184.64	8,324	12,199
184.13	7,767	8,095	184.65	8,335	12,282
184.14	7,778	8,173	184.66	8,346	12,365
184.15	7,789	8,251	184.67	8,357	12,449
184.16	7,800	8,329	184.68	8,368	12,532
184.17	7,811	8,407	184.69	8,378	12,616
184.18	7,822	8,485	184.70	8,389	12,700
184.19	7,832	8,563	184.71	8,400	12,784
184.20	7,843	8,642	184.72	8,411	12,868
184.21	7,854	8,720	184.73	8,422	12,952
184.22	7,865	8,799	184.74	8,433	13,036
184.23	7,876	8,878	184.75	8,444	13,121
184.24	7,887	8,956	184.76	8,455	13,205
184.25	7,898	9,035	184.77	8,466	13,290
184.26	7,909	9,114	184.78	8,477	13,375
184.27	7,920	9,194	184.79	8,488	13,460
184.28	7,931	9,273	184.80	8,499	13,544
184.29	7,942	9,352	184.81	8,510	13,629
184.30	7,953	9,432	184.82	8,520	13,715
184.31	7,964	9,511	184.83	8,531	13,800
184.32	7,974	9,591	184.84	8,542	13,885
184.33	7,985	9,671	184.85	8,553	13,971
184.34	7,996	9,751	184.86	8,564	14,056
184.35	8,007	9,831	184.87	8,575	14,142
184.36	8,018	9,911	184.88	8,586	14,228
184.37	8,029	9,991	184.89	8,597	14,314
184.38	8,040	10,071	184.90	8,608	14,400
184.39	8,051	10,152	184.91	8,619	14,486
184.40	8,062	10,232	184.92	8,630	14,572
184.41	8,073	10,313	184.93	8,641	14,658
184.42	8,084	10,394	184.94	8,651	14,745
184.43	8,095	10,475	184.95	8,662	14,832
184.44	8,105	10,556	184.96	8,673	14,918
184.45	8,116	10,637	184.97	8,684	15,005
184.46	8,127	10,718	184.98	8,695	15,092
184.47	8,138	10,799	184.99	8,706	15,179
184.48	8,149	10,881	185.00	8,717	15,266
184.49	8,160	10,962	185.01	8,728	15,353
184.50	8,171	11,044	185.02	8,740	15,441
184.51	8,182	11,126	185.03	8,751	15,528
184.52	8,193	11,208	185.04	8,762	15,616
184.53	8,204	11,290	185.05	8,774	15,703
184.54	8,215	11,372	185.06	8,785	15,791
184.55	8,226	11,454	185.07	8,797	15,879

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	8,808	15,967	185.60	9,399	20,701
185.09	8,819	16,055	185.61	9,410	20,795
185.10	8,831	16,143	185.62	9,421	20,889
185.11	8,842	16,232	185.63	9,433	20,983
185.12	8,853	16,320	185.64	9,444	21,078
185.13	8,865	16,409	185.65	9,455	21,172
185.14	8,876	16,498	185.66	9,467	21,267
185.15	8,887	16,586	185.67	9,478	21,361
185.16	8,899	16,675	185.68	9,489	21,456
185.17	8,910	16,764	185.69	9,501	21,551
185.18	8,921	16,853	185.70	9,512	21,646
185.19	8,933	16,943	185.71	9,524	21,741
185.20	8,944	17,032	185.72	9,535	21,837
185.21	8,956	17,122	185.73	9,546	21,932
185.22	8,967	17,211	185.74	9,558	22,028
185.23	8,978	17,301	185.75	9,569	22,123
185.24	8,990	17,391	185.76	9,580	22,219
185.25	9,001	17,481	185.77	9,592	22,315
185.26	9,012	17,571	185.78	9,603	22,411
185.27	9,024	17,661	185.79	9,614	22,507
185.28	9,035	17,751	185.80	9,626	22,603
185.29	9,046	17,842	185.81	9,637	22,699
185.30	9,058	17,932	185.82	9,649	22,796
185.31	9,069	18,023	185.83	9,660	22,892
185.32	9,081	18,114	185.84	9,671	22,989
185.33	9,092	18,204	185.85	9,683	23,086
185.34	9,103	18,295	185.86	9,694	23,183
185.35	9,115	18,387	185.87	9,705	23,280
185.36	9,126	18,478	185.88	9,717	23,377
185.37	9,137	18,569	185.89	9,728	23,474
185.38	9,149	18,660	185.90	9,739	23,571
185.39	9,160	18,752	185.91	9,751	23,669
185.40	9,171	18,844	185.92	9,762	23,766
185.41	9,183	18,935	185.93	9,773	23,864
185.42	9,194	19,027	185.94	9,785	23,962
185.43	9,205	19,119	185.95	9,796	24,060
185.44	9,217	19,211	185.96	9,808	24,158
185.45	9,228	19,304	185.97	9,819	24,256
185.46	9,240	19,396	185.98	9,830	24,354
185.47	9,251	19,488	185.99	9,842	24,453
185.48	9,262	19,581	186.00	9,853	24,551
185.49	9,274	19,674	186.01	9,865	24,650
185.50	9,285	19,767	186.02	9,876	24,748
185.51	9,296	19,859	186.03	9,888	24,847
185.52	9,308	19,952	186.04	9,900	24,946
185.53	9,319	20,046	186.05	9,912	25,045
185.54	9,330	20,139	186.06	9,923	25,144
185.55	9,342	20,232	186.07	9,935	25,244
185.56	9,353	20,326	186.08	9,947	25,343
185.57	9,365	20,419	186.09	9,959	25,443
185.58	9,376	20,513	186.10	9,970	25,542
185.59	9,387	20,607	186.11	9,982	25,642

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.12	9,994	25,742	186.64	10,604	31,097
186.13	10,006	25,842	186.65	10,616	31,203
186.14	10,017	25,942	186.66	10,628	31,310
186.15	10,029	26,042	186.67	10,640	31,416
186.16	10,041	26,143	186.68	10,651	31,522
186.17	10,053	26,243	186.69	10,663	31,629
186.18	10,064	26,344	186.70	10,675	31,736
186.19	10,076	26,444	186.71	10,687	31,843
186.20	10,088	26,545	186.72	10,698	31,949
186.21	10,100	26,646	186.73	10,710	32,057
186.22	10,111	26,747	186.74	10,722	32,164
186.23	10,123	26,848	186.75	10,734	32,271
186.24	10,135	26,950	186.76	10,745	32,378
186.25	10,147	27,051	186.77	10,757	32,486
186.26	10,158	27,152	186.78	10,769	32,593
186.27	10,170	27,254	186.79	10,780	32,701
186.28	10,182	27,356	186.80	10,792	32,809
186.29	10,193	27,458	186.81	10,804	32,917
186.30	10,205	27,560	186.82	10,816	33,025
186.31	10,217	27,662	186.83	10,827	33,133
186.32	10,229	27,764	186.84	10,839	33,242
186.33	10,240	27,866	186.85	10,851	33,350
186.34	10,252	27,969	186.86	10,863	33,459
186.35	10,264	28,071	186.87	10,874	33,567
186.36	10,276	28,174	186.88	10,886	33,676
186.37	10,287	28,277	186.89	10,898	33,785
186.38	10,299	28,380	186.90	10,910	33,894
186.39	10,311	28,483	186.91	10,921	34,003
186.40	10,323	28,586	186.92	10,933	34,113
186.41	10,334	28,689	186.93	10,945	34,222
186.42	10,346	28,793	186.94	10,957	34,331
186.43	10,358	28,896	186.95	10,968	34,441
186.44	10,370	29,000	186.96	10,980	34,551
186.45	10,381	29,104	186.97	10,992	34,661
186.46	10,393	29,208	186.98	11,004	34,771
186.47	10,405	29,312	186.99	11,015	34,881
186.48	10,417	29,416	187.00	11,027	34,991
186.49	10,428	29,520	187.01	11,040	35,101
186.50	10,440	29,624	187.02	11,053	35,212
186.51	10,452	29,729	187.03	11,066	35,322
186.52	10,463	29,833	187.04	11,079	35,433
186.53	10,475	29,938	187.05	11,092	35,544
186.54	10,487	30,043	187.06	11,105	35,655
186.55	10,499	30,148	187.07	11,118	35,766
186.56	10,510	30,253	187.08	11,131	35,877
186.57	10,522	30,358	187.09	11,145	35,989
186.58	10,534	30,463	187.10	11,158	36,100
186.59	10,546	30,569	187.11	11,171	36,212
186.60	10,557	30,674	187.12	11,184	36,324
186.61	10,569	30,780	187.13	11,197	36,436
186.62	10,581	30,886	187.14	11,210	36,548
186.63	10,593	30,991	187.15	11,223	36,660

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.16	11,236	36,772
187.17	11,249	36,884
187.18	11,262	36,997
187.19	11,275	37,110
187.20	11,288	37,223
187.21	11,301	37,335
187.22	11,314	37,449
187.23	11,327	37,562
187.24	11,340	37,675
187.25	11,354	37,789
187.26	11,367	37,902
187.27	11,380	38,016
187.28	11,393	38,130
187.29	11,406	38,244
187.30	11,419	38,358
187.31	11,432	38,472
187.32	11,445	38,587
187.33	11,458	38,701
187.34	11,471	38,816
187.35	11,484	38,930
187.36	11,497	39,045
187.37	11,510	39,160
187.38	11,523	39,276
187.39	11,536	39,391
187.40	11,549	39,506
187.41	11,562	39,622
187.42	11,576	39,738
187.43	11,589	39,853
187.44	11,602	39,969
187.45	11,615	40,085
187.46	11,628	40,202
187.47	11,641	40,318
187.48	11,654	40,434
187.49	11,667	40,551
187.50	11,680	40,668
187.51	11,693	40,785
187.52	11,706	40,902
187.53	11,719	41,019
187.54	11,732	41,136
187.55	11,745	41,253
187.56	11,758	41,371
187.57	11,771	41,489
187.58	11,784	41,606
187.59	11,798	41,724
187.60	11,811	41,842
187.61	11,824	41,960
187.62	11,837	42,079
187.63	11,850	42,197
187.64	11,863	42,316
187.65	11,876	42,434
187.66	11,889	42,553
187.67	11,902	42,672
187.68	11,915	42,791
187.69	11,928	42,911
187.70	11,941	43,030
187.71	11,954	43,149
187.72	11,967	43,269
187.73	11,980	43,389
187.74	11,993	43,509
187.75	12,007	43,629
187.76	12,020	43,749
187.77	12,033	43,869
187.78	12,046	43,989
187.79	12,059	44,110
187.80	12,072	44,231
187.81	12,085	44,351
187.82	12,098	44,472
187.83	12,111	44,593
187.84	12,124	44,714
187.85	12,137	44,836
187.86	12,150	44,957
187.87	12,163	45,079
187.88	12,176	45,200
187.89	12,189	45,322
187.90	12,202	45,444
187.91	12,215	45,566
187.92	12,229	45,689
187.93	12,242	45,811
187.94	12,255	45,933
187.95	12,268	46,056
187.96	12,281	46,179
187.97	12,294	46,302
187.98	12,307	46,425
187.99	12,320	46,548
188.00	12,333	46,671
188.01	12,345	46,794
188.02	12,358	46,918
188.03	12,370	47,042
188.04	12,383	47,165
188.05	12,395	47,289
188.06	12,408	47,413
188.07	12,420	47,537
188.08	12,433	47,662
188.09	12,445	47,786
188.10	12,458	47,911
188.11	12,470	48,035
188.12	12,483	48,160
188.13	12,495	48,285
188.14	12,507	48,410
188.15	12,520	48,535
188.16	12,532	48,660
188.17	12,545	48,786
188.18	12,557	48,911
188.19	12,570	49,037

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.20	12,582	49,163
188.21	12,595	49,288
188.22	12,607	49,414
188.23	12,620	49,541
188.24	12,632	49,667
188.25	12,645	49,793
188.26	12,657	49,920
188.27	12,669	50,046
188.28	12,682	50,173
188.29	12,694	50,300
188.30	12,707	50,427
188.31	12,719	50,554
188.32	12,732	50,681
188.33	12,744	50,809
188.34	12,757	50,936
188.35	12,769	51,064
188.36	12,782	51,192
188.37	12,794	51,319
188.38	12,806	51,448
188.39	12,819	51,576
188.40	12,831	51,704
188.41	12,844	51,832
188.42	12,856	51,961
188.43	12,869	52,089
188.44	12,881	52,218
188.45	12,894	52,347
188.46	12,906	52,476
188.47	12,919	52,605
188.48	12,931	52,734
188.49	12,944	52,864
188.50	**12,956**	**52,993**

Summary for Pond B-50: Basin #50

Inflow Area = 2.262 ac, 29.27% Impervious, Inflow Depth = 3.81" for Future 10 yr event
Inflow = 8.95 cfs @ 12.17 hrs, Volume= 0.717 af
Outflow = 2.40 cfs @ 12.54 hrs, Volume= 0.583 af, Atten= 73%, Lag= 22.1 min
Primary = 2.40 cfs @ 12.54 hrs, Volume= 0.583 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 185.61' @ 12.54 hrs Surf.Area= 10,924 sf Storage= 15,862 cf

Plug-Flow detention time= 445.0 min calculated for 0.582 af (81% of inflow)
Center-of-Mass det. time= 366.6 min (1,166.1 - 799.4)

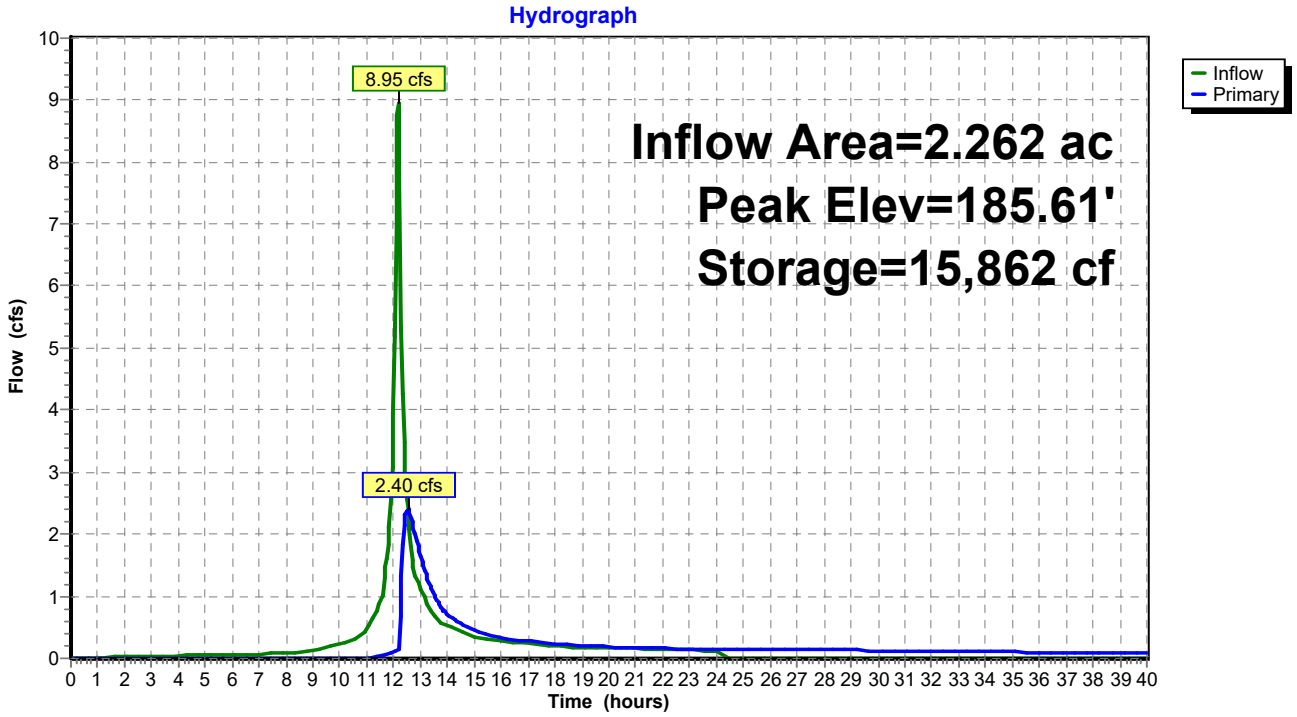
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	53,209 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	8,805	0	0
185.00	10,108	9,457	9,457
186.00	11,448	10,778	20,235
187.00	12,826	12,137	32,372
188.00	14,244	13,535	45,907
188.50	14,966	7,303	53,209

Device	Routing	Invert	Outlet Devices
#1	Primary	180.50'	**18.0" Round Culvert** L= 83.0' Ke= 0.500 Inlet / Outlet Invert= 180.50' / 179.67' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.32'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.30'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.39 cfs @ 12.54 hrs HW=185.61' (Free Discharge)
- **1=Culvert** (Passes 2.39 cfs of 17.20 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.24 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.21 cfs @ 1.82 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-50: Basin #50



Stage-Discharge for Pond B-50: Basin #50

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	0.05	185.04	0.13	185.56	1.89
184.01	0.00	184.53	0.05	185.05	0.13	185.57	1.99
184.02	0.00	184.54	0.06	185.06	0.13	185.58	2.09
184.03	0.00	184.55	0.06	185.07	0.13	185.59	2.19
184.04	0.00	184.56	0.06	185.08	0.13	185.60	2.30
184.05	0.00	184.57	0.06	185.09	0.13	185.61	2.40
184.06	0.00	184.58	0.06	185.10	0.13	185.62	2.51
184.07	0.00	184.59	0.07	185.11	0.14	185.63	2.62
184.08	0.00	184.60	0.07	185.12	0.14	185.64	2.73
184.09	0.00	184.61	0.07	185.13	0.14	185.65	2.84
184.10	0.00	184.62	0.07	185.14	0.14	185.66	2.96
184.11	0.00	184.63	0.07	185.15	0.14	185.67	3.07
184.12	0.00	184.64	0.08	185.16	0.14	185.68	3.19
184.13	0.00	184.65	0.08	185.17	0.14	185.69	3.31
184.14	0.00	184.66	0.08	185.18	0.14	185.70	3.43
184.15	0.00	184.67	0.08	185.19	0.14	185.71	3.55
184.16	0.00	184.68	0.08	185.20	0.14	185.72	3.67
184.17	0.00	184.69	0.08	185.21	0.15	185.73	3.80
184.18	0.00	184.70	0.09	185.22	0.15	185.74	3.92
184.19	0.00	184.71	0.09	185.23	0.15	185.75	4.05
184.20	0.00	184.72	0.09	185.24	0.15	185.76	4.18
184.21	0.00	184.73	0.09	185.25	0.15	185.77	4.31
184.22	0.00	184.74	0.09	185.26	0.15	185.78	4.44
184.23	0.00	184.75	0.09	185.27	0.15	185.79	4.57
184.24	0.00	184.76	0.10	185.28	0.15	185.80	4.70
184.25	0.00	184.77	0.10	185.29	0.15	185.81	4.84
184.26	0.00	184.78	0.10	185.30	0.15	185.82	4.97
184.27	0.00	184.79	0.10	185.31	0.17	185.83	5.11
184.28	0.00	184.80	0.10	185.32	0.19	185.84	5.25
184.29	0.00	184.81	0.10	185.33	0.22	185.85	5.38
184.30	0.00	184.82	0.10	185.34	0.26	185.86	5.52
184.31	0.00	184.83	0.10	185.35	0.30	185.87	5.67
184.32	0.00	184.84	0.11	185.36	0.35	185.88	5.81
184.33	0.00	184.85	0.11	185.37	0.40	185.89	5.95
184.34	0.00	184.86	0.11	185.38	0.46	185.90	6.10
184.35	0.00	184.87	0.11	185.39	0.51	185.91	6.24
184.36	0.00	184.88	0.11	185.40	0.57	185.92	6.39
184.37	0.00	184.89	0.11	185.41	0.64	185.93	6.54
184.38	0.01	184.90	0.11	185.42	0.70	185.94	6.68
184.39	0.01	184.91	0.11	185.43	0.77	185.95	6.83
184.40	0.01	184.92	0.12	185.44	0.85	185.96	6.99
184.41	0.01	184.93	0.12	185.45	0.92	185.97	7.14
184.42	0.02	184.94	0.12	185.46	1.00	185.98	7.29
184.43	0.02	184.95	0.12	185.47	1.08	185.99	7.44
184.44	0.02	184.96	0.12	185.48	1.16	186.00	7.60
184.45	0.03	184.97	0.12	185.49	1.24	186.01	7.75
184.46	0.03	184.98	0.12	185.50	1.33	186.02	7.91
184.47	0.03	184.99	0.12	185.51	1.42	186.03	8.07
184.48	0.04	185.00	0.12	185.52	1.51	186.04	8.23
184.49	0.04	185.01	0.13	185.53	1.60	186.05	8.39
184.50	0.05	185.02	0.13	185.54	1.69	186.06	8.55
184.51	0.05	185.03	0.13	185.55	1.79	186.07	8.71

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	8.87	186.60	18.37	187.12	19.91	187.64	20.76
186.09	9.03	186.61	18.57	187.13	19.93	187.65	20.78
186.10	9.20	186.62	18.77	187.14	19.95	187.66	20.80
186.11	9.36	186.63	18.97	187.15	19.96	187.67	20.81
186.12	9.53	186.64	19.09	187.16	19.98	187.68	20.83
186.13	9.69	186.65	19.11	187.17	20.00	187.69	20.84
186.14	9.86	186.66	19.13	187.18	20.01	187.70	20.86
186.15	10.03	186.67	19.14	187.19	20.03	187.71	20.88
186.16	10.20	186.68	19.16	187.20	20.05	187.72	20.89
186.17	10.37	186.69	19.18	187.21	20.06	187.73	20.91
186.18	10.54	186.70	19.20	187.22	20.08	187.74	20.92
186.19	10.71	186.71	19.21	187.23	20.10	187.75	20.94
186.20	10.88	186.72	19.23	187.24	20.11	187.76	20.96
186.21	11.06	186.73	19.25	187.25	20.13	187.77	20.97
186.22	11.23	186.74	19.27	187.26	20.15	187.78	20.99
186.23	11.41	186.75	19.28	187.27	20.16	187.79	21.00
186.24	11.58	186.76	19.30	187.28	20.18	187.80	21.02
186.25	11.76	186.77	19.32	187.29	20.19	187.81	21.04
186.26	11.93	186.78	19.33	187.30	20.21	187.82	21.05
186.27	12.11	186.79	19.35	187.31	20.23	187.83	21.07
186.28	12.29	186.80	19.37	187.32	20.24	187.84	21.08
186.29	12.47	186.81	19.39	187.33	20.26	187.85	21.10
186.30	12.65	186.82	19.40	187.34	20.28	187.86	21.11
186.31	12.83	186.83	19.42	187.35	20.29	187.87	21.13
186.32	13.01	186.84	19.44	187.36	20.31	187.88	21.15
186.33	13.20	186.85	19.46	187.37	20.33	187.89	21.16
186.34	13.38	186.86	19.47	187.38	20.34	187.90	21.18
186.35	13.56	186.87	19.49	187.39	20.36	187.91	21.19
186.36	13.75	186.88	19.51	187.40	20.38	187.92	21.21
186.37	13.93	186.89	19.52	187.41	20.39	187.93	21.22
186.38	14.12	186.90	19.54	187.42	20.41	187.94	21.24
186.39	14.30	186.91	19.56	187.43	20.42	187.95	21.26
186.40	14.49	186.92	19.57	187.44	20.44	187.96	21.27
186.41	14.68	186.93	19.59	187.45	20.46	187.97	21.29
186.42	14.87	186.94	19.61	187.46	20.47	187.98	21.30
186.43	15.06	186.95	19.63	187.47	20.49	187.99	21.32
186.44	15.25	186.96	19.64	187.48	20.51	188.00	21.33
186.45	15.44	186.97	19.66	187.49	20.52	188.01	21.35
186.46	15.63	186.98	19.68	187.50	20.54	188.02	21.37
186.47	15.82	186.99	19.69	187.51	20.55	188.03	21.38
186.48	16.01	187.00	19.71	187.52	20.57	188.04	21.40
186.49	16.21	187.01	19.73	187.53	20.59	188.05	21.41
186.50	16.40	187.02	19.74	187.54	20.60	188.06	21.43
186.51	16.59	187.03	19.76	187.55	20.62	188.07	21.44
186.52	16.79	187.04	19.78	187.56	20.64	188.08	21.46
186.53	16.98	187.05	19.79	187.57	20.65	188.09	21.47
186.54	17.18	187.06	19.81	187.58	20.67	188.10	21.49
186.55	17.38	187.07	19.83	187.59	20.68	188.11	21.51
186.56	17.57	187.08	19.85	187.60	20.70	188.12	21.52
186.57	17.77	187.09	19.86	187.61	20.72	188.13	21.54
186.58	17.97	187.10	19.88	187.62	20.73	188.14	21.55
186.59	18.17	187.11	19.90	187.63	20.75	188.15	21.57

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)
188.16	21.58
188.17	21.60
188.18	21.61
188.19	21.63
188.20	21.64
188.21	21.66
188.22	21.67
188.23	21.69
188.24	21.71
188.25	21.72
188.26	21.74
188.27	21.75
188.28	21.77
188.29	21.78
188.30	21.80
188.31	21.81
188.32	21.83
188.33	21.84
188.34	21.86
188.35	21.87
188.36	21.89
188.37	21.90
188.38	21.92
188.39	21.93
188.40	21.95
188.41	21.97
188.42	21.98
188.43	22.00
188.44	22.01
188.45	22.03
188.46	22.16
188.47	22.39
188.48	22.68
188.49	23.02
188.50	**23.41**

Stage-Area-Storage for Pond B-50: Basin #50

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	8,805	0	184.52	9,483	4,755
184.01	8,818	88	184.53	9,496	4,850
184.02	8,831	176	184.54	9,509	4,945
184.03	8,844	265	184.55	9,522	5,040
184.04	8,857	353	184.56	9,535	5,135
184.05	8,870	442	184.57	9,548	5,231
184.06	8,883	531	184.58	9,561	5,326
184.07	8,896	620	184.59	9,574	5,422
184.08	8,909	709	184.60	9,587	5,518
184.09	8,922	798	184.61	9,600	5,613
184.10	8,935	887	184.62	9,613	5,710
184.11	8,948	976	184.63	9,626	5,806
184.12	8,961	1,066	184.64	9,639	5,902
184.13	8,974	1,156	184.65	9,652	5,999
184.14	8,987	1,245	184.66	9,665	6,095
184.15	9,000	1,335	184.67	9,678	6,192
184.16	9,013	1,425	184.68	9,691	6,289
184.17	9,027	1,516	184.69	9,704	6,386
184.18	9,040	1,606	184.70	9,717	6,483
184.19	9,053	1,696	184.71	9,730	6,580
184.20	9,066	1,787	184.72	9,743	6,677
184.21	9,079	1,878	184.73	9,756	6,775
184.22	9,092	1,969	184.74	9,769	6,872
184.23	9,105	2,060	184.75	9,782	6,970
184.24	9,118	2,151	184.76	9,795	7,068
184.25	9,131	2,242	184.77	9,808	7,166
184.26	9,144	2,333	184.78	9,821	7,264
184.27	9,157	2,425	184.79	9,834	7,363
184.28	9,170	2,516	184.80	9,847	7,461
184.29	9,183	2,608	184.81	9,860	7,559
184.30	9,196	2,700	184.82	9,873	7,658
184.31	9,209	2,792	184.83	9,886	7,757
184.32	9,222	2,884	184.84	9,900	7,856
184.33	9,235	2,977	184.85	9,913	7,955
184.34	9,248	3,069	184.86	9,926	8,054
184.35	9,261	3,162	184.87	9,939	8,153
184.36	9,274	3,254	184.88	9,952	8,253
184.37	9,287	3,347	184.89	9,965	8,353
184.38	9,300	3,440	184.90	9,978	8,452
184.39	9,313	3,533	184.91	9,991	8,552
184.40	9,326	3,626	184.92	10,004	8,652
184.41	9,339	3,720	184.93	10,017	8,752
184.42	9,352	3,813	184.94	10,030	8,852
184.43	9,365	3,907	184.95	10,043	8,953
184.44	9,378	4,000	184.96	10,056	9,053
184.45	9,391	4,094	184.97	10,069	9,154
184.46	9,404	4,188	184.98	10,082	9,255
184.47	9,417	4,282	184.99	10,095	9,355
184.48	9,430	4,377	185.00	10,108	9,457
184.49	9,443	4,471	185.01	10,121	9,558
184.50	9,457	4,565	185.02	10,135	9,659
184.51	9,470	4,660	185.03	10,148	9,760

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	10,162	9,862	185.56	10,858	15,327
185.05	10,175	9,964	185.57	10,872	15,436
185.06	10,188	10,065	185.58	10,885	15,545
185.07	10,202	10,167	185.59	10,899	15,653
185.08	10,215	10,269	185.60	10,912	15,762
185.09	10,229	10,372	185.61	10,925	15,872
185.10	10,242	10,474	185.62	10,939	15,981
185.11	10,255	10,576	185.63	10,952	16,090
185.12	10,269	10,679	185.64	10,966	16,200
185.13	10,282	10,782	185.65	10,979	16,310
185.14	10,296	10,885	185.66	10,992	16,420
185.15	10,309	10,988	185.67	11,006	16,530
185.16	10,322	11,091	185.68	11,019	16,640
185.17	10,336	11,194	185.69	11,033	16,750
185.18	10,349	11,298	185.70	11,046	16,860
185.19	10,363	11,401	185.71	11,059	16,971
185.20	10,376	11,505	185.72	11,073	17,082
185.21	10,389	11,609	185.73	11,086	17,192
185.22	10,403	11,713	185.74	11,100	17,303
185.23	10,416	11,817	185.75	11,113	17,414
185.24	10,430	11,921	185.76	11,126	17,526
185.25	10,443	12,025	185.77	11,140	17,637
185.26	10,456	12,130	185.78	11,153	17,748
185.27	10,470	12,235	185.79	11,167	17,860
185.28	10,483	12,339	185.80	11,180	17,972
185.29	10,497	12,444	185.81	11,193	18,084
185.30	10,510	12,549	185.82	11,207	18,196
185.31	10,523	12,654	185.83	11,220	18,308
185.32	10,537	12,760	185.84	11,234	18,420
185.33	10,550	12,865	185.85	11,247	18,532
185.34	10,564	12,971	185.86	11,260	18,645
185.35	10,577	13,076	185.87	11,274	18,758
185.36	10,590	13,182	185.88	11,287	18,870
185.37	10,604	13,288	185.89	11,301	18,983
185.38	10,617	13,394	185.90	11,314	19,096
185.39	10,631	13,501	185.91	11,327	19,210
185.40	10,644	13,607	185.92	11,341	19,323
185.41	10,657	13,713	185.93	11,354	19,436
185.42	10,671	13,820	185.94	11,368	19,550
185.43	10,684	13,927	185.95	11,381	19,664
185.44	10,698	14,034	185.96	11,394	19,778
185.45	10,711	14,141	185.97	11,408	19,892
185.46	10,724	14,248	185.98	11,421	20,006
185.47	10,738	14,355	185.99	11,435	20,120
185.48	10,751	14,463	186.00	11,448	20,235
185.49	10,765	14,570	186.01	11,462	20,349
185.50	10,778	14,678	186.02	11,476	20,464
185.51	10,791	14,786	186.03	11,489	20,579
185.52	10,805	14,894	186.04	11,503	20,694
185.53	10,818	15,002	186.05	11,517	20,809
185.54	10,832	15,110	186.06	11,531	20,924
185.55	10,845	15,219	186.07	11,544	21,039

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	11,558	21,155	186.60	12,275	27,351
186.09	11,572	21,270	186.61	12,289	27,474
186.10	11,586	21,386	186.62	12,302	27,597
186.11	11,600	21,502	186.63	12,316	27,720
186.12	11,613	21,618	186.64	12,330	27,843
186.13	11,627	21,734	186.65	12,344	27,967
186.14	11,641	21,851	186.66	12,357	28,090
186.15	11,655	21,967	186.67	12,371	28,214
186.16	11,668	22,084	186.68	12,385	28,338
186.17	11,682	22,201	186.69	12,399	28,462
186.18	11,696	22,317	186.70	12,413	28,586
186.19	11,710	22,434	186.71	12,426	28,710
186.20	11,724	22,552	186.72	12,440	28,834
186.21	11,737	22,669	186.73	12,454	28,959
186.22	11,751	22,786	186.74	12,468	29,083
186.23	11,765	22,904	186.75	12,482	29,208
186.24	11,779	23,022	186.76	12,495	29,333
186.25	11,793	23,140	186.77	12,509	29,458
186.26	11,806	23,258	186.78	12,523	29,583
186.27	11,820	23,376	186.79	12,537	29,708
186.28	11,834	23,494	186.80	12,550	29,834
186.29	11,848	23,612	186.81	12,564	29,959
186.30	11,861	23,731	186.82	12,578	30,085
186.31	11,875	23,850	186.83	12,592	30,211
186.32	11,889	23,968	186.84	12,606	30,337
186.33	11,903	24,087	186.85	12,619	30,463
186.34	11,917	24,206	186.86	12,633	30,589
186.35	11,930	24,326	186.87	12,647	30,716
186.36	11,944	24,445	186.88	12,661	30,842
186.37	11,958	24,565	186.89	12,674	30,969
186.38	11,972	24,684	186.90	12,688	31,096
186.39	11,985	24,804	186.91	12,702	31,223
186.40	11,999	24,924	186.92	12,716	31,350
186.41	12,013	25,044	186.93	12,730	31,477
186.42	12,027	25,164	186.94	12,743	31,604
186.43	12,041	25,285	186.95	12,757	31,732
186.44	12,054	25,405	186.96	12,771	31,860
186.45	12,068	25,526	186.97	12,785	31,987
186.46	12,082	25,646	186.98	12,798	32,115
186.47	12,096	25,767	186.99	12,812	32,243
186.48	12,109	25,888	187.00	12,826	32,372
186.49	12,123	26,009	187.01	12,840	32,500
186.50	12,137	26,131	187.02	12,854	32,628
186.51	12,151	26,252	187.03	12,869	32,757
186.52	12,165	26,374	187.04	12,883	32,886
186.53	12,178	26,495	187.05	12,897	33,015
186.54	12,192	26,617	187.06	12,911	33,144
186.55	12,206	26,739	187.07	12,925	33,273
186.56	12,220	26,861	187.08	12,939	33,402
186.57	12,233	26,984	187.09	12,954	33,532
186.58	12,247	27,106	187.10	12,968	33,661
186.59	12,261	27,229	187.11	12,982	33,791

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	12,996	33,921	187.64	13,734	40,871
187.13	13,010	34,051	187.65	13,748	41,008
187.14	13,025	34,181	187.66	13,762	41,146
187.15	13,039	34,311	187.67	13,776	41,283
187.16	13,053	34,442	187.68	13,790	41,421
187.17	13,067	34,572	187.69	13,804	41,559
187.18	13,081	34,703	187.70	13,819	41,697
187.19	13,095	34,834	187.71	13,833	41,835
187.20	13,110	34,965	187.72	13,847	41,974
187.21	13,124	35,096	187.73	13,861	42,112
187.22	13,138	35,228	187.74	13,875	42,251
187.23	13,152	35,359	187.75	13,890	42,390
187.24	13,166	35,491	187.76	13,904	42,529
187.25	13,181	35,622	187.77	13,918	42,668
187.26	13,195	35,754	187.78	13,932	42,807
187.27	13,209	35,886	187.79	13,946	42,947
187.28	13,223	36,018	187.80	13,960	43,086
187.29	13,237	36,151	187.81	13,975	43,226
187.30	13,251	36,283	187.82	13,989	43,366
187.31	13,266	36,416	187.83	14,003	43,506
187.32	13,280	36,548	187.84	14,017	43,646
187.33	13,294	36,681	187.85	14,031	43,786
187.34	13,308	36,814	187.86	14,045	43,926
187.35	13,322	36,947	187.87	14,060	44,067
187.36	13,336	37,081	187.88	14,074	44,207
187.37	13,351	37,214	187.89	14,088	44,348
187.38	13,365	37,348	187.90	14,102	44,489
187.39	13,379	37,481	187.91	14,116	44,630
187.40	13,393	37,615	187.92	14,131	44,772
187.41	13,407	37,749	187.93	14,145	44,913
187.42	13,422	37,883	187.94	14,159	45,054
187.43	13,436	38,018	187.95	14,173	45,196
187.44	13,450	38,152	187.96	14,187	45,338
187.45	13,464	38,287	187.97	14,201	45,480
187.46	13,478	38,421	187.98	14,216	45,622
187.47	13,492	38,556	187.99	14,230	45,764
187.48	13,507	38,691	188.00	14,244	45,907
187.49	13,521	38,826	188.01	14,258	46,049
187.50	13,535	38,962	188.02	14,273	46,192
187.51	13,549	39,097	188.03	14,287	46,334
187.52	13,563	39,233	188.04	14,302	46,477
187.53	13,578	39,368	188.05	14,316	46,621
187.54	13,592	39,504	188.06	14,331	46,764
187.55	13,606	39,640	188.07	14,345	46,907
187.56	13,620	39,776	188.08	14,360	47,051
187.57	13,634	39,913	188.09	14,374	47,194
187.58	13,648	40,049	188.10	14,388	47,338
187.59	13,663	40,186	188.11	14,403	47,482
187.60	13,677	40,322	188.12	14,417	47,626
187.61	13,691	40,459	188.13	14,432	47,770
187.62	13,705	40,596	188.14	14,446	47,915
187.63	13,719	40,733	188.15	14,461	48,059

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

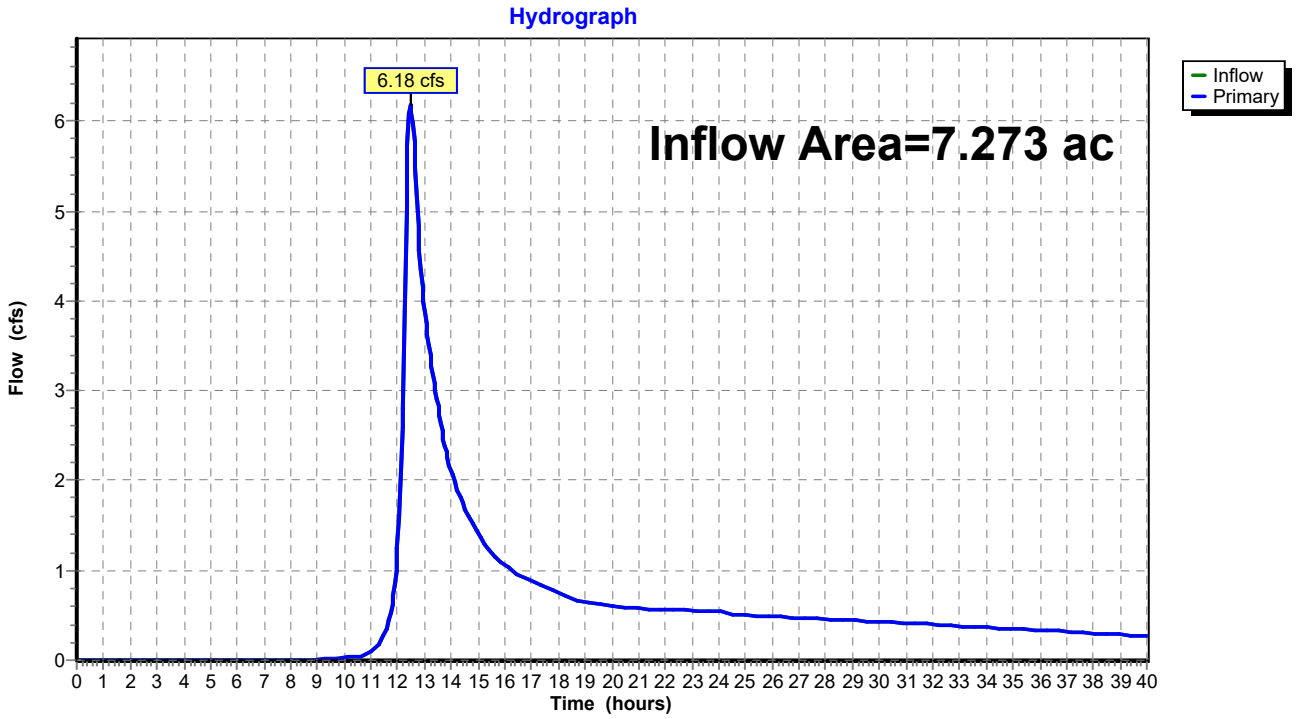
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	14,475	48,204
188.17	14,489	48,349
188.18	14,504	48,494
188.19	14,518	48,639
188.20	14,533	48,784
188.21	14,547	48,930
188.22	14,562	49,075
188.23	14,576	49,221
188.24	14,591	49,367
188.25	14,605	49,513
188.26	14,619	49,659
188.27	14,634	49,805
188.28	14,648	49,951
188.29	14,663	50,098
188.30	14,677	50,245
188.31	14,692	50,392
188.32	14,706	50,539
188.33	14,721	50,686
188.34	14,735	50,833
188.35	14,749	50,980
188.36	14,764	51,128
188.37	14,778	51,276
188.38	14,793	51,423
188.39	14,807	51,571
188.40	14,822	51,720
188.41	14,836	51,868
188.42	14,850	52,016
188.43	14,865	52,165
188.44	14,879	52,314
188.45	14,894	52,463
188.46	14,908	52,612
188.47	14,923	52,761
188.48	14,937	52,910
188.49	14,952	53,059
188.50	**14,966**	**53,209**

Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 7.273 ac, 32.33% Impervious, Inflow Depth > 3.05" for Future 10 yr event
Inflow = 6.18 cfs @ 12.45 hrs, Volume= 1.851 af
Primary = 6.18 cfs @ 12.45 hrs, Volume= 1.851 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5



Summary for Subcatchment 48l: PDA-48 (impervious)

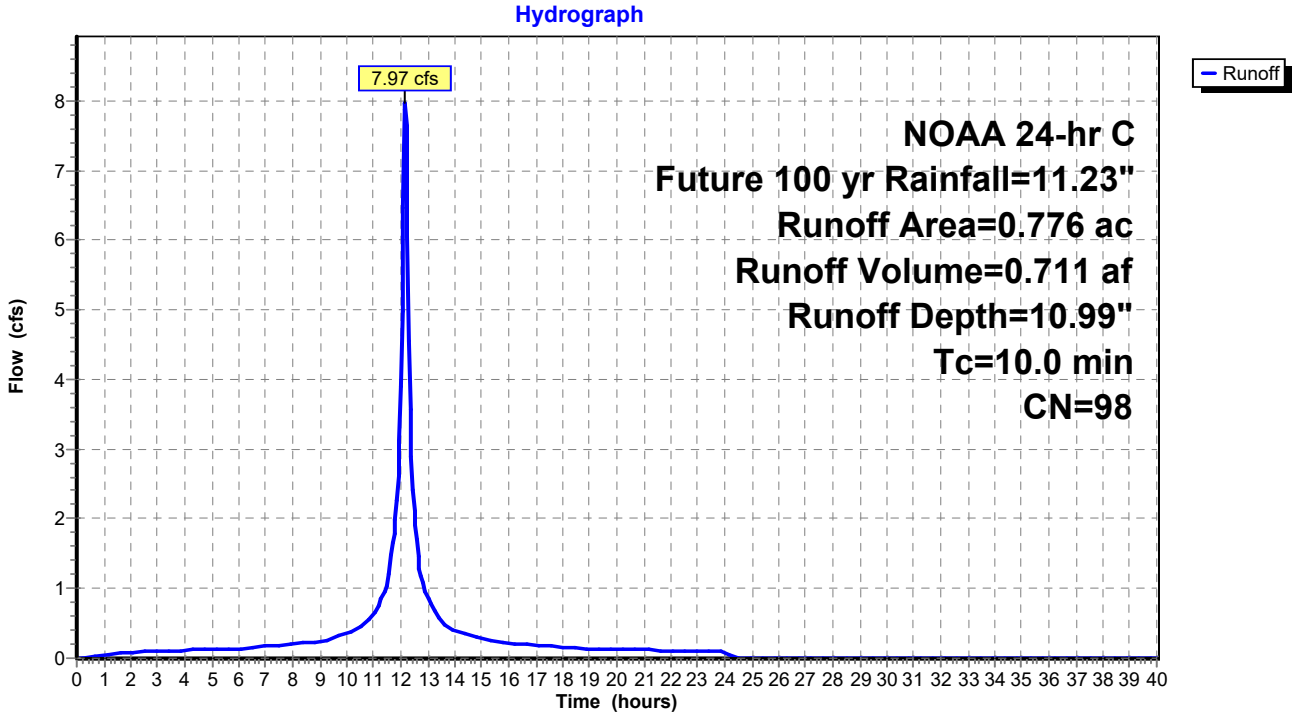
Runoff = 7.97 cfs @ 12.17 hrs, Volume= 0.711 af, Depth=10.99"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.235	98	Pavement, HSG C
*	0.522	98	Roof, HSG C
*	0.019	98	Concrete, HSG C
	0.776	98	Weighted Average
	0.776		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 48l: PDA-48 (impervious)



Summary for Subcatchment 48P: PDA-48 (pervious)

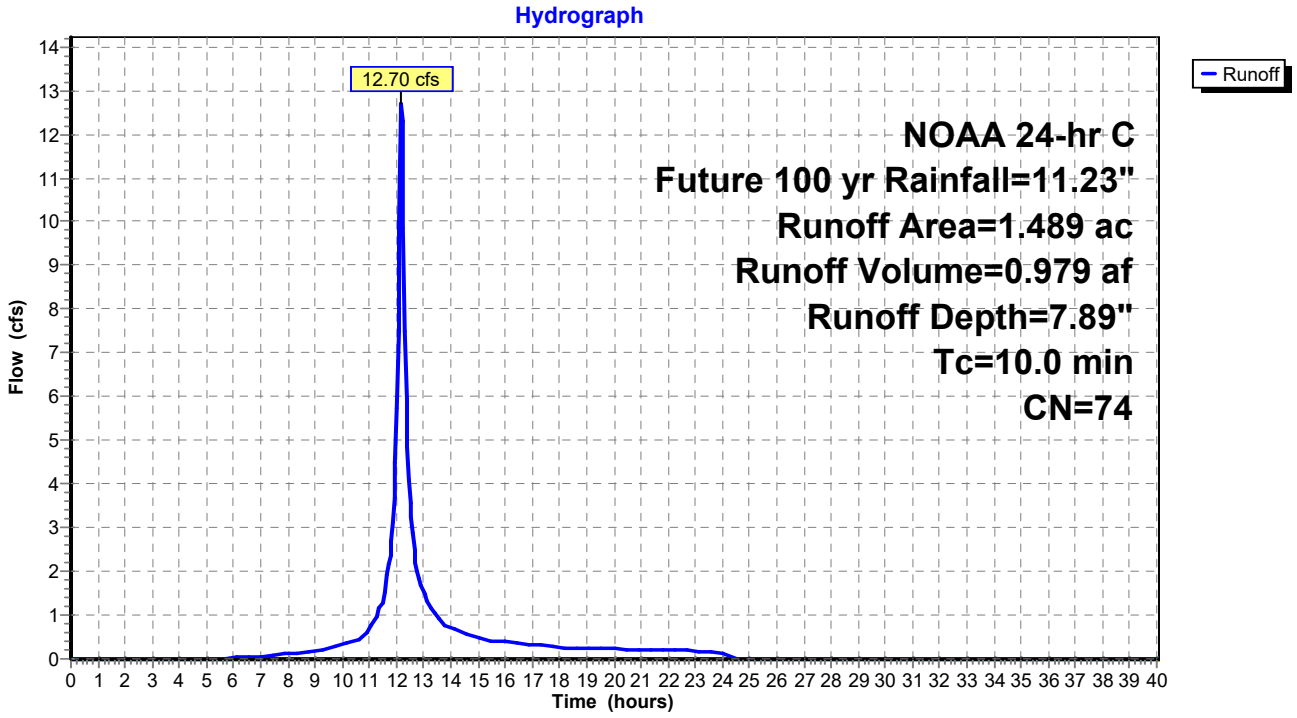
Runoff = 12.70 cfs @ 12.17 hrs, Volume= 0.979 af, Depth= 7.89"
Routed to Pond B-48 : Basin #48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.489	74	>75% Grass cover, Good, HSG C
1.489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 48P: PDA-48 (pervious)



Summary for Subcatchment 49l: PDA-49 (impervious)

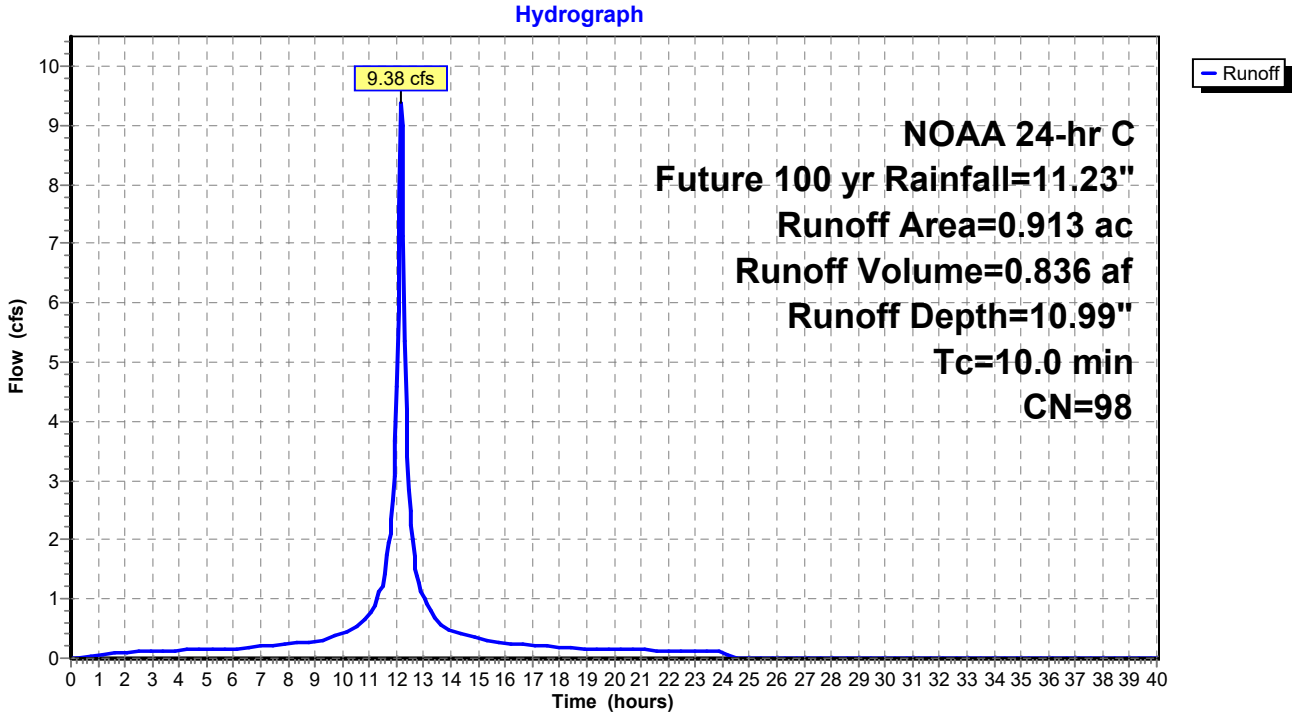
Runoff = 9.38 cfs @ 12.17 hrs, Volume= 0.836 af, Depth=10.99"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.434	98	Pavement, HSG C
*	0.418	98	Roof, HSG C
*	0.061	98	Concrete, HSG C
	0.913	98	Weighted Average
	0.913		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 49l: PDA-49 (impervious)



Summary for Subcatchment 49P: PDA-49 (pervious)

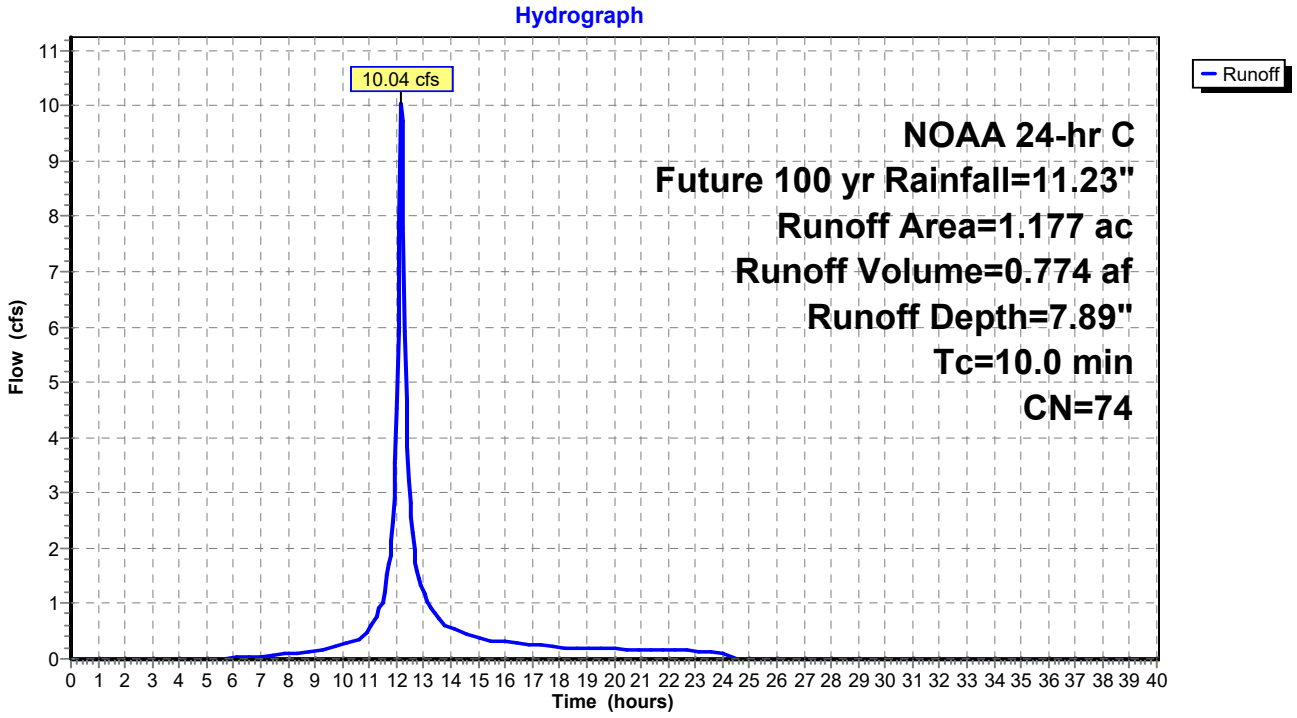
Runoff = 10.04 cfs @ 12.17 hrs, Volume= 0.774 af, Depth= 7.89"
Routed to Pond B-49 : Basin #49

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.177	74	>75% Grass cover, Good, HSG C
1.177		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 49P: PDA-49 (pervious)



Summary for Subcatchment 50l: PDA-50 (impervious)

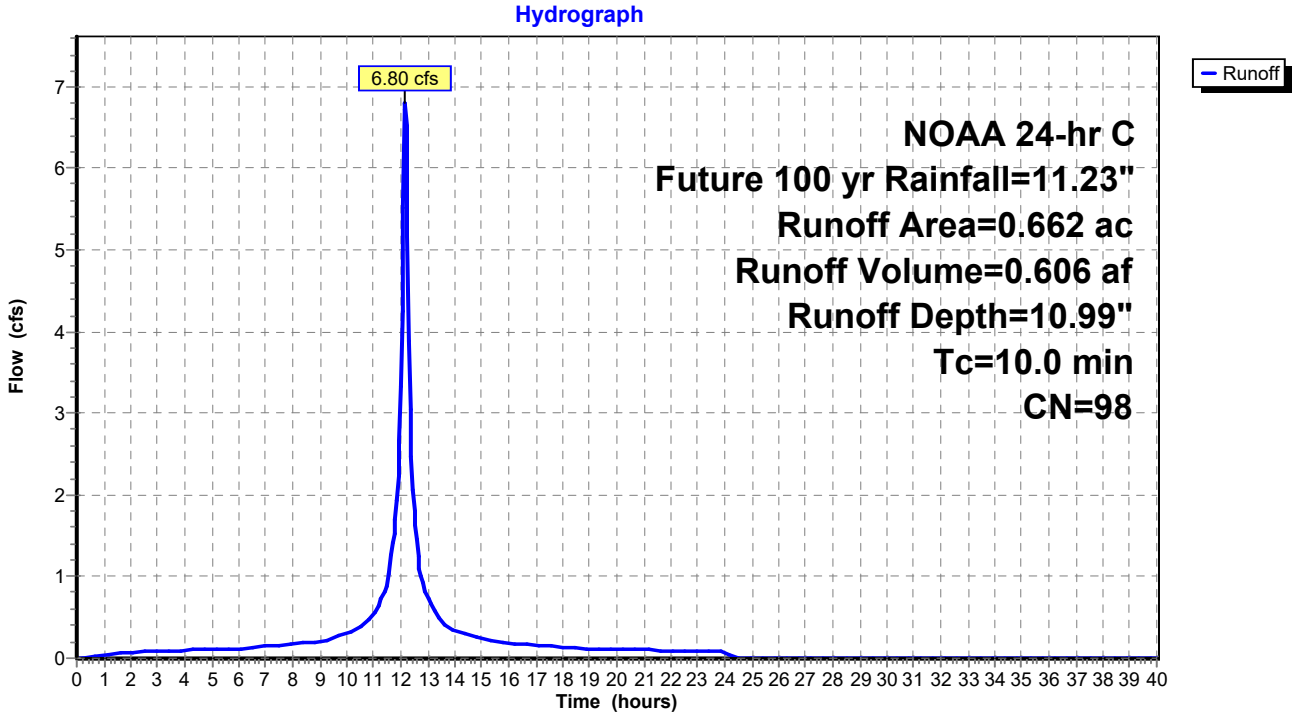
Runoff = 6.80 cfs @ 12.17 hrs, Volume= 0.606 af, Depth=10.99"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.291	98	Pavement, HSG C
*	0.325	98	Roof, HSG C
*	0.046	98	Concrete, HSG C
	0.662	98	Weighted Average
	0.662		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 50l: PDA-50 (impervious)



Summary for Subcatchment 50P: PDA-50 (pervious)

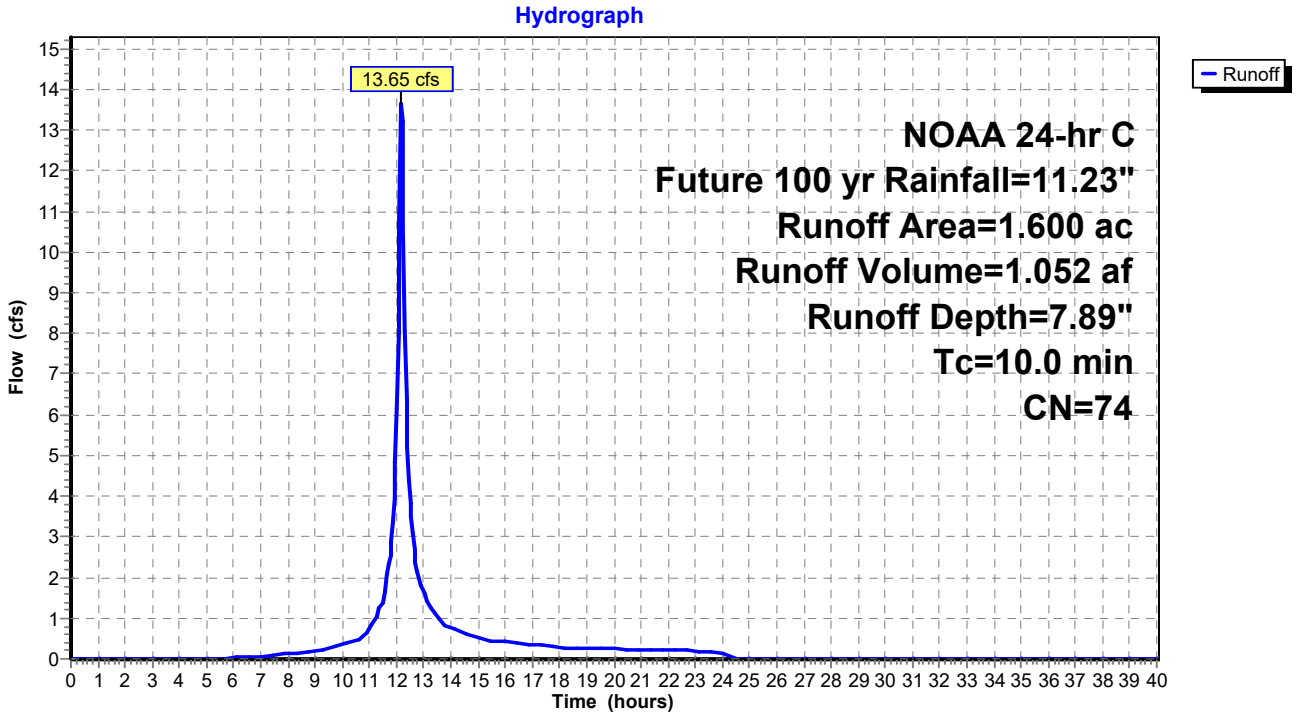
Runoff = 13.65 cfs @ 12.17 hrs, Volume= 1.052 af, Depth= 7.89"
Routed to Pond B-50 : Basin #50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.600	74	>75% Grass cover, Good, HSG C
1.600		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 50P: PDA-50 (pervious)



Summary for Subcatchment UPDA-5: PDA-5 (undetained)

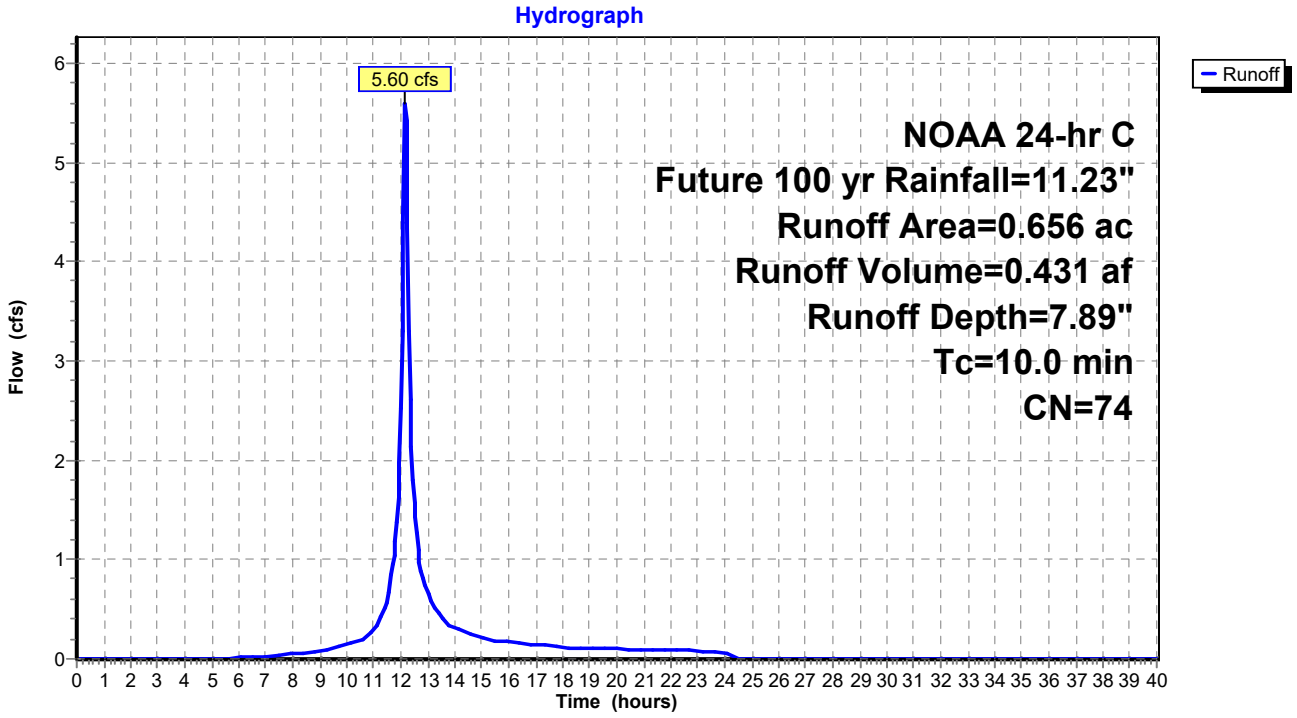
Runoff = 5.60 cfs @ 12.17 hrs, Volume= 0.431 af, Depth= 7.89"
Routed to Link PDA-5 : Proposed Drainage Area #5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.656	74	>75% Grass cover, Good, HSG C
0.656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-5: PDA-5 (undetained)



Summary for Pond B-48: Basin #48

Inflow Area = 2.265 ac, 34.26% Impervious, Inflow Depth = 8.95" for Future 100 yr event
Inflow = 20.67 cfs @ 12.17 hrs, Volume= 1.690 af
Outflow = 11.54 cfs @ 12.32 hrs, Volume= 1.438 af, Atten= 44%, Lag= 8.7 min
Primary = 11.54 cfs @ 12.32 hrs, Volume= 1.438 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.94' @ 12.32 hrs Surf.Area= 12,644 sf Storage= 31,469 cf

Plug-Flow detention time= 310.1 min calculated for 1.437 af (85% of inflow)
Center-of-Mass det. time= 243.6 min (1,024.6 - 780.9)

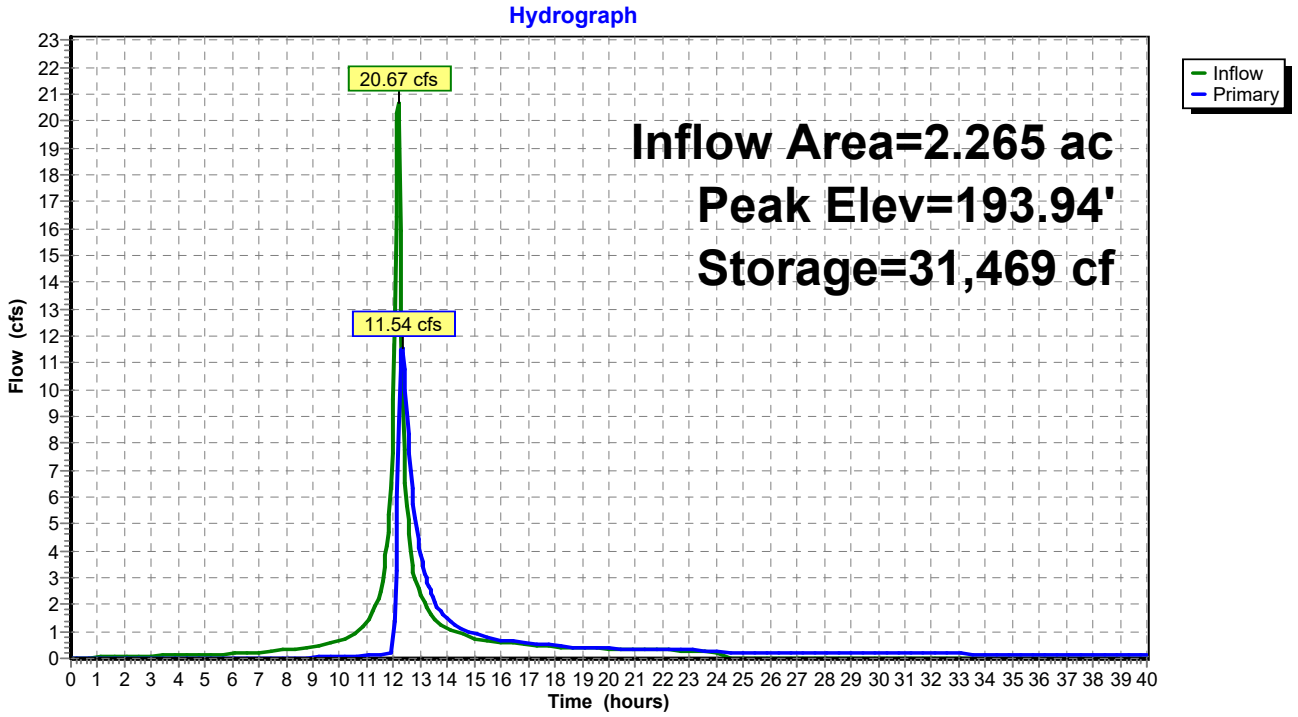
Volume	Invert	Avail.Storage	Storage Description
#1	191.00'	32,287 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.00	8,869	0	0
192.00	10,100	9,485	9,485
193.00	11,387	10,744	20,228
194.00	12,731	12,059	32,287

Device	Routing	Invert	Outlet Devices
#1	Primary	191.00'	**18.0" Round Culvert** L= 185.0' Ke= 0.500 Inlet / Outlet Invert= 191.00' / 188.45' S= 0.0138 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	191.40'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.00'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	193.99'	**50.0' long + 3.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=11.44 cfs @ 12.32 hrs HW=193.93' (Free Discharge)
- **1=Culvert** (Passes 11.44 cfs of 12.56 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.26 cfs @ 7.50 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 11.19 cfs @ 3.15 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-48: Basin #48



Stage-Discharge for Pond B-48: Basin #48

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.00	0.00	191.52	0.02	192.04	0.12	192.56	0.17
191.01	0.00	191.53	0.03	192.05	0.12	192.57	0.17
191.02	0.00	191.54	0.03	192.06	0.12	192.58	0.17
191.03	0.00	191.55	0.03	192.07	0.12	192.59	0.17
191.04	0.00	191.56	0.04	192.08	0.12	192.60	0.17
191.05	0.00	191.57	0.04	192.09	0.13	192.61	0.17
191.06	0.00	191.58	0.05	192.10	0.13	192.62	0.17
191.07	0.00	191.59	0.05	192.11	0.13	192.63	0.17
191.08	0.00	191.60	0.05	192.12	0.13	192.64	0.17
191.09	0.00	191.61	0.05	192.13	0.13	192.65	0.18
191.10	0.00	191.62	0.06	192.14	0.13	192.66	0.18
191.11	0.00	191.63	0.06	192.15	0.13	192.67	0.18
191.12	0.00	191.64	0.06	192.16	0.13	192.68	0.18
191.13	0.00	191.65	0.06	192.17	0.13	192.69	0.18
191.14	0.00	191.66	0.06	192.18	0.13	192.70	0.18
191.15	0.00	191.67	0.07	192.19	0.14	192.71	0.18
191.16	0.00	191.68	0.07	192.20	0.14	192.72	0.18
191.17	0.00	191.69	0.07	192.21	0.14	192.73	0.18
191.18	0.00	191.70	0.07	192.22	0.14	192.74	0.18
191.19	0.00	191.71	0.07	192.23	0.14	192.75	0.18
191.20	0.00	191.72	0.08	192.24	0.14	192.76	0.18
191.21	0.00	191.73	0.08	192.25	0.14	192.77	0.18
191.22	0.00	191.74	0.08	192.26	0.14	192.78	0.19
191.23	0.00	191.75	0.08	192.27	0.14	192.79	0.19
191.24	0.00	191.76	0.08	192.28	0.14	192.80	0.19
191.25	0.00	191.77	0.08	192.29	0.15	192.81	0.19
191.26	0.00	191.78	0.09	192.30	0.15	192.82	0.19
191.27	0.00	191.79	0.09	192.31	0.15	192.83	0.19
191.28	0.00	191.80	0.09	192.32	0.15	192.84	0.19
191.29	0.00	191.81	0.09	192.33	0.15	192.85	0.19
191.30	0.00	191.82	0.09	192.34	0.15	192.86	0.19
191.31	0.00	191.83	0.09	192.35	0.15	192.87	0.19
191.32	0.00	191.84	0.10	192.36	0.15	192.88	0.19
191.33	0.00	191.85	0.10	192.37	0.15	192.89	0.19
191.34	0.00	191.86	0.10	192.38	0.15	192.90	0.19
191.35	0.00	191.87	0.10	192.39	0.15	192.91	0.19
191.36	0.00	191.88	0.10	192.40	0.16	192.92	0.20
191.37	0.00	191.89	0.10	192.41	0.16	192.93	0.20
191.38	0.00	191.90	0.10	192.42	0.16	192.94	0.20
191.39	0.00	191.91	0.10	192.43	0.16	192.95	0.20
191.40	0.00	191.92	0.11	192.44	0.16	192.96	0.20
191.41	0.00	191.93	0.11	192.45	0.16	192.97	0.20
191.42	0.00	191.94	0.11	192.46	0.16	192.98	0.20
191.43	0.00	191.95	0.11	192.47	0.16	192.99	0.20
191.44	0.00	191.96	0.11	192.48	0.16	193.00	0.20
191.45	0.00	191.97	0.11	192.49	0.16	193.01	0.21
191.46	0.01	191.98	0.11	192.50	0.16	193.02	0.24
191.47	0.01	191.99	0.11	192.51	0.16	193.03	0.27
191.48	0.01	192.00	0.12	192.52	0.17	193.04	0.31
191.49	0.01	192.01	0.12	192.53	0.17	193.05	0.35
191.50	0.02	192.02	0.12	192.54	0.17	193.06	0.40
191.51	0.02	192.03	0.12	192.55	0.17	193.07	0.45

Stage-Discharge for Pond B-48: Basin #48 (continued)

Elevation (feet)	Primary (cfs)
193.08	0.50
193.09	0.56
193.10	0.62
193.11	0.68
193.12	0.75
193.13	0.82
193.14	0.89
193.15	0.96
193.16	1.04
193.17	1.12
193.18	1.20
193.19	1.29
193.20	1.37
193.21	1.46
193.22	1.55
193.23	1.64
193.24	1.74
193.25	1.83
193.26	1.93
193.27	2.03
193.28	2.13
193.29	2.23
193.30	2.34
193.31	2.44
193.32	2.55
193.33	2.66
193.34	2.77
193.35	2.88
193.36	3.00
193.37	3.11
193.38	3.23
193.39	3.35
193.40	3.47
193.41	3.59
193.42	3.71
193.43	3.84
193.44	3.96
193.45	4.09
193.46	4.22
193.47	4.35
193.48	4.48
193.49	4.61
193.50	4.74
193.51	4.87
193.52	5.01
193.53	5.15
193.54	5.28
193.55	5.42
193.56	5.56
193.57	5.70
193.58	5.85
193.59	5.99
193.60	6.13
193.61	6.28
193.62	6.43
193.63	6.57
193.64	6.72
193.65	6.87
193.66	7.02
193.67	7.17
193.68	7.33
193.69	7.48
193.70	7.64
193.71	7.79
193.72	7.95
193.73	8.11
193.74	8.26
193.75	8.42
193.76	8.58
193.77	8.74
193.78	8.91
193.79	9.07
193.80	9.23
193.81	9.40
193.82	9.56
193.83	9.73
193.84	9.90
193.85	10.07
193.86	10.24
193.87	10.40
193.88	10.58
193.89	10.75
193.90	10.92
193.91	11.09
193.92	11.27
193.93	11.44
193.94	11.62
193.95	11.79
193.96	11.97
193.97	12.15
193.98	12.33
193.99	12.51
194.00	**12.81**

Stage-Area-Storage for Pond B-48: Basin #48

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.00	8,869	0	191.52	9,509	4,778
191.01	8,881	89	191.53	9,521	4,873
191.02	8,894	178	191.54	9,534	4,969
191.03	8,906	267	191.55	9,546	5,064
191.04	8,918	356	191.56	9,558	5,160
191.05	8,931	445	191.57	9,571	5,255
191.06	8,943	534	191.58	9,583	5,351
191.07	8,955	624	191.59	9,595	5,447
191.08	8,967	713	191.60	9,608	5,543
191.09	8,980	803	191.61	9,620	5,639
191.10	8,992	893	191.62	9,632	5,735
191.11	9,004	983	191.63	9,645	5,832
191.12	9,017	1,073	191.64	9,657	5,928
191.13	9,029	1,163	191.65	9,669	6,025
191.14	9,041	1,254	191.66	9,681	6,122
191.15	9,054	1,344	191.67	9,694	6,219
191.16	9,066	1,435	191.68	9,706	6,316
191.17	9,078	1,526	191.69	9,718	6,413
191.18	9,091	1,616	191.70	9,731	6,510
191.19	9,103	1,707	191.71	9,743	6,607
191.20	9,115	1,798	191.72	9,755	6,705
191.21	9,128	1,890	191.73	9,768	6,802
191.22	9,140	1,981	191.74	9,780	6,900
191.23	9,152	2,072	191.75	9,792	6,998
191.24	9,164	2,164	191.76	9,805	7,096
191.25	9,177	2,256	191.77	9,817	7,194
191.26	9,189	2,348	191.78	9,829	7,292
191.27	9,201	2,439	191.79	9,841	7,391
191.28	9,214	2,532	191.80	9,854	7,489
191.29	9,226	2,624	191.81	9,866	7,588
191.30	9,238	2,716	191.82	9,878	7,686
191.31	9,251	2,809	191.83	9,891	7,785
191.32	9,263	2,901	191.84	9,903	7,884
191.33	9,275	2,994	191.85	9,915	7,983
191.34	9,288	3,087	191.86	9,928	8,083
191.35	9,300	3,180	191.87	9,940	8,182
191.36	9,312	3,273	191.88	9,952	8,281
191.37	9,324	3,366	191.89	9,965	8,381
191.38	9,337	3,459	191.90	9,977	8,481
191.39	9,349	3,553	191.91	9,989	8,580
191.40	9,361	3,646	191.92	10,002	8,680
191.41	9,374	3,740	191.93	10,014	8,781
191.42	9,386	3,834	191.94	10,026	8,881
191.43	9,398	3,927	191.95	10,038	8,981
191.44	9,411	4,022	191.96	10,051	9,081
191.45	9,423	4,116	191.97	10,063	9,182
191.46	9,435	4,210	191.98	10,075	9,283
191.47	9,448	4,304	191.99	10,088	9,384
191.48	9,460	4,399	192.00	10,100	9,485
191.49	9,472	4,494	192.01	10,113	9,586
191.50	9,485	4,588	192.02	10,126	9,687
191.51	9,497	4,683	192.03	10,139	9,788

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.04	10,151	9,890	192.56	10,821	15,342
192.05	10,164	9,991	192.57	10,834	15,451
192.06	10,177	10,093	192.58	10,846	15,559
192.07	10,190	10,195	192.59	10,859	15,668
192.08	10,203	10,297	192.60	10,872	15,776
192.09	10,216	10,399	192.61	10,885	15,885
192.10	10,229	10,501	192.62	10,898	15,994
192.11	10,242	10,603	192.63	10,911	16,103
192.12	10,254	10,706	192.64	10,924	16,212
192.13	10,267	10,808	192.65	10,937	16,321
192.14	10,280	10,911	192.66	10,949	16,431
192.15	10,293	11,014	192.67	10,962	16,540
192.16	10,306	11,117	192.68	10,975	16,650
192.17	10,319	11,220	192.69	10,988	16,760
192.18	10,332	11,323	192.70	11,001	16,870
192.19	10,345	11,427	192.71	11,014	16,980
192.20	10,357	11,530	192.72	11,027	17,090
192.21	10,370	11,634	192.73	11,040	17,200
192.22	10,383	11,738	192.74	11,052	17,311
192.23	10,396	11,842	192.75	11,065	17,421
192.24	10,409	11,946	192.76	11,078	17,532
192.25	10,422	12,050	192.77	11,091	17,643
192.26	10,435	12,154	192.78	11,104	17,754
192.27	10,447	12,258	192.79	11,117	17,865
192.28	10,460	12,363	192.80	11,130	17,976
192.29	10,473	12,468	192.81	11,142	18,088
192.30	10,486	12,572	192.82	11,155	18,199
192.31	10,499	12,677	192.83	11,168	18,311
192.32	10,512	12,782	192.84	11,181	18,423
192.33	10,525	12,888	192.85	11,194	18,534
192.34	10,538	12,993	192.86	11,207	18,646
192.35	10,550	13,098	192.87	11,220	18,759
192.36	10,563	13,204	192.88	11,233	18,871
192.37	10,576	13,310	192.89	11,245	18,983
192.38	10,589	13,415	192.90	11,258	19,096
192.39	10,602	13,521	192.91	11,271	19,208
192.40	10,615	13,627	192.92	11,284	19,321
192.41	10,628	13,734	192.93	11,297	19,434
192.42	10,641	13,840	192.94	11,310	19,547
192.43	10,653	13,946	192.95	11,323	19,660
192.44	10,666	14,053	192.96	11,336	19,774
192.45	10,679	14,160	192.97	11,348	19,887
192.46	10,692	14,267	192.98	11,361	20,001
192.47	10,705	14,374	192.99	11,374	20,114
192.48	10,718	14,481	193.00	11,387	20,228
192.49	10,731	14,588	193.01	11,400	20,342
192.50	10,744	14,695	193.02	11,414	20,456
192.51	10,756	14,803	193.03	11,427	20,570
192.52	10,769	14,911	193.04	11,441	20,685
192.53	10,782	15,018	193.05	11,454	20,799
192.54	10,795	15,126	193.06	11,468	20,914
192.55	10,808	15,234	193.07	11,481	21,028

Stage-Area-Storage for Pond B-48: Basin #48 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.08	11,495	21,143
193.09	11,508	21,258
193.10	11,521	21,373
193.11	11,535	21,489
193.12	11,548	21,604
193.13	11,562	21,720
193.14	11,575	21,835
193.15	11,589	21,951
193.16	11,602	22,067
193.17	11,615	22,183
193.18	11,629	22,299
193.19	11,642	22,416
193.20	11,656	22,532
193.21	11,669	22,649
193.22	11,683	22,766
193.23	11,696	22,883
193.24	11,710	23,000
193.25	11,723	23,117
193.26	11,736	23,234
193.27	11,750	23,351
193.28	11,763	23,469
193.29	11,777	23,587
193.30	11,790	23,705
193.31	11,804	23,823
193.32	11,817	23,941
193.33	11,831	24,059
193.34	11,844	24,177
193.35	11,857	24,296
193.36	11,871	24,414
193.37	11,884	24,533
193.38	11,898	24,652
193.39	11,911	24,771
193.40	11,925	24,890
193.41	11,938	25,010
193.42	11,951	25,129
193.43	11,965	25,249
193.44	11,978	25,368
193.45	11,992	25,488
193.46	12,005	25,608
193.47	12,019	25,728
193.48	12,032	25,849
193.49	12,046	25,969
193.50	12,059	26,090
193.51	12,072	26,210
193.52	12,086	26,331
193.53	12,099	26,452
193.54	12,113	26,573
193.55	12,126	26,694
193.56	12,140	26,815
193.57	12,153	26,937
193.58	12,167	27,059
193.59	12,180	27,180
193.60	12,193	27,302
193.61	12,207	27,424
193.62	12,220	27,546
193.63	12,234	27,669
193.64	12,247	27,791
193.65	12,261	27,913
193.66	12,274	28,036
193.67	12,287	28,159
193.68	12,301	28,282
193.69	12,314	28,405
193.70	12,328	28,528
193.71	12,341	28,652
193.72	12,355	28,775
193.73	12,368	28,899
193.74	12,382	29,022
193.75	12,395	29,146
193.76	12,408	29,270
193.77	12,422	29,394
193.78	12,435	29,519
193.79	12,449	29,643
193.80	12,462	29,768
193.81	12,476	29,892
193.82	12,489	30,017
193.83	12,503	30,142
193.84	12,516	30,267
193.85	12,529	30,392
193.86	12,543	30,518
193.87	12,556	30,643
193.88	12,570	30,769
193.89	12,583	30,895
193.90	12,597	31,021
193.91	12,610	31,147
193.92	12,623	31,273
193.93	12,637	31,399
193.94	12,650	31,526
193.95	12,664	31,652
193.96	12,677	31,779
193.97	12,691	31,906
193.98	12,704	32,033
193.99	12,718	32,160
194.00	**12,731**	**32,287**

Summary for Pond B-49: Basin #49

Inflow Area = 2.090 ac, 43.68% Impervious, Inflow Depth = 9.25" for Future 100 yr event
Inflow = 19.42 cfs @ 12.17 hrs, Volume= 1.610 af
Outflow = 9.25 cfs @ 12.35 hrs, Volume= 1.470 af, Atten= 52%, Lag= 10.6 min
Primary = 9.25 cfs @ 12.35 hrs, Volume= 1.470 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 186.08' @ 12.35 hrs Surf.Area= 9,945 sf Storage= 25,324 cf

Plug-Flow detention time= 232.9 min calculated for 1.470 af (91% of inflow)
Center-of-Mass det. time= 186.3 min (960.5 - 774.2)

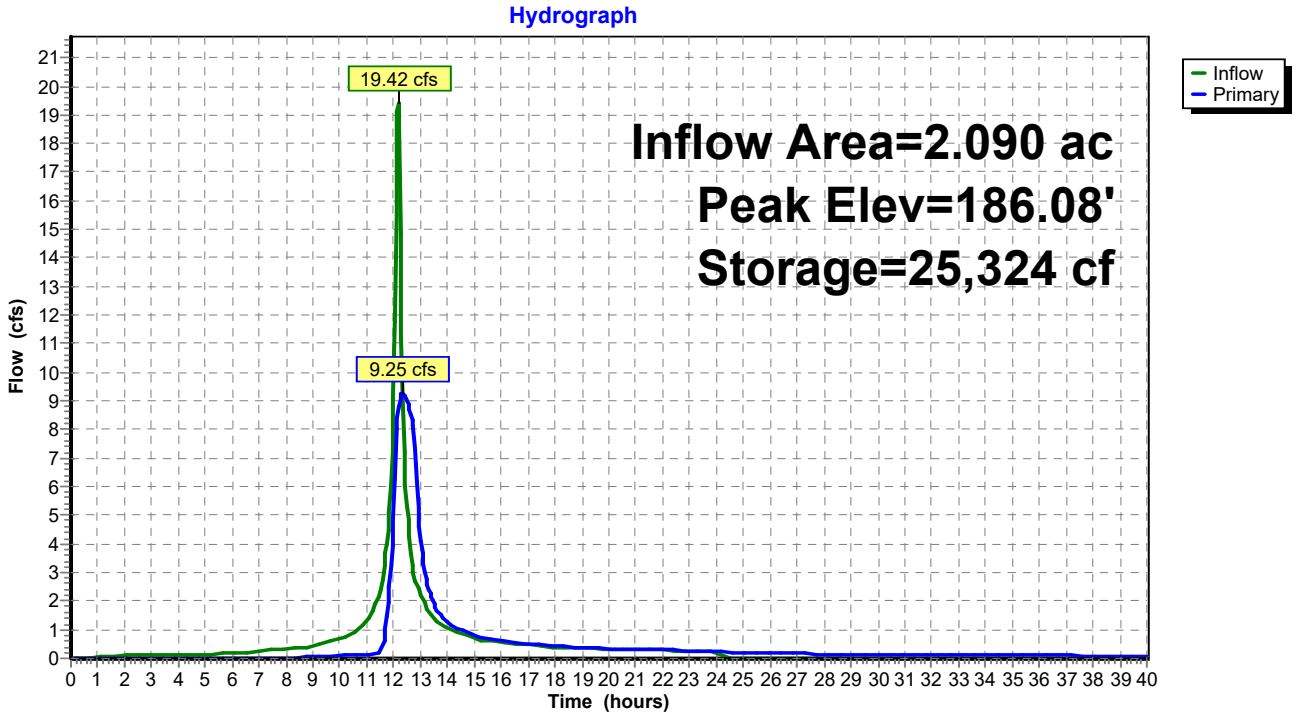
Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	52,993 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	6,565	0	0
184.00	7,625	7,095	7,095
185.00	8,717	8,171	15,266
186.00	9,853	9,285	24,551
187.00	11,027	10,440	34,991
188.00	12,333	11,680	46,671
188.50	12,956	6,322	52,993

Device	Routing	Invert	Outlet Devices
#1	Primary	183.00'	**15.0" Round Culvert** L= 25.0' Ke= 0.500 Inlet / Outlet Invert= 183.00' / 182.81' S= 0.0076 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	183.55'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	184.74'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.25'	**100.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=9.25 cfs @ 12.35 hrs HW=186.08' (Free Discharge)
- **1=Culvert** (Inlet Controls 9.25 cfs @ 7.54 fps)
  - **2=Orifice/Grate** (Passes < 0.26 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 18.87 cfs potential flow)
- **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-49: Basin #49



Stage-Discharge for Pond B-49: Basin #49

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
183.00	0.00	183.52	0.00	184.04	0.10	184.56	0.16
183.01	0.00	183.53	0.00	184.05	0.10	184.57	0.16
183.02	0.00	183.54	0.00	184.06	0.10	184.58	0.16
183.03	0.00	183.55	0.00	184.07	0.11	184.59	0.16
183.04	0.00	183.56	0.00	184.08	0.11	184.60	0.16
183.05	0.00	183.57	0.00	184.09	0.11	184.61	0.16
183.06	0.00	183.58	0.00	184.10	0.11	184.62	0.16
183.07	0.00	183.59	0.00	184.11	0.11	184.63	0.16
183.08	0.00	183.60	0.00	184.12	0.11	184.64	0.16
183.09	0.00	183.61	0.01	184.13	0.11	184.65	0.16
183.10	0.00	183.62	0.01	184.14	0.11	184.66	0.16
183.11	0.00	183.63	0.01	184.15	0.12	184.67	0.17
183.12	0.00	183.64	0.01	184.16	0.12	184.68	0.17
183.13	0.00	183.65	0.02	184.17	0.12	184.69	0.17
183.14	0.00	183.66	0.02	184.18	0.12	184.70	0.17
183.15	0.00	183.67	0.02	184.19	0.12	184.71	0.17
183.16	0.00	183.68	0.03	184.20	0.12	184.72	0.17
183.17	0.00	183.69	0.03	184.21	0.12	184.73	0.17
183.18	0.00	183.70	0.03	184.22	0.12	184.74	0.17
183.19	0.00	183.71	0.04	184.23	0.12	184.75	0.18
183.20	0.00	183.72	0.04	184.24	0.13	184.76	0.21
183.21	0.00	183.73	0.05	184.25	0.13	184.77	0.24
183.22	0.00	183.74	0.05	184.26	0.13	184.78	0.28
183.23	0.00	183.75	0.05	184.27	0.13	184.79	0.32
183.24	0.00	183.76	0.05	184.28	0.13	184.80	0.37
183.25	0.00	183.77	0.06	184.29	0.13	184.81	0.42
183.26	0.00	183.78	0.06	184.30	0.13	184.82	0.47
183.27	0.00	183.79	0.06	184.31	0.13	184.83	0.53
183.28	0.00	183.80	0.06	184.32	0.13	184.84	0.59
183.29	0.00	183.81	0.06	184.33	0.13	184.85	0.65
183.30	0.00	183.82	0.07	184.34	0.14	184.86	0.72
183.31	0.00	183.83	0.07	184.35	0.14	184.87	0.79
183.32	0.00	183.84	0.07	184.36	0.14	184.88	0.86
183.33	0.00	183.85	0.07	184.37	0.14	184.89	0.94
183.34	0.00	183.86	0.07	184.38	0.14	184.90	1.01
183.35	0.00	183.87	0.08	184.39	0.14	184.91	1.09
183.36	0.00	183.88	0.08	184.40	0.14	184.92	1.17
183.37	0.00	183.89	0.08	184.41	0.14	184.93	1.26
183.38	0.00	183.90	0.08	184.42	0.14	184.94	1.34
183.39	0.00	183.91	0.08	184.43	0.14	184.95	1.43
183.40	0.00	183.92	0.08	184.44	0.15	184.96	1.52
183.41	0.00	183.93	0.09	184.45	0.15	184.97	1.61
183.42	0.00	183.94	0.09	184.46	0.15	184.98	1.71
183.43	0.00	183.95	0.09	184.47	0.15	184.99	1.80
183.44	0.00	183.96	0.09	184.48	0.15	185.00	1.90
183.45	0.00	183.97	0.09	184.49	0.15	185.01	2.00
183.46	0.00	183.98	0.09	184.50	0.15	185.02	2.10
183.47	0.00	183.99	0.10	184.51	0.15	185.03	2.21
183.48	0.00	184.00	0.10	184.52	0.15	185.04	2.31
183.49	0.00	184.01	0.10	184.53	0.15	185.05	2.42
183.50	0.00	184.02	0.10	184.54	0.15	185.06	2.52
183.51	0.00	184.03	0.10	184.55	0.16	185.07	2.63

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
185.08	2.75	185.60	8.30	186.12	9.33	186.64	10.26
185.09	2.86	185.61	8.33	186.13	9.35	186.65	10.28
185.10	2.97	185.62	8.35	186.14	9.37	186.66	10.29
185.11	3.09	185.63	8.37	186.15	9.39	186.67	10.31
185.12	3.20	185.64	8.39	186.16	9.41	186.68	10.33
185.13	3.32	185.65	8.41	186.17	9.43	186.69	10.34
185.14	3.44	185.66	8.43	186.18	9.44	186.70	10.36
185.15	3.56	185.67	8.45	186.19	9.46	186.71	10.38
185.16	3.69	185.68	8.47	186.20	9.48	186.72	10.40
185.17	3.81	185.69	8.49	186.21	9.50	186.73	10.41
185.18	3.94	185.70	8.51	186.22	9.52	186.74	10.43
185.19	4.06	185.71	8.53	186.23	9.54	186.75	10.45
185.20	4.19	185.72	8.55	186.24	9.56	186.76	10.46
185.21	4.32	185.73	8.57	186.25	9.57	186.77	10.48
185.22	4.45	185.74	8.59	186.26	9.59	186.78	10.50
185.23	4.58	185.75	8.61	186.27	9.61	186.79	10.51
185.24	4.72	185.76	8.63	186.28	9.63	186.80	10.53
185.25	4.85	185.77	8.65	186.29	9.65	186.81	10.55
185.26	4.99	185.78	8.67	186.30	9.66	186.82	10.56
185.27	5.12	185.79	8.69	186.31	9.68	186.83	10.58
185.28	5.26	185.80	8.71	186.32	9.70	186.84	10.59
185.29	5.40	185.81	8.73	186.33	9.72	186.85	10.61
185.30	5.54	185.82	8.75	186.34	9.74	186.86	10.63
185.31	5.68	185.83	8.77	186.35	9.75	186.87	10.64
185.32	5.82	185.84	8.79	186.36	9.77	186.88	10.66
185.33	5.97	185.85	8.81	186.37	9.79	186.89	10.68
185.34	6.11	185.86	8.83	186.38	9.81	186.90	10.69
185.35	6.26	185.87	8.85	186.39	9.83	186.91	10.71
185.36	6.40	185.88	8.87	186.40	9.84	186.92	10.73
185.37	6.55	185.89	8.89	186.41	9.86	186.93	10.74
185.38	6.70	185.90	8.91	186.42	9.88	186.94	10.76
185.39	6.85	185.91	8.93	186.43	9.90	186.95	10.77
185.40	7.00	185.92	8.95	186.44	9.91	186.96	10.79
185.41	7.15	185.93	8.97	186.45	9.93	186.97	10.81
185.42	7.30	185.94	8.99	186.46	9.95	186.98	10.82
185.43	7.46	185.95	9.01	186.47	9.97	186.99	10.84
185.44	7.61	185.96	9.03	186.48	9.98	187.00	10.86
185.45	7.77	185.97	9.05	186.49	10.00	187.01	10.87
185.46	7.92	185.98	9.07	186.50	10.02	187.02	10.89
185.47	8.03	185.99	9.09	186.51	10.04	187.03	10.90
185.48	8.05	186.00	9.11	186.52	10.05	187.04	10.92
185.49	8.07	186.01	9.13	186.53	10.07	187.05	10.94
185.50	8.09	186.02	9.14	186.54	10.09	187.06	10.95
185.51	8.11	186.03	9.16	186.55	10.11	187.07	10.97
185.52	8.13	186.04	9.18	186.56	10.12	187.08	10.98
185.53	8.16	186.05	9.20	186.57	10.14	187.09	11.00
185.54	8.18	186.06	9.22	186.58	10.16	187.10	11.01
185.55	8.20	186.07	9.24	186.59	10.17	187.11	11.03
185.56	8.22	186.08	9.26	186.60	10.19	187.12	11.05
185.57	8.24	186.09	9.28	186.61	10.21	187.13	11.06
185.58	8.26	186.10	9.30	186.62	10.23	187.14	11.08
185.59	8.28	186.11	9.31	186.63	10.24	187.15	11.09

Stage-Discharge for Pond B-49: Basin #49 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
187.16	11.11	187.68	11.90	188.20	12.64
187.17	11.13	187.69	11.91	188.21	12.65
187.18	11.14	187.70	11.93	188.22	12.67
187.19	11.16	187.71	11.94	188.23	12.68
187.20	11.17	187.72	11.96	188.24	12.69
187.21	11.19	187.73	11.97	188.25	12.71
187.22	11.20	187.74	11.99	188.26	13.05
187.23	11.22	187.75	12.00	188.27	13.66
187.24	11.23	187.76	12.02	188.28	14.45
187.25	11.25	187.77	12.03	188.29	15.38
187.26	11.27	187.78	12.04	188.30	16.43
187.27	11.28	187.79	12.06	188.31	17.59
187.28	11.30	187.80	12.07	188.32	18.86
187.29	11.31	187.81	12.09	188.33	20.21
187.30	11.33	187.82	12.10	188.34	21.66
187.31	11.34	187.83	12.12	188.35	23.18
187.32	11.36	187.84	12.13	188.36	24.78
187.33	11.37	187.85	12.15	188.37	26.46
187.34	11.39	187.86	12.16	188.38	28.21
187.35	11.40	187.87	12.17	188.39	30.02
187.36	11.42	187.88	12.19	188.40	31.90
187.37	11.43	187.89	12.20	188.41	33.85
187.38	11.45	187.90	12.22	188.42	35.85
187.39	11.47	187.91	12.23	188.43	37.92
187.40	11.48	187.92	12.25	188.44	40.04
187.41	11.50	187.93	12.26	188.45	42.22
187.42	11.51	187.94	12.27	188.46	44.45
187.43	11.53	187.95	12.29	188.47	46.73
187.44	11.54	187.96	12.30	188.48	49.07
187.45	11.56	187.97	12.32	188.49	51.46
187.46	11.57	187.98	12.33	188.50	**53.90**
187.47	11.59	187.99	12.35		
187.48	11.60	188.00	12.36		
187.49	11.62	188.01	12.37		
187.50	11.63	188.02	12.39		
187.51	11.65	188.03	12.40		
187.52	11.66	188.04	12.42		
187.53	11.68	188.05	12.43		
187.54	11.69	188.06	12.44		
187.55	11.71	188.07	12.46		
187.56	11.72	188.08	12.47		
187.57	11.74	188.09	12.49		
187.58	11.75	188.10	12.50		
187.59	11.77	188.11	12.51		
187.60	11.78	188.12	12.53		
187.61	11.80	188.13	12.54		
187.62	11.81	188.14	12.56		
187.63	11.83	188.15	12.57		
187.64	11.84	188.16	12.58		
187.65	11.85	188.17	12.60		
187.66	11.87	188.18	12.61		
187.67	11.88	188.19	12.62		

Stage-Area-Storage for Pond B-49: Basin #49

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	6,565	0	183.52	7,116	3,557
183.01	6,576	66	183.53	7,127	3,628
183.02	6,586	132	183.54	7,137	3,700
183.03	6,597	197	183.55	7,148	3,771
183.04	6,607	263	183.56	7,159	3,843
183.05	6,618	330	183.57	7,169	3,914
183.06	6,629	396	183.58	7,180	3,986
183.07	6,639	462	183.59	7,190	4,058
183.08	6,650	529	183.60	7,201	4,130
183.09	6,660	595	183.61	7,212	4,202
183.10	6,671	662	183.62	7,222	4,274
183.11	6,682	729	183.63	7,233	4,346
183.12	6,692	795	183.64	7,243	4,419
183.13	6,703	862	183.65	7,254	4,491
183.14	6,713	929	183.66	7,265	4,564
183.15	6,724	997	183.67	7,275	4,636
183.16	6,735	1,064	183.68	7,286	4,709
183.17	6,745	1,131	183.69	7,296	4,782
183.18	6,756	1,199	183.70	7,307	4,855
183.19	6,766	1,266	183.71	7,318	4,928
183.20	6,777	1,334	183.72	7,328	5,002
183.21	6,788	1,402	183.73	7,339	5,075
183.22	6,798	1,470	183.74	7,349	5,148
183.23	6,809	1,538	183.75	7,360	5,222
183.24	6,819	1,606	183.76	7,371	5,296
183.25	6,830	1,674	183.77	7,381	5,369
183.26	6,841	1,743	183.78	7,392	5,443
183.27	6,851	1,811	183.79	7,402	5,517
183.28	6,862	1,880	183.80	7,413	5,591
183.29	6,872	1,948	183.81	7,424	5,665
183.30	6,883	2,017	183.82	7,434	5,740
183.31	6,894	2,086	183.83	7,445	5,814
183.32	6,904	2,155	183.84	7,455	5,889
183.33	6,915	2,224	183.85	7,466	5,963
183.34	6,925	2,293	183.86	7,477	6,038
183.35	6,936	2,363	183.87	7,487	6,113
183.36	6,947	2,432	183.88	7,498	6,188
183.37	6,957	2,502	183.89	7,508	6,263
183.38	6,968	2,571	183.90	7,519	6,338
183.39	6,978	2,641	183.91	7,530	6,413
183.40	6,989	2,711	183.92	7,540	6,488
183.41	7,000	2,781	183.93	7,551	6,564
183.42	7,010	2,851	183.94	7,561	6,639
183.43	7,021	2,921	183.95	7,572	6,715
183.44	7,031	2,991	183.96	7,583	6,791
183.45	7,042	3,062	183.97	7,593	6,867
183.46	7,053	3,132	183.98	7,604	6,943
183.47	7,063	3,203	183.99	7,614	7,019
183.48	7,074	3,273	184.00	7,625	7,095
183.49	7,084	3,344	184.01	7,636	7,171
183.50	7,095	3,415	184.02	7,647	7,248
183.51	7,106	3,486	184.03	7,658	7,324

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	7,669	7,401	184.56	8,237	11,536
184.05	7,680	7,478	184.57	8,247	11,619
184.06	7,691	7,554	184.58	8,258	11,701
184.07	7,701	7,631	184.59	8,269	11,784
184.08	7,712	7,708	184.60	8,280	11,867
184.09	7,723	7,786	184.61	8,291	11,949
184.10	7,734	7,863	184.62	8,302	12,032
184.11	7,745	7,940	184.63	8,313	12,115
184.12	7,756	8,018	184.64	8,324	12,199
184.13	7,767	8,095	184.65	8,335	12,282
184.14	7,778	8,173	184.66	8,346	12,365
184.15	7,789	8,251	184.67	8,357	12,449
184.16	7,800	8,329	184.68	8,368	12,532
184.17	7,811	8,407	184.69	8,378	12,616
184.18	7,822	8,485	184.70	8,389	12,700
184.19	7,832	8,563	184.71	8,400	12,784
184.20	7,843	8,642	184.72	8,411	12,868
184.21	7,854	8,720	184.73	8,422	12,952
184.22	7,865	8,799	184.74	8,433	13,036
184.23	7,876	8,878	184.75	8,444	13,121
184.24	7,887	8,956	184.76	8,455	13,205
184.25	7,898	9,035	184.77	8,466	13,290
184.26	7,909	9,114	184.78	8,477	13,375
184.27	7,920	9,194	184.79	8,488	13,460
184.28	7,931	9,273	184.80	8,499	13,544
184.29	7,942	9,352	184.81	8,510	13,629
184.30	7,953	9,432	184.82	8,520	13,715
184.31	7,964	9,511	184.83	8,531	13,800
184.32	7,974	9,591	184.84	8,542	13,885
184.33	7,985	9,671	184.85	8,553	13,971
184.34	7,996	9,751	184.86	8,564	14,056
184.35	8,007	9,831	184.87	8,575	14,142
184.36	8,018	9,911	184.88	8,586	14,228
184.37	8,029	9,991	184.89	8,597	14,314
184.38	8,040	10,071	184.90	8,608	14,400
184.39	8,051	10,152	184.91	8,619	14,486
184.40	8,062	10,232	184.92	8,630	14,572
184.41	8,073	10,313	184.93	8,641	14,658
184.42	8,084	10,394	184.94	8,651	14,745
184.43	8,095	10,475	184.95	8,662	14,832
184.44	8,105	10,556	184.96	8,673	14,918
184.45	8,116	10,637	184.97	8,684	15,005
184.46	8,127	10,718	184.98	8,695	15,092
184.47	8,138	10,799	184.99	8,706	15,179
184.48	8,149	10,881	185.00	8,717	15,266
184.49	8,160	10,962	185.01	8,728	15,353
184.50	8,171	11,044	185.02	8,740	15,441
184.51	8,182	11,126	185.03	8,751	15,528
184.52	8,193	11,208	185.04	8,762	15,616
184.53	8,204	11,290	185.05	8,774	15,703
184.54	8,215	11,372	185.06	8,785	15,791
184.55	8,226	11,454	185.07	8,797	15,879

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	8,808	15,967	185.60	9,399	20,701
185.09	8,819	16,055	185.61	9,410	20,795
185.10	8,831	16,143	185.62	9,421	20,889
185.11	8,842	16,232	185.63	9,433	20,983
185.12	8,853	16,320	185.64	9,444	21,078
185.13	8,865	16,409	185.65	9,455	21,172
185.14	8,876	16,498	185.66	9,467	21,267
185.15	8,887	16,586	185.67	9,478	21,361
185.16	8,899	16,675	185.68	9,489	21,456
185.17	8,910	16,764	185.69	9,501	21,551
185.18	8,921	16,853	185.70	9,512	21,646
185.19	8,933	16,943	185.71	9,524	21,741
185.20	8,944	17,032	185.72	9,535	21,837
185.21	8,956	17,122	185.73	9,546	21,932
185.22	8,967	17,211	185.74	9,558	22,028
185.23	8,978	17,301	185.75	9,569	22,123
185.24	8,990	17,391	185.76	9,580	22,219
185.25	9,001	17,481	185.77	9,592	22,315
185.26	9,012	17,571	185.78	9,603	22,411
185.27	9,024	17,661	185.79	9,614	22,507
185.28	9,035	17,751	185.80	9,626	22,603
185.29	9,046	17,842	185.81	9,637	22,699
185.30	9,058	17,932	185.82	9,649	22,796
185.31	9,069	18,023	185.83	9,660	22,892
185.32	9,081	18,114	185.84	9,671	22,989
185.33	9,092	18,204	185.85	9,683	23,086
185.34	9,103	18,295	185.86	9,694	23,183
185.35	9,115	18,387	185.87	9,705	23,280
185.36	9,126	18,478	185.88	9,717	23,377
185.37	9,137	18,569	185.89	9,728	23,474
185.38	9,149	18,660	185.90	9,739	23,571
185.39	9,160	18,752	185.91	9,751	23,669
185.40	9,171	18,844	185.92	9,762	23,766
185.41	9,183	18,935	185.93	9,773	23,864
185.42	9,194	19,027	185.94	9,785	23,962
185.43	9,205	19,119	185.95	9,796	24,060
185.44	9,217	19,211	185.96	9,808	24,158
185.45	9,228	19,304	185.97	9,819	24,256
185.46	9,240	19,396	185.98	9,830	24,354
185.47	9,251	19,488	185.99	9,842	24,453
185.48	9,262	19,581	186.00	9,853	24,551
185.49	9,274	19,674	186.01	9,865	24,650
185.50	9,285	19,767	186.02	9,876	24,748
185.51	9,296	19,859	186.03	9,888	24,847
185.52	9,308	19,952	186.04	9,900	24,946
185.53	9,319	20,046	186.05	9,912	25,045
185.54	9,330	20,139	186.06	9,923	25,144
185.55	9,342	20,232	186.07	9,935	25,244
185.56	9,353	20,326	186.08	9,947	25,343
185.57	9,365	20,419	186.09	9,959	25,443
185.58	9,376	20,513	186.10	9,970	25,542
185.59	9,387	20,607	186.11	9,982	25,642

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.12	9,994	25,742	186.64	10,604	31,097
186.13	10,006	25,842	186.65	10,616	31,203
186.14	10,017	25,942	186.66	10,628	31,310
186.15	10,029	26,042	186.67	10,640	31,416
186.16	10,041	26,143	186.68	10,651	31,522
186.17	10,053	26,243	186.69	10,663	31,629
186.18	10,064	26,344	186.70	10,675	31,736
186.19	10,076	26,444	186.71	10,687	31,843
186.20	10,088	26,545	186.72	10,698	31,949
186.21	10,100	26,646	186.73	10,710	32,057
186.22	10,111	26,747	186.74	10,722	32,164
186.23	10,123	26,848	186.75	10,734	32,271
186.24	10,135	26,950	186.76	10,745	32,378
186.25	10,147	27,051	186.77	10,757	32,486
186.26	10,158	27,152	186.78	10,769	32,593
186.27	10,170	27,254	186.79	10,780	32,701
186.28	10,182	27,356	186.80	10,792	32,809
186.29	10,193	27,458	186.81	10,804	32,917
186.30	10,205	27,560	186.82	10,816	33,025
186.31	10,217	27,662	186.83	10,827	33,133
186.32	10,229	27,764	186.84	10,839	33,242
186.33	10,240	27,866	186.85	10,851	33,350
186.34	10,252	27,969	186.86	10,863	33,459
186.35	10,264	28,071	186.87	10,874	33,567
186.36	10,276	28,174	186.88	10,886	33,676
186.37	10,287	28,277	186.89	10,898	33,785
186.38	10,299	28,380	186.90	10,910	33,894
186.39	10,311	28,483	186.91	10,921	34,003
186.40	10,323	28,586	186.92	10,933	34,113
186.41	10,334	28,689	186.93	10,945	34,222
186.42	10,346	28,793	186.94	10,957	34,331
186.43	10,358	28,896	186.95	10,968	34,441
186.44	10,370	29,000	186.96	10,980	34,551
186.45	10,381	29,104	186.97	10,992	34,661
186.46	10,393	29,208	186.98	11,004	34,771
186.47	10,405	29,312	186.99	11,015	34,881
186.48	10,417	29,416	187.00	11,027	34,991
186.49	10,428	29,520	187.01	11,040	35,101
186.50	10,440	29,624	187.02	11,053	35,212
186.51	10,452	29,729	187.03	11,066	35,322
186.52	10,463	29,833	187.04	11,079	35,433
186.53	10,475	29,938	187.05	11,092	35,544
186.54	10,487	30,043	187.06	11,105	35,655
186.55	10,499	30,148	187.07	11,118	35,766
186.56	10,510	30,253	187.08	11,131	35,877
186.57	10,522	30,358	187.09	11,145	35,989
186.58	10,534	30,463	187.10	11,158	36,100
186.59	10,546	30,569	187.11	11,171	36,212
186.60	10,557	30,674	187.12	11,184	36,324
186.61	10,569	30,780	187.13	11,197	36,436
186.62	10,581	30,886	187.14	11,210	36,548
186.63	10,593	30,991	187.15	11,223	36,660

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.16	11,236	36,772	187.68	11,915	42,791
187.17	11,249	36,884	187.69	11,928	42,911
187.18	11,262	36,997	187.70	11,941	43,030
187.19	11,275	37,110	187.71	11,954	43,149
187.20	11,288	37,223	187.72	11,967	43,269
187.21	11,301	37,335	187.73	11,980	43,389
187.22	11,314	37,449	187.74	11,993	43,509
187.23	11,327	37,562	187.75	12,007	43,629
187.24	11,340	37,675	187.76	12,020	43,749
187.25	11,354	37,789	187.77	12,033	43,869
187.26	11,367	37,902	187.78	12,046	43,989
187.27	11,380	38,016	187.79	12,059	44,110
187.28	11,393	38,130	187.80	12,072	44,231
187.29	11,406	38,244	187.81	12,085	44,351
187.30	11,419	38,358	187.82	12,098	44,472
187.31	11,432	38,472	187.83	12,111	44,593
187.32	11,445	38,587	187.84	12,124	44,714
187.33	11,458	38,701	187.85	12,137	44,836
187.34	11,471	38,816	187.86	12,150	44,957
187.35	11,484	38,930	187.87	12,163	45,079
187.36	11,497	39,045	187.88	12,176	45,200
187.37	11,510	39,160	187.89	12,189	45,322
187.38	11,523	39,276	187.90	12,202	45,444
187.39	11,536	39,391	187.91	12,215	45,566
187.40	11,549	39,506	187.92	12,229	45,689
187.41	11,562	39,622	187.93	12,242	45,811
187.42	11,576	39,738	187.94	12,255	45,933
187.43	11,589	39,853	187.95	12,268	46,056
187.44	11,602	39,969	187.96	12,281	46,179
187.45	11,615	40,085	187.97	12,294	46,302
187.46	11,628	40,202	187.98	12,307	46,425
187.47	11,641	40,318	187.99	12,320	46,548
187.48	11,654	40,434	188.00	12,333	46,671
187.49	11,667	40,551	188.01	12,345	46,794
187.50	11,680	40,668	188.02	12,358	46,918
187.51	11,693	40,785	188.03	12,370	47,042
187.52	11,706	40,902	188.04	12,383	47,165
187.53	11,719	41,019	188.05	12,395	47,289
187.54	11,732	41,136	188.06	12,408	47,413
187.55	11,745	41,253	188.07	12,420	47,537
187.56	11,758	41,371	188.08	12,433	47,662
187.57	11,771	41,489	188.09	12,445	47,786
187.58	11,784	41,606	188.10	12,458	47,911
187.59	11,798	41,724	188.11	12,470	48,035
187.60	11,811	41,842	188.12	12,483	48,160
187.61	11,824	41,960	188.13	12,495	48,285
187.62	11,837	42,079	188.14	12,507	48,410
187.63	11,850	42,197	188.15	12,520	48,535
187.64	11,863	42,316	188.16	12,532	48,660
187.65	11,876	42,434	188.17	12,545	48,786
187.66	11,889	42,553	188.18	12,557	48,911
187.67	11,902	42,672	188.19	12,570	49,037

Stage-Area-Storage for Pond B-49: Basin #49 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.20	12,582	49,163
188.21	12,595	49,288
188.22	12,607	49,414
188.23	12,620	49,541
188.24	12,632	49,667
188.25	12,645	49,793
188.26	12,657	49,920
188.27	12,669	50,046
188.28	12,682	50,173
188.29	12,694	50,300
188.30	12,707	50,427
188.31	12,719	50,554
188.32	12,732	50,681
188.33	12,744	50,809
188.34	12,757	50,936
188.35	12,769	51,064
188.36	12,782	51,192
188.37	12,794	51,319
188.38	12,806	51,448
188.39	12,819	51,576
188.40	12,831	51,704
188.41	12,844	51,832
188.42	12,856	51,961
188.43	12,869	52,089
188.44	12,881	52,218
188.45	12,894	52,347
188.46	12,906	52,476
188.47	12,919	52,605
188.48	12,931	52,734
188.49	12,944	52,864
188.50	**12,956**	**52,993**

Summary for Pond B-50: Basin #50

Inflow Area = 2.262 ac, 29.27% Impervious, Inflow Depth = 8.80" for Future 100 yr event
Inflow = 20.45 cfs @ 12.17 hrs, Volume= 1.659 af
Outflow = 13.64 cfs @ 12.28 hrs, Volume= 1.518 af, Atten= 33%, Lag= 6.6 min
Primary = 13.64 cfs @ 12.28 hrs, Volume= 1.518 af
Routed to Link PDA-5 : Proposed Drainage Area #5

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 186.35' @ 12.28 hrs Surf.Area= 11,936 sf Storage= 24,379 cf

Plug-Flow detention time= 215.4 min calculated for 1.517 af (91% of inflow)
Center-of-Mass det. time= 171.6 min (956.2 - 784.7)

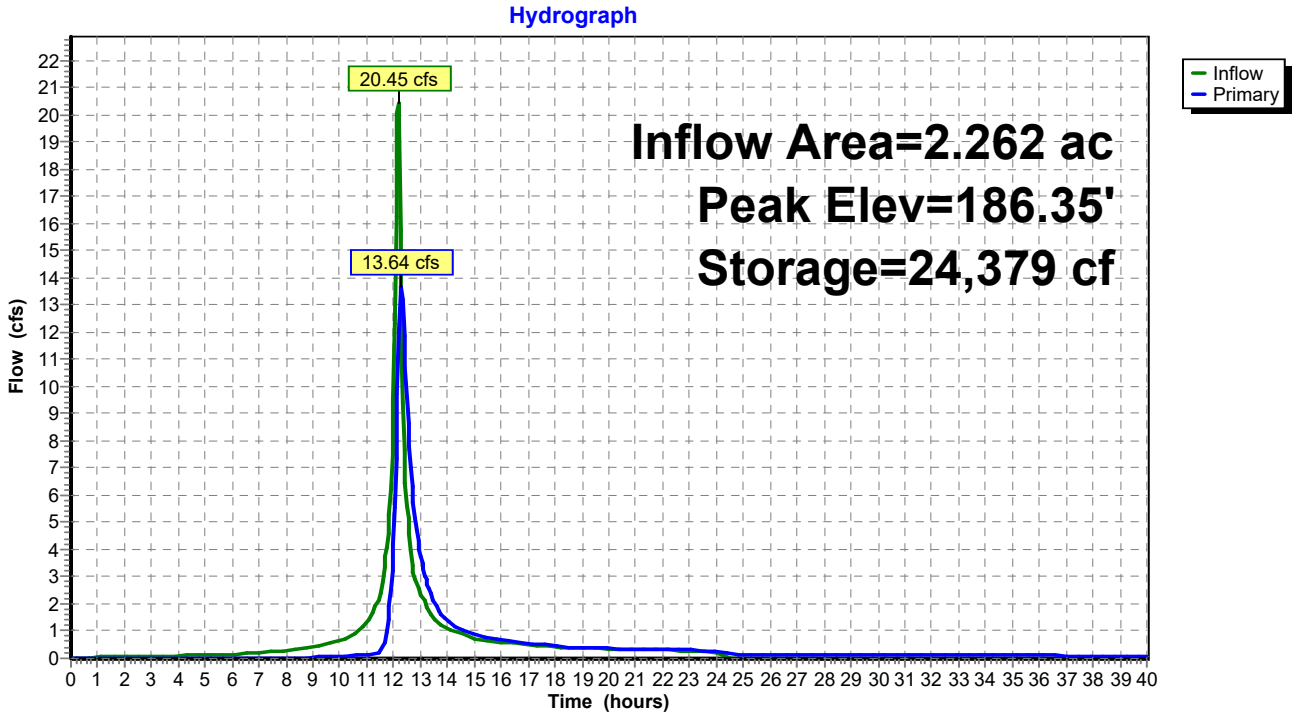
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	53,209 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	8,805	0	0
185.00	10,108	9,457	9,457
186.00	11,448	10,778	20,235
187.00	12,826	12,137	32,372
188.00	14,244	13,535	45,907
188.50	14,966	7,303	53,209

Device	Routing	Invert	Outlet Devices
#1	Primary	180.50'	**18.0" Round Culvert** L= 83.0' Ke= 0.500 Inlet / Outlet Invert= 180.50' / 179.67' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.32'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.30'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	188.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.55 cfs @ 12.28 hrs HW=186.35' (Free Discharge)
- **1=Culvert** (Passes 13.55 cfs of 18.58 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 6.68 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 13.32 cfs @ 3.35 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-50: Basin #50



Stage-Discharge for Pond B-50: Basin #50

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	0.05	185.04	0.13	185.56	1.89
184.01	0.00	184.53	0.05	185.05	0.13	185.57	1.99
184.02	0.00	184.54	0.06	185.06	0.13	185.58	2.09
184.03	0.00	184.55	0.06	185.07	0.13	185.59	2.19
184.04	0.00	184.56	0.06	185.08	0.13	185.60	2.30
184.05	0.00	184.57	0.06	185.09	0.13	185.61	2.40
184.06	0.00	184.58	0.06	185.10	0.13	185.62	2.51
184.07	0.00	184.59	0.07	185.11	0.14	185.63	2.62
184.08	0.00	184.60	0.07	185.12	0.14	185.64	2.73
184.09	0.00	184.61	0.07	185.13	0.14	185.65	2.84
184.10	0.00	184.62	0.07	185.14	0.14	185.66	2.96
184.11	0.00	184.63	0.07	185.15	0.14	185.67	3.07
184.12	0.00	184.64	0.08	185.16	0.14	185.68	3.19
184.13	0.00	184.65	0.08	185.17	0.14	185.69	3.31
184.14	0.00	184.66	0.08	185.18	0.14	185.70	3.43
184.15	0.00	184.67	0.08	185.19	0.14	185.71	3.55
184.16	0.00	184.68	0.08	185.20	0.14	185.72	3.67
184.17	0.00	184.69	0.08	185.21	0.15	185.73	3.80
184.18	0.00	184.70	0.09	185.22	0.15	185.74	3.92
184.19	0.00	184.71	0.09	185.23	0.15	185.75	4.05
184.20	0.00	184.72	0.09	185.24	0.15	185.76	4.18
184.21	0.00	184.73	0.09	185.25	0.15	185.77	4.31
184.22	0.00	184.74	0.09	185.26	0.15	185.78	4.44
184.23	0.00	184.75	0.09	185.27	0.15	185.79	4.57
184.24	0.00	184.76	0.10	185.28	0.15	185.80	4.70
184.25	0.00	184.77	0.10	185.29	0.15	185.81	4.84
184.26	0.00	184.78	0.10	185.30	0.15	185.82	4.97
184.27	0.00	184.79	0.10	185.31	0.17	185.83	5.11
184.28	0.00	184.80	0.10	185.32	0.19	185.84	5.25
184.29	0.00	184.81	0.10	185.33	0.22	185.85	5.38
184.30	0.00	184.82	0.10	185.34	0.26	185.86	5.52
184.31	0.00	184.83	0.10	185.35	0.30	185.87	5.67
184.32	0.00	184.84	0.11	185.36	0.35	185.88	5.81
184.33	0.00	184.85	0.11	185.37	0.40	185.89	5.95
184.34	0.00	184.86	0.11	185.38	0.46	185.90	6.10
184.35	0.00	184.87	0.11	185.39	0.51	185.91	6.24
184.36	0.00	184.88	0.11	185.40	0.57	185.92	6.39
184.37	0.00	184.89	0.11	185.41	0.64	185.93	6.54
184.38	0.01	184.90	0.11	185.42	0.70	185.94	6.68
184.39	0.01	184.91	0.11	185.43	0.77	185.95	6.83
184.40	0.01	184.92	0.12	185.44	0.85	185.96	6.99
184.41	0.01	184.93	0.12	185.45	0.92	185.97	7.14
184.42	0.02	184.94	0.12	185.46	1.00	185.98	7.29
184.43	0.02	184.95	0.12	185.47	1.08	185.99	7.44
184.44	0.02	184.96	0.12	185.48	1.16	186.00	7.60
184.45	0.03	184.97	0.12	185.49	1.24	186.01	7.75
184.46	0.03	184.98	0.12	185.50	1.33	186.02	7.91
184.47	0.03	184.99	0.12	185.51	1.42	186.03	8.07
184.48	0.04	185.00	0.12	185.52	1.51	186.04	8.23
184.49	0.04	185.01	0.13	185.53	1.60	186.05	8.39
184.50	0.05	185.02	0.13	185.54	1.69	186.06	8.55
184.51	0.05	185.03	0.13	185.55	1.79	186.07	8.71

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	8.87	186.60	18.37	187.12	19.91	187.64	20.76
186.09	9.03	186.61	18.57	187.13	19.93	187.65	20.78
186.10	9.20	186.62	18.77	187.14	19.95	187.66	20.80
186.11	9.36	186.63	18.97	187.15	19.96	187.67	20.81
186.12	9.53	186.64	19.09	187.16	19.98	187.68	20.83
186.13	9.69	186.65	19.11	187.17	20.00	187.69	20.84
186.14	9.86	186.66	19.13	187.18	20.01	187.70	20.86
186.15	10.03	186.67	19.14	187.19	20.03	187.71	20.88
186.16	10.20	186.68	19.16	187.20	20.05	187.72	20.89
186.17	10.37	186.69	19.18	187.21	20.06	187.73	20.91
186.18	10.54	186.70	19.20	187.22	20.08	187.74	20.92
186.19	10.71	186.71	19.21	187.23	20.10	187.75	20.94
186.20	10.88	186.72	19.23	187.24	20.11	187.76	20.96
186.21	11.06	186.73	19.25	187.25	20.13	187.77	20.97
186.22	11.23	186.74	19.27	187.26	20.15	187.78	20.99
186.23	11.41	186.75	19.28	187.27	20.16	187.79	21.00
186.24	11.58	186.76	19.30	187.28	20.18	187.80	21.02
186.25	11.76	186.77	19.32	187.29	20.19	187.81	21.04
186.26	11.93	186.78	19.33	187.30	20.21	187.82	21.05
186.27	12.11	186.79	19.35	187.31	20.23	187.83	21.07
186.28	12.29	186.80	19.37	187.32	20.24	187.84	21.08
186.29	12.47	186.81	19.39	187.33	20.26	187.85	21.10
186.30	12.65	186.82	19.40	187.34	20.28	187.86	21.11
186.31	12.83	186.83	19.42	187.35	20.29	187.87	21.13
186.32	13.01	186.84	19.44	187.36	20.31	187.88	21.15
186.33	13.20	186.85	19.46	187.37	20.33	187.89	21.16
186.34	13.38	186.86	19.47	187.38	20.34	187.90	21.18
186.35	13.56	186.87	19.49	187.39	20.36	187.91	21.19
186.36	13.75	186.88	19.51	187.40	20.38	187.92	21.21
186.37	13.93	186.89	19.52	187.41	20.39	187.93	21.22
186.38	14.12	186.90	19.54	187.42	20.41	187.94	21.24
186.39	14.30	186.91	19.56	187.43	20.42	187.95	21.26
186.40	14.49	186.92	19.57	187.44	20.44	187.96	21.27
186.41	14.68	186.93	19.59	187.45	20.46	187.97	21.29
186.42	14.87	186.94	19.61	187.46	20.47	187.98	21.30
186.43	15.06	186.95	19.63	187.47	20.49	187.99	21.32
186.44	15.25	186.96	19.64	187.48	20.51	188.00	21.33
186.45	15.44	186.97	19.66	187.49	20.52	188.01	21.35
186.46	15.63	186.98	19.68	187.50	20.54	188.02	21.37
186.47	15.82	186.99	19.69	187.51	20.55	188.03	21.38
186.48	16.01	187.00	19.71	187.52	20.57	188.04	21.40
186.49	16.21	187.01	19.73	187.53	20.59	188.05	21.41
186.50	16.40	187.02	19.74	187.54	20.60	188.06	21.43
186.51	16.59	187.03	19.76	187.55	20.62	188.07	21.44
186.52	16.79	187.04	19.78	187.56	20.64	188.08	21.46
186.53	16.98	187.05	19.79	187.57	20.65	188.09	21.47
186.54	17.18	187.06	19.81	187.58	20.67	188.10	21.49
186.55	17.38	187.07	19.83	187.59	20.68	188.11	21.51
186.56	17.57	187.08	19.85	187.60	20.70	188.12	21.52
186.57	17.77	187.09	19.86	187.61	20.72	188.13	21.54
186.58	17.97	187.10	19.88	187.62	20.73	188.14	21.55
186.59	18.17	187.11	19.90	187.63	20.75	188.15	21.57

Stage-Discharge for Pond B-50: Basin #50 (continued)

Elevation (feet)	Primary (cfs)
188.16	21.58
188.17	21.60
188.18	21.61
188.19	21.63
188.20	21.64
188.21	21.66
188.22	21.67
188.23	21.69
188.24	21.71
188.25	21.72
188.26	21.74
188.27	21.75
188.28	21.77
188.29	21.78
188.30	21.80
188.31	21.81
188.32	21.83
188.33	21.84
188.34	21.86
188.35	21.87
188.36	21.89
188.37	21.90
188.38	21.92
188.39	21.93
188.40	21.95
188.41	21.97
188.42	21.98
188.43	22.00
188.44	22.01
188.45	22.03
188.46	22.16
188.47	22.39
188.48	22.68
188.49	23.02
188.50	**23.41**

Stage-Area-Storage for Pond B-50: Basin #50

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	8,805	0	184.52	9,483	4,755
184.01	8,818	88	184.53	9,496	4,850
184.02	8,831	176	184.54	9,509	4,945
184.03	8,844	265	184.55	9,522	5,040
184.04	8,857	353	184.56	9,535	5,135
184.05	8,870	442	184.57	9,548	5,231
184.06	8,883	531	184.58	9,561	5,326
184.07	8,896	620	184.59	9,574	5,422
184.08	8,909	709	184.60	9,587	5,518
184.09	8,922	798	184.61	9,600	5,613
184.10	8,935	887	184.62	9,613	5,710
184.11	8,948	976	184.63	9,626	5,806
184.12	8,961	1,066	184.64	9,639	5,902
184.13	8,974	1,156	184.65	9,652	5,999
184.14	8,987	1,245	184.66	9,665	6,095
184.15	9,000	1,335	184.67	9,678	6,192
184.16	9,013	1,425	184.68	9,691	6,289
184.17	9,027	1,516	184.69	9,704	6,386
184.18	9,040	1,606	184.70	9,717	6,483
184.19	9,053	1,696	184.71	9,730	6,580
184.20	9,066	1,787	184.72	9,743	6,677
184.21	9,079	1,878	184.73	9,756	6,775
184.22	9,092	1,969	184.74	9,769	6,872
184.23	9,105	2,060	184.75	9,782	6,970
184.24	9,118	2,151	184.76	9,795	7,068
184.25	9,131	2,242	184.77	9,808	7,166
184.26	9,144	2,333	184.78	9,821	7,264
184.27	9,157	2,425	184.79	9,834	7,363
184.28	9,170	2,516	184.80	9,847	7,461
184.29	9,183	2,608	184.81	9,860	7,559
184.30	9,196	2,700	184.82	9,873	7,658
184.31	9,209	2,792	184.83	9,886	7,757
184.32	9,222	2,884	184.84	9,900	7,856
184.33	9,235	2,977	184.85	9,913	7,955
184.34	9,248	3,069	184.86	9,926	8,054
184.35	9,261	3,162	184.87	9,939	8,153
184.36	9,274	3,254	184.88	9,952	8,253
184.37	9,287	3,347	184.89	9,965	8,353
184.38	9,300	3,440	184.90	9,978	8,452
184.39	9,313	3,533	184.91	9,991	8,552
184.40	9,326	3,626	184.92	10,004	8,652
184.41	9,339	3,720	184.93	10,017	8,752
184.42	9,352	3,813	184.94	10,030	8,852
184.43	9,365	3,907	184.95	10,043	8,953
184.44	9,378	4,000	184.96	10,056	9,053
184.45	9,391	4,094	184.97	10,069	9,154
184.46	9,404	4,188	184.98	10,082	9,255
184.47	9,417	4,282	184.99	10,095	9,355
184.48	9,430	4,377	185.00	10,108	9,457
184.49	9,443	4,471	185.01	10,121	9,558
184.50	9,457	4,565	185.02	10,135	9,659
184.51	9,470	4,660	185.03	10,148	9,760

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	10,162	9,862	185.56	10,858	15,327
185.05	10,175	9,964	185.57	10,872	15,436
185.06	10,188	10,065	185.58	10,885	15,545
185.07	10,202	10,167	185.59	10,899	15,653
185.08	10,215	10,269	185.60	10,912	15,762
185.09	10,229	10,372	185.61	10,925	15,872
185.10	10,242	10,474	185.62	10,939	15,981
185.11	10,255	10,576	185.63	10,952	16,090
185.12	10,269	10,679	185.64	10,966	16,200
185.13	10,282	10,782	185.65	10,979	16,310
185.14	10,296	10,885	185.66	10,992	16,420
185.15	10,309	10,988	185.67	11,006	16,530
185.16	10,322	11,091	185.68	11,019	16,640
185.17	10,336	11,194	185.69	11,033	16,750
185.18	10,349	11,298	185.70	11,046	16,860
185.19	10,363	11,401	185.71	11,059	16,971
185.20	10,376	11,505	185.72	11,073	17,082
185.21	10,389	11,609	185.73	11,086	17,192
185.22	10,403	11,713	185.74	11,100	17,303
185.23	10,416	11,817	185.75	11,113	17,414
185.24	10,430	11,921	185.76	11,126	17,526
185.25	10,443	12,025	185.77	11,140	17,637
185.26	10,456	12,130	185.78	11,153	17,748
185.27	10,470	12,235	185.79	11,167	17,860
185.28	10,483	12,339	185.80	11,180	17,972
185.29	10,497	12,444	185.81	11,193	18,084
185.30	10,510	12,549	185.82	11,207	18,196
185.31	10,523	12,654	185.83	11,220	18,308
185.32	10,537	12,760	185.84	11,234	18,420
185.33	10,550	12,865	185.85	11,247	18,532
185.34	10,564	12,971	185.86	11,260	18,645
185.35	10,577	13,076	185.87	11,274	18,758
185.36	10,590	13,182	185.88	11,287	18,870
185.37	10,604	13,288	185.89	11,301	18,983
185.38	10,617	13,394	185.90	11,314	19,096
185.39	10,631	13,501	185.91	11,327	19,210
185.40	10,644	13,607	185.92	11,341	19,323
185.41	10,657	13,713	185.93	11,354	19,436
185.42	10,671	13,820	185.94	11,368	19,550
185.43	10,684	13,927	185.95	11,381	19,664
185.44	10,698	14,034	185.96	11,394	19,778
185.45	10,711	14,141	185.97	11,408	19,892
185.46	10,724	14,248	185.98	11,421	20,006
185.47	10,738	14,355	185.99	11,435	20,120
185.48	10,751	14,463	186.00	11,448	20,235
185.49	10,765	14,570	186.01	11,462	20,349
185.50	10,778	14,678	186.02	11,476	20,464
185.51	10,791	14,786	186.03	11,489	20,579
185.52	10,805	14,894	186.04	11,503	20,694
185.53	10,818	15,002	186.05	11,517	20,809
185.54	10,832	15,110	186.06	11,531	20,924
185.55	10,845	15,219	186.07	11,544	21,039

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	11,558	21,155	186.60	12,275	27,351
186.09	11,572	21,270	186.61	12,289	27,474
186.10	11,586	21,386	186.62	12,302	27,597
186.11	11,600	21,502	186.63	12,316	27,720
186.12	11,613	21,618	186.64	12,330	27,843
186.13	11,627	21,734	186.65	12,344	27,967
186.14	11,641	21,851	186.66	12,357	28,090
186.15	11,655	21,967	186.67	12,371	28,214
186.16	11,668	22,084	186.68	12,385	28,338
186.17	11,682	22,201	186.69	12,399	28,462
186.18	11,696	22,317	186.70	12,413	28,586
186.19	11,710	22,434	186.71	12,426	28,710
186.20	11,724	22,552	186.72	12,440	28,834
186.21	11,737	22,669	186.73	12,454	28,959
186.22	11,751	22,786	186.74	12,468	29,083
186.23	11,765	22,904	186.75	12,482	29,208
186.24	11,779	23,022	186.76	12,495	29,333
186.25	11,793	23,140	186.77	12,509	29,458
186.26	11,806	23,258	186.78	12,523	29,583
186.27	11,820	23,376	186.79	12,537	29,708
186.28	11,834	23,494	186.80	12,550	29,834
186.29	11,848	23,612	186.81	12,564	29,959
186.30	11,861	23,731	186.82	12,578	30,085
186.31	11,875	23,850	186.83	12,592	30,211
186.32	11,889	23,968	186.84	12,606	30,337
186.33	11,903	24,087	186.85	12,619	30,463
186.34	11,917	24,206	186.86	12,633	30,589
186.35	11,930	24,326	186.87	12,647	30,716
186.36	11,944	24,445	186.88	12,661	30,842
186.37	11,958	24,565	186.89	12,674	30,969
186.38	11,972	24,684	186.90	12,688	31,096
186.39	11,985	24,804	186.91	12,702	31,223
186.40	11,999	24,924	186.92	12,716	31,350
186.41	12,013	25,044	186.93	12,730	31,477
186.42	12,027	25,164	186.94	12,743	31,604
186.43	12,041	25,285	186.95	12,757	31,732
186.44	12,054	25,405	186.96	12,771	31,860
186.45	12,068	25,526	186.97	12,785	31,987
186.46	12,082	25,646	186.98	12,798	32,115
186.47	12,096	25,767	186.99	12,812	32,243
186.48	12,109	25,888	187.00	12,826	32,372
186.49	12,123	26,009	187.01	12,840	32,500
186.50	12,137	26,131	187.02	12,854	32,628
186.51	12,151	26,252	187.03	12,869	32,757
186.52	12,165	26,374	187.04	12,883	32,886
186.53	12,178	26,495	187.05	12,897	33,015
186.54	12,192	26,617	187.06	12,911	33,144
186.55	12,206	26,739	187.07	12,925	33,273
186.56	12,220	26,861	187.08	12,939	33,402
186.57	12,233	26,984	187.09	12,954	33,532
186.58	12,247	27,106	187.10	12,968	33,661
186.59	12,261	27,229	187.11	12,982	33,791

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	12,996	33,921	187.64	13,734	40,871
187.13	13,010	34,051	187.65	13,748	41,008
187.14	13,025	34,181	187.66	13,762	41,146
187.15	13,039	34,311	187.67	13,776	41,283
187.16	13,053	34,442	187.68	13,790	41,421
187.17	13,067	34,572	187.69	13,804	41,559
187.18	13,081	34,703	187.70	13,819	41,697
187.19	13,095	34,834	187.71	13,833	41,835
187.20	13,110	34,965	187.72	13,847	41,974
187.21	13,124	35,096	187.73	13,861	42,112
187.22	13,138	35,228	187.74	13,875	42,251
187.23	13,152	35,359	187.75	13,890	42,390
187.24	13,166	35,491	187.76	13,904	42,529
187.25	13,181	35,622	187.77	13,918	42,668
187.26	13,195	35,754	187.78	13,932	42,807
187.27	13,209	35,886	187.79	13,946	42,947
187.28	13,223	36,018	187.80	13,960	43,086
187.29	13,237	36,151	187.81	13,975	43,226
187.30	13,251	36,283	187.82	13,989	43,366
187.31	13,266	36,416	187.83	14,003	43,506
187.32	13,280	36,548	187.84	14,017	43,646
187.33	13,294	36,681	187.85	14,031	43,786
187.34	13,308	36,814	187.86	14,045	43,926
187.35	13,322	36,947	187.87	14,060	44,067
187.36	13,336	37,081	187.88	14,074	44,207
187.37	13,351	37,214	187.89	14,088	44,348
187.38	13,365	37,348	187.90	14,102	44,489
187.39	13,379	37,481	187.91	14,116	44,630
187.40	13,393	37,615	187.92	14,131	44,772
187.41	13,407	37,749	187.93	14,145	44,913
187.42	13,422	37,883	187.94	14,159	45,054
187.43	13,436	38,018	187.95	14,173	45,196
187.44	13,450	38,152	187.96	14,187	45,338
187.45	13,464	38,287	187.97	14,201	45,480
187.46	13,478	38,421	187.98	14,216	45,622
187.47	13,492	38,556	187.99	14,230	45,764
187.48	13,507	38,691	188.00	14,244	45,907
187.49	13,521	38,826	188.01	14,258	46,049
187.50	13,535	38,962	188.02	14,273	46,192
187.51	13,549	39,097	188.03	14,287	46,334
187.52	13,563	39,233	188.04	14,302	46,477
187.53	13,578	39,368	188.05	14,316	46,621
187.54	13,592	39,504	188.06	14,331	46,764
187.55	13,606	39,640	188.07	14,345	46,907
187.56	13,620	39,776	188.08	14,360	47,051
187.57	13,634	39,913	188.09	14,374	47,194
187.58	13,648	40,049	188.10	14,388	47,338
187.59	13,663	40,186	188.11	14,403	47,482
187.60	13,677	40,322	188.12	14,417	47,626
187.61	13,691	40,459	188.13	14,432	47,770
187.62	13,705	40,596	188.14	14,446	47,915
187.63	13,719	40,733	188.15	14,461	48,059

Stage-Area-Storage for Pond B-50: Basin #50 (continued)

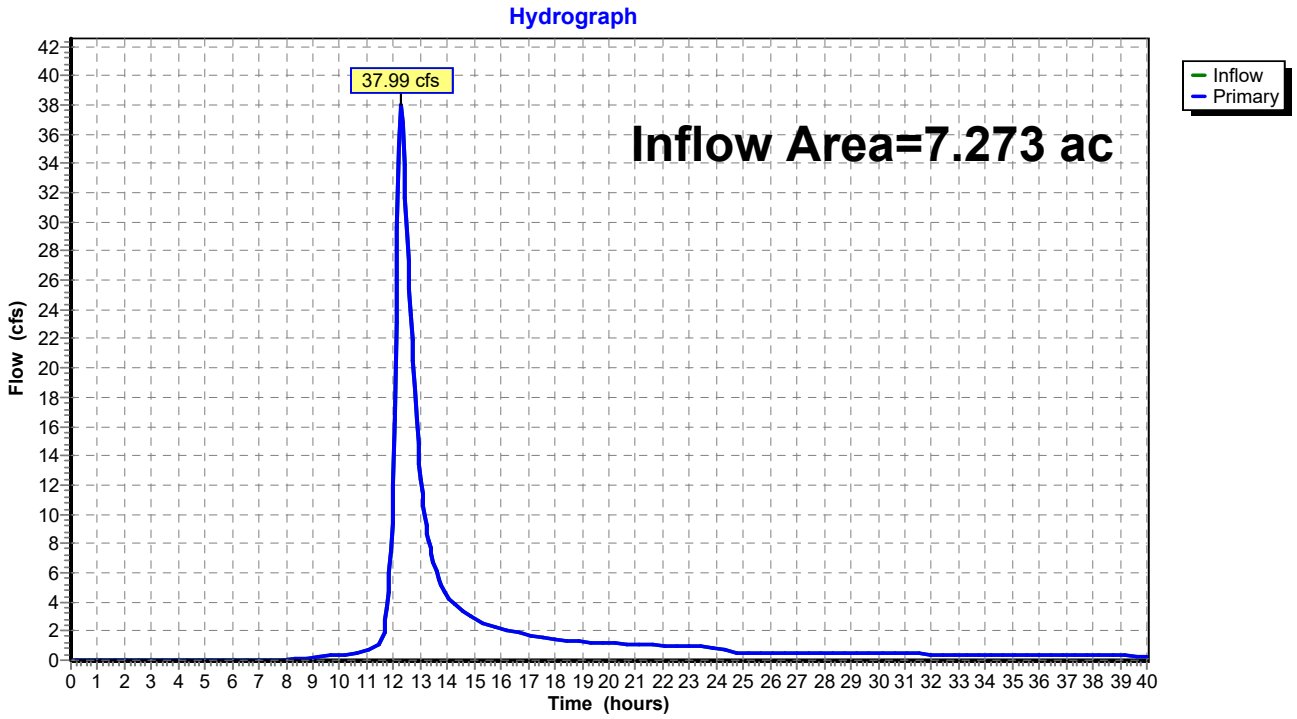
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	14,475	48,204
188.17	14,489	48,349
188.18	14,504	48,494
188.19	14,518	48,639
188.20	14,533	48,784
188.21	14,547	48,930
188.22	14,562	49,075
188.23	14,576	49,221
188.24	14,591	49,367
188.25	14,605	49,513
188.26	14,619	49,659
188.27	14,634	49,805
188.28	14,648	49,951
188.29	14,663	50,098
188.30	14,677	50,245
188.31	14,692	50,392
188.32	14,706	50,539
188.33	14,721	50,686
188.34	14,735	50,833
188.35	14,749	50,980
188.36	14,764	51,128
188.37	14,778	51,276
188.38	14,793	51,423
188.39	14,807	51,571
188.40	14,822	51,720
188.41	14,836	51,868
188.42	14,850	52,016
188.43	14,865	52,165
188.44	14,879	52,314
188.45	14,894	52,463
188.46	14,908	52,612
188.47	14,923	52,761
188.48	14,937	52,910
188.49	14,952	53,059
188.50	**14,966**	**53,209**

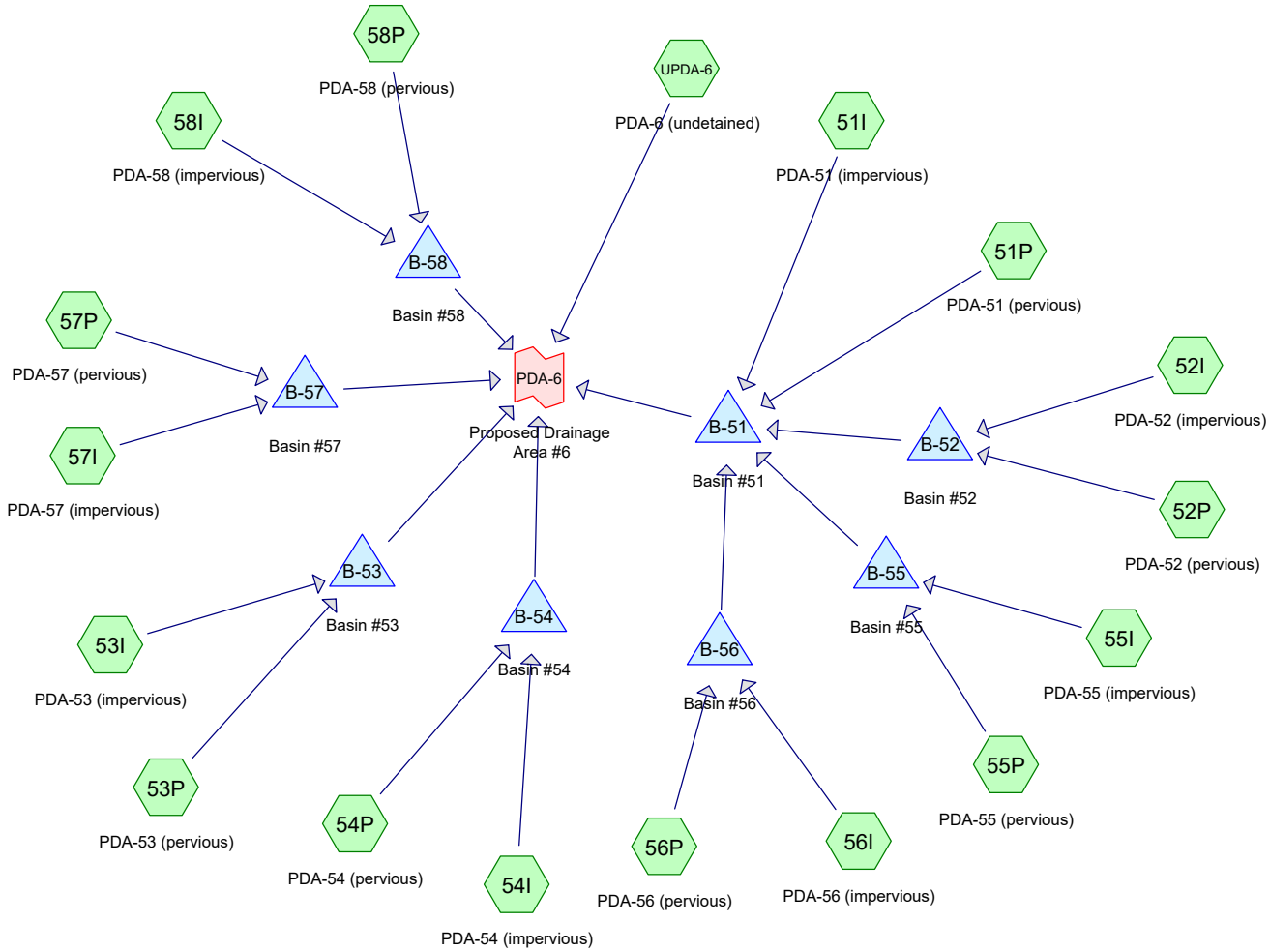
Summary for Link PDA-5: Proposed Drainage Area #5

Inflow Area = 7.273 ac, 32.33% Impervious, Inflow Depth > 8.02" for Future 100 yr event
Inflow = 37.99 cfs @ 12.27 hrs, Volume= 4.859 af
Primary = 37.99 cfs @ 12.27 hrs, Volume= 4.859 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-5: Proposed Drainage Area #5





Subcat Reach Pond Link

Routing Diagram for 2024-12-17 Proposed- 081391_6
Prepared by Bowman Consulting Group, Printed 12/19/2024
HydroCAD® 10.20-5c s/n 09435 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 51I: PDA-51 (impervious)

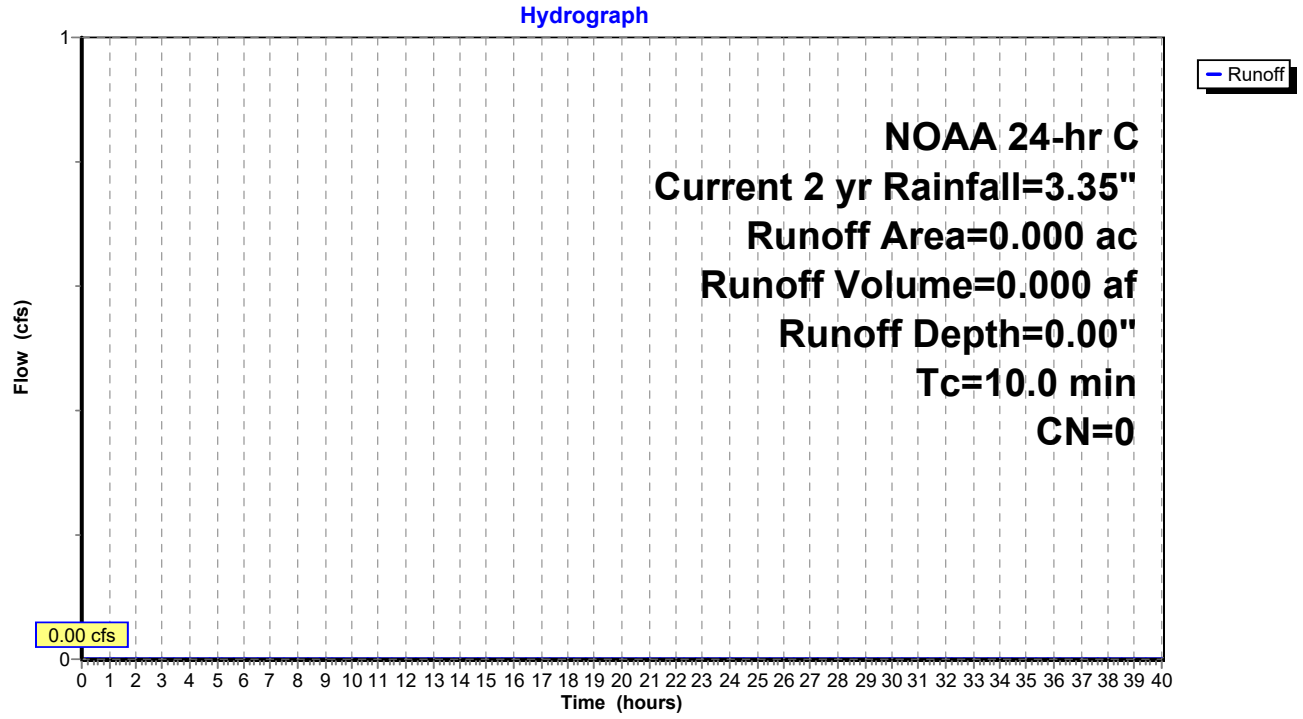
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.000	98	Roof, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 51I: PDA-51 (impervious)



Summary for Subcatchment 51P: PDA-51 (pervious)

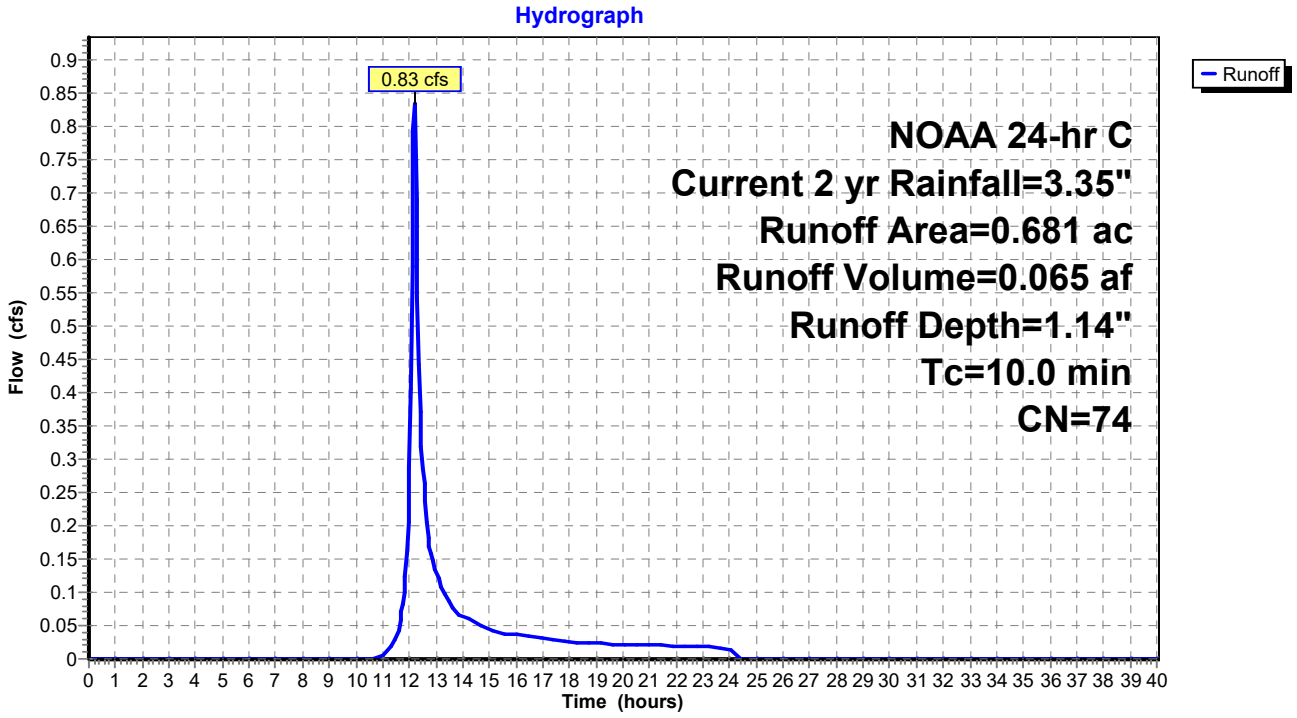
Runoff = 0.83 cfs @ 12.18 hrs, Volume= 0.065 af, Depth= 1.14"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.681	74	>75% Grass cover, Good, HSG C
0.681		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 51P: PDA-51 (pervious)



Summary for Subcatchment 52I: PDA-52 (impervious)

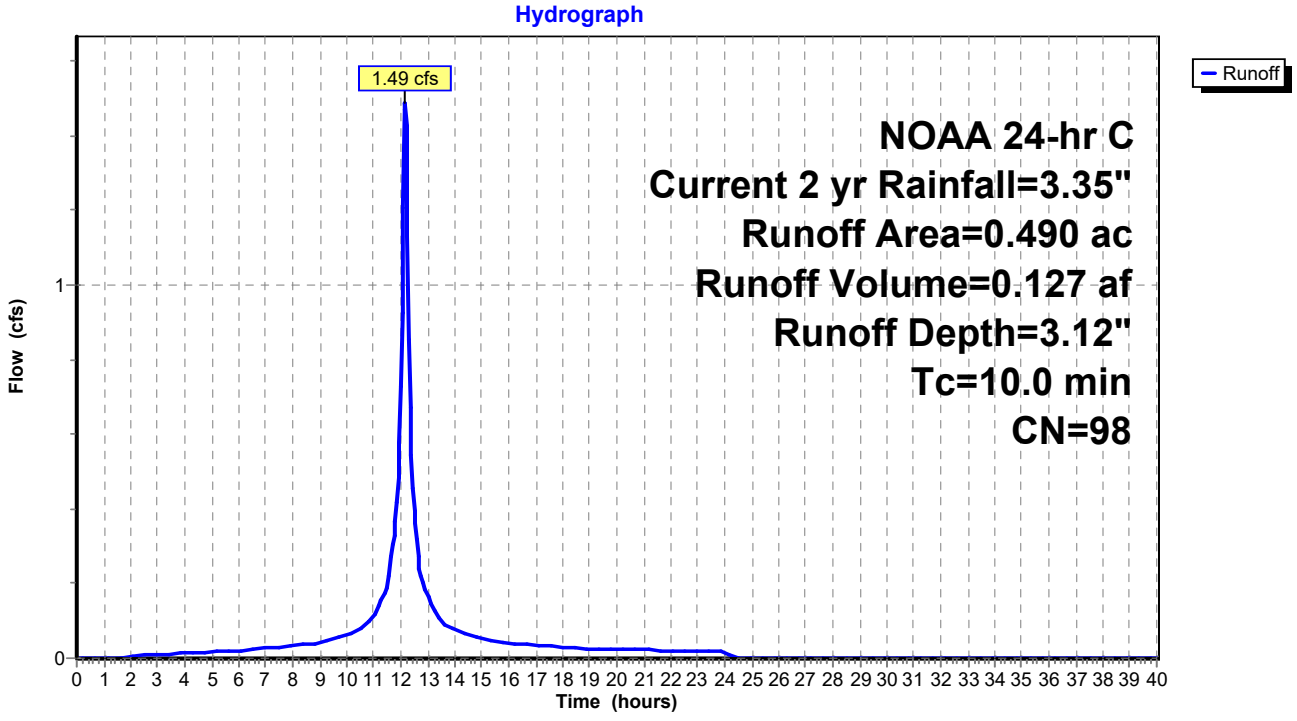
Runoff = 1.49 cfs @ 12.17 hrs, Volume= 0.127 af, Depth= 3.12"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.118	98	Pavement, HSG C
*	0.339	98	Roof, HSG C
*	0.033	98	Concrete, HSG C
	0.490	98	Weighted Average
	0.490		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 52I: PDA-52 (impervious)



Summary for Subcatchment 52P: PDA-52 (pervious)

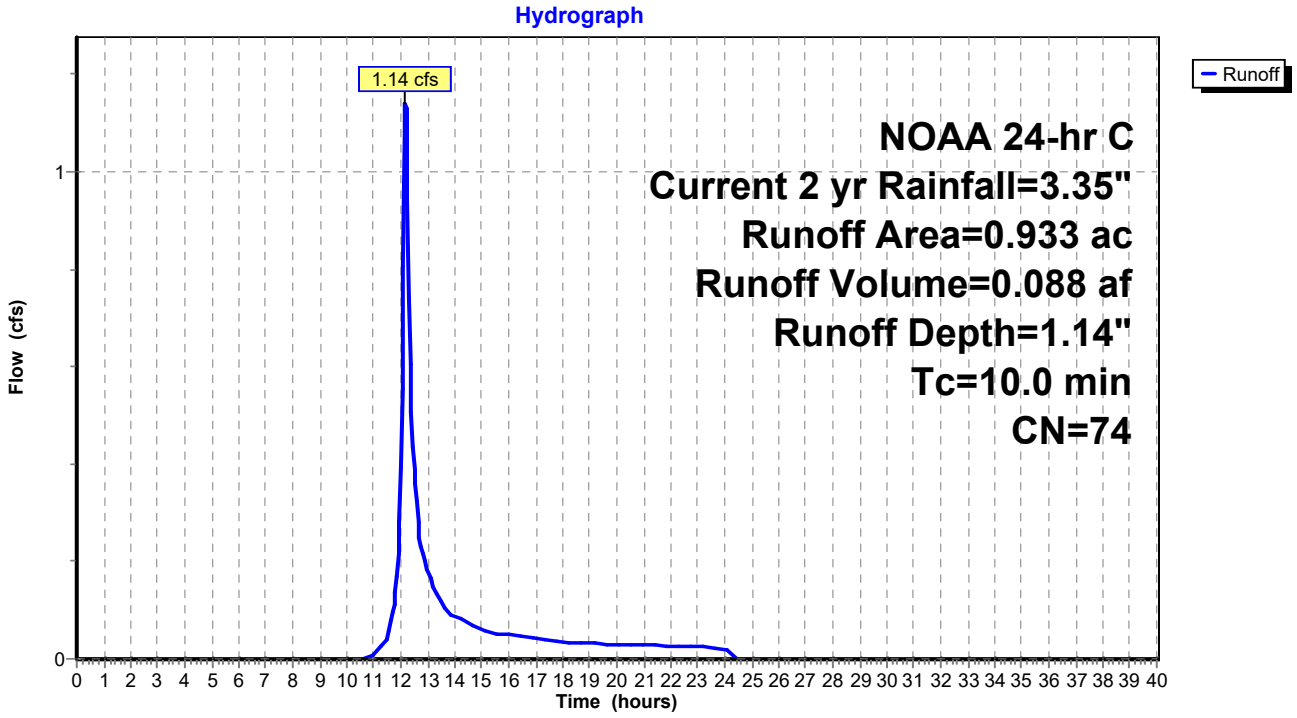
Runoff = 1.14 cfs @ 12.18 hrs, Volume= 0.088 af, Depth= 1.14"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.933	74	>75% Grass cover, Good, HSG C
0.933		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 52P: PDA-52 (pervious)



Summary for Subcatchment 53I: PDA-53 (impervious)

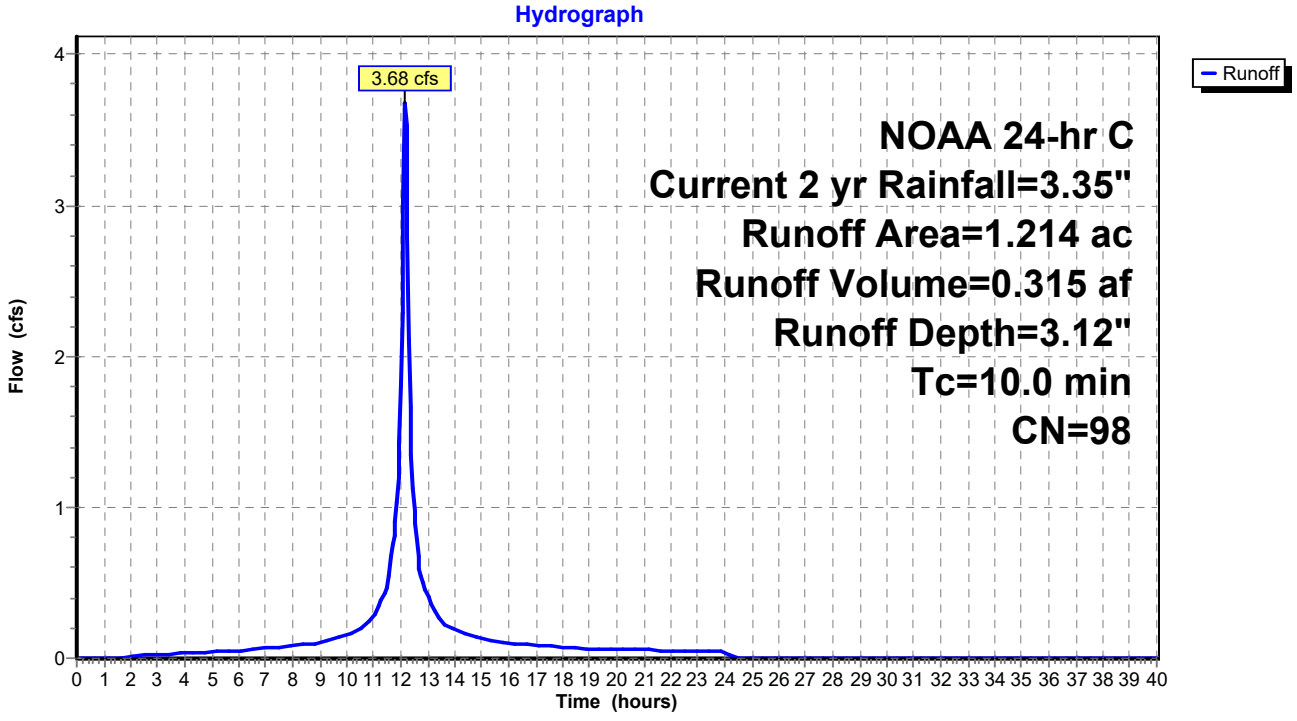
Runoff = 3.68 cfs @ 12.17 hrs, Volume= 0.315 af, Depth= 3.12"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.628	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	1.214	98	Weighted Average
	1.214		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 53I: PDA-53 (impervious)



Summary for Subcatchment 53P: PDA-53 (pervious)

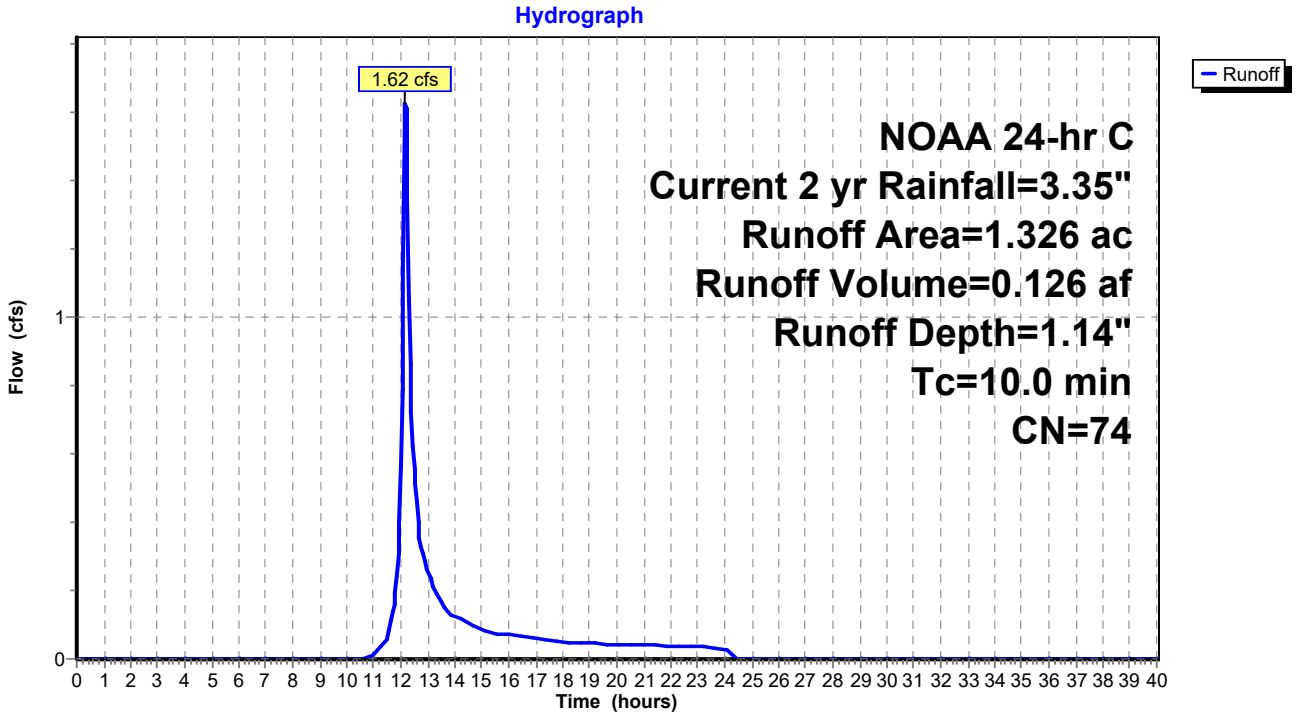
Runoff = 1.62 cfs @ 12.18 hrs, Volume= 0.126 af, Depth= 1.14"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.326	74	>75% Grass cover, Good, HSG C
1.326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 53P: PDA-53 (pervious)



Summary for Subcatchment 54l: PDA-54 (impervious)

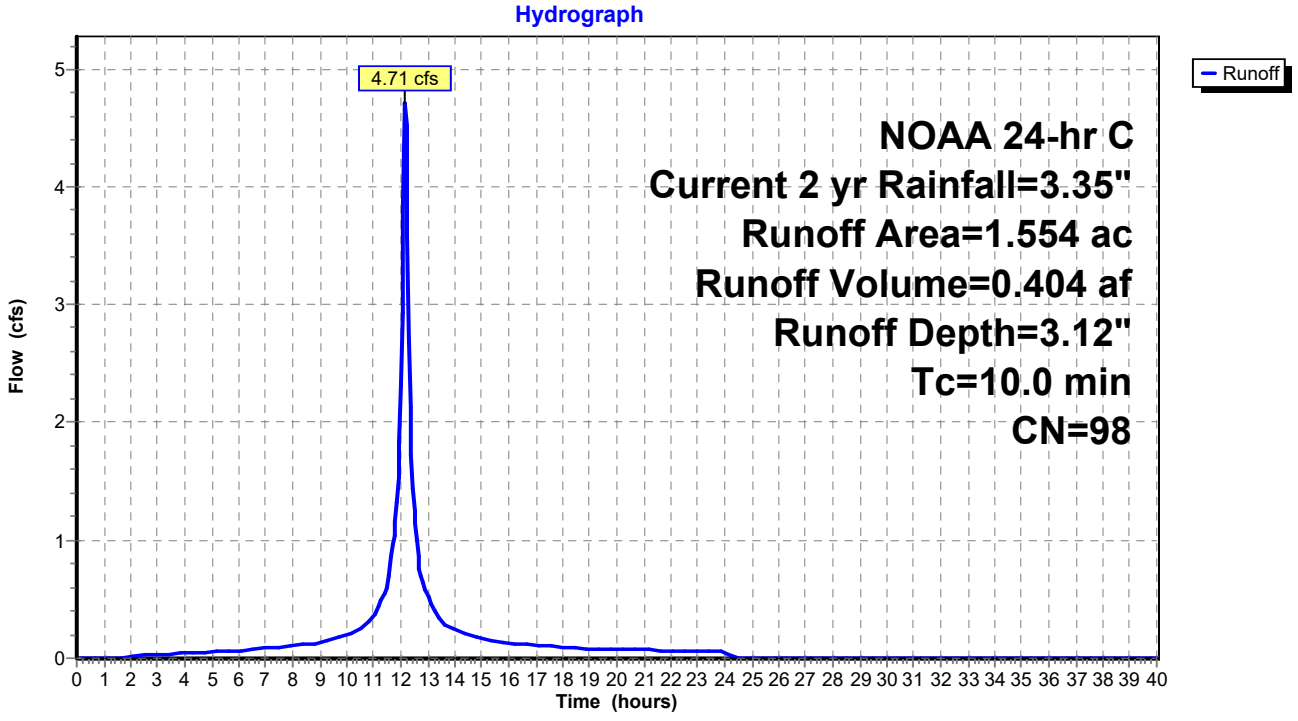
Runoff = 4.71 cfs @ 12.17 hrs, Volume= 0.404 af, Depth= 3.12"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.983	98	Pavement, HSG C
*	0.361	98	Roof, HSG C
*	0.210	98	Concrete, HSG C
	1.554	98	Weighted Average
	1.554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 54l: PDA-54 (impervious)



Summary for Subcatchment 54P: PDA-54 (pervious)

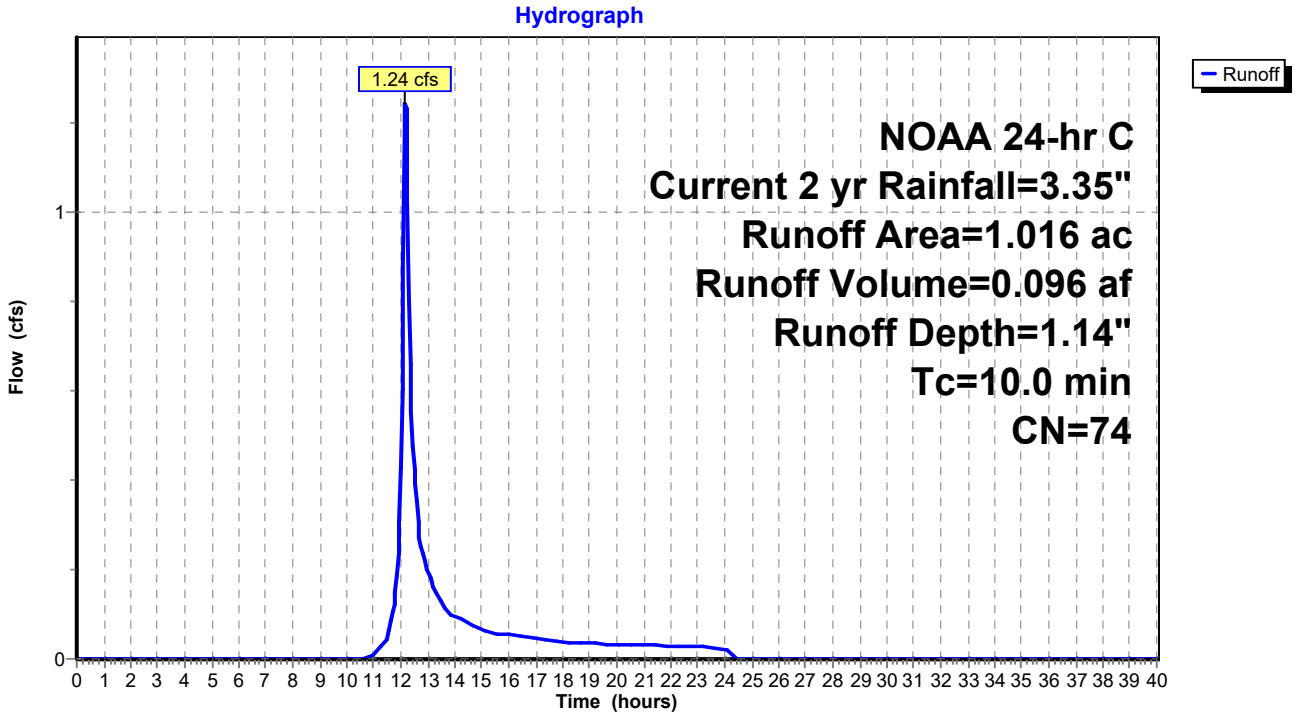
Runoff = 1.24 cfs @ 12.18 hrs, Volume= 0.096 af, Depth= 1.14"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.016	74	>75% Grass cover, Good, HSG C
1.016		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 54P: PDA-54 (pervious)



Summary for Subcatchment 55l: PDA-55 (impervious)

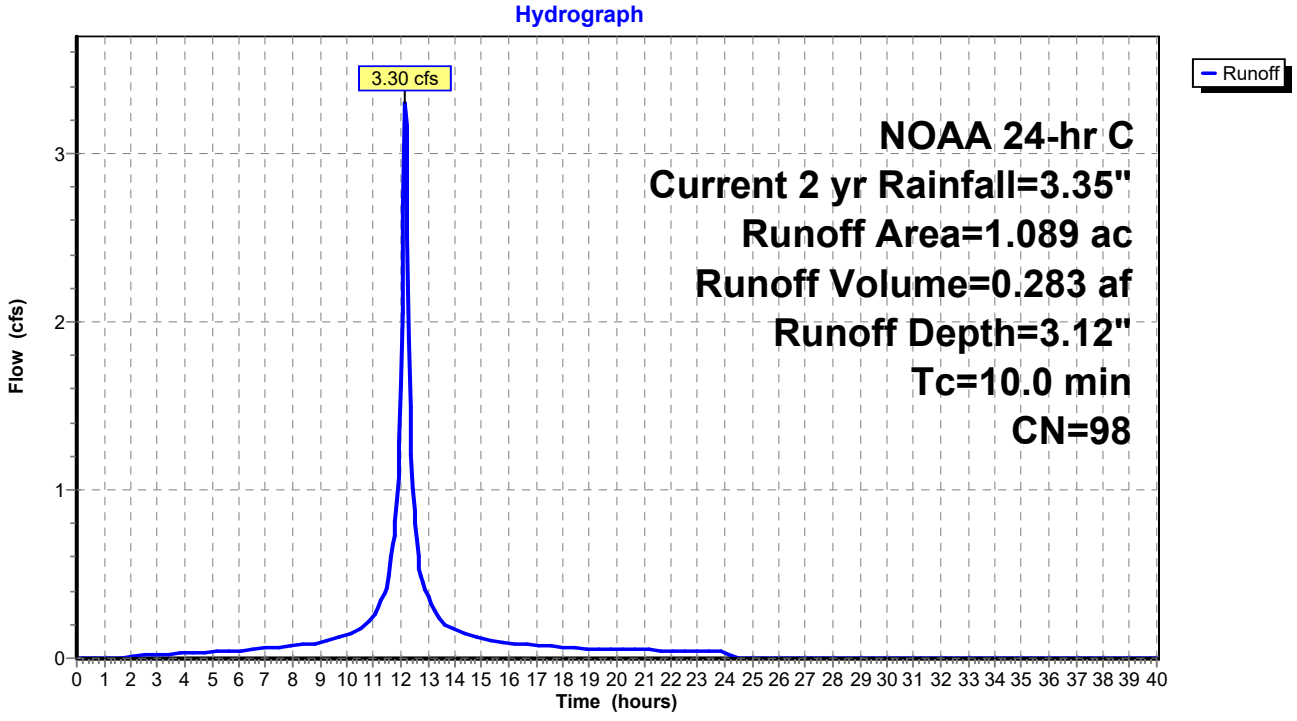
Runoff = 3.30 cfs @ 12.17 hrs, Volume= 0.283 af, Depth= 3.12"
Routed to Pond B-55 : Basin #55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.467	98	Pavement, HSG C
*	0.574	98	Roof, HSG C
*	0.048	98	Concrete, HSG C
	1.089	98	Weighted Average
	1.089		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 55l: PDA-55 (impervious)



Summary for Subcatchment 55P: PDA-55 (pervious)

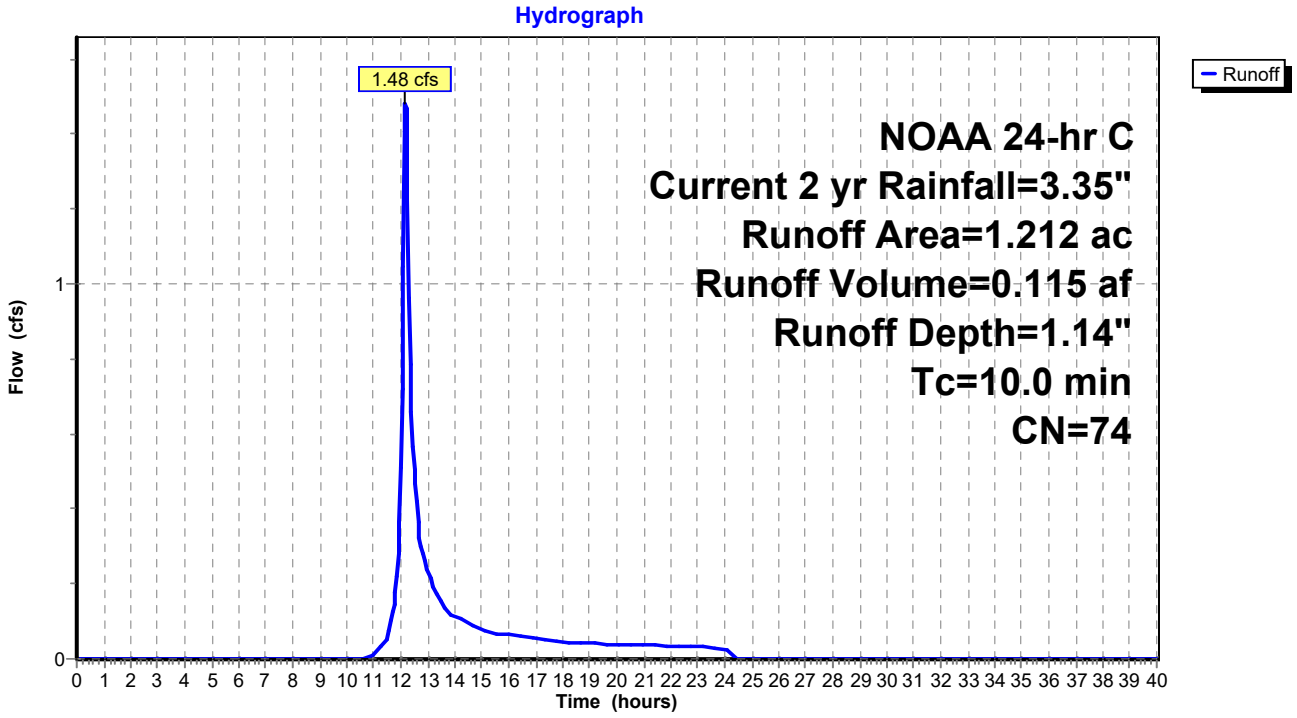
Runoff = 1.48 cfs @ 12.18 hrs, Volume= 0.115 af, Depth= 1.14"
Routed to Pond B-55 : Basin #55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.212	74	>75% Grass cover, Good, HSG C
1.212		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 55P: PDA-55 (pervious)



Summary for Subcatchment 56I: PDA-56 (impervious)

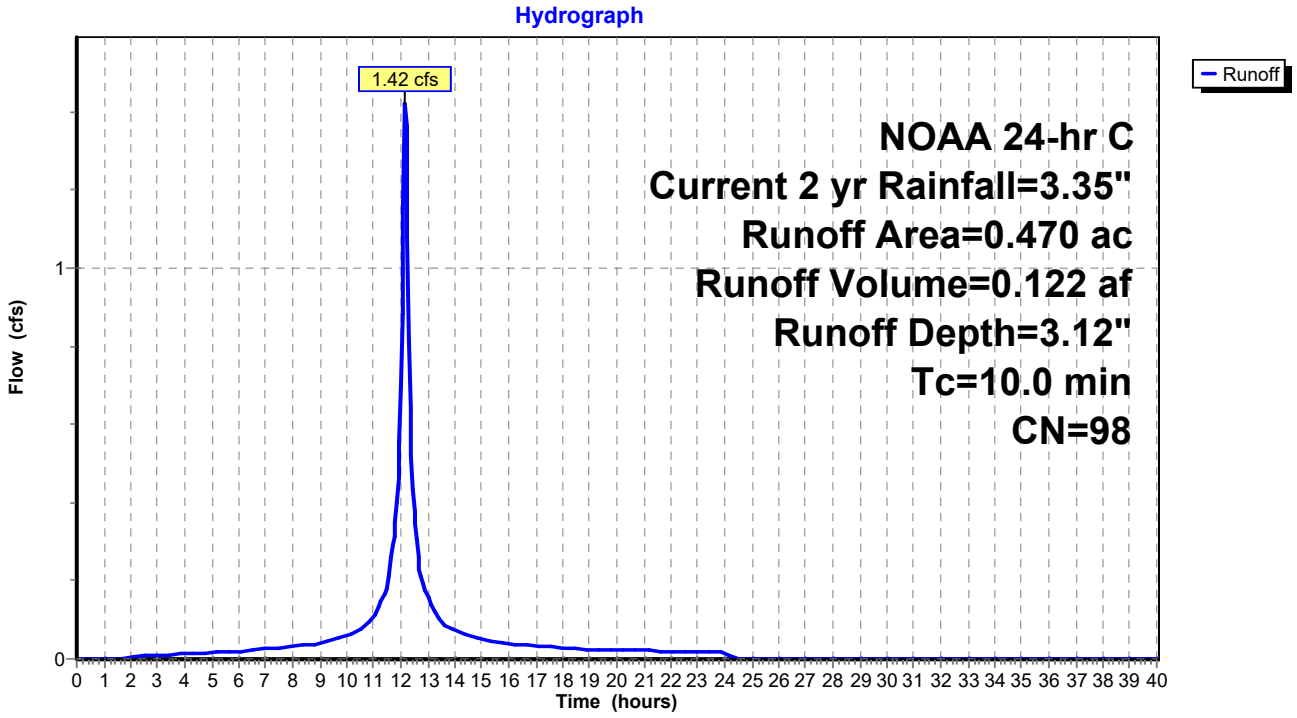
Runoff = 1.42 cfs @ 12.17 hrs, Volume= 0.122 af, Depth= 3.12"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.470	98	Roof, HSG C
	0.470		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 56I: PDA-56 (impervious)



Summary for Subcatchment 56P: PDA-56 (pervious)

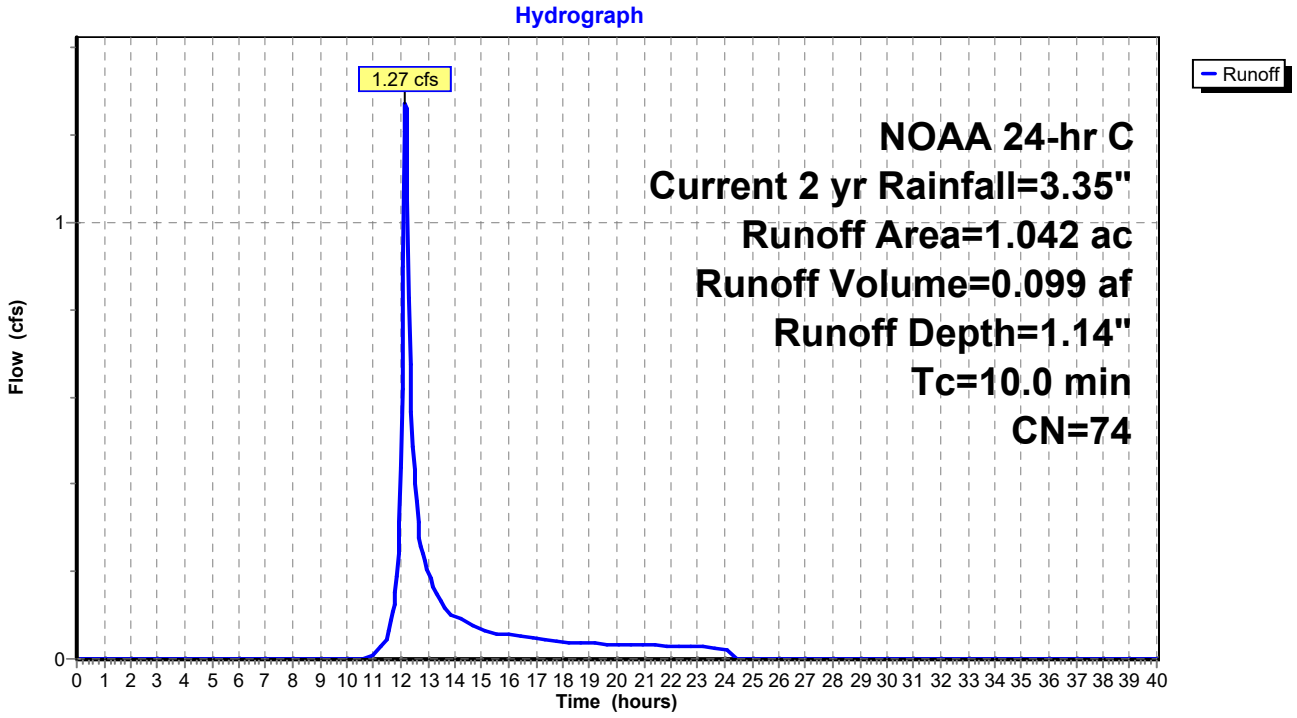
Runoff = 1.27 cfs @ 12.18 hrs, Volume= 0.099 af, Depth= 1.14"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.042	74	>75% Grass cover, Good, HSG C
1.042		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 56P: PDA-56 (pervious)



Summary for Subcatchment 57I: PDA-57 (impervious)

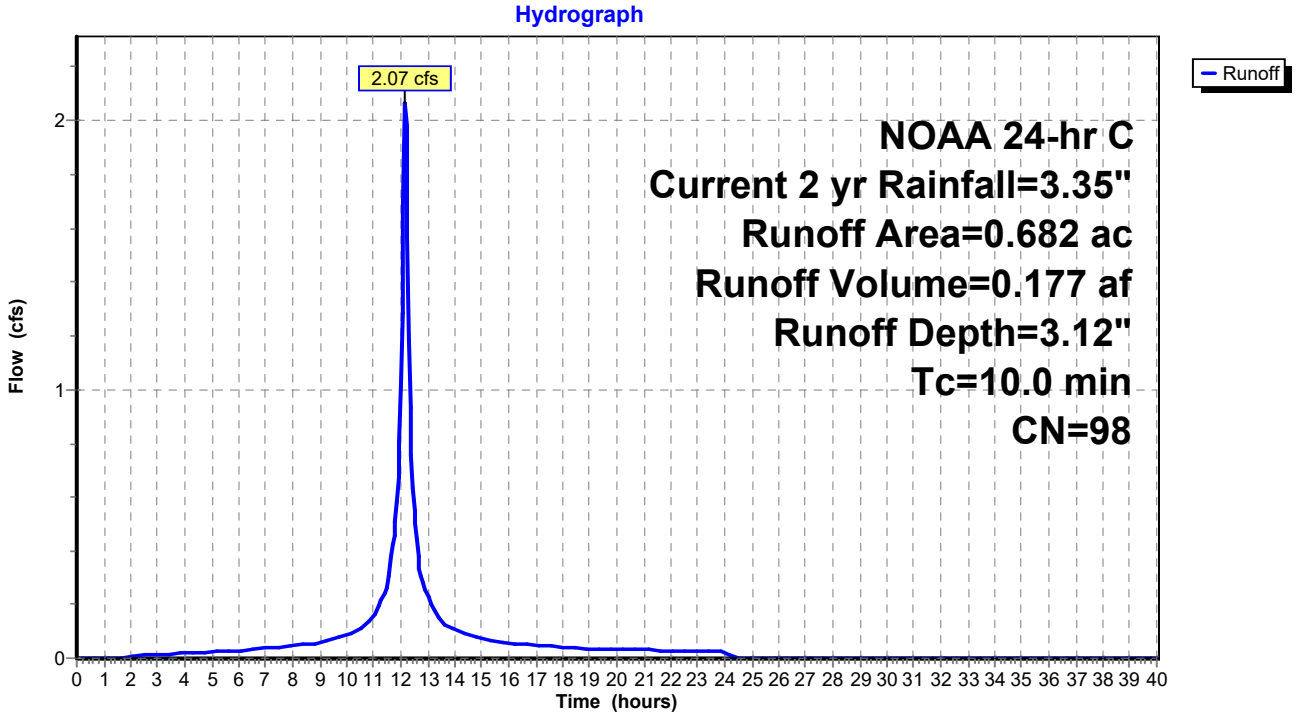
Runoff = 2.07 cfs @ 12.17 hrs, Volume= 0.177 af, Depth= 3.12"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.268	98	Pavement, HSG C
*	0.378	98	Roof, HSG C
*	0.036	98	Concrete, HSG C
	0.682	98	Weighted Average
	0.682		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 57I: PDA-57 (impervious)



Summary for Subcatchment 57P: PDA-57 (pervious)

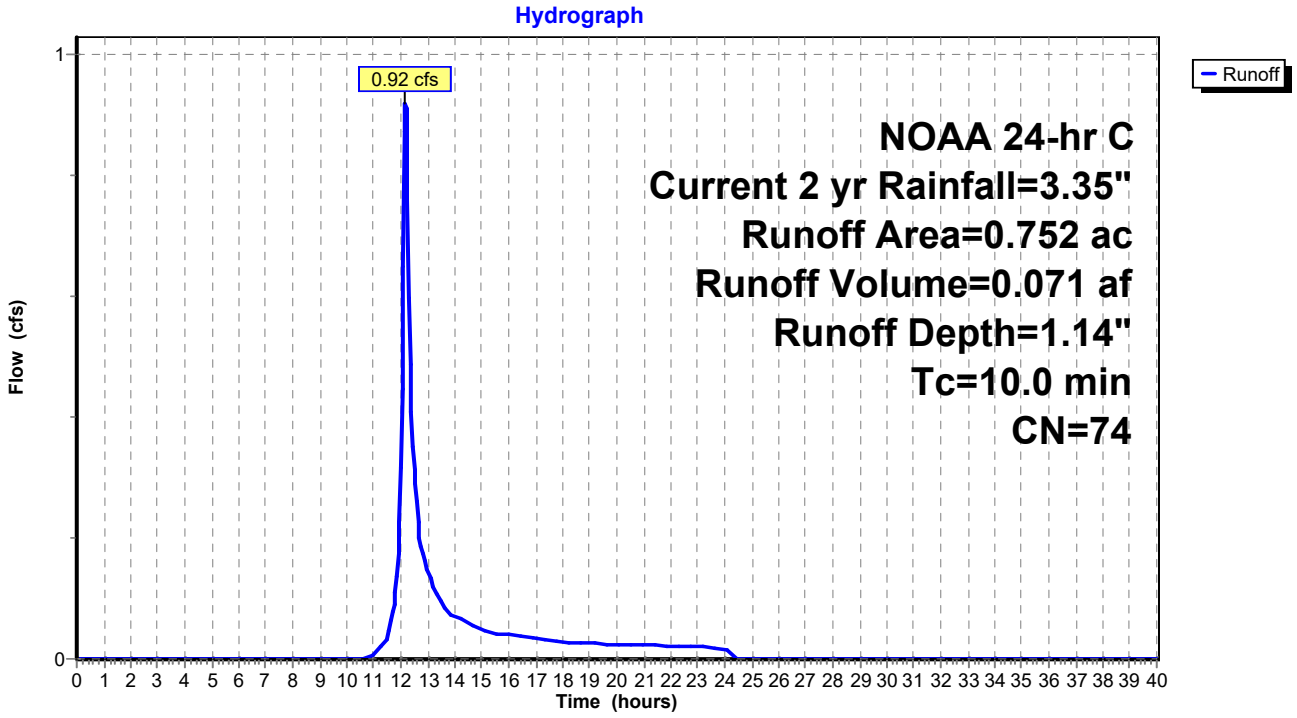
Runoff = 0.92 cfs @ 12.18 hrs, Volume= 0.071 af, Depth= 1.14"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
0.752	74	>75% Grass cover, Good, HSG C
0.752		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 57P: PDA-57 (pervious)



Summary for Subcatchment 58l: PDA-58 (impervious)

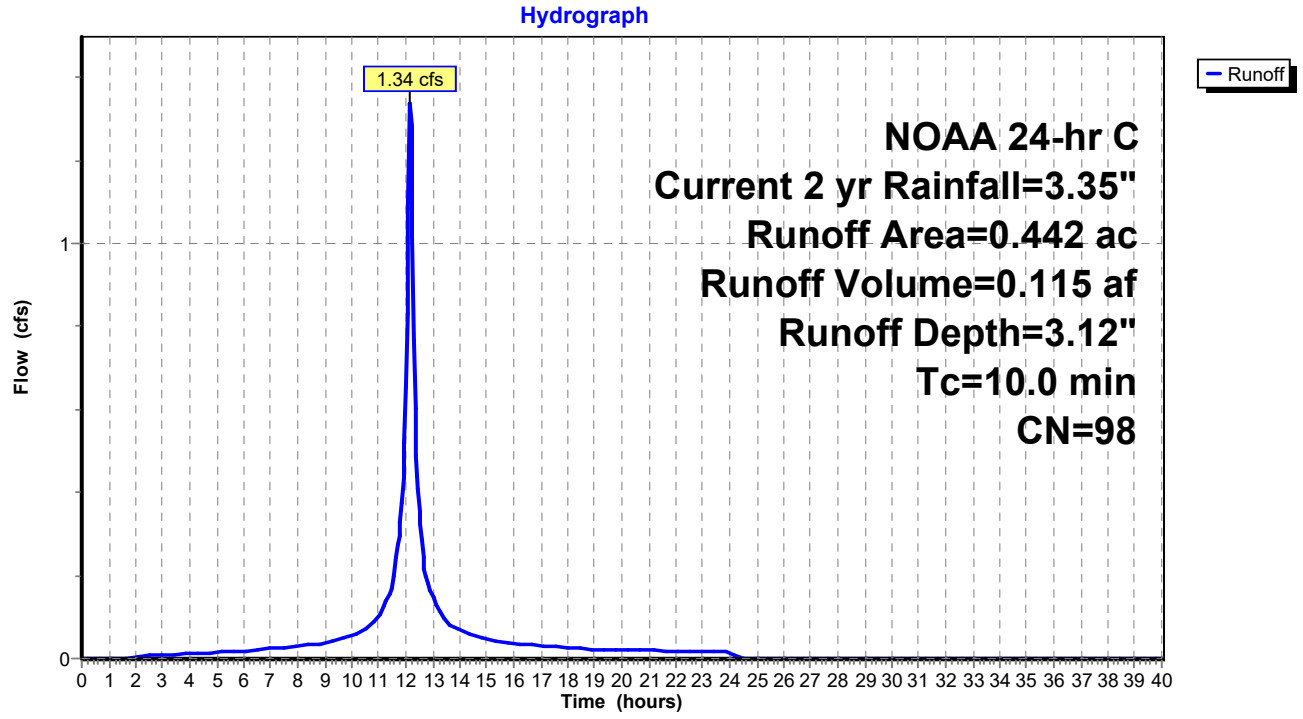
Runoff = 1.34 cfs @ 12.17 hrs, Volume= 0.115 af, Depth= 3.12"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

	Area (ac)	CN	Description
*	0.442	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.442	98	Weighted Average
	0.442		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 58l: PDA-58 (impervious)



Summary for Subcatchment 58P: PDA-58 (pervious)

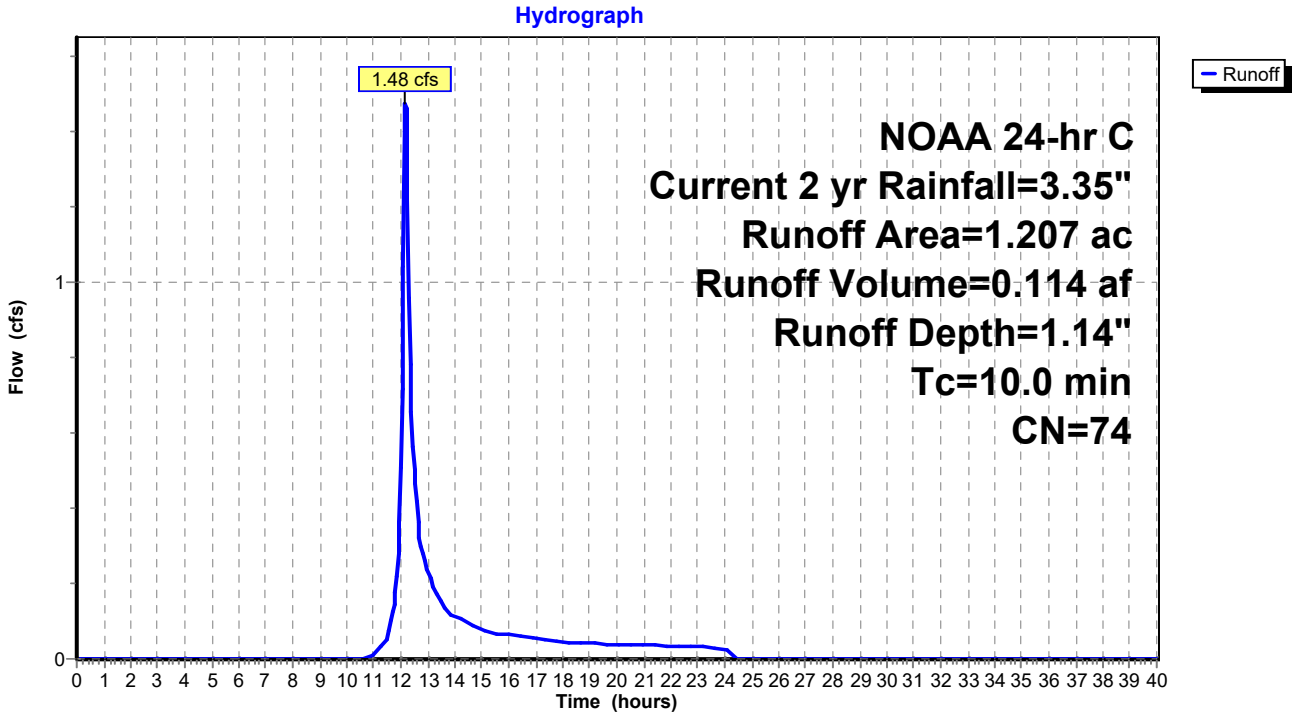
Runoff = 1.48 cfs @ 12.18 hrs, Volume= 0.114 af, Depth= 1.14"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
1.207	74	>75% Grass cover, Good, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 58P: PDA-58 (pervious)



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

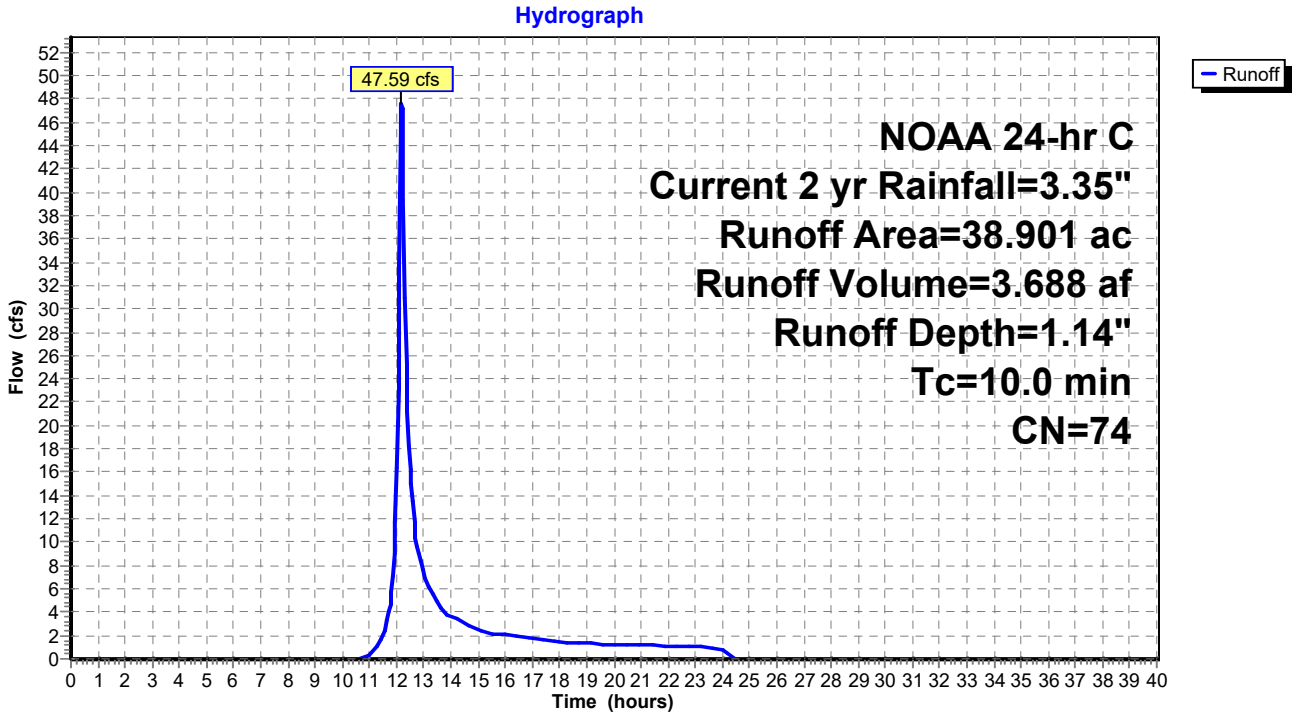
Runoff = 47.59 cfs @ 12.18 hrs, Volume= 3.688 af, Depth= 1.14"
Routed to Link PDA-6 : Proposed Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 2 yr Rainfall=3.35"

Area (ac)	CN	Description
38.901	74	>75% Grass cover, Good, HSG C
38.901		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-6: PDA-6 (undetained)



Summary for Pond B-51: Basin #51

Inflow Area = 5.917 ac, 34.63% Impervious, Inflow Depth = 1.42" for Current 2 yr event
Inflow = 5.70 cfs @ 12.25 hrs, Volume= 0.701 af
Outflow = 3.44 cfs @ 12.62 hrs, Volume= 0.695 af, Atten= 40%, Lag= 21.8 min
Primary = 3.44 cfs @ 12.62 hrs, Volume= 0.695 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 184.88' @ 12.62 hrs Surf.Area= 6,547 sf Storage= 5,182 cf

Plug-Flow detention time= 45.9 min calculated for 0.694 af (99% of inflow)
Center-of-Mass det. time= 40.8 min (928.5 - 887.7)

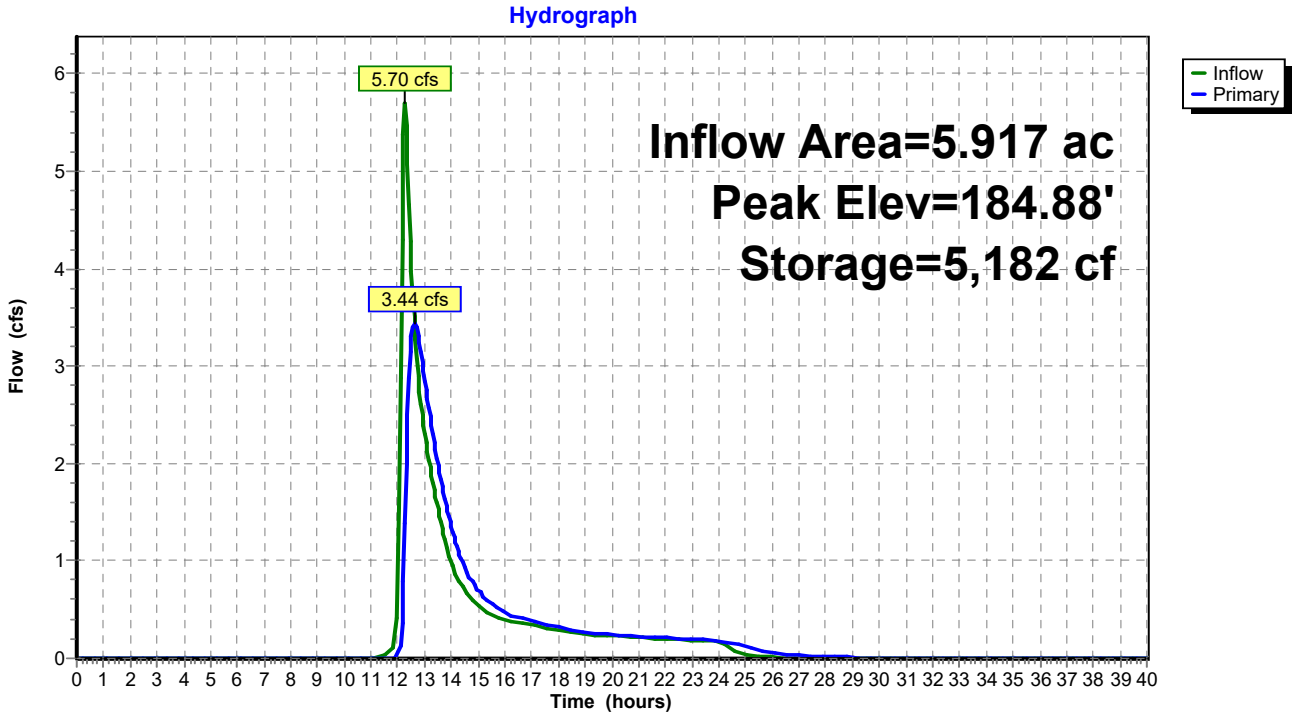
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	58,347 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	5,243	0	0
185.00	6,727	5,985	5,985
186.00	8,424	7,576	13,561
187.00	10,085	9,255	22,815
188.00	11,802	10,944	33,759
189.00	13,576	12,689	46,448
189.83	15,098	11,900	58,347

Device	Routing	Invert	Outlet Devices
#1	Primary	184.00'	**18.0" Round Culvert** L= 147.0' Ke= 0.500 Inlet / Outlet Invert= 184.00' / 182.00' S= 0.0136 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.05'	**48.0" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	189.80'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.43 cfs @ 12.62 hrs HW=184.88' (Free Discharge)
- **1=Culvert** (Inlet Controls 3.43 cfs @ 3.19 fps)
  - **2=Orifice/Grate** (Passes 3.43 cfs of 9.68 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-51: Basin #51



Stage-Discharge for Pond B-51: Basin #51

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	1.34	185.04	4.54	185.56	7.66
184.01	0.00	184.53	1.38	185.05	4.61	185.57	7.71
184.02	0.00	184.54	1.43	185.06	4.68	185.58	7.75
184.03	0.00	184.55	1.48	185.07	4.75	185.59	7.80
184.04	0.00	184.56	1.53	185.08	4.82	185.60	7.84
184.05	0.00	184.57	1.58	185.09	4.89	185.61	7.89
184.06	0.01	184.58	1.64	185.10	4.96	185.62	7.94
184.07	0.03	184.59	1.69	185.11	5.03	185.63	7.98
184.08	0.04	184.60	1.74	185.12	5.10	185.64	8.03
184.09	0.04	184.61	1.79	185.13	5.17	185.65	8.07
184.10	0.05	184.62	1.85	185.14	5.24	185.66	8.12
184.11	0.07	184.63	1.90	185.15	5.31	185.67	8.16
184.12	0.08	184.64	1.96	185.16	5.38	185.68	8.21
184.13	0.09	184.65	2.01	185.17	5.45	185.69	8.25
184.14	0.11	184.66	2.07	185.18	5.52	185.70	8.29
184.15	0.12	184.67	2.13	185.19	5.58	185.71	8.34
184.16	0.14	184.68	2.19	185.20	5.65	185.72	8.38
184.17	0.16	184.69	2.24	185.21	5.72	185.73	8.42
184.18	0.17	184.70	2.30	185.22	5.79	185.74	8.47
184.19	0.19	184.71	2.36	185.23	5.86	185.75	8.51
184.20	0.21	184.72	2.42	185.24	5.92	185.76	8.55
184.21	0.23	184.73	2.48	185.25	5.99	185.77	8.59
184.22	0.26	184.74	2.54	185.26	6.06	185.78	8.64
184.23	0.28	184.75	2.61	185.27	6.12	185.79	8.68
184.24	0.30	184.76	2.67	185.28	6.19	185.80	8.72
184.25	0.33	184.77	2.73	185.29	6.25	185.81	8.76
184.26	0.36	184.78	2.79	185.30	6.32	185.82	8.80
184.27	0.38	184.79	2.86	185.31	6.38	185.83	8.84
184.28	0.41	184.80	2.92	185.32	6.44	185.84	8.88
184.29	0.44	184.81	2.98	185.33	6.50	185.85	8.92
184.30	0.47	184.82	3.05	185.34	6.57	185.86	8.96
184.31	0.50	184.83	3.11	185.35	6.63	185.87	9.00
184.32	0.53	184.84	3.18	185.36	6.69	185.88	9.04
184.33	0.56	184.85	3.24	185.37	6.75	185.89	9.08
184.34	0.60	184.86	3.31	185.38	6.80	185.90	9.12
184.35	0.63	184.87	3.38	185.39	6.86	185.91	9.16
184.36	0.67	184.88	3.44	185.40	6.92	185.92	9.20
184.37	0.70	184.89	3.51	185.41	6.97	185.93	9.24
184.38	0.74	184.90	3.58	185.42	7.02	185.94	9.28
184.39	0.78	184.91	3.64	185.43	7.07	185.95	9.32
184.40	0.81	184.92	3.71	185.44	7.12	185.96	9.36
184.41	0.85	184.93	3.78	185.45	7.17	185.97	9.40
184.42	0.89	184.94	3.85	185.46	7.22	185.98	9.44
184.43	0.93	184.95	3.92	185.47	7.26	185.99	9.47
184.44	0.98	184.96	3.98	185.48	7.30	186.00	9.51
184.45	1.02	184.97	4.05	185.49	7.34	186.01	9.55
184.46	1.06	184.98	4.12	185.50	7.37	186.02	9.59
184.47	1.11	184.99	4.19	185.51	7.42	186.03	9.63
184.48	1.15	185.00	4.26	185.52	7.47	186.04	9.66
184.49	1.20	185.01	4.33	185.53	7.51	186.05	9.70
184.50	1.24	185.02	4.40	185.54	7.56	186.06	9.74
184.51	1.29	185.03	4.47	185.55	7.61	186.07	9.78

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	9.81	186.60	11.57	187.12	13.10	187.64	14.10
186.09	9.85	186.61	11.60	187.13	13.13	187.65	14.12
186.10	9.89	186.62	11.64	187.14	13.15	187.66	14.13
186.11	9.92	186.63	11.67	187.15	13.18	187.67	14.15
186.12	9.96	186.64	11.70	187.16	13.21	187.68	14.17
186.13	10.00	186.65	11.73	187.17	13.24	187.69	14.18
186.14	10.03	186.66	11.76	187.18	13.26	187.70	14.20
186.15	10.07	186.67	11.79	187.19	13.29	187.71	14.22
186.16	10.10	186.68	11.82	187.20	13.32	187.72	14.23
186.17	10.14	186.69	11.85	187.21	13.35	187.73	14.25
186.18	10.18	186.70	11.88	187.22	13.36	187.74	14.27
186.19	10.21	186.71	11.91	187.23	13.38	187.75	14.29
186.20	10.25	186.72	11.94	187.24	13.40	187.76	14.30
186.21	10.28	186.73	11.97	187.25	13.42	187.77	14.32
186.22	10.32	186.74	12.00	187.26	13.44	187.78	14.34
186.23	10.35	186.75	12.03	187.27	13.45	187.79	14.35
186.24	10.39	186.76	12.06	187.28	13.47	187.80	14.37
186.25	10.42	186.77	12.09	187.29	13.49	187.81	14.39
186.26	10.46	186.78	12.12	187.30	13.51	187.82	14.40
186.27	10.49	186.79	12.15	187.31	13.53	187.83	14.42
186.28	10.52	186.80	12.18	187.32	13.54	187.84	14.44
186.29	10.56	186.81	12.21	187.33	13.56	187.85	14.45
186.30	10.59	186.82	12.24	187.34	13.58	187.86	14.47
186.31	10.63	186.83	12.27	187.35	13.60	187.87	14.49
186.32	10.66	186.84	12.30	187.36	13.61	187.88	14.50
186.33	10.70	186.85	12.33	187.37	13.63	187.89	14.52
186.34	10.73	186.86	12.36	187.38	13.65	187.90	14.54
186.35	10.76	186.87	12.39	187.39	13.67	187.91	14.55
186.36	10.80	186.88	12.42	187.40	13.68	187.92	14.57
186.37	10.83	186.89	12.45	187.41	13.70	187.93	14.58
186.38	10.86	186.90	12.48	187.42	13.72	187.94	14.60
186.39	10.90	186.91	12.51	187.43	13.74	187.95	14.62
186.40	10.93	186.92	12.53	187.44	13.75	187.96	14.63
186.41	10.96	186.93	12.56	187.45	13.77	187.97	14.65
186.42	11.00	186.94	12.59	187.46	13.79	187.98	14.67
186.43	11.03	186.95	12.62	187.47	13.81	187.99	14.68
186.44	11.06	186.96	12.65	187.48	13.82	188.00	14.70
186.45	11.09	186.97	12.68	187.49	13.84	188.01	14.72
186.46	11.13	186.98	12.71	187.50	13.86	188.02	14.73
186.47	11.16	186.99	12.73	187.51	13.88	188.03	14.75
186.48	11.19	187.00	12.76	187.52	13.89	188.04	14.76
186.49	11.22	187.01	12.79	187.53	13.91	188.05	14.78
186.50	11.26	187.02	12.82	187.54	13.93	188.06	14.80
186.51	11.29	187.03	12.85	187.55	13.95	188.07	14.81
186.52	11.32	187.04	12.88	187.56	13.96	188.08	14.83
186.53	11.35	187.05	12.90	187.57	13.98	188.09	14.85
186.54	11.38	187.06	12.93	187.58	14.00	188.10	14.86
186.55	11.42	187.07	12.96	187.59	14.01	188.11	14.88
186.56	11.45	187.08	12.99	187.60	14.03	188.12	14.89
186.57	11.48	187.09	13.02	187.61	14.05	188.13	14.91
186.58	11.51	187.10	13.04	187.62	14.07	188.14	14.93
186.59	11.54	187.11	13.07	187.63	14.08	188.15	14.94

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.16	14.96	188.68	15.77	189.20	16.54	189.72	17.28
188.17	14.97	188.69	15.79	189.21	16.56	189.73	17.30
188.18	14.99	188.70	15.80	189.22	16.57	189.74	17.31
188.19	15.01	188.71	15.82	189.23	16.59	189.75	17.32
188.20	15.02	188.72	15.83	189.24	16.60	189.76	17.34
188.21	15.04	188.73	15.85	189.25	16.62	189.77	17.35
188.22	15.05	188.74	15.86	189.26	16.63	189.78	17.36
188.23	15.07	188.75	15.88	189.27	16.64	189.79	17.38
188.24	15.09	188.76	15.89	189.28	16.66	189.80	17.39
188.25	15.10	188.77	15.91	189.29	16.67	189.81	17.52
188.26	15.12	188.78	15.92	189.30	16.69	189.82	17.75
188.27	15.13	188.79	15.94	189.31	16.70	189.83	**18.04**
188.28	15.15	188.80	15.95	189.32	16.72		
188.29	15.17	188.81	15.97	189.33	16.73		
188.30	15.18	188.82	15.98	189.34	16.75		
188.31	15.20	188.83	16.00	189.35	16.76		
188.32	15.21	188.84	16.01	189.36	16.77		
188.33	15.23	188.85	16.03	189.37	16.79		
188.34	15.24	188.86	16.04	189.38	16.80		
188.35	15.26	188.87	16.06	189.39	16.82		
188.36	15.28	188.88	16.07	189.40	16.83		
188.37	15.29	188.89	16.09	189.41	16.85		
188.38	15.31	188.90	16.10	189.42	16.86		
188.39	15.32	188.91	16.12	189.43	16.87		
188.40	15.34	188.92	16.13	189.44	16.89		
188.41	15.35	188.93	16.15	189.45	16.90		
188.42	15.37	188.94	16.16	189.46	16.92		
188.43	15.39	188.95	16.18	189.47	16.93		
188.44	15.40	188.96	16.19	189.48	16.95		
188.45	15.42	188.97	16.21	189.49	16.96		
188.46	15.43	188.98	16.22	189.50	16.97		
188.47	15.45	188.99	16.24	189.51	16.99		
188.48	15.46	189.00	16.25	189.52	17.00		
188.49	15.48	189.01	16.27	189.53	17.02		
188.50	15.49	189.02	16.28	189.54	17.03		
188.51	15.51	189.03	16.30	189.55	17.04		
188.52	15.53	189.04	16.31	189.56	17.06		
188.53	15.54	189.05	16.32	189.57	17.07		
188.54	15.56	189.06	16.34	189.58	17.09		
188.55	15.57	189.07	16.35	189.59	17.10		
188.56	15.59	189.08	16.37	189.60	17.11		
188.57	15.60	189.09	16.38	189.61	17.13		
188.58	15.62	189.10	16.40	189.62	17.14		
188.59	15.63	189.11	16.41	189.63	17.16		
188.60	15.65	189.12	16.43	189.64	17.17		
188.61	15.66	189.13	16.44	189.65	17.18		
188.62	15.68	189.14	16.46	189.66	17.20		
188.63	15.69	189.15	16.47	189.67	17.21		
188.64	15.71	189.16	16.49	189.68	17.23		
188.65	15.73	189.17	16.50	189.69	17.24		
188.66	15.74	189.18	16.51	189.70	17.25		
188.67	15.76	189.19	16.53	189.71	17.27		

Stage-Area-Storage for Pond B-51: Basin #51

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	5,243	0	184.52	6,015	2,927
184.01	5,258	53	184.53	6,030	2,987
184.02	5,273	105	184.54	6,044	3,048
184.03	5,288	158	184.55	6,059	3,108
184.04	5,302	211	184.56	6,074	3,169
184.05	5,317	264	184.57	6,089	3,230
184.06	5,332	317	184.58	6,104	3,291
184.07	5,347	371	184.59	6,119	3,352
184.08	5,362	424	184.60	6,133	3,413
184.09	5,377	478	184.61	6,148	3,474
184.10	5,391	532	184.62	6,163	3,536
184.11	5,406	586	184.63	6,178	3,598
184.12	5,421	640	184.64	6,193	3,659
184.13	5,436	694	184.65	6,208	3,721
184.14	5,451	749	184.66	6,222	3,784
184.15	5,466	803	184.67	6,237	3,846
184.16	5,480	858	184.68	6,252	3,908
184.17	5,495	913	184.69	6,267	3,971
184.18	5,510	968	184.70	6,282	4,034
184.19	5,525	1,023	184.71	6,297	4,097
184.20	5,540	1,078	184.72	6,311	4,160
184.21	5,555	1,134	184.73	6,326	4,223
184.22	5,569	1,189	184.74	6,341	4,286
184.23	5,584	1,245	184.75	6,356	4,350
184.24	5,599	1,301	184.76	6,371	4,413
184.25	5,614	1,357	184.77	6,386	4,477
184.26	5,629	1,413	184.78	6,401	4,541
184.27	5,644	1,470	184.79	6,415	4,605
184.28	5,659	1,526	184.80	6,430	4,669
184.29	5,673	1,583	184.81	6,445	4,734
184.30	5,688	1,640	184.82	6,460	4,798
184.31	5,703	1,697	184.83	6,475	4,863
184.32	5,718	1,754	184.84	6,490	4,928
184.33	5,733	1,811	184.85	6,504	4,993
184.34	5,748	1,868	184.86	6,519	5,058
184.35	5,762	1,926	184.87	6,534	5,123
184.36	5,777	1,984	184.88	6,549	5,188
184.37	5,792	2,041	184.89	6,564	5,254
184.38	5,807	2,099	184.90	6,579	5,320
184.39	5,822	2,158	184.91	6,593	5,386
184.40	5,837	2,216	184.92	6,608	5,452
184.41	5,851	2,274	184.93	6,623	5,518
184.42	5,866	2,333	184.94	6,638	5,584
184.43	5,881	2,392	184.95	6,653	5,651
184.44	5,896	2,451	184.96	6,668	5,717
184.45	5,911	2,510	184.97	6,682	5,784
184.46	5,926	2,569	184.98	6,697	5,851
184.47	5,940	2,628	184.99	6,712	5,918
184.48	5,955	2,688	185.00	6,727	5,985
184.49	5,970	2,747	185.01	6,744	6,052
184.50	5,985	2,807	185.02	6,761	6,120
184.51	6,000	2,867	185.03	6,778	6,188

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	6,795	6,255	185.56	7,677	10,018
185.05	6,812	6,323	185.57	7,694	10,095
185.06	6,829	6,392	185.58	7,711	10,172
185.07	6,846	6,460	185.59	7,728	10,249
185.08	6,863	6,529	185.60	7,745	10,327
185.09	6,880	6,597	185.61	7,762	10,404
185.10	6,897	6,666	185.62	7,779	10,482
185.11	6,914	6,735	185.63	7,796	10,560
185.12	6,931	6,804	185.64	7,813	10,638
185.13	6,948	6,874	185.65	7,830	10,716
185.14	6,965	6,943	185.66	7,847	10,794
185.15	6,982	7,013	185.67	7,864	10,873
185.16	6,999	7,083	185.68	7,881	10,952
185.17	7,015	7,153	185.69	7,898	11,031
185.18	7,032	7,223	185.70	7,915	11,110
185.19	7,049	7,294	185.71	7,932	11,189
185.20	7,066	7,364	185.72	7,949	11,268
185.21	7,083	7,435	185.73	7,966	11,348
185.22	7,100	7,506	185.74	7,983	11,428
185.23	7,117	7,577	185.75	8,000	11,508
185.24	7,134	7,648	185.76	8,017	11,588
185.25	7,151	7,720	185.77	8,034	11,668
185.26	7,168	7,791	185.78	8,051	11,748
185.27	7,185	7,863	185.79	8,068	11,829
185.28	7,202	7,935	185.80	8,085	11,910
185.29	7,219	8,007	185.81	8,102	11,991
185.30	7,236	8,079	185.82	8,119	12,072
185.31	7,253	8,152	185.83	8,136	12,153
185.32	7,270	8,225	185.84	8,152	12,234
185.33	7,287	8,297	185.85	8,169	12,316
185.34	7,304	8,370	185.86	8,186	12,398
185.35	7,321	8,443	185.87	8,203	12,480
185.36	7,338	8,517	185.88	8,220	12,562
185.37	7,355	8,590	185.89	8,237	12,644
185.38	7,372	8,664	185.90	8,254	12,727
185.39	7,389	8,738	185.91	8,271	12,809
185.40	7,406	8,812	185.92	8,288	12,892
185.41	7,423	8,886	185.93	8,305	12,975
185.42	7,440	8,960	185.94	8,322	13,058
185.43	7,457	9,034	185.95	8,339	13,141
185.44	7,474	9,109	185.96	8,356	13,225
185.45	7,491	9,184	185.97	8,373	13,309
185.46	7,508	9,259	185.98	8,390	13,392
185.47	7,525	9,334	185.99	8,407	13,476
185.48	7,542	9,409	186.00	8,424	13,561
185.49	7,559	9,485	186.01	8,441	13,645
185.50	7,576	9,561	186.02	8,457	13,729
185.51	7,592	9,636	186.03	8,474	13,814
185.52	7,609	9,712	186.04	8,490	13,899
185.53	7,626	9,789	186.05	8,507	13,984
185.54	7,643	9,865	186.06	8,524	14,069
185.55	7,660	9,942	186.07	8,540	14,154

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	8,557	14,240	186.60	9,421	18,914
186.09	8,573	14,325	186.61	9,437	19,008
186.10	8,590	14,411	186.62	9,454	19,103
186.11	8,607	14,497	186.63	9,470	19,197
186.12	8,623	14,583	186.64	9,487	19,292
186.13	8,640	14,670	186.65	9,504	19,387
186.14	8,657	14,756	186.66	9,520	19,482
186.15	8,673	14,843	186.67	9,537	19,577
186.16	8,690	14,930	186.68	9,553	19,673
186.17	8,706	15,017	186.69	9,570	19,768
186.18	8,723	15,104	186.70	9,587	19,864
186.19	8,740	15,191	186.71	9,603	19,960
186.20	8,756	15,279	186.72	9,620	20,056
186.21	8,773	15,366	186.73	9,637	20,153
186.22	8,789	15,454	186.74	9,653	20,249
186.23	8,806	15,542	186.75	9,670	20,346
186.24	8,823	15,630	186.76	9,686	20,442
186.25	8,839	15,718	186.77	9,703	20,539
186.26	8,856	15,807	186.78	9,720	20,636
186.27	8,872	15,896	186.79	9,736	20,734
186.28	8,889	15,984	186.80	9,753	20,831
186.29	8,906	16,073	186.81	9,769	20,929
186.30	8,922	16,162	186.82	9,786	21,027
186.31	8,939	16,252	186.83	9,803	21,125
186.32	8,956	16,341	186.84	9,819	21,223
186.33	8,972	16,431	186.85	9,836	21,321
186.34	8,989	16,521	186.86	9,852	21,419
186.35	9,005	16,611	186.87	9,869	21,518
186.36	9,022	16,701	186.88	9,886	21,617
186.37	9,039	16,791	186.89	9,902	21,716
186.38	9,055	16,882	186.90	9,919	21,815
186.39	9,072	16,972	186.91	9,936	21,914
186.40	9,088	17,063	186.92	9,952	22,014
186.41	9,105	17,154	186.93	9,969	22,113
186.42	9,122	17,245	186.94	9,985	22,213
186.43	9,138	17,336	186.95	10,002	22,313
186.44	9,155	17,428	186.96	10,019	22,413
186.45	9,171	17,519	186.97	10,035	22,513
186.46	9,188	17,611	186.98	10,052	22,614
186.47	9,205	17,703	186.99	10,068	22,714
186.48	9,221	17,795	187.00	10,085	22,815
186.49	9,238	17,888	187.01	10,102	22,916
186.50	9,255	17,980	187.02	10,119	23,017
186.51	9,271	18,073	187.03	10,137	23,118
186.52	9,288	18,166	187.04	10,154	23,220
186.53	9,304	18,259	187.05	10,171	23,321
186.54	9,321	18,352	187.06	10,188	23,423
186.55	9,338	18,445	187.07	10,205	23,525
186.56	9,354	18,538	187.08	10,222	23,627
186.57	9,371	18,632	187.09	10,240	23,730
186.58	9,387	18,726	187.10	10,257	23,832
186.59	9,404	18,820	187.11	10,274	23,935

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	10,291	24,038	187.64	11,184	29,621
187.13	10,308	24,141	187.65	11,201	29,733
187.14	10,325	24,244	187.66	11,218	29,845
187.15	10,343	24,347	187.67	11,235	29,957
187.16	10,360	24,451	187.68	11,253	30,070
187.17	10,377	24,554	187.69	11,270	30,182
187.18	10,394	24,658	187.70	11,287	30,295
187.19	10,411	24,762	187.71	11,304	30,408
187.20	10,428	24,866	187.72	11,321	30,521
187.21	10,446	24,971	187.73	11,338	30,635
187.22	10,463	25,075	187.74	11,356	30,748
187.23	10,480	25,180	187.75	11,373	30,862
187.24	10,497	25,285	187.76	11,390	30,975
187.25	10,514	25,390	187.77	11,407	31,089
187.26	10,531	25,495	187.78	11,424	31,204
187.27	10,549	25,601	187.79	11,441	31,318
187.28	10,566	25,706	187.80	11,459	31,432
187.29	10,583	25,812	187.81	11,476	31,547
187.30	10,600	25,918	187.82	11,493	31,662
187.31	10,617	26,024	187.83	11,510	31,777
187.32	10,634	26,130	187.84	11,527	31,892
187.33	10,652	26,237	187.85	11,544	32,008
187.34	10,669	26,343	187.86	11,562	32,123
187.35	10,686	26,450	187.87	11,579	32,239
187.36	10,703	26,557	187.88	11,596	32,355
187.37	10,720	26,664	187.89	11,613	32,471
187.38	10,737	26,771	187.90	11,630	32,587
187.39	10,755	26,879	187.91	11,647	32,703
187.40	10,772	26,986	187.92	11,665	32,820
187.41	10,789	27,094	187.93	11,682	32,937
187.42	10,806	27,202	187.94	11,699	33,053
187.43	10,823	27,310	187.95	11,716	33,171
187.44	10,840	27,419	187.96	11,733	33,288
187.45	10,858	27,527	187.97	11,750	33,405
187.46	10,875	27,636	187.98	11,768	33,523
187.47	10,892	27,745	187.99	11,785	33,641
187.48	10,909	27,854	188.00	11,802	33,759
187.49	10,926	27,963	188.01	11,820	33,877
187.50	10,944	28,072	188.02	11,837	33,995
187.51	10,961	28,182	188.03	11,855	34,113
187.52	10,978	28,291	188.04	11,873	34,232
187.53	10,995	28,401	188.05	11,891	34,351
187.54	11,012	28,511	188.06	11,908	34,470
187.55	11,029	28,621	188.07	11,926	34,589
187.56	11,047	28,732	188.08	11,944	34,708
187.57	11,064	28,842	188.09	11,962	34,828
187.58	11,081	28,953	188.10	11,979	34,948
187.59	11,098	29,064	188.11	11,997	35,067
187.60	11,115	29,175	188.12	12,015	35,188
187.61	11,132	29,286	188.13	12,033	35,308
187.62	11,150	29,398	188.14	12,050	35,428
187.63	11,167	29,509	188.15	12,068	35,549

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	12,086	35,670
188.17	12,104	35,790
188.18	12,121	35,912
188.19	12,139	36,033
188.20	12,157	36,154
188.21	12,175	36,276
188.22	12,192	36,398
188.23	12,210	36,520
188.24	12,228	36,642
188.25	12,246	36,764
188.26	12,263	36,887
188.27	12,281	37,010
188.28	12,299	37,133
188.29	12,316	37,256
188.30	12,334	37,379
188.31	12,352	37,502
188.32	12,370	37,626
188.33	12,387	37,750
188.34	12,405	37,874
188.35	12,423	37,998
188.36	12,441	38,122
188.37	12,458	38,247
188.38	12,476	38,371
188.39	12,494	38,496
188.40	12,512	38,621
188.41	12,529	38,746
188.42	12,547	38,872
188.43	12,565	38,997
188.44	12,583	39,123
188.45	12,600	39,249
188.46	12,618	39,375
188.47	12,636	39,501
188.48	12,654	39,628
188.49	12,671	39,754
188.50	12,689	39,881
188.51	12,707	40,008
188.52	12,724	40,135
188.53	12,742	40,263
188.54	12,760	40,390
188.55	12,778	40,518
188.56	12,795	40,646
188.57	12,813	40,774
188.58	12,831	40,902
188.59	12,849	41,030
188.60	12,866	41,159
188.61	12,884	41,288
188.62	12,902	41,417
188.63	12,920	41,546
188.64	12,937	41,675
188.65	12,955	41,805
188.66	12,973	41,934
188.67	12,991	42,064
188.68	13,008	42,194
188.69	13,026	42,324
188.70	13,044	42,455
188.71	13,062	42,585
188.72	13,079	42,716
188.73	13,097	42,847
188.74	13,115	42,978
188.75	13,133	43,109
188.76	13,150	43,240
188.77	13,168	43,372
188.78	13,186	43,504
188.79	13,203	43,636
188.80	13,221	43,768
188.81	13,239	43,900
188.82	13,257	44,033
188.83	13,274	44,165
188.84	13,292	44,298
188.85	13,310	44,431
188.86	13,328	44,564
188.87	13,345	44,698
188.88	13,363	44,831
188.89	13,381	44,965
188.90	13,399	45,099
188.91	13,416	45,233
188.92	13,434	45,367
188.93	13,452	45,502
188.94	13,470	45,636
188.95	13,487	45,771
188.96	13,505	45,906
188.97	13,523	46,041
188.98	13,541	46,176
188.99	13,558	46,312
189.00	13,576	46,448
189.01	13,594	46,583
189.02	13,613	46,719
189.03	13,631	46,856
189.04	13,649	46,992
189.05	13,668	47,129
189.06	13,686	47,265
189.07	13,704	47,402
189.08	13,723	47,539
189.09	13,741	47,677
189.10	13,759	47,814
189.11	13,778	47,952
189.12	13,796	48,090
189.13	13,814	48,228
189.14	13,833	48,366
189.15	13,851	48,505
189.16	13,869	48,643
189.17	13,888	48,782
189.18	13,906	48,921
189.19	13,924	49,060

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.20	13,943	49,199
189.21	13,961	49,339
189.22	13,979	49,479
189.23	13,998	49,618
189.24	14,016	49,759
189.25	14,034	49,899
189.26	14,053	50,039
189.27	14,071	50,180
189.28	14,089	50,321
189.29	14,108	50,462
189.30	14,126	50,603
189.31	14,144	50,744
189.32	14,163	50,886
189.33	14,181	51,027
189.34	14,199	51,169
189.35	14,218	51,311
189.36	14,236	51,454
189.37	14,254	51,596
189.38	14,273	51,739
189.39	14,291	51,882
189.40	14,309	52,025
189.41	14,328	52,168
189.42	14,346	52,311
189.43	14,365	52,455
189.44	14,383	52,598
189.45	14,401	52,742
189.46	14,420	52,886
189.47	14,438	53,031
189.48	14,456	53,175
189.49	14,475	53,320
189.50	14,493	53,465
189.51	14,511	53,610
189.52	14,530	53,755
189.53	14,548	53,900
189.54	14,566	54,046
189.55	14,585	54,192
189.56	14,603	54,338
189.57	14,621	54,484
189.58	14,640	54,630
189.59	14,658	54,777
189.60	14,676	54,923
189.61	14,695	55,070
189.62	14,713	55,217
189.63	14,731	55,364
189.64	14,750	55,512
189.65	14,768	55,659
189.66	14,786	55,807
189.67	14,805	55,955
189.68	14,823	56,103
189.69	14,841	56,251
189.70	14,860	56,400
189.71	14,878	56,549
189.72	14,896	56,698
189.73	14,915	56,847
189.74	14,933	56,996
189.75	14,951	57,145
189.76	14,970	57,295
189.77	14,988	57,445
189.78	15,006	57,595
189.79	15,025	57,745
189.80	15,043	57,895
189.81	15,061	58,046
189.82	15,080	58,196
189.83	**15,098**	**58,347**

Summary for Pond B-52: Basin #52

Inflow Area = 1.423 ac, 34.43% Impervious, Inflow Depth = 1.82" for Current 2 yr event
Inflow = 2.61 cfs @ 12.18 hrs, Volume= 0.216 af
Outflow = 2.32 cfs @ 12.23 hrs, Volume= 0.168 af, Atten= 11%, Lag= 3.2 min
Primary = 2.32 cfs @ 12.23 hrs, Volume= 0.168 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.47' @ 12.23 hrs Surf.Area= 1,808 sf Storage= 2,747 cf

Plug-Flow detention time= 157.8 min calculated for 0.168 af (78% of inflow)
Center-of-Mass det. time= 67.5 min (871.4 - 803.8)

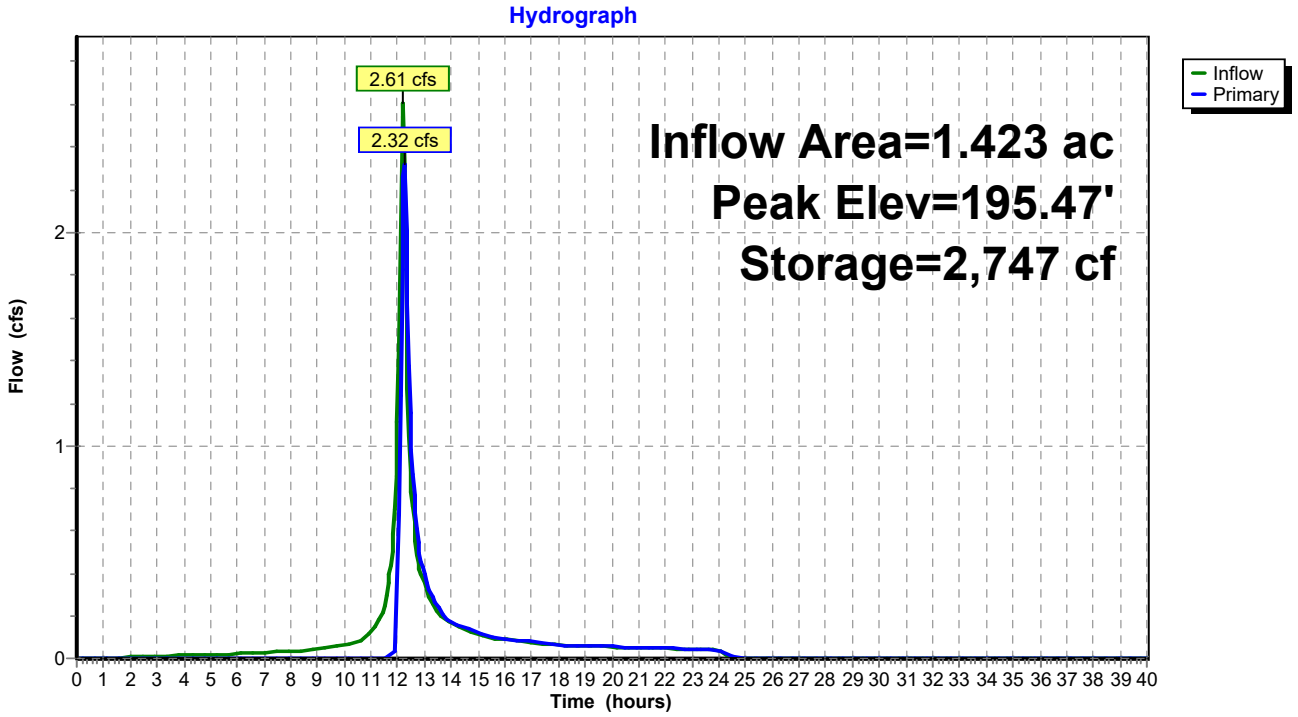
Volume	Invert	Avail.Storage	Storage Description
#1	193.00'	7,751 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.00	474	0	0
194.00	970	722	722
195.00	1,523	1,247	1,969
196.00	2,133	1,828	3,797
197.00	2,799	2,466	6,263
197.50	3,154	1,488	7,751

Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	**15.0" Round Culvert** L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	195.08'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.72'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.28 cfs @ 12.23 hrs HW=195.46' (Free Discharge)
- **1=Culvert** (Passes 2.28 cfs of 7.67 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.28 cfs @ 1.99 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-52: Basin #52



Stage-Discharge for Pond B-52: Basin #52

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.00	0.00	193.52	0.00	194.04	0.00	194.56	0.00
193.01	0.00	193.53	0.00	194.05	0.00	194.57	0.00
193.02	0.00	193.54	0.00	194.06	0.00	194.58	0.00
193.03	0.00	193.55	0.00	194.07	0.00	194.59	0.00
193.04	0.00	193.56	0.00	194.08	0.00	194.60	0.00
193.05	0.00	193.57	0.00	194.09	0.00	194.61	0.00
193.06	0.00	193.58	0.00	194.10	0.00	194.62	0.00
193.07	0.00	193.59	0.00	194.11	0.00	194.63	0.00
193.08	0.00	193.60	0.00	194.12	0.00	194.64	0.00
193.09	0.00	193.61	0.00	194.13	0.00	194.65	0.00
193.10	0.00	193.62	0.00	194.14	0.00	194.66	0.00
193.11	0.00	193.63	0.00	194.15	0.00	194.67	0.00
193.12	0.00	193.64	0.00	194.16	0.00	194.68	0.00
193.13	0.00	193.65	0.00	194.17	0.00	194.69	0.00
193.14	0.00	193.66	0.00	194.18	0.00	194.70	0.00
193.15	0.00	193.67	0.00	194.19	0.00	194.71	0.00
193.16	0.00	193.68	0.00	194.20	0.00	194.72	0.00
193.17	0.00	193.69	0.00	194.21	0.00	194.73	0.00
193.18	0.00	193.70	0.00	194.22	0.00	194.74	0.00
193.19	0.00	193.71	0.00	194.23	0.00	194.75	0.00
193.20	0.00	193.72	0.00	194.24	0.00	194.76	0.00
193.21	0.00	193.73	0.00	194.25	0.00	194.77	0.00
193.22	0.00	193.74	0.00	194.26	0.00	194.78	0.00
193.23	0.00	193.75	0.00	194.27	0.00	194.79	0.00
193.24	0.00	193.76	0.00	194.28	0.00	194.80	0.00
193.25	0.00	193.77	0.00	194.29	0.00	194.81	0.00
193.26	0.00	193.78	0.00	194.30	0.00	194.82	0.00
193.27	0.00	193.79	0.00	194.31	0.00	194.83	0.00
193.28	0.00	193.80	0.00	194.32	0.00	194.84	0.00
193.29	0.00	193.81	0.00	194.33	0.00	194.85	0.00
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.00
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.00
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.00
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.00
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.00
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.00
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.00
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.00
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.00
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.00
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.00
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.00
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.00
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.00
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.00
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.00
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.00
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.00
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.00
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.00
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.00

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.08	0.00	195.60	3.58	196.12	8.41	196.64	8.96
195.09	0.01	195.61	3.67	196.13	8.43	196.65	8.97
195.10	0.03	195.62	3.74	196.14	8.44	196.66	8.98
195.11	0.05	195.63	3.82	196.15	8.45	196.67	8.99
195.12	0.08	195.64	3.89	196.16	8.46	196.68	9.00
195.13	0.11	195.65	3.97	196.17	8.47	196.69	9.01
195.14	0.14	195.66	4.04	196.18	8.48	196.70	9.02
195.15	0.18	195.67	4.10	196.19	8.49	196.71	9.03
195.16	0.22	195.68	4.17	196.20	8.50	196.72	9.04
195.17	0.26	195.69	4.24	196.21	8.51	196.73	9.05
195.18	0.30	195.70	4.30	196.22	8.52	196.74	9.06
195.19	0.35	195.71	4.36	196.23	8.53	196.75	9.07
195.20	0.40	195.72	4.43	196.24	8.54	196.76	9.08
195.21	0.45	195.73	4.50	196.25	8.55	196.77	9.09
195.22	0.50	195.74	4.58	196.26	8.57	196.78	9.10
195.23	0.56	195.75	4.67	196.27	8.58	196.79	9.11
195.24	0.62	195.76	4.77	196.28	8.59	196.80	9.12
195.25	0.67	195.77	4.87	196.29	8.60	196.81	9.13
195.26	0.74	195.78	4.97	196.30	8.61	196.82	9.14
195.27	0.80	195.79	5.08	196.31	8.62	196.83	9.15
195.28	0.86	195.80	5.18	196.32	8.63	196.84	9.16
195.29	0.93	195.81	5.30	196.33	8.64	196.85	9.17
195.30	0.99	195.82	5.41	196.34	8.65	196.86	9.18
195.31	1.06	195.83	5.53	196.35	8.66	196.87	9.19
195.32	1.13	195.84	5.64	196.36	8.67	196.88	9.20
195.33	1.20	195.85	5.76	196.37	8.68	196.89	9.21
195.34	1.28	195.86	5.89	196.38	8.69	196.90	9.22
195.35	1.35	195.87	6.01	196.39	8.70	196.91	9.23
195.36	1.43	195.88	6.14	196.40	8.71	196.92	9.24
195.37	1.50	195.89	6.27	196.41	8.72	196.93	9.25
195.38	1.58	195.90	6.40	196.42	8.73	196.94	9.26
195.39	1.66	195.91	6.53	196.43	8.75	196.95	9.27
195.40	1.74	195.92	6.66	196.44	8.76	196.96	9.28
195.41	1.83	195.93	6.80	196.45	8.77	196.97	9.29
195.42	1.91	195.94	6.93	196.46	8.78	196.98	9.30
195.43	1.99	195.95	7.07	196.47	8.79	196.99	9.31
195.44	2.08	195.96	7.21	196.48	8.80	197.00	9.32
195.45	2.17	195.97	7.35	196.49	8.81	197.01	9.33
195.46	2.26	195.98	7.50	196.50	8.82	197.02	9.34
195.47	2.35	195.99	7.64	196.51	8.83	197.03	9.35
195.48	2.44	196.00	7.79	196.52	8.84	197.04	9.36
195.49	2.53	196.01	7.93	196.53	8.85	197.05	9.37
195.50	2.62	196.02	8.08	196.54	8.86	197.06	9.38
195.51	2.72	196.03	8.23	196.55	8.87	197.07	9.39
195.52	2.81	196.04	8.33	196.56	8.88	197.08	9.40
195.53	2.91	196.05	8.34	196.57	8.89	197.09	9.41
195.54	3.00	196.06	8.35	196.58	8.90	197.10	9.42
195.55	3.10	196.07	8.36	196.59	8.91	197.11	9.43
195.56	3.20	196.08	8.37	196.60	8.92	197.12	9.44
195.57	3.30	196.09	8.38	196.61	8.93	197.13	9.45
195.58	3.40	196.10	8.39	196.62	8.94	197.14	9.46
195.59	3.50	196.11	8.40	196.63	8.95	197.15	9.47

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)
197.16	9.48
197.17	9.49
197.18	9.50
197.19	9.51
197.20	9.52
197.21	9.53
197.22	9.54
197.23	9.55
197.24	9.55
197.25	9.56
197.26	9.69
197.27	9.91
197.28	10.20
197.29	10.54
197.30	10.92
197.31	11.35
197.32	11.81
197.33	12.30
197.34	12.82
197.35	13.38
197.36	13.96
197.37	14.57
197.38	15.21
197.39	15.87
197.40	16.55
197.41	17.26
197.42	17.99
197.43	18.75
197.44	19.52
197.45	20.32
197.46	21.17
197.47	22.06
197.48	22.96
197.49	23.90
197.50	**24.85**

Stage-Area-Storage for Pond B-52: Basin #52

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.00	474	0
193.01	479	5
193.02	484	10
193.03	489	14
193.04	494	19
193.05	499	24
193.06	504	29
193.07	509	34
193.08	514	40
193.09	519	45
193.10	524	50
193.11	529	55
193.12	534	60
193.13	538	66
193.14	543	71
193.15	548	77
193.16	553	82
193.17	558	88
193.18	563	93
193.19	568	99
193.20	573	105
193.21	578	110
193.22	583	116
193.23	588	122
193.24	593	128
193.25	598	134
193.26	603	140
193.27	608	146
193.28	613	152
193.29	618	158
193.30	623	165
193.31	628	171
193.32	633	177
193.33	638	183
193.34	643	190
193.35	648	196
193.36	653	203
193.37	658	209
193.38	662	216
193.39	667	223
193.40	672	229
193.41	677	236
193.42	682	243
193.43	687	250
193.44	692	257
193.45	697	264
193.46	702	271
193.47	707	278
193.48	712	285
193.49	717	292
193.50	722	299
193.51	727	306
193.52	732	314
193.53	737	321
193.54	742	328
193.55	747	336
193.56	752	343
193.57	757	351
193.58	762	358
193.59	767	366
193.60	772	374
193.61	777	381
193.62	782	389
193.63	786	397
193.64	791	405
193.65	796	413
193.66	801	421
193.67	806	429
193.68	811	437
193.69	816	445
193.70	821	453
193.71	826	462
193.72	831	470
193.73	836	478
193.74	841	487
193.75	846	495
193.76	851	503
193.77	856	512
193.78	861	521
193.79	866	529
193.80	871	538
193.81	876	547
193.82	881	555
193.83	886	564
193.84	891	573
193.85	896	582
193.86	901	591
193.87	906	600
193.88	910	609
193.89	915	618
193.90	920	627
193.91	925	637
193.92	930	646
193.93	935	655
193.94	940	665
193.95	945	674
193.96	950	684
193.97	955	693
193.98	960	703
193.99	965	712
194.00	970	722
194.01	976	732
194.02	981	742
194.03	987	751

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.04	992	761	194.56	1,280	1,352
194.05	998	771	194.57	1,285	1,365
194.06	1,003	781	194.58	1,291	1,378
194.07	1,009	791	194.59	1,296	1,391
194.08	1,014	801	194.60	1,302	1,404
194.09	1,020	812	194.61	1,307	1,417
194.10	1,025	822	194.62	1,313	1,430
194.11	1,031	832	194.63	1,318	1,443
194.12	1,036	842	194.64	1,324	1,456
194.13	1,042	853	194.65	1,329	1,469
194.14	1,047	863	194.66	1,335	1,483
194.15	1,053	874	194.67	1,341	1,496
194.16	1,058	884	194.68	1,346	1,509
194.17	1,064	895	194.69	1,352	1,523
194.18	1,070	906	194.70	1,357	1,536
194.19	1,075	916	194.71	1,363	1,550
194.20	1,081	927	194.72	1,368	1,564
194.21	1,086	938	194.73	1,374	1,577
194.22	1,092	949	194.74	1,379	1,591
194.23	1,097	960	194.75	1,385	1,605
194.24	1,103	971	194.76	1,390	1,619
194.25	1,108	982	194.77	1,396	1,633
194.26	1,114	993	194.78	1,401	1,647
194.27	1,119	1,004	194.79	1,407	1,661
194.28	1,125	1,015	194.80	1,412	1,675
194.29	1,130	1,027	194.81	1,418	1,689
194.30	1,136	1,038	194.82	1,423	1,703
194.31	1,141	1,049	194.83	1,429	1,718
194.32	1,147	1,061	194.84	1,435	1,732
194.33	1,152	1,072	194.85	1,440	1,746
194.34	1,158	1,084	194.86	1,446	1,761
194.35	1,164	1,095	194.87	1,451	1,775
194.36	1,169	1,107	194.88	1,457	1,790
194.37	1,175	1,119	194.89	1,462	1,804
194.38	1,180	1,131	194.90	1,468	1,819
194.39	1,186	1,142	194.91	1,473	1,834
194.40	1,191	1,154	194.92	1,479	1,848
194.41	1,197	1,166	194.93	1,484	1,863
194.42	1,202	1,178	194.94	1,490	1,878
194.43	1,208	1,190	194.95	1,495	1,893
194.44	1,213	1,202	194.96	1,501	1,908
194.45	1,219	1,214	194.97	1,506	1,923
194.46	1,224	1,227	194.98	1,512	1,938
194.47	1,230	1,239	194.99	1,517	1,953
194.48	1,235	1,251	195.00	1,523	1,969
194.49	1,241	1,264	195.01	1,529	1,984
194.50	1,247	1,276	195.02	1,535	1,999
194.51	1,252	1,289	195.03	1,541	2,014
194.52	1,258	1,301	195.04	1,547	2,030
194.53	1,263	1,314	195.05	1,554	2,045
194.54	1,269	1,326	195.06	1,560	2,061
194.55	1,274	1,339	195.07	1,566	2,077

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.08	1,572	2,092	195.60	1,889	2,992
195.09	1,578	2,108	195.61	1,895	3,011
195.10	1,584	2,124	195.62	1,901	3,030
195.11	1,590	2,140	195.63	1,907	3,049
195.12	1,596	2,156	195.64	1,913	3,068
195.13	1,602	2,172	195.65	1,920	3,087
195.14	1,608	2,188	195.66	1,926	3,107
195.15	1,615	2,204	195.67	1,932	3,126
195.16	1,621	2,220	195.68	1,938	3,145
195.17	1,627	2,236	195.69	1,944	3,165
195.18	1,633	2,253	195.70	1,950	3,184
195.19	1,639	2,269	195.71	1,956	3,204
195.20	1,645	2,285	195.72	1,962	3,223
195.21	1,651	2,302	195.73	1,968	3,243
195.22	1,657	2,318	195.74	1,974	3,263
195.23	1,663	2,335	195.75	1,981	3,282
195.24	1,669	2,352	195.76	1,987	3,302
195.25	1,676	2,368	195.77	1,993	3,322
195.26	1,682	2,385	195.78	1,999	3,342
195.27	1,688	2,402	195.79	2,005	3,362
195.28	1,694	2,419	195.80	2,011	3,382
195.29	1,700	2,436	195.81	2,017	3,402
195.30	1,706	2,453	195.82	2,023	3,422
195.31	1,712	2,470	195.83	2,029	3,443
195.32	1,718	2,487	195.84	2,035	3,463
195.33	1,724	2,504	195.85	2,041	3,483
195.34	1,730	2,522	195.86	2,048	3,504
195.35	1,736	2,539	195.87	2,054	3,524
195.36	1,743	2,556	195.88	2,060	3,545
195.37	1,749	2,574	195.89	2,066	3,566
195.38	1,755	2,591	195.90	2,072	3,586
195.39	1,761	2,609	195.91	2,078	3,607
195.40	1,767	2,627	195.92	2,084	3,628
195.41	1,773	2,644	195.93	2,090	3,649
195.42	1,779	2,662	195.94	2,096	3,670
195.43	1,785	2,680	195.95	2,102	3,691
195.44	1,791	2,698	195.96	2,109	3,712
195.45	1,797	2,716	195.97	2,115	3,733
195.46	1,804	2,734	195.98	2,121	3,754
195.47	1,810	2,752	195.99	2,127	3,775
195.48	1,816	2,770	196.00	2,133	3,797
195.49	1,822	2,788	196.01	2,140	3,818
195.50	1,828	2,806	196.02	2,146	3,839
195.51	1,834	2,825	196.03	2,153	3,861
195.52	1,840	2,843	196.04	2,160	3,882
195.53	1,846	2,861	196.05	2,166	3,904
195.54	1,852	2,880	196.06	2,173	3,926
195.55	1,859	2,898	196.07	2,180	3,947
195.56	1,865	2,917	196.08	2,186	3,969
195.57	1,871	2,936	196.09	2,193	3,991
195.58	1,877	2,954	196.10	2,200	4,013
195.59	1,883	2,973	196.11	2,206	4,035

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.12	2,213	4,057	196.64	2,559	5,298
196.13	2,220	4,079	196.65	2,566	5,324
196.14	2,226	4,102	196.66	2,573	5,349
196.15	2,233	4,124	196.67	2,579	5,375
196.16	2,240	4,146	196.68	2,586	5,401
196.17	2,246	4,169	196.69	2,593	5,427
196.18	2,253	4,191	196.70	2,599	5,453
196.19	2,260	4,214	196.71	2,606	5,479
196.20	2,266	4,236	196.72	2,613	5,505
196.21	2,273	4,259	196.73	2,619	5,531
196.22	2,280	4,282	196.74	2,626	5,557
196.23	2,286	4,305	196.75	2,633	5,584
196.24	2,293	4,328	196.76	2,639	5,610
196.25	2,300	4,351	196.77	2,646	5,636
196.26	2,306	4,374	196.78	2,652	5,663
196.27	2,313	4,397	196.79	2,659	5,689
196.28	2,319	4,420	196.80	2,666	5,716
196.29	2,326	4,443	196.81	2,672	5,743
196.30	2,333	4,466	196.82	2,679	5,769
196.31	2,339	4,490	196.83	2,686	5,796
196.32	2,346	4,513	196.84	2,692	5,823
196.33	2,353	4,537	196.85	2,699	5,850
196.34	2,359	4,560	196.86	2,706	5,877
196.35	2,366	4,584	196.87	2,712	5,904
196.36	2,373	4,608	196.88	2,719	5,931
196.37	2,379	4,631	196.89	2,726	5,959
196.38	2,386	4,655	196.90	2,732	5,986
196.39	2,393	4,679	196.91	2,739	6,013
196.40	2,399	4,703	196.92	2,746	6,041
196.41	2,406	4,727	196.93	2,752	6,068
196.42	2,413	4,751	196.94	2,759	6,096
196.43	2,419	4,775	196.95	2,766	6,123
196.44	2,426	4,799	196.96	2,772	6,151
196.45	2,433	4,824	196.97	2,779	6,179
196.46	2,439	4,848	196.98	2,786	6,207
196.47	2,446	4,873	196.99	2,792	6,235
196.48	2,453	4,897	197.00	2,799	6,263
196.49	2,459	4,922	197.01	2,806	6,291
196.50	2,466	4,946	197.02	2,813	6,319
196.51	2,473	4,971	197.03	2,820	6,347
196.52	2,479	4,996	197.04	2,827	6,375
196.53	2,486	5,021	197.05	2,835	6,403
196.54	2,493	5,045	197.06	2,842	6,432
196.55	2,499	5,070	197.07	2,849	6,460
196.56	2,506	5,095	197.08	2,856	6,489
196.57	2,513	5,121	197.09	2,863	6,517
196.58	2,519	5,146	197.10	2,870	6,546
196.59	2,526	5,171	197.11	2,877	6,575
196.60	2,533	5,196	197.12	2,884	6,603
196.61	2,539	5,222	197.13	2,891	6,632
196.62	2,546	5,247	197.14	2,898	6,661
196.63	2,553	5,272	197.15	2,906	6,690

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.16	2,913	6,719
197.17	2,920	6,749
197.18	2,927	6,778
197.19	2,934	6,807
197.20	2,941	6,836
197.21	2,948	6,866
197.22	2,955	6,895
197.23	2,962	6,925
197.24	2,969	6,955
197.25	2,977	6,984
197.26	2,984	7,014
197.27	2,991	7,044
197.28	2,998	7,074
197.29	3,005	7,104
197.30	3,012	7,134
197.31	3,019	7,164
197.32	3,026	7,195
197.33	3,033	7,225
197.34	3,040	7,255
197.35	3,047	7,286
197.36	3,055	7,316
197.37	3,062	7,347
197.38	3,069	7,377
197.39	3,076	7,408
197.40	3,083	7,439
197.41	3,090	7,470
197.42	3,097	7,501
197.43	3,104	7,532
197.44	3,111	7,563
197.45	3,118	7,594
197.46	3,126	7,625
197.47	3,133	7,656
197.48	3,140	7,688
197.49	3,147	7,719
197.50	**3,154**	**7,751**

Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.80% Impervious, Inflow Depth = 2.08" for Current 2 yr event
Inflow = 5.29 cfs @ 12.17 hrs, Volume= 0.441 af
Outflow = 2.26 cfs @ 12.38 hrs, Volume= 0.327 af, Atten= 57%, Lag= 12.3 min
Primary = 2.26 cfs @ 12.38 hrs, Volume= 0.327 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 201.69' @ 12.38 hrs Surf.Area= 5,377 sf Storage= 8,337 cf

Plug-Flow detention time= 195.6 min calculated for 0.327 af (74% of inflow)
Center-of-Mass det. time= 99.6 min (890.2 - 790.6)

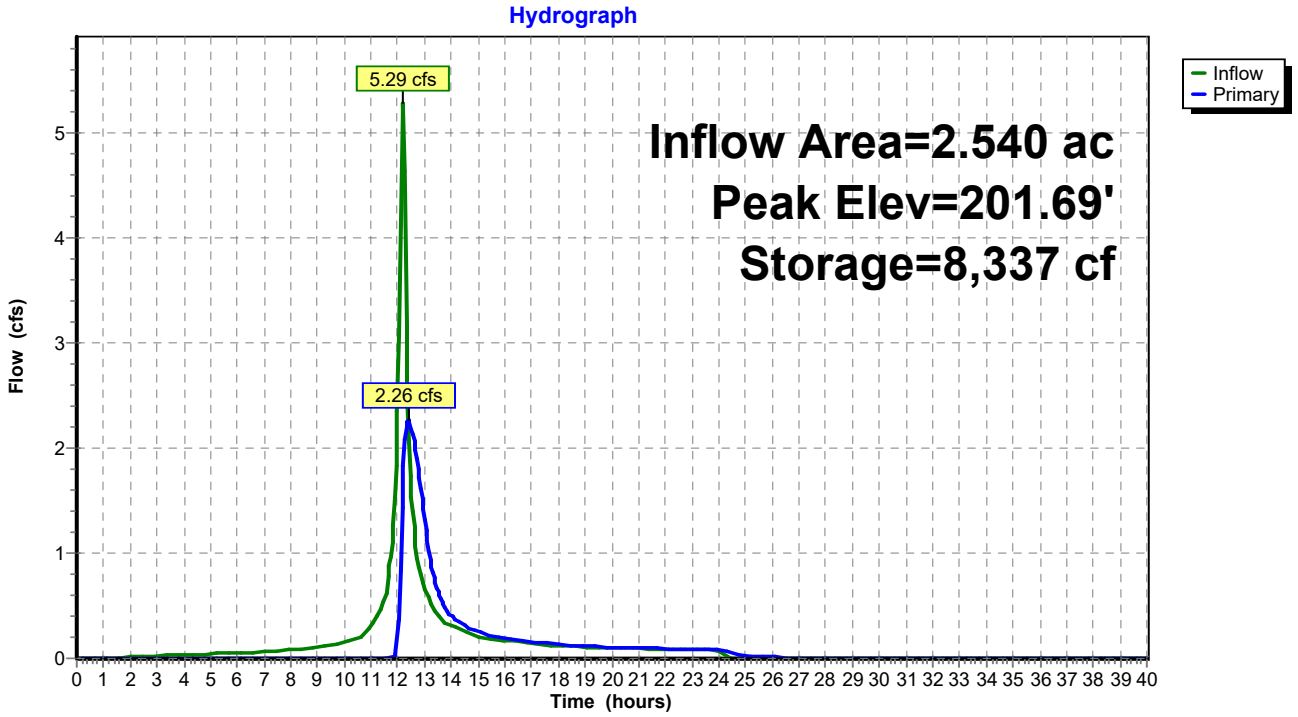
Volume	Invert	Avail.Storage	Storage Description
#1	199.75'	33,011 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.75	0	0	0
200.00	4,035	504	504
201.00	4,695	4,365	4,869
202.00	5,685	5,190	10,059
203.00	6,015	5,850	15,909
204.00	6,676	6,346	22,255
205.00	7,336	7,006	29,261
205.50	7,666	3,751	33,011

Device	Routing	Invert	Outlet Devices
#1	Primary	198.75'	**18.0" Round Culvert** L= 122.0' Ke= 0.500 Inlet / Outlet Invert= 198.75' / 198.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.02'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.43'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.26 cfs @ 12.38 hrs HW=201.69' (Free Discharge)
- **1=Culvert** (Passes 2.26 cfs of 10.86 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.26 cfs @ 3.39 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-53: Basin #53



Stage-Discharge for Pond B-53: Basin #53

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.75	0.00	200.27	0.00	200.79	0.00	201.31	1.00
199.76	0.00	200.28	0.00	200.80	0.00	201.32	1.05
199.77	0.00	200.29	0.00	200.81	0.00	201.33	1.11
199.78	0.00	200.30	0.00	200.82	0.00	201.34	1.16
199.79	0.00	200.31	0.00	200.83	0.00	201.35	1.22
199.80	0.00	200.32	0.00	200.84	0.00	201.36	1.27
199.81	0.00	200.33	0.00	200.85	0.00	201.37	1.32
199.82	0.00	200.34	0.00	200.86	0.00	201.38	1.36
199.83	0.00	200.35	0.00	200.87	0.00	201.39	1.40
199.84	0.00	200.36	0.00	200.88	0.00	201.40	1.44
199.85	0.00	200.37	0.00	200.89	0.00	201.41	1.48
199.86	0.00	200.38	0.00	200.90	0.00	201.42	1.51
199.87	0.00	200.39	0.00	200.91	0.00	201.43	1.55
199.88	0.00	200.40	0.00	200.92	0.00	201.44	1.58
199.89	0.00	200.41	0.00	200.93	0.00	201.45	1.62
199.90	0.00	200.42	0.00	200.94	0.00	201.46	1.65
199.91	0.00	200.43	0.00	200.95	0.00	201.47	1.68
199.92	0.00	200.44	0.00	200.96	0.00	201.48	1.71
199.93	0.00	200.45	0.00	200.97	0.00	201.49	1.74
199.94	0.00	200.46	0.00	200.98	0.00	201.50	1.77
199.95	0.00	200.47	0.00	200.99	0.00	201.51	1.80
199.96	0.00	200.48	0.00	201.00	0.00	201.52	1.83
199.97	0.00	200.49	0.00	201.01	0.00	201.53	1.86
199.98	0.00	200.50	0.00	201.02	0.00	201.54	1.89
199.99	0.00	200.51	0.00	201.03	0.01	201.55	1.92
200.00	0.00	200.52	0.00	201.04	0.02	201.56	1.94
200.01	0.00	200.53	0.00	201.05	0.03	201.57	1.97
200.02	0.00	200.54	0.00	201.06	0.05	201.58	2.00
200.03	0.00	200.55	0.00	201.07	0.07	201.59	2.02
200.04	0.00	200.56	0.00	201.08	0.09	201.60	2.05
200.05	0.00	200.57	0.00	201.09	0.12	201.61	2.07
200.06	0.00	200.58	0.00	201.10	0.15	201.62	2.10
200.07	0.00	200.59	0.00	201.11	0.17	201.63	2.12
200.08	0.00	200.60	0.00	201.12	0.20	201.64	2.15
200.09	0.00	200.61	0.00	201.13	0.23	201.65	2.17
200.10	0.00	200.62	0.00	201.14	0.27	201.66	2.20
200.11	0.00	200.63	0.00	201.15	0.30	201.67	2.22
200.12	0.00	200.64	0.00	201.16	0.34	201.68	2.24
200.13	0.00	200.65	0.00	201.17	0.37	201.69	2.27
200.14	0.00	200.66	0.00	201.18	0.41	201.70	2.29
200.15	0.00	200.67	0.00	201.19	0.45	201.71	2.31
200.16	0.00	200.68	0.00	201.20	0.49	201.72	2.33
200.17	0.00	200.69	0.00	201.21	0.53	201.73	2.36
200.18	0.00	200.70	0.00	201.22	0.57	201.74	2.38
200.19	0.00	200.71	0.00	201.23	0.62	201.75	2.40
200.20	0.00	200.72	0.00	201.24	0.66	201.76	2.42
200.21	0.00	200.73	0.00	201.25	0.71	201.77	2.44
200.22	0.00	200.74	0.00	201.26	0.75	201.78	2.46
200.23	0.00	200.75	0.00	201.27	0.80	201.79	2.49
200.24	0.00	200.76	0.00	201.28	0.85	201.80	2.51
200.25	0.00	200.77	0.00	201.29	0.90	201.81	2.53
200.26	0.00	200.78	0.00	201.30	0.95	201.82	2.55

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.83	2.57	202.35	7.19	202.87	13.48	203.39	14.48
201.84	2.59	202.36	7.33	202.88	13.50	203.40	14.50
201.85	2.61	202.37	7.48	202.89	13.52	203.41	14.52
201.86	2.63	202.38	7.62	202.90	13.54	203.42	14.54
201.87	2.65	202.39	7.76	202.91	13.56	203.43	14.55
201.88	2.67	202.40	7.91	202.92	13.58	203.44	14.57
201.89	2.69	202.41	8.06	202.93	13.60	203.45	14.59
201.90	2.70	202.42	8.20	202.94	13.62	203.46	14.61
201.91	2.72	202.43	8.35	202.95	13.64	203.47	14.63
201.92	2.76	202.44	8.50	202.96	13.66	203.48	14.65
201.93	2.80	202.45	8.66	202.97	13.68	203.49	14.66
201.94	2.85	202.46	8.81	202.98	13.70	203.50	14.68
201.95	2.90	202.47	8.96	202.99	13.72	203.51	14.70
201.96	2.96	202.48	9.12	203.00	13.74	203.52	14.72
201.97	3.03	202.49	9.27	203.01	13.75	203.53	14.74
201.98	3.10	202.50	9.43	203.02	13.77	203.54	14.76
201.99	3.17	202.51	9.59	203.03	13.79	203.55	14.77
202.00	3.24	202.52	9.75	203.04	13.81	203.56	14.79
202.01	3.32	202.53	9.91	203.05	13.83	203.57	14.81
202.02	3.40	202.54	10.07	203.06	13.85	203.58	14.83
202.03	3.48	202.55	10.23	203.07	13.87	203.59	14.85
202.04	3.57	202.56	10.39	203.08	13.89	203.60	14.87
202.05	3.66	202.57	10.56	203.09	13.91	203.61	14.88
202.06	3.75	202.58	10.72	203.10	13.93	203.62	14.90
202.07	3.84	202.59	10.89	203.11	13.95	203.63	14.92
202.08	3.94	202.60	11.05	203.12	13.97	203.64	14.94
202.09	4.04	202.61	11.22	203.13	13.99	203.65	14.96
202.10	4.14	202.62	11.39	203.14	14.01	203.66	14.97
202.11	4.24	202.63	11.56	203.15	14.03	203.67	14.99
202.12	4.34	202.64	11.73	203.16	14.05	203.68	15.01
202.13	4.45	202.65	11.90	203.17	14.06	203.69	15.03
202.14	4.56	202.66	12.07	203.18	14.08	203.70	15.05
202.15	4.67	202.67	12.24	203.19	14.10	203.71	15.06
202.16	4.78	202.68	12.42	203.20	14.12	203.72	15.08
202.17	4.89	202.69	12.59	203.21	14.14	203.73	15.10
202.18	5.01	202.70	12.77	203.22	14.16	203.74	15.12
202.19	5.12	202.71	12.94	203.23	14.18	203.75	15.14
202.20	5.24	202.72	13.12	203.24	14.20	203.76	15.15
202.21	5.36	202.73	13.19	203.25	14.22	203.77	15.17
202.22	5.48	202.74	13.22	203.26	14.24	203.78	15.19
202.23	5.61	202.75	13.24	203.27	14.25	203.79	15.21
202.24	5.73	202.76	13.26	203.28	14.27	203.80	15.22
202.25	5.86	202.77	13.28	203.29	14.29	203.81	15.24
202.26	5.98	202.78	13.30	203.30	14.31	203.82	15.26
202.27	6.11	202.79	13.32	203.31	14.33	203.83	15.28
202.28	6.24	202.80	13.34	203.32	14.35	203.84	15.29
202.29	6.37	202.81	13.36	203.33	14.37	203.85	15.31
202.30	6.51	202.82	13.38	203.34	14.39	203.86	15.33
202.31	6.64	202.83	13.40	203.35	14.41	203.87	15.35
202.32	6.78	202.84	13.42	203.36	14.42	203.88	15.36
202.33	6.91	202.85	13.44	203.37	14.44	203.89	15.38
202.34	7.05	202.86	13.46	203.38	14.46	203.90	15.40

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.91	15.42	204.43	16.30	204.95	67.49	205.47	166.93
203.92	15.43	204.44	16.43	204.96	69.18	205.48	169.11
203.93	15.45	204.45	16.67	204.97	70.91	205.49	171.30
203.94	15.47	204.46	16.96	204.98	72.66	205.50	**173.51**
203.95	15.49	204.47	17.30	204.99	74.44		
203.96	15.50	204.48	17.69	205.00	76.24		
203.97	15.52	204.49	18.12	205.01	78.07		
203.98	15.54	204.50	18.59	205.02	79.93		
203.99	15.56	204.51	19.09	205.03	81.81		
204.00	15.57	204.52	19.62	205.04	83.46		
204.01	15.59	204.53	20.18	205.05	85.11		
204.02	15.61	204.54	20.77	205.06	86.78		
204.03	15.63	204.55	21.39	205.07	88.46		
204.04	15.64	204.56	22.03	205.08	90.16		
204.05	15.66	204.57	22.70	205.09	91.87		
204.06	15.68	204.58	23.39	205.10	93.59		
204.07	15.69	204.59	24.11	205.11	95.33		
204.08	15.71	204.60	24.85	205.12	97.08		
204.09	15.73	204.61	25.61	205.13	98.84		
204.10	15.75	204.62	26.39	205.14	100.61		
204.11	15.76	204.63	27.19	205.15	102.40		
204.12	15.78	204.64	28.06	205.16	104.20		
204.13	15.80	204.65	28.94	205.17	106.01		
204.14	15.81	204.66	29.86	205.18	107.83		
204.15	15.83	204.67	30.80	205.19	109.67		
204.16	15.85	204.68	31.76	205.20	111.52		
204.17	15.87	204.69	32.75	205.21	113.38		
204.18	15.88	204.70	33.77	205.22	115.25		
204.19	15.90	204.71	34.81	205.23	117.14		
204.20	15.92	204.72	35.87	205.24	119.07		
204.21	15.93	204.73	36.96	205.25	121.02		
204.22	15.95	204.74	38.07	205.26	122.98		
204.23	15.97	204.75	39.21	205.27	124.96		
204.24	15.98	204.76	40.37	205.28	126.95		
204.25	16.00	204.77	41.56	205.29	128.95		
204.26	16.02	204.78	42.77	205.30	130.96		
204.27	16.03	204.79	44.00	205.31	132.99		
204.28	16.05	204.80	45.26	205.32	135.03		
204.29	16.07	204.81	46.54	205.33	137.08		
204.30	16.08	204.82	47.85	205.34	139.15		
204.31	16.10	204.83	49.18	205.35	141.22		
204.32	16.12	204.84	50.56	205.36	143.32		
204.33	16.13	204.85	51.97	205.37	145.42		
204.34	16.15	204.86	53.40	205.38	147.54		
204.35	16.17	204.87	54.86	205.39	149.67		
204.36	16.19	204.88	56.35	205.40	151.81		
204.37	16.20	204.89	57.86	205.41	153.96		
204.38	16.22	204.90	59.40	205.42	156.13		
204.39	16.23	204.91	60.96	205.43	158.31		
204.40	16.25	204.92	62.56	205.44	160.45		
204.41	16.27	204.93	64.17	205.45	162.60		
204.42	16.28	204.94	65.82	205.46	164.76		

Stage-Area-Storage for Pond B-53: Basin #53

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.75	0	0
199.76	161	1
199.77	323	3
199.78	484	7
199.79	646	13
199.80	807	20
199.81	968	29
199.82	1,130	40
199.83	1,291	52
199.84	1,453	65
199.85	1,614	81
199.86	1,775	98
199.87	1,937	116
199.88	2,098	136
199.89	2,260	158
199.90	2,421	182
199.91	2,582	207
199.92	2,744	233
199.93	2,905	261
199.94	3,067	291
199.95	3,228	323
199.96	3,389	356
199.97	3,551	391
199.98	3,712	427
199.99	3,874	465
200.00	4,035	504
200.01	4,042	545
200.02	4,048	585
200.03	4,055	626
200.04	4,061	666
200.05	4,068	707
200.06	4,075	748
200.07	4,081	788
200.08	4,088	829
200.09	4,094	870
200.10	4,101	911
200.11	4,108	952
200.12	4,114	993
200.13	4,121	1,035
200.14	4,127	1,076
200.15	4,134	1,117
200.16	4,141	1,158
200.17	4,147	1,200
200.18	4,154	1,241
200.19	4,160	1,283
200.20	4,167	1,325
200.21	4,174	1,366
200.22	4,180	1,408
200.23	4,187	1,450
200.24	4,193	1,492
200.25	4,200	1,534
200.26	4,207	1,576
200.27	4,213	1,618
200.28	4,220	1,660
200.29	4,226	1,702
200.30	4,233	1,745
200.31	4,240	1,787
200.32	4,246	1,829
200.33	4,253	1,872
200.34	4,259	1,914
200.35	4,266	1,957
200.36	4,273	2,000
200.37	4,279	2,043
200.38	4,286	2,085
200.39	4,292	2,128
200.40	4,299	2,171
200.41	4,306	2,214
200.42	4,312	2,257
200.43	4,319	2,300
200.44	4,325	2,344
200.45	4,332	2,387
200.46	4,339	2,430
200.47	4,345	2,474
200.48	4,352	2,517
200.49	4,358	2,561
200.50	4,365	2,604
200.51	4,372	2,648
200.52	4,378	2,692
200.53	4,385	2,736
200.54	4,391	2,780
200.55	4,398	2,823
200.56	4,405	2,867
200.57	4,411	2,912
200.58	4,418	2,956
200.59	4,424	3,000
200.60	4,431	3,044
200.61	4,438	3,089
200.62	4,444	3,133
200.63	4,451	3,177
200.64	4,457	3,222
200.65	4,464	3,267
200.66	4,471	3,311
200.67	4,477	3,356
200.68	4,484	3,401
200.69	4,490	3,446
200.70	4,497	3,491
200.71	4,504	3,536
200.72	4,510	3,581
200.73	4,517	3,626
200.74	4,523	3,671
200.75	4,530	3,716
200.76	4,537	3,762
200.77	4,543	3,807
200.78	4,550	3,852

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.79	4,556	3,898	201.31	5,002	6,372
200.80	4,563	3,944	201.32	5,012	6,422
200.81	4,570	3,989	201.33	5,022	6,473
200.82	4,576	4,035	201.34	5,032	6,523
200.83	4,583	4,081	201.35	5,041	6,573
200.84	4,589	4,127	201.36	5,051	6,624
200.85	4,596	4,173	201.37	5,061	6,674
200.86	4,603	4,219	201.38	5,071	6,725
200.87	4,609	4,265	201.39	5,081	6,776
200.88	4,616	4,311	201.40	5,091	6,827
200.89	4,622	4,357	201.41	5,101	6,878
200.90	4,629	4,403	201.42	5,111	6,929
200.91	4,636	4,449	201.43	5,121	6,980
200.92	4,642	4,496	201.44	5,131	7,031
200.93	4,649	4,542	201.45	5,140	7,082
200.94	4,655	4,589	201.46	5,150	7,134
200.95	4,662	4,635	201.47	5,160	7,185
200.96	4,669	4,682	201.48	5,170	7,237
200.97	4,675	4,729	201.49	5,180	7,289
200.98	4,682	4,776	201.50	5,190	7,341
200.99	4,688	4,822	201.51	5,200	7,393
201.00	4,695	4,869	201.52	5,210	7,445
201.01	4,705	4,916	201.53	5,220	7,497
201.02	4,715	4,963	201.54	5,230	7,549
201.03	4,725	5,011	201.55	5,240	7,601
201.04	4,735	5,058	201.56	5,249	7,654
201.05	4,745	5,105	201.57	5,259	7,706
201.06	4,754	5,153	201.58	5,269	7,759
201.07	4,764	5,200	201.59	5,279	7,812
201.08	4,774	5,248	201.60	5,289	7,865
201.09	4,784	5,296	201.61	5,299	7,918
201.10	4,794	5,344	201.62	5,309	7,971
201.11	4,804	5,392	201.63	5,319	8,024
201.12	4,814	5,440	201.64	5,329	8,077
201.13	4,824	5,488	201.65	5,339	8,130
201.14	4,834	5,536	201.66	5,348	8,184
201.15	4,844	5,585	201.67	5,358	8,237
201.16	4,853	5,633	201.68	5,368	8,291
201.17	4,863	5,682	201.69	5,378	8,345
201.18	4,873	5,731	201.70	5,388	8,398
201.19	4,883	5,779	201.71	5,398	8,452
201.20	4,893	5,828	201.72	5,408	8,506
201.21	4,903	5,877	201.73	5,418	8,561
201.22	4,913	5,926	201.74	5,428	8,615
201.23	4,923	5,975	201.75	5,438	8,669
201.24	4,933	6,025	201.76	5,447	8,723
201.25	4,943	6,074	201.77	5,457	8,778
201.26	4,952	6,124	201.78	5,467	8,833
201.27	4,962	6,173	201.79	5,477	8,887
201.28	4,972	6,223	201.80	5,487	8,942
201.29	4,982	6,273	201.81	5,497	8,997
201.30	4,992	6,322	201.82	5,507	9,052

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.83	5,517	9,107	202.35	5,800	12,069
201.84	5,527	9,162	202.36	5,804	12,127
201.85	5,536	9,218	202.37	5,807	12,185
201.86	5,546	9,273	202.38	5,810	12,244
201.87	5,556	9,329	202.39	5,814	12,302
201.88	5,566	9,384	202.40	5,817	12,360
201.89	5,576	9,440	202.41	5,820	12,418
201.90	5,586	9,496	202.42	5,824	12,476
201.91	5,596	9,552	202.43	5,827	12,534
201.92	5,606	9,608	202.44	5,830	12,593
201.93	5,616	9,664	202.45	5,833	12,651
201.94	5,626	9,720	202.46	5,837	12,709
201.95	5,635	9,776	202.47	5,840	12,768
201.96	5,645	9,833	202.48	5,843	12,826
201.97	5,655	9,889	202.49	5,847	12,885
201.98	5,665	9,946	202.50	5,850	12,943
201.99	5,675	10,003	202.51	5,853	13,002
202.00	5,685	10,059	202.52	5,857	13,060
202.01	5,688	10,116	202.53	5,860	13,119
202.02	5,692	10,173	202.54	5,863	13,177
202.03	5,695	10,230	202.55	5,867	13,236
202.04	5,698	10,287	202.56	5,870	13,295
202.05	5,702	10,344	202.57	5,873	13,353
202.06	5,705	10,401	202.58	5,876	13,412
202.07	5,708	10,458	202.59	5,880	13,471
202.08	5,711	10,515	202.60	5,883	13,530
202.09	5,715	10,572	202.61	5,886	13,589
202.10	5,718	10,630	202.62	5,890	13,648
202.11	5,721	10,687	202.63	5,893	13,706
202.12	5,725	10,744	202.64	5,896	13,765
202.13	5,728	10,801	202.65	5,900	13,824
202.14	5,731	10,859	202.66	5,903	13,883
202.15	5,735	10,916	202.67	5,906	13,942
202.16	5,738	10,973	202.68	5,909	14,001
202.17	5,741	11,031	202.69	5,913	14,061
202.18	5,744	11,088	202.70	5,916	14,120
202.19	5,748	11,145	202.71	5,919	14,179
202.20	5,751	11,203	202.72	5,923	14,238
202.21	5,754	11,261	202.73	5,926	14,297
202.22	5,758	11,318	202.74	5,929	14,357
202.23	5,761	11,376	202.75	5,933	14,416
202.24	5,764	11,433	202.76	5,936	14,475
202.25	5,768	11,491	202.77	5,939	14,535
202.26	5,771	11,549	202.78	5,942	14,594
202.27	5,774	11,606	202.79	5,946	14,654
202.28	5,777	11,664	202.80	5,949	14,713
202.29	5,781	11,722	202.81	5,952	14,772
202.30	5,784	11,780	202.82	5,956	14,832
202.31	5,787	11,838	202.83	5,959	14,892
202.32	5,791	11,895	202.84	5,962	14,951
202.33	5,794	11,953	202.85	5,965	15,011
202.34	5,797	12,011	202.86	5,969	15,071

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.87	5,972	15,130	203.39	6,273	18,305
202.88	5,975	15,190	203.40	6,279	18,368
202.89	5,979	15,250	203.41	6,286	18,431
202.90	5,982	15,310	203.42	6,293	18,494
202.91	5,985	15,369	203.43	6,299	18,557
202.92	5,989	15,429	203.44	6,306	18,620
202.93	5,992	15,489	203.45	6,312	18,683
202.94	5,995	15,549	203.46	6,319	18,746
202.95	5,998	15,609	203.47	6,326	18,809
202.96	6,002	15,669	203.48	6,332	18,873
202.97	6,005	15,729	203.49	6,339	18,936
202.98	6,008	15,789	203.50	6,346	19,000
202.99	6,012	15,849	203.51	6,352	19,063
203.00	6,015	15,909	203.52	6,359	19,127
203.01	6,022	15,970	203.53	6,365	19,190
203.02	6,028	16,030	203.54	6,372	19,254
203.03	6,035	16,090	203.55	6,379	19,318
203.04	6,041	16,151	203.56	6,385	19,381
203.05	6,048	16,211	203.57	6,392	19,445
203.06	6,055	16,271	203.58	6,398	19,509
203.07	6,061	16,332	203.59	6,405	19,573
203.08	6,068	16,393	203.60	6,412	19,637
203.09	6,074	16,453	203.61	6,418	19,702
203.10	6,081	16,514	203.62	6,425	19,766
203.11	6,088	16,575	203.63	6,431	19,830
203.12	6,094	16,636	203.64	6,438	19,894
203.13	6,101	16,697	203.65	6,445	19,959
203.14	6,108	16,758	203.66	6,451	20,023
203.15	6,114	16,819	203.67	6,458	20,088
203.16	6,121	16,880	203.68	6,464	20,152
203.17	6,127	16,941	203.69	6,471	20,217
203.18	6,134	17,003	203.70	6,478	20,282
203.19	6,141	17,064	203.71	6,484	20,347
203.20	6,147	17,126	203.72	6,491	20,412
203.21	6,154	17,187	203.73	6,498	20,476
203.22	6,160	17,249	203.74	6,504	20,541
203.23	6,167	17,310	203.75	6,511	20,607
203.24	6,174	17,372	203.76	6,517	20,672
203.25	6,180	17,434	203.77	6,524	20,737
203.26	6,187	17,496	203.78	6,531	20,802
203.27	6,193	17,558	203.79	6,537	20,867
203.28	6,200	17,619	203.80	6,544	20,933
203.29	6,207	17,682	203.81	6,550	20,998
203.30	6,213	17,744	203.82	6,557	21,064
203.31	6,220	17,806	203.83	6,564	21,130
203.32	6,227	17,868	203.84	6,570	21,195
203.33	6,233	17,930	203.85	6,577	21,261
203.34	6,240	17,993	203.86	6,583	21,327
203.35	6,246	18,055	203.87	6,590	21,393
203.36	6,253	18,118	203.88	6,597	21,459
203.37	6,260	18,180	203.89	6,603	21,525
203.38	6,266	18,243	203.90	6,610	21,591

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.91	6,617	21,657	204.43	6,960	25,187
203.92	6,623	21,723	204.44	6,966	25,256
203.93	6,630	21,789	204.45	6,973	25,326
203.94	6,636	21,856	204.46	6,980	25,396
203.95	6,643	21,922	204.47	6,986	25,465
203.96	6,650	21,988	204.48	6,993	25,535
203.97	6,656	22,055	204.49	6,999	25,605
203.98	6,663	22,121	204.50	7,006	25,675
203.99	6,669	22,188	204.51	7,013	25,745
204.00	6,676	22,255	204.52	7,019	25,816
204.01	6,683	22,322	204.53	7,026	25,886
204.02	6,689	22,389	204.54	7,032	25,956
204.03	6,696	22,455	204.55	7,039	26,027
204.04	6,702	22,522	204.56	7,046	26,097
204.05	6,709	22,590	204.57	7,052	26,167
204.06	6,716	22,657	204.58	7,059	26,238
204.07	6,722	22,724	204.59	7,065	26,309
204.08	6,729	22,791	204.60	7,072	26,379
204.09	6,735	22,858	204.61	7,079	26,450
204.10	6,742	22,926	204.62	7,085	26,521
204.11	6,749	22,993	204.63	7,092	26,592
204.12	6,755	23,061	204.64	7,098	26,663
204.13	6,762	23,128	204.65	7,105	26,734
204.14	6,768	23,196	204.66	7,112	26,805
204.15	6,775	23,264	204.67	7,118	26,876
204.16	6,782	23,331	204.68	7,125	26,947
204.17	6,788	23,399	204.69	7,131	27,018
204.18	6,795	23,467	204.70	7,138	27,090
204.19	6,801	23,535	204.71	7,145	27,161
204.20	6,808	23,603	204.72	7,151	27,233
204.21	6,815	23,671	204.73	7,158	27,304
204.22	6,821	23,740	204.74	7,164	27,376
204.23	6,828	23,808	204.75	7,171	27,448
204.24	6,834	23,876	204.76	7,178	27,519
204.25	6,841	23,945	204.77	7,184	27,591
204.26	6,848	24,013	204.78	7,191	27,663
204.27	6,854	24,081	204.79	7,197	27,735
204.28	6,861	24,150	204.80	7,204	27,807
204.29	6,867	24,219	204.81	7,211	27,879
204.30	6,874	24,287	204.82	7,217	27,951
204.31	6,881	24,356	204.83	7,224	28,023
204.32	6,887	24,425	204.84	7,230	28,096
204.33	6,894	24,494	204.85	7,237	28,168
204.34	6,900	24,563	204.86	7,244	28,240
204.35	6,907	24,632	204.87	7,250	28,313
204.36	6,914	24,701	204.88	7,257	28,385
204.37	6,920	24,770	204.89	7,263	28,458
204.38	6,927	24,839	204.90	7,270	28,531
204.39	6,933	24,909	204.91	7,277	28,603
204.40	6,940	24,978	204.92	7,283	28,676
204.41	6,947	25,048	204.93	7,290	28,749
204.42	6,953	25,117	204.94	7,296	28,822

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.95	7,303	28,895
204.96	7,310	28,968
204.97	7,316	29,041
204.98	7,323	29,114
204.99	7,329	29,188
205.00	7,336	29,261
205.01	7,343	29,334
205.02	7,349	29,408
205.03	7,356	29,481
205.04	7,362	29,555
205.05	7,369	29,629
205.06	7,376	29,702
205.07	7,382	29,776
205.08	7,389	29,850
205.09	7,395	29,924
205.10	7,402	29,998
205.11	7,409	30,072
205.12	7,415	30,146
205.13	7,422	30,220
205.14	7,428	30,294
205.15	7,435	30,369
205.16	7,442	30,443
205.17	7,448	30,518
205.18	7,455	30,592
205.19	7,461	30,667
205.20	7,468	30,741
205.21	7,475	30,816
205.22	7,481	30,891
205.23	7,488	30,966
205.24	7,494	31,041
205.25	7,501	31,116
205.26	7,508	31,191
205.27	7,514	31,266
205.28	7,521	31,341
205.29	7,527	31,416
205.30	7,534	31,491
205.31	7,541	31,567
205.32	7,547	31,642
205.33	7,554	31,718
205.34	7,560	31,793
205.35	7,567	31,869
205.36	7,574	31,945
205.37	7,580	32,020
205.38	7,587	32,096
205.39	7,593	32,172
205.40	7,600	32,248
205.41	7,607	32,324
205.42	7,613	32,400
205.43	7,620	32,476
205.44	7,626	32,553
205.45	7,633	32,629
205.46	7,640	32,705
205.47	7,646	32,782
205.48	7,653	32,858
205.49	7,659	32,935
205.50	**7,666**	**33,011**

Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.47% Impervious, Inflow Depth = 2.33" for Current 2 yr event
Inflow = 5.94 cfs @ 12.17 hrs, Volume= 0.500 af
Outflow = 2.49 cfs @ 12.38 hrs, Volume= 0.359 af, Atten= 58%, Lag= 12.5 min
Primary = 2.49 cfs @ 12.38 hrs, Volume= 0.359 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 202.17' @ 12.38 hrs Surf.Area= 5,212 sf Storage= 9,966 cf

Plug-Flow detention time= 203.7 min calculated for 0.359 af (72% of inflow)
Center-of-Mass det. time= 105.6 min (886.4 - 780.7)

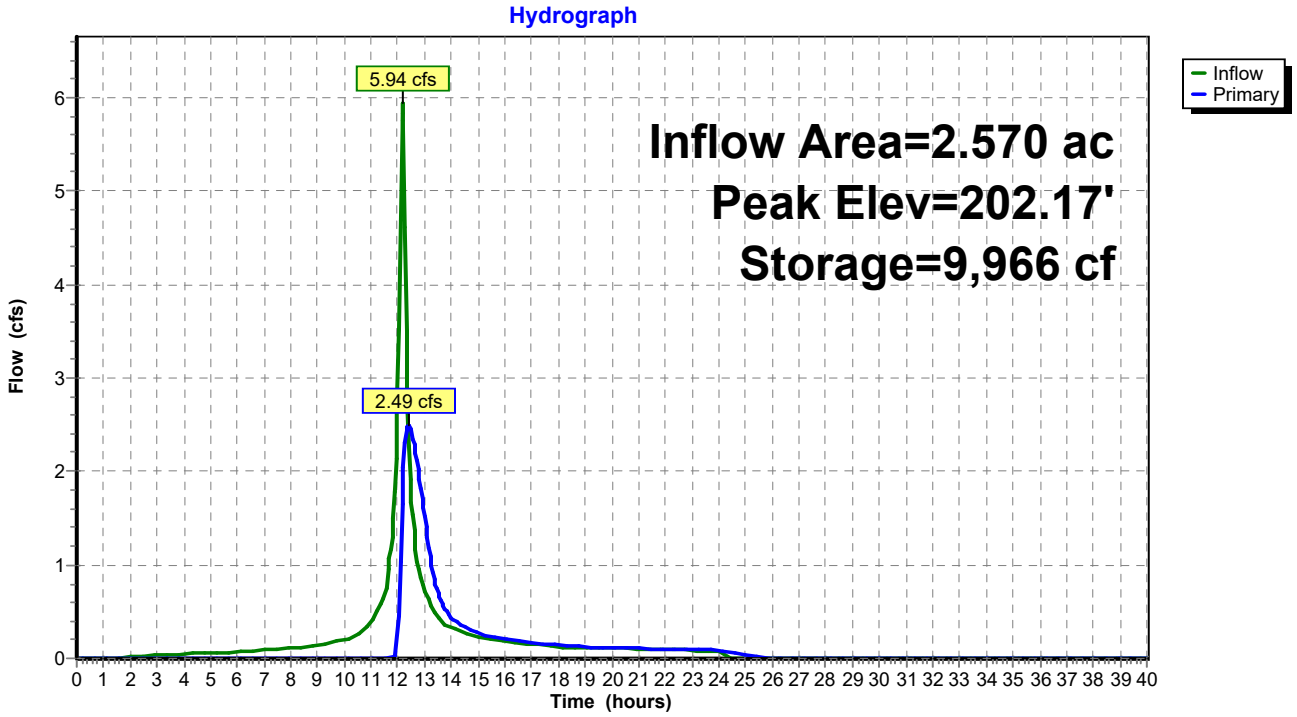
Volume	Invert	Avail.Storage	Storage Description
#1	199.89'	30,982 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.89	0	0	0
200.00	3,780	208	208
201.00	4,440	4,110	4,318
202.00	5,100	4,770	9,088
203.00	5,760	5,430	14,518
204.00	6,421	6,091	20,608
205.00	7,081	6,751	27,359
205.50	7,411	3,623	30,982

Device	Routing	Invert	Outlet Devices
#1	Primary	198.89'	**18.0" Round Culvert** L= 178.0' Ke= 0.500 Inlet / Outlet Invert= 198.89' / 198.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.40'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	202.42'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.47'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.48 cfs @ 12.38 hrs HW=202.17' (Free Discharge)
- **1=Culvert** (Passes 2.48 cfs of 10.62 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.48 cfs @ 3.72 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-54: Basin #54



Stage-Discharge for Pond B-54: Basin #54

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.89	0.00	200.41	0.00	200.93	0.00	201.45	0.07
199.90	0.00	200.42	0.00	200.94	0.00	201.46	0.09
199.91	0.00	200.43	0.00	200.95	0.00	201.47	0.12
199.92	0.00	200.44	0.00	200.96	0.00	201.48	0.15
199.93	0.00	200.45	0.00	200.97	0.00	201.49	0.17
199.94	0.00	200.46	0.00	200.98	0.00	201.50	0.20
199.95	0.00	200.47	0.00	200.99	0.00	201.51	0.23
199.96	0.00	200.48	0.00	201.00	0.00	201.52	0.27
199.97	0.00	200.49	0.00	201.01	0.00	201.53	0.30
199.98	0.00	200.50	0.00	201.02	0.00	201.54	0.34
199.99	0.00	200.51	0.00	201.03	0.00	201.55	0.37
200.00	0.00	200.52	0.00	201.04	0.00	201.56	0.41
200.01	0.00	200.53	0.00	201.05	0.00	201.57	0.45
200.02	0.00	200.54	0.00	201.06	0.00	201.58	0.49
200.03	0.00	200.55	0.00	201.07	0.00	201.59	0.53
200.04	0.00	200.56	0.00	201.08	0.00	201.60	0.57
200.05	0.00	200.57	0.00	201.09	0.00	201.61	0.62
200.06	0.00	200.58	0.00	201.10	0.00	201.62	0.66
200.07	0.00	200.59	0.00	201.11	0.00	201.63	0.71
200.08	0.00	200.60	0.00	201.12	0.00	201.64	0.75
200.09	0.00	200.61	0.00	201.13	0.00	201.65	0.80
200.10	0.00	200.62	0.00	201.14	0.00	201.66	0.85
200.11	0.00	200.63	0.00	201.15	0.00	201.67	0.90
200.12	0.00	200.64	0.00	201.16	0.00	201.68	0.95
200.13	0.00	200.65	0.00	201.17	0.00	201.69	1.00
200.14	0.00	200.66	0.00	201.18	0.00	201.70	1.05
200.15	0.00	200.67	0.00	201.19	0.00	201.71	1.11
200.16	0.00	200.68	0.00	201.20	0.00	201.72	1.16
200.17	0.00	200.69	0.00	201.21	0.00	201.73	1.22
200.18	0.00	200.70	0.00	201.22	0.00	201.74	1.27
200.19	0.00	200.71	0.00	201.23	0.00	201.75	1.32
200.20	0.00	200.72	0.00	201.24	0.00	201.76	1.36
200.21	0.00	200.73	0.00	201.25	0.00	201.77	1.40
200.22	0.00	200.74	0.00	201.26	0.00	201.78	1.44
200.23	0.00	200.75	0.00	201.27	0.00	201.79	1.48
200.24	0.00	200.76	0.00	201.28	0.00	201.80	1.51
200.25	0.00	200.77	0.00	201.29	0.00	201.81	1.55
200.26	0.00	200.78	0.00	201.30	0.00	201.82	1.58
200.27	0.00	200.79	0.00	201.31	0.00	201.83	1.62
200.28	0.00	200.80	0.00	201.32	0.00	201.84	1.65
200.29	0.00	200.81	0.00	201.33	0.00	201.85	1.68
200.30	0.00	200.82	0.00	201.34	0.00	201.86	1.71
200.31	0.00	200.83	0.00	201.35	0.00	201.87	1.74
200.32	0.00	200.84	0.00	201.36	0.00	201.88	1.77
200.33	0.00	200.85	0.00	201.37	0.00	201.89	1.80
200.34	0.00	200.86	0.00	201.38	0.00	201.90	1.83
200.35	0.00	200.87	0.00	201.39	0.00	201.91	1.86
200.36	0.00	200.88	0.00	201.40	0.00	201.92	1.89
200.37	0.00	200.89	0.00	201.41	0.01	201.93	1.92
200.38	0.00	200.90	0.00	201.42	0.02	201.94	1.94
200.39	0.00	200.91	0.00	201.43	0.03	201.95	1.97
200.40	0.00	200.92	0.00	201.44	0.05	201.96	2.00

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.97	2.02	202.49	3.32	203.01	9.61	203.53	13.06
201.98	2.05	202.50	3.39	203.02	9.76	203.54	13.07
201.99	2.07	202.51	3.47	203.03	9.92	203.55	13.09
202.00	2.10	202.52	3.54	203.04	10.08	203.56	13.10
202.01	2.12	202.53	3.62	203.05	10.24	203.57	13.12
202.02	2.15	202.54	3.70	203.06	10.40	203.58	13.14
202.03	2.17	202.55	3.79	203.07	10.57	203.59	13.15
202.04	2.20	202.56	3.88	203.08	10.73	203.60	13.17
202.05	2.22	202.57	3.97	203.09	10.89	203.61	13.18
202.06	2.24	202.58	4.06	203.10	11.06	203.62	13.20
202.07	2.27	202.59	4.15	203.11	11.22	203.63	13.22
202.08	2.29	202.60	4.25	203.12	11.39	203.64	13.23
202.09	2.31	202.61	4.35	203.13	11.56	203.65	13.25
202.10	2.33	202.62	4.45	203.14	11.73	203.66	13.26
202.11	2.36	202.63	4.55	203.15	11.90	203.67	13.28
202.12	2.38	202.64	4.66	203.16	12.07	203.68	13.30
202.13	2.40	202.65	4.76	203.17	12.24	203.69	13.31
202.14	2.42	202.66	4.87	203.18	12.41	203.70	13.33
202.15	2.44	202.67	4.98	203.19	12.49	203.71	13.34
202.16	2.46	202.68	5.10	203.20	12.51	203.72	13.36
202.17	2.49	202.69	5.21	203.21	12.53	203.73	13.38
202.18	2.51	202.70	5.33	203.22	12.54	203.74	13.39
202.19	2.53	202.71	5.44	203.23	12.56	203.75	13.41
202.20	2.55	202.72	5.56	203.24	12.58	203.76	13.42
202.21	2.57	202.73	5.68	203.25	12.59	203.77	13.44
202.22	2.59	202.74	5.80	203.26	12.61	203.78	13.45
202.23	2.61	202.75	5.93	203.27	12.63	203.79	13.47
202.24	2.63	202.76	6.05	203.28	12.64	203.80	13.49
202.25	2.65	202.77	6.18	203.29	12.66	203.81	13.50
202.26	2.67	202.78	6.31	203.30	12.68	203.82	13.52
202.27	2.69	202.79	6.44	203.31	12.69	203.83	13.53
202.28	2.70	202.80	6.57	203.32	12.71	203.84	13.55
202.29	2.72	202.81	6.70	203.33	12.73	203.85	13.56
202.30	2.74	202.82	6.83	203.34	12.74	203.86	13.58
202.31	2.76	202.83	6.97	203.35	12.76	203.87	13.59
202.32	2.78	202.84	7.11	203.36	12.78	203.88	13.61
202.33	2.80	202.85	7.24	203.37	12.79	203.89	13.63
202.34	2.82	202.86	7.38	203.38	12.81	203.90	13.64
202.35	2.84	202.87	7.52	203.39	12.83	203.91	13.66
202.36	2.85	202.88	7.66	203.40	12.84	203.92	13.67
202.37	2.87	202.89	7.81	203.41	12.86	203.93	13.69
202.38	2.89	202.90	7.95	203.42	12.88	203.94	13.70
202.39	2.91	202.91	8.09	203.43	12.89	203.95	13.72
202.40	2.93	202.92	8.24	203.44	12.91	203.96	13.73
202.41	2.94	202.93	8.39	203.45	12.92	203.97	13.75
202.42	2.96	202.94	8.54	203.46	12.94	203.98	13.76
202.43	2.99	202.95	8.69	203.47	12.96	203.99	13.78
202.44	3.03	202.96	8.84	203.48	12.97	204.00	13.80
202.45	3.08	202.97	8.99	203.49	12.99	204.01	13.81
202.46	3.13	202.98	9.14	203.50	13.01	204.02	13.83
202.47	3.19	202.99	9.30	203.51	13.02	204.03	13.84
202.48	3.26	203.00	9.45	203.52	13.04	204.04	13.86

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
204.05	13.87	204.57	18.36	205.09	83.19
204.06	13.89	204.58	18.95	205.10	84.86
204.07	13.90	204.59	19.56	205.11	86.54
204.08	13.92	204.60	20.20	205.12	88.24
204.09	13.93	204.61	20.87	205.13	89.94
204.10	13.95	204.62	21.56	205.14	91.66
204.11	13.96	204.63	22.27	205.15	93.40
204.12	13.98	204.64	23.01	205.16	95.14
204.13	13.99	204.65	23.77	205.17	96.90
204.14	14.01	204.66	24.55	205.18	98.68
204.15	14.02	204.67	25.35	205.19	100.46
204.16	14.04	204.68	26.21	205.20	102.26
204.17	14.05	204.69	27.10	205.21	104.07
204.18	14.07	204.70	28.01	205.22	105.89
204.19	14.08	204.71	28.95	205.23	107.73
204.20	14.10	204.72	29.91	205.24	109.57
204.21	14.11	204.73	30.90	205.25	111.43
204.22	14.13	204.74	31.91	205.26	113.30
204.23	14.14	204.75	32.95	205.27	115.19
204.24	14.16	204.76	34.01	205.28	117.12
204.25	14.17	204.77	35.10	205.29	119.07
204.26	14.19	204.78	36.21	205.30	121.02
204.27	14.20	204.79	37.34	205.31	123.00
204.28	14.22	204.80	38.50	205.32	124.98
204.29	14.23	204.81	39.69	205.33	126.98
204.30	14.25	204.82	40.90	205.34	129.00
204.31	14.26	204.83	42.13	205.35	131.02
204.32	14.28	204.84	43.39	205.36	133.06
204.33	14.29	204.85	44.67	205.37	135.11
204.34	14.31	204.86	45.97	205.38	137.17
204.35	14.32	204.87	47.30	205.39	139.25
204.36	14.34	204.88	48.68	205.40	141.34
204.37	14.35	204.89	50.09	205.41	143.44
204.38	14.37	204.90	51.52	205.42	145.56
204.39	14.38	204.91	52.98	205.43	147.69
204.40	14.40	204.92	54.46	205.44	149.83
204.41	14.41	204.93	55.97	205.45	151.98
204.42	14.42	204.94	57.51	205.46	154.14
204.43	14.44	204.95	59.07	205.47	156.32
204.44	14.45	204.96	60.66	205.48	158.46
204.45	14.47	204.97	62.27	205.49	160.61
204.46	14.48	204.98	63.92	205.50	**162.77**
204.47	14.50	204.99	65.59		
204.48	14.63	205.00	67.28		
204.49	14.86	205.01	69.00		
204.50	15.15	205.02	70.75		
204.51	15.49	205.03	72.53		
204.52	15.88	205.04	74.33		
204.53	16.31	205.05	76.16		
204.54	16.77	205.06	78.01		
204.55	17.27	205.07	79.90		
204.56	17.80	205.08	81.54		

Stage-Area-Storage for Pond B-54: Basin #54

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.89	0	0	200.41	4,051	1,813
199.90	344	2	200.42	4,057	1,854
199.91	687	7	200.43	4,064	1,894
199.92	1,031	15	200.44	4,070	1,935
199.93	1,375	27	200.45	4,077	1,976
199.94	1,718	43	200.46	4,084	2,017
199.95	2,062	62	200.47	4,090	2,057
199.96	2,405	84	200.48	4,097	2,098
199.97	2,749	110	200.49	4,103	2,139
199.98	3,093	139	200.50	4,110	2,180
199.99	3,436	172	200.51	4,117	2,222
200.00	3,780	208	200.52	4,123	2,263
200.01	3,787	246	200.53	4,130	2,304
200.02	3,793	284	200.54	4,136	2,345
200.03	3,800	322	200.55	4,143	2,387
200.04	3,806	360	200.56	4,150	2,428
200.05	3,813	398	200.57	4,156	2,470
200.06	3,820	436	200.58	4,163	2,511
200.07	3,826	474	200.59	4,169	2,553
200.08	3,833	512	200.60	4,176	2,595
200.09	3,839	551	200.61	4,183	2,636
200.10	3,846	589	200.62	4,189	2,678
200.11	3,853	628	200.63	4,196	2,720
200.12	3,859	666	200.64	4,202	2,762
200.13	3,866	705	200.65	4,209	2,804
200.14	3,872	744	200.66	4,216	2,846
200.15	3,879	782	200.67	4,222	2,889
200.16	3,886	821	200.68	4,229	2,931
200.17	3,892	860	200.69	4,235	2,973
200.18	3,899	899	200.70	4,242	3,016
200.19	3,905	938	200.71	4,249	3,058
200.20	3,912	977	200.72	4,255	3,101
200.21	3,919	1,016	200.73	4,262	3,143
200.22	3,925	1,055	200.74	4,268	3,186
200.23	3,932	1,095	200.75	4,275	3,229
200.24	3,938	1,134	200.76	4,282	3,271
200.25	3,945	1,174	200.77	4,288	3,314
200.26	3,952	1,213	200.78	4,295	3,357
200.27	3,958	1,253	200.79	4,301	3,400
200.28	3,965	1,292	200.80	4,308	3,443
200.29	3,971	1,332	200.81	4,315	3,486
200.30	3,978	1,372	200.82	4,321	3,529
200.31	3,985	1,411	200.83	4,328	3,573
200.32	3,991	1,451	200.84	4,334	3,616
200.33	3,998	1,491	200.85	4,341	3,659
200.34	4,004	1,531	200.86	4,348	3,703
200.35	4,011	1,571	200.87	4,354	3,746
200.36	4,018	1,611	200.88	4,361	3,790
200.37	4,024	1,652	200.89	4,367	3,833
200.38	4,031	1,692	200.90	4,374	3,877
200.39	4,037	1,732	200.91	4,381	3,921
200.40	4,044	1,773	200.92	4,387	3,965

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.93	4,394	4,009	201.45	4,737	6,383
200.94	4,400	4,053	201.46	4,744	6,430
200.95	4,407	4,097	201.47	4,750	6,478
200.96	4,414	4,141	201.48	4,757	6,525
200.97	4,420	4,185	201.49	4,763	6,573
200.98	4,427	4,229	201.50	4,770	6,620
200.99	4,433	4,274	201.51	4,777	6,668
201.00	4,440	4,318	201.52	4,783	6,716
201.01	4,447	4,362	201.53	4,790	6,764
201.02	4,453	4,407	201.54	4,796	6,812
201.03	4,460	4,451	201.55	4,803	6,860
201.04	4,466	4,496	201.56	4,810	6,908
201.05	4,473	4,541	201.57	4,816	6,956
201.06	4,480	4,585	201.58	4,823	7,004
201.07	4,486	4,630	201.59	4,829	7,052
201.08	4,493	4,675	201.60	4,836	7,101
201.09	4,499	4,720	201.61	4,843	7,149
201.10	4,506	4,765	201.62	4,849	7,198
201.11	4,513	4,810	201.63	4,856	7,246
201.12	4,519	4,855	201.64	4,862	7,295
201.13	4,526	4,901	201.65	4,869	7,343
201.14	4,532	4,946	201.66	4,876	7,392
201.15	4,539	4,991	201.67	4,882	7,441
201.16	4,546	5,037	201.68	4,889	7,490
201.17	4,552	5,082	201.69	4,895	7,539
201.18	4,559	5,128	201.70	4,902	7,588
201.19	4,565	5,173	201.71	4,909	7,637
201.20	4,572	5,219	201.72	4,915	7,686
201.21	4,579	5,265	201.73	4,922	7,735
201.22	4,585	5,311	201.74	4,928	7,784
201.23	4,592	5,357	201.75	4,935	7,834
201.24	4,598	5,403	201.76	4,942	7,883
201.25	4,605	5,449	201.77	4,948	7,932
201.26	4,612	5,495	201.78	4,955	7,982
201.27	4,618	5,541	201.79	4,961	8,031
201.28	4,625	5,587	201.80	4,968	8,081
201.29	4,631	5,633	201.81	4,975	8,131
201.30	4,638	5,680	201.82	4,981	8,181
201.31	4,645	5,726	201.83	4,988	8,230
201.32	4,651	5,772	201.84	4,994	8,280
201.33	4,658	5,819	201.85	5,001	8,330
201.34	4,664	5,866	201.86	5,008	8,380
201.35	4,671	5,912	201.87	5,014	8,430
201.36	4,678	5,959	201.88	5,021	8,481
201.37	4,684	6,006	201.89	5,027	8,531
201.38	4,691	6,053	201.90	5,034	8,581
201.39	4,697	6,100	201.91	5,041	8,632
201.40	4,704	6,147	201.92	5,047	8,682
201.41	4,711	6,194	201.93	5,054	8,733
201.42	4,717	6,241	201.94	5,060	8,783
201.43	4,724	6,288	201.95	5,067	8,834
201.44	4,730	6,335	201.96	5,074	8,884

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.97	5,080	8,935	202.49	5,423	11,666
201.98	5,087	8,986	202.50	5,430	11,720
201.99	5,093	9,037	202.51	5,437	11,775
202.00	5,100	9,088	202.52	5,443	11,829
202.01	5,107	9,139	202.53	5,450	11,884
202.02	5,113	9,190	202.54	5,456	11,938
202.03	5,120	9,241	202.55	5,463	11,993
202.04	5,126	9,292	202.56	5,470	12,047
202.05	5,133	9,344	202.57	5,476	12,102
202.06	5,140	9,395	202.58	5,483	12,157
202.07	5,146	9,447	202.59	5,489	12,212
202.08	5,153	9,498	202.60	5,496	12,267
202.09	5,159	9,550	202.61	5,503	12,322
202.10	5,166	9,601	202.62	5,509	12,377
202.11	5,173	9,653	202.63	5,516	12,432
202.12	5,179	9,705	202.64	5,522	12,487
202.13	5,186	9,756	202.65	5,529	12,542
202.14	5,192	9,808	202.66	5,536	12,598
202.15	5,199	9,860	202.67	5,542	12,653
202.16	5,206	9,912	202.68	5,549	12,708
202.17	5,212	9,964	202.69	5,555	12,764
202.18	5,219	10,017	202.70	5,562	12,820
202.19	5,225	10,069	202.71	5,569	12,875
202.20	5,232	10,121	202.72	5,575	12,931
202.21	5,239	10,173	202.73	5,582	12,987
202.22	5,245	10,226	202.74	5,588	13,043
202.23	5,252	10,278	202.75	5,595	13,099
202.24	5,258	10,331	202.76	5,602	13,155
202.25	5,265	10,384	202.77	5,608	13,211
202.26	5,272	10,436	202.78	5,615	13,267
202.27	5,278	10,489	202.79	5,621	13,323
202.28	5,285	10,542	202.80	5,628	13,379
202.29	5,291	10,595	202.81	5,635	13,435
202.30	5,298	10,648	202.82	5,641	13,492
202.31	5,305	10,701	202.83	5,648	13,548
202.32	5,311	10,754	202.84	5,654	13,605
202.33	5,318	10,807	202.85	5,661	13,661
202.34	5,324	10,860	202.86	5,668	13,718
202.35	5,331	10,913	202.87	5,674	13,775
202.36	5,338	10,967	202.88	5,681	13,831
202.37	5,344	11,020	202.89	5,687	13,888
202.38	5,351	11,074	202.90	5,694	13,945
202.39	5,357	11,127	202.91	5,701	14,002
202.40	5,364	11,181	202.92	5,707	14,059
202.41	5,371	11,234	202.93	5,714	14,116
202.42	5,377	11,288	202.94	5,720	14,173
202.43	5,384	11,342	202.95	5,727	14,231
202.44	5,390	11,396	202.96	5,734	14,288
202.45	5,397	11,450	202.97	5,740	14,345
202.46	5,404	11,504	202.98	5,747	14,403
202.47	5,410	11,558	202.99	5,753	14,460
202.48	5,417	11,612	203.00	5,760	14,518

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.01	5,767	14,576	203.53	6,110	17,664
203.02	5,773	14,633	203.54	6,117	17,725
203.03	5,780	14,691	203.55	6,124	17,786
203.04	5,786	14,749	203.56	6,130	17,847
203.05	5,793	14,807	203.57	6,137	17,908
203.06	5,800	14,865	203.58	6,143	17,970
203.07	5,806	14,923	203.59	6,150	18,031
203.08	5,813	14,981	203.60	6,157	18,093
203.09	5,819	15,039	203.61	6,163	18,154
203.10	5,826	15,097	203.62	6,170	18,216
203.11	5,833	15,155	203.63	6,176	18,278
203.12	5,839	15,214	203.64	6,183	18,340
203.13	5,846	15,272	203.65	6,190	18,402
203.14	5,853	15,331	203.66	6,196	18,463
203.15	5,859	15,389	203.67	6,203	18,525
203.16	5,866	15,448	203.68	6,209	18,588
203.17	5,872	15,507	203.69	6,216	18,650
203.18	5,879	15,565	203.70	6,223	18,712
203.19	5,886	15,624	203.71	6,229	18,774
203.20	5,892	15,683	203.72	6,236	18,836
203.21	5,899	15,742	203.73	6,243	18,899
203.22	5,905	15,801	203.74	6,249	18,961
203.23	5,912	15,860	203.75	6,256	19,024
203.24	5,919	15,919	203.76	6,262	19,086
203.25	5,925	15,979	203.77	6,269	19,149
203.26	5,932	16,038	203.78	6,276	19,212
203.27	5,938	16,097	203.79	6,282	19,275
203.28	5,945	16,157	203.80	6,289	19,337
203.29	5,952	16,216	203.81	6,295	19,400
203.30	5,958	16,276	203.82	6,302	19,463
203.31	5,965	16,335	203.83	6,309	19,526
203.32	5,972	16,395	203.84	6,315	19,590
203.33	5,978	16,455	203.85	6,322	19,653
203.34	5,985	16,515	203.86	6,328	19,716
203.35	5,991	16,574	203.87	6,335	19,779
203.36	5,998	16,634	203.88	6,342	19,843
203.37	6,005	16,694	203.89	6,348	19,906
203.38	6,011	16,754	203.90	6,355	19,970
203.39	6,018	16,815	203.91	6,362	20,033
203.40	6,024	16,875	203.92	6,368	20,097
203.41	6,031	16,935	203.93	6,375	20,161
203.42	6,038	16,995	203.94	6,381	20,224
203.43	6,044	17,056	203.95	6,388	20,288
203.44	6,051	17,116	203.96	6,395	20,352
203.45	6,057	17,177	203.97	6,401	20,416
203.46	6,064	17,237	203.98	6,408	20,480
203.47	6,071	17,298	203.99	6,414	20,544
203.48	6,077	17,359	204.00	6,421	20,608
203.49	6,084	17,420	204.01	6,428	20,673
203.50	6,091	17,481	204.02	6,434	20,737
203.51	6,097	17,541	204.03	6,441	20,801
203.52	6,104	17,602	204.04	6,447	20,866

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.05	6,454	20,930
204.06	6,461	20,995
204.07	6,467	21,059
204.08	6,474	21,124
204.09	6,480	21,189
204.10	6,487	21,254
204.11	6,494	21,319
204.12	6,500	21,384
204.13	6,507	21,449
204.14	6,513	21,514
204.15	6,520	21,579
204.16	6,527	21,644
204.17	6,533	21,710
204.18	6,540	21,775
204.19	6,546	21,840
204.20	6,553	21,906
204.21	6,560	21,971
204.22	6,566	22,037
204.23	6,573	22,103
204.24	6,579	22,168
204.25	6,586	22,234
204.26	6,593	22,300
204.27	6,599	22,366
204.28	6,606	22,432
204.29	6,612	22,498
204.30	6,619	22,564
204.31	6,626	22,631
204.32	6,632	22,697
204.33	6,639	22,763
204.34	6,645	22,830
204.35	6,652	22,896
204.36	6,659	22,963
204.37	6,665	23,029
204.38	6,672	23,096
204.39	6,678	23,163
204.40	6,685	23,230
204.41	6,692	23,296
204.42	6,698	23,363
204.43	6,705	23,430
204.44	6,711	23,498
204.45	6,718	23,565
204.46	6,725	23,632
204.47	6,731	23,699
204.48	6,738	23,767
204.49	6,744	23,834
204.50	6,751	23,901
204.51	6,758	23,969
204.52	6,764	24,037
204.53	6,771	24,104
204.54	6,777	24,172
204.55	6,784	24,240
204.56	6,791	24,308
204.57	6,797	24,376
204.58	6,804	24,444
204.59	6,810	24,512
204.60	6,817	24,580
204.61	6,824	24,648
204.62	6,830	24,716
204.63	6,837	24,785
204.64	6,843	24,853
204.65	6,850	24,921
204.66	6,857	24,990
204.67	6,863	25,059
204.68	6,870	25,127
204.69	6,876	25,196
204.70	6,883	25,265
204.71	6,890	25,334
204.72	6,896	25,403
204.73	6,903	25,472
204.74	6,909	25,541
204.75	6,916	25,610
204.76	6,923	25,679
204.77	6,929	25,748
204.78	6,936	25,818
204.79	6,942	25,887
204.80	6,949	25,956
204.81	6,956	26,026
204.82	6,962	26,096
204.83	6,969	26,165
204.84	6,975	26,235
204.85	6,982	26,305
204.86	6,989	26,375
204.87	6,995	26,444
204.88	7,002	26,514
204.89	7,008	26,584
204.90	7,015	26,655
204.91	7,022	26,725
204.92	7,028	26,795
204.93	7,035	26,865
204.94	7,041	26,936
204.95	7,048	27,006
204.96	7,055	27,077
204.97	7,061	27,147
204.98	7,068	27,218
204.99	7,074	27,289
205.00	7,081	27,359
205.01	7,088	27,430
205.02	7,094	27,501
205.03	7,101	27,572
205.04	7,107	27,643
205.05	7,114	27,714
205.06	7,121	27,785
205.07	7,127	27,857
205.08	7,134	27,928

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.09	7,140	27,999
205.10	7,147	28,071
205.11	7,154	28,142
205.12	7,160	28,214
205.13	7,167	28,286
205.14	7,173	28,357
205.15	7,180	28,429
205.16	7,187	28,501
205.17	7,193	28,573
205.18	7,200	28,645
205.19	7,206	28,717
205.20	7,213	28,789
205.21	7,220	28,861
205.22	7,226	28,933
205.23	7,233	29,005
205.24	7,239	29,078
205.25	7,246	29,150
205.26	7,253	29,223
205.27	7,259	29,295
205.28	7,266	29,368
205.29	7,272	29,441
205.30	7,279	29,513
205.31	7,286	29,586
205.32	7,292	29,659
205.33	7,299	29,732
205.34	7,305	29,805
205.35	7,312	29,878
205.36	7,319	29,951
205.37	7,325	30,025
205.38	7,332	30,098
205.39	7,338	30,171
205.40	7,345	30,245
205.41	7,352	30,318
205.42	7,358	30,392
205.43	7,365	30,465
205.44	7,371	30,539
205.45	7,378	30,613
205.46	7,385	30,686
205.47	7,391	30,760
205.48	7,398	30,834
205.49	7,404	30,908
205.50	**7,411**	**30,982**

Summary for Pond B-55: Basin #55

Inflow Area = 2.301 ac, 47.33% Impervious, Inflow Depth = 2.07" for Current 2 yr event
Inflow = 4.77 cfs @ 12.17 hrs, Volume= 0.398 af
Outflow = 1.47 cfs @ 12.48 hrs, Volume= 0.295 af, Atten= 69%, Lag= 18.1 min
Primary = 1.47 cfs @ 12.48 hrs, Volume= 0.295 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.55' @ 12.48 hrs Surf.Area= 5,026 sf Storage= 8,111 cf

Plug-Flow detention time= 204.3 min calculated for 0.295 af (74% of inflow)
Center-of-Mass det. time= 108.2 min (899.2 - 791.0)

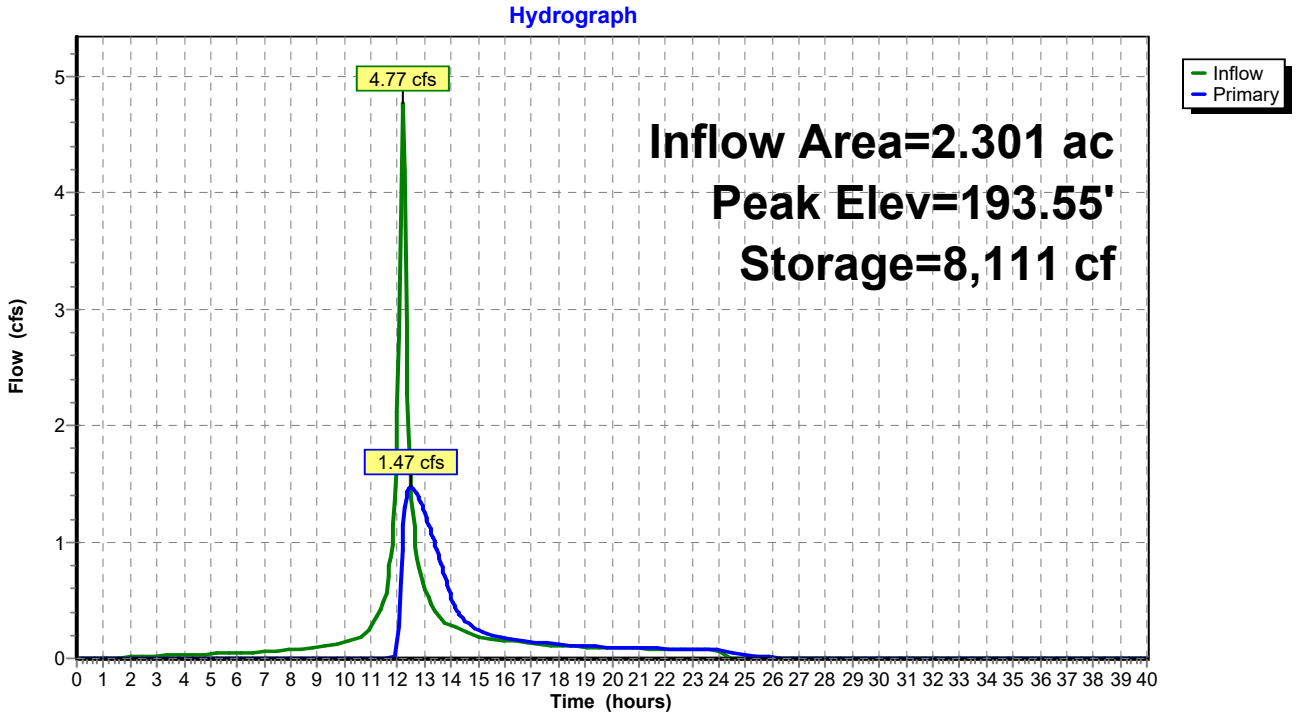
Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	**18.0" Round Culvert** L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 191.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.80'	**22.0" W x 2.5" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.82'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	195.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.47 cfs @ 12.48 hrs HW=193.55' (Free Discharge)
- **1=Culvert** (Passes 1.47 cfs of 8.24 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.47 cfs @ 3.86 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-55: Basin #55



Stage-Discharge for Pond B-55: Basin #55

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.56	0.00	192.08	0.00	192.60	0.00	193.12	0.85
191.57	0.00	192.09	0.00	192.61	0.00	193.13	0.87
191.58	0.00	192.10	0.00	192.62	0.00	193.14	0.89
191.59	0.00	192.11	0.00	192.63	0.00	193.15	0.90
191.60	0.00	192.12	0.00	192.64	0.00	193.16	0.92
191.61	0.00	192.13	0.00	192.65	0.00	193.17	0.94
191.62	0.00	192.14	0.00	192.66	0.00	193.18	0.96
191.63	0.00	192.15	0.00	192.67	0.00	193.19	0.98
191.64	0.00	192.16	0.00	192.68	0.00	193.20	0.99
191.65	0.00	192.17	0.00	192.69	0.00	193.21	1.01
191.66	0.00	192.18	0.00	192.70	0.00	193.22	1.03
191.67	0.00	192.19	0.00	192.71	0.00	193.23	1.05
191.68	0.00	192.20	0.00	192.72	0.00	193.24	1.06
191.69	0.00	192.21	0.00	192.73	0.00	193.25	1.08
191.70	0.00	192.22	0.00	192.74	0.00	193.26	1.09
191.71	0.00	192.23	0.00	192.75	0.00	193.27	1.11
191.72	0.00	192.24	0.00	192.76	0.00	193.28	1.12
191.73	0.00	192.25	0.00	192.77	0.00	193.29	1.14
191.74	0.00	192.26	0.00	192.78	0.00	193.30	1.15
191.75	0.00	192.27	0.00	192.79	0.00	193.31	1.17
191.76	0.00	192.28	0.00	192.80	0.00	193.32	1.18
191.77	0.00	192.29	0.00	192.81	0.01	193.33	1.20
191.78	0.00	192.30	0.00	192.82	0.02	193.34	1.21
191.79	0.00	192.31	0.00	192.83	0.03	193.35	1.23
191.80	0.00	192.32	0.00	192.84	0.05	193.36	1.24
191.81	0.00	192.33	0.00	192.85	0.07	193.37	1.25
191.82	0.00	192.34	0.00	192.86	0.09	193.38	1.27
191.83	0.00	192.35	0.00	192.87	0.11	193.39	1.28
191.84	0.00	192.36	0.00	192.88	0.13	193.40	1.29
191.85	0.00	192.37	0.00	192.89	0.16	193.41	1.31
191.86	0.00	192.38	0.00	192.90	0.19	193.42	1.32
191.87	0.00	192.39	0.00	192.91	0.21	193.43	1.33
191.88	0.00	192.40	0.00	192.92	0.24	193.44	1.34
191.89	0.00	192.41	0.00	192.93	0.28	193.45	1.36
191.90	0.00	192.42	0.00	192.94	0.31	193.46	1.37
191.91	0.00	192.43	0.00	192.95	0.34	193.47	1.38
191.92	0.00	192.44	0.00	192.96	0.38	193.48	1.39
191.93	0.00	192.45	0.00	192.97	0.41	193.49	1.41
191.94	0.00	192.46	0.00	192.98	0.45	193.50	1.42
191.95	0.00	192.47	0.00	192.99	0.49	193.51	1.43
191.96	0.00	192.48	0.00	193.00	0.53	193.52	1.44
191.97	0.00	192.49	0.00	193.01	0.57	193.53	1.45
191.98	0.00	192.50	0.00	193.02	0.60	193.54	1.46
191.99	0.00	192.51	0.00	193.03	0.63	193.55	1.48
192.00	0.00	192.52	0.00	193.04	0.66	193.56	1.49
192.01	0.00	192.53	0.00	193.05	0.69	193.57	1.50
192.02	0.00	192.54	0.00	193.06	0.71	193.58	1.51
192.03	0.00	192.55	0.00	193.07	0.74	193.59	1.52
192.04	0.00	192.56	0.00	193.08	0.76	193.60	1.53
192.05	0.00	192.57	0.00	193.09	0.78	193.61	1.54
192.06	0.00	192.58	0.00	193.10	0.80	193.62	1.55
192.07	0.00	192.59	0.00	193.11	0.82	193.63	1.57

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.64	1.58	194.16	4.61	194.68	11.12	195.20	12.37
193.65	1.59	194.17	4.73	194.69	11.14	195.21	12.39
193.66	1.60	194.18	4.85	194.70	11.17	195.22	12.42
193.67	1.61	194.19	4.97	194.71	11.19	195.23	12.44
193.68	1.62	194.20	5.10	194.72	11.22	195.24	12.46
193.69	1.63	194.21	5.22	194.73	11.24	195.25	12.48
193.70	1.64	194.22	5.35	194.74	11.27	195.26	12.51
193.71	1.65	194.23	5.48	194.75	11.29	195.27	12.53
193.72	1.66	194.24	5.61	194.76	11.32	195.28	12.55
193.73	1.67	194.25	5.74	194.77	11.34	195.29	12.58
193.74	1.68	194.26	5.87	194.78	11.37	195.30	12.60
193.75	1.69	194.27	6.01	194.79	11.39	195.31	12.62
193.76	1.70	194.28	6.14	194.80	11.42	195.32	12.64
193.77	1.71	194.29	6.28	194.81	11.44	195.33	12.66
193.78	1.72	194.30	6.42	194.82	11.47	195.34	12.69
193.79	1.73	194.31	6.56	194.83	11.49	195.35	12.71
193.80	1.74	194.32	6.70	194.84	11.52	195.36	12.73
193.81	1.75	194.33	6.84	194.85	11.54	195.37	12.75
193.82	1.76	194.34	6.98	194.86	11.57	195.38	12.78
193.83	1.78	194.35	7.12	194.87	11.59	195.39	12.80
193.84	1.82	194.36	7.27	194.88	11.61	195.40	12.82
193.85	1.86	194.37	7.41	194.89	11.64	195.41	12.84
193.86	1.90	194.38	7.56	194.90	11.66	195.42	12.86
193.87	1.95	194.39	7.71	194.91	11.69	195.43	12.89
193.88	2.01	194.40	7.86	194.92	11.71	195.44	12.91
193.89	2.07	194.41	8.01	194.93	11.74	195.45	12.93
193.90	2.13	194.42	8.16	194.94	11.76	195.46	13.07
193.91	2.20	194.43	8.31	194.95	11.78	195.47	13.31
193.92	2.26	194.44	8.47	194.96	11.81	195.48	13.61
193.93	2.34	194.45	8.62	194.97	11.83	195.49	13.96
193.94	2.41	194.46	8.78	194.98	11.86	195.50	14.35
193.95	2.49	194.47	8.93	194.99	11.88	195.51	14.79
193.96	2.57	194.48	9.09	195.00	11.90	195.52	15.26
193.97	2.65	194.49	9.25	195.01	11.93	195.53	15.76
193.98	2.74	194.50	9.41	195.02	11.95	195.54	16.30
193.99	2.82	194.51	9.57	195.03	11.97	195.55	16.87
194.00	2.91	194.52	9.73	195.04	12.00	195.56	17.46
194.01	3.01	194.53	9.89	195.05	12.02	195.57	18.08
194.02	3.10	194.54	10.06	195.06	12.05	195.58	18.73
194.03	3.20	194.55	10.22	195.07	12.07	195.59	19.40
194.04	3.29	194.56	10.38	195.08	12.09	195.60	20.10
194.05	3.39	194.57	10.55	195.09	12.12	195.61	20.82
194.06	3.50	194.58	10.72	195.10	12.14	195.62	21.57
194.07	3.60	194.59	10.88	195.11	12.16	195.63	22.33
194.08	3.71	194.60	10.91	195.12	12.19	195.64	23.12
194.09	3.81	194.61	10.94	195.13	12.21	195.65	23.93
194.10	3.92	194.62	10.96	195.14	12.23	195.66	24.79
194.11	4.03	194.63	10.99	195.15	12.26	195.67	25.69
194.12	4.14	194.64	11.01	195.16	12.28	195.68	26.61
194.13	4.26	194.65	11.04	195.17	12.30	195.69	27.55
194.14	4.37	194.66	11.06	195.18	12.32	195.70	28.52
194.15	4.49	194.67	11.09	195.19	12.35	195.71	29.52

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)
195.72	30.53
195.73	31.58
195.74	32.65
195.75	33.74
195.76	34.86
195.77	36.00
195.78	37.17
195.79	38.36
195.80	39.57
195.81	40.81
195.82	42.08
195.83	43.36
195.84	44.67
195.85	46.01
195.86	47.40
195.87	48.81
195.88	50.25
195.89	51.71
195.90	53.20
195.91	54.72
195.92	56.26
195.93	57.83
195.94	59.43
195.95	61.05
195.96	62.70
195.97	64.37
195.98	66.07
195.99	67.80
196.00	**69.56**

Stage-Area-Storage for Pond B-55: Basin #55

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.56	0	0	192.08	4,290	1,277
191.57	97	0	192.09	4,295	1,320
191.58	193	2	192.10	4,300	1,362
191.59	290	4	192.11	4,305	1,406
191.60	386	8	192.12	4,310	1,449
191.61	483	12	192.13	4,314	1,492
191.62	580	17	192.14	4,319	1,535
191.63	676	24	192.15	4,324	1,578
191.64	773	31	192.16	4,329	1,621
191.65	869	39	192.17	4,334	1,665
191.66	966	48	192.18	4,339	1,708
191.67	1,063	58	192.19	4,344	1,751
191.68	1,159	70	192.20	4,349	1,795
191.69	1,256	82	192.21	4,354	1,838
191.70	1,352	95	192.22	4,359	1,882
191.71	1,449	109	192.23	4,364	1,926
191.72	1,545	124	192.24	4,369	1,969
191.73	1,642	140	192.25	4,374	2,013
191.74	1,739	156	192.26	4,379	2,057
191.75	1,835	174	192.27	4,384	2,101
191.76	1,932	193	192.28	4,389	2,144
191.77	2,028	213	192.29	4,394	2,188
191.78	2,125	234	192.30	4,399	2,232
191.79	2,222	255	192.31	4,404	2,276
191.80	2,318	278	192.32	4,409	2,320
191.81	2,415	302	192.33	4,414	2,365
191.82	2,511	326	192.34	4,419	2,409
191.83	2,608	352	192.35	4,424	2,453
191.84	2,705	379	192.36	4,429	2,497
191.85	2,801	406	192.37	4,434	2,541
191.86	2,898	435	192.38	4,438	2,586
191.87	2,994	464	192.39	4,443	2,630
191.88	3,091	495	192.40	4,448	2,675
191.89	3,188	526	192.41	4,453	2,719
191.90	3,284	558	192.42	4,458	2,764
191.91	3,381	592	192.43	4,463	2,808
191.92	3,477	626	192.44	4,468	2,853
191.93	3,574	661	192.45	4,473	2,898
191.94	3,670	697	192.46	4,478	2,942
191.95	3,767	735	192.47	4,483	2,987
191.96	3,864	773	192.48	4,488	3,032
191.97	3,960	812	192.49	4,493	3,077
191.98	4,057	852	192.50	4,498	3,122
191.99	4,153	893	192.51	4,503	3,167
192.00	4,250	935	192.52	4,508	3,212
192.01	4,255	978	192.53	4,513	3,257
192.02	4,260	1,020	192.54	4,518	3,302
192.03	4,265	1,063	192.55	4,523	3,348
192.04	4,270	1,105	192.56	4,528	3,393
192.05	4,275	1,148	192.57	4,533	3,438
192.06	4,280	1,191	192.58	4,538	3,483
192.07	4,285	1,234	192.59	4,543	3,529

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.60	4,548	3,574	193.12	4,807	6,006
192.61	4,553	3,620	193.13	4,812	6,054
192.62	4,558	3,665	193.14	4,818	6,102
192.63	4,562	3,711	193.15	4,823	6,151
192.64	4,567	3,757	193.16	4,828	6,199
192.65	4,572	3,802	193.17	4,833	6,247
192.66	4,577	3,848	193.18	4,838	6,296
192.67	4,582	3,894	193.19	4,843	6,344
192.68	4,587	3,940	193.20	4,848	6,392
192.69	4,592	3,986	193.21	4,853	6,441
192.70	4,597	4,032	193.22	4,858	6,489
192.71	4,602	4,078	193.23	4,864	6,538
192.72	4,607	4,124	193.24	4,869	6,587
192.73	4,612	4,170	193.25	4,874	6,635
192.74	4,617	4,216	193.26	4,879	6,684
192.75	4,622	4,262	193.27	4,884	6,733
192.76	4,627	4,308	193.28	4,889	6,782
192.77	4,632	4,355	193.29	4,894	6,831
192.78	4,637	4,401	193.30	4,899	6,880
192.79	4,642	4,447	193.31	4,904	6,929
192.80	4,647	4,494	193.32	4,910	6,978
192.81	4,652	4,540	193.33	4,915	7,027
192.82	4,657	4,587	193.34	4,920	7,076
192.83	4,662	4,633	193.35	4,925	7,125
192.84	4,667	4,680	193.36	4,930	7,175
192.85	4,672	4,727	193.37	4,935	7,224
192.86	4,677	4,773	193.38	4,940	7,273
192.87	4,682	4,820	193.39	4,945	7,323
192.88	4,686	4,867	193.40	4,950	7,372
192.89	4,691	4,914	193.41	4,956	7,422
192.90	4,696	4,961	193.42	4,961	7,471
192.91	4,701	5,008	193.43	4,966	7,521
192.92	4,706	5,055	193.44	4,971	7,571
192.93	4,711	5,102	193.45	4,976	7,620
192.94	4,716	5,149	193.46	4,981	7,670
192.95	4,721	5,196	193.47	4,986	7,720
192.96	4,726	5,244	193.48	4,991	7,770
192.97	4,731	5,291	193.49	4,996	7,820
192.98	4,736	5,338	193.50	5,002	7,870
192.99	4,741	5,386	193.51	5,007	7,920
193.00	4,746	5,433	193.52	5,012	7,970
193.01	4,751	5,480	193.53	5,017	8,020
193.02	4,756	5,528	193.54	5,022	8,070
193.03	4,761	5,576	193.55	5,027	8,121
193.04	4,766	5,623	193.56	5,032	8,171
193.05	4,772	5,671	193.57	5,037	8,221
193.06	4,777	5,719	193.58	5,042	8,272
193.07	4,782	5,766	193.59	5,047	8,322
193.08	4,787	5,814	193.60	5,053	8,373
193.09	4,792	5,862	193.61	5,058	8,423
193.10	4,797	5,910	193.62	5,063	8,474
193.11	4,802	5,958	193.63	5,068	8,524

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.64	5,073	8,575	194.16	5,341	11,282
193.65	5,078	8,626	194.17	5,347	11,336
193.66	5,083	8,677	194.18	5,352	11,389
193.67	5,088	8,728	194.19	5,357	11,443
193.68	5,093	8,778	194.20	5,362	11,496
193.69	5,099	8,829	194.21	5,368	11,550
193.70	5,104	8,880	194.22	5,373	11,604
193.71	5,109	8,931	194.23	5,378	11,658
193.72	5,114	8,983	194.24	5,383	11,711
193.73	5,119	9,034	194.25	5,389	11,765
193.74	5,124	9,085	194.26	5,394	11,819
193.75	5,129	9,136	194.27	5,399	11,873
193.76	5,134	9,188	194.28	5,405	11,927
193.77	5,139	9,239	194.29	5,410	11,981
193.78	5,145	9,290	194.30	5,415	12,035
193.79	5,150	9,342	194.31	5,420	12,089
193.80	5,155	9,393	194.32	5,426	12,144
193.81	5,160	9,445	194.33	5,431	12,198
193.82	5,165	9,497	194.34	5,436	12,252
193.83	5,170	9,548	194.35	5,441	12,307
193.84	5,175	9,600	194.36	5,447	12,361
193.85	5,180	9,652	194.37	5,452	12,416
193.86	5,185	9,704	194.38	5,457	12,470
193.87	5,191	9,755	194.39	5,463	12,525
193.88	5,196	9,807	194.40	5,468	12,579
193.89	5,201	9,859	194.41	5,473	12,634
193.90	5,206	9,911	194.42	5,478	12,689
193.91	5,211	9,963	194.43	5,484	12,744
193.92	5,216	10,016	194.44	5,489	12,799
193.93	5,221	10,068	194.45	5,494	12,854
193.94	5,226	10,120	194.46	5,499	12,908
193.95	5,231	10,172	194.47	5,505	12,963
193.96	5,237	10,225	194.48	5,510	13,019
193.97	5,242	10,277	194.49	5,515	13,074
193.98	5,247	10,329	194.50	5,521	13,129
193.99	5,252	10,382	194.51	5,526	13,184
194.00	5,257	10,434	194.52	5,531	13,239
194.01	5,262	10,487	194.53	5,536	13,295
194.02	5,268	10,540	194.54	5,542	13,350
194.03	5,273	10,592	194.55	5,547	13,406
194.04	5,278	10,645	194.56	5,552	13,461
194.05	5,283	10,698	194.57	5,557	13,517
194.06	5,289	10,751	194.58	5,563	13,572
194.07	5,294	10,804	194.59	5,568	13,628
194.08	5,299	10,857	194.60	5,573	13,684
194.09	5,304	10,910	194.61	5,578	13,739
194.10	5,310	10,963	194.62	5,584	13,795
194.11	5,315	11,016	194.63	5,589	13,851
194.12	5,320	11,069	194.64	5,594	13,907
194.13	5,326	11,122	194.65	5,600	13,963
194.14	5,331	11,176	194.66	5,605	14,019
194.15	5,336	11,229	194.67	5,610	14,075

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.68	5,615	14,131	195.20	5,893	17,123
194.69	5,621	14,187	195.21	5,898	17,182
194.70	5,626	14,244	195.22	5,903	17,241
194.71	5,631	14,300	195.23	5,909	17,300
194.72	5,636	14,356	195.24	5,914	17,359
194.73	5,642	14,413	195.25	5,920	17,418
194.74	5,647	14,469	195.26	5,925	17,477
194.75	5,652	14,525	195.27	5,931	17,536
194.76	5,658	14,582	195.28	5,936	17,596
194.77	5,663	14,639	195.29	5,941	17,655
194.78	5,668	14,695	195.30	5,947	17,715
194.79	5,673	14,752	195.31	5,952	17,774
194.80	5,679	14,809	195.32	5,958	17,834
194.81	5,684	14,866	195.33	5,963	17,893
194.82	5,689	14,922	195.34	5,969	17,953
194.83	5,694	14,979	195.35	5,974	18,013
194.84	5,700	15,036	195.36	5,979	18,072
194.85	5,705	15,093	195.37	5,985	18,132
194.86	5,710	15,150	195.38	5,990	18,192
194.87	5,715	15,208	195.39	5,996	18,252
194.88	5,721	15,265	195.40	6,001	18,312
194.89	5,726	15,322	195.41	6,007	18,372
194.90	5,731	15,379	195.42	6,012	18,432
194.91	5,737	15,437	195.43	6,017	18,492
194.92	5,742	15,494	195.44	6,023	18,553
194.93	5,747	15,551	195.45	6,028	18,613
194.94	5,752	15,609	195.46	6,034	18,673
194.95	5,758	15,666	195.47	6,039	18,733
194.96	5,763	15,724	195.48	6,045	18,794
194.97	5,768	15,782	195.49	6,050	18,854
194.98	5,773	15,839	195.50	6,056	18,915
194.99	5,779	15,897	195.51	6,061	18,975
195.00	5,784	15,955	195.52	6,066	19,036
195.01	5,789	16,013	195.53	6,072	19,097
195.02	5,795	16,071	195.54	6,077	19,158
195.03	5,800	16,129	195.55	6,083	19,218
195.04	5,806	16,187	195.56	6,088	19,279
195.05	5,811	16,245	195.57	6,094	19,340
195.06	5,817	16,303	195.58	6,099	19,401
195.07	5,822	16,361	195.59	6,104	19,462
195.08	5,827	16,419	195.60	6,110	19,523
195.09	5,833	16,478	195.61	6,115	19,584
195.10	5,838	16,536	195.62	6,121	19,645
195.11	5,844	16,595	195.63	6,126	19,707
195.12	5,849	16,653	195.64	6,132	19,768
195.13	5,855	16,712	195.65	6,137	19,829
195.14	5,860	16,770	195.66	6,142	19,891
195.15	5,865	16,829	195.67	6,148	19,952
195.16	5,871	16,887	195.68	6,153	20,014
195.17	5,876	16,946	195.69	6,159	20,075
195.18	5,882	17,005	195.70	6,164	20,137
195.19	5,887	17,064	195.71	6,170	20,199

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.72	6,175	20,260
195.73	6,180	20,322
195.74	6,186	20,384
195.75	6,191	20,446
195.76	6,197	20,508
195.77	6,202	20,570
195.78	6,208	20,632
195.79	6,213	20,694
195.80	6,218	20,756
195.81	6,224	20,818
195.82	6,229	20,880
195.83	6,235	20,943
195.84	6,240	21,005
195.85	6,246	21,068
195.86	6,251	21,130
195.87	6,256	21,193
195.88	6,262	21,255
195.89	6,267	21,318
195.90	6,273	21,381
195.91	6,278	21,443
195.92	6,284	21,506
195.93	6,289	21,569
195.94	6,294	21,632
195.95	6,300	21,695
195.96	6,305	21,758
195.97	6,311	21,821
195.98	6,316	21,884
195.99	6,322	21,947
196.00	**6,327**	**22,010**

Summary for Pond B-56: Basin #56

Inflow Area = 1.512 ac, 31.08% Impervious, Inflow Depth = 1.75" for Current 2 yr event
Inflow = 2.69 cfs @ 12.18 hrs, Volume= 0.221 af
Outflow = 1.54 cfs @ 12.32 hrs, Volume= 0.174 af, Atten= 43%, Lag= 8.6 min
Primary = 1.54 cfs @ 12.32 hrs, Volume= 0.174 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 192.48' @ 12.32 hrs Surf.Area= 5,248 sf Storage= 3,566 cf

Plug-Flow detention time= 172.7 min calculated for 0.174 af (79% of inflow)
Center-of-Mass det. time= 84.2 min (892.0 - 807.8)

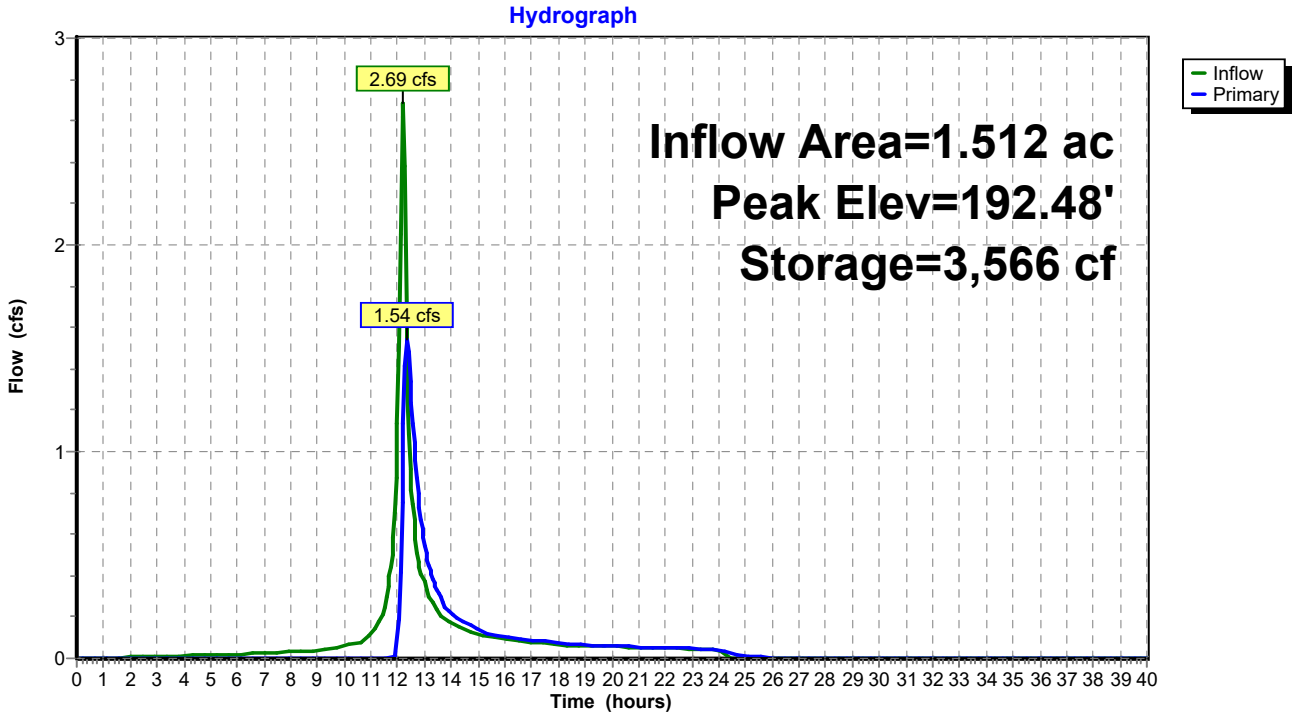
Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	**18.0" Round Culvert** L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.19'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.62'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.52 cfs @ 12.32 hrs HW=192.48' (Free Discharge)
- **1=Culvert** (Passes 1.52 cfs of 2.69 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.52 cfs @ 1.74 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-56: Basin #56



Stage-Discharge for Pond B-56: Basin #56

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.57	0.00	192.09	0.00	192.61	2.62	193.13	5.97
191.58	0.00	192.10	0.00	192.62	2.72	193.14	6.01
191.59	0.00	192.11	0.00	192.63	2.81	193.15	6.05
191.60	0.00	192.12	0.00	192.64	2.91	193.16	6.10
191.61	0.00	192.13	0.00	192.65	3.00	193.17	6.14
191.62	0.00	192.14	0.00	192.66	3.10	193.18	6.18
191.63	0.00	192.15	0.00	192.67	3.20	193.19	6.23
191.64	0.00	192.16	0.00	192.68	3.30	193.20	6.27
191.65	0.00	192.17	0.00	192.69	3.40	193.21	6.31
191.66	0.00	192.18	0.00	192.70	3.50	193.22	6.35
191.67	0.00	192.19	0.00	192.71	3.58	193.23	6.39
191.68	0.00	192.20	0.01	192.72	3.67	193.24	6.43
191.69	0.00	192.21	0.03	192.73	3.74	193.25	6.47
191.70	0.00	192.22	0.05	192.74	3.82	193.26	6.51
191.71	0.00	192.23	0.08	192.75	3.89	193.27	6.55
191.72	0.00	192.24	0.11	192.76	3.97	193.28	6.59
191.73	0.00	192.25	0.14	192.77	4.04	193.29	6.63
191.74	0.00	192.26	0.18	192.78	4.10	193.30	6.67
191.75	0.00	192.27	0.22	192.79	4.17	193.31	6.71
191.76	0.00	192.28	0.26	192.80	4.24	193.32	6.75
191.77	0.00	192.29	0.30	192.81	4.30	193.33	6.79
191.78	0.00	192.30	0.35	192.82	4.36	193.34	6.83
191.79	0.00	192.31	0.40	192.83	4.43	193.35	6.87
191.80	0.00	192.32	0.45	192.84	4.49	193.36	6.91
191.81	0.00	192.33	0.50	192.85	4.55	193.37	6.94
191.82	0.00	192.34	0.56	192.86	4.61	193.38	6.98
191.83	0.00	192.35	0.62	192.87	4.66	193.39	7.02
191.84	0.00	192.36	0.67	192.88	4.72	193.40	7.06
191.85	0.00	192.37	0.74	192.89	4.78	193.41	7.09
191.86	0.00	192.38	0.80	192.90	4.83	193.42	7.13
191.87	0.00	192.39	0.86	192.91	4.89	193.43	7.17
191.88	0.00	192.40	0.93	192.92	4.94	193.44	7.20
191.89	0.00	192.41	0.99	192.93	5.00	193.45	7.24
191.90	0.00	192.42	1.06	192.94	5.05	193.46	7.28
191.91	0.00	192.43	1.13	192.95	5.10	193.47	7.31
191.92	0.00	192.44	1.20	192.96	5.16	193.48	7.35
191.93	0.00	192.45	1.28	192.97	5.21	193.49	7.38
191.94	0.00	192.46	1.35	192.98	5.26	193.50	7.42
191.95	0.00	192.47	1.43	192.99	5.31	193.51	7.45
191.96	0.00	192.48	1.50	193.00	5.36	193.52	7.49
191.97	0.00	192.49	1.58	193.01	5.41	193.53	7.52
191.98	0.00	192.50	1.66	193.02	5.46	193.54	7.56
191.99	0.00	192.51	1.74	193.03	5.50	193.55	7.59
192.00	0.00	192.52	1.83	193.04	5.55	193.56	7.63
192.01	0.00	192.53	1.91	193.05	5.60	193.57	7.66
192.02	0.00	192.54	1.99	193.06	5.65	193.58	7.70
192.03	0.00	192.55	2.08	193.07	5.69	193.59	7.73
192.04	0.00	192.56	2.17	193.08	5.74	193.60	7.76
192.05	0.00	192.57	2.26	193.09	5.79	193.61	7.80
192.06	0.00	192.58	2.35	193.10	5.83	193.62	7.83
192.07	0.00	192.59	2.44	193.11	5.88	193.63	7.88
192.08	0.00	192.60	2.53	193.12	5.92	193.64	7.93

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.65	8.00	194.17	11.13	194.69	13.10	195.21	26.75
193.66	8.07	194.18	11.17	194.70	13.13	195.22	27.67
193.67	8.14	194.19	11.22	194.71	13.15	195.23	28.62
193.68	8.22	194.20	11.26	194.72	13.18	195.24	29.59
193.69	8.30	194.21	11.30	194.73	13.21	195.25	30.59
193.70	8.39	194.22	11.35	194.74	13.24	195.26	31.61
193.71	8.48	194.23	11.39	194.75	13.26	195.27	32.66
193.72	8.57	194.24	11.43	194.76	13.29	195.28	33.74
193.73	8.66	194.25	11.48	194.77	13.32	195.29	34.83
193.74	8.76	194.26	11.52	194.78	13.35	195.30	35.95
193.75	8.86	194.27	11.56	194.79	13.37	195.31	37.10
193.76	8.97	194.28	11.61	194.80	13.40	195.32	38.27
193.77	9.07	194.29	11.65	194.81	13.43	195.33	39.46
193.78	9.18	194.30	11.69	194.82	13.45	195.34	40.68
193.79	9.28	194.31	11.73	194.83	13.48	195.35	41.93
193.80	9.34	194.32	11.78	194.84	13.51	195.36	43.19
193.81	9.39	194.33	11.82	194.85	13.53	195.37	44.48
193.82	9.44	194.34	11.86	194.86	13.56	195.38	45.80
193.83	9.49	194.35	11.90	194.87	13.59	195.39	47.14
193.84	9.55	194.36	11.94	194.88	13.61	195.40	48.53
193.85	9.60	194.37	11.98	194.89	13.64	195.41	49.94
193.86	9.65	194.38	12.03	194.90	13.67	195.42	51.39
193.87	9.70	194.39	12.07	194.91	13.69	195.43	52.85
193.88	9.75	194.40	12.11	194.92	13.72	195.44	54.35
193.89	9.80	194.41	12.15	194.93	13.75	195.45	55.87
193.90	9.85	194.42	12.19	194.94	13.77	195.46	57.42
193.91	9.90	194.43	12.23	194.95	13.80	195.47	58.99
193.92	9.95	194.44	12.27	194.96	13.83	195.48	60.59
193.93	10.00	194.45	12.31	194.97	13.85	195.49	62.21
193.94	10.05	194.46	12.35	194.98	13.88	195.50	63.87
193.95	10.10	194.47	12.39	194.99	13.90	195.51	65.55
193.96	10.15	194.48	12.43	195.00	14.05	195.52	67.25
193.97	10.20	194.49	12.47	195.01	14.29	195.53	68.98
193.98	10.25	194.50	12.51	195.02	14.59	195.54	70.74
193.99	10.29	194.51	12.55	195.03	14.94	195.55	72.53
194.00	10.34	194.52	12.59	195.04	15.34	195.56	74.34
194.01	10.39	194.53	12.63	195.05	15.78	195.57	76.18
194.02	10.44	194.54	12.67	195.06	16.26	195.58	78.04
194.03	10.49	194.55	12.71	195.07	16.77	195.59	79.94
194.04	10.53	194.56	12.73	195.08	17.31	195.60	81.59
194.05	10.58	194.57	12.76	195.09	17.88	195.61	83.25
194.06	10.63	194.58	12.79	195.10	18.48	195.62	84.93
194.07	10.67	194.59	12.82	195.11	19.10	195.63	86.62
194.08	10.72	194.60	12.85	195.12	19.76	195.64	88.32
194.09	10.77	194.61	12.88	195.13	20.43	195.65	90.04
194.10	10.81	194.62	12.90	195.14	21.13	195.66	91.77
194.11	10.86	194.63	12.93	195.15	21.86	195.67	93.51
194.12	10.90	194.64	12.96	195.16	22.61	195.68	95.27
194.13	10.95	194.65	12.99	195.17	23.38	195.69	97.04
194.14	10.99	194.66	13.02	195.18	24.17	195.70	98.82
194.15	11.04	194.67	13.04	195.19	24.98	195.71	100.61
194.16	11.08	194.68	13.07	195.20	25.85	195.72	102.42

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)
195.73	104.24
195.74	106.07
195.75	107.92
195.76	109.77
195.77	111.64
195.78	113.52
195.79	115.41
195.80	117.36
195.81	119.31
195.82	121.28
195.83	123.26
195.84	125.26
195.85	127.27
195.86	129.29
195.87	131.32
195.88	133.37
195.89	135.43
195.90	137.50
195.91	139.59
195.92	141.69
195.93	143.80
195.94	145.92
195.95	148.06
195.96	150.21
195.97	152.37
195.98	154.55
195.99	156.73
196.00	**158.88**

Stage-Area-Storage for Pond B-56: Basin #56

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.57	0	0
191.58	117	1
191.59	234	2
191.60	350	5
191.61	467	9
191.62	584	15
191.63	701	21
191.64	817	29
191.65	934	37
191.66	1,051	47
191.67	1,168	58
191.68	1,284	71
191.69	1,401	84
191.70	1,518	99
191.71	1,635	114
191.72	1,752	131
191.73	1,868	149
191.74	1,985	169
191.75	2,102	189
191.76	2,219	211
191.77	2,335	234
191.78	2,452	257
191.79	2,569	283
191.80	2,686	309
191.81	2,802	336
191.82	2,919	365
191.83	3,036	395
191.84	3,153	426
191.85	3,269	458
191.86	3,386	491
191.87	3,503	525
191.88	3,620	561
191.89	3,737	598
191.90	3,853	636
191.91	3,970	675
191.92	4,087	715
191.93	4,204	757
191.94	4,320	799
191.95	4,437	843
191.96	4,554	888
191.97	4,671	934
191.98	4,787	981
191.99	4,904	1,030
192.00	5,021	1,080
192.01	5,026	1,130
192.02	5,030	1,180
192.03	5,035	1,230
192.04	5,040	1,281
192.05	5,044	1,331
192.06	5,049	1,382
192.07	5,054	1,432
192.08	5,059	1,483
192.09	5,063	1,533
192.10	5,068	1,584
192.11	5,073	1,635
192.12	5,077	1,685
192.13	5,082	1,736
192.14	5,087	1,787
192.15	5,091	1,838
192.16	5,096	1,889
192.17	5,101	1,940
192.18	5,105	1,991
192.19	5,110	2,042
192.20	5,115	2,093
192.21	5,119	2,144
192.22	5,124	2,195
192.23	5,129	2,247
192.24	5,134	2,298
192.25	5,138	2,349
192.26	5,143	2,401
192.27	5,148	2,452
192.28	5,152	2,504
192.29	5,157	2,555
192.30	5,162	2,607
192.31	5,166	2,659
192.32	5,171	2,710
192.33	5,176	2,762
192.34	5,180	2,814
192.35	5,185	2,866
192.36	5,190	2,917
192.37	5,195	2,969
192.38	5,199	3,021
192.39	5,204	3,073
192.40	5,209	3,125
192.41	5,213	3,178
192.42	5,218	3,230
192.43	5,223	3,282
192.44	5,227	3,334
192.45	5,232	3,386
192.46	5,237	3,439
192.47	5,241	3,491
192.48	5,246	3,544
192.49	5,251	3,596
192.50	5,256	3,649
192.51	5,260	3,701
192.52	5,265	3,754
192.53	5,270	3,807
192.54	5,274	3,859
192.55	5,279	3,912
192.56	5,284	3,965
192.57	5,288	4,018
192.58	5,293	4,071
192.59	5,298	4,124
192.60	5,302	4,177

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.61	5,307	4,230	193.13	5,553	7,053
192.62	5,312	4,283	193.14	5,558	7,108
192.63	5,316	4,336	193.15	5,563	7,164
192.64	5,321	4,389	193.16	5,568	7,220
192.65	5,326	4,442	193.17	5,573	7,275
192.66	5,331	4,496	193.18	5,577	7,331
192.67	5,335	4,549	193.19	5,582	7,387
192.68	5,340	4,602	193.20	5,587	7,443
192.69	5,345	4,656	193.21	5,592	7,499
192.70	5,349	4,709	193.22	5,597	7,555
192.71	5,354	4,763	193.23	5,602	7,611
192.72	5,359	4,816	193.24	5,607	7,667
192.73	5,363	4,870	193.25	5,612	7,723
192.74	5,368	4,923	193.26	5,616	7,779
192.75	5,373	4,977	193.27	5,621	7,835
192.76	5,377	5,031	193.28	5,626	7,891
192.77	5,382	5,085	193.29	5,631	7,948
192.78	5,387	5,139	193.30	5,636	8,004
192.79	5,392	5,192	193.31	5,641	8,060
192.80	5,396	5,246	193.32	5,646	8,117
192.81	5,401	5,300	193.33	5,650	8,173
192.82	5,406	5,354	193.34	5,655	8,230
192.83	5,410	5,408	193.35	5,660	8,286
192.84	5,415	5,463	193.36	5,665	8,343
192.85	5,420	5,517	193.37	5,670	8,400
192.86	5,424	5,571	193.38	5,675	8,456
192.87	5,429	5,625	193.39	5,680	8,513
192.88	5,434	5,680	193.40	5,684	8,570
192.89	5,438	5,734	193.41	5,689	8,627
192.90	5,443	5,788	193.42	5,694	8,684
192.91	5,448	5,843	193.43	5,699	8,741
192.92	5,452	5,897	193.44	5,704	8,798
192.93	5,457	5,952	193.45	5,709	8,855
192.94	5,462	6,006	193.46	5,714	8,912
192.95	5,467	6,061	193.47	5,718	8,969
192.96	5,471	6,116	193.48	5,723	9,026
192.97	5,476	6,171	193.49	5,728	9,083
192.98	5,481	6,225	193.50	5,733	9,141
192.99	5,485	6,280	193.51	5,738	9,198
193.00	5,490	6,335	193.52	5,743	9,256
193.01	5,495	6,390	193.53	5,748	9,313
193.02	5,500	6,445	193.54	5,752	9,370
193.03	5,505	6,500	193.55	5,757	9,428
193.04	5,509	6,555	193.56	5,762	9,486
193.05	5,514	6,610	193.57	5,767	9,543
193.06	5,519	6,665	193.58	5,772	9,601
193.07	5,524	6,721	193.59	5,777	9,659
193.08	5,529	6,776	193.60	5,782	9,716
193.09	5,534	6,831	193.61	5,786	9,774
193.10	5,539	6,886	193.62	5,791	9,832
193.11	5,543	6,942	193.63	5,796	9,890
193.12	5,548	6,997	193.64	5,801	9,948

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.65	5,806	10,006	194.17	6,061	13,091
193.66	5,811	10,064	194.18	6,066	13,152
193.67	5,816	10,122	194.19	6,071	13,213
193.68	5,820	10,181	194.20	6,076	13,273
193.69	5,825	10,239	194.21	6,081	13,334
193.70	5,830	10,297	194.22	6,086	13,395
193.71	5,835	10,355	194.23	6,091	13,456
193.72	5,840	10,414	194.24	6,096	13,517
193.73	5,845	10,472	194.25	6,102	13,578
193.74	5,850	10,531	194.26	6,107	13,639
193.75	5,855	10,589	194.27	6,112	13,700
193.76	5,859	10,648	194.28	6,117	13,761
193.77	5,864	10,706	194.29	6,122	13,822
193.78	5,869	10,765	194.30	6,127	13,883
193.79	5,874	10,824	194.31	6,132	13,945
193.80	5,879	10,883	194.32	6,137	14,006
193.81	5,884	10,941	194.33	6,142	14,067
193.82	5,889	11,000	194.34	6,147	14,129
193.83	5,893	11,059	194.35	6,152	14,190
193.84	5,898	11,118	194.36	6,157	14,252
193.85	5,903	11,177	194.37	6,162	14,313
193.86	5,908	11,236	194.38	6,167	14,375
193.87	5,913	11,295	194.39	6,172	14,437
193.88	5,918	11,354	194.40	6,177	14,499
193.89	5,923	11,414	194.41	6,182	14,560
193.90	5,927	11,473	194.42	6,187	14,622
193.91	5,932	11,532	194.43	6,192	14,684
193.92	5,937	11,591	194.44	6,197	14,746
193.93	5,942	11,651	194.45	6,202	14,808
193.94	5,947	11,710	194.46	6,207	14,870
193.95	5,952	11,770	194.47	6,212	14,932
193.96	5,957	11,829	194.48	6,217	14,994
193.97	5,961	11,889	194.49	6,222	15,057
193.98	5,966	11,949	194.50	6,227	15,119
193.99	5,971	12,008	194.51	6,232	15,181
194.00	5,976	12,068	194.52	6,237	15,243
194.01	5,981	12,128	194.53	6,242	15,306
194.02	5,986	12,188	194.54	6,247	15,368
194.03	5,991	12,248	194.55	6,252	15,431
194.04	5,996	12,307	194.56	6,257	15,493
194.05	6,001	12,367	194.57	6,262	15,556
194.06	6,006	12,427	194.58	6,267	15,619
194.07	6,011	12,488	194.59	6,272	15,681
194.08	6,016	12,548	194.60	6,277	15,744
194.09	6,021	12,608	194.61	6,282	15,807
194.10	6,026	12,668	194.62	6,287	15,870
194.11	6,031	12,728	194.63	6,292	15,933
194.12	6,036	12,789	194.64	6,297	15,995
194.13	6,041	12,849	194.65	6,302	16,058
194.14	6,046	12,910	194.66	6,307	16,122
194.15	6,051	12,970	194.67	6,312	16,185
194.16	6,056	13,031	194.68	6,317	16,248

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.69	6,322	16,311	195.21	6,587	19,667
194.70	6,327	16,374	195.22	6,592	19,733
194.71	6,332	16,438	195.23	6,597	19,799
194.72	6,337	16,501	195.24	6,602	19,865
194.73	6,342	16,564	195.25	6,607	19,931
194.74	6,347	16,628	195.26	6,612	19,997
194.75	6,353	16,691	195.27	6,618	20,063
194.76	6,358	16,755	195.28	6,623	20,129
194.77	6,363	16,818	195.29	6,628	20,195
194.78	6,368	16,882	195.30	6,633	20,262
194.79	6,373	16,946	195.31	6,638	20,328
194.80	6,378	17,009	195.32	6,643	20,394
194.81	6,383	17,073	195.33	6,649	20,461
194.82	6,388	17,137	195.34	6,654	20,527
194.83	6,393	17,201	195.35	6,659	20,594
194.84	6,398	17,265	195.36	6,664	20,661
194.85	6,403	17,329	195.37	6,669	20,727
194.86	6,408	17,393	195.38	6,674	20,794
194.87	6,413	17,457	195.39	6,680	20,861
194.88	6,418	17,521	195.40	6,685	20,928
194.89	6,423	17,585	195.41	6,690	20,994
194.90	6,428	17,650	195.42	6,695	21,061
194.91	6,433	17,714	195.43	6,700	21,128
194.92	6,438	17,778	195.44	6,705	21,195
194.93	6,443	17,843	195.45	6,711	21,262
194.94	6,448	17,907	195.46	6,716	21,330
194.95	6,453	17,972	195.47	6,721	21,397
194.96	6,458	18,036	195.48	6,726	21,464
194.97	6,463	18,101	195.49	6,731	21,531
194.98	6,468	18,166	195.50	6,737	21,599
194.99	6,473	18,230	195.51	6,742	21,666
195.00	6,478	18,295	195.52	6,747	21,733
195.01	6,483	18,360	195.53	6,752	21,801
195.02	6,488	18,425	195.54	6,757	21,869
195.03	6,494	18,490	195.55	6,762	21,936
195.04	6,499	18,555	195.56	6,768	22,004
195.05	6,504	18,620	195.57	6,773	22,071
195.06	6,509	18,685	195.58	6,778	22,139
195.07	6,514	18,750	195.59	6,783	22,207
195.08	6,519	18,815	195.60	6,788	22,275
195.09	6,525	18,880	195.61	6,793	22,343
195.10	6,530	18,945	195.62	6,799	22,411
195.11	6,535	19,011	195.63	6,804	22,479
195.12	6,540	19,076	195.64	6,809	22,547
195.13	6,545	19,142	195.65	6,814	22,615
195.14	6,550	19,207	195.66	6,819	22,683
195.15	6,556	19,273	195.67	6,824	22,751
195.16	6,561	19,338	195.68	6,830	22,820
195.17	6,566	19,404	195.69	6,835	22,888
195.18	6,571	19,469	195.70	6,840	22,956
195.19	6,576	19,535	195.71	6,845	23,025
195.20	6,581	19,601	195.72	6,850	23,093

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.73	6,855	23,162
195.74	6,861	23,230
195.75	6,866	23,299
195.76	6,871	23,368
195.77	6,876	23,436
195.78	6,881	23,505
195.79	6,886	23,574
195.80	6,892	23,643
195.81	6,897	23,712
195.82	6,902	23,781
195.83	6,907	23,850
195.84	6,912	23,919
195.85	6,917	23,988
195.86	6,923	24,057
195.87	6,928	24,127
195.88	6,933	24,196
195.89	6,938	24,265
195.90	6,943	24,335
195.91	6,948	24,404
195.92	6,954	24,474
195.93	6,959	24,543
195.94	6,964	24,613
195.95	6,969	24,682
195.96	6,974	24,752
195.97	6,979	24,822
195.98	6,985	24,892
195.99	6,990	24,962
196.00	**6,995**	**25,032**

Summary for Pond B-57: Basin #57

Inflow Area = 1.434 ac, 47.56% Impervious, Inflow Depth = 2.08" for Current 2 yr event
Inflow = 2.98 cfs @ 12.17 hrs, Volume= 0.248 af
Outflow = 0.16 cfs @ 14.36 hrs, Volume= 0.181 af, Atten= 95%, Lag= 131.2 min
Primary = 0.16 cfs @ 14.36 hrs, Volume= 0.181 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.34' @ 14.36 hrs Surf.Area= 4,676 sf Storage= 7,194 cf

Plug-Flow detention time= 531.9 min calculated for 0.180 af (73% of inflow)
Center-of-Mass det. time= 435.1 min (1,225.8 - 790.8)

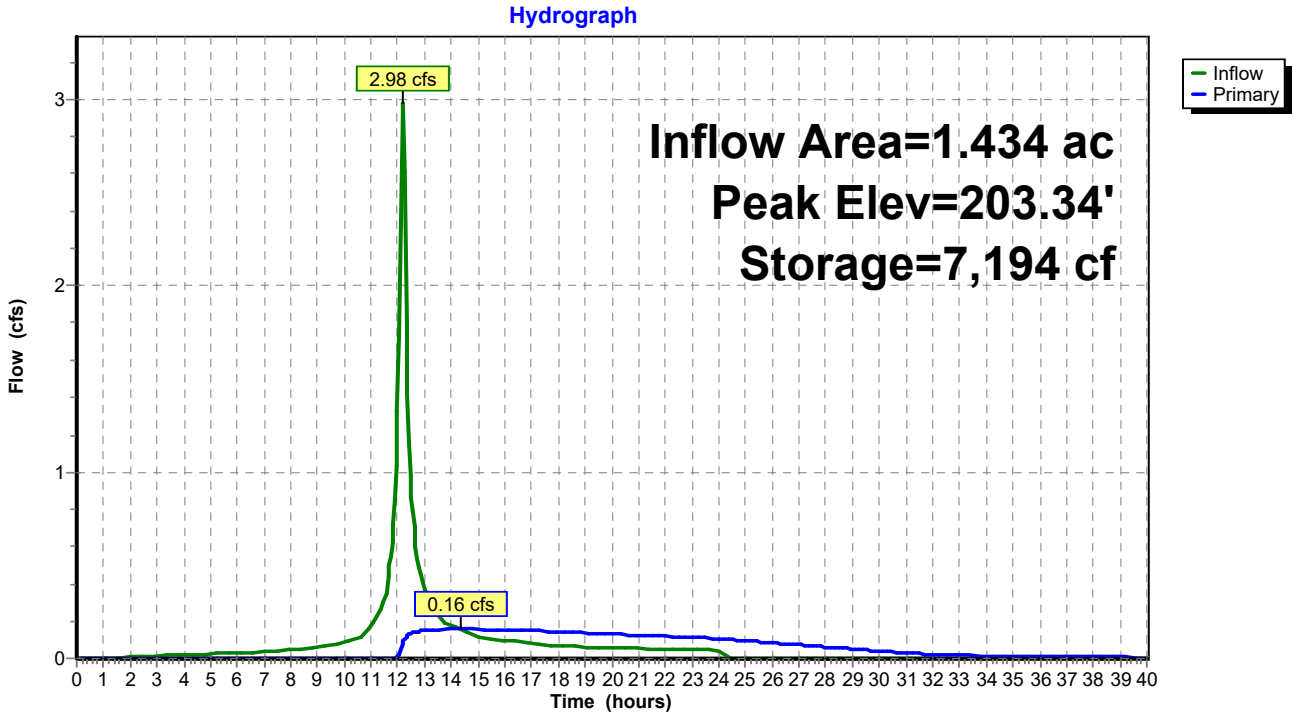
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	**18.0" Round Culvert** L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.34'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.60'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.16 cfs @ 14.36 hrs HW=203.34' (Free Discharge)
- **1=Culvert** (Passes 0.16 cfs of 11.86 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.16 cfs @ 4.57 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-57: Basin #57



Stage-Discharge for Pond B-57: Basin #57

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.11
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.11
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.11
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.11
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.11
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.11
201.36	0.00	201.88	0.00	202.40	0.01	202.92	0.11
201.37	0.00	201.89	0.00	202.41	0.01	202.93	0.11
201.38	0.00	201.90	0.00	202.42	0.01	202.94	0.12
201.39	0.00	201.91	0.00	202.43	0.01	202.95	0.12
201.40	0.00	201.92	0.00	202.44	0.02	202.96	0.12
201.41	0.00	201.93	0.00	202.45	0.02	202.97	0.12
201.42	0.00	201.94	0.00	202.46	0.02	202.98	0.12
201.43	0.00	201.95	0.00	202.47	0.03	202.99	0.12
201.44	0.00	201.96	0.00	202.48	0.03	203.00	0.12
201.45	0.00	201.97	0.00	202.49	0.03	203.01	0.12
201.46	0.00	201.98	0.00	202.50	0.04	203.02	0.12
201.47	0.00	201.99	0.00	202.51	0.04	203.03	0.13
201.48	0.00	202.00	0.00	202.52	0.05	203.04	0.13
201.49	0.00	202.01	0.00	202.53	0.05	203.05	0.13
201.50	0.00	202.02	0.00	202.54	0.05	203.06	0.13
201.51	0.00	202.03	0.00	202.55	0.05	203.07	0.13
201.52	0.00	202.04	0.00	202.56	0.06	203.08	0.13
201.53	0.00	202.05	0.00	202.57	0.06	203.09	0.13
201.54	0.00	202.06	0.00	202.58	0.06	203.10	0.13
201.55	0.00	202.07	0.00	202.59	0.06	203.11	0.13
201.56	0.00	202.08	0.00	202.60	0.06	203.12	0.13
201.57	0.00	202.09	0.00	202.61	0.07	203.13	0.14
201.58	0.00	202.10	0.00	202.62	0.07	203.14	0.14
201.59	0.00	202.11	0.00	202.63	0.07	203.15	0.14
201.60	0.00	202.12	0.00	202.64	0.07	203.16	0.14
201.61	0.00	202.13	0.00	202.65	0.07	203.17	0.14
201.62	0.00	202.14	0.00	202.66	0.08	203.18	0.14
201.63	0.00	202.15	0.00	202.67	0.08	203.19	0.14
201.64	0.00	202.16	0.00	202.68	0.08	203.20	0.14
201.65	0.00	202.17	0.00	202.69	0.08	203.21	0.14
201.66	0.00	202.18	0.00	202.70	0.08	203.22	0.14
201.67	0.00	202.19	0.00	202.71	0.08	203.23	0.15
201.68	0.00	202.20	0.00	202.72	0.09	203.24	0.15
201.69	0.00	202.21	0.00	202.73	0.09	203.25	0.15
201.70	0.00	202.22	0.00	202.74	0.09	203.26	0.15
201.71	0.00	202.23	0.00	202.75	0.09	203.27	0.15
201.72	0.00	202.24	0.00	202.76	0.09	203.28	0.15
201.73	0.00	202.25	0.00	202.77	0.09	203.29	0.15
201.74	0.00	202.26	0.00	202.78	0.10	203.30	0.15
201.75	0.00	202.27	0.00	202.79	0.10	203.31	0.15
201.76	0.00	202.28	0.00	202.80	0.10	203.32	0.15
201.77	0.00	202.29	0.00	202.81	0.10	203.33	0.15
201.78	0.00	202.30	0.00	202.82	0.10	203.34	0.16
201.79	0.00	202.31	0.00	202.83	0.10	203.35	0.16
201.80	0.00	202.32	0.00	202.84	0.10	203.36	0.16
201.81	0.00	202.33	0.00	202.85	0.10	203.37	0.16

Stage-Discharge for Pond B-57: Basin #57 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	0.16	203.90	2.32	204.42	9.54	204.94	52.24
203.39	0.16	203.91	2.42	204.43	9.71	204.95	53.72
203.40	0.16	203.92	2.53	204.44	9.88	204.96	55.23
203.41	0.16	203.93	2.64	204.45	10.05	204.97	56.77
203.42	0.16	203.94	2.75	204.46	10.22	204.98	58.33
203.43	0.16	203.95	2.86	204.47	10.39	204.99	59.92
203.44	0.16	203.96	2.98	204.48	10.56	205.00	**61.53**
203.45	0.16	203.97	3.09	204.49	10.73		
203.46	0.17	203.98	3.21	204.50	10.90		
203.47	0.17	203.99	3.33	204.51	11.19		
203.48	0.17	204.00	3.45	204.52	11.58		
203.49	0.17	204.01	3.57	204.53	12.03		
203.50	0.17	204.02	3.69	204.54	12.54		
203.51	0.17	204.03	3.82	204.55	13.09		
203.52	0.17	204.04	3.94	204.56	13.68		
203.53	0.17	204.05	4.07	204.57	14.30		
203.54	0.17	204.06	4.20	204.58	14.97		
203.55	0.17	204.07	4.32	204.59	15.66		
203.56	0.17	204.08	4.46	204.60	16.38		
203.57	0.17	204.09	4.59	204.61	17.14		
203.58	0.17	204.10	4.72	204.62	17.92		
203.59	0.18	204.11	4.85	204.63	18.73		
203.60	0.18	204.12	4.99	204.64	19.56		
203.61	0.19	204.13	5.13	204.65	20.42		
203.62	0.21	204.14	5.26	204.66	21.31		
203.63	0.25	204.15	5.40	204.67	22.22		
203.64	0.28	204.16	5.54	204.68	23.05		
203.65	0.33	204.17	5.68	204.69	23.83		
203.66	0.37	204.18	5.83	204.70	24.63		
203.67	0.42	204.19	5.97	204.71	25.49		
203.68	0.48	204.20	6.11	204.72	26.38		
203.69	0.53	204.21	6.26	204.73	27.29		
203.70	0.60	204.22	6.41	204.74	28.23		
203.71	0.66	204.23	6.55	204.75	29.19		
203.72	0.73	204.24	6.70	204.76	30.17		
203.73	0.80	204.25	6.85	204.77	31.19		
203.74	0.87	204.26	7.00	204.78	32.22		
203.75	0.94	204.27	7.15	204.79	33.28		
203.76	1.02	204.28	7.31	204.80	34.37		
203.77	1.10	204.29	7.46	204.81	35.48		
203.78	1.18	204.30	7.62	204.82	36.61		
203.79	1.26	204.31	7.77	204.83	37.77		
203.80	1.35	204.32	7.93	204.84	38.96		
203.81	1.44	204.33	8.09	204.85	40.16		
203.82	1.53	204.34	8.24	204.86	41.40		
203.83	1.62	204.35	8.40	204.87	42.65		
203.84	1.71	204.36	8.56	204.88	43.93		
203.85	1.81	204.37	8.73	204.89	45.24		
203.86	1.91	204.38	8.89	204.90	46.56		
203.87	2.01	204.39	9.05	204.91	47.94		
203.88	2.11	204.40	9.21	204.92	49.35		
203.89	2.21	204.41	9.38	204.93	50.78		

Stage-Area-Storage for Pond B-57: Basin #57

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,948	767
201.31	57	0	201.83	3,005	796
201.32	113	1	201.84	3,062	827
201.33	170	3	201.85	3,119	858
201.34	227	5	201.86	3,175	889
201.35	284	7	201.87	3,232	921
201.36	340	10	201.88	3,289	954
201.37	397	14	201.89	3,345	987
201.38	454	18	201.90	3,402	1,021
201.39	510	23	201.91	3,459	1,055
201.40	567	28	201.92	3,515	1,090
201.41	624	34	201.93	3,572	1,125
201.42	680	41	201.94	3,629	1,161
201.43	737	48	201.95	3,686	1,198
201.44	794	56	201.96	3,742	1,235
201.45	851	64	201.97	3,799	1,273
201.46	907	73	201.98	3,856	1,311
201.47	964	82	201.99	3,912	1,350
201.48	1,021	92	202.00	3,969	1,389
201.49	1,077	102	202.01	3,974	1,429
201.50	1,134	113	202.02	3,979	1,469
201.51	1,191	125	202.03	3,985	1,508
201.52	1,247	137	202.04	3,990	1,548
201.53	1,304	150	202.05	3,995	1,588
201.54	1,361	163	202.06	4,000	1,628
201.55	1,418	177	202.07	4,005	1,668
201.56	1,474	192	202.08	4,011	1,708
201.57	1,531	207	202.09	4,016	1,748
201.58	1,588	222	202.10	4,021	1,789
201.59	1,644	238	202.11	4,026	1,829
201.60	1,701	255	202.12	4,031	1,869
201.61	1,758	272	202.13	4,036	1,910
201.62	1,814	290	202.14	4,042	1,950
201.63	1,871	309	202.15	4,047	1,990
201.64	1,928	328	202.16	4,052	2,031
201.65	1,985	347	202.17	4,057	2,071
201.66	2,041	367	202.18	4,062	2,112
201.67	2,098	388	202.19	4,068	2,153
201.68	2,155	409	202.20	4,073	2,193
201.69	2,211	431	202.21	4,078	2,234
201.70	2,268	454	202.22	4,083	2,275
201.71	2,325	477	202.23	4,088	2,316
201.72	2,381	500	202.24	4,094	2,357
201.73	2,438	524	202.25	4,099	2,398
201.74	2,495	549	202.26	4,104	2,439
201.75	2,551	574	202.27	4,109	2,480
201.76	2,608	600	202.28	4,114	2,521
201.77	2,665	626	202.29	4,120	2,562
201.78	2,722	653	202.30	4,125	2,603
201.79	2,778	681	202.31	4,130	2,644
201.80	2,835	709	202.32	4,135	2,686
201.81	2,892	737	202.33	4,140	2,727

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	4,145	2,769	202.86	4,415	4,994
202.35	4,151	2,810	202.87	4,421	5,039
202.36	4,156	2,852	202.88	4,426	5,083
202.37	4,161	2,893	202.89	4,431	5,127
202.38	4,166	2,935	202.90	4,436	5,171
202.39	4,171	2,977	202.91	4,441	5,216
202.40	4,177	3,018	202.92	4,446	5,260
202.41	4,182	3,060	202.93	4,452	5,305
202.42	4,187	3,102	202.94	4,457	5,349
202.43	4,192	3,144	202.95	4,462	5,394
202.44	4,197	3,186	202.96	4,467	5,439
202.45	4,203	3,228	202.97	4,472	5,483
202.46	4,208	3,270	202.98	4,478	5,528
202.47	4,213	3,312	202.99	4,483	5,573
202.48	4,218	3,354	203.00	4,488	5,618
202.49	4,223	3,396	203.01	4,493	5,663
202.50	4,229	3,439	203.02	4,499	5,708
202.51	4,234	3,481	203.03	4,504	5,753
202.52	4,239	3,523	203.04	4,510	5,798
202.53	4,244	3,566	203.05	4,515	5,843
202.54	4,249	3,608	203.06	4,521	5,888
202.55	4,254	3,651	203.07	4,526	5,933
202.56	4,260	3,693	203.08	4,532	5,978
202.57	4,265	3,736	203.09	4,537	6,024
202.58	4,270	3,778	203.10	4,543	6,069
202.59	4,275	3,821	203.11	4,548	6,115
202.60	4,280	3,864	203.12	4,554	6,160
202.61	4,286	3,907	203.13	4,559	6,206
202.62	4,291	3,950	203.14	4,564	6,251
202.63	4,296	3,993	203.15	4,570	6,297
202.64	4,301	4,036	203.16	4,575	6,343
202.65	4,306	4,079	203.17	4,581	6,388
202.66	4,312	4,122	203.18	4,586	6,434
202.67	4,317	4,165	203.19	4,592	6,480
202.68	4,322	4,208	203.20	4,597	6,526
202.69	4,327	4,251	203.21	4,603	6,572
202.70	4,332	4,295	203.22	4,608	6,618
202.71	4,337	4,338	203.23	4,614	6,664
202.72	4,343	4,381	203.24	4,619	6,710
202.73	4,348	4,425	203.25	4,625	6,757
202.74	4,353	4,468	203.26	4,630	6,803
202.75	4,358	4,512	203.27	4,635	6,849
202.76	4,363	4,555	203.28	4,641	6,896
202.77	4,369	4,599	203.29	4,646	6,942
202.78	4,374	4,643	203.30	4,652	6,989
202.79	4,379	4,687	203.31	4,657	7,035
202.80	4,384	4,730	203.32	4,663	7,082
202.81	4,389	4,774	203.33	4,668	7,128
202.82	4,395	4,818	203.34	4,674	7,175
202.83	4,400	4,862	203.35	4,679	7,222
202.84	4,405	4,906	203.36	4,685	7,269
202.85	4,410	4,950	203.37	4,690	7,316

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,695	7,363	203.90	4,979	9,878
203.39	4,701	7,409	203.91	4,985	9,928
203.40	4,706	7,457	203.92	4,990	9,978
203.41	4,712	7,504	203.93	4,996	10,028
203.42	4,717	7,551	203.94	5,001	10,078
203.43	4,723	7,598	203.95	5,007	10,128
203.44	4,728	7,645	203.96	5,012	10,178
203.45	4,734	7,693	203.97	5,018	10,228
203.46	4,739	7,740	203.98	5,023	10,278
203.47	4,745	7,787	203.99	5,029	10,328
203.48	4,750	7,835	204.00	5,034	10,379
203.49	4,756	7,882	204.01	5,040	10,429
203.50	4,761	7,930	204.02	5,045	10,479
203.51	4,766	7,978	204.03	5,051	10,530
203.52	4,772	8,025	204.04	5,057	10,580
203.53	4,777	8,073	204.05	5,063	10,631
203.54	4,783	8,121	204.06	5,068	10,682
203.55	4,788	8,169	204.07	5,074	10,732
203.56	4,794	8,217	204.08	5,080	10,783
203.57	4,799	8,265	204.09	5,086	10,834
203.58	4,805	8,313	204.10	5,091	10,885
203.59	4,810	8,361	204.11	5,097	10,936
203.60	4,816	8,409	204.12	5,103	10,987
203.61	4,821	8,457	204.13	5,109	11,038
203.62	4,827	8,505	204.14	5,114	11,089
203.63	4,832	8,553	204.15	5,120	11,140
203.64	4,837	8,602	204.16	5,126	11,191
203.65	4,843	8,650	204.17	5,132	11,243
203.66	4,848	8,699	204.18	5,137	11,294
203.67	4,854	8,747	204.19	5,143	11,345
203.68	4,859	8,796	204.20	5,149	11,397
203.69	4,865	8,844	204.21	5,155	11,448
203.70	4,870	8,893	204.22	5,160	11,500
203.71	4,876	8,942	204.23	5,166	11,552
203.72	4,881	8,991	204.24	5,172	11,603
203.73	4,887	9,039	204.25	5,178	11,655
203.74	4,892	9,088	204.26	5,183	11,707
203.75	4,898	9,137	204.27	5,189	11,759
203.76	4,903	9,186	204.28	5,195	11,811
203.77	4,908	9,235	204.29	5,200	11,863
203.78	4,914	9,284	204.30	5,206	11,915
203.79	4,919	9,334	204.31	5,212	11,967
203.80	4,925	9,383	204.32	5,218	12,019
203.81	4,930	9,432	204.33	5,223	12,071
203.82	4,936	9,481	204.34	5,229	12,123
203.83	4,941	9,531	204.35	5,235	12,176
203.84	4,947	9,580	204.36	5,241	12,228
203.85	4,952	9,630	204.37	5,246	12,281
203.86	4,958	9,679	204.38	5,252	12,333
203.87	4,963	9,729	204.39	5,258	12,386
203.88	4,968	9,779	204.40	5,264	12,438
203.89	4,974	9,828	204.41	5,269	12,491

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	5,275	12,544
204.43	5,281	12,596
204.44	5,287	12,649
204.45	5,292	12,702
204.46	5,298	12,755
204.47	5,304	12,808
204.48	5,310	12,861
204.49	5,315	12,914
204.50	5,321	12,967
204.51	5,327	13,021
204.52	5,332	13,074
204.53	5,338	13,127
204.54	5,344	13,181
204.55	5,350	13,234
204.56	5,355	13,288
204.57	5,361	13,341
204.58	5,367	13,395
204.59	5,373	13,449
204.60	5,378	13,502
204.61	5,384	13,556
204.62	5,390	13,610
204.63	5,396	13,664
204.64	5,401	13,718
204.65	5,407	13,772
204.66	5,413	13,826
204.67	5,419	13,880
204.68	5,424	13,934
204.69	5,430	13,989
204.70	5,436	14,043
204.71	5,442	14,097
204.72	5,447	14,152
204.73	5,453	14,206
204.74	5,459	14,261
204.75	5,465	14,316
204.76	5,470	14,370
204.77	5,476	14,425
204.78	5,482	14,480
204.79	5,487	14,535
204.80	5,493	14,590
204.81	5,499	14,644
204.82	5,505	14,700
204.83	5,510	14,755
204.84	5,516	14,810
204.85	5,522	14,865
204.86	5,528	14,920
204.87	5,533	14,975
204.88	5,539	15,031
204.89	5,545	15,086
204.90	5,551	15,142
204.91	5,556	15,197
204.92	5,562	15,253
204.93	5,568	15,308
204.94	5,574	15,364
204.95	5,579	15,420
204.96	5,585	15,476
204.97	5,591	15,532
204.98	5,597	15,588
204.99	5,602	15,644
205.00	**5,608**	**15,700**

Summary for Pond B-58: Basin #58

Inflow Area = 1.649 ac, 26.80% Impervious, Inflow Depth = 1.67" for Current 2 yr event
Inflow = 2.80 cfs @ 12.18 hrs, Volume= 0.229 af
Outflow = 0.13 cfs @ 14.95 hrs, Volume= 0.173 af, Atten= 95%, Lag= 166.3 min
Primary = 0.13 cfs @ 14.95 hrs, Volume= 0.173 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 199.67' @ 14.95 hrs Surf.Area= 6,703 sf Storage= 6,534 cf

Plug-Flow detention time= 587.3 min calculated for 0.173 af (76% of inflow)
Center-of-Mass det. time= 492.9 min (1,306.2 - 813.3)

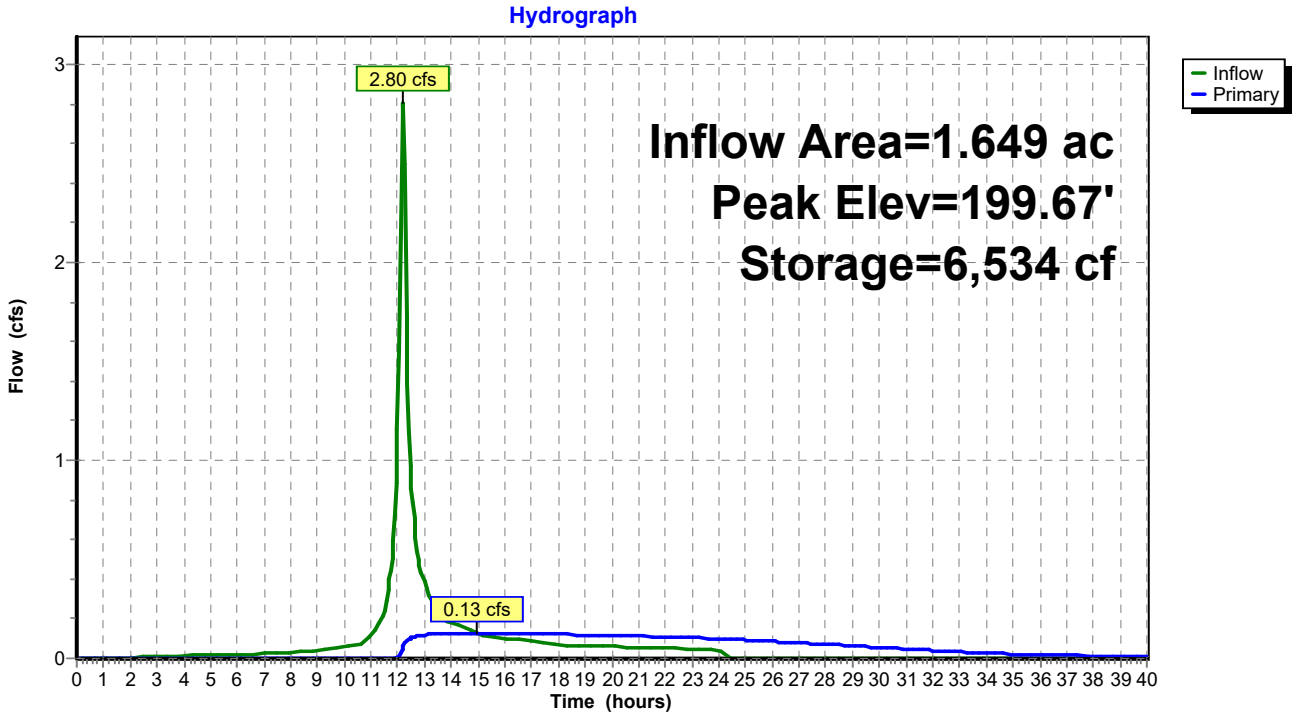
Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	**18.0" Round Culvert** L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	198.97'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	199.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	201.90'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.13 cfs @ 14.95 hrs HW=199.67' (Free Discharge)
- **1=Culvert** (Passes 0.13 cfs of 5.61 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 3.73 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-58: Basin #58



Stage-Discharge for Pond B-58: Basin #58

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
198.30	0.00	198.82	0.00	199.34	0.08	199.86	0.15
198.31	0.00	198.83	0.00	199.35	0.09	199.87	0.15
198.32	0.00	198.84	0.00	199.36	0.09	199.88	0.15
198.33	0.00	198.85	0.00	199.37	0.09	199.89	0.15
198.34	0.00	198.86	0.00	199.38	0.09	199.90	0.15
198.35	0.00	198.87	0.00	199.39	0.09	199.91	0.15
198.36	0.00	198.88	0.00	199.40	0.09	199.92	0.16
198.37	0.00	198.89	0.00	199.41	0.10	199.93	0.19
198.38	0.00	198.90	0.00	199.42	0.10	199.94	0.22
198.39	0.00	198.91	0.00	199.43	0.10	199.95	0.26
198.40	0.00	198.92	0.00	199.44	0.10	199.96	0.30
198.41	0.00	198.93	0.00	199.45	0.10	199.97	0.35
198.42	0.00	198.94	0.00	199.46	0.10	199.98	0.40
198.43	0.00	198.95	0.00	199.47	0.10	199.99	0.45
198.44	0.00	198.96	0.00	199.48	0.10	200.00	0.51
198.45	0.00	198.97	0.00	199.49	0.11	200.01	0.57
198.46	0.00	198.98	0.00	199.50	0.11	200.02	0.63
198.47	0.00	198.99	0.00	199.51	0.11	200.03	0.70
198.48	0.00	199.00	0.00	199.52	0.11	200.04	0.77
198.49	0.00	199.01	0.00	199.53	0.11	200.05	0.84
198.50	0.00	199.02	0.00	199.54	0.11	200.06	0.92
198.51	0.00	199.03	0.01	199.55	0.11	200.07	0.99
198.52	0.00	199.04	0.01	199.56	0.11	200.08	1.07
198.53	0.00	199.05	0.01	199.57	0.12	200.09	1.16
198.54	0.00	199.06	0.01	199.58	0.12	200.10	1.24
198.55	0.00	199.07	0.02	199.59	0.12	200.11	1.33
198.56	0.00	199.08	0.02	199.60	0.12	200.12	1.41
198.57	0.00	199.09	0.02	199.61	0.12	200.13	1.50
198.58	0.00	199.10	0.03	199.62	0.12	200.14	1.60
198.59	0.00	199.11	0.03	199.63	0.12	200.15	1.69
198.60	0.00	199.12	0.03	199.64	0.12	200.16	1.79
198.61	0.00	199.13	0.04	199.65	0.12	200.17	1.88
198.62	0.00	199.14	0.04	199.66	0.13	200.18	1.98
198.63	0.00	199.15	0.05	199.67	0.13	200.19	2.08
198.64	0.00	199.16	0.05	199.68	0.13	200.20	2.19
198.65	0.00	199.17	0.05	199.69	0.13	200.21	2.29
198.66	0.00	199.18	0.05	199.70	0.13	200.22	2.40
198.67	0.00	199.19	0.06	199.71	0.13	200.23	2.51
198.68	0.00	199.20	0.06	199.72	0.13	200.24	2.62
198.69	0.00	199.21	0.06	199.73	0.13	200.25	2.73
198.70	0.00	199.22	0.06	199.74	0.13	200.26	2.84
198.71	0.00	199.23	0.06	199.75	0.13	200.27	2.95
198.72	0.00	199.24	0.07	199.76	0.14	200.28	3.07
198.73	0.00	199.25	0.07	199.77	0.14	200.29	3.19
198.74	0.00	199.26	0.07	199.78	0.14	200.30	3.31
198.75	0.00	199.27	0.07	199.79	0.14	200.31	3.43
198.76	0.00	199.28	0.07	199.80	0.14	200.32	3.55
198.77	0.00	199.29	0.08	199.81	0.14	200.33	3.67
198.78	0.00	199.30	0.08	199.82	0.14	200.34	3.79
198.79	0.00	199.31	0.08	199.83	0.14	200.35	3.92
198.80	0.00	199.32	0.08	199.84	0.14	200.36	4.05
198.81	0.00	199.33	0.08	199.85	0.14	200.37	4.17

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.38	4.30	200.90	10.88	201.42	12.74	201.94	15.30
200.39	4.43	200.91	10.92	201.43	12.78	201.95	15.71
200.40	4.57	200.92	10.96	201.44	12.81	201.96	16.15
200.41	4.70	200.93	11.00	201.45	12.84	201.97	16.63
200.42	4.83	200.94	11.04	201.46	12.88	201.98	17.14
200.43	4.97	200.95	11.07	201.47	12.91	201.99	17.68
200.44	5.10	200.96	11.11	201.48	12.94	202.00	18.26
200.45	5.24	200.97	11.15	201.49	12.97	202.01	18.86
200.46	5.38	200.98	11.19	201.50	13.01	202.02	19.49
200.47	5.52	200.99	11.23	201.51	13.04	202.03	20.15
200.48	5.66	201.00	11.26	201.52	13.07	202.04	20.83
200.49	5.81	201.01	11.30	201.53	13.10	202.05	21.53
200.50	5.95	201.02	11.34	201.54	13.14	202.06	22.26
200.51	6.09	201.03	11.38	201.55	13.17	202.07	23.01
200.52	6.24	201.04	11.41	201.56	13.20	202.08	23.78
200.53	6.39	201.05	11.45	201.57	13.23	202.09	24.58
200.54	6.53	201.06	11.49	201.58	13.26	202.10	25.39
200.55	6.68	201.07	11.52	201.59	13.30	202.11	26.27
200.56	6.83	201.08	11.56	201.60	13.33	202.12	27.17
200.57	6.98	201.09	11.60	201.61	13.36	202.13	28.10
200.58	7.13	201.10	11.63	201.62	13.39	202.14	29.05
200.59	7.29	201.11	11.67	201.63	13.42	202.15	30.02
200.60	7.44	201.12	11.71	201.64	13.45	202.16	31.03
200.61	7.60	201.13	11.74	201.65	13.48	202.17	32.05
200.62	7.75	201.14	11.78	201.66	13.52	202.18	33.10
200.63	7.91	201.15	11.81	201.67	13.55	202.19	34.17
200.64	8.07	201.16	11.85	201.68	13.58	202.20	35.27
200.65	8.22	201.17	11.88	201.69	13.61	202.21	36.39
200.66	8.38	201.18	11.92	201.70	13.64	202.22	37.54
200.67	8.54	201.19	11.96	201.71	13.67	202.23	38.71
200.68	8.71	201.20	11.99	201.72	13.70	202.24	39.90
200.69	8.87	201.21	12.03	201.73	13.73	202.25	41.12
200.70	9.03	201.22	12.06	201.74	13.76	202.26	42.36
200.71	9.19	201.23	12.10	201.75	13.79	202.27	43.63
200.72	9.36	201.24	12.13	201.76	13.83	202.28	44.92
200.73	9.53	201.25	12.17	201.77	13.86	202.29	46.23
200.74	9.69	201.26	12.20	201.78	13.89	202.30	47.57
200.75	9.86	201.27	12.24	201.79	13.92	202.31	48.96
200.76	10.03	201.28	12.27	201.80	13.95	202.32	50.37
200.77	10.20	201.29	12.30	201.81	13.98	202.33	51.82
200.78	10.37	201.30	12.34	201.82	14.01	202.34	53.28
200.79	10.45	201.31	12.37	201.83	14.04	202.35	54.78
200.80	10.49	201.32	12.41	201.84	14.07	202.36	56.30
200.81	10.53	201.33	12.44	201.85	14.10	202.37	57.84
200.82	10.57	201.34	12.47	201.86	14.13	202.38	59.41
200.83	10.61	201.35	12.51	201.87	14.16	202.39	61.01
200.84	10.65	201.36	12.54	201.88	14.19	202.40	62.64
200.85	10.69	201.37	12.58	201.89	14.22	202.41	64.29
200.86	10.72	201.38	12.61	201.90	14.25	202.42	65.97
200.87	10.76	201.39	12.64	201.91	14.39	202.43	67.67
200.88	10.80	201.40	12.68	201.92	14.64	202.44	69.40
200.89	10.84	201.41	12.71	201.93	14.94	202.45	71.16

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)
202.46	72.95
202.47	74.76
202.48	76.60
202.49	78.46
202.50	80.35
202.51	82.00
202.52	83.67
202.53	85.34
202.54	87.03
202.55	88.74
202.56	90.45
202.57	92.18
202.58	93.93
202.59	95.68
202.60	97.45
202.61	99.23
202.62	101.02
202.63	102.83
202.64	104.65
202.65	106.48
202.66	108.32
202.67	110.18
202.68	112.05
202.69	113.93
202.70	115.82
202.71	117.76
202.72	119.72
202.73	121.69
202.74	123.67
202.75	125.66
202.76	127.67
202.77	129.69
202.78	131.72
202.79	133.77
202.80	135.83
202.81	137.90
202.82	139.99
202.83	142.09
202.84	144.20
202.85	146.32
202.86	148.46
202.87	150.61
202.88	152.77
202.89	154.94
202.90	157.13
202.91	159.27
202.92	161.43
202.93	163.60
202.94	165.77
202.95	167.96
202.96	170.16
202.97	172.37
202.98	174.59
202.99	176.82
203.00	**179.06**

Stage-Area-Storage for Pond B-58: Basin #58

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.30	0	0	198.82	4,628	1,203
198.31	89	0	198.83	4,717	1,250
198.32	178	2	198.84	4,806	1,298
198.33	267	4	198.85	4,895	1,346
198.34	356	7	198.86	4,984	1,396
198.35	445	11	198.87	5,073	1,446
198.36	534	16	198.88	5,162	1,497
198.37	623	22	198.89	5,251	1,549
198.38	712	28	198.90	5,340	1,602
198.39	801	36	198.91	5,429	1,656
198.40	890	44	198.92	5,518	1,711
198.41	979	54	198.93	5,607	1,766
198.42	1,068	64	198.94	5,696	1,823
198.43	1,157	75	198.95	5,785	1,880
198.44	1,246	87	198.96	5,874	1,938
198.45	1,335	100	198.97	5,963	1,998
198.46	1,424	114	198.98	6,052	2,058
198.47	1,513	129	198.99	6,141	2,119
198.48	1,602	144	199.00	6,230	2,180
198.49	1,691	161	199.01	6,237	2,243
198.50	1,780	178	199.02	6,244	2,305
198.51	1,869	196	199.03	6,251	2,368
198.52	1,958	215	199.04	6,258	2,430
198.53	2,047	235	199.05	6,265	2,493
198.54	2,136	256	199.06	6,272	2,556
198.55	2,225	278	199.07	6,279	2,618
198.56	2,314	301	199.08	6,286	2,681
198.57	2,403	324	199.09	6,293	2,744
198.58	2,492	349	199.10	6,300	2,807
198.59	2,581	374	199.11	6,307	2,870
198.60	2,670	401	199.12	6,314	2,933
198.61	2,759	428	199.13	6,321	2,996
198.62	2,848	456	199.14	6,328	3,060
198.63	2,937	485	199.15	6,335	3,123
198.64	3,026	514	199.16	6,342	3,186
198.65	3,115	545	199.17	6,349	3,250
198.66	3,204	577	199.18	6,356	3,313
198.67	3,293	609	199.19	6,363	3,377
198.68	3,382	643	199.20	6,370	3,441
198.69	3,471	677	199.21	6,377	3,504
198.70	3,560	712	199.22	6,384	3,568
198.71	3,649	748	199.23	6,391	3,632
198.72	3,738	785	199.24	6,398	3,696
198.73	3,827	823	199.25	6,406	3,760
198.74	3,916	862	199.26	6,413	3,824
198.75	4,005	901	199.27	6,420	3,888
198.76	4,094	942	199.28	6,427	3,952
198.77	4,183	983	199.29	6,434	4,017
198.78	4,272	1,025	199.30	6,441	4,081
198.79	4,361	1,068	199.31	6,448	4,146
198.80	4,450	1,113	199.32	6,455	4,210
198.81	4,539	1,157	199.33	6,462	4,275

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.34	6,469	4,339	199.86	6,834	7,798
199.35	6,476	4,404	199.87	6,841	7,866
199.36	6,483	4,469	199.88	6,848	7,935
199.37	6,490	4,534	199.89	6,855	8,003
199.38	6,497	4,599	199.90	6,862	8,072
199.39	6,504	4,664	199.91	6,869	8,140
199.40	6,511	4,729	199.92	6,876	8,209
199.41	6,518	4,794	199.93	6,883	8,278
199.42	6,525	4,859	199.94	6,890	8,347
199.43	6,532	4,924	199.95	6,897	8,416
199.44	6,539	4,990	199.96	6,904	8,485
199.45	6,546	5,055	199.97	6,911	8,554
199.46	6,553	5,121	199.98	6,918	8,623
199.47	6,560	5,186	199.99	6,925	8,692
199.48	6,567	5,252	200.00	6,932	8,761
199.49	6,574	5,317	200.01	6,939	8,831
199.50	6,581	5,383	200.02	6,947	8,900
199.51	6,588	5,449	200.03	6,954	8,970
199.52	6,595	5,515	200.04	6,962	9,039
199.53	6,602	5,581	200.05	6,969	9,109
199.54	6,609	5,647	200.06	6,976	9,179
199.55	6,616	5,713	200.07	6,984	9,249
199.56	6,623	5,779	200.08	6,991	9,318
199.57	6,630	5,846	200.09	6,998	9,388
199.58	6,637	5,912	200.10	7,006	9,458
199.59	6,644	5,978	200.11	7,013	9,528
199.60	6,651	6,045	200.12	7,021	9,599
199.61	6,658	6,111	200.13	7,028	9,669
199.62	6,665	6,178	200.14	7,035	9,739
199.63	6,672	6,245	200.15	7,043	9,810
199.64	6,679	6,311	200.16	7,050	9,880
199.65	6,686	6,378	200.17	7,057	9,951
199.66	6,693	6,445	200.18	7,065	10,021
199.67	6,700	6,512	200.19	7,072	10,092
199.68	6,707	6,579	200.20	7,080	10,163
199.69	6,714	6,646	200.21	7,087	10,233
199.70	6,721	6,713	200.22	7,094	10,304
199.71	6,728	6,781	200.23	7,102	10,375
199.72	6,735	6,848	200.24	7,109	10,446
199.73	6,742	6,915	200.25	7,117	10,518
199.74	6,749	6,983	200.26	7,124	10,589
199.75	6,757	7,050	200.27	7,131	10,660
199.76	6,764	7,118	200.28	7,139	10,731
199.77	6,771	7,186	200.29	7,146	10,803
199.78	6,778	7,253	200.30	7,153	10,874
199.79	6,785	7,321	200.31	7,161	10,946
199.80	6,792	7,389	200.32	7,168	11,018
199.81	6,799	7,457	200.33	7,176	11,089
199.82	6,806	7,525	200.34	7,183	11,161
199.83	6,813	7,593	200.35	7,190	11,233
199.84	6,820	7,661	200.36	7,198	11,305
199.85	6,827	7,730	200.37	7,205	11,377

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.38	7,212	11,449	200.90	7,596	15,299
200.39	7,220	11,521	200.91	7,604	15,375
200.40	7,227	11,593	200.92	7,611	15,451
200.41	7,235	11,666	200.93	7,618	15,527
200.42	7,242	11,738	200.94	7,626	15,604
200.43	7,249	11,810	200.95	7,633	15,680
200.44	7,257	11,883	200.96	7,640	15,756
200.45	7,264	11,956	200.97	7,648	15,833
200.46	7,271	12,028	200.98	7,655	15,909
200.47	7,279	12,101	200.99	7,663	15,986
200.48	7,286	12,174	201.00	7,670	16,062
200.49	7,294	12,247	201.01	7,678	16,139
200.50	7,301	12,320	201.02	7,685	16,216
200.51	7,308	12,393	201.03	7,693	16,293
200.52	7,316	12,466	201.04	7,700	16,370
200.53	7,323	12,539	201.05	7,708	16,447
200.54	7,331	12,612	201.06	7,715	16,524
200.55	7,338	12,686	201.07	7,723	16,601
200.56	7,345	12,759	201.08	7,730	16,679
200.57	7,353	12,833	201.09	7,738	16,756
200.58	7,360	12,906	201.10	7,746	16,833
200.59	7,367	12,980	201.11	7,753	16,911
200.60	7,375	13,054	201.12	7,761	16,988
200.61	7,382	13,127	201.13	7,768	17,066
200.62	7,390	13,201	201.14	7,776	17,144
200.63	7,397	13,275	201.15	7,783	17,222
200.64	7,404	13,349	201.16	7,791	17,299
200.65	7,412	13,423	201.17	7,799	17,377
200.66	7,419	13,497	201.18	7,806	17,455
200.67	7,426	13,572	201.19	7,814	17,533
200.68	7,434	13,646	201.20	7,821	17,612
200.69	7,441	13,720	201.21	7,829	17,690
200.70	7,449	13,795	201.22	7,836	17,768
200.71	7,456	13,869	201.23	7,844	17,847
200.72	7,463	13,944	201.24	7,851	17,925
200.73	7,471	14,019	201.25	7,859	18,004
200.74	7,478	14,093	201.26	7,867	18,082
200.75	7,486	14,168	201.27	7,874	18,161
200.76	7,493	14,243	201.28	7,882	18,240
200.77	7,500	14,318	201.29	7,889	18,319
200.78	7,508	14,393	201.30	7,897	18,398
200.79	7,515	14,468	201.31	7,904	18,477
200.80	7,522	14,543	201.32	7,912	18,556
200.81	7,530	14,619	201.33	7,919	18,635
200.82	7,537	14,694	201.34	7,927	18,714
200.83	7,545	14,769	201.35	7,935	18,793
200.84	7,552	14,845	201.36	7,942	18,873
200.85	7,559	14,920	201.37	7,950	18,952
200.86	7,567	14,996	201.38	7,957	19,032
200.87	7,574	15,072	201.39	7,965	19,111
200.88	7,581	15,147	201.40	7,972	19,191
200.89	7,589	15,223	201.41	7,980	19,271

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.42	7,988	19,351	201.94	8,381	23,606
201.43	7,995	19,430	201.95	8,388	23,690
201.44	8,003	19,510	201.96	8,396	23,774
201.45	8,010	19,591	201.97	8,403	23,858
201.46	8,018	19,671	201.98	8,411	23,942
201.47	8,025	19,751	201.99	8,418	24,026
201.48	8,033	19,831	202.00	8,426	24,110
201.49	8,040	19,912	202.01	8,434	24,195
201.50	8,048	19,992	202.02	8,442	24,279
201.51	8,056	20,073	202.03	8,449	24,364
201.52	8,063	20,153	202.04	8,457	24,448
201.53	8,071	20,234	202.05	8,465	24,533
201.54	8,078	20,315	202.06	8,473	24,617
201.55	8,086	20,395	202.07	8,480	24,702
201.56	8,093	20,476	202.08	8,488	24,787
201.57	8,101	20,557	202.09	8,496	24,872
201.58	8,108	20,638	202.10	8,504	24,957
201.59	8,116	20,719	202.11	8,511	25,042
201.60	8,124	20,801	202.12	8,519	25,127
201.61	8,131	20,882	202.13	8,527	25,212
201.62	8,139	20,963	202.14	8,535	25,298
201.63	8,146	21,045	202.15	8,542	25,383
201.64	8,154	21,126	202.16	8,550	25,469
201.65	8,161	21,208	202.17	8,558	25,554
201.66	8,169	21,289	202.18	8,566	25,640
201.67	8,177	21,371	202.19	8,573	25,725
201.68	8,184	21,453	202.20	8,581	25,811
201.69	8,192	21,535	202.21	8,589	25,897
201.70	8,199	21,617	202.22	8,597	25,983
201.71	8,207	21,699	202.23	8,604	26,069
201.72	8,214	21,781	202.24	8,612	26,155
201.73	8,222	21,863	202.25	8,620	26,241
201.74	8,229	21,945	202.26	8,628	26,327
201.75	8,237	22,028	202.27	8,635	26,414
201.76	8,245	22,110	202.28	8,643	26,500
201.77	8,252	22,193	202.29	8,651	26,587
201.78	8,260	22,275	202.30	8,659	26,673
201.79	8,267	22,358	202.31	8,666	26,760
201.80	8,275	22,440	202.32	8,674	26,847
201.81	8,282	22,523	202.33	8,682	26,933
201.82	8,290	22,606	202.34	8,690	27,020
201.83	8,297	22,689	202.35	8,697	27,107
201.84	8,305	22,772	202.36	8,705	27,194
201.85	8,313	22,855	202.37	8,713	27,281
201.86	8,320	22,938	202.38	8,721	27,368
201.87	8,328	23,022	202.39	8,728	27,456
201.88	8,335	23,105	202.40	8,736	27,543
201.89	8,343	23,188	202.41	8,744	27,630
201.90	8,350	23,272	202.42	8,752	27,718
201.91	8,358	23,355	202.43	8,759	27,805
201.92	8,366	23,439	202.44	8,767	27,893
201.93	8,373	23,523	202.45	8,775	27,981

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

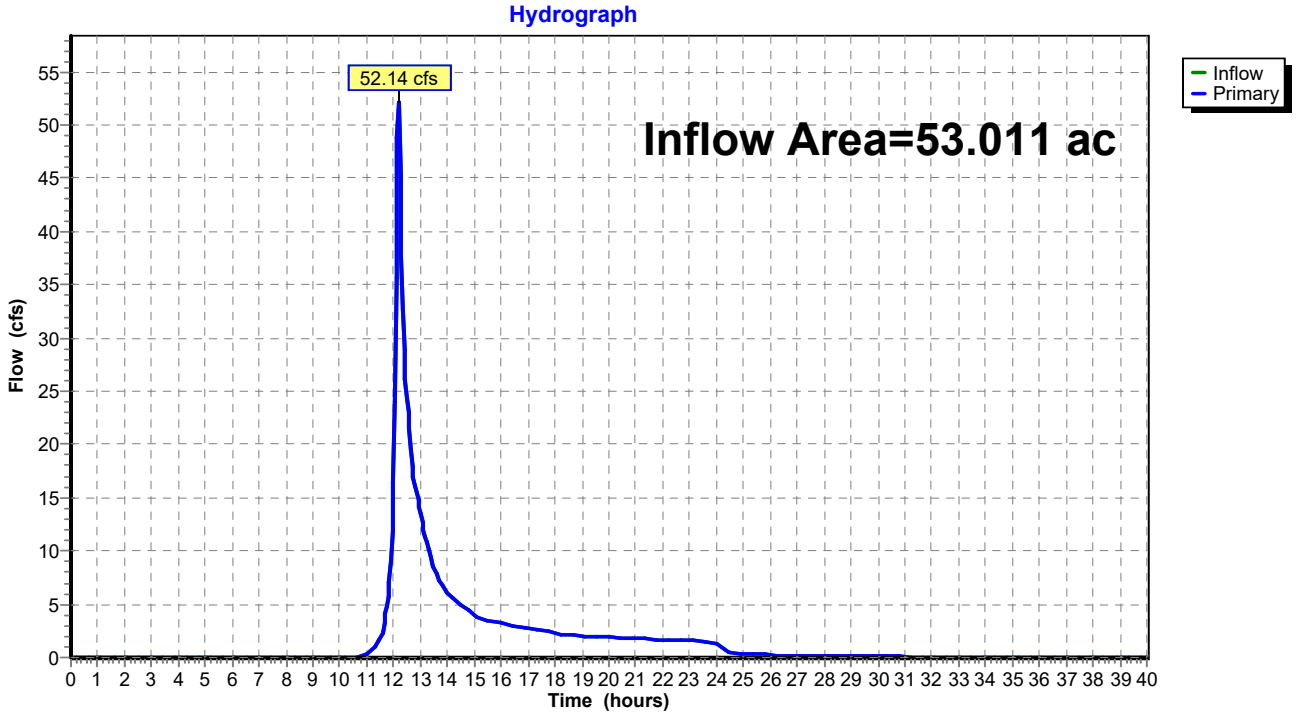
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.46	8,783	28,068
202.47	8,790	28,156
202.48	8,798	28,244
202.49	8,806	28,332
202.50	8,814	28,420
202.51	8,821	28,509
202.52	8,829	28,597
202.53	8,837	28,685
202.54	8,845	28,774
202.55	8,852	28,862
202.56	8,860	28,951
202.57	8,868	29,039
202.58	8,876	29,128
202.59	8,883	29,217
202.60	8,891	29,306
202.61	8,899	29,395
202.62	8,907	29,484
202.63	8,914	29,573
202.64	8,922	29,662
202.65	8,930	29,751
202.66	8,938	29,840
202.67	8,945	29,930
202.68	8,953	30,019
202.69	8,961	30,109
202.70	8,969	30,199
202.71	8,976	30,288
202.72	8,984	30,378
202.73	8,992	30,468
202.74	9,000	30,558
202.75	9,007	30,648
202.76	9,015	30,738
202.77	9,023	30,828
202.78	9,031	30,919
202.79	9,038	31,009
202.80	9,046	31,099
202.81	9,054	31,190
202.82	9,062	31,280
202.83	9,069	31,371
202.84	9,077	31,462
202.85	9,085	31,553
202.86	9,093	31,643
202.87	9,100	31,734
202.88	9,108	31,825
202.89	9,116	31,917
202.90	9,124	32,008
202.91	9,131	32,099
202.92	9,139	32,190
202.93	9,147	32,282
202.94	9,154	32,373
202.95	9,162	32,465
202.96	9,170	32,557
202.97	9,178	32,648
202.98	9,186	32,740
202.99	9,193	32,832
203.00	**9,201**	**32,924**

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 53.011 ac, 11.21% Impervious, Inflow Depth > 1.23" for Current 2 yr event
Inflow = 52.14 cfs @ 12.19 hrs, Volume= 5.422 af
Primary = 52.14 cfs @ 12.19 hrs, Volume= 5.422 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6



Summary for Subcatchment 51I: PDA-51 (impervious)

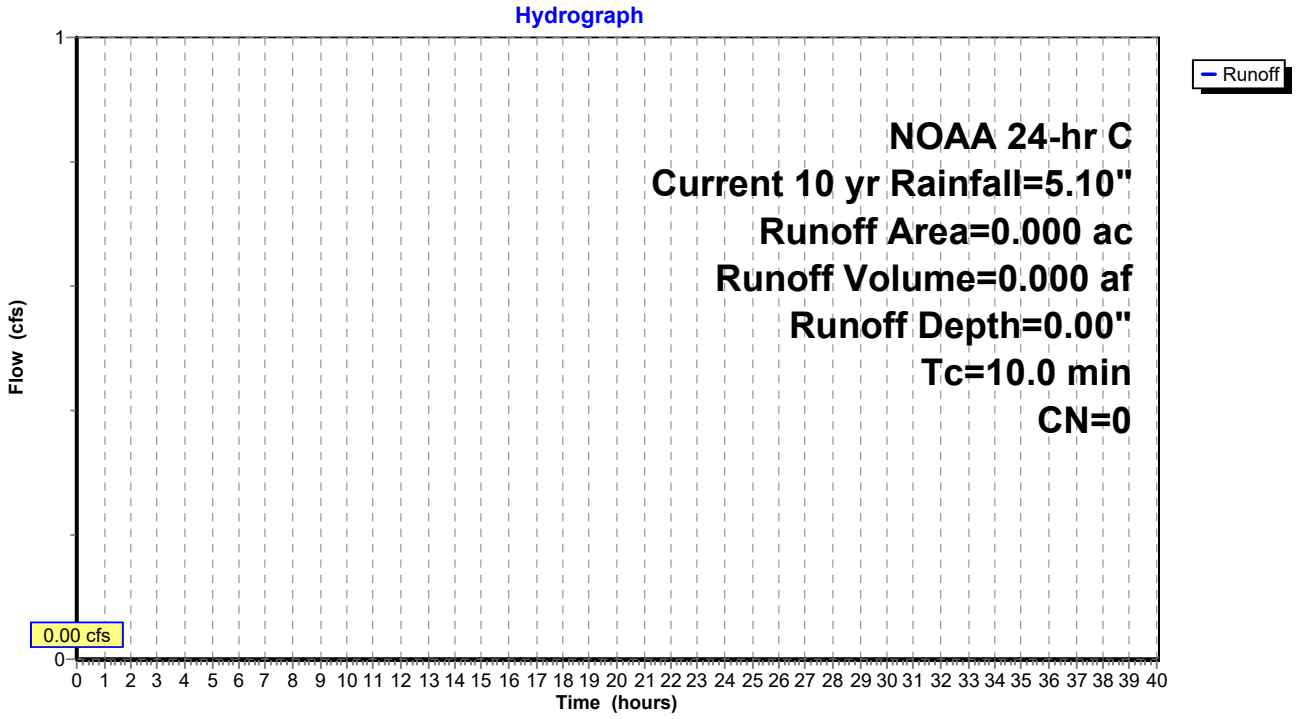
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.000	98	Roof, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 51I: PDA-51 (impervious)



Summary for Subcatchment 51P: PDA-51 (pervious)

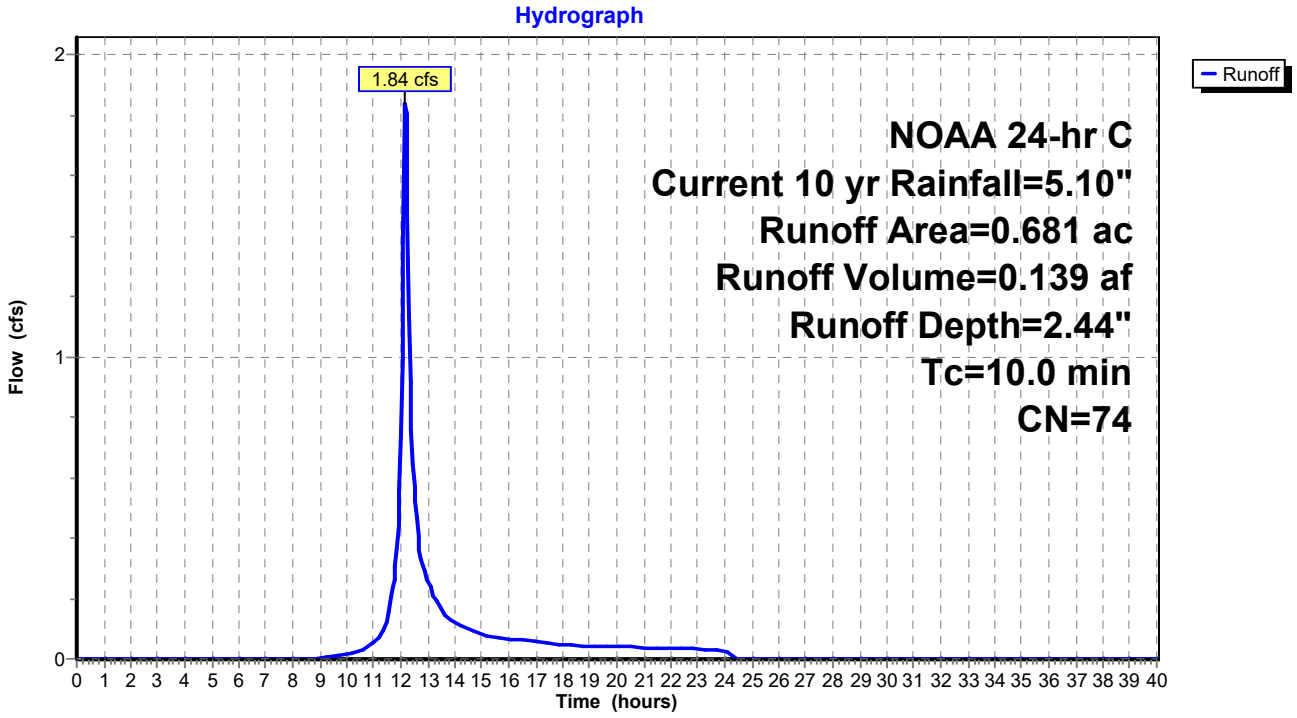
Runoff = 1.84 cfs @ 12.18 hrs, Volume= 0.139 af, Depth= 2.44"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.681	74	>75% Grass cover, Good, HSG C
0.681		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 51P: PDA-51 (pervious)



Summary for Subcatchment 52I: PDA-52 (impervious)

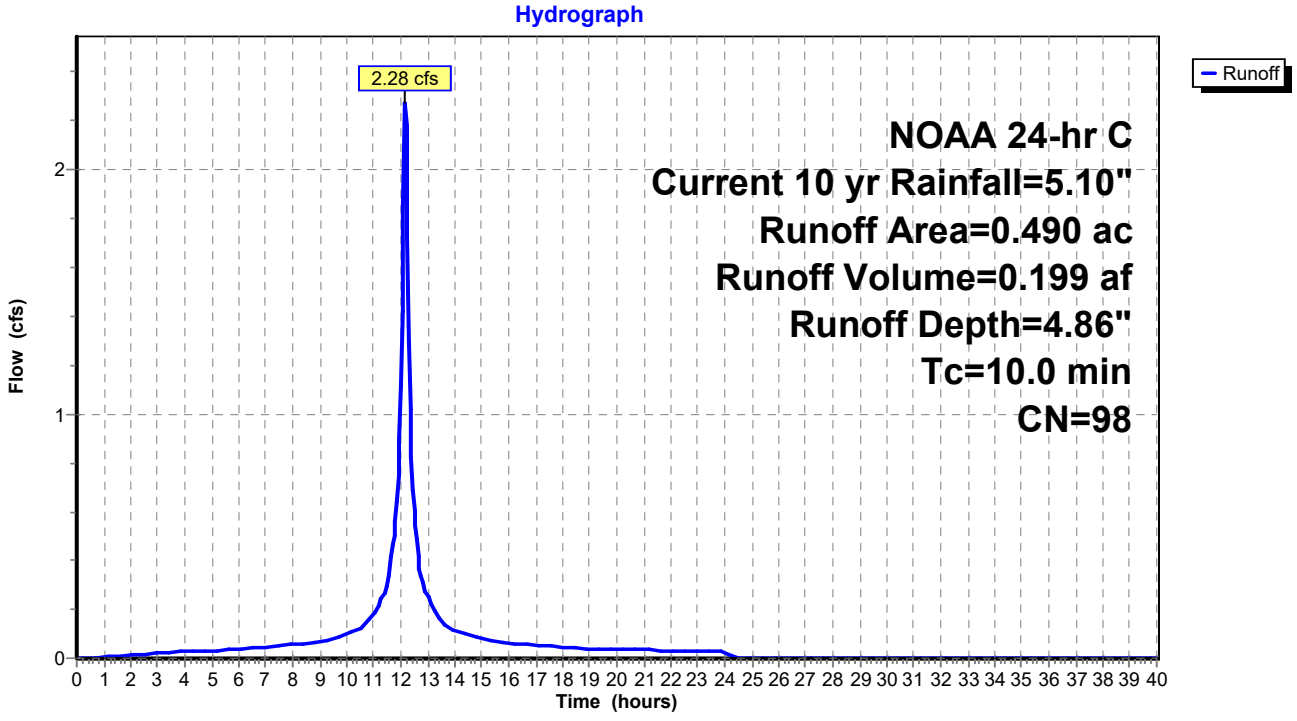
Runoff = 2.28 cfs @ 12.17 hrs, Volume= 0.199 af, Depth= 4.86"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.118	98	Pavement, HSG C
*	0.339	98	Roof, HSG C
*	0.033	98	Concrete, HSG C
	0.490	98	Weighted Average
	0.490		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 52I: PDA-52 (impervious)



Summary for Subcatchment 52P: PDA-52 (pervious)

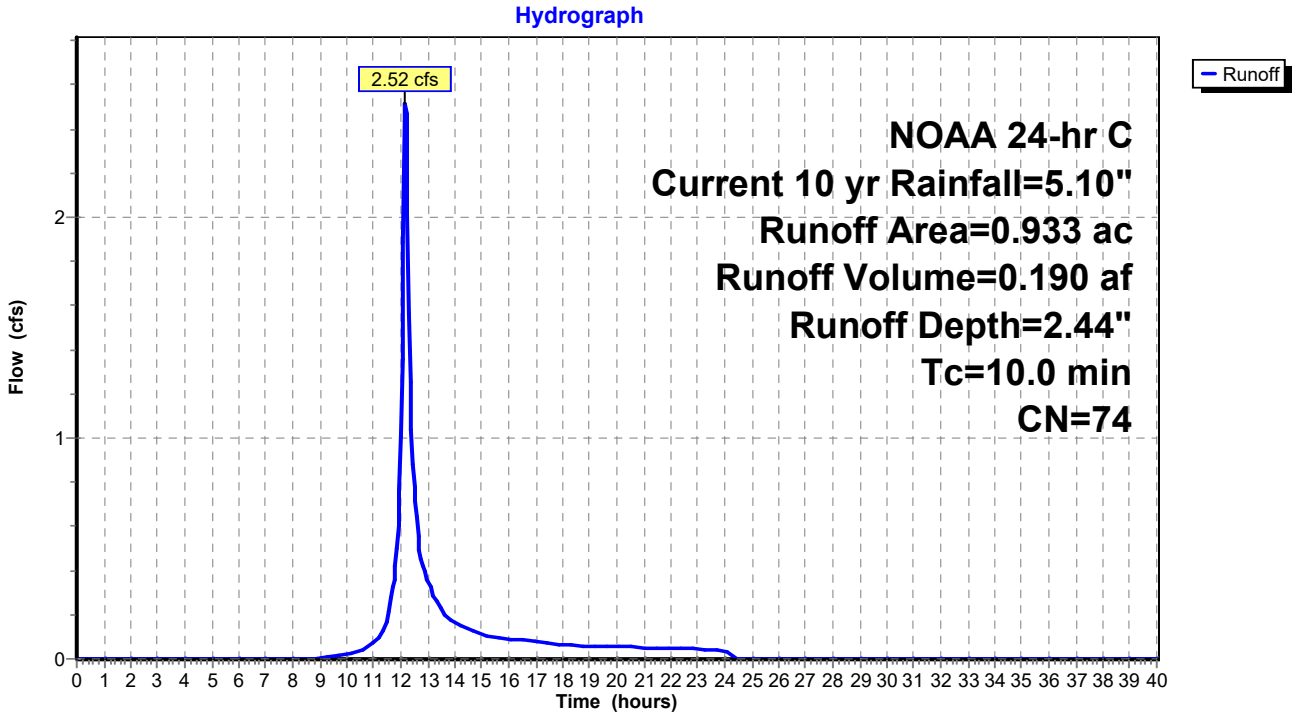
Runoff = 2.52 cfs @ 12.18 hrs, Volume= 0.190 af, Depth= 2.44"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.933	74	>75% Grass cover, Good, HSG C
0.933		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 52P: PDA-52 (pervious)



Summary for Subcatchment 53I: PDA-53 (impervious)

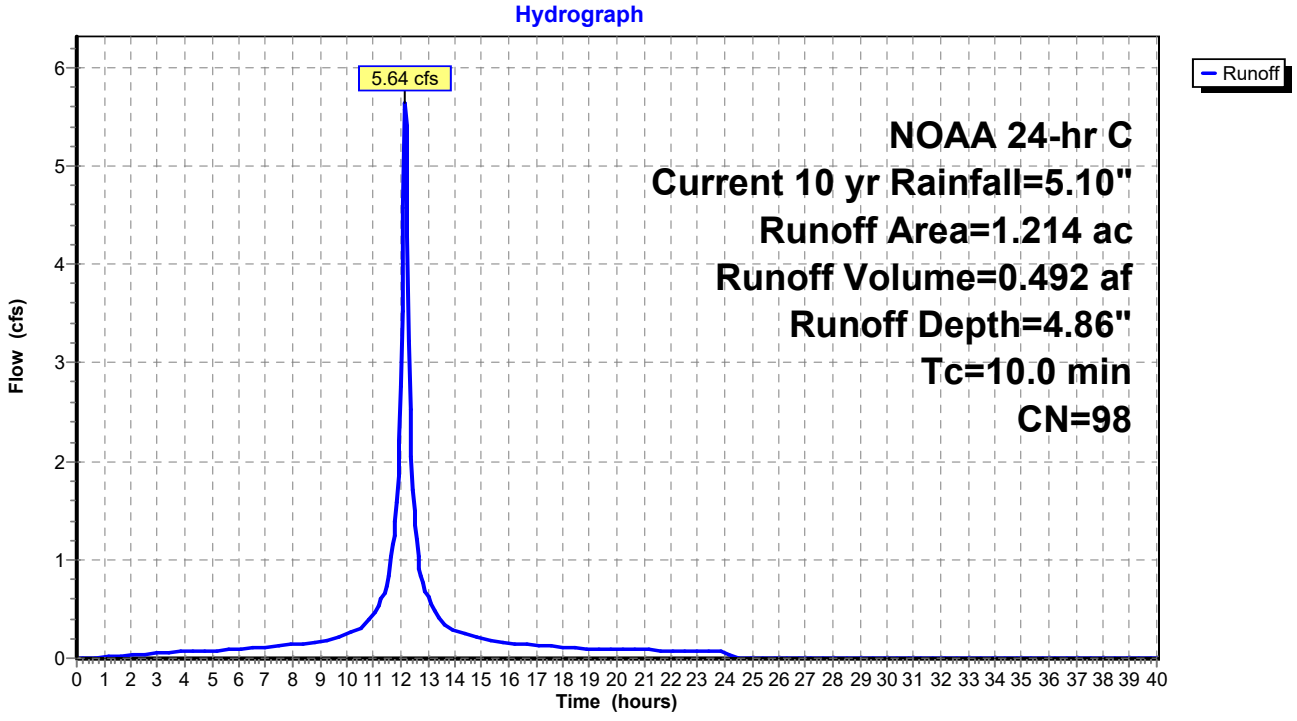
Runoff = 5.64 cfs @ 12.17 hrs, Volume= 0.492 af, Depth= 4.86"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.628	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	1.214	98	Weighted Average
	1.214		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 53I: PDA-53 (impervious)



Summary for Subcatchment 53P: PDA-53 (pervious)

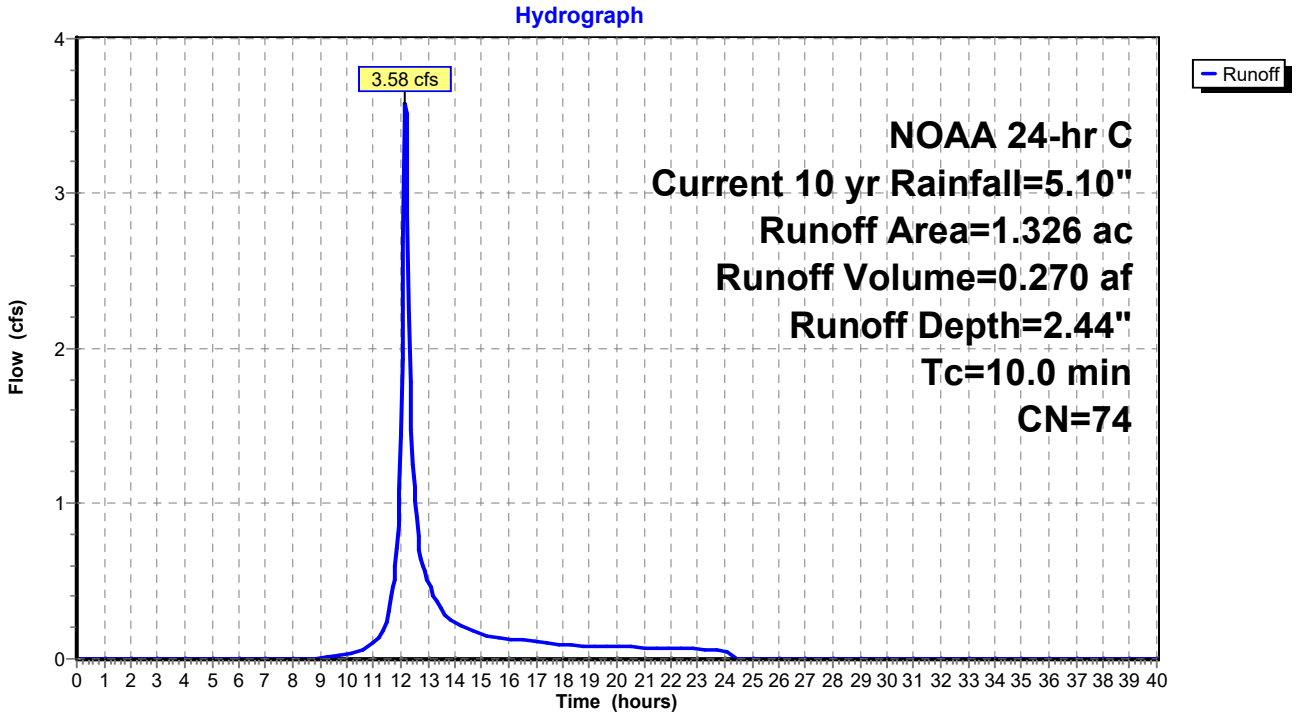
Runoff = 3.58 cfs @ 12.18 hrs, Volume= 0.270 af, Depth= 2.44"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.326	74	>75% Grass cover, Good, HSG C
1.326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 53P: PDA-53 (pervious)



Summary for Subcatchment 54l: PDA-54 (impervious)

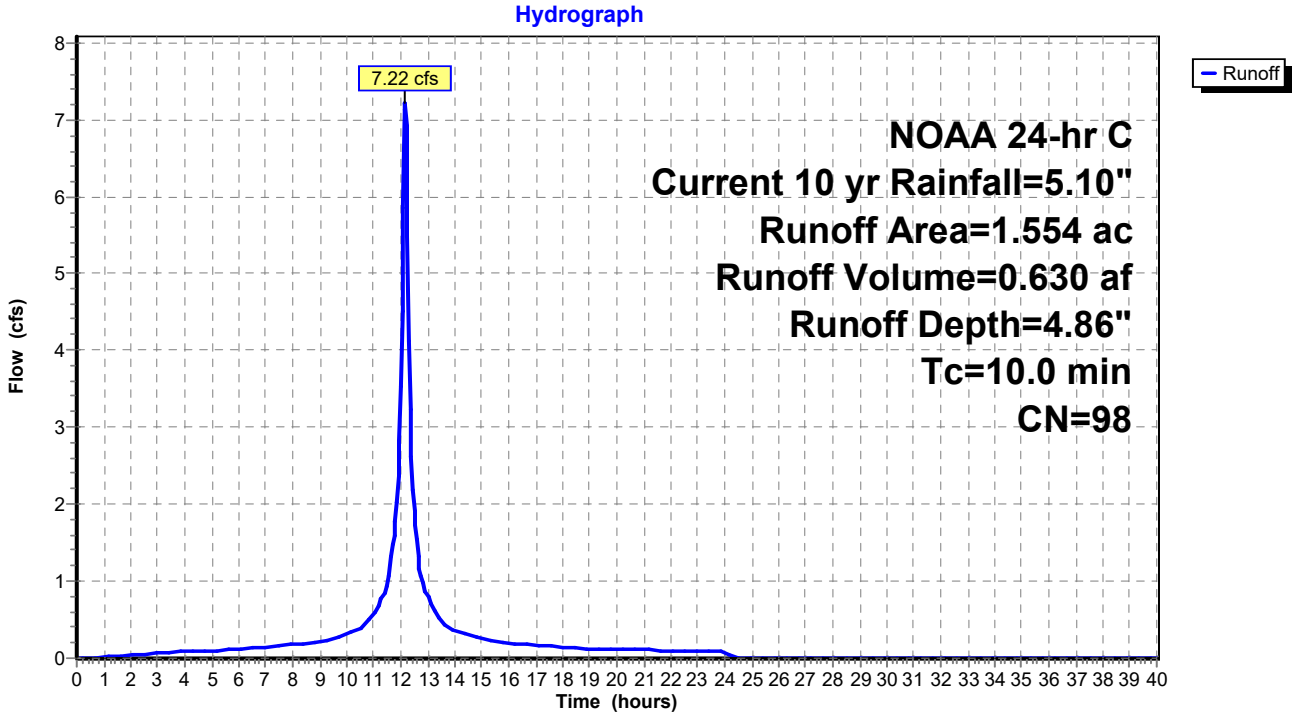
Runoff = 7.22 cfs @ 12.17 hrs, Volume= 0.630 af, Depth= 4.86"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.983	98	Pavement, HSG C
*	0.361	98	Roof, HSG C
*	0.210	98	Concrete, HSG C
	1.554	98	Weighted Average
	1.554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 54l: PDA-54 (impervious)



Summary for Subcatchment 54P: PDA-54 (pervious)

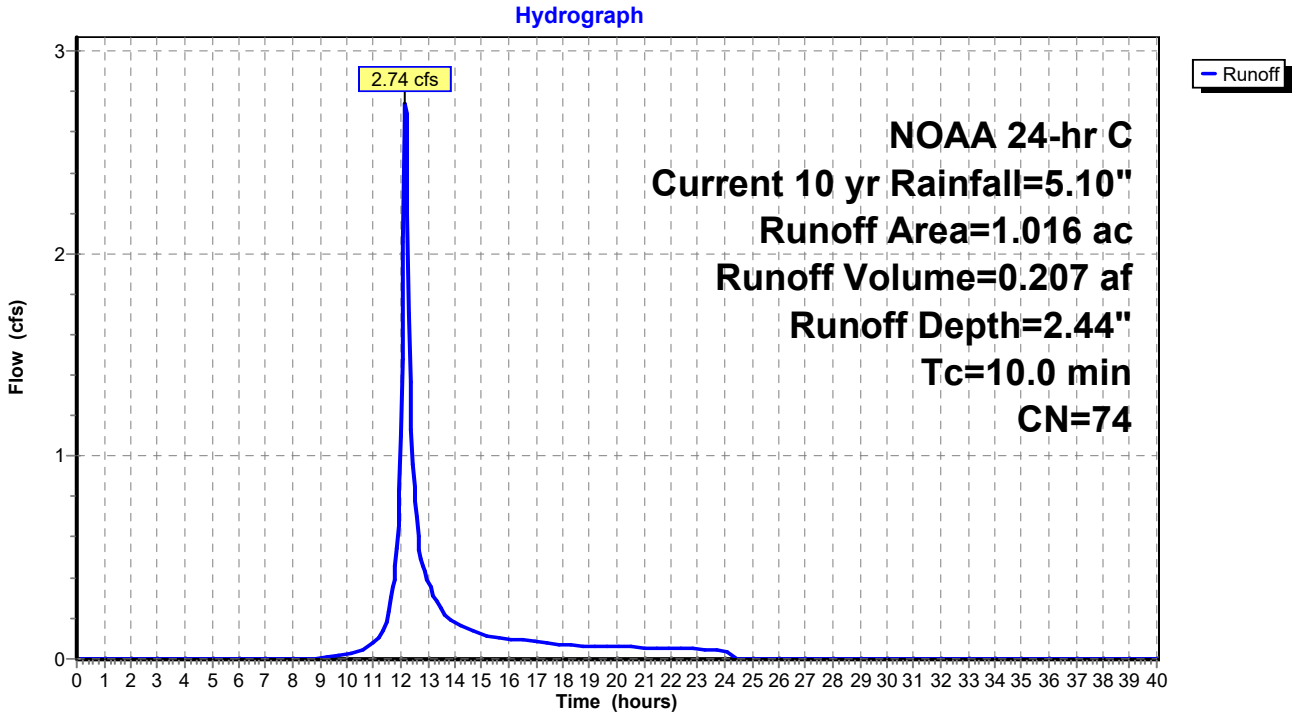
Runoff = 2.74 cfs @ 12.18 hrs, Volume= 0.207 af, Depth= 2.44"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.016	74	>75% Grass cover, Good, HSG C
1.016		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 54P: PDA-54 (pervious)



Summary for Subcatchment 55l: PDA-55 (impervious)

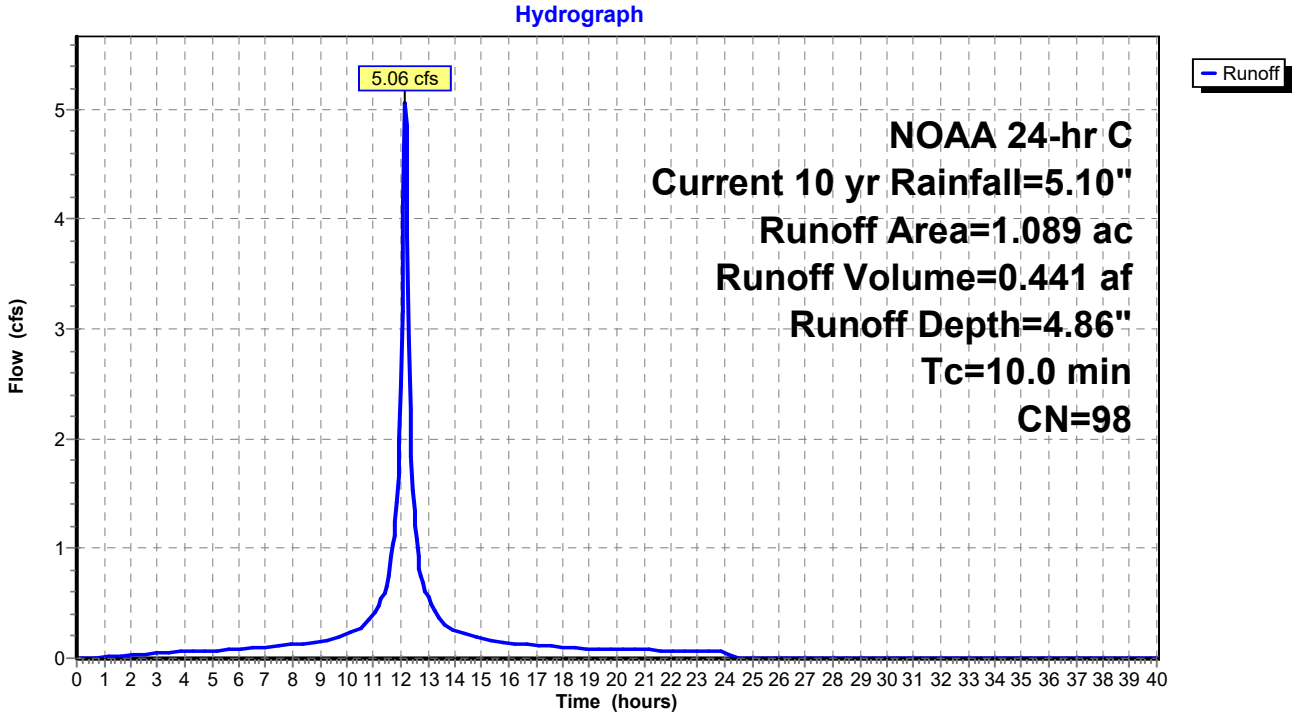
Runoff = 5.06 cfs @ 12.17 hrs, Volume= 0.441 af, Depth= 4.86"
Routed to Pond B-55 : Basin #55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.467	98	Pavement, HSG C
*	0.574	98	Roof, HSG C
*	0.048	98	Concrete, HSG C
	1.089	98	Weighted Average
	1.089		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 55l: PDA-55 (impervious)



Summary for Subcatchment 55P: PDA-55 (pervious)

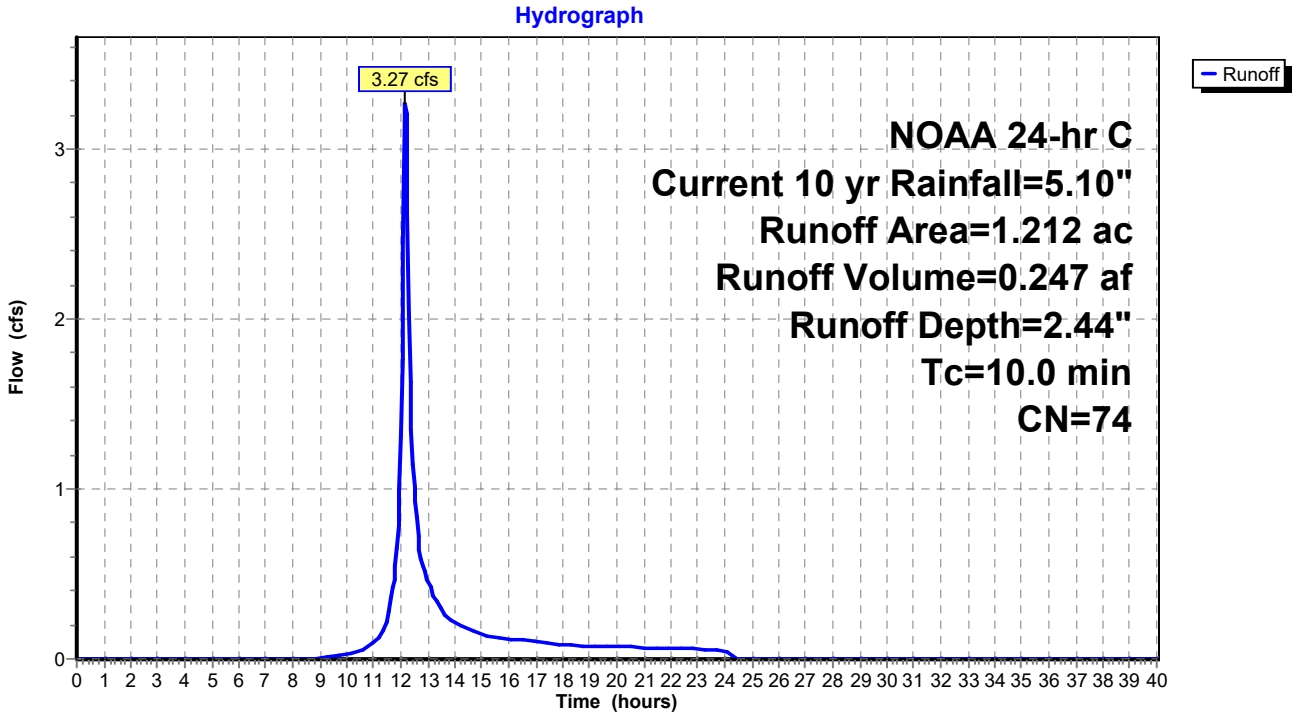
Runoff = 3.27 cfs @ 12.18 hrs, Volume= 0.247 af, Depth= 2.44"
Routed to Pond B-55 : Basin #55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.212	74	>75% Grass cover, Good, HSG C
1.212		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 55P: PDA-55 (pervious)



Summary for Subcatchment 56l: PDA-56 (impervious)

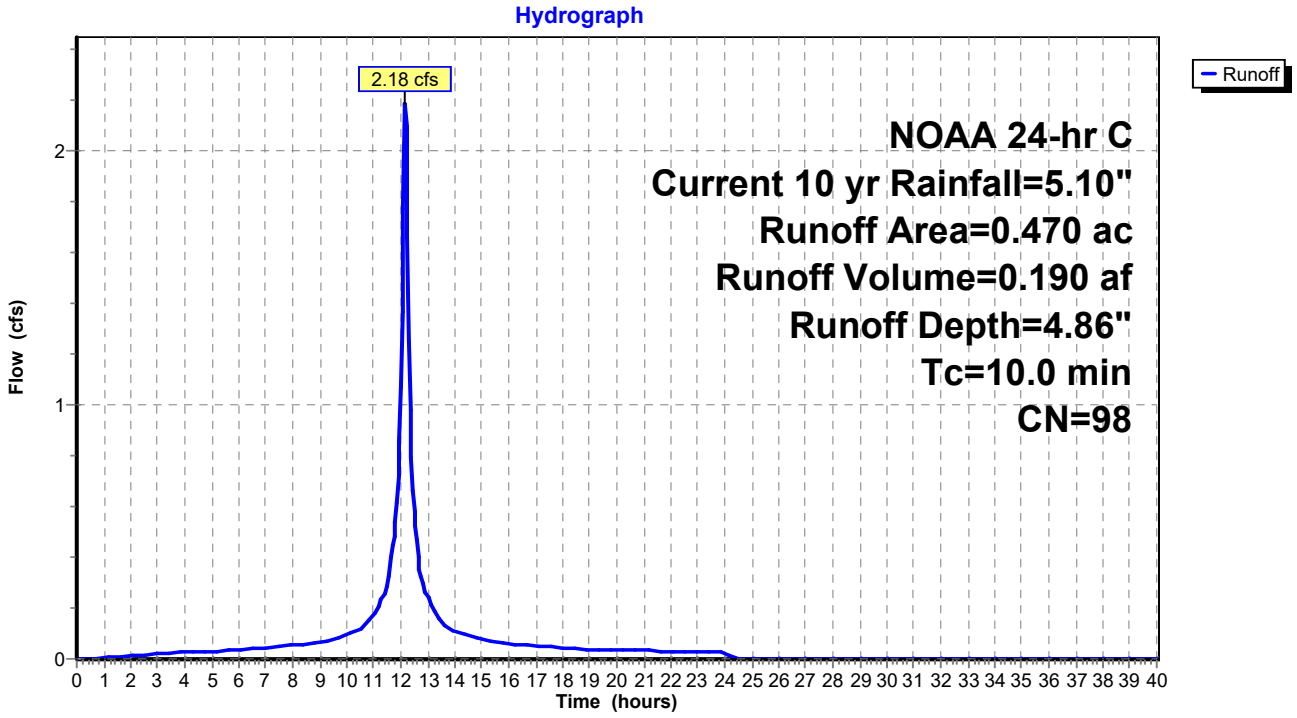
Runoff = 2.18 cfs @ 12.17 hrs, Volume= 0.190 af, Depth= 4.86"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.470	98	Roof, HSG C
	0.470		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 56l: PDA-56 (impervious)



Summary for Subcatchment 56P: PDA-56 (pervious)

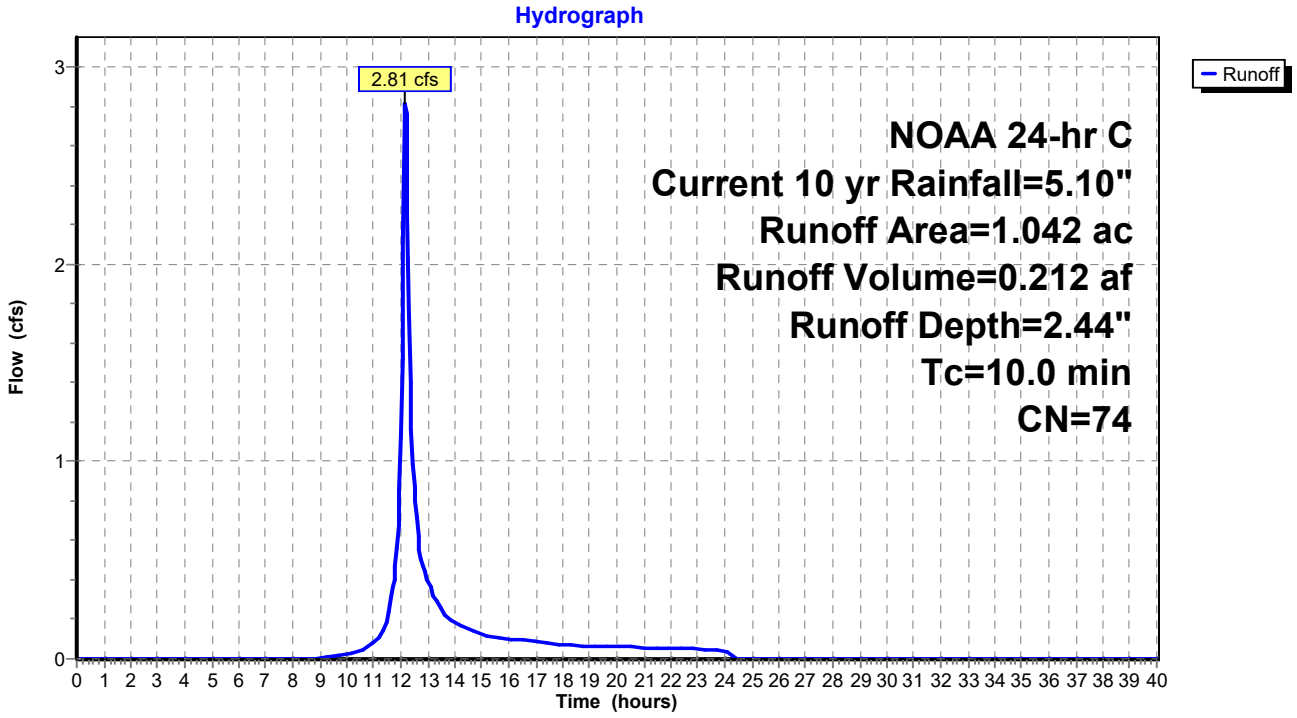
Runoff = 2.81 cfs @ 12.18 hrs, Volume= 0.212 af, Depth= 2.44"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.042	74	>75% Grass cover, Good, HSG C
1.042		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 56P: PDA-56 (pervious)



Summary for Subcatchment 57I: PDA-57 (impervious)

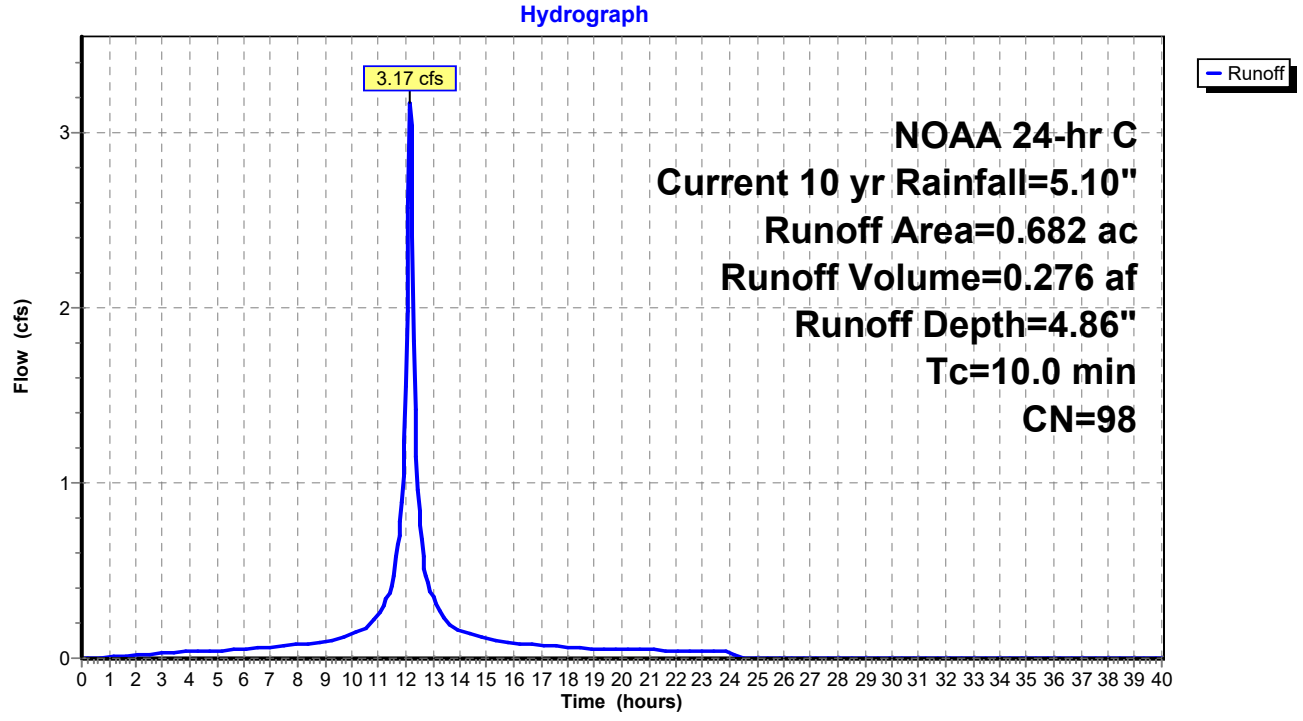
Runoff = 3.17 cfs @ 12.17 hrs, Volume= 0.276 af, Depth= 4.86"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.268	98	Pavement, HSG C
*	0.378	98	Roof, HSG C
*	0.036	98	Concrete, HSG C
	0.682	98	Weighted Average
	0.682		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 57I: PDA-57 (impervious)



Summary for Subcatchment 57P: PDA-57 (pervious)

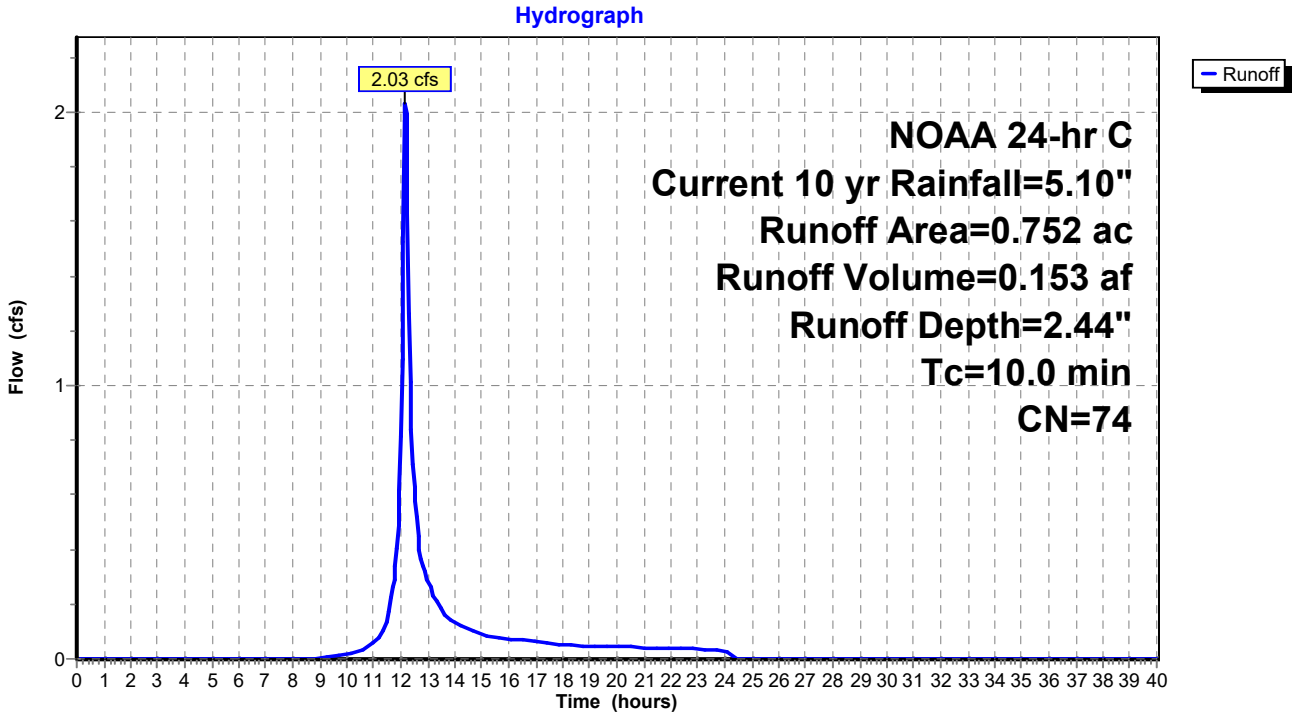
Runoff = 2.03 cfs @ 12.18 hrs, Volume= 0.153 af, Depth= 2.44"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
0.752	74	>75% Grass cover, Good, HSG C
0.752		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 57P: PDA-57 (pervious)



Summary for Subcatchment 58I: PDA-58 (impervious)

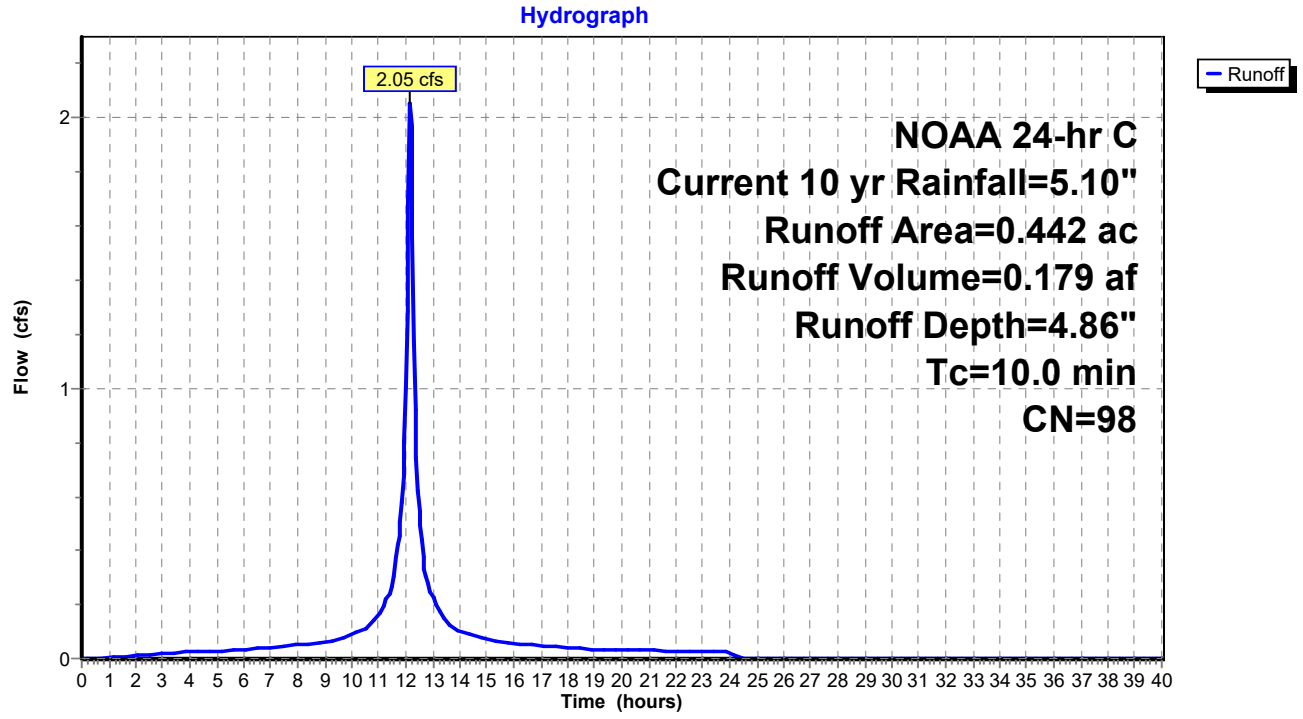
Runoff = 2.05 cfs @ 12.17 hrs, Volume= 0.179 af, Depth= 4.86"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

	Area (ac)	CN	Description
*	0.442	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.442	98	Weighted Average
	0.442		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 58I: PDA-58 (impervious)



Summary for Subcatchment 58P: PDA-58 (pervious)

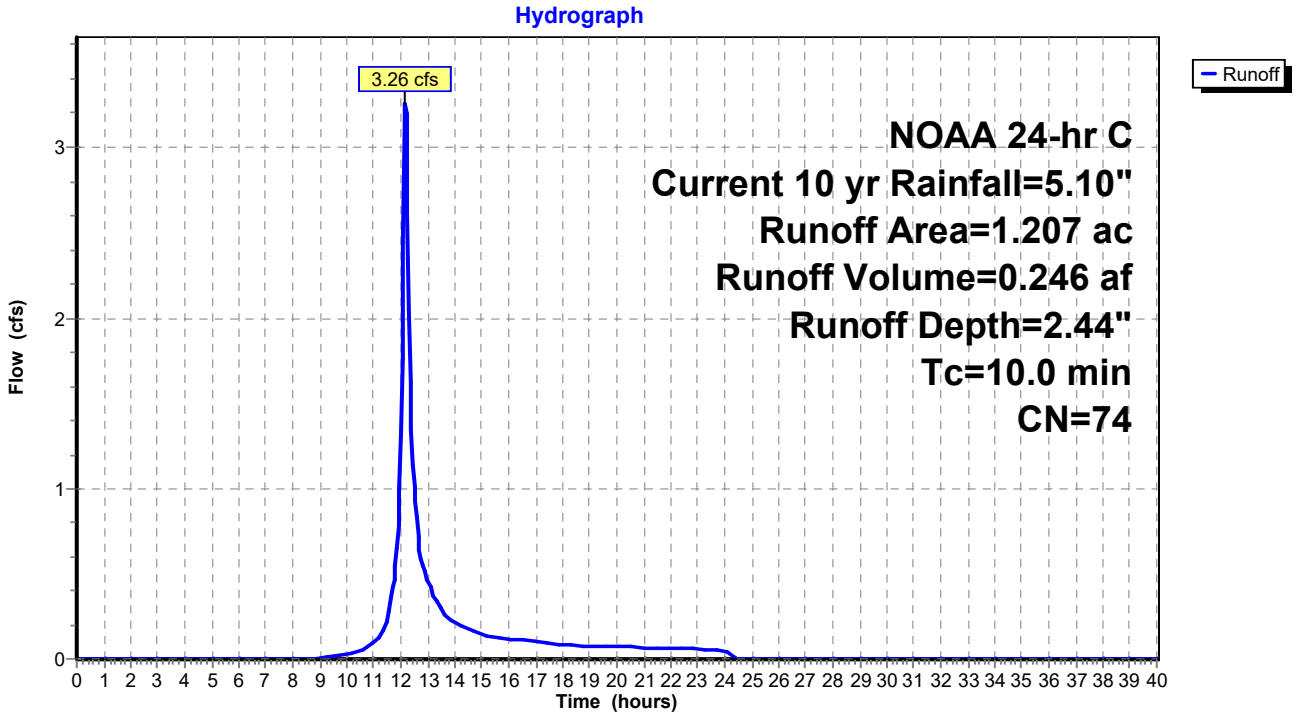
Runoff = 3.26 cfs @ 12.18 hrs, Volume= 0.246 af, Depth= 2.44"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
1.207	74	>75% Grass cover, Good, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 58P: PDA-58 (pervious)



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

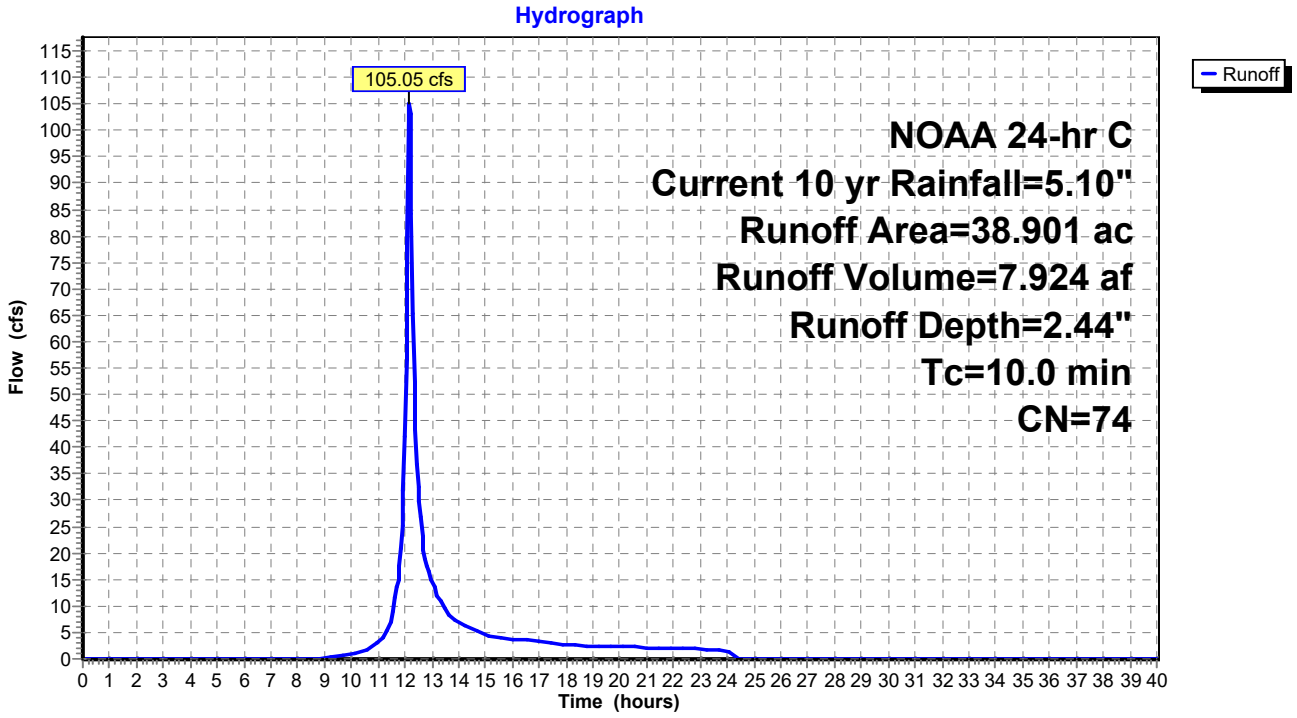
Runoff = 105.05 cfs @ 12.18 hrs, Volume= 7.924 af, Depth= 2.44"
Routed to Link PDA-6 : Proposed Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 10 yr Rainfall=5.10"

Area (ac)	CN	Description
38.901	74	>75% Grass cover, Good, HSG C
38.901		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-6: PDA-6 (undetained)



Summary for Pond B-51: Basin #51

Inflow Area = 5.917 ac, 34.63% Impervious, Inflow Depth = 2.88" for Current 10 yr event
Inflow = 13.51 cfs @ 12.27 hrs, Volume= 1.420 af
Outflow = 8.33 cfs @ 12.49 hrs, Volume= 1.414 af, Atten= 38%, Lag= 13.5 min
Primary = 8.33 cfs @ 12.49 hrs, Volume= 1.414 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 185.71' @ 12.49 hrs Surf.Area= 7,928 sf Storage= 11,170 cf

Plug-Flow detention time= 35.3 min calculated for 1.414 af (100% of inflow)
Center-of-Mass det. time= 32.1 min (891.7 - 859.6)

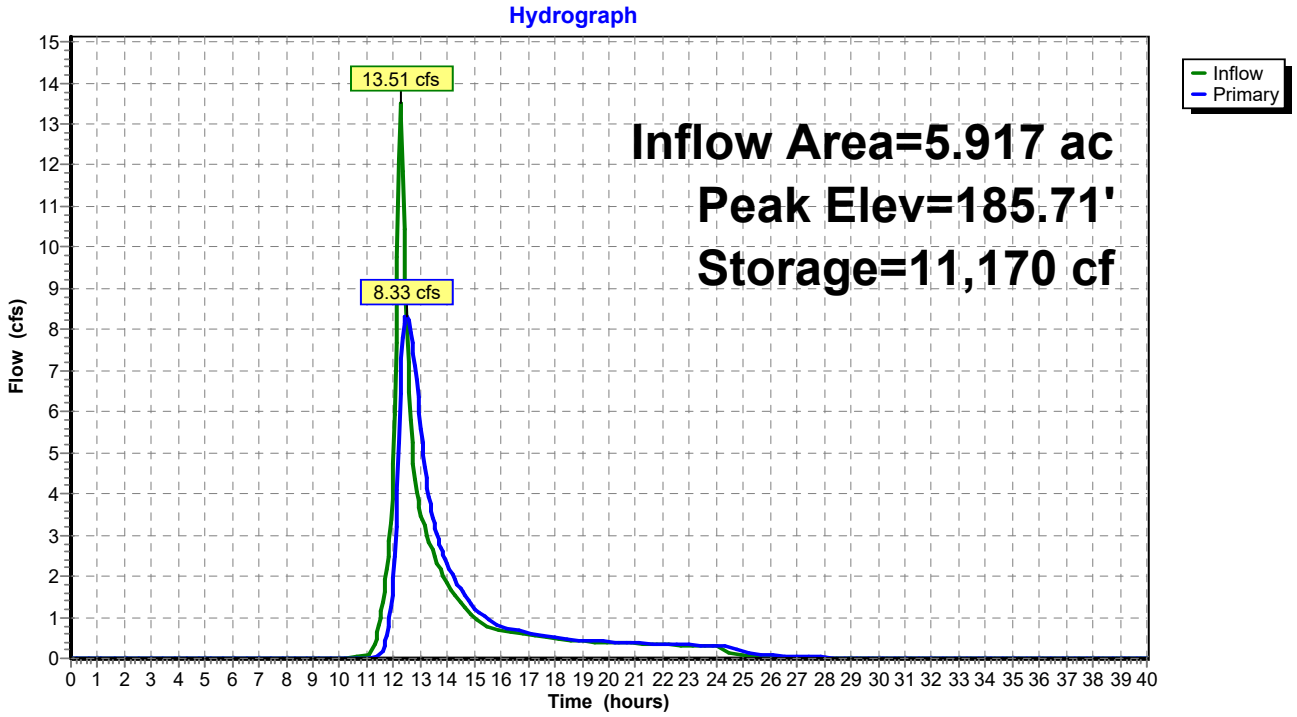
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	58,347 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	5,243	0	0
185.00	6,727	5,985	5,985
186.00	8,424	7,576	13,561
187.00	10,085	9,255	22,815
188.00	11,802	10,944	33,759
189.00	13,576	12,689	46,448
189.83	15,098	11,900	58,347

Device	Routing	Invert	Outlet Devices
#1	Primary	184.00'	**18.0" Round Culvert** L= 147.0' Ke= 0.500 Inlet / Outlet Invert= 184.00' / 182.00' S= 0.0136 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.05'	**48.0" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	189.80'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.32 cfs @ 12.49 hrs HW=185.71' (Free Discharge)
- **1=Culvert** (Inlet Controls 8.32 cfs @ 4.71 fps)
  - **2=Orifice/Grate** (Passes 8.32 cfs of 20.54 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-51: Basin #51



Stage-Discharge for Pond B-51: Basin #51

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	1.34	185.04	4.54	185.56	7.66
184.01	0.00	184.53	1.38	185.05	4.61	185.57	7.71
184.02	0.00	184.54	1.43	185.06	4.68	185.58	7.75
184.03	0.00	184.55	1.48	185.07	4.75	185.59	7.80
184.04	0.00	184.56	1.53	185.08	4.82	185.60	7.84
184.05	0.00	184.57	1.58	185.09	4.89	185.61	7.89
184.06	0.01	184.58	1.64	185.10	4.96	185.62	7.94
184.07	0.03	184.59	1.69	185.11	5.03	185.63	7.98
184.08	0.04	184.60	1.74	185.12	5.10	185.64	8.03
184.09	0.04	184.61	1.79	185.13	5.17	185.65	8.07
184.10	0.05	184.62	1.85	185.14	5.24	185.66	8.12
184.11	0.07	184.63	1.90	185.15	5.31	185.67	8.16
184.12	0.08	184.64	1.96	185.16	5.38	185.68	8.21
184.13	0.09	184.65	2.01	185.17	5.45	185.69	8.25
184.14	0.11	184.66	2.07	185.18	5.52	185.70	8.29
184.15	0.12	184.67	2.13	185.19	5.58	185.71	8.34
184.16	0.14	184.68	2.19	185.20	5.65	185.72	8.38
184.17	0.16	184.69	2.24	185.21	5.72	185.73	8.42
184.18	0.17	184.70	2.30	185.22	5.79	185.74	8.47
184.19	0.19	184.71	2.36	185.23	5.86	185.75	8.51
184.20	0.21	184.72	2.42	185.24	5.92	185.76	8.55
184.21	0.23	184.73	2.48	185.25	5.99	185.77	8.59
184.22	0.26	184.74	2.54	185.26	6.06	185.78	8.64
184.23	0.28	184.75	2.61	185.27	6.12	185.79	8.68
184.24	0.30	184.76	2.67	185.28	6.19	185.80	8.72
184.25	0.33	184.77	2.73	185.29	6.25	185.81	8.76
184.26	0.36	184.78	2.79	185.30	6.32	185.82	8.80
184.27	0.38	184.79	2.86	185.31	6.38	185.83	8.84
184.28	0.41	184.80	2.92	185.32	6.44	185.84	8.88
184.29	0.44	184.81	2.98	185.33	6.50	185.85	8.92
184.30	0.47	184.82	3.05	185.34	6.57	185.86	8.96
184.31	0.50	184.83	3.11	185.35	6.63	185.87	9.00
184.32	0.53	184.84	3.18	185.36	6.69	185.88	9.04
184.33	0.56	184.85	3.24	185.37	6.75	185.89	9.08
184.34	0.60	184.86	3.31	185.38	6.80	185.90	9.12
184.35	0.63	184.87	3.38	185.39	6.86	185.91	9.16
184.36	0.67	184.88	3.44	185.40	6.92	185.92	9.20
184.37	0.70	184.89	3.51	185.41	6.97	185.93	9.24
184.38	0.74	184.90	3.58	185.42	7.02	185.94	9.28
184.39	0.78	184.91	3.64	185.43	7.07	185.95	9.32
184.40	0.81	184.92	3.71	185.44	7.12	185.96	9.36
184.41	0.85	184.93	3.78	185.45	7.17	185.97	9.40
184.42	0.89	184.94	3.85	185.46	7.22	185.98	9.44
184.43	0.93	184.95	3.92	185.47	7.26	185.99	9.47
184.44	0.98	184.96	3.98	185.48	7.30	186.00	9.51
184.45	1.02	184.97	4.05	185.49	7.34	186.01	9.55
184.46	1.06	184.98	4.12	185.50	7.37	186.02	9.59
184.47	1.11	184.99	4.19	185.51	7.42	186.03	9.63
184.48	1.15	185.00	4.26	185.52	7.47	186.04	9.66
184.49	1.20	185.01	4.33	185.53	7.51	186.05	9.70
184.50	1.24	185.02	4.40	185.54	7.56	186.06	9.74
184.51	1.29	185.03	4.47	185.55	7.61	186.07	9.78

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	9.81	186.60	11.57	187.12	13.10	187.64	14.10
186.09	9.85	186.61	11.60	187.13	13.13	187.65	14.12
186.10	9.89	186.62	11.64	187.14	13.15	187.66	14.13
186.11	9.92	186.63	11.67	187.15	13.18	187.67	14.15
186.12	9.96	186.64	11.70	187.16	13.21	187.68	14.17
186.13	10.00	186.65	11.73	187.17	13.24	187.69	14.18
186.14	10.03	186.66	11.76	187.18	13.26	187.70	14.20
186.15	10.07	186.67	11.79	187.19	13.29	187.71	14.22
186.16	10.10	186.68	11.82	187.20	13.32	187.72	14.23
186.17	10.14	186.69	11.85	187.21	13.35	187.73	14.25
186.18	10.18	186.70	11.88	187.22	13.36	187.74	14.27
186.19	10.21	186.71	11.91	187.23	13.38	187.75	14.29
186.20	10.25	186.72	11.94	187.24	13.40	187.76	14.30
186.21	10.28	186.73	11.97	187.25	13.42	187.77	14.32
186.22	10.32	186.74	12.00	187.26	13.44	187.78	14.34
186.23	10.35	186.75	12.03	187.27	13.45	187.79	14.35
186.24	10.39	186.76	12.06	187.28	13.47	187.80	14.37
186.25	10.42	186.77	12.09	187.29	13.49	187.81	14.39
186.26	10.46	186.78	12.12	187.30	13.51	187.82	14.40
186.27	10.49	186.79	12.15	187.31	13.53	187.83	14.42
186.28	10.52	186.80	12.18	187.32	13.54	187.84	14.44
186.29	10.56	186.81	12.21	187.33	13.56	187.85	14.45
186.30	10.59	186.82	12.24	187.34	13.58	187.86	14.47
186.31	10.63	186.83	12.27	187.35	13.60	187.87	14.49
186.32	10.66	186.84	12.30	187.36	13.61	187.88	14.50
186.33	10.70	186.85	12.33	187.37	13.63	187.89	14.52
186.34	10.73	186.86	12.36	187.38	13.65	187.90	14.54
186.35	10.76	186.87	12.39	187.39	13.67	187.91	14.55
186.36	10.80	186.88	12.42	187.40	13.68	187.92	14.57
186.37	10.83	186.89	12.45	187.41	13.70	187.93	14.58
186.38	10.86	186.90	12.48	187.42	13.72	187.94	14.60
186.39	10.90	186.91	12.51	187.43	13.74	187.95	14.62
186.40	10.93	186.92	12.53	187.44	13.75	187.96	14.63
186.41	10.96	186.93	12.56	187.45	13.77	187.97	14.65
186.42	11.00	186.94	12.59	187.46	13.79	187.98	14.67
186.43	11.03	186.95	12.62	187.47	13.81	187.99	14.68
186.44	11.06	186.96	12.65	187.48	13.82	188.00	14.70
186.45	11.09	186.97	12.68	187.49	13.84	188.01	14.72
186.46	11.13	186.98	12.71	187.50	13.86	188.02	14.73
186.47	11.16	186.99	12.73	187.51	13.88	188.03	14.75
186.48	11.19	187.00	12.76	187.52	13.89	188.04	14.76
186.49	11.22	187.01	12.79	187.53	13.91	188.05	14.78
186.50	11.26	187.02	12.82	187.54	13.93	188.06	14.80
186.51	11.29	187.03	12.85	187.55	13.95	188.07	14.81
186.52	11.32	187.04	12.88	187.56	13.96	188.08	14.83
186.53	11.35	187.05	12.90	187.57	13.98	188.09	14.85
186.54	11.38	187.06	12.93	187.58	14.00	188.10	14.86
186.55	11.42	187.07	12.96	187.59	14.01	188.11	14.88
186.56	11.45	187.08	12.99	187.60	14.03	188.12	14.89
186.57	11.48	187.09	13.02	187.61	14.05	188.13	14.91
186.58	11.51	187.10	13.04	187.62	14.07	188.14	14.93
186.59	11.54	187.11	13.07	187.63	14.08	188.15	14.94

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.16	14.96	188.68	15.77	189.20	16.54	189.72	17.28
188.17	14.97	188.69	15.79	189.21	16.56	189.73	17.30
188.18	14.99	188.70	15.80	189.22	16.57	189.74	17.31
188.19	15.01	188.71	15.82	189.23	16.59	189.75	17.32
188.20	15.02	188.72	15.83	189.24	16.60	189.76	17.34
188.21	15.04	188.73	15.85	189.25	16.62	189.77	17.35
188.22	15.05	188.74	15.86	189.26	16.63	189.78	17.36
188.23	15.07	188.75	15.88	189.27	16.64	189.79	17.38
188.24	15.09	188.76	15.89	189.28	16.66	189.80	17.39
188.25	15.10	188.77	15.91	189.29	16.67	189.81	17.52
188.26	15.12	188.78	15.92	189.30	16.69	189.82	17.75
188.27	15.13	188.79	15.94	189.31	16.70	189.83	**18.04**
188.28	15.15	188.80	15.95	189.32	16.72		
188.29	15.17	188.81	15.97	189.33	16.73		
188.30	15.18	188.82	15.98	189.34	16.75		
188.31	15.20	188.83	16.00	189.35	16.76		
188.32	15.21	188.84	16.01	189.36	16.77		
188.33	15.23	188.85	16.03	189.37	16.79		
188.34	15.24	188.86	16.04	189.38	16.80		
188.35	15.26	188.87	16.06	189.39	16.82		
188.36	15.28	188.88	16.07	189.40	16.83		
188.37	15.29	188.89	16.09	189.41	16.85		
188.38	15.31	188.90	16.10	189.42	16.86		
188.39	15.32	188.91	16.12	189.43	16.87		
188.40	15.34	188.92	16.13	189.44	16.89		
188.41	15.35	188.93	16.15	189.45	16.90		
188.42	15.37	188.94	16.16	189.46	16.92		
188.43	15.39	188.95	16.18	189.47	16.93		
188.44	15.40	188.96	16.19	189.48	16.95		
188.45	15.42	188.97	16.21	189.49	16.96		
188.46	15.43	188.98	16.22	189.50	16.97		
188.47	15.45	188.99	16.24	189.51	16.99		
188.48	15.46	189.00	16.25	189.52	17.00		
188.49	15.48	189.01	16.27	189.53	17.02		
188.50	15.49	189.02	16.28	189.54	17.03		
188.51	15.51	189.03	16.30	189.55	17.04		
188.52	15.53	189.04	16.31	189.56	17.06		
188.53	15.54	189.05	16.32	189.57	17.07		
188.54	15.56	189.06	16.34	189.58	17.09		
188.55	15.57	189.07	16.35	189.59	17.10		
188.56	15.59	189.08	16.37	189.60	17.11		
188.57	15.60	189.09	16.38	189.61	17.13		
188.58	15.62	189.10	16.40	189.62	17.14		
188.59	15.63	189.11	16.41	189.63	17.16		
188.60	15.65	189.12	16.43	189.64	17.17		
188.61	15.66	189.13	16.44	189.65	17.18		
188.62	15.68	189.14	16.46	189.66	17.20		
188.63	15.69	189.15	16.47	189.67	17.21		
188.64	15.71	189.16	16.49	189.68	17.23		
188.65	15.73	189.17	16.50	189.69	17.24		
188.66	15.74	189.18	16.51	189.70	17.25		
188.67	15.76	189.19	16.53	189.71	17.27		

Stage-Area-Storage for Pond B-51: Basin #51

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	5,243	0	184.52	6,015	2,927
184.01	5,258	53	184.53	6,030	2,987
184.02	5,273	105	184.54	6,044	3,048
184.03	5,288	158	184.55	6,059	3,108
184.04	5,302	211	184.56	6,074	3,169
184.05	5,317	264	184.57	6,089	3,230
184.06	5,332	317	184.58	6,104	3,291
184.07	5,347	371	184.59	6,119	3,352
184.08	5,362	424	184.60	6,133	3,413
184.09	5,377	478	184.61	6,148	3,474
184.10	5,391	532	184.62	6,163	3,536
184.11	5,406	586	184.63	6,178	3,598
184.12	5,421	640	184.64	6,193	3,659
184.13	5,436	694	184.65	6,208	3,721
184.14	5,451	749	184.66	6,222	3,784
184.15	5,466	803	184.67	6,237	3,846
184.16	5,480	858	184.68	6,252	3,908
184.17	5,495	913	184.69	6,267	3,971
184.18	5,510	968	184.70	6,282	4,034
184.19	5,525	1,023	184.71	6,297	4,097
184.20	5,540	1,078	184.72	6,311	4,160
184.21	5,555	1,134	184.73	6,326	4,223
184.22	5,569	1,189	184.74	6,341	4,286
184.23	5,584	1,245	184.75	6,356	4,350
184.24	5,599	1,301	184.76	6,371	4,413
184.25	5,614	1,357	184.77	6,386	4,477
184.26	5,629	1,413	184.78	6,401	4,541
184.27	5,644	1,470	184.79	6,415	4,605
184.28	5,659	1,526	184.80	6,430	4,669
184.29	5,673	1,583	184.81	6,445	4,734
184.30	5,688	1,640	184.82	6,460	4,798
184.31	5,703	1,697	184.83	6,475	4,863
184.32	5,718	1,754	184.84	6,490	4,928
184.33	5,733	1,811	184.85	6,504	4,993
184.34	5,748	1,868	184.86	6,519	5,058
184.35	5,762	1,926	184.87	6,534	5,123
184.36	5,777	1,984	184.88	6,549	5,188
184.37	5,792	2,041	184.89	6,564	5,254
184.38	5,807	2,099	184.90	6,579	5,320
184.39	5,822	2,158	184.91	6,593	5,386
184.40	5,837	2,216	184.92	6,608	5,452
184.41	5,851	2,274	184.93	6,623	5,518
184.42	5,866	2,333	184.94	6,638	5,584
184.43	5,881	2,392	184.95	6,653	5,651
184.44	5,896	2,451	184.96	6,668	5,717
184.45	5,911	2,510	184.97	6,682	5,784
184.46	5,926	2,569	184.98	6,697	5,851
184.47	5,940	2,628	184.99	6,712	5,918
184.48	5,955	2,688	185.00	6,727	5,985
184.49	5,970	2,747	185.01	6,744	6,052
184.50	5,985	2,807	185.02	6,761	6,120
184.51	6,000	2,867	185.03	6,778	6,188

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	6,795	6,255	185.56	7,677	10,018
185.05	6,812	6,323	185.57	7,694	10,095
185.06	6,829	6,392	185.58	7,711	10,172
185.07	6,846	6,460	185.59	7,728	10,249
185.08	6,863	6,529	185.60	7,745	10,327
185.09	6,880	6,597	185.61	7,762	10,404
185.10	6,897	6,666	185.62	7,779	10,482
185.11	6,914	6,735	185.63	7,796	10,560
185.12	6,931	6,804	185.64	7,813	10,638
185.13	6,948	6,874	185.65	7,830	10,716
185.14	6,965	6,943	185.66	7,847	10,794
185.15	6,982	7,013	185.67	7,864	10,873
185.16	6,999	7,083	185.68	7,881	10,952
185.17	7,015	7,153	185.69	7,898	11,031
185.18	7,032	7,223	185.70	7,915	11,110
185.19	7,049	7,294	185.71	7,932	11,189
185.20	7,066	7,364	185.72	7,949	11,268
185.21	7,083	7,435	185.73	7,966	11,348
185.22	7,100	7,506	185.74	7,983	11,428
185.23	7,117	7,577	185.75	8,000	11,508
185.24	7,134	7,648	185.76	8,017	11,588
185.25	7,151	7,720	185.77	8,034	11,668
185.26	7,168	7,791	185.78	8,051	11,748
185.27	7,185	7,863	185.79	8,068	11,829
185.28	7,202	7,935	185.80	8,085	11,910
185.29	7,219	8,007	185.81	8,102	11,991
185.30	7,236	8,079	185.82	8,119	12,072
185.31	7,253	8,152	185.83	8,136	12,153
185.32	7,270	8,225	185.84	8,152	12,234
185.33	7,287	8,297	185.85	8,169	12,316
185.34	7,304	8,370	185.86	8,186	12,398
185.35	7,321	8,443	185.87	8,203	12,480
185.36	7,338	8,517	185.88	8,220	12,562
185.37	7,355	8,590	185.89	8,237	12,644
185.38	7,372	8,664	185.90	8,254	12,727
185.39	7,389	8,738	185.91	8,271	12,809
185.40	7,406	8,812	185.92	8,288	12,892
185.41	7,423	8,886	185.93	8,305	12,975
185.42	7,440	8,960	185.94	8,322	13,058
185.43	7,457	9,034	185.95	8,339	13,141
185.44	7,474	9,109	185.96	8,356	13,225
185.45	7,491	9,184	185.97	8,373	13,309
185.46	7,508	9,259	185.98	8,390	13,392
185.47	7,525	9,334	185.99	8,407	13,476
185.48	7,542	9,409	186.00	8,424	13,561
185.49	7,559	9,485	186.01	8,441	13,645
185.50	7,576	9,561	186.02	8,457	13,729
185.51	7,592	9,636	186.03	8,474	13,814
185.52	7,609	9,712	186.04	8,490	13,899
185.53	7,626	9,789	186.05	8,507	13,984
185.54	7,643	9,865	186.06	8,524	14,069
185.55	7,660	9,942	186.07	8,540	14,154

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	8,557	14,240	186.60	9,421	18,914
186.09	8,573	14,325	186.61	9,437	19,008
186.10	8,590	14,411	186.62	9,454	19,103
186.11	8,607	14,497	186.63	9,470	19,197
186.12	8,623	14,583	186.64	9,487	19,292
186.13	8,640	14,670	186.65	9,504	19,387
186.14	8,657	14,756	186.66	9,520	19,482
186.15	8,673	14,843	186.67	9,537	19,577
186.16	8,690	14,930	186.68	9,553	19,673
186.17	8,706	15,017	186.69	9,570	19,768
186.18	8,723	15,104	186.70	9,587	19,864
186.19	8,740	15,191	186.71	9,603	19,960
186.20	8,756	15,279	186.72	9,620	20,056
186.21	8,773	15,366	186.73	9,637	20,153
186.22	8,789	15,454	186.74	9,653	20,249
186.23	8,806	15,542	186.75	9,670	20,346
186.24	8,823	15,630	186.76	9,686	20,442
186.25	8,839	15,718	186.77	9,703	20,539
186.26	8,856	15,807	186.78	9,720	20,636
186.27	8,872	15,896	186.79	9,736	20,734
186.28	8,889	15,984	186.80	9,753	20,831
186.29	8,906	16,073	186.81	9,769	20,929
186.30	8,922	16,162	186.82	9,786	21,027
186.31	8,939	16,252	186.83	9,803	21,125
186.32	8,956	16,341	186.84	9,819	21,223
186.33	8,972	16,431	186.85	9,836	21,321
186.34	8,989	16,521	186.86	9,852	21,419
186.35	9,005	16,611	186.87	9,869	21,518
186.36	9,022	16,701	186.88	9,886	21,617
186.37	9,039	16,791	186.89	9,902	21,716
186.38	9,055	16,882	186.90	9,919	21,815
186.39	9,072	16,972	186.91	9,936	21,914
186.40	9,088	17,063	186.92	9,952	22,014
186.41	9,105	17,154	186.93	9,969	22,113
186.42	9,122	17,245	186.94	9,985	22,213
186.43	9,138	17,336	186.95	10,002	22,313
186.44	9,155	17,428	186.96	10,019	22,413
186.45	9,171	17,519	186.97	10,035	22,513
186.46	9,188	17,611	186.98	10,052	22,614
186.47	9,205	17,703	186.99	10,068	22,714
186.48	9,221	17,795	187.00	10,085	22,815
186.49	9,238	17,888	187.01	10,102	22,916
186.50	9,255	17,980	187.02	10,119	23,017
186.51	9,271	18,073	187.03	10,137	23,118
186.52	9,288	18,166	187.04	10,154	23,220
186.53	9,304	18,259	187.05	10,171	23,321
186.54	9,321	18,352	187.06	10,188	23,423
186.55	9,338	18,445	187.07	10,205	23,525
186.56	9,354	18,538	187.08	10,222	23,627
186.57	9,371	18,632	187.09	10,240	23,730
186.58	9,387	18,726	187.10	10,257	23,832
186.59	9,404	18,820	187.11	10,274	23,935

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	10,291	24,038	187.64	11,184	29,621
187.13	10,308	24,141	187.65	11,201	29,733
187.14	10,325	24,244	187.66	11,218	29,845
187.15	10,343	24,347	187.67	11,235	29,957
187.16	10,360	24,451	187.68	11,253	30,070
187.17	10,377	24,554	187.69	11,270	30,182
187.18	10,394	24,658	187.70	11,287	30,295
187.19	10,411	24,762	187.71	11,304	30,408
187.20	10,428	24,866	187.72	11,321	30,521
187.21	10,446	24,971	187.73	11,338	30,635
187.22	10,463	25,075	187.74	11,356	30,748
187.23	10,480	25,180	187.75	11,373	30,862
187.24	10,497	25,285	187.76	11,390	30,975
187.25	10,514	25,390	187.77	11,407	31,089
187.26	10,531	25,495	187.78	11,424	31,204
187.27	10,549	25,601	187.79	11,441	31,318
187.28	10,566	25,706	187.80	11,459	31,432
187.29	10,583	25,812	187.81	11,476	31,547
187.30	10,600	25,918	187.82	11,493	31,662
187.31	10,617	26,024	187.83	11,510	31,777
187.32	10,634	26,130	187.84	11,527	31,892
187.33	10,652	26,237	187.85	11,544	32,008
187.34	10,669	26,343	187.86	11,562	32,123
187.35	10,686	26,450	187.87	11,579	32,239
187.36	10,703	26,557	187.88	11,596	32,355
187.37	10,720	26,664	187.89	11,613	32,471
187.38	10,737	26,771	187.90	11,630	32,587
187.39	10,755	26,879	187.91	11,647	32,703
187.40	10,772	26,986	187.92	11,665	32,820
187.41	10,789	27,094	187.93	11,682	32,937
187.42	10,806	27,202	187.94	11,699	33,053
187.43	10,823	27,310	187.95	11,716	33,171
187.44	10,840	27,419	187.96	11,733	33,288
187.45	10,858	27,527	187.97	11,750	33,405
187.46	10,875	27,636	187.98	11,768	33,523
187.47	10,892	27,745	187.99	11,785	33,641
187.48	10,909	27,854	188.00	11,802	33,759
187.49	10,926	27,963	188.01	11,820	33,877
187.50	10,944	28,072	188.02	11,837	33,995
187.51	10,961	28,182	188.03	11,855	34,113
187.52	10,978	28,291	188.04	11,873	34,232
187.53	10,995	28,401	188.05	11,891	34,351
187.54	11,012	28,511	188.06	11,908	34,470
187.55	11,029	28,621	188.07	11,926	34,589
187.56	11,047	28,732	188.08	11,944	34,708
187.57	11,064	28,842	188.09	11,962	34,828
187.58	11,081	28,953	188.10	11,979	34,948
187.59	11,098	29,064	188.11	11,997	35,067
187.60	11,115	29,175	188.12	12,015	35,188
187.61	11,132	29,286	188.13	12,033	35,308
187.62	11,150	29,398	188.14	12,050	35,428
187.63	11,167	29,509	188.15	12,068	35,549

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	12,086	35,670
188.17	12,104	35,790
188.18	12,121	35,912
188.19	12,139	36,033
188.20	12,157	36,154
188.21	12,175	36,276
188.22	12,192	36,398
188.23	12,210	36,520
188.24	12,228	36,642
188.25	12,246	36,764
188.26	12,263	36,887
188.27	12,281	37,010
188.28	12,299	37,133
188.29	12,316	37,256
188.30	12,334	37,379
188.31	12,352	37,502
188.32	12,370	37,626
188.33	12,387	37,750
188.34	12,405	37,874
188.35	12,423	37,998
188.36	12,441	38,122
188.37	12,458	38,247
188.38	12,476	38,371
188.39	12,494	38,496
188.40	12,512	38,621
188.41	12,529	38,746
188.42	12,547	38,872
188.43	12,565	38,997
188.44	12,583	39,123
188.45	12,600	39,249
188.46	12,618	39,375
188.47	12,636	39,501
188.48	12,654	39,628
188.49	12,671	39,754
188.50	12,689	39,881
188.51	12,707	40,008
188.52	12,724	40,135
188.53	12,742	40,263
188.54	12,760	40,390
188.55	12,778	40,518
188.56	12,795	40,646
188.57	12,813	40,774
188.58	12,831	40,902
188.59	12,849	41,030
188.60	12,866	41,159
188.61	12,884	41,288
188.62	12,902	41,417
188.63	12,920	41,546
188.64	12,937	41,675
188.65	12,955	41,805
188.66	12,973	41,934
188.67	12,991	42,064
188.68	13,008	42,194
188.69	13,026	42,324
188.70	13,044	42,455
188.71	13,062	42,585
188.72	13,079	42,716
188.73	13,097	42,847
188.74	13,115	42,978
188.75	13,133	43,109
188.76	13,150	43,240
188.77	13,168	43,372
188.78	13,186	43,504
188.79	13,203	43,636
188.80	13,221	43,768
188.81	13,239	43,900
188.82	13,257	44,033
188.83	13,274	44,165
188.84	13,292	44,298
188.85	13,310	44,431
188.86	13,328	44,564
188.87	13,345	44,698
188.88	13,363	44,831
188.89	13,381	44,965
188.90	13,399	45,099
188.91	13,416	45,233
188.92	13,434	45,367
188.93	13,452	45,502
188.94	13,470	45,636
188.95	13,487	45,771
188.96	13,505	45,906
188.97	13,523	46,041
188.98	13,541	46,176
188.99	13,558	46,312
189.00	13,576	46,448
189.01	13,594	46,583
189.02	13,613	46,719
189.03	13,631	46,856
189.04	13,649	46,992
189.05	13,668	47,129
189.06	13,686	47,265
189.07	13,704	47,402
189.08	13,723	47,539
189.09	13,741	47,677
189.10	13,759	47,814
189.11	13,778	47,952
189.12	13,796	48,090
189.13	13,814	48,228
189.14	13,833	48,366
189.15	13,851	48,505
189.16	13,869	48,643
189.17	13,888	48,782
189.18	13,906	48,921
189.19	13,924	49,060

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.20	13,943	49,199
189.21	13,961	49,339
189.22	13,979	49,479
189.23	13,998	49,618
189.24	14,016	49,759
189.25	14,034	49,899
189.26	14,053	50,039
189.27	14,071	50,180
189.28	14,089	50,321
189.29	14,108	50,462
189.30	14,126	50,603
189.31	14,144	50,744
189.32	14,163	50,886
189.33	14,181	51,027
189.34	14,199	51,169
189.35	14,218	51,311
189.36	14,236	51,454
189.37	14,254	51,596
189.38	14,273	51,739
189.39	14,291	51,882
189.40	14,309	52,025
189.41	14,328	52,168
189.42	14,346	52,311
189.43	14,365	52,455
189.44	14,383	52,598
189.45	14,401	52,742
189.46	14,420	52,886
189.47	14,438	53,031
189.48	14,456	53,175
189.49	14,475	53,320
189.50	14,493	53,465
189.51	14,511	53,610
189.52	14,530	53,755
189.53	14,548	53,900
189.54	14,566	54,046
189.55	14,585	54,192
189.56	14,603	54,338
189.57	14,621	54,484
189.58	14,640	54,630
189.59	14,658	54,777
189.60	14,676	54,923
189.61	14,695	55,070
189.62	14,713	55,217
189.63	14,731	55,364
189.64	14,750	55,512
189.65	14,768	55,659
189.66	14,786	55,807
189.67	14,805	55,955
189.68	14,823	56,103
189.69	14,841	56,251
189.70	14,860	56,400
189.71	14,878	56,549
189.72	14,896	56,698
189.73	14,915	56,847
189.74	14,933	56,996
189.75	14,951	57,145
189.76	14,970	57,295
189.77	14,988	57,445
189.78	15,006	57,595
189.79	15,025	57,745
189.80	15,043	57,895
189.81	15,061	58,046
189.82	15,080	58,196
189.83	**15,098**	**58,347**

Summary for Pond B-52: Basin #52

Inflow Area = 1.423 ac, 34.43% Impervious, Inflow Depth = 3.28" for Current 10 yr event
Inflow = 4.79 cfs @ 12.17 hrs, Volume= 0.389 af
Outflow = 4.24 cfs @ 12.23 hrs, Volume= 0.341 af, Atten= 11%, Lag= 3.2 min
Primary = 4.24 cfs @ 12.23 hrs, Volume= 0.341 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.69' @ 12.23 hrs Surf.Area= 1,945 sf Storage= 3,167 cf

Plug-Flow detention time= 108.2 min calculated for 0.340 af (88% of inflow)
Center-of-Mass det. time= 47.8 min (844.7 - 796.9)

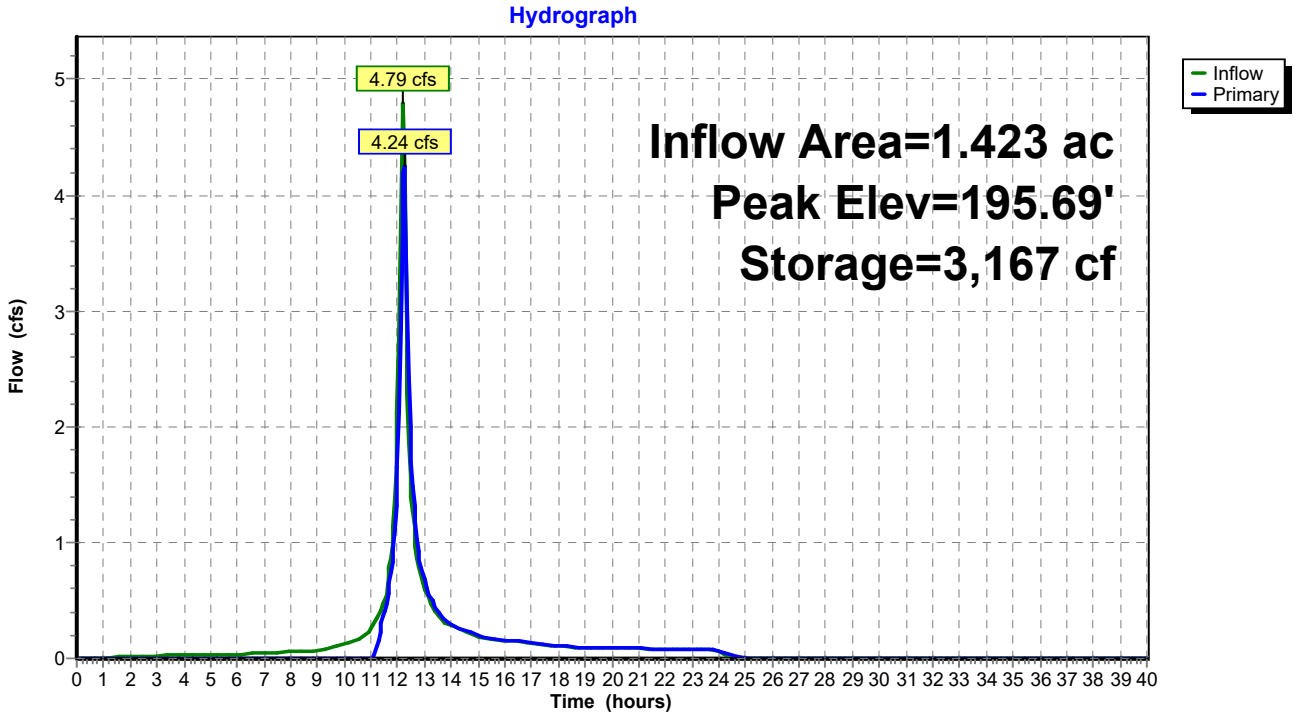
Volume	Invert	Avail.Storage	Storage Description
#1	193.00'	7,751 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.00	474	0	0
194.00	970	722	722
195.00	1,523	1,247	1,969
196.00	2,133	1,828	3,797
197.00	2,799	2,466	6,263
197.50	3,154	1,488	7,751

Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	**15.0" Round Culvert** L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	195.08'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.72'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.19 cfs @ 12.23 hrs HW=195.68' (Free Discharge)
- **1=Culvert** (Passes 4.19 cfs of 7.93 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 4.19 cfs @ 2.79 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-52: Basin #52



Stage-Discharge for Pond B-52: Basin #52

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.00	0.00	193.52	0.00	194.04	0.00	194.56	0.00
193.01	0.00	193.53	0.00	194.05	0.00	194.57	0.00
193.02	0.00	193.54	0.00	194.06	0.00	194.58	0.00
193.03	0.00	193.55	0.00	194.07	0.00	194.59	0.00
193.04	0.00	193.56	0.00	194.08	0.00	194.60	0.00
193.05	0.00	193.57	0.00	194.09	0.00	194.61	0.00
193.06	0.00	193.58	0.00	194.10	0.00	194.62	0.00
193.07	0.00	193.59	0.00	194.11	0.00	194.63	0.00
193.08	0.00	193.60	0.00	194.12	0.00	194.64	0.00
193.09	0.00	193.61	0.00	194.13	0.00	194.65	0.00
193.10	0.00	193.62	0.00	194.14	0.00	194.66	0.00
193.11	0.00	193.63	0.00	194.15	0.00	194.67	0.00
193.12	0.00	193.64	0.00	194.16	0.00	194.68	0.00
193.13	0.00	193.65	0.00	194.17	0.00	194.69	0.00
193.14	0.00	193.66	0.00	194.18	0.00	194.70	0.00
193.15	0.00	193.67	0.00	194.19	0.00	194.71	0.00
193.16	0.00	193.68	0.00	194.20	0.00	194.72	0.00
193.17	0.00	193.69	0.00	194.21	0.00	194.73	0.00
193.18	0.00	193.70	0.00	194.22	0.00	194.74	0.00
193.19	0.00	193.71	0.00	194.23	0.00	194.75	0.00
193.20	0.00	193.72	0.00	194.24	0.00	194.76	0.00
193.21	0.00	193.73	0.00	194.25	0.00	194.77	0.00
193.22	0.00	193.74	0.00	194.26	0.00	194.78	0.00
193.23	0.00	193.75	0.00	194.27	0.00	194.79	0.00
193.24	0.00	193.76	0.00	194.28	0.00	194.80	0.00
193.25	0.00	193.77	0.00	194.29	0.00	194.81	0.00
193.26	0.00	193.78	0.00	194.30	0.00	194.82	0.00
193.27	0.00	193.79	0.00	194.31	0.00	194.83	0.00
193.28	0.00	193.80	0.00	194.32	0.00	194.84	0.00
193.29	0.00	193.81	0.00	194.33	0.00	194.85	0.00
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.00
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.00
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.00
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.00
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.00
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.00
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.00
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.00
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.00
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.00
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.00
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.00
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.00
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.00
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.00
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.00
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.00
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.00
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.00
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.00
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.00

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.08	0.00	195.60	3.58	196.12	8.41	196.64	8.96
195.09	0.01	195.61	3.67	196.13	8.43	196.65	8.97
195.10	0.03	195.62	3.74	196.14	8.44	196.66	8.98
195.11	0.05	195.63	3.82	196.15	8.45	196.67	8.99
195.12	0.08	195.64	3.89	196.16	8.46	196.68	9.00
195.13	0.11	195.65	3.97	196.17	8.47	196.69	9.01
195.14	0.14	195.66	4.04	196.18	8.48	196.70	9.02
195.15	0.18	195.67	4.10	196.19	8.49	196.71	9.03
195.16	0.22	195.68	4.17	196.20	8.50	196.72	9.04
195.17	0.26	195.69	4.24	196.21	8.51	196.73	9.05
195.18	0.30	195.70	4.30	196.22	8.52	196.74	9.06
195.19	0.35	195.71	4.36	196.23	8.53	196.75	9.07
195.20	0.40	195.72	4.43	196.24	8.54	196.76	9.08
195.21	0.45	195.73	4.50	196.25	8.55	196.77	9.09
195.22	0.50	195.74	4.58	196.26	8.57	196.78	9.10
195.23	0.56	195.75	4.67	196.27	8.58	196.79	9.11
195.24	0.62	195.76	4.77	196.28	8.59	196.80	9.12
195.25	0.67	195.77	4.87	196.29	8.60	196.81	9.13
195.26	0.74	195.78	4.97	196.30	8.61	196.82	9.14
195.27	0.80	195.79	5.08	196.31	8.62	196.83	9.15
195.28	0.86	195.80	5.18	196.32	8.63	196.84	9.16
195.29	0.93	195.81	5.30	196.33	8.64	196.85	9.17
195.30	0.99	195.82	5.41	196.34	8.65	196.86	9.18
195.31	1.06	195.83	5.53	196.35	8.66	196.87	9.19
195.32	1.13	195.84	5.64	196.36	8.67	196.88	9.20
195.33	1.20	195.85	5.76	196.37	8.68	196.89	9.21
195.34	1.28	195.86	5.89	196.38	8.69	196.90	9.22
195.35	1.35	195.87	6.01	196.39	8.70	196.91	9.23
195.36	1.43	195.88	6.14	196.40	8.71	196.92	9.24
195.37	1.50	195.89	6.27	196.41	8.72	196.93	9.25
195.38	1.58	195.90	6.40	196.42	8.73	196.94	9.26
195.39	1.66	195.91	6.53	196.43	8.75	196.95	9.27
195.40	1.74	195.92	6.66	196.44	8.76	196.96	9.28
195.41	1.83	195.93	6.80	196.45	8.77	196.97	9.29
195.42	1.91	195.94	6.93	196.46	8.78	196.98	9.30
195.43	1.99	195.95	7.07	196.47	8.79	196.99	9.31
195.44	2.08	195.96	7.21	196.48	8.80	197.00	9.32
195.45	2.17	195.97	7.35	196.49	8.81	197.01	9.33
195.46	2.26	195.98	7.50	196.50	8.82	197.02	9.34
195.47	2.35	195.99	7.64	196.51	8.83	197.03	9.35
195.48	2.44	196.00	7.79	196.52	8.84	197.04	9.36
195.49	2.53	196.01	7.93	196.53	8.85	197.05	9.37
195.50	2.62	196.02	8.08	196.54	8.86	197.06	9.38
195.51	2.72	196.03	8.23	196.55	8.87	197.07	9.39
195.52	2.81	196.04	8.33	196.56	8.88	197.08	9.40
195.53	2.91	196.05	8.34	196.57	8.89	197.09	9.41
195.54	3.00	196.06	8.35	196.58	8.90	197.10	9.42
195.55	3.10	196.07	8.36	196.59	8.91	197.11	9.43
195.56	3.20	196.08	8.37	196.60	8.92	197.12	9.44
195.57	3.30	196.09	8.38	196.61	8.93	197.13	9.45
195.58	3.40	196.10	8.39	196.62	8.94	197.14	9.46
195.59	3.50	196.11	8.40	196.63	8.95	197.15	9.47

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)
197.16	9.48
197.17	9.49
197.18	9.50
197.19	9.51
197.20	9.52
197.21	9.53
197.22	9.54
197.23	9.55
197.24	9.55
197.25	9.56
197.26	9.69
197.27	9.91
197.28	10.20
197.29	10.54
197.30	10.92
197.31	11.35
197.32	11.81
197.33	12.30
197.34	12.82
197.35	13.38
197.36	13.96
197.37	14.57
197.38	15.21
197.39	15.87
197.40	16.55
197.41	17.26
197.42	17.99
197.43	18.75
197.44	19.52
197.45	20.32
197.46	21.17
197.47	22.06
197.48	22.96
197.49	23.90
197.50	**24.85**

Stage-Area-Storage for Pond B-52: Basin #52

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.00	474	0
193.01	479	5
193.02	484	10
193.03	489	14
193.04	494	19
193.05	499	24
193.06	504	29
193.07	509	34
193.08	514	40
193.09	519	45
193.10	524	50
193.11	529	55
193.12	534	60
193.13	538	66
193.14	543	71
193.15	548	77
193.16	553	82
193.17	558	88
193.18	563	93
193.19	568	99
193.20	573	105
193.21	578	110
193.22	583	116
193.23	588	122
193.24	593	128
193.25	598	134
193.26	603	140
193.27	608	146
193.28	613	152
193.29	618	158
193.30	623	165
193.31	628	171
193.32	633	177
193.33	638	183
193.34	643	190
193.35	648	196
193.36	653	203
193.37	658	209
193.38	662	216
193.39	667	223
193.40	672	229
193.41	677	236
193.42	682	243
193.43	687	250
193.44	692	257
193.45	697	264
193.46	702	271
193.47	707	278
193.48	712	285
193.49	717	292
193.50	722	299
193.51	727	306
193.52	732	314
193.53	737	321
193.54	742	328
193.55	747	336
193.56	752	343
193.57	757	351
193.58	762	358
193.59	767	366
193.60	772	374
193.61	777	381
193.62	782	389
193.63	786	397
193.64	791	405
193.65	796	413
193.66	801	421
193.67	806	429
193.68	811	437
193.69	816	445
193.70	821	453
193.71	826	462
193.72	831	470
193.73	836	478
193.74	841	487
193.75	846	495
193.76	851	503
193.77	856	512
193.78	861	521
193.79	866	529
193.80	871	538
193.81	876	547
193.82	881	555
193.83	886	564
193.84	891	573
193.85	896	582
193.86	901	591
193.87	906	600
193.88	910	609
193.89	915	618
193.90	920	627
193.91	925	637
193.92	930	646
193.93	935	655
193.94	940	665
193.95	945	674
193.96	950	684
193.97	955	693
193.98	960	703
193.99	965	712
194.00	970	722
194.01	976	732
194.02	981	742
194.03	987	751

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.04	992	761	194.56	1,280	1,352
194.05	998	771	194.57	1,285	1,365
194.06	1,003	781	194.58	1,291	1,378
194.07	1,009	791	194.59	1,296	1,391
194.08	1,014	801	194.60	1,302	1,404
194.09	1,020	812	194.61	1,307	1,417
194.10	1,025	822	194.62	1,313	1,430
194.11	1,031	832	194.63	1,318	1,443
194.12	1,036	842	194.64	1,324	1,456
194.13	1,042	853	194.65	1,329	1,469
194.14	1,047	863	194.66	1,335	1,483
194.15	1,053	874	194.67	1,341	1,496
194.16	1,058	884	194.68	1,346	1,509
194.17	1,064	895	194.69	1,352	1,523
194.18	1,070	906	194.70	1,357	1,536
194.19	1,075	916	194.71	1,363	1,550
194.20	1,081	927	194.72	1,368	1,564
194.21	1,086	938	194.73	1,374	1,577
194.22	1,092	949	194.74	1,379	1,591
194.23	1,097	960	194.75	1,385	1,605
194.24	1,103	971	194.76	1,390	1,619
194.25	1,108	982	194.77	1,396	1,633
194.26	1,114	993	194.78	1,401	1,647
194.27	1,119	1,004	194.79	1,407	1,661
194.28	1,125	1,015	194.80	1,412	1,675
194.29	1,130	1,027	194.81	1,418	1,689
194.30	1,136	1,038	194.82	1,423	1,703
194.31	1,141	1,049	194.83	1,429	1,718
194.32	1,147	1,061	194.84	1,435	1,732
194.33	1,152	1,072	194.85	1,440	1,746
194.34	1,158	1,084	194.86	1,446	1,761
194.35	1,164	1,095	194.87	1,451	1,775
194.36	1,169	1,107	194.88	1,457	1,790
194.37	1,175	1,119	194.89	1,462	1,804
194.38	1,180	1,131	194.90	1,468	1,819
194.39	1,186	1,142	194.91	1,473	1,834
194.40	1,191	1,154	194.92	1,479	1,848
194.41	1,197	1,166	194.93	1,484	1,863
194.42	1,202	1,178	194.94	1,490	1,878
194.43	1,208	1,190	194.95	1,495	1,893
194.44	1,213	1,202	194.96	1,501	1,908
194.45	1,219	1,214	194.97	1,506	1,923
194.46	1,224	1,227	194.98	1,512	1,938
194.47	1,230	1,239	194.99	1,517	1,953
194.48	1,235	1,251	195.00	1,523	1,969
194.49	1,241	1,264	195.01	1,529	1,984
194.50	1,247	1,276	195.02	1,535	1,999
194.51	1,252	1,289	195.03	1,541	2,014
194.52	1,258	1,301	195.04	1,547	2,030
194.53	1,263	1,314	195.05	1,554	2,045
194.54	1,269	1,326	195.06	1,560	2,061
194.55	1,274	1,339	195.07	1,566	2,077

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.08	1,572	2,092	195.60	1,889	2,992
195.09	1,578	2,108	195.61	1,895	3,011
195.10	1,584	2,124	195.62	1,901	3,030
195.11	1,590	2,140	195.63	1,907	3,049
195.12	1,596	2,156	195.64	1,913	3,068
195.13	1,602	2,172	195.65	1,920	3,087
195.14	1,608	2,188	195.66	1,926	3,107
195.15	1,615	2,204	195.67	1,932	3,126
195.16	1,621	2,220	195.68	1,938	3,145
195.17	1,627	2,236	195.69	1,944	3,165
195.18	1,633	2,253	195.70	1,950	3,184
195.19	1,639	2,269	195.71	1,956	3,204
195.20	1,645	2,285	195.72	1,962	3,223
195.21	1,651	2,302	195.73	1,968	3,243
195.22	1,657	2,318	195.74	1,974	3,263
195.23	1,663	2,335	195.75	1,981	3,282
195.24	1,669	2,352	195.76	1,987	3,302
195.25	1,676	2,368	195.77	1,993	3,322
195.26	1,682	2,385	195.78	1,999	3,342
195.27	1,688	2,402	195.79	2,005	3,362
195.28	1,694	2,419	195.80	2,011	3,382
195.29	1,700	2,436	195.81	2,017	3,402
195.30	1,706	2,453	195.82	2,023	3,422
195.31	1,712	2,470	195.83	2,029	3,443
195.32	1,718	2,487	195.84	2,035	3,463
195.33	1,724	2,504	195.85	2,041	3,483
195.34	1,730	2,522	195.86	2,048	3,504
195.35	1,736	2,539	195.87	2,054	3,524
195.36	1,743	2,556	195.88	2,060	3,545
195.37	1,749	2,574	195.89	2,066	3,566
195.38	1,755	2,591	195.90	2,072	3,586
195.39	1,761	2,609	195.91	2,078	3,607
195.40	1,767	2,627	195.92	2,084	3,628
195.41	1,773	2,644	195.93	2,090	3,649
195.42	1,779	2,662	195.94	2,096	3,670
195.43	1,785	2,680	195.95	2,102	3,691
195.44	1,791	2,698	195.96	2,109	3,712
195.45	1,797	2,716	195.97	2,115	3,733
195.46	1,804	2,734	195.98	2,121	3,754
195.47	1,810	2,752	195.99	2,127	3,775
195.48	1,816	2,770	196.00	2,133	3,797
195.49	1,822	2,788	196.01	2,140	3,818
195.50	1,828	2,806	196.02	2,146	3,839
195.51	1,834	2,825	196.03	2,153	3,861
195.52	1,840	2,843	196.04	2,160	3,882
195.53	1,846	2,861	196.05	2,166	3,904
195.54	1,852	2,880	196.06	2,173	3,926
195.55	1,859	2,898	196.07	2,180	3,947
195.56	1,865	2,917	196.08	2,186	3,969
195.57	1,871	2,936	196.09	2,193	3,991
195.58	1,877	2,954	196.10	2,200	4,013
195.59	1,883	2,973	196.11	2,206	4,035

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.12	2,213	4,057	196.64	2,559	5,298
196.13	2,220	4,079	196.65	2,566	5,324
196.14	2,226	4,102	196.66	2,573	5,349
196.15	2,233	4,124	196.67	2,579	5,375
196.16	2,240	4,146	196.68	2,586	5,401
196.17	2,246	4,169	196.69	2,593	5,427
196.18	2,253	4,191	196.70	2,599	5,453
196.19	2,260	4,214	196.71	2,606	5,479
196.20	2,266	4,236	196.72	2,613	5,505
196.21	2,273	4,259	196.73	2,619	5,531
196.22	2,280	4,282	196.74	2,626	5,557
196.23	2,286	4,305	196.75	2,633	5,584
196.24	2,293	4,328	196.76	2,639	5,610
196.25	2,300	4,351	196.77	2,646	5,636
196.26	2,306	4,374	196.78	2,652	5,663
196.27	2,313	4,397	196.79	2,659	5,689
196.28	2,319	4,420	196.80	2,666	5,716
196.29	2,326	4,443	196.81	2,672	5,743
196.30	2,333	4,466	196.82	2,679	5,769
196.31	2,339	4,490	196.83	2,686	5,796
196.32	2,346	4,513	196.84	2,692	5,823
196.33	2,353	4,537	196.85	2,699	5,850
196.34	2,359	4,560	196.86	2,706	5,877
196.35	2,366	4,584	196.87	2,712	5,904
196.36	2,373	4,608	196.88	2,719	5,931
196.37	2,379	4,631	196.89	2,726	5,959
196.38	2,386	4,655	196.90	2,732	5,986
196.39	2,393	4,679	196.91	2,739	6,013
196.40	2,399	4,703	196.92	2,746	6,041
196.41	2,406	4,727	196.93	2,752	6,068
196.42	2,413	4,751	196.94	2,759	6,096
196.43	2,419	4,775	196.95	2,766	6,123
196.44	2,426	4,799	196.96	2,772	6,151
196.45	2,433	4,824	196.97	2,779	6,179
196.46	2,439	4,848	196.98	2,786	6,207
196.47	2,446	4,873	196.99	2,792	6,235
196.48	2,453	4,897	197.00	2,799	6,263
196.49	2,459	4,922	197.01	2,806	6,291
196.50	2,466	4,946	197.02	2,813	6,319
196.51	2,473	4,971	197.03	2,820	6,347
196.52	2,479	4,996	197.04	2,827	6,375
196.53	2,486	5,021	197.05	2,835	6,403
196.54	2,493	5,045	197.06	2,842	6,432
196.55	2,499	5,070	197.07	2,849	6,460
196.56	2,506	5,095	197.08	2,856	6,489
196.57	2,513	5,121	197.09	2,863	6,517
196.58	2,519	5,146	197.10	2,870	6,546
196.59	2,526	5,171	197.11	2,877	6,575
196.60	2,533	5,196	197.12	2,884	6,603
196.61	2,539	5,222	197.13	2,891	6,632
196.62	2,546	5,247	197.14	2,898	6,661
196.63	2,553	5,272	197.15	2,906	6,690

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.16	2,913	6,719
197.17	2,920	6,749
197.18	2,927	6,778
197.19	2,934	6,807
197.20	2,941	6,836
197.21	2,948	6,866
197.22	2,955	6,895
197.23	2,962	6,925
197.24	2,969	6,955
197.25	2,977	6,984
197.26	2,984	7,014
197.27	2,991	7,044
197.28	2,998	7,074
197.29	3,005	7,104
197.30	3,012	7,134
197.31	3,019	7,164
197.32	3,026	7,195
197.33	3,033	7,225
197.34	3,040	7,255
197.35	3,047	7,286
197.36	3,055	7,316
197.37	3,062	7,347
197.38	3,069	7,377
197.39	3,076	7,408
197.40	3,083	7,439
197.41	3,090	7,470
197.42	3,097	7,501
197.43	3,104	7,532
197.44	3,111	7,563
197.45	3,118	7,594
197.46	3,126	7,625
197.47	3,133	7,656
197.48	3,140	7,688
197.49	3,147	7,719
197.50	**3,154**	**7,751**

Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.80% Impervious, Inflow Depth = 3.60" for Current 10 yr event
Inflow = 9.22 cfs @ 12.17 hrs, Volume= 0.762 af
Outflow = 5.68 cfs @ 12.30 hrs, Volume= 0.648 af, Atten= 38%, Lag= 7.8 min
Primary = 5.68 cfs @ 12.30 hrs, Volume= 0.648 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 202.24' @ 12.30 hrs Surf.Area= 5,763 sf Storage= 11,408 cf

Plug-Flow detention time= 145.6 min calculated for 0.647 af (85% of inflow)
Center-of-Mass det. time= 77.0 min (861.5 - 784.6)

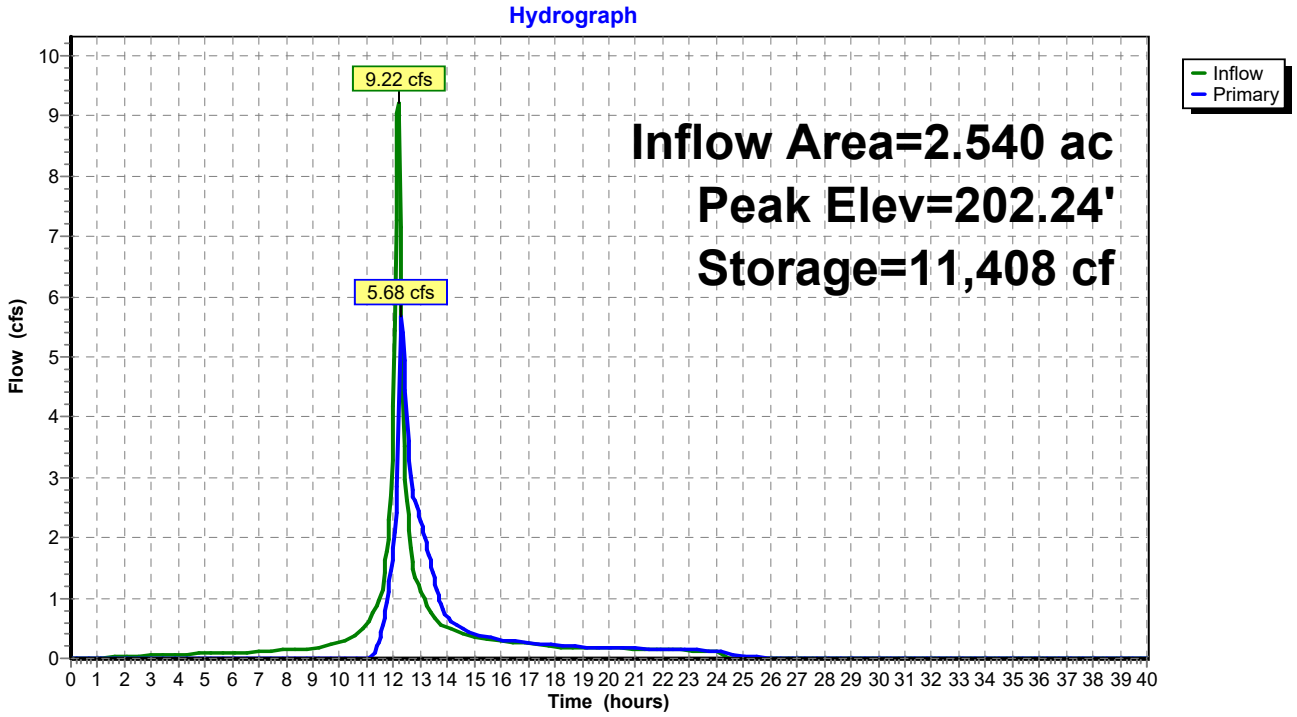
Volume	Invert	Avail.Storage	Storage Description
#1	199.75'	33,011 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.75	0	0	0
200.00	4,035	504	504
201.00	4,695	4,365	4,869
202.00	5,685	5,190	10,059
203.00	6,015	5,850	15,909
204.00	6,676	6,346	22,255
205.00	7,336	7,006	29,261
205.50	7,666	3,751	33,011

Device	Routing	Invert	Outlet Devices
#1	Primary	198.75'	**18.0" Round Culvert** L= 122.0' Ke= 0.500 Inlet / Outlet Invert= 198.75' / 198.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.02'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.43'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.66 cfs @ 12.30 hrs HW=202.23' (Free Discharge)
- **1=Culvert** (Passes 5.66 cfs of 12.14 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.28 cfs @ 4.92 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.38 cfs @ 1.86 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-53: Basin #53



Stage-Discharge for Pond B-53: Basin #53

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.75	0.00	200.27	0.00	200.79	0.00	201.31	1.00
199.76	0.00	200.28	0.00	200.80	0.00	201.32	1.05
199.77	0.00	200.29	0.00	200.81	0.00	201.33	1.11
199.78	0.00	200.30	0.00	200.82	0.00	201.34	1.16
199.79	0.00	200.31	0.00	200.83	0.00	201.35	1.22
199.80	0.00	200.32	0.00	200.84	0.00	201.36	1.27
199.81	0.00	200.33	0.00	200.85	0.00	201.37	1.32
199.82	0.00	200.34	0.00	200.86	0.00	201.38	1.36
199.83	0.00	200.35	0.00	200.87	0.00	201.39	1.40
199.84	0.00	200.36	0.00	200.88	0.00	201.40	1.44
199.85	0.00	200.37	0.00	200.89	0.00	201.41	1.48
199.86	0.00	200.38	0.00	200.90	0.00	201.42	1.51
199.87	0.00	200.39	0.00	200.91	0.00	201.43	1.55
199.88	0.00	200.40	0.00	200.92	0.00	201.44	1.58
199.89	0.00	200.41	0.00	200.93	0.00	201.45	1.62
199.90	0.00	200.42	0.00	200.94	0.00	201.46	1.65
199.91	0.00	200.43	0.00	200.95	0.00	201.47	1.68
199.92	0.00	200.44	0.00	200.96	0.00	201.48	1.71
199.93	0.00	200.45	0.00	200.97	0.00	201.49	1.74
199.94	0.00	200.46	0.00	200.98	0.00	201.50	1.77
199.95	0.00	200.47	0.00	200.99	0.00	201.51	1.80
199.96	0.00	200.48	0.00	201.00	0.00	201.52	1.83
199.97	0.00	200.49	0.00	201.01	0.00	201.53	1.86
199.98	0.00	200.50	0.00	201.02	0.00	201.54	1.89
199.99	0.00	200.51	0.00	201.03	0.01	201.55	1.92
200.00	0.00	200.52	0.00	201.04	0.02	201.56	1.94
200.01	0.00	200.53	0.00	201.05	0.03	201.57	1.97
200.02	0.00	200.54	0.00	201.06	0.05	201.58	2.00
200.03	0.00	200.55	0.00	201.07	0.07	201.59	2.02
200.04	0.00	200.56	0.00	201.08	0.09	201.60	2.05
200.05	0.00	200.57	0.00	201.09	0.12	201.61	2.07
200.06	0.00	200.58	0.00	201.10	0.15	201.62	2.10
200.07	0.00	200.59	0.00	201.11	0.17	201.63	2.12
200.08	0.00	200.60	0.00	201.12	0.20	201.64	2.15
200.09	0.00	200.61	0.00	201.13	0.23	201.65	2.17
200.10	0.00	200.62	0.00	201.14	0.27	201.66	2.20
200.11	0.00	200.63	0.00	201.15	0.30	201.67	2.22
200.12	0.00	200.64	0.00	201.16	0.34	201.68	2.24
200.13	0.00	200.65	0.00	201.17	0.37	201.69	2.27
200.14	0.00	200.66	0.00	201.18	0.41	201.70	2.29
200.15	0.00	200.67	0.00	201.19	0.45	201.71	2.31
200.16	0.00	200.68	0.00	201.20	0.49	201.72	2.33
200.17	0.00	200.69	0.00	201.21	0.53	201.73	2.36
200.18	0.00	200.70	0.00	201.22	0.57	201.74	2.38
200.19	0.00	200.71	0.00	201.23	0.62	201.75	2.40
200.20	0.00	200.72	0.00	201.24	0.66	201.76	2.42
200.21	0.00	200.73	0.00	201.25	0.71	201.77	2.44
200.22	0.00	200.74	0.00	201.26	0.75	201.78	2.46
200.23	0.00	200.75	0.00	201.27	0.80	201.79	2.49
200.24	0.00	200.76	0.00	201.28	0.85	201.80	2.51
200.25	0.00	200.77	0.00	201.29	0.90	201.81	2.53
200.26	0.00	200.78	0.00	201.30	0.95	201.82	2.55

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.83	2.57	202.35	7.19	202.87	13.48	203.39	14.48
201.84	2.59	202.36	7.33	202.88	13.50	203.40	14.50
201.85	2.61	202.37	7.48	202.89	13.52	203.41	14.52
201.86	2.63	202.38	7.62	202.90	13.54	203.42	14.54
201.87	2.65	202.39	7.76	202.91	13.56	203.43	14.55
201.88	2.67	202.40	7.91	202.92	13.58	203.44	14.57
201.89	2.69	202.41	8.06	202.93	13.60	203.45	14.59
201.90	2.70	202.42	8.20	202.94	13.62	203.46	14.61
201.91	2.72	202.43	8.35	202.95	13.64	203.47	14.63
201.92	2.76	202.44	8.50	202.96	13.66	203.48	14.65
201.93	2.80	202.45	8.66	202.97	13.68	203.49	14.66
201.94	2.85	202.46	8.81	202.98	13.70	203.50	14.68
201.95	2.90	202.47	8.96	202.99	13.72	203.51	14.70
201.96	2.96	202.48	9.12	203.00	13.74	203.52	14.72
201.97	3.03	202.49	9.27	203.01	13.75	203.53	14.74
201.98	3.10	202.50	9.43	203.02	13.77	203.54	14.76
201.99	3.17	202.51	9.59	203.03	13.79	203.55	14.77
202.00	3.24	202.52	9.75	203.04	13.81	203.56	14.79
202.01	3.32	202.53	9.91	203.05	13.83	203.57	14.81
202.02	3.40	202.54	10.07	203.06	13.85	203.58	14.83
202.03	3.48	202.55	10.23	203.07	13.87	203.59	14.85
202.04	3.57	202.56	10.39	203.08	13.89	203.60	14.87
202.05	3.66	202.57	10.56	203.09	13.91	203.61	14.88
202.06	3.75	202.58	10.72	203.10	13.93	203.62	14.90
202.07	3.84	202.59	10.89	203.11	13.95	203.63	14.92
202.08	3.94	202.60	11.05	203.12	13.97	203.64	14.94
202.09	4.04	202.61	11.22	203.13	13.99	203.65	14.96
202.10	4.14	202.62	11.39	203.14	14.01	203.66	14.97
202.11	4.24	202.63	11.56	203.15	14.03	203.67	14.99
202.12	4.34	202.64	11.73	203.16	14.05	203.68	15.01
202.13	4.45	202.65	11.90	203.17	14.06	203.69	15.03
202.14	4.56	202.66	12.07	203.18	14.08	203.70	15.05
202.15	4.67	202.67	12.24	203.19	14.10	203.71	15.06
202.16	4.78	202.68	12.42	203.20	14.12	203.72	15.08
202.17	4.89	202.69	12.59	203.21	14.14	203.73	15.10
202.18	5.01	202.70	12.77	203.22	14.16	203.74	15.12
202.19	5.12	202.71	12.94	203.23	14.18	203.75	15.14
202.20	5.24	202.72	13.12	203.24	14.20	203.76	15.15
202.21	5.36	202.73	13.19	203.25	14.22	203.77	15.17
202.22	5.48	202.74	13.22	203.26	14.24	203.78	15.19
202.23	5.61	202.75	13.24	203.27	14.25	203.79	15.21
202.24	5.73	202.76	13.26	203.28	14.27	203.80	15.22
202.25	5.86	202.77	13.28	203.29	14.29	203.81	15.24
202.26	5.98	202.78	13.30	203.30	14.31	203.82	15.26
202.27	6.11	202.79	13.32	203.31	14.33	203.83	15.28
202.28	6.24	202.80	13.34	203.32	14.35	203.84	15.29
202.29	6.37	202.81	13.36	203.33	14.37	203.85	15.31
202.30	6.51	202.82	13.38	203.34	14.39	203.86	15.33
202.31	6.64	202.83	13.40	203.35	14.41	203.87	15.35
202.32	6.78	202.84	13.42	203.36	14.42	203.88	15.36
202.33	6.91	202.85	13.44	203.37	14.44	203.89	15.38
202.34	7.05	202.86	13.46	203.38	14.46	203.90	15.40

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.91	15.42	204.43	16.30	204.95	67.49	205.47	166.93
203.92	15.43	204.44	16.43	204.96	69.18	205.48	169.11
203.93	15.45	204.45	16.67	204.97	70.91	205.49	171.30
203.94	15.47	204.46	16.96	204.98	72.66	205.50	**173.51**
203.95	15.49	204.47	17.30	204.99	74.44		
203.96	15.50	204.48	17.69	205.00	76.24		
203.97	15.52	204.49	18.12	205.01	78.07		
203.98	15.54	204.50	18.59	205.02	79.93		
203.99	15.56	204.51	19.09	205.03	81.81		
204.00	15.57	204.52	19.62	205.04	83.46		
204.01	15.59	204.53	20.18	205.05	85.11		
204.02	15.61	204.54	20.77	205.06	86.78		
204.03	15.63	204.55	21.39	205.07	88.46		
204.04	15.64	204.56	22.03	205.08	90.16		
204.05	15.66	204.57	22.70	205.09	91.87		
204.06	15.68	204.58	23.39	205.10	93.59		
204.07	15.69	204.59	24.11	205.11	95.33		
204.08	15.71	204.60	24.85	205.12	97.08		
204.09	15.73	204.61	25.61	205.13	98.84		
204.10	15.75	204.62	26.39	205.14	100.61		
204.11	15.76	204.63	27.19	205.15	102.40		
204.12	15.78	204.64	28.06	205.16	104.20		
204.13	15.80	204.65	28.94	205.17	106.01		
204.14	15.81	204.66	29.86	205.18	107.83		
204.15	15.83	204.67	30.80	205.19	109.67		
204.16	15.85	204.68	31.76	205.20	111.52		
204.17	15.87	204.69	32.75	205.21	113.38		
204.18	15.88	204.70	33.77	205.22	115.25		
204.19	15.90	204.71	34.81	205.23	117.14		
204.20	15.92	204.72	35.87	205.24	119.07		
204.21	15.93	204.73	36.96	205.25	121.02		
204.22	15.95	204.74	38.07	205.26	122.98		
204.23	15.97	204.75	39.21	205.27	124.96		
204.24	15.98	204.76	40.37	205.28	126.95		
204.25	16.00	204.77	41.56	205.29	128.95		
204.26	16.02	204.78	42.77	205.30	130.96		
204.27	16.03	204.79	44.00	205.31	132.99		
204.28	16.05	204.80	45.26	205.32	135.03		
204.29	16.07	204.81	46.54	205.33	137.08		
204.30	16.08	204.82	47.85	205.34	139.15		
204.31	16.10	204.83	49.18	205.35	141.22		
204.32	16.12	204.84	50.56	205.36	143.32		
204.33	16.13	204.85	51.97	205.37	145.42		
204.34	16.15	204.86	53.40	205.38	147.54		
204.35	16.17	204.87	54.86	205.39	149.67		
204.36	16.19	204.88	56.35	205.40	151.81		
204.37	16.20	204.89	57.86	205.41	153.96		
204.38	16.22	204.90	59.40	205.42	156.13		
204.39	16.23	204.91	60.96	205.43	158.31		
204.40	16.25	204.92	62.56	205.44	160.45		
204.41	16.27	204.93	64.17	205.45	162.60		
204.42	16.28	204.94	65.82	205.46	164.76		

Stage-Area-Storage for Pond B-53: Basin #53

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.75	0	0
199.76	161	1
199.77	323	3
199.78	484	7
199.79	646	13
199.80	807	20
199.81	968	29
199.82	1,130	40
199.83	1,291	52
199.84	1,453	65
199.85	1,614	81
199.86	1,775	98
199.87	1,937	116
199.88	2,098	136
199.89	2,260	158
199.90	2,421	182
199.91	2,582	207
199.92	2,744	233
199.93	2,905	261
199.94	3,067	291
199.95	3,228	323
199.96	3,389	356
199.97	3,551	391
199.98	3,712	427
199.99	3,874	465
200.00	4,035	504
200.01	4,042	545
200.02	4,048	585
200.03	4,055	626
200.04	4,061	666
200.05	4,068	707
200.06	4,075	748
200.07	4,081	788
200.08	4,088	829
200.09	4,094	870
200.10	4,101	911
200.11	4,108	952
200.12	4,114	993
200.13	4,121	1,035
200.14	4,127	1,076
200.15	4,134	1,117
200.16	4,141	1,158
200.17	4,147	1,200
200.18	4,154	1,241
200.19	4,160	1,283
200.20	4,167	1,325
200.21	4,174	1,366
200.22	4,180	1,408
200.23	4,187	1,450
200.24	4,193	1,492
200.25	4,200	1,534
200.26	4,207	1,576
200.27	4,213	1,618
200.28	4,220	1,660
200.29	4,226	1,702
200.30	4,233	1,745
200.31	4,240	1,787
200.32	4,246	1,829
200.33	4,253	1,872
200.34	4,259	1,914
200.35	4,266	1,957
200.36	4,273	2,000
200.37	4,279	2,043
200.38	4,286	2,085
200.39	4,292	2,128
200.40	4,299	2,171
200.41	4,306	2,214
200.42	4,312	2,257
200.43	4,319	2,300
200.44	4,325	2,344
200.45	4,332	2,387
200.46	4,339	2,430
200.47	4,345	2,474
200.48	4,352	2,517
200.49	4,358	2,561
200.50	4,365	2,604
200.51	4,372	2,648
200.52	4,378	2,692
200.53	4,385	2,736
200.54	4,391	2,780
200.55	4,398	2,823
200.56	4,405	2,867
200.57	4,411	2,912
200.58	4,418	2,956
200.59	4,424	3,000
200.60	4,431	3,044
200.61	4,438	3,089
200.62	4,444	3,133
200.63	4,451	3,177
200.64	4,457	3,222
200.65	4,464	3,267
200.66	4,471	3,311
200.67	4,477	3,356
200.68	4,484	3,401
200.69	4,490	3,446
200.70	4,497	3,491
200.71	4,504	3,536
200.72	4,510	3,581
200.73	4,517	3,626
200.74	4,523	3,671
200.75	4,530	3,716
200.76	4,537	3,762
200.77	4,543	3,807
200.78	4,550	3,852

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.79	4,556	3,898	201.31	5,002	6,372
200.80	4,563	3,944	201.32	5,012	6,422
200.81	4,570	3,989	201.33	5,022	6,473
200.82	4,576	4,035	201.34	5,032	6,523
200.83	4,583	4,081	201.35	5,041	6,573
200.84	4,589	4,127	201.36	5,051	6,624
200.85	4,596	4,173	201.37	5,061	6,674
200.86	4,603	4,219	201.38	5,071	6,725
200.87	4,609	4,265	201.39	5,081	6,776
200.88	4,616	4,311	201.40	5,091	6,827
200.89	4,622	4,357	201.41	5,101	6,878
200.90	4,629	4,403	201.42	5,111	6,929
200.91	4,636	4,449	201.43	5,121	6,980
200.92	4,642	4,496	201.44	5,131	7,031
200.93	4,649	4,542	201.45	5,140	7,082
200.94	4,655	4,589	201.46	5,150	7,134
200.95	4,662	4,635	201.47	5,160	7,185
200.96	4,669	4,682	201.48	5,170	7,237
200.97	4,675	4,729	201.49	5,180	7,289
200.98	4,682	4,776	201.50	5,190	7,341
200.99	4,688	4,822	201.51	5,200	7,393
201.00	4,695	4,869	201.52	5,210	7,445
201.01	4,705	4,916	201.53	5,220	7,497
201.02	4,715	4,963	201.54	5,230	7,549
201.03	4,725	5,011	201.55	5,240	7,601
201.04	4,735	5,058	201.56	5,249	7,654
201.05	4,745	5,105	201.57	5,259	7,706
201.06	4,754	5,153	201.58	5,269	7,759
201.07	4,764	5,200	201.59	5,279	7,812
201.08	4,774	5,248	201.60	5,289	7,865
201.09	4,784	5,296	201.61	5,299	7,918
201.10	4,794	5,344	201.62	5,309	7,971
201.11	4,804	5,392	201.63	5,319	8,024
201.12	4,814	5,440	201.64	5,329	8,077
201.13	4,824	5,488	201.65	5,339	8,130
201.14	4,834	5,536	201.66	5,348	8,184
201.15	4,844	5,585	201.67	5,358	8,237
201.16	4,853	5,633	201.68	5,368	8,291
201.17	4,863	5,682	201.69	5,378	8,345
201.18	4,873	5,731	201.70	5,388	8,398
201.19	4,883	5,779	201.71	5,398	8,452
201.20	4,893	5,828	201.72	5,408	8,506
201.21	4,903	5,877	201.73	5,418	8,561
201.22	4,913	5,926	201.74	5,428	8,615
201.23	4,923	5,975	201.75	5,438	8,669
201.24	4,933	6,025	201.76	5,447	8,723
201.25	4,943	6,074	201.77	5,457	8,778
201.26	4,952	6,124	201.78	5,467	8,833
201.27	4,962	6,173	201.79	5,477	8,887
201.28	4,972	6,223	201.80	5,487	8,942
201.29	4,982	6,273	201.81	5,497	8,997
201.30	4,992	6,322	201.82	5,507	9,052

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.83	5,517	9,107	202.35	5,800	12,069
201.84	5,527	9,162	202.36	5,804	12,127
201.85	5,536	9,218	202.37	5,807	12,185
201.86	5,546	9,273	202.38	5,810	12,244
201.87	5,556	9,329	202.39	5,814	12,302
201.88	5,566	9,384	202.40	5,817	12,360
201.89	5,576	9,440	202.41	5,820	12,418
201.90	5,586	9,496	202.42	5,824	12,476
201.91	5,596	9,552	202.43	5,827	12,534
201.92	5,606	9,608	202.44	5,830	12,593
201.93	5,616	9,664	202.45	5,833	12,651
201.94	5,626	9,720	202.46	5,837	12,709
201.95	5,635	9,776	202.47	5,840	12,768
201.96	5,645	9,833	202.48	5,843	12,826
201.97	5,655	9,889	202.49	5,847	12,885
201.98	5,665	9,946	202.50	5,850	12,943
201.99	5,675	10,003	202.51	5,853	13,002
202.00	5,685	10,059	202.52	5,857	13,060
202.01	5,688	10,116	202.53	5,860	13,119
202.02	5,692	10,173	202.54	5,863	13,177
202.03	5,695	10,230	202.55	5,867	13,236
202.04	5,698	10,287	202.56	5,870	13,295
202.05	5,702	10,344	202.57	5,873	13,353
202.06	5,705	10,401	202.58	5,876	13,412
202.07	5,708	10,458	202.59	5,880	13,471
202.08	5,711	10,515	202.60	5,883	13,530
202.09	5,715	10,572	202.61	5,886	13,589
202.10	5,718	10,630	202.62	5,890	13,648
202.11	5,721	10,687	202.63	5,893	13,706
202.12	5,725	10,744	202.64	5,896	13,765
202.13	5,728	10,801	202.65	5,900	13,824
202.14	5,731	10,859	202.66	5,903	13,883
202.15	5,735	10,916	202.67	5,906	13,942
202.16	5,738	10,973	202.68	5,909	14,001
202.17	5,741	11,031	202.69	5,913	14,061
202.18	5,744	11,088	202.70	5,916	14,120
202.19	5,748	11,145	202.71	5,919	14,179
202.20	5,751	11,203	202.72	5,923	14,238
202.21	5,754	11,261	202.73	5,926	14,297
202.22	5,758	11,318	202.74	5,929	14,357
202.23	5,761	11,376	202.75	5,933	14,416
202.24	5,764	11,433	202.76	5,936	14,475
202.25	5,768	11,491	202.77	5,939	14,535
202.26	5,771	11,549	202.78	5,942	14,594
202.27	5,774	11,606	202.79	5,946	14,654
202.28	5,777	11,664	202.80	5,949	14,713
202.29	5,781	11,722	202.81	5,952	14,772
202.30	5,784	11,780	202.82	5,956	14,832
202.31	5,787	11,838	202.83	5,959	14,892
202.32	5,791	11,895	202.84	5,962	14,951
202.33	5,794	11,953	202.85	5,965	15,011
202.34	5,797	12,011	202.86	5,969	15,071

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.87	5,972	15,130	203.39	6,273	18,305
202.88	5,975	15,190	203.40	6,279	18,368
202.89	5,979	15,250	203.41	6,286	18,431
202.90	5,982	15,310	203.42	6,293	18,494
202.91	5,985	15,369	203.43	6,299	18,557
202.92	5,989	15,429	203.44	6,306	18,620
202.93	5,992	15,489	203.45	6,312	18,683
202.94	5,995	15,549	203.46	6,319	18,746
202.95	5,998	15,609	203.47	6,326	18,809
202.96	6,002	15,669	203.48	6,332	18,873
202.97	6,005	15,729	203.49	6,339	18,936
202.98	6,008	15,789	203.50	6,346	19,000
202.99	6,012	15,849	203.51	6,352	19,063
203.00	6,015	15,909	203.52	6,359	19,127
203.01	6,022	15,970	203.53	6,365	19,190
203.02	6,028	16,030	203.54	6,372	19,254
203.03	6,035	16,090	203.55	6,379	19,318
203.04	6,041	16,151	203.56	6,385	19,381
203.05	6,048	16,211	203.57	6,392	19,445
203.06	6,055	16,271	203.58	6,398	19,509
203.07	6,061	16,332	203.59	6,405	19,573
203.08	6,068	16,393	203.60	6,412	19,637
203.09	6,074	16,453	203.61	6,418	19,702
203.10	6,081	16,514	203.62	6,425	19,766
203.11	6,088	16,575	203.63	6,431	19,830
203.12	6,094	16,636	203.64	6,438	19,894
203.13	6,101	16,697	203.65	6,445	19,959
203.14	6,108	16,758	203.66	6,451	20,023
203.15	6,114	16,819	203.67	6,458	20,088
203.16	6,121	16,880	203.68	6,464	20,152
203.17	6,127	16,941	203.69	6,471	20,217
203.18	6,134	17,003	203.70	6,478	20,282
203.19	6,141	17,064	203.71	6,484	20,347
203.20	6,147	17,126	203.72	6,491	20,412
203.21	6,154	17,187	203.73	6,498	20,476
203.22	6,160	17,249	203.74	6,504	20,541
203.23	6,167	17,310	203.75	6,511	20,607
203.24	6,174	17,372	203.76	6,517	20,672
203.25	6,180	17,434	203.77	6,524	20,737
203.26	6,187	17,496	203.78	6,531	20,802
203.27	6,193	17,558	203.79	6,537	20,867
203.28	6,200	17,619	203.80	6,544	20,933
203.29	6,207	17,682	203.81	6,550	20,998
203.30	6,213	17,744	203.82	6,557	21,064
203.31	6,220	17,806	203.83	6,564	21,130
203.32	6,227	17,868	203.84	6,570	21,195
203.33	6,233	17,930	203.85	6,577	21,261
203.34	6,240	17,993	203.86	6,583	21,327
203.35	6,246	18,055	203.87	6,590	21,393
203.36	6,253	18,118	203.88	6,597	21,459
203.37	6,260	18,180	203.89	6,603	21,525
203.38	6,266	18,243	203.90	6,610	21,591

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.91	6,617	21,657	204.43	6,960	25,187
203.92	6,623	21,723	204.44	6,966	25,256
203.93	6,630	21,789	204.45	6,973	25,326
203.94	6,636	21,856	204.46	6,980	25,396
203.95	6,643	21,922	204.47	6,986	25,465
203.96	6,650	21,988	204.48	6,993	25,535
203.97	6,656	22,055	204.49	6,999	25,605
203.98	6,663	22,121	204.50	7,006	25,675
203.99	6,669	22,188	204.51	7,013	25,745
204.00	6,676	22,255	204.52	7,019	25,816
204.01	6,683	22,322	204.53	7,026	25,886
204.02	6,689	22,389	204.54	7,032	25,956
204.03	6,696	22,455	204.55	7,039	26,027
204.04	6,702	22,522	204.56	7,046	26,097
204.05	6,709	22,590	204.57	7,052	26,167
204.06	6,716	22,657	204.58	7,059	26,238
204.07	6,722	22,724	204.59	7,065	26,309
204.08	6,729	22,791	204.60	7,072	26,379
204.09	6,735	22,858	204.61	7,079	26,450
204.10	6,742	22,926	204.62	7,085	26,521
204.11	6,749	22,993	204.63	7,092	26,592
204.12	6,755	23,061	204.64	7,098	26,663
204.13	6,762	23,128	204.65	7,105	26,734
204.14	6,768	23,196	204.66	7,112	26,805
204.15	6,775	23,264	204.67	7,118	26,876
204.16	6,782	23,331	204.68	7,125	26,947
204.17	6,788	23,399	204.69	7,131	27,018
204.18	6,795	23,467	204.70	7,138	27,090
204.19	6,801	23,535	204.71	7,145	27,161
204.20	6,808	23,603	204.72	7,151	27,233
204.21	6,815	23,671	204.73	7,158	27,304
204.22	6,821	23,740	204.74	7,164	27,376
204.23	6,828	23,808	204.75	7,171	27,448
204.24	6,834	23,876	204.76	7,178	27,519
204.25	6,841	23,945	204.77	7,184	27,591
204.26	6,848	24,013	204.78	7,191	27,663
204.27	6,854	24,081	204.79	7,197	27,735
204.28	6,861	24,150	204.80	7,204	27,807
204.29	6,867	24,219	204.81	7,211	27,879
204.30	6,874	24,287	204.82	7,217	27,951
204.31	6,881	24,356	204.83	7,224	28,023
204.32	6,887	24,425	204.84	7,230	28,096
204.33	6,894	24,494	204.85	7,237	28,168
204.34	6,900	24,563	204.86	7,244	28,240
204.35	6,907	24,632	204.87	7,250	28,313
204.36	6,914	24,701	204.88	7,257	28,385
204.37	6,920	24,770	204.89	7,263	28,458
204.38	6,927	24,839	204.90	7,270	28,531
204.39	6,933	24,909	204.91	7,277	28,603
204.40	6,940	24,978	204.92	7,283	28,676
204.41	6,947	25,048	204.93	7,290	28,749
204.42	6,953	25,117	204.94	7,296	28,822

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.95	7,303	28,895
204.96	7,310	28,968
204.97	7,316	29,041
204.98	7,323	29,114
204.99	7,329	29,188
205.00	7,336	29,261
205.01	7,343	29,334
205.02	7,349	29,408
205.03	7,356	29,481
205.04	7,362	29,555
205.05	7,369	29,629
205.06	7,376	29,702
205.07	7,382	29,776
205.08	7,389	29,850
205.09	7,395	29,924
205.10	7,402	29,998
205.11	7,409	30,072
205.12	7,415	30,146
205.13	7,422	30,220
205.14	7,428	30,294
205.15	7,435	30,369
205.16	7,442	30,443
205.17	7,448	30,518
205.18	7,455	30,592
205.19	7,461	30,667
205.20	7,468	30,741
205.21	7,475	30,816
205.22	7,481	30,891
205.23	7,488	30,966
205.24	7,494	31,041
205.25	7,501	31,116
205.26	7,508	31,191
205.27	7,514	31,266
205.28	7,521	31,341
205.29	7,527	31,416
205.30	7,534	31,491
205.31	7,541	31,567
205.32	7,547	31,642
205.33	7,554	31,718
205.34	7,560	31,793
205.35	7,567	31,869
205.36	7,574	31,945
205.37	7,580	32,020
205.38	7,587	32,096
205.39	7,593	32,172
205.40	7,600	32,248
205.41	7,607	32,324
205.42	7,613	32,400
205.43	7,620	32,476
205.44	7,626	32,553
205.45	7,633	32,629
205.46	7,640	32,705
205.47	7,646	32,782
205.48	7,653	32,858
205.49	7,659	32,935
205.50	**7,666**	**33,011**

Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.47% Impervious, Inflow Depth = 3.91" for Current 10 yr event
Inflow = 9.96 cfs @ 12.17 hrs, Volume= 0.837 af
Outflow = 6.16 cfs @ 12.30 hrs, Volume= 0.696 af, Atten= 38%, Lag= 7.7 min
Primary = 6.16 cfs @ 12.30 hrs, Volume= 0.696 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 202.77' @ 12.30 hrs Surf.Area= 5,607 sf Storage= 13,198 cf

Plug-Flow detention time= 158.1 min calculated for 0.696 af (83% of inflow)
Center-of-Mass det. time= 83.4 min (858.2 - 774.8)

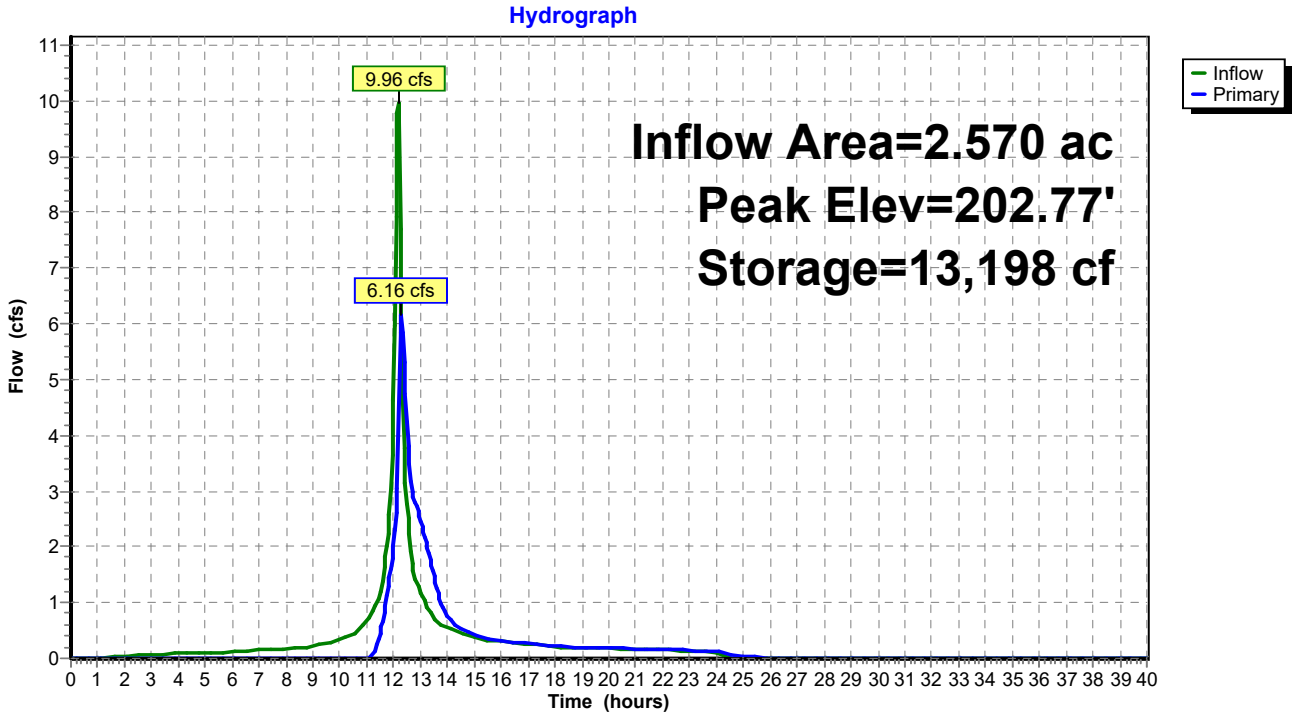
Volume	Invert	Avail.Storage	Storage Description
#1	199.89'	30,982 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.89	0	0	0
200.00	3,780	208	208
201.00	4,440	4,110	4,318
202.00	5,100	4,770	9,088
203.00	5,760	5,430	14,518
204.00	6,421	6,091	20,608
205.00	7,081	6,751	27,359
205.50	7,411	3,623	30,982

Device	Routing	Invert	Outlet Devices
#1	Primary	198.89'	**18.0" Round Culvert** L= 178.0' Ke= 0.500 Inlet / Outlet Invert= 198.89' / 198.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.40'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	202.42'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.47'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.15 cfs @ 12.30 hrs HW=202.77' (Free Discharge)
- **1=Culvert** (Passes 6.15 cfs of 11.76 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.52 cfs @ 5.27 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.64 cfs @ 1.93 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-54: Basin #54



Stage-Discharge for Pond B-54: Basin #54

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.89	0.00	200.41	0.00	200.93	0.00	201.45	0.07
199.90	0.00	200.42	0.00	200.94	0.00	201.46	0.09
199.91	0.00	200.43	0.00	200.95	0.00	201.47	0.12
199.92	0.00	200.44	0.00	200.96	0.00	201.48	0.15
199.93	0.00	200.45	0.00	200.97	0.00	201.49	0.17
199.94	0.00	200.46	0.00	200.98	0.00	201.50	0.20
199.95	0.00	200.47	0.00	200.99	0.00	201.51	0.23
199.96	0.00	200.48	0.00	201.00	0.00	201.52	0.27
199.97	0.00	200.49	0.00	201.01	0.00	201.53	0.30
199.98	0.00	200.50	0.00	201.02	0.00	201.54	0.34
199.99	0.00	200.51	0.00	201.03	0.00	201.55	0.37
200.00	0.00	200.52	0.00	201.04	0.00	201.56	0.41
200.01	0.00	200.53	0.00	201.05	0.00	201.57	0.45
200.02	0.00	200.54	0.00	201.06	0.00	201.58	0.49
200.03	0.00	200.55	0.00	201.07	0.00	201.59	0.53
200.04	0.00	200.56	0.00	201.08	0.00	201.60	0.57
200.05	0.00	200.57	0.00	201.09	0.00	201.61	0.62
200.06	0.00	200.58	0.00	201.10	0.00	201.62	0.66
200.07	0.00	200.59	0.00	201.11	0.00	201.63	0.71
200.08	0.00	200.60	0.00	201.12	0.00	201.64	0.75
200.09	0.00	200.61	0.00	201.13	0.00	201.65	0.80
200.10	0.00	200.62	0.00	201.14	0.00	201.66	0.85
200.11	0.00	200.63	0.00	201.15	0.00	201.67	0.90
200.12	0.00	200.64	0.00	201.16	0.00	201.68	0.95
200.13	0.00	200.65	0.00	201.17	0.00	201.69	1.00
200.14	0.00	200.66	0.00	201.18	0.00	201.70	1.05
200.15	0.00	200.67	0.00	201.19	0.00	201.71	1.11
200.16	0.00	200.68	0.00	201.20	0.00	201.72	1.16
200.17	0.00	200.69	0.00	201.21	0.00	201.73	1.22
200.18	0.00	200.70	0.00	201.22	0.00	201.74	1.27
200.19	0.00	200.71	0.00	201.23	0.00	201.75	1.32
200.20	0.00	200.72	0.00	201.24	0.00	201.76	1.36
200.21	0.00	200.73	0.00	201.25	0.00	201.77	1.40
200.22	0.00	200.74	0.00	201.26	0.00	201.78	1.44
200.23	0.00	200.75	0.00	201.27	0.00	201.79	1.48
200.24	0.00	200.76	0.00	201.28	0.00	201.80	1.51
200.25	0.00	200.77	0.00	201.29	0.00	201.81	1.55
200.26	0.00	200.78	0.00	201.30	0.00	201.82	1.58
200.27	0.00	200.79	0.00	201.31	0.00	201.83	1.62
200.28	0.00	200.80	0.00	201.32	0.00	201.84	1.65
200.29	0.00	200.81	0.00	201.33	0.00	201.85	1.68
200.30	0.00	200.82	0.00	201.34	0.00	201.86	1.71
200.31	0.00	200.83	0.00	201.35	0.00	201.87	1.74
200.32	0.00	200.84	0.00	201.36	0.00	201.88	1.77
200.33	0.00	200.85	0.00	201.37	0.00	201.89	1.80
200.34	0.00	200.86	0.00	201.38	0.00	201.90	1.83
200.35	0.00	200.87	0.00	201.39	0.00	201.91	1.86
200.36	0.00	200.88	0.00	201.40	0.00	201.92	1.89
200.37	0.00	200.89	0.00	201.41	0.01	201.93	1.92
200.38	0.00	200.90	0.00	201.42	0.02	201.94	1.94
200.39	0.00	200.91	0.00	201.43	0.03	201.95	1.97
200.40	0.00	200.92	0.00	201.44	0.05	201.96	2.00

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.97	2.02	202.49	3.32	203.01	9.61	203.53	13.06
201.98	2.05	202.50	3.39	203.02	9.76	203.54	13.07
201.99	2.07	202.51	3.47	203.03	9.92	203.55	13.09
202.00	2.10	202.52	3.54	203.04	10.08	203.56	13.10
202.01	2.12	202.53	3.62	203.05	10.24	203.57	13.12
202.02	2.15	202.54	3.70	203.06	10.40	203.58	13.14
202.03	2.17	202.55	3.79	203.07	10.57	203.59	13.15
202.04	2.20	202.56	3.88	203.08	10.73	203.60	13.17
202.05	2.22	202.57	3.97	203.09	10.89	203.61	13.18
202.06	2.24	202.58	4.06	203.10	11.06	203.62	13.20
202.07	2.27	202.59	4.15	203.11	11.22	203.63	13.22
202.08	2.29	202.60	4.25	203.12	11.39	203.64	13.23
202.09	2.31	202.61	4.35	203.13	11.56	203.65	13.25
202.10	2.33	202.62	4.45	203.14	11.73	203.66	13.26
202.11	2.36	202.63	4.55	203.15	11.90	203.67	13.28
202.12	2.38	202.64	4.66	203.16	12.07	203.68	13.30
202.13	2.40	202.65	4.76	203.17	12.24	203.69	13.31
202.14	2.42	202.66	4.87	203.18	12.41	203.70	13.33
202.15	2.44	202.67	4.98	203.19	12.49	203.71	13.34
202.16	2.46	202.68	5.10	203.20	12.51	203.72	13.36
202.17	2.49	202.69	5.21	203.21	12.53	203.73	13.38
202.18	2.51	202.70	5.33	203.22	12.54	203.74	13.39
202.19	2.53	202.71	5.44	203.23	12.56	203.75	13.41
202.20	2.55	202.72	5.56	203.24	12.58	203.76	13.42
202.21	2.57	202.73	5.68	203.25	12.59	203.77	13.44
202.22	2.59	202.74	5.80	203.26	12.61	203.78	13.45
202.23	2.61	202.75	5.93	203.27	12.63	203.79	13.47
202.24	2.63	202.76	6.05	203.28	12.64	203.80	13.49
202.25	2.65	202.77	6.18	203.29	12.66	203.81	13.50
202.26	2.67	202.78	6.31	203.30	12.68	203.82	13.52
202.27	2.69	202.79	6.44	203.31	12.69	203.83	13.53
202.28	2.70	202.80	6.57	203.32	12.71	203.84	13.55
202.29	2.72	202.81	6.70	203.33	12.73	203.85	13.56
202.30	2.74	202.82	6.83	203.34	12.74	203.86	13.58
202.31	2.76	202.83	6.97	203.35	12.76	203.87	13.59
202.32	2.78	202.84	7.11	203.36	12.78	203.88	13.61
202.33	2.80	202.85	7.24	203.37	12.79	203.89	13.63
202.34	2.82	202.86	7.38	203.38	12.81	203.90	13.64
202.35	2.84	202.87	7.52	203.39	12.83	203.91	13.66
202.36	2.85	202.88	7.66	203.40	12.84	203.92	13.67
202.37	2.87	202.89	7.81	203.41	12.86	203.93	13.69
202.38	2.89	202.90	7.95	203.42	12.88	203.94	13.70
202.39	2.91	202.91	8.09	203.43	12.89	203.95	13.72
202.40	2.93	202.92	8.24	203.44	12.91	203.96	13.73
202.41	2.94	202.93	8.39	203.45	12.92	203.97	13.75
202.42	2.96	202.94	8.54	203.46	12.94	203.98	13.76
202.43	2.99	202.95	8.69	203.47	12.96	203.99	13.78
202.44	3.03	202.96	8.84	203.48	12.97	204.00	13.80
202.45	3.08	202.97	8.99	203.49	12.99	204.01	13.81
202.46	3.13	202.98	9.14	203.50	13.01	204.02	13.83
202.47	3.19	202.99	9.30	203.51	13.02	204.03	13.84
202.48	3.26	203.00	9.45	203.52	13.04	204.04	13.86

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
204.05	13.87	204.57	18.36	205.09	83.19
204.06	13.89	204.58	18.95	205.10	84.86
204.07	13.90	204.59	19.56	205.11	86.54
204.08	13.92	204.60	20.20	205.12	88.24
204.09	13.93	204.61	20.87	205.13	89.94
204.10	13.95	204.62	21.56	205.14	91.66
204.11	13.96	204.63	22.27	205.15	93.40
204.12	13.98	204.64	23.01	205.16	95.14
204.13	13.99	204.65	23.77	205.17	96.90
204.14	14.01	204.66	24.55	205.18	98.68
204.15	14.02	204.67	25.35	205.19	100.46
204.16	14.04	204.68	26.21	205.20	102.26
204.17	14.05	204.69	27.10	205.21	104.07
204.18	14.07	204.70	28.01	205.22	105.89
204.19	14.08	204.71	28.95	205.23	107.73
204.20	14.10	204.72	29.91	205.24	109.57
204.21	14.11	204.73	30.90	205.25	111.43
204.22	14.13	204.74	31.91	205.26	113.30
204.23	14.14	204.75	32.95	205.27	115.19
204.24	14.16	204.76	34.01	205.28	117.12
204.25	14.17	204.77	35.10	205.29	119.07
204.26	14.19	204.78	36.21	205.30	121.02
204.27	14.20	204.79	37.34	205.31	123.00
204.28	14.22	204.80	38.50	205.32	124.98
204.29	14.23	204.81	39.69	205.33	126.98
204.30	14.25	204.82	40.90	205.34	129.00
204.31	14.26	204.83	42.13	205.35	131.02
204.32	14.28	204.84	43.39	205.36	133.06
204.33	14.29	204.85	44.67	205.37	135.11
204.34	14.31	204.86	45.97	205.38	137.17
204.35	14.32	204.87	47.30	205.39	139.25
204.36	14.34	204.88	48.68	205.40	141.34
204.37	14.35	204.89	50.09	205.41	143.44
204.38	14.37	204.90	51.52	205.42	145.56
204.39	14.38	204.91	52.98	205.43	147.69
204.40	14.40	204.92	54.46	205.44	149.83
204.41	14.41	204.93	55.97	205.45	151.98
204.42	14.42	204.94	57.51	205.46	154.14
204.43	14.44	204.95	59.07	205.47	156.32
204.44	14.45	204.96	60.66	205.48	158.46
204.45	14.47	204.97	62.27	205.49	160.61
204.46	14.48	204.98	63.92	205.50	**162.77**
204.47	14.50	204.99	65.59		
204.48	14.63	205.00	67.28		
204.49	14.86	205.01	69.00		
204.50	15.15	205.02	70.75		
204.51	15.49	205.03	72.53		
204.52	15.88	205.04	74.33		
204.53	16.31	205.05	76.16		
204.54	16.77	205.06	78.01		
204.55	17.27	205.07	79.90		
204.56	17.80	205.08	81.54		

Stage-Area-Storage for Pond B-54: Basin #54

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.89	0	0	200.41	4,051	1,813
199.90	344	2	200.42	4,057	1,854
199.91	687	7	200.43	4,064	1,894
199.92	1,031	15	200.44	4,070	1,935
199.93	1,375	27	200.45	4,077	1,976
199.94	1,718	43	200.46	4,084	2,017
199.95	2,062	62	200.47	4,090	2,057
199.96	2,405	84	200.48	4,097	2,098
199.97	2,749	110	200.49	4,103	2,139
199.98	3,093	139	200.50	4,110	2,180
199.99	3,436	172	200.51	4,117	2,222
200.00	3,780	208	200.52	4,123	2,263
200.01	3,787	246	200.53	4,130	2,304
200.02	3,793	284	200.54	4,136	2,345
200.03	3,800	322	200.55	4,143	2,387
200.04	3,806	360	200.56	4,150	2,428
200.05	3,813	398	200.57	4,156	2,470
200.06	3,820	436	200.58	4,163	2,511
200.07	3,826	474	200.59	4,169	2,553
200.08	3,833	512	200.60	4,176	2,595
200.09	3,839	551	200.61	4,183	2,636
200.10	3,846	589	200.62	4,189	2,678
200.11	3,853	628	200.63	4,196	2,720
200.12	3,859	666	200.64	4,202	2,762
200.13	3,866	705	200.65	4,209	2,804
200.14	3,872	744	200.66	4,216	2,846
200.15	3,879	782	200.67	4,222	2,889
200.16	3,886	821	200.68	4,229	2,931
200.17	3,892	860	200.69	4,235	2,973
200.18	3,899	899	200.70	4,242	3,016
200.19	3,905	938	200.71	4,249	3,058
200.20	3,912	977	200.72	4,255	3,101
200.21	3,919	1,016	200.73	4,262	3,143
200.22	3,925	1,055	200.74	4,268	3,186
200.23	3,932	1,095	200.75	4,275	3,229
200.24	3,938	1,134	200.76	4,282	3,271
200.25	3,945	1,174	200.77	4,288	3,314
200.26	3,952	1,213	200.78	4,295	3,357
200.27	3,958	1,253	200.79	4,301	3,400
200.28	3,965	1,292	200.80	4,308	3,443
200.29	3,971	1,332	200.81	4,315	3,486
200.30	3,978	1,372	200.82	4,321	3,529
200.31	3,985	1,411	200.83	4,328	3,573
200.32	3,991	1,451	200.84	4,334	3,616
200.33	3,998	1,491	200.85	4,341	3,659
200.34	4,004	1,531	200.86	4,348	3,703
200.35	4,011	1,571	200.87	4,354	3,746
200.36	4,018	1,611	200.88	4,361	3,790
200.37	4,024	1,652	200.89	4,367	3,833
200.38	4,031	1,692	200.90	4,374	3,877
200.39	4,037	1,732	200.91	4,381	3,921
200.40	4,044	1,773	200.92	4,387	3,965

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.93	4,394	4,009
200.94	4,400	4,053
200.95	4,407	4,097
200.96	4,414	4,141
200.97	4,420	4,185
200.98	4,427	4,229
200.99	4,433	4,274
201.00	4,440	4,318
201.01	4,447	4,362
201.02	4,453	4,407
201.03	4,460	4,451
201.04	4,466	4,496
201.05	4,473	4,541
201.06	4,480	4,585
201.07	4,486	4,630
201.08	4,493	4,675
201.09	4,499	4,720
201.10	4,506	4,765
201.11	4,513	4,810
201.12	4,519	4,855
201.13	4,526	4,901
201.14	4,532	4,946
201.15	4,539	4,991
201.16	4,546	5,037
201.17	4,552	5,082
201.18	4,559	5,128
201.19	4,565	5,173
201.20	4,572	5,219
201.21	4,579	5,265
201.22	4,585	5,311
201.23	4,592	5,357
201.24	4,598	5,403
201.25	4,605	5,449
201.26	4,612	5,495
201.27	4,618	5,541
201.28	4,625	5,587
201.29	4,631	5,633
201.30	4,638	5,680
201.31	4,645	5,726
201.32	4,651	5,772
201.33	4,658	5,819
201.34	4,664	5,866
201.35	4,671	5,912
201.36	4,678	5,959
201.37	4,684	6,006
201.38	4,691	6,053
201.39	4,697	6,100
201.40	4,704	6,147
201.41	4,711	6,194
201.42	4,717	6,241
201.43	4,724	6,288
201.44	4,730	6,335
201.45	4,737	6,383
201.46	4,744	6,430
201.47	4,750	6,478
201.48	4,757	6,525
201.49	4,763	6,573
201.50	4,770	6,620
201.51	4,777	6,668
201.52	4,783	6,716
201.53	4,790	6,764
201.54	4,796	6,812
201.55	4,803	6,860
201.56	4,810	6,908
201.57	4,816	6,956
201.58	4,823	7,004
201.59	4,829	7,052
201.60	4,836	7,101
201.61	4,843	7,149
201.62	4,849	7,198
201.63	4,856	7,246
201.64	4,862	7,295
201.65	4,869	7,343
201.66	4,876	7,392
201.67	4,882	7,441
201.68	4,889	7,490
201.69	4,895	7,539
201.70	4,902	7,588
201.71	4,909	7,637
201.72	4,915	7,686
201.73	4,922	7,735
201.74	4,928	7,784
201.75	4,935	7,834
201.76	4,942	7,883
201.77	4,948	7,932
201.78	4,955	7,982
201.79	4,961	8,031
201.80	4,968	8,081
201.81	4,975	8,131
201.82	4,981	8,181
201.83	4,988	8,230
201.84	4,994	8,280
201.85	5,001	8,330
201.86	5,008	8,380
201.87	5,014	8,430
201.88	5,021	8,481
201.89	5,027	8,531
201.90	5,034	8,581
201.91	5,041	8,632
201.92	5,047	8,682
201.93	5,054	8,733
201.94	5,060	8,783
201.95	5,067	8,834
201.96	5,074	8,884

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.97	5,080	8,935	202.49	5,423	11,666
201.98	5,087	8,986	202.50	5,430	11,720
201.99	5,093	9,037	202.51	5,437	11,775
202.00	5,100	9,088	202.52	5,443	11,829
202.01	5,107	9,139	202.53	5,450	11,884
202.02	5,113	9,190	202.54	5,456	11,938
202.03	5,120	9,241	202.55	5,463	11,993
202.04	5,126	9,292	202.56	5,470	12,047
202.05	5,133	9,344	202.57	5,476	12,102
202.06	5,140	9,395	202.58	5,483	12,157
202.07	5,146	9,447	202.59	5,489	12,212
202.08	5,153	9,498	202.60	5,496	12,267
202.09	5,159	9,550	202.61	5,503	12,322
202.10	5,166	9,601	202.62	5,509	12,377
202.11	5,173	9,653	202.63	5,516	12,432
202.12	5,179	9,705	202.64	5,522	12,487
202.13	5,186	9,756	202.65	5,529	12,542
202.14	5,192	9,808	202.66	5,536	12,598
202.15	5,199	9,860	202.67	5,542	12,653
202.16	5,206	9,912	202.68	5,549	12,708
202.17	5,212	9,964	202.69	5,555	12,764
202.18	5,219	10,017	202.70	5,562	12,820
202.19	5,225	10,069	202.71	5,569	12,875
202.20	5,232	10,121	202.72	5,575	12,931
202.21	5,239	10,173	202.73	5,582	12,987
202.22	5,245	10,226	202.74	5,588	13,043
202.23	5,252	10,278	202.75	5,595	13,099
202.24	5,258	10,331	202.76	5,602	13,155
202.25	5,265	10,384	202.77	5,608	13,211
202.26	5,272	10,436	202.78	5,615	13,267
202.27	5,278	10,489	202.79	5,621	13,323
202.28	5,285	10,542	202.80	5,628	13,379
202.29	5,291	10,595	202.81	5,635	13,435
202.30	5,298	10,648	202.82	5,641	13,492
202.31	5,305	10,701	202.83	5,648	13,548
202.32	5,311	10,754	202.84	5,654	13,605
202.33	5,318	10,807	202.85	5,661	13,661
202.34	5,324	10,860	202.86	5,668	13,718
202.35	5,331	10,913	202.87	5,674	13,775
202.36	5,338	10,967	202.88	5,681	13,831
202.37	5,344	11,020	202.89	5,687	13,888
202.38	5,351	11,074	202.90	5,694	13,945
202.39	5,357	11,127	202.91	5,701	14,002
202.40	5,364	11,181	202.92	5,707	14,059
202.41	5,371	11,234	202.93	5,714	14,116
202.42	5,377	11,288	202.94	5,720	14,173
202.43	5,384	11,342	202.95	5,727	14,231
202.44	5,390	11,396	202.96	5,734	14,288
202.45	5,397	11,450	202.97	5,740	14,345
202.46	5,404	11,504	202.98	5,747	14,403
202.47	5,410	11,558	202.99	5,753	14,460
202.48	5,417	11,612	203.00	5,760	14,518

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.01	5,767	14,576	203.53	6,110	17,664
203.02	5,773	14,633	203.54	6,117	17,725
203.03	5,780	14,691	203.55	6,124	17,786
203.04	5,786	14,749	203.56	6,130	17,847
203.05	5,793	14,807	203.57	6,137	17,908
203.06	5,800	14,865	203.58	6,143	17,970
203.07	5,806	14,923	203.59	6,150	18,031
203.08	5,813	14,981	203.60	6,157	18,093
203.09	5,819	15,039	203.61	6,163	18,154
203.10	5,826	15,097	203.62	6,170	18,216
203.11	5,833	15,155	203.63	6,176	18,278
203.12	5,839	15,214	203.64	6,183	18,340
203.13	5,846	15,272	203.65	6,190	18,402
203.14	5,853	15,331	203.66	6,196	18,463
203.15	5,859	15,389	203.67	6,203	18,525
203.16	5,866	15,448	203.68	6,209	18,588
203.17	5,872	15,507	203.69	6,216	18,650
203.18	5,879	15,565	203.70	6,223	18,712
203.19	5,886	15,624	203.71	6,229	18,774
203.20	5,892	15,683	203.72	6,236	18,836
203.21	5,899	15,742	203.73	6,243	18,899
203.22	5,905	15,801	203.74	6,249	18,961
203.23	5,912	15,860	203.75	6,256	19,024
203.24	5,919	15,919	203.76	6,262	19,086
203.25	5,925	15,979	203.77	6,269	19,149
203.26	5,932	16,038	203.78	6,276	19,212
203.27	5,938	16,097	203.79	6,282	19,275
203.28	5,945	16,157	203.80	6,289	19,337
203.29	5,952	16,216	203.81	6,295	19,400
203.30	5,958	16,276	203.82	6,302	19,463
203.31	5,965	16,335	203.83	6,309	19,526
203.32	5,972	16,395	203.84	6,315	19,590
203.33	5,978	16,455	203.85	6,322	19,653
203.34	5,985	16,515	203.86	6,328	19,716
203.35	5,991	16,574	203.87	6,335	19,779
203.36	5,998	16,634	203.88	6,342	19,843
203.37	6,005	16,694	203.89	6,348	19,906
203.38	6,011	16,754	203.90	6,355	19,970
203.39	6,018	16,815	203.91	6,362	20,033
203.40	6,024	16,875	203.92	6,368	20,097
203.41	6,031	16,935	203.93	6,375	20,161
203.42	6,038	16,995	203.94	6,381	20,224
203.43	6,044	17,056	203.95	6,388	20,288
203.44	6,051	17,116	203.96	6,395	20,352
203.45	6,057	17,177	203.97	6,401	20,416
203.46	6,064	17,237	203.98	6,408	20,480
203.47	6,071	17,298	203.99	6,414	20,544
203.48	6,077	17,359	204.00	6,421	20,608
203.49	6,084	17,420	204.01	6,428	20,673
203.50	6,091	17,481	204.02	6,434	20,737
203.51	6,097	17,541	204.03	6,441	20,801
203.52	6,104	17,602	204.04	6,447	20,866

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.05	6,454	20,930	204.57	6,797	24,376
204.06	6,461	20,995	204.58	6,804	24,444
204.07	6,467	21,059	204.59	6,810	24,512
204.08	6,474	21,124	204.60	6,817	24,580
204.09	6,480	21,189	204.61	6,824	24,648
204.10	6,487	21,254	204.62	6,830	24,716
204.11	6,494	21,319	204.63	6,837	24,785
204.12	6,500	21,384	204.64	6,843	24,853
204.13	6,507	21,449	204.65	6,850	24,921
204.14	6,513	21,514	204.66	6,857	24,990
204.15	6,520	21,579	204.67	6,863	25,059
204.16	6,527	21,644	204.68	6,870	25,127
204.17	6,533	21,710	204.69	6,876	25,196
204.18	6,540	21,775	204.70	6,883	25,265
204.19	6,546	21,840	204.71	6,890	25,334
204.20	6,553	21,906	204.72	6,896	25,403
204.21	6,560	21,971	204.73	6,903	25,472
204.22	6,566	22,037	204.74	6,909	25,541
204.23	6,573	22,103	204.75	6,916	25,610
204.24	6,579	22,168	204.76	6,923	25,679
204.25	6,586	22,234	204.77	6,929	25,748
204.26	6,593	22,300	204.78	6,936	25,818
204.27	6,599	22,366	204.79	6,942	25,887
204.28	6,606	22,432	204.80	6,949	25,956
204.29	6,612	22,498	204.81	6,956	26,026
204.30	6,619	22,564	204.82	6,962	26,096
204.31	6,626	22,631	204.83	6,969	26,165
204.32	6,632	22,697	204.84	6,975	26,235
204.33	6,639	22,763	204.85	6,982	26,305
204.34	6,645	22,830	204.86	6,989	26,375
204.35	6,652	22,896	204.87	6,995	26,444
204.36	6,659	22,963	204.88	7,002	26,514
204.37	6,665	23,029	204.89	7,008	26,584
204.38	6,672	23,096	204.90	7,015	26,655
204.39	6,678	23,163	204.91	7,022	26,725
204.40	6,685	23,230	204.92	7,028	26,795
204.41	6,692	23,296	204.93	7,035	26,865
204.42	6,698	23,363	204.94	7,041	26,936
204.43	6,705	23,430	204.95	7,048	27,006
204.44	6,711	23,498	204.96	7,055	27,077
204.45	6,718	23,565	204.97	7,061	27,147
204.46	6,725	23,632	204.98	7,068	27,218
204.47	6,731	23,699	204.99	7,074	27,289
204.48	6,738	23,767	205.00	7,081	27,359
204.49	6,744	23,834	205.01	7,088	27,430
204.50	6,751	23,901	205.02	7,094	27,501
204.51	6,758	23,969	205.03	7,101	27,572
204.52	6,764	24,037	205.04	7,107	27,643
204.53	6,771	24,104	205.05	7,114	27,714
204.54	6,777	24,172	205.06	7,121	27,785
204.55	6,784	24,240	205.07	7,127	27,857
204.56	6,791	24,308	205.08	7,134	27,928

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.09	7,140	27,999
205.10	7,147	28,071
205.11	7,154	28,142
205.12	7,160	28,214
205.13	7,167	28,286
205.14	7,173	28,357
205.15	7,180	28,429
205.16	7,187	28,501
205.17	7,193	28,573
205.18	7,200	28,645
205.19	7,206	28,717
205.20	7,213	28,789
205.21	7,220	28,861
205.22	7,226	28,933
205.23	7,233	29,005
205.24	7,239	29,078
205.25	7,246	29,150
205.26	7,253	29,223
205.27	7,259	29,295
205.28	7,266	29,368
205.29	7,272	29,441
205.30	7,279	29,513
205.31	7,286	29,586
205.32	7,292	29,659
205.33	7,299	29,732
205.34	7,305	29,805
205.35	7,312	29,878
205.36	7,319	29,951
205.37	7,325	30,025
205.38	7,332	30,098
205.39	7,338	30,171
205.40	7,345	30,245
205.41	7,352	30,318
205.42	7,358	30,392
205.43	7,365	30,465
205.44	7,371	30,539
205.45	7,378	30,613
205.46	7,385	30,686
205.47	7,391	30,760
205.48	7,398	30,834
205.49	7,404	30,908
205.50	**7,411**	**30,982**

Summary for Pond B-55: Basin #55

Inflow Area = 2.301 ac, 47.33% Impervious, Inflow Depth = 3.59" for Current 10 yr event
Inflow = 8.33 cfs @ 12.17 hrs, Volume= 0.688 af
Outflow = 4.75 cfs @ 12.32 hrs, Volume= 0.585 af, Atten= 43%, Lag= 8.6 min
Primary = 4.75 cfs @ 12.32 hrs, Volume= 0.585 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.17' @ 12.32 hrs Surf.Area= 5,347 sf Storage= 11,345 cf

Plug-Flow detention time= 155.6 min calculated for 0.585 af (85% of inflow)
Center-of-Mass det. time= 86.0 min (870.9 - 785.0)

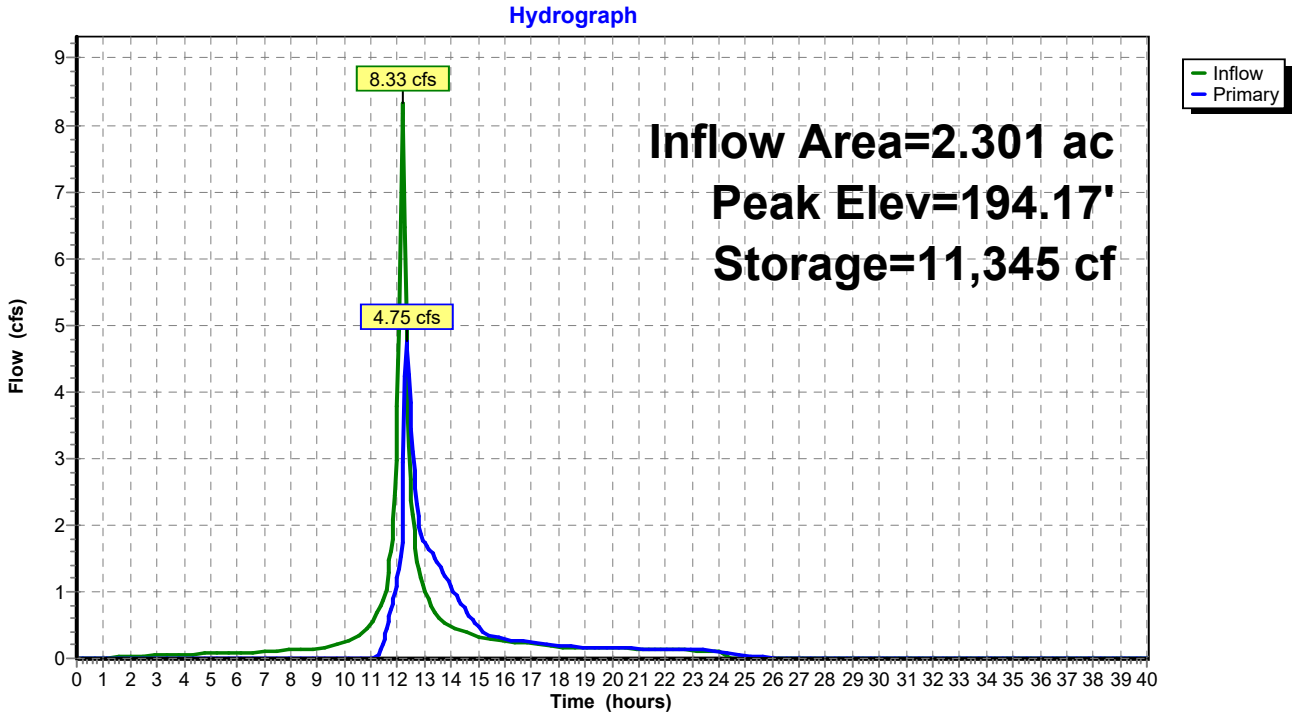
Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	**18.0" Round Culvert** L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 191.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.80'	**22.0" W x 2.5" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.82'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	195.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.68 cfs @ 12.32 hrs HW=194.17' (Free Discharge)
- **1=Culvert** (Passes 4.68 cfs of 9.72 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.07 cfs @ 5.41 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.62 cfs @ 1.92 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-55: Basin #55



Stage-Discharge for Pond B-55: Basin #55

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.56	0.00	192.08	0.00	192.60	0.00	193.12	0.85
191.57	0.00	192.09	0.00	192.61	0.00	193.13	0.87
191.58	0.00	192.10	0.00	192.62	0.00	193.14	0.89
191.59	0.00	192.11	0.00	192.63	0.00	193.15	0.90
191.60	0.00	192.12	0.00	192.64	0.00	193.16	0.92
191.61	0.00	192.13	0.00	192.65	0.00	193.17	0.94
191.62	0.00	192.14	0.00	192.66	0.00	193.18	0.96
191.63	0.00	192.15	0.00	192.67	0.00	193.19	0.98
191.64	0.00	192.16	0.00	192.68	0.00	193.20	0.99
191.65	0.00	192.17	0.00	192.69	0.00	193.21	1.01
191.66	0.00	192.18	0.00	192.70	0.00	193.22	1.03
191.67	0.00	192.19	0.00	192.71	0.00	193.23	1.05
191.68	0.00	192.20	0.00	192.72	0.00	193.24	1.06
191.69	0.00	192.21	0.00	192.73	0.00	193.25	1.08
191.70	0.00	192.22	0.00	192.74	0.00	193.26	1.09
191.71	0.00	192.23	0.00	192.75	0.00	193.27	1.11
191.72	0.00	192.24	0.00	192.76	0.00	193.28	1.12
191.73	0.00	192.25	0.00	192.77	0.00	193.29	1.14
191.74	0.00	192.26	0.00	192.78	0.00	193.30	1.15
191.75	0.00	192.27	0.00	192.79	0.00	193.31	1.17
191.76	0.00	192.28	0.00	192.80	0.00	193.32	1.18
191.77	0.00	192.29	0.00	192.81	0.01	193.33	1.20
191.78	0.00	192.30	0.00	192.82	0.02	193.34	1.21
191.79	0.00	192.31	0.00	192.83	0.03	193.35	1.23
191.80	0.00	192.32	0.00	192.84	0.05	193.36	1.24
191.81	0.00	192.33	0.00	192.85	0.07	193.37	1.25
191.82	0.00	192.34	0.00	192.86	0.09	193.38	1.27
191.83	0.00	192.35	0.00	192.87	0.11	193.39	1.28
191.84	0.00	192.36	0.00	192.88	0.13	193.40	1.29
191.85	0.00	192.37	0.00	192.89	0.16	193.41	1.31
191.86	0.00	192.38	0.00	192.90	0.19	193.42	1.32
191.87	0.00	192.39	0.00	192.91	0.21	193.43	1.33
191.88	0.00	192.40	0.00	192.92	0.24	193.44	1.34
191.89	0.00	192.41	0.00	192.93	0.28	193.45	1.36
191.90	0.00	192.42	0.00	192.94	0.31	193.46	1.37
191.91	0.00	192.43	0.00	192.95	0.34	193.47	1.38
191.92	0.00	192.44	0.00	192.96	0.38	193.48	1.39
191.93	0.00	192.45	0.00	192.97	0.41	193.49	1.41
191.94	0.00	192.46	0.00	192.98	0.45	193.50	1.42
191.95	0.00	192.47	0.00	192.99	0.49	193.51	1.43
191.96	0.00	192.48	0.00	193.00	0.53	193.52	1.44
191.97	0.00	192.49	0.00	193.01	0.57	193.53	1.45
191.98	0.00	192.50	0.00	193.02	0.60	193.54	1.46
191.99	0.00	192.51	0.00	193.03	0.63	193.55	1.48
192.00	0.00	192.52	0.00	193.04	0.66	193.56	1.49
192.01	0.00	192.53	0.00	193.05	0.69	193.57	1.50
192.02	0.00	192.54	0.00	193.06	0.71	193.58	1.51
192.03	0.00	192.55	0.00	193.07	0.74	193.59	1.52
192.04	0.00	192.56	0.00	193.08	0.76	193.60	1.53
192.05	0.00	192.57	0.00	193.09	0.78	193.61	1.54
192.06	0.00	192.58	0.00	193.10	0.80	193.62	1.55
192.07	0.00	192.59	0.00	193.11	0.82	193.63	1.57

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.64	1.58	194.16	4.61	194.68	11.12	195.20	12.37
193.65	1.59	194.17	4.73	194.69	11.14	195.21	12.39
193.66	1.60	194.18	4.85	194.70	11.17	195.22	12.42
193.67	1.61	194.19	4.97	194.71	11.19	195.23	12.44
193.68	1.62	194.20	5.10	194.72	11.22	195.24	12.46
193.69	1.63	194.21	5.22	194.73	11.24	195.25	12.48
193.70	1.64	194.22	5.35	194.74	11.27	195.26	12.51
193.71	1.65	194.23	5.48	194.75	11.29	195.27	12.53
193.72	1.66	194.24	5.61	194.76	11.32	195.28	12.55
193.73	1.67	194.25	5.74	194.77	11.34	195.29	12.58
193.74	1.68	194.26	5.87	194.78	11.37	195.30	12.60
193.75	1.69	194.27	6.01	194.79	11.39	195.31	12.62
193.76	1.70	194.28	6.14	194.80	11.42	195.32	12.64
193.77	1.71	194.29	6.28	194.81	11.44	195.33	12.66
193.78	1.72	194.30	6.42	194.82	11.47	195.34	12.69
193.79	1.73	194.31	6.56	194.83	11.49	195.35	12.71
193.80	1.74	194.32	6.70	194.84	11.52	195.36	12.73
193.81	1.75	194.33	6.84	194.85	11.54	195.37	12.75
193.82	1.76	194.34	6.98	194.86	11.57	195.38	12.78
193.83	1.78	194.35	7.12	194.87	11.59	195.39	12.80
193.84	1.82	194.36	7.27	194.88	11.61	195.40	12.82
193.85	1.86	194.37	7.41	194.89	11.64	195.41	12.84
193.86	1.90	194.38	7.56	194.90	11.66	195.42	12.86
193.87	1.95	194.39	7.71	194.91	11.69	195.43	12.89
193.88	2.01	194.40	7.86	194.92	11.71	195.44	12.91
193.89	2.07	194.41	8.01	194.93	11.74	195.45	12.93
193.90	2.13	194.42	8.16	194.94	11.76	195.46	13.07
193.91	2.20	194.43	8.31	194.95	11.78	195.47	13.31
193.92	2.26	194.44	8.47	194.96	11.81	195.48	13.61
193.93	2.34	194.45	8.62	194.97	11.83	195.49	13.96
193.94	2.41	194.46	8.78	194.98	11.86	195.50	14.35
193.95	2.49	194.47	8.93	194.99	11.88	195.51	14.79
193.96	2.57	194.48	9.09	195.00	11.90	195.52	15.26
193.97	2.65	194.49	9.25	195.01	11.93	195.53	15.76
193.98	2.74	194.50	9.41	195.02	11.95	195.54	16.30
193.99	2.82	194.51	9.57	195.03	11.97	195.55	16.87
194.00	2.91	194.52	9.73	195.04	12.00	195.56	17.46
194.01	3.01	194.53	9.89	195.05	12.02	195.57	18.08
194.02	3.10	194.54	10.06	195.06	12.05	195.58	18.73
194.03	3.20	194.55	10.22	195.07	12.07	195.59	19.40
194.04	3.29	194.56	10.38	195.08	12.09	195.60	20.10
194.05	3.39	194.57	10.55	195.09	12.12	195.61	20.82
194.06	3.50	194.58	10.72	195.10	12.14	195.62	21.57
194.07	3.60	194.59	10.88	195.11	12.16	195.63	22.33
194.08	3.71	194.60	10.91	195.12	12.19	195.64	23.12
194.09	3.81	194.61	10.94	195.13	12.21	195.65	23.93
194.10	3.92	194.62	10.96	195.14	12.23	195.66	24.79
194.11	4.03	194.63	10.99	195.15	12.26	195.67	25.69
194.12	4.14	194.64	11.01	195.16	12.28	195.68	26.61
194.13	4.26	194.65	11.04	195.17	12.30	195.69	27.55
194.14	4.37	194.66	11.06	195.18	12.32	195.70	28.52
194.15	4.49	194.67	11.09	195.19	12.35	195.71	29.52

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)
195.72	30.53
195.73	31.58
195.74	32.65
195.75	33.74
195.76	34.86
195.77	36.00
195.78	37.17
195.79	38.36
195.80	39.57
195.81	40.81
195.82	42.08
195.83	43.36
195.84	44.67
195.85	46.01
195.86	47.40
195.87	48.81
195.88	50.25
195.89	51.71
195.90	53.20
195.91	54.72
195.92	56.26
195.93	57.83
195.94	59.43
195.95	61.05
195.96	62.70
195.97	64.37
195.98	66.07
195.99	67.80
196.00	**69.56**

Stage-Area-Storage for Pond B-55: Basin #55

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.56	0	0
191.57	97	0
191.58	193	2
191.59	290	4
191.60	386	8
191.61	483	12
191.62	580	17
191.63	676	24
191.64	773	31
191.65	869	39
191.66	966	48
191.67	1,063	58
191.68	1,159	70
191.69	1,256	82
191.70	1,352	95
191.71	1,449	109
191.72	1,545	124
191.73	1,642	140
191.74	1,739	156
191.75	1,835	174
191.76	1,932	193
191.77	2,028	213
191.78	2,125	234
191.79	2,222	255
191.80	2,318	278
191.81	2,415	302
191.82	2,511	326
191.83	2,608	352
191.84	2,705	379
191.85	2,801	406
191.86	2,898	435
191.87	2,994	464
191.88	3,091	495
191.89	3,188	526
191.90	3,284	558
191.91	3,381	592
191.92	3,477	626
191.93	3,574	661
191.94	3,670	697
191.95	3,767	735
191.96	3,864	773
191.97	3,960	812
191.98	4,057	852
191.99	4,153	893
192.00	4,250	935
192.01	4,255	978
192.02	4,260	1,020
192.03	4,265	1,063
192.04	4,270	1,105
192.05	4,275	1,148
192.06	4,280	1,191
192.07	4,285	1,234
192.08	4,290	1,277
192.09	4,295	1,320
192.10	4,300	1,362
192.11	4,305	1,406
192.12	4,310	1,449
192.13	4,314	1,492
192.14	4,319	1,535
192.15	4,324	1,578
192.16	4,329	1,621
192.17	4,334	1,665
192.18	4,339	1,708
192.19	4,344	1,751
192.20	4,349	1,795
192.21	4,354	1,838
192.22	4,359	1,882
192.23	4,364	1,926
192.24	4,369	1,969
192.25	4,374	2,013
192.26	4,379	2,057
192.27	4,384	2,101
192.28	4,389	2,144
192.29	4,394	2,188
192.30	4,399	2,232
192.31	4,404	2,276
192.32	4,409	2,320
192.33	4,414	2,365
192.34	4,419	2,409
192.35	4,424	2,453
192.36	4,429	2,497
192.37	4,434	2,541
192.38	4,438	2,586
192.39	4,443	2,630
192.40	4,448	2,675
192.41	4,453	2,719
192.42	4,458	2,764
192.43	4,463	2,808
192.44	4,468	2,853
192.45	4,473	2,898
192.46	4,478	2,942
192.47	4,483	2,987
192.48	4,488	3,032
192.49	4,493	3,077
192.50	4,498	3,122
192.51	4,503	3,167
192.52	4,508	3,212
192.53	4,513	3,257
192.54	4,518	3,302
192.55	4,523	3,348
192.56	4,528	3,393
192.57	4,533	3,438
192.58	4,538	3,483
192.59	4,543	3,529

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.60	4,548	3,574	193.12	4,807	6,006
192.61	4,553	3,620	193.13	4,812	6,054
192.62	4,558	3,665	193.14	4,818	6,102
192.63	4,562	3,711	193.15	4,823	6,151
192.64	4,567	3,757	193.16	4,828	6,199
192.65	4,572	3,802	193.17	4,833	6,247
192.66	4,577	3,848	193.18	4,838	6,296
192.67	4,582	3,894	193.19	4,843	6,344
192.68	4,587	3,940	193.20	4,848	6,392
192.69	4,592	3,986	193.21	4,853	6,441
192.70	4,597	4,032	193.22	4,858	6,489
192.71	4,602	4,078	193.23	4,864	6,538
192.72	4,607	4,124	193.24	4,869	6,587
192.73	4,612	4,170	193.25	4,874	6,635
192.74	4,617	4,216	193.26	4,879	6,684
192.75	4,622	4,262	193.27	4,884	6,733
192.76	4,627	4,308	193.28	4,889	6,782
192.77	4,632	4,355	193.29	4,894	6,831
192.78	4,637	4,401	193.30	4,899	6,880
192.79	4,642	4,447	193.31	4,904	6,929
192.80	4,647	4,494	193.32	4,910	6,978
192.81	4,652	4,540	193.33	4,915	7,027
192.82	4,657	4,587	193.34	4,920	7,076
192.83	4,662	4,633	193.35	4,925	7,125
192.84	4,667	4,680	193.36	4,930	7,175
192.85	4,672	4,727	193.37	4,935	7,224
192.86	4,677	4,773	193.38	4,940	7,273
192.87	4,682	4,820	193.39	4,945	7,323
192.88	4,686	4,867	193.40	4,950	7,372
192.89	4,691	4,914	193.41	4,956	7,422
192.90	4,696	4,961	193.42	4,961	7,471
192.91	4,701	5,008	193.43	4,966	7,521
192.92	4,706	5,055	193.44	4,971	7,571
192.93	4,711	5,102	193.45	4,976	7,620
192.94	4,716	5,149	193.46	4,981	7,670
192.95	4,721	5,196	193.47	4,986	7,720
192.96	4,726	5,244	193.48	4,991	7,770
192.97	4,731	5,291	193.49	4,996	7,820
192.98	4,736	5,338	193.50	5,002	7,870
192.99	4,741	5,386	193.51	5,007	7,920
193.00	4,746	5,433	193.52	5,012	7,970
193.01	4,751	5,480	193.53	5,017	8,020
193.02	4,756	5,528	193.54	5,022	8,070
193.03	4,761	5,576	193.55	5,027	8,121
193.04	4,766	5,623	193.56	5,032	8,171
193.05	4,772	5,671	193.57	5,037	8,221
193.06	4,777	5,719	193.58	5,042	8,272
193.07	4,782	5,766	193.59	5,047	8,322
193.08	4,787	5,814	193.60	5,053	8,373
193.09	4,792	5,862	193.61	5,058	8,423
193.10	4,797	5,910	193.62	5,063	8,474
193.11	4,802	5,958	193.63	5,068	8,524

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.64	5,073	8,575	194.16	5,341	11,282
193.65	5,078	8,626	194.17	5,347	11,336
193.66	5,083	8,677	194.18	5,352	11,389
193.67	5,088	8,728	194.19	5,357	11,443
193.68	5,093	8,778	194.20	5,362	11,496
193.69	5,099	8,829	194.21	5,368	11,550
193.70	5,104	8,880	194.22	5,373	11,604
193.71	5,109	8,931	194.23	5,378	11,658
193.72	5,114	8,983	194.24	5,383	11,711
193.73	5,119	9,034	194.25	5,389	11,765
193.74	5,124	9,085	194.26	5,394	11,819
193.75	5,129	9,136	194.27	5,399	11,873
193.76	5,134	9,188	194.28	5,405	11,927
193.77	5,139	9,239	194.29	5,410	11,981
193.78	5,145	9,290	194.30	5,415	12,035
193.79	5,150	9,342	194.31	5,420	12,089
193.80	5,155	9,393	194.32	5,426	12,144
193.81	5,160	9,445	194.33	5,431	12,198
193.82	5,165	9,497	194.34	5,436	12,252
193.83	5,170	9,548	194.35	5,441	12,307
193.84	5,175	9,600	194.36	5,447	12,361
193.85	5,180	9,652	194.37	5,452	12,416
193.86	5,185	9,704	194.38	5,457	12,470
193.87	5,191	9,755	194.39	5,463	12,525
193.88	5,196	9,807	194.40	5,468	12,579
193.89	5,201	9,859	194.41	5,473	12,634
193.90	5,206	9,911	194.42	5,478	12,689
193.91	5,211	9,963	194.43	5,484	12,744
193.92	5,216	10,016	194.44	5,489	12,799
193.93	5,221	10,068	194.45	5,494	12,854
193.94	5,226	10,120	194.46	5,499	12,908
193.95	5,231	10,172	194.47	5,505	12,963
193.96	5,237	10,225	194.48	5,510	13,019
193.97	5,242	10,277	194.49	5,515	13,074
193.98	5,247	10,329	194.50	5,521	13,129
193.99	5,252	10,382	194.51	5,526	13,184
194.00	5,257	10,434	194.52	5,531	13,239
194.01	5,262	10,487	194.53	5,536	13,295
194.02	5,268	10,540	194.54	5,542	13,350
194.03	5,273	10,592	194.55	5,547	13,406
194.04	5,278	10,645	194.56	5,552	13,461
194.05	5,283	10,698	194.57	5,557	13,517
194.06	5,289	10,751	194.58	5,563	13,572
194.07	5,294	10,804	194.59	5,568	13,628
194.08	5,299	10,857	194.60	5,573	13,684
194.09	5,304	10,910	194.61	5,578	13,739
194.10	5,310	10,963	194.62	5,584	13,795
194.11	5,315	11,016	194.63	5,589	13,851
194.12	5,320	11,069	194.64	5,594	13,907
194.13	5,326	11,122	194.65	5,600	13,963
194.14	5,331	11,176	194.66	5,605	14,019
194.15	5,336	11,229	194.67	5,610	14,075

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.68	5,615	14,131	195.20	5,893	17,123
194.69	5,621	14,187	195.21	5,898	17,182
194.70	5,626	14,244	195.22	5,903	17,241
194.71	5,631	14,300	195.23	5,909	17,300
194.72	5,636	14,356	195.24	5,914	17,359
194.73	5,642	14,413	195.25	5,920	17,418
194.74	5,647	14,469	195.26	5,925	17,477
194.75	5,652	14,525	195.27	5,931	17,536
194.76	5,658	14,582	195.28	5,936	17,596
194.77	5,663	14,639	195.29	5,941	17,655
194.78	5,668	14,695	195.30	5,947	17,715
194.79	5,673	14,752	195.31	5,952	17,774
194.80	5,679	14,809	195.32	5,958	17,834
194.81	5,684	14,866	195.33	5,963	17,893
194.82	5,689	14,922	195.34	5,969	17,953
194.83	5,694	14,979	195.35	5,974	18,013
194.84	5,700	15,036	195.36	5,979	18,072
194.85	5,705	15,093	195.37	5,985	18,132
194.86	5,710	15,150	195.38	5,990	18,192
194.87	5,715	15,208	195.39	5,996	18,252
194.88	5,721	15,265	195.40	6,001	18,312
194.89	5,726	15,322	195.41	6,007	18,372
194.90	5,731	15,379	195.42	6,012	18,432
194.91	5,737	15,437	195.43	6,017	18,492
194.92	5,742	15,494	195.44	6,023	18,553
194.93	5,747	15,551	195.45	6,028	18,613
194.94	5,752	15,609	195.46	6,034	18,673
194.95	5,758	15,666	195.47	6,039	18,733
194.96	5,763	15,724	195.48	6,045	18,794
194.97	5,768	15,782	195.49	6,050	18,854
194.98	5,773	15,839	195.50	6,056	18,915
194.99	5,779	15,897	195.51	6,061	18,975
195.00	5,784	15,955	195.52	6,066	19,036
195.01	5,789	16,013	195.53	6,072	19,097
195.02	5,795	16,071	195.54	6,077	19,158
195.03	5,800	16,129	195.55	6,083	19,218
195.04	5,806	16,187	195.56	6,088	19,279
195.05	5,811	16,245	195.57	6,094	19,340
195.06	5,817	16,303	195.58	6,099	19,401
195.07	5,822	16,361	195.59	6,104	19,462
195.08	5,827	16,419	195.60	6,110	19,523
195.09	5,833	16,478	195.61	6,115	19,584
195.10	5,838	16,536	195.62	6,121	19,645
195.11	5,844	16,595	195.63	6,126	19,707
195.12	5,849	16,653	195.64	6,132	19,768
195.13	5,855	16,712	195.65	6,137	19,829
195.14	5,860	16,770	195.66	6,142	19,891
195.15	5,865	16,829	195.67	6,148	19,952
195.16	5,871	16,887	195.68	6,153	20,014
195.17	5,876	16,946	195.69	6,159	20,075
195.18	5,882	17,005	195.70	6,164	20,137
195.19	5,887	17,064	195.71	6,170	20,199

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.72	6,175	20,260
195.73	6,180	20,322
195.74	6,186	20,384
195.75	6,191	20,446
195.76	6,197	20,508
195.77	6,202	20,570
195.78	6,208	20,632
195.79	6,213	20,694
195.80	6,218	20,756
195.81	6,224	20,818
195.82	6,229	20,880
195.83	6,235	20,943
195.84	6,240	21,005
195.85	6,246	21,068
195.86	6,251	21,130
195.87	6,256	21,193
195.88	6,262	21,255
195.89	6,267	21,318
195.90	6,273	21,381
195.91	6,278	21,443
195.92	6,284	21,506
195.93	6,289	21,569
195.94	6,294	21,632
195.95	6,300	21,695
195.96	6,305	21,758
195.97	6,311	21,821
195.98	6,316	21,884
195.99	6,322	21,947
196.00	**6,327**	**22,010**

Summary for Pond B-56: Basin #56

Inflow Area = 1.512 ac, 31.08% Impervious, Inflow Depth = 3.20" for Current 10 yr event
Inflow = 5.00 cfs @ 12.17 hrs, Volume= 0.403 af
Outflow = 3.56 cfs @ 12.27 hrs, Volume= 0.356 af, Atten= 29%, Lag= 5.9 min
Primary = 3.56 cfs @ 12.27 hrs, Volume= 0.356 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 192.71' @ 12.27 hrs Surf.Area= 5,353 sf Storage= 4,755 cf

Plug-Flow detention time= 119.9 min calculated for 0.356 af (88% of inflow)
Center-of-Mass det. time= 61.3 min (861.6 - 800.3)

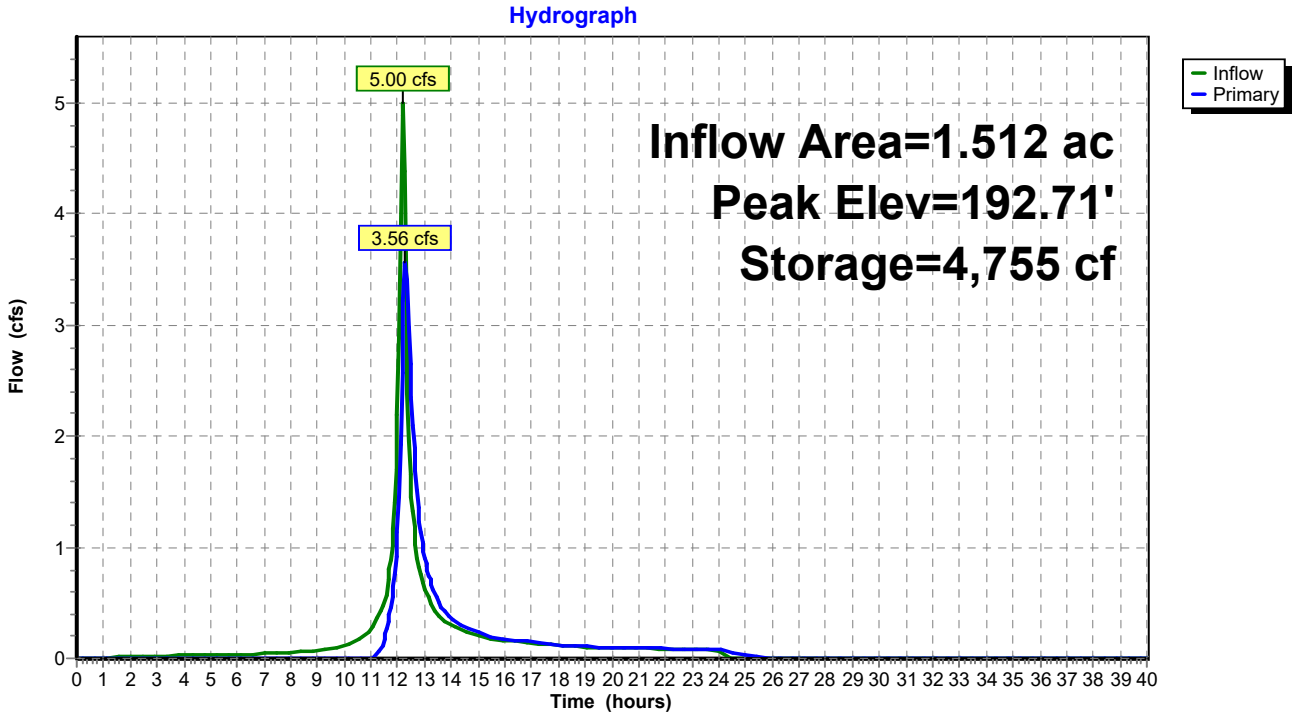
Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	**18.0" Round Culvert** L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.19'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.62'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.53 cfs @ 12.27 hrs HW=192.70' (Free Discharge)
- **1=Culvert** (Passes 3.53 cfs of 3.88 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.53 cfs @ 2.36 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-56: Basin #56



Stage-Discharge for Pond B-56: Basin #56

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.57	0.00	192.09	0.00	192.61	2.62	193.13	5.97
191.58	0.00	192.10	0.00	192.62	2.72	193.14	6.01
191.59	0.00	192.11	0.00	192.63	2.81	193.15	6.05
191.60	0.00	192.12	0.00	192.64	2.91	193.16	6.10
191.61	0.00	192.13	0.00	192.65	3.00	193.17	6.14
191.62	0.00	192.14	0.00	192.66	3.10	193.18	6.18
191.63	0.00	192.15	0.00	192.67	3.20	193.19	6.23
191.64	0.00	192.16	0.00	192.68	3.30	193.20	6.27
191.65	0.00	192.17	0.00	192.69	3.40	193.21	6.31
191.66	0.00	192.18	0.00	192.70	3.50	193.22	6.35
191.67	0.00	192.19	0.00	192.71	3.58	193.23	6.39
191.68	0.00	192.20	0.01	192.72	3.67	193.24	6.43
191.69	0.00	192.21	0.03	192.73	3.74	193.25	6.47
191.70	0.00	192.22	0.05	192.74	3.82	193.26	6.51
191.71	0.00	192.23	0.08	192.75	3.89	193.27	6.55
191.72	0.00	192.24	0.11	192.76	3.97	193.28	6.59
191.73	0.00	192.25	0.14	192.77	4.04	193.29	6.63
191.74	0.00	192.26	0.18	192.78	4.10	193.30	6.67
191.75	0.00	192.27	0.22	192.79	4.17	193.31	6.71
191.76	0.00	192.28	0.26	192.80	4.24	193.32	6.75
191.77	0.00	192.29	0.30	192.81	4.30	193.33	6.79
191.78	0.00	192.30	0.35	192.82	4.36	193.34	6.83
191.79	0.00	192.31	0.40	192.83	4.43	193.35	6.87
191.80	0.00	192.32	0.45	192.84	4.49	193.36	6.91
191.81	0.00	192.33	0.50	192.85	4.55	193.37	6.94
191.82	0.00	192.34	0.56	192.86	4.61	193.38	6.98
191.83	0.00	192.35	0.62	192.87	4.66	193.39	7.02
191.84	0.00	192.36	0.67	192.88	4.72	193.40	7.06
191.85	0.00	192.37	0.74	192.89	4.78	193.41	7.09
191.86	0.00	192.38	0.80	192.90	4.83	193.42	7.13
191.87	0.00	192.39	0.86	192.91	4.89	193.43	7.17
191.88	0.00	192.40	0.93	192.92	4.94	193.44	7.20
191.89	0.00	192.41	0.99	192.93	5.00	193.45	7.24
191.90	0.00	192.42	1.06	192.94	5.05	193.46	7.28
191.91	0.00	192.43	1.13	192.95	5.10	193.47	7.31
191.92	0.00	192.44	1.20	192.96	5.16	193.48	7.35
191.93	0.00	192.45	1.28	192.97	5.21	193.49	7.38
191.94	0.00	192.46	1.35	192.98	5.26	193.50	7.42
191.95	0.00	192.47	1.43	192.99	5.31	193.51	7.45
191.96	0.00	192.48	1.50	193.00	5.36	193.52	7.49
191.97	0.00	192.49	1.58	193.01	5.41	193.53	7.52
191.98	0.00	192.50	1.66	193.02	5.46	193.54	7.56
191.99	0.00	192.51	1.74	193.03	5.50	193.55	7.59
192.00	0.00	192.52	1.83	193.04	5.55	193.56	7.63
192.01	0.00	192.53	1.91	193.05	5.60	193.57	7.66
192.02	0.00	192.54	1.99	193.06	5.65	193.58	7.70
192.03	0.00	192.55	2.08	193.07	5.69	193.59	7.73
192.04	0.00	192.56	2.17	193.08	5.74	193.60	7.76
192.05	0.00	192.57	2.26	193.09	5.79	193.61	7.80
192.06	0.00	192.58	2.35	193.10	5.83	193.62	7.83
192.07	0.00	192.59	2.44	193.11	5.88	193.63	7.88
192.08	0.00	192.60	2.53	193.12	5.92	193.64	7.93

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.65	8.00	194.17	11.13	194.69	13.10	195.21	26.75
193.66	8.07	194.18	11.17	194.70	13.13	195.22	27.67
193.67	8.14	194.19	11.22	194.71	13.15	195.23	28.62
193.68	8.22	194.20	11.26	194.72	13.18	195.24	29.59
193.69	8.30	194.21	11.30	194.73	13.21	195.25	30.59
193.70	8.39	194.22	11.35	194.74	13.24	195.26	31.61
193.71	8.48	194.23	11.39	194.75	13.26	195.27	32.66
193.72	8.57	194.24	11.43	194.76	13.29	195.28	33.74
193.73	8.66	194.25	11.48	194.77	13.32	195.29	34.83
193.74	8.76	194.26	11.52	194.78	13.35	195.30	35.95
193.75	8.86	194.27	11.56	194.79	13.37	195.31	37.10
193.76	8.97	194.28	11.61	194.80	13.40	195.32	38.27
193.77	9.07	194.29	11.65	194.81	13.43	195.33	39.46
193.78	9.18	194.30	11.69	194.82	13.45	195.34	40.68
193.79	9.28	194.31	11.73	194.83	13.48	195.35	41.93
193.80	9.34	194.32	11.78	194.84	13.51	195.36	43.19
193.81	9.39	194.33	11.82	194.85	13.53	195.37	44.48
193.82	9.44	194.34	11.86	194.86	13.56	195.38	45.80
193.83	9.49	194.35	11.90	194.87	13.59	195.39	47.14
193.84	9.55	194.36	11.94	194.88	13.61	195.40	48.53
193.85	9.60	194.37	11.98	194.89	13.64	195.41	49.94
193.86	9.65	194.38	12.03	194.90	13.67	195.42	51.39
193.87	9.70	194.39	12.07	194.91	13.69	195.43	52.85
193.88	9.75	194.40	12.11	194.92	13.72	195.44	54.35
193.89	9.80	194.41	12.15	194.93	13.75	195.45	55.87
193.90	9.85	194.42	12.19	194.94	13.77	195.46	57.42
193.91	9.90	194.43	12.23	194.95	13.80	195.47	58.99
193.92	9.95	194.44	12.27	194.96	13.83	195.48	60.59
193.93	10.00	194.45	12.31	194.97	13.85	195.49	62.21
193.94	10.05	194.46	12.35	194.98	13.88	195.50	63.87
193.95	10.10	194.47	12.39	194.99	13.90	195.51	65.55
193.96	10.15	194.48	12.43	195.00	14.05	195.52	67.25
193.97	10.20	194.49	12.47	195.01	14.29	195.53	68.98
193.98	10.25	194.50	12.51	195.02	14.59	195.54	70.74
193.99	10.29	194.51	12.55	195.03	14.94	195.55	72.53
194.00	10.34	194.52	12.59	195.04	15.34	195.56	74.34
194.01	10.39	194.53	12.63	195.05	15.78	195.57	76.18
194.02	10.44	194.54	12.67	195.06	16.26	195.58	78.04
194.03	10.49	194.55	12.71	195.07	16.77	195.59	79.94
194.04	10.53	194.56	12.73	195.08	17.31	195.60	81.59
194.05	10.58	194.57	12.76	195.09	17.88	195.61	83.25
194.06	10.63	194.58	12.79	195.10	18.48	195.62	84.93
194.07	10.67	194.59	12.82	195.11	19.10	195.63	86.62
194.08	10.72	194.60	12.85	195.12	19.76	195.64	88.32
194.09	10.77	194.61	12.88	195.13	20.43	195.65	90.04
194.10	10.81	194.62	12.90	195.14	21.13	195.66	91.77
194.11	10.86	194.63	12.93	195.15	21.86	195.67	93.51
194.12	10.90	194.64	12.96	195.16	22.61	195.68	95.27
194.13	10.95	194.65	12.99	195.17	23.38	195.69	97.04
194.14	10.99	194.66	13.02	195.18	24.17	195.70	98.82
194.15	11.04	194.67	13.04	195.19	24.98	195.71	100.61
194.16	11.08	194.68	13.07	195.20	25.85	195.72	102.42

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)
195.73	104.24
195.74	106.07
195.75	107.92
195.76	109.77
195.77	111.64
195.78	113.52
195.79	115.41
195.80	117.36
195.81	119.31
195.82	121.28
195.83	123.26
195.84	125.26
195.85	127.27
195.86	129.29
195.87	131.32
195.88	133.37
195.89	135.43
195.90	137.50
195.91	139.59
195.92	141.69
195.93	143.80
195.94	145.92
195.95	148.06
195.96	150.21
195.97	152.37
195.98	154.55
195.99	156.73
196.00	**158.88**

Stage-Area-Storage for Pond B-56: Basin #56

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.57	0	0
191.58	117	1
191.59	234	2
191.60	350	5
191.61	467	9
191.62	584	15
191.63	701	21
191.64	817	29
191.65	934	37
191.66	1,051	47
191.67	1,168	58
191.68	1,284	71
191.69	1,401	84
191.70	1,518	99
191.71	1,635	114
191.72	1,752	131
191.73	1,868	149
191.74	1,985	169
191.75	2,102	189
191.76	2,219	211
191.77	2,335	234
191.78	2,452	257
191.79	2,569	283
191.80	2,686	309
191.81	2,802	336
191.82	2,919	365
191.83	3,036	395
191.84	3,153	426
191.85	3,269	458
191.86	3,386	491
191.87	3,503	525
191.88	3,620	561
191.89	3,737	598
191.90	3,853	636
191.91	3,970	675
191.92	4,087	715
191.93	4,204	757
191.94	4,320	799
191.95	4,437	843
191.96	4,554	888
191.97	4,671	934
191.98	4,787	981
191.99	4,904	1,030
192.00	5,021	1,080
192.01	5,026	1,130
192.02	5,030	1,180
192.03	5,035	1,230
192.04	5,040	1,281
192.05	5,044	1,331
192.06	5,049	1,382
192.07	5,054	1,432
192.08	5,059	1,483
192.09	5,063	1,533
192.10	5,068	1,584
192.11	5,073	1,635
192.12	5,077	1,685
192.13	5,082	1,736
192.14	5,087	1,787
192.15	5,091	1,838
192.16	5,096	1,889
192.17	5,101	1,940
192.18	5,105	1,991
192.19	5,110	2,042
192.20	5,115	2,093
192.21	5,119	2,144
192.22	5,124	2,195
192.23	5,129	2,247
192.24	5,134	2,298
192.25	5,138	2,349
192.26	5,143	2,401
192.27	5,148	2,452
192.28	5,152	2,504
192.29	5,157	2,555
192.30	5,162	2,607
192.31	5,166	2,659
192.32	5,171	2,710
192.33	5,176	2,762
192.34	5,180	2,814
192.35	5,185	2,866
192.36	5,190	2,917
192.37	5,195	2,969
192.38	5,199	3,021
192.39	5,204	3,073
192.40	5,209	3,125
192.41	5,213	3,178
192.42	5,218	3,230
192.43	5,223	3,282
192.44	5,227	3,334
192.45	5,232	3,386
192.46	5,237	3,439
192.47	5,241	3,491
192.48	5,246	3,544
192.49	5,251	3,596
192.50	5,256	3,649
192.51	5,260	3,701
192.52	5,265	3,754
192.53	5,270	3,807
192.54	5,274	3,859
192.55	5,279	3,912
192.56	5,284	3,965
192.57	5,288	4,018
192.58	5,293	4,071
192.59	5,298	4,124
192.60	5,302	4,177

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.61	5,307	4,230	193.13	5,553	7,053
192.62	5,312	4,283	193.14	5,558	7,108
192.63	5,316	4,336	193.15	5,563	7,164
192.64	5,321	4,389	193.16	5,568	7,220
192.65	5,326	4,442	193.17	5,573	7,275
192.66	5,331	4,496	193.18	5,577	7,331
192.67	5,335	4,549	193.19	5,582	7,387
192.68	5,340	4,602	193.20	5,587	7,443
192.69	5,345	4,656	193.21	5,592	7,499
192.70	5,349	4,709	193.22	5,597	7,555
192.71	5,354	4,763	193.23	5,602	7,611
192.72	5,359	4,816	193.24	5,607	7,667
192.73	5,363	4,870	193.25	5,612	7,723
192.74	5,368	4,923	193.26	5,616	7,779
192.75	5,373	4,977	193.27	5,621	7,835
192.76	5,377	5,031	193.28	5,626	7,891
192.77	5,382	5,085	193.29	5,631	7,948
192.78	5,387	5,139	193.30	5,636	8,004
192.79	5,392	5,192	193.31	5,641	8,060
192.80	5,396	5,246	193.32	5,646	8,117
192.81	5,401	5,300	193.33	5,650	8,173
192.82	5,406	5,354	193.34	5,655	8,230
192.83	5,410	5,408	193.35	5,660	8,286
192.84	5,415	5,463	193.36	5,665	8,343
192.85	5,420	5,517	193.37	5,670	8,400
192.86	5,424	5,571	193.38	5,675	8,456
192.87	5,429	5,625	193.39	5,680	8,513
192.88	5,434	5,680	193.40	5,684	8,570
192.89	5,438	5,734	193.41	5,689	8,627
192.90	5,443	5,788	193.42	5,694	8,684
192.91	5,448	5,843	193.43	5,699	8,741
192.92	5,452	5,897	193.44	5,704	8,798
192.93	5,457	5,952	193.45	5,709	8,855
192.94	5,462	6,006	193.46	5,714	8,912
192.95	5,467	6,061	193.47	5,718	8,969
192.96	5,471	6,116	193.48	5,723	9,026
192.97	5,476	6,171	193.49	5,728	9,083
192.98	5,481	6,225	193.50	5,733	9,141
192.99	5,485	6,280	193.51	5,738	9,198
193.00	5,490	6,335	193.52	5,743	9,256
193.01	5,495	6,390	193.53	5,748	9,313
193.02	5,500	6,445	193.54	5,752	9,370
193.03	5,505	6,500	193.55	5,757	9,428
193.04	5,509	6,555	193.56	5,762	9,486
193.05	5,514	6,610	193.57	5,767	9,543
193.06	5,519	6,665	193.58	5,772	9,601
193.07	5,524	6,721	193.59	5,777	9,659
193.08	5,529	6,776	193.60	5,782	9,716
193.09	5,534	6,831	193.61	5,786	9,774
193.10	5,539	6,886	193.62	5,791	9,832
193.11	5,543	6,942	193.63	5,796	9,890
193.12	5,548	6,997	193.64	5,801	9,948

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.65	5,806	10,006	194.17	6,061	13,091
193.66	5,811	10,064	194.18	6,066	13,152
193.67	5,816	10,122	194.19	6,071	13,213
193.68	5,820	10,181	194.20	6,076	13,273
193.69	5,825	10,239	194.21	6,081	13,334
193.70	5,830	10,297	194.22	6,086	13,395
193.71	5,835	10,355	194.23	6,091	13,456
193.72	5,840	10,414	194.24	6,096	13,517
193.73	5,845	10,472	194.25	6,102	13,578
193.74	5,850	10,531	194.26	6,107	13,639
193.75	5,855	10,589	194.27	6,112	13,700
193.76	5,859	10,648	194.28	6,117	13,761
193.77	5,864	10,706	194.29	6,122	13,822
193.78	5,869	10,765	194.30	6,127	13,883
193.79	5,874	10,824	194.31	6,132	13,945
193.80	5,879	10,883	194.32	6,137	14,006
193.81	5,884	10,941	194.33	6,142	14,067
193.82	5,889	11,000	194.34	6,147	14,129
193.83	5,893	11,059	194.35	6,152	14,190
193.84	5,898	11,118	194.36	6,157	14,252
193.85	5,903	11,177	194.37	6,162	14,313
193.86	5,908	11,236	194.38	6,167	14,375
193.87	5,913	11,295	194.39	6,172	14,437
193.88	5,918	11,354	194.40	6,177	14,499
193.89	5,923	11,414	194.41	6,182	14,560
193.90	5,927	11,473	194.42	6,187	14,622
193.91	5,932	11,532	194.43	6,192	14,684
193.92	5,937	11,591	194.44	6,197	14,746
193.93	5,942	11,651	194.45	6,202	14,808
193.94	5,947	11,710	194.46	6,207	14,870
193.95	5,952	11,770	194.47	6,212	14,932
193.96	5,957	11,829	194.48	6,217	14,994
193.97	5,961	11,889	194.49	6,222	15,057
193.98	5,966	11,949	194.50	6,227	15,119
193.99	5,971	12,008	194.51	6,232	15,181
194.00	5,976	12,068	194.52	6,237	15,243
194.01	5,981	12,128	194.53	6,242	15,306
194.02	5,986	12,188	194.54	6,247	15,368
194.03	5,991	12,248	194.55	6,252	15,431
194.04	5,996	12,307	194.56	6,257	15,493
194.05	6,001	12,367	194.57	6,262	15,556
194.06	6,006	12,427	194.58	6,267	15,619
194.07	6,011	12,488	194.59	6,272	15,681
194.08	6,016	12,548	194.60	6,277	15,744
194.09	6,021	12,608	194.61	6,282	15,807
194.10	6,026	12,668	194.62	6,287	15,870
194.11	6,031	12,728	194.63	6,292	15,933
194.12	6,036	12,789	194.64	6,297	15,995
194.13	6,041	12,849	194.65	6,302	16,058
194.14	6,046	12,910	194.66	6,307	16,122
194.15	6,051	12,970	194.67	6,312	16,185
194.16	6,056	13,031	194.68	6,317	16,248

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.69	6,322	16,311	195.21	6,587	19,667
194.70	6,327	16,374	195.22	6,592	19,733
194.71	6,332	16,438	195.23	6,597	19,799
194.72	6,337	16,501	195.24	6,602	19,865
194.73	6,342	16,564	195.25	6,607	19,931
194.74	6,347	16,628	195.26	6,612	19,997
194.75	6,353	16,691	195.27	6,618	20,063
194.76	6,358	16,755	195.28	6,623	20,129
194.77	6,363	16,818	195.29	6,628	20,195
194.78	6,368	16,882	195.30	6,633	20,262
194.79	6,373	16,946	195.31	6,638	20,328
194.80	6,378	17,009	195.32	6,643	20,394
194.81	6,383	17,073	195.33	6,649	20,461
194.82	6,388	17,137	195.34	6,654	20,527
194.83	6,393	17,201	195.35	6,659	20,594
194.84	6,398	17,265	195.36	6,664	20,661
194.85	6,403	17,329	195.37	6,669	20,727
194.86	6,408	17,393	195.38	6,674	20,794
194.87	6,413	17,457	195.39	6,680	20,861
194.88	6,418	17,521	195.40	6,685	20,928
194.89	6,423	17,585	195.41	6,690	20,994
194.90	6,428	17,650	195.42	6,695	21,061
194.91	6,433	17,714	195.43	6,700	21,128
194.92	6,438	17,778	195.44	6,705	21,195
194.93	6,443	17,843	195.45	6,711	21,262
194.94	6,448	17,907	195.46	6,716	21,330
194.95	6,453	17,972	195.47	6,721	21,397
194.96	6,458	18,036	195.48	6,726	21,464
194.97	6,463	18,101	195.49	6,731	21,531
194.98	6,468	18,166	195.50	6,737	21,599
194.99	6,473	18,230	195.51	6,742	21,666
195.00	6,478	18,295	195.52	6,747	21,733
195.01	6,483	18,360	195.53	6,752	21,801
195.02	6,488	18,425	195.54	6,757	21,869
195.03	6,494	18,490	195.55	6,762	21,936
195.04	6,499	18,555	195.56	6,768	22,004
195.05	6,504	18,620	195.57	6,773	22,071
195.06	6,509	18,685	195.58	6,778	22,139
195.07	6,514	18,750	195.59	6,783	22,207
195.08	6,519	18,815	195.60	6,788	22,275
195.09	6,525	18,880	195.61	6,793	22,343
195.10	6,530	18,945	195.62	6,799	22,411
195.11	6,535	19,011	195.63	6,804	22,479
195.12	6,540	19,076	195.64	6,809	22,547
195.13	6,545	19,142	195.65	6,814	22,615
195.14	6,550	19,207	195.66	6,819	22,683
195.15	6,556	19,273	195.67	6,824	22,751
195.16	6,561	19,338	195.68	6,830	22,820
195.17	6,566	19,404	195.69	6,835	22,888
195.18	6,571	19,469	195.70	6,840	22,956
195.19	6,576	19,535	195.71	6,845	23,025
195.20	6,581	19,601	195.72	6,850	23,093

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.73	6,855	23,162
195.74	6,861	23,230
195.75	6,866	23,299
195.76	6,871	23,368
195.77	6,876	23,436
195.78	6,881	23,505
195.79	6,886	23,574
195.80	6,892	23,643
195.81	6,897	23,712
195.82	6,902	23,781
195.83	6,907	23,850
195.84	6,912	23,919
195.85	6,917	23,988
195.86	6,923	24,057
195.87	6,928	24,127
195.88	6,933	24,196
195.89	6,938	24,265
195.90	6,943	24,335
195.91	6,948	24,404
195.92	6,954	24,474
195.93	6,959	24,543
195.94	6,964	24,613
195.95	6,969	24,682
195.96	6,974	24,752
195.97	6,979	24,822
195.98	6,985	24,892
195.99	6,990	24,962
196.00	**6,995**	**25,032**

Summary for Pond B-57: Basin #57

Inflow Area = 1.434 ac, 47.56% Impervious, Inflow Depth = 3.59" for Current 10 yr event
Inflow = 5.20 cfs @ 12.17 hrs, Volume= 0.430 af
Outflow = 1.75 cfs @ 12.44 hrs, Volume= 0.360 af, Atten= 66%, Lag= 16.3 min
Primary = 1.75 cfs @ 12.44 hrs, Volume= 0.360 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.84' @ 12.44 hrs Surf.Area= 4,949 sf Storage= 9,601 cf

Plug-Flow detention time= 417.5 min calculated for 0.360 af (84% of inflow)
Center-of-Mass det. time= 345.9 min (1,130.7 - 784.8)

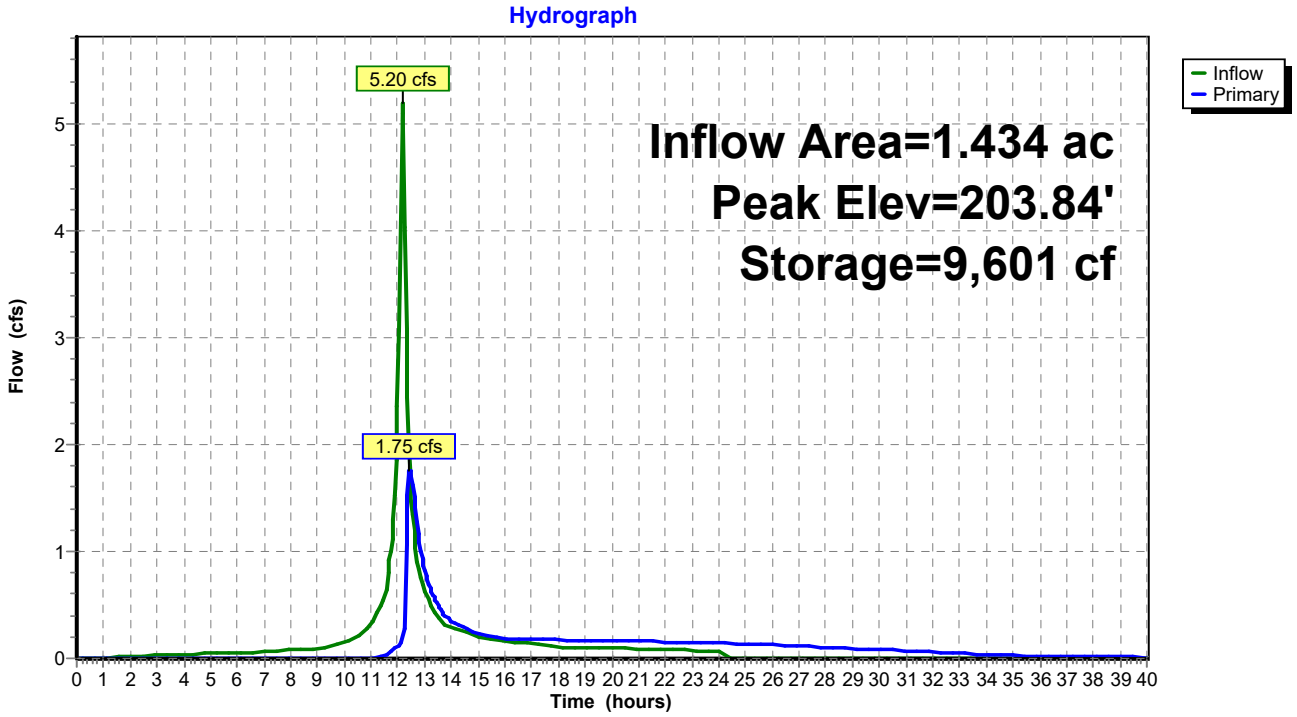
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	**18.0" Round Culvert** L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.34'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.60'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.75 cfs @ 12.44 hrs HW=203.84' (Free Discharge)
- **1=Culvert** (Passes 1.75 cfs of 12.86 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.19 cfs @ 5.70 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.55 cfs @ 1.61 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-57: Basin #57



Stage-Discharge for Pond B-57: Basin #57

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.11
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.11
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.11
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.11
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.11
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.11
201.36	0.00	201.88	0.00	202.40	0.01	202.92	0.11
201.37	0.00	201.89	0.00	202.41	0.01	202.93	0.11
201.38	0.00	201.90	0.00	202.42	0.01	202.94	0.12
201.39	0.00	201.91	0.00	202.43	0.01	202.95	0.12
201.40	0.00	201.92	0.00	202.44	0.02	202.96	0.12
201.41	0.00	201.93	0.00	202.45	0.02	202.97	0.12
201.42	0.00	201.94	0.00	202.46	0.02	202.98	0.12
201.43	0.00	201.95	0.00	202.47	0.03	202.99	0.12
201.44	0.00	201.96	0.00	202.48	0.03	203.00	0.12
201.45	0.00	201.97	0.00	202.49	0.03	203.01	0.12
201.46	0.00	201.98	0.00	202.50	0.04	203.02	0.12
201.47	0.00	201.99	0.00	202.51	0.04	203.03	0.13
201.48	0.00	202.00	0.00	202.52	0.05	203.04	0.13
201.49	0.00	202.01	0.00	202.53	0.05	203.05	0.13
201.50	0.00	202.02	0.00	202.54	0.05	203.06	0.13
201.51	0.00	202.03	0.00	202.55	0.05	203.07	0.13
201.52	0.00	202.04	0.00	202.56	0.06	203.08	0.13
201.53	0.00	202.05	0.00	202.57	0.06	203.09	0.13
201.54	0.00	202.06	0.00	202.58	0.06	203.10	0.13
201.55	0.00	202.07	0.00	202.59	0.06	203.11	0.13
201.56	0.00	202.08	0.00	202.60	0.06	203.12	0.13
201.57	0.00	202.09	0.00	202.61	0.07	203.13	0.14
201.58	0.00	202.10	0.00	202.62	0.07	203.14	0.14
201.59	0.00	202.11	0.00	202.63	0.07	203.15	0.14
201.60	0.00	202.12	0.00	202.64	0.07	203.16	0.14
201.61	0.00	202.13	0.00	202.65	0.07	203.17	0.14
201.62	0.00	202.14	0.00	202.66	0.08	203.18	0.14
201.63	0.00	202.15	0.00	202.67	0.08	203.19	0.14
201.64	0.00	202.16	0.00	202.68	0.08	203.20	0.14
201.65	0.00	202.17	0.00	202.69	0.08	203.21	0.14
201.66	0.00	202.18	0.00	202.70	0.08	203.22	0.14
201.67	0.00	202.19	0.00	202.71	0.08	203.23	0.15
201.68	0.00	202.20	0.00	202.72	0.09	203.24	0.15
201.69	0.00	202.21	0.00	202.73	0.09	203.25	0.15
201.70	0.00	202.22	0.00	202.74	0.09	203.26	0.15
201.71	0.00	202.23	0.00	202.75	0.09	203.27	0.15
201.72	0.00	202.24	0.00	202.76	0.09	203.28	0.15
201.73	0.00	202.25	0.00	202.77	0.09	203.29	0.15
201.74	0.00	202.26	0.00	202.78	0.10	203.30	0.15
201.75	0.00	202.27	0.00	202.79	0.10	203.31	0.15
201.76	0.00	202.28	0.00	202.80	0.10	203.32	0.15
201.77	0.00	202.29	0.00	202.81	0.10	203.33	0.15
201.78	0.00	202.30	0.00	202.82	0.10	203.34	0.16
201.79	0.00	202.31	0.00	202.83	0.10	203.35	0.16
201.80	0.00	202.32	0.00	202.84	0.10	203.36	0.16
201.81	0.00	202.33	0.00	202.85	0.10	203.37	0.16

Stage-Discharge for Pond B-57: Basin #57 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	0.16	203.90	2.32	204.42	9.54	204.94	52.24
203.39	0.16	203.91	2.42	204.43	9.71	204.95	53.72
203.40	0.16	203.92	2.53	204.44	9.88	204.96	55.23
203.41	0.16	203.93	2.64	204.45	10.05	204.97	56.77
203.42	0.16	203.94	2.75	204.46	10.22	204.98	58.33
203.43	0.16	203.95	2.86	204.47	10.39	204.99	59.92
203.44	0.16	203.96	2.98	204.48	10.56	205.00	**61.53**
203.45	0.16	203.97	3.09	204.49	10.73		
203.46	0.17	203.98	3.21	204.50	10.90		
203.47	0.17	203.99	3.33	204.51	11.19		
203.48	0.17	204.00	3.45	204.52	11.58		
203.49	0.17	204.01	3.57	204.53	12.03		
203.50	0.17	204.02	3.69	204.54	12.54		
203.51	0.17	204.03	3.82	204.55	13.09		
203.52	0.17	204.04	3.94	204.56	13.68		
203.53	0.17	204.05	4.07	204.57	14.30		
203.54	0.17	204.06	4.20	204.58	14.97		
203.55	0.17	204.07	4.32	204.59	15.66		
203.56	0.17	204.08	4.46	204.60	16.38		
203.57	0.17	204.09	4.59	204.61	17.14		
203.58	0.17	204.10	4.72	204.62	17.92		
203.59	0.18	204.11	4.85	204.63	18.73		
203.60	0.18	204.12	4.99	204.64	19.56		
203.61	0.19	204.13	5.13	204.65	20.42		
203.62	0.21	204.14	5.26	204.66	21.31		
203.63	0.25	204.15	5.40	204.67	22.22		
203.64	0.28	204.16	5.54	204.68	23.05		
203.65	0.33	204.17	5.68	204.69	23.83		
203.66	0.37	204.18	5.83	204.70	24.63		
203.67	0.42	204.19	5.97	204.71	25.49		
203.68	0.48	204.20	6.11	204.72	26.38		
203.69	0.53	204.21	6.26	204.73	27.29		
203.70	0.60	204.22	6.41	204.74	28.23		
203.71	0.66	204.23	6.55	204.75	29.19		
203.72	0.73	204.24	6.70	204.76	30.17		
203.73	0.80	204.25	6.85	204.77	31.19		
203.74	0.87	204.26	7.00	204.78	32.22		
203.75	0.94	204.27	7.15	204.79	33.28		
203.76	1.02	204.28	7.31	204.80	34.37		
203.77	1.10	204.29	7.46	204.81	35.48		
203.78	1.18	204.30	7.62	204.82	36.61		
203.79	1.26	204.31	7.77	204.83	37.77		
203.80	1.35	204.32	7.93	204.84	38.96		
203.81	1.44	204.33	8.09	204.85	40.16		
203.82	1.53	204.34	8.24	204.86	41.40		
203.83	1.62	204.35	8.40	204.87	42.65		
203.84	1.71	204.36	8.56	204.88	43.93		
203.85	1.81	204.37	8.73	204.89	45.24		
203.86	1.91	204.38	8.89	204.90	46.56		
203.87	2.01	204.39	9.05	204.91	47.94		
203.88	2.11	204.40	9.21	204.92	49.35		
203.89	2.21	204.41	9.38	204.93	50.78		

Stage-Area-Storage for Pond B-57: Basin #57

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,948	767
201.31	57	0	201.83	3,005	796
201.32	113	1	201.84	3,062	827
201.33	170	3	201.85	3,119	858
201.34	227	5	201.86	3,175	889
201.35	284	7	201.87	3,232	921
201.36	340	10	201.88	3,289	954
201.37	397	14	201.89	3,345	987
201.38	454	18	201.90	3,402	1,021
201.39	510	23	201.91	3,459	1,055
201.40	567	28	201.92	3,515	1,090
201.41	624	34	201.93	3,572	1,125
201.42	680	41	201.94	3,629	1,161
201.43	737	48	201.95	3,686	1,198
201.44	794	56	201.96	3,742	1,235
201.45	851	64	201.97	3,799	1,273
201.46	907	73	201.98	3,856	1,311
201.47	964	82	201.99	3,912	1,350
201.48	1,021	92	202.00	3,969	1,389
201.49	1,077	102	202.01	3,974	1,429
201.50	1,134	113	202.02	3,979	1,469
201.51	1,191	125	202.03	3,985	1,508
201.52	1,247	137	202.04	3,990	1,548
201.53	1,304	150	202.05	3,995	1,588
201.54	1,361	163	202.06	4,000	1,628
201.55	1,418	177	202.07	4,005	1,668
201.56	1,474	192	202.08	4,011	1,708
201.57	1,531	207	202.09	4,016	1,748
201.58	1,588	222	202.10	4,021	1,789
201.59	1,644	238	202.11	4,026	1,829
201.60	1,701	255	202.12	4,031	1,869
201.61	1,758	272	202.13	4,036	1,910
201.62	1,814	290	202.14	4,042	1,950
201.63	1,871	309	202.15	4,047	1,990
201.64	1,928	328	202.16	4,052	2,031
201.65	1,985	347	202.17	4,057	2,071
201.66	2,041	367	202.18	4,062	2,112
201.67	2,098	388	202.19	4,068	2,153
201.68	2,155	409	202.20	4,073	2,193
201.69	2,211	431	202.21	4,078	2,234
201.70	2,268	454	202.22	4,083	2,275
201.71	2,325	477	202.23	4,088	2,316
201.72	2,381	500	202.24	4,094	2,357
201.73	2,438	524	202.25	4,099	2,398
201.74	2,495	549	202.26	4,104	2,439
201.75	2,551	574	202.27	4,109	2,480
201.76	2,608	600	202.28	4,114	2,521
201.77	2,665	626	202.29	4,120	2,562
201.78	2,722	653	202.30	4,125	2,603
201.79	2,778	681	202.31	4,130	2,644
201.80	2,835	709	202.32	4,135	2,686
201.81	2,892	737	202.33	4,140	2,727

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	4,145	2,769	202.86	4,415	4,994
202.35	4,151	2,810	202.87	4,421	5,039
202.36	4,156	2,852	202.88	4,426	5,083
202.37	4,161	2,893	202.89	4,431	5,127
202.38	4,166	2,935	202.90	4,436	5,171
202.39	4,171	2,977	202.91	4,441	5,216
202.40	4,177	3,018	202.92	4,446	5,260
202.41	4,182	3,060	202.93	4,452	5,305
202.42	4,187	3,102	202.94	4,457	5,349
202.43	4,192	3,144	202.95	4,462	5,394
202.44	4,197	3,186	202.96	4,467	5,439
202.45	4,203	3,228	202.97	4,472	5,483
202.46	4,208	3,270	202.98	4,478	5,528
202.47	4,213	3,312	202.99	4,483	5,573
202.48	4,218	3,354	203.00	4,488	5,618
202.49	4,223	3,396	203.01	4,493	5,663
202.50	4,229	3,439	203.02	4,499	5,708
202.51	4,234	3,481	203.03	4,504	5,753
202.52	4,239	3,523	203.04	4,510	5,798
202.53	4,244	3,566	203.05	4,515	5,843
202.54	4,249	3,608	203.06	4,521	5,888
202.55	4,254	3,651	203.07	4,526	5,933
202.56	4,260	3,693	203.08	4,532	5,978
202.57	4,265	3,736	203.09	4,537	6,024
202.58	4,270	3,778	203.10	4,543	6,069
202.59	4,275	3,821	203.11	4,548	6,115
202.60	4,280	3,864	203.12	4,554	6,160
202.61	4,286	3,907	203.13	4,559	6,206
202.62	4,291	3,950	203.14	4,564	6,251
202.63	4,296	3,993	203.15	4,570	6,297
202.64	4,301	4,036	203.16	4,575	6,343
202.65	4,306	4,079	203.17	4,581	6,388
202.66	4,312	4,122	203.18	4,586	6,434
202.67	4,317	4,165	203.19	4,592	6,480
202.68	4,322	4,208	203.20	4,597	6,526
202.69	4,327	4,251	203.21	4,603	6,572
202.70	4,332	4,295	203.22	4,608	6,618
202.71	4,337	4,338	203.23	4,614	6,664
202.72	4,343	4,381	203.24	4,619	6,710
202.73	4,348	4,425	203.25	4,625	6,757
202.74	4,353	4,468	203.26	4,630	6,803
202.75	4,358	4,512	203.27	4,635	6,849
202.76	4,363	4,555	203.28	4,641	6,896
202.77	4,369	4,599	203.29	4,646	6,942
202.78	4,374	4,643	203.30	4,652	6,989
202.79	4,379	4,687	203.31	4,657	7,035
202.80	4,384	4,730	203.32	4,663	7,082
202.81	4,389	4,774	203.33	4,668	7,128
202.82	4,395	4,818	203.34	4,674	7,175
202.83	4,400	4,862	203.35	4,679	7,222
202.84	4,405	4,906	203.36	4,685	7,269
202.85	4,410	4,950	203.37	4,690	7,316

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,695	7,363
203.39	4,701	7,409
203.40	4,706	7,457
203.41	4,712	7,504
203.42	4,717	7,551
203.43	4,723	7,598
203.44	4,728	7,645
203.45	4,734	7,693
203.46	4,739	7,740
203.47	4,745	7,787
203.48	4,750	7,835
203.49	4,756	7,882
203.50	4,761	7,930
203.51	4,766	7,978
203.52	4,772	8,025
203.53	4,777	8,073
203.54	4,783	8,121
203.55	4,788	8,169
203.56	4,794	8,217
203.57	4,799	8,265
203.58	4,805	8,313
203.59	4,810	8,361
203.60	4,816	8,409
203.61	4,821	8,457
203.62	4,827	8,505
203.63	4,832	8,553
203.64	4,837	8,602
203.65	4,843	8,650
203.66	4,848	8,699
203.67	4,854	8,747
203.68	4,859	8,796
203.69	4,865	8,844
203.70	4,870	8,893
203.71	4,876	8,942
203.72	4,881	8,991
203.73	4,887	9,039
203.74	4,892	9,088
203.75	4,898	9,137
203.76	4,903	9,186
203.77	4,908	9,235
203.78	4,914	9,284
203.79	4,919	9,334
203.80	4,925	9,383
203.81	4,930	9,432
203.82	4,936	9,481
203.83	4,941	9,531
203.84	4,947	9,580
203.85	4,952	9,630
203.86	4,958	9,679
203.87	4,963	9,729
203.88	4,968	9,779
203.89	4,974	9,828
203.90	4,979	9,878
203.91	4,985	9,928
203.92	4,990	9,978
203.93	4,996	10,028
203.94	5,001	10,078
203.95	5,007	10,128
203.96	5,012	10,178
203.97	5,018	10,228
203.98	5,023	10,278
203.99	5,029	10,328
204.00	5,034	10,379
204.01	5,040	10,429
204.02	5,045	10,479
204.03	5,051	10,530
204.04	5,057	10,580
204.05	5,063	10,631
204.06	5,068	10,682
204.07	5,074	10,732
204.08	5,080	10,783
204.09	5,086	10,834
204.10	5,091	10,885
204.11	5,097	10,936
204.12	5,103	10,987
204.13	5,109	11,038
204.14	5,114	11,089
204.15	5,120	11,140
204.16	5,126	11,191
204.17	5,132	11,243
204.18	5,137	11,294
204.19	5,143	11,345
204.20	5,149	11,397
204.21	5,155	11,448
204.22	5,160	11,500
204.23	5,166	11,552
204.24	5,172	11,603
204.25	5,178	11,655
204.26	5,183	11,707
204.27	5,189	11,759
204.28	5,195	11,811
204.29	5,200	11,863
204.30	5,206	11,915
204.31	5,212	11,967
204.32	5,218	12,019
204.33	5,223	12,071
204.34	5,229	12,123
204.35	5,235	12,176
204.36	5,241	12,228
204.37	5,246	12,281
204.38	5,252	12,333
204.39	5,258	12,386
204.40	5,264	12,438
204.41	5,269	12,491

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	5,275	12,544
204.43	5,281	12,596
204.44	5,287	12,649
204.45	5,292	12,702
204.46	5,298	12,755
204.47	5,304	12,808
204.48	5,310	12,861
204.49	5,315	12,914
204.50	5,321	12,967
204.51	5,327	13,021
204.52	5,332	13,074
204.53	5,338	13,127
204.54	5,344	13,181
204.55	5,350	13,234
204.56	5,355	13,288
204.57	5,361	13,341
204.58	5,367	13,395
204.59	5,373	13,449
204.60	5,378	13,502
204.61	5,384	13,556
204.62	5,390	13,610
204.63	5,396	13,664
204.64	5,401	13,718
204.65	5,407	13,772
204.66	5,413	13,826
204.67	5,419	13,880
204.68	5,424	13,934
204.69	5,430	13,989
204.70	5,436	14,043
204.71	5,442	14,097
204.72	5,447	14,152
204.73	5,453	14,206
204.74	5,459	14,261
204.75	5,465	14,316
204.76	5,470	14,370
204.77	5,476	14,425
204.78	5,482	14,480
204.79	5,487	14,535
204.80	5,493	14,590
204.81	5,499	14,644
204.82	5,505	14,700
204.83	5,510	14,755
204.84	5,516	14,810
204.85	5,522	14,865
204.86	5,528	14,920
204.87	5,533	14,975
204.88	5,539	15,031
204.89	5,545	15,086
204.90	5,551	15,142
204.91	5,556	15,197
204.92	5,562	15,253
204.93	5,568	15,308
204.94	5,574	15,364
204.95	5,579	15,420
204.96	5,585	15,476
204.97	5,591	15,532
204.98	5,597	15,588
204.99	5,602	15,644
205.00	**5,608**	**15,700**

Summary for Pond B-58: Basin #58

Inflow Area = 1.649 ac, 26.80% Impervious, Inflow Depth = 3.09" for Current 10 yr event
Inflow = 5.31 cfs @ 12.17 hrs, Volume= 0.425 af
Outflow = 1.30 cfs @ 12.59 hrs, Volume= 0.363 af, Atten= 76%, Lag= 25.1 min
Primary = 1.30 cfs @ 12.59 hrs, Volume= 0.363 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.11' @ 12.59 hrs Surf.Area= 7,010 sf Storage= 9,502 cf

Plug-Flow detention time= 453.7 min calculated for 0.363 af (85% of inflow)
Center-of-Mass det. time= 385.7 min (1,190.7 - 805.0)

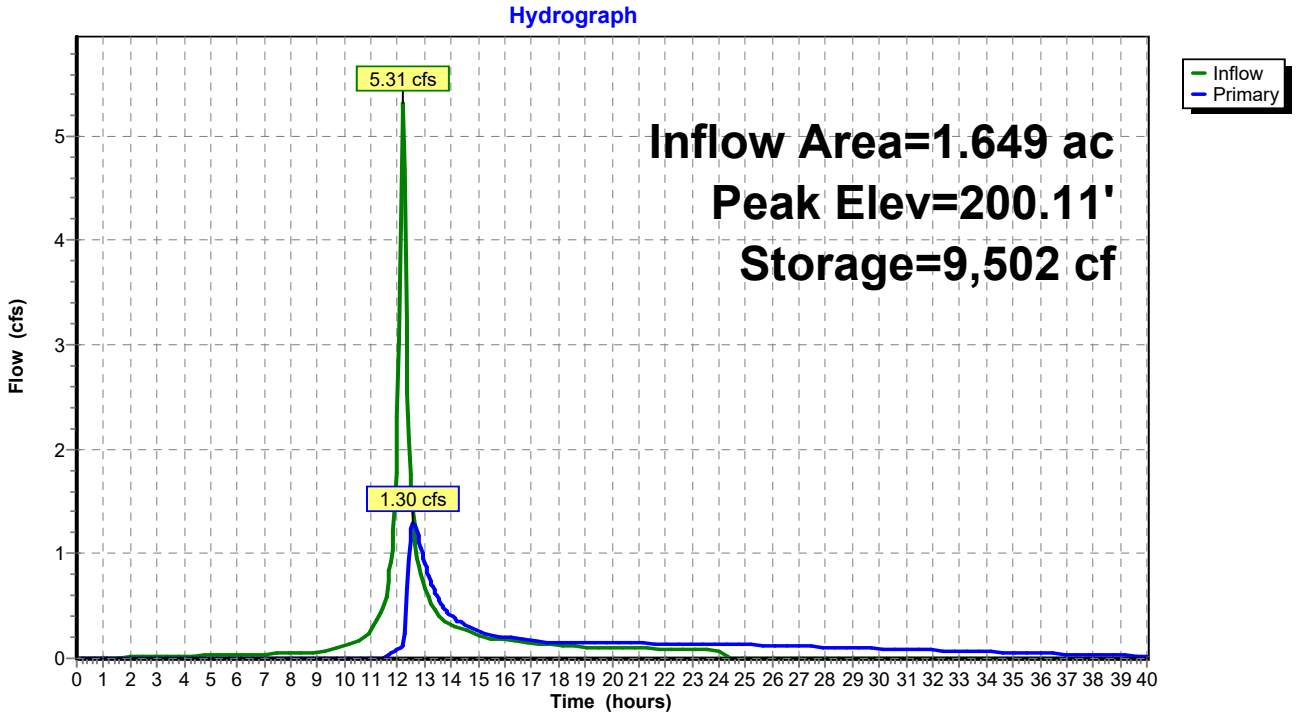
Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	**18.0" Round Culvert** L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	198.97'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	199.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	201.90'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.29 cfs @ 12.59 hrs HW=200.11' (Free Discharge)
- **1=Culvert** (Passes 1.29 cfs of 7.88 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.17 cfs @ 4.89 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.12 cfs @ 1.45 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-58: Basin #58



Stage-Discharge for Pond B-58: Basin #58

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
198.30	0.00	198.82	0.00	199.34	0.08	199.86	0.15
198.31	0.00	198.83	0.00	199.35	0.09	199.87	0.15
198.32	0.00	198.84	0.00	199.36	0.09	199.88	0.15
198.33	0.00	198.85	0.00	199.37	0.09	199.89	0.15
198.34	0.00	198.86	0.00	199.38	0.09	199.90	0.15
198.35	0.00	198.87	0.00	199.39	0.09	199.91	0.15
198.36	0.00	198.88	0.00	199.40	0.09	199.92	0.16
198.37	0.00	198.89	0.00	199.41	0.10	199.93	0.19
198.38	0.00	198.90	0.00	199.42	0.10	199.94	0.22
198.39	0.00	198.91	0.00	199.43	0.10	199.95	0.26
198.40	0.00	198.92	0.00	199.44	0.10	199.96	0.30
198.41	0.00	198.93	0.00	199.45	0.10	199.97	0.35
198.42	0.00	198.94	0.00	199.46	0.10	199.98	0.40
198.43	0.00	198.95	0.00	199.47	0.10	199.99	0.45
198.44	0.00	198.96	0.00	199.48	0.10	200.00	0.51
198.45	0.00	198.97	0.00	199.49	0.11	200.01	0.57
198.46	0.00	198.98	0.00	199.50	0.11	200.02	0.63
198.47	0.00	198.99	0.00	199.51	0.11	200.03	0.70
198.48	0.00	199.00	0.00	199.52	0.11	200.04	0.77
198.49	0.00	199.01	0.00	199.53	0.11	200.05	0.84
198.50	0.00	199.02	0.00	199.54	0.11	200.06	0.92
198.51	0.00	199.03	0.01	199.55	0.11	200.07	0.99
198.52	0.00	199.04	0.01	199.56	0.11	200.08	1.07
198.53	0.00	199.05	0.01	199.57	0.12	200.09	1.16
198.54	0.00	199.06	0.01	199.58	0.12	200.10	1.24
198.55	0.00	199.07	0.02	199.59	0.12	200.11	1.33
198.56	0.00	199.08	0.02	199.60	0.12	200.12	1.41
198.57	0.00	199.09	0.02	199.61	0.12	200.13	1.50
198.58	0.00	199.10	0.03	199.62	0.12	200.14	1.60
198.59	0.00	199.11	0.03	199.63	0.12	200.15	1.69
198.60	0.00	199.12	0.03	199.64	0.12	200.16	1.79
198.61	0.00	199.13	0.04	199.65	0.12	200.17	1.88
198.62	0.00	199.14	0.04	199.66	0.13	200.18	1.98
198.63	0.00	199.15	0.05	199.67	0.13	200.19	2.08
198.64	0.00	199.16	0.05	199.68	0.13	200.20	2.19
198.65	0.00	199.17	0.05	199.69	0.13	200.21	2.29
198.66	0.00	199.18	0.05	199.70	0.13	200.22	2.40
198.67	0.00	199.19	0.06	199.71	0.13	200.23	2.51
198.68	0.00	199.20	0.06	199.72	0.13	200.24	2.62
198.69	0.00	199.21	0.06	199.73	0.13	200.25	2.73
198.70	0.00	199.22	0.06	199.74	0.13	200.26	2.84
198.71	0.00	199.23	0.06	199.75	0.13	200.27	2.95
198.72	0.00	199.24	0.07	199.76	0.14	200.28	3.07
198.73	0.00	199.25	0.07	199.77	0.14	200.29	3.19
198.74	0.00	199.26	0.07	199.78	0.14	200.30	3.31
198.75	0.00	199.27	0.07	199.79	0.14	200.31	3.43
198.76	0.00	199.28	0.07	199.80	0.14	200.32	3.55
198.77	0.00	199.29	0.08	199.81	0.14	200.33	3.67
198.78	0.00	199.30	0.08	199.82	0.14	200.34	3.79
198.79	0.00	199.31	0.08	199.83	0.14	200.35	3.92
198.80	0.00	199.32	0.08	199.84	0.14	200.36	4.05
198.81	0.00	199.33	0.08	199.85	0.14	200.37	4.17

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.38	4.30	200.90	10.88	201.42	12.74	201.94	15.30
200.39	4.43	200.91	10.92	201.43	12.78	201.95	15.71
200.40	4.57	200.92	10.96	201.44	12.81	201.96	16.15
200.41	4.70	200.93	11.00	201.45	12.84	201.97	16.63
200.42	4.83	200.94	11.04	201.46	12.88	201.98	17.14
200.43	4.97	200.95	11.07	201.47	12.91	201.99	17.68
200.44	5.10	200.96	11.11	201.48	12.94	202.00	18.26
200.45	5.24	200.97	11.15	201.49	12.97	202.01	18.86
200.46	5.38	200.98	11.19	201.50	13.01	202.02	19.49
200.47	5.52	200.99	11.23	201.51	13.04	202.03	20.15
200.48	5.66	201.00	11.26	201.52	13.07	202.04	20.83
200.49	5.81	201.01	11.30	201.53	13.10	202.05	21.53
200.50	5.95	201.02	11.34	201.54	13.14	202.06	22.26
200.51	6.09	201.03	11.38	201.55	13.17	202.07	23.01
200.52	6.24	201.04	11.41	201.56	13.20	202.08	23.78
200.53	6.39	201.05	11.45	201.57	13.23	202.09	24.58
200.54	6.53	201.06	11.49	201.58	13.26	202.10	25.39
200.55	6.68	201.07	11.52	201.59	13.30	202.11	26.27
200.56	6.83	201.08	11.56	201.60	13.33	202.12	27.17
200.57	6.98	201.09	11.60	201.61	13.36	202.13	28.10
200.58	7.13	201.10	11.63	201.62	13.39	202.14	29.05
200.59	7.29	201.11	11.67	201.63	13.42	202.15	30.02
200.60	7.44	201.12	11.71	201.64	13.45	202.16	31.03
200.61	7.60	201.13	11.74	201.65	13.48	202.17	32.05
200.62	7.75	201.14	11.78	201.66	13.52	202.18	33.10
200.63	7.91	201.15	11.81	201.67	13.55	202.19	34.17
200.64	8.07	201.16	11.85	201.68	13.58	202.20	35.27
200.65	8.22	201.17	11.88	201.69	13.61	202.21	36.39
200.66	8.38	201.18	11.92	201.70	13.64	202.22	37.54
200.67	8.54	201.19	11.96	201.71	13.67	202.23	38.71
200.68	8.71	201.20	11.99	201.72	13.70	202.24	39.90
200.69	8.87	201.21	12.03	201.73	13.73	202.25	41.12
200.70	9.03	201.22	12.06	201.74	13.76	202.26	42.36
200.71	9.19	201.23	12.10	201.75	13.79	202.27	43.63
200.72	9.36	201.24	12.13	201.76	13.83	202.28	44.92
200.73	9.53	201.25	12.17	201.77	13.86	202.29	46.23
200.74	9.69	201.26	12.20	201.78	13.89	202.30	47.57
200.75	9.86	201.27	12.24	201.79	13.92	202.31	48.96
200.76	10.03	201.28	12.27	201.80	13.95	202.32	50.37
200.77	10.20	201.29	12.30	201.81	13.98	202.33	51.82
200.78	10.37	201.30	12.34	201.82	14.01	202.34	53.28
200.79	10.45	201.31	12.37	201.83	14.04	202.35	54.78
200.80	10.49	201.32	12.41	201.84	14.07	202.36	56.30
200.81	10.53	201.33	12.44	201.85	14.10	202.37	57.84
200.82	10.57	201.34	12.47	201.86	14.13	202.38	59.41
200.83	10.61	201.35	12.51	201.87	14.16	202.39	61.01
200.84	10.65	201.36	12.54	201.88	14.19	202.40	62.64
200.85	10.69	201.37	12.58	201.89	14.22	202.41	64.29
200.86	10.72	201.38	12.61	201.90	14.25	202.42	65.97
200.87	10.76	201.39	12.64	201.91	14.39	202.43	67.67
200.88	10.80	201.40	12.68	201.92	14.64	202.44	69.40
200.89	10.84	201.41	12.71	201.93	14.94	202.45	71.16

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)
202.46	72.95
202.47	74.76
202.48	76.60
202.49	78.46
202.50	80.35
202.51	82.00
202.52	83.67
202.53	85.34
202.54	87.03
202.55	88.74
202.56	90.45
202.57	92.18
202.58	93.93
202.59	95.68
202.60	97.45
202.61	99.23
202.62	101.02
202.63	102.83
202.64	104.65
202.65	106.48
202.66	108.32
202.67	110.18
202.68	112.05
202.69	113.93
202.70	115.82
202.71	117.76
202.72	119.72
202.73	121.69
202.74	123.67
202.75	125.66
202.76	127.67
202.77	129.69
202.78	131.72
202.79	133.77
202.80	135.83
202.81	137.90
202.82	139.99
202.83	142.09
202.84	144.20
202.85	146.32
202.86	148.46
202.87	150.61
202.88	152.77
202.89	154.94
202.90	157.13
202.91	159.27
202.92	161.43
202.93	163.60
202.94	165.77
202.95	167.96
202.96	170.16
202.97	172.37
202.98	174.59
202.99	176.82
203.00	**179.06**

Stage-Area-Storage for Pond B-58: Basin #58

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.30	0	0	198.82	4,628	1,203
198.31	89	0	198.83	4,717	1,250
198.32	178	2	198.84	4,806	1,298
198.33	267	4	198.85	4,895	1,346
198.34	356	7	198.86	4,984	1,396
198.35	445	11	198.87	5,073	1,446
198.36	534	16	198.88	5,162	1,497
198.37	623	22	198.89	5,251	1,549
198.38	712	28	198.90	5,340	1,602
198.39	801	36	198.91	5,429	1,656
198.40	890	44	198.92	5,518	1,711
198.41	979	54	198.93	5,607	1,766
198.42	1,068	64	198.94	5,696	1,823
198.43	1,157	75	198.95	5,785	1,880
198.44	1,246	87	198.96	5,874	1,938
198.45	1,335	100	198.97	5,963	1,998
198.46	1,424	114	198.98	6,052	2,058
198.47	1,513	129	198.99	6,141	2,119
198.48	1,602	144	199.00	6,230	2,180
198.49	1,691	161	199.01	6,237	2,243
198.50	1,780	178	199.02	6,244	2,305
198.51	1,869	196	199.03	6,251	2,368
198.52	1,958	215	199.04	6,258	2,430
198.53	2,047	235	199.05	6,265	2,493
198.54	2,136	256	199.06	6,272	2,556
198.55	2,225	278	199.07	6,279	2,618
198.56	2,314	301	199.08	6,286	2,681
198.57	2,403	324	199.09	6,293	2,744
198.58	2,492	349	199.10	6,300	2,807
198.59	2,581	374	199.11	6,307	2,870
198.60	2,670	401	199.12	6,314	2,933
198.61	2,759	428	199.13	6,321	2,996
198.62	2,848	456	199.14	6,328	3,060
198.63	2,937	485	199.15	6,335	3,123
198.64	3,026	514	199.16	6,342	3,186
198.65	3,115	545	199.17	6,349	3,250
198.66	3,204	577	199.18	6,356	3,313
198.67	3,293	609	199.19	6,363	3,377
198.68	3,382	643	199.20	6,370	3,441
198.69	3,471	677	199.21	6,377	3,504
198.70	3,560	712	199.22	6,384	3,568
198.71	3,649	748	199.23	6,391	3,632
198.72	3,738	785	199.24	6,398	3,696
198.73	3,827	823	199.25	6,406	3,760
198.74	3,916	862	199.26	6,413	3,824
198.75	4,005	901	199.27	6,420	3,888
198.76	4,094	942	199.28	6,427	3,952
198.77	4,183	983	199.29	6,434	4,017
198.78	4,272	1,025	199.30	6,441	4,081
198.79	4,361	1,068	199.31	6,448	4,146
198.80	4,450	1,113	199.32	6,455	4,210
198.81	4,539	1,157	199.33	6,462	4,275

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.34	6,469	4,339	199.86	6,834	7,798
199.35	6,476	4,404	199.87	6,841	7,866
199.36	6,483	4,469	199.88	6,848	7,935
199.37	6,490	4,534	199.89	6,855	8,003
199.38	6,497	4,599	199.90	6,862	8,072
199.39	6,504	4,664	199.91	6,869	8,140
199.40	6,511	4,729	199.92	6,876	8,209
199.41	6,518	4,794	199.93	6,883	8,278
199.42	6,525	4,859	199.94	6,890	8,347
199.43	6,532	4,924	199.95	6,897	8,416
199.44	6,539	4,990	199.96	6,904	8,485
199.45	6,546	5,055	199.97	6,911	8,554
199.46	6,553	5,121	199.98	6,918	8,623
199.47	6,560	5,186	199.99	6,925	8,692
199.48	6,567	5,252	200.00	6,932	8,761
199.49	6,574	5,317	200.01	6,939	8,831
199.50	6,581	5,383	200.02	6,947	8,900
199.51	6,588	5,449	200.03	6,954	8,970
199.52	6,595	5,515	200.04	6,962	9,039
199.53	6,602	5,581	200.05	6,969	9,109
199.54	6,609	5,647	200.06	6,976	9,179
199.55	6,616	5,713	200.07	6,984	9,249
199.56	6,623	5,779	200.08	6,991	9,318
199.57	6,630	5,846	200.09	6,998	9,388
199.58	6,637	5,912	200.10	7,006	9,458
199.59	6,644	5,978	200.11	7,013	9,528
199.60	6,651	6,045	200.12	7,021	9,599
199.61	6,658	6,111	200.13	7,028	9,669
199.62	6,665	6,178	200.14	7,035	9,739
199.63	6,672	6,245	200.15	7,043	9,810
199.64	6,679	6,311	200.16	7,050	9,880
199.65	6,686	6,378	200.17	7,057	9,951
199.66	6,693	6,445	200.18	7,065	10,021
199.67	6,700	6,512	200.19	7,072	10,092
199.68	6,707	6,579	200.20	7,080	10,163
199.69	6,714	6,646	200.21	7,087	10,233
199.70	6,721	6,713	200.22	7,094	10,304
199.71	6,728	6,781	200.23	7,102	10,375
199.72	6,735	6,848	200.24	7,109	10,446
199.73	6,742	6,915	200.25	7,117	10,518
199.74	6,749	6,983	200.26	7,124	10,589
199.75	6,757	7,050	200.27	7,131	10,660
199.76	6,764	7,118	200.28	7,139	10,731
199.77	6,771	7,186	200.29	7,146	10,803
199.78	6,778	7,253	200.30	7,153	10,874
199.79	6,785	7,321	200.31	7,161	10,946
199.80	6,792	7,389	200.32	7,168	11,018
199.81	6,799	7,457	200.33	7,176	11,089
199.82	6,806	7,525	200.34	7,183	11,161
199.83	6,813	7,593	200.35	7,190	11,233
199.84	6,820	7,661	200.36	7,198	11,305
199.85	6,827	7,730	200.37	7,205	11,377

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.38	7,212	11,449
200.39	7,220	11,521
200.40	7,227	11,593
200.41	7,235	11,666
200.42	7,242	11,738
200.43	7,249	11,810
200.44	7,257	11,883
200.45	7,264	11,956
200.46	7,271	12,028
200.47	7,279	12,101
200.48	7,286	12,174
200.49	7,294	12,247
200.50	7,301	12,320
200.51	7,308	12,393
200.52	7,316	12,466
200.53	7,323	12,539
200.54	7,331	12,612
200.55	7,338	12,686
200.56	7,345	12,759
200.57	7,353	12,833
200.58	7,360	12,906
200.59	7,367	12,980
200.60	7,375	13,054
200.61	7,382	13,127
200.62	7,390	13,201
200.63	7,397	13,275
200.64	7,404	13,349
200.65	7,412	13,423
200.66	7,419	13,497
200.67	7,426	13,572
200.68	7,434	13,646
200.69	7,441	13,720
200.70	7,449	13,795
200.71	7,456	13,869
200.72	7,463	13,944
200.73	7,471	14,019
200.74	7,478	14,093
200.75	7,486	14,168
200.76	7,493	14,243
200.77	7,500	14,318
200.78	7,508	14,393
200.79	7,515	14,468
200.80	7,522	14,543
200.81	7,530	14,619
200.82	7,537	14,694
200.83	7,545	14,769
200.84	7,552	14,845
200.85	7,559	14,920
200.86	7,567	14,996
200.87	7,574	15,072
200.88	7,581	15,147
200.89	7,589	15,223
200.90	7,596	15,299
200.91	7,604	15,375
200.92	7,611	15,451
200.93	7,618	15,527
200.94	7,626	15,604
200.95	7,633	15,680
200.96	7,640	15,756
200.97	7,648	15,833
200.98	7,655	15,909
200.99	7,663	15,986
201.00	7,670	16,062
201.01	7,678	16,139
201.02	7,685	16,216
201.03	7,693	16,293
201.04	7,700	16,370
201.05	7,708	16,447
201.06	7,715	16,524
201.07	7,723	16,601
201.08	7,730	16,679
201.09	7,738	16,756
201.10	7,746	16,833
201.11	7,753	16,911
201.12	7,761	16,988
201.13	7,768	17,066
201.14	7,776	17,144
201.15	7,783	17,222
201.16	7,791	17,299
201.17	7,799	17,377
201.18	7,806	17,455
201.19	7,814	17,533
201.20	7,821	17,612
201.21	7,829	17,690
201.22	7,836	17,768
201.23	7,844	17,847
201.24	7,851	17,925
201.25	7,859	18,004
201.26	7,867	18,082
201.27	7,874	18,161
201.28	7,882	18,240
201.29	7,889	18,319
201.30	7,897	18,398
201.31	7,904	18,477
201.32	7,912	18,556
201.33	7,919	18,635
201.34	7,927	18,714
201.35	7,935	18,793
201.36	7,942	18,873
201.37	7,950	18,952
201.38	7,957	19,032
201.39	7,965	19,111
201.40	7,972	19,191
201.41	7,980	19,271

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.42	7,988	19,351	201.94	8,381	23,606
201.43	7,995	19,430	201.95	8,388	23,690
201.44	8,003	19,510	201.96	8,396	23,774
201.45	8,010	19,591	201.97	8,403	23,858
201.46	8,018	19,671	201.98	8,411	23,942
201.47	8,025	19,751	201.99	8,418	24,026
201.48	8,033	19,831	202.00	8,426	24,110
201.49	8,040	19,912	202.01	8,434	24,195
201.50	8,048	19,992	202.02	8,442	24,279
201.51	8,056	20,073	202.03	8,449	24,364
201.52	8,063	20,153	202.04	8,457	24,448
201.53	8,071	20,234	202.05	8,465	24,533
201.54	8,078	20,315	202.06	8,473	24,617
201.55	8,086	20,395	202.07	8,480	24,702
201.56	8,093	20,476	202.08	8,488	24,787
201.57	8,101	20,557	202.09	8,496	24,872
201.58	8,108	20,638	202.10	8,504	24,957
201.59	8,116	20,719	202.11	8,511	25,042
201.60	8,124	20,801	202.12	8,519	25,127
201.61	8,131	20,882	202.13	8,527	25,212
201.62	8,139	20,963	202.14	8,535	25,298
201.63	8,146	21,045	202.15	8,542	25,383
201.64	8,154	21,126	202.16	8,550	25,469
201.65	8,161	21,208	202.17	8,558	25,554
201.66	8,169	21,289	202.18	8,566	25,640
201.67	8,177	21,371	202.19	8,573	25,725
201.68	8,184	21,453	202.20	8,581	25,811
201.69	8,192	21,535	202.21	8,589	25,897
201.70	8,199	21,617	202.22	8,597	25,983
201.71	8,207	21,699	202.23	8,604	26,069
201.72	8,214	21,781	202.24	8,612	26,155
201.73	8,222	21,863	202.25	8,620	26,241
201.74	8,229	21,945	202.26	8,628	26,327
201.75	8,237	22,028	202.27	8,635	26,414
201.76	8,245	22,110	202.28	8,643	26,500
201.77	8,252	22,193	202.29	8,651	26,587
201.78	8,260	22,275	202.30	8,659	26,673
201.79	8,267	22,358	202.31	8,666	26,760
201.80	8,275	22,440	202.32	8,674	26,847
201.81	8,282	22,523	202.33	8,682	26,933
201.82	8,290	22,606	202.34	8,690	27,020
201.83	8,297	22,689	202.35	8,697	27,107
201.84	8,305	22,772	202.36	8,705	27,194
201.85	8,313	22,855	202.37	8,713	27,281
201.86	8,320	22,938	202.38	8,721	27,368
201.87	8,328	23,022	202.39	8,728	27,456
201.88	8,335	23,105	202.40	8,736	27,543
201.89	8,343	23,188	202.41	8,744	27,630
201.90	8,350	23,272	202.42	8,752	27,718
201.91	8,358	23,355	202.43	8,759	27,805
201.92	8,366	23,439	202.44	8,767	27,893
201.93	8,373	23,523	202.45	8,775	27,981

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

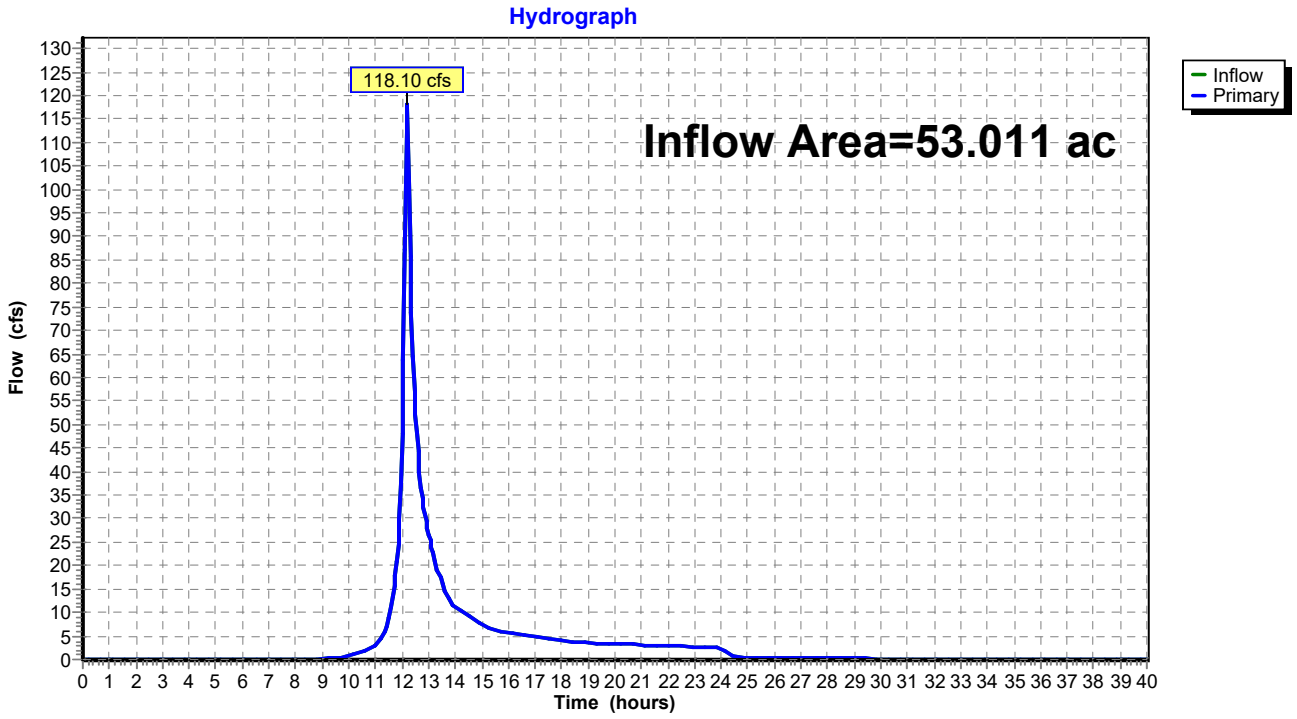
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.46	8,783	28,068
202.47	8,790	28,156
202.48	8,798	28,244
202.49	8,806	28,332
202.50	8,814	28,420
202.51	8,821	28,509
202.52	8,829	28,597
202.53	8,837	28,685
202.54	8,845	28,774
202.55	8,852	28,862
202.56	8,860	28,951
202.57	8,868	29,039
202.58	8,876	29,128
202.59	8,883	29,217
202.60	8,891	29,306
202.61	8,899	29,395
202.62	8,907	29,484
202.63	8,914	29,573
202.64	8,922	29,662
202.65	8,930	29,751
202.66	8,938	29,840
202.67	8,945	29,930
202.68	8,953	30,019
202.69	8,961	30,109
202.70	8,969	30,199
202.71	8,976	30,288
202.72	8,984	30,378
202.73	8,992	30,468
202.74	9,000	30,558
202.75	9,007	30,648
202.76	9,015	30,738
202.77	9,023	30,828
202.78	9,031	30,919
202.79	9,038	31,009
202.80	9,046	31,099
202.81	9,054	31,190
202.82	9,062	31,280
202.83	9,069	31,371
202.84	9,077	31,462
202.85	9,085	31,553
202.86	9,093	31,643
202.87	9,100	31,734
202.88	9,108	31,825
202.89	9,116	31,917
202.90	9,124	32,008
202.91	9,131	32,099
202.92	9,139	32,190
202.93	9,147	32,282
202.94	9,154	32,373
202.95	9,162	32,465
202.96	9,170	32,557
202.97	9,178	32,648
202.98	9,186	32,740
202.99	9,193	32,832
203.00	**9,201**	**32,924**

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 53.011 ac, 11.21% Impervious, Inflow Depth > 2.58" for Current 10 yr event
Inflow = 118.10 cfs @ 12.19 hrs, Volume= 11.405 af
Primary = 118.10 cfs @ 12.19 hrs, Volume= 11.405 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6



Summary for Subcatchment 51I: PDA-51 (impervious)

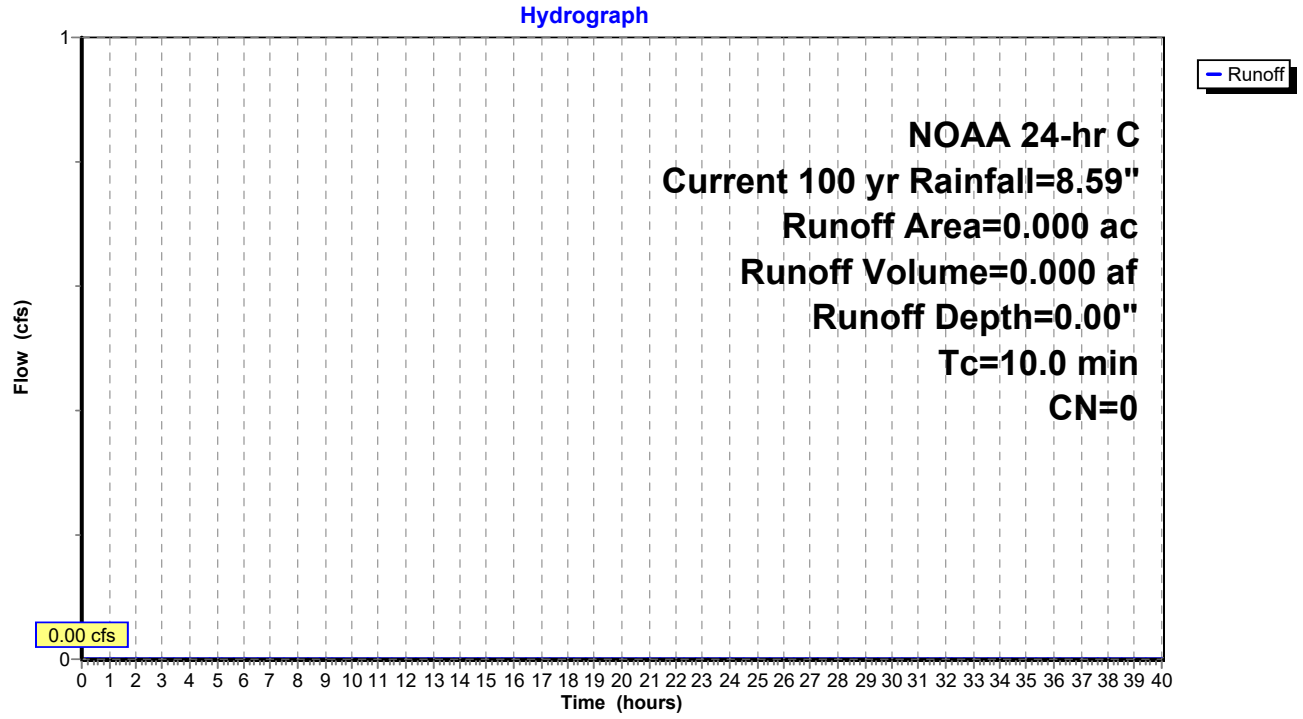
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.000	98	Roof, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 51I: PDA-51 (impervious)



Summary for Subcatchment 51P: PDA-51 (pervious)

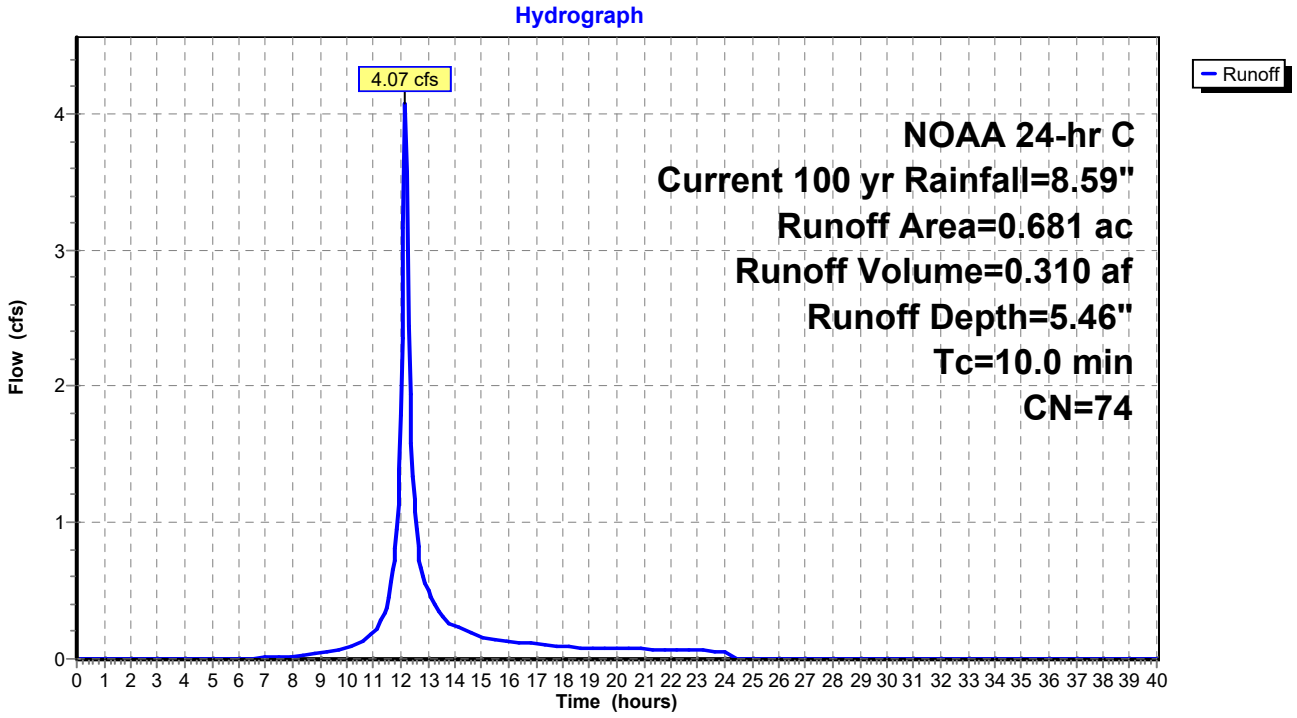
Runoff = 4.07 cfs @ 12.17 hrs, Volume= 0.310 af, Depth= 5.46"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.681	74	>75% Grass cover, Good, HSG C
0.681		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 51P: PDA-51 (pervious)



Summary for Subcatchment 52l: PDA-52 (impervious)

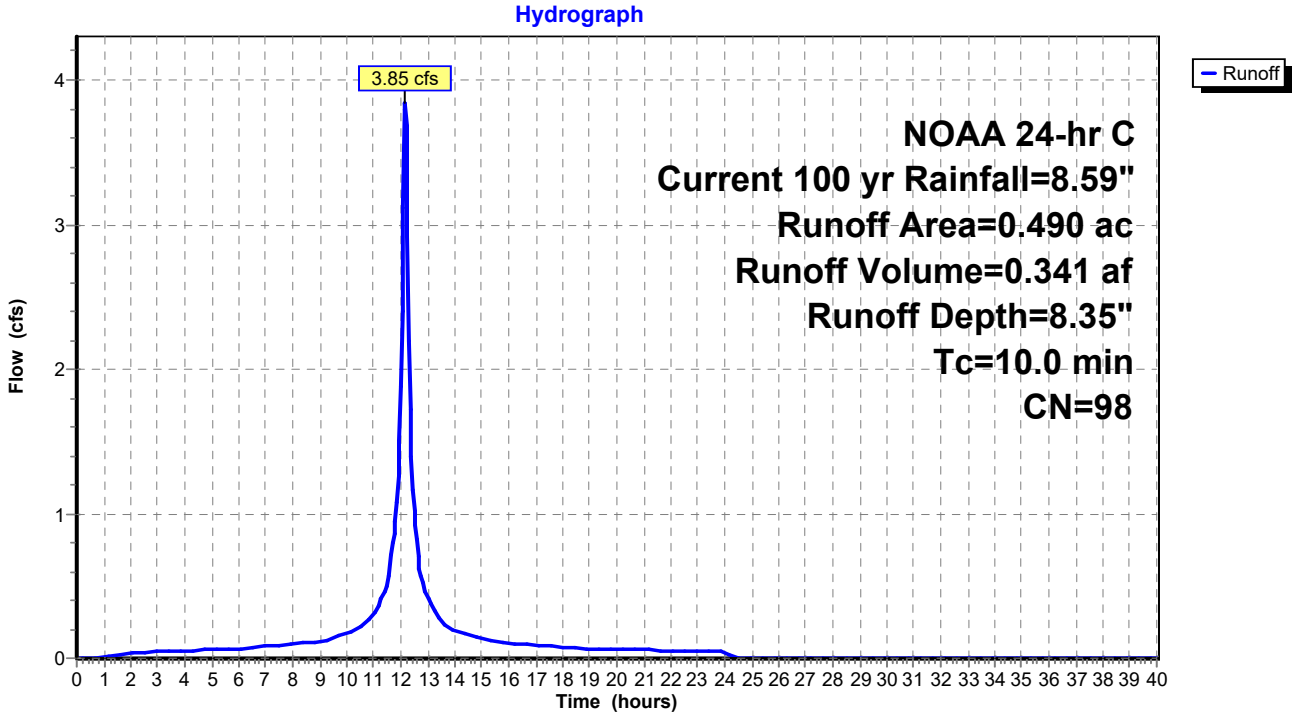
Runoff = 3.85 cfs @ 12.17 hrs, Volume= 0.341 af, Depth= 8.35"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.118	98	Pavement, HSG C
*	0.339	98	Roof, HSG C
*	0.033	98	Concrete, HSG C
	0.490	98	Weighted Average
	0.490		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 52l: PDA-52 (impervious)



Summary for Subcatchment 52P: PDA-52 (pervious)

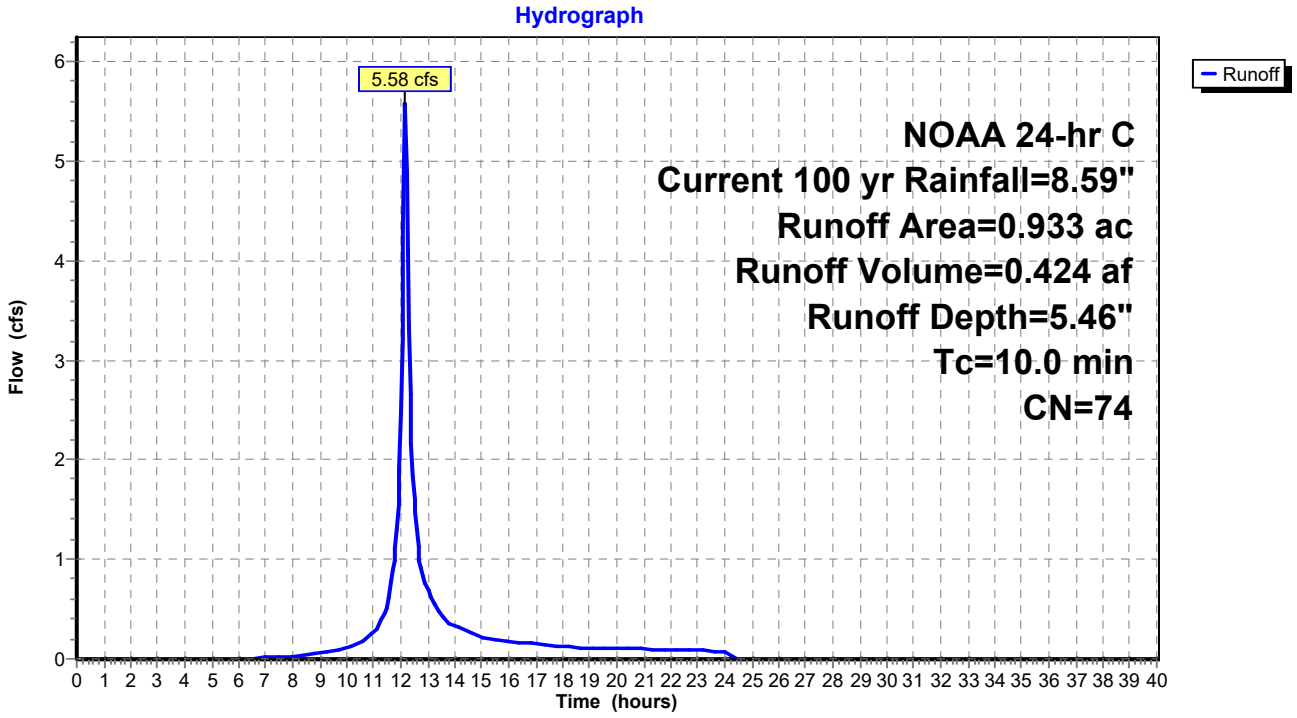
Runoff = 5.58 cfs @ 12.17 hrs, Volume= 0.424 af, Depth= 5.46"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.933	74	>75% Grass cover, Good, HSG C
0.933		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 52P: PDA-52 (pervious)



Summary for Subcatchment 53I: PDA-53 (impervious)

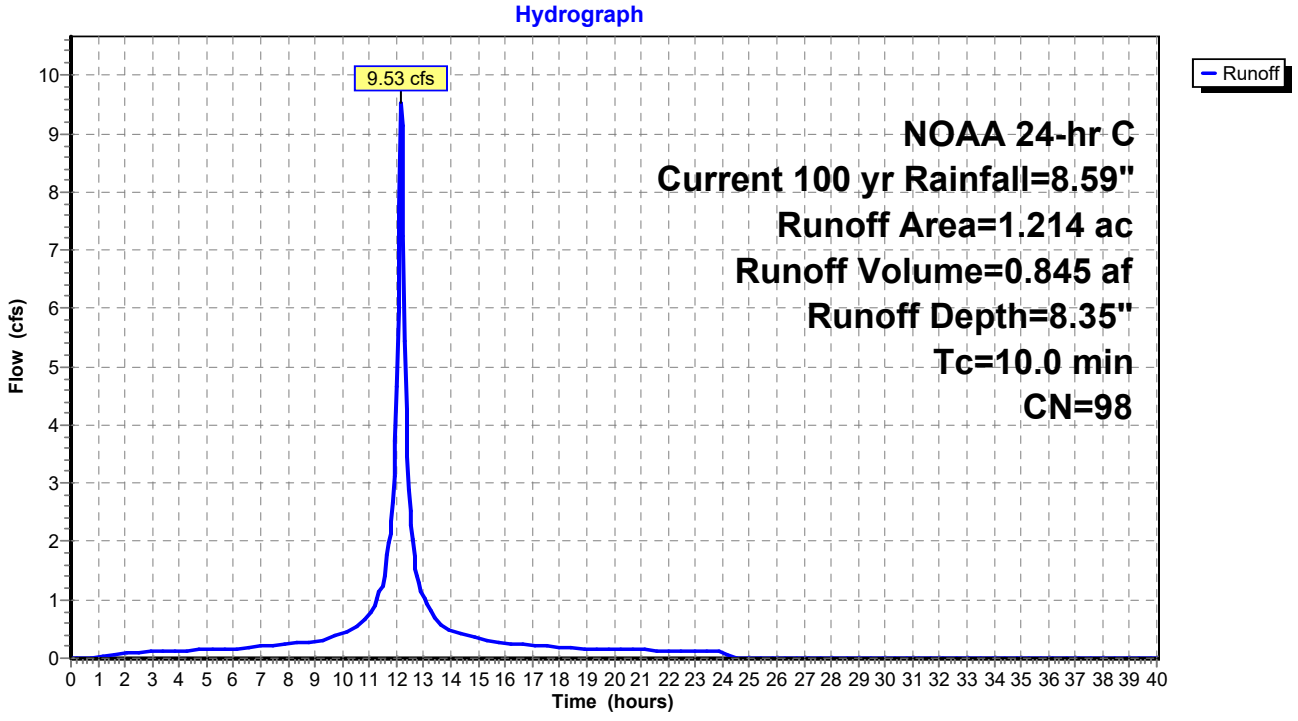
Runoff = 9.53 cfs @ 12.17 hrs, Volume= 0.845 af, Depth= 8.35"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.628	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	1.214	98	Weighted Average
	1.214		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 53I: PDA-53 (impervious)



Summary for Subcatchment 53P: PDA-53 (pervious)

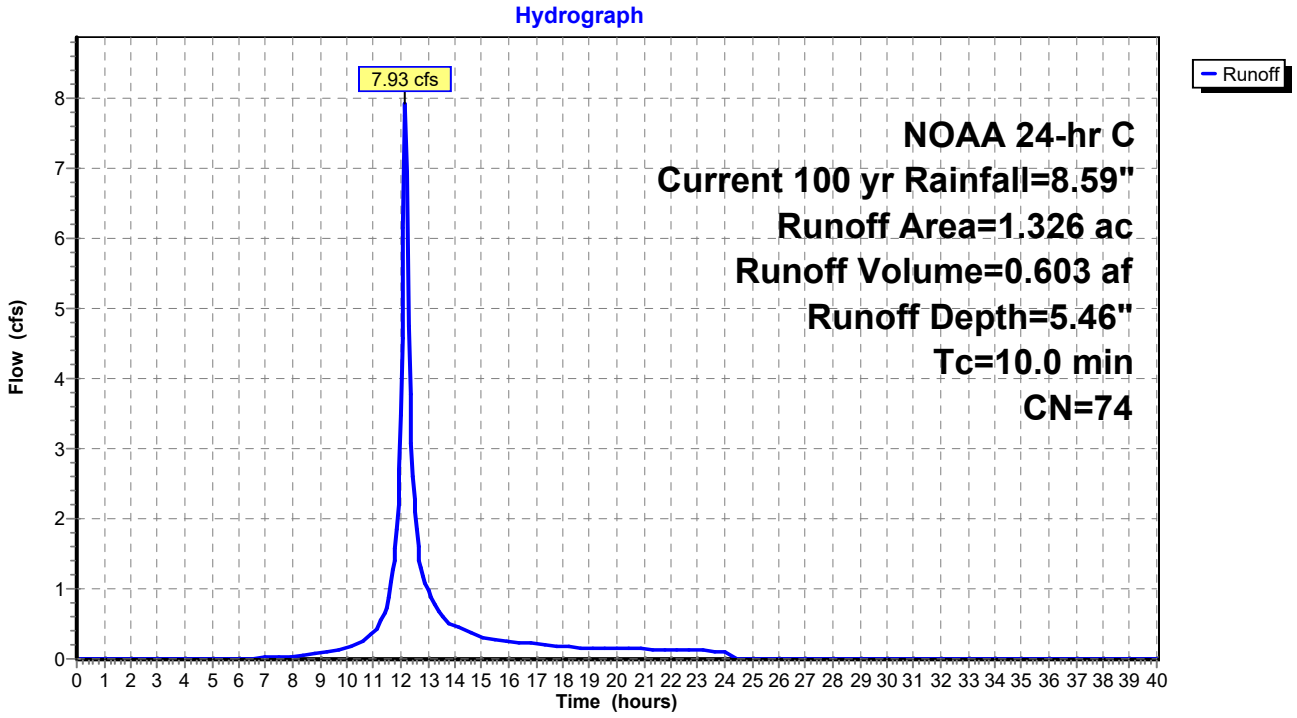
Runoff = 7.93 cfs @ 12.17 hrs, Volume= 0.603 af, Depth= 5.46"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.326	74	>75% Grass cover, Good, HSG C
1.326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 53P: PDA-53 (pervious)



Summary for Subcatchment 54I: PDA-54 (impervious)

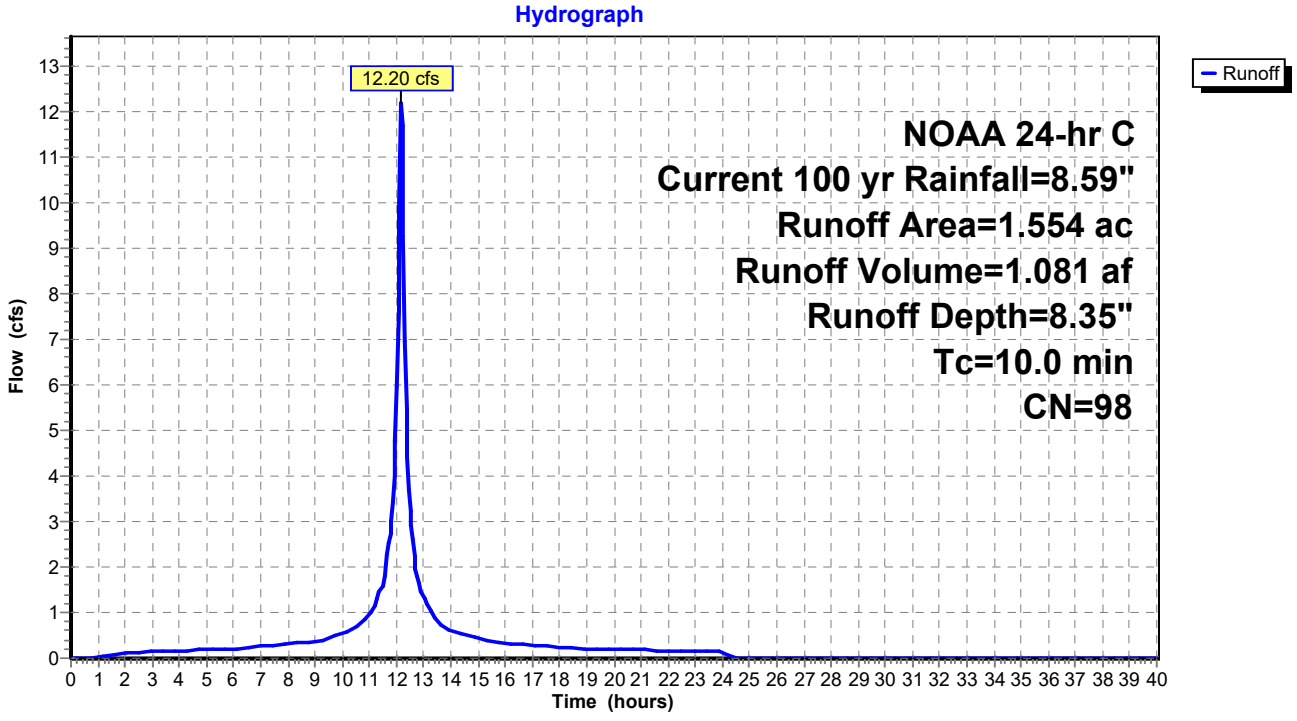
Runoff = 12.20 cfs @ 12.17 hrs, Volume= 1.081 af, Depth= 8.35"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.983	98	Pavement, HSG C
*	0.361	98	Roof, HSG C
*	0.210	98	Concrete, HSG C
	1.554	98	Weighted Average
	1.554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 54I: PDA-54 (impervious)



Summary for Subcatchment 54P: PDA-54 (pervious)

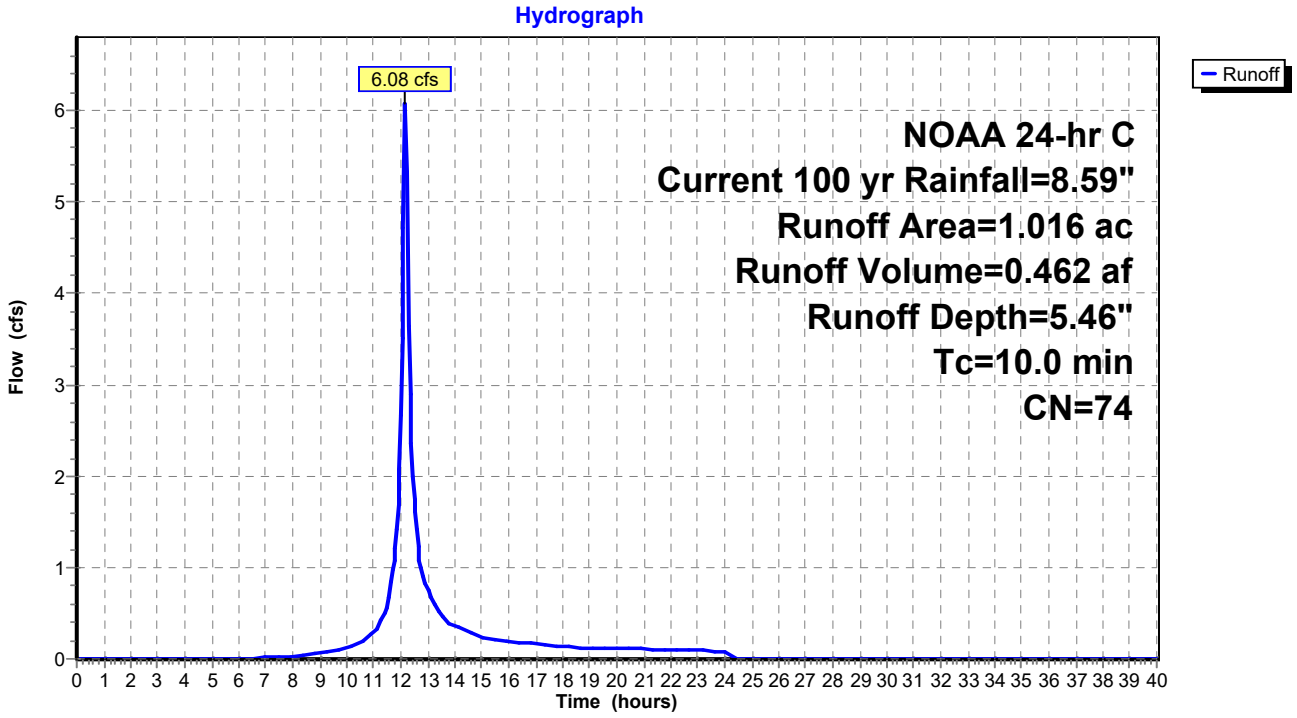
Runoff = 6.08 cfs @ 12.17 hrs, Volume= 0.462 af, Depth= 5.46"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.016	74	>75% Grass cover, Good, HSG C
1.016		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 54P: PDA-54 (pervious)



Summary for Subcatchment 55l: PDA-55 (impervious)

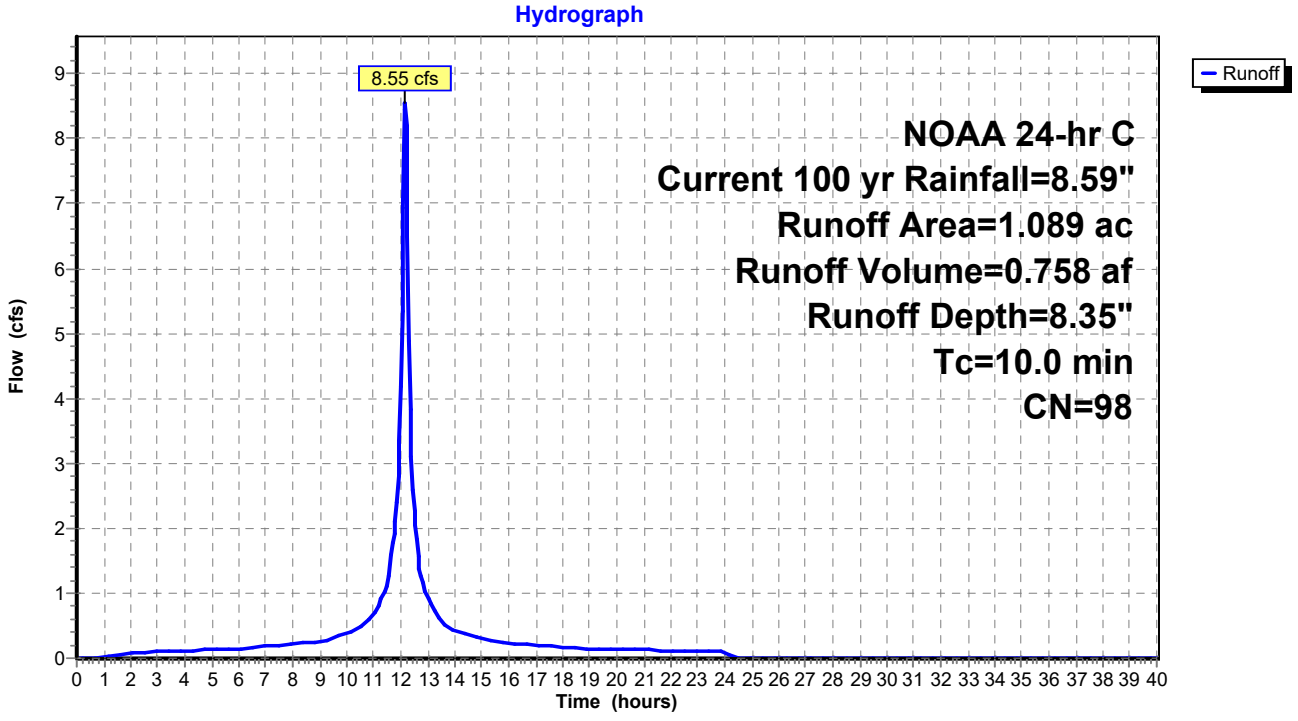
Runoff = 8.55 cfs @ 12.17 hrs, Volume= 0.758 af, Depth= 8.35"
Routed to Pond B-55 : Basin #55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.467	98	Pavement, HSG C
*	0.574	98	Roof, HSG C
*	0.048	98	Concrete, HSG C
	1.089	98	Weighted Average
	1.089		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 55l: PDA-55 (impervious)



Summary for Subcatchment 55P: PDA-55 (pervious)

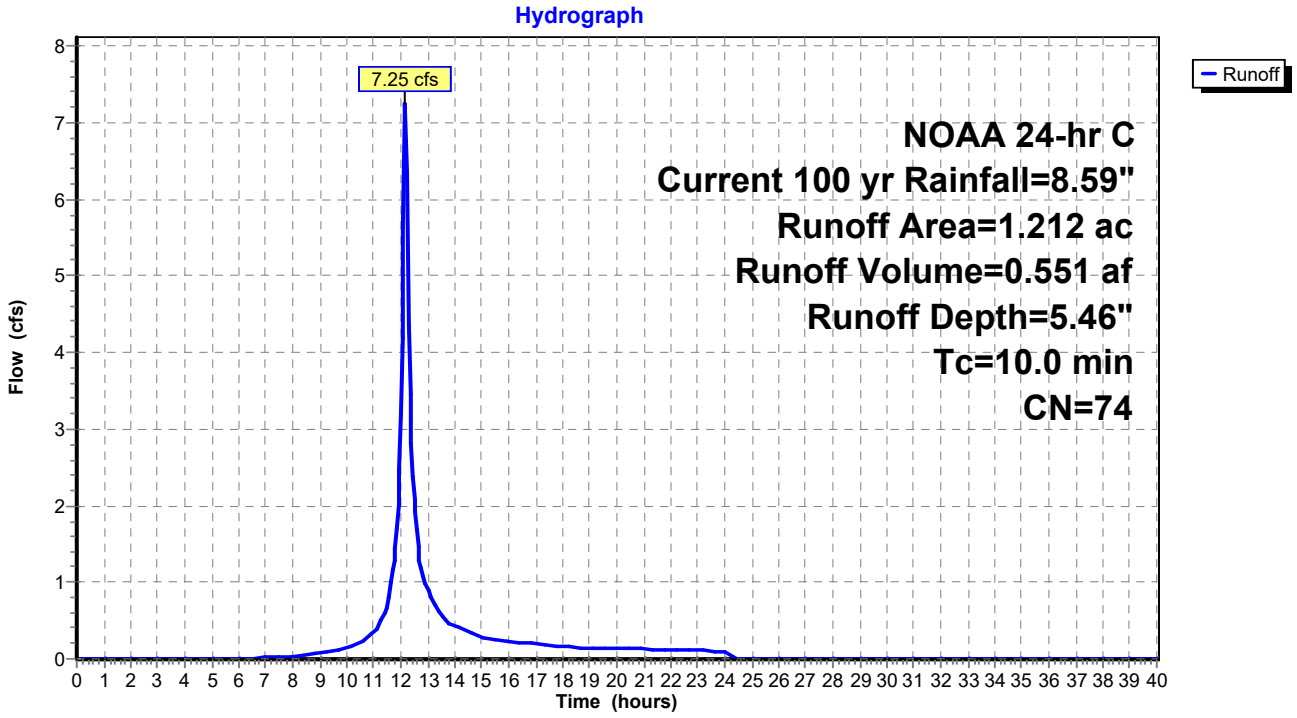
Runoff = 7.25 cfs @ 12.17 hrs, Volume= 0.551 af, Depth= 5.46"
Routed to Pond B-55 : Basin #55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.212	74	>75% Grass cover, Good, HSG C
1.212		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 55P: PDA-55 (pervious)



Summary for Subcatchment 56I: PDA-56 (impervious)

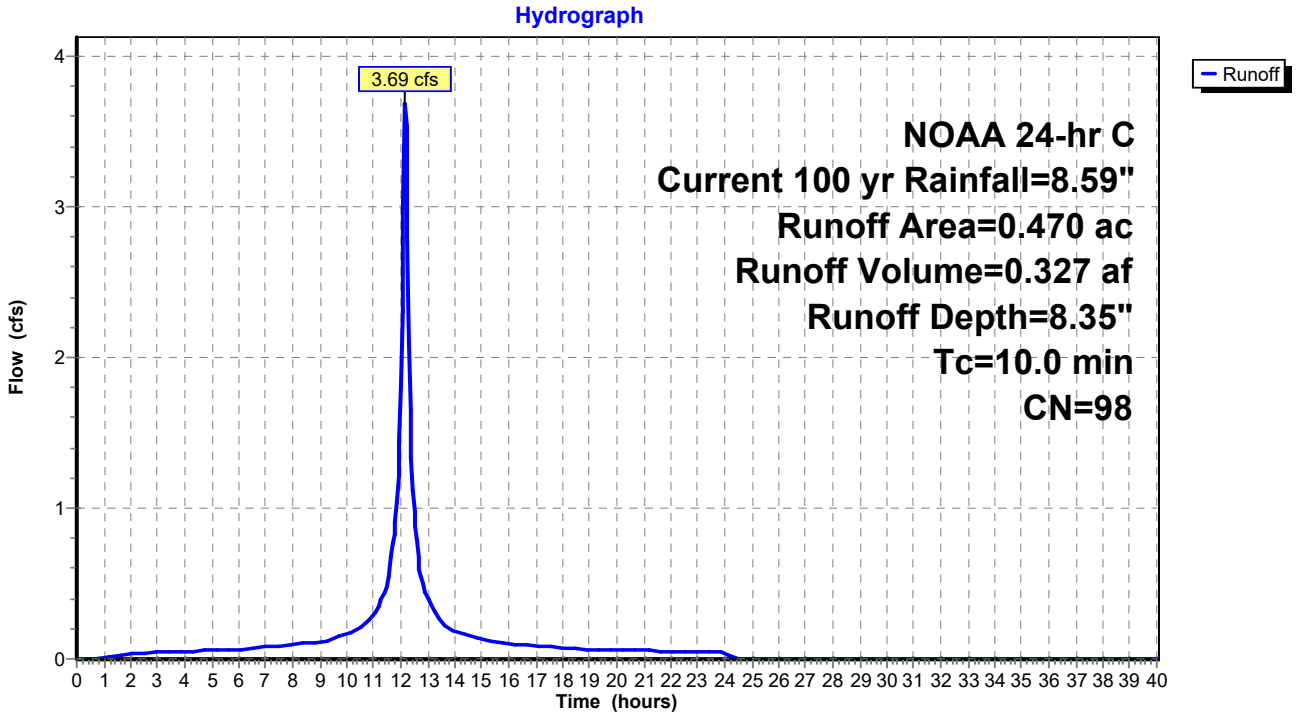
Runoff = 3.69 cfs @ 12.17 hrs, Volume= 0.327 af, Depth= 8.35"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.470	98	Roof, HSG C
	0.470		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 56I: PDA-56 (impervious)



Summary for Subcatchment 56P: PDA-56 (pervious)

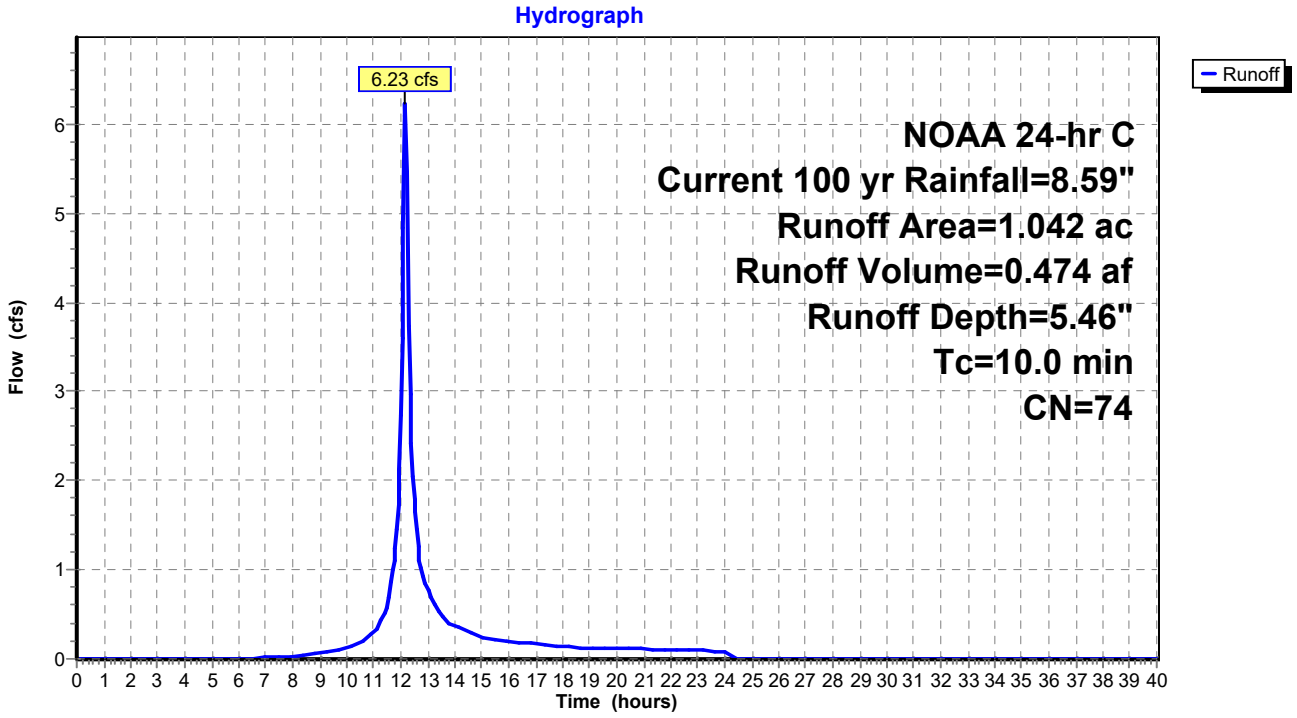
Runoff = 6.23 cfs @ 12.17 hrs, Volume= 0.474 af, Depth= 5.46"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.042	74	>75% Grass cover, Good, HSG C
1.042		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 56P: PDA-56 (pervious)



Summary for Subcatchment 57I: PDA-57 (impervious)

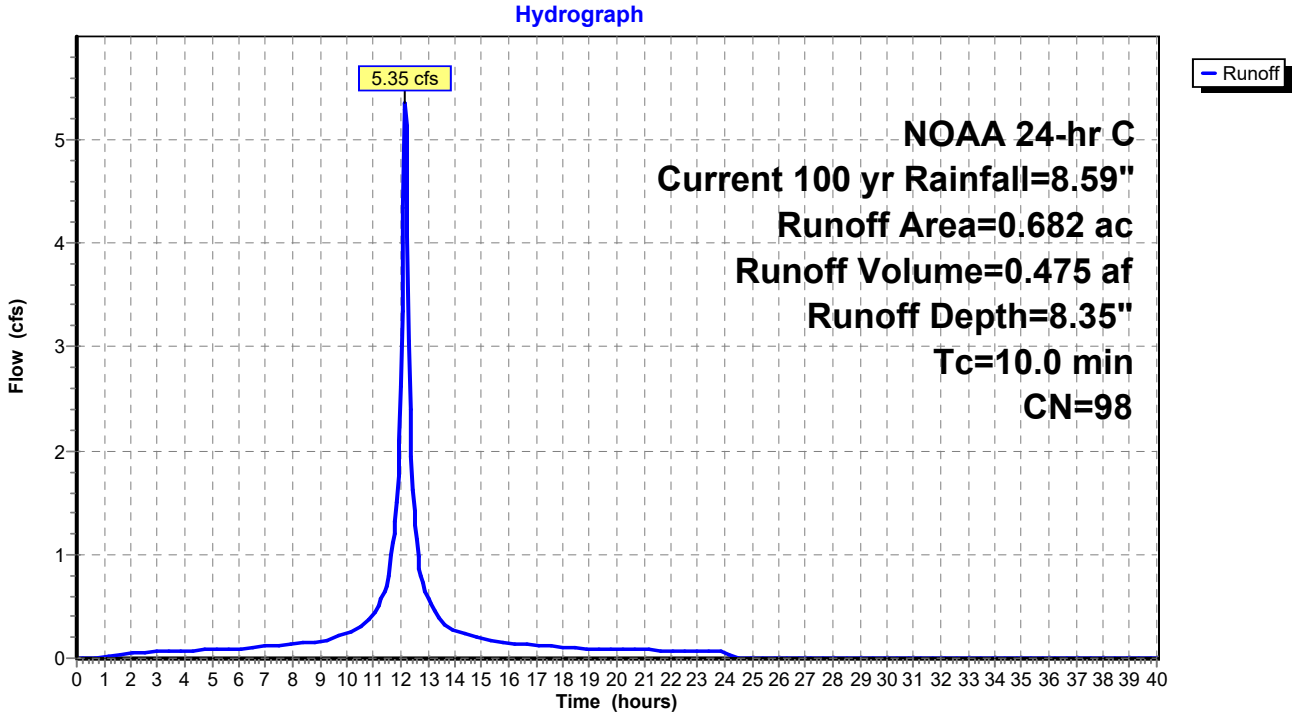
Runoff = 5.35 cfs @ 12.17 hrs, Volume= 0.475 af, Depth= 8.35"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.268	98	Pavement, HSG C
*	0.378	98	Roof, HSG C
*	0.036	98	Concrete, HSG C
	0.682	98	Weighted Average
	0.682		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 57I: PDA-57 (impervious)



Summary for Subcatchment 57P: PDA-57 (pervious)

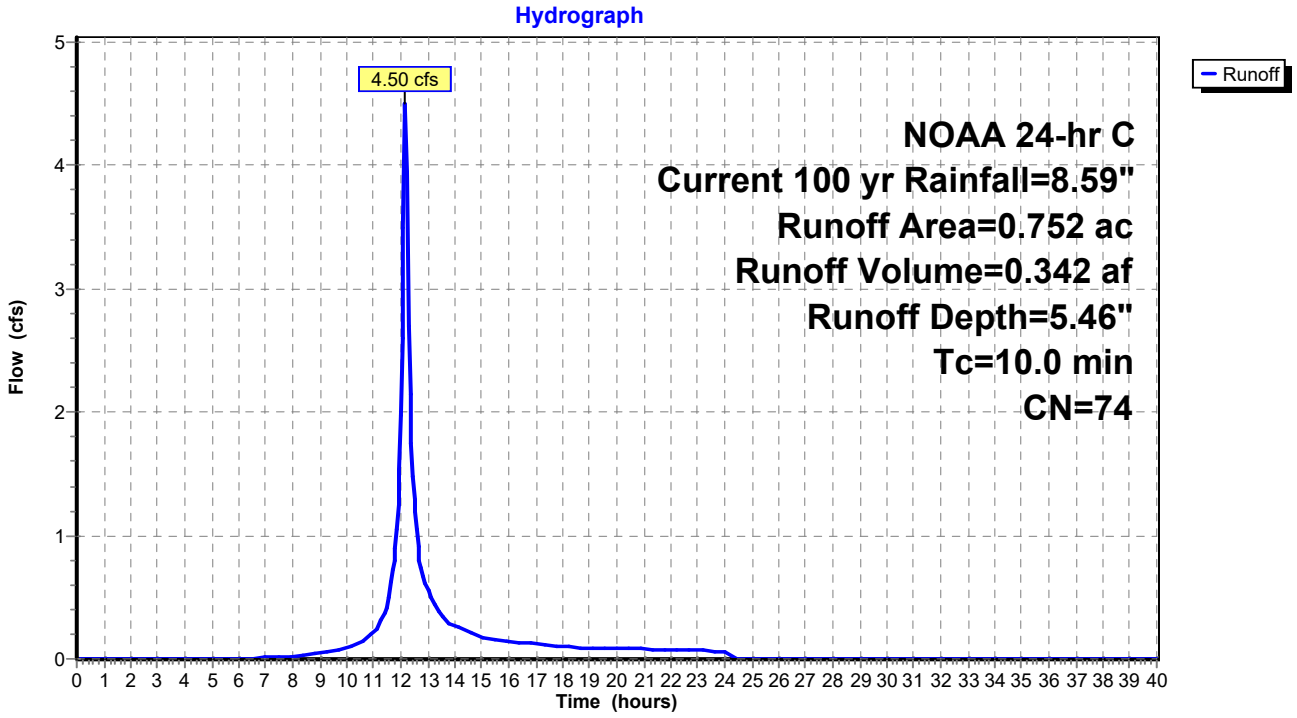
Runoff = 4.50 cfs @ 12.17 hrs, Volume= 0.342 af, Depth= 5.46"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
0.752	74	>75% Grass cover, Good, HSG C
0.752		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 57P: PDA-57 (pervious)



Summary for Subcatchment 58l: PDA-58 (impervious)

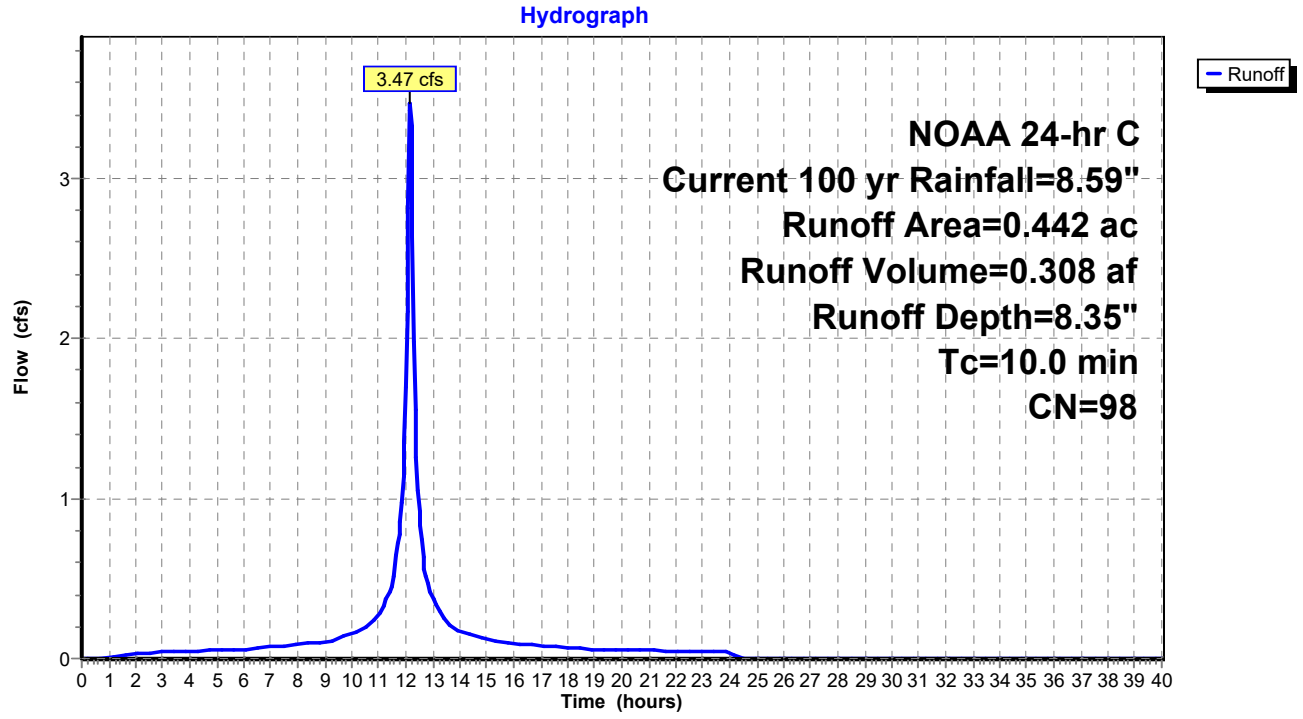
Runoff = 3.47 cfs @ 12.17 hrs, Volume= 0.308 af, Depth= 8.35"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

	Area (ac)	CN	Description
*	0.442	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.442	98	Weighted Average
	0.442		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 58l: PDA-58 (impervious)



Summary for Subcatchment 58P: PDA-58 (pervious)

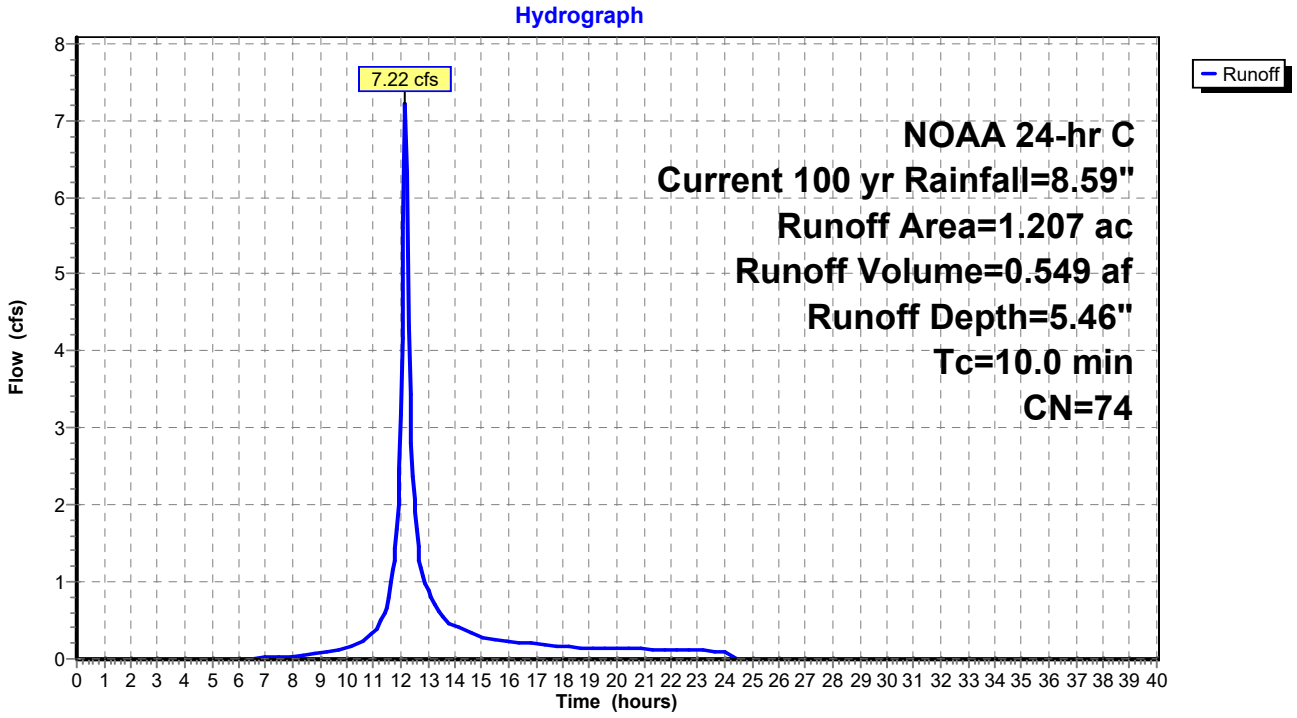
Runoff = 7.22 cfs @ 12.17 hrs, Volume= 0.549 af, Depth= 5.46"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
1.207	74	>75% Grass cover, Good, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 58P: PDA-58 (pervious)



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

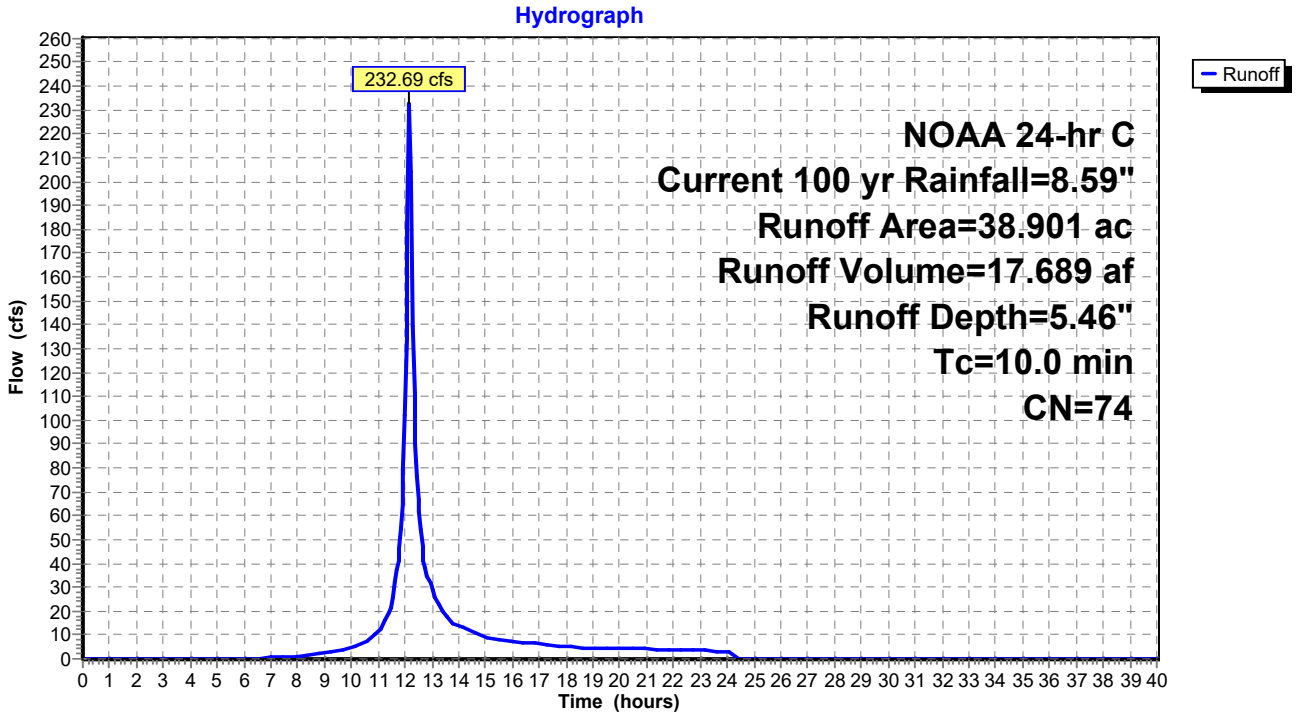
Runoff = 232.69 cfs @ 12.17 hrs, Volume= 17.689 af, Depth= 5.46"
Routed to Link PDA-6 : Proposed Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Current 100 yr Rainfall=8.59"

Area (ac)	CN	Description
38.901	74	>75% Grass cover, Good, HSG C
38.901		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-6: PDA-6 (undetained)



Summary for Pond B-51: Basin #51

Inflow Area = 5.917 ac, 34.63% Impervious, Inflow Depth = 6.06" for Current 100 yr event
Inflow = 29.46 cfs @ 12.22 hrs, Volume= 2.986 af
Outflow = 13.94 cfs @ 12.56 hrs, Volume= 2.980 af, Atten= 53%, Lag= 20.5 min
Primary = 13.94 cfs @ 12.56 hrs, Volume= 2.980 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 187.55' @ 12.56 hrs Surf.Area= 11,029 sf Storage= 28,617 cf

Plug-Flow detention time= 32.9 min calculated for 2.980 af (100% of inflow)
Center-of-Mass det. time= 31.1 min (863.1 - 832.0)

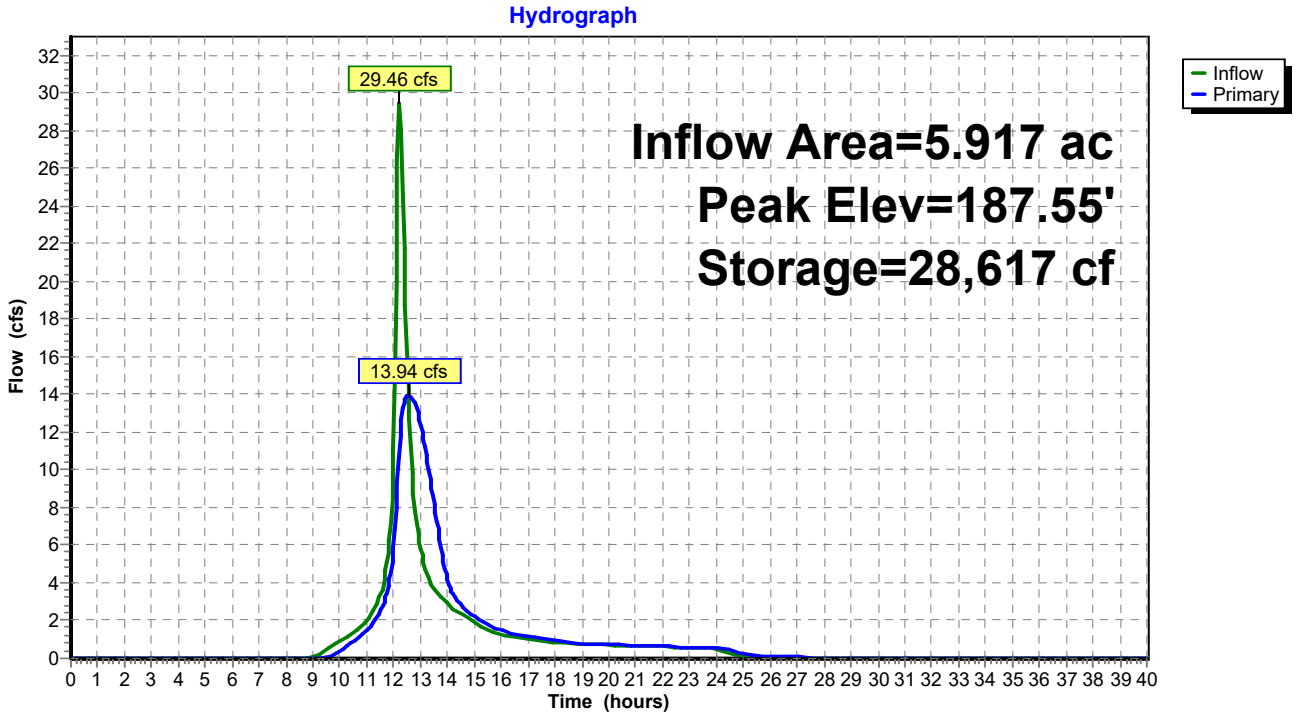
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	58,347 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	5,243	0	0
185.00	6,727	5,985	5,985
186.00	8,424	7,576	13,561
187.00	10,085	9,255	22,815
188.00	11,802	10,944	33,759
189.00	13,576	12,689	46,448
189.83	15,098	11,900	58,347

Device	Routing	Invert	Outlet Devices
#1	Primary	184.00'	**18.0" Round Culvert** L= 147.0' Ke= 0.500 Inlet / Outlet Invert= 184.00' / 182.00' S= 0.0136 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.05'	**48.0" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	189.80'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.94 cfs @ 12.56 hrs HW=187.55' (Free Discharge)
- **1=Culvert** (Barrel Controls 13.94 cfs @ 7.89 fps)
  - **2=Orifice/Grate** (Passes < 33.30 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 27.78 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-51: Basin #51



Stage-Discharge for Pond B-51: Basin #51

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	1.34	185.04	4.54	185.56	7.66
184.01	0.00	184.53	1.38	185.05	4.61	185.57	7.71
184.02	0.00	184.54	1.43	185.06	4.68	185.58	7.75
184.03	0.00	184.55	1.48	185.07	4.75	185.59	7.80
184.04	0.00	184.56	1.53	185.08	4.82	185.60	7.84
184.05	0.00	184.57	1.58	185.09	4.89	185.61	7.89
184.06	0.01	184.58	1.64	185.10	4.96	185.62	7.94
184.07	0.03	184.59	1.69	185.11	5.03	185.63	7.98
184.08	0.04	184.60	1.74	185.12	5.10	185.64	8.03
184.09	0.04	184.61	1.79	185.13	5.17	185.65	8.07
184.10	0.05	184.62	1.85	185.14	5.24	185.66	8.12
184.11	0.07	184.63	1.90	185.15	5.31	185.67	8.16
184.12	0.08	184.64	1.96	185.16	5.38	185.68	8.21
184.13	0.09	184.65	2.01	185.17	5.45	185.69	8.25
184.14	0.11	184.66	2.07	185.18	5.52	185.70	8.29
184.15	0.12	184.67	2.13	185.19	5.58	185.71	8.34
184.16	0.14	184.68	2.19	185.20	5.65	185.72	8.38
184.17	0.16	184.69	2.24	185.21	5.72	185.73	8.42
184.18	0.17	184.70	2.30	185.22	5.79	185.74	8.47
184.19	0.19	184.71	2.36	185.23	5.86	185.75	8.51
184.20	0.21	184.72	2.42	185.24	5.92	185.76	8.55
184.21	0.23	184.73	2.48	185.25	5.99	185.77	8.59
184.22	0.26	184.74	2.54	185.26	6.06	185.78	8.64
184.23	0.28	184.75	2.61	185.27	6.12	185.79	8.68
184.24	0.30	184.76	2.67	185.28	6.19	185.80	8.72
184.25	0.33	184.77	2.73	185.29	6.25	185.81	8.76
184.26	0.36	184.78	2.79	185.30	6.32	185.82	8.80
184.27	0.38	184.79	2.86	185.31	6.38	185.83	8.84
184.28	0.41	184.80	2.92	185.32	6.44	185.84	8.88
184.29	0.44	184.81	2.98	185.33	6.50	185.85	8.92
184.30	0.47	184.82	3.05	185.34	6.57	185.86	8.96
184.31	0.50	184.83	3.11	185.35	6.63	185.87	9.00
184.32	0.53	184.84	3.18	185.36	6.69	185.88	9.04
184.33	0.56	184.85	3.24	185.37	6.75	185.89	9.08
184.34	0.60	184.86	3.31	185.38	6.80	185.90	9.12
184.35	0.63	184.87	3.38	185.39	6.86	185.91	9.16
184.36	0.67	184.88	3.44	185.40	6.92	185.92	9.20
184.37	0.70	184.89	3.51	185.41	6.97	185.93	9.24
184.38	0.74	184.90	3.58	185.42	7.02	185.94	9.28
184.39	0.78	184.91	3.64	185.43	7.07	185.95	9.32
184.40	0.81	184.92	3.71	185.44	7.12	185.96	9.36
184.41	0.85	184.93	3.78	185.45	7.17	185.97	9.40
184.42	0.89	184.94	3.85	185.46	7.22	185.98	9.44
184.43	0.93	184.95	3.92	185.47	7.26	185.99	9.47
184.44	0.98	184.96	3.98	185.48	7.30	186.00	9.51
184.45	1.02	184.97	4.05	185.49	7.34	186.01	9.55
184.46	1.06	184.98	4.12	185.50	7.37	186.02	9.59
184.47	1.11	184.99	4.19	185.51	7.42	186.03	9.63
184.48	1.15	185.00	4.26	185.52	7.47	186.04	9.66
184.49	1.20	185.01	4.33	185.53	7.51	186.05	9.70
184.50	1.24	185.02	4.40	185.54	7.56	186.06	9.74
184.51	1.29	185.03	4.47	185.55	7.61	186.07	9.78

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	9.81	186.60	11.57	187.12	13.10	187.64	14.10
186.09	9.85	186.61	11.60	187.13	13.13	187.65	14.12
186.10	9.89	186.62	11.64	187.14	13.15	187.66	14.13
186.11	9.92	186.63	11.67	187.15	13.18	187.67	14.15
186.12	9.96	186.64	11.70	187.16	13.21	187.68	14.17
186.13	10.00	186.65	11.73	187.17	13.24	187.69	14.18
186.14	10.03	186.66	11.76	187.18	13.26	187.70	14.20
186.15	10.07	186.67	11.79	187.19	13.29	187.71	14.22
186.16	10.10	186.68	11.82	187.20	13.32	187.72	14.23
186.17	10.14	186.69	11.85	187.21	13.35	187.73	14.25
186.18	10.18	186.70	11.88	187.22	13.36	187.74	14.27
186.19	10.21	186.71	11.91	187.23	13.38	187.75	14.29
186.20	10.25	186.72	11.94	187.24	13.40	187.76	14.30
186.21	10.28	186.73	11.97	187.25	13.42	187.77	14.32
186.22	10.32	186.74	12.00	187.26	13.44	187.78	14.34
186.23	10.35	186.75	12.03	187.27	13.45	187.79	14.35
186.24	10.39	186.76	12.06	187.28	13.47	187.80	14.37
186.25	10.42	186.77	12.09	187.29	13.49	187.81	14.39
186.26	10.46	186.78	12.12	187.30	13.51	187.82	14.40
186.27	10.49	186.79	12.15	187.31	13.53	187.83	14.42
186.28	10.52	186.80	12.18	187.32	13.54	187.84	14.44
186.29	10.56	186.81	12.21	187.33	13.56	187.85	14.45
186.30	10.59	186.82	12.24	187.34	13.58	187.86	14.47
186.31	10.63	186.83	12.27	187.35	13.60	187.87	14.49
186.32	10.66	186.84	12.30	187.36	13.61	187.88	14.50
186.33	10.70	186.85	12.33	187.37	13.63	187.89	14.52
186.34	10.73	186.86	12.36	187.38	13.65	187.90	14.54
186.35	10.76	186.87	12.39	187.39	13.67	187.91	14.55
186.36	10.80	186.88	12.42	187.40	13.68	187.92	14.57
186.37	10.83	186.89	12.45	187.41	13.70	187.93	14.58
186.38	10.86	186.90	12.48	187.42	13.72	187.94	14.60
186.39	10.90	186.91	12.51	187.43	13.74	187.95	14.62
186.40	10.93	186.92	12.53	187.44	13.75	187.96	14.63
186.41	10.96	186.93	12.56	187.45	13.77	187.97	14.65
186.42	11.00	186.94	12.59	187.46	13.79	187.98	14.67
186.43	11.03	186.95	12.62	187.47	13.81	187.99	14.68
186.44	11.06	186.96	12.65	187.48	13.82	188.00	14.70
186.45	11.09	186.97	12.68	187.49	13.84	188.01	14.72
186.46	11.13	186.98	12.71	187.50	13.86	188.02	14.73
186.47	11.16	186.99	12.73	187.51	13.88	188.03	14.75
186.48	11.19	187.00	12.76	187.52	13.89	188.04	14.76
186.49	11.22	187.01	12.79	187.53	13.91	188.05	14.78
186.50	11.26	187.02	12.82	187.54	13.93	188.06	14.80
186.51	11.29	187.03	12.85	187.55	13.95	188.07	14.81
186.52	11.32	187.04	12.88	187.56	13.96	188.08	14.83
186.53	11.35	187.05	12.90	187.57	13.98	188.09	14.85
186.54	11.38	187.06	12.93	187.58	14.00	188.10	14.86
186.55	11.42	187.07	12.96	187.59	14.01	188.11	14.88
186.56	11.45	187.08	12.99	187.60	14.03	188.12	14.89
186.57	11.48	187.09	13.02	187.61	14.05	188.13	14.91
186.58	11.51	187.10	13.04	187.62	14.07	188.14	14.93
186.59	11.54	187.11	13.07	187.63	14.08	188.15	14.94

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.16	14.96	188.68	15.77	189.20	16.54	189.72	17.28
188.17	14.97	188.69	15.79	189.21	16.56	189.73	17.30
188.18	14.99	188.70	15.80	189.22	16.57	189.74	17.31
188.19	15.01	188.71	15.82	189.23	16.59	189.75	17.32
188.20	15.02	188.72	15.83	189.24	16.60	189.76	17.34
188.21	15.04	188.73	15.85	189.25	16.62	189.77	17.35
188.22	15.05	188.74	15.86	189.26	16.63	189.78	17.36
188.23	15.07	188.75	15.88	189.27	16.64	189.79	17.38
188.24	15.09	188.76	15.89	189.28	16.66	189.80	17.39
188.25	15.10	188.77	15.91	189.29	16.67	189.81	17.52
188.26	15.12	188.78	15.92	189.30	16.69	189.82	17.75
188.27	15.13	188.79	15.94	189.31	16.70	189.83	**18.04**
188.28	15.15	188.80	15.95	189.32	16.72		
188.29	15.17	188.81	15.97	189.33	16.73		
188.30	15.18	188.82	15.98	189.34	16.75		
188.31	15.20	188.83	16.00	189.35	16.76		
188.32	15.21	188.84	16.01	189.36	16.77		
188.33	15.23	188.85	16.03	189.37	16.79		
188.34	15.24	188.86	16.04	189.38	16.80		
188.35	15.26	188.87	16.06	189.39	16.82		
188.36	15.28	188.88	16.07	189.40	16.83		
188.37	15.29	188.89	16.09	189.41	16.85		
188.38	15.31	188.90	16.10	189.42	16.86		
188.39	15.32	188.91	16.12	189.43	16.87		
188.40	15.34	188.92	16.13	189.44	16.89		
188.41	15.35	188.93	16.15	189.45	16.90		
188.42	15.37	188.94	16.16	189.46	16.92		
188.43	15.39	188.95	16.18	189.47	16.93		
188.44	15.40	188.96	16.19	189.48	16.95		
188.45	15.42	188.97	16.21	189.49	16.96		
188.46	15.43	188.98	16.22	189.50	16.97		
188.47	15.45	188.99	16.24	189.51	16.99		
188.48	15.46	189.00	16.25	189.52	17.00		
188.49	15.48	189.01	16.27	189.53	17.02		
188.50	15.49	189.02	16.28	189.54	17.03		
188.51	15.51	189.03	16.30	189.55	17.04		
188.52	15.53	189.04	16.31	189.56	17.06		
188.53	15.54	189.05	16.32	189.57	17.07		
188.54	15.56	189.06	16.34	189.58	17.09		
188.55	15.57	189.07	16.35	189.59	17.10		
188.56	15.59	189.08	16.37	189.60	17.11		
188.57	15.60	189.09	16.38	189.61	17.13		
188.58	15.62	189.10	16.40	189.62	17.14		
188.59	15.63	189.11	16.41	189.63	17.16		
188.60	15.65	189.12	16.43	189.64	17.17		
188.61	15.66	189.13	16.44	189.65	17.18		
188.62	15.68	189.14	16.46	189.66	17.20		
188.63	15.69	189.15	16.47	189.67	17.21		
188.64	15.71	189.16	16.49	189.68	17.23		
188.65	15.73	189.17	16.50	189.69	17.24		
188.66	15.74	189.18	16.51	189.70	17.25		
188.67	15.76	189.19	16.53	189.71	17.27		

Stage-Area-Storage for Pond B-51: Basin #51

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	5,243	0
184.01	5,258	53
184.02	5,273	105
184.03	5,288	158
184.04	5,302	211
184.05	5,317	264
184.06	5,332	317
184.07	5,347	371
184.08	5,362	424
184.09	5,377	478
184.10	5,391	532
184.11	5,406	586
184.12	5,421	640
184.13	5,436	694
184.14	5,451	749
184.15	5,466	803
184.16	5,480	858
184.17	5,495	913
184.18	5,510	968
184.19	5,525	1,023
184.20	5,540	1,078
184.21	5,555	1,134
184.22	5,569	1,189
184.23	5,584	1,245
184.24	5,599	1,301
184.25	5,614	1,357
184.26	5,629	1,413
184.27	5,644	1,470
184.28	5,659	1,526
184.29	5,673	1,583
184.30	5,688	1,640
184.31	5,703	1,697
184.32	5,718	1,754
184.33	5,733	1,811
184.34	5,748	1,868
184.35	5,762	1,926
184.36	5,777	1,984
184.37	5,792	2,041
184.38	5,807	2,099
184.39	5,822	2,158
184.40	5,837	2,216
184.41	5,851	2,274
184.42	5,866	2,333
184.43	5,881	2,392
184.44	5,896	2,451
184.45	5,911	2,510
184.46	5,926	2,569
184.47	5,940	2,628
184.48	5,955	2,688
184.49	5,970	2,747
184.50	5,985	2,807
184.51	6,000	2,867
184.52	6,015	2,927
184.53	6,030	2,987
184.54	6,044	3,048
184.55	6,059	3,108
184.56	6,074	3,169
184.57	6,089	3,230
184.58	6,104	3,291
184.59	6,119	3,352
184.60	6,133	3,413
184.61	6,148	3,474
184.62	6,163	3,536
184.63	6,178	3,598
184.64	6,193	3,659
184.65	6,208	3,721
184.66	6,222	3,784
184.67	6,237	3,846
184.68	6,252	3,908
184.69	6,267	3,971
184.70	6,282	4,034
184.71	6,297	4,097
184.72	6,311	4,160
184.73	6,326	4,223
184.74	6,341	4,286
184.75	6,356	4,350
184.76	6,371	4,413
184.77	6,386	4,477
184.78	6,401	4,541
184.79	6,415	4,605
184.80	6,430	4,669
184.81	6,445	4,734
184.82	6,460	4,798
184.83	6,475	4,863
184.84	6,490	4,928
184.85	6,504	4,993
184.86	6,519	5,058
184.87	6,534	5,123
184.88	6,549	5,188
184.89	6,564	5,254
184.90	6,579	5,320
184.91	6,593	5,386
184.92	6,608	5,452
184.93	6,623	5,518
184.94	6,638	5,584
184.95	6,653	5,651
184.96	6,668	5,717
184.97	6,682	5,784
184.98	6,697	5,851
184.99	6,712	5,918
185.00	6,727	5,985
185.01	6,744	6,052
185.02	6,761	6,120
185.03	6,778	6,188

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	6,795	6,255	185.56	7,677	10,018
185.05	6,812	6,323	185.57	7,694	10,095
185.06	6,829	6,392	185.58	7,711	10,172
185.07	6,846	6,460	185.59	7,728	10,249
185.08	6,863	6,529	185.60	7,745	10,327
185.09	6,880	6,597	185.61	7,762	10,404
185.10	6,897	6,666	185.62	7,779	10,482
185.11	6,914	6,735	185.63	7,796	10,560
185.12	6,931	6,804	185.64	7,813	10,638
185.13	6,948	6,874	185.65	7,830	10,716
185.14	6,965	6,943	185.66	7,847	10,794
185.15	6,982	7,013	185.67	7,864	10,873
185.16	6,999	7,083	185.68	7,881	10,952
185.17	7,015	7,153	185.69	7,898	11,031
185.18	7,032	7,223	185.70	7,915	11,110
185.19	7,049	7,294	185.71	7,932	11,189
185.20	7,066	7,364	185.72	7,949	11,268
185.21	7,083	7,435	185.73	7,966	11,348
185.22	7,100	7,506	185.74	7,983	11,428
185.23	7,117	7,577	185.75	8,000	11,508
185.24	7,134	7,648	185.76	8,017	11,588
185.25	7,151	7,720	185.77	8,034	11,668
185.26	7,168	7,791	185.78	8,051	11,748
185.27	7,185	7,863	185.79	8,068	11,829
185.28	7,202	7,935	185.80	8,085	11,910
185.29	7,219	8,007	185.81	8,102	11,991
185.30	7,236	8,079	185.82	8,119	12,072
185.31	7,253	8,152	185.83	8,136	12,153
185.32	7,270	8,225	185.84	8,152	12,234
185.33	7,287	8,297	185.85	8,169	12,316
185.34	7,304	8,370	185.86	8,186	12,398
185.35	7,321	8,443	185.87	8,203	12,480
185.36	7,338	8,517	185.88	8,220	12,562
185.37	7,355	8,590	185.89	8,237	12,644
185.38	7,372	8,664	185.90	8,254	12,727
185.39	7,389	8,738	185.91	8,271	12,809
185.40	7,406	8,812	185.92	8,288	12,892
185.41	7,423	8,886	185.93	8,305	12,975
185.42	7,440	8,960	185.94	8,322	13,058
185.43	7,457	9,034	185.95	8,339	13,141
185.44	7,474	9,109	185.96	8,356	13,225
185.45	7,491	9,184	185.97	8,373	13,309
185.46	7,508	9,259	185.98	8,390	13,392
185.47	7,525	9,334	185.99	8,407	13,476
185.48	7,542	9,409	186.00	8,424	13,561
185.49	7,559	9,485	186.01	8,441	13,645
185.50	7,576	9,561	186.02	8,457	13,729
185.51	7,592	9,636	186.03	8,474	13,814
185.52	7,609	9,712	186.04	8,490	13,899
185.53	7,626	9,789	186.05	8,507	13,984
185.54	7,643	9,865	186.06	8,524	14,069
185.55	7,660	9,942	186.07	8,540	14,154

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	8,557	14,240	186.60	9,421	18,914
186.09	8,573	14,325	186.61	9,437	19,008
186.10	8,590	14,411	186.62	9,454	19,103
186.11	8,607	14,497	186.63	9,470	19,197
186.12	8,623	14,583	186.64	9,487	19,292
186.13	8,640	14,670	186.65	9,504	19,387
186.14	8,657	14,756	186.66	9,520	19,482
186.15	8,673	14,843	186.67	9,537	19,577
186.16	8,690	14,930	186.68	9,553	19,673
186.17	8,706	15,017	186.69	9,570	19,768
186.18	8,723	15,104	186.70	9,587	19,864
186.19	8,740	15,191	186.71	9,603	19,960
186.20	8,756	15,279	186.72	9,620	20,056
186.21	8,773	15,366	186.73	9,637	20,153
186.22	8,789	15,454	186.74	9,653	20,249
186.23	8,806	15,542	186.75	9,670	20,346
186.24	8,823	15,630	186.76	9,686	20,442
186.25	8,839	15,718	186.77	9,703	20,539
186.26	8,856	15,807	186.78	9,720	20,636
186.27	8,872	15,896	186.79	9,736	20,734
186.28	8,889	15,984	186.80	9,753	20,831
186.29	8,906	16,073	186.81	9,769	20,929
186.30	8,922	16,162	186.82	9,786	21,027
186.31	8,939	16,252	186.83	9,803	21,125
186.32	8,956	16,341	186.84	9,819	21,223
186.33	8,972	16,431	186.85	9,836	21,321
186.34	8,989	16,521	186.86	9,852	21,419
186.35	9,005	16,611	186.87	9,869	21,518
186.36	9,022	16,701	186.88	9,886	21,617
186.37	9,039	16,791	186.89	9,902	21,716
186.38	9,055	16,882	186.90	9,919	21,815
186.39	9,072	16,972	186.91	9,936	21,914
186.40	9,088	17,063	186.92	9,952	22,014
186.41	9,105	17,154	186.93	9,969	22,113
186.42	9,122	17,245	186.94	9,985	22,213
186.43	9,138	17,336	186.95	10,002	22,313
186.44	9,155	17,428	186.96	10,019	22,413
186.45	9,171	17,519	186.97	10,035	22,513
186.46	9,188	17,611	186.98	10,052	22,614
186.47	9,205	17,703	186.99	10,068	22,714
186.48	9,221	17,795	187.00	10,085	22,815
186.49	9,238	17,888	187.01	10,102	22,916
186.50	9,255	17,980	187.02	10,119	23,017
186.51	9,271	18,073	187.03	10,137	23,118
186.52	9,288	18,166	187.04	10,154	23,220
186.53	9,304	18,259	187.05	10,171	23,321
186.54	9,321	18,352	187.06	10,188	23,423
186.55	9,338	18,445	187.07	10,205	23,525
186.56	9,354	18,538	187.08	10,222	23,627
186.57	9,371	18,632	187.09	10,240	23,730
186.58	9,387	18,726	187.10	10,257	23,832
186.59	9,404	18,820	187.11	10,274	23,935

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	10,291	24,038	187.64	11,184	29,621
187.13	10,308	24,141	187.65	11,201	29,733
187.14	10,325	24,244	187.66	11,218	29,845
187.15	10,343	24,347	187.67	11,235	29,957
187.16	10,360	24,451	187.68	11,253	30,070
187.17	10,377	24,554	187.69	11,270	30,182
187.18	10,394	24,658	187.70	11,287	30,295
187.19	10,411	24,762	187.71	11,304	30,408
187.20	10,428	24,866	187.72	11,321	30,521
187.21	10,446	24,971	187.73	11,338	30,635
187.22	10,463	25,075	187.74	11,356	30,748
187.23	10,480	25,180	187.75	11,373	30,862
187.24	10,497	25,285	187.76	11,390	30,975
187.25	10,514	25,390	187.77	11,407	31,089
187.26	10,531	25,495	187.78	11,424	31,204
187.27	10,549	25,601	187.79	11,441	31,318
187.28	10,566	25,706	187.80	11,459	31,432
187.29	10,583	25,812	187.81	11,476	31,547
187.30	10,600	25,918	187.82	11,493	31,662
187.31	10,617	26,024	187.83	11,510	31,777
187.32	10,634	26,130	187.84	11,527	31,892
187.33	10,652	26,237	187.85	11,544	32,008
187.34	10,669	26,343	187.86	11,562	32,123
187.35	10,686	26,450	187.87	11,579	32,239
187.36	10,703	26,557	187.88	11,596	32,355
187.37	10,720	26,664	187.89	11,613	32,471
187.38	10,737	26,771	187.90	11,630	32,587
187.39	10,755	26,879	187.91	11,647	32,703
187.40	10,772	26,986	187.92	11,665	32,820
187.41	10,789	27,094	187.93	11,682	32,937
187.42	10,806	27,202	187.94	11,699	33,053
187.43	10,823	27,310	187.95	11,716	33,171
187.44	10,840	27,419	187.96	11,733	33,288
187.45	10,858	27,527	187.97	11,750	33,405
187.46	10,875	27,636	187.98	11,768	33,523
187.47	10,892	27,745	187.99	11,785	33,641
187.48	10,909	27,854	188.00	11,802	33,759
187.49	10,926	27,963	188.01	11,820	33,877
187.50	10,944	28,072	188.02	11,837	33,995
187.51	10,961	28,182	188.03	11,855	34,113
187.52	10,978	28,291	188.04	11,873	34,232
187.53	10,995	28,401	188.05	11,891	34,351
187.54	11,012	28,511	188.06	11,908	34,470
187.55	11,029	28,621	188.07	11,926	34,589
187.56	11,047	28,732	188.08	11,944	34,708
187.57	11,064	28,842	188.09	11,962	34,828
187.58	11,081	28,953	188.10	11,979	34,948
187.59	11,098	29,064	188.11	11,997	35,067
187.60	11,115	29,175	188.12	12,015	35,188
187.61	11,132	29,286	188.13	12,033	35,308
187.62	11,150	29,398	188.14	12,050	35,428
187.63	11,167	29,509	188.15	12,068	35,549

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	12,086	35,670
188.17	12,104	35,790
188.18	12,121	35,912
188.19	12,139	36,033
188.20	12,157	36,154
188.21	12,175	36,276
188.22	12,192	36,398
188.23	12,210	36,520
188.24	12,228	36,642
188.25	12,246	36,764
188.26	12,263	36,887
188.27	12,281	37,010
188.28	12,299	37,133
188.29	12,316	37,256
188.30	12,334	37,379
188.31	12,352	37,502
188.32	12,370	37,626
188.33	12,387	37,750
188.34	12,405	37,874
188.35	12,423	37,998
188.36	12,441	38,122
188.37	12,458	38,247
188.38	12,476	38,371
188.39	12,494	38,496
188.40	12,512	38,621
188.41	12,529	38,746
188.42	12,547	38,872
188.43	12,565	38,997
188.44	12,583	39,123
188.45	12,600	39,249
188.46	12,618	39,375
188.47	12,636	39,501
188.48	12,654	39,628
188.49	12,671	39,754
188.50	12,689	39,881
188.51	12,707	40,008
188.52	12,724	40,135
188.53	12,742	40,263
188.54	12,760	40,390
188.55	12,778	40,518
188.56	12,795	40,646
188.57	12,813	40,774
188.58	12,831	40,902
188.59	12,849	41,030
188.60	12,866	41,159
188.61	12,884	41,288
188.62	12,902	41,417
188.63	12,920	41,546
188.64	12,937	41,675
188.65	12,955	41,805
188.66	12,973	41,934
188.67	12,991	42,064
188.68	13,008	42,194
188.69	13,026	42,324
188.70	13,044	42,455
188.71	13,062	42,585
188.72	13,079	42,716
188.73	13,097	42,847
188.74	13,115	42,978
188.75	13,133	43,109
188.76	13,150	43,240
188.77	13,168	43,372
188.78	13,186	43,504
188.79	13,203	43,636
188.80	13,221	43,768
188.81	13,239	43,900
188.82	13,257	44,033
188.83	13,274	44,165
188.84	13,292	44,298
188.85	13,310	44,431
188.86	13,328	44,564
188.87	13,345	44,698
188.88	13,363	44,831
188.89	13,381	44,965
188.90	13,399	45,099
188.91	13,416	45,233
188.92	13,434	45,367
188.93	13,452	45,502
188.94	13,470	45,636
188.95	13,487	45,771
188.96	13,505	45,906
188.97	13,523	46,041
188.98	13,541	46,176
188.99	13,558	46,312
189.00	13,576	46,448
189.01	13,594	46,583
189.02	13,613	46,719
189.03	13,631	46,856
189.04	13,649	46,992
189.05	13,668	47,129
189.06	13,686	47,265
189.07	13,704	47,402
189.08	13,723	47,539
189.09	13,741	47,677
189.10	13,759	47,814
189.11	13,778	47,952
189.12	13,796	48,090
189.13	13,814	48,228
189.14	13,833	48,366
189.15	13,851	48,505
189.16	13,869	48,643
189.17	13,888	48,782
189.18	13,906	48,921
189.19	13,924	49,060

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.20	13,943	49,199
189.21	13,961	49,339
189.22	13,979	49,479
189.23	13,998	49,618
189.24	14,016	49,759
189.25	14,034	49,899
189.26	14,053	50,039
189.27	14,071	50,180
189.28	14,089	50,321
189.29	14,108	50,462
189.30	14,126	50,603
189.31	14,144	50,744
189.32	14,163	50,886
189.33	14,181	51,027
189.34	14,199	51,169
189.35	14,218	51,311
189.36	14,236	51,454
189.37	14,254	51,596
189.38	14,273	51,739
189.39	14,291	51,882
189.40	14,309	52,025
189.41	14,328	52,168
189.42	14,346	52,311
189.43	14,365	52,455
189.44	14,383	52,598
189.45	14,401	52,742
189.46	14,420	52,886
189.47	14,438	53,031
189.48	14,456	53,175
189.49	14,475	53,320
189.50	14,493	53,465
189.51	14,511	53,610
189.52	14,530	53,755
189.53	14,548	53,900
189.54	14,566	54,046
189.55	14,585	54,192
189.56	14,603	54,338
189.57	14,621	54,484
189.58	14,640	54,630
189.59	14,658	54,777
189.60	14,676	54,923
189.61	14,695	55,070
189.62	14,713	55,217
189.63	14,731	55,364
189.64	14,750	55,512
189.65	14,768	55,659
189.66	14,786	55,807
189.67	14,805	55,955
189.68	14,823	56,103
189.69	14,841	56,251
189.70	14,860	56,400
189.71	14,878	56,549
189.72	14,896	56,698
189.73	14,915	56,847
189.74	14,933	56,996
189.75	14,951	57,145
189.76	14,970	57,295
189.77	14,988	57,445
189.78	15,006	57,595
189.79	15,025	57,745
189.80	15,043	57,895
189.81	15,061	58,046
189.82	15,080	58,196
189.83	**15,098**	**58,347**

Summary for Pond B-52: Basin #52

Inflow Area = 1.423 ac, 34.43% Impervious, Inflow Depth = 6.45" for Current 100 yr event
Inflow = 9.43 cfs @ 12.17 hrs, Volume= 0.765 af
Outflow = 8.47 cfs @ 12.22 hrs, Volume= 0.717 af, Atten= 10%, Lag= 3.2 min
Primary = 8.47 cfs @ 12.22 hrs, Volume= 0.717 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 196.09' @ 12.22 hrs Surf.Area= 2,196 sf Storage= 4,001 cf

Plug-Flow detention time= 68.9 min calculated for 0.716 af (94% of inflow)
Center-of-Mass det. time= 33.7 min (820.2 - 786.5)

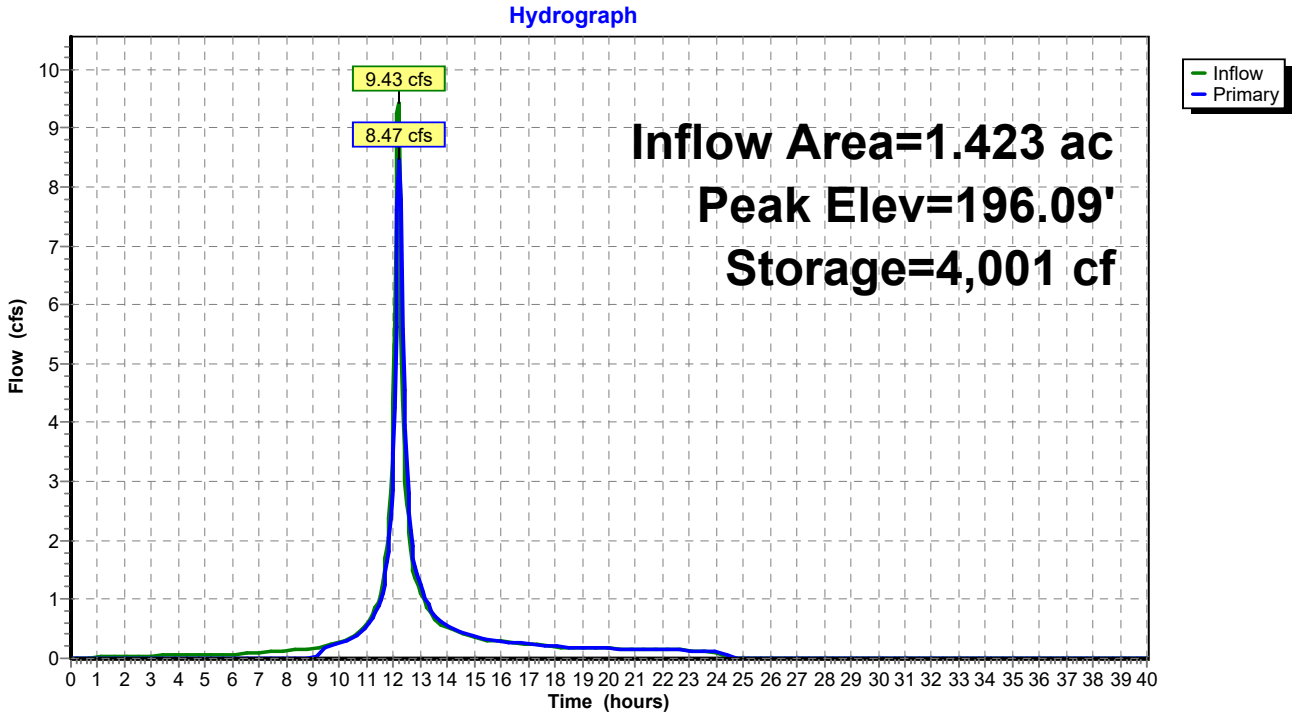
Volume	Invert	Avail.Storage	Storage Description
#1	193.00'	7,751 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.00	474	0	0
194.00	970	722	722
195.00	1,523	1,247	1,969
196.00	2,133	1,828	3,797
197.00	2,799	2,466	6,263
197.50	3,154	1,488	7,751

Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	**15.0" Round Culvert** L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	195.08'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.72'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.37 cfs @ 12.22 hrs HW=196.08' (Free Discharge)
- **1=Culvert** (Barrel Controls 8.37 cfs @ 6.82 fps)
  - **2=Orifice/Grate** (Passes < 6.23 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 2.77 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-52: Basin #52



Stage-Discharge for Pond B-52: Basin #52

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.00	0.00	193.52	0.00	194.04	0.00	194.56	0.00
193.01	0.00	193.53	0.00	194.05	0.00	194.57	0.00
193.02	0.00	193.54	0.00	194.06	0.00	194.58	0.00
193.03	0.00	193.55	0.00	194.07	0.00	194.59	0.00
193.04	0.00	193.56	0.00	194.08	0.00	194.60	0.00
193.05	0.00	193.57	0.00	194.09	0.00	194.61	0.00
193.06	0.00	193.58	0.00	194.10	0.00	194.62	0.00
193.07	0.00	193.59	0.00	194.11	0.00	194.63	0.00
193.08	0.00	193.60	0.00	194.12	0.00	194.64	0.00
193.09	0.00	193.61	0.00	194.13	0.00	194.65	0.00
193.10	0.00	193.62	0.00	194.14	0.00	194.66	0.00
193.11	0.00	193.63	0.00	194.15	0.00	194.67	0.00
193.12	0.00	193.64	0.00	194.16	0.00	194.68	0.00
193.13	0.00	193.65	0.00	194.17	0.00	194.69	0.00
193.14	0.00	193.66	0.00	194.18	0.00	194.70	0.00
193.15	0.00	193.67	0.00	194.19	0.00	194.71	0.00
193.16	0.00	193.68	0.00	194.20	0.00	194.72	0.00
193.17	0.00	193.69	0.00	194.21	0.00	194.73	0.00
193.18	0.00	193.70	0.00	194.22	0.00	194.74	0.00
193.19	0.00	193.71	0.00	194.23	0.00	194.75	0.00
193.20	0.00	193.72	0.00	194.24	0.00	194.76	0.00
193.21	0.00	193.73	0.00	194.25	0.00	194.77	0.00
193.22	0.00	193.74	0.00	194.26	0.00	194.78	0.00
193.23	0.00	193.75	0.00	194.27	0.00	194.79	0.00
193.24	0.00	193.76	0.00	194.28	0.00	194.80	0.00
193.25	0.00	193.77	0.00	194.29	0.00	194.81	0.00
193.26	0.00	193.78	0.00	194.30	0.00	194.82	0.00
193.27	0.00	193.79	0.00	194.31	0.00	194.83	0.00
193.28	0.00	193.80	0.00	194.32	0.00	194.84	0.00
193.29	0.00	193.81	0.00	194.33	0.00	194.85	0.00
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.00
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.00
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.00
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.00
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.00
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.00
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.00
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.00
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.00
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.00
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.00
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.00
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.00
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.00
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.00
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.00
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.00
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.00
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.00
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.00
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.00

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.08	0.00	195.60	3.58	196.12	8.41	196.64	8.96
195.09	0.01	195.61	3.67	196.13	8.43	196.65	8.97
195.10	0.03	195.62	3.74	196.14	8.44	196.66	8.98
195.11	0.05	195.63	3.82	196.15	8.45	196.67	8.99
195.12	0.08	195.64	3.89	196.16	8.46	196.68	9.00
195.13	0.11	195.65	3.97	196.17	8.47	196.69	9.01
195.14	0.14	195.66	4.04	196.18	8.48	196.70	9.02
195.15	0.18	195.67	4.10	196.19	8.49	196.71	9.03
195.16	0.22	195.68	4.17	196.20	8.50	196.72	9.04
195.17	0.26	195.69	4.24	196.21	8.51	196.73	9.05
195.18	0.30	195.70	4.30	196.22	8.52	196.74	9.06
195.19	0.35	195.71	4.36	196.23	8.53	196.75	9.07
195.20	0.40	195.72	4.43	196.24	8.54	196.76	9.08
195.21	0.45	195.73	4.50	196.25	8.55	196.77	9.09
195.22	0.50	195.74	4.58	196.26	8.57	196.78	9.10
195.23	0.56	195.75	4.67	196.27	8.58	196.79	9.11
195.24	0.62	195.76	4.77	196.28	8.59	196.80	9.12
195.25	0.67	195.77	4.87	196.29	8.60	196.81	9.13
195.26	0.74	195.78	4.97	196.30	8.61	196.82	9.14
195.27	0.80	195.79	5.08	196.31	8.62	196.83	9.15
195.28	0.86	195.80	5.18	196.32	8.63	196.84	9.16
195.29	0.93	195.81	5.30	196.33	8.64	196.85	9.17
195.30	0.99	195.82	5.41	196.34	8.65	196.86	9.18
195.31	1.06	195.83	5.53	196.35	8.66	196.87	9.19
195.32	1.13	195.84	5.64	196.36	8.67	196.88	9.20
195.33	1.20	195.85	5.76	196.37	8.68	196.89	9.21
195.34	1.28	195.86	5.89	196.38	8.69	196.90	9.22
195.35	1.35	195.87	6.01	196.39	8.70	196.91	9.23
195.36	1.43	195.88	6.14	196.40	8.71	196.92	9.24
195.37	1.50	195.89	6.27	196.41	8.72	196.93	9.25
195.38	1.58	195.90	6.40	196.42	8.73	196.94	9.26
195.39	1.66	195.91	6.53	196.43	8.75	196.95	9.27
195.40	1.74	195.92	6.66	196.44	8.76	196.96	9.28
195.41	1.83	195.93	6.80	196.45	8.77	196.97	9.29
195.42	1.91	195.94	6.93	196.46	8.78	196.98	9.30
195.43	1.99	195.95	7.07	196.47	8.79	196.99	9.31
195.44	2.08	195.96	7.21	196.48	8.80	197.00	9.32
195.45	2.17	195.97	7.35	196.49	8.81	197.01	9.33
195.46	2.26	195.98	7.50	196.50	8.82	197.02	9.34
195.47	2.35	195.99	7.64	196.51	8.83	197.03	9.35
195.48	2.44	196.00	7.79	196.52	8.84	197.04	9.36
195.49	2.53	196.01	7.93	196.53	8.85	197.05	9.37
195.50	2.62	196.02	8.08	196.54	8.86	197.06	9.38
195.51	2.72	196.03	8.23	196.55	8.87	197.07	9.39
195.52	2.81	196.04	8.33	196.56	8.88	197.08	9.40
195.53	2.91	196.05	8.34	196.57	8.89	197.09	9.41
195.54	3.00	196.06	8.35	196.58	8.90	197.10	9.42
195.55	3.10	196.07	8.36	196.59	8.91	197.11	9.43
195.56	3.20	196.08	8.37	196.60	8.92	197.12	9.44
195.57	3.30	196.09	8.38	196.61	8.93	197.13	9.45
195.58	3.40	196.10	8.39	196.62	8.94	197.14	9.46
195.59	3.50	196.11	8.40	196.63	8.95	197.15	9.47

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)
197.16	9.48
197.17	9.49
197.18	9.50
197.19	9.51
197.20	9.52
197.21	9.53
197.22	9.54
197.23	9.55
197.24	9.55
197.25	9.56
197.26	9.69
197.27	9.91
197.28	10.20
197.29	10.54
197.30	10.92
197.31	11.35
197.32	11.81
197.33	12.30
197.34	12.82
197.35	13.38
197.36	13.96
197.37	14.57
197.38	15.21
197.39	15.87
197.40	16.55
197.41	17.26
197.42	17.99
197.43	18.75
197.44	19.52
197.45	20.32
197.46	21.17
197.47	22.06
197.48	22.96
197.49	23.90
197.50	**24.85**

Stage-Area-Storage for Pond B-52: Basin #52

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.00	474	0
193.01	479	5
193.02	484	10
193.03	489	14
193.04	494	19
193.05	499	24
193.06	504	29
193.07	509	34
193.08	514	40
193.09	519	45
193.10	524	50
193.11	529	55
193.12	534	60
193.13	538	66
193.14	543	71
193.15	548	77
193.16	553	82
193.17	558	88
193.18	563	93
193.19	568	99
193.20	573	105
193.21	578	110
193.22	583	116
193.23	588	122
193.24	593	128
193.25	598	134
193.26	603	140
193.27	608	146
193.28	613	152
193.29	618	158
193.30	623	165
193.31	628	171
193.32	633	177
193.33	638	183
193.34	643	190
193.35	648	196
193.36	653	203
193.37	658	209
193.38	662	216
193.39	667	223
193.40	672	229
193.41	677	236
193.42	682	243
193.43	687	250
193.44	692	257
193.45	697	264
193.46	702	271
193.47	707	278
193.48	712	285
193.49	717	292
193.50	722	299
193.51	727	306
193.52	732	314
193.53	737	321
193.54	742	328
193.55	747	336
193.56	752	343
193.57	757	351
193.58	762	358
193.59	767	366
193.60	772	374
193.61	777	381
193.62	782	389
193.63	786	397
193.64	791	405
193.65	796	413
193.66	801	421
193.67	806	429
193.68	811	437
193.69	816	445
193.70	821	453
193.71	826	462
193.72	831	470
193.73	836	478
193.74	841	487
193.75	846	495
193.76	851	503
193.77	856	512
193.78	861	521
193.79	866	529
193.80	871	538
193.81	876	547
193.82	881	555
193.83	886	564
193.84	891	573
193.85	896	582
193.86	901	591
193.87	906	600
193.88	910	609
193.89	915	618
193.90	920	627
193.91	925	637
193.92	930	646
193.93	935	655
193.94	940	665
193.95	945	674
193.96	950	684
193.97	955	693
193.98	960	703
193.99	965	712
194.00	970	722
194.01	976	732
194.02	981	742
194.03	987	751

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.04	992	761	194.56	1,280	1,352
194.05	998	771	194.57	1,285	1,365
194.06	1,003	781	194.58	1,291	1,378
194.07	1,009	791	194.59	1,296	1,391
194.08	1,014	801	194.60	1,302	1,404
194.09	1,020	812	194.61	1,307	1,417
194.10	1,025	822	194.62	1,313	1,430
194.11	1,031	832	194.63	1,318	1,443
194.12	1,036	842	194.64	1,324	1,456
194.13	1,042	853	194.65	1,329	1,469
194.14	1,047	863	194.66	1,335	1,483
194.15	1,053	874	194.67	1,341	1,496
194.16	1,058	884	194.68	1,346	1,509
194.17	1,064	895	194.69	1,352	1,523
194.18	1,070	906	194.70	1,357	1,536
194.19	1,075	916	194.71	1,363	1,550
194.20	1,081	927	194.72	1,368	1,564
194.21	1,086	938	194.73	1,374	1,577
194.22	1,092	949	194.74	1,379	1,591
194.23	1,097	960	194.75	1,385	1,605
194.24	1,103	971	194.76	1,390	1,619
194.25	1,108	982	194.77	1,396	1,633
194.26	1,114	993	194.78	1,401	1,647
194.27	1,119	1,004	194.79	1,407	1,661
194.28	1,125	1,015	194.80	1,412	1,675
194.29	1,130	1,027	194.81	1,418	1,689
194.30	1,136	1,038	194.82	1,423	1,703
194.31	1,141	1,049	194.83	1,429	1,718
194.32	1,147	1,061	194.84	1,435	1,732
194.33	1,152	1,072	194.85	1,440	1,746
194.34	1,158	1,084	194.86	1,446	1,761
194.35	1,164	1,095	194.87	1,451	1,775
194.36	1,169	1,107	194.88	1,457	1,790
194.37	1,175	1,119	194.89	1,462	1,804
194.38	1,180	1,131	194.90	1,468	1,819
194.39	1,186	1,142	194.91	1,473	1,834
194.40	1,191	1,154	194.92	1,479	1,848
194.41	1,197	1,166	194.93	1,484	1,863
194.42	1,202	1,178	194.94	1,490	1,878
194.43	1,208	1,190	194.95	1,495	1,893
194.44	1,213	1,202	194.96	1,501	1,908
194.45	1,219	1,214	194.97	1,506	1,923
194.46	1,224	1,227	194.98	1,512	1,938
194.47	1,230	1,239	194.99	1,517	1,953
194.48	1,235	1,251	195.00	1,523	1,969
194.49	1,241	1,264	195.01	1,529	1,984
194.50	1,247	1,276	195.02	1,535	1,999
194.51	1,252	1,289	195.03	1,541	2,014
194.52	1,258	1,301	195.04	1,547	2,030
194.53	1,263	1,314	195.05	1,554	2,045
194.54	1,269	1,326	195.06	1,560	2,061
194.55	1,274	1,339	195.07	1,566	2,077

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.08	1,572	2,092	195.60	1,889	2,992
195.09	1,578	2,108	195.61	1,895	3,011
195.10	1,584	2,124	195.62	1,901	3,030
195.11	1,590	2,140	195.63	1,907	3,049
195.12	1,596	2,156	195.64	1,913	3,068
195.13	1,602	2,172	195.65	1,920	3,087
195.14	1,608	2,188	195.66	1,926	3,107
195.15	1,615	2,204	195.67	1,932	3,126
195.16	1,621	2,220	195.68	1,938	3,145
195.17	1,627	2,236	195.69	1,944	3,165
195.18	1,633	2,253	195.70	1,950	3,184
195.19	1,639	2,269	195.71	1,956	3,204
195.20	1,645	2,285	195.72	1,962	3,223
195.21	1,651	2,302	195.73	1,968	3,243
195.22	1,657	2,318	195.74	1,974	3,263
195.23	1,663	2,335	195.75	1,981	3,282
195.24	1,669	2,352	195.76	1,987	3,302
195.25	1,676	2,368	195.77	1,993	3,322
195.26	1,682	2,385	195.78	1,999	3,342
195.27	1,688	2,402	195.79	2,005	3,362
195.28	1,694	2,419	195.80	2,011	3,382
195.29	1,700	2,436	195.81	2,017	3,402
195.30	1,706	2,453	195.82	2,023	3,422
195.31	1,712	2,470	195.83	2,029	3,443
195.32	1,718	2,487	195.84	2,035	3,463
195.33	1,724	2,504	195.85	2,041	3,483
195.34	1,730	2,522	195.86	2,048	3,504
195.35	1,736	2,539	195.87	2,054	3,524
195.36	1,743	2,556	195.88	2,060	3,545
195.37	1,749	2,574	195.89	2,066	3,566
195.38	1,755	2,591	195.90	2,072	3,586
195.39	1,761	2,609	195.91	2,078	3,607
195.40	1,767	2,627	195.92	2,084	3,628
195.41	1,773	2,644	195.93	2,090	3,649
195.42	1,779	2,662	195.94	2,096	3,670
195.43	1,785	2,680	195.95	2,102	3,691
195.44	1,791	2,698	195.96	2,109	3,712
195.45	1,797	2,716	195.97	2,115	3,733
195.46	1,804	2,734	195.98	2,121	3,754
195.47	1,810	2,752	195.99	2,127	3,775
195.48	1,816	2,770	196.00	2,133	3,797
195.49	1,822	2,788	196.01	2,140	3,818
195.50	1,828	2,806	196.02	2,146	3,839
195.51	1,834	2,825	196.03	2,153	3,861
195.52	1,840	2,843	196.04	2,160	3,882
195.53	1,846	2,861	196.05	2,166	3,904
195.54	1,852	2,880	196.06	2,173	3,926
195.55	1,859	2,898	196.07	2,180	3,947
195.56	1,865	2,917	196.08	2,186	3,969
195.57	1,871	2,936	196.09	2,193	3,991
195.58	1,877	2,954	196.10	2,200	4,013
195.59	1,883	2,973	196.11	2,206	4,035

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.12	2,213	4,057	196.64	2,559	5,298
196.13	2,220	4,079	196.65	2,566	5,324
196.14	2,226	4,102	196.66	2,573	5,349
196.15	2,233	4,124	196.67	2,579	5,375
196.16	2,240	4,146	196.68	2,586	5,401
196.17	2,246	4,169	196.69	2,593	5,427
196.18	2,253	4,191	196.70	2,599	5,453
196.19	2,260	4,214	196.71	2,606	5,479
196.20	2,266	4,236	196.72	2,613	5,505
196.21	2,273	4,259	196.73	2,619	5,531
196.22	2,280	4,282	196.74	2,626	5,557
196.23	2,286	4,305	196.75	2,633	5,584
196.24	2,293	4,328	196.76	2,639	5,610
196.25	2,300	4,351	196.77	2,646	5,636
196.26	2,306	4,374	196.78	2,652	5,663
196.27	2,313	4,397	196.79	2,659	5,689
196.28	2,319	4,420	196.80	2,666	5,716
196.29	2,326	4,443	196.81	2,672	5,743
196.30	2,333	4,466	196.82	2,679	5,769
196.31	2,339	4,490	196.83	2,686	5,796
196.32	2,346	4,513	196.84	2,692	5,823
196.33	2,353	4,537	196.85	2,699	5,850
196.34	2,359	4,560	196.86	2,706	5,877
196.35	2,366	4,584	196.87	2,712	5,904
196.36	2,373	4,608	196.88	2,719	5,931
196.37	2,379	4,631	196.89	2,726	5,959
196.38	2,386	4,655	196.90	2,732	5,986
196.39	2,393	4,679	196.91	2,739	6,013
196.40	2,399	4,703	196.92	2,746	6,041
196.41	2,406	4,727	196.93	2,752	6,068
196.42	2,413	4,751	196.94	2,759	6,096
196.43	2,419	4,775	196.95	2,766	6,123
196.44	2,426	4,799	196.96	2,772	6,151
196.45	2,433	4,824	196.97	2,779	6,179
196.46	2,439	4,848	196.98	2,786	6,207
196.47	2,446	4,873	196.99	2,792	6,235
196.48	2,453	4,897	197.00	2,799	6,263
196.49	2,459	4,922	197.01	2,806	6,291
196.50	2,466	4,946	197.02	2,813	6,319
196.51	2,473	4,971	197.03	2,820	6,347
196.52	2,479	4,996	197.04	2,827	6,375
196.53	2,486	5,021	197.05	2,835	6,403
196.54	2,493	5,045	197.06	2,842	6,432
196.55	2,499	5,070	197.07	2,849	6,460
196.56	2,506	5,095	197.08	2,856	6,489
196.57	2,513	5,121	197.09	2,863	6,517
196.58	2,519	5,146	197.10	2,870	6,546
196.59	2,526	5,171	197.11	2,877	6,575
196.60	2,533	5,196	197.12	2,884	6,603
196.61	2,539	5,222	197.13	2,891	6,632
196.62	2,546	5,247	197.14	2,898	6,661
196.63	2,553	5,272	197.15	2,906	6,690

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.16	2,913	6,719
197.17	2,920	6,749
197.18	2,927	6,778
197.19	2,934	6,807
197.20	2,941	6,836
197.21	2,948	6,866
197.22	2,955	6,895
197.23	2,962	6,925
197.24	2,969	6,955
197.25	2,977	6,984
197.26	2,984	7,014
197.27	2,991	7,044
197.28	2,998	7,074
197.29	3,005	7,104
197.30	3,012	7,134
197.31	3,019	7,164
197.32	3,026	7,195
197.33	3,033	7,225
197.34	3,040	7,255
197.35	3,047	7,286
197.36	3,055	7,316
197.37	3,062	7,347
197.38	3,069	7,377
197.39	3,076	7,408
197.40	3,083	7,439
197.41	3,090	7,470
197.42	3,097	7,501
197.43	3,104	7,532
197.44	3,111	7,563
197.45	3,118	7,594
197.46	3,126	7,625
197.47	3,133	7,656
197.48	3,140	7,688
197.49	3,147	7,719
197.50	**3,154**	**7,751**

Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.80% Impervious, Inflow Depth = 6.84" for Current 100 yr event
Inflow = 17.46 cfs @ 12.17 hrs, Volume= 1.448 af
Outflow = 13.32 cfs @ 12.26 hrs, Volume= 1.334 af, Atten= 24%, Lag= 5.4 min
Primary = 13.32 cfs @ 12.26 hrs, Volume= 1.334 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 202.79' @ 12.25 hrs Surf.Area= 5,946 sf Storage= 14,650 cf

Plug-Flow detention time= 100.9 min calculated for 1.334 af (92% of inflow)
Center-of-Mass det. time= 57.3 min (833.4 - 776.1)

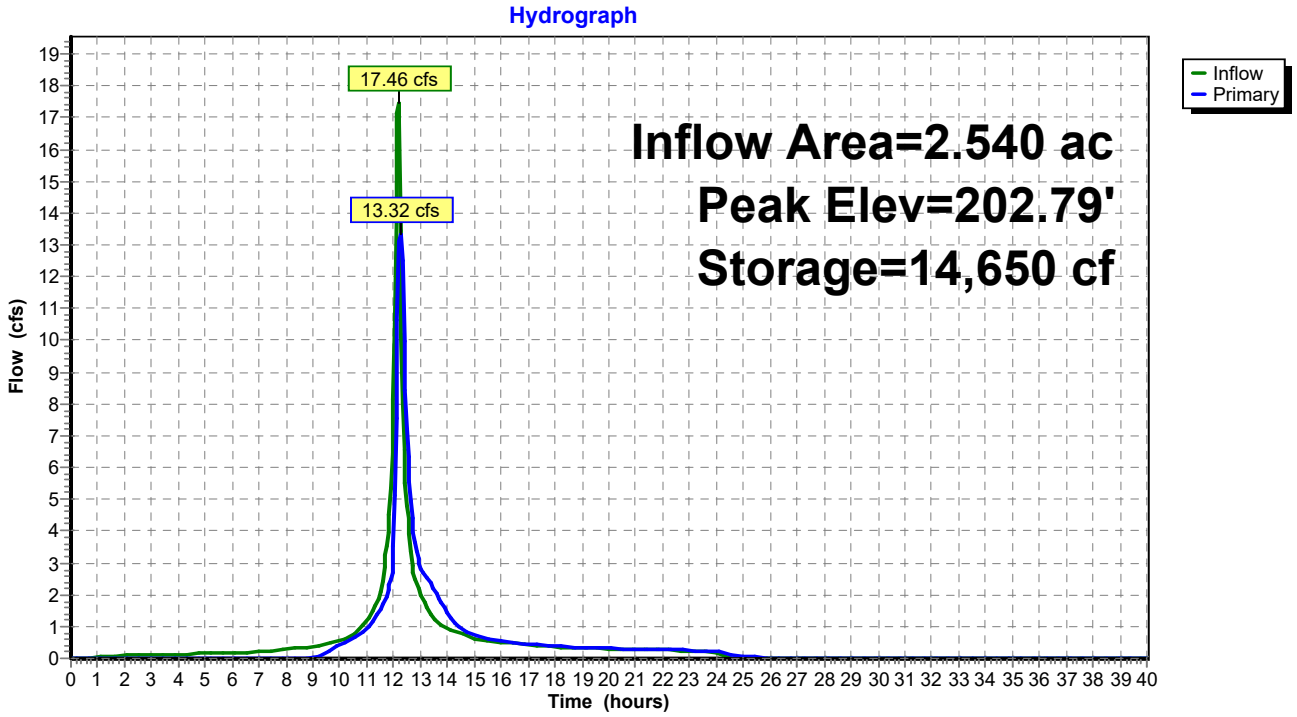
Volume	Invert	Avail.Storage	Storage Description
#1	199.75'	33,011 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.75	0	0	0
200.00	4,035	504	504
201.00	4,695	4,365	4,869
202.00	5,685	5,190	10,059
203.00	6,015	5,850	15,909
204.00	6,676	6,346	22,255
205.00	7,336	7,006	29,261
205.50	7,666	3,751	33,011

Device	Routing	Invert	Outlet Devices
#1	Primary	198.75'	**18.0" Round Culvert** L= 122.0' Ke= 0.500 Inlet / Outlet Invert= 198.75' / 198.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.02'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.43'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.30 cfs @ 12.26 hrs HW=202.78' (Free Discharge)
- **1=Culvert** (Barrel Controls 13.30 cfs @ 7.52 fps)
  - **2=Orifice/Grate** (Passes < 4.05 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 10.15 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-53: Basin #53



Stage-Discharge for Pond B-53: Basin #53

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.75	0.00	200.27	0.00	200.79	0.00	201.31	1.00
199.76	0.00	200.28	0.00	200.80	0.00	201.32	1.05
199.77	0.00	200.29	0.00	200.81	0.00	201.33	1.11
199.78	0.00	200.30	0.00	200.82	0.00	201.34	1.16
199.79	0.00	200.31	0.00	200.83	0.00	201.35	1.22
199.80	0.00	200.32	0.00	200.84	0.00	201.36	1.27
199.81	0.00	200.33	0.00	200.85	0.00	201.37	1.32
199.82	0.00	200.34	0.00	200.86	0.00	201.38	1.36
199.83	0.00	200.35	0.00	200.87	0.00	201.39	1.40
199.84	0.00	200.36	0.00	200.88	0.00	201.40	1.44
199.85	0.00	200.37	0.00	200.89	0.00	201.41	1.48
199.86	0.00	200.38	0.00	200.90	0.00	201.42	1.51
199.87	0.00	200.39	0.00	200.91	0.00	201.43	1.55
199.88	0.00	200.40	0.00	200.92	0.00	201.44	1.58
199.89	0.00	200.41	0.00	200.93	0.00	201.45	1.62
199.90	0.00	200.42	0.00	200.94	0.00	201.46	1.65
199.91	0.00	200.43	0.00	200.95	0.00	201.47	1.68
199.92	0.00	200.44	0.00	200.96	0.00	201.48	1.71
199.93	0.00	200.45	0.00	200.97	0.00	201.49	1.74
199.94	0.00	200.46	0.00	200.98	0.00	201.50	1.77
199.95	0.00	200.47	0.00	200.99	0.00	201.51	1.80
199.96	0.00	200.48	0.00	201.00	0.00	201.52	1.83
199.97	0.00	200.49	0.00	201.01	0.00	201.53	1.86
199.98	0.00	200.50	0.00	201.02	0.00	201.54	1.89
199.99	0.00	200.51	0.00	201.03	0.01	201.55	1.92
200.00	0.00	200.52	0.00	201.04	0.02	201.56	1.94
200.01	0.00	200.53	0.00	201.05	0.03	201.57	1.97
200.02	0.00	200.54	0.00	201.06	0.05	201.58	2.00
200.03	0.00	200.55	0.00	201.07	0.07	201.59	2.02
200.04	0.00	200.56	0.00	201.08	0.09	201.60	2.05
200.05	0.00	200.57	0.00	201.09	0.12	201.61	2.07
200.06	0.00	200.58	0.00	201.10	0.15	201.62	2.10
200.07	0.00	200.59	0.00	201.11	0.17	201.63	2.12
200.08	0.00	200.60	0.00	201.12	0.20	201.64	2.15
200.09	0.00	200.61	0.00	201.13	0.23	201.65	2.17
200.10	0.00	200.62	0.00	201.14	0.27	201.66	2.20
200.11	0.00	200.63	0.00	201.15	0.30	201.67	2.22
200.12	0.00	200.64	0.00	201.16	0.34	201.68	2.24
200.13	0.00	200.65	0.00	201.17	0.37	201.69	2.27
200.14	0.00	200.66	0.00	201.18	0.41	201.70	2.29
200.15	0.00	200.67	0.00	201.19	0.45	201.71	2.31
200.16	0.00	200.68	0.00	201.20	0.49	201.72	2.33
200.17	0.00	200.69	0.00	201.21	0.53	201.73	2.36
200.18	0.00	200.70	0.00	201.22	0.57	201.74	2.38
200.19	0.00	200.71	0.00	201.23	0.62	201.75	2.40
200.20	0.00	200.72	0.00	201.24	0.66	201.76	2.42
200.21	0.00	200.73	0.00	201.25	0.71	201.77	2.44
200.22	0.00	200.74	0.00	201.26	0.75	201.78	2.46
200.23	0.00	200.75	0.00	201.27	0.80	201.79	2.49
200.24	0.00	200.76	0.00	201.28	0.85	201.80	2.51
200.25	0.00	200.77	0.00	201.29	0.90	201.81	2.53
200.26	0.00	200.78	0.00	201.30	0.95	201.82	2.55

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.83	2.57	202.35	7.19	202.87	13.48	203.39	14.48
201.84	2.59	202.36	7.33	202.88	13.50	203.40	14.50
201.85	2.61	202.37	7.48	202.89	13.52	203.41	14.52
201.86	2.63	202.38	7.62	202.90	13.54	203.42	14.54
201.87	2.65	202.39	7.76	202.91	13.56	203.43	14.55
201.88	2.67	202.40	7.91	202.92	13.58	203.44	14.57
201.89	2.69	202.41	8.06	202.93	13.60	203.45	14.59
201.90	2.70	202.42	8.20	202.94	13.62	203.46	14.61
201.91	2.72	202.43	8.35	202.95	13.64	203.47	14.63
201.92	2.76	202.44	8.50	202.96	13.66	203.48	14.65
201.93	2.80	202.45	8.66	202.97	13.68	203.49	14.66
201.94	2.85	202.46	8.81	202.98	13.70	203.50	14.68
201.95	2.90	202.47	8.96	202.99	13.72	203.51	14.70
201.96	2.96	202.48	9.12	203.00	13.74	203.52	14.72
201.97	3.03	202.49	9.27	203.01	13.75	203.53	14.74
201.98	3.10	202.50	9.43	203.02	13.77	203.54	14.76
201.99	3.17	202.51	9.59	203.03	13.79	203.55	14.77
202.00	3.24	202.52	9.75	203.04	13.81	203.56	14.79
202.01	3.32	202.53	9.91	203.05	13.83	203.57	14.81
202.02	3.40	202.54	10.07	203.06	13.85	203.58	14.83
202.03	3.48	202.55	10.23	203.07	13.87	203.59	14.85
202.04	3.57	202.56	10.39	203.08	13.89	203.60	14.87
202.05	3.66	202.57	10.56	203.09	13.91	203.61	14.88
202.06	3.75	202.58	10.72	203.10	13.93	203.62	14.90
202.07	3.84	202.59	10.89	203.11	13.95	203.63	14.92
202.08	3.94	202.60	11.05	203.12	13.97	203.64	14.94
202.09	4.04	202.61	11.22	203.13	13.99	203.65	14.96
202.10	4.14	202.62	11.39	203.14	14.01	203.66	14.97
202.11	4.24	202.63	11.56	203.15	14.03	203.67	14.99
202.12	4.34	202.64	11.73	203.16	14.05	203.68	15.01
202.13	4.45	202.65	11.90	203.17	14.06	203.69	15.03
202.14	4.56	202.66	12.07	203.18	14.08	203.70	15.05
202.15	4.67	202.67	12.24	203.19	14.10	203.71	15.06
202.16	4.78	202.68	12.42	203.20	14.12	203.72	15.08
202.17	4.89	202.69	12.59	203.21	14.14	203.73	15.10
202.18	5.01	202.70	12.77	203.22	14.16	203.74	15.12
202.19	5.12	202.71	12.94	203.23	14.18	203.75	15.14
202.20	5.24	202.72	13.12	203.24	14.20	203.76	15.15
202.21	5.36	202.73	13.19	203.25	14.22	203.77	15.17
202.22	5.48	202.74	13.22	203.26	14.24	203.78	15.19
202.23	5.61	202.75	13.24	203.27	14.25	203.79	15.21
202.24	5.73	202.76	13.26	203.28	14.27	203.80	15.22
202.25	5.86	202.77	13.28	203.29	14.29	203.81	15.24
202.26	5.98	202.78	13.30	203.30	14.31	203.82	15.26
202.27	6.11	202.79	13.32	203.31	14.33	203.83	15.28
202.28	6.24	202.80	13.34	203.32	14.35	203.84	15.29
202.29	6.37	202.81	13.36	203.33	14.37	203.85	15.31
202.30	6.51	202.82	13.38	203.34	14.39	203.86	15.33
202.31	6.64	202.83	13.40	203.35	14.41	203.87	15.35
202.32	6.78	202.84	13.42	203.36	14.42	203.88	15.36
202.33	6.91	202.85	13.44	203.37	14.44	203.89	15.38
202.34	7.05	202.86	13.46	203.38	14.46	203.90	15.40

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.91	15.42	204.43	16.30	204.95	67.49	205.47	166.93
203.92	15.43	204.44	16.43	204.96	69.18	205.48	169.11
203.93	15.45	204.45	16.67	204.97	70.91	205.49	171.30
203.94	15.47	204.46	16.96	204.98	72.66	205.50	**173.51**
203.95	15.49	204.47	17.30	204.99	74.44		
203.96	15.50	204.48	17.69	205.00	76.24		
203.97	15.52	204.49	18.12	205.01	78.07		
203.98	15.54	204.50	18.59	205.02	79.93		
203.99	15.56	204.51	19.09	205.03	81.81		
204.00	15.57	204.52	19.62	205.04	83.46		
204.01	15.59	204.53	20.18	205.05	85.11		
204.02	15.61	204.54	20.77	205.06	86.78		
204.03	15.63	204.55	21.39	205.07	88.46		
204.04	15.64	204.56	22.03	205.08	90.16		
204.05	15.66	204.57	22.70	205.09	91.87		
204.06	15.68	204.58	23.39	205.10	93.59		
204.07	15.69	204.59	24.11	205.11	95.33		
204.08	15.71	204.60	24.85	205.12	97.08		
204.09	15.73	204.61	25.61	205.13	98.84		
204.10	15.75	204.62	26.39	205.14	100.61		
204.11	15.76	204.63	27.19	205.15	102.40		
204.12	15.78	204.64	28.06	205.16	104.20		
204.13	15.80	204.65	28.94	205.17	106.01		
204.14	15.81	204.66	29.86	205.18	107.83		
204.15	15.83	204.67	30.80	205.19	109.67		
204.16	15.85	204.68	31.76	205.20	111.52		
204.17	15.87	204.69	32.75	205.21	113.38		
204.18	15.88	204.70	33.77	205.22	115.25		
204.19	15.90	204.71	34.81	205.23	117.14		
204.20	15.92	204.72	35.87	205.24	119.07		
204.21	15.93	204.73	36.96	205.25	121.02		
204.22	15.95	204.74	38.07	205.26	122.98		
204.23	15.97	204.75	39.21	205.27	124.96		
204.24	15.98	204.76	40.37	205.28	126.95		
204.25	16.00	204.77	41.56	205.29	128.95		
204.26	16.02	204.78	42.77	205.30	130.96		
204.27	16.03	204.79	44.00	205.31	132.99		
204.28	16.05	204.80	45.26	205.32	135.03		
204.29	16.07	204.81	46.54	205.33	137.08		
204.30	16.08	204.82	47.85	205.34	139.15		
204.31	16.10	204.83	49.18	205.35	141.22		
204.32	16.12	204.84	50.56	205.36	143.32		
204.33	16.13	204.85	51.97	205.37	145.42		
204.34	16.15	204.86	53.40	205.38	147.54		
204.35	16.17	204.87	54.86	205.39	149.67		
204.36	16.19	204.88	56.35	205.40	151.81		
204.37	16.20	204.89	57.86	205.41	153.96		
204.38	16.22	204.90	59.40	205.42	156.13		
204.39	16.23	204.91	60.96	205.43	158.31		
204.40	16.25	204.92	62.56	205.44	160.45		
204.41	16.27	204.93	64.17	205.45	162.60		
204.42	16.28	204.94	65.82	205.46	164.76		

Stage-Area-Storage for Pond B-53: Basin #53

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.75	0	0
199.76	161	1
199.77	323	3
199.78	484	7
199.79	646	13
199.80	807	20
199.81	968	29
199.82	1,130	40
199.83	1,291	52
199.84	1,453	65
199.85	1,614	81
199.86	1,775	98
199.87	1,937	116
199.88	2,098	136
199.89	2,260	158
199.90	2,421	182
199.91	2,582	207
199.92	2,744	233
199.93	2,905	261
199.94	3,067	291
199.95	3,228	323
199.96	3,389	356
199.97	3,551	391
199.98	3,712	427
199.99	3,874	465
200.00	4,035	504
200.01	4,042	545
200.02	4,048	585
200.03	4,055	626
200.04	4,061	666
200.05	4,068	707
200.06	4,075	748
200.07	4,081	788
200.08	4,088	829
200.09	4,094	870
200.10	4,101	911
200.11	4,108	952
200.12	4,114	993
200.13	4,121	1,035
200.14	4,127	1,076
200.15	4,134	1,117
200.16	4,141	1,158
200.17	4,147	1,200
200.18	4,154	1,241
200.19	4,160	1,283
200.20	4,167	1,325
200.21	4,174	1,366
200.22	4,180	1,408
200.23	4,187	1,450
200.24	4,193	1,492
200.25	4,200	1,534
200.26	4,207	1,576
200.27	4,213	1,618
200.28	4,220	1,660
200.29	4,226	1,702
200.30	4,233	1,745
200.31	4,240	1,787
200.32	4,246	1,829
200.33	4,253	1,872
200.34	4,259	1,914
200.35	4,266	1,957
200.36	4,273	2,000
200.37	4,279	2,043
200.38	4,286	2,085
200.39	4,292	2,128
200.40	4,299	2,171
200.41	4,306	2,214
200.42	4,312	2,257
200.43	4,319	2,300
200.44	4,325	2,344
200.45	4,332	2,387
200.46	4,339	2,430
200.47	4,345	2,474
200.48	4,352	2,517
200.49	4,358	2,561
200.50	4,365	2,604
200.51	4,372	2,648
200.52	4,378	2,692
200.53	4,385	2,736
200.54	4,391	2,780
200.55	4,398	2,823
200.56	4,405	2,867
200.57	4,411	2,912
200.58	4,418	2,956
200.59	4,424	3,000
200.60	4,431	3,044
200.61	4,438	3,089
200.62	4,444	3,133
200.63	4,451	3,177
200.64	4,457	3,222
200.65	4,464	3,267
200.66	4,471	3,311
200.67	4,477	3,356
200.68	4,484	3,401
200.69	4,490	3,446
200.70	4,497	3,491
200.71	4,504	3,536
200.72	4,510	3,581
200.73	4,517	3,626
200.74	4,523	3,671
200.75	4,530	3,716
200.76	4,537	3,762
200.77	4,543	3,807
200.78	4,550	3,852

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.79	4,556	3,898	201.31	5,002	6,372
200.80	4,563	3,944	201.32	5,012	6,422
200.81	4,570	3,989	201.33	5,022	6,473
200.82	4,576	4,035	201.34	5,032	6,523
200.83	4,583	4,081	201.35	5,041	6,573
200.84	4,589	4,127	201.36	5,051	6,624
200.85	4,596	4,173	201.37	5,061	6,674
200.86	4,603	4,219	201.38	5,071	6,725
200.87	4,609	4,265	201.39	5,081	6,776
200.88	4,616	4,311	201.40	5,091	6,827
200.89	4,622	4,357	201.41	5,101	6,878
200.90	4,629	4,403	201.42	5,111	6,929
200.91	4,636	4,449	201.43	5,121	6,980
200.92	4,642	4,496	201.44	5,131	7,031
200.93	4,649	4,542	201.45	5,140	7,082
200.94	4,655	4,589	201.46	5,150	7,134
200.95	4,662	4,635	201.47	5,160	7,185
200.96	4,669	4,682	201.48	5,170	7,237
200.97	4,675	4,729	201.49	5,180	7,289
200.98	4,682	4,776	201.50	5,190	7,341
200.99	4,688	4,822	201.51	5,200	7,393
201.00	4,695	4,869	201.52	5,210	7,445
201.01	4,705	4,916	201.53	5,220	7,497
201.02	4,715	4,963	201.54	5,230	7,549
201.03	4,725	5,011	201.55	5,240	7,601
201.04	4,735	5,058	201.56	5,249	7,654
201.05	4,745	5,105	201.57	5,259	7,706
201.06	4,754	5,153	201.58	5,269	7,759
201.07	4,764	5,200	201.59	5,279	7,812
201.08	4,774	5,248	201.60	5,289	7,865
201.09	4,784	5,296	201.61	5,299	7,918
201.10	4,794	5,344	201.62	5,309	7,971
201.11	4,804	5,392	201.63	5,319	8,024
201.12	4,814	5,440	201.64	5,329	8,077
201.13	4,824	5,488	201.65	5,339	8,130
201.14	4,834	5,536	201.66	5,348	8,184
201.15	4,844	5,585	201.67	5,358	8,237
201.16	4,853	5,633	201.68	5,368	8,291
201.17	4,863	5,682	201.69	5,378	8,345
201.18	4,873	5,731	201.70	5,388	8,398
201.19	4,883	5,779	201.71	5,398	8,452
201.20	4,893	5,828	201.72	5,408	8,506
201.21	4,903	5,877	201.73	5,418	8,561
201.22	4,913	5,926	201.74	5,428	8,615
201.23	4,923	5,975	201.75	5,438	8,669
201.24	4,933	6,025	201.76	5,447	8,723
201.25	4,943	6,074	201.77	5,457	8,778
201.26	4,952	6,124	201.78	5,467	8,833
201.27	4,962	6,173	201.79	5,477	8,887
201.28	4,972	6,223	201.80	5,487	8,942
201.29	4,982	6,273	201.81	5,497	8,997
201.30	4,992	6,322	201.82	5,507	9,052

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.83	5,517	9,107	202.35	5,800	12,069
201.84	5,527	9,162	202.36	5,804	12,127
201.85	5,536	9,218	202.37	5,807	12,185
201.86	5,546	9,273	202.38	5,810	12,244
201.87	5,556	9,329	202.39	5,814	12,302
201.88	5,566	9,384	202.40	5,817	12,360
201.89	5,576	9,440	202.41	5,820	12,418
201.90	5,586	9,496	202.42	5,824	12,476
201.91	5,596	9,552	202.43	5,827	12,534
201.92	5,606	9,608	202.44	5,830	12,593
201.93	5,616	9,664	202.45	5,833	12,651
201.94	5,626	9,720	202.46	5,837	12,709
201.95	5,635	9,776	202.47	5,840	12,768
201.96	5,645	9,833	202.48	5,843	12,826
201.97	5,655	9,889	202.49	5,847	12,885
201.98	5,665	9,946	202.50	5,850	12,943
201.99	5,675	10,003	202.51	5,853	13,002
202.00	5,685	10,059	202.52	5,857	13,060
202.01	5,688	10,116	202.53	5,860	13,119
202.02	5,692	10,173	202.54	5,863	13,177
202.03	5,695	10,230	202.55	5,867	13,236
202.04	5,698	10,287	202.56	5,870	13,295
202.05	5,702	10,344	202.57	5,873	13,353
202.06	5,705	10,401	202.58	5,876	13,412
202.07	5,708	10,458	202.59	5,880	13,471
202.08	5,711	10,515	202.60	5,883	13,530
202.09	5,715	10,572	202.61	5,886	13,589
202.10	5,718	10,630	202.62	5,890	13,648
202.11	5,721	10,687	202.63	5,893	13,706
202.12	5,725	10,744	202.64	5,896	13,765
202.13	5,728	10,801	202.65	5,900	13,824
202.14	5,731	10,859	202.66	5,903	13,883
202.15	5,735	10,916	202.67	5,906	13,942
202.16	5,738	10,973	202.68	5,909	14,001
202.17	5,741	11,031	202.69	5,913	14,061
202.18	5,744	11,088	202.70	5,916	14,120
202.19	5,748	11,145	202.71	5,919	14,179
202.20	5,751	11,203	202.72	5,923	14,238
202.21	5,754	11,261	202.73	5,926	14,297
202.22	5,758	11,318	202.74	5,929	14,357
202.23	5,761	11,376	202.75	5,933	14,416
202.24	5,764	11,433	202.76	5,936	14,475
202.25	5,768	11,491	202.77	5,939	14,535
202.26	5,771	11,549	202.78	5,942	14,594
202.27	5,774	11,606	202.79	5,946	14,654
202.28	5,777	11,664	202.80	5,949	14,713
202.29	5,781	11,722	202.81	5,952	14,772
202.30	5,784	11,780	202.82	5,956	14,832
202.31	5,787	11,838	202.83	5,959	14,892
202.32	5,791	11,895	202.84	5,962	14,951
202.33	5,794	11,953	202.85	5,965	15,011
202.34	5,797	12,011	202.86	5,969	15,071

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.87	5,972	15,130
202.88	5,975	15,190
202.89	5,979	15,250
202.90	5,982	15,310
202.91	5,985	15,369
202.92	5,989	15,429
202.93	5,992	15,489
202.94	5,995	15,549
202.95	5,998	15,609
202.96	6,002	15,669
202.97	6,005	15,729
202.98	6,008	15,789
202.99	6,012	15,849
203.00	6,015	15,909
203.01	6,022	15,970
203.02	6,028	16,030
203.03	6,035	16,090
203.04	6,041	16,151
203.05	6,048	16,211
203.06	6,055	16,271
203.07	6,061	16,332
203.08	6,068	16,393
203.09	6,074	16,453
203.10	6,081	16,514
203.11	6,088	16,575
203.12	6,094	16,636
203.13	6,101	16,697
203.14	6,108	16,758
203.15	6,114	16,819
203.16	6,121	16,880
203.17	6,127	16,941
203.18	6,134	17,003
203.19	6,141	17,064
203.20	6,147	17,126
203.21	6,154	17,187
203.22	6,160	17,249
203.23	6,167	17,310
203.24	6,174	17,372
203.25	6,180	17,434
203.26	6,187	17,496
203.27	6,193	17,558
203.28	6,200	17,619
203.29	6,207	17,682
203.30	6,213	17,744
203.31	6,220	17,806
203.32	6,227	17,868
203.33	6,233	17,930
203.34	6,240	17,993
203.35	6,246	18,055
203.36	6,253	18,118
203.37	6,260	18,180
203.38	6,266	18,243
203.39	6,273	18,305
203.40	6,279	18,368
203.41	6,286	18,431
203.42	6,293	18,494
203.43	6,299	18,557
203.44	6,306	18,620
203.45	6,312	18,683
203.46	6,319	18,746
203.47	6,326	18,809
203.48	6,332	18,873
203.49	6,339	18,936
203.50	6,346	19,000
203.51	6,352	19,063
203.52	6,359	19,127
203.53	6,365	19,190
203.54	6,372	19,254
203.55	6,379	19,318
203.56	6,385	19,381
203.57	6,392	19,445
203.58	6,398	19,509
203.59	6,405	19,573
203.60	6,412	19,637
203.61	6,418	19,702
203.62	6,425	19,766
203.63	6,431	19,830
203.64	6,438	19,894
203.65	6,445	19,959
203.66	6,451	20,023
203.67	6,458	20,088
203.68	6,464	20,152
203.69	6,471	20,217
203.70	6,478	20,282
203.71	6,484	20,347
203.72	6,491	20,412
203.73	6,498	20,476
203.74	6,504	20,541
203.75	6,511	20,607
203.76	6,517	20,672
203.77	6,524	20,737
203.78	6,531	20,802
203.79	6,537	20,867
203.80	6,544	20,933
203.81	6,550	20,998
203.82	6,557	21,064
203.83	6,564	21,130
203.84	6,570	21,195
203.85	6,577	21,261
203.86	6,583	21,327
203.87	6,590	21,393
203.88	6,597	21,459
203.89	6,603	21,525
203.90	6,610	21,591

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.91	6,617	21,657	204.43	6,960	25,187
203.92	6,623	21,723	204.44	6,966	25,256
203.93	6,630	21,789	204.45	6,973	25,326
203.94	6,636	21,856	204.46	6,980	25,396
203.95	6,643	21,922	204.47	6,986	25,465
203.96	6,650	21,988	204.48	6,993	25,535
203.97	6,656	22,055	204.49	6,999	25,605
203.98	6,663	22,121	204.50	7,006	25,675
203.99	6,669	22,188	204.51	7,013	25,745
204.00	6,676	22,255	204.52	7,019	25,816
204.01	6,683	22,322	204.53	7,026	25,886
204.02	6,689	22,389	204.54	7,032	25,956
204.03	6,696	22,455	204.55	7,039	26,027
204.04	6,702	22,522	204.56	7,046	26,097
204.05	6,709	22,590	204.57	7,052	26,167
204.06	6,716	22,657	204.58	7,059	26,238
204.07	6,722	22,724	204.59	7,065	26,309
204.08	6,729	22,791	204.60	7,072	26,379
204.09	6,735	22,858	204.61	7,079	26,450
204.10	6,742	22,926	204.62	7,085	26,521
204.11	6,749	22,993	204.63	7,092	26,592
204.12	6,755	23,061	204.64	7,098	26,663
204.13	6,762	23,128	204.65	7,105	26,734
204.14	6,768	23,196	204.66	7,112	26,805
204.15	6,775	23,264	204.67	7,118	26,876
204.16	6,782	23,331	204.68	7,125	26,947
204.17	6,788	23,399	204.69	7,131	27,018
204.18	6,795	23,467	204.70	7,138	27,090
204.19	6,801	23,535	204.71	7,145	27,161
204.20	6,808	23,603	204.72	7,151	27,233
204.21	6,815	23,671	204.73	7,158	27,304
204.22	6,821	23,740	204.74	7,164	27,376
204.23	6,828	23,808	204.75	7,171	27,448
204.24	6,834	23,876	204.76	7,178	27,519
204.25	6,841	23,945	204.77	7,184	27,591
204.26	6,848	24,013	204.78	7,191	27,663
204.27	6,854	24,081	204.79	7,197	27,735
204.28	6,861	24,150	204.80	7,204	27,807
204.29	6,867	24,219	204.81	7,211	27,879
204.30	6,874	24,287	204.82	7,217	27,951
204.31	6,881	24,356	204.83	7,224	28,023
204.32	6,887	24,425	204.84	7,230	28,096
204.33	6,894	24,494	204.85	7,237	28,168
204.34	6,900	24,563	204.86	7,244	28,240
204.35	6,907	24,632	204.87	7,250	28,313
204.36	6,914	24,701	204.88	7,257	28,385
204.37	6,920	24,770	204.89	7,263	28,458
204.38	6,927	24,839	204.90	7,270	28,531
204.39	6,933	24,909	204.91	7,277	28,603
204.40	6,940	24,978	204.92	7,283	28,676
204.41	6,947	25,048	204.93	7,290	28,749
204.42	6,953	25,117	204.94	7,296	28,822

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.95	7,303	28,895
204.96	7,310	28,968
204.97	7,316	29,041
204.98	7,323	29,114
204.99	7,329	29,188
205.00	7,336	29,261
205.01	7,343	29,334
205.02	7,349	29,408
205.03	7,356	29,481
205.04	7,362	29,555
205.05	7,369	29,629
205.06	7,376	29,702
205.07	7,382	29,776
205.08	7,389	29,850
205.09	7,395	29,924
205.10	7,402	29,998
205.11	7,409	30,072
205.12	7,415	30,146
205.13	7,422	30,220
205.14	7,428	30,294
205.15	7,435	30,369
205.16	7,442	30,443
205.17	7,448	30,518
205.18	7,455	30,592
205.19	7,461	30,667
205.20	7,468	30,741
205.21	7,475	30,816
205.22	7,481	30,891
205.23	7,488	30,966
205.24	7,494	31,041
205.25	7,501	31,116
205.26	7,508	31,191
205.27	7,514	31,266
205.28	7,521	31,341
205.29	7,527	31,416
205.30	7,534	31,491
205.31	7,541	31,567
205.32	7,547	31,642
205.33	7,554	31,718
205.34	7,560	31,793
205.35	7,567	31,869
205.36	7,574	31,945
205.37	7,580	32,020
205.38	7,587	32,096
205.39	7,593	32,172
205.40	7,600	32,248
205.41	7,607	32,324
205.42	7,613	32,400
205.43	7,620	32,476
205.44	7,626	32,553
205.45	7,633	32,629
205.46	7,640	32,705
205.47	7,646	32,782
205.48	7,653	32,858
205.49	7,659	32,935
205.50	**7,666**	**33,011**

Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.47% Impervious, Inflow Depth = 7.21" for Current 100 yr event
Inflow = 18.27 cfs @ 12.17 hrs, Volume= 1.543 af
Outflow = 12.82 cfs @ 12.27 hrs, Volume= 1.402 af, Atten= 30%, Lag= 5.9 min
Primary = 12.82 cfs @ 12.27 hrs, Volume= 1.402 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.39' @ 12.27 hrs Surf.Area= 6,017 sf Storage= 16,804 cf

Plug-Flow detention time= 112.4 min calculated for 1.402 af (91% of inflow)
Center-of-Mass det. time= 63.2 min (830.4 - 767.2)

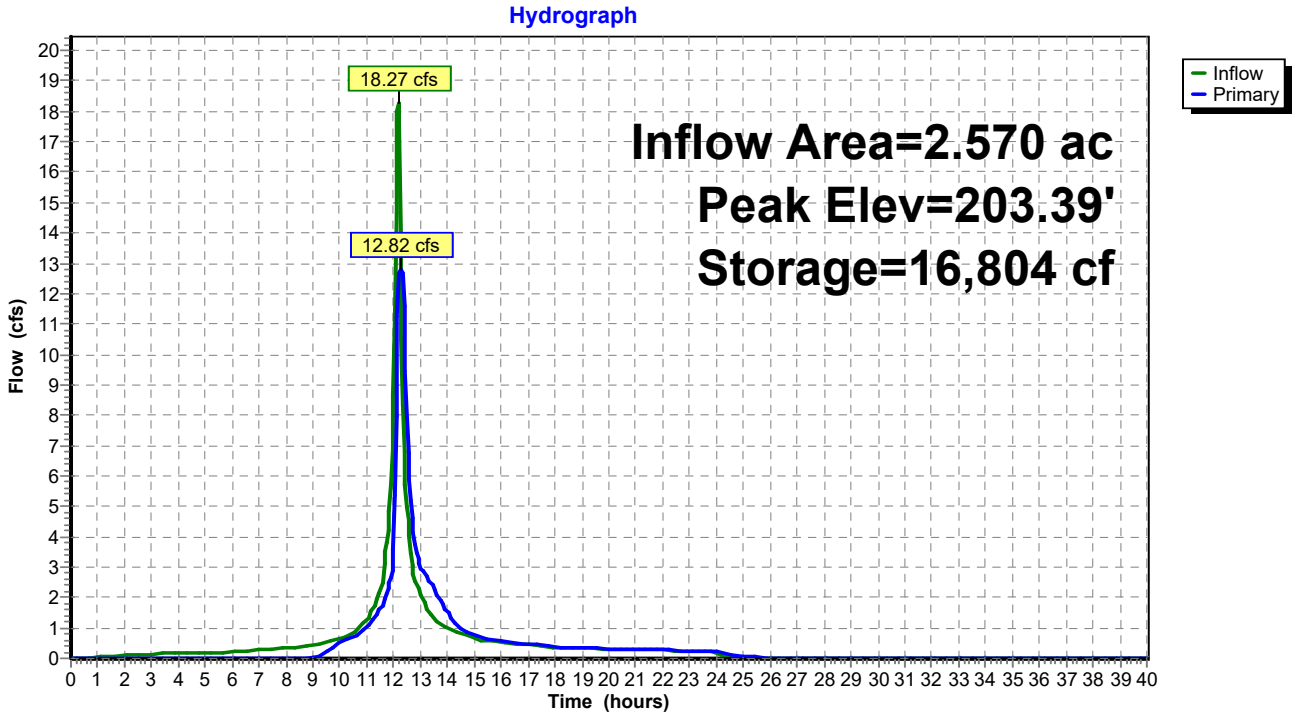
Volume	Invert	Avail.Storage	Storage Description
#1	199.89'	30,982 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.89	0	0	0
200.00	3,780	208	208
201.00	4,440	4,110	4,318
202.00	5,100	4,770	9,088
203.00	5,760	5,430	14,518
204.00	6,421	6,091	20,608
205.00	7,081	6,751	27,359
205.50	7,411	3,623	30,982

Device	Routing	Invert	Outlet Devices
#1	Primary	198.89'	**18.0" Round Culvert** L= 178.0' Ke= 0.500 Inlet / Outlet Invert= 198.89' / 198.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.40'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	202.42'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.47'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.80 cfs @ 12.27 hrs HW=203.38' (Free Discharge)
- **1=Culvert** (Barrel Controls 12.80 cfs @ 7.25 fps)
  - **2=Orifice/Grate** (Passes < 4.32 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 11.64 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-54: Basin #54



Stage-Discharge for Pond B-54: Basin #54

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.89	0.00	200.41	0.00	200.93	0.00	201.45	0.07
199.90	0.00	200.42	0.00	200.94	0.00	201.46	0.09
199.91	0.00	200.43	0.00	200.95	0.00	201.47	0.12
199.92	0.00	200.44	0.00	200.96	0.00	201.48	0.15
199.93	0.00	200.45	0.00	200.97	0.00	201.49	0.17
199.94	0.00	200.46	0.00	200.98	0.00	201.50	0.20
199.95	0.00	200.47	0.00	200.99	0.00	201.51	0.23
199.96	0.00	200.48	0.00	201.00	0.00	201.52	0.27
199.97	0.00	200.49	0.00	201.01	0.00	201.53	0.30
199.98	0.00	200.50	0.00	201.02	0.00	201.54	0.34
199.99	0.00	200.51	0.00	201.03	0.00	201.55	0.37
200.00	0.00	200.52	0.00	201.04	0.00	201.56	0.41
200.01	0.00	200.53	0.00	201.05	0.00	201.57	0.45
200.02	0.00	200.54	0.00	201.06	0.00	201.58	0.49
200.03	0.00	200.55	0.00	201.07	0.00	201.59	0.53
200.04	0.00	200.56	0.00	201.08	0.00	201.60	0.57
200.05	0.00	200.57	0.00	201.09	0.00	201.61	0.62
200.06	0.00	200.58	0.00	201.10	0.00	201.62	0.66
200.07	0.00	200.59	0.00	201.11	0.00	201.63	0.71
200.08	0.00	200.60	0.00	201.12	0.00	201.64	0.75
200.09	0.00	200.61	0.00	201.13	0.00	201.65	0.80
200.10	0.00	200.62	0.00	201.14	0.00	201.66	0.85
200.11	0.00	200.63	0.00	201.15	0.00	201.67	0.90
200.12	0.00	200.64	0.00	201.16	0.00	201.68	0.95
200.13	0.00	200.65	0.00	201.17	0.00	201.69	1.00
200.14	0.00	200.66	0.00	201.18	0.00	201.70	1.05
200.15	0.00	200.67	0.00	201.19	0.00	201.71	1.11
200.16	0.00	200.68	0.00	201.20	0.00	201.72	1.16
200.17	0.00	200.69	0.00	201.21	0.00	201.73	1.22
200.18	0.00	200.70	0.00	201.22	0.00	201.74	1.27
200.19	0.00	200.71	0.00	201.23	0.00	201.75	1.32
200.20	0.00	200.72	0.00	201.24	0.00	201.76	1.36
200.21	0.00	200.73	0.00	201.25	0.00	201.77	1.40
200.22	0.00	200.74	0.00	201.26	0.00	201.78	1.44
200.23	0.00	200.75	0.00	201.27	0.00	201.79	1.48
200.24	0.00	200.76	0.00	201.28	0.00	201.80	1.51
200.25	0.00	200.77	0.00	201.29	0.00	201.81	1.55
200.26	0.00	200.78	0.00	201.30	0.00	201.82	1.58
200.27	0.00	200.79	0.00	201.31	0.00	201.83	1.62
200.28	0.00	200.80	0.00	201.32	0.00	201.84	1.65
200.29	0.00	200.81	0.00	201.33	0.00	201.85	1.68
200.30	0.00	200.82	0.00	201.34	0.00	201.86	1.71
200.31	0.00	200.83	0.00	201.35	0.00	201.87	1.74
200.32	0.00	200.84	0.00	201.36	0.00	201.88	1.77
200.33	0.00	200.85	0.00	201.37	0.00	201.89	1.80
200.34	0.00	200.86	0.00	201.38	0.00	201.90	1.83
200.35	0.00	200.87	0.00	201.39	0.00	201.91	1.86
200.36	0.00	200.88	0.00	201.40	0.00	201.92	1.89
200.37	0.00	200.89	0.00	201.41	0.01	201.93	1.92
200.38	0.00	200.90	0.00	201.42	0.02	201.94	1.94
200.39	0.00	200.91	0.00	201.43	0.03	201.95	1.97
200.40	0.00	200.92	0.00	201.44	0.05	201.96	2.00

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.97	2.02	202.49	3.32	203.01	9.61	203.53	13.06
201.98	2.05	202.50	3.39	203.02	9.76	203.54	13.07
201.99	2.07	202.51	3.47	203.03	9.92	203.55	13.09
202.00	2.10	202.52	3.54	203.04	10.08	203.56	13.10
202.01	2.12	202.53	3.62	203.05	10.24	203.57	13.12
202.02	2.15	202.54	3.70	203.06	10.40	203.58	13.14
202.03	2.17	202.55	3.79	203.07	10.57	203.59	13.15
202.04	2.20	202.56	3.88	203.08	10.73	203.60	13.17
202.05	2.22	202.57	3.97	203.09	10.89	203.61	13.18
202.06	2.24	202.58	4.06	203.10	11.06	203.62	13.20
202.07	2.27	202.59	4.15	203.11	11.22	203.63	13.22
202.08	2.29	202.60	4.25	203.12	11.39	203.64	13.23
202.09	2.31	202.61	4.35	203.13	11.56	203.65	13.25
202.10	2.33	202.62	4.45	203.14	11.73	203.66	13.26
202.11	2.36	202.63	4.55	203.15	11.90	203.67	13.28
202.12	2.38	202.64	4.66	203.16	12.07	203.68	13.30
202.13	2.40	202.65	4.76	203.17	12.24	203.69	13.31
202.14	2.42	202.66	4.87	203.18	12.41	203.70	13.33
202.15	2.44	202.67	4.98	203.19	12.49	203.71	13.34
202.16	2.46	202.68	5.10	203.20	12.51	203.72	13.36
202.17	2.49	202.69	5.21	203.21	12.53	203.73	13.38
202.18	2.51	202.70	5.33	203.22	12.54	203.74	13.39
202.19	2.53	202.71	5.44	203.23	12.56	203.75	13.41
202.20	2.55	202.72	5.56	203.24	12.58	203.76	13.42
202.21	2.57	202.73	5.68	203.25	12.59	203.77	13.44
202.22	2.59	202.74	5.80	203.26	12.61	203.78	13.45
202.23	2.61	202.75	5.93	203.27	12.63	203.79	13.47
202.24	2.63	202.76	6.05	203.28	12.64	203.80	13.49
202.25	2.65	202.77	6.18	203.29	12.66	203.81	13.50
202.26	2.67	202.78	6.31	203.30	12.68	203.82	13.52
202.27	2.69	202.79	6.44	203.31	12.69	203.83	13.53
202.28	2.70	202.80	6.57	203.32	12.71	203.84	13.55
202.29	2.72	202.81	6.70	203.33	12.73	203.85	13.56
202.30	2.74	202.82	6.83	203.34	12.74	203.86	13.58
202.31	2.76	202.83	6.97	203.35	12.76	203.87	13.59
202.32	2.78	202.84	7.11	203.36	12.78	203.88	13.61
202.33	2.80	202.85	7.24	203.37	12.79	203.89	13.63
202.34	2.82	202.86	7.38	203.38	12.81	203.90	13.64
202.35	2.84	202.87	7.52	203.39	12.83	203.91	13.66
202.36	2.85	202.88	7.66	203.40	12.84	203.92	13.67
202.37	2.87	202.89	7.81	203.41	12.86	203.93	13.69
202.38	2.89	202.90	7.95	203.42	12.88	203.94	13.70
202.39	2.91	202.91	8.09	203.43	12.89	203.95	13.72
202.40	2.93	202.92	8.24	203.44	12.91	203.96	13.73
202.41	2.94	202.93	8.39	203.45	12.92	203.97	13.75
202.42	2.96	202.94	8.54	203.46	12.94	203.98	13.76
202.43	2.99	202.95	8.69	203.47	12.96	203.99	13.78
202.44	3.03	202.96	8.84	203.48	12.97	204.00	13.80
202.45	3.08	202.97	8.99	203.49	12.99	204.01	13.81
202.46	3.13	202.98	9.14	203.50	13.01	204.02	13.83
202.47	3.19	202.99	9.30	203.51	13.02	204.03	13.84
202.48	3.26	203.00	9.45	203.52	13.04	204.04	13.86

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
204.05	13.87	204.57	18.36	205.09	83.19
204.06	13.89	204.58	18.95	205.10	84.86
204.07	13.90	204.59	19.56	205.11	86.54
204.08	13.92	204.60	20.20	205.12	88.24
204.09	13.93	204.61	20.87	205.13	89.94
204.10	13.95	204.62	21.56	205.14	91.66
204.11	13.96	204.63	22.27	205.15	93.40
204.12	13.98	204.64	23.01	205.16	95.14
204.13	13.99	204.65	23.77	205.17	96.90
204.14	14.01	204.66	24.55	205.18	98.68
204.15	14.02	204.67	25.35	205.19	100.46
204.16	14.04	204.68	26.21	205.20	102.26
204.17	14.05	204.69	27.10	205.21	104.07
204.18	14.07	204.70	28.01	205.22	105.89
204.19	14.08	204.71	28.95	205.23	107.73
204.20	14.10	204.72	29.91	205.24	109.57
204.21	14.11	204.73	30.90	205.25	111.43
204.22	14.13	204.74	31.91	205.26	113.30
204.23	14.14	204.75	32.95	205.27	115.19
204.24	14.16	204.76	34.01	205.28	117.12
204.25	14.17	204.77	35.10	205.29	119.07
204.26	14.19	204.78	36.21	205.30	121.02
204.27	14.20	204.79	37.34	205.31	123.00
204.28	14.22	204.80	38.50	205.32	124.98
204.29	14.23	204.81	39.69	205.33	126.98
204.30	14.25	204.82	40.90	205.34	129.00
204.31	14.26	204.83	42.13	205.35	131.02
204.32	14.28	204.84	43.39	205.36	133.06
204.33	14.29	204.85	44.67	205.37	135.11
204.34	14.31	204.86	45.97	205.38	137.17
204.35	14.32	204.87	47.30	205.39	139.25
204.36	14.34	204.88	48.68	205.40	141.34
204.37	14.35	204.89	50.09	205.41	143.44
204.38	14.37	204.90	51.52	205.42	145.56
204.39	14.38	204.91	52.98	205.43	147.69
204.40	14.40	204.92	54.46	205.44	149.83
204.41	14.41	204.93	55.97	205.45	151.98
204.42	14.42	204.94	57.51	205.46	154.14
204.43	14.44	204.95	59.07	205.47	156.32
204.44	14.45	204.96	60.66	205.48	158.46
204.45	14.47	204.97	62.27	205.49	160.61
204.46	14.48	204.98	63.92	205.50	**162.77**
204.47	14.50	204.99	65.59		
204.48	14.63	205.00	67.28		
204.49	14.86	205.01	69.00		
204.50	15.15	205.02	70.75		
204.51	15.49	205.03	72.53		
204.52	15.88	205.04	74.33		
204.53	16.31	205.05	76.16		
204.54	16.77	205.06	78.01		
204.55	17.27	205.07	79.90		
204.56	17.80	205.08	81.54		

Stage-Area-Storage for Pond B-54: Basin #54

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.89	0	0
199.90	344	2
199.91	687	7
199.92	1,031	15
199.93	1,375	27
199.94	1,718	43
199.95	2,062	62
199.96	2,405	84
199.97	2,749	110
199.98	3,093	139
199.99	3,436	172
200.00	3,780	208
200.01	3,787	246
200.02	3,793	284
200.03	3,800	322
200.04	3,806	360
200.05	3,813	398
200.06	3,820	436
200.07	3,826	474
200.08	3,833	512
200.09	3,839	551
200.10	3,846	589
200.11	3,853	628
200.12	3,859	666
200.13	3,866	705
200.14	3,872	744
200.15	3,879	782
200.16	3,886	821
200.17	3,892	860
200.18	3,899	899
200.19	3,905	938
200.20	3,912	977
200.21	3,919	1,016
200.22	3,925	1,055
200.23	3,932	1,095
200.24	3,938	1,134
200.25	3,945	1,174
200.26	3,952	1,213
200.27	3,958	1,253
200.28	3,965	1,292
200.29	3,971	1,332
200.30	3,978	1,372
200.31	3,985	1,411
200.32	3,991	1,451
200.33	3,998	1,491
200.34	4,004	1,531
200.35	4,011	1,571
200.36	4,018	1,611
200.37	4,024	1,652
200.38	4,031	1,692
200.39	4,037	1,732
200.40	4,044	1,773
200.41	4,051	1,813
200.42	4,057	1,854
200.43	4,064	1,894
200.44	4,070	1,935
200.45	4,077	1,976
200.46	4,084	2,017
200.47	4,090	2,057
200.48	4,097	2,098
200.49	4,103	2,139
200.50	4,110	2,180
200.51	4,117	2,222
200.52	4,123	2,263
200.53	4,130	2,304
200.54	4,136	2,345
200.55	4,143	2,387
200.56	4,150	2,428
200.57	4,156	2,470
200.58	4,163	2,511
200.59	4,169	2,553
200.60	4,176	2,595
200.61	4,183	2,636
200.62	4,189	2,678
200.63	4,196	2,720
200.64	4,202	2,762
200.65	4,209	2,804
200.66	4,216	2,846
200.67	4,222	2,889
200.68	4,229	2,931
200.69	4,235	2,973
200.70	4,242	3,016
200.71	4,249	3,058
200.72	4,255	3,101
200.73	4,262	3,143
200.74	4,268	3,186
200.75	4,275	3,229
200.76	4,282	3,271
200.77	4,288	3,314
200.78	4,295	3,357
200.79	4,301	3,400
200.80	4,308	3,443
200.81	4,315	3,486
200.82	4,321	3,529
200.83	4,328	3,573
200.84	4,334	3,616
200.85	4,341	3,659
200.86	4,348	3,703
200.87	4,354	3,746
200.88	4,361	3,790
200.89	4,367	3,833
200.90	4,374	3,877
200.91	4,381	3,921
200.92	4,387	3,965

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.93	4,394	4,009
200.94	4,400	4,053
200.95	4,407	4,097
200.96	4,414	4,141
200.97	4,420	4,185
200.98	4,427	4,229
200.99	4,433	4,274
201.00	4,440	4,318
201.01	4,447	4,362
201.02	4,453	4,407
201.03	4,460	4,451
201.04	4,466	4,496
201.05	4,473	4,541
201.06	4,480	4,585
201.07	4,486	4,630
201.08	4,493	4,675
201.09	4,499	4,720
201.10	4,506	4,765
201.11	4,513	4,810
201.12	4,519	4,855
201.13	4,526	4,901
201.14	4,532	4,946
201.15	4,539	4,991
201.16	4,546	5,037
201.17	4,552	5,082
201.18	4,559	5,128
201.19	4,565	5,173
201.20	4,572	5,219
201.21	4,579	5,265
201.22	4,585	5,311
201.23	4,592	5,357
201.24	4,598	5,403
201.25	4,605	5,449
201.26	4,612	5,495
201.27	4,618	5,541
201.28	4,625	5,587
201.29	4,631	5,633
201.30	4,638	5,680
201.31	4,645	5,726
201.32	4,651	5,772
201.33	4,658	5,819
201.34	4,664	5,866
201.35	4,671	5,912
201.36	4,678	5,959
201.37	4,684	6,006
201.38	4,691	6,053
201.39	4,697	6,100
201.40	4,704	6,147
201.41	4,711	6,194
201.42	4,717	6,241
201.43	4,724	6,288
201.44	4,730	6,335
201.45	4,737	6,383
201.46	4,744	6,430
201.47	4,750	6,478
201.48	4,757	6,525
201.49	4,763	6,573
201.50	4,770	6,620
201.51	4,777	6,668
201.52	4,783	6,716
201.53	4,790	6,764
201.54	4,796	6,812
201.55	4,803	6,860
201.56	4,810	6,908
201.57	4,816	6,956
201.58	4,823	7,004
201.59	4,829	7,052
201.60	4,836	7,101
201.61	4,843	7,149
201.62	4,849	7,198
201.63	4,856	7,246
201.64	4,862	7,295
201.65	4,869	7,343
201.66	4,876	7,392
201.67	4,882	7,441
201.68	4,889	7,490
201.69	4,895	7,539
201.70	4,902	7,588
201.71	4,909	7,637
201.72	4,915	7,686
201.73	4,922	7,735
201.74	4,928	7,784
201.75	4,935	7,834
201.76	4,942	7,883
201.77	4,948	7,932
201.78	4,955	7,982
201.79	4,961	8,031
201.80	4,968	8,081
201.81	4,975	8,131
201.82	4,981	8,181
201.83	4,988	8,230
201.84	4,994	8,280
201.85	5,001	8,330
201.86	5,008	8,380
201.87	5,014	8,430
201.88	5,021	8,481
201.89	5,027	8,531
201.90	5,034	8,581
201.91	5,041	8,632
201.92	5,047	8,682
201.93	5,054	8,733
201.94	5,060	8,783
201.95	5,067	8,834
201.96	5,074	8,884

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.97	5,080	8,935	202.49	5,423	11,666
201.98	5,087	8,986	202.50	5,430	11,720
201.99	5,093	9,037	202.51	5,437	11,775
202.00	5,100	9,088	202.52	5,443	11,829
202.01	5,107	9,139	202.53	5,450	11,884
202.02	5,113	9,190	202.54	5,456	11,938
202.03	5,120	9,241	202.55	5,463	11,993
202.04	5,126	9,292	202.56	5,470	12,047
202.05	5,133	9,344	202.57	5,476	12,102
202.06	5,140	9,395	202.58	5,483	12,157
202.07	5,146	9,447	202.59	5,489	12,212
202.08	5,153	9,498	202.60	5,496	12,267
202.09	5,159	9,550	202.61	5,503	12,322
202.10	5,166	9,601	202.62	5,509	12,377
202.11	5,173	9,653	202.63	5,516	12,432
202.12	5,179	9,705	202.64	5,522	12,487
202.13	5,186	9,756	202.65	5,529	12,542
202.14	5,192	9,808	202.66	5,536	12,598
202.15	5,199	9,860	202.67	5,542	12,653
202.16	5,206	9,912	202.68	5,549	12,708
202.17	5,212	9,964	202.69	5,555	12,764
202.18	5,219	10,017	202.70	5,562	12,820
202.19	5,225	10,069	202.71	5,569	12,875
202.20	5,232	10,121	202.72	5,575	12,931
202.21	5,239	10,173	202.73	5,582	12,987
202.22	5,245	10,226	202.74	5,588	13,043
202.23	5,252	10,278	202.75	5,595	13,099
202.24	5,258	10,331	202.76	5,602	13,155
202.25	5,265	10,384	202.77	5,608	13,211
202.26	5,272	10,436	202.78	5,615	13,267
202.27	5,278	10,489	202.79	5,621	13,323
202.28	5,285	10,542	202.80	5,628	13,379
202.29	5,291	10,595	202.81	5,635	13,435
202.30	5,298	10,648	202.82	5,641	13,492
202.31	5,305	10,701	202.83	5,648	13,548
202.32	5,311	10,754	202.84	5,654	13,605
202.33	5,318	10,807	202.85	5,661	13,661
202.34	5,324	10,860	202.86	5,668	13,718
202.35	5,331	10,913	202.87	5,674	13,775
202.36	5,338	10,967	202.88	5,681	13,831
202.37	5,344	11,020	202.89	5,687	13,888
202.38	5,351	11,074	202.90	5,694	13,945
202.39	5,357	11,127	202.91	5,701	14,002
202.40	5,364	11,181	202.92	5,707	14,059
202.41	5,371	11,234	202.93	5,714	14,116
202.42	5,377	11,288	202.94	5,720	14,173
202.43	5,384	11,342	202.95	5,727	14,231
202.44	5,390	11,396	202.96	5,734	14,288
202.45	5,397	11,450	202.97	5,740	14,345
202.46	5,404	11,504	202.98	5,747	14,403
202.47	5,410	11,558	202.99	5,753	14,460
202.48	5,417	11,612	203.00	5,760	14,518

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.01	5,767	14,576	203.53	6,110	17,664
203.02	5,773	14,633	203.54	6,117	17,725
203.03	5,780	14,691	203.55	6,124	17,786
203.04	5,786	14,749	203.56	6,130	17,847
203.05	5,793	14,807	203.57	6,137	17,908
203.06	5,800	14,865	203.58	6,143	17,970
203.07	5,806	14,923	203.59	6,150	18,031
203.08	5,813	14,981	203.60	6,157	18,093
203.09	5,819	15,039	203.61	6,163	18,154
203.10	5,826	15,097	203.62	6,170	18,216
203.11	5,833	15,155	203.63	6,176	18,278
203.12	5,839	15,214	203.64	6,183	18,340
203.13	5,846	15,272	203.65	6,190	18,402
203.14	5,853	15,331	203.66	6,196	18,463
203.15	5,859	15,389	203.67	6,203	18,525
203.16	5,866	15,448	203.68	6,209	18,588
203.17	5,872	15,507	203.69	6,216	18,650
203.18	5,879	15,565	203.70	6,223	18,712
203.19	5,886	15,624	203.71	6,229	18,774
203.20	5,892	15,683	203.72	6,236	18,836
203.21	5,899	15,742	203.73	6,243	18,899
203.22	5,905	15,801	203.74	6,249	18,961
203.23	5,912	15,860	203.75	6,256	19,024
203.24	5,919	15,919	203.76	6,262	19,086
203.25	5,925	15,979	203.77	6,269	19,149
203.26	5,932	16,038	203.78	6,276	19,212
203.27	5,938	16,097	203.79	6,282	19,275
203.28	5,945	16,157	203.80	6,289	19,337
203.29	5,952	16,216	203.81	6,295	19,400
203.30	5,958	16,276	203.82	6,302	19,463
203.31	5,965	16,335	203.83	6,309	19,526
203.32	5,972	16,395	203.84	6,315	19,590
203.33	5,978	16,455	203.85	6,322	19,653
203.34	5,985	16,515	203.86	6,328	19,716
203.35	5,991	16,574	203.87	6,335	19,779
203.36	5,998	16,634	203.88	6,342	19,843
203.37	6,005	16,694	203.89	6,348	19,906
203.38	6,011	16,754	203.90	6,355	19,970
203.39	6,018	16,815	203.91	6,362	20,033
203.40	6,024	16,875	203.92	6,368	20,097
203.41	6,031	16,935	203.93	6,375	20,161
203.42	6,038	16,995	203.94	6,381	20,224
203.43	6,044	17,056	203.95	6,388	20,288
203.44	6,051	17,116	203.96	6,395	20,352
203.45	6,057	17,177	203.97	6,401	20,416
203.46	6,064	17,237	203.98	6,408	20,480
203.47	6,071	17,298	203.99	6,414	20,544
203.48	6,077	17,359	204.00	6,421	20,608
203.49	6,084	17,420	204.01	6,428	20,673
203.50	6,091	17,481	204.02	6,434	20,737
203.51	6,097	17,541	204.03	6,441	20,801
203.52	6,104	17,602	204.04	6,447	20,866

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.05	6,454	20,930
204.06	6,461	20,995
204.07	6,467	21,059
204.08	6,474	21,124
204.09	6,480	21,189
204.10	6,487	21,254
204.11	6,494	21,319
204.12	6,500	21,384
204.13	6,507	21,449
204.14	6,513	21,514
204.15	6,520	21,579
204.16	6,527	21,644
204.17	6,533	21,710
204.18	6,540	21,775
204.19	6,546	21,840
204.20	6,553	21,906
204.21	6,560	21,971
204.22	6,566	22,037
204.23	6,573	22,103
204.24	6,579	22,168
204.25	6,586	22,234
204.26	6,593	22,300
204.27	6,599	22,366
204.28	6,606	22,432
204.29	6,612	22,498
204.30	6,619	22,564
204.31	6,626	22,631
204.32	6,632	22,697
204.33	6,639	22,763
204.34	6,645	22,830
204.35	6,652	22,896
204.36	6,659	22,963
204.37	6,665	23,029
204.38	6,672	23,096
204.39	6,678	23,163
204.40	6,685	23,230
204.41	6,692	23,296
204.42	6,698	23,363
204.43	6,705	23,430
204.44	6,711	23,498
204.45	6,718	23,565
204.46	6,725	23,632
204.47	6,731	23,699
204.48	6,738	23,767
204.49	6,744	23,834
204.50	6,751	23,901
204.51	6,758	23,969
204.52	6,764	24,037
204.53	6,771	24,104
204.54	6,777	24,172
204.55	6,784	24,240
204.56	6,791	24,308
204.57	6,797	24,376
204.58	6,804	24,444
204.59	6,810	24,512
204.60	6,817	24,580
204.61	6,824	24,648
204.62	6,830	24,716
204.63	6,837	24,785
204.64	6,843	24,853
204.65	6,850	24,921
204.66	6,857	24,990
204.67	6,863	25,059
204.68	6,870	25,127
204.69	6,876	25,196
204.70	6,883	25,265
204.71	6,890	25,334
204.72	6,896	25,403
204.73	6,903	25,472
204.74	6,909	25,541
204.75	6,916	25,610
204.76	6,923	25,679
204.77	6,929	25,748
204.78	6,936	25,818
204.79	6,942	25,887
204.80	6,949	25,956
204.81	6,956	26,026
204.82	6,962	26,096
204.83	6,969	26,165
204.84	6,975	26,235
204.85	6,982	26,305
204.86	6,989	26,375
204.87	6,995	26,444
204.88	7,002	26,514
204.89	7,008	26,584
204.90	7,015	26,655
204.91	7,022	26,725
204.92	7,028	26,795
204.93	7,035	26,865
204.94	7,041	26,936
204.95	7,048	27,006
204.96	7,055	27,077
204.97	7,061	27,147
204.98	7,068	27,218
204.99	7,074	27,289
205.00	7,081	27,359
205.01	7,088	27,430
205.02	7,094	27,501
205.03	7,101	27,572
205.04	7,107	27,643
205.05	7,114	27,714
205.06	7,121	27,785
205.07	7,127	27,857
205.08	7,134	27,928

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.09	7,140	27,999
205.10	7,147	28,071
205.11	7,154	28,142
205.12	7,160	28,214
205.13	7,167	28,286
205.14	7,173	28,357
205.15	7,180	28,429
205.16	7,187	28,501
205.17	7,193	28,573
205.18	7,200	28,645
205.19	7,206	28,717
205.20	7,213	28,789
205.21	7,220	28,861
205.22	7,226	28,933
205.23	7,233	29,005
205.24	7,239	29,078
205.25	7,246	29,150
205.26	7,253	29,223
205.27	7,259	29,295
205.28	7,266	29,368
205.29	7,272	29,441
205.30	7,279	29,513
205.31	7,286	29,586
205.32	7,292	29,659
205.33	7,299	29,732
205.34	7,305	29,805
205.35	7,312	29,878
205.36	7,319	29,951
205.37	7,325	30,025
205.38	7,332	30,098
205.39	7,338	30,171
205.40	7,345	30,245
205.41	7,352	30,318
205.42	7,358	30,392
205.43	7,365	30,465
205.44	7,371	30,539
205.45	7,378	30,613
205.46	7,385	30,686
205.47	7,391	30,760
205.48	7,398	30,834
205.49	7,404	30,908
205.50	**7,411**	**30,982**

Summary for Pond B-55: Basin #55

Inflow Area = 2.301 ac, 47.33% Impervious, Inflow Depth = 6.83" for Current 100 yr event
Inflow = 15.79 cfs @ 12.17 hrs, Volume= 1.309 af
Outflow = 11.33 cfs @ 12.27 hrs, Volume= 1.206 af, Atten= 28%, Lag= 5.7 min
Primary = 11.33 cfs @ 12.27 hrs, Volume= 1.206 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.77' @ 12.27 hrs Surf.Area= 5,661 sf Storage= 14,616 cf

Plug-Flow detention time= 107.5 min calculated for 1.206 af (92% of inflow)
Center-of-Mass det. time= 64.0 min (840.4 - 776.4)

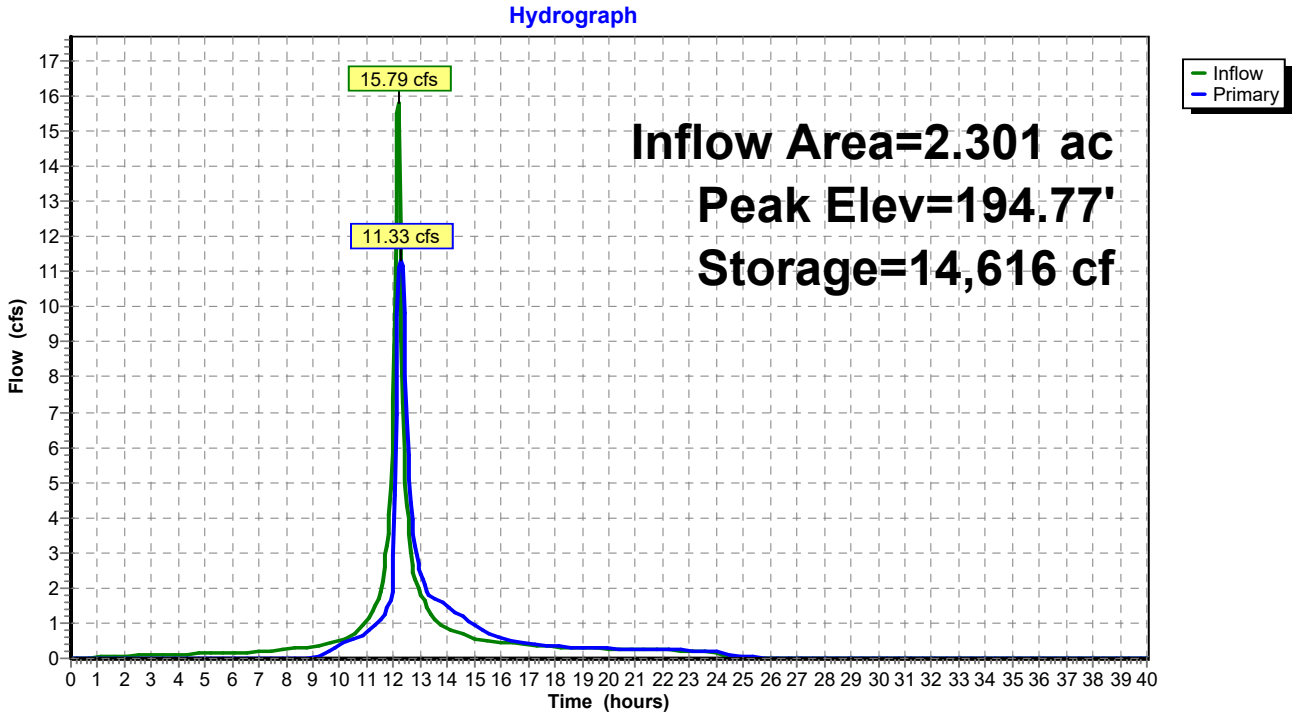
Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	**18.0" Round Culvert** L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 191.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.80'	**22.0" W x 2.5" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.82'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	195.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.31 cfs @ 12.27 hrs HW=194.76' (Free Discharge)
- **1=Culvert** (Barrel Controls 11.31 cfs @ 6.40 fps)
  - **2=Orifice/Grate** (Passes < 2.50 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 11.28 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-55: Basin #55



Stage-Discharge for Pond B-55: Basin #55

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.56	0.00	192.08	0.00	192.60	0.00	193.12	0.85
191.57	0.00	192.09	0.00	192.61	0.00	193.13	0.87
191.58	0.00	192.10	0.00	192.62	0.00	193.14	0.89
191.59	0.00	192.11	0.00	192.63	0.00	193.15	0.90
191.60	0.00	192.12	0.00	192.64	0.00	193.16	0.92
191.61	0.00	192.13	0.00	192.65	0.00	193.17	0.94
191.62	0.00	192.14	0.00	192.66	0.00	193.18	0.96
191.63	0.00	192.15	0.00	192.67	0.00	193.19	0.98
191.64	0.00	192.16	0.00	192.68	0.00	193.20	0.99
191.65	0.00	192.17	0.00	192.69	0.00	193.21	1.01
191.66	0.00	192.18	0.00	192.70	0.00	193.22	1.03
191.67	0.00	192.19	0.00	192.71	0.00	193.23	1.05
191.68	0.00	192.20	0.00	192.72	0.00	193.24	1.06
191.69	0.00	192.21	0.00	192.73	0.00	193.25	1.08
191.70	0.00	192.22	0.00	192.74	0.00	193.26	1.09
191.71	0.00	192.23	0.00	192.75	0.00	193.27	1.11
191.72	0.00	192.24	0.00	192.76	0.00	193.28	1.12
191.73	0.00	192.25	0.00	192.77	0.00	193.29	1.14
191.74	0.00	192.26	0.00	192.78	0.00	193.30	1.15
191.75	0.00	192.27	0.00	192.79	0.00	193.31	1.17
191.76	0.00	192.28	0.00	192.80	0.00	193.32	1.18
191.77	0.00	192.29	0.00	192.81	0.01	193.33	1.20
191.78	0.00	192.30	0.00	192.82	0.02	193.34	1.21
191.79	0.00	192.31	0.00	192.83	0.03	193.35	1.23
191.80	0.00	192.32	0.00	192.84	0.05	193.36	1.24
191.81	0.00	192.33	0.00	192.85	0.07	193.37	1.25
191.82	0.00	192.34	0.00	192.86	0.09	193.38	1.27
191.83	0.00	192.35	0.00	192.87	0.11	193.39	1.28
191.84	0.00	192.36	0.00	192.88	0.13	193.40	1.29
191.85	0.00	192.37	0.00	192.89	0.16	193.41	1.31
191.86	0.00	192.38	0.00	192.90	0.19	193.42	1.32
191.87	0.00	192.39	0.00	192.91	0.21	193.43	1.33
191.88	0.00	192.40	0.00	192.92	0.24	193.44	1.34
191.89	0.00	192.41	0.00	192.93	0.28	193.45	1.36
191.90	0.00	192.42	0.00	192.94	0.31	193.46	1.37
191.91	0.00	192.43	0.00	192.95	0.34	193.47	1.38
191.92	0.00	192.44	0.00	192.96	0.38	193.48	1.39
191.93	0.00	192.45	0.00	192.97	0.41	193.49	1.41
191.94	0.00	192.46	0.00	192.98	0.45	193.50	1.42
191.95	0.00	192.47	0.00	192.99	0.49	193.51	1.43
191.96	0.00	192.48	0.00	193.00	0.53	193.52	1.44
191.97	0.00	192.49	0.00	193.01	0.57	193.53	1.45
191.98	0.00	192.50	0.00	193.02	0.60	193.54	1.46
191.99	0.00	192.51	0.00	193.03	0.63	193.55	1.48
192.00	0.00	192.52	0.00	193.04	0.66	193.56	1.49
192.01	0.00	192.53	0.00	193.05	0.69	193.57	1.50
192.02	0.00	192.54	0.00	193.06	0.71	193.58	1.51
192.03	0.00	192.55	0.00	193.07	0.74	193.59	1.52
192.04	0.00	192.56	0.00	193.08	0.76	193.60	1.53
192.05	0.00	192.57	0.00	193.09	0.78	193.61	1.54
192.06	0.00	192.58	0.00	193.10	0.80	193.62	1.55
192.07	0.00	192.59	0.00	193.11	0.82	193.63	1.57

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.64	1.58	194.16	4.61	194.68	11.12	195.20	12.37
193.65	1.59	194.17	4.73	194.69	11.14	195.21	12.39
193.66	1.60	194.18	4.85	194.70	11.17	195.22	12.42
193.67	1.61	194.19	4.97	194.71	11.19	195.23	12.44
193.68	1.62	194.20	5.10	194.72	11.22	195.24	12.46
193.69	1.63	194.21	5.22	194.73	11.24	195.25	12.48
193.70	1.64	194.22	5.35	194.74	11.27	195.26	12.51
193.71	1.65	194.23	5.48	194.75	11.29	195.27	12.53
193.72	1.66	194.24	5.61	194.76	11.32	195.28	12.55
193.73	1.67	194.25	5.74	194.77	11.34	195.29	12.58
193.74	1.68	194.26	5.87	194.78	11.37	195.30	12.60
193.75	1.69	194.27	6.01	194.79	11.39	195.31	12.62
193.76	1.70	194.28	6.14	194.80	11.42	195.32	12.64
193.77	1.71	194.29	6.28	194.81	11.44	195.33	12.66
193.78	1.72	194.30	6.42	194.82	11.47	195.34	12.69
193.79	1.73	194.31	6.56	194.83	11.49	195.35	12.71
193.80	1.74	194.32	6.70	194.84	11.52	195.36	12.73
193.81	1.75	194.33	6.84	194.85	11.54	195.37	12.75
193.82	1.76	194.34	6.98	194.86	11.57	195.38	12.78
193.83	1.78	194.35	7.12	194.87	11.59	195.39	12.80
193.84	1.82	194.36	7.27	194.88	11.61	195.40	12.82
193.85	1.86	194.37	7.41	194.89	11.64	195.41	12.84
193.86	1.90	194.38	7.56	194.90	11.66	195.42	12.86
193.87	1.95	194.39	7.71	194.91	11.69	195.43	12.89
193.88	2.01	194.40	7.86	194.92	11.71	195.44	12.91
193.89	2.07	194.41	8.01	194.93	11.74	195.45	12.93
193.90	2.13	194.42	8.16	194.94	11.76	195.46	13.07
193.91	2.20	194.43	8.31	194.95	11.78	195.47	13.31
193.92	2.26	194.44	8.47	194.96	11.81	195.48	13.61
193.93	2.34	194.45	8.62	194.97	11.83	195.49	13.96
193.94	2.41	194.46	8.78	194.98	11.86	195.50	14.35
193.95	2.49	194.47	8.93	194.99	11.88	195.51	14.79
193.96	2.57	194.48	9.09	195.00	11.90	195.52	15.26
193.97	2.65	194.49	9.25	195.01	11.93	195.53	15.76
193.98	2.74	194.50	9.41	195.02	11.95	195.54	16.30
193.99	2.82	194.51	9.57	195.03	11.97	195.55	16.87
194.00	2.91	194.52	9.73	195.04	12.00	195.56	17.46
194.01	3.01	194.53	9.89	195.05	12.02	195.57	18.08
194.02	3.10	194.54	10.06	195.06	12.05	195.58	18.73
194.03	3.20	194.55	10.22	195.07	12.07	195.59	19.40
194.04	3.29	194.56	10.38	195.08	12.09	195.60	20.10
194.05	3.39	194.57	10.55	195.09	12.12	195.61	20.82
194.06	3.50	194.58	10.72	195.10	12.14	195.62	21.57
194.07	3.60	194.59	10.88	195.11	12.16	195.63	22.33
194.08	3.71	194.60	10.91	195.12	12.19	195.64	23.12
194.09	3.81	194.61	10.94	195.13	12.21	195.65	23.93
194.10	3.92	194.62	10.96	195.14	12.23	195.66	24.79
194.11	4.03	194.63	10.99	195.15	12.26	195.67	25.69
194.12	4.14	194.64	11.01	195.16	12.28	195.68	26.61
194.13	4.26	194.65	11.04	195.17	12.30	195.69	27.55
194.14	4.37	194.66	11.06	195.18	12.32	195.70	28.52
194.15	4.49	194.67	11.09	195.19	12.35	195.71	29.52

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)
195.72	30.53
195.73	31.58
195.74	32.65
195.75	33.74
195.76	34.86
195.77	36.00
195.78	37.17
195.79	38.36
195.80	39.57
195.81	40.81
195.82	42.08
195.83	43.36
195.84	44.67
195.85	46.01
195.86	47.40
195.87	48.81
195.88	50.25
195.89	51.71
195.90	53.20
195.91	54.72
195.92	56.26
195.93	57.83
195.94	59.43
195.95	61.05
195.96	62.70
195.97	64.37
195.98	66.07
195.99	67.80
196.00	**69.56**

Stage-Area-Storage for Pond B-55: Basin #55

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.56	0	0
191.57	97	0
191.58	193	2
191.59	290	4
191.60	386	8
191.61	483	12
191.62	580	17
191.63	676	24
191.64	773	31
191.65	869	39
191.66	966	48
191.67	1,063	58
191.68	1,159	70
191.69	1,256	82
191.70	1,352	95
191.71	1,449	109
191.72	1,545	124
191.73	1,642	140
191.74	1,739	156
191.75	1,835	174
191.76	1,932	193
191.77	2,028	213
191.78	2,125	234
191.79	2,222	255
191.80	2,318	278
191.81	2,415	302
191.82	2,511	326
191.83	2,608	352
191.84	2,705	379
191.85	2,801	406
191.86	2,898	435
191.87	2,994	464
191.88	3,091	495
191.89	3,188	526
191.90	3,284	558
191.91	3,381	592
191.92	3,477	626
191.93	3,574	661
191.94	3,670	697
191.95	3,767	735
191.96	3,864	773
191.97	3,960	812
191.98	4,057	852
191.99	4,153	893
192.00	4,250	935
192.01	4,255	978
192.02	4,260	1,020
192.03	4,265	1,063
192.04	4,270	1,105
192.05	4,275	1,148
192.06	4,280	1,191
192.07	4,285	1,234
192.08	4,290	1,277
192.09	4,295	1,320
192.10	4,300	1,362
192.11	4,305	1,406
192.12	4,310	1,449
192.13	4,314	1,492
192.14	4,319	1,535
192.15	4,324	1,578
192.16	4,329	1,621
192.17	4,334	1,665
192.18	4,339	1,708
192.19	4,344	1,751
192.20	4,349	1,795
192.21	4,354	1,838
192.22	4,359	1,882
192.23	4,364	1,926
192.24	4,369	1,969
192.25	4,374	2,013
192.26	4,379	2,057
192.27	4,384	2,101
192.28	4,389	2,144
192.29	4,394	2,188
192.30	4,399	2,232
192.31	4,404	2,276
192.32	4,409	2,320
192.33	4,414	2,365
192.34	4,419	2,409
192.35	4,424	2,453
192.36	4,429	2,497
192.37	4,434	2,541
192.38	4,438	2,586
192.39	4,443	2,630
192.40	4,448	2,675
192.41	4,453	2,719
192.42	4,458	2,764
192.43	4,463	2,808
192.44	4,468	2,853
192.45	4,473	2,898
192.46	4,478	2,942
192.47	4,483	2,987
192.48	4,488	3,032
192.49	4,493	3,077
192.50	4,498	3,122
192.51	4,503	3,167
192.52	4,508	3,212
192.53	4,513	3,257
192.54	4,518	3,302
192.55	4,523	3,348
192.56	4,528	3,393
192.57	4,533	3,438
192.58	4,538	3,483
192.59	4,543	3,529

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.60	4,548	3,574	193.12	4,807	6,006
192.61	4,553	3,620	193.13	4,812	6,054
192.62	4,558	3,665	193.14	4,818	6,102
192.63	4,562	3,711	193.15	4,823	6,151
192.64	4,567	3,757	193.16	4,828	6,199
192.65	4,572	3,802	193.17	4,833	6,247
192.66	4,577	3,848	193.18	4,838	6,296
192.67	4,582	3,894	193.19	4,843	6,344
192.68	4,587	3,940	193.20	4,848	6,392
192.69	4,592	3,986	193.21	4,853	6,441
192.70	4,597	4,032	193.22	4,858	6,489
192.71	4,602	4,078	193.23	4,864	6,538
192.72	4,607	4,124	193.24	4,869	6,587
192.73	4,612	4,170	193.25	4,874	6,635
192.74	4,617	4,216	193.26	4,879	6,684
192.75	4,622	4,262	193.27	4,884	6,733
192.76	4,627	4,308	193.28	4,889	6,782
192.77	4,632	4,355	193.29	4,894	6,831
192.78	4,637	4,401	193.30	4,899	6,880
192.79	4,642	4,447	193.31	4,904	6,929
192.80	4,647	4,494	193.32	4,910	6,978
192.81	4,652	4,540	193.33	4,915	7,027
192.82	4,657	4,587	193.34	4,920	7,076
192.83	4,662	4,633	193.35	4,925	7,125
192.84	4,667	4,680	193.36	4,930	7,175
192.85	4,672	4,727	193.37	4,935	7,224
192.86	4,677	4,773	193.38	4,940	7,273
192.87	4,682	4,820	193.39	4,945	7,323
192.88	4,686	4,867	193.40	4,950	7,372
192.89	4,691	4,914	193.41	4,956	7,422
192.90	4,696	4,961	193.42	4,961	7,471
192.91	4,701	5,008	193.43	4,966	7,521
192.92	4,706	5,055	193.44	4,971	7,571
192.93	4,711	5,102	193.45	4,976	7,620
192.94	4,716	5,149	193.46	4,981	7,670
192.95	4,721	5,196	193.47	4,986	7,720
192.96	4,726	5,244	193.48	4,991	7,770
192.97	4,731	5,291	193.49	4,996	7,820
192.98	4,736	5,338	193.50	5,002	7,870
192.99	4,741	5,386	193.51	5,007	7,920
193.00	4,746	5,433	193.52	5,012	7,970
193.01	4,751	5,480	193.53	5,017	8,020
193.02	4,756	5,528	193.54	5,022	8,070
193.03	4,761	5,576	193.55	5,027	8,121
193.04	4,766	5,623	193.56	5,032	8,171
193.05	4,772	5,671	193.57	5,037	8,221
193.06	4,777	5,719	193.58	5,042	8,272
193.07	4,782	5,766	193.59	5,047	8,322
193.08	4,787	5,814	193.60	5,053	8,373
193.09	4,792	5,862	193.61	5,058	8,423
193.10	4,797	5,910	193.62	5,063	8,474
193.11	4,802	5,958	193.63	5,068	8,524

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.64	5,073	8,575	194.16	5,341	11,282
193.65	5,078	8,626	194.17	5,347	11,336
193.66	5,083	8,677	194.18	5,352	11,389
193.67	5,088	8,728	194.19	5,357	11,443
193.68	5,093	8,778	194.20	5,362	11,496
193.69	5,099	8,829	194.21	5,368	11,550
193.70	5,104	8,880	194.22	5,373	11,604
193.71	5,109	8,931	194.23	5,378	11,658
193.72	5,114	8,983	194.24	5,383	11,711
193.73	5,119	9,034	194.25	5,389	11,765
193.74	5,124	9,085	194.26	5,394	11,819
193.75	5,129	9,136	194.27	5,399	11,873
193.76	5,134	9,188	194.28	5,405	11,927
193.77	5,139	9,239	194.29	5,410	11,981
193.78	5,145	9,290	194.30	5,415	12,035
193.79	5,150	9,342	194.31	5,420	12,089
193.80	5,155	9,393	194.32	5,426	12,144
193.81	5,160	9,445	194.33	5,431	12,198
193.82	5,165	9,497	194.34	5,436	12,252
193.83	5,170	9,548	194.35	5,441	12,307
193.84	5,175	9,600	194.36	5,447	12,361
193.85	5,180	9,652	194.37	5,452	12,416
193.86	5,185	9,704	194.38	5,457	12,470
193.87	5,191	9,755	194.39	5,463	12,525
193.88	5,196	9,807	194.40	5,468	12,579
193.89	5,201	9,859	194.41	5,473	12,634
193.90	5,206	9,911	194.42	5,478	12,689
193.91	5,211	9,963	194.43	5,484	12,744
193.92	5,216	10,016	194.44	5,489	12,799
193.93	5,221	10,068	194.45	5,494	12,854
193.94	5,226	10,120	194.46	5,499	12,908
193.95	5,231	10,172	194.47	5,505	12,963
193.96	5,237	10,225	194.48	5,510	13,019
193.97	5,242	10,277	194.49	5,515	13,074
193.98	5,247	10,329	194.50	5,521	13,129
193.99	5,252	10,382	194.51	5,526	13,184
194.00	5,257	10,434	194.52	5,531	13,239
194.01	5,262	10,487	194.53	5,536	13,295
194.02	5,268	10,540	194.54	5,542	13,350
194.03	5,273	10,592	194.55	5,547	13,406
194.04	5,278	10,645	194.56	5,552	13,461
194.05	5,283	10,698	194.57	5,557	13,517
194.06	5,289	10,751	194.58	5,563	13,572
194.07	5,294	10,804	194.59	5,568	13,628
194.08	5,299	10,857	194.60	5,573	13,684
194.09	5,304	10,910	194.61	5,578	13,739
194.10	5,310	10,963	194.62	5,584	13,795
194.11	5,315	11,016	194.63	5,589	13,851
194.12	5,320	11,069	194.64	5,594	13,907
194.13	5,326	11,122	194.65	5,600	13,963
194.14	5,331	11,176	194.66	5,605	14,019
194.15	5,336	11,229	194.67	5,610	14,075

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.68	5,615	14,131	195.20	5,893	17,123
194.69	5,621	14,187	195.21	5,898	17,182
194.70	5,626	14,244	195.22	5,903	17,241
194.71	5,631	14,300	195.23	5,909	17,300
194.72	5,636	14,356	195.24	5,914	17,359
194.73	5,642	14,413	195.25	5,920	17,418
194.74	5,647	14,469	195.26	5,925	17,477
194.75	5,652	14,525	195.27	5,931	17,536
194.76	5,658	14,582	195.28	5,936	17,596
194.77	5,663	14,639	195.29	5,941	17,655
194.78	5,668	14,695	195.30	5,947	17,715
194.79	5,673	14,752	195.31	5,952	17,774
194.80	5,679	14,809	195.32	5,958	17,834
194.81	5,684	14,866	195.33	5,963	17,893
194.82	5,689	14,922	195.34	5,969	17,953
194.83	5,694	14,979	195.35	5,974	18,013
194.84	5,700	15,036	195.36	5,979	18,072
194.85	5,705	15,093	195.37	5,985	18,132
194.86	5,710	15,150	195.38	5,990	18,192
194.87	5,715	15,208	195.39	5,996	18,252
194.88	5,721	15,265	195.40	6,001	18,312
194.89	5,726	15,322	195.41	6,007	18,372
194.90	5,731	15,379	195.42	6,012	18,432
194.91	5,737	15,437	195.43	6,017	18,492
194.92	5,742	15,494	195.44	6,023	18,553
194.93	5,747	15,551	195.45	6,028	18,613
194.94	5,752	15,609	195.46	6,034	18,673
194.95	5,758	15,666	195.47	6,039	18,733
194.96	5,763	15,724	195.48	6,045	18,794
194.97	5,768	15,782	195.49	6,050	18,854
194.98	5,773	15,839	195.50	6,056	18,915
194.99	5,779	15,897	195.51	6,061	18,975
195.00	5,784	15,955	195.52	6,066	19,036
195.01	5,789	16,013	195.53	6,072	19,097
195.02	5,795	16,071	195.54	6,077	19,158
195.03	5,800	16,129	195.55	6,083	19,218
195.04	5,806	16,187	195.56	6,088	19,279
195.05	5,811	16,245	195.57	6,094	19,340
195.06	5,817	16,303	195.58	6,099	19,401
195.07	5,822	16,361	195.59	6,104	19,462
195.08	5,827	16,419	195.60	6,110	19,523
195.09	5,833	16,478	195.61	6,115	19,584
195.10	5,838	16,536	195.62	6,121	19,645
195.11	5,844	16,595	195.63	6,126	19,707
195.12	5,849	16,653	195.64	6,132	19,768
195.13	5,855	16,712	195.65	6,137	19,829
195.14	5,860	16,770	195.66	6,142	19,891
195.15	5,865	16,829	195.67	6,148	19,952
195.16	5,871	16,887	195.68	6,153	20,014
195.17	5,876	16,946	195.69	6,159	20,075
195.18	5,882	17,005	195.70	6,164	20,137
195.19	5,887	17,064	195.71	6,170	20,199

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.72	6,175	20,260
195.73	6,180	20,322
195.74	6,186	20,384
195.75	6,191	20,446
195.76	6,197	20,508
195.77	6,202	20,570
195.78	6,208	20,632
195.79	6,213	20,694
195.80	6,218	20,756
195.81	6,224	20,818
195.82	6,229	20,880
195.83	6,235	20,943
195.84	6,240	21,005
195.85	6,246	21,068
195.86	6,251	21,130
195.87	6,256	21,193
195.88	6,262	21,255
195.89	6,267	21,318
195.90	6,273	21,381
195.91	6,278	21,443
195.92	6,284	21,506
195.93	6,289	21,569
195.94	6,294	21,632
195.95	6,300	21,695
195.96	6,305	21,758
195.97	6,311	21,821
195.98	6,316	21,884
195.99	6,322	21,947
196.00	**6,327**	**22,010**

Summary for Pond B-56: Basin #56

Inflow Area = 1.512 ac, 31.08% Impervious, Inflow Depth = 6.36" for Current 100 yr event
Inflow = 9.92 cfs @ 12.17 hrs, Volume= 0.801 af
Outflow = 6.20 cfs @ 12.29 hrs, Volume= 0.754 af, Atten= 37%, Lag= 7.4 min
Primary = 6.20 cfs @ 12.29 hrs, Volume= 0.754 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.18' @ 12.29 hrs Surf.Area= 5,580 sf Storage= 7,355 cf

Plug-Flow detention time= 78.3 min calculated for 0.753 af (94% of inflow)
Center-of-Mass det. time= 45.4 min (834.7 - 789.3)

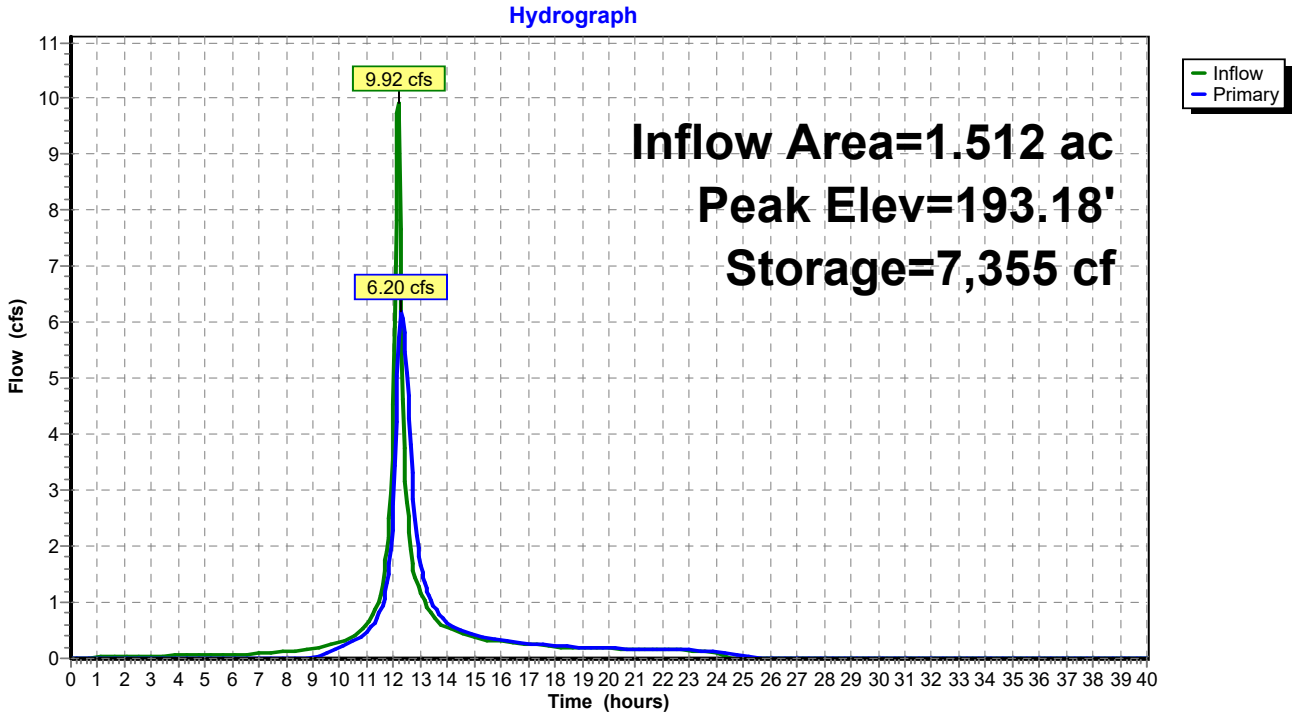
Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	**18.0" Round Culvert** L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.19'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.62'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.19 cfs @ 12.29 hrs HW=193.18' (Free Discharge)
- **1=Culvert** (Passes 6.19 cfs of 6.59 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 6.19 cfs @ 4.13 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-56: Basin #56



Stage-Discharge for Pond B-56: Basin #56

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.57	0.00	192.09	0.00	192.61	2.62	193.13	5.97
191.58	0.00	192.10	0.00	192.62	2.72	193.14	6.01
191.59	0.00	192.11	0.00	192.63	2.81	193.15	6.05
191.60	0.00	192.12	0.00	192.64	2.91	193.16	6.10
191.61	0.00	192.13	0.00	192.65	3.00	193.17	6.14
191.62	0.00	192.14	0.00	192.66	3.10	193.18	6.18
191.63	0.00	192.15	0.00	192.67	3.20	193.19	6.23
191.64	0.00	192.16	0.00	192.68	3.30	193.20	6.27
191.65	0.00	192.17	0.00	192.69	3.40	193.21	6.31
191.66	0.00	192.18	0.00	192.70	3.50	193.22	6.35
191.67	0.00	192.19	0.00	192.71	3.58	193.23	6.39
191.68	0.00	192.20	0.01	192.72	3.67	193.24	6.43
191.69	0.00	192.21	0.03	192.73	3.74	193.25	6.47
191.70	0.00	192.22	0.05	192.74	3.82	193.26	6.51
191.71	0.00	192.23	0.08	192.75	3.89	193.27	6.55
191.72	0.00	192.24	0.11	192.76	3.97	193.28	6.59
191.73	0.00	192.25	0.14	192.77	4.04	193.29	6.63
191.74	0.00	192.26	0.18	192.78	4.10	193.30	6.67
191.75	0.00	192.27	0.22	192.79	4.17	193.31	6.71
191.76	0.00	192.28	0.26	192.80	4.24	193.32	6.75
191.77	0.00	192.29	0.30	192.81	4.30	193.33	6.79
191.78	0.00	192.30	0.35	192.82	4.36	193.34	6.83
191.79	0.00	192.31	0.40	192.83	4.43	193.35	6.87
191.80	0.00	192.32	0.45	192.84	4.49	193.36	6.91
191.81	0.00	192.33	0.50	192.85	4.55	193.37	6.94
191.82	0.00	192.34	0.56	192.86	4.61	193.38	6.98
191.83	0.00	192.35	0.62	192.87	4.66	193.39	7.02
191.84	0.00	192.36	0.67	192.88	4.72	193.40	7.06
191.85	0.00	192.37	0.74	192.89	4.78	193.41	7.09
191.86	0.00	192.38	0.80	192.90	4.83	193.42	7.13
191.87	0.00	192.39	0.86	192.91	4.89	193.43	7.17
191.88	0.00	192.40	0.93	192.92	4.94	193.44	7.20
191.89	0.00	192.41	0.99	192.93	5.00	193.45	7.24
191.90	0.00	192.42	1.06	192.94	5.05	193.46	7.28
191.91	0.00	192.43	1.13	192.95	5.10	193.47	7.31
191.92	0.00	192.44	1.20	192.96	5.16	193.48	7.35
191.93	0.00	192.45	1.28	192.97	5.21	193.49	7.38
191.94	0.00	192.46	1.35	192.98	5.26	193.50	7.42
191.95	0.00	192.47	1.43	192.99	5.31	193.51	7.45
191.96	0.00	192.48	1.50	193.00	5.36	193.52	7.49
191.97	0.00	192.49	1.58	193.01	5.41	193.53	7.52
191.98	0.00	192.50	1.66	193.02	5.46	193.54	7.56
191.99	0.00	192.51	1.74	193.03	5.50	193.55	7.59
192.00	0.00	192.52	1.83	193.04	5.55	193.56	7.63
192.01	0.00	192.53	1.91	193.05	5.60	193.57	7.66
192.02	0.00	192.54	1.99	193.06	5.65	193.58	7.70
192.03	0.00	192.55	2.08	193.07	5.69	193.59	7.73
192.04	0.00	192.56	2.17	193.08	5.74	193.60	7.76
192.05	0.00	192.57	2.26	193.09	5.79	193.61	7.80
192.06	0.00	192.58	2.35	193.10	5.83	193.62	7.83
192.07	0.00	192.59	2.44	193.11	5.88	193.63	7.88
192.08	0.00	192.60	2.53	193.12	5.92	193.64	7.93

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.65	8.00	194.17	11.13	194.69	13.10	195.21	26.75
193.66	8.07	194.18	11.17	194.70	13.13	195.22	27.67
193.67	8.14	194.19	11.22	194.71	13.15	195.23	28.62
193.68	8.22	194.20	11.26	194.72	13.18	195.24	29.59
193.69	8.30	194.21	11.30	194.73	13.21	195.25	30.59
193.70	8.39	194.22	11.35	194.74	13.24	195.26	31.61
193.71	8.48	194.23	11.39	194.75	13.26	195.27	32.66
193.72	8.57	194.24	11.43	194.76	13.29	195.28	33.74
193.73	8.66	194.25	11.48	194.77	13.32	195.29	34.83
193.74	8.76	194.26	11.52	194.78	13.35	195.30	35.95
193.75	8.86	194.27	11.56	194.79	13.37	195.31	37.10
193.76	8.97	194.28	11.61	194.80	13.40	195.32	38.27
193.77	9.07	194.29	11.65	194.81	13.43	195.33	39.46
193.78	9.18	194.30	11.69	194.82	13.45	195.34	40.68
193.79	9.28	194.31	11.73	194.83	13.48	195.35	41.93
193.80	9.34	194.32	11.78	194.84	13.51	195.36	43.19
193.81	9.39	194.33	11.82	194.85	13.53	195.37	44.48
193.82	9.44	194.34	11.86	194.86	13.56	195.38	45.80
193.83	9.49	194.35	11.90	194.87	13.59	195.39	47.14
193.84	9.55	194.36	11.94	194.88	13.61	195.40	48.53
193.85	9.60	194.37	11.98	194.89	13.64	195.41	49.94
193.86	9.65	194.38	12.03	194.90	13.67	195.42	51.39
193.87	9.70	194.39	12.07	194.91	13.69	195.43	52.85
193.88	9.75	194.40	12.11	194.92	13.72	195.44	54.35
193.89	9.80	194.41	12.15	194.93	13.75	195.45	55.87
193.90	9.85	194.42	12.19	194.94	13.77	195.46	57.42
193.91	9.90	194.43	12.23	194.95	13.80	195.47	58.99
193.92	9.95	194.44	12.27	194.96	13.83	195.48	60.59
193.93	10.00	194.45	12.31	194.97	13.85	195.49	62.21
193.94	10.05	194.46	12.35	194.98	13.88	195.50	63.87
193.95	10.10	194.47	12.39	194.99	13.90	195.51	65.55
193.96	10.15	194.48	12.43	195.00	14.05	195.52	67.25
193.97	10.20	194.49	12.47	195.01	14.29	195.53	68.98
193.98	10.25	194.50	12.51	195.02	14.59	195.54	70.74
193.99	10.29	194.51	12.55	195.03	14.94	195.55	72.53
194.00	10.34	194.52	12.59	195.04	15.34	195.56	74.34
194.01	10.39	194.53	12.63	195.05	15.78	195.57	76.18
194.02	10.44	194.54	12.67	195.06	16.26	195.58	78.04
194.03	10.49	194.55	12.71	195.07	16.77	195.59	79.94
194.04	10.53	194.56	12.73	195.08	17.31	195.60	81.59
194.05	10.58	194.57	12.76	195.09	17.88	195.61	83.25
194.06	10.63	194.58	12.79	195.10	18.48	195.62	84.93
194.07	10.67	194.59	12.82	195.11	19.10	195.63	86.62
194.08	10.72	194.60	12.85	195.12	19.76	195.64	88.32
194.09	10.77	194.61	12.88	195.13	20.43	195.65	90.04
194.10	10.81	194.62	12.90	195.14	21.13	195.66	91.77
194.11	10.86	194.63	12.93	195.15	21.86	195.67	93.51
194.12	10.90	194.64	12.96	195.16	22.61	195.68	95.27
194.13	10.95	194.65	12.99	195.17	23.38	195.69	97.04
194.14	10.99	194.66	13.02	195.18	24.17	195.70	98.82
194.15	11.04	194.67	13.04	195.19	24.98	195.71	100.61
194.16	11.08	194.68	13.07	195.20	25.85	195.72	102.42

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)
195.73	104.24
195.74	106.07
195.75	107.92
195.76	109.77
195.77	111.64
195.78	113.52
195.79	115.41
195.80	117.36
195.81	119.31
195.82	121.28
195.83	123.26
195.84	125.26
195.85	127.27
195.86	129.29
195.87	131.32
195.88	133.37
195.89	135.43
195.90	137.50
195.91	139.59
195.92	141.69
195.93	143.80
195.94	145.92
195.95	148.06
195.96	150.21
195.97	152.37
195.98	154.55
195.99	156.73
196.00	**158.88**

Stage-Area-Storage for Pond B-56: Basin #56

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.57	0	0
191.58	117	1
191.59	234	2
191.60	350	5
191.61	467	9
191.62	584	15
191.63	701	21
191.64	817	29
191.65	934	37
191.66	1,051	47
191.67	1,168	58
191.68	1,284	71
191.69	1,401	84
191.70	1,518	99
191.71	1,635	114
191.72	1,752	131
191.73	1,868	149
191.74	1,985	169
191.75	2,102	189
191.76	2,219	211
191.77	2,335	234
191.78	2,452	257
191.79	2,569	283
191.80	2,686	309
191.81	2,802	336
191.82	2,919	365
191.83	3,036	395
191.84	3,153	426
191.85	3,269	458
191.86	3,386	491
191.87	3,503	525
191.88	3,620	561
191.89	3,737	598
191.90	3,853	636
191.91	3,970	675
191.92	4,087	715
191.93	4,204	757
191.94	4,320	799
191.95	4,437	843
191.96	4,554	888
191.97	4,671	934
191.98	4,787	981
191.99	4,904	1,030
192.00	5,021	1,080
192.01	5,026	1,130
192.02	5,030	1,180
192.03	5,035	1,230
192.04	5,040	1,281
192.05	5,044	1,331
192.06	5,049	1,382
192.07	5,054	1,432
192.08	5,059	1,483
192.09	5,063	1,533
192.10	5,068	1,584
192.11	5,073	1,635
192.12	5,077	1,685
192.13	5,082	1,736
192.14	5,087	1,787
192.15	5,091	1,838
192.16	5,096	1,889
192.17	5,101	1,940
192.18	5,105	1,991
192.19	5,110	2,042
192.20	5,115	2,093
192.21	5,119	2,144
192.22	5,124	2,195
192.23	5,129	2,247
192.24	5,134	2,298
192.25	5,138	2,349
192.26	5,143	2,401
192.27	5,148	2,452
192.28	5,152	2,504
192.29	5,157	2,555
192.30	5,162	2,607
192.31	5,166	2,659
192.32	5,171	2,710
192.33	5,176	2,762
192.34	5,180	2,814
192.35	5,185	2,866
192.36	5,190	2,917
192.37	5,195	2,969
192.38	5,199	3,021
192.39	5,204	3,073
192.40	5,209	3,125
192.41	5,213	3,178
192.42	5,218	3,230
192.43	5,223	3,282
192.44	5,227	3,334
192.45	5,232	3,386
192.46	5,237	3,439
192.47	5,241	3,491
192.48	5,246	3,544
192.49	5,251	3,596
192.50	5,256	3,649
192.51	5,260	3,701
192.52	5,265	3,754
192.53	5,270	3,807
192.54	5,274	3,859
192.55	5,279	3,912
192.56	5,284	3,965
192.57	5,288	4,018
192.58	5,293	4,071
192.59	5,298	4,124
192.60	5,302	4,177

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.61	5,307	4,230
192.62	5,312	4,283
192.63	5,316	4,336
192.64	5,321	4,389
192.65	5,326	4,442
192.66	5,331	4,496
192.67	5,335	4,549
192.68	5,340	4,602
192.69	5,345	4,656
192.70	5,349	4,709
192.71	5,354	4,763
192.72	5,359	4,816
192.73	5,363	4,870
192.74	5,368	4,923
192.75	5,373	4,977
192.76	5,377	5,031
192.77	5,382	5,085
192.78	5,387	5,139
192.79	5,392	5,192
192.80	5,396	5,246
192.81	5,401	5,300
192.82	5,406	5,354
192.83	5,410	5,408
192.84	5,415	5,463
192.85	5,420	5,517
192.86	5,424	5,571
192.87	5,429	5,625
192.88	5,434	5,680
192.89	5,438	5,734
192.90	5,443	5,788
192.91	5,448	5,843
192.92	5,452	5,897
192.93	5,457	5,952
192.94	5,462	6,006
192.95	5,467	6,061
192.96	5,471	6,116
192.97	5,476	6,171
192.98	5,481	6,225
192.99	5,485	6,280
193.00	5,490	6,335
193.01	5,495	6,390
193.02	5,500	6,445
193.03	5,505	6,500
193.04	5,509	6,555
193.05	5,514	6,610
193.06	5,519	6,665
193.07	5,524	6,721
193.08	5,529	6,776
193.09	5,534	6,831
193.10	5,539	6,886
193.11	5,543	6,942
193.12	5,548	6,997
193.13	5,553	7,053
193.14	5,558	7,108
193.15	5,563	7,164
193.16	5,568	7,220
193.17	5,573	7,275
193.18	5,577	7,331
193.19	5,582	7,387
193.20	5,587	7,443
193.21	5,592	7,499
193.22	5,597	7,555
193.23	5,602	7,611
193.24	5,607	7,667
193.25	5,612	7,723
193.26	5,616	7,779
193.27	5,621	7,835
193.28	5,626	7,891
193.29	5,631	7,948
193.30	5,636	8,004
193.31	5,641	8,060
193.32	5,646	8,117
193.33	5,650	8,173
193.34	5,655	8,230
193.35	5,660	8,286
193.36	5,665	8,343
193.37	5,670	8,400
193.38	5,675	8,456
193.39	5,680	8,513
193.40	5,684	8,570
193.41	5,689	8,627
193.42	5,694	8,684
193.43	5,699	8,741
193.44	5,704	8,798
193.45	5,709	8,855
193.46	5,714	8,912
193.47	5,718	8,969
193.48	5,723	9,026
193.49	5,728	9,083
193.50	5,733	9,141
193.51	5,738	9,198
193.52	5,743	9,256
193.53	5,748	9,313
193.54	5,752	9,370
193.55	5,757	9,428
193.56	5,762	9,486
193.57	5,767	9,543
193.58	5,772	9,601
193.59	5,777	9,659
193.60	5,782	9,716
193.61	5,786	9,774
193.62	5,791	9,832
193.63	5,796	9,890
193.64	5,801	9,948

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.65	5,806	10,006
193.66	5,811	10,064
193.67	5,816	10,122
193.68	5,820	10,181
193.69	5,825	10,239
193.70	5,830	10,297
193.71	5,835	10,355
193.72	5,840	10,414
193.73	5,845	10,472
193.74	5,850	10,531
193.75	5,855	10,589
193.76	5,859	10,648
193.77	5,864	10,706
193.78	5,869	10,765
193.79	5,874	10,824
193.80	5,879	10,883
193.81	5,884	10,941
193.82	5,889	11,000
193.83	5,893	11,059
193.84	5,898	11,118
193.85	5,903	11,177
193.86	5,908	11,236
193.87	5,913	11,295
193.88	5,918	11,354
193.89	5,923	11,414
193.90	5,927	11,473
193.91	5,932	11,532
193.92	5,937	11,591
193.93	5,942	11,651
193.94	5,947	11,710
193.95	5,952	11,770
193.96	5,957	11,829
193.97	5,961	11,889
193.98	5,966	11,949
193.99	5,971	12,008
194.00	5,976	12,068
194.01	5,981	12,128
194.02	5,986	12,188
194.03	5,991	12,248
194.04	5,996	12,307
194.05	6,001	12,367
194.06	6,006	12,427
194.07	6,011	12,488
194.08	6,016	12,548
194.09	6,021	12,608
194.10	6,026	12,668
194.11	6,031	12,728
194.12	6,036	12,789
194.13	6,041	12,849
194.14	6,046	12,910
194.15	6,051	12,970
194.16	6,056	13,031
194.17	6,061	13,091
194.18	6,066	13,152
194.19	6,071	13,213
194.20	6,076	13,273
194.21	6,081	13,334
194.22	6,086	13,395
194.23	6,091	13,456
194.24	6,096	13,517
194.25	6,102	13,578
194.26	6,107	13,639
194.27	6,112	13,700
194.28	6,117	13,761
194.29	6,122	13,822
194.30	6,127	13,883
194.31	6,132	13,945
194.32	6,137	14,006
194.33	6,142	14,067
194.34	6,147	14,129
194.35	6,152	14,190
194.36	6,157	14,252
194.37	6,162	14,313
194.38	6,167	14,375
194.39	6,172	14,437
194.40	6,177	14,499
194.41	6,182	14,560
194.42	6,187	14,622
194.43	6,192	14,684
194.44	6,197	14,746
194.45	6,202	14,808
194.46	6,207	14,870
194.47	6,212	14,932
194.48	6,217	14,994
194.49	6,222	15,057
194.50	6,227	15,119
194.51	6,232	15,181
194.52	6,237	15,243
194.53	6,242	15,306
194.54	6,247	15,368
194.55	6,252	15,431
194.56	6,257	15,493
194.57	6,262	15,556
194.58	6,267	15,619
194.59	6,272	15,681
194.60	6,277	15,744
194.61	6,282	15,807
194.62	6,287	15,870
194.63	6,292	15,933
194.64	6,297	15,995
194.65	6,302	16,058
194.66	6,307	16,122
194.67	6,312	16,185
194.68	6,317	16,248

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.69	6,322	16,311	195.21	6,587	19,667
194.70	6,327	16,374	195.22	6,592	19,733
194.71	6,332	16,438	195.23	6,597	19,799
194.72	6,337	16,501	195.24	6,602	19,865
194.73	6,342	16,564	195.25	6,607	19,931
194.74	6,347	16,628	195.26	6,612	19,997
194.75	6,353	16,691	195.27	6,618	20,063
194.76	6,358	16,755	195.28	6,623	20,129
194.77	6,363	16,818	195.29	6,628	20,195
194.78	6,368	16,882	195.30	6,633	20,262
194.79	6,373	16,946	195.31	6,638	20,328
194.80	6,378	17,009	195.32	6,643	20,394
194.81	6,383	17,073	195.33	6,649	20,461
194.82	6,388	17,137	195.34	6,654	20,527
194.83	6,393	17,201	195.35	6,659	20,594
194.84	6,398	17,265	195.36	6,664	20,661
194.85	6,403	17,329	195.37	6,669	20,727
194.86	6,408	17,393	195.38	6,674	20,794
194.87	6,413	17,457	195.39	6,680	20,861
194.88	6,418	17,521	195.40	6,685	20,928
194.89	6,423	17,585	195.41	6,690	20,994
194.90	6,428	17,650	195.42	6,695	21,061
194.91	6,433	17,714	195.43	6,700	21,128
194.92	6,438	17,778	195.44	6,705	21,195
194.93	6,443	17,843	195.45	6,711	21,262
194.94	6,448	17,907	195.46	6,716	21,330
194.95	6,453	17,972	195.47	6,721	21,397
194.96	6,458	18,036	195.48	6,726	21,464
194.97	6,463	18,101	195.49	6,731	21,531
194.98	6,468	18,166	195.50	6,737	21,599
194.99	6,473	18,230	195.51	6,742	21,666
195.00	6,478	18,295	195.52	6,747	21,733
195.01	6,483	18,360	195.53	6,752	21,801
195.02	6,488	18,425	195.54	6,757	21,869
195.03	6,494	18,490	195.55	6,762	21,936
195.04	6,499	18,555	195.56	6,768	22,004
195.05	6,504	18,620	195.57	6,773	22,071
195.06	6,509	18,685	195.58	6,778	22,139
195.07	6,514	18,750	195.59	6,783	22,207
195.08	6,519	18,815	195.60	6,788	22,275
195.09	6,525	18,880	195.61	6,793	22,343
195.10	6,530	18,945	195.62	6,799	22,411
195.11	6,535	19,011	195.63	6,804	22,479
195.12	6,540	19,076	195.64	6,809	22,547
195.13	6,545	19,142	195.65	6,814	22,615
195.14	6,550	19,207	195.66	6,819	22,683
195.15	6,556	19,273	195.67	6,824	22,751
195.16	6,561	19,338	195.68	6,830	22,820
195.17	6,566	19,404	195.69	6,835	22,888
195.18	6,571	19,469	195.70	6,840	22,956
195.19	6,576	19,535	195.71	6,845	23,025
195.20	6,581	19,601	195.72	6,850	23,093

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.73	6,855	23,162
195.74	6,861	23,230
195.75	6,866	23,299
195.76	6,871	23,368
195.77	6,876	23,436
195.78	6,881	23,505
195.79	6,886	23,574
195.80	6,892	23,643
195.81	6,897	23,712
195.82	6,902	23,781
195.83	6,907	23,850
195.84	6,912	23,919
195.85	6,917	23,988
195.86	6,923	24,057
195.87	6,928	24,127
195.88	6,933	24,196
195.89	6,938	24,265
195.90	6,943	24,335
195.91	6,948	24,404
195.92	6,954	24,474
195.93	6,959	24,543
195.94	6,964	24,613
195.95	6,969	24,682
195.96	6,974	24,752
195.97	6,979	24,822
195.98	6,985	24,892
195.99	6,990	24,962
196.00	**6,995**	**25,032**

Summary for Pond B-57: Basin #57

Inflow Area = 1.434 ac, 47.56% Impervious, Inflow Depth = 6.83" for Current 100 yr event
Inflow = 9.85 cfs @ 12.17 hrs, Volume= 0.816 af
Outflow = 7.96 cfs @ 12.25 hrs, Volume= 0.745 af, Atten= 19%, Lag= 4.6 min
Primary = 7.96 cfs @ 12.25 hrs, Volume= 0.745 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 204.32' @ 12.25 hrs Surf.Area= 5,219 sf Storage= 12,029 cf

Plug-Flow detention time= 263.7 min calculated for 0.744 af (91% of inflow)
Center-of-Mass det. time= 217.9 min (994.2 - 776.3)

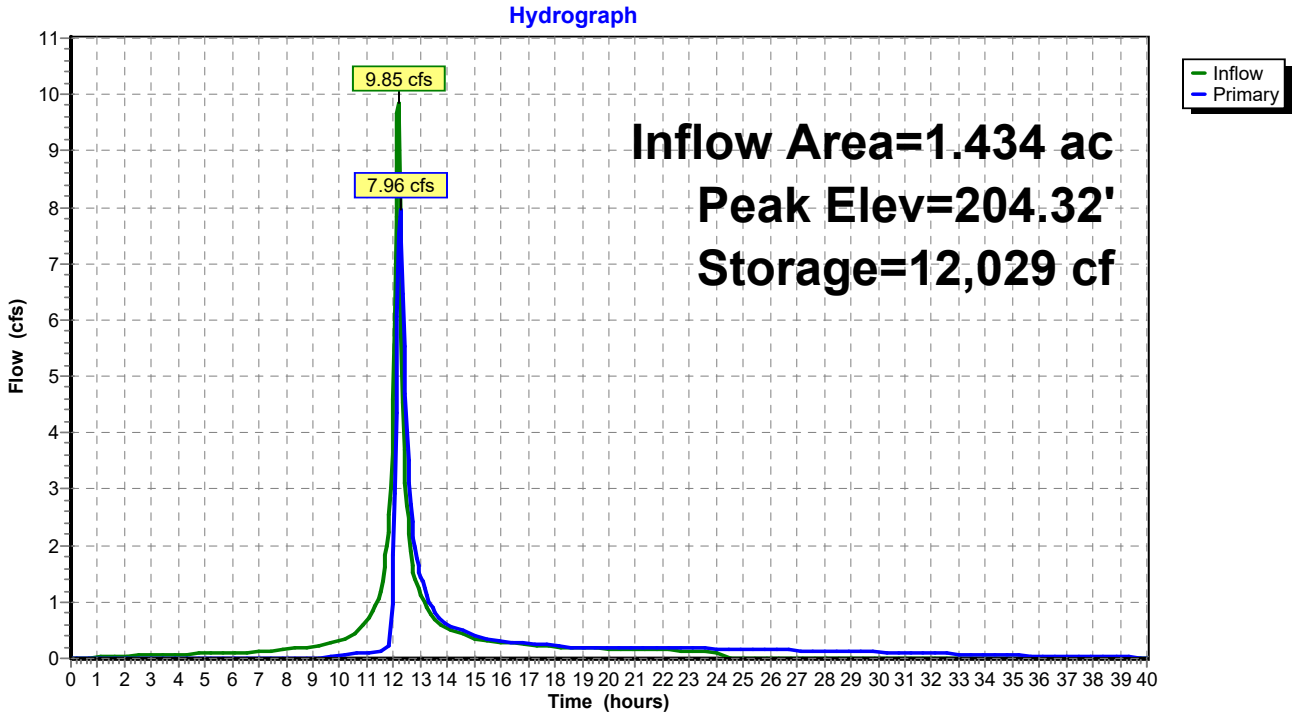
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	**18.0" Round Culvert** L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.34'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.60'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.93 cfs @ 12.25 hrs HW=204.32' (Free Discharge)
- **1=Culvert** (Passes 7.93 cfs of 13.54 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.22 cfs @ 6.60 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 7.71 cfs @ 2.78 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-57: Basin #57



Stage-Discharge for Pond B-57: Basin #57

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.11
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.11
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.11
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.11
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.11
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.11
201.36	0.00	201.88	0.00	202.40	0.01	202.92	0.11
201.37	0.00	201.89	0.00	202.41	0.01	202.93	0.11
201.38	0.00	201.90	0.00	202.42	0.01	202.94	0.12
201.39	0.00	201.91	0.00	202.43	0.01	202.95	0.12
201.40	0.00	201.92	0.00	202.44	0.02	202.96	0.12
201.41	0.00	201.93	0.00	202.45	0.02	202.97	0.12
201.42	0.00	201.94	0.00	202.46	0.02	202.98	0.12
201.43	0.00	201.95	0.00	202.47	0.03	202.99	0.12
201.44	0.00	201.96	0.00	202.48	0.03	203.00	0.12
201.45	0.00	201.97	0.00	202.49	0.03	203.01	0.12
201.46	0.00	201.98	0.00	202.50	0.04	203.02	0.12
201.47	0.00	201.99	0.00	202.51	0.04	203.03	0.13
201.48	0.00	202.00	0.00	202.52	0.05	203.04	0.13
201.49	0.00	202.01	0.00	202.53	0.05	203.05	0.13
201.50	0.00	202.02	0.00	202.54	0.05	203.06	0.13
201.51	0.00	202.03	0.00	202.55	0.05	203.07	0.13
201.52	0.00	202.04	0.00	202.56	0.06	203.08	0.13
201.53	0.00	202.05	0.00	202.57	0.06	203.09	0.13
201.54	0.00	202.06	0.00	202.58	0.06	203.10	0.13
201.55	0.00	202.07	0.00	202.59	0.06	203.11	0.13
201.56	0.00	202.08	0.00	202.60	0.06	203.12	0.13
201.57	0.00	202.09	0.00	202.61	0.07	203.13	0.14
201.58	0.00	202.10	0.00	202.62	0.07	203.14	0.14
201.59	0.00	202.11	0.00	202.63	0.07	203.15	0.14
201.60	0.00	202.12	0.00	202.64	0.07	203.16	0.14
201.61	0.00	202.13	0.00	202.65	0.07	203.17	0.14
201.62	0.00	202.14	0.00	202.66	0.08	203.18	0.14
201.63	0.00	202.15	0.00	202.67	0.08	203.19	0.14
201.64	0.00	202.16	0.00	202.68	0.08	203.20	0.14
201.65	0.00	202.17	0.00	202.69	0.08	203.21	0.14
201.66	0.00	202.18	0.00	202.70	0.08	203.22	0.14
201.67	0.00	202.19	0.00	202.71	0.08	203.23	0.15
201.68	0.00	202.20	0.00	202.72	0.09	203.24	0.15
201.69	0.00	202.21	0.00	202.73	0.09	203.25	0.15
201.70	0.00	202.22	0.00	202.74	0.09	203.26	0.15
201.71	0.00	202.23	0.00	202.75	0.09	203.27	0.15
201.72	0.00	202.24	0.00	202.76	0.09	203.28	0.15
201.73	0.00	202.25	0.00	202.77	0.09	203.29	0.15
201.74	0.00	202.26	0.00	202.78	0.10	203.30	0.15
201.75	0.00	202.27	0.00	202.79	0.10	203.31	0.15
201.76	0.00	202.28	0.00	202.80	0.10	203.32	0.15
201.77	0.00	202.29	0.00	202.81	0.10	203.33	0.15
201.78	0.00	202.30	0.00	202.82	0.10	203.34	0.16
201.79	0.00	202.31	0.00	202.83	0.10	203.35	0.16
201.80	0.00	202.32	0.00	202.84	0.10	203.36	0.16
201.81	0.00	202.33	0.00	202.85	0.10	203.37	0.16

Stage-Discharge for Pond B-57: Basin #57 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	0.16	203.90	2.32	204.42	9.54	204.94	52.24
203.39	0.16	203.91	2.42	204.43	9.71	204.95	53.72
203.40	0.16	203.92	2.53	204.44	9.88	204.96	55.23
203.41	0.16	203.93	2.64	204.45	10.05	204.97	56.77
203.42	0.16	203.94	2.75	204.46	10.22	204.98	58.33
203.43	0.16	203.95	2.86	204.47	10.39	204.99	59.92
203.44	0.16	203.96	2.98	204.48	10.56	205.00	**61.53**
203.45	0.16	203.97	3.09	204.49	10.73		
203.46	0.17	203.98	3.21	204.50	10.90		
203.47	0.17	203.99	3.33	204.51	11.19		
203.48	0.17	204.00	3.45	204.52	11.58		
203.49	0.17	204.01	3.57	204.53	12.03		
203.50	0.17	204.02	3.69	204.54	12.54		
203.51	0.17	204.03	3.82	204.55	13.09		
203.52	0.17	204.04	3.94	204.56	13.68		
203.53	0.17	204.05	4.07	204.57	14.30		
203.54	0.17	204.06	4.20	204.58	14.97		
203.55	0.17	204.07	4.32	204.59	15.66		
203.56	0.17	204.08	4.46	204.60	16.38		
203.57	0.17	204.09	4.59	204.61	17.14		
203.58	0.17	204.10	4.72	204.62	17.92		
203.59	0.18	204.11	4.85	204.63	18.73		
203.60	0.18	204.12	4.99	204.64	19.56		
203.61	0.19	204.13	5.13	204.65	20.42		
203.62	0.21	204.14	5.26	204.66	21.31		
203.63	0.25	204.15	5.40	204.67	22.22		
203.64	0.28	204.16	5.54	204.68	23.05		
203.65	0.33	204.17	5.68	204.69	23.83		
203.66	0.37	204.18	5.83	204.70	24.63		
203.67	0.42	204.19	5.97	204.71	25.49		
203.68	0.48	204.20	6.11	204.72	26.38		
203.69	0.53	204.21	6.26	204.73	27.29		
203.70	0.60	204.22	6.41	204.74	28.23		
203.71	0.66	204.23	6.55	204.75	29.19		
203.72	0.73	204.24	6.70	204.76	30.17		
203.73	0.80	204.25	6.85	204.77	31.19		
203.74	0.87	204.26	7.00	204.78	32.22		
203.75	0.94	204.27	7.15	204.79	33.28		
203.76	1.02	204.28	7.31	204.80	34.37		
203.77	1.10	204.29	7.46	204.81	35.48		
203.78	1.18	204.30	7.62	204.82	36.61		
203.79	1.26	204.31	7.77	204.83	37.77		
203.80	1.35	204.32	7.93	204.84	38.96		
203.81	1.44	204.33	8.09	204.85	40.16		
203.82	1.53	204.34	8.24	204.86	41.40		
203.83	1.62	204.35	8.40	204.87	42.65		
203.84	1.71	204.36	8.56	204.88	43.93		
203.85	1.81	204.37	8.73	204.89	45.24		
203.86	1.91	204.38	8.89	204.90	46.56		
203.87	2.01	204.39	9.05	204.91	47.94		
203.88	2.11	204.40	9.21	204.92	49.35		
203.89	2.21	204.41	9.38	204.93	50.78		

Stage-Area-Storage for Pond B-57: Basin #57

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,948	767
201.31	57	0	201.83	3,005	796
201.32	113	1	201.84	3,062	827
201.33	170	3	201.85	3,119	858
201.34	227	5	201.86	3,175	889
201.35	284	7	201.87	3,232	921
201.36	340	10	201.88	3,289	954
201.37	397	14	201.89	3,345	987
201.38	454	18	201.90	3,402	1,021
201.39	510	23	201.91	3,459	1,055
201.40	567	28	201.92	3,515	1,090
201.41	624	34	201.93	3,572	1,125
201.42	680	41	201.94	3,629	1,161
201.43	737	48	201.95	3,686	1,198
201.44	794	56	201.96	3,742	1,235
201.45	851	64	201.97	3,799	1,273
201.46	907	73	201.98	3,856	1,311
201.47	964	82	201.99	3,912	1,350
201.48	1,021	92	202.00	3,969	1,389
201.49	1,077	102	202.01	3,974	1,429
201.50	1,134	113	202.02	3,979	1,469
201.51	1,191	125	202.03	3,985	1,508
201.52	1,247	137	202.04	3,990	1,548
201.53	1,304	150	202.05	3,995	1,588
201.54	1,361	163	202.06	4,000	1,628
201.55	1,418	177	202.07	4,005	1,668
201.56	1,474	192	202.08	4,011	1,708
201.57	1,531	207	202.09	4,016	1,748
201.58	1,588	222	202.10	4,021	1,789
201.59	1,644	238	202.11	4,026	1,829
201.60	1,701	255	202.12	4,031	1,869
201.61	1,758	272	202.13	4,036	1,910
201.62	1,814	290	202.14	4,042	1,950
201.63	1,871	309	202.15	4,047	1,990
201.64	1,928	328	202.16	4,052	2,031
201.65	1,985	347	202.17	4,057	2,071
201.66	2,041	367	202.18	4,062	2,112
201.67	2,098	388	202.19	4,068	2,153
201.68	2,155	409	202.20	4,073	2,193
201.69	2,211	431	202.21	4,078	2,234
201.70	2,268	454	202.22	4,083	2,275
201.71	2,325	477	202.23	4,088	2,316
201.72	2,381	500	202.24	4,094	2,357
201.73	2,438	524	202.25	4,099	2,398
201.74	2,495	549	202.26	4,104	2,439
201.75	2,551	574	202.27	4,109	2,480
201.76	2,608	600	202.28	4,114	2,521
201.77	2,665	626	202.29	4,120	2,562
201.78	2,722	653	202.30	4,125	2,603
201.79	2,778	681	202.31	4,130	2,644
201.80	2,835	709	202.32	4,135	2,686
201.81	2,892	737	202.33	4,140	2,727

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	4,145	2,769	202.86	4,415	4,994
202.35	4,151	2,810	202.87	4,421	5,039
202.36	4,156	2,852	202.88	4,426	5,083
202.37	4,161	2,893	202.89	4,431	5,127
202.38	4,166	2,935	202.90	4,436	5,171
202.39	4,171	2,977	202.91	4,441	5,216
202.40	4,177	3,018	202.92	4,446	5,260
202.41	4,182	3,060	202.93	4,452	5,305
202.42	4,187	3,102	202.94	4,457	5,349
202.43	4,192	3,144	202.95	4,462	5,394
202.44	4,197	3,186	202.96	4,467	5,439
202.45	4,203	3,228	202.97	4,472	5,483
202.46	4,208	3,270	202.98	4,478	5,528
202.47	4,213	3,312	202.99	4,483	5,573
202.48	4,218	3,354	203.00	4,488	5,618
202.49	4,223	3,396	203.01	4,493	5,663
202.50	4,229	3,439	203.02	4,499	5,708
202.51	4,234	3,481	203.03	4,504	5,753
202.52	4,239	3,523	203.04	4,510	5,798
202.53	4,244	3,566	203.05	4,515	5,843
202.54	4,249	3,608	203.06	4,521	5,888
202.55	4,254	3,651	203.07	4,526	5,933
202.56	4,260	3,693	203.08	4,532	5,978
202.57	4,265	3,736	203.09	4,537	6,024
202.58	4,270	3,778	203.10	4,543	6,069
202.59	4,275	3,821	203.11	4,548	6,115
202.60	4,280	3,864	203.12	4,554	6,160
202.61	4,286	3,907	203.13	4,559	6,206
202.62	4,291	3,950	203.14	4,564	6,251
202.63	4,296	3,993	203.15	4,570	6,297
202.64	4,301	4,036	203.16	4,575	6,343
202.65	4,306	4,079	203.17	4,581	6,388
202.66	4,312	4,122	203.18	4,586	6,434
202.67	4,317	4,165	203.19	4,592	6,480
202.68	4,322	4,208	203.20	4,597	6,526
202.69	4,327	4,251	203.21	4,603	6,572
202.70	4,332	4,295	203.22	4,608	6,618
202.71	4,337	4,338	203.23	4,614	6,664
202.72	4,343	4,381	203.24	4,619	6,710
202.73	4,348	4,425	203.25	4,625	6,757
202.74	4,353	4,468	203.26	4,630	6,803
202.75	4,358	4,512	203.27	4,635	6,849
202.76	4,363	4,555	203.28	4,641	6,896
202.77	4,369	4,599	203.29	4,646	6,942
202.78	4,374	4,643	203.30	4,652	6,989
202.79	4,379	4,687	203.31	4,657	7,035
202.80	4,384	4,730	203.32	4,663	7,082
202.81	4,389	4,774	203.33	4,668	7,128
202.82	4,395	4,818	203.34	4,674	7,175
202.83	4,400	4,862	203.35	4,679	7,222
202.84	4,405	4,906	203.36	4,685	7,269
202.85	4,410	4,950	203.37	4,690	7,316

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,695	7,363
203.39	4,701	7,409
203.40	4,706	7,457
203.41	4,712	7,504
203.42	4,717	7,551
203.43	4,723	7,598
203.44	4,728	7,645
203.45	4,734	7,693
203.46	4,739	7,740
203.47	4,745	7,787
203.48	4,750	7,835
203.49	4,756	7,882
203.50	4,761	7,930
203.51	4,766	7,978
203.52	4,772	8,025
203.53	4,777	8,073
203.54	4,783	8,121
203.55	4,788	8,169
203.56	4,794	8,217
203.57	4,799	8,265
203.58	4,805	8,313
203.59	4,810	8,361
203.60	4,816	8,409
203.61	4,821	8,457
203.62	4,827	8,505
203.63	4,832	8,553
203.64	4,837	8,602
203.65	4,843	8,650
203.66	4,848	8,699
203.67	4,854	8,747
203.68	4,859	8,796
203.69	4,865	8,844
203.70	4,870	8,893
203.71	4,876	8,942
203.72	4,881	8,991
203.73	4,887	9,039
203.74	4,892	9,088
203.75	4,898	9,137
203.76	4,903	9,186
203.77	4,908	9,235
203.78	4,914	9,284
203.79	4,919	9,334
203.80	4,925	9,383
203.81	4,930	9,432
203.82	4,936	9,481
203.83	4,941	9,531
203.84	4,947	9,580
203.85	4,952	9,630
203.86	4,958	9,679
203.87	4,963	9,729
203.88	4,968	9,779
203.89	4,974	9,828
203.90	4,979	9,878
203.91	4,985	9,928
203.92	4,990	9,978
203.93	4,996	10,028
203.94	5,001	10,078
203.95	5,007	10,128
203.96	5,012	10,178
203.97	5,018	10,228
203.98	5,023	10,278
203.99	5,029	10,328
204.00	5,034	10,379
204.01	5,040	10,429
204.02	5,045	10,479
204.03	5,051	10,530
204.04	5,057	10,580
204.05	5,063	10,631
204.06	5,068	10,682
204.07	5,074	10,732
204.08	5,080	10,783
204.09	5,086	10,834
204.10	5,091	10,885
204.11	5,097	10,936
204.12	5,103	10,987
204.13	5,109	11,038
204.14	5,114	11,089
204.15	5,120	11,140
204.16	5,126	11,191
204.17	5,132	11,243
204.18	5,137	11,294
204.19	5,143	11,345
204.20	5,149	11,397
204.21	5,155	11,448
204.22	5,160	11,500
204.23	5,166	11,552
204.24	5,172	11,603
204.25	5,178	11,655
204.26	5,183	11,707
204.27	5,189	11,759
204.28	5,195	11,811
204.29	5,200	11,863
204.30	5,206	11,915
204.31	5,212	11,967
204.32	5,218	12,019
204.33	5,223	12,071
204.34	5,229	12,123
204.35	5,235	12,176
204.36	5,241	12,228
204.37	5,246	12,281
204.38	5,252	12,333
204.39	5,258	12,386
204.40	5,264	12,438
204.41	5,269	12,491

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	5,275	12,544
204.43	5,281	12,596
204.44	5,287	12,649
204.45	5,292	12,702
204.46	5,298	12,755
204.47	5,304	12,808
204.48	5,310	12,861
204.49	5,315	12,914
204.50	5,321	12,967
204.51	5,327	13,021
204.52	5,332	13,074
204.53	5,338	13,127
204.54	5,344	13,181
204.55	5,350	13,234
204.56	5,355	13,288
204.57	5,361	13,341
204.58	5,367	13,395
204.59	5,373	13,449
204.60	5,378	13,502
204.61	5,384	13,556
204.62	5,390	13,610
204.63	5,396	13,664
204.64	5,401	13,718
204.65	5,407	13,772
204.66	5,413	13,826
204.67	5,419	13,880
204.68	5,424	13,934
204.69	5,430	13,989
204.70	5,436	14,043
204.71	5,442	14,097
204.72	5,447	14,152
204.73	5,453	14,206
204.74	5,459	14,261
204.75	5,465	14,316
204.76	5,470	14,370
204.77	5,476	14,425
204.78	5,482	14,480
204.79	5,487	14,535
204.80	5,493	14,590
204.81	5,499	14,644
204.82	5,505	14,700
204.83	5,510	14,755
204.84	5,516	14,810
204.85	5,522	14,865
204.86	5,528	14,920
204.87	5,533	14,975
204.88	5,539	15,031
204.89	5,545	15,086
204.90	5,551	15,142
204.91	5,556	15,197
204.92	5,562	15,253
204.93	5,568	15,308
204.94	5,574	15,364
204.95	5,579	15,420
204.96	5,585	15,476
204.97	5,591	15,532
204.98	5,597	15,588
204.99	5,602	15,644
205.00	**5,608**	**15,700**

Summary for Pond B-58: Basin #58

Inflow Area = 1.649 ac, 26.80% Impervious, Inflow Depth = 6.23" for Current 100 yr event
Inflow = 10.69 cfs @ 12.17 hrs, Volume= 0.856 af
Outflow = 7.53 cfs @ 12.27 hrs, Volume= 0.790 af, Atten= 30%, Lag= 6.0 min
Primary = 7.53 cfs @ 12.27 hrs, Volume= 0.790 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.61' @ 12.27 hrs Surf.Area= 7,379 sf Storage= 13,097 cf

Plug-Flow detention time= 257.0 min calculated for 0.790 af (92% of inflow)
Center-of-Mass det. time= 215.0 min (1,008.0 - 793.0)

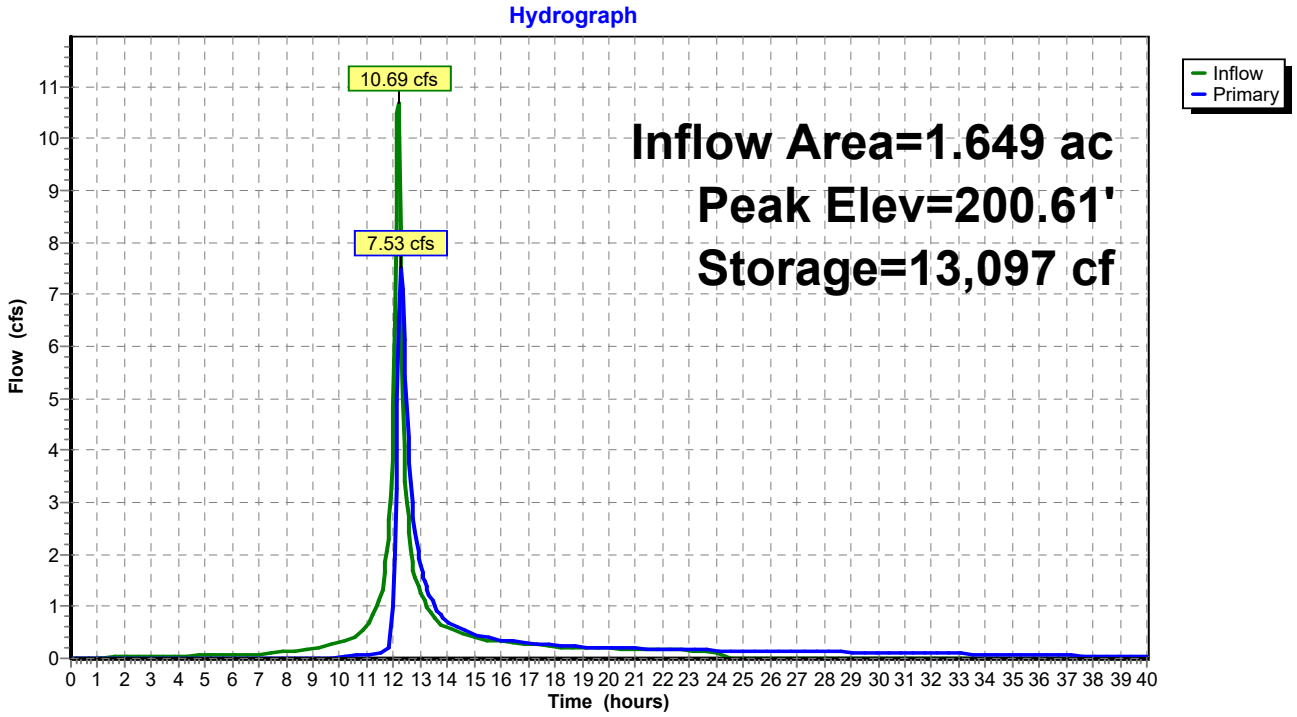
Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	**18.0" Round Culvert** L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	198.97'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	199.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	201.90'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.42 cfs @ 12.27 hrs HW=200.60' (Free Discharge)
- **1=Culvert** (Passes 7.42 cfs of 9.64 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.94 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 7.22 cfs @ 2.71 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-58: Basin #58



Stage-Discharge for Pond B-58: Basin #58

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
198.30	0.00	198.82	0.00	199.34	0.08	199.86	0.15
198.31	0.00	198.83	0.00	199.35	0.09	199.87	0.15
198.32	0.00	198.84	0.00	199.36	0.09	199.88	0.15
198.33	0.00	198.85	0.00	199.37	0.09	199.89	0.15
198.34	0.00	198.86	0.00	199.38	0.09	199.90	0.15
198.35	0.00	198.87	0.00	199.39	0.09	199.91	0.15
198.36	0.00	198.88	0.00	199.40	0.09	199.92	0.16
198.37	0.00	198.89	0.00	199.41	0.10	199.93	0.19
198.38	0.00	198.90	0.00	199.42	0.10	199.94	0.22
198.39	0.00	198.91	0.00	199.43	0.10	199.95	0.26
198.40	0.00	198.92	0.00	199.44	0.10	199.96	0.30
198.41	0.00	198.93	0.00	199.45	0.10	199.97	0.35
198.42	0.00	198.94	0.00	199.46	0.10	199.98	0.40
198.43	0.00	198.95	0.00	199.47	0.10	199.99	0.45
198.44	0.00	198.96	0.00	199.48	0.10	200.00	0.51
198.45	0.00	198.97	0.00	199.49	0.11	200.01	0.57
198.46	0.00	198.98	0.00	199.50	0.11	200.02	0.63
198.47	0.00	198.99	0.00	199.51	0.11	200.03	0.70
198.48	0.00	199.00	0.00	199.52	0.11	200.04	0.77
198.49	0.00	199.01	0.00	199.53	0.11	200.05	0.84
198.50	0.00	199.02	0.00	199.54	0.11	200.06	0.92
198.51	0.00	199.03	0.01	199.55	0.11	200.07	0.99
198.52	0.00	199.04	0.01	199.56	0.11	200.08	1.07
198.53	0.00	199.05	0.01	199.57	0.12	200.09	1.16
198.54	0.00	199.06	0.01	199.58	0.12	200.10	1.24
198.55	0.00	199.07	0.02	199.59	0.12	200.11	1.33
198.56	0.00	199.08	0.02	199.60	0.12	200.12	1.41
198.57	0.00	199.09	0.02	199.61	0.12	200.13	1.50
198.58	0.00	199.10	0.03	199.62	0.12	200.14	1.60
198.59	0.00	199.11	0.03	199.63	0.12	200.15	1.69
198.60	0.00	199.12	0.03	199.64	0.12	200.16	1.79
198.61	0.00	199.13	0.04	199.65	0.12	200.17	1.88
198.62	0.00	199.14	0.04	199.66	0.13	200.18	1.98
198.63	0.00	199.15	0.05	199.67	0.13	200.19	2.08
198.64	0.00	199.16	0.05	199.68	0.13	200.20	2.19
198.65	0.00	199.17	0.05	199.69	0.13	200.21	2.29
198.66	0.00	199.18	0.05	199.70	0.13	200.22	2.40
198.67	0.00	199.19	0.06	199.71	0.13	200.23	2.51
198.68	0.00	199.20	0.06	199.72	0.13	200.24	2.62
198.69	0.00	199.21	0.06	199.73	0.13	200.25	2.73
198.70	0.00	199.22	0.06	199.74	0.13	200.26	2.84
198.71	0.00	199.23	0.06	199.75	0.13	200.27	2.95
198.72	0.00	199.24	0.07	199.76	0.14	200.28	3.07
198.73	0.00	199.25	0.07	199.77	0.14	200.29	3.19
198.74	0.00	199.26	0.07	199.78	0.14	200.30	3.31
198.75	0.00	199.27	0.07	199.79	0.14	200.31	3.43
198.76	0.00	199.28	0.07	199.80	0.14	200.32	3.55
198.77	0.00	199.29	0.08	199.81	0.14	200.33	3.67
198.78	0.00	199.30	0.08	199.82	0.14	200.34	3.79
198.79	0.00	199.31	0.08	199.83	0.14	200.35	3.92
198.80	0.00	199.32	0.08	199.84	0.14	200.36	4.05
198.81	0.00	199.33	0.08	199.85	0.14	200.37	4.17

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.38	4.30	200.90	10.88	201.42	12.74	201.94	15.30
200.39	4.43	200.91	10.92	201.43	12.78	201.95	15.71
200.40	4.57	200.92	10.96	201.44	12.81	201.96	16.15
200.41	4.70	200.93	11.00	201.45	12.84	201.97	16.63
200.42	4.83	200.94	11.04	201.46	12.88	201.98	17.14
200.43	4.97	200.95	11.07	201.47	12.91	201.99	17.68
200.44	5.10	200.96	11.11	201.48	12.94	202.00	18.26
200.45	5.24	200.97	11.15	201.49	12.97	202.01	18.86
200.46	5.38	200.98	11.19	201.50	13.01	202.02	19.49
200.47	5.52	200.99	11.23	201.51	13.04	202.03	20.15
200.48	5.66	201.00	11.26	201.52	13.07	202.04	20.83
200.49	5.81	201.01	11.30	201.53	13.10	202.05	21.53
200.50	5.95	201.02	11.34	201.54	13.14	202.06	22.26
200.51	6.09	201.03	11.38	201.55	13.17	202.07	23.01
200.52	6.24	201.04	11.41	201.56	13.20	202.08	23.78
200.53	6.39	201.05	11.45	201.57	13.23	202.09	24.58
200.54	6.53	201.06	11.49	201.58	13.26	202.10	25.39
200.55	6.68	201.07	11.52	201.59	13.30	202.11	26.27
200.56	6.83	201.08	11.56	201.60	13.33	202.12	27.17
200.57	6.98	201.09	11.60	201.61	13.36	202.13	28.10
200.58	7.13	201.10	11.63	201.62	13.39	202.14	29.05
200.59	7.29	201.11	11.67	201.63	13.42	202.15	30.02
200.60	7.44	201.12	11.71	201.64	13.45	202.16	31.03
200.61	7.60	201.13	11.74	201.65	13.48	202.17	32.05
200.62	7.75	201.14	11.78	201.66	13.52	202.18	33.10
200.63	7.91	201.15	11.81	201.67	13.55	202.19	34.17
200.64	8.07	201.16	11.85	201.68	13.58	202.20	35.27
200.65	8.22	201.17	11.88	201.69	13.61	202.21	36.39
200.66	8.38	201.18	11.92	201.70	13.64	202.22	37.54
200.67	8.54	201.19	11.96	201.71	13.67	202.23	38.71
200.68	8.71	201.20	11.99	201.72	13.70	202.24	39.90
200.69	8.87	201.21	12.03	201.73	13.73	202.25	41.12
200.70	9.03	201.22	12.06	201.74	13.76	202.26	42.36
200.71	9.19	201.23	12.10	201.75	13.79	202.27	43.63
200.72	9.36	201.24	12.13	201.76	13.83	202.28	44.92
200.73	9.53	201.25	12.17	201.77	13.86	202.29	46.23
200.74	9.69	201.26	12.20	201.78	13.89	202.30	47.57
200.75	9.86	201.27	12.24	201.79	13.92	202.31	48.96
200.76	10.03	201.28	12.27	201.80	13.95	202.32	50.37
200.77	10.20	201.29	12.30	201.81	13.98	202.33	51.82
200.78	10.37	201.30	12.34	201.82	14.01	202.34	53.28
200.79	10.45	201.31	12.37	201.83	14.04	202.35	54.78
200.80	10.49	201.32	12.41	201.84	14.07	202.36	56.30
200.81	10.53	201.33	12.44	201.85	14.10	202.37	57.84
200.82	10.57	201.34	12.47	201.86	14.13	202.38	59.41
200.83	10.61	201.35	12.51	201.87	14.16	202.39	61.01
200.84	10.65	201.36	12.54	201.88	14.19	202.40	62.64
200.85	10.69	201.37	12.58	201.89	14.22	202.41	64.29
200.86	10.72	201.38	12.61	201.90	14.25	202.42	65.97
200.87	10.76	201.39	12.64	201.91	14.39	202.43	67.67
200.88	10.80	201.40	12.68	201.92	14.64	202.44	69.40
200.89	10.84	201.41	12.71	201.93	14.94	202.45	71.16

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)
202.46	72.95
202.47	74.76
202.48	76.60
202.49	78.46
202.50	80.35
202.51	82.00
202.52	83.67
202.53	85.34
202.54	87.03
202.55	88.74
202.56	90.45
202.57	92.18
202.58	93.93
202.59	95.68
202.60	97.45
202.61	99.23
202.62	101.02
202.63	102.83
202.64	104.65
202.65	106.48
202.66	108.32
202.67	110.18
202.68	112.05
202.69	113.93
202.70	115.82
202.71	117.76
202.72	119.72
202.73	121.69
202.74	123.67
202.75	125.66
202.76	127.67
202.77	129.69
202.78	131.72
202.79	133.77
202.80	135.83
202.81	137.90
202.82	139.99
202.83	142.09
202.84	144.20
202.85	146.32
202.86	148.46
202.87	150.61
202.88	152.77
202.89	154.94
202.90	157.13
202.91	159.27
202.92	161.43
202.93	163.60
202.94	165.77
202.95	167.96
202.96	170.16
202.97	172.37
202.98	174.59
202.99	176.82
203.00	**179.06**

Stage-Area-Storage for Pond B-58: Basin #58

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.30	0	0	198.82	4,628	1,203
198.31	89	0	198.83	4,717	1,250
198.32	178	2	198.84	4,806	1,298
198.33	267	4	198.85	4,895	1,346
198.34	356	7	198.86	4,984	1,396
198.35	445	11	198.87	5,073	1,446
198.36	534	16	198.88	5,162	1,497
198.37	623	22	198.89	5,251	1,549
198.38	712	28	198.90	5,340	1,602
198.39	801	36	198.91	5,429	1,656
198.40	890	44	198.92	5,518	1,711
198.41	979	54	198.93	5,607	1,766
198.42	1,068	64	198.94	5,696	1,823
198.43	1,157	75	198.95	5,785	1,880
198.44	1,246	87	198.96	5,874	1,938
198.45	1,335	100	198.97	5,963	1,998
198.46	1,424	114	198.98	6,052	2,058
198.47	1,513	129	198.99	6,141	2,119
198.48	1,602	144	199.00	6,230	2,180
198.49	1,691	161	199.01	6,237	2,243
198.50	1,780	178	199.02	6,244	2,305
198.51	1,869	196	199.03	6,251	2,368
198.52	1,958	215	199.04	6,258	2,430
198.53	2,047	235	199.05	6,265	2,493
198.54	2,136	256	199.06	6,272	2,556
198.55	2,225	278	199.07	6,279	2,618
198.56	2,314	301	199.08	6,286	2,681
198.57	2,403	324	199.09	6,293	2,744
198.58	2,492	349	199.10	6,300	2,807
198.59	2,581	374	199.11	6,307	2,870
198.60	2,670	401	199.12	6,314	2,933
198.61	2,759	428	199.13	6,321	2,996
198.62	2,848	456	199.14	6,328	3,060
198.63	2,937	485	199.15	6,335	3,123
198.64	3,026	514	199.16	6,342	3,186
198.65	3,115	545	199.17	6,349	3,250
198.66	3,204	577	199.18	6,356	3,313
198.67	3,293	609	199.19	6,363	3,377
198.68	3,382	643	199.20	6,370	3,441
198.69	3,471	677	199.21	6,377	3,504
198.70	3,560	712	199.22	6,384	3,568
198.71	3,649	748	199.23	6,391	3,632
198.72	3,738	785	199.24	6,398	3,696
198.73	3,827	823	199.25	6,406	3,760
198.74	3,916	862	199.26	6,413	3,824
198.75	4,005	901	199.27	6,420	3,888
198.76	4,094	942	199.28	6,427	3,952
198.77	4,183	983	199.29	6,434	4,017
198.78	4,272	1,025	199.30	6,441	4,081
198.79	4,361	1,068	199.31	6,448	4,146
198.80	4,450	1,113	199.32	6,455	4,210
198.81	4,539	1,157	199.33	6,462	4,275

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.34	6,469	4,339
199.35	6,476	4,404
199.36	6,483	4,469
199.37	6,490	4,534
199.38	6,497	4,599
199.39	6,504	4,664
199.40	6,511	4,729
199.41	6,518	4,794
199.42	6,525	4,859
199.43	6,532	4,924
199.44	6,539	4,990
199.45	6,546	5,055
199.46	6,553	5,121
199.47	6,560	5,186
199.48	6,567	5,252
199.49	6,574	5,317
199.50	6,581	5,383
199.51	6,588	5,449
199.52	6,595	5,515
199.53	6,602	5,581
199.54	6,609	5,647
199.55	6,616	5,713
199.56	6,623	5,779
199.57	6,630	5,846
199.58	6,637	5,912
199.59	6,644	5,978
199.60	6,651	6,045
199.61	6,658	6,111
199.62	6,665	6,178
199.63	6,672	6,245
199.64	6,679	6,311
199.65	6,686	6,378
199.66	6,693	6,445
199.67	6,700	6,512
199.68	6,707	6,579
199.69	6,714	6,646
199.70	6,721	6,713
199.71	6,728	6,781
199.72	6,735	6,848
199.73	6,742	6,915
199.74	6,749	6,983
199.75	6,757	7,050
199.76	6,764	7,118
199.77	6,771	7,186
199.78	6,778	7,253
199.79	6,785	7,321
199.80	6,792	7,389
199.81	6,799	7,457
199.82	6,806	7,525
199.83	6,813	7,593
199.84	6,820	7,661
199.85	6,827	7,730
199.86	6,834	7,798
199.87	6,841	7,866
199.88	6,848	7,935
199.89	6,855	8,003
199.90	6,862	8,072
199.91	6,869	8,140
199.92	6,876	8,209
199.93	6,883	8,278
199.94	6,890	8,347
199.95	6,897	8,416
199.96	6,904	8,485
199.97	6,911	8,554
199.98	6,918	8,623
199.99	6,925	8,692
200.00	6,932	8,761
200.01	6,939	8,831
200.02	6,947	8,900
200.03	6,954	8,970
200.04	6,962	9,039
200.05	6,969	9,109
200.06	6,976	9,179
200.07	6,984	9,249
200.08	6,991	9,318
200.09	6,998	9,388
200.10	7,006	9,458
200.11	7,013	9,528
200.12	7,021	9,599
200.13	7,028	9,669
200.14	7,035	9,739
200.15	7,043	9,810
200.16	7,050	9,880
200.17	7,057	9,951
200.18	7,065	10,021
200.19	7,072	10,092
200.20	7,080	10,163
200.21	7,087	10,233
200.22	7,094	10,304
200.23	7,102	10,375
200.24	7,109	10,446
200.25	7,117	10,518
200.26	7,124	10,589
200.27	7,131	10,660
200.28	7,139	10,731
200.29	7,146	10,803
200.30	7,153	10,874
200.31	7,161	10,946
200.32	7,168	11,018
200.33	7,176	11,089
200.34	7,183	11,161
200.35	7,190	11,233
200.36	7,198	11,305
200.37	7,205	11,377

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.38	7,212	11,449
200.39	7,220	11,521
200.40	7,227	11,593
200.41	7,235	11,666
200.42	7,242	11,738
200.43	7,249	11,810
200.44	7,257	11,883
200.45	7,264	11,956
200.46	7,271	12,028
200.47	7,279	12,101
200.48	7,286	12,174
200.49	7,294	12,247
200.50	7,301	12,320
200.51	7,308	12,393
200.52	7,316	12,466
200.53	7,323	12,539
200.54	7,331	12,612
200.55	7,338	12,686
200.56	7,345	12,759
200.57	7,353	12,833
200.58	7,360	12,906
200.59	7,367	12,980
200.60	7,375	13,054
200.61	7,382	13,127
200.62	7,390	13,201
200.63	7,397	13,275
200.64	7,404	13,349
200.65	7,412	13,423
200.66	7,419	13,497
200.67	7,426	13,572
200.68	7,434	13,646
200.69	7,441	13,720
200.70	7,449	13,795
200.71	7,456	13,869
200.72	7,463	13,944
200.73	7,471	14,019
200.74	7,478	14,093
200.75	7,486	14,168
200.76	7,493	14,243
200.77	7,500	14,318
200.78	7,508	14,393
200.79	7,515	14,468
200.80	7,522	14,543
200.81	7,530	14,619
200.82	7,537	14,694
200.83	7,545	14,769
200.84	7,552	14,845
200.85	7,559	14,920
200.86	7,567	14,996
200.87	7,574	15,072
200.88	7,581	15,147
200.89	7,589	15,223
200.90	7,596	15,299
200.91	7,604	15,375
200.92	7,611	15,451
200.93	7,618	15,527
200.94	7,626	15,604
200.95	7,633	15,680
200.96	7,640	15,756
200.97	7,648	15,833
200.98	7,655	15,909
200.99	7,663	15,986
201.00	7,670	16,062
201.01	7,678	16,139
201.02	7,685	16,216
201.03	7,693	16,293
201.04	7,700	16,370
201.05	7,708	16,447
201.06	7,715	16,524
201.07	7,723	16,601
201.08	7,730	16,679
201.09	7,738	16,756
201.10	7,746	16,833
201.11	7,753	16,911
201.12	7,761	16,988
201.13	7,768	17,066
201.14	7,776	17,144
201.15	7,783	17,222
201.16	7,791	17,299
201.17	7,799	17,377
201.18	7,806	17,455
201.19	7,814	17,533
201.20	7,821	17,612
201.21	7,829	17,690
201.22	7,836	17,768
201.23	7,844	17,847
201.24	7,851	17,925
201.25	7,859	18,004
201.26	7,867	18,082
201.27	7,874	18,161
201.28	7,882	18,240
201.29	7,889	18,319
201.30	7,897	18,398
201.31	7,904	18,477
201.32	7,912	18,556
201.33	7,919	18,635
201.34	7,927	18,714
201.35	7,935	18,793
201.36	7,942	18,873
201.37	7,950	18,952
201.38	7,957	19,032
201.39	7,965	19,111
201.40	7,972	19,191
201.41	7,980	19,271

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.42	7,988	19,351
201.43	7,995	19,430
201.44	8,003	19,510
201.45	8,010	19,591
201.46	8,018	19,671
201.47	8,025	19,751
201.48	8,033	19,831
201.49	8,040	19,912
201.50	8,048	19,992
201.51	8,056	20,073
201.52	8,063	20,153
201.53	8,071	20,234
201.54	8,078	20,315
201.55	8,086	20,395
201.56	8,093	20,476
201.57	8,101	20,557
201.58	8,108	20,638
201.59	8,116	20,719
201.60	8,124	20,801
201.61	8,131	20,882
201.62	8,139	20,963
201.63	8,146	21,045
201.64	8,154	21,126
201.65	8,161	21,208
201.66	8,169	21,289
201.67	8,177	21,371
201.68	8,184	21,453
201.69	8,192	21,535
201.70	8,199	21,617
201.71	8,207	21,699
201.72	8,214	21,781
201.73	8,222	21,863
201.74	8,229	21,945
201.75	8,237	22,028
201.76	8,245	22,110
201.77	8,252	22,193
201.78	8,260	22,275
201.79	8,267	22,358
201.80	8,275	22,440
201.81	8,282	22,523
201.82	8,290	22,606
201.83	8,297	22,689
201.84	8,305	22,772
201.85	8,313	22,855
201.86	8,320	22,938
201.87	8,328	23,022
201.88	8,335	23,105
201.89	8,343	23,188
201.90	8,350	23,272
201.91	8,358	23,355
201.92	8,366	23,439
201.93	8,373	23,523
201.94	8,381	23,606
201.95	8,388	23,690
201.96	8,396	23,774
201.97	8,403	23,858
201.98	8,411	23,942
201.99	8,418	24,026
202.00	8,426	24,110
202.01	8,434	24,195
202.02	8,442	24,279
202.03	8,449	24,364
202.04	8,457	24,448
202.05	8,465	24,533
202.06	8,473	24,617
202.07	8,480	24,702
202.08	8,488	24,787
202.09	8,496	24,872
202.10	8,504	24,957
202.11	8,511	25,042
202.12	8,519	25,127
202.13	8,527	25,212
202.14	8,535	25,298
202.15	8,542	25,383
202.16	8,550	25,469
202.17	8,558	25,554
202.18	8,566	25,640
202.19	8,573	25,725
202.20	8,581	25,811
202.21	8,589	25,897
202.22	8,597	25,983
202.23	8,604	26,069
202.24	8,612	26,155
202.25	8,620	26,241
202.26	8,628	26,327
202.27	8,635	26,414
202.28	8,643	26,500
202.29	8,651	26,587
202.30	8,659	26,673
202.31	8,666	26,760
202.32	8,674	26,847
202.33	8,682	26,933
202.34	8,690	27,020
202.35	8,697	27,107
202.36	8,705	27,194
202.37	8,713	27,281
202.38	8,721	27,368
202.39	8,728	27,456
202.40	8,736	27,543
202.41	8,744	27,630
202.42	8,752	27,718
202.43	8,759	27,805
202.44	8,767	27,893
202.45	8,775	27,981

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

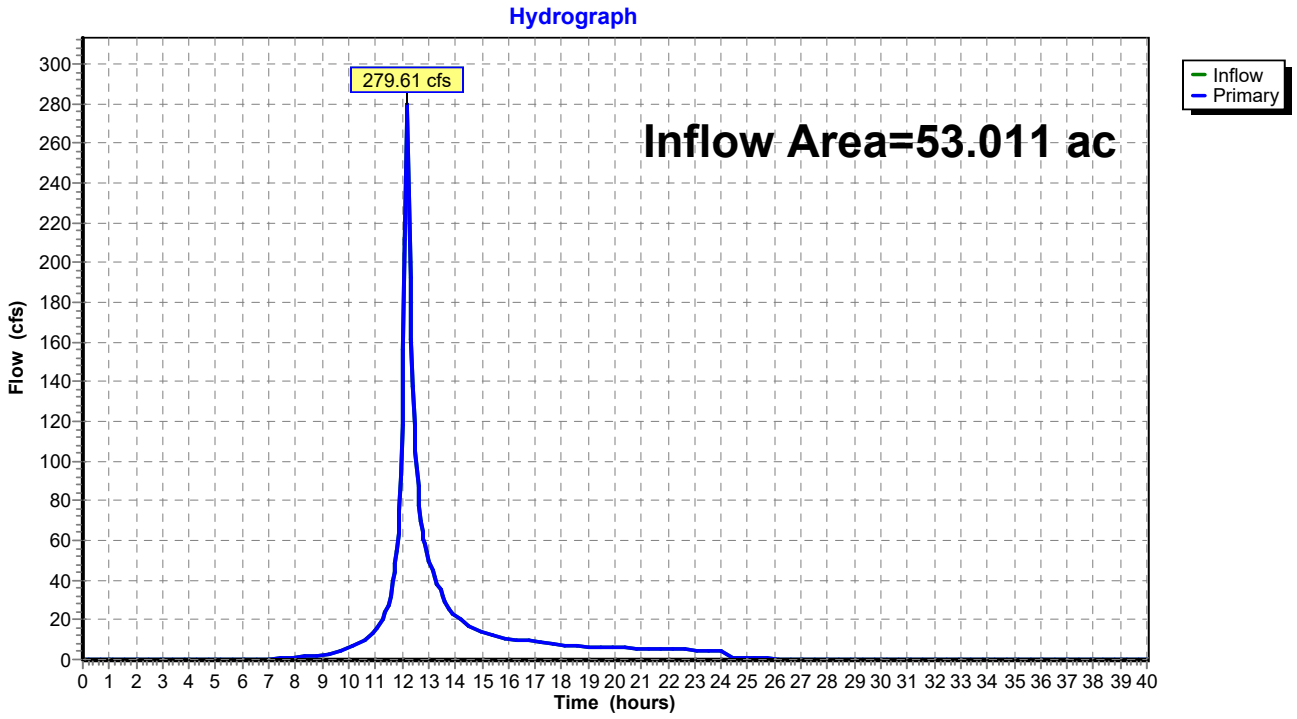
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.46	8,783	28,068
202.47	8,790	28,156
202.48	8,798	28,244
202.49	8,806	28,332
202.50	8,814	28,420
202.51	8,821	28,509
202.52	8,829	28,597
202.53	8,837	28,685
202.54	8,845	28,774
202.55	8,852	28,862
202.56	8,860	28,951
202.57	8,868	29,039
202.58	8,876	29,128
202.59	8,883	29,217
202.60	8,891	29,306
202.61	8,899	29,395
202.62	8,907	29,484
202.63	8,914	29,573
202.64	8,922	29,662
202.65	8,930	29,751
202.66	8,938	29,840
202.67	8,945	29,930
202.68	8,953	30,019
202.69	8,961	30,109
202.70	8,969	30,199
202.71	8,976	30,288
202.72	8,984	30,378
202.73	8,992	30,468
202.74	9,000	30,558
202.75	9,007	30,648
202.76	9,015	30,738
202.77	9,023	30,828
202.78	9,031	30,919
202.79	9,038	31,009
202.80	9,046	31,099
202.81	9,054	31,190
202.82	9,062	31,280
202.83	9,069	31,371
202.84	9,077	31,462
202.85	9,085	31,553
202.86	9,093	31,643
202.87	9,100	31,734
202.88	9,108	31,825
202.89	9,116	31,917
202.90	9,124	32,008
202.91	9,131	32,099
202.92	9,139	32,190
202.93	9,147	32,282
202.94	9,154	32,373
202.95	9,162	32,465
202.96	9,170	32,557
202.97	9,178	32,648
202.98	9,186	32,740
202.99	9,193	32,832
203.00	**9,201**	**32,924**

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 53.011 ac, 11.21% Impervious, Inflow Depth > 5.65" for Current 100 yr event
Inflow = 279.61 cfs @ 12.18 hrs, Volume= 24.940 af
Primary = 279.61 cfs @ 12.18 hrs, Volume= 24.940 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6



Summary for Subcatchment 51I: PDA-51 (impervious)

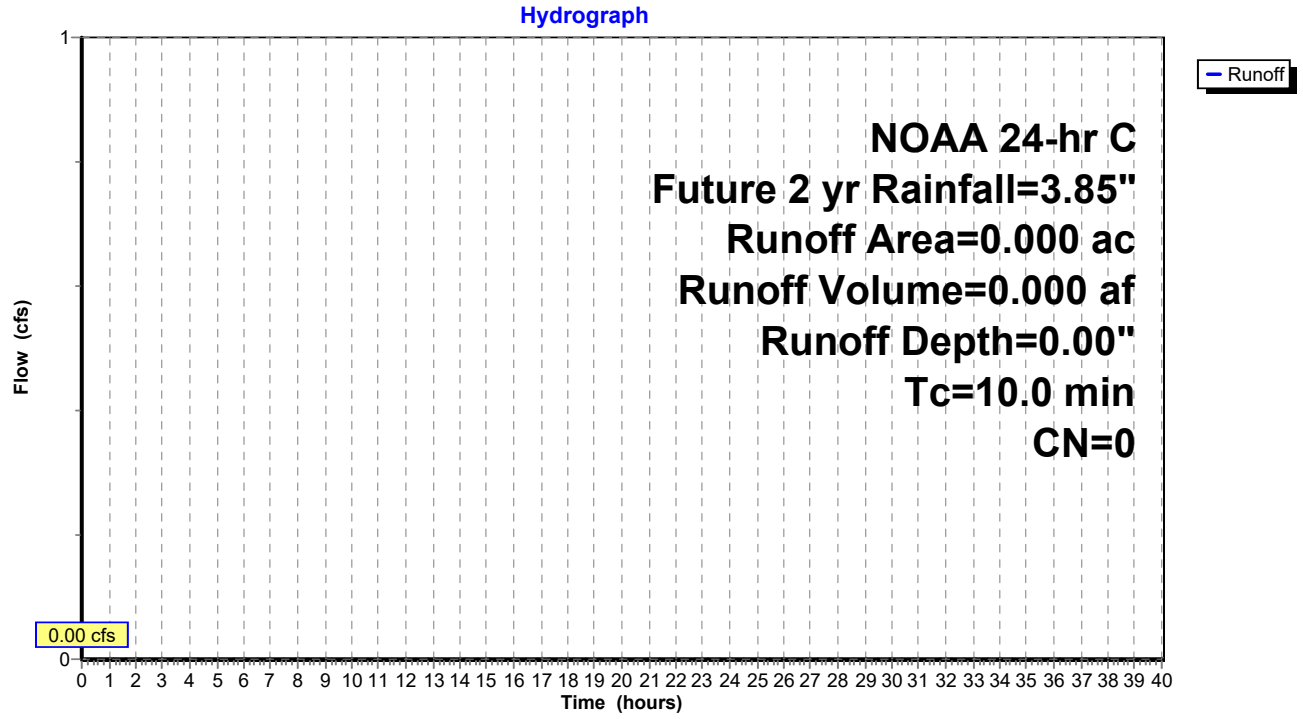
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.000	98	Roof, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 51I: PDA-51 (impervious)



Summary for Subcatchment 51P: PDA-51 (pervious)

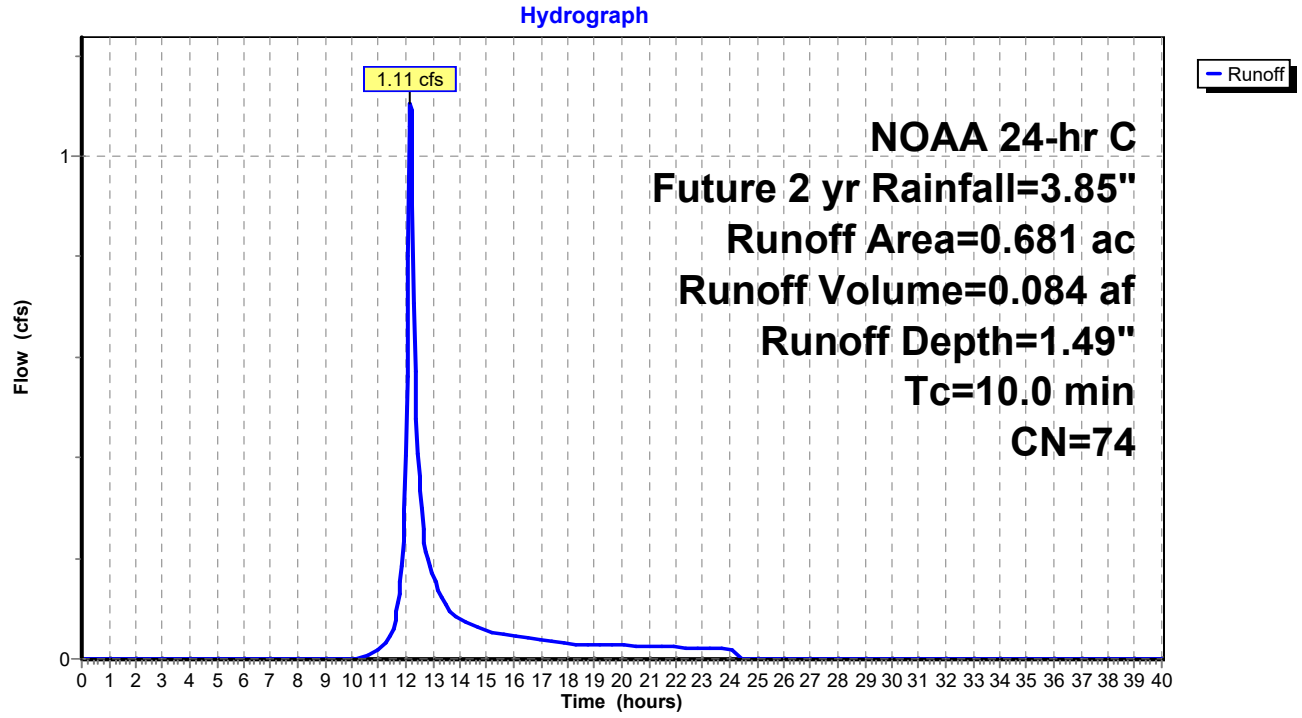
Runoff = 1.11 cfs @ 12.18 hrs, Volume= 0.084 af, Depth= 1.49"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.681	74	>75% Grass cover, Good, HSG C
0.681		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 51P: PDA-51 (pervious)



Summary for Subcatchment 52l: PDA-52 (impervious)

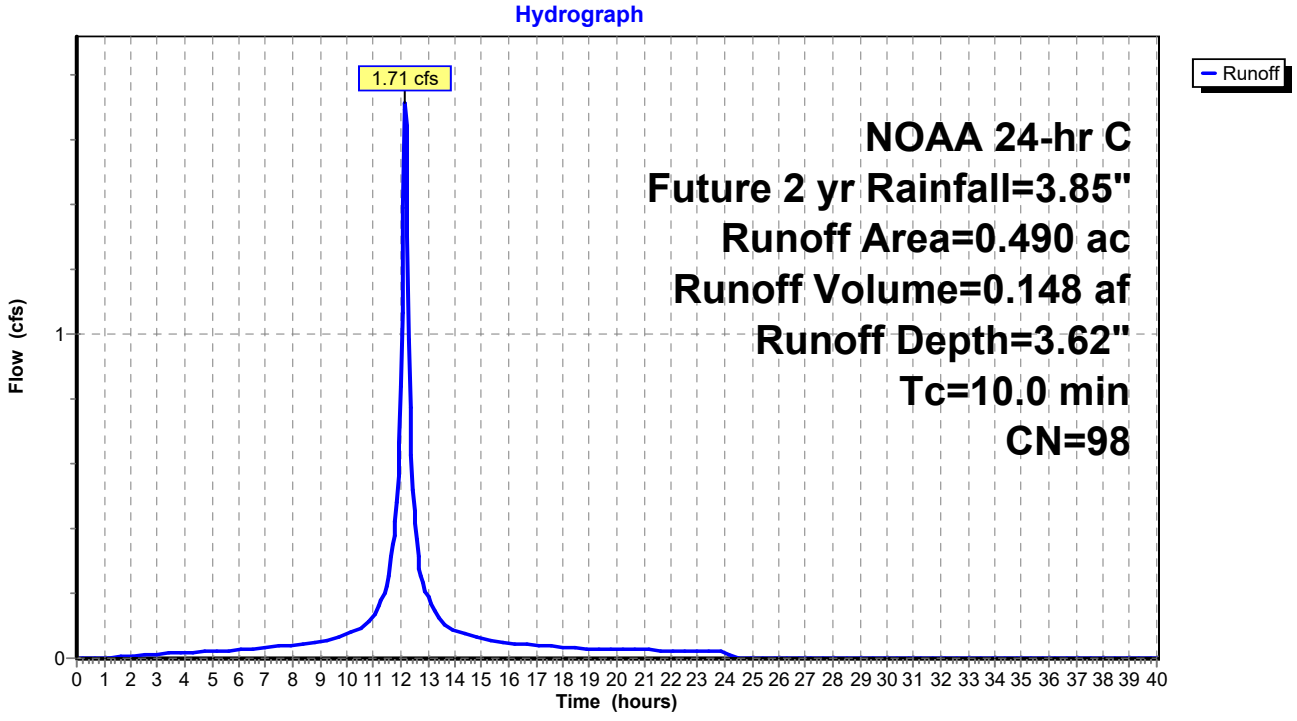
Runoff = 1.71 cfs @ 12.17 hrs, Volume= 0.148 af, Depth= 3.62"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.118	98	Pavement, HSG C
*	0.339	98	Roof, HSG C
*	0.033	98	Concrete, HSG C
	0.490	98	Weighted Average
	0.490		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 52l: PDA-52 (impervious)



Summary for Subcatchment 52P: PDA-52 (pervious)

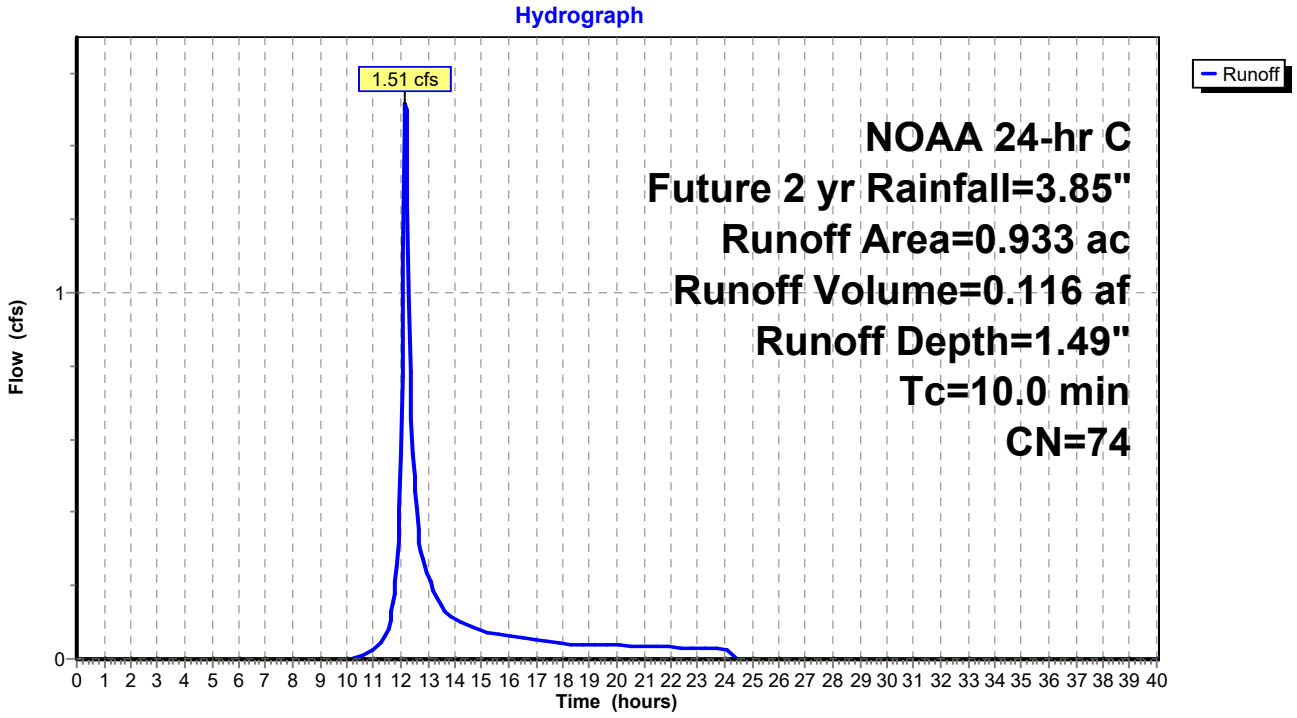
Runoff = 1.51 cfs @ 12.18 hrs, Volume= 0.116 af, Depth= 1.49"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.933	74	>75% Grass cover, Good, HSG C
0.933		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 52P: PDA-52 (pervious)



Summary for Subcatchment 53I: PDA-53 (impervious)

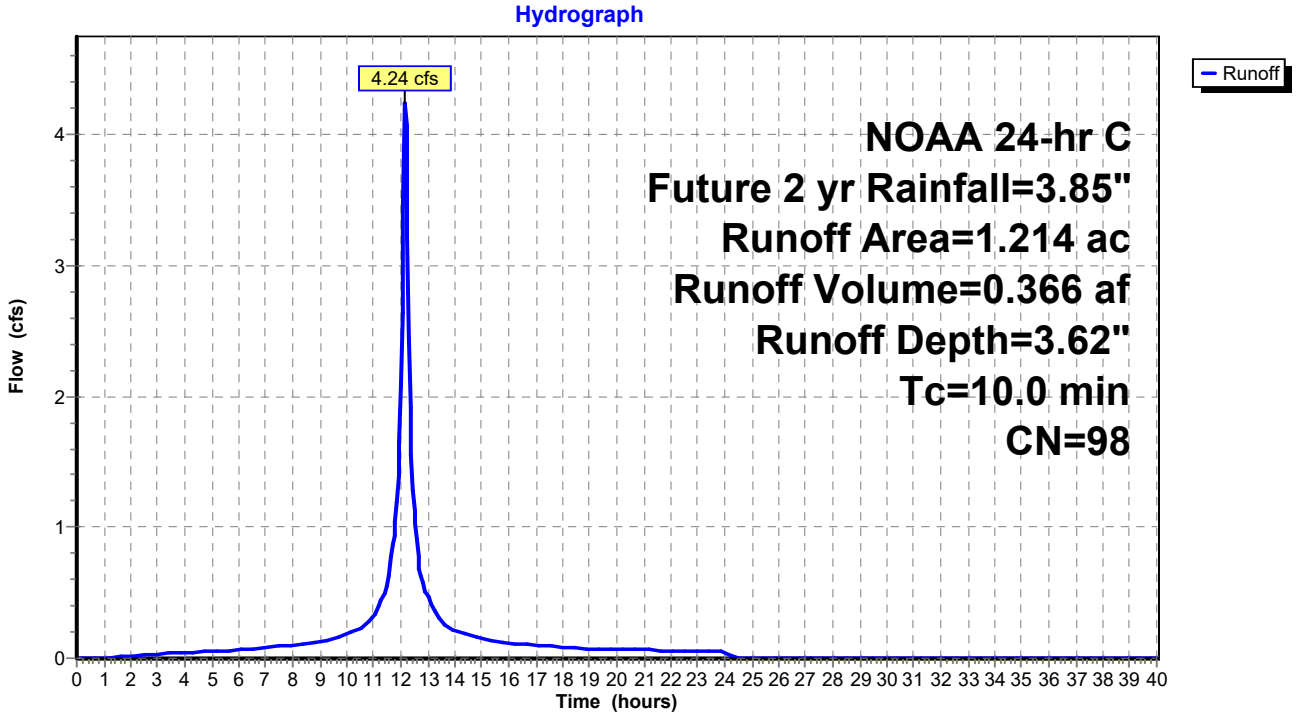
Runoff = 4.24 cfs @ 12.17 hrs, Volume= 0.366 af, Depth= 3.62"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.628	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	1.214	98	Weighted Average
	1.214		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 53I: PDA-53 (impervious)



Summary for Subcatchment 53P: PDA-53 (pervious)

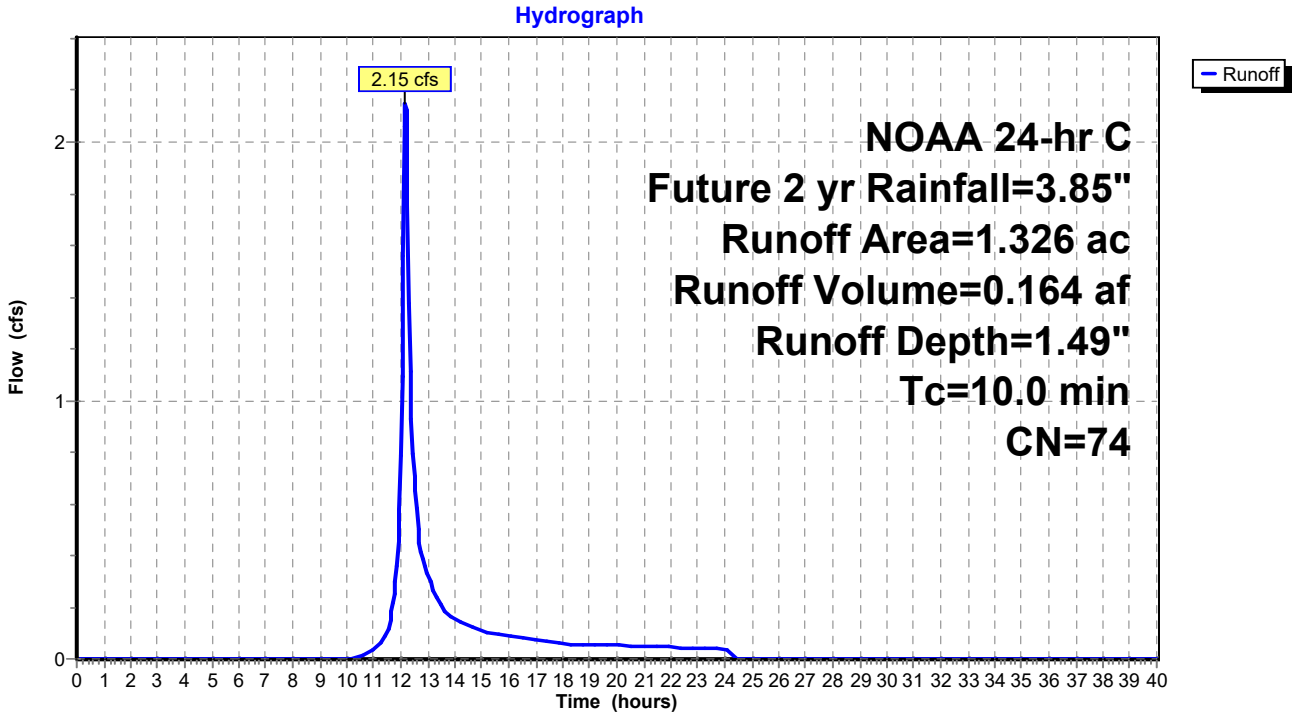
Runoff = 2.15 cfs @ 12.18 hrs, Volume= 0.164 af, Depth= 1.49"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.326	74	>75% Grass cover, Good, HSG C
1.326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 53P: PDA-53 (pervious)



Summary for Subcatchment 54l: PDA-54 (impervious)

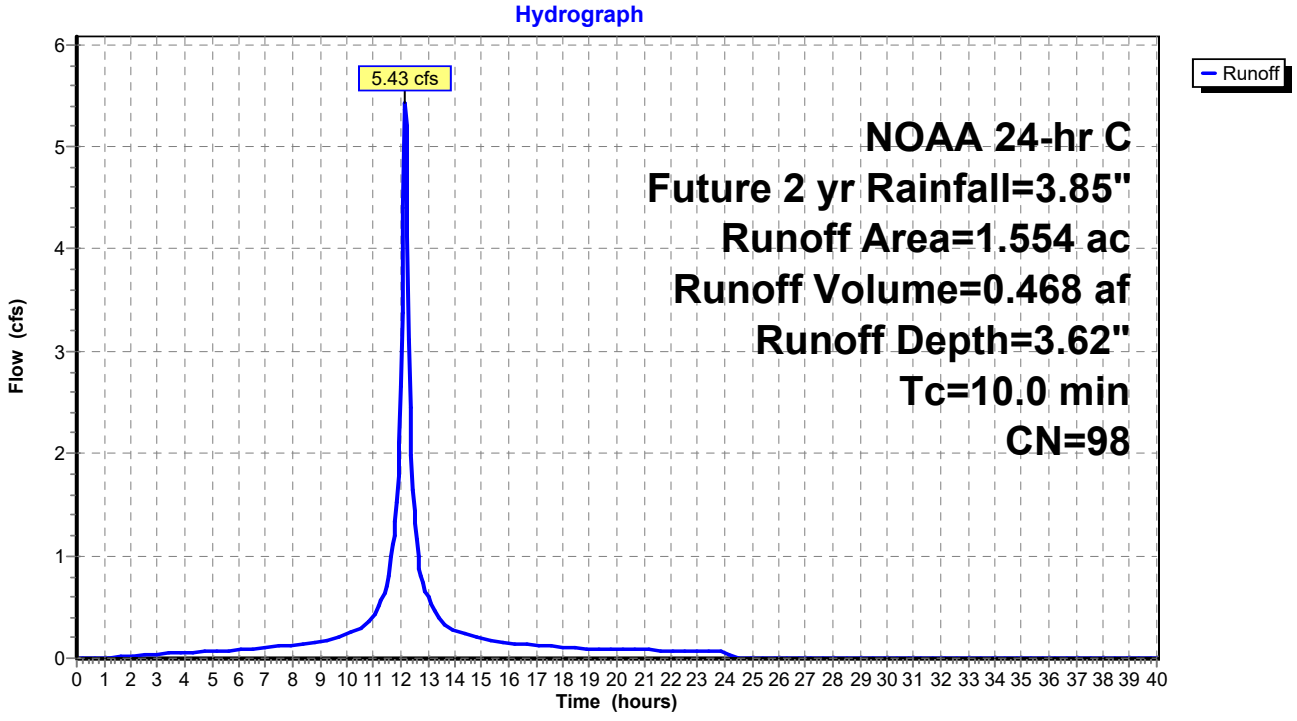
Runoff = 5.43 cfs @ 12.17 hrs, Volume= 0.468 af, Depth= 3.62"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.983	98	Pavement, HSG C
*	0.361	98	Roof, HSG C
*	0.210	98	Concrete, HSG C
	1.554	98	Weighted Average
	1.554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 54l: PDA-54 (impervious)



Summary for Subcatchment 54P: PDA-54 (pervious)

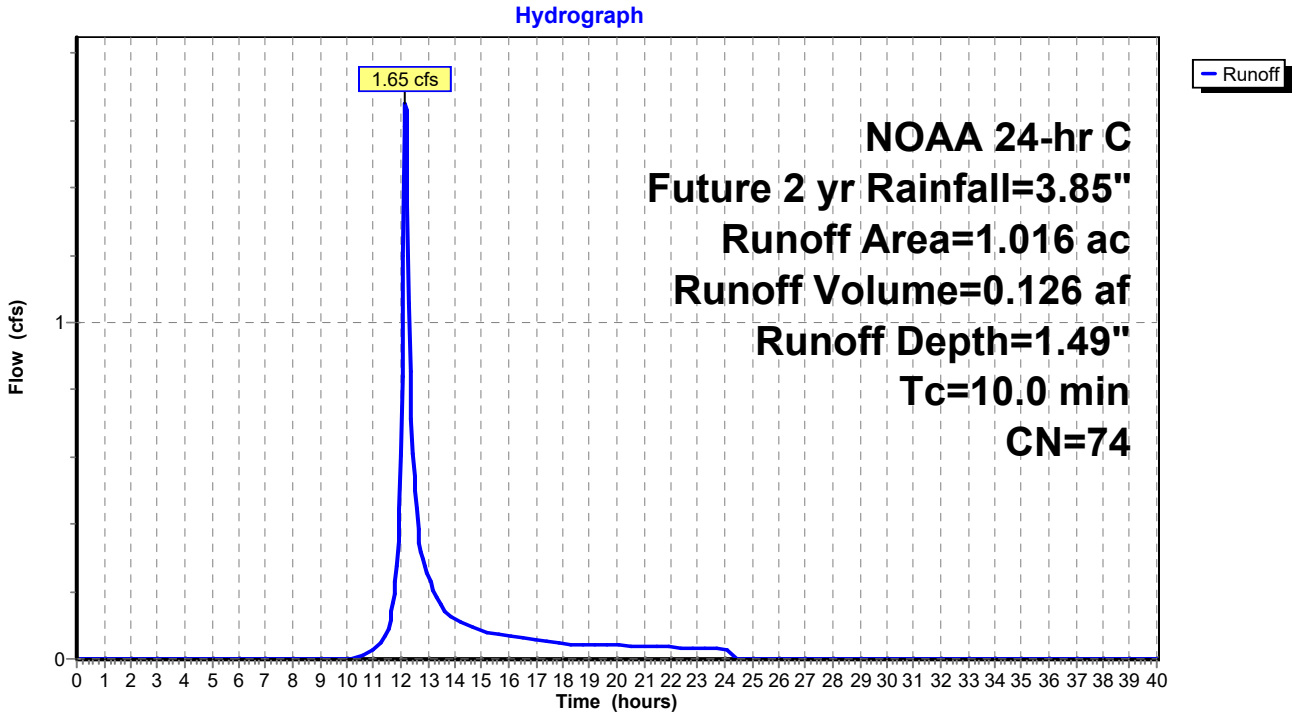
Runoff = 1.65 cfs @ 12.18 hrs, Volume= 0.126 af, Depth= 1.49"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.016	74	>75% Grass cover, Good, HSG C
1.016		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 54P: PDA-54 (pervious)



Summary for Subcatchment 55l: PDA-55 (impervious)

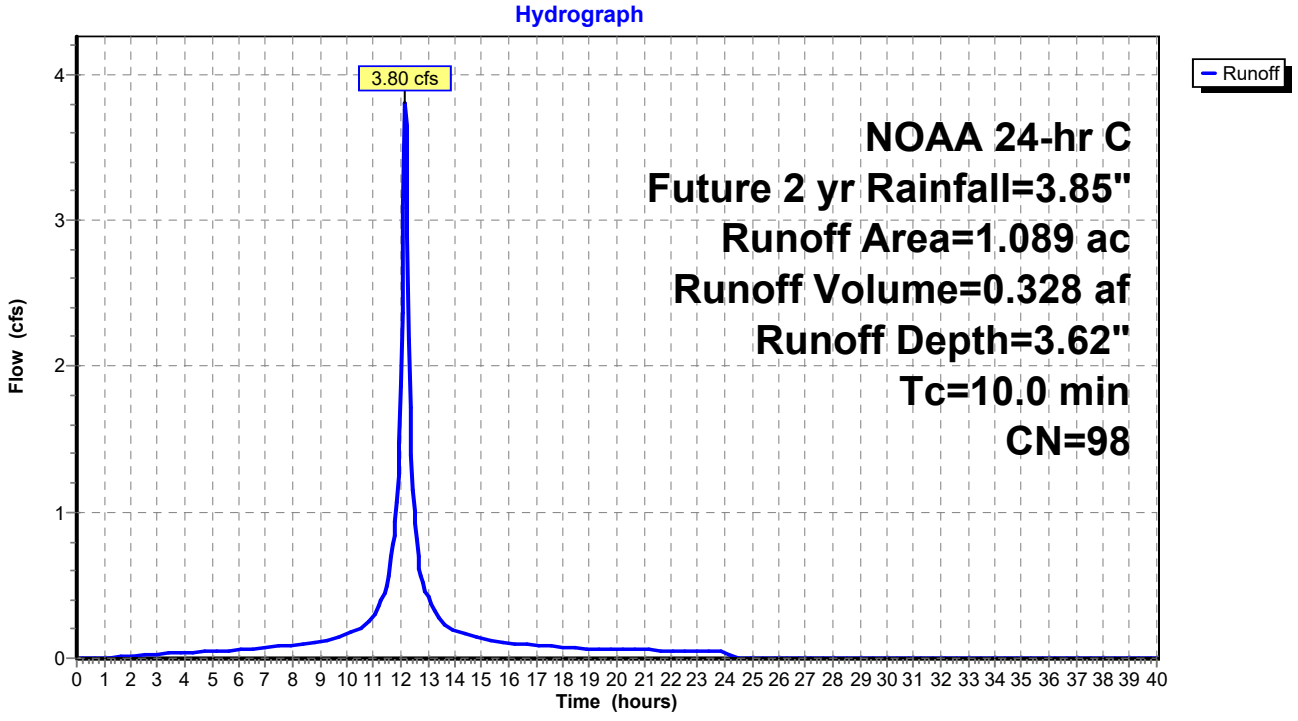
Runoff = 3.80 cfs @ 12.17 hrs, Volume= 0.328 af, Depth= 3.62"
Routed to Pond B-55 : Basin #55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.467	98	Pavement, HSG C
*	0.574	98	Roof, HSG C
*	0.048	98	Concrete, HSG C
	1.089	98	Weighted Average
	1.089		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 55l: PDA-55 (impervious)



Summary for Subcatchment 55P: PDA-55 (pervious)

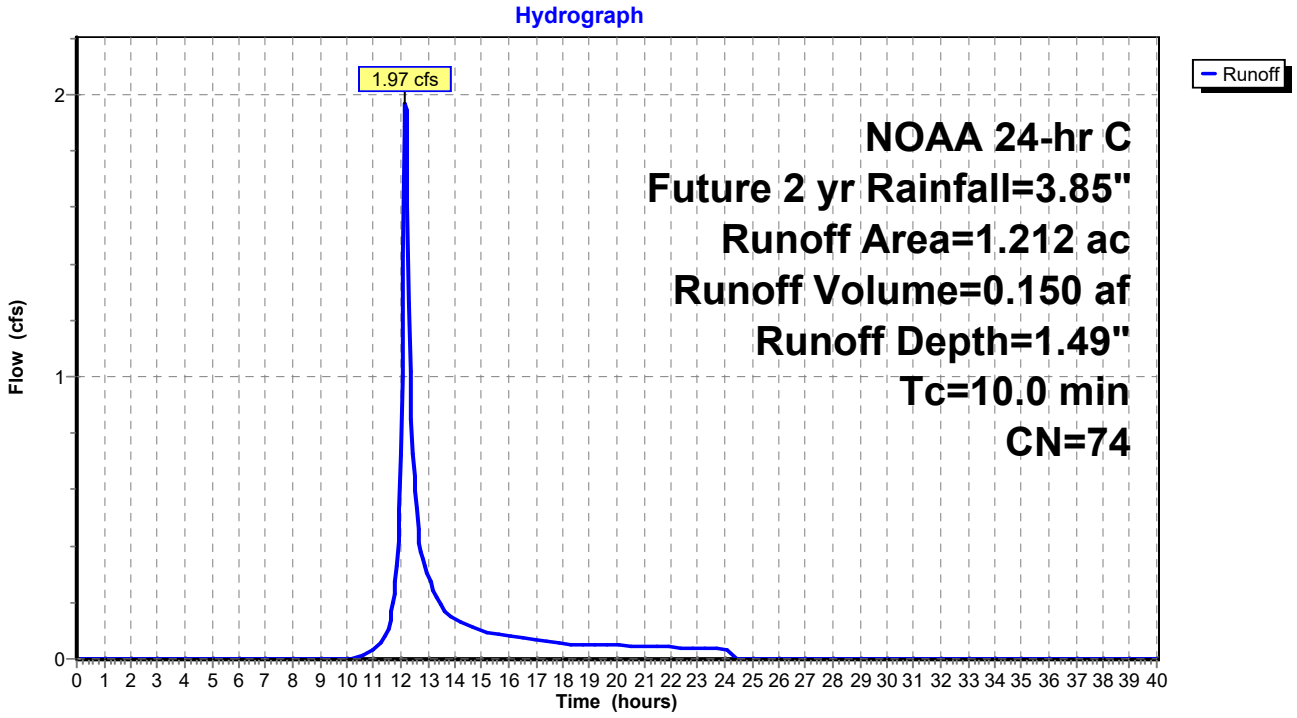
Runoff = 1.97 cfs @ 12.18 hrs, Volume= 0.150 af, Depth= 1.49"
Routed to Pond B-55 : Basin #55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.212	74	>75% Grass cover, Good, HSG C
1.212		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 55P: PDA-55 (pervious)



Summary for Subcatchment 56l: PDA-56 (impervious)

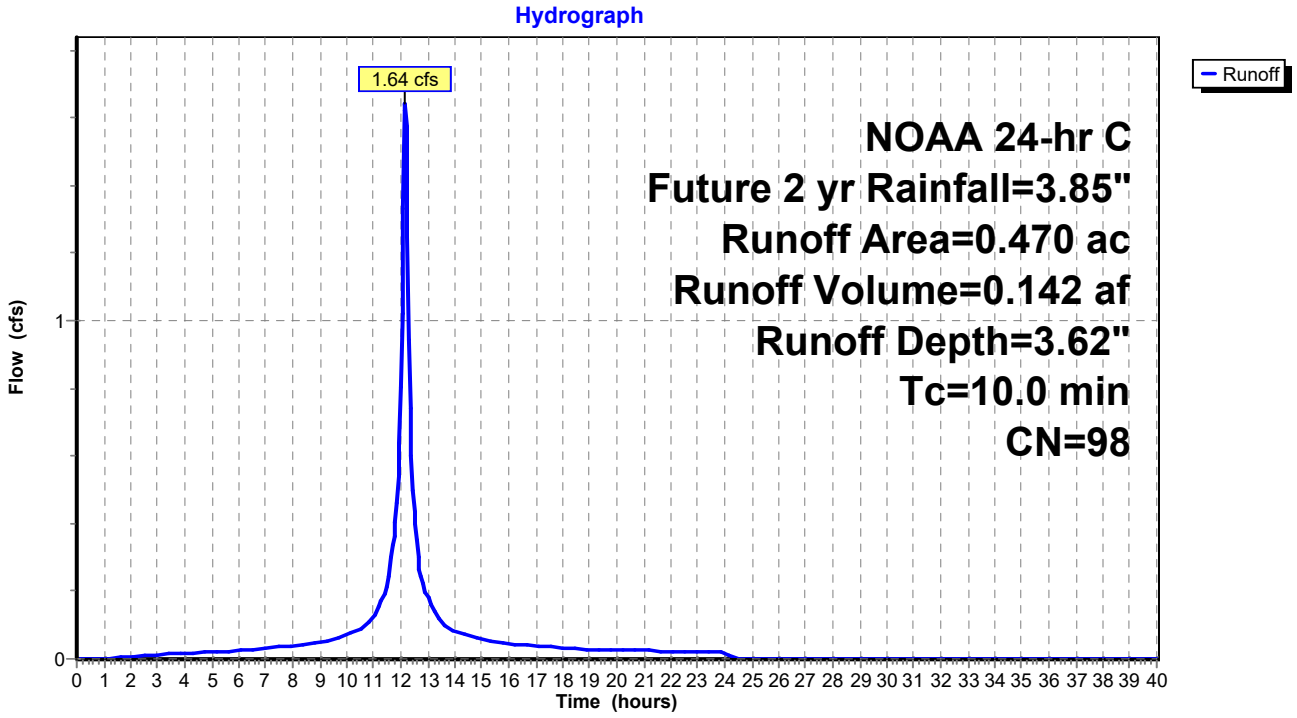
Runoff = 1.64 cfs @ 12.17 hrs, Volume= 0.142 af, Depth= 3.62"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.470	98	Roof, HSG C
	0.470		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 56l: PDA-56 (impervious)



Summary for Subcatchment 56P: PDA-56 (pervious)

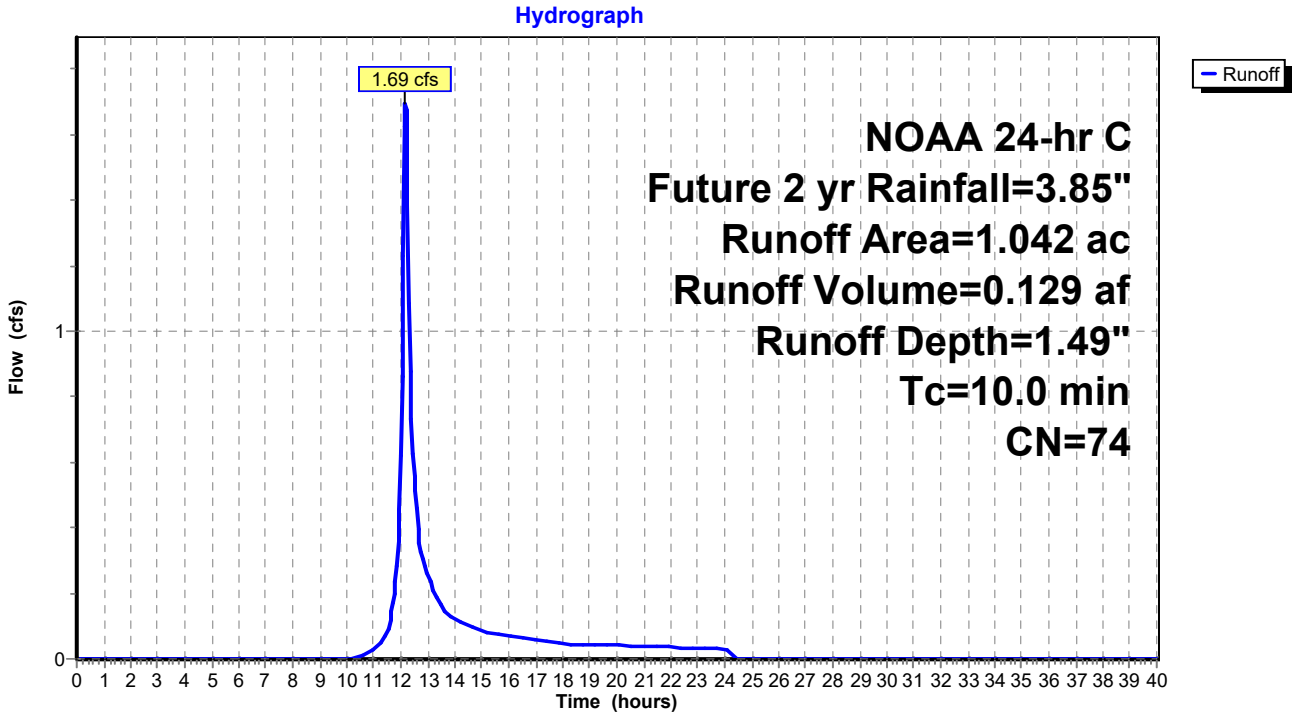
Runoff = 1.69 cfs @ 12.18 hrs, Volume= 0.129 af, Depth= 1.49"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.042	74	>75% Grass cover, Good, HSG C
1.042		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 56P: PDA-56 (pervious)



Summary for Subcatchment 57l: PDA-57 (impervious)

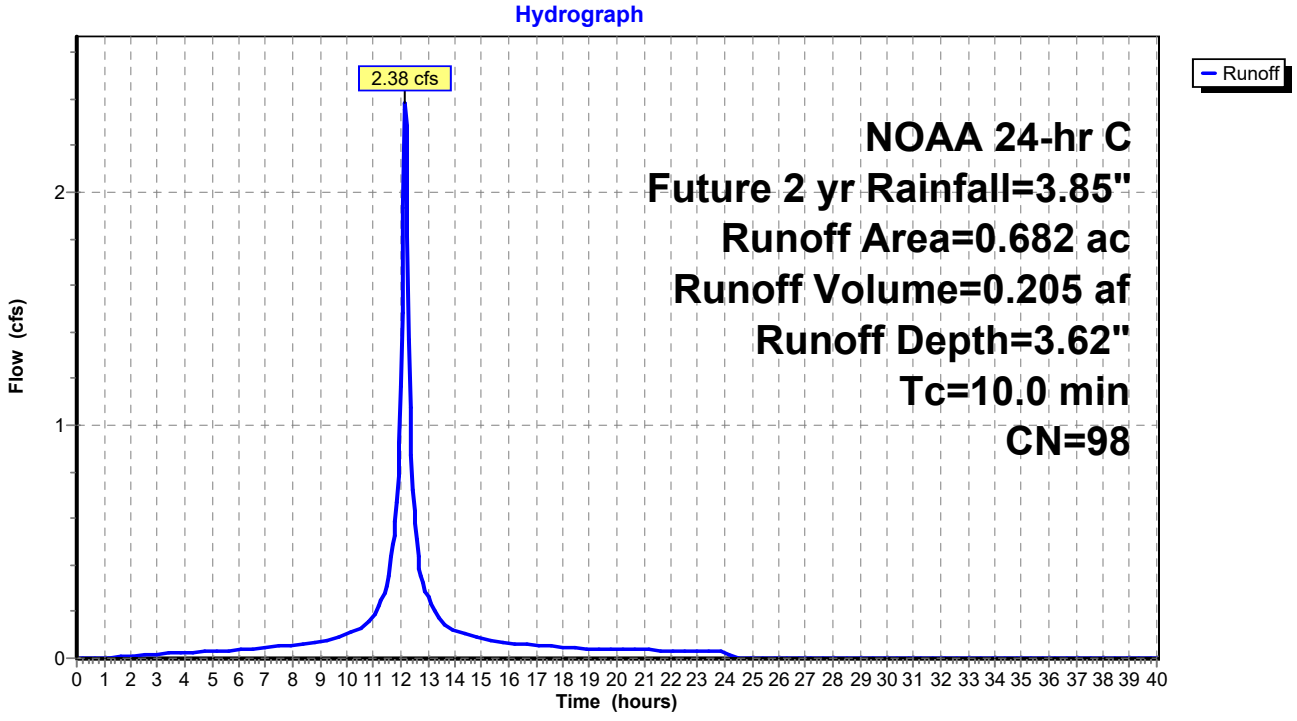
Runoff = 2.38 cfs @ 12.17 hrs, Volume= 0.205 af, Depth= 3.62"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.268	98	Pavement, HSG C
*	0.378	98	Roof, HSG C
*	0.036	98	Concrete, HSG C
	0.682	98	Weighted Average
	0.682		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 57l: PDA-57 (impervious)



Summary for Subcatchment 57P: PDA-57 (pervious)

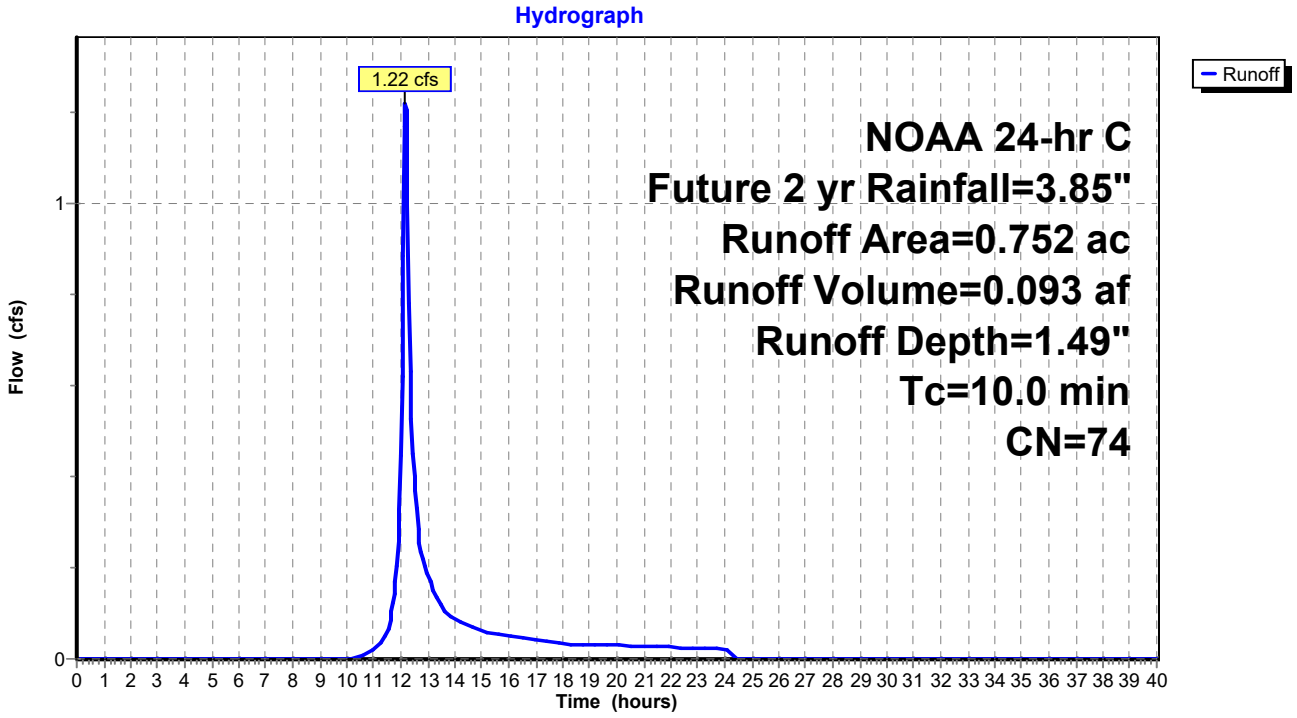
Runoff = 1.22 cfs @ 12.18 hrs, Volume= 0.093 af, Depth= 1.49"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
0.752	74	>75% Grass cover, Good, HSG C
0.752		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 57P: PDA-57 (pervious)



Summary for Subcatchment 58I: PDA-58 (impervious)

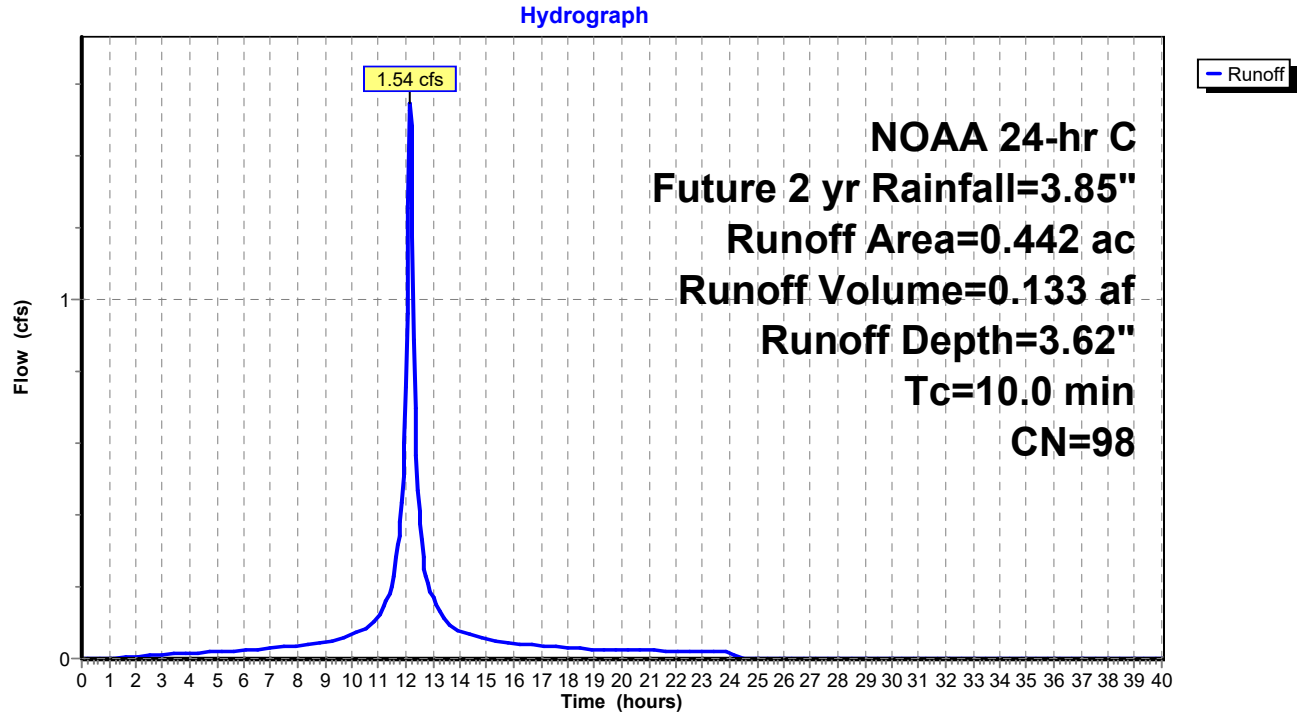
Runoff = 1.54 cfs @ 12.17 hrs, Volume= 0.133 af, Depth= 3.62"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

	Area (ac)	CN	Description
*	0.442	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.442	98	Weighted Average
	0.442		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 58I: PDA-58 (impervious)



Summary for Subcatchment 58P: PDA-58 (pervious)

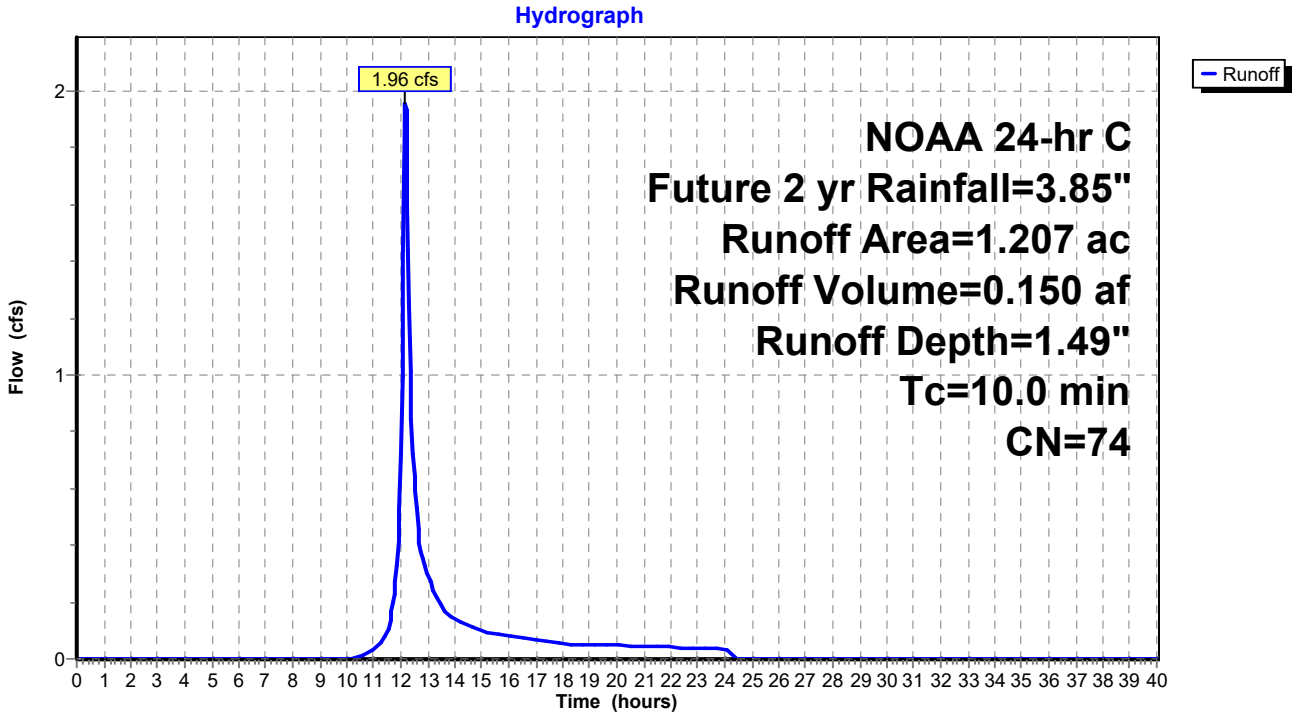
Runoff = 1.96 cfs @ 12.18 hrs, Volume= 0.150 af, Depth= 1.49"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
1.207	74	>75% Grass cover, Good, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 58P: PDA-58 (pervious)



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

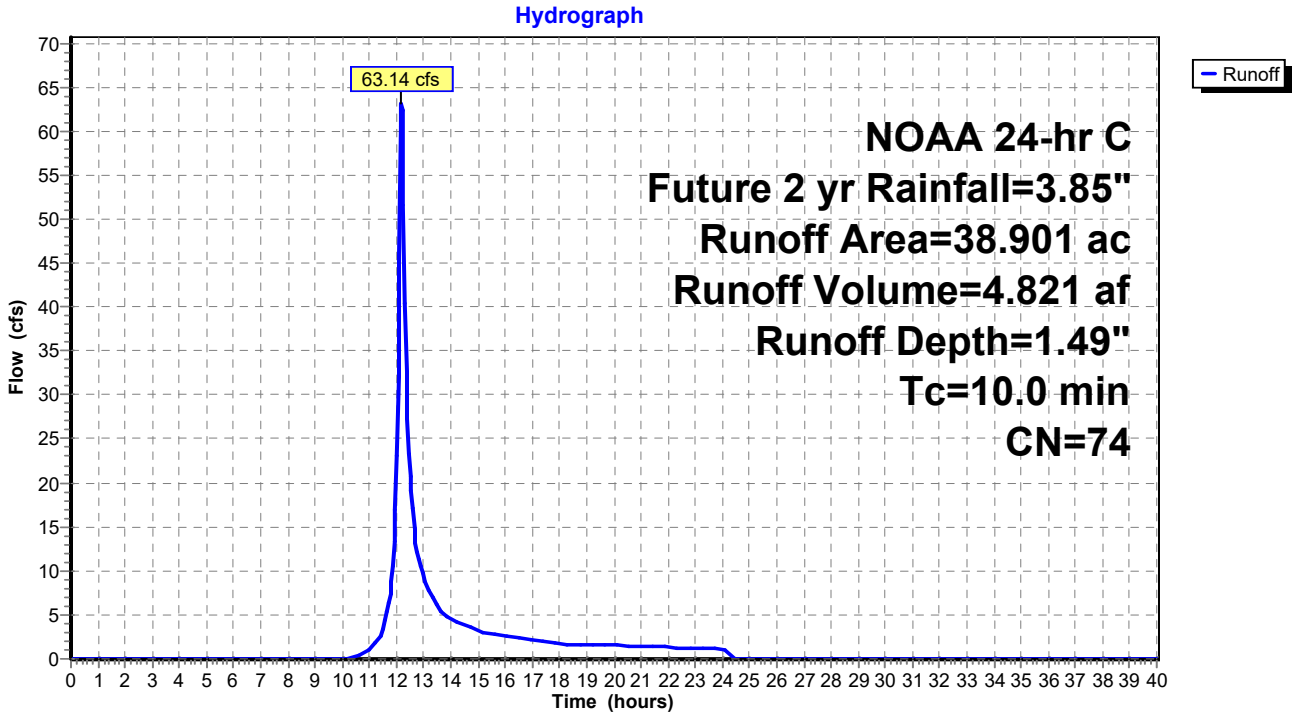
Runoff = 63.14 cfs @ 12.18 hrs, Volume= 4.821 af, Depth= 1.49"
Routed to Link PDA-6 : Proposed Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 2 yr Rainfall=3.85"

Area (ac)	CN	Description
38.901	74	>75% Grass cover, Good, HSG C
38.901		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-6: PDA-6 (undetained)



Summary for Pond B-51: Basin #51

Inflow Area = 5.917 ac, 34.63% Impervious, Inflow Depth = 1.82" for Future 2 yr event
Inflow = 7.42 cfs @ 12.24 hrs, Volume= 0.899 af
Outflow = 4.70 cfs @ 12.53 hrs, Volume= 0.893 af, Atten= 37%, Lag= 17.2 min
Primary = 4.70 cfs @ 12.53 hrs, Volume= 0.893 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 185.06' @ 12.53 hrs Surf.Area= 6,833 sf Storage= 6,409 cf

Plug-Flow detention time= 41.0 min calculated for 0.891 af (99% of inflow)
Center-of-Mass det. time= 37.0 min (915.0 - 878.0)

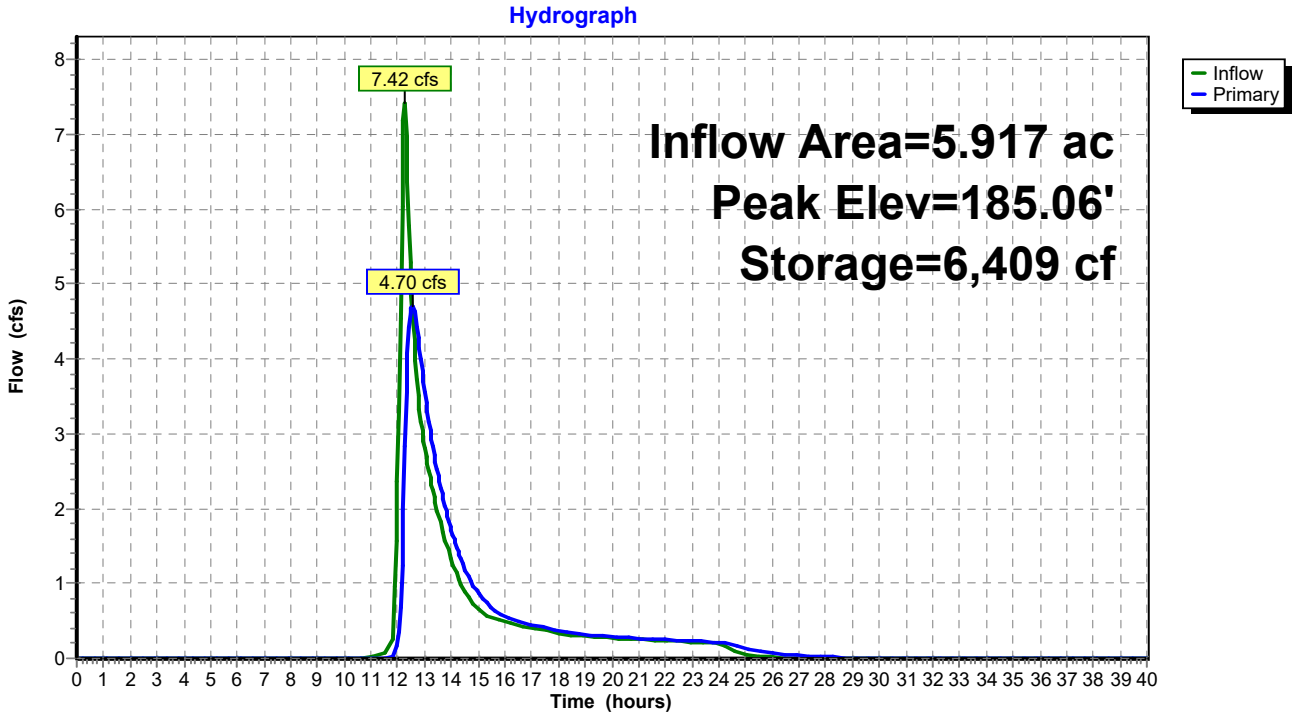
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	58,347 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	5,243	0	0
185.00	6,727	5,985	5,985
186.00	8,424	7,576	13,561
187.00	10,085	9,255	22,815
188.00	11,802	10,944	33,759
189.00	13,576	12,689	46,448
189.83	15,098	11,900	58,347

Device	Routing	Invert	Outlet Devices
#1	Primary	184.00'	**18.0" Round Culvert** L= 147.0' Ke= 0.500 Inlet / Outlet Invert= 184.00' / 182.00' S= 0.0136 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.05'	**48.0" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	189.80'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.69 cfs @ 12.53 hrs HW=185.06' (Free Discharge)
- **1=Culvert** (Inlet Controls 4.69 cfs @ 3.51 fps)
  - **2=Orifice/Grate** (Passes 4.69 cfs of 13.05 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-51: Basin #51



Stage-Discharge for Pond B-51: Basin #51

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	1.34	185.04	4.54	185.56	7.66
184.01	0.00	184.53	1.38	185.05	4.61	185.57	7.71
184.02	0.00	184.54	1.43	185.06	4.68	185.58	7.75
184.03	0.00	184.55	1.48	185.07	4.75	185.59	7.80
184.04	0.00	184.56	1.53	185.08	4.82	185.60	7.84
184.05	0.00	184.57	1.58	185.09	4.89	185.61	7.89
184.06	0.01	184.58	1.64	185.10	4.96	185.62	7.94
184.07	0.03	184.59	1.69	185.11	5.03	185.63	7.98
184.08	0.04	184.60	1.74	185.12	5.10	185.64	8.03
184.09	0.04	184.61	1.79	185.13	5.17	185.65	8.07
184.10	0.05	184.62	1.85	185.14	5.24	185.66	8.12
184.11	0.07	184.63	1.90	185.15	5.31	185.67	8.16
184.12	0.08	184.64	1.96	185.16	5.38	185.68	8.21
184.13	0.09	184.65	2.01	185.17	5.45	185.69	8.25
184.14	0.11	184.66	2.07	185.18	5.52	185.70	8.29
184.15	0.12	184.67	2.13	185.19	5.58	185.71	8.34
184.16	0.14	184.68	2.19	185.20	5.65	185.72	8.38
184.17	0.16	184.69	2.24	185.21	5.72	185.73	8.42
184.18	0.17	184.70	2.30	185.22	5.79	185.74	8.47
184.19	0.19	184.71	2.36	185.23	5.86	185.75	8.51
184.20	0.21	184.72	2.42	185.24	5.92	185.76	8.55
184.21	0.23	184.73	2.48	185.25	5.99	185.77	8.59
184.22	0.26	184.74	2.54	185.26	6.06	185.78	8.64
184.23	0.28	184.75	2.61	185.27	6.12	185.79	8.68
184.24	0.30	184.76	2.67	185.28	6.19	185.80	8.72
184.25	0.33	184.77	2.73	185.29	6.25	185.81	8.76
184.26	0.36	184.78	2.79	185.30	6.32	185.82	8.80
184.27	0.38	184.79	2.86	185.31	6.38	185.83	8.84
184.28	0.41	184.80	2.92	185.32	6.44	185.84	8.88
184.29	0.44	184.81	2.98	185.33	6.50	185.85	8.92
184.30	0.47	184.82	3.05	185.34	6.57	185.86	8.96
184.31	0.50	184.83	3.11	185.35	6.63	185.87	9.00
184.32	0.53	184.84	3.18	185.36	6.69	185.88	9.04
184.33	0.56	184.85	3.24	185.37	6.75	185.89	9.08
184.34	0.60	184.86	3.31	185.38	6.80	185.90	9.12
184.35	0.63	184.87	3.38	185.39	6.86	185.91	9.16
184.36	0.67	184.88	3.44	185.40	6.92	185.92	9.20
184.37	0.70	184.89	3.51	185.41	6.97	185.93	9.24
184.38	0.74	184.90	3.58	185.42	7.02	185.94	9.28
184.39	0.78	184.91	3.64	185.43	7.07	185.95	9.32
184.40	0.81	184.92	3.71	185.44	7.12	185.96	9.36
184.41	0.85	184.93	3.78	185.45	7.17	185.97	9.40
184.42	0.89	184.94	3.85	185.46	7.22	185.98	9.44
184.43	0.93	184.95	3.92	185.47	7.26	185.99	9.47
184.44	0.98	184.96	3.98	185.48	7.30	186.00	9.51
184.45	1.02	184.97	4.05	185.49	7.34	186.01	9.55
184.46	1.06	184.98	4.12	185.50	7.37	186.02	9.59
184.47	1.11	184.99	4.19	185.51	7.42	186.03	9.63
184.48	1.15	185.00	4.26	185.52	7.47	186.04	9.66
184.49	1.20	185.01	4.33	185.53	7.51	186.05	9.70
184.50	1.24	185.02	4.40	185.54	7.56	186.06	9.74
184.51	1.29	185.03	4.47	185.55	7.61	186.07	9.78

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	9.81	186.60	11.57	187.12	13.10	187.64	14.10
186.09	9.85	186.61	11.60	187.13	13.13	187.65	14.12
186.10	9.89	186.62	11.64	187.14	13.15	187.66	14.13
186.11	9.92	186.63	11.67	187.15	13.18	187.67	14.15
186.12	9.96	186.64	11.70	187.16	13.21	187.68	14.17
186.13	10.00	186.65	11.73	187.17	13.24	187.69	14.18
186.14	10.03	186.66	11.76	187.18	13.26	187.70	14.20
186.15	10.07	186.67	11.79	187.19	13.29	187.71	14.22
186.16	10.10	186.68	11.82	187.20	13.32	187.72	14.23
186.17	10.14	186.69	11.85	187.21	13.35	187.73	14.25
186.18	10.18	186.70	11.88	187.22	13.36	187.74	14.27
186.19	10.21	186.71	11.91	187.23	13.38	187.75	14.29
186.20	10.25	186.72	11.94	187.24	13.40	187.76	14.30
186.21	10.28	186.73	11.97	187.25	13.42	187.77	14.32
186.22	10.32	186.74	12.00	187.26	13.44	187.78	14.34
186.23	10.35	186.75	12.03	187.27	13.45	187.79	14.35
186.24	10.39	186.76	12.06	187.28	13.47	187.80	14.37
186.25	10.42	186.77	12.09	187.29	13.49	187.81	14.39
186.26	10.46	186.78	12.12	187.30	13.51	187.82	14.40
186.27	10.49	186.79	12.15	187.31	13.53	187.83	14.42
186.28	10.52	186.80	12.18	187.32	13.54	187.84	14.44
186.29	10.56	186.81	12.21	187.33	13.56	187.85	14.45
186.30	10.59	186.82	12.24	187.34	13.58	187.86	14.47
186.31	10.63	186.83	12.27	187.35	13.60	187.87	14.49
186.32	10.66	186.84	12.30	187.36	13.61	187.88	14.50
186.33	10.70	186.85	12.33	187.37	13.63	187.89	14.52
186.34	10.73	186.86	12.36	187.38	13.65	187.90	14.54
186.35	10.76	186.87	12.39	187.39	13.67	187.91	14.55
186.36	10.80	186.88	12.42	187.40	13.68	187.92	14.57
186.37	10.83	186.89	12.45	187.41	13.70	187.93	14.58
186.38	10.86	186.90	12.48	187.42	13.72	187.94	14.60
186.39	10.90	186.91	12.51	187.43	13.74	187.95	14.62
186.40	10.93	186.92	12.53	187.44	13.75	187.96	14.63
186.41	10.96	186.93	12.56	187.45	13.77	187.97	14.65
186.42	11.00	186.94	12.59	187.46	13.79	187.98	14.67
186.43	11.03	186.95	12.62	187.47	13.81	187.99	14.68
186.44	11.06	186.96	12.65	187.48	13.82	188.00	14.70
186.45	11.09	186.97	12.68	187.49	13.84	188.01	14.72
186.46	11.13	186.98	12.71	187.50	13.86	188.02	14.73
186.47	11.16	186.99	12.73	187.51	13.88	188.03	14.75
186.48	11.19	187.00	12.76	187.52	13.89	188.04	14.76
186.49	11.22	187.01	12.79	187.53	13.91	188.05	14.78
186.50	11.26	187.02	12.82	187.54	13.93	188.06	14.80
186.51	11.29	187.03	12.85	187.55	13.95	188.07	14.81
186.52	11.32	187.04	12.88	187.56	13.96	188.08	14.83
186.53	11.35	187.05	12.90	187.57	13.98	188.09	14.85
186.54	11.38	187.06	12.93	187.58	14.00	188.10	14.86
186.55	11.42	187.07	12.96	187.59	14.01	188.11	14.88
186.56	11.45	187.08	12.99	187.60	14.03	188.12	14.89
186.57	11.48	187.09	13.02	187.61	14.05	188.13	14.91
186.58	11.51	187.10	13.04	187.62	14.07	188.14	14.93
186.59	11.54	187.11	13.07	187.63	14.08	188.15	14.94

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.16	14.96	188.68	15.77	189.20	16.54	189.72	17.28
188.17	14.97	188.69	15.79	189.21	16.56	189.73	17.30
188.18	14.99	188.70	15.80	189.22	16.57	189.74	17.31
188.19	15.01	188.71	15.82	189.23	16.59	189.75	17.32
188.20	15.02	188.72	15.83	189.24	16.60	189.76	17.34
188.21	15.04	188.73	15.85	189.25	16.62	189.77	17.35
188.22	15.05	188.74	15.86	189.26	16.63	189.78	17.36
188.23	15.07	188.75	15.88	189.27	16.64	189.79	17.38
188.24	15.09	188.76	15.89	189.28	16.66	189.80	17.39
188.25	15.10	188.77	15.91	189.29	16.67	189.81	17.52
188.26	15.12	188.78	15.92	189.30	16.69	189.82	17.75
188.27	15.13	188.79	15.94	189.31	16.70	189.83	**18.04**
188.28	15.15	188.80	15.95	189.32	16.72		
188.29	15.17	188.81	15.97	189.33	16.73		
188.30	15.18	188.82	15.98	189.34	16.75		
188.31	15.20	188.83	16.00	189.35	16.76		
188.32	15.21	188.84	16.01	189.36	16.77		
188.33	15.23	188.85	16.03	189.37	16.79		
188.34	15.24	188.86	16.04	189.38	16.80		
188.35	15.26	188.87	16.06	189.39	16.82		
188.36	15.28	188.88	16.07	189.40	16.83		
188.37	15.29	188.89	16.09	189.41	16.85		
188.38	15.31	188.90	16.10	189.42	16.86		
188.39	15.32	188.91	16.12	189.43	16.87		
188.40	15.34	188.92	16.13	189.44	16.89		
188.41	15.35	188.93	16.15	189.45	16.90		
188.42	15.37	188.94	16.16	189.46	16.92		
188.43	15.39	188.95	16.18	189.47	16.93		
188.44	15.40	188.96	16.19	189.48	16.95		
188.45	15.42	188.97	16.21	189.49	16.96		
188.46	15.43	188.98	16.22	189.50	16.97		
188.47	15.45	188.99	16.24	189.51	16.99		
188.48	15.46	189.00	16.25	189.52	17.00		
188.49	15.48	189.01	16.27	189.53	17.02		
188.50	15.49	189.02	16.28	189.54	17.03		
188.51	15.51	189.03	16.30	189.55	17.04		
188.52	15.53	189.04	16.31	189.56	17.06		
188.53	15.54	189.05	16.32	189.57	17.07		
188.54	15.56	189.06	16.34	189.58	17.09		
188.55	15.57	189.07	16.35	189.59	17.10		
188.56	15.59	189.08	16.37	189.60	17.11		
188.57	15.60	189.09	16.38	189.61	17.13		
188.58	15.62	189.10	16.40	189.62	17.14		
188.59	15.63	189.11	16.41	189.63	17.16		
188.60	15.65	189.12	16.43	189.64	17.17		
188.61	15.66	189.13	16.44	189.65	17.18		
188.62	15.68	189.14	16.46	189.66	17.20		
188.63	15.69	189.15	16.47	189.67	17.21		
188.64	15.71	189.16	16.49	189.68	17.23		
188.65	15.73	189.17	16.50	189.69	17.24		
188.66	15.74	189.18	16.51	189.70	17.25		
188.67	15.76	189.19	16.53	189.71	17.27		

Stage-Area-Storage for Pond B-51: Basin #51

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	5,243	0	184.52	6,015	2,927
184.01	5,258	53	184.53	6,030	2,987
184.02	5,273	105	184.54	6,044	3,048
184.03	5,288	158	184.55	6,059	3,108
184.04	5,302	211	184.56	6,074	3,169
184.05	5,317	264	184.57	6,089	3,230
184.06	5,332	317	184.58	6,104	3,291
184.07	5,347	371	184.59	6,119	3,352
184.08	5,362	424	184.60	6,133	3,413
184.09	5,377	478	184.61	6,148	3,474
184.10	5,391	532	184.62	6,163	3,536
184.11	5,406	586	184.63	6,178	3,598
184.12	5,421	640	184.64	6,193	3,659
184.13	5,436	694	184.65	6,208	3,721
184.14	5,451	749	184.66	6,222	3,784
184.15	5,466	803	184.67	6,237	3,846
184.16	5,480	858	184.68	6,252	3,908
184.17	5,495	913	184.69	6,267	3,971
184.18	5,510	968	184.70	6,282	4,034
184.19	5,525	1,023	184.71	6,297	4,097
184.20	5,540	1,078	184.72	6,311	4,160
184.21	5,555	1,134	184.73	6,326	4,223
184.22	5,569	1,189	184.74	6,341	4,286
184.23	5,584	1,245	184.75	6,356	4,350
184.24	5,599	1,301	184.76	6,371	4,413
184.25	5,614	1,357	184.77	6,386	4,477
184.26	5,629	1,413	184.78	6,401	4,541
184.27	5,644	1,470	184.79	6,415	4,605
184.28	5,659	1,526	184.80	6,430	4,669
184.29	5,673	1,583	184.81	6,445	4,734
184.30	5,688	1,640	184.82	6,460	4,798
184.31	5,703	1,697	184.83	6,475	4,863
184.32	5,718	1,754	184.84	6,490	4,928
184.33	5,733	1,811	184.85	6,504	4,993
184.34	5,748	1,868	184.86	6,519	5,058
184.35	5,762	1,926	184.87	6,534	5,123
184.36	5,777	1,984	184.88	6,549	5,188
184.37	5,792	2,041	184.89	6,564	5,254
184.38	5,807	2,099	184.90	6,579	5,320
184.39	5,822	2,158	184.91	6,593	5,386
184.40	5,837	2,216	184.92	6,608	5,452
184.41	5,851	2,274	184.93	6,623	5,518
184.42	5,866	2,333	184.94	6,638	5,584
184.43	5,881	2,392	184.95	6,653	5,651
184.44	5,896	2,451	184.96	6,668	5,717
184.45	5,911	2,510	184.97	6,682	5,784
184.46	5,926	2,569	184.98	6,697	5,851
184.47	5,940	2,628	184.99	6,712	5,918
184.48	5,955	2,688	185.00	6,727	5,985
184.49	5,970	2,747	185.01	6,744	6,052
184.50	5,985	2,807	185.02	6,761	6,120
184.51	6,000	2,867	185.03	6,778	6,188

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	6,795	6,255	185.56	7,677	10,018
185.05	6,812	6,323	185.57	7,694	10,095
185.06	6,829	6,392	185.58	7,711	10,172
185.07	6,846	6,460	185.59	7,728	10,249
185.08	6,863	6,529	185.60	7,745	10,327
185.09	6,880	6,597	185.61	7,762	10,404
185.10	6,897	6,666	185.62	7,779	10,482
185.11	6,914	6,735	185.63	7,796	10,560
185.12	6,931	6,804	185.64	7,813	10,638
185.13	6,948	6,874	185.65	7,830	10,716
185.14	6,965	6,943	185.66	7,847	10,794
185.15	6,982	7,013	185.67	7,864	10,873
185.16	6,999	7,083	185.68	7,881	10,952
185.17	7,015	7,153	185.69	7,898	11,031
185.18	7,032	7,223	185.70	7,915	11,110
185.19	7,049	7,294	185.71	7,932	11,189
185.20	7,066	7,364	185.72	7,949	11,268
185.21	7,083	7,435	185.73	7,966	11,348
185.22	7,100	7,506	185.74	7,983	11,428
185.23	7,117	7,577	185.75	8,000	11,508
185.24	7,134	7,648	185.76	8,017	11,588
185.25	7,151	7,720	185.77	8,034	11,668
185.26	7,168	7,791	185.78	8,051	11,748
185.27	7,185	7,863	185.79	8,068	11,829
185.28	7,202	7,935	185.80	8,085	11,910
185.29	7,219	8,007	185.81	8,102	11,991
185.30	7,236	8,079	185.82	8,119	12,072
185.31	7,253	8,152	185.83	8,136	12,153
185.32	7,270	8,225	185.84	8,152	12,234
185.33	7,287	8,297	185.85	8,169	12,316
185.34	7,304	8,370	185.86	8,186	12,398
185.35	7,321	8,443	185.87	8,203	12,480
185.36	7,338	8,517	185.88	8,220	12,562
185.37	7,355	8,590	185.89	8,237	12,644
185.38	7,372	8,664	185.90	8,254	12,727
185.39	7,389	8,738	185.91	8,271	12,809
185.40	7,406	8,812	185.92	8,288	12,892
185.41	7,423	8,886	185.93	8,305	12,975
185.42	7,440	8,960	185.94	8,322	13,058
185.43	7,457	9,034	185.95	8,339	13,141
185.44	7,474	9,109	185.96	8,356	13,225
185.45	7,491	9,184	185.97	8,373	13,309
185.46	7,508	9,259	185.98	8,390	13,392
185.47	7,525	9,334	185.99	8,407	13,476
185.48	7,542	9,409	186.00	8,424	13,561
185.49	7,559	9,485	186.01	8,441	13,645
185.50	7,576	9,561	186.02	8,457	13,729
185.51	7,592	9,636	186.03	8,474	13,814
185.52	7,609	9,712	186.04	8,490	13,899
185.53	7,626	9,789	186.05	8,507	13,984
185.54	7,643	9,865	186.06	8,524	14,069
185.55	7,660	9,942	186.07	8,540	14,154

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	8,557	14,240	186.60	9,421	18,914
186.09	8,573	14,325	186.61	9,437	19,008
186.10	8,590	14,411	186.62	9,454	19,103
186.11	8,607	14,497	186.63	9,470	19,197
186.12	8,623	14,583	186.64	9,487	19,292
186.13	8,640	14,670	186.65	9,504	19,387
186.14	8,657	14,756	186.66	9,520	19,482
186.15	8,673	14,843	186.67	9,537	19,577
186.16	8,690	14,930	186.68	9,553	19,673
186.17	8,706	15,017	186.69	9,570	19,768
186.18	8,723	15,104	186.70	9,587	19,864
186.19	8,740	15,191	186.71	9,603	19,960
186.20	8,756	15,279	186.72	9,620	20,056
186.21	8,773	15,366	186.73	9,637	20,153
186.22	8,789	15,454	186.74	9,653	20,249
186.23	8,806	15,542	186.75	9,670	20,346
186.24	8,823	15,630	186.76	9,686	20,442
186.25	8,839	15,718	186.77	9,703	20,539
186.26	8,856	15,807	186.78	9,720	20,636
186.27	8,872	15,896	186.79	9,736	20,734
186.28	8,889	15,984	186.80	9,753	20,831
186.29	8,906	16,073	186.81	9,769	20,929
186.30	8,922	16,162	186.82	9,786	21,027
186.31	8,939	16,252	186.83	9,803	21,125
186.32	8,956	16,341	186.84	9,819	21,223
186.33	8,972	16,431	186.85	9,836	21,321
186.34	8,989	16,521	186.86	9,852	21,419
186.35	9,005	16,611	186.87	9,869	21,518
186.36	9,022	16,701	186.88	9,886	21,617
186.37	9,039	16,791	186.89	9,902	21,716
186.38	9,055	16,882	186.90	9,919	21,815
186.39	9,072	16,972	186.91	9,936	21,914
186.40	9,088	17,063	186.92	9,952	22,014
186.41	9,105	17,154	186.93	9,969	22,113
186.42	9,122	17,245	186.94	9,985	22,213
186.43	9,138	17,336	186.95	10,002	22,313
186.44	9,155	17,428	186.96	10,019	22,413
186.45	9,171	17,519	186.97	10,035	22,513
186.46	9,188	17,611	186.98	10,052	22,614
186.47	9,205	17,703	186.99	10,068	22,714
186.48	9,221	17,795	187.00	10,085	22,815
186.49	9,238	17,888	187.01	10,102	22,916
186.50	9,255	17,980	187.02	10,119	23,017
186.51	9,271	18,073	187.03	10,137	23,118
186.52	9,288	18,166	187.04	10,154	23,220
186.53	9,304	18,259	187.05	10,171	23,321
186.54	9,321	18,352	187.06	10,188	23,423
186.55	9,338	18,445	187.07	10,205	23,525
186.56	9,354	18,538	187.08	10,222	23,627
186.57	9,371	18,632	187.09	10,240	23,730
186.58	9,387	18,726	187.10	10,257	23,832
186.59	9,404	18,820	187.11	10,274	23,935

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	10,291	24,038	187.64	11,184	29,621
187.13	10,308	24,141	187.65	11,201	29,733
187.14	10,325	24,244	187.66	11,218	29,845
187.15	10,343	24,347	187.67	11,235	29,957
187.16	10,360	24,451	187.68	11,253	30,070
187.17	10,377	24,554	187.69	11,270	30,182
187.18	10,394	24,658	187.70	11,287	30,295
187.19	10,411	24,762	187.71	11,304	30,408
187.20	10,428	24,866	187.72	11,321	30,521
187.21	10,446	24,971	187.73	11,338	30,635
187.22	10,463	25,075	187.74	11,356	30,748
187.23	10,480	25,180	187.75	11,373	30,862
187.24	10,497	25,285	187.76	11,390	30,975
187.25	10,514	25,390	187.77	11,407	31,089
187.26	10,531	25,495	187.78	11,424	31,204
187.27	10,549	25,601	187.79	11,441	31,318
187.28	10,566	25,706	187.80	11,459	31,432
187.29	10,583	25,812	187.81	11,476	31,547
187.30	10,600	25,918	187.82	11,493	31,662
187.31	10,617	26,024	187.83	11,510	31,777
187.32	10,634	26,130	187.84	11,527	31,892
187.33	10,652	26,237	187.85	11,544	32,008
187.34	10,669	26,343	187.86	11,562	32,123
187.35	10,686	26,450	187.87	11,579	32,239
187.36	10,703	26,557	187.88	11,596	32,355
187.37	10,720	26,664	187.89	11,613	32,471
187.38	10,737	26,771	187.90	11,630	32,587
187.39	10,755	26,879	187.91	11,647	32,703
187.40	10,772	26,986	187.92	11,665	32,820
187.41	10,789	27,094	187.93	11,682	32,937
187.42	10,806	27,202	187.94	11,699	33,053
187.43	10,823	27,310	187.95	11,716	33,171
187.44	10,840	27,419	187.96	11,733	33,288
187.45	10,858	27,527	187.97	11,750	33,405
187.46	10,875	27,636	187.98	11,768	33,523
187.47	10,892	27,745	187.99	11,785	33,641
187.48	10,909	27,854	188.00	11,802	33,759
187.49	10,926	27,963	188.01	11,820	33,877
187.50	10,944	28,072	188.02	11,837	33,995
187.51	10,961	28,182	188.03	11,855	34,113
187.52	10,978	28,291	188.04	11,873	34,232
187.53	10,995	28,401	188.05	11,891	34,351
187.54	11,012	28,511	188.06	11,908	34,470
187.55	11,029	28,621	188.07	11,926	34,589
187.56	11,047	28,732	188.08	11,944	34,708
187.57	11,064	28,842	188.09	11,962	34,828
187.58	11,081	28,953	188.10	11,979	34,948
187.59	11,098	29,064	188.11	11,997	35,067
187.60	11,115	29,175	188.12	12,015	35,188
187.61	11,132	29,286	188.13	12,033	35,308
187.62	11,150	29,398	188.14	12,050	35,428
187.63	11,167	29,509	188.15	12,068	35,549

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	12,086	35,670
188.17	12,104	35,790
188.18	12,121	35,912
188.19	12,139	36,033
188.20	12,157	36,154
188.21	12,175	36,276
188.22	12,192	36,398
188.23	12,210	36,520
188.24	12,228	36,642
188.25	12,246	36,764
188.26	12,263	36,887
188.27	12,281	37,010
188.28	12,299	37,133
188.29	12,316	37,256
188.30	12,334	37,379
188.31	12,352	37,502
188.32	12,370	37,626
188.33	12,387	37,750
188.34	12,405	37,874
188.35	12,423	37,998
188.36	12,441	38,122
188.37	12,458	38,247
188.38	12,476	38,371
188.39	12,494	38,496
188.40	12,512	38,621
188.41	12,529	38,746
188.42	12,547	38,872
188.43	12,565	38,997
188.44	12,583	39,123
188.45	12,600	39,249
188.46	12,618	39,375
188.47	12,636	39,501
188.48	12,654	39,628
188.49	12,671	39,754
188.50	12,689	39,881
188.51	12,707	40,008
188.52	12,724	40,135
188.53	12,742	40,263
188.54	12,760	40,390
188.55	12,778	40,518
188.56	12,795	40,646
188.57	12,813	40,774
188.58	12,831	40,902
188.59	12,849	41,030
188.60	12,866	41,159
188.61	12,884	41,288
188.62	12,902	41,417
188.63	12,920	41,546
188.64	12,937	41,675
188.65	12,955	41,805
188.66	12,973	41,934
188.67	12,991	42,064
188.68	13,008	42,194
188.69	13,026	42,324
188.70	13,044	42,455
188.71	13,062	42,585
188.72	13,079	42,716
188.73	13,097	42,847
188.74	13,115	42,978
188.75	13,133	43,109
188.76	13,150	43,240
188.77	13,168	43,372
188.78	13,186	43,504
188.79	13,203	43,636
188.80	13,221	43,768
188.81	13,239	43,900
188.82	13,257	44,033
188.83	13,274	44,165
188.84	13,292	44,298
188.85	13,310	44,431
188.86	13,328	44,564
188.87	13,345	44,698
188.88	13,363	44,831
188.89	13,381	44,965
188.90	13,399	45,099
188.91	13,416	45,233
188.92	13,434	45,367
188.93	13,452	45,502
188.94	13,470	45,636
188.95	13,487	45,771
188.96	13,505	45,906
188.97	13,523	46,041
188.98	13,541	46,176
188.99	13,558	46,312
189.00	13,576	46,448
189.01	13,594	46,583
189.02	13,613	46,719
189.03	13,631	46,856
189.04	13,649	46,992
189.05	13,668	47,129
189.06	13,686	47,265
189.07	13,704	47,402
189.08	13,723	47,539
189.09	13,741	47,677
189.10	13,759	47,814
189.11	13,778	47,952
189.12	13,796	48,090
189.13	13,814	48,228
189.14	13,833	48,366
189.15	13,851	48,505
189.16	13,869	48,643
189.17	13,888	48,782
189.18	13,906	48,921
189.19	13,924	49,060

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.20	13,943	49,199
189.21	13,961	49,339
189.22	13,979	49,479
189.23	13,998	49,618
189.24	14,016	49,759
189.25	14,034	49,899
189.26	14,053	50,039
189.27	14,071	50,180
189.28	14,089	50,321
189.29	14,108	50,462
189.30	14,126	50,603
189.31	14,144	50,744
189.32	14,163	50,886
189.33	14,181	51,027
189.34	14,199	51,169
189.35	14,218	51,311
189.36	14,236	51,454
189.37	14,254	51,596
189.38	14,273	51,739
189.39	14,291	51,882
189.40	14,309	52,025
189.41	14,328	52,168
189.42	14,346	52,311
189.43	14,365	52,455
189.44	14,383	52,598
189.45	14,401	52,742
189.46	14,420	52,886
189.47	14,438	53,031
189.48	14,456	53,175
189.49	14,475	53,320
189.50	14,493	53,465
189.51	14,511	53,610
189.52	14,530	53,755
189.53	14,548	53,900
189.54	14,566	54,046
189.55	14,585	54,192
189.56	14,603	54,338
189.57	14,621	54,484
189.58	14,640	54,630
189.59	14,658	54,777
189.60	14,676	54,923
189.61	14,695	55,070
189.62	14,713	55,217
189.63	14,731	55,364
189.64	14,750	55,512
189.65	14,768	55,659
189.66	14,786	55,807
189.67	14,805	55,955
189.68	14,823	56,103
189.69	14,841	56,251
189.70	14,860	56,400
189.71	14,878	56,549
189.72	14,896	56,698
189.73	14,915	56,847
189.74	14,933	56,996
189.75	14,951	57,145
189.76	14,970	57,295
189.77	14,988	57,445
189.78	15,006	57,595
189.79	15,025	57,745
189.80	15,043	57,895
189.81	15,061	58,046
189.82	15,080	58,196
189.83	**15,098**	**58,347**

Summary for Pond B-52: Basin #52

Inflow Area = 1.423 ac, 34.43% Impervious, Inflow Depth = 2.22" for Future 2 yr event
Inflow = 3.22 cfs @ 12.17 hrs, Volume= 0.263 af
Outflow = 2.92 cfs @ 12.22 hrs, Volume= 0.215 af, Atten= 9%, Lag= 2.9 min
Primary = 2.92 cfs @ 12.22 hrs, Volume= 0.215 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.53' @ 12.22 hrs Surf.Area= 1,847 sf Storage= 2,864 cf

Plug-Flow detention time= 139.3 min calculated for 0.215 af (82% of inflow)
Center-of-Mass det. time= 59.4 min (861.1 - 801.7)

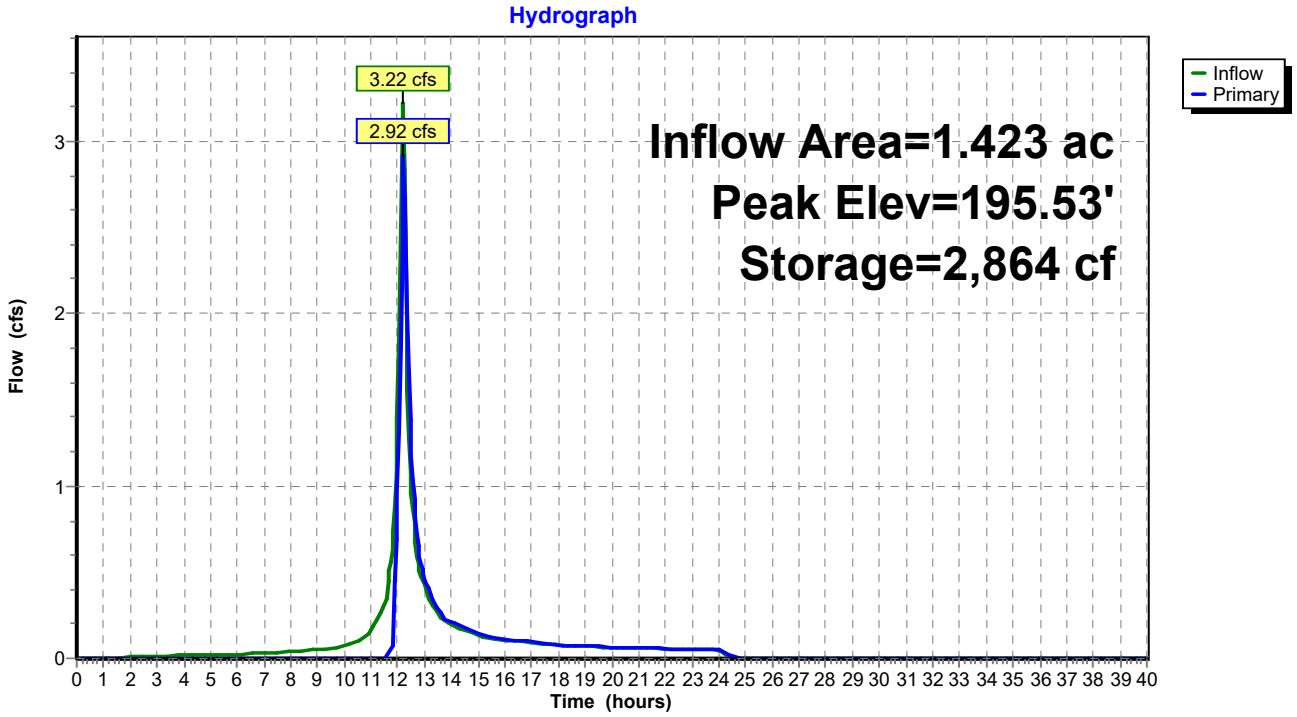
Volume	Invert	Avail.Storage	Storage Description
#1	193.00'	7,751 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.00	474	0	0
194.00	970	722	722
195.00	1,523	1,247	1,969
196.00	2,133	1,828	3,797
197.00	2,799	2,466	6,263
197.50	3,154	1,488	7,751

Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	**15.0" Round Culvert** L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	195.08'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.72'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.86 cfs @ 12.22 hrs HW=195.53' (Free Discharge)
- **1=Culvert** (Passes 2.86 cfs of 7.74 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.86 cfs @ 2.14 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-52: Basin #52



Stage-Discharge for Pond B-52: Basin #52

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.00	0.00	193.52	0.00	194.04	0.00	194.56	0.00
193.01	0.00	193.53	0.00	194.05	0.00	194.57	0.00
193.02	0.00	193.54	0.00	194.06	0.00	194.58	0.00
193.03	0.00	193.55	0.00	194.07	0.00	194.59	0.00
193.04	0.00	193.56	0.00	194.08	0.00	194.60	0.00
193.05	0.00	193.57	0.00	194.09	0.00	194.61	0.00
193.06	0.00	193.58	0.00	194.10	0.00	194.62	0.00
193.07	0.00	193.59	0.00	194.11	0.00	194.63	0.00
193.08	0.00	193.60	0.00	194.12	0.00	194.64	0.00
193.09	0.00	193.61	0.00	194.13	0.00	194.65	0.00
193.10	0.00	193.62	0.00	194.14	0.00	194.66	0.00
193.11	0.00	193.63	0.00	194.15	0.00	194.67	0.00
193.12	0.00	193.64	0.00	194.16	0.00	194.68	0.00
193.13	0.00	193.65	0.00	194.17	0.00	194.69	0.00
193.14	0.00	193.66	0.00	194.18	0.00	194.70	0.00
193.15	0.00	193.67	0.00	194.19	0.00	194.71	0.00
193.16	0.00	193.68	0.00	194.20	0.00	194.72	0.00
193.17	0.00	193.69	0.00	194.21	0.00	194.73	0.00
193.18	0.00	193.70	0.00	194.22	0.00	194.74	0.00
193.19	0.00	193.71	0.00	194.23	0.00	194.75	0.00
193.20	0.00	193.72	0.00	194.24	0.00	194.76	0.00
193.21	0.00	193.73	0.00	194.25	0.00	194.77	0.00
193.22	0.00	193.74	0.00	194.26	0.00	194.78	0.00
193.23	0.00	193.75	0.00	194.27	0.00	194.79	0.00
193.24	0.00	193.76	0.00	194.28	0.00	194.80	0.00
193.25	0.00	193.77	0.00	194.29	0.00	194.81	0.00
193.26	0.00	193.78	0.00	194.30	0.00	194.82	0.00
193.27	0.00	193.79	0.00	194.31	0.00	194.83	0.00
193.28	0.00	193.80	0.00	194.32	0.00	194.84	0.00
193.29	0.00	193.81	0.00	194.33	0.00	194.85	0.00
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.00
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.00
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.00
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.00
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.00
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.00
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.00
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.00
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.00
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.00
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.00
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.00
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.00
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.00
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.00
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.00
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.00
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.00
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.00
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.00
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.00

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.08	0.00	195.60	3.58	196.12	8.41	196.64	8.96
195.09	0.01	195.61	3.67	196.13	8.43	196.65	8.97
195.10	0.03	195.62	3.74	196.14	8.44	196.66	8.98
195.11	0.05	195.63	3.82	196.15	8.45	196.67	8.99
195.12	0.08	195.64	3.89	196.16	8.46	196.68	9.00
195.13	0.11	195.65	3.97	196.17	8.47	196.69	9.01
195.14	0.14	195.66	4.04	196.18	8.48	196.70	9.02
195.15	0.18	195.67	4.10	196.19	8.49	196.71	9.03
195.16	0.22	195.68	4.17	196.20	8.50	196.72	9.04
195.17	0.26	195.69	4.24	196.21	8.51	196.73	9.05
195.18	0.30	195.70	4.30	196.22	8.52	196.74	9.06
195.19	0.35	195.71	4.36	196.23	8.53	196.75	9.07
195.20	0.40	195.72	4.43	196.24	8.54	196.76	9.08
195.21	0.45	195.73	4.50	196.25	8.55	196.77	9.09
195.22	0.50	195.74	4.58	196.26	8.57	196.78	9.10
195.23	0.56	195.75	4.67	196.27	8.58	196.79	9.11
195.24	0.62	195.76	4.77	196.28	8.59	196.80	9.12
195.25	0.67	195.77	4.87	196.29	8.60	196.81	9.13
195.26	0.74	195.78	4.97	196.30	8.61	196.82	9.14
195.27	0.80	195.79	5.08	196.31	8.62	196.83	9.15
195.28	0.86	195.80	5.18	196.32	8.63	196.84	9.16
195.29	0.93	195.81	5.30	196.33	8.64	196.85	9.17
195.30	0.99	195.82	5.41	196.34	8.65	196.86	9.18
195.31	1.06	195.83	5.53	196.35	8.66	196.87	9.19
195.32	1.13	195.84	5.64	196.36	8.67	196.88	9.20
195.33	1.20	195.85	5.76	196.37	8.68	196.89	9.21
195.34	1.28	195.86	5.89	196.38	8.69	196.90	9.22
195.35	1.35	195.87	6.01	196.39	8.70	196.91	9.23
195.36	1.43	195.88	6.14	196.40	8.71	196.92	9.24
195.37	1.50	195.89	6.27	196.41	8.72	196.93	9.25
195.38	1.58	195.90	6.40	196.42	8.73	196.94	9.26
195.39	1.66	195.91	6.53	196.43	8.75	196.95	9.27
195.40	1.74	195.92	6.66	196.44	8.76	196.96	9.28
195.41	1.83	195.93	6.80	196.45	8.77	196.97	9.29
195.42	1.91	195.94	6.93	196.46	8.78	196.98	9.30
195.43	1.99	195.95	7.07	196.47	8.79	196.99	9.31
195.44	2.08	195.96	7.21	196.48	8.80	197.00	9.32
195.45	2.17	195.97	7.35	196.49	8.81	197.01	9.33
195.46	2.26	195.98	7.50	196.50	8.82	197.02	9.34
195.47	2.35	195.99	7.64	196.51	8.83	197.03	9.35
195.48	2.44	196.00	7.79	196.52	8.84	197.04	9.36
195.49	2.53	196.01	7.93	196.53	8.85	197.05	9.37
195.50	2.62	196.02	8.08	196.54	8.86	197.06	9.38
195.51	2.72	196.03	8.23	196.55	8.87	197.07	9.39
195.52	2.81	196.04	8.33	196.56	8.88	197.08	9.40
195.53	2.91	196.05	8.34	196.57	8.89	197.09	9.41
195.54	3.00	196.06	8.35	196.58	8.90	197.10	9.42
195.55	3.10	196.07	8.36	196.59	8.91	197.11	9.43
195.56	3.20	196.08	8.37	196.60	8.92	197.12	9.44
195.57	3.30	196.09	8.38	196.61	8.93	197.13	9.45
195.58	3.40	196.10	8.39	196.62	8.94	197.14	9.46
195.59	3.50	196.11	8.40	196.63	8.95	197.15	9.47

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)
197.16	9.48
197.17	9.49
197.18	9.50
197.19	9.51
197.20	9.52
197.21	9.53
197.22	9.54
197.23	9.55
197.24	9.55
197.25	9.56
197.26	9.69
197.27	9.91
197.28	10.20
197.29	10.54
197.30	10.92
197.31	11.35
197.32	11.81
197.33	12.30
197.34	12.82
197.35	13.38
197.36	13.96
197.37	14.57
197.38	15.21
197.39	15.87
197.40	16.55
197.41	17.26
197.42	17.99
197.43	18.75
197.44	19.52
197.45	20.32
197.46	21.17
197.47	22.06
197.48	22.96
197.49	23.90
197.50	**24.85**

Stage-Area-Storage for Pond B-52: Basin #52

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.00	474	0	193.52	732	314
193.01	479	5	193.53	737	321
193.02	484	10	193.54	742	328
193.03	489	14	193.55	747	336
193.04	494	19	193.56	752	343
193.05	499	24	193.57	757	351
193.06	504	29	193.58	762	358
193.07	509	34	193.59	767	366
193.08	514	40	193.60	772	374
193.09	519	45	193.61	777	381
193.10	524	50	193.62	782	389
193.11	529	55	193.63	786	397
193.12	534	60	193.64	791	405
193.13	538	66	193.65	796	413
193.14	543	71	193.66	801	421
193.15	548	77	193.67	806	429
193.16	553	82	193.68	811	437
193.17	558	88	193.69	816	445
193.18	563	93	193.70	821	453
193.19	568	99	193.71	826	462
193.20	573	105	193.72	831	470
193.21	578	110	193.73	836	478
193.22	583	116	193.74	841	487
193.23	588	122	193.75	846	495
193.24	593	128	193.76	851	503
193.25	598	134	193.77	856	512
193.26	603	140	193.78	861	521
193.27	608	146	193.79	866	529
193.28	613	152	193.80	871	538
193.29	618	158	193.81	876	547
193.30	623	165	193.82	881	555
193.31	628	171	193.83	886	564
193.32	633	177	193.84	891	573
193.33	638	183	193.85	896	582
193.34	643	190	193.86	901	591
193.35	648	196	193.87	906	600
193.36	653	203	193.88	910	609
193.37	658	209	193.89	915	618
193.38	662	216	193.90	920	627
193.39	667	223	193.91	925	637
193.40	672	229	193.92	930	646
193.41	677	236	193.93	935	655
193.42	682	243	193.94	940	665
193.43	687	250	193.95	945	674
193.44	692	257	193.96	950	684
193.45	697	264	193.97	955	693
193.46	702	271	193.98	960	703
193.47	707	278	193.99	965	712
193.48	712	285	194.00	970	722
193.49	717	292	194.01	976	732
193.50	722	299	194.02	981	742
193.51	727	306	194.03	987	751

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.04	992	761	194.56	1,280	1,352
194.05	998	771	194.57	1,285	1,365
194.06	1,003	781	194.58	1,291	1,378
194.07	1,009	791	194.59	1,296	1,391
194.08	1,014	801	194.60	1,302	1,404
194.09	1,020	812	194.61	1,307	1,417
194.10	1,025	822	194.62	1,313	1,430
194.11	1,031	832	194.63	1,318	1,443
194.12	1,036	842	194.64	1,324	1,456
194.13	1,042	853	194.65	1,329	1,469
194.14	1,047	863	194.66	1,335	1,483
194.15	1,053	874	194.67	1,341	1,496
194.16	1,058	884	194.68	1,346	1,509
194.17	1,064	895	194.69	1,352	1,523
194.18	1,070	906	194.70	1,357	1,536
194.19	1,075	916	194.71	1,363	1,550
194.20	1,081	927	194.72	1,368	1,564
194.21	1,086	938	194.73	1,374	1,577
194.22	1,092	949	194.74	1,379	1,591
194.23	1,097	960	194.75	1,385	1,605
194.24	1,103	971	194.76	1,390	1,619
194.25	1,108	982	194.77	1,396	1,633
194.26	1,114	993	194.78	1,401	1,647
194.27	1,119	1,004	194.79	1,407	1,661
194.28	1,125	1,015	194.80	1,412	1,675
194.29	1,130	1,027	194.81	1,418	1,689
194.30	1,136	1,038	194.82	1,423	1,703
194.31	1,141	1,049	194.83	1,429	1,718
194.32	1,147	1,061	194.84	1,435	1,732
194.33	1,152	1,072	194.85	1,440	1,746
194.34	1,158	1,084	194.86	1,446	1,761
194.35	1,164	1,095	194.87	1,451	1,775
194.36	1,169	1,107	194.88	1,457	1,790
194.37	1,175	1,119	194.89	1,462	1,804
194.38	1,180	1,131	194.90	1,468	1,819
194.39	1,186	1,142	194.91	1,473	1,834
194.40	1,191	1,154	194.92	1,479	1,848
194.41	1,197	1,166	194.93	1,484	1,863
194.42	1,202	1,178	194.94	1,490	1,878
194.43	1,208	1,190	194.95	1,495	1,893
194.44	1,213	1,202	194.96	1,501	1,908
194.45	1,219	1,214	194.97	1,506	1,923
194.46	1,224	1,227	194.98	1,512	1,938
194.47	1,230	1,239	194.99	1,517	1,953
194.48	1,235	1,251	195.00	1,523	1,969
194.49	1,241	1,264	195.01	1,529	1,984
194.50	1,247	1,276	195.02	1,535	1,999
194.51	1,252	1,289	195.03	1,541	2,014
194.52	1,258	1,301	195.04	1,547	2,030
194.53	1,263	1,314	195.05	1,554	2,045
194.54	1,269	1,326	195.06	1,560	2,061
194.55	1,274	1,339	195.07	1,566	2,077

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.08	1,572	2,092	195.60	1,889	2,992
195.09	1,578	2,108	195.61	1,895	3,011
195.10	1,584	2,124	195.62	1,901	3,030
195.11	1,590	2,140	195.63	1,907	3,049
195.12	1,596	2,156	195.64	1,913	3,068
195.13	1,602	2,172	195.65	1,920	3,087
195.14	1,608	2,188	195.66	1,926	3,107
195.15	1,615	2,204	195.67	1,932	3,126
195.16	1,621	2,220	195.68	1,938	3,145
195.17	1,627	2,236	195.69	1,944	3,165
195.18	1,633	2,253	195.70	1,950	3,184
195.19	1,639	2,269	195.71	1,956	3,204
195.20	1,645	2,285	195.72	1,962	3,223
195.21	1,651	2,302	195.73	1,968	3,243
195.22	1,657	2,318	195.74	1,974	3,263
195.23	1,663	2,335	195.75	1,981	3,282
195.24	1,669	2,352	195.76	1,987	3,302
195.25	1,676	2,368	195.77	1,993	3,322
195.26	1,682	2,385	195.78	1,999	3,342
195.27	1,688	2,402	195.79	2,005	3,362
195.28	1,694	2,419	195.80	2,011	3,382
195.29	1,700	2,436	195.81	2,017	3,402
195.30	1,706	2,453	195.82	2,023	3,422
195.31	1,712	2,470	195.83	2,029	3,443
195.32	1,718	2,487	195.84	2,035	3,463
195.33	1,724	2,504	195.85	2,041	3,483
195.34	1,730	2,522	195.86	2,048	3,504
195.35	1,736	2,539	195.87	2,054	3,524
195.36	1,743	2,556	195.88	2,060	3,545
195.37	1,749	2,574	195.89	2,066	3,566
195.38	1,755	2,591	195.90	2,072	3,586
195.39	1,761	2,609	195.91	2,078	3,607
195.40	1,767	2,627	195.92	2,084	3,628
195.41	1,773	2,644	195.93	2,090	3,649
195.42	1,779	2,662	195.94	2,096	3,670
195.43	1,785	2,680	195.95	2,102	3,691
195.44	1,791	2,698	195.96	2,109	3,712
195.45	1,797	2,716	195.97	2,115	3,733
195.46	1,804	2,734	195.98	2,121	3,754
195.47	1,810	2,752	195.99	2,127	3,775
195.48	1,816	2,770	196.00	2,133	3,797
195.49	1,822	2,788	196.01	2,140	3,818
195.50	1,828	2,806	196.02	2,146	3,839
195.51	1,834	2,825	196.03	2,153	3,861
195.52	1,840	2,843	196.04	2,160	3,882
195.53	1,846	2,861	196.05	2,166	3,904
195.54	1,852	2,880	196.06	2,173	3,926
195.55	1,859	2,898	196.07	2,180	3,947
195.56	1,865	2,917	196.08	2,186	3,969
195.57	1,871	2,936	196.09	2,193	3,991
195.58	1,877	2,954	196.10	2,200	4,013
195.59	1,883	2,973	196.11	2,206	4,035

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.12	2,213	4,057	196.64	2,559	5,298
196.13	2,220	4,079	196.65	2,566	5,324
196.14	2,226	4,102	196.66	2,573	5,349
196.15	2,233	4,124	196.67	2,579	5,375
196.16	2,240	4,146	196.68	2,586	5,401
196.17	2,246	4,169	196.69	2,593	5,427
196.18	2,253	4,191	196.70	2,599	5,453
196.19	2,260	4,214	196.71	2,606	5,479
196.20	2,266	4,236	196.72	2,613	5,505
196.21	2,273	4,259	196.73	2,619	5,531
196.22	2,280	4,282	196.74	2,626	5,557
196.23	2,286	4,305	196.75	2,633	5,584
196.24	2,293	4,328	196.76	2,639	5,610
196.25	2,300	4,351	196.77	2,646	5,636
196.26	2,306	4,374	196.78	2,652	5,663
196.27	2,313	4,397	196.79	2,659	5,689
196.28	2,319	4,420	196.80	2,666	5,716
196.29	2,326	4,443	196.81	2,672	5,743
196.30	2,333	4,466	196.82	2,679	5,769
196.31	2,339	4,490	196.83	2,686	5,796
196.32	2,346	4,513	196.84	2,692	5,823
196.33	2,353	4,537	196.85	2,699	5,850
196.34	2,359	4,560	196.86	2,706	5,877
196.35	2,366	4,584	196.87	2,712	5,904
196.36	2,373	4,608	196.88	2,719	5,931
196.37	2,379	4,631	196.89	2,726	5,959
196.38	2,386	4,655	196.90	2,732	5,986
196.39	2,393	4,679	196.91	2,739	6,013
196.40	2,399	4,703	196.92	2,746	6,041
196.41	2,406	4,727	196.93	2,752	6,068
196.42	2,413	4,751	196.94	2,759	6,096
196.43	2,419	4,775	196.95	2,766	6,123
196.44	2,426	4,799	196.96	2,772	6,151
196.45	2,433	4,824	196.97	2,779	6,179
196.46	2,439	4,848	196.98	2,786	6,207
196.47	2,446	4,873	196.99	2,792	6,235
196.48	2,453	4,897	197.00	2,799	6,263
196.49	2,459	4,922	197.01	2,806	6,291
196.50	2,466	4,946	197.02	2,813	6,319
196.51	2,473	4,971	197.03	2,820	6,347
196.52	2,479	4,996	197.04	2,827	6,375
196.53	2,486	5,021	197.05	2,835	6,403
196.54	2,493	5,045	197.06	2,842	6,432
196.55	2,499	5,070	197.07	2,849	6,460
196.56	2,506	5,095	197.08	2,856	6,489
196.57	2,513	5,121	197.09	2,863	6,517
196.58	2,519	5,146	197.10	2,870	6,546
196.59	2,526	5,171	197.11	2,877	6,575
196.60	2,533	5,196	197.12	2,884	6,603
196.61	2,539	5,222	197.13	2,891	6,632
196.62	2,546	5,247	197.14	2,898	6,661
196.63	2,553	5,272	197.15	2,906	6,690

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.16	2,913	6,719
197.17	2,920	6,749
197.18	2,927	6,778
197.19	2,934	6,807
197.20	2,941	6,836
197.21	2,948	6,866
197.22	2,955	6,895
197.23	2,962	6,925
197.24	2,969	6,955
197.25	2,977	6,984
197.26	2,984	7,014
197.27	2,991	7,044
197.28	2,998	7,074
197.29	3,005	7,104
197.30	3,012	7,134
197.31	3,019	7,164
197.32	3,026	7,195
197.33	3,033	7,225
197.34	3,040	7,255
197.35	3,047	7,286
197.36	3,055	7,316
197.37	3,062	7,347
197.38	3,069	7,377
197.39	3,076	7,408
197.40	3,083	7,439
197.41	3,090	7,470
197.42	3,097	7,501
197.43	3,104	7,532
197.44	3,111	7,563
197.45	3,118	7,594
197.46	3,126	7,625
197.47	3,133	7,656
197.48	3,140	7,688
197.49	3,147	7,719
197.50	**3,154**	**7,751**

Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.80% Impervious, Inflow Depth = 2.50" for Future 2 yr event
Inflow = 6.38 cfs @ 12.17 hrs, Volume= 0.530 af
Outflow = 2.72 cfs @ 12.38 hrs, Volume= 0.416 af, Atten= 57%, Lag= 12.3 min
Primary = 2.72 cfs @ 12.38 hrs, Volume= 0.416 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 201.91' @ 12.38 hrs Surf.Area= 5,592 sf Storage= 9,531 cf

Plug-Flow detention time= 178.3 min calculated for 0.416 af (79% of inflow)
Center-of-Mass det. time= 91.2 min (879.9 - 788.7)

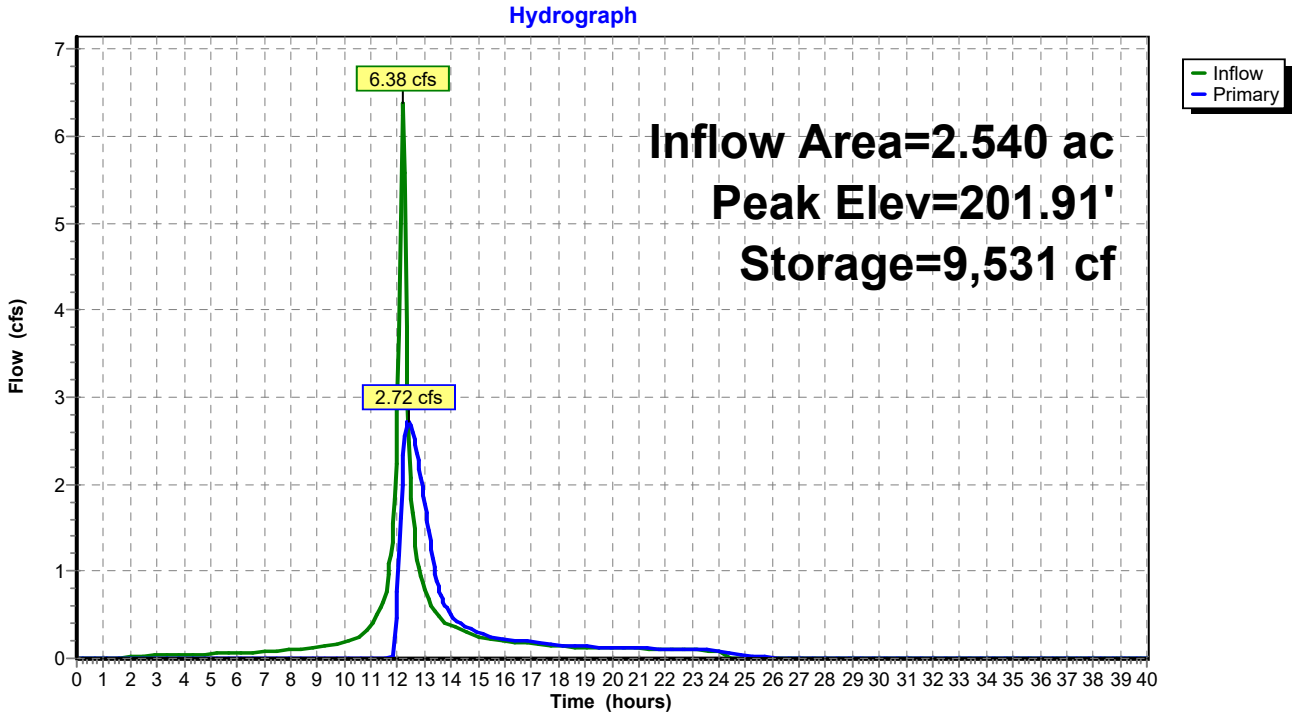
Volume	Invert	Avail.Storage	Storage Description
#1	199.75'	33,011 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.75	0	0	0
200.00	4,035	504	504
201.00	4,695	4,365	4,869
202.00	5,685	5,190	10,059
203.00	6,015	5,850	15,909
204.00	6,676	6,346	22,255
205.00	7,336	7,006	29,261
205.50	7,666	3,751	33,011

Device	Routing	Invert	Outlet Devices
#1	Primary	198.75'	**18.0" Round Culvert** L= 122.0' Ke= 0.500 Inlet / Outlet Invert= 198.75' / 198.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.02'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.43'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.71 cfs @ 12.38 hrs HW=201.90' (Free Discharge)
- **1=Culvert** (Passes 2.71 cfs of 11.38 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.71 cfs @ 4.07 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-53: Basin #53



Stage-Discharge for Pond B-53: Basin #53

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.75	0.00	200.27	0.00	200.79	0.00	201.31	1.00
199.76	0.00	200.28	0.00	200.80	0.00	201.32	1.05
199.77	0.00	200.29	0.00	200.81	0.00	201.33	1.11
199.78	0.00	200.30	0.00	200.82	0.00	201.34	1.16
199.79	0.00	200.31	0.00	200.83	0.00	201.35	1.22
199.80	0.00	200.32	0.00	200.84	0.00	201.36	1.27
199.81	0.00	200.33	0.00	200.85	0.00	201.37	1.32
199.82	0.00	200.34	0.00	200.86	0.00	201.38	1.36
199.83	0.00	200.35	0.00	200.87	0.00	201.39	1.40
199.84	0.00	200.36	0.00	200.88	0.00	201.40	1.44
199.85	0.00	200.37	0.00	200.89	0.00	201.41	1.48
199.86	0.00	200.38	0.00	200.90	0.00	201.42	1.51
199.87	0.00	200.39	0.00	200.91	0.00	201.43	1.55
199.88	0.00	200.40	0.00	200.92	0.00	201.44	1.58
199.89	0.00	200.41	0.00	200.93	0.00	201.45	1.62
199.90	0.00	200.42	0.00	200.94	0.00	201.46	1.65
199.91	0.00	200.43	0.00	200.95	0.00	201.47	1.68
199.92	0.00	200.44	0.00	200.96	0.00	201.48	1.71
199.93	0.00	200.45	0.00	200.97	0.00	201.49	1.74
199.94	0.00	200.46	0.00	200.98	0.00	201.50	1.77
199.95	0.00	200.47	0.00	200.99	0.00	201.51	1.80
199.96	0.00	200.48	0.00	201.00	0.00	201.52	1.83
199.97	0.00	200.49	0.00	201.01	0.00	201.53	1.86
199.98	0.00	200.50	0.00	201.02	0.00	201.54	1.89
199.99	0.00	200.51	0.00	201.03	0.01	201.55	1.92
200.00	0.00	200.52	0.00	201.04	0.02	201.56	1.94
200.01	0.00	200.53	0.00	201.05	0.03	201.57	1.97
200.02	0.00	200.54	0.00	201.06	0.05	201.58	2.00
200.03	0.00	200.55	0.00	201.07	0.07	201.59	2.02
200.04	0.00	200.56	0.00	201.08	0.09	201.60	2.05
200.05	0.00	200.57	0.00	201.09	0.12	201.61	2.07
200.06	0.00	200.58	0.00	201.10	0.15	201.62	2.10
200.07	0.00	200.59	0.00	201.11	0.17	201.63	2.12
200.08	0.00	200.60	0.00	201.12	0.20	201.64	2.15
200.09	0.00	200.61	0.00	201.13	0.23	201.65	2.17
200.10	0.00	200.62	0.00	201.14	0.27	201.66	2.20
200.11	0.00	200.63	0.00	201.15	0.30	201.67	2.22
200.12	0.00	200.64	0.00	201.16	0.34	201.68	2.24
200.13	0.00	200.65	0.00	201.17	0.37	201.69	2.27
200.14	0.00	200.66	0.00	201.18	0.41	201.70	2.29
200.15	0.00	200.67	0.00	201.19	0.45	201.71	2.31
200.16	0.00	200.68	0.00	201.20	0.49	201.72	2.33
200.17	0.00	200.69	0.00	201.21	0.53	201.73	2.36
200.18	0.00	200.70	0.00	201.22	0.57	201.74	2.38
200.19	0.00	200.71	0.00	201.23	0.62	201.75	2.40
200.20	0.00	200.72	0.00	201.24	0.66	201.76	2.42
200.21	0.00	200.73	0.00	201.25	0.71	201.77	2.44
200.22	0.00	200.74	0.00	201.26	0.75	201.78	2.46
200.23	0.00	200.75	0.00	201.27	0.80	201.79	2.49
200.24	0.00	200.76	0.00	201.28	0.85	201.80	2.51
200.25	0.00	200.77	0.00	201.29	0.90	201.81	2.53
200.26	0.00	200.78	0.00	201.30	0.95	201.82	2.55

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.83	2.57	202.35	7.19	202.87	13.48	203.39	14.48
201.84	2.59	202.36	7.33	202.88	13.50	203.40	14.50
201.85	2.61	202.37	7.48	202.89	13.52	203.41	14.52
201.86	2.63	202.38	7.62	202.90	13.54	203.42	14.54
201.87	2.65	202.39	7.76	202.91	13.56	203.43	14.55
201.88	2.67	202.40	7.91	202.92	13.58	203.44	14.57
201.89	2.69	202.41	8.06	202.93	13.60	203.45	14.59
201.90	2.70	202.42	8.20	202.94	13.62	203.46	14.61
201.91	2.72	202.43	8.35	202.95	13.64	203.47	14.63
201.92	2.76	202.44	8.50	202.96	13.66	203.48	14.65
201.93	2.80	202.45	8.66	202.97	13.68	203.49	14.66
201.94	2.85	202.46	8.81	202.98	13.70	203.50	14.68
201.95	2.90	202.47	8.96	202.99	13.72	203.51	14.70
201.96	2.96	202.48	9.12	203.00	13.74	203.52	14.72
201.97	3.03	202.49	9.27	203.01	13.75	203.53	14.74
201.98	3.10	202.50	9.43	203.02	13.77	203.54	14.76
201.99	3.17	202.51	9.59	203.03	13.79	203.55	14.77
202.00	3.24	202.52	9.75	203.04	13.81	203.56	14.79
202.01	3.32	202.53	9.91	203.05	13.83	203.57	14.81
202.02	3.40	202.54	10.07	203.06	13.85	203.58	14.83
202.03	3.48	202.55	10.23	203.07	13.87	203.59	14.85
202.04	3.57	202.56	10.39	203.08	13.89	203.60	14.87
202.05	3.66	202.57	10.56	203.09	13.91	203.61	14.88
202.06	3.75	202.58	10.72	203.10	13.93	203.62	14.90
202.07	3.84	202.59	10.89	203.11	13.95	203.63	14.92
202.08	3.94	202.60	11.05	203.12	13.97	203.64	14.94
202.09	4.04	202.61	11.22	203.13	13.99	203.65	14.96
202.10	4.14	202.62	11.39	203.14	14.01	203.66	14.97
202.11	4.24	202.63	11.56	203.15	14.03	203.67	14.99
202.12	4.34	202.64	11.73	203.16	14.05	203.68	15.01
202.13	4.45	202.65	11.90	203.17	14.06	203.69	15.03
202.14	4.56	202.66	12.07	203.18	14.08	203.70	15.05
202.15	4.67	202.67	12.24	203.19	14.10	203.71	15.06
202.16	4.78	202.68	12.42	203.20	14.12	203.72	15.08
202.17	4.89	202.69	12.59	203.21	14.14	203.73	15.10
202.18	5.01	202.70	12.77	203.22	14.16	203.74	15.12
202.19	5.12	202.71	12.94	203.23	14.18	203.75	15.14
202.20	5.24	202.72	13.12	203.24	14.20	203.76	15.15
202.21	5.36	202.73	13.19	203.25	14.22	203.77	15.17
202.22	5.48	202.74	13.22	203.26	14.24	203.78	15.19
202.23	5.61	202.75	13.24	203.27	14.25	203.79	15.21
202.24	5.73	202.76	13.26	203.28	14.27	203.80	15.22
202.25	5.86	202.77	13.28	203.29	14.29	203.81	15.24
202.26	5.98	202.78	13.30	203.30	14.31	203.82	15.26
202.27	6.11	202.79	13.32	203.31	14.33	203.83	15.28
202.28	6.24	202.80	13.34	203.32	14.35	203.84	15.29
202.29	6.37	202.81	13.36	203.33	14.37	203.85	15.31
202.30	6.51	202.82	13.38	203.34	14.39	203.86	15.33
202.31	6.64	202.83	13.40	203.35	14.41	203.87	15.35
202.32	6.78	202.84	13.42	203.36	14.42	203.88	15.36
202.33	6.91	202.85	13.44	203.37	14.44	203.89	15.38
202.34	7.05	202.86	13.46	203.38	14.46	203.90	15.40

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.91	15.42	204.43	16.30	204.95	67.49	205.47	166.93
203.92	15.43	204.44	16.43	204.96	69.18	205.48	169.11
203.93	15.45	204.45	16.67	204.97	70.91	205.49	171.30
203.94	15.47	204.46	16.96	204.98	72.66	205.50	**173.51**
203.95	15.49	204.47	17.30	204.99	74.44		
203.96	15.50	204.48	17.69	205.00	76.24		
203.97	15.52	204.49	18.12	205.01	78.07		
203.98	15.54	204.50	18.59	205.02	79.93		
203.99	15.56	204.51	19.09	205.03	81.81		
204.00	15.57	204.52	19.62	205.04	83.46		
204.01	15.59	204.53	20.18	205.05	85.11		
204.02	15.61	204.54	20.77	205.06	86.78		
204.03	15.63	204.55	21.39	205.07	88.46		
204.04	15.64	204.56	22.03	205.08	90.16		
204.05	15.66	204.57	22.70	205.09	91.87		
204.06	15.68	204.58	23.39	205.10	93.59		
204.07	15.69	204.59	24.11	205.11	95.33		
204.08	15.71	204.60	24.85	205.12	97.08		
204.09	15.73	204.61	25.61	205.13	98.84		
204.10	15.75	204.62	26.39	205.14	100.61		
204.11	15.76	204.63	27.19	205.15	102.40		
204.12	15.78	204.64	28.06	205.16	104.20		
204.13	15.80	204.65	28.94	205.17	106.01		
204.14	15.81	204.66	29.86	205.18	107.83		
204.15	15.83	204.67	30.80	205.19	109.67		
204.16	15.85	204.68	31.76	205.20	111.52		
204.17	15.87	204.69	32.75	205.21	113.38		
204.18	15.88	204.70	33.77	205.22	115.25		
204.19	15.90	204.71	34.81	205.23	117.14		
204.20	15.92	204.72	35.87	205.24	119.07		
204.21	15.93	204.73	36.96	205.25	121.02		
204.22	15.95	204.74	38.07	205.26	122.98		
204.23	15.97	204.75	39.21	205.27	124.96		
204.24	15.98	204.76	40.37	205.28	126.95		
204.25	16.00	204.77	41.56	205.29	128.95		
204.26	16.02	204.78	42.77	205.30	130.96		
204.27	16.03	204.79	44.00	205.31	132.99		
204.28	16.05	204.80	45.26	205.32	135.03		
204.29	16.07	204.81	46.54	205.33	137.08		
204.30	16.08	204.82	47.85	205.34	139.15		
204.31	16.10	204.83	49.18	205.35	141.22		
204.32	16.12	204.84	50.56	205.36	143.32		
204.33	16.13	204.85	51.97	205.37	145.42		
204.34	16.15	204.86	53.40	205.38	147.54		
204.35	16.17	204.87	54.86	205.39	149.67		
204.36	16.19	204.88	56.35	205.40	151.81		
204.37	16.20	204.89	57.86	205.41	153.96		
204.38	16.22	204.90	59.40	205.42	156.13		
204.39	16.23	204.91	60.96	205.43	158.31		
204.40	16.25	204.92	62.56	205.44	160.45		
204.41	16.27	204.93	64.17	205.45	162.60		
204.42	16.28	204.94	65.82	205.46	164.76		

Stage-Area-Storage for Pond B-53: Basin #53

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.75	0	0	200.27	4,213	1,618
199.76	161	1	200.28	4,220	1,660
199.77	323	3	200.29	4,226	1,702
199.78	484	7	200.30	4,233	1,745
199.79	646	13	200.31	4,240	1,787
199.80	807	20	200.32	4,246	1,829
199.81	968	29	200.33	4,253	1,872
199.82	1,130	40	200.34	4,259	1,914
199.83	1,291	52	200.35	4,266	1,957
199.84	1,453	65	200.36	4,273	2,000
199.85	1,614	81	200.37	4,279	2,043
199.86	1,775	98	200.38	4,286	2,085
199.87	1,937	116	200.39	4,292	2,128
199.88	2,098	136	200.40	4,299	2,171
199.89	2,260	158	200.41	4,306	2,214
199.90	2,421	182	200.42	4,312	2,257
199.91	2,582	207	200.43	4,319	2,300
199.92	2,744	233	200.44	4,325	2,344
199.93	2,905	261	200.45	4,332	2,387
199.94	3,067	291	200.46	4,339	2,430
199.95	3,228	323	200.47	4,345	2,474
199.96	3,389	356	200.48	4,352	2,517
199.97	3,551	391	200.49	4,358	2,561
199.98	3,712	427	200.50	4,365	2,604
199.99	3,874	465	200.51	4,372	2,648
200.00	4,035	504	200.52	4,378	2,692
200.01	4,042	545	200.53	4,385	2,736
200.02	4,048	585	200.54	4,391	2,780
200.03	4,055	626	200.55	4,398	2,823
200.04	4,061	666	200.56	4,405	2,867
200.05	4,068	707	200.57	4,411	2,912
200.06	4,075	748	200.58	4,418	2,956
200.07	4,081	788	200.59	4,424	3,000
200.08	4,088	829	200.60	4,431	3,044
200.09	4,094	870	200.61	4,438	3,089
200.10	4,101	911	200.62	4,444	3,133
200.11	4,108	952	200.63	4,451	3,177
200.12	4,114	993	200.64	4,457	3,222
200.13	4,121	1,035	200.65	4,464	3,267
200.14	4,127	1,076	200.66	4,471	3,311
200.15	4,134	1,117	200.67	4,477	3,356
200.16	4,141	1,158	200.68	4,484	3,401
200.17	4,147	1,200	200.69	4,490	3,446
200.18	4,154	1,241	200.70	4,497	3,491
200.19	4,160	1,283	200.71	4,504	3,536
200.20	4,167	1,325	200.72	4,510	3,581
200.21	4,174	1,366	200.73	4,517	3,626
200.22	4,180	1,408	200.74	4,523	3,671
200.23	4,187	1,450	200.75	4,530	3,716
200.24	4,193	1,492	200.76	4,537	3,762
200.25	4,200	1,534	200.77	4,543	3,807
200.26	4,207	1,576	200.78	4,550	3,852

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.79	4,556	3,898	201.31	5,002	6,372
200.80	4,563	3,944	201.32	5,012	6,422
200.81	4,570	3,989	201.33	5,022	6,473
200.82	4,576	4,035	201.34	5,032	6,523
200.83	4,583	4,081	201.35	5,041	6,573
200.84	4,589	4,127	201.36	5,051	6,624
200.85	4,596	4,173	201.37	5,061	6,674
200.86	4,603	4,219	201.38	5,071	6,725
200.87	4,609	4,265	201.39	5,081	6,776
200.88	4,616	4,311	201.40	5,091	6,827
200.89	4,622	4,357	201.41	5,101	6,878
200.90	4,629	4,403	201.42	5,111	6,929
200.91	4,636	4,449	201.43	5,121	6,980
200.92	4,642	4,496	201.44	5,131	7,031
200.93	4,649	4,542	201.45	5,140	7,082
200.94	4,655	4,589	201.46	5,150	7,134
200.95	4,662	4,635	201.47	5,160	7,185
200.96	4,669	4,682	201.48	5,170	7,237
200.97	4,675	4,729	201.49	5,180	7,289
200.98	4,682	4,776	201.50	5,190	7,341
200.99	4,688	4,822	201.51	5,200	7,393
201.00	4,695	4,869	201.52	5,210	7,445
201.01	4,705	4,916	201.53	5,220	7,497
201.02	4,715	4,963	201.54	5,230	7,549
201.03	4,725	5,011	201.55	5,240	7,601
201.04	4,735	5,058	201.56	5,249	7,654
201.05	4,745	5,105	201.57	5,259	7,706
201.06	4,754	5,153	201.58	5,269	7,759
201.07	4,764	5,200	201.59	5,279	7,812
201.08	4,774	5,248	201.60	5,289	7,865
201.09	4,784	5,296	201.61	5,299	7,918
201.10	4,794	5,344	201.62	5,309	7,971
201.11	4,804	5,392	201.63	5,319	8,024
201.12	4,814	5,440	201.64	5,329	8,077
201.13	4,824	5,488	201.65	5,339	8,130
201.14	4,834	5,536	201.66	5,348	8,184
201.15	4,844	5,585	201.67	5,358	8,237
201.16	4,853	5,633	201.68	5,368	8,291
201.17	4,863	5,682	201.69	5,378	8,345
201.18	4,873	5,731	201.70	5,388	8,398
201.19	4,883	5,779	201.71	5,398	8,452
201.20	4,893	5,828	201.72	5,408	8,506
201.21	4,903	5,877	201.73	5,418	8,561
201.22	4,913	5,926	201.74	5,428	8,615
201.23	4,923	5,975	201.75	5,438	8,669
201.24	4,933	6,025	201.76	5,447	8,723
201.25	4,943	6,074	201.77	5,457	8,778
201.26	4,952	6,124	201.78	5,467	8,833
201.27	4,962	6,173	201.79	5,477	8,887
201.28	4,972	6,223	201.80	5,487	8,942
201.29	4,982	6,273	201.81	5,497	8,997
201.30	4,992	6,322	201.82	5,507	9,052

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.83	5,517	9,107	202.35	5,800	12,069
201.84	5,527	9,162	202.36	5,804	12,127
201.85	5,536	9,218	202.37	5,807	12,185
201.86	5,546	9,273	202.38	5,810	12,244
201.87	5,556	9,329	202.39	5,814	12,302
201.88	5,566	9,384	202.40	5,817	12,360
201.89	5,576	9,440	202.41	5,820	12,418
201.90	5,586	9,496	202.42	5,824	12,476
201.91	5,596	9,552	202.43	5,827	12,534
201.92	5,606	9,608	202.44	5,830	12,593
201.93	5,616	9,664	202.45	5,833	12,651
201.94	5,626	9,720	202.46	5,837	12,709
201.95	5,635	9,776	202.47	5,840	12,768
201.96	5,645	9,833	202.48	5,843	12,826
201.97	5,655	9,889	202.49	5,847	12,885
201.98	5,665	9,946	202.50	5,850	12,943
201.99	5,675	10,003	202.51	5,853	13,002
202.00	5,685	10,059	202.52	5,857	13,060
202.01	5,688	10,116	202.53	5,860	13,119
202.02	5,692	10,173	202.54	5,863	13,177
202.03	5,695	10,230	202.55	5,867	13,236
202.04	5,698	10,287	202.56	5,870	13,295
202.05	5,702	10,344	202.57	5,873	13,353
202.06	5,705	10,401	202.58	5,876	13,412
202.07	5,708	10,458	202.59	5,880	13,471
202.08	5,711	10,515	202.60	5,883	13,530
202.09	5,715	10,572	202.61	5,886	13,589
202.10	5,718	10,630	202.62	5,890	13,648
202.11	5,721	10,687	202.63	5,893	13,706
202.12	5,725	10,744	202.64	5,896	13,765
202.13	5,728	10,801	202.65	5,900	13,824
202.14	5,731	10,859	202.66	5,903	13,883
202.15	5,735	10,916	202.67	5,906	13,942
202.16	5,738	10,973	202.68	5,909	14,001
202.17	5,741	11,031	202.69	5,913	14,061
202.18	5,744	11,088	202.70	5,916	14,120
202.19	5,748	11,145	202.71	5,919	14,179
202.20	5,751	11,203	202.72	5,923	14,238
202.21	5,754	11,261	202.73	5,926	14,297
202.22	5,758	11,318	202.74	5,929	14,357
202.23	5,761	11,376	202.75	5,933	14,416
202.24	5,764	11,433	202.76	5,936	14,475
202.25	5,768	11,491	202.77	5,939	14,535
202.26	5,771	11,549	202.78	5,942	14,594
202.27	5,774	11,606	202.79	5,946	14,654
202.28	5,777	11,664	202.80	5,949	14,713
202.29	5,781	11,722	202.81	5,952	14,772
202.30	5,784	11,780	202.82	5,956	14,832
202.31	5,787	11,838	202.83	5,959	14,892
202.32	5,791	11,895	202.84	5,962	14,951
202.33	5,794	11,953	202.85	5,965	15,011
202.34	5,797	12,011	202.86	5,969	15,071

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.87	5,972	15,130	203.39	6,273	18,305
202.88	5,975	15,190	203.40	6,279	18,368
202.89	5,979	15,250	203.41	6,286	18,431
202.90	5,982	15,310	203.42	6,293	18,494
202.91	5,985	15,369	203.43	6,299	18,557
202.92	5,989	15,429	203.44	6,306	18,620
202.93	5,992	15,489	203.45	6,312	18,683
202.94	5,995	15,549	203.46	6,319	18,746
202.95	5,998	15,609	203.47	6,326	18,809
202.96	6,002	15,669	203.48	6,332	18,873
202.97	6,005	15,729	203.49	6,339	18,936
202.98	6,008	15,789	203.50	6,346	19,000
202.99	6,012	15,849	203.51	6,352	19,063
203.00	6,015	15,909	203.52	6,359	19,127
203.01	6,022	15,970	203.53	6,365	19,190
203.02	6,028	16,030	203.54	6,372	19,254
203.03	6,035	16,090	203.55	6,379	19,318
203.04	6,041	16,151	203.56	6,385	19,381
203.05	6,048	16,211	203.57	6,392	19,445
203.06	6,055	16,271	203.58	6,398	19,509
203.07	6,061	16,332	203.59	6,405	19,573
203.08	6,068	16,393	203.60	6,412	19,637
203.09	6,074	16,453	203.61	6,418	19,702
203.10	6,081	16,514	203.62	6,425	19,766
203.11	6,088	16,575	203.63	6,431	19,830
203.12	6,094	16,636	203.64	6,438	19,894
203.13	6,101	16,697	203.65	6,445	19,959
203.14	6,108	16,758	203.66	6,451	20,023
203.15	6,114	16,819	203.67	6,458	20,088
203.16	6,121	16,880	203.68	6,464	20,152
203.17	6,127	16,941	203.69	6,471	20,217
203.18	6,134	17,003	203.70	6,478	20,282
203.19	6,141	17,064	203.71	6,484	20,347
203.20	6,147	17,126	203.72	6,491	20,412
203.21	6,154	17,187	203.73	6,498	20,476
203.22	6,160	17,249	203.74	6,504	20,541
203.23	6,167	17,310	203.75	6,511	20,607
203.24	6,174	17,372	203.76	6,517	20,672
203.25	6,180	17,434	203.77	6,524	20,737
203.26	6,187	17,496	203.78	6,531	20,802
203.27	6,193	17,558	203.79	6,537	20,867
203.28	6,200	17,619	203.80	6,544	20,933
203.29	6,207	17,682	203.81	6,550	20,998
203.30	6,213	17,744	203.82	6,557	21,064
203.31	6,220	17,806	203.83	6,564	21,130
203.32	6,227	17,868	203.84	6,570	21,195
203.33	6,233	17,930	203.85	6,577	21,261
203.34	6,240	17,993	203.86	6,583	21,327
203.35	6,246	18,055	203.87	6,590	21,393
203.36	6,253	18,118	203.88	6,597	21,459
203.37	6,260	18,180	203.89	6,603	21,525
203.38	6,266	18,243	203.90	6,610	21,591

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.91	6,617	21,657	204.43	6,960	25,187
203.92	6,623	21,723	204.44	6,966	25,256
203.93	6,630	21,789	204.45	6,973	25,326
203.94	6,636	21,856	204.46	6,980	25,396
203.95	6,643	21,922	204.47	6,986	25,465
203.96	6,650	21,988	204.48	6,993	25,535
203.97	6,656	22,055	204.49	6,999	25,605
203.98	6,663	22,121	204.50	7,006	25,675
203.99	6,669	22,188	204.51	7,013	25,745
204.00	6,676	22,255	204.52	7,019	25,816
204.01	6,683	22,322	204.53	7,026	25,886
204.02	6,689	22,389	204.54	7,032	25,956
204.03	6,696	22,455	204.55	7,039	26,027
204.04	6,702	22,522	204.56	7,046	26,097
204.05	6,709	22,590	204.57	7,052	26,167
204.06	6,716	22,657	204.58	7,059	26,238
204.07	6,722	22,724	204.59	7,065	26,309
204.08	6,729	22,791	204.60	7,072	26,379
204.09	6,735	22,858	204.61	7,079	26,450
204.10	6,742	22,926	204.62	7,085	26,521
204.11	6,749	22,993	204.63	7,092	26,592
204.12	6,755	23,061	204.64	7,098	26,663
204.13	6,762	23,128	204.65	7,105	26,734
204.14	6,768	23,196	204.66	7,112	26,805
204.15	6,775	23,264	204.67	7,118	26,876
204.16	6,782	23,331	204.68	7,125	26,947
204.17	6,788	23,399	204.69	7,131	27,018
204.18	6,795	23,467	204.70	7,138	27,090
204.19	6,801	23,535	204.71	7,145	27,161
204.20	6,808	23,603	204.72	7,151	27,233
204.21	6,815	23,671	204.73	7,158	27,304
204.22	6,821	23,740	204.74	7,164	27,376
204.23	6,828	23,808	204.75	7,171	27,448
204.24	6,834	23,876	204.76	7,178	27,519
204.25	6,841	23,945	204.77	7,184	27,591
204.26	6,848	24,013	204.78	7,191	27,663
204.27	6,854	24,081	204.79	7,197	27,735
204.28	6,861	24,150	204.80	7,204	27,807
204.29	6,867	24,219	204.81	7,211	27,879
204.30	6,874	24,287	204.82	7,217	27,951
204.31	6,881	24,356	204.83	7,224	28,023
204.32	6,887	24,425	204.84	7,230	28,096
204.33	6,894	24,494	204.85	7,237	28,168
204.34	6,900	24,563	204.86	7,244	28,240
204.35	6,907	24,632	204.87	7,250	28,313
204.36	6,914	24,701	204.88	7,257	28,385
204.37	6,920	24,770	204.89	7,263	28,458
204.38	6,927	24,839	204.90	7,270	28,531
204.39	6,933	24,909	204.91	7,277	28,603
204.40	6,940	24,978	204.92	7,283	28,676
204.41	6,947	25,048	204.93	7,290	28,749
204.42	6,953	25,117	204.94	7,296	28,822

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.95	7,303	28,895
204.96	7,310	28,968
204.97	7,316	29,041
204.98	7,323	29,114
204.99	7,329	29,188
205.00	7,336	29,261
205.01	7,343	29,334
205.02	7,349	29,408
205.03	7,356	29,481
205.04	7,362	29,555
205.05	7,369	29,629
205.06	7,376	29,702
205.07	7,382	29,776
205.08	7,389	29,850
205.09	7,395	29,924
205.10	7,402	29,998
205.11	7,409	30,072
205.12	7,415	30,146
205.13	7,422	30,220
205.14	7,428	30,294
205.15	7,435	30,369
205.16	7,442	30,443
205.17	7,448	30,518
205.18	7,455	30,592
205.19	7,461	30,667
205.20	7,468	30,741
205.21	7,475	30,816
205.22	7,481	30,891
205.23	7,488	30,966
205.24	7,494	31,041
205.25	7,501	31,116
205.26	7,508	31,191
205.27	7,514	31,266
205.28	7,521	31,341
205.29	7,527	31,416
205.30	7,534	31,491
205.31	7,541	31,567
205.32	7,547	31,642
205.33	7,554	31,718
205.34	7,560	31,793
205.35	7,567	31,869
205.36	7,574	31,945
205.37	7,580	32,020
205.38	7,587	32,096
205.39	7,593	32,172
205.40	7,600	32,248
205.41	7,607	32,324
205.42	7,613	32,400
205.43	7,620	32,476
205.44	7,626	32,553
205.45	7,633	32,629
205.46	7,640	32,705
205.47	7,646	32,782
205.48	7,653	32,858
205.49	7,659	32,935
205.50	**7,666**	**33,011**

Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.47% Impervious, Inflow Depth = 2.77" for Future 2 yr event
Inflow = 7.07 cfs @ 12.17 hrs, Volume= 0.594 af
Outflow = 2.95 cfs @ 12.38 hrs, Volume= 0.453 af, Atten= 58%, Lag= 12.5 min
Primary = 2.95 cfs @ 12.38 hrs, Volume= 0.453 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 202.42' @ 12.38 hrs Surf.Area= 5,374 sf Storage= 11,266 cf

Plug-Flow detention time= 187.9 min calculated for 0.453 af (76% of inflow)
Center-of-Mass det. time= 97.6 min (876.4 - 778.8)

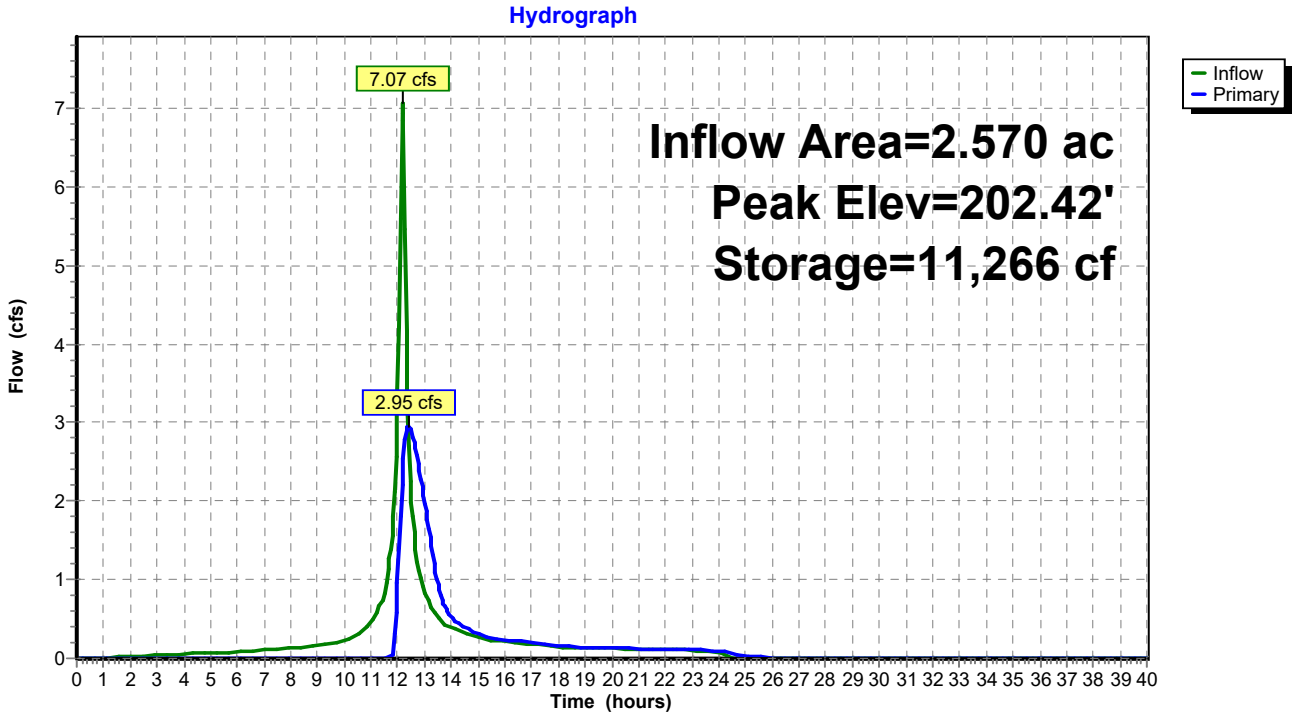
Volume	Invert	Avail.Storage	Storage Description
#1	199.89'	30,982 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.89	0	0	0
200.00	3,780	208	208
201.00	4,440	4,110	4,318
202.00	5,100	4,770	9,088
203.00	5,760	5,430	14,518
204.00	6,421	6,091	20,608
205.00	7,081	6,751	27,359
205.50	7,411	3,623	30,982

Device	Routing	Invert	Outlet Devices
#1	Primary	198.89'	**18.0" Round Culvert** L= 178.0' Ke= 0.500 Inlet / Outlet Invert= 198.89' / 198.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.40'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	202.42'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.47'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.95 cfs @ 12.38 hrs HW=202.41' (Free Discharge)
- **1=Culvert** (Passes 2.95 cfs of 11.10 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.95 cfs @ 4.42 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-54: Basin #54



Stage-Discharge for Pond B-54: Basin #54

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.89	0.00	200.41	0.00	200.93	0.00	201.45	0.07
199.90	0.00	200.42	0.00	200.94	0.00	201.46	0.09
199.91	0.00	200.43	0.00	200.95	0.00	201.47	0.12
199.92	0.00	200.44	0.00	200.96	0.00	201.48	0.15
199.93	0.00	200.45	0.00	200.97	0.00	201.49	0.17
199.94	0.00	200.46	0.00	200.98	0.00	201.50	0.20
199.95	0.00	200.47	0.00	200.99	0.00	201.51	0.23
199.96	0.00	200.48	0.00	201.00	0.00	201.52	0.27
199.97	0.00	200.49	0.00	201.01	0.00	201.53	0.30
199.98	0.00	200.50	0.00	201.02	0.00	201.54	0.34
199.99	0.00	200.51	0.00	201.03	0.00	201.55	0.37
200.00	0.00	200.52	0.00	201.04	0.00	201.56	0.41
200.01	0.00	200.53	0.00	201.05	0.00	201.57	0.45
200.02	0.00	200.54	0.00	201.06	0.00	201.58	0.49
200.03	0.00	200.55	0.00	201.07	0.00	201.59	0.53
200.04	0.00	200.56	0.00	201.08	0.00	201.60	0.57
200.05	0.00	200.57	0.00	201.09	0.00	201.61	0.62
200.06	0.00	200.58	0.00	201.10	0.00	201.62	0.66
200.07	0.00	200.59	0.00	201.11	0.00	201.63	0.71
200.08	0.00	200.60	0.00	201.12	0.00	201.64	0.75
200.09	0.00	200.61	0.00	201.13	0.00	201.65	0.80
200.10	0.00	200.62	0.00	201.14	0.00	201.66	0.85
200.11	0.00	200.63	0.00	201.15	0.00	201.67	0.90
200.12	0.00	200.64	0.00	201.16	0.00	201.68	0.95
200.13	0.00	200.65	0.00	201.17	0.00	201.69	1.00
200.14	0.00	200.66	0.00	201.18	0.00	201.70	1.05
200.15	0.00	200.67	0.00	201.19	0.00	201.71	1.11
200.16	0.00	200.68	0.00	201.20	0.00	201.72	1.16
200.17	0.00	200.69	0.00	201.21	0.00	201.73	1.22
200.18	0.00	200.70	0.00	201.22	0.00	201.74	1.27
200.19	0.00	200.71	0.00	201.23	0.00	201.75	1.32
200.20	0.00	200.72	0.00	201.24	0.00	201.76	1.36
200.21	0.00	200.73	0.00	201.25	0.00	201.77	1.40
200.22	0.00	200.74	0.00	201.26	0.00	201.78	1.44
200.23	0.00	200.75	0.00	201.27	0.00	201.79	1.48
200.24	0.00	200.76	0.00	201.28	0.00	201.80	1.51
200.25	0.00	200.77	0.00	201.29	0.00	201.81	1.55
200.26	0.00	200.78	0.00	201.30	0.00	201.82	1.58
200.27	0.00	200.79	0.00	201.31	0.00	201.83	1.62
200.28	0.00	200.80	0.00	201.32	0.00	201.84	1.65
200.29	0.00	200.81	0.00	201.33	0.00	201.85	1.68
200.30	0.00	200.82	0.00	201.34	0.00	201.86	1.71
200.31	0.00	200.83	0.00	201.35	0.00	201.87	1.74
200.32	0.00	200.84	0.00	201.36	0.00	201.88	1.77
200.33	0.00	200.85	0.00	201.37	0.00	201.89	1.80
200.34	0.00	200.86	0.00	201.38	0.00	201.90	1.83
200.35	0.00	200.87	0.00	201.39	0.00	201.91	1.86
200.36	0.00	200.88	0.00	201.40	0.00	201.92	1.89
200.37	0.00	200.89	0.00	201.41	0.01	201.93	1.92
200.38	0.00	200.90	0.00	201.42	0.02	201.94	1.94
200.39	0.00	200.91	0.00	201.43	0.03	201.95	1.97
200.40	0.00	200.92	0.00	201.44	0.05	201.96	2.00

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.97	2.02	202.49	3.32	203.01	9.61	203.53	13.06
201.98	2.05	202.50	3.39	203.02	9.76	203.54	13.07
201.99	2.07	202.51	3.47	203.03	9.92	203.55	13.09
202.00	2.10	202.52	3.54	203.04	10.08	203.56	13.10
202.01	2.12	202.53	3.62	203.05	10.24	203.57	13.12
202.02	2.15	202.54	3.70	203.06	10.40	203.58	13.14
202.03	2.17	202.55	3.79	203.07	10.57	203.59	13.15
202.04	2.20	202.56	3.88	203.08	10.73	203.60	13.17
202.05	2.22	202.57	3.97	203.09	10.89	203.61	13.18
202.06	2.24	202.58	4.06	203.10	11.06	203.62	13.20
202.07	2.27	202.59	4.15	203.11	11.22	203.63	13.22
202.08	2.29	202.60	4.25	203.12	11.39	203.64	13.23
202.09	2.31	202.61	4.35	203.13	11.56	203.65	13.25
202.10	2.33	202.62	4.45	203.14	11.73	203.66	13.26
202.11	2.36	202.63	4.55	203.15	11.90	203.67	13.28
202.12	2.38	202.64	4.66	203.16	12.07	203.68	13.30
202.13	2.40	202.65	4.76	203.17	12.24	203.69	13.31
202.14	2.42	202.66	4.87	203.18	12.41	203.70	13.33
202.15	2.44	202.67	4.98	203.19	12.49	203.71	13.34
202.16	2.46	202.68	5.10	203.20	12.51	203.72	13.36
202.17	2.49	202.69	5.21	203.21	12.53	203.73	13.38
202.18	2.51	202.70	5.33	203.22	12.54	203.74	13.39
202.19	2.53	202.71	5.44	203.23	12.56	203.75	13.41
202.20	2.55	202.72	5.56	203.24	12.58	203.76	13.42
202.21	2.57	202.73	5.68	203.25	12.59	203.77	13.44
202.22	2.59	202.74	5.80	203.26	12.61	203.78	13.45
202.23	2.61	202.75	5.93	203.27	12.63	203.79	13.47
202.24	2.63	202.76	6.05	203.28	12.64	203.80	13.49
202.25	2.65	202.77	6.18	203.29	12.66	203.81	13.50
202.26	2.67	202.78	6.31	203.30	12.68	203.82	13.52
202.27	2.69	202.79	6.44	203.31	12.69	203.83	13.53
202.28	2.70	202.80	6.57	203.32	12.71	203.84	13.55
202.29	2.72	202.81	6.70	203.33	12.73	203.85	13.56
202.30	2.74	202.82	6.83	203.34	12.74	203.86	13.58
202.31	2.76	202.83	6.97	203.35	12.76	203.87	13.59
202.32	2.78	202.84	7.11	203.36	12.78	203.88	13.61
202.33	2.80	202.85	7.24	203.37	12.79	203.89	13.63
202.34	2.82	202.86	7.38	203.38	12.81	203.90	13.64
202.35	2.84	202.87	7.52	203.39	12.83	203.91	13.66
202.36	2.85	202.88	7.66	203.40	12.84	203.92	13.67
202.37	2.87	202.89	7.81	203.41	12.86	203.93	13.69
202.38	2.89	202.90	7.95	203.42	12.88	203.94	13.70
202.39	2.91	202.91	8.09	203.43	12.89	203.95	13.72
202.40	2.93	202.92	8.24	203.44	12.91	203.96	13.73
202.41	2.94	202.93	8.39	203.45	12.92	203.97	13.75
202.42	2.96	202.94	8.54	203.46	12.94	203.98	13.76
202.43	2.99	202.95	8.69	203.47	12.96	203.99	13.78
202.44	3.03	202.96	8.84	203.48	12.97	204.00	13.80
202.45	3.08	202.97	8.99	203.49	12.99	204.01	13.81
202.46	3.13	202.98	9.14	203.50	13.01	204.02	13.83
202.47	3.19	202.99	9.30	203.51	13.02	204.03	13.84
202.48	3.26	203.00	9.45	203.52	13.04	204.04	13.86

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
204.05	13.87	204.57	18.36	205.09	83.19
204.06	13.89	204.58	18.95	205.10	84.86
204.07	13.90	204.59	19.56	205.11	86.54
204.08	13.92	204.60	20.20	205.12	88.24
204.09	13.93	204.61	20.87	205.13	89.94
204.10	13.95	204.62	21.56	205.14	91.66
204.11	13.96	204.63	22.27	205.15	93.40
204.12	13.98	204.64	23.01	205.16	95.14
204.13	13.99	204.65	23.77	205.17	96.90
204.14	14.01	204.66	24.55	205.18	98.68
204.15	14.02	204.67	25.35	205.19	100.46
204.16	14.04	204.68	26.21	205.20	102.26
204.17	14.05	204.69	27.10	205.21	104.07
204.18	14.07	204.70	28.01	205.22	105.89
204.19	14.08	204.71	28.95	205.23	107.73
204.20	14.10	204.72	29.91	205.24	109.57
204.21	14.11	204.73	30.90	205.25	111.43
204.22	14.13	204.74	31.91	205.26	113.30
204.23	14.14	204.75	32.95	205.27	115.19
204.24	14.16	204.76	34.01	205.28	117.12
204.25	14.17	204.77	35.10	205.29	119.07
204.26	14.19	204.78	36.21	205.30	121.02
204.27	14.20	204.79	37.34	205.31	123.00
204.28	14.22	204.80	38.50	205.32	124.98
204.29	14.23	204.81	39.69	205.33	126.98
204.30	14.25	204.82	40.90	205.34	129.00
204.31	14.26	204.83	42.13	205.35	131.02
204.32	14.28	204.84	43.39	205.36	133.06
204.33	14.29	204.85	44.67	205.37	135.11
204.34	14.31	204.86	45.97	205.38	137.17
204.35	14.32	204.87	47.30	205.39	139.25
204.36	14.34	204.88	48.68	205.40	141.34
204.37	14.35	204.89	50.09	205.41	143.44
204.38	14.37	204.90	51.52	205.42	145.56
204.39	14.38	204.91	52.98	205.43	147.69
204.40	14.40	204.92	54.46	205.44	149.83
204.41	14.41	204.93	55.97	205.45	151.98
204.42	14.42	204.94	57.51	205.46	154.14
204.43	14.44	204.95	59.07	205.47	156.32
204.44	14.45	204.96	60.66	205.48	158.46
204.45	14.47	204.97	62.27	205.49	160.61
204.46	14.48	204.98	63.92	205.50	**162.77**
204.47	14.50	204.99	65.59		
204.48	14.63	205.00	67.28		
204.49	14.86	205.01	69.00		
204.50	15.15	205.02	70.75		
204.51	15.49	205.03	72.53		
204.52	15.88	205.04	74.33		
204.53	16.31	205.05	76.16		
204.54	16.77	205.06	78.01		
204.55	17.27	205.07	79.90		
204.56	17.80	205.08	81.54		

Stage-Area-Storage for Pond B-54: Basin #54

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.89	0	0	200.41	4,051	1,813
199.90	344	2	200.42	4,057	1,854
199.91	687	7	200.43	4,064	1,894
199.92	1,031	15	200.44	4,070	1,935
199.93	1,375	27	200.45	4,077	1,976
199.94	1,718	43	200.46	4,084	2,017
199.95	2,062	62	200.47	4,090	2,057
199.96	2,405	84	200.48	4,097	2,098
199.97	2,749	110	200.49	4,103	2,139
199.98	3,093	139	200.50	4,110	2,180
199.99	3,436	172	200.51	4,117	2,222
200.00	3,780	208	200.52	4,123	2,263
200.01	3,787	246	200.53	4,130	2,304
200.02	3,793	284	200.54	4,136	2,345
200.03	3,800	322	200.55	4,143	2,387
200.04	3,806	360	200.56	4,150	2,428
200.05	3,813	398	200.57	4,156	2,470
200.06	3,820	436	200.58	4,163	2,511
200.07	3,826	474	200.59	4,169	2,553
200.08	3,833	512	200.60	4,176	2,595
200.09	3,839	551	200.61	4,183	2,636
200.10	3,846	589	200.62	4,189	2,678
200.11	3,853	628	200.63	4,196	2,720
200.12	3,859	666	200.64	4,202	2,762
200.13	3,866	705	200.65	4,209	2,804
200.14	3,872	744	200.66	4,216	2,846
200.15	3,879	782	200.67	4,222	2,889
200.16	3,886	821	200.68	4,229	2,931
200.17	3,892	860	200.69	4,235	2,973
200.18	3,899	899	200.70	4,242	3,016
200.19	3,905	938	200.71	4,249	3,058
200.20	3,912	977	200.72	4,255	3,101
200.21	3,919	1,016	200.73	4,262	3,143
200.22	3,925	1,055	200.74	4,268	3,186
200.23	3,932	1,095	200.75	4,275	3,229
200.24	3,938	1,134	200.76	4,282	3,271
200.25	3,945	1,174	200.77	4,288	3,314
200.26	3,952	1,213	200.78	4,295	3,357
200.27	3,958	1,253	200.79	4,301	3,400
200.28	3,965	1,292	200.80	4,308	3,443
200.29	3,971	1,332	200.81	4,315	3,486
200.30	3,978	1,372	200.82	4,321	3,529
200.31	3,985	1,411	200.83	4,328	3,573
200.32	3,991	1,451	200.84	4,334	3,616
200.33	3,998	1,491	200.85	4,341	3,659
200.34	4,004	1,531	200.86	4,348	3,703
200.35	4,011	1,571	200.87	4,354	3,746
200.36	4,018	1,611	200.88	4,361	3,790
200.37	4,024	1,652	200.89	4,367	3,833
200.38	4,031	1,692	200.90	4,374	3,877
200.39	4,037	1,732	200.91	4,381	3,921
200.40	4,044	1,773	200.92	4,387	3,965

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.93	4,394	4,009
200.94	4,400	4,053
200.95	4,407	4,097
200.96	4,414	4,141
200.97	4,420	4,185
200.98	4,427	4,229
200.99	4,433	4,274
201.00	4,440	4,318
201.01	4,447	4,362
201.02	4,453	4,407
201.03	4,460	4,451
201.04	4,466	4,496
201.05	4,473	4,541
201.06	4,480	4,585
201.07	4,486	4,630
201.08	4,493	4,675
201.09	4,499	4,720
201.10	4,506	4,765
201.11	4,513	4,810
201.12	4,519	4,855
201.13	4,526	4,901
201.14	4,532	4,946
201.15	4,539	4,991
201.16	4,546	5,037
201.17	4,552	5,082
201.18	4,559	5,128
201.19	4,565	5,173
201.20	4,572	5,219
201.21	4,579	5,265
201.22	4,585	5,311
201.23	4,592	5,357
201.24	4,598	5,403
201.25	4,605	5,449
201.26	4,612	5,495
201.27	4,618	5,541
201.28	4,625	5,587
201.29	4,631	5,633
201.30	4,638	5,680
201.31	4,645	5,726
201.32	4,651	5,772
201.33	4,658	5,819
201.34	4,664	5,866
201.35	4,671	5,912
201.36	4,678	5,959
201.37	4,684	6,006
201.38	4,691	6,053
201.39	4,697	6,100
201.40	4,704	6,147
201.41	4,711	6,194
201.42	4,717	6,241
201.43	4,724	6,288
201.44	4,730	6,335
201.45	4,737	6,383
201.46	4,744	6,430
201.47	4,750	6,478
201.48	4,757	6,525
201.49	4,763	6,573
201.50	4,770	6,620
201.51	4,777	6,668
201.52	4,783	6,716
201.53	4,790	6,764
201.54	4,796	6,812
201.55	4,803	6,860
201.56	4,810	6,908
201.57	4,816	6,956
201.58	4,823	7,004
201.59	4,829	7,052
201.60	4,836	7,101
201.61	4,843	7,149
201.62	4,849	7,198
201.63	4,856	7,246
201.64	4,862	7,295
201.65	4,869	7,343
201.66	4,876	7,392
201.67	4,882	7,441
201.68	4,889	7,490
201.69	4,895	7,539
201.70	4,902	7,588
201.71	4,909	7,637
201.72	4,915	7,686
201.73	4,922	7,735
201.74	4,928	7,784
201.75	4,935	7,834
201.76	4,942	7,883
201.77	4,948	7,932
201.78	4,955	7,982
201.79	4,961	8,031
201.80	4,968	8,081
201.81	4,975	8,131
201.82	4,981	8,181
201.83	4,988	8,230
201.84	4,994	8,280
201.85	5,001	8,330
201.86	5,008	8,380
201.87	5,014	8,430
201.88	5,021	8,481
201.89	5,027	8,531
201.90	5,034	8,581
201.91	5,041	8,632
201.92	5,047	8,682
201.93	5,054	8,733
201.94	5,060	8,783
201.95	5,067	8,834
201.96	5,074	8,884

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.97	5,080	8,935	202.49	5,423	11,666
201.98	5,087	8,986	202.50	5,430	11,720
201.99	5,093	9,037	202.51	5,437	11,775
202.00	5,100	9,088	202.52	5,443	11,829
202.01	5,107	9,139	202.53	5,450	11,884
202.02	5,113	9,190	202.54	5,456	11,938
202.03	5,120	9,241	202.55	5,463	11,993
202.04	5,126	9,292	202.56	5,470	12,047
202.05	5,133	9,344	202.57	5,476	12,102
202.06	5,140	9,395	202.58	5,483	12,157
202.07	5,146	9,447	202.59	5,489	12,212
202.08	5,153	9,498	202.60	5,496	12,267
202.09	5,159	9,550	202.61	5,503	12,322
202.10	5,166	9,601	202.62	5,509	12,377
202.11	5,173	9,653	202.63	5,516	12,432
202.12	5,179	9,705	202.64	5,522	12,487
202.13	5,186	9,756	202.65	5,529	12,542
202.14	5,192	9,808	202.66	5,536	12,598
202.15	5,199	9,860	202.67	5,542	12,653
202.16	5,206	9,912	202.68	5,549	12,708
202.17	5,212	9,964	202.69	5,555	12,764
202.18	5,219	10,017	202.70	5,562	12,820
202.19	5,225	10,069	202.71	5,569	12,875
202.20	5,232	10,121	202.72	5,575	12,931
202.21	5,239	10,173	202.73	5,582	12,987
202.22	5,245	10,226	202.74	5,588	13,043
202.23	5,252	10,278	202.75	5,595	13,099
202.24	5,258	10,331	202.76	5,602	13,155
202.25	5,265	10,384	202.77	5,608	13,211
202.26	5,272	10,436	202.78	5,615	13,267
202.27	5,278	10,489	202.79	5,621	13,323
202.28	5,285	10,542	202.80	5,628	13,379
202.29	5,291	10,595	202.81	5,635	13,435
202.30	5,298	10,648	202.82	5,641	13,492
202.31	5,305	10,701	202.83	5,648	13,548
202.32	5,311	10,754	202.84	5,654	13,605
202.33	5,318	10,807	202.85	5,661	13,661
202.34	5,324	10,860	202.86	5,668	13,718
202.35	5,331	10,913	202.87	5,674	13,775
202.36	5,338	10,967	202.88	5,681	13,831
202.37	5,344	11,020	202.89	5,687	13,888
202.38	5,351	11,074	202.90	5,694	13,945
202.39	5,357	11,127	202.91	5,701	14,002
202.40	5,364	11,181	202.92	5,707	14,059
202.41	5,371	11,234	202.93	5,714	14,116
202.42	5,377	11,288	202.94	5,720	14,173
202.43	5,384	11,342	202.95	5,727	14,231
202.44	5,390	11,396	202.96	5,734	14,288
202.45	5,397	11,450	202.97	5,740	14,345
202.46	5,404	11,504	202.98	5,747	14,403
202.47	5,410	11,558	202.99	5,753	14,460
202.48	5,417	11,612	203.00	5,760	14,518

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.01	5,767	14,576	203.53	6,110	17,664
203.02	5,773	14,633	203.54	6,117	17,725
203.03	5,780	14,691	203.55	6,124	17,786
203.04	5,786	14,749	203.56	6,130	17,847
203.05	5,793	14,807	203.57	6,137	17,908
203.06	5,800	14,865	203.58	6,143	17,970
203.07	5,806	14,923	203.59	6,150	18,031
203.08	5,813	14,981	203.60	6,157	18,093
203.09	5,819	15,039	203.61	6,163	18,154
203.10	5,826	15,097	203.62	6,170	18,216
203.11	5,833	15,155	203.63	6,176	18,278
203.12	5,839	15,214	203.64	6,183	18,340
203.13	5,846	15,272	203.65	6,190	18,402
203.14	5,853	15,331	203.66	6,196	18,463
203.15	5,859	15,389	203.67	6,203	18,525
203.16	5,866	15,448	203.68	6,209	18,588
203.17	5,872	15,507	203.69	6,216	18,650
203.18	5,879	15,565	203.70	6,223	18,712
203.19	5,886	15,624	203.71	6,229	18,774
203.20	5,892	15,683	203.72	6,236	18,836
203.21	5,899	15,742	203.73	6,243	18,899
203.22	5,905	15,801	203.74	6,249	18,961
203.23	5,912	15,860	203.75	6,256	19,024
203.24	5,919	15,919	203.76	6,262	19,086
203.25	5,925	15,979	203.77	6,269	19,149
203.26	5,932	16,038	203.78	6,276	19,212
203.27	5,938	16,097	203.79	6,282	19,275
203.28	5,945	16,157	203.80	6,289	19,337
203.29	5,952	16,216	203.81	6,295	19,400
203.30	5,958	16,276	203.82	6,302	19,463
203.31	5,965	16,335	203.83	6,309	19,526
203.32	5,972	16,395	203.84	6,315	19,590
203.33	5,978	16,455	203.85	6,322	19,653
203.34	5,985	16,515	203.86	6,328	19,716
203.35	5,991	16,574	203.87	6,335	19,779
203.36	5,998	16,634	203.88	6,342	19,843
203.37	6,005	16,694	203.89	6,348	19,906
203.38	6,011	16,754	203.90	6,355	19,970
203.39	6,018	16,815	203.91	6,362	20,033
203.40	6,024	16,875	203.92	6,368	20,097
203.41	6,031	16,935	203.93	6,375	20,161
203.42	6,038	16,995	203.94	6,381	20,224
203.43	6,044	17,056	203.95	6,388	20,288
203.44	6,051	17,116	203.96	6,395	20,352
203.45	6,057	17,177	203.97	6,401	20,416
203.46	6,064	17,237	203.98	6,408	20,480
203.47	6,071	17,298	203.99	6,414	20,544
203.48	6,077	17,359	204.00	6,421	20,608
203.49	6,084	17,420	204.01	6,428	20,673
203.50	6,091	17,481	204.02	6,434	20,737
203.51	6,097	17,541	204.03	6,441	20,801
203.52	6,104	17,602	204.04	6,447	20,866

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.05	6,454	20,930	204.57	6,797	24,376
204.06	6,461	20,995	204.58	6,804	24,444
204.07	6,467	21,059	204.59	6,810	24,512
204.08	6,474	21,124	204.60	6,817	24,580
204.09	6,480	21,189	204.61	6,824	24,648
204.10	6,487	21,254	204.62	6,830	24,716
204.11	6,494	21,319	204.63	6,837	24,785
204.12	6,500	21,384	204.64	6,843	24,853
204.13	6,507	21,449	204.65	6,850	24,921
204.14	6,513	21,514	204.66	6,857	24,990
204.15	6,520	21,579	204.67	6,863	25,059
204.16	6,527	21,644	204.68	6,870	25,127
204.17	6,533	21,710	204.69	6,876	25,196
204.18	6,540	21,775	204.70	6,883	25,265
204.19	6,546	21,840	204.71	6,890	25,334
204.20	6,553	21,906	204.72	6,896	25,403
204.21	6,560	21,971	204.73	6,903	25,472
204.22	6,566	22,037	204.74	6,909	25,541
204.23	6,573	22,103	204.75	6,916	25,610
204.24	6,579	22,168	204.76	6,923	25,679
204.25	6,586	22,234	204.77	6,929	25,748
204.26	6,593	22,300	204.78	6,936	25,818
204.27	6,599	22,366	204.79	6,942	25,887
204.28	6,606	22,432	204.80	6,949	25,956
204.29	6,612	22,498	204.81	6,956	26,026
204.30	6,619	22,564	204.82	6,962	26,096
204.31	6,626	22,631	204.83	6,969	26,165
204.32	6,632	22,697	204.84	6,975	26,235
204.33	6,639	22,763	204.85	6,982	26,305
204.34	6,645	22,830	204.86	6,989	26,375
204.35	6,652	22,896	204.87	6,995	26,444
204.36	6,659	22,963	204.88	7,002	26,514
204.37	6,665	23,029	204.89	7,008	26,584
204.38	6,672	23,096	204.90	7,015	26,655
204.39	6,678	23,163	204.91	7,022	26,725
204.40	6,685	23,230	204.92	7,028	26,795
204.41	6,692	23,296	204.93	7,035	26,865
204.42	6,698	23,363	204.94	7,041	26,936
204.43	6,705	23,430	204.95	7,048	27,006
204.44	6,711	23,498	204.96	7,055	27,077
204.45	6,718	23,565	204.97	7,061	27,147
204.46	6,725	23,632	204.98	7,068	27,218
204.47	6,731	23,699	204.99	7,074	27,289
204.48	6,738	23,767	205.00	7,081	27,359
204.49	6,744	23,834	205.01	7,088	27,430
204.50	6,751	23,901	205.02	7,094	27,501
204.51	6,758	23,969	205.03	7,101	27,572
204.52	6,764	24,037	205.04	7,107	27,643
204.53	6,771	24,104	205.05	7,114	27,714
204.54	6,777	24,172	205.06	7,121	27,785
204.55	6,784	24,240	205.07	7,127	27,857
204.56	6,791	24,308	205.08	7,134	27,928

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.09	7,140	27,999
205.10	7,147	28,071
205.11	7,154	28,142
205.12	7,160	28,214
205.13	7,167	28,286
205.14	7,173	28,357
205.15	7,180	28,429
205.16	7,187	28,501
205.17	7,193	28,573
205.18	7,200	28,645
205.19	7,206	28,717
205.20	7,213	28,789
205.21	7,220	28,861
205.22	7,226	28,933
205.23	7,233	29,005
205.24	7,239	29,078
205.25	7,246	29,150
205.26	7,253	29,223
205.27	7,259	29,295
205.28	7,266	29,368
205.29	7,272	29,441
205.30	7,279	29,513
205.31	7,286	29,586
205.32	7,292	29,659
205.33	7,299	29,732
205.34	7,305	29,805
205.35	7,312	29,878
205.36	7,319	29,951
205.37	7,325	30,025
205.38	7,332	30,098
205.39	7,338	30,171
205.40	7,345	30,245
205.41	7,352	30,318
205.42	7,358	30,392
205.43	7,365	30,465
205.44	7,371	30,539
205.45	7,378	30,613
205.46	7,385	30,686
205.47	7,391	30,760
205.48	7,398	30,834
205.49	7,404	30,908
205.50	**7,411**	**30,982**

Summary for Pond B-55: Basin #55

Inflow Area = 2.301 ac, 47.33% Impervious, Inflow Depth = 2.49" for Future 2 yr event
Inflow = 5.76 cfs @ 12.17 hrs, Volume= 0.478 af
Outflow = 1.75 cfs @ 12.48 hrs, Volume= 0.375 af, Atten= 70%, Lag= 18.4 min
Primary = 1.75 cfs @ 12.48 hrs, Volume= 0.375 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.82' @ 12.48 hrs Surf.Area= 5,163 sf Storage= 9,473 cf

Plug-Flow detention time= 187.6 min calculated for 0.375 af (78% of inflow)
Center-of-Mass det. time= 101.7 min (890.8 - 789.1)

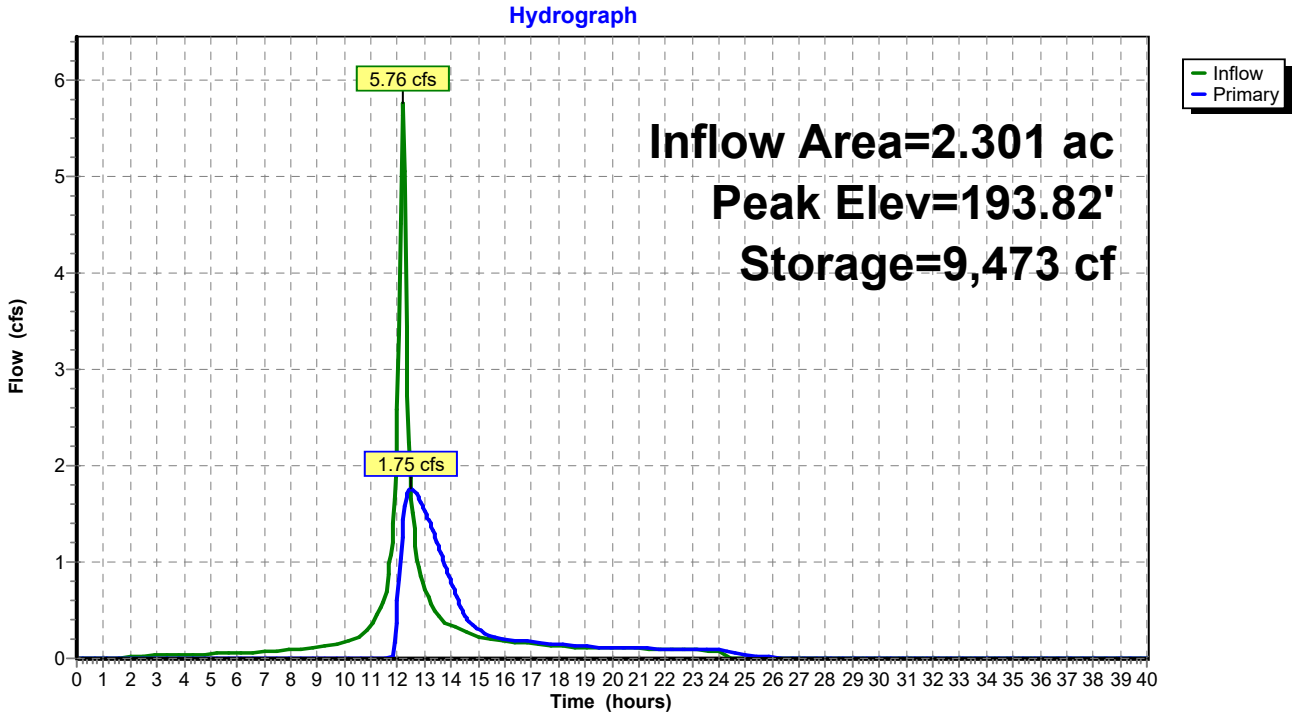
Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	**18.0" Round Culvert** L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 191.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.80'	**22.0" W x 2.5" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.82'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	195.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.75 cfs @ 12.48 hrs HW=193.81' (Free Discharge)
- **1=Culvert** (Passes 1.75 cfs of 8.63 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 1.75 cfs @ 4.59 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-55: Basin #55



Stage-Discharge for Pond B-55: Basin #55

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.56	0.00	192.08	0.00	192.60	0.00	193.12	0.85
191.57	0.00	192.09	0.00	192.61	0.00	193.13	0.87
191.58	0.00	192.10	0.00	192.62	0.00	193.14	0.89
191.59	0.00	192.11	0.00	192.63	0.00	193.15	0.90
191.60	0.00	192.12	0.00	192.64	0.00	193.16	0.92
191.61	0.00	192.13	0.00	192.65	0.00	193.17	0.94
191.62	0.00	192.14	0.00	192.66	0.00	193.18	0.96
191.63	0.00	192.15	0.00	192.67	0.00	193.19	0.98
191.64	0.00	192.16	0.00	192.68	0.00	193.20	0.99
191.65	0.00	192.17	0.00	192.69	0.00	193.21	1.01
191.66	0.00	192.18	0.00	192.70	0.00	193.22	1.03
191.67	0.00	192.19	0.00	192.71	0.00	193.23	1.05
191.68	0.00	192.20	0.00	192.72	0.00	193.24	1.06
191.69	0.00	192.21	0.00	192.73	0.00	193.25	1.08
191.70	0.00	192.22	0.00	192.74	0.00	193.26	1.09
191.71	0.00	192.23	0.00	192.75	0.00	193.27	1.11
191.72	0.00	192.24	0.00	192.76	0.00	193.28	1.12
191.73	0.00	192.25	0.00	192.77	0.00	193.29	1.14
191.74	0.00	192.26	0.00	192.78	0.00	193.30	1.15
191.75	0.00	192.27	0.00	192.79	0.00	193.31	1.17
191.76	0.00	192.28	0.00	192.80	0.00	193.32	1.18
191.77	0.00	192.29	0.00	192.81	0.01	193.33	1.20
191.78	0.00	192.30	0.00	192.82	0.02	193.34	1.21
191.79	0.00	192.31	0.00	192.83	0.03	193.35	1.23
191.80	0.00	192.32	0.00	192.84	0.05	193.36	1.24
191.81	0.00	192.33	0.00	192.85	0.07	193.37	1.25
191.82	0.00	192.34	0.00	192.86	0.09	193.38	1.27
191.83	0.00	192.35	0.00	192.87	0.11	193.39	1.28
191.84	0.00	192.36	0.00	192.88	0.13	193.40	1.29
191.85	0.00	192.37	0.00	192.89	0.16	193.41	1.31
191.86	0.00	192.38	0.00	192.90	0.19	193.42	1.32
191.87	0.00	192.39	0.00	192.91	0.21	193.43	1.33
191.88	0.00	192.40	0.00	192.92	0.24	193.44	1.34
191.89	0.00	192.41	0.00	192.93	0.28	193.45	1.36
191.90	0.00	192.42	0.00	192.94	0.31	193.46	1.37
191.91	0.00	192.43	0.00	192.95	0.34	193.47	1.38
191.92	0.00	192.44	0.00	192.96	0.38	193.48	1.39
191.93	0.00	192.45	0.00	192.97	0.41	193.49	1.41
191.94	0.00	192.46	0.00	192.98	0.45	193.50	1.42
191.95	0.00	192.47	0.00	192.99	0.49	193.51	1.43
191.96	0.00	192.48	0.00	193.00	0.53	193.52	1.44
191.97	0.00	192.49	0.00	193.01	0.57	193.53	1.45
191.98	0.00	192.50	0.00	193.02	0.60	193.54	1.46
191.99	0.00	192.51	0.00	193.03	0.63	193.55	1.48
192.00	0.00	192.52	0.00	193.04	0.66	193.56	1.49
192.01	0.00	192.53	0.00	193.05	0.69	193.57	1.50
192.02	0.00	192.54	0.00	193.06	0.71	193.58	1.51
192.03	0.00	192.55	0.00	193.07	0.74	193.59	1.52
192.04	0.00	192.56	0.00	193.08	0.76	193.60	1.53
192.05	0.00	192.57	0.00	193.09	0.78	193.61	1.54
192.06	0.00	192.58	0.00	193.10	0.80	193.62	1.55
192.07	0.00	192.59	0.00	193.11	0.82	193.63	1.57

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.64	1.58	194.16	4.61	194.68	11.12	195.20	12.37
193.65	1.59	194.17	4.73	194.69	11.14	195.21	12.39
193.66	1.60	194.18	4.85	194.70	11.17	195.22	12.42
193.67	1.61	194.19	4.97	194.71	11.19	195.23	12.44
193.68	1.62	194.20	5.10	194.72	11.22	195.24	12.46
193.69	1.63	194.21	5.22	194.73	11.24	195.25	12.48
193.70	1.64	194.22	5.35	194.74	11.27	195.26	12.51
193.71	1.65	194.23	5.48	194.75	11.29	195.27	12.53
193.72	1.66	194.24	5.61	194.76	11.32	195.28	12.55
193.73	1.67	194.25	5.74	194.77	11.34	195.29	12.58
193.74	1.68	194.26	5.87	194.78	11.37	195.30	12.60
193.75	1.69	194.27	6.01	194.79	11.39	195.31	12.62
193.76	1.70	194.28	6.14	194.80	11.42	195.32	12.64
193.77	1.71	194.29	6.28	194.81	11.44	195.33	12.66
193.78	1.72	194.30	6.42	194.82	11.47	195.34	12.69
193.79	1.73	194.31	6.56	194.83	11.49	195.35	12.71
193.80	1.74	194.32	6.70	194.84	11.52	195.36	12.73
193.81	1.75	194.33	6.84	194.85	11.54	195.37	12.75
193.82	1.76	194.34	6.98	194.86	11.57	195.38	12.78
193.83	1.78	194.35	7.12	194.87	11.59	195.39	12.80
193.84	1.82	194.36	7.27	194.88	11.61	195.40	12.82
193.85	1.86	194.37	7.41	194.89	11.64	195.41	12.84
193.86	1.90	194.38	7.56	194.90	11.66	195.42	12.86
193.87	1.95	194.39	7.71	194.91	11.69	195.43	12.89
193.88	2.01	194.40	7.86	194.92	11.71	195.44	12.91
193.89	2.07	194.41	8.01	194.93	11.74	195.45	12.93
193.90	2.13	194.42	8.16	194.94	11.76	195.46	13.07
193.91	2.20	194.43	8.31	194.95	11.78	195.47	13.31
193.92	2.26	194.44	8.47	194.96	11.81	195.48	13.61
193.93	2.34	194.45	8.62	194.97	11.83	195.49	13.96
193.94	2.41	194.46	8.78	194.98	11.86	195.50	14.35
193.95	2.49	194.47	8.93	194.99	11.88	195.51	14.79
193.96	2.57	194.48	9.09	195.00	11.90	195.52	15.26
193.97	2.65	194.49	9.25	195.01	11.93	195.53	15.76
193.98	2.74	194.50	9.41	195.02	11.95	195.54	16.30
193.99	2.82	194.51	9.57	195.03	11.97	195.55	16.87
194.00	2.91	194.52	9.73	195.04	12.00	195.56	17.46
194.01	3.01	194.53	9.89	195.05	12.02	195.57	18.08
194.02	3.10	194.54	10.06	195.06	12.05	195.58	18.73
194.03	3.20	194.55	10.22	195.07	12.07	195.59	19.40
194.04	3.29	194.56	10.38	195.08	12.09	195.60	20.10
194.05	3.39	194.57	10.55	195.09	12.12	195.61	20.82
194.06	3.50	194.58	10.72	195.10	12.14	195.62	21.57
194.07	3.60	194.59	10.88	195.11	12.16	195.63	22.33
194.08	3.71	194.60	10.91	195.12	12.19	195.64	23.12
194.09	3.81	194.61	10.94	195.13	12.21	195.65	23.93
194.10	3.92	194.62	10.96	195.14	12.23	195.66	24.79
194.11	4.03	194.63	10.99	195.15	12.26	195.67	25.69
194.12	4.14	194.64	11.01	195.16	12.28	195.68	26.61
194.13	4.26	194.65	11.04	195.17	12.30	195.69	27.55
194.14	4.37	194.66	11.06	195.18	12.32	195.70	28.52
194.15	4.49	194.67	11.09	195.19	12.35	195.71	29.52

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)
195.72	30.53
195.73	31.58
195.74	32.65
195.75	33.74
195.76	34.86
195.77	36.00
195.78	37.17
195.79	38.36
195.80	39.57
195.81	40.81
195.82	42.08
195.83	43.36
195.84	44.67
195.85	46.01
195.86	47.40
195.87	48.81
195.88	50.25
195.89	51.71
195.90	53.20
195.91	54.72
195.92	56.26
195.93	57.83
195.94	59.43
195.95	61.05
195.96	62.70
195.97	64.37
195.98	66.07
195.99	67.80
196.00	**69.56**

Stage-Area-Storage for Pond B-55: Basin #55

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.56	0	0	192.08	4,290	1,277
191.57	97	0	192.09	4,295	1,320
191.58	193	2	192.10	4,300	1,362
191.59	290	4	192.11	4,305	1,406
191.60	386	8	192.12	4,310	1,449
191.61	483	12	192.13	4,314	1,492
191.62	580	17	192.14	4,319	1,535
191.63	676	24	192.15	4,324	1,578
191.64	773	31	192.16	4,329	1,621
191.65	869	39	192.17	4,334	1,665
191.66	966	48	192.18	4,339	1,708
191.67	1,063	58	192.19	4,344	1,751
191.68	1,159	70	192.20	4,349	1,795
191.69	1,256	82	192.21	4,354	1,838
191.70	1,352	95	192.22	4,359	1,882
191.71	1,449	109	192.23	4,364	1,926
191.72	1,545	124	192.24	4,369	1,969
191.73	1,642	140	192.25	4,374	2,013
191.74	1,739	156	192.26	4,379	2,057
191.75	1,835	174	192.27	4,384	2,101
191.76	1,932	193	192.28	4,389	2,144
191.77	2,028	213	192.29	4,394	2,188
191.78	2,125	234	192.30	4,399	2,232
191.79	2,222	255	192.31	4,404	2,276
191.80	2,318	278	192.32	4,409	2,320
191.81	2,415	302	192.33	4,414	2,365
191.82	2,511	326	192.34	4,419	2,409
191.83	2,608	352	192.35	4,424	2,453
191.84	2,705	379	192.36	4,429	2,497
191.85	2,801	406	192.37	4,434	2,541
191.86	2,898	435	192.38	4,438	2,586
191.87	2,994	464	192.39	4,443	2,630
191.88	3,091	495	192.40	4,448	2,675
191.89	3,188	526	192.41	4,453	2,719
191.90	3,284	558	192.42	4,458	2,764
191.91	3,381	592	192.43	4,463	2,808
191.92	3,477	626	192.44	4,468	2,853
191.93	3,574	661	192.45	4,473	2,898
191.94	3,670	697	192.46	4,478	2,942
191.95	3,767	735	192.47	4,483	2,987
191.96	3,864	773	192.48	4,488	3,032
191.97	3,960	812	192.49	4,493	3,077
191.98	4,057	852	192.50	4,498	3,122
191.99	4,153	893	192.51	4,503	3,167
192.00	4,250	935	192.52	4,508	3,212
192.01	4,255	978	192.53	4,513	3,257
192.02	4,260	1,020	192.54	4,518	3,302
192.03	4,265	1,063	192.55	4,523	3,348
192.04	4,270	1,105	192.56	4,528	3,393
192.05	4,275	1,148	192.57	4,533	3,438
192.06	4,280	1,191	192.58	4,538	3,483
192.07	4,285	1,234	192.59	4,543	3,529

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.60	4,548	3,574	193.12	4,807	6,006
192.61	4,553	3,620	193.13	4,812	6,054
192.62	4,558	3,665	193.14	4,818	6,102
192.63	4,562	3,711	193.15	4,823	6,151
192.64	4,567	3,757	193.16	4,828	6,199
192.65	4,572	3,802	193.17	4,833	6,247
192.66	4,577	3,848	193.18	4,838	6,296
192.67	4,582	3,894	193.19	4,843	6,344
192.68	4,587	3,940	193.20	4,848	6,392
192.69	4,592	3,986	193.21	4,853	6,441
192.70	4,597	4,032	193.22	4,858	6,489
192.71	4,602	4,078	193.23	4,864	6,538
192.72	4,607	4,124	193.24	4,869	6,587
192.73	4,612	4,170	193.25	4,874	6,635
192.74	4,617	4,216	193.26	4,879	6,684
192.75	4,622	4,262	193.27	4,884	6,733
192.76	4,627	4,308	193.28	4,889	6,782
192.77	4,632	4,355	193.29	4,894	6,831
192.78	4,637	4,401	193.30	4,899	6,880
192.79	4,642	4,447	193.31	4,904	6,929
192.80	4,647	4,494	193.32	4,910	6,978
192.81	4,652	4,540	193.33	4,915	7,027
192.82	4,657	4,587	193.34	4,920	7,076
192.83	4,662	4,633	193.35	4,925	7,125
192.84	4,667	4,680	193.36	4,930	7,175
192.85	4,672	4,727	193.37	4,935	7,224
192.86	4,677	4,773	193.38	4,940	7,273
192.87	4,682	4,820	193.39	4,945	7,323
192.88	4,686	4,867	193.40	4,950	7,372
192.89	4,691	4,914	193.41	4,956	7,422
192.90	4,696	4,961	193.42	4,961	7,471
192.91	4,701	5,008	193.43	4,966	7,521
192.92	4,706	5,055	193.44	4,971	7,571
192.93	4,711	5,102	193.45	4,976	7,620
192.94	4,716	5,149	193.46	4,981	7,670
192.95	4,721	5,196	193.47	4,986	7,720
192.96	4,726	5,244	193.48	4,991	7,770
192.97	4,731	5,291	193.49	4,996	7,820
192.98	4,736	5,338	193.50	5,002	7,870
192.99	4,741	5,386	193.51	5,007	7,920
193.00	4,746	5,433	193.52	5,012	7,970
193.01	4,751	5,480	193.53	5,017	8,020
193.02	4,756	5,528	193.54	5,022	8,070
193.03	4,761	5,576	193.55	5,027	8,121
193.04	4,766	5,623	193.56	5,032	8,171
193.05	4,772	5,671	193.57	5,037	8,221
193.06	4,777	5,719	193.58	5,042	8,272
193.07	4,782	5,766	193.59	5,047	8,322
193.08	4,787	5,814	193.60	5,053	8,373
193.09	4,792	5,862	193.61	5,058	8,423
193.10	4,797	5,910	193.62	5,063	8,474
193.11	4,802	5,958	193.63	5,068	8,524

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.64	5,073	8,575	194.16	5,341	11,282
193.65	5,078	8,626	194.17	5,347	11,336
193.66	5,083	8,677	194.18	5,352	11,389
193.67	5,088	8,728	194.19	5,357	11,443
193.68	5,093	8,778	194.20	5,362	11,496
193.69	5,099	8,829	194.21	5,368	11,550
193.70	5,104	8,880	194.22	5,373	11,604
193.71	5,109	8,931	194.23	5,378	11,658
193.72	5,114	8,983	194.24	5,383	11,711
193.73	5,119	9,034	194.25	5,389	11,765
193.74	5,124	9,085	194.26	5,394	11,819
193.75	5,129	9,136	194.27	5,399	11,873
193.76	5,134	9,188	194.28	5,405	11,927
193.77	5,139	9,239	194.29	5,410	11,981
193.78	5,145	9,290	194.30	5,415	12,035
193.79	5,150	9,342	194.31	5,420	12,089
193.80	5,155	9,393	194.32	5,426	12,144
193.81	5,160	9,445	194.33	5,431	12,198
193.82	5,165	9,497	194.34	5,436	12,252
193.83	5,170	9,548	194.35	5,441	12,307
193.84	5,175	9,600	194.36	5,447	12,361
193.85	5,180	9,652	194.37	5,452	12,416
193.86	5,185	9,704	194.38	5,457	12,470
193.87	5,191	9,755	194.39	5,463	12,525
193.88	5,196	9,807	194.40	5,468	12,579
193.89	5,201	9,859	194.41	5,473	12,634
193.90	5,206	9,911	194.42	5,478	12,689
193.91	5,211	9,963	194.43	5,484	12,744
193.92	5,216	10,016	194.44	5,489	12,799
193.93	5,221	10,068	194.45	5,494	12,854
193.94	5,226	10,120	194.46	5,499	12,908
193.95	5,231	10,172	194.47	5,505	12,963
193.96	5,237	10,225	194.48	5,510	13,019
193.97	5,242	10,277	194.49	5,515	13,074
193.98	5,247	10,329	194.50	5,521	13,129
193.99	5,252	10,382	194.51	5,526	13,184
194.00	5,257	10,434	194.52	5,531	13,239
194.01	5,262	10,487	194.53	5,536	13,295
194.02	5,268	10,540	194.54	5,542	13,350
194.03	5,273	10,592	194.55	5,547	13,406
194.04	5,278	10,645	194.56	5,552	13,461
194.05	5,283	10,698	194.57	5,557	13,517
194.06	5,289	10,751	194.58	5,563	13,572
194.07	5,294	10,804	194.59	5,568	13,628
194.08	5,299	10,857	194.60	5,573	13,684
194.09	5,304	10,910	194.61	5,578	13,739
194.10	5,310	10,963	194.62	5,584	13,795
194.11	5,315	11,016	194.63	5,589	13,851
194.12	5,320	11,069	194.64	5,594	13,907
194.13	5,326	11,122	194.65	5,600	13,963
194.14	5,331	11,176	194.66	5,605	14,019
194.15	5,336	11,229	194.67	5,610	14,075

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.68	5,615	14,131	195.20	5,893	17,123
194.69	5,621	14,187	195.21	5,898	17,182
194.70	5,626	14,244	195.22	5,903	17,241
194.71	5,631	14,300	195.23	5,909	17,300
194.72	5,636	14,356	195.24	5,914	17,359
194.73	5,642	14,413	195.25	5,920	17,418
194.74	5,647	14,469	195.26	5,925	17,477
194.75	5,652	14,525	195.27	5,931	17,536
194.76	5,658	14,582	195.28	5,936	17,596
194.77	5,663	14,639	195.29	5,941	17,655
194.78	5,668	14,695	195.30	5,947	17,715
194.79	5,673	14,752	195.31	5,952	17,774
194.80	5,679	14,809	195.32	5,958	17,834
194.81	5,684	14,866	195.33	5,963	17,893
194.82	5,689	14,922	195.34	5,969	17,953
194.83	5,694	14,979	195.35	5,974	18,013
194.84	5,700	15,036	195.36	5,979	18,072
194.85	5,705	15,093	195.37	5,985	18,132
194.86	5,710	15,150	195.38	5,990	18,192
194.87	5,715	15,208	195.39	5,996	18,252
194.88	5,721	15,265	195.40	6,001	18,312
194.89	5,726	15,322	195.41	6,007	18,372
194.90	5,731	15,379	195.42	6,012	18,432
194.91	5,737	15,437	195.43	6,017	18,492
194.92	5,742	15,494	195.44	6,023	18,553
194.93	5,747	15,551	195.45	6,028	18,613
194.94	5,752	15,609	195.46	6,034	18,673
194.95	5,758	15,666	195.47	6,039	18,733
194.96	5,763	15,724	195.48	6,045	18,794
194.97	5,768	15,782	195.49	6,050	18,854
194.98	5,773	15,839	195.50	6,056	18,915
194.99	5,779	15,897	195.51	6,061	18,975
195.00	5,784	15,955	195.52	6,066	19,036
195.01	5,789	16,013	195.53	6,072	19,097
195.02	5,795	16,071	195.54	6,077	19,158
195.03	5,800	16,129	195.55	6,083	19,218
195.04	5,806	16,187	195.56	6,088	19,279
195.05	5,811	16,245	195.57	6,094	19,340
195.06	5,817	16,303	195.58	6,099	19,401
195.07	5,822	16,361	195.59	6,104	19,462
195.08	5,827	16,419	195.60	6,110	19,523
195.09	5,833	16,478	195.61	6,115	19,584
195.10	5,838	16,536	195.62	6,121	19,645
195.11	5,844	16,595	195.63	6,126	19,707
195.12	5,849	16,653	195.64	6,132	19,768
195.13	5,855	16,712	195.65	6,137	19,829
195.14	5,860	16,770	195.66	6,142	19,891
195.15	5,865	16,829	195.67	6,148	19,952
195.16	5,871	16,887	195.68	6,153	20,014
195.17	5,876	16,946	195.69	6,159	20,075
195.18	5,882	17,005	195.70	6,164	20,137
195.19	5,887	17,064	195.71	6,170	20,199

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.72	6,175	20,260
195.73	6,180	20,322
195.74	6,186	20,384
195.75	6,191	20,446
195.76	6,197	20,508
195.77	6,202	20,570
195.78	6,208	20,632
195.79	6,213	20,694
195.80	6,218	20,756
195.81	6,224	20,818
195.82	6,229	20,880
195.83	6,235	20,943
195.84	6,240	21,005
195.85	6,246	21,068
195.86	6,251	21,130
195.87	6,256	21,193
195.88	6,262	21,255
195.89	6,267	21,318
195.90	6,273	21,381
195.91	6,278	21,443
195.92	6,284	21,506
195.93	6,289	21,569
195.94	6,294	21,632
195.95	6,300	21,695
195.96	6,305	21,758
195.97	6,311	21,821
195.98	6,316	21,884
195.99	6,322	21,947
196.00	**6,327**	**22,010**

Summary for Pond B-56: Basin #56

Inflow Area = 1.512 ac, 31.08% Impervious, Inflow Depth = 2.15" for Future 2 yr event
Inflow = 3.32 cfs @ 12.18 hrs, Volume= 0.271 af
Outflow = 2.14 cfs @ 12.30 hrs, Volume= 0.224 af, Atten= 35%, Lag= 7.3 min
Primary = 2.14 cfs @ 12.30 hrs, Volume= 0.224 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 192.56' @ 12.30 hrs Surf.Area= 5,282 sf Storage= 3,948 cf

Plug-Flow detention time= 151.4 min calculated for 0.224 af (83% of inflow)
Center-of-Mass det. time= 74.8 min (880.3 - 805.5)

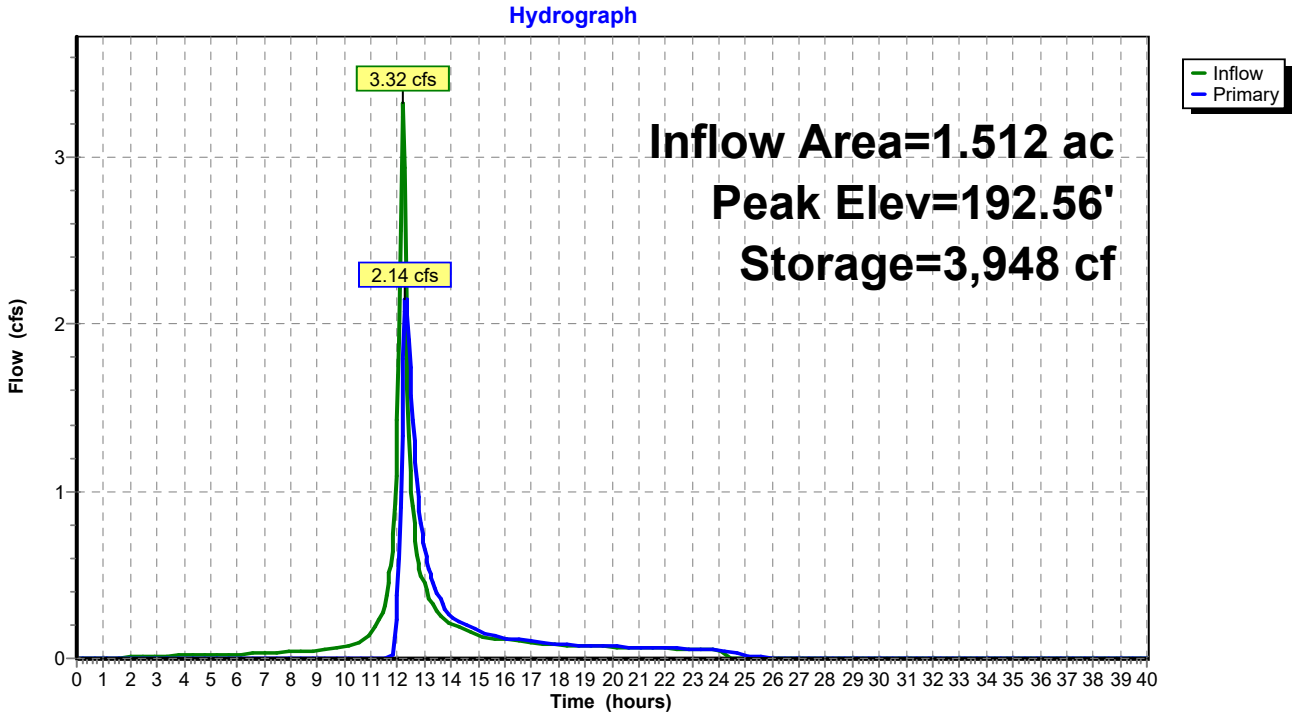
Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	**18.0" Round Culvert** L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.19'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.62'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.14 cfs @ 12.30 hrs HW=192.56' (Free Discharge)
- **1=Culvert** (Passes 2.14 cfs of 3.07 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.14 cfs @ 1.94 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-56: Basin #56



Stage-Discharge for Pond B-56: Basin #56

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.57	0.00	192.09	0.00	192.61	2.62	193.13	5.97
191.58	0.00	192.10	0.00	192.62	2.72	193.14	6.01
191.59	0.00	192.11	0.00	192.63	2.81	193.15	6.05
191.60	0.00	192.12	0.00	192.64	2.91	193.16	6.10
191.61	0.00	192.13	0.00	192.65	3.00	193.17	6.14
191.62	0.00	192.14	0.00	192.66	3.10	193.18	6.18
191.63	0.00	192.15	0.00	192.67	3.20	193.19	6.23
191.64	0.00	192.16	0.00	192.68	3.30	193.20	6.27
191.65	0.00	192.17	0.00	192.69	3.40	193.21	6.31
191.66	0.00	192.18	0.00	192.70	3.50	193.22	6.35
191.67	0.00	192.19	0.00	192.71	3.58	193.23	6.39
191.68	0.00	192.20	0.01	192.72	3.67	193.24	6.43
191.69	0.00	192.21	0.03	192.73	3.74	193.25	6.47
191.70	0.00	192.22	0.05	192.74	3.82	193.26	6.51
191.71	0.00	192.23	0.08	192.75	3.89	193.27	6.55
191.72	0.00	192.24	0.11	192.76	3.97	193.28	6.59
191.73	0.00	192.25	0.14	192.77	4.04	193.29	6.63
191.74	0.00	192.26	0.18	192.78	4.10	193.30	6.67
191.75	0.00	192.27	0.22	192.79	4.17	193.31	6.71
191.76	0.00	192.28	0.26	192.80	4.24	193.32	6.75
191.77	0.00	192.29	0.30	192.81	4.30	193.33	6.79
191.78	0.00	192.30	0.35	192.82	4.36	193.34	6.83
191.79	0.00	192.31	0.40	192.83	4.43	193.35	6.87
191.80	0.00	192.32	0.45	192.84	4.49	193.36	6.91
191.81	0.00	192.33	0.50	192.85	4.55	193.37	6.94
191.82	0.00	192.34	0.56	192.86	4.61	193.38	6.98
191.83	0.00	192.35	0.62	192.87	4.66	193.39	7.02
191.84	0.00	192.36	0.67	192.88	4.72	193.40	7.06
191.85	0.00	192.37	0.74	192.89	4.78	193.41	7.09
191.86	0.00	192.38	0.80	192.90	4.83	193.42	7.13
191.87	0.00	192.39	0.86	192.91	4.89	193.43	7.17
191.88	0.00	192.40	0.93	192.92	4.94	193.44	7.20
191.89	0.00	192.41	0.99	192.93	5.00	193.45	7.24
191.90	0.00	192.42	1.06	192.94	5.05	193.46	7.28
191.91	0.00	192.43	1.13	192.95	5.10	193.47	7.31
191.92	0.00	192.44	1.20	192.96	5.16	193.48	7.35
191.93	0.00	192.45	1.28	192.97	5.21	193.49	7.38
191.94	0.00	192.46	1.35	192.98	5.26	193.50	7.42
191.95	0.00	192.47	1.43	192.99	5.31	193.51	7.45
191.96	0.00	192.48	1.50	193.00	5.36	193.52	7.49
191.97	0.00	192.49	1.58	193.01	5.41	193.53	7.52
191.98	0.00	192.50	1.66	193.02	5.46	193.54	7.56
191.99	0.00	192.51	1.74	193.03	5.50	193.55	7.59
192.00	0.00	192.52	1.83	193.04	5.55	193.56	7.63
192.01	0.00	192.53	1.91	193.05	5.60	193.57	7.66
192.02	0.00	192.54	1.99	193.06	5.65	193.58	7.70
192.03	0.00	192.55	2.08	193.07	5.69	193.59	7.73
192.04	0.00	192.56	2.17	193.08	5.74	193.60	7.76
192.05	0.00	192.57	2.26	193.09	5.79	193.61	7.80
192.06	0.00	192.58	2.35	193.10	5.83	193.62	7.83
192.07	0.00	192.59	2.44	193.11	5.88	193.63	7.88
192.08	0.00	192.60	2.53	193.12	5.92	193.64	7.93

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.65	8.00	194.17	11.13	194.69	13.10	195.21	26.75
193.66	8.07	194.18	11.17	194.70	13.13	195.22	27.67
193.67	8.14	194.19	11.22	194.71	13.15	195.23	28.62
193.68	8.22	194.20	11.26	194.72	13.18	195.24	29.59
193.69	8.30	194.21	11.30	194.73	13.21	195.25	30.59
193.70	8.39	194.22	11.35	194.74	13.24	195.26	31.61
193.71	8.48	194.23	11.39	194.75	13.26	195.27	32.66
193.72	8.57	194.24	11.43	194.76	13.29	195.28	33.74
193.73	8.66	194.25	11.48	194.77	13.32	195.29	34.83
193.74	8.76	194.26	11.52	194.78	13.35	195.30	35.95
193.75	8.86	194.27	11.56	194.79	13.37	195.31	37.10
193.76	8.97	194.28	11.61	194.80	13.40	195.32	38.27
193.77	9.07	194.29	11.65	194.81	13.43	195.33	39.46
193.78	9.18	194.30	11.69	194.82	13.45	195.34	40.68
193.79	9.28	194.31	11.73	194.83	13.48	195.35	41.93
193.80	9.34	194.32	11.78	194.84	13.51	195.36	43.19
193.81	9.39	194.33	11.82	194.85	13.53	195.37	44.48
193.82	9.44	194.34	11.86	194.86	13.56	195.38	45.80
193.83	9.49	194.35	11.90	194.87	13.59	195.39	47.14
193.84	9.55	194.36	11.94	194.88	13.61	195.40	48.53
193.85	9.60	194.37	11.98	194.89	13.64	195.41	49.94
193.86	9.65	194.38	12.03	194.90	13.67	195.42	51.39
193.87	9.70	194.39	12.07	194.91	13.69	195.43	52.85
193.88	9.75	194.40	12.11	194.92	13.72	195.44	54.35
193.89	9.80	194.41	12.15	194.93	13.75	195.45	55.87
193.90	9.85	194.42	12.19	194.94	13.77	195.46	57.42
193.91	9.90	194.43	12.23	194.95	13.80	195.47	58.99
193.92	9.95	194.44	12.27	194.96	13.83	195.48	60.59
193.93	10.00	194.45	12.31	194.97	13.85	195.49	62.21
193.94	10.05	194.46	12.35	194.98	13.88	195.50	63.87
193.95	10.10	194.47	12.39	194.99	13.90	195.51	65.55
193.96	10.15	194.48	12.43	195.00	14.05	195.52	67.25
193.97	10.20	194.49	12.47	195.01	14.29	195.53	68.98
193.98	10.25	194.50	12.51	195.02	14.59	195.54	70.74
193.99	10.29	194.51	12.55	195.03	14.94	195.55	72.53
194.00	10.34	194.52	12.59	195.04	15.34	195.56	74.34
194.01	10.39	194.53	12.63	195.05	15.78	195.57	76.18
194.02	10.44	194.54	12.67	195.06	16.26	195.58	78.04
194.03	10.49	194.55	12.71	195.07	16.77	195.59	79.94
194.04	10.53	194.56	12.73	195.08	17.31	195.60	81.59
194.05	10.58	194.57	12.76	195.09	17.88	195.61	83.25
194.06	10.63	194.58	12.79	195.10	18.48	195.62	84.93
194.07	10.67	194.59	12.82	195.11	19.10	195.63	86.62
194.08	10.72	194.60	12.85	195.12	19.76	195.64	88.32
194.09	10.77	194.61	12.88	195.13	20.43	195.65	90.04
194.10	10.81	194.62	12.90	195.14	21.13	195.66	91.77
194.11	10.86	194.63	12.93	195.15	21.86	195.67	93.51
194.12	10.90	194.64	12.96	195.16	22.61	195.68	95.27
194.13	10.95	194.65	12.99	195.17	23.38	195.69	97.04
194.14	10.99	194.66	13.02	195.18	24.17	195.70	98.82
194.15	11.04	194.67	13.04	195.19	24.98	195.71	100.61
194.16	11.08	194.68	13.07	195.20	25.85	195.72	102.42

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)
195.73	104.24
195.74	106.07
195.75	107.92
195.76	109.77
195.77	111.64
195.78	113.52
195.79	115.41
195.80	117.36
195.81	119.31
195.82	121.28
195.83	123.26
195.84	125.26
195.85	127.27
195.86	129.29
195.87	131.32
195.88	133.37
195.89	135.43
195.90	137.50
195.91	139.59
195.92	141.69
195.93	143.80
195.94	145.92
195.95	148.06
195.96	150.21
195.97	152.37
195.98	154.55
195.99	156.73
196.00	**158.88**

Stage-Area-Storage for Pond B-56: Basin #56

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.57	0	0	192.09	5,063	1,533
191.58	117	1	192.10	5,068	1,584
191.59	234	2	192.11	5,073	1,635
191.60	350	5	192.12	5,077	1,685
191.61	467	9	192.13	5,082	1,736
191.62	584	15	192.14	5,087	1,787
191.63	701	21	192.15	5,091	1,838
191.64	817	29	192.16	5,096	1,889
191.65	934	37	192.17	5,101	1,940
191.66	1,051	47	192.18	5,105	1,991
191.67	1,168	58	192.19	5,110	2,042
191.68	1,284	71	192.20	5,115	2,093
191.69	1,401	84	192.21	5,119	2,144
191.70	1,518	99	192.22	5,124	2,195
191.71	1,635	114	192.23	5,129	2,247
191.72	1,752	131	192.24	5,134	2,298
191.73	1,868	149	192.25	5,138	2,349
191.74	1,985	169	192.26	5,143	2,401
191.75	2,102	189	192.27	5,148	2,452
191.76	2,219	211	192.28	5,152	2,504
191.77	2,335	234	192.29	5,157	2,555
191.78	2,452	257	192.30	5,162	2,607
191.79	2,569	283	192.31	5,166	2,659
191.80	2,686	309	192.32	5,171	2,710
191.81	2,802	336	192.33	5,176	2,762
191.82	2,919	365	192.34	5,180	2,814
191.83	3,036	395	192.35	5,185	2,866
191.84	3,153	426	192.36	5,190	2,917
191.85	3,269	458	192.37	5,195	2,969
191.86	3,386	491	192.38	5,199	3,021
191.87	3,503	525	192.39	5,204	3,073
191.88	3,620	561	192.40	5,209	3,125
191.89	3,737	598	192.41	5,213	3,178
191.90	3,853	636	192.42	5,218	3,230
191.91	3,970	675	192.43	5,223	3,282
191.92	4,087	715	192.44	5,227	3,334
191.93	4,204	757	192.45	5,232	3,386
191.94	4,320	799	192.46	5,237	3,439
191.95	4,437	843	192.47	5,241	3,491
191.96	4,554	888	192.48	5,246	3,544
191.97	4,671	934	192.49	5,251	3,596
191.98	4,787	981	192.50	5,256	3,649
191.99	4,904	1,030	192.51	5,260	3,701
192.00	5,021	1,080	192.52	5,265	3,754
192.01	5,026	1,130	192.53	5,270	3,807
192.02	5,030	1,180	192.54	5,274	3,859
192.03	5,035	1,230	192.55	5,279	3,912
192.04	5,040	1,281	192.56	5,284	3,965
192.05	5,044	1,331	192.57	5,288	4,018
192.06	5,049	1,382	192.58	5,293	4,071
192.07	5,054	1,432	192.59	5,298	4,124
192.08	5,059	1,483	192.60	5,302	4,177

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.61	5,307	4,230
192.62	5,312	4,283
192.63	5,316	4,336
192.64	5,321	4,389
192.65	5,326	4,442
192.66	5,331	4,496
192.67	5,335	4,549
192.68	5,340	4,602
192.69	5,345	4,656
192.70	5,349	4,709
192.71	5,354	4,763
192.72	5,359	4,816
192.73	5,363	4,870
192.74	5,368	4,923
192.75	5,373	4,977
192.76	5,377	5,031
192.77	5,382	5,085
192.78	5,387	5,139
192.79	5,392	5,192
192.80	5,396	5,246
192.81	5,401	5,300
192.82	5,406	5,354
192.83	5,410	5,408
192.84	5,415	5,463
192.85	5,420	5,517
192.86	5,424	5,571
192.87	5,429	5,625
192.88	5,434	5,680
192.89	5,438	5,734
192.90	5,443	5,788
192.91	5,448	5,843
192.92	5,452	5,897
192.93	5,457	5,952
192.94	5,462	6,006
192.95	5,467	6,061
192.96	5,471	6,116
192.97	5,476	6,171
192.98	5,481	6,225
192.99	5,485	6,280
193.00	5,490	6,335
193.01	5,495	6,390
193.02	5,500	6,445
193.03	5,505	6,500
193.04	5,509	6,555
193.05	5,514	6,610
193.06	5,519	6,665
193.07	5,524	6,721
193.08	5,529	6,776
193.09	5,534	6,831
193.10	5,539	6,886
193.11	5,543	6,942
193.12	5,548	6,997
193.13	5,553	7,053
193.14	5,558	7,108
193.15	5,563	7,164
193.16	5,568	7,220
193.17	5,573	7,275
193.18	5,577	7,331
193.19	5,582	7,387
193.20	5,587	7,443
193.21	5,592	7,499
193.22	5,597	7,555
193.23	5,602	7,611
193.24	5,607	7,667
193.25	5,612	7,723
193.26	5,616	7,779
193.27	5,621	7,835
193.28	5,626	7,891
193.29	5,631	7,948
193.30	5,636	8,004
193.31	5,641	8,060
193.32	5,646	8,117
193.33	5,650	8,173
193.34	5,655	8,230
193.35	5,660	8,286
193.36	5,665	8,343
193.37	5,670	8,400
193.38	5,675	8,456
193.39	5,680	8,513
193.40	5,684	8,570
193.41	5,689	8,627
193.42	5,694	8,684
193.43	5,699	8,741
193.44	5,704	8,798
193.45	5,709	8,855
193.46	5,714	8,912
193.47	5,718	8,969
193.48	5,723	9,026
193.49	5,728	9,083
193.50	5,733	9,141
193.51	5,738	9,198
193.52	5,743	9,256
193.53	5,748	9,313
193.54	5,752	9,370
193.55	5,757	9,428
193.56	5,762	9,486
193.57	5,767	9,543
193.58	5,772	9,601
193.59	5,777	9,659
193.60	5,782	9,716
193.61	5,786	9,774
193.62	5,791	9,832
193.63	5,796	9,890
193.64	5,801	9,948

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.65	5,806	10,006	194.17	6,061	13,091
193.66	5,811	10,064	194.18	6,066	13,152
193.67	5,816	10,122	194.19	6,071	13,213
193.68	5,820	10,181	194.20	6,076	13,273
193.69	5,825	10,239	194.21	6,081	13,334
193.70	5,830	10,297	194.22	6,086	13,395
193.71	5,835	10,355	194.23	6,091	13,456
193.72	5,840	10,414	194.24	6,096	13,517
193.73	5,845	10,472	194.25	6,102	13,578
193.74	5,850	10,531	194.26	6,107	13,639
193.75	5,855	10,589	194.27	6,112	13,700
193.76	5,859	10,648	194.28	6,117	13,761
193.77	5,864	10,706	194.29	6,122	13,822
193.78	5,869	10,765	194.30	6,127	13,883
193.79	5,874	10,824	194.31	6,132	13,945
193.80	5,879	10,883	194.32	6,137	14,006
193.81	5,884	10,941	194.33	6,142	14,067
193.82	5,889	11,000	194.34	6,147	14,129
193.83	5,893	11,059	194.35	6,152	14,190
193.84	5,898	11,118	194.36	6,157	14,252
193.85	5,903	11,177	194.37	6,162	14,313
193.86	5,908	11,236	194.38	6,167	14,375
193.87	5,913	11,295	194.39	6,172	14,437
193.88	5,918	11,354	194.40	6,177	14,499
193.89	5,923	11,414	194.41	6,182	14,560
193.90	5,927	11,473	194.42	6,187	14,622
193.91	5,932	11,532	194.43	6,192	14,684
193.92	5,937	11,591	194.44	6,197	14,746
193.93	5,942	11,651	194.45	6,202	14,808
193.94	5,947	11,710	194.46	6,207	14,870
193.95	5,952	11,770	194.47	6,212	14,932
193.96	5,957	11,829	194.48	6,217	14,994
193.97	5,961	11,889	194.49	6,222	15,057
193.98	5,966	11,949	194.50	6,227	15,119
193.99	5,971	12,008	194.51	6,232	15,181
194.00	5,976	12,068	194.52	6,237	15,243
194.01	5,981	12,128	194.53	6,242	15,306
194.02	5,986	12,188	194.54	6,247	15,368
194.03	5,991	12,248	194.55	6,252	15,431
194.04	5,996	12,307	194.56	6,257	15,493
194.05	6,001	12,367	194.57	6,262	15,556
194.06	6,006	12,427	194.58	6,267	15,619
194.07	6,011	12,488	194.59	6,272	15,681
194.08	6,016	12,548	194.60	6,277	15,744
194.09	6,021	12,608	194.61	6,282	15,807
194.10	6,026	12,668	194.62	6,287	15,870
194.11	6,031	12,728	194.63	6,292	15,933
194.12	6,036	12,789	194.64	6,297	15,995
194.13	6,041	12,849	194.65	6,302	16,058
194.14	6,046	12,910	194.66	6,307	16,122
194.15	6,051	12,970	194.67	6,312	16,185
194.16	6,056	13,031	194.68	6,317	16,248

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.69	6,322	16,311	195.21	6,587	19,667
194.70	6,327	16,374	195.22	6,592	19,733
194.71	6,332	16,438	195.23	6,597	19,799
194.72	6,337	16,501	195.24	6,602	19,865
194.73	6,342	16,564	195.25	6,607	19,931
194.74	6,347	16,628	195.26	6,612	19,997
194.75	6,353	16,691	195.27	6,618	20,063
194.76	6,358	16,755	195.28	6,623	20,129
194.77	6,363	16,818	195.29	6,628	20,195
194.78	6,368	16,882	195.30	6,633	20,262
194.79	6,373	16,946	195.31	6,638	20,328
194.80	6,378	17,009	195.32	6,643	20,394
194.81	6,383	17,073	195.33	6,649	20,461
194.82	6,388	17,137	195.34	6,654	20,527
194.83	6,393	17,201	195.35	6,659	20,594
194.84	6,398	17,265	195.36	6,664	20,661
194.85	6,403	17,329	195.37	6,669	20,727
194.86	6,408	17,393	195.38	6,674	20,794
194.87	6,413	17,457	195.39	6,680	20,861
194.88	6,418	17,521	195.40	6,685	20,928
194.89	6,423	17,585	195.41	6,690	20,994
194.90	6,428	17,650	195.42	6,695	21,061
194.91	6,433	17,714	195.43	6,700	21,128
194.92	6,438	17,778	195.44	6,705	21,195
194.93	6,443	17,843	195.45	6,711	21,262
194.94	6,448	17,907	195.46	6,716	21,330
194.95	6,453	17,972	195.47	6,721	21,397
194.96	6,458	18,036	195.48	6,726	21,464
194.97	6,463	18,101	195.49	6,731	21,531
194.98	6,468	18,166	195.50	6,737	21,599
194.99	6,473	18,230	195.51	6,742	21,666
195.00	6,478	18,295	195.52	6,747	21,733
195.01	6,483	18,360	195.53	6,752	21,801
195.02	6,488	18,425	195.54	6,757	21,869
195.03	6,494	18,490	195.55	6,762	21,936
195.04	6,499	18,555	195.56	6,768	22,004
195.05	6,504	18,620	195.57	6,773	22,071
195.06	6,509	18,685	195.58	6,778	22,139
195.07	6,514	18,750	195.59	6,783	22,207
195.08	6,519	18,815	195.60	6,788	22,275
195.09	6,525	18,880	195.61	6,793	22,343
195.10	6,530	18,945	195.62	6,799	22,411
195.11	6,535	19,011	195.63	6,804	22,479
195.12	6,540	19,076	195.64	6,809	22,547
195.13	6,545	19,142	195.65	6,814	22,615
195.14	6,550	19,207	195.66	6,819	22,683
195.15	6,556	19,273	195.67	6,824	22,751
195.16	6,561	19,338	195.68	6,830	22,820
195.17	6,566	19,404	195.69	6,835	22,888
195.18	6,571	19,469	195.70	6,840	22,956
195.19	6,576	19,535	195.71	6,845	23,025
195.20	6,581	19,601	195.72	6,850	23,093

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.73	6,855	23,162
195.74	6,861	23,230
195.75	6,866	23,299
195.76	6,871	23,368
195.77	6,876	23,436
195.78	6,881	23,505
195.79	6,886	23,574
195.80	6,892	23,643
195.81	6,897	23,712
195.82	6,902	23,781
195.83	6,907	23,850
195.84	6,912	23,919
195.85	6,917	23,988
195.86	6,923	24,057
195.87	6,928	24,127
195.88	6,933	24,196
195.89	6,938	24,265
195.90	6,943	24,335
195.91	6,948	24,404
195.92	6,954	24,474
195.93	6,959	24,543
195.94	6,964	24,613
195.95	6,969	24,682
195.96	6,974	24,752
195.97	6,979	24,822
195.98	6,985	24,892
195.99	6,990	24,962
196.00	**6,995**	**25,032**

Summary for Pond B-57: Basin #57

Inflow Area = 1.434 ac, 47.56% Impervious, Inflow Depth = 2.50" for Future 2 yr event
Inflow = 3.60 cfs @ 12.17 hrs, Volume= 0.299 af
Outflow = 0.24 cfs @ 13.66 hrs, Volume= 0.230 af, Atten= 93%, Lag= 89.0 min
Primary = 0.24 cfs @ 13.66 hrs, Volume= 0.230 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.63' @ 13.66 hrs Surf.Area= 4,831 sf Storage= 8,543 cf

Plug-Flow detention time= 548.1 min calculated for 0.230 af (77% of inflow)
Center-of-Mass det. time= 458.3 min (1,247.2 - 788.9)

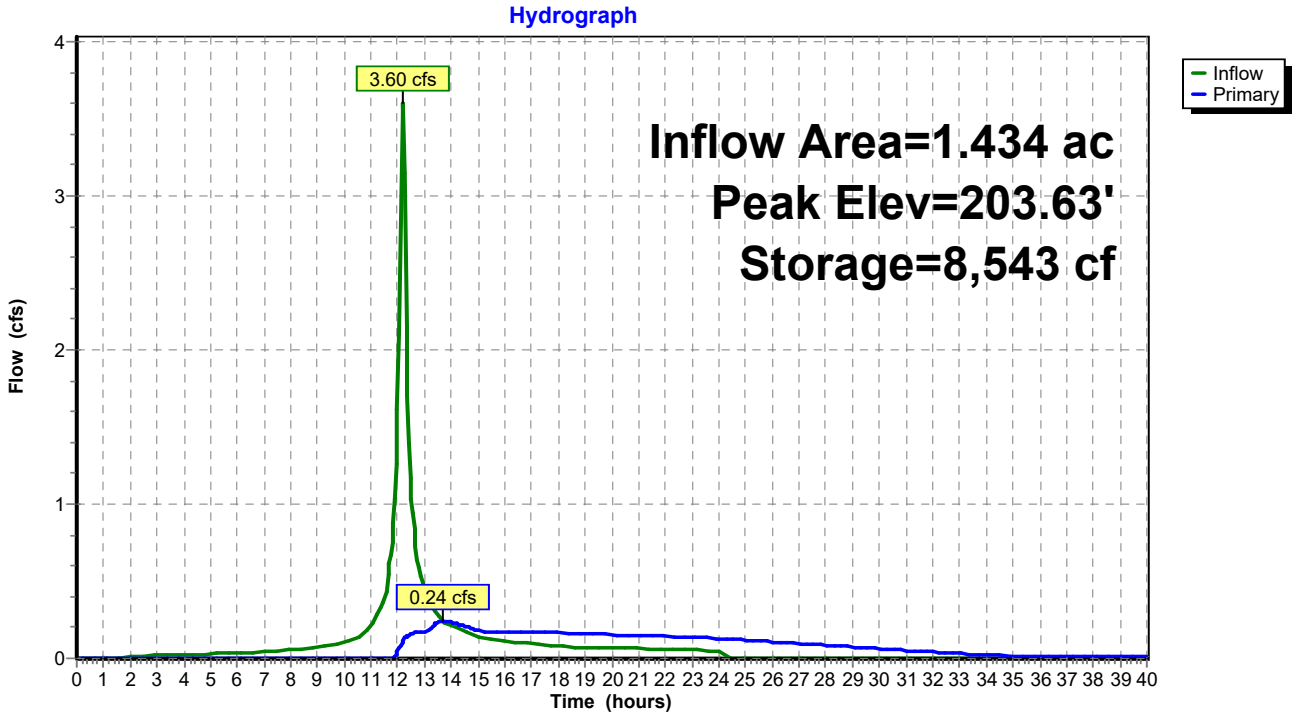
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	**18.0" Round Culvert** L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.34'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.60'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.24 cfs @ 13.66 hrs HW=203.63' (Free Discharge)
- **1=Culvert** (Passes 0.24 cfs of 12.53 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.24 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.06 cfs @ 0.55 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-57: Basin #57



Stage-Discharge for Pond B-57: Basin #57

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.11
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.11
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.11
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.11
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.11
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.11
201.36	0.00	201.88	0.00	202.40	0.01	202.92	0.11
201.37	0.00	201.89	0.00	202.41	0.01	202.93	0.11
201.38	0.00	201.90	0.00	202.42	0.01	202.94	0.12
201.39	0.00	201.91	0.00	202.43	0.01	202.95	0.12
201.40	0.00	201.92	0.00	202.44	0.02	202.96	0.12
201.41	0.00	201.93	0.00	202.45	0.02	202.97	0.12
201.42	0.00	201.94	0.00	202.46	0.02	202.98	0.12
201.43	0.00	201.95	0.00	202.47	0.03	202.99	0.12
201.44	0.00	201.96	0.00	202.48	0.03	203.00	0.12
201.45	0.00	201.97	0.00	202.49	0.03	203.01	0.12
201.46	0.00	201.98	0.00	202.50	0.04	203.02	0.12
201.47	0.00	201.99	0.00	202.51	0.04	203.03	0.13
201.48	0.00	202.00	0.00	202.52	0.05	203.04	0.13
201.49	0.00	202.01	0.00	202.53	0.05	203.05	0.13
201.50	0.00	202.02	0.00	202.54	0.05	203.06	0.13
201.51	0.00	202.03	0.00	202.55	0.05	203.07	0.13
201.52	0.00	202.04	0.00	202.56	0.06	203.08	0.13
201.53	0.00	202.05	0.00	202.57	0.06	203.09	0.13
201.54	0.00	202.06	0.00	202.58	0.06	203.10	0.13
201.55	0.00	202.07	0.00	202.59	0.06	203.11	0.13
201.56	0.00	202.08	0.00	202.60	0.06	203.12	0.13
201.57	0.00	202.09	0.00	202.61	0.07	203.13	0.14
201.58	0.00	202.10	0.00	202.62	0.07	203.14	0.14
201.59	0.00	202.11	0.00	202.63	0.07	203.15	0.14
201.60	0.00	202.12	0.00	202.64	0.07	203.16	0.14
201.61	0.00	202.13	0.00	202.65	0.07	203.17	0.14
201.62	0.00	202.14	0.00	202.66	0.08	203.18	0.14
201.63	0.00	202.15	0.00	202.67	0.08	203.19	0.14
201.64	0.00	202.16	0.00	202.68	0.08	203.20	0.14
201.65	0.00	202.17	0.00	202.69	0.08	203.21	0.14
201.66	0.00	202.18	0.00	202.70	0.08	203.22	0.14
201.67	0.00	202.19	0.00	202.71	0.08	203.23	0.15
201.68	0.00	202.20	0.00	202.72	0.09	203.24	0.15
201.69	0.00	202.21	0.00	202.73	0.09	203.25	0.15
201.70	0.00	202.22	0.00	202.74	0.09	203.26	0.15
201.71	0.00	202.23	0.00	202.75	0.09	203.27	0.15
201.72	0.00	202.24	0.00	202.76	0.09	203.28	0.15
201.73	0.00	202.25	0.00	202.77	0.09	203.29	0.15
201.74	0.00	202.26	0.00	202.78	0.10	203.30	0.15
201.75	0.00	202.27	0.00	202.79	0.10	203.31	0.15
201.76	0.00	202.28	0.00	202.80	0.10	203.32	0.15
201.77	0.00	202.29	0.00	202.81	0.10	203.33	0.15
201.78	0.00	202.30	0.00	202.82	0.10	203.34	0.16
201.79	0.00	202.31	0.00	202.83	0.10	203.35	0.16
201.80	0.00	202.32	0.00	202.84	0.10	203.36	0.16
201.81	0.00	202.33	0.00	202.85	0.10	203.37	0.16

Stage-Discharge for Pond B-57: Basin #57 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	0.16	203.90	2.32	204.42	9.54	204.94	52.24
203.39	0.16	203.91	2.42	204.43	9.71	204.95	53.72
203.40	0.16	203.92	2.53	204.44	9.88	204.96	55.23
203.41	0.16	203.93	2.64	204.45	10.05	204.97	56.77
203.42	0.16	203.94	2.75	204.46	10.22	204.98	58.33
203.43	0.16	203.95	2.86	204.47	10.39	204.99	59.92
203.44	0.16	203.96	2.98	204.48	10.56	205.00	**61.53**
203.45	0.16	203.97	3.09	204.49	10.73		
203.46	0.17	203.98	3.21	204.50	10.90		
203.47	0.17	203.99	3.33	204.51	11.19		
203.48	0.17	204.00	3.45	204.52	11.58		
203.49	0.17	204.01	3.57	204.53	12.03		
203.50	0.17	204.02	3.69	204.54	12.54		
203.51	0.17	204.03	3.82	204.55	13.09		
203.52	0.17	204.04	3.94	204.56	13.68		
203.53	0.17	204.05	4.07	204.57	14.30		
203.54	0.17	204.06	4.20	204.58	14.97		
203.55	0.17	204.07	4.32	204.59	15.66		
203.56	0.17	204.08	4.46	204.60	16.38		
203.57	0.17	204.09	4.59	204.61	17.14		
203.58	0.17	204.10	4.72	204.62	17.92		
203.59	0.18	204.11	4.85	204.63	18.73		
203.60	0.18	204.12	4.99	204.64	19.56		
203.61	0.19	204.13	5.13	204.65	20.42		
203.62	0.21	204.14	5.26	204.66	21.31		
203.63	0.25	204.15	5.40	204.67	22.22		
203.64	0.28	204.16	5.54	204.68	23.05		
203.65	0.33	204.17	5.68	204.69	23.83		
203.66	0.37	204.18	5.83	204.70	24.63		
203.67	0.42	204.19	5.97	204.71	25.49		
203.68	0.48	204.20	6.11	204.72	26.38		
203.69	0.53	204.21	6.26	204.73	27.29		
203.70	0.60	204.22	6.41	204.74	28.23		
203.71	0.66	204.23	6.55	204.75	29.19		
203.72	0.73	204.24	6.70	204.76	30.17		
203.73	0.80	204.25	6.85	204.77	31.19		
203.74	0.87	204.26	7.00	204.78	32.22		
203.75	0.94	204.27	7.15	204.79	33.28		
203.76	1.02	204.28	7.31	204.80	34.37		
203.77	1.10	204.29	7.46	204.81	35.48		
203.78	1.18	204.30	7.62	204.82	36.61		
203.79	1.26	204.31	7.77	204.83	37.77		
203.80	1.35	204.32	7.93	204.84	38.96		
203.81	1.44	204.33	8.09	204.85	40.16		
203.82	1.53	204.34	8.24	204.86	41.40		
203.83	1.62	204.35	8.40	204.87	42.65		
203.84	1.71	204.36	8.56	204.88	43.93		
203.85	1.81	204.37	8.73	204.89	45.24		
203.86	1.91	204.38	8.89	204.90	46.56		
203.87	2.01	204.39	9.05	204.91	47.94		
203.88	2.11	204.40	9.21	204.92	49.35		
203.89	2.21	204.41	9.38	204.93	50.78		

Stage-Area-Storage for Pond B-57: Basin #57

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,948	767
201.31	57	0	201.83	3,005	796
201.32	113	1	201.84	3,062	827
201.33	170	3	201.85	3,119	858
201.34	227	5	201.86	3,175	889
201.35	284	7	201.87	3,232	921
201.36	340	10	201.88	3,289	954
201.37	397	14	201.89	3,345	987
201.38	454	18	201.90	3,402	1,021
201.39	510	23	201.91	3,459	1,055
201.40	567	28	201.92	3,515	1,090
201.41	624	34	201.93	3,572	1,125
201.42	680	41	201.94	3,629	1,161
201.43	737	48	201.95	3,686	1,198
201.44	794	56	201.96	3,742	1,235
201.45	851	64	201.97	3,799	1,273
201.46	907	73	201.98	3,856	1,311
201.47	964	82	201.99	3,912	1,350
201.48	1,021	92	202.00	3,969	1,389
201.49	1,077	102	202.01	3,974	1,429
201.50	1,134	113	202.02	3,979	1,469
201.51	1,191	125	202.03	3,985	1,508
201.52	1,247	137	202.04	3,990	1,548
201.53	1,304	150	202.05	3,995	1,588
201.54	1,361	163	202.06	4,000	1,628
201.55	1,418	177	202.07	4,005	1,668
201.56	1,474	192	202.08	4,011	1,708
201.57	1,531	207	202.09	4,016	1,748
201.58	1,588	222	202.10	4,021	1,789
201.59	1,644	238	202.11	4,026	1,829
201.60	1,701	255	202.12	4,031	1,869
201.61	1,758	272	202.13	4,036	1,910
201.62	1,814	290	202.14	4,042	1,950
201.63	1,871	309	202.15	4,047	1,990
201.64	1,928	328	202.16	4,052	2,031
201.65	1,985	347	202.17	4,057	2,071
201.66	2,041	367	202.18	4,062	2,112
201.67	2,098	388	202.19	4,068	2,153
201.68	2,155	409	202.20	4,073	2,193
201.69	2,211	431	202.21	4,078	2,234
201.70	2,268	454	202.22	4,083	2,275
201.71	2,325	477	202.23	4,088	2,316
201.72	2,381	500	202.24	4,094	2,357
201.73	2,438	524	202.25	4,099	2,398
201.74	2,495	549	202.26	4,104	2,439
201.75	2,551	574	202.27	4,109	2,480
201.76	2,608	600	202.28	4,114	2,521
201.77	2,665	626	202.29	4,120	2,562
201.78	2,722	653	202.30	4,125	2,603
201.79	2,778	681	202.31	4,130	2,644
201.80	2,835	709	202.32	4,135	2,686
201.81	2,892	737	202.33	4,140	2,727

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	4,145	2,769	202.86	4,415	4,994
202.35	4,151	2,810	202.87	4,421	5,039
202.36	4,156	2,852	202.88	4,426	5,083
202.37	4,161	2,893	202.89	4,431	5,127
202.38	4,166	2,935	202.90	4,436	5,171
202.39	4,171	2,977	202.91	4,441	5,216
202.40	4,177	3,018	202.92	4,446	5,260
202.41	4,182	3,060	202.93	4,452	5,305
202.42	4,187	3,102	202.94	4,457	5,349
202.43	4,192	3,144	202.95	4,462	5,394
202.44	4,197	3,186	202.96	4,467	5,439
202.45	4,203	3,228	202.97	4,472	5,483
202.46	4,208	3,270	202.98	4,478	5,528
202.47	4,213	3,312	202.99	4,483	5,573
202.48	4,218	3,354	203.00	4,488	5,618
202.49	4,223	3,396	203.01	4,493	5,663
202.50	4,229	3,439	203.02	4,499	5,708
202.51	4,234	3,481	203.03	4,504	5,753
202.52	4,239	3,523	203.04	4,510	5,798
202.53	4,244	3,566	203.05	4,515	5,843
202.54	4,249	3,608	203.06	4,521	5,888
202.55	4,254	3,651	203.07	4,526	5,933
202.56	4,260	3,693	203.08	4,532	5,978
202.57	4,265	3,736	203.09	4,537	6,024
202.58	4,270	3,778	203.10	4,543	6,069
202.59	4,275	3,821	203.11	4,548	6,115
202.60	4,280	3,864	203.12	4,554	6,160
202.61	4,286	3,907	203.13	4,559	6,206
202.62	4,291	3,950	203.14	4,564	6,251
202.63	4,296	3,993	203.15	4,570	6,297
202.64	4,301	4,036	203.16	4,575	6,343
202.65	4,306	4,079	203.17	4,581	6,388
202.66	4,312	4,122	203.18	4,586	6,434
202.67	4,317	4,165	203.19	4,592	6,480
202.68	4,322	4,208	203.20	4,597	6,526
202.69	4,327	4,251	203.21	4,603	6,572
202.70	4,332	4,295	203.22	4,608	6,618
202.71	4,337	4,338	203.23	4,614	6,664
202.72	4,343	4,381	203.24	4,619	6,710
202.73	4,348	4,425	203.25	4,625	6,757
202.74	4,353	4,468	203.26	4,630	6,803
202.75	4,358	4,512	203.27	4,635	6,849
202.76	4,363	4,555	203.28	4,641	6,896
202.77	4,369	4,599	203.29	4,646	6,942
202.78	4,374	4,643	203.30	4,652	6,989
202.79	4,379	4,687	203.31	4,657	7,035
202.80	4,384	4,730	203.32	4,663	7,082
202.81	4,389	4,774	203.33	4,668	7,128
202.82	4,395	4,818	203.34	4,674	7,175
202.83	4,400	4,862	203.35	4,679	7,222
202.84	4,405	4,906	203.36	4,685	7,269
202.85	4,410	4,950	203.37	4,690	7,316

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,695	7,363	203.90	4,979	9,878
203.39	4,701	7,409	203.91	4,985	9,928
203.40	4,706	7,457	203.92	4,990	9,978
203.41	4,712	7,504	203.93	4,996	10,028
203.42	4,717	7,551	203.94	5,001	10,078
203.43	4,723	7,598	203.95	5,007	10,128
203.44	4,728	7,645	203.96	5,012	10,178
203.45	4,734	7,693	203.97	5,018	10,228
203.46	4,739	7,740	203.98	5,023	10,278
203.47	4,745	7,787	203.99	5,029	10,328
203.48	4,750	7,835	204.00	5,034	10,379
203.49	4,756	7,882	204.01	5,040	10,429
203.50	4,761	7,930	204.02	5,045	10,479
203.51	4,766	7,978	204.03	5,051	10,530
203.52	4,772	8,025	204.04	5,057	10,580
203.53	4,777	8,073	204.05	5,063	10,631
203.54	4,783	8,121	204.06	5,068	10,682
203.55	4,788	8,169	204.07	5,074	10,732
203.56	4,794	8,217	204.08	5,080	10,783
203.57	4,799	8,265	204.09	5,086	10,834
203.58	4,805	8,313	204.10	5,091	10,885
203.59	4,810	8,361	204.11	5,097	10,936
203.60	4,816	8,409	204.12	5,103	10,987
203.61	4,821	8,457	204.13	5,109	11,038
203.62	4,827	8,505	204.14	5,114	11,089
203.63	4,832	8,553	204.15	5,120	11,140
203.64	4,837	8,602	204.16	5,126	11,191
203.65	4,843	8,650	204.17	5,132	11,243
203.66	4,848	8,699	204.18	5,137	11,294
203.67	4,854	8,747	204.19	5,143	11,345
203.68	4,859	8,796	204.20	5,149	11,397
203.69	4,865	8,844	204.21	5,155	11,448
203.70	4,870	8,893	204.22	5,160	11,500
203.71	4,876	8,942	204.23	5,166	11,552
203.72	4,881	8,991	204.24	5,172	11,603
203.73	4,887	9,039	204.25	5,178	11,655
203.74	4,892	9,088	204.26	5,183	11,707
203.75	4,898	9,137	204.27	5,189	11,759
203.76	4,903	9,186	204.28	5,195	11,811
203.77	4,908	9,235	204.29	5,200	11,863
203.78	4,914	9,284	204.30	5,206	11,915
203.79	4,919	9,334	204.31	5,212	11,967
203.80	4,925	9,383	204.32	5,218	12,019
203.81	4,930	9,432	204.33	5,223	12,071
203.82	4,936	9,481	204.34	5,229	12,123
203.83	4,941	9,531	204.35	5,235	12,176
203.84	4,947	9,580	204.36	5,241	12,228
203.85	4,952	9,630	204.37	5,246	12,281
203.86	4,958	9,679	204.38	5,252	12,333
203.87	4,963	9,729	204.39	5,258	12,386
203.88	4,968	9,779	204.40	5,264	12,438
203.89	4,974	9,828	204.41	5,269	12,491

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	5,275	12,544
204.43	5,281	12,596
204.44	5,287	12,649
204.45	5,292	12,702
204.46	5,298	12,755
204.47	5,304	12,808
204.48	5,310	12,861
204.49	5,315	12,914
204.50	5,321	12,967
204.51	5,327	13,021
204.52	5,332	13,074
204.53	5,338	13,127
204.54	5,344	13,181
204.55	5,350	13,234
204.56	5,355	13,288
204.57	5,361	13,341
204.58	5,367	13,395
204.59	5,373	13,449
204.60	5,378	13,502
204.61	5,384	13,556
204.62	5,390	13,610
204.63	5,396	13,664
204.64	5,401	13,718
204.65	5,407	13,772
204.66	5,413	13,826
204.67	5,419	13,880
204.68	5,424	13,934
204.69	5,430	13,989
204.70	5,436	14,043
204.71	5,442	14,097
204.72	5,447	14,152
204.73	5,453	14,206
204.74	5,459	14,261
204.75	5,465	14,316
204.76	5,470	14,370
204.77	5,476	14,425
204.78	5,482	14,480
204.79	5,487	14,535
204.80	5,493	14,590
204.81	5,499	14,644
204.82	5,505	14,700
204.83	5,510	14,755
204.84	5,516	14,810
204.85	5,522	14,865
204.86	5,528	14,920
204.87	5,533	14,975
204.88	5,539	15,031
204.89	5,545	15,086
204.90	5,551	15,142
204.91	5,556	15,197
204.92	5,562	15,253
204.93	5,568	15,308
204.94	5,574	15,364
204.95	5,579	15,420
204.96	5,585	15,476
204.97	5,591	15,532
204.98	5,597	15,588
204.99	5,602	15,644
205.00	**5,608**	**15,700**

Summary for Pond B-58: Basin #58

Inflow Area = 1.649 ac, 26.80% Impervious, Inflow Depth = 2.06" for Future 2 yr event
Inflow = 3.49 cfs @ 12.18 hrs, Volume= 0.283 af
Outflow = 0.15 cfs @ 14.97 hrs, Volume= 0.224 af, Atten= 96%, Lag= 167.6 min
Primary = 0.15 cfs @ 14.97 hrs, Volume= 0.224 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 199.91' @ 14.97 hrs Surf.Area= 6,869 sf Storage= 8,147 cf

Plug-Flow detention time= 623.4 min calculated for 0.224 af (79% of inflow)
Center-of-Mass det. time= 536.6 min (1,347.3 - 810.8)

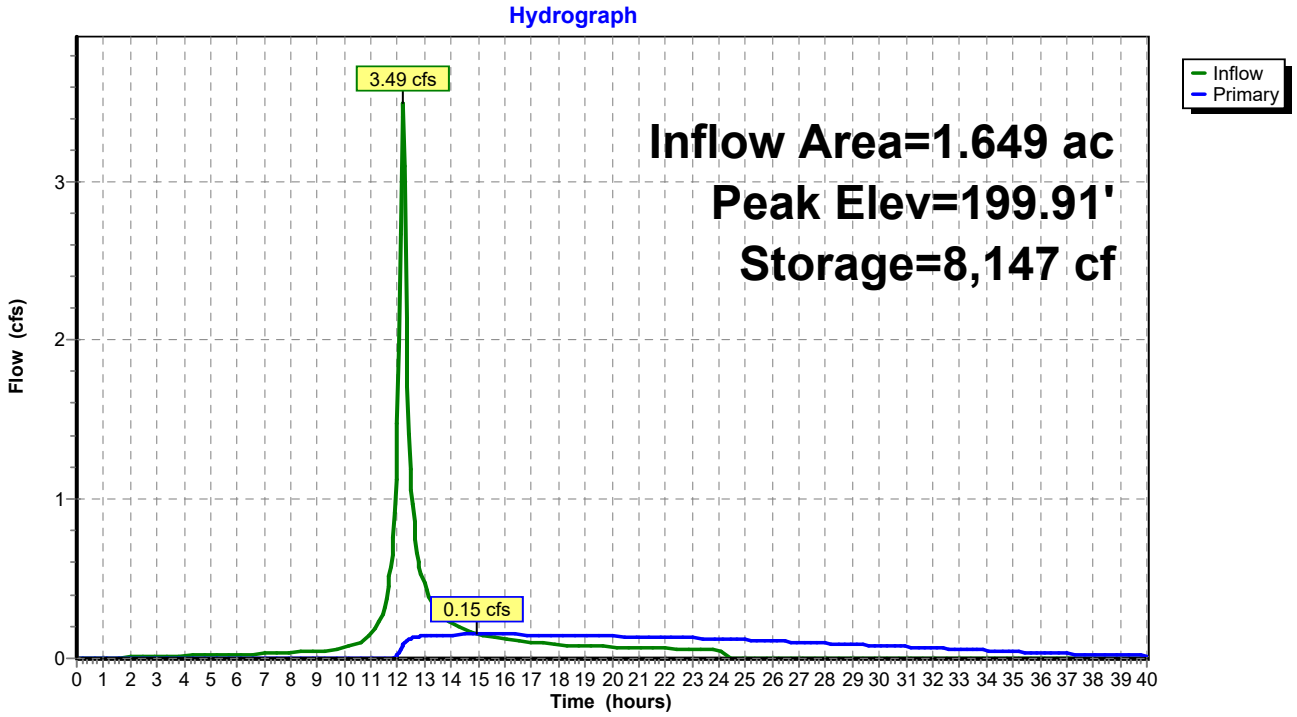
Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	**18.0" Round Culvert** L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	198.97'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	199.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	201.90'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.15 cfs @ 14.97 hrs HW=199.91' (Free Discharge)
- **1=Culvert** (Passes 0.15 cfs of 6.96 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.15 cfs @ 4.40 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.10 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-58: Basin #58



Stage-Discharge for Pond B-58: Basin #58

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
198.30	0.00	198.82	0.00	199.34	0.08	199.86	0.15
198.31	0.00	198.83	0.00	199.35	0.09	199.87	0.15
198.32	0.00	198.84	0.00	199.36	0.09	199.88	0.15
198.33	0.00	198.85	0.00	199.37	0.09	199.89	0.15
198.34	0.00	198.86	0.00	199.38	0.09	199.90	0.15
198.35	0.00	198.87	0.00	199.39	0.09	199.91	0.15
198.36	0.00	198.88	0.00	199.40	0.09	199.92	0.16
198.37	0.00	198.89	0.00	199.41	0.10	199.93	0.19
198.38	0.00	198.90	0.00	199.42	0.10	199.94	0.22
198.39	0.00	198.91	0.00	199.43	0.10	199.95	0.26
198.40	0.00	198.92	0.00	199.44	0.10	199.96	0.30
198.41	0.00	198.93	0.00	199.45	0.10	199.97	0.35
198.42	0.00	198.94	0.00	199.46	0.10	199.98	0.40
198.43	0.00	198.95	0.00	199.47	0.10	199.99	0.45
198.44	0.00	198.96	0.00	199.48	0.10	200.00	0.51
198.45	0.00	198.97	0.00	199.49	0.11	200.01	0.57
198.46	0.00	198.98	0.00	199.50	0.11	200.02	0.63
198.47	0.00	198.99	0.00	199.51	0.11	200.03	0.70
198.48	0.00	199.00	0.00	199.52	0.11	200.04	0.77
198.49	0.00	199.01	0.00	199.53	0.11	200.05	0.84
198.50	0.00	199.02	0.00	199.54	0.11	200.06	0.92
198.51	0.00	199.03	0.01	199.55	0.11	200.07	0.99
198.52	0.00	199.04	0.01	199.56	0.11	200.08	1.07
198.53	0.00	199.05	0.01	199.57	0.12	200.09	1.16
198.54	0.00	199.06	0.01	199.58	0.12	200.10	1.24
198.55	0.00	199.07	0.02	199.59	0.12	200.11	1.33
198.56	0.00	199.08	0.02	199.60	0.12	200.12	1.41
198.57	0.00	199.09	0.02	199.61	0.12	200.13	1.50
198.58	0.00	199.10	0.03	199.62	0.12	200.14	1.60
198.59	0.00	199.11	0.03	199.63	0.12	200.15	1.69
198.60	0.00	199.12	0.03	199.64	0.12	200.16	1.79
198.61	0.00	199.13	0.04	199.65	0.12	200.17	1.88
198.62	0.00	199.14	0.04	199.66	0.13	200.18	1.98
198.63	0.00	199.15	0.05	199.67	0.13	200.19	2.08
198.64	0.00	199.16	0.05	199.68	0.13	200.20	2.19
198.65	0.00	199.17	0.05	199.69	0.13	200.21	2.29
198.66	0.00	199.18	0.05	199.70	0.13	200.22	2.40
198.67	0.00	199.19	0.06	199.71	0.13	200.23	2.51
198.68	0.00	199.20	0.06	199.72	0.13	200.24	2.62
198.69	0.00	199.21	0.06	199.73	0.13	200.25	2.73
198.70	0.00	199.22	0.06	199.74	0.13	200.26	2.84
198.71	0.00	199.23	0.06	199.75	0.13	200.27	2.95
198.72	0.00	199.24	0.07	199.76	0.14	200.28	3.07
198.73	0.00	199.25	0.07	199.77	0.14	200.29	3.19
198.74	0.00	199.26	0.07	199.78	0.14	200.30	3.31
198.75	0.00	199.27	0.07	199.79	0.14	200.31	3.43
198.76	0.00	199.28	0.07	199.80	0.14	200.32	3.55
198.77	0.00	199.29	0.08	199.81	0.14	200.33	3.67
198.78	0.00	199.30	0.08	199.82	0.14	200.34	3.79
198.79	0.00	199.31	0.08	199.83	0.14	200.35	3.92
198.80	0.00	199.32	0.08	199.84	0.14	200.36	4.05
198.81	0.00	199.33	0.08	199.85	0.14	200.37	4.17

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.38	4.30	200.90	10.88	201.42	12.74	201.94	15.30
200.39	4.43	200.91	10.92	201.43	12.78	201.95	15.71
200.40	4.57	200.92	10.96	201.44	12.81	201.96	16.15
200.41	4.70	200.93	11.00	201.45	12.84	201.97	16.63
200.42	4.83	200.94	11.04	201.46	12.88	201.98	17.14
200.43	4.97	200.95	11.07	201.47	12.91	201.99	17.68
200.44	5.10	200.96	11.11	201.48	12.94	202.00	18.26
200.45	5.24	200.97	11.15	201.49	12.97	202.01	18.86
200.46	5.38	200.98	11.19	201.50	13.01	202.02	19.49
200.47	5.52	200.99	11.23	201.51	13.04	202.03	20.15
200.48	5.66	201.00	11.26	201.52	13.07	202.04	20.83
200.49	5.81	201.01	11.30	201.53	13.10	202.05	21.53
200.50	5.95	201.02	11.34	201.54	13.14	202.06	22.26
200.51	6.09	201.03	11.38	201.55	13.17	202.07	23.01
200.52	6.24	201.04	11.41	201.56	13.20	202.08	23.78
200.53	6.39	201.05	11.45	201.57	13.23	202.09	24.58
200.54	6.53	201.06	11.49	201.58	13.26	202.10	25.39
200.55	6.68	201.07	11.52	201.59	13.30	202.11	26.27
200.56	6.83	201.08	11.56	201.60	13.33	202.12	27.17
200.57	6.98	201.09	11.60	201.61	13.36	202.13	28.10
200.58	7.13	201.10	11.63	201.62	13.39	202.14	29.05
200.59	7.29	201.11	11.67	201.63	13.42	202.15	30.02
200.60	7.44	201.12	11.71	201.64	13.45	202.16	31.03
200.61	7.60	201.13	11.74	201.65	13.48	202.17	32.05
200.62	7.75	201.14	11.78	201.66	13.52	202.18	33.10
200.63	7.91	201.15	11.81	201.67	13.55	202.19	34.17
200.64	8.07	201.16	11.85	201.68	13.58	202.20	35.27
200.65	8.22	201.17	11.88	201.69	13.61	202.21	36.39
200.66	8.38	201.18	11.92	201.70	13.64	202.22	37.54
200.67	8.54	201.19	11.96	201.71	13.67	202.23	38.71
200.68	8.71	201.20	11.99	201.72	13.70	202.24	39.90
200.69	8.87	201.21	12.03	201.73	13.73	202.25	41.12
200.70	9.03	201.22	12.06	201.74	13.76	202.26	42.36
200.71	9.19	201.23	12.10	201.75	13.79	202.27	43.63
200.72	9.36	201.24	12.13	201.76	13.83	202.28	44.92
200.73	9.53	201.25	12.17	201.77	13.86	202.29	46.23
200.74	9.69	201.26	12.20	201.78	13.89	202.30	47.57
200.75	9.86	201.27	12.24	201.79	13.92	202.31	48.96
200.76	10.03	201.28	12.27	201.80	13.95	202.32	50.37
200.77	10.20	201.29	12.30	201.81	13.98	202.33	51.82
200.78	10.37	201.30	12.34	201.82	14.01	202.34	53.28
200.79	10.45	201.31	12.37	201.83	14.04	202.35	54.78
200.80	10.49	201.32	12.41	201.84	14.07	202.36	56.30
200.81	10.53	201.33	12.44	201.85	14.10	202.37	57.84
200.82	10.57	201.34	12.47	201.86	14.13	202.38	59.41
200.83	10.61	201.35	12.51	201.87	14.16	202.39	61.01
200.84	10.65	201.36	12.54	201.88	14.19	202.40	62.64
200.85	10.69	201.37	12.58	201.89	14.22	202.41	64.29
200.86	10.72	201.38	12.61	201.90	14.25	202.42	65.97
200.87	10.76	201.39	12.64	201.91	14.39	202.43	67.67
200.88	10.80	201.40	12.68	201.92	14.64	202.44	69.40
200.89	10.84	201.41	12.71	201.93	14.94	202.45	71.16

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)
202.46	72.95
202.47	74.76
202.48	76.60
202.49	78.46
202.50	80.35
202.51	82.00
202.52	83.67
202.53	85.34
202.54	87.03
202.55	88.74
202.56	90.45
202.57	92.18
202.58	93.93
202.59	95.68
202.60	97.45
202.61	99.23
202.62	101.02
202.63	102.83
202.64	104.65
202.65	106.48
202.66	108.32
202.67	110.18
202.68	112.05
202.69	113.93
202.70	115.82
202.71	117.76
202.72	119.72
202.73	121.69
202.74	123.67
202.75	125.66
202.76	127.67
202.77	129.69
202.78	131.72
202.79	133.77
202.80	135.83
202.81	137.90
202.82	139.99
202.83	142.09
202.84	144.20
202.85	146.32
202.86	148.46
202.87	150.61
202.88	152.77
202.89	154.94
202.90	157.13
202.91	159.27
202.92	161.43
202.93	163.60
202.94	165.77
202.95	167.96
202.96	170.16
202.97	172.37
202.98	174.59
202.99	176.82
203.00	**179.06**

Stage-Area-Storage for Pond B-58: Basin #58

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.30	0	0	198.82	4,628	1,203
198.31	89	0	198.83	4,717	1,250
198.32	178	2	198.84	4,806	1,298
198.33	267	4	198.85	4,895	1,346
198.34	356	7	198.86	4,984	1,396
198.35	445	11	198.87	5,073	1,446
198.36	534	16	198.88	5,162	1,497
198.37	623	22	198.89	5,251	1,549
198.38	712	28	198.90	5,340	1,602
198.39	801	36	198.91	5,429	1,656
198.40	890	44	198.92	5,518	1,711
198.41	979	54	198.93	5,607	1,766
198.42	1,068	64	198.94	5,696	1,823
198.43	1,157	75	198.95	5,785	1,880
198.44	1,246	87	198.96	5,874	1,938
198.45	1,335	100	198.97	5,963	1,998
198.46	1,424	114	198.98	6,052	2,058
198.47	1,513	129	198.99	6,141	2,119
198.48	1,602	144	199.00	6,230	2,180
198.49	1,691	161	199.01	6,237	2,243
198.50	1,780	178	199.02	6,244	2,305
198.51	1,869	196	199.03	6,251	2,368
198.52	1,958	215	199.04	6,258	2,430
198.53	2,047	235	199.05	6,265	2,493
198.54	2,136	256	199.06	6,272	2,556
198.55	2,225	278	199.07	6,279	2,618
198.56	2,314	301	199.08	6,286	2,681
198.57	2,403	324	199.09	6,293	2,744
198.58	2,492	349	199.10	6,300	2,807
198.59	2,581	374	199.11	6,307	2,870
198.60	2,670	401	199.12	6,314	2,933
198.61	2,759	428	199.13	6,321	2,996
198.62	2,848	456	199.14	6,328	3,060
198.63	2,937	485	199.15	6,335	3,123
198.64	3,026	514	199.16	6,342	3,186
198.65	3,115	545	199.17	6,349	3,250
198.66	3,204	577	199.18	6,356	3,313
198.67	3,293	609	199.19	6,363	3,377
198.68	3,382	643	199.20	6,370	3,441
198.69	3,471	677	199.21	6,377	3,504
198.70	3,560	712	199.22	6,384	3,568
198.71	3,649	748	199.23	6,391	3,632
198.72	3,738	785	199.24	6,398	3,696
198.73	3,827	823	199.25	6,406	3,760
198.74	3,916	862	199.26	6,413	3,824
198.75	4,005	901	199.27	6,420	3,888
198.76	4,094	942	199.28	6,427	3,952
198.77	4,183	983	199.29	6,434	4,017
198.78	4,272	1,025	199.30	6,441	4,081
198.79	4,361	1,068	199.31	6,448	4,146
198.80	4,450	1,113	199.32	6,455	4,210
198.81	4,539	1,157	199.33	6,462	4,275

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.34	6,469	4,339	199.86	6,834	7,798
199.35	6,476	4,404	199.87	6,841	7,866
199.36	6,483	4,469	199.88	6,848	7,935
199.37	6,490	4,534	199.89	6,855	8,003
199.38	6,497	4,599	199.90	6,862	8,072
199.39	6,504	4,664	199.91	6,869	8,140
199.40	6,511	4,729	199.92	6,876	8,209
199.41	6,518	4,794	199.93	6,883	8,278
199.42	6,525	4,859	199.94	6,890	8,347
199.43	6,532	4,924	199.95	6,897	8,416
199.44	6,539	4,990	199.96	6,904	8,485
199.45	6,546	5,055	199.97	6,911	8,554
199.46	6,553	5,121	199.98	6,918	8,623
199.47	6,560	5,186	199.99	6,925	8,692
199.48	6,567	5,252	200.00	6,932	8,761
199.49	6,574	5,317	200.01	6,939	8,831
199.50	6,581	5,383	200.02	6,947	8,900
199.51	6,588	5,449	200.03	6,954	8,970
199.52	6,595	5,515	200.04	6,962	9,039
199.53	6,602	5,581	200.05	6,969	9,109
199.54	6,609	5,647	200.06	6,976	9,179
199.55	6,616	5,713	200.07	6,984	9,249
199.56	6,623	5,779	200.08	6,991	9,318
199.57	6,630	5,846	200.09	6,998	9,388
199.58	6,637	5,912	200.10	7,006	9,458
199.59	6,644	5,978	200.11	7,013	9,528
199.60	6,651	6,045	200.12	7,021	9,599
199.61	6,658	6,111	200.13	7,028	9,669
199.62	6,665	6,178	200.14	7,035	9,739
199.63	6,672	6,245	200.15	7,043	9,810
199.64	6,679	6,311	200.16	7,050	9,880
199.65	6,686	6,378	200.17	7,057	9,951
199.66	6,693	6,445	200.18	7,065	10,021
199.67	6,700	6,512	200.19	7,072	10,092
199.68	6,707	6,579	200.20	7,080	10,163
199.69	6,714	6,646	200.21	7,087	10,233
199.70	6,721	6,713	200.22	7,094	10,304
199.71	6,728	6,781	200.23	7,102	10,375
199.72	6,735	6,848	200.24	7,109	10,446
199.73	6,742	6,915	200.25	7,117	10,518
199.74	6,749	6,983	200.26	7,124	10,589
199.75	6,757	7,050	200.27	7,131	10,660
199.76	6,764	7,118	200.28	7,139	10,731
199.77	6,771	7,186	200.29	7,146	10,803
199.78	6,778	7,253	200.30	7,153	10,874
199.79	6,785	7,321	200.31	7,161	10,946
199.80	6,792	7,389	200.32	7,168	11,018
199.81	6,799	7,457	200.33	7,176	11,089
199.82	6,806	7,525	200.34	7,183	11,161
199.83	6,813	7,593	200.35	7,190	11,233
199.84	6,820	7,661	200.36	7,198	11,305
199.85	6,827	7,730	200.37	7,205	11,377

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.38	7,212	11,449	200.90	7,596	15,299
200.39	7,220	11,521	200.91	7,604	15,375
200.40	7,227	11,593	200.92	7,611	15,451
200.41	7,235	11,666	200.93	7,618	15,527
200.42	7,242	11,738	200.94	7,626	15,604
200.43	7,249	11,810	200.95	7,633	15,680
200.44	7,257	11,883	200.96	7,640	15,756
200.45	7,264	11,956	200.97	7,648	15,833
200.46	7,271	12,028	200.98	7,655	15,909
200.47	7,279	12,101	200.99	7,663	15,986
200.48	7,286	12,174	201.00	7,670	16,062
200.49	7,294	12,247	201.01	7,678	16,139
200.50	7,301	12,320	201.02	7,685	16,216
200.51	7,308	12,393	201.03	7,693	16,293
200.52	7,316	12,466	201.04	7,700	16,370
200.53	7,323	12,539	201.05	7,708	16,447
200.54	7,331	12,612	201.06	7,715	16,524
200.55	7,338	12,686	201.07	7,723	16,601
200.56	7,345	12,759	201.08	7,730	16,679
200.57	7,353	12,833	201.09	7,738	16,756
200.58	7,360	12,906	201.10	7,746	16,833
200.59	7,367	12,980	201.11	7,753	16,911
200.60	7,375	13,054	201.12	7,761	16,988
200.61	7,382	13,127	201.13	7,768	17,066
200.62	7,390	13,201	201.14	7,776	17,144
200.63	7,397	13,275	201.15	7,783	17,222
200.64	7,404	13,349	201.16	7,791	17,299
200.65	7,412	13,423	201.17	7,799	17,377
200.66	7,419	13,497	201.18	7,806	17,455
200.67	7,426	13,572	201.19	7,814	17,533
200.68	7,434	13,646	201.20	7,821	17,612
200.69	7,441	13,720	201.21	7,829	17,690
200.70	7,449	13,795	201.22	7,836	17,768
200.71	7,456	13,869	201.23	7,844	17,847
200.72	7,463	13,944	201.24	7,851	17,925
200.73	7,471	14,019	201.25	7,859	18,004
200.74	7,478	14,093	201.26	7,867	18,082
200.75	7,486	14,168	201.27	7,874	18,161
200.76	7,493	14,243	201.28	7,882	18,240
200.77	7,500	14,318	201.29	7,889	18,319
200.78	7,508	14,393	201.30	7,897	18,398
200.79	7,515	14,468	201.31	7,904	18,477
200.80	7,522	14,543	201.32	7,912	18,556
200.81	7,530	14,619	201.33	7,919	18,635
200.82	7,537	14,694	201.34	7,927	18,714
200.83	7,545	14,769	201.35	7,935	18,793
200.84	7,552	14,845	201.36	7,942	18,873
200.85	7,559	14,920	201.37	7,950	18,952
200.86	7,567	14,996	201.38	7,957	19,032
200.87	7,574	15,072	201.39	7,965	19,111
200.88	7,581	15,147	201.40	7,972	19,191
200.89	7,589	15,223	201.41	7,980	19,271

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.42	7,988	19,351	201.94	8,381	23,606
201.43	7,995	19,430	201.95	8,388	23,690
201.44	8,003	19,510	201.96	8,396	23,774
201.45	8,010	19,591	201.97	8,403	23,858
201.46	8,018	19,671	201.98	8,411	23,942
201.47	8,025	19,751	201.99	8,418	24,026
201.48	8,033	19,831	202.00	8,426	24,110
201.49	8,040	19,912	202.01	8,434	24,195
201.50	8,048	19,992	202.02	8,442	24,279
201.51	8,056	20,073	202.03	8,449	24,364
201.52	8,063	20,153	202.04	8,457	24,448
201.53	8,071	20,234	202.05	8,465	24,533
201.54	8,078	20,315	202.06	8,473	24,617
201.55	8,086	20,395	202.07	8,480	24,702
201.56	8,093	20,476	202.08	8,488	24,787
201.57	8,101	20,557	202.09	8,496	24,872
201.58	8,108	20,638	202.10	8,504	24,957
201.59	8,116	20,719	202.11	8,511	25,042
201.60	8,124	20,801	202.12	8,519	25,127
201.61	8,131	20,882	202.13	8,527	25,212
201.62	8,139	20,963	202.14	8,535	25,298
201.63	8,146	21,045	202.15	8,542	25,383
201.64	8,154	21,126	202.16	8,550	25,469
201.65	8,161	21,208	202.17	8,558	25,554
201.66	8,169	21,289	202.18	8,566	25,640
201.67	8,177	21,371	202.19	8,573	25,725
201.68	8,184	21,453	202.20	8,581	25,811
201.69	8,192	21,535	202.21	8,589	25,897
201.70	8,199	21,617	202.22	8,597	25,983
201.71	8,207	21,699	202.23	8,604	26,069
201.72	8,214	21,781	202.24	8,612	26,155
201.73	8,222	21,863	202.25	8,620	26,241
201.74	8,229	21,945	202.26	8,628	26,327
201.75	8,237	22,028	202.27	8,635	26,414
201.76	8,245	22,110	202.28	8,643	26,500
201.77	8,252	22,193	202.29	8,651	26,587
201.78	8,260	22,275	202.30	8,659	26,673
201.79	8,267	22,358	202.31	8,666	26,760
201.80	8,275	22,440	202.32	8,674	26,847
201.81	8,282	22,523	202.33	8,682	26,933
201.82	8,290	22,606	202.34	8,690	27,020
201.83	8,297	22,689	202.35	8,697	27,107
201.84	8,305	22,772	202.36	8,705	27,194
201.85	8,313	22,855	202.37	8,713	27,281
201.86	8,320	22,938	202.38	8,721	27,368
201.87	8,328	23,022	202.39	8,728	27,456
201.88	8,335	23,105	202.40	8,736	27,543
201.89	8,343	23,188	202.41	8,744	27,630
201.90	8,350	23,272	202.42	8,752	27,718
201.91	8,358	23,355	202.43	8,759	27,805
201.92	8,366	23,439	202.44	8,767	27,893
201.93	8,373	23,523	202.45	8,775	27,981

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

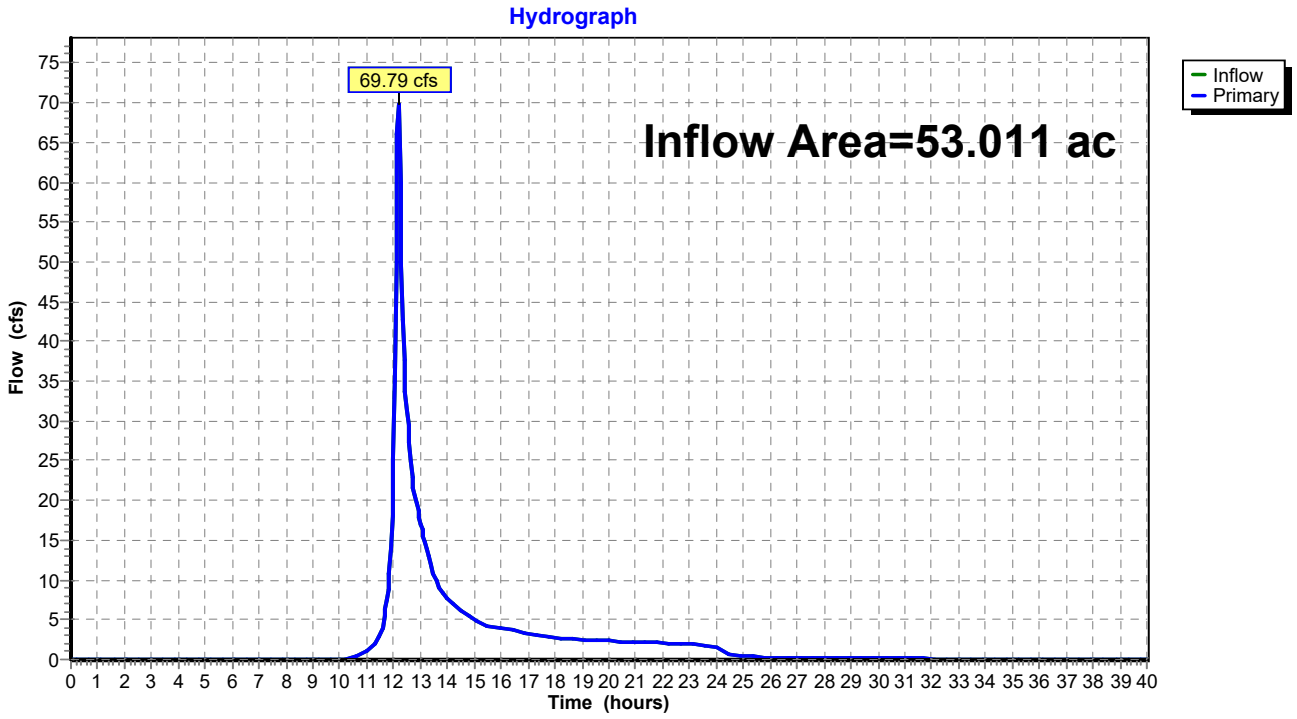
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.46	8,783	28,068
202.47	8,790	28,156
202.48	8,798	28,244
202.49	8,806	28,332
202.50	8,814	28,420
202.51	8,821	28,509
202.52	8,829	28,597
202.53	8,837	28,685
202.54	8,845	28,774
202.55	8,852	28,862
202.56	8,860	28,951
202.57	8,868	29,039
202.58	8,876	29,128
202.59	8,883	29,217
202.60	8,891	29,306
202.61	8,899	29,395
202.62	8,907	29,484
202.63	8,914	29,573
202.64	8,922	29,662
202.65	8,930	29,751
202.66	8,938	29,840
202.67	8,945	29,930
202.68	8,953	30,019
202.69	8,961	30,109
202.70	8,969	30,199
202.71	8,976	30,288
202.72	8,984	30,378
202.73	8,992	30,468
202.74	9,000	30,558
202.75	9,007	30,648
202.76	9,015	30,738
202.77	9,023	30,828
202.78	9,031	30,919
202.79	9,038	31,009
202.80	9,046	31,099
202.81	9,054	31,190
202.82	9,062	31,280
202.83	9,069	31,371
202.84	9,077	31,462
202.85	9,085	31,553
202.86	9,093	31,643
202.87	9,100	31,734
202.88	9,108	31,825
202.89	9,116	31,917
202.90	9,124	32,008
202.91	9,131	32,099
202.92	9,139	32,190
202.93	9,147	32,282
202.94	9,154	32,373
202.95	9,162	32,465
202.96	9,170	32,557
202.97	9,178	32,648
202.98	9,186	32,740
202.99	9,193	32,832
203.00	**9,201**	**32,924**

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 53.011 ac, 11.21% Impervious, Inflow Depth > 1.59" for Future 2 yr event
Inflow = 69.79 cfs @ 12.19 hrs, Volume= 7.036 af
Primary = 69.79 cfs @ 12.19 hrs, Volume= 7.036 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6



Summary for Subcatchment 51I: PDA-51 (impervious)

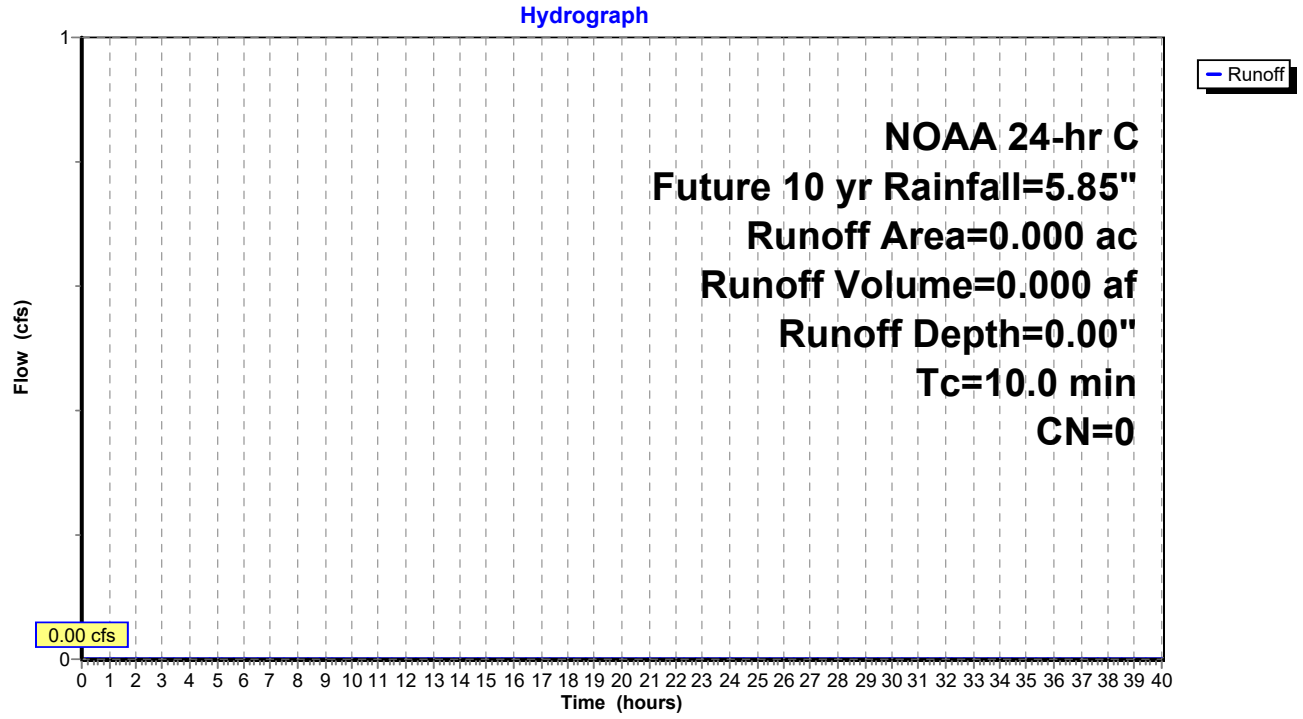
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.000	98	Roof, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 51I: PDA-51 (impervious)



Summary for Subcatchment 51P: PDA-51 (pervious)

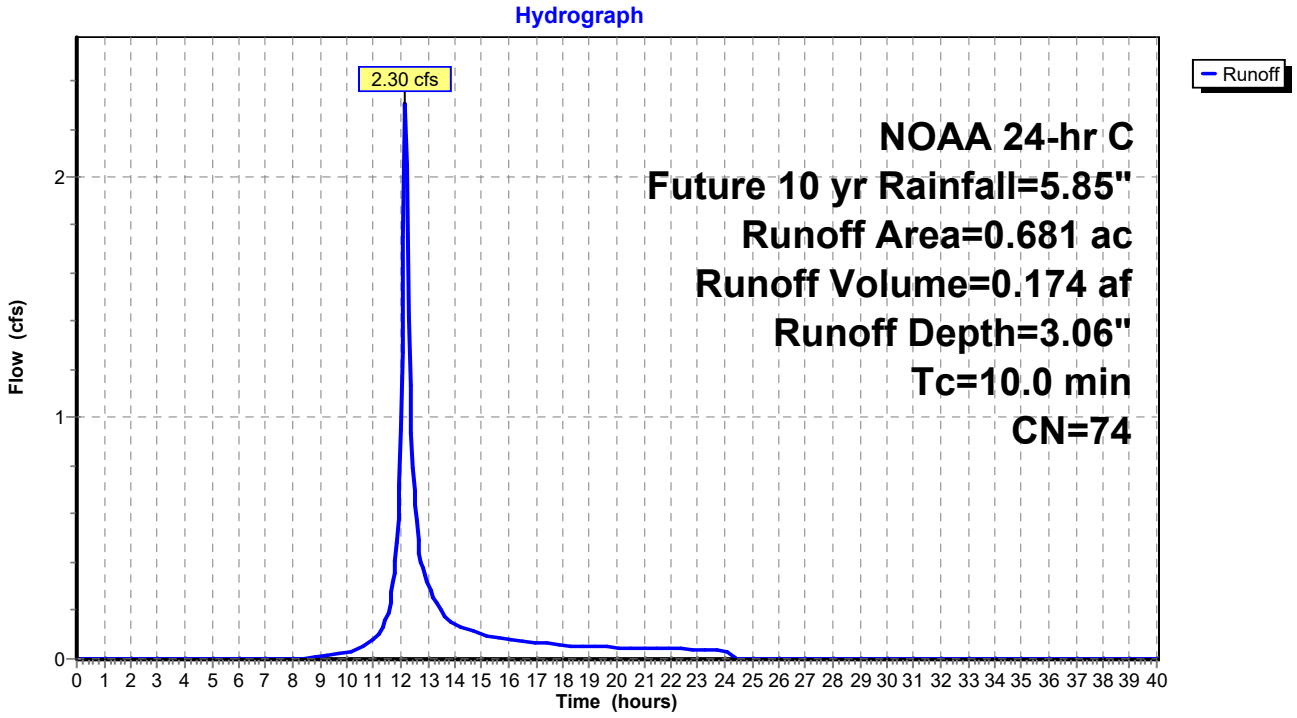
Runoff = 2.30 cfs @ 12.18 hrs, Volume= 0.174 af, Depth= 3.06"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.681	74	>75% Grass cover, Good, HSG C
0.681		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 51P: PDA-51 (pervious)



Summary for Subcatchment 52l: PDA-52 (impervious)

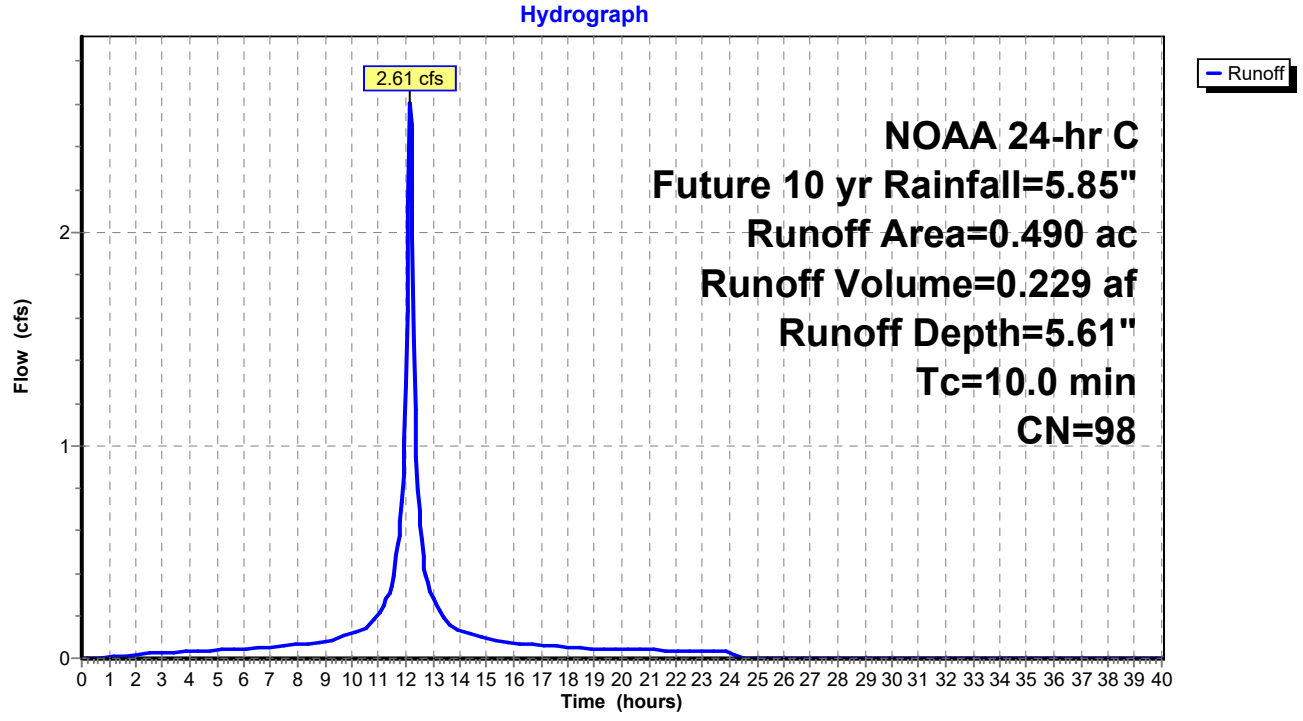
Runoff = 2.61 cfs @ 12.17 hrs, Volume= 0.229 af, Depth= 5.61"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.118	98	Pavement, HSG C
*	0.339	98	Roof, HSG C
*	0.033	98	Concrete, HSG C
	0.490	98	Weighted Average
	0.490		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 52l: PDA-52 (impervious)



Summary for Subcatchment 52P: PDA-52 (pervious)

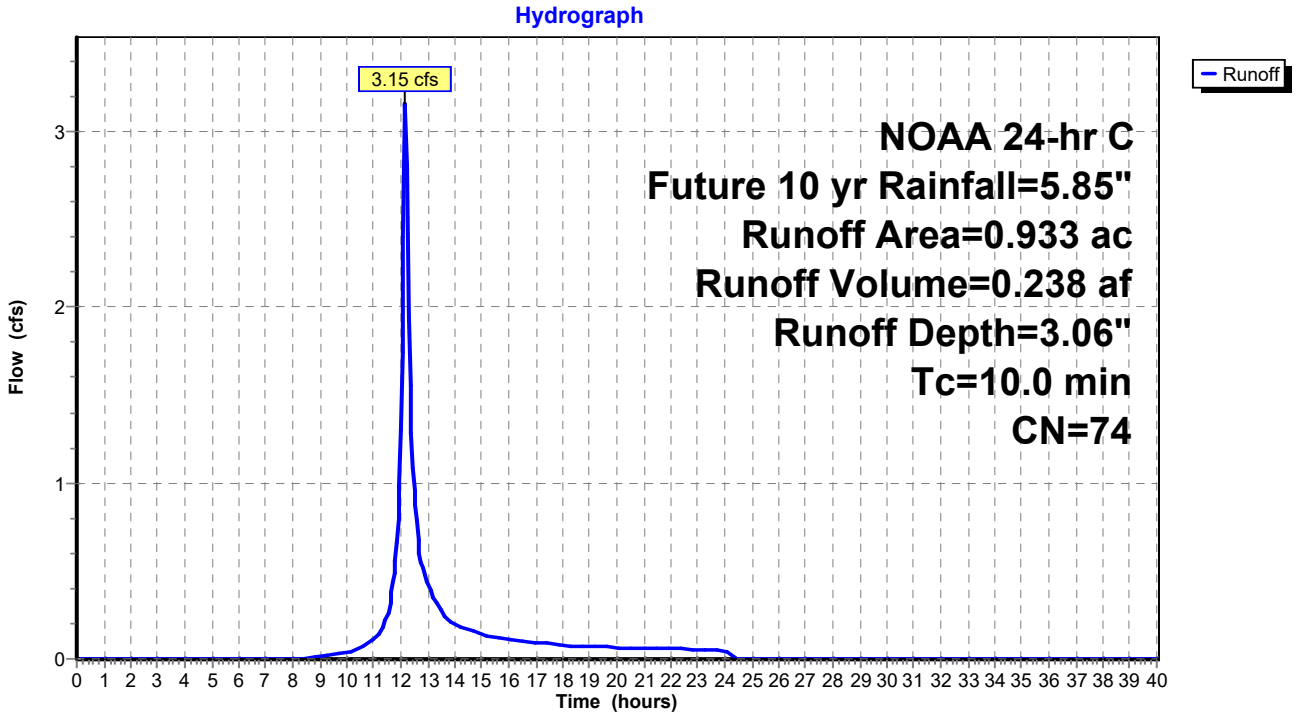
Runoff = 3.15 cfs @ 12.18 hrs, Volume= 0.238 af, Depth= 3.06"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.933	74	>75% Grass cover, Good, HSG C
0.933		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 52P: PDA-52 (pervious)



Summary for Subcatchment 53I: PDA-53 (impervious)

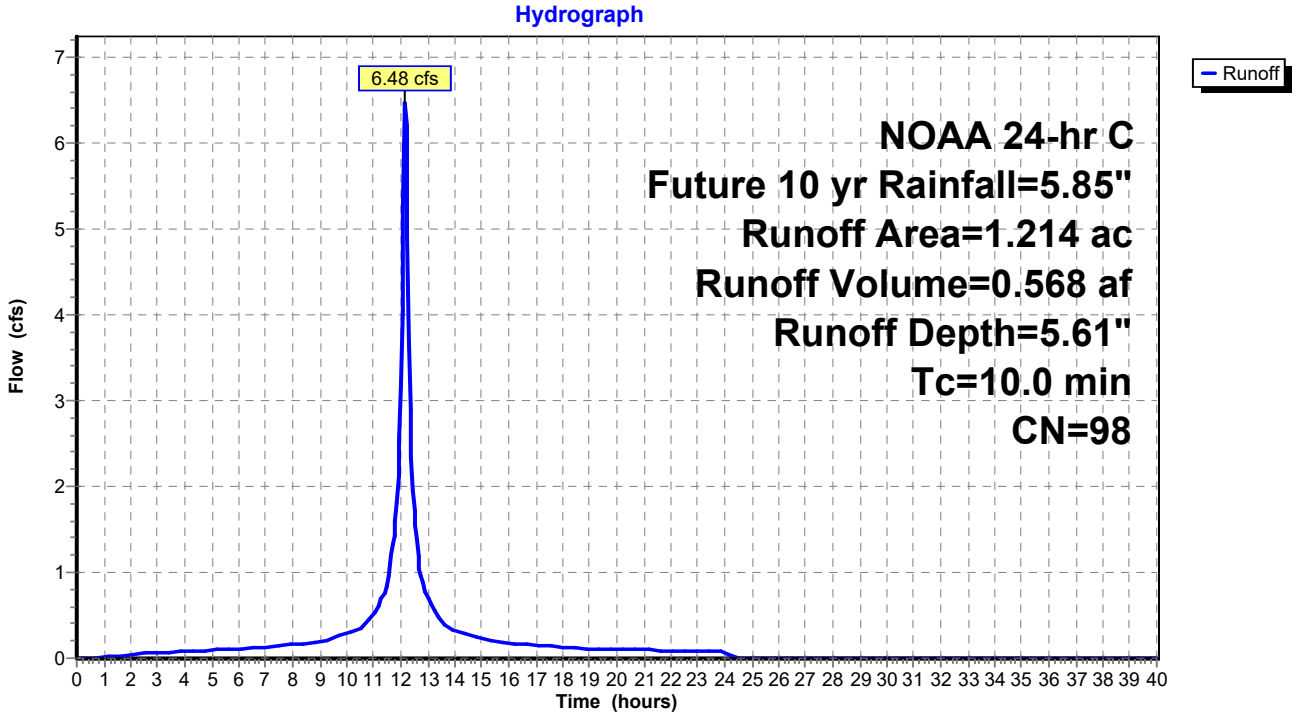
Runoff = 6.48 cfs @ 12.17 hrs, Volume= 0.568 af, Depth= 5.61"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.628	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	1.214	98	Weighted Average
	1.214		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 53I: PDA-53 (impervious)



Summary for Subcatchment 53P: PDA-53 (pervious)

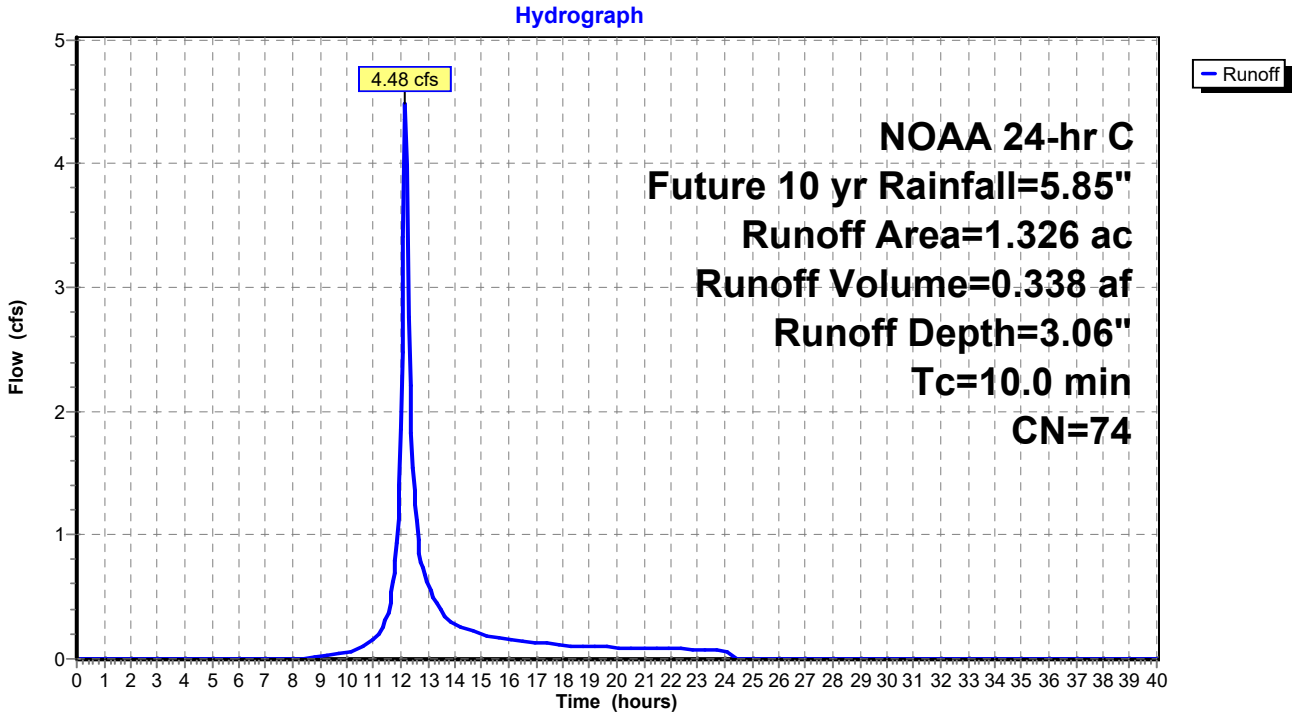
Runoff = 4.48 cfs @ 12.18 hrs, Volume= 0.338 af, Depth= 3.06"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.326	74	>75% Grass cover, Good, HSG C
1.326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 53P: PDA-53 (pervious)



Summary for Subcatchment 54l: PDA-54 (impervious)

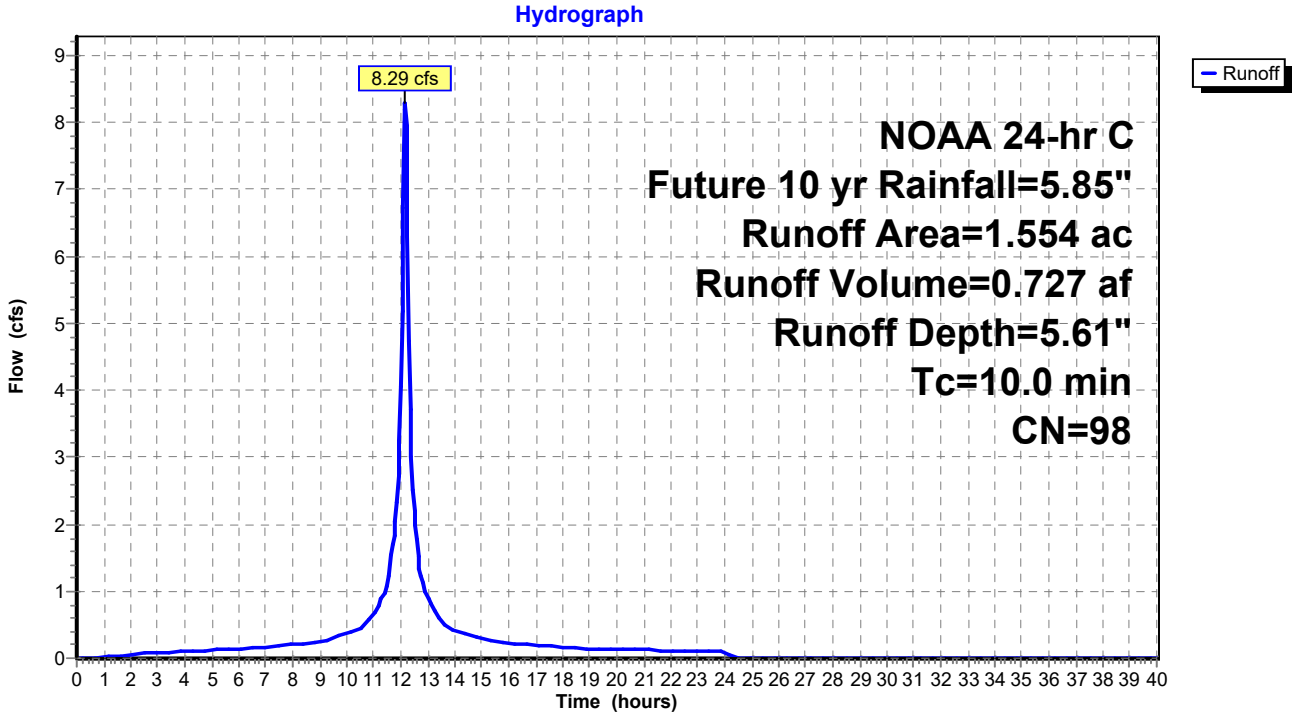
Runoff = 8.29 cfs @ 12.17 hrs, Volume= 0.727 af, Depth= 5.61"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.983	98	Pavement, HSG C
*	0.361	98	Roof, HSG C
*	0.210	98	Concrete, HSG C
	1.554	98	Weighted Average
	1.554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 54l: PDA-54 (impervious)



Summary for Subcatchment 54P: PDA-54 (pervious)

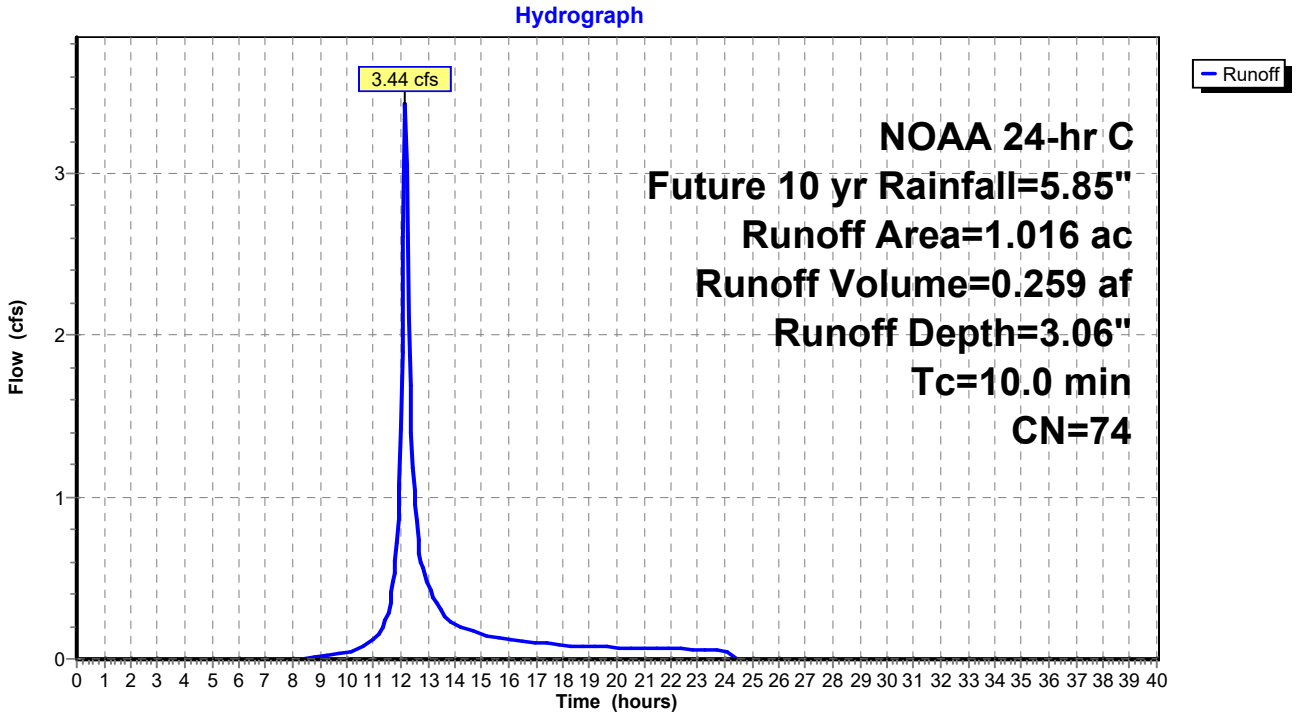
Runoff = 3.44 cfs @ 12.18 hrs, Volume= 0.259 af, Depth= 3.06"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.016	74	>75% Grass cover, Good, HSG C
1.016		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 54P: PDA-54 (pervious)



Summary for Subcatchment 55l: PDA-55 (impervious)

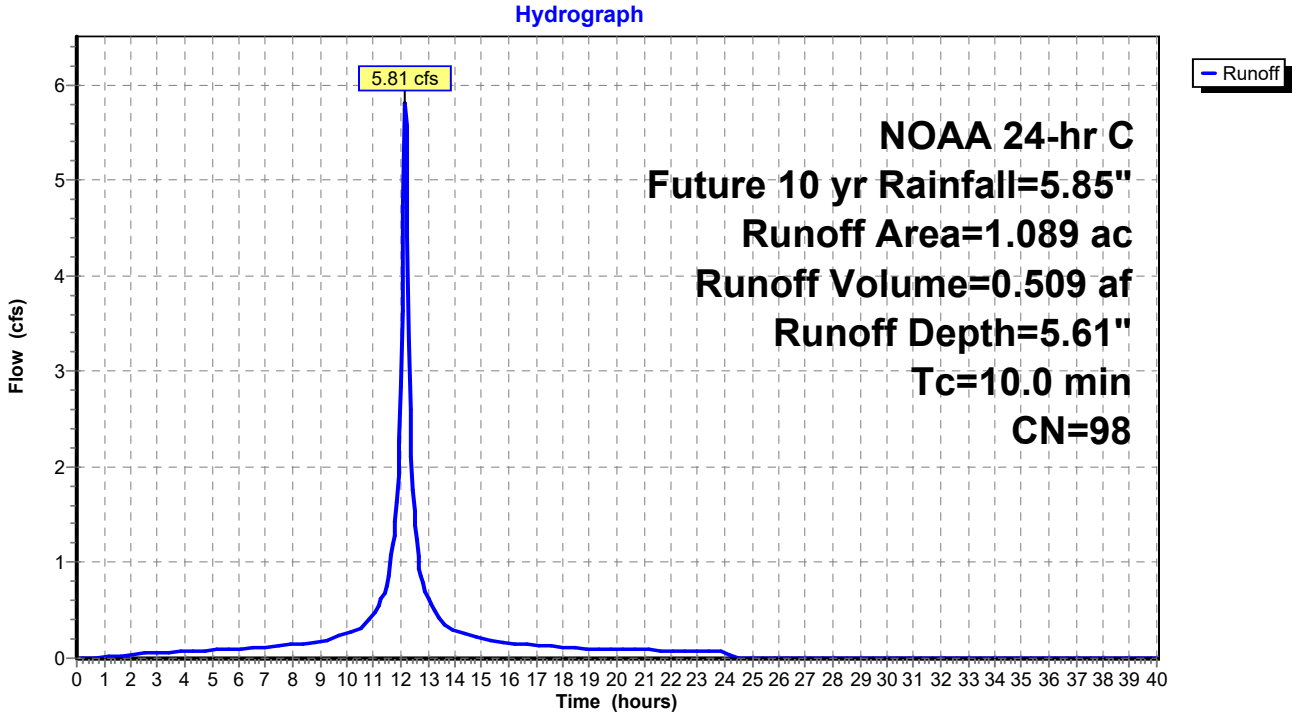
Runoff = 5.81 cfs @ 12.17 hrs, Volume= 0.509 af, Depth= 5.61"
Routed to Pond B-55 : Basin #55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.467	98	Pavement, HSG C
*	0.574	98	Roof, HSG C
*	0.048	98	Concrete, HSG C
	1.089	98	Weighted Average
	1.089		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 55l: PDA-55 (impervious)



Summary for Subcatchment 55P: PDA-55 (pervious)

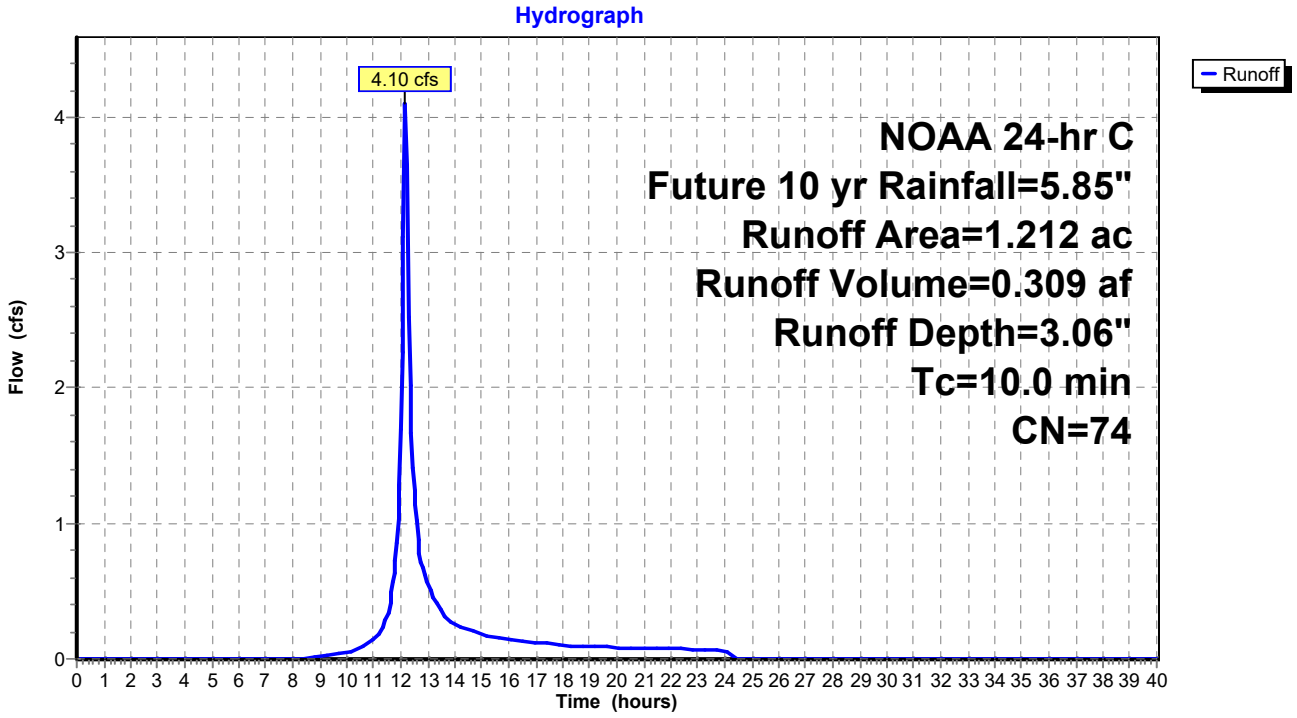
Runoff = 4.10 cfs @ 12.18 hrs, Volume= 0.309 af, Depth= 3.06"
Routed to Pond B-55 : Basin #55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.212	74	>75% Grass cover, Good, HSG C
1.212		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 55P: PDA-55 (pervious)



Summary for Subcatchment 56l: PDA-56 (impervious)

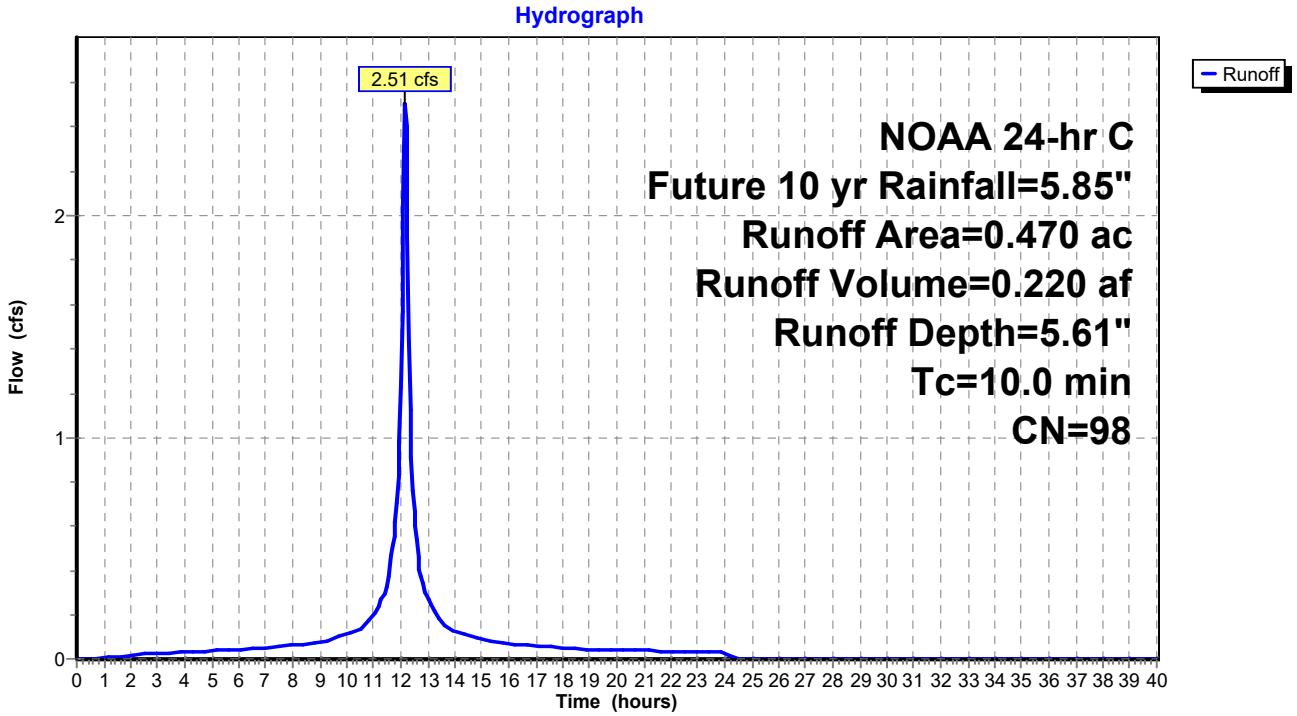
Runoff = 2.51 cfs @ 12.17 hrs, Volume= 0.220 af, Depth= 5.61"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.470	98	Roof, HSG C
	0.470		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 56l: PDA-56 (impervious)



Summary for Subcatchment 56P: PDA-56 (pervious)

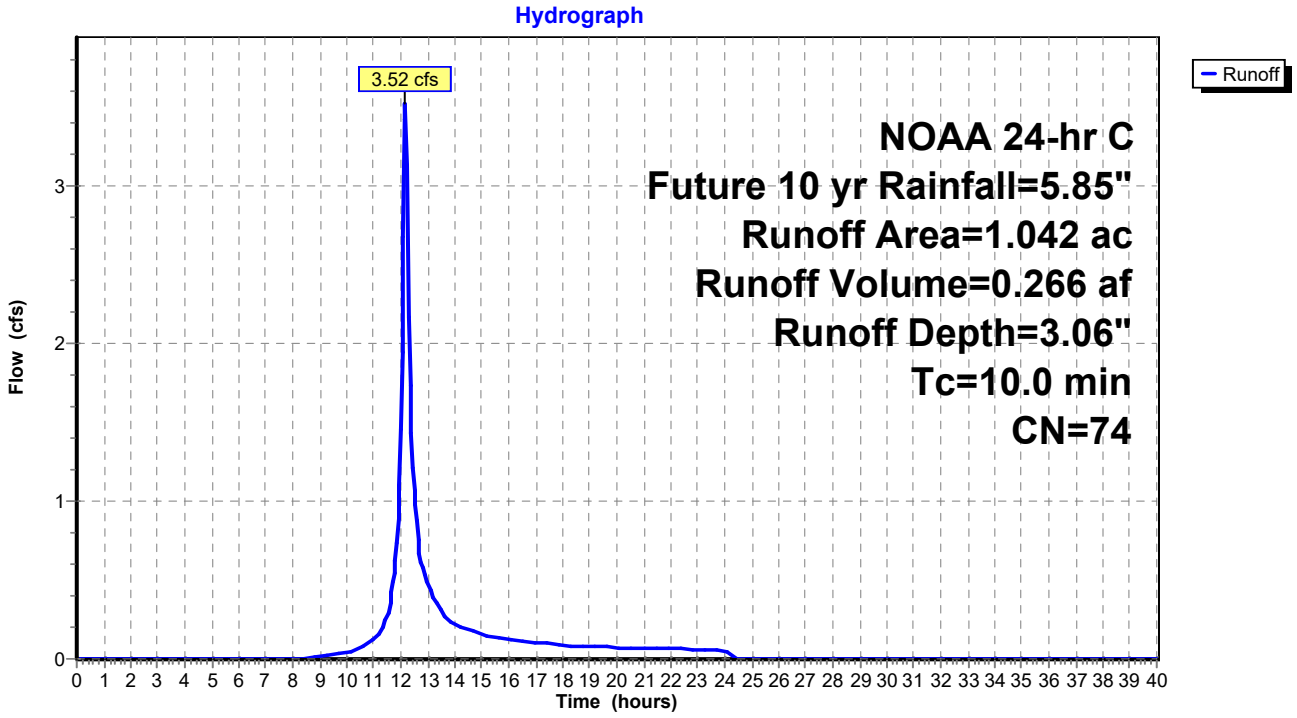
Runoff = 3.52 cfs @ 12.18 hrs, Volume= 0.266 af, Depth= 3.06"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.042	74	>75% Grass cover, Good, HSG C
1.042		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 56P: PDA-56 (pervious)



Summary for Subcatchment 57l: PDA-57 (impervious)

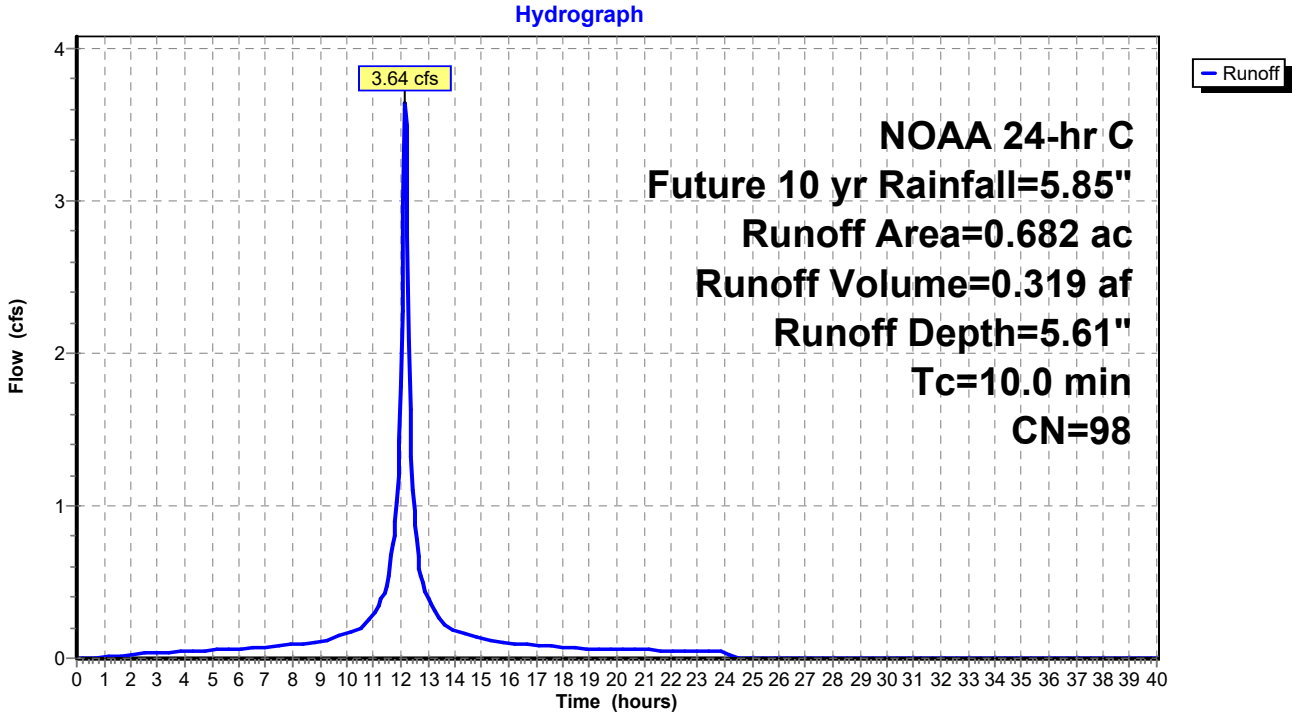
Runoff = 3.64 cfs @ 12.17 hrs, Volume= 0.319 af, Depth= 5.61"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.268	98	Pavement, HSG C
*	0.378	98	Roof, HSG C
*	0.036	98	Concrete, HSG C
	0.682	98	Weighted Average
	0.682		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 57l: PDA-57 (impervious)



Summary for Subcatchment 57P: PDA-57 (pervious)

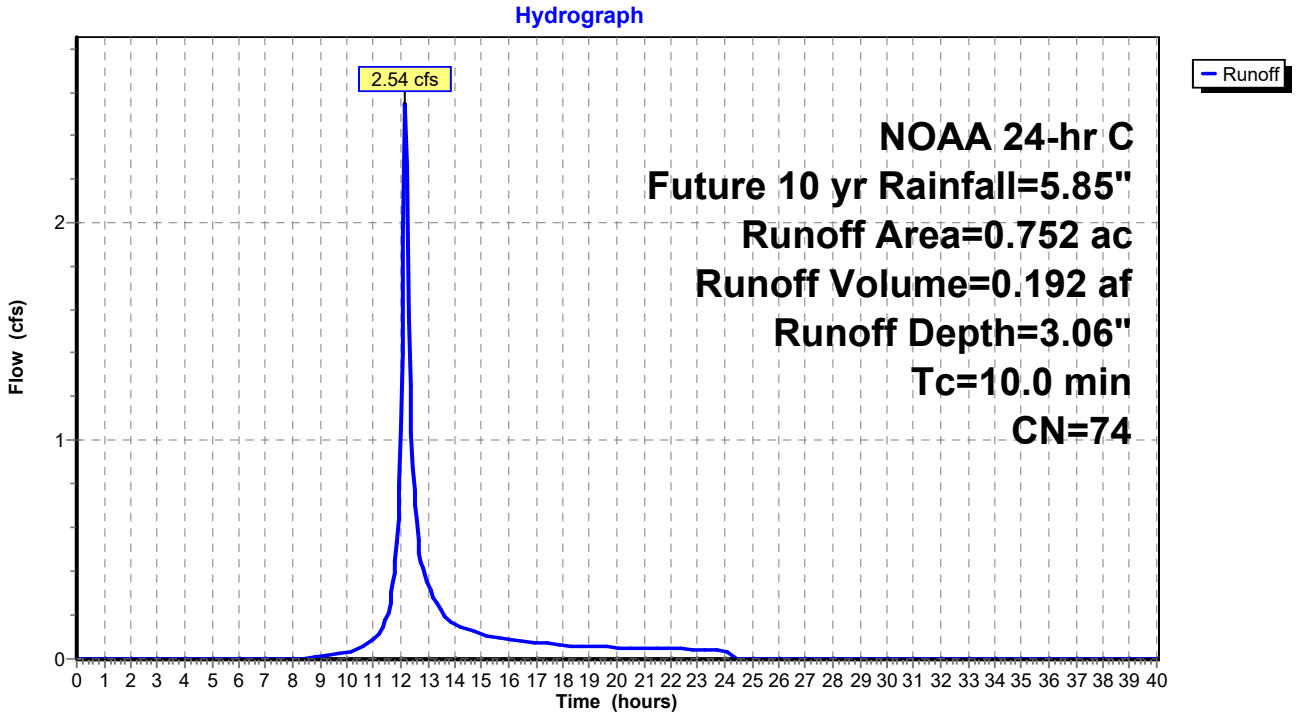
Runoff = 2.54 cfs @ 12.18 hrs, Volume= 0.192 af, Depth= 3.06"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
0.752	74	>75% Grass cover, Good, HSG C
0.752		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 57P: PDA-57 (pervious)



Summary for Subcatchment 58l: PDA-58 (impervious)

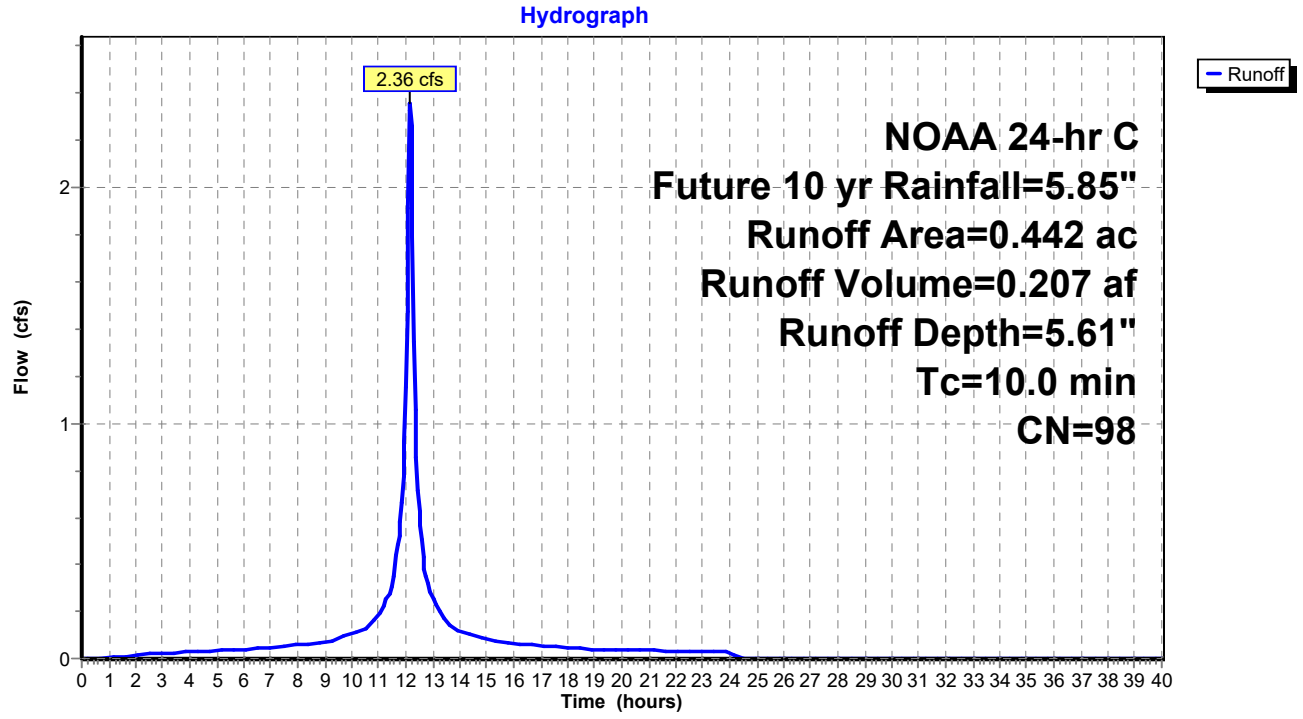
Runoff = 2.36 cfs @ 12.17 hrs, Volume= 0.207 af, Depth= 5.61"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

	Area (ac)	CN	Description
*	0.442	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.442	98	Weighted Average
	0.442		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 58l: PDA-58 (impervious)



Summary for Subcatchment 58P: PDA-58 (pervious)

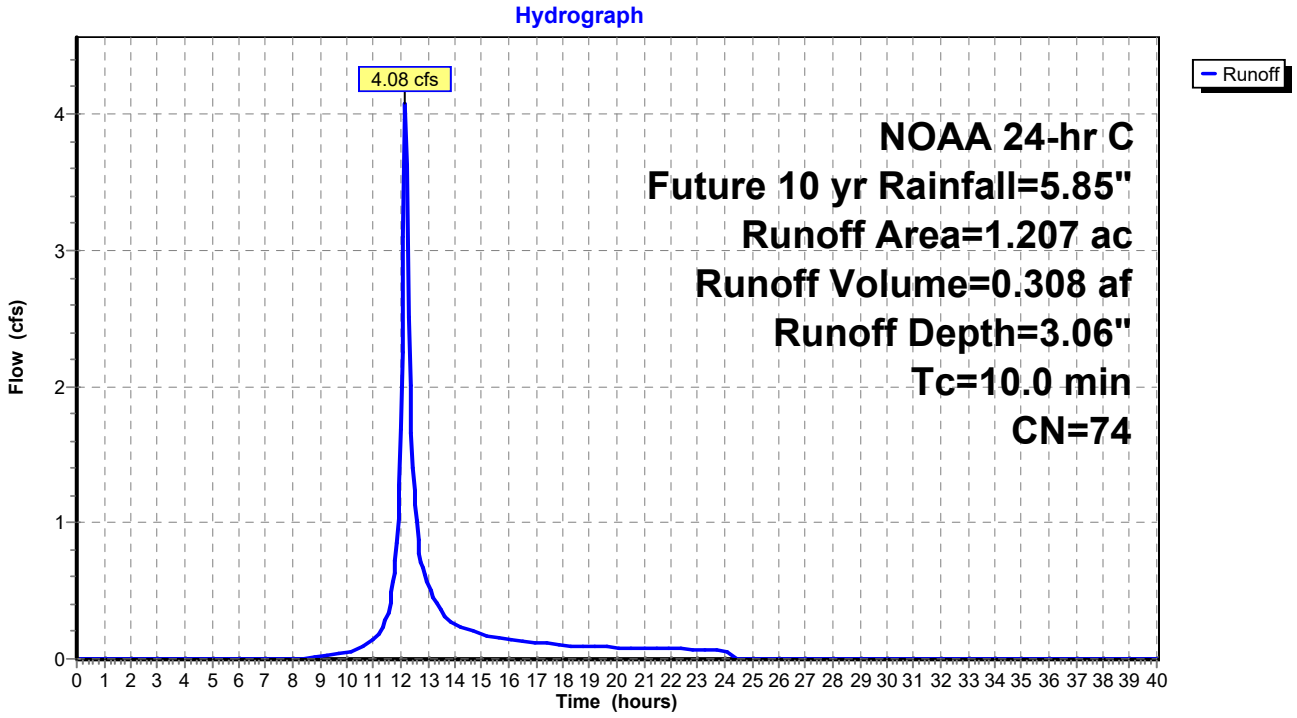
Runoff = 4.08 cfs @ 12.18 hrs, Volume= 0.308 af, Depth= 3.06"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
1.207	74	>75% Grass cover, Good, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 58P: PDA-58 (pervious)



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

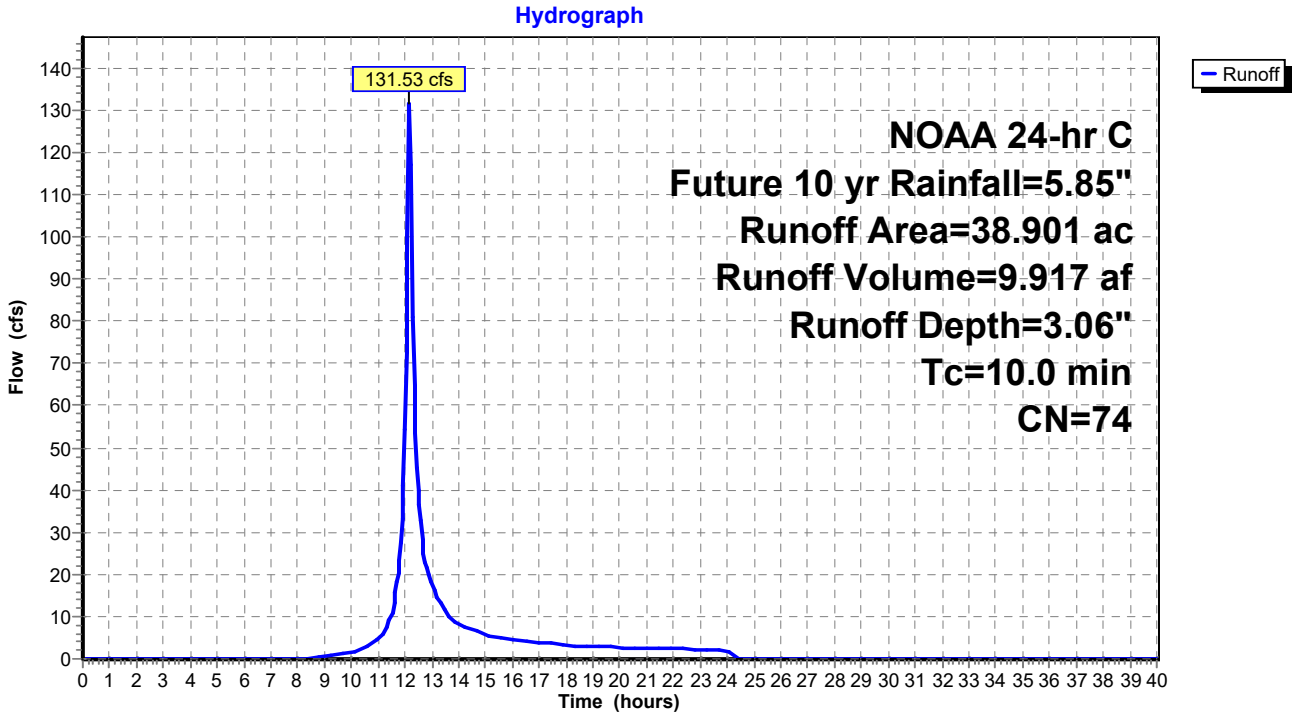
Runoff = 131.53 cfs @ 12.18 hrs, Volume= 9.917 af, Depth= 3.06"
Routed to Link PDA-6 : Proposed Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 10 yr Rainfall=5.85"

Area (ac)	CN	Description
38.901	74	>75% Grass cover, Good, HSG C
38.901		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-6: PDA-6 (undetained)



Summary for Pond B-51: Basin #51

Inflow Area = 5.917 ac, 34.63% Impervious, Inflow Depth = 3.54" for Future 10 yr event
Inflow = 17.51 cfs @ 12.25 hrs, Volume= 1.746 af
Outflow = 9.95 cfs @ 12.50 hrs, Volume= 1.740 af, Atten= 43%, Lag= 14.6 min
Primary = 9.95 cfs @ 12.50 hrs, Volume= 1.740 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 186.12' @ 12.50 hrs Surf.Area= 8,620 sf Storage= 14,564 cf

Plug-Flow detention time= 33.7 min calculated for 1.740 af (100% of inflow)
Center-of-Mass det. time= 31.0 min (882.7 - 851.7)

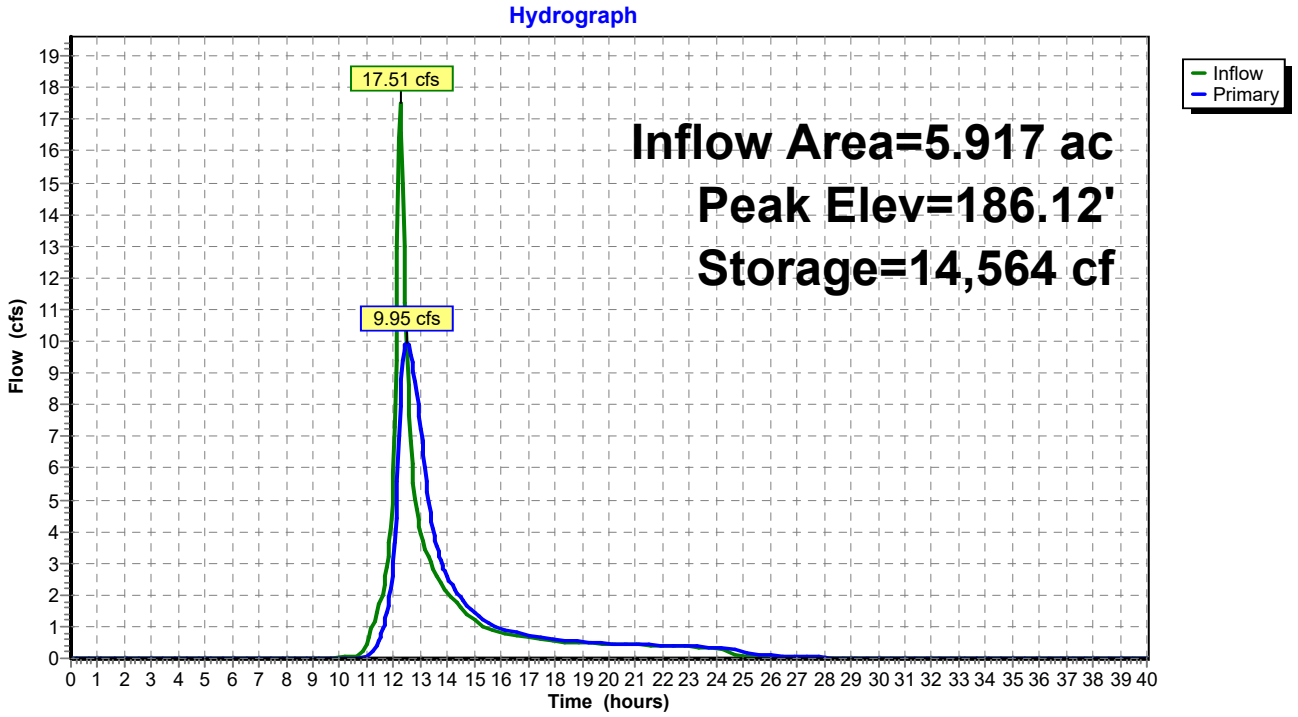
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	58,347 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	5,243	0	0
185.00	6,727	5,985	5,985
186.00	8,424	7,576	13,561
187.00	10,085	9,255	22,815
188.00	11,802	10,944	33,759
189.00	13,576	12,689	46,448
189.83	15,098	11,900	58,347

Device	Routing	Invert	Outlet Devices
#1	Primary	184.00'	**18.0" Round Culvert** L= 147.0' Ke= 0.500 Inlet / Outlet Invert= 184.00' / 182.00' S= 0.0136 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.05'	**48.0" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	189.80'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=9.95 cfs @ 12.50 hrs HW=186.12' (Free Discharge)
- **1=Culvert** (Inlet Controls 9.95 cfs @ 5.63 fps)
  - **2=Orifice/Grate** (Passes < 24.00 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 2.40 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-51: Basin #51



Stage-Discharge for Pond B-51: Basin #51

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	1.34	185.04	4.54	185.56	7.66
184.01	0.00	184.53	1.38	185.05	4.61	185.57	7.71
184.02	0.00	184.54	1.43	185.06	4.68	185.58	7.75
184.03	0.00	184.55	1.48	185.07	4.75	185.59	7.80
184.04	0.00	184.56	1.53	185.08	4.82	185.60	7.84
184.05	0.00	184.57	1.58	185.09	4.89	185.61	7.89
184.06	0.01	184.58	1.64	185.10	4.96	185.62	7.94
184.07	0.03	184.59	1.69	185.11	5.03	185.63	7.98
184.08	0.04	184.60	1.74	185.12	5.10	185.64	8.03
184.09	0.04	184.61	1.79	185.13	5.17	185.65	8.07
184.10	0.05	184.62	1.85	185.14	5.24	185.66	8.12
184.11	0.07	184.63	1.90	185.15	5.31	185.67	8.16
184.12	0.08	184.64	1.96	185.16	5.38	185.68	8.21
184.13	0.09	184.65	2.01	185.17	5.45	185.69	8.25
184.14	0.11	184.66	2.07	185.18	5.52	185.70	8.29
184.15	0.12	184.67	2.13	185.19	5.58	185.71	8.34
184.16	0.14	184.68	2.19	185.20	5.65	185.72	8.38
184.17	0.16	184.69	2.24	185.21	5.72	185.73	8.42
184.18	0.17	184.70	2.30	185.22	5.79	185.74	8.47
184.19	0.19	184.71	2.36	185.23	5.86	185.75	8.51
184.20	0.21	184.72	2.42	185.24	5.92	185.76	8.55
184.21	0.23	184.73	2.48	185.25	5.99	185.77	8.59
184.22	0.26	184.74	2.54	185.26	6.06	185.78	8.64
184.23	0.28	184.75	2.61	185.27	6.12	185.79	8.68
184.24	0.30	184.76	2.67	185.28	6.19	185.80	8.72
184.25	0.33	184.77	2.73	185.29	6.25	185.81	8.76
184.26	0.36	184.78	2.79	185.30	6.32	185.82	8.80
184.27	0.38	184.79	2.86	185.31	6.38	185.83	8.84
184.28	0.41	184.80	2.92	185.32	6.44	185.84	8.88
184.29	0.44	184.81	2.98	185.33	6.50	185.85	8.92
184.30	0.47	184.82	3.05	185.34	6.57	185.86	8.96
184.31	0.50	184.83	3.11	185.35	6.63	185.87	9.00
184.32	0.53	184.84	3.18	185.36	6.69	185.88	9.04
184.33	0.56	184.85	3.24	185.37	6.75	185.89	9.08
184.34	0.60	184.86	3.31	185.38	6.80	185.90	9.12
184.35	0.63	184.87	3.38	185.39	6.86	185.91	9.16
184.36	0.67	184.88	3.44	185.40	6.92	185.92	9.20
184.37	0.70	184.89	3.51	185.41	6.97	185.93	9.24
184.38	0.74	184.90	3.58	185.42	7.02	185.94	9.28
184.39	0.78	184.91	3.64	185.43	7.07	185.95	9.32
184.40	0.81	184.92	3.71	185.44	7.12	185.96	9.36
184.41	0.85	184.93	3.78	185.45	7.17	185.97	9.40
184.42	0.89	184.94	3.85	185.46	7.22	185.98	9.44
184.43	0.93	184.95	3.92	185.47	7.26	185.99	9.47
184.44	0.98	184.96	3.98	185.48	7.30	186.00	9.51
184.45	1.02	184.97	4.05	185.49	7.34	186.01	9.55
184.46	1.06	184.98	4.12	185.50	7.37	186.02	9.59
184.47	1.11	184.99	4.19	185.51	7.42	186.03	9.63
184.48	1.15	185.00	4.26	185.52	7.47	186.04	9.66
184.49	1.20	185.01	4.33	185.53	7.51	186.05	9.70
184.50	1.24	185.02	4.40	185.54	7.56	186.06	9.74
184.51	1.29	185.03	4.47	185.55	7.61	186.07	9.78

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	9.81	186.60	11.57	187.12	13.10	187.64	14.10
186.09	9.85	186.61	11.60	187.13	13.13	187.65	14.12
186.10	9.89	186.62	11.64	187.14	13.15	187.66	14.13
186.11	9.92	186.63	11.67	187.15	13.18	187.67	14.15
186.12	9.96	186.64	11.70	187.16	13.21	187.68	14.17
186.13	10.00	186.65	11.73	187.17	13.24	187.69	14.18
186.14	10.03	186.66	11.76	187.18	13.26	187.70	14.20
186.15	10.07	186.67	11.79	187.19	13.29	187.71	14.22
186.16	10.10	186.68	11.82	187.20	13.32	187.72	14.23
186.17	10.14	186.69	11.85	187.21	13.35	187.73	14.25
186.18	10.18	186.70	11.88	187.22	13.36	187.74	14.27
186.19	10.21	186.71	11.91	187.23	13.38	187.75	14.29
186.20	10.25	186.72	11.94	187.24	13.40	187.76	14.30
186.21	10.28	186.73	11.97	187.25	13.42	187.77	14.32
186.22	10.32	186.74	12.00	187.26	13.44	187.78	14.34
186.23	10.35	186.75	12.03	187.27	13.45	187.79	14.35
186.24	10.39	186.76	12.06	187.28	13.47	187.80	14.37
186.25	10.42	186.77	12.09	187.29	13.49	187.81	14.39
186.26	10.46	186.78	12.12	187.30	13.51	187.82	14.40
186.27	10.49	186.79	12.15	187.31	13.53	187.83	14.42
186.28	10.52	186.80	12.18	187.32	13.54	187.84	14.44
186.29	10.56	186.81	12.21	187.33	13.56	187.85	14.45
186.30	10.59	186.82	12.24	187.34	13.58	187.86	14.47
186.31	10.63	186.83	12.27	187.35	13.60	187.87	14.49
186.32	10.66	186.84	12.30	187.36	13.61	187.88	14.50
186.33	10.70	186.85	12.33	187.37	13.63	187.89	14.52
186.34	10.73	186.86	12.36	187.38	13.65	187.90	14.54
186.35	10.76	186.87	12.39	187.39	13.67	187.91	14.55
186.36	10.80	186.88	12.42	187.40	13.68	187.92	14.57
186.37	10.83	186.89	12.45	187.41	13.70	187.93	14.58
186.38	10.86	186.90	12.48	187.42	13.72	187.94	14.60
186.39	10.90	186.91	12.51	187.43	13.74	187.95	14.62
186.40	10.93	186.92	12.53	187.44	13.75	187.96	14.63
186.41	10.96	186.93	12.56	187.45	13.77	187.97	14.65
186.42	11.00	186.94	12.59	187.46	13.79	187.98	14.67
186.43	11.03	186.95	12.62	187.47	13.81	187.99	14.68
186.44	11.06	186.96	12.65	187.48	13.82	188.00	14.70
186.45	11.09	186.97	12.68	187.49	13.84	188.01	14.72
186.46	11.13	186.98	12.71	187.50	13.86	188.02	14.73
186.47	11.16	186.99	12.73	187.51	13.88	188.03	14.75
186.48	11.19	187.00	12.76	187.52	13.89	188.04	14.76
186.49	11.22	187.01	12.79	187.53	13.91	188.05	14.78
186.50	11.26	187.02	12.82	187.54	13.93	188.06	14.80
186.51	11.29	187.03	12.85	187.55	13.95	188.07	14.81
186.52	11.32	187.04	12.88	187.56	13.96	188.08	14.83
186.53	11.35	187.05	12.90	187.57	13.98	188.09	14.85
186.54	11.38	187.06	12.93	187.58	14.00	188.10	14.86
186.55	11.42	187.07	12.96	187.59	14.01	188.11	14.88
186.56	11.45	187.08	12.99	187.60	14.03	188.12	14.89
186.57	11.48	187.09	13.02	187.61	14.05	188.13	14.91
186.58	11.51	187.10	13.04	187.62	14.07	188.14	14.93
186.59	11.54	187.11	13.07	187.63	14.08	188.15	14.94

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.16	14.96	188.68	15.77	189.20	16.54	189.72	17.28
188.17	14.97	188.69	15.79	189.21	16.56	189.73	17.30
188.18	14.99	188.70	15.80	189.22	16.57	189.74	17.31
188.19	15.01	188.71	15.82	189.23	16.59	189.75	17.32
188.20	15.02	188.72	15.83	189.24	16.60	189.76	17.34
188.21	15.04	188.73	15.85	189.25	16.62	189.77	17.35
188.22	15.05	188.74	15.86	189.26	16.63	189.78	17.36
188.23	15.07	188.75	15.88	189.27	16.64	189.79	17.38
188.24	15.09	188.76	15.89	189.28	16.66	189.80	17.39
188.25	15.10	188.77	15.91	189.29	16.67	189.81	17.52
188.26	15.12	188.78	15.92	189.30	16.69	189.82	17.75
188.27	15.13	188.79	15.94	189.31	16.70	189.83	**18.04**
188.28	15.15	188.80	15.95	189.32	16.72		
188.29	15.17	188.81	15.97	189.33	16.73		
188.30	15.18	188.82	15.98	189.34	16.75		
188.31	15.20	188.83	16.00	189.35	16.76		
188.32	15.21	188.84	16.01	189.36	16.77		
188.33	15.23	188.85	16.03	189.37	16.79		
188.34	15.24	188.86	16.04	189.38	16.80		
188.35	15.26	188.87	16.06	189.39	16.82		
188.36	15.28	188.88	16.07	189.40	16.83		
188.37	15.29	188.89	16.09	189.41	16.85		
188.38	15.31	188.90	16.10	189.42	16.86		
188.39	15.32	188.91	16.12	189.43	16.87		
188.40	15.34	188.92	16.13	189.44	16.89		
188.41	15.35	188.93	16.15	189.45	16.90		
188.42	15.37	188.94	16.16	189.46	16.92		
188.43	15.39	188.95	16.18	189.47	16.93		
188.44	15.40	188.96	16.19	189.48	16.95		
188.45	15.42	188.97	16.21	189.49	16.96		
188.46	15.43	188.98	16.22	189.50	16.97		
188.47	15.45	188.99	16.24	189.51	16.99		
188.48	15.46	189.00	16.25	189.52	17.00		
188.49	15.48	189.01	16.27	189.53	17.02		
188.50	15.49	189.02	16.28	189.54	17.03		
188.51	15.51	189.03	16.30	189.55	17.04		
188.52	15.53	189.04	16.31	189.56	17.06		
188.53	15.54	189.05	16.32	189.57	17.07		
188.54	15.56	189.06	16.34	189.58	17.09		
188.55	15.57	189.07	16.35	189.59	17.10		
188.56	15.59	189.08	16.37	189.60	17.11		
188.57	15.60	189.09	16.38	189.61	17.13		
188.58	15.62	189.10	16.40	189.62	17.14		
188.59	15.63	189.11	16.41	189.63	17.16		
188.60	15.65	189.12	16.43	189.64	17.17		
188.61	15.66	189.13	16.44	189.65	17.18		
188.62	15.68	189.14	16.46	189.66	17.20		
188.63	15.69	189.15	16.47	189.67	17.21		
188.64	15.71	189.16	16.49	189.68	17.23		
188.65	15.73	189.17	16.50	189.69	17.24		
188.66	15.74	189.18	16.51	189.70	17.25		
188.67	15.76	189.19	16.53	189.71	17.27		

Stage-Area-Storage for Pond B-51: Basin #51

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	5,243	0	184.52	6,015	2,927
184.01	5,258	53	184.53	6,030	2,987
184.02	5,273	105	184.54	6,044	3,048
184.03	5,288	158	184.55	6,059	3,108
184.04	5,302	211	184.56	6,074	3,169
184.05	5,317	264	184.57	6,089	3,230
184.06	5,332	317	184.58	6,104	3,291
184.07	5,347	371	184.59	6,119	3,352
184.08	5,362	424	184.60	6,133	3,413
184.09	5,377	478	184.61	6,148	3,474
184.10	5,391	532	184.62	6,163	3,536
184.11	5,406	586	184.63	6,178	3,598
184.12	5,421	640	184.64	6,193	3,659
184.13	5,436	694	184.65	6,208	3,721
184.14	5,451	749	184.66	6,222	3,784
184.15	5,466	803	184.67	6,237	3,846
184.16	5,480	858	184.68	6,252	3,908
184.17	5,495	913	184.69	6,267	3,971
184.18	5,510	968	184.70	6,282	4,034
184.19	5,525	1,023	184.71	6,297	4,097
184.20	5,540	1,078	184.72	6,311	4,160
184.21	5,555	1,134	184.73	6,326	4,223
184.22	5,569	1,189	184.74	6,341	4,286
184.23	5,584	1,245	184.75	6,356	4,350
184.24	5,599	1,301	184.76	6,371	4,413
184.25	5,614	1,357	184.77	6,386	4,477
184.26	5,629	1,413	184.78	6,401	4,541
184.27	5,644	1,470	184.79	6,415	4,605
184.28	5,659	1,526	184.80	6,430	4,669
184.29	5,673	1,583	184.81	6,445	4,734
184.30	5,688	1,640	184.82	6,460	4,798
184.31	5,703	1,697	184.83	6,475	4,863
184.32	5,718	1,754	184.84	6,490	4,928
184.33	5,733	1,811	184.85	6,504	4,993
184.34	5,748	1,868	184.86	6,519	5,058
184.35	5,762	1,926	184.87	6,534	5,123
184.36	5,777	1,984	184.88	6,549	5,188
184.37	5,792	2,041	184.89	6,564	5,254
184.38	5,807	2,099	184.90	6,579	5,320
184.39	5,822	2,158	184.91	6,593	5,386
184.40	5,837	2,216	184.92	6,608	5,452
184.41	5,851	2,274	184.93	6,623	5,518
184.42	5,866	2,333	184.94	6,638	5,584
184.43	5,881	2,392	184.95	6,653	5,651
184.44	5,896	2,451	184.96	6,668	5,717
184.45	5,911	2,510	184.97	6,682	5,784
184.46	5,926	2,569	184.98	6,697	5,851
184.47	5,940	2,628	184.99	6,712	5,918
184.48	5,955	2,688	185.00	6,727	5,985
184.49	5,970	2,747	185.01	6,744	6,052
184.50	5,985	2,807	185.02	6,761	6,120
184.51	6,000	2,867	185.03	6,778	6,188

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	6,795	6,255	185.56	7,677	10,018
185.05	6,812	6,323	185.57	7,694	10,095
185.06	6,829	6,392	185.58	7,711	10,172
185.07	6,846	6,460	185.59	7,728	10,249
185.08	6,863	6,529	185.60	7,745	10,327
185.09	6,880	6,597	185.61	7,762	10,404
185.10	6,897	6,666	185.62	7,779	10,482
185.11	6,914	6,735	185.63	7,796	10,560
185.12	6,931	6,804	185.64	7,813	10,638
185.13	6,948	6,874	185.65	7,830	10,716
185.14	6,965	6,943	185.66	7,847	10,794
185.15	6,982	7,013	185.67	7,864	10,873
185.16	6,999	7,083	185.68	7,881	10,952
185.17	7,015	7,153	185.69	7,898	11,031
185.18	7,032	7,223	185.70	7,915	11,110
185.19	7,049	7,294	185.71	7,932	11,189
185.20	7,066	7,364	185.72	7,949	11,268
185.21	7,083	7,435	185.73	7,966	11,348
185.22	7,100	7,506	185.74	7,983	11,428
185.23	7,117	7,577	185.75	8,000	11,508
185.24	7,134	7,648	185.76	8,017	11,588
185.25	7,151	7,720	185.77	8,034	11,668
185.26	7,168	7,791	185.78	8,051	11,748
185.27	7,185	7,863	185.79	8,068	11,829
185.28	7,202	7,935	185.80	8,085	11,910
185.29	7,219	8,007	185.81	8,102	11,991
185.30	7,236	8,079	185.82	8,119	12,072
185.31	7,253	8,152	185.83	8,136	12,153
185.32	7,270	8,225	185.84	8,152	12,234
185.33	7,287	8,297	185.85	8,169	12,316
185.34	7,304	8,370	185.86	8,186	12,398
185.35	7,321	8,443	185.87	8,203	12,480
185.36	7,338	8,517	185.88	8,220	12,562
185.37	7,355	8,590	185.89	8,237	12,644
185.38	7,372	8,664	185.90	8,254	12,727
185.39	7,389	8,738	185.91	8,271	12,809
185.40	7,406	8,812	185.92	8,288	12,892
185.41	7,423	8,886	185.93	8,305	12,975
185.42	7,440	8,960	185.94	8,322	13,058
185.43	7,457	9,034	185.95	8,339	13,141
185.44	7,474	9,109	185.96	8,356	13,225
185.45	7,491	9,184	185.97	8,373	13,309
185.46	7,508	9,259	185.98	8,390	13,392
185.47	7,525	9,334	185.99	8,407	13,476
185.48	7,542	9,409	186.00	8,424	13,561
185.49	7,559	9,485	186.01	8,441	13,645
185.50	7,576	9,561	186.02	8,457	13,729
185.51	7,592	9,636	186.03	8,474	13,814
185.52	7,609	9,712	186.04	8,490	13,899
185.53	7,626	9,789	186.05	8,507	13,984
185.54	7,643	9,865	186.06	8,524	14,069
185.55	7,660	9,942	186.07	8,540	14,154

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	8,557	14,240	186.60	9,421	18,914
186.09	8,573	14,325	186.61	9,437	19,008
186.10	8,590	14,411	186.62	9,454	19,103
186.11	8,607	14,497	186.63	9,470	19,197
186.12	8,623	14,583	186.64	9,487	19,292
186.13	8,640	14,670	186.65	9,504	19,387
186.14	8,657	14,756	186.66	9,520	19,482
186.15	8,673	14,843	186.67	9,537	19,577
186.16	8,690	14,930	186.68	9,553	19,673
186.17	8,706	15,017	186.69	9,570	19,768
186.18	8,723	15,104	186.70	9,587	19,864
186.19	8,740	15,191	186.71	9,603	19,960
186.20	8,756	15,279	186.72	9,620	20,056
186.21	8,773	15,366	186.73	9,637	20,153
186.22	8,789	15,454	186.74	9,653	20,249
186.23	8,806	15,542	186.75	9,670	20,346
186.24	8,823	15,630	186.76	9,686	20,442
186.25	8,839	15,718	186.77	9,703	20,539
186.26	8,856	15,807	186.78	9,720	20,636
186.27	8,872	15,896	186.79	9,736	20,734
186.28	8,889	15,984	186.80	9,753	20,831
186.29	8,906	16,073	186.81	9,769	20,929
186.30	8,922	16,162	186.82	9,786	21,027
186.31	8,939	16,252	186.83	9,803	21,125
186.32	8,956	16,341	186.84	9,819	21,223
186.33	8,972	16,431	186.85	9,836	21,321
186.34	8,989	16,521	186.86	9,852	21,419
186.35	9,005	16,611	186.87	9,869	21,518
186.36	9,022	16,701	186.88	9,886	21,617
186.37	9,039	16,791	186.89	9,902	21,716
186.38	9,055	16,882	186.90	9,919	21,815
186.39	9,072	16,972	186.91	9,936	21,914
186.40	9,088	17,063	186.92	9,952	22,014
186.41	9,105	17,154	186.93	9,969	22,113
186.42	9,122	17,245	186.94	9,985	22,213
186.43	9,138	17,336	186.95	10,002	22,313
186.44	9,155	17,428	186.96	10,019	22,413
186.45	9,171	17,519	186.97	10,035	22,513
186.46	9,188	17,611	186.98	10,052	22,614
186.47	9,205	17,703	186.99	10,068	22,714
186.48	9,221	17,795	187.00	10,085	22,815
186.49	9,238	17,888	187.01	10,102	22,916
186.50	9,255	17,980	187.02	10,119	23,017
186.51	9,271	18,073	187.03	10,137	23,118
186.52	9,288	18,166	187.04	10,154	23,220
186.53	9,304	18,259	187.05	10,171	23,321
186.54	9,321	18,352	187.06	10,188	23,423
186.55	9,338	18,445	187.07	10,205	23,525
186.56	9,354	18,538	187.08	10,222	23,627
186.57	9,371	18,632	187.09	10,240	23,730
186.58	9,387	18,726	187.10	10,257	23,832
186.59	9,404	18,820	187.11	10,274	23,935

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	10,291	24,038	187.64	11,184	29,621
187.13	10,308	24,141	187.65	11,201	29,733
187.14	10,325	24,244	187.66	11,218	29,845
187.15	10,343	24,347	187.67	11,235	29,957
187.16	10,360	24,451	187.68	11,253	30,070
187.17	10,377	24,554	187.69	11,270	30,182
187.18	10,394	24,658	187.70	11,287	30,295
187.19	10,411	24,762	187.71	11,304	30,408
187.20	10,428	24,866	187.72	11,321	30,521
187.21	10,446	24,971	187.73	11,338	30,635
187.22	10,463	25,075	187.74	11,356	30,748
187.23	10,480	25,180	187.75	11,373	30,862
187.24	10,497	25,285	187.76	11,390	30,975
187.25	10,514	25,390	187.77	11,407	31,089
187.26	10,531	25,495	187.78	11,424	31,204
187.27	10,549	25,601	187.79	11,441	31,318
187.28	10,566	25,706	187.80	11,459	31,432
187.29	10,583	25,812	187.81	11,476	31,547
187.30	10,600	25,918	187.82	11,493	31,662
187.31	10,617	26,024	187.83	11,510	31,777
187.32	10,634	26,130	187.84	11,527	31,892
187.33	10,652	26,237	187.85	11,544	32,008
187.34	10,669	26,343	187.86	11,562	32,123
187.35	10,686	26,450	187.87	11,579	32,239
187.36	10,703	26,557	187.88	11,596	32,355
187.37	10,720	26,664	187.89	11,613	32,471
187.38	10,737	26,771	187.90	11,630	32,587
187.39	10,755	26,879	187.91	11,647	32,703
187.40	10,772	26,986	187.92	11,665	32,820
187.41	10,789	27,094	187.93	11,682	32,937
187.42	10,806	27,202	187.94	11,699	33,053
187.43	10,823	27,310	187.95	11,716	33,171
187.44	10,840	27,419	187.96	11,733	33,288
187.45	10,858	27,527	187.97	11,750	33,405
187.46	10,875	27,636	187.98	11,768	33,523
187.47	10,892	27,745	187.99	11,785	33,641
187.48	10,909	27,854	188.00	11,802	33,759
187.49	10,926	27,963	188.01	11,820	33,877
187.50	10,944	28,072	188.02	11,837	33,995
187.51	10,961	28,182	188.03	11,855	34,113
187.52	10,978	28,291	188.04	11,873	34,232
187.53	10,995	28,401	188.05	11,891	34,351
187.54	11,012	28,511	188.06	11,908	34,470
187.55	11,029	28,621	188.07	11,926	34,589
187.56	11,047	28,732	188.08	11,944	34,708
187.57	11,064	28,842	188.09	11,962	34,828
187.58	11,081	28,953	188.10	11,979	34,948
187.59	11,098	29,064	188.11	11,997	35,067
187.60	11,115	29,175	188.12	12,015	35,188
187.61	11,132	29,286	188.13	12,033	35,308
187.62	11,150	29,398	188.14	12,050	35,428
187.63	11,167	29,509	188.15	12,068	35,549

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	12,086	35,670	188.68	13,008	42,194
188.17	12,104	35,790	188.69	13,026	42,324
188.18	12,121	35,912	188.70	13,044	42,455
188.19	12,139	36,033	188.71	13,062	42,585
188.20	12,157	36,154	188.72	13,079	42,716
188.21	12,175	36,276	188.73	13,097	42,847
188.22	12,192	36,398	188.74	13,115	42,978
188.23	12,210	36,520	188.75	13,133	43,109
188.24	12,228	36,642	188.76	13,150	43,240
188.25	12,246	36,764	188.77	13,168	43,372
188.26	12,263	36,887	188.78	13,186	43,504
188.27	12,281	37,010	188.79	13,203	43,636
188.28	12,299	37,133	188.80	13,221	43,768
188.29	12,316	37,256	188.81	13,239	43,900
188.30	12,334	37,379	188.82	13,257	44,033
188.31	12,352	37,502	188.83	13,274	44,165
188.32	12,370	37,626	188.84	13,292	44,298
188.33	12,387	37,750	188.85	13,310	44,431
188.34	12,405	37,874	188.86	13,328	44,564
188.35	12,423	37,998	188.87	13,345	44,698
188.36	12,441	38,122	188.88	13,363	44,831
188.37	12,458	38,247	188.89	13,381	44,965
188.38	12,476	38,371	188.90	13,399	45,099
188.39	12,494	38,496	188.91	13,416	45,233
188.40	12,512	38,621	188.92	13,434	45,367
188.41	12,529	38,746	188.93	13,452	45,502
188.42	12,547	38,872	188.94	13,470	45,636
188.43	12,565	38,997	188.95	13,487	45,771
188.44	12,583	39,123	188.96	13,505	45,906
188.45	12,600	39,249	188.97	13,523	46,041
188.46	12,618	39,375	188.98	13,541	46,176
188.47	12,636	39,501	188.99	13,558	46,312
188.48	12,654	39,628	189.00	13,576	46,448
188.49	12,671	39,754	189.01	13,594	46,583
188.50	12,689	39,881	189.02	13,613	46,719
188.51	12,707	40,008	189.03	13,631	46,856
188.52	12,724	40,135	189.04	13,649	46,992
188.53	12,742	40,263	189.05	13,668	47,129
188.54	12,760	40,390	189.06	13,686	47,265
188.55	12,778	40,518	189.07	13,704	47,402
188.56	12,795	40,646	189.08	13,723	47,539
188.57	12,813	40,774	189.09	13,741	47,677
188.58	12,831	40,902	189.10	13,759	47,814
188.59	12,849	41,030	189.11	13,778	47,952
188.60	12,866	41,159	189.12	13,796	48,090
188.61	12,884	41,288	189.13	13,814	48,228
188.62	12,902	41,417	189.14	13,833	48,366
188.63	12,920	41,546	189.15	13,851	48,505
188.64	12,937	41,675	189.16	13,869	48,643
188.65	12,955	41,805	189.17	13,888	48,782
188.66	12,973	41,934	189.18	13,906	48,921
188.67	12,991	42,064	189.19	13,924	49,060

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.20	13,943	49,199
189.21	13,961	49,339
189.22	13,979	49,479
189.23	13,998	49,618
189.24	14,016	49,759
189.25	14,034	49,899
189.26	14,053	50,039
189.27	14,071	50,180
189.28	14,089	50,321
189.29	14,108	50,462
189.30	14,126	50,603
189.31	14,144	50,744
189.32	14,163	50,886
189.33	14,181	51,027
189.34	14,199	51,169
189.35	14,218	51,311
189.36	14,236	51,454
189.37	14,254	51,596
189.38	14,273	51,739
189.39	14,291	51,882
189.40	14,309	52,025
189.41	14,328	52,168
189.42	14,346	52,311
189.43	14,365	52,455
189.44	14,383	52,598
189.45	14,401	52,742
189.46	14,420	52,886
189.47	14,438	53,031
189.48	14,456	53,175
189.49	14,475	53,320
189.50	14,493	53,465
189.51	14,511	53,610
189.52	14,530	53,755
189.53	14,548	53,900
189.54	14,566	54,046
189.55	14,585	54,192
189.56	14,603	54,338
189.57	14,621	54,484
189.58	14,640	54,630
189.59	14,658	54,777
189.60	14,676	54,923
189.61	14,695	55,070
189.62	14,713	55,217
189.63	14,731	55,364
189.64	14,750	55,512
189.65	14,768	55,659
189.66	14,786	55,807
189.67	14,805	55,955
189.68	14,823	56,103
189.69	14,841	56,251
189.70	14,860	56,400
189.71	14,878	56,549
189.72	14,896	56,698
189.73	14,915	56,847
189.74	14,933	56,996
189.75	14,951	57,145
189.76	14,970	57,295
189.77	14,988	57,445
189.78	15,006	57,595
189.79	15,025	57,745
189.80	15,043	57,895
189.81	15,061	58,046
189.82	15,080	58,196
189.83	**15,098**	**58,347**

Summary for Pond B-52: Basin #52

Inflow Area = 1.423 ac, 34.43% Impervious, Inflow Depth = 3.94" for Future 10 yr event
Inflow = 5.77 cfs @ 12.17 hrs, Volume= 0.467 af
Outflow = 5.12 cfs @ 12.23 hrs, Volume= 0.419 af, Atten= 11%, Lag= 3.1 min
Primary = 5.12 cfs @ 12.23 hrs, Volume= 0.419 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.80' @ 12.23 hrs Surf.Area= 2,008 sf Storage= 3,373 cf

Plug-Flow detention time= 96.6 min calculated for 0.419 af (90% of inflow)
Center-of-Mass det. time= 43.5 min (837.8 - 794.3)

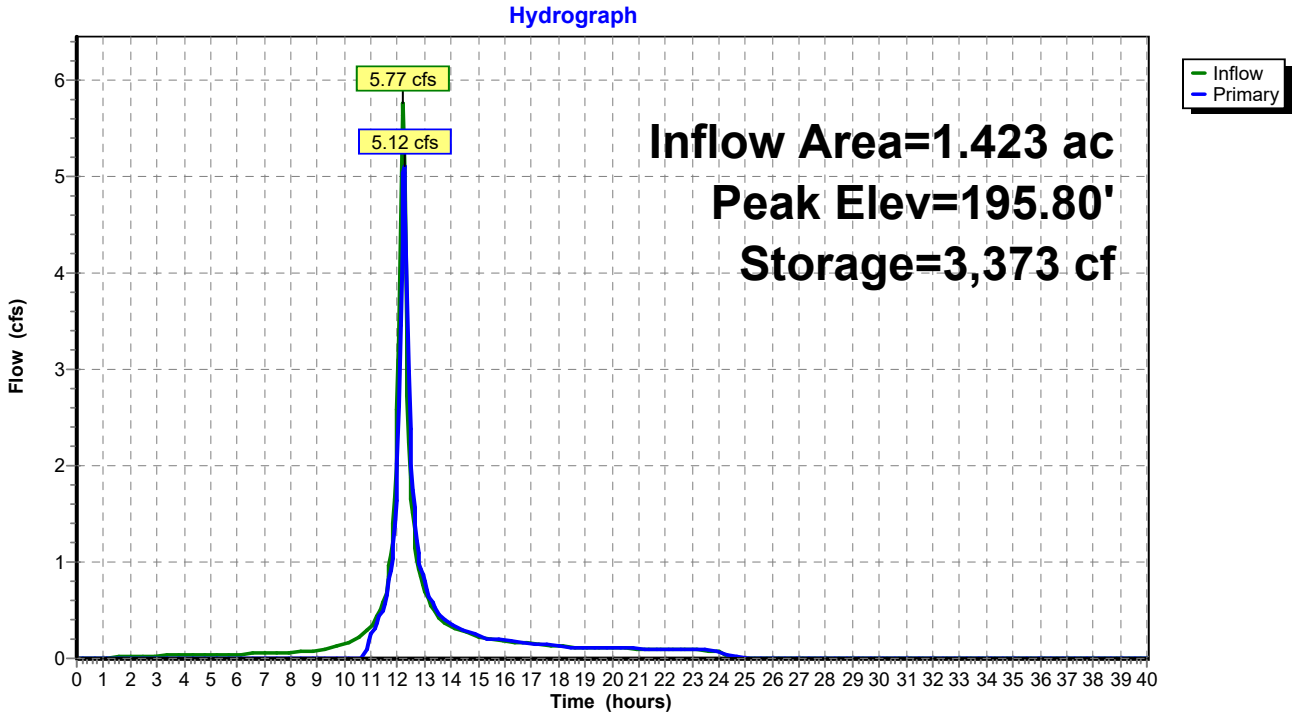
Volume	Invert	Avail.Storage	Storage Description
#1	193.00'	7,751 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.00	474	0	0
194.00	970	722	722
195.00	1,523	1,247	1,969
196.00	2,133	1,828	3,797
197.00	2,799	2,466	6,263
197.50	3,154	1,488	7,751

Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	**15.0" Round Culvert** L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	195.08'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.72'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.04 cfs @ 12.23 hrs HW=195.79' (Free Discharge)
- **1=Culvert** (Passes 5.04 cfs of 8.04 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 4.82 cfs @ 3.21 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 0.23 cfs @ 0.85 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-52: Basin #52



Stage-Discharge for Pond B-52: Basin #52

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.00	0.00	193.52	0.00	194.04	0.00	194.56	0.00
193.01	0.00	193.53	0.00	194.05	0.00	194.57	0.00
193.02	0.00	193.54	0.00	194.06	0.00	194.58	0.00
193.03	0.00	193.55	0.00	194.07	0.00	194.59	0.00
193.04	0.00	193.56	0.00	194.08	0.00	194.60	0.00
193.05	0.00	193.57	0.00	194.09	0.00	194.61	0.00
193.06	0.00	193.58	0.00	194.10	0.00	194.62	0.00
193.07	0.00	193.59	0.00	194.11	0.00	194.63	0.00
193.08	0.00	193.60	0.00	194.12	0.00	194.64	0.00
193.09	0.00	193.61	0.00	194.13	0.00	194.65	0.00
193.10	0.00	193.62	0.00	194.14	0.00	194.66	0.00
193.11	0.00	193.63	0.00	194.15	0.00	194.67	0.00
193.12	0.00	193.64	0.00	194.16	0.00	194.68	0.00
193.13	0.00	193.65	0.00	194.17	0.00	194.69	0.00
193.14	0.00	193.66	0.00	194.18	0.00	194.70	0.00
193.15	0.00	193.67	0.00	194.19	0.00	194.71	0.00
193.16	0.00	193.68	0.00	194.20	0.00	194.72	0.00
193.17	0.00	193.69	0.00	194.21	0.00	194.73	0.00
193.18	0.00	193.70	0.00	194.22	0.00	194.74	0.00
193.19	0.00	193.71	0.00	194.23	0.00	194.75	0.00
193.20	0.00	193.72	0.00	194.24	0.00	194.76	0.00
193.21	0.00	193.73	0.00	194.25	0.00	194.77	0.00
193.22	0.00	193.74	0.00	194.26	0.00	194.78	0.00
193.23	0.00	193.75	0.00	194.27	0.00	194.79	0.00
193.24	0.00	193.76	0.00	194.28	0.00	194.80	0.00
193.25	0.00	193.77	0.00	194.29	0.00	194.81	0.00
193.26	0.00	193.78	0.00	194.30	0.00	194.82	0.00
193.27	0.00	193.79	0.00	194.31	0.00	194.83	0.00
193.28	0.00	193.80	0.00	194.32	0.00	194.84	0.00
193.29	0.00	193.81	0.00	194.33	0.00	194.85	0.00
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.00
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.00
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.00
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.00
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.00
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.00
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.00
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.00
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.00
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.00
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.00
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.00
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.00
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.00
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.00
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.00
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.00
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.00
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.00
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.00
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.00

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.08	0.00	195.60	3.58	196.12	8.41	196.64	8.96
195.09	0.01	195.61	3.67	196.13	8.43	196.65	8.97
195.10	0.03	195.62	3.74	196.14	8.44	196.66	8.98
195.11	0.05	195.63	3.82	196.15	8.45	196.67	8.99
195.12	0.08	195.64	3.89	196.16	8.46	196.68	9.00
195.13	0.11	195.65	3.97	196.17	8.47	196.69	9.01
195.14	0.14	195.66	4.04	196.18	8.48	196.70	9.02
195.15	0.18	195.67	4.10	196.19	8.49	196.71	9.03
195.16	0.22	195.68	4.17	196.20	8.50	196.72	9.04
195.17	0.26	195.69	4.24	196.21	8.51	196.73	9.05
195.18	0.30	195.70	4.30	196.22	8.52	196.74	9.06
195.19	0.35	195.71	4.36	196.23	8.53	196.75	9.07
195.20	0.40	195.72	4.43	196.24	8.54	196.76	9.08
195.21	0.45	195.73	4.50	196.25	8.55	196.77	9.09
195.22	0.50	195.74	4.58	196.26	8.57	196.78	9.10
195.23	0.56	195.75	4.67	196.27	8.58	196.79	9.11
195.24	0.62	195.76	4.77	196.28	8.59	196.80	9.12
195.25	0.67	195.77	4.87	196.29	8.60	196.81	9.13
195.26	0.74	195.78	4.97	196.30	8.61	196.82	9.14
195.27	0.80	195.79	5.08	196.31	8.62	196.83	9.15
195.28	0.86	195.80	5.18	196.32	8.63	196.84	9.16
195.29	0.93	195.81	5.30	196.33	8.64	196.85	9.17
195.30	0.99	195.82	5.41	196.34	8.65	196.86	9.18
195.31	1.06	195.83	5.53	196.35	8.66	196.87	9.19
195.32	1.13	195.84	5.64	196.36	8.67	196.88	9.20
195.33	1.20	195.85	5.76	196.37	8.68	196.89	9.21
195.34	1.28	195.86	5.89	196.38	8.69	196.90	9.22
195.35	1.35	195.87	6.01	196.39	8.70	196.91	9.23
195.36	1.43	195.88	6.14	196.40	8.71	196.92	9.24
195.37	1.50	195.89	6.27	196.41	8.72	196.93	9.25
195.38	1.58	195.90	6.40	196.42	8.73	196.94	9.26
195.39	1.66	195.91	6.53	196.43	8.75	196.95	9.27
195.40	1.74	195.92	6.66	196.44	8.76	196.96	9.28
195.41	1.83	195.93	6.80	196.45	8.77	196.97	9.29
195.42	1.91	195.94	6.93	196.46	8.78	196.98	9.30
195.43	1.99	195.95	7.07	196.47	8.79	196.99	9.31
195.44	2.08	195.96	7.21	196.48	8.80	197.00	9.32
195.45	2.17	195.97	7.35	196.49	8.81	197.01	9.33
195.46	2.26	195.98	7.50	196.50	8.82	197.02	9.34
195.47	2.35	195.99	7.64	196.51	8.83	197.03	9.35
195.48	2.44	196.00	7.79	196.52	8.84	197.04	9.36
195.49	2.53	196.01	7.93	196.53	8.85	197.05	9.37
195.50	2.62	196.02	8.08	196.54	8.86	197.06	9.38
195.51	2.72	196.03	8.23	196.55	8.87	197.07	9.39
195.52	2.81	196.04	8.33	196.56	8.88	197.08	9.40
195.53	2.91	196.05	8.34	196.57	8.89	197.09	9.41
195.54	3.00	196.06	8.35	196.58	8.90	197.10	9.42
195.55	3.10	196.07	8.36	196.59	8.91	197.11	9.43
195.56	3.20	196.08	8.37	196.60	8.92	197.12	9.44
195.57	3.30	196.09	8.38	196.61	8.93	197.13	9.45
195.58	3.40	196.10	8.39	196.62	8.94	197.14	9.46
195.59	3.50	196.11	8.40	196.63	8.95	197.15	9.47

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)
197.16	9.48
197.17	9.49
197.18	9.50
197.19	9.51
197.20	9.52
197.21	9.53
197.22	9.54
197.23	9.55
197.24	9.55
197.25	9.56
197.26	9.69
197.27	9.91
197.28	10.20
197.29	10.54
197.30	10.92
197.31	11.35
197.32	11.81
197.33	12.30
197.34	12.82
197.35	13.38
197.36	13.96
197.37	14.57
197.38	15.21
197.39	15.87
197.40	16.55
197.41	17.26
197.42	17.99
197.43	18.75
197.44	19.52
197.45	20.32
197.46	21.17
197.47	22.06
197.48	22.96
197.49	23.90
197.50	**24.85**

Stage-Area-Storage for Pond B-52: Basin #52

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.00	474	0	193.52	732	314
193.01	479	5	193.53	737	321
193.02	484	10	193.54	742	328
193.03	489	14	193.55	747	336
193.04	494	19	193.56	752	343
193.05	499	24	193.57	757	351
193.06	504	29	193.58	762	358
193.07	509	34	193.59	767	366
193.08	514	40	193.60	772	374
193.09	519	45	193.61	777	381
193.10	524	50	193.62	782	389
193.11	529	55	193.63	786	397
193.12	534	60	193.64	791	405
193.13	538	66	193.65	796	413
193.14	543	71	193.66	801	421
193.15	548	77	193.67	806	429
193.16	553	82	193.68	811	437
193.17	558	88	193.69	816	445
193.18	563	93	193.70	821	453
193.19	568	99	193.71	826	462
193.20	573	105	193.72	831	470
193.21	578	110	193.73	836	478
193.22	583	116	193.74	841	487
193.23	588	122	193.75	846	495
193.24	593	128	193.76	851	503
193.25	598	134	193.77	856	512
193.26	603	140	193.78	861	521
193.27	608	146	193.79	866	529
193.28	613	152	193.80	871	538
193.29	618	158	193.81	876	547
193.30	623	165	193.82	881	555
193.31	628	171	193.83	886	564
193.32	633	177	193.84	891	573
193.33	638	183	193.85	896	582
193.34	643	190	193.86	901	591
193.35	648	196	193.87	906	600
193.36	653	203	193.88	910	609
193.37	658	209	193.89	915	618
193.38	662	216	193.90	920	627
193.39	667	223	193.91	925	637
193.40	672	229	193.92	930	646
193.41	677	236	193.93	935	655
193.42	682	243	193.94	940	665
193.43	687	250	193.95	945	674
193.44	692	257	193.96	950	684
193.45	697	264	193.97	955	693
193.46	702	271	193.98	960	703
193.47	707	278	193.99	965	712
193.48	712	285	194.00	970	722
193.49	717	292	194.01	976	732
193.50	722	299	194.02	981	742
193.51	727	306	194.03	987	751

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.04	992	761	194.56	1,280	1,352
194.05	998	771	194.57	1,285	1,365
194.06	1,003	781	194.58	1,291	1,378
194.07	1,009	791	194.59	1,296	1,391
194.08	1,014	801	194.60	1,302	1,404
194.09	1,020	812	194.61	1,307	1,417
194.10	1,025	822	194.62	1,313	1,430
194.11	1,031	832	194.63	1,318	1,443
194.12	1,036	842	194.64	1,324	1,456
194.13	1,042	853	194.65	1,329	1,469
194.14	1,047	863	194.66	1,335	1,483
194.15	1,053	874	194.67	1,341	1,496
194.16	1,058	884	194.68	1,346	1,509
194.17	1,064	895	194.69	1,352	1,523
194.18	1,070	906	194.70	1,357	1,536
194.19	1,075	916	194.71	1,363	1,550
194.20	1,081	927	194.72	1,368	1,564
194.21	1,086	938	194.73	1,374	1,577
194.22	1,092	949	194.74	1,379	1,591
194.23	1,097	960	194.75	1,385	1,605
194.24	1,103	971	194.76	1,390	1,619
194.25	1,108	982	194.77	1,396	1,633
194.26	1,114	993	194.78	1,401	1,647
194.27	1,119	1,004	194.79	1,407	1,661
194.28	1,125	1,015	194.80	1,412	1,675
194.29	1,130	1,027	194.81	1,418	1,689
194.30	1,136	1,038	194.82	1,423	1,703
194.31	1,141	1,049	194.83	1,429	1,718
194.32	1,147	1,061	194.84	1,435	1,732
194.33	1,152	1,072	194.85	1,440	1,746
194.34	1,158	1,084	194.86	1,446	1,761
194.35	1,164	1,095	194.87	1,451	1,775
194.36	1,169	1,107	194.88	1,457	1,790
194.37	1,175	1,119	194.89	1,462	1,804
194.38	1,180	1,131	194.90	1,468	1,819
194.39	1,186	1,142	194.91	1,473	1,834
194.40	1,191	1,154	194.92	1,479	1,848
194.41	1,197	1,166	194.93	1,484	1,863
194.42	1,202	1,178	194.94	1,490	1,878
194.43	1,208	1,190	194.95	1,495	1,893
194.44	1,213	1,202	194.96	1,501	1,908
194.45	1,219	1,214	194.97	1,506	1,923
194.46	1,224	1,227	194.98	1,512	1,938
194.47	1,230	1,239	194.99	1,517	1,953
194.48	1,235	1,251	195.00	1,523	1,969
194.49	1,241	1,264	195.01	1,529	1,984
194.50	1,247	1,276	195.02	1,535	1,999
194.51	1,252	1,289	195.03	1,541	2,014
194.52	1,258	1,301	195.04	1,547	2,030
194.53	1,263	1,314	195.05	1,554	2,045
194.54	1,269	1,326	195.06	1,560	2,061
194.55	1,274	1,339	195.07	1,566	2,077

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.08	1,572	2,092	195.60	1,889	2,992
195.09	1,578	2,108	195.61	1,895	3,011
195.10	1,584	2,124	195.62	1,901	3,030
195.11	1,590	2,140	195.63	1,907	3,049
195.12	1,596	2,156	195.64	1,913	3,068
195.13	1,602	2,172	195.65	1,920	3,087
195.14	1,608	2,188	195.66	1,926	3,107
195.15	1,615	2,204	195.67	1,932	3,126
195.16	1,621	2,220	195.68	1,938	3,145
195.17	1,627	2,236	195.69	1,944	3,165
195.18	1,633	2,253	195.70	1,950	3,184
195.19	1,639	2,269	195.71	1,956	3,204
195.20	1,645	2,285	195.72	1,962	3,223
195.21	1,651	2,302	195.73	1,968	3,243
195.22	1,657	2,318	195.74	1,974	3,263
195.23	1,663	2,335	195.75	1,981	3,282
195.24	1,669	2,352	195.76	1,987	3,302
195.25	1,676	2,368	195.77	1,993	3,322
195.26	1,682	2,385	195.78	1,999	3,342
195.27	1,688	2,402	195.79	2,005	3,362
195.28	1,694	2,419	195.80	2,011	3,382
195.29	1,700	2,436	195.81	2,017	3,402
195.30	1,706	2,453	195.82	2,023	3,422
195.31	1,712	2,470	195.83	2,029	3,443
195.32	1,718	2,487	195.84	2,035	3,463
195.33	1,724	2,504	195.85	2,041	3,483
195.34	1,730	2,522	195.86	2,048	3,504
195.35	1,736	2,539	195.87	2,054	3,524
195.36	1,743	2,556	195.88	2,060	3,545
195.37	1,749	2,574	195.89	2,066	3,566
195.38	1,755	2,591	195.90	2,072	3,586
195.39	1,761	2,609	195.91	2,078	3,607
195.40	1,767	2,627	195.92	2,084	3,628
195.41	1,773	2,644	195.93	2,090	3,649
195.42	1,779	2,662	195.94	2,096	3,670
195.43	1,785	2,680	195.95	2,102	3,691
195.44	1,791	2,698	195.96	2,109	3,712
195.45	1,797	2,716	195.97	2,115	3,733
195.46	1,804	2,734	195.98	2,121	3,754
195.47	1,810	2,752	195.99	2,127	3,775
195.48	1,816	2,770	196.00	2,133	3,797
195.49	1,822	2,788	196.01	2,140	3,818
195.50	1,828	2,806	196.02	2,146	3,839
195.51	1,834	2,825	196.03	2,153	3,861
195.52	1,840	2,843	196.04	2,160	3,882
195.53	1,846	2,861	196.05	2,166	3,904
195.54	1,852	2,880	196.06	2,173	3,926
195.55	1,859	2,898	196.07	2,180	3,947
195.56	1,865	2,917	196.08	2,186	3,969
195.57	1,871	2,936	196.09	2,193	3,991
195.58	1,877	2,954	196.10	2,200	4,013
195.59	1,883	2,973	196.11	2,206	4,035

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.12	2,213	4,057	196.64	2,559	5,298
196.13	2,220	4,079	196.65	2,566	5,324
196.14	2,226	4,102	196.66	2,573	5,349
196.15	2,233	4,124	196.67	2,579	5,375
196.16	2,240	4,146	196.68	2,586	5,401
196.17	2,246	4,169	196.69	2,593	5,427
196.18	2,253	4,191	196.70	2,599	5,453
196.19	2,260	4,214	196.71	2,606	5,479
196.20	2,266	4,236	196.72	2,613	5,505
196.21	2,273	4,259	196.73	2,619	5,531
196.22	2,280	4,282	196.74	2,626	5,557
196.23	2,286	4,305	196.75	2,633	5,584
196.24	2,293	4,328	196.76	2,639	5,610
196.25	2,300	4,351	196.77	2,646	5,636
196.26	2,306	4,374	196.78	2,652	5,663
196.27	2,313	4,397	196.79	2,659	5,689
196.28	2,319	4,420	196.80	2,666	5,716
196.29	2,326	4,443	196.81	2,672	5,743
196.30	2,333	4,466	196.82	2,679	5,769
196.31	2,339	4,490	196.83	2,686	5,796
196.32	2,346	4,513	196.84	2,692	5,823
196.33	2,353	4,537	196.85	2,699	5,850
196.34	2,359	4,560	196.86	2,706	5,877
196.35	2,366	4,584	196.87	2,712	5,904
196.36	2,373	4,608	196.88	2,719	5,931
196.37	2,379	4,631	196.89	2,726	5,959
196.38	2,386	4,655	196.90	2,732	5,986
196.39	2,393	4,679	196.91	2,739	6,013
196.40	2,399	4,703	196.92	2,746	6,041
196.41	2,406	4,727	196.93	2,752	6,068
196.42	2,413	4,751	196.94	2,759	6,096
196.43	2,419	4,775	196.95	2,766	6,123
196.44	2,426	4,799	196.96	2,772	6,151
196.45	2,433	4,824	196.97	2,779	6,179
196.46	2,439	4,848	196.98	2,786	6,207
196.47	2,446	4,873	196.99	2,792	6,235
196.48	2,453	4,897	197.00	2,799	6,263
196.49	2,459	4,922	197.01	2,806	6,291
196.50	2,466	4,946	197.02	2,813	6,319
196.51	2,473	4,971	197.03	2,820	6,347
196.52	2,479	4,996	197.04	2,827	6,375
196.53	2,486	5,021	197.05	2,835	6,403
196.54	2,493	5,045	197.06	2,842	6,432
196.55	2,499	5,070	197.07	2,849	6,460
196.56	2,506	5,095	197.08	2,856	6,489
196.57	2,513	5,121	197.09	2,863	6,517
196.58	2,519	5,146	197.10	2,870	6,546
196.59	2,526	5,171	197.11	2,877	6,575
196.60	2,533	5,196	197.12	2,884	6,603
196.61	2,539	5,222	197.13	2,891	6,632
196.62	2,546	5,247	197.14	2,898	6,661
196.63	2,553	5,272	197.15	2,906	6,690

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.16	2,913	6,719
197.17	2,920	6,749
197.18	2,927	6,778
197.19	2,934	6,807
197.20	2,941	6,836
197.21	2,948	6,866
197.22	2,955	6,895
197.23	2,962	6,925
197.24	2,969	6,955
197.25	2,977	6,984
197.26	2,984	7,014
197.27	2,991	7,044
197.28	2,998	7,074
197.29	3,005	7,104
197.30	3,012	7,134
197.31	3,019	7,164
197.32	3,026	7,195
197.33	3,033	7,225
197.34	3,040	7,255
197.35	3,047	7,286
197.36	3,055	7,316
197.37	3,062	7,347
197.38	3,069	7,377
197.39	3,076	7,408
197.40	3,083	7,439
197.41	3,090	7,470
197.42	3,097	7,501
197.43	3,104	7,532
197.44	3,111	7,563
197.45	3,118	7,594
197.46	3,126	7,625
197.47	3,133	7,656
197.48	3,140	7,688
197.49	3,147	7,719
197.50	**3,154**	**7,751**

Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.80% Impervious, Inflow Depth = 4.28" for Future 10 yr event
Inflow = 10.96 cfs @ 12.17 hrs, Volume= 0.906 af
Outflow = 7.50 cfs @ 12.28 hrs, Volume= 0.792 af, Atten= 32%, Lag= 6.3 min
Primary = 7.50 cfs @ 12.28 hrs, Volume= 0.792 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 202.37' @ 12.28 hrs Surf.Area= 5,808 sf Storage= 12,195 cf

Plug-Flow detention time= 132.0 min calculated for 0.791 af (87% of inflow)
Center-of-Mass det. time= 71.1 min (853.5 - 782.4)

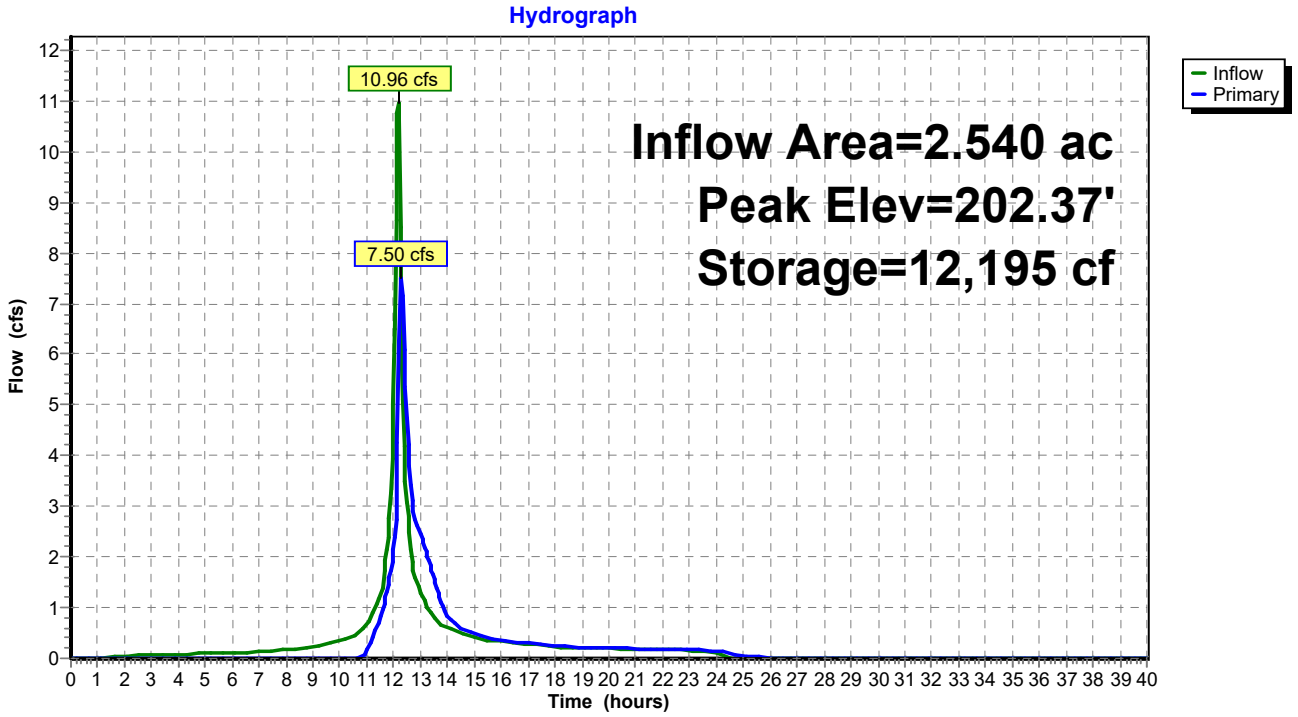
Volume	Invert	Avail.Storage	Storage Description
#1	199.75'	33,011 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.75	0	0	0
200.00	4,035	504	504
201.00	4,695	4,365	4,869
202.00	5,685	5,190	10,059
203.00	6,015	5,850	15,909
204.00	6,676	6,346	22,255
205.00	7,336	7,006	29,261
205.50	7,666	3,751	33,011

Device	Routing	Invert	Outlet Devices
#1	Primary	198.75'	**18.0" Round Culvert** L= 122.0' Ke= 0.500 Inlet / Outlet Invert= 198.75' / 198.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.02'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.43'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.42 cfs @ 12.28 hrs HW=202.37' (Free Discharge)
- **1=Culvert** (Passes 7.42 cfs of 12.43 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.48 cfs @ 5.23 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 3.94 cfs @ 2.21 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-53: Basin #53



Stage-Discharge for Pond B-53: Basin #53

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.75	0.00	200.27	0.00	200.79	0.00	201.31	1.00
199.76	0.00	200.28	0.00	200.80	0.00	201.32	1.05
199.77	0.00	200.29	0.00	200.81	0.00	201.33	1.11
199.78	0.00	200.30	0.00	200.82	0.00	201.34	1.16
199.79	0.00	200.31	0.00	200.83	0.00	201.35	1.22
199.80	0.00	200.32	0.00	200.84	0.00	201.36	1.27
199.81	0.00	200.33	0.00	200.85	0.00	201.37	1.32
199.82	0.00	200.34	0.00	200.86	0.00	201.38	1.36
199.83	0.00	200.35	0.00	200.87	0.00	201.39	1.40
199.84	0.00	200.36	0.00	200.88	0.00	201.40	1.44
199.85	0.00	200.37	0.00	200.89	0.00	201.41	1.48
199.86	0.00	200.38	0.00	200.90	0.00	201.42	1.51
199.87	0.00	200.39	0.00	200.91	0.00	201.43	1.55
199.88	0.00	200.40	0.00	200.92	0.00	201.44	1.58
199.89	0.00	200.41	0.00	200.93	0.00	201.45	1.62
199.90	0.00	200.42	0.00	200.94	0.00	201.46	1.65
199.91	0.00	200.43	0.00	200.95	0.00	201.47	1.68
199.92	0.00	200.44	0.00	200.96	0.00	201.48	1.71
199.93	0.00	200.45	0.00	200.97	0.00	201.49	1.74
199.94	0.00	200.46	0.00	200.98	0.00	201.50	1.77
199.95	0.00	200.47	0.00	200.99	0.00	201.51	1.80
199.96	0.00	200.48	0.00	201.00	0.00	201.52	1.83
199.97	0.00	200.49	0.00	201.01	0.00	201.53	1.86
199.98	0.00	200.50	0.00	201.02	0.00	201.54	1.89
199.99	0.00	200.51	0.00	201.03	0.01	201.55	1.92
200.00	0.00	200.52	0.00	201.04	0.02	201.56	1.94
200.01	0.00	200.53	0.00	201.05	0.03	201.57	1.97
200.02	0.00	200.54	0.00	201.06	0.05	201.58	2.00
200.03	0.00	200.55	0.00	201.07	0.07	201.59	2.02
200.04	0.00	200.56	0.00	201.08	0.09	201.60	2.05
200.05	0.00	200.57	0.00	201.09	0.12	201.61	2.07
200.06	0.00	200.58	0.00	201.10	0.15	201.62	2.10
200.07	0.00	200.59	0.00	201.11	0.17	201.63	2.12
200.08	0.00	200.60	0.00	201.12	0.20	201.64	2.15
200.09	0.00	200.61	0.00	201.13	0.23	201.65	2.17
200.10	0.00	200.62	0.00	201.14	0.27	201.66	2.20
200.11	0.00	200.63	0.00	201.15	0.30	201.67	2.22
200.12	0.00	200.64	0.00	201.16	0.34	201.68	2.24
200.13	0.00	200.65	0.00	201.17	0.37	201.69	2.27
200.14	0.00	200.66	0.00	201.18	0.41	201.70	2.29
200.15	0.00	200.67	0.00	201.19	0.45	201.71	2.31
200.16	0.00	200.68	0.00	201.20	0.49	201.72	2.33
200.17	0.00	200.69	0.00	201.21	0.53	201.73	2.36
200.18	0.00	200.70	0.00	201.22	0.57	201.74	2.38
200.19	0.00	200.71	0.00	201.23	0.62	201.75	2.40
200.20	0.00	200.72	0.00	201.24	0.66	201.76	2.42
200.21	0.00	200.73	0.00	201.25	0.71	201.77	2.44
200.22	0.00	200.74	0.00	201.26	0.75	201.78	2.46
200.23	0.00	200.75	0.00	201.27	0.80	201.79	2.49
200.24	0.00	200.76	0.00	201.28	0.85	201.80	2.51
200.25	0.00	200.77	0.00	201.29	0.90	201.81	2.53
200.26	0.00	200.78	0.00	201.30	0.95	201.82	2.55

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.83	2.57	202.35	7.19	202.87	13.48	203.39	14.48
201.84	2.59	202.36	7.33	202.88	13.50	203.40	14.50
201.85	2.61	202.37	7.48	202.89	13.52	203.41	14.52
201.86	2.63	202.38	7.62	202.90	13.54	203.42	14.54
201.87	2.65	202.39	7.76	202.91	13.56	203.43	14.55
201.88	2.67	202.40	7.91	202.92	13.58	203.44	14.57
201.89	2.69	202.41	8.06	202.93	13.60	203.45	14.59
201.90	2.70	202.42	8.20	202.94	13.62	203.46	14.61
201.91	2.72	202.43	8.35	202.95	13.64	203.47	14.63
201.92	2.76	202.44	8.50	202.96	13.66	203.48	14.65
201.93	2.80	202.45	8.66	202.97	13.68	203.49	14.66
201.94	2.85	202.46	8.81	202.98	13.70	203.50	14.68
201.95	2.90	202.47	8.96	202.99	13.72	203.51	14.70
201.96	2.96	202.48	9.12	203.00	13.74	203.52	14.72
201.97	3.03	202.49	9.27	203.01	13.75	203.53	14.74
201.98	3.10	202.50	9.43	203.02	13.77	203.54	14.76
201.99	3.17	202.51	9.59	203.03	13.79	203.55	14.77
202.00	3.24	202.52	9.75	203.04	13.81	203.56	14.79
202.01	3.32	202.53	9.91	203.05	13.83	203.57	14.81
202.02	3.40	202.54	10.07	203.06	13.85	203.58	14.83
202.03	3.48	202.55	10.23	203.07	13.87	203.59	14.85
202.04	3.57	202.56	10.39	203.08	13.89	203.60	14.87
202.05	3.66	202.57	10.56	203.09	13.91	203.61	14.88
202.06	3.75	202.58	10.72	203.10	13.93	203.62	14.90
202.07	3.84	202.59	10.89	203.11	13.95	203.63	14.92
202.08	3.94	202.60	11.05	203.12	13.97	203.64	14.94
202.09	4.04	202.61	11.22	203.13	13.99	203.65	14.96
202.10	4.14	202.62	11.39	203.14	14.01	203.66	14.97
202.11	4.24	202.63	11.56	203.15	14.03	203.67	14.99
202.12	4.34	202.64	11.73	203.16	14.05	203.68	15.01
202.13	4.45	202.65	11.90	203.17	14.06	203.69	15.03
202.14	4.56	202.66	12.07	203.18	14.08	203.70	15.05
202.15	4.67	202.67	12.24	203.19	14.10	203.71	15.06
202.16	4.78	202.68	12.42	203.20	14.12	203.72	15.08
202.17	4.89	202.69	12.59	203.21	14.14	203.73	15.10
202.18	5.01	202.70	12.77	203.22	14.16	203.74	15.12
202.19	5.12	202.71	12.94	203.23	14.18	203.75	15.14
202.20	5.24	202.72	13.12	203.24	14.20	203.76	15.15
202.21	5.36	202.73	13.19	203.25	14.22	203.77	15.17
202.22	5.48	202.74	13.22	203.26	14.24	203.78	15.19
202.23	5.61	202.75	13.24	203.27	14.25	203.79	15.21
202.24	5.73	202.76	13.26	203.28	14.27	203.80	15.22
202.25	5.86	202.77	13.28	203.29	14.29	203.81	15.24
202.26	5.98	202.78	13.30	203.30	14.31	203.82	15.26
202.27	6.11	202.79	13.32	203.31	14.33	203.83	15.28
202.28	6.24	202.80	13.34	203.32	14.35	203.84	15.29
202.29	6.37	202.81	13.36	203.33	14.37	203.85	15.31
202.30	6.51	202.82	13.38	203.34	14.39	203.86	15.33
202.31	6.64	202.83	13.40	203.35	14.41	203.87	15.35
202.32	6.78	202.84	13.42	203.36	14.42	203.88	15.36
202.33	6.91	202.85	13.44	203.37	14.44	203.89	15.38
202.34	7.05	202.86	13.46	203.38	14.46	203.90	15.40

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.91	15.42	204.43	16.30	204.95	67.49	205.47	166.93
203.92	15.43	204.44	16.43	204.96	69.18	205.48	169.11
203.93	15.45	204.45	16.67	204.97	70.91	205.49	171.30
203.94	15.47	204.46	16.96	204.98	72.66	205.50	**173.51**
203.95	15.49	204.47	17.30	204.99	74.44		
203.96	15.50	204.48	17.69	205.00	76.24		
203.97	15.52	204.49	18.12	205.01	78.07		
203.98	15.54	204.50	18.59	205.02	79.93		
203.99	15.56	204.51	19.09	205.03	81.81		
204.00	15.57	204.52	19.62	205.04	83.46		
204.01	15.59	204.53	20.18	205.05	85.11		
204.02	15.61	204.54	20.77	205.06	86.78		
204.03	15.63	204.55	21.39	205.07	88.46		
204.04	15.64	204.56	22.03	205.08	90.16		
204.05	15.66	204.57	22.70	205.09	91.87		
204.06	15.68	204.58	23.39	205.10	93.59		
204.07	15.69	204.59	24.11	205.11	95.33		
204.08	15.71	204.60	24.85	205.12	97.08		
204.09	15.73	204.61	25.61	205.13	98.84		
204.10	15.75	204.62	26.39	205.14	100.61		
204.11	15.76	204.63	27.19	205.15	102.40		
204.12	15.78	204.64	28.06	205.16	104.20		
204.13	15.80	204.65	28.94	205.17	106.01		
204.14	15.81	204.66	29.86	205.18	107.83		
204.15	15.83	204.67	30.80	205.19	109.67		
204.16	15.85	204.68	31.76	205.20	111.52		
204.17	15.87	204.69	32.75	205.21	113.38		
204.18	15.88	204.70	33.77	205.22	115.25		
204.19	15.90	204.71	34.81	205.23	117.14		
204.20	15.92	204.72	35.87	205.24	119.07		
204.21	15.93	204.73	36.96	205.25	121.02		
204.22	15.95	204.74	38.07	205.26	122.98		
204.23	15.97	204.75	39.21	205.27	124.96		
204.24	15.98	204.76	40.37	205.28	126.95		
204.25	16.00	204.77	41.56	205.29	128.95		
204.26	16.02	204.78	42.77	205.30	130.96		
204.27	16.03	204.79	44.00	205.31	132.99		
204.28	16.05	204.80	45.26	205.32	135.03		
204.29	16.07	204.81	46.54	205.33	137.08		
204.30	16.08	204.82	47.85	205.34	139.15		
204.31	16.10	204.83	49.18	205.35	141.22		
204.32	16.12	204.84	50.56	205.36	143.32		
204.33	16.13	204.85	51.97	205.37	145.42		
204.34	16.15	204.86	53.40	205.38	147.54		
204.35	16.17	204.87	54.86	205.39	149.67		
204.36	16.19	204.88	56.35	205.40	151.81		
204.37	16.20	204.89	57.86	205.41	153.96		
204.38	16.22	204.90	59.40	205.42	156.13		
204.39	16.23	204.91	60.96	205.43	158.31		
204.40	16.25	204.92	62.56	205.44	160.45		
204.41	16.27	204.93	64.17	205.45	162.60		
204.42	16.28	204.94	65.82	205.46	164.76		

Stage-Area-Storage for Pond B-53: Basin #53

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.75	0	0	200.27	4,213	1,618
199.76	161	1	200.28	4,220	1,660
199.77	323	3	200.29	4,226	1,702
199.78	484	7	200.30	4,233	1,745
199.79	646	13	200.31	4,240	1,787
199.80	807	20	200.32	4,246	1,829
199.81	968	29	200.33	4,253	1,872
199.82	1,130	40	200.34	4,259	1,914
199.83	1,291	52	200.35	4,266	1,957
199.84	1,453	65	200.36	4,273	2,000
199.85	1,614	81	200.37	4,279	2,043
199.86	1,775	98	200.38	4,286	2,085
199.87	1,937	116	200.39	4,292	2,128
199.88	2,098	136	200.40	4,299	2,171
199.89	2,260	158	200.41	4,306	2,214
199.90	2,421	182	200.42	4,312	2,257
199.91	2,582	207	200.43	4,319	2,300
199.92	2,744	233	200.44	4,325	2,344
199.93	2,905	261	200.45	4,332	2,387
199.94	3,067	291	200.46	4,339	2,430
199.95	3,228	323	200.47	4,345	2,474
199.96	3,389	356	200.48	4,352	2,517
199.97	3,551	391	200.49	4,358	2,561
199.98	3,712	427	200.50	4,365	2,604
199.99	3,874	465	200.51	4,372	2,648
200.00	4,035	504	200.52	4,378	2,692
200.01	4,042	545	200.53	4,385	2,736
200.02	4,048	585	200.54	4,391	2,780
200.03	4,055	626	200.55	4,398	2,823
200.04	4,061	666	200.56	4,405	2,867
200.05	4,068	707	200.57	4,411	2,912
200.06	4,075	748	200.58	4,418	2,956
200.07	4,081	788	200.59	4,424	3,000
200.08	4,088	829	200.60	4,431	3,044
200.09	4,094	870	200.61	4,438	3,089
200.10	4,101	911	200.62	4,444	3,133
200.11	4,108	952	200.63	4,451	3,177
200.12	4,114	993	200.64	4,457	3,222
200.13	4,121	1,035	200.65	4,464	3,267
200.14	4,127	1,076	200.66	4,471	3,311
200.15	4,134	1,117	200.67	4,477	3,356
200.16	4,141	1,158	200.68	4,484	3,401
200.17	4,147	1,200	200.69	4,490	3,446
200.18	4,154	1,241	200.70	4,497	3,491
200.19	4,160	1,283	200.71	4,504	3,536
200.20	4,167	1,325	200.72	4,510	3,581
200.21	4,174	1,366	200.73	4,517	3,626
200.22	4,180	1,408	200.74	4,523	3,671
200.23	4,187	1,450	200.75	4,530	3,716
200.24	4,193	1,492	200.76	4,537	3,762
200.25	4,200	1,534	200.77	4,543	3,807
200.26	4,207	1,576	200.78	4,550	3,852

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.79	4,556	3,898	201.31	5,002	6,372
200.80	4,563	3,944	201.32	5,012	6,422
200.81	4,570	3,989	201.33	5,022	6,473
200.82	4,576	4,035	201.34	5,032	6,523
200.83	4,583	4,081	201.35	5,041	6,573
200.84	4,589	4,127	201.36	5,051	6,624
200.85	4,596	4,173	201.37	5,061	6,674
200.86	4,603	4,219	201.38	5,071	6,725
200.87	4,609	4,265	201.39	5,081	6,776
200.88	4,616	4,311	201.40	5,091	6,827
200.89	4,622	4,357	201.41	5,101	6,878
200.90	4,629	4,403	201.42	5,111	6,929
200.91	4,636	4,449	201.43	5,121	6,980
200.92	4,642	4,496	201.44	5,131	7,031
200.93	4,649	4,542	201.45	5,140	7,082
200.94	4,655	4,589	201.46	5,150	7,134
200.95	4,662	4,635	201.47	5,160	7,185
200.96	4,669	4,682	201.48	5,170	7,237
200.97	4,675	4,729	201.49	5,180	7,289
200.98	4,682	4,776	201.50	5,190	7,341
200.99	4,688	4,822	201.51	5,200	7,393
201.00	4,695	4,869	201.52	5,210	7,445
201.01	4,705	4,916	201.53	5,220	7,497
201.02	4,715	4,963	201.54	5,230	7,549
201.03	4,725	5,011	201.55	5,240	7,601
201.04	4,735	5,058	201.56	5,249	7,654
201.05	4,745	5,105	201.57	5,259	7,706
201.06	4,754	5,153	201.58	5,269	7,759
201.07	4,764	5,200	201.59	5,279	7,812
201.08	4,774	5,248	201.60	5,289	7,865
201.09	4,784	5,296	201.61	5,299	7,918
201.10	4,794	5,344	201.62	5,309	7,971
201.11	4,804	5,392	201.63	5,319	8,024
201.12	4,814	5,440	201.64	5,329	8,077
201.13	4,824	5,488	201.65	5,339	8,130
201.14	4,834	5,536	201.66	5,348	8,184
201.15	4,844	5,585	201.67	5,358	8,237
201.16	4,853	5,633	201.68	5,368	8,291
201.17	4,863	5,682	201.69	5,378	8,345
201.18	4,873	5,731	201.70	5,388	8,398
201.19	4,883	5,779	201.71	5,398	8,452
201.20	4,893	5,828	201.72	5,408	8,506
201.21	4,903	5,877	201.73	5,418	8,561
201.22	4,913	5,926	201.74	5,428	8,615
201.23	4,923	5,975	201.75	5,438	8,669
201.24	4,933	6,025	201.76	5,447	8,723
201.25	4,943	6,074	201.77	5,457	8,778
201.26	4,952	6,124	201.78	5,467	8,833
201.27	4,962	6,173	201.79	5,477	8,887
201.28	4,972	6,223	201.80	5,487	8,942
201.29	4,982	6,273	201.81	5,497	8,997
201.30	4,992	6,322	201.82	5,507	9,052

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.83	5,517	9,107	202.35	5,800	12,069
201.84	5,527	9,162	202.36	5,804	12,127
201.85	5,536	9,218	202.37	5,807	12,185
201.86	5,546	9,273	202.38	5,810	12,244
201.87	5,556	9,329	202.39	5,814	12,302
201.88	5,566	9,384	202.40	5,817	12,360
201.89	5,576	9,440	202.41	5,820	12,418
201.90	5,586	9,496	202.42	5,824	12,476
201.91	5,596	9,552	202.43	5,827	12,534
201.92	5,606	9,608	202.44	5,830	12,593
201.93	5,616	9,664	202.45	5,833	12,651
201.94	5,626	9,720	202.46	5,837	12,709
201.95	5,635	9,776	202.47	5,840	12,768
201.96	5,645	9,833	202.48	5,843	12,826
201.97	5,655	9,889	202.49	5,847	12,885
201.98	5,665	9,946	202.50	5,850	12,943
201.99	5,675	10,003	202.51	5,853	13,002
202.00	5,685	10,059	202.52	5,857	13,060
202.01	5,688	10,116	202.53	5,860	13,119
202.02	5,692	10,173	202.54	5,863	13,177
202.03	5,695	10,230	202.55	5,867	13,236
202.04	5,698	10,287	202.56	5,870	13,295
202.05	5,702	10,344	202.57	5,873	13,353
202.06	5,705	10,401	202.58	5,876	13,412
202.07	5,708	10,458	202.59	5,880	13,471
202.08	5,711	10,515	202.60	5,883	13,530
202.09	5,715	10,572	202.61	5,886	13,589
202.10	5,718	10,630	202.62	5,890	13,648
202.11	5,721	10,687	202.63	5,893	13,706
202.12	5,725	10,744	202.64	5,896	13,765
202.13	5,728	10,801	202.65	5,900	13,824
202.14	5,731	10,859	202.66	5,903	13,883
202.15	5,735	10,916	202.67	5,906	13,942
202.16	5,738	10,973	202.68	5,909	14,001
202.17	5,741	11,031	202.69	5,913	14,061
202.18	5,744	11,088	202.70	5,916	14,120
202.19	5,748	11,145	202.71	5,919	14,179
202.20	5,751	11,203	202.72	5,923	14,238
202.21	5,754	11,261	202.73	5,926	14,297
202.22	5,758	11,318	202.74	5,929	14,357
202.23	5,761	11,376	202.75	5,933	14,416
202.24	5,764	11,433	202.76	5,936	14,475
202.25	5,768	11,491	202.77	5,939	14,535
202.26	5,771	11,549	202.78	5,942	14,594
202.27	5,774	11,606	202.79	5,946	14,654
202.28	5,777	11,664	202.80	5,949	14,713
202.29	5,781	11,722	202.81	5,952	14,772
202.30	5,784	11,780	202.82	5,956	14,832
202.31	5,787	11,838	202.83	5,959	14,892
202.32	5,791	11,895	202.84	5,962	14,951
202.33	5,794	11,953	202.85	5,965	15,011
202.34	5,797	12,011	202.86	5,969	15,071

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.87	5,972	15,130	203.39	6,273	18,305
202.88	5,975	15,190	203.40	6,279	18,368
202.89	5,979	15,250	203.41	6,286	18,431
202.90	5,982	15,310	203.42	6,293	18,494
202.91	5,985	15,369	203.43	6,299	18,557
202.92	5,989	15,429	203.44	6,306	18,620
202.93	5,992	15,489	203.45	6,312	18,683
202.94	5,995	15,549	203.46	6,319	18,746
202.95	5,998	15,609	203.47	6,326	18,809
202.96	6,002	15,669	203.48	6,332	18,873
202.97	6,005	15,729	203.49	6,339	18,936
202.98	6,008	15,789	203.50	6,346	19,000
202.99	6,012	15,849	203.51	6,352	19,063
203.00	6,015	15,909	203.52	6,359	19,127
203.01	6,022	15,970	203.53	6,365	19,190
203.02	6,028	16,030	203.54	6,372	19,254
203.03	6,035	16,090	203.55	6,379	19,318
203.04	6,041	16,151	203.56	6,385	19,381
203.05	6,048	16,211	203.57	6,392	19,445
203.06	6,055	16,271	203.58	6,398	19,509
203.07	6,061	16,332	203.59	6,405	19,573
203.08	6,068	16,393	203.60	6,412	19,637
203.09	6,074	16,453	203.61	6,418	19,702
203.10	6,081	16,514	203.62	6,425	19,766
203.11	6,088	16,575	203.63	6,431	19,830
203.12	6,094	16,636	203.64	6,438	19,894
203.13	6,101	16,697	203.65	6,445	19,959
203.14	6,108	16,758	203.66	6,451	20,023
203.15	6,114	16,819	203.67	6,458	20,088
203.16	6,121	16,880	203.68	6,464	20,152
203.17	6,127	16,941	203.69	6,471	20,217
203.18	6,134	17,003	203.70	6,478	20,282
203.19	6,141	17,064	203.71	6,484	20,347
203.20	6,147	17,126	203.72	6,491	20,412
203.21	6,154	17,187	203.73	6,498	20,476
203.22	6,160	17,249	203.74	6,504	20,541
203.23	6,167	17,310	203.75	6,511	20,607
203.24	6,174	17,372	203.76	6,517	20,672
203.25	6,180	17,434	203.77	6,524	20,737
203.26	6,187	17,496	203.78	6,531	20,802
203.27	6,193	17,558	203.79	6,537	20,867
203.28	6,200	17,619	203.80	6,544	20,933
203.29	6,207	17,682	203.81	6,550	20,998
203.30	6,213	17,744	203.82	6,557	21,064
203.31	6,220	17,806	203.83	6,564	21,130
203.32	6,227	17,868	203.84	6,570	21,195
203.33	6,233	17,930	203.85	6,577	21,261
203.34	6,240	17,993	203.86	6,583	21,327
203.35	6,246	18,055	203.87	6,590	21,393
203.36	6,253	18,118	203.88	6,597	21,459
203.37	6,260	18,180	203.89	6,603	21,525
203.38	6,266	18,243	203.90	6,610	21,591

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.91	6,617	21,657	204.43	6,960	25,187
203.92	6,623	21,723	204.44	6,966	25,256
203.93	6,630	21,789	204.45	6,973	25,326
203.94	6,636	21,856	204.46	6,980	25,396
203.95	6,643	21,922	204.47	6,986	25,465
203.96	6,650	21,988	204.48	6,993	25,535
203.97	6,656	22,055	204.49	6,999	25,605
203.98	6,663	22,121	204.50	7,006	25,675
203.99	6,669	22,188	204.51	7,013	25,745
204.00	6,676	22,255	204.52	7,019	25,816
204.01	6,683	22,322	204.53	7,026	25,886
204.02	6,689	22,389	204.54	7,032	25,956
204.03	6,696	22,455	204.55	7,039	26,027
204.04	6,702	22,522	204.56	7,046	26,097
204.05	6,709	22,590	204.57	7,052	26,167
204.06	6,716	22,657	204.58	7,059	26,238
204.07	6,722	22,724	204.59	7,065	26,309
204.08	6,729	22,791	204.60	7,072	26,379
204.09	6,735	22,858	204.61	7,079	26,450
204.10	6,742	22,926	204.62	7,085	26,521
204.11	6,749	22,993	204.63	7,092	26,592
204.12	6,755	23,061	204.64	7,098	26,663
204.13	6,762	23,128	204.65	7,105	26,734
204.14	6,768	23,196	204.66	7,112	26,805
204.15	6,775	23,264	204.67	7,118	26,876
204.16	6,782	23,331	204.68	7,125	26,947
204.17	6,788	23,399	204.69	7,131	27,018
204.18	6,795	23,467	204.70	7,138	27,090
204.19	6,801	23,535	204.71	7,145	27,161
204.20	6,808	23,603	204.72	7,151	27,233
204.21	6,815	23,671	204.73	7,158	27,304
204.22	6,821	23,740	204.74	7,164	27,376
204.23	6,828	23,808	204.75	7,171	27,448
204.24	6,834	23,876	204.76	7,178	27,519
204.25	6,841	23,945	204.77	7,184	27,591
204.26	6,848	24,013	204.78	7,191	27,663
204.27	6,854	24,081	204.79	7,197	27,735
204.28	6,861	24,150	204.80	7,204	27,807
204.29	6,867	24,219	204.81	7,211	27,879
204.30	6,874	24,287	204.82	7,217	27,951
204.31	6,881	24,356	204.83	7,224	28,023
204.32	6,887	24,425	204.84	7,230	28,096
204.33	6,894	24,494	204.85	7,237	28,168
204.34	6,900	24,563	204.86	7,244	28,240
204.35	6,907	24,632	204.87	7,250	28,313
204.36	6,914	24,701	204.88	7,257	28,385
204.37	6,920	24,770	204.89	7,263	28,458
204.38	6,927	24,839	204.90	7,270	28,531
204.39	6,933	24,909	204.91	7,277	28,603
204.40	6,940	24,978	204.92	7,283	28,676
204.41	6,947	25,048	204.93	7,290	28,749
204.42	6,953	25,117	204.94	7,296	28,822

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.95	7,303	28,895
204.96	7,310	28,968
204.97	7,316	29,041
204.98	7,323	29,114
204.99	7,329	29,188
205.00	7,336	29,261
205.01	7,343	29,334
205.02	7,349	29,408
205.03	7,356	29,481
205.04	7,362	29,555
205.05	7,369	29,629
205.06	7,376	29,702
205.07	7,382	29,776
205.08	7,389	29,850
205.09	7,395	29,924
205.10	7,402	29,998
205.11	7,409	30,072
205.12	7,415	30,146
205.13	7,422	30,220
205.14	7,428	30,294
205.15	7,435	30,369
205.16	7,442	30,443
205.17	7,448	30,518
205.18	7,455	30,592
205.19	7,461	30,667
205.20	7,468	30,741
205.21	7,475	30,816
205.22	7,481	30,891
205.23	7,488	30,966
205.24	7,494	31,041
205.25	7,501	31,116
205.26	7,508	31,191
205.27	7,514	31,266
205.28	7,521	31,341
205.29	7,527	31,416
205.30	7,534	31,491
205.31	7,541	31,567
205.32	7,547	31,642
205.33	7,554	31,718
205.34	7,560	31,793
205.35	7,567	31,869
205.36	7,574	31,945
205.37	7,580	32,020
205.38	7,587	32,096
205.39	7,593	32,172
205.40	7,600	32,248
205.41	7,607	32,324
205.42	7,613	32,400
205.43	7,620	32,476
205.44	7,626	32,553
205.45	7,633	32,629
205.46	7,640	32,705
205.47	7,646	32,782
205.48	7,653	32,858
205.49	7,659	32,935
205.50	**7,666**	**33,011**

Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.47% Impervious, Inflow Depth = 4.60" for Future 10 yr event
Inflow = 11.73 cfs @ 12.17 hrs, Volume= 0.986 af
Outflow = 8.14 cfs @ 12.27 hrs, Volume= 0.845 af, Atten= 31%, Lag= 6.2 min
Primary = 8.14 cfs @ 12.27 hrs, Volume= 0.845 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 202.91' @ 12.27 hrs Surf.Area= 5,703 sf Storage= 14,021 cf

Plug-Flow detention time= 143.8 min calculated for 0.844 af (86% of inflow)
Center-of-Mass det. time= 77.5 min (850.3 - 772.8)

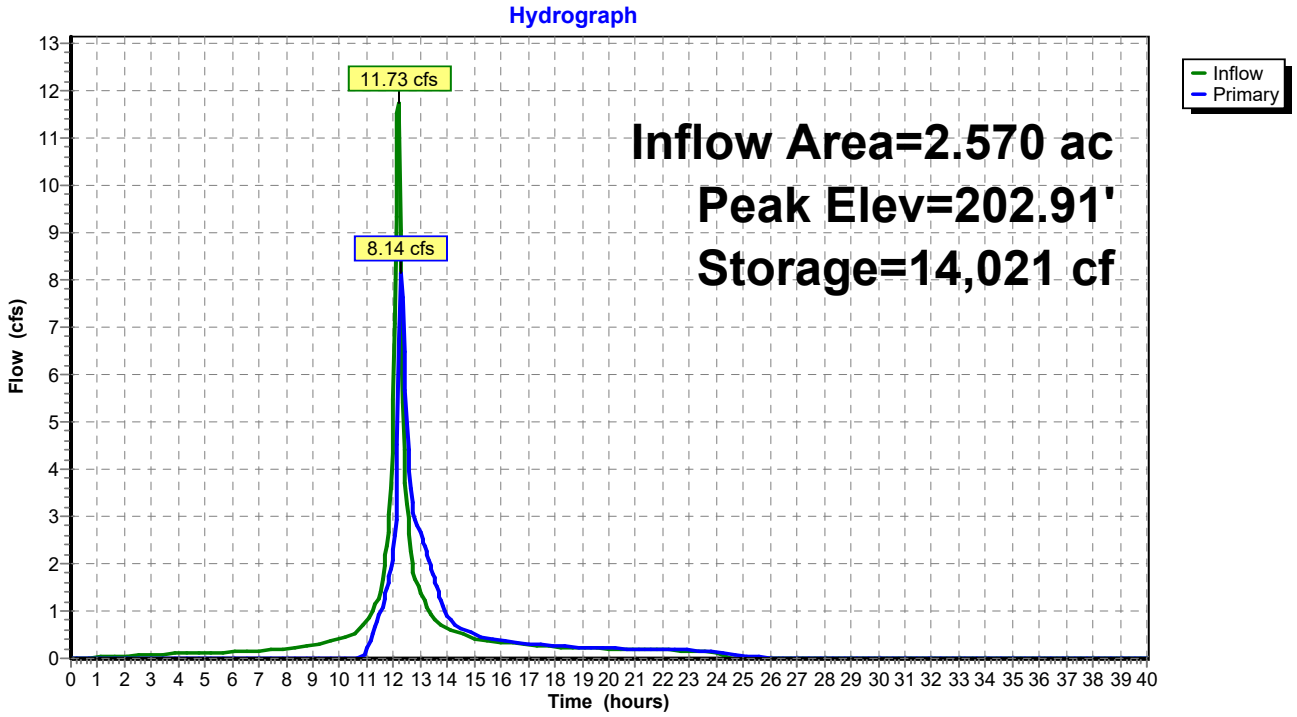
Volume	Invert	Avail.Storage	Storage Description
#1	199.89'	30,982 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.89	0	0	0
200.00	3,780	208	208
201.00	4,440	4,110	4,318
202.00	5,100	4,770	9,088
203.00	5,760	5,430	14,518
204.00	6,421	6,091	20,608
205.00	7,081	6,751	27,359
205.50	7,411	3,623	30,982

Device	Routing	Invert	Outlet Devices
#1	Primary	198.89'	**18.0" Round Culvert** L= 178.0' Ke= 0.500 Inlet / Outlet Invert= 198.89' / 198.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.40'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	202.42'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.47'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.98 cfs @ 12.27 hrs HW=202.90' (Free Discharge)
- **1=Culvert** (Passes 7.98 cfs of 11.99 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 3.71 cfs @ 5.56 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.27 cfs @ 2.27 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-54: Basin #54



Stage-Discharge for Pond B-54: Basin #54

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.89	0.00	200.41	0.00	200.93	0.00	201.45	0.07
199.90	0.00	200.42	0.00	200.94	0.00	201.46	0.09
199.91	0.00	200.43	0.00	200.95	0.00	201.47	0.12
199.92	0.00	200.44	0.00	200.96	0.00	201.48	0.15
199.93	0.00	200.45	0.00	200.97	0.00	201.49	0.17
199.94	0.00	200.46	0.00	200.98	0.00	201.50	0.20
199.95	0.00	200.47	0.00	200.99	0.00	201.51	0.23
199.96	0.00	200.48	0.00	201.00	0.00	201.52	0.27
199.97	0.00	200.49	0.00	201.01	0.00	201.53	0.30
199.98	0.00	200.50	0.00	201.02	0.00	201.54	0.34
199.99	0.00	200.51	0.00	201.03	0.00	201.55	0.37
200.00	0.00	200.52	0.00	201.04	0.00	201.56	0.41
200.01	0.00	200.53	0.00	201.05	0.00	201.57	0.45
200.02	0.00	200.54	0.00	201.06	0.00	201.58	0.49
200.03	0.00	200.55	0.00	201.07	0.00	201.59	0.53
200.04	0.00	200.56	0.00	201.08	0.00	201.60	0.57
200.05	0.00	200.57	0.00	201.09	0.00	201.61	0.62
200.06	0.00	200.58	0.00	201.10	0.00	201.62	0.66
200.07	0.00	200.59	0.00	201.11	0.00	201.63	0.71
200.08	0.00	200.60	0.00	201.12	0.00	201.64	0.75
200.09	0.00	200.61	0.00	201.13	0.00	201.65	0.80
200.10	0.00	200.62	0.00	201.14	0.00	201.66	0.85
200.11	0.00	200.63	0.00	201.15	0.00	201.67	0.90
200.12	0.00	200.64	0.00	201.16	0.00	201.68	0.95
200.13	0.00	200.65	0.00	201.17	0.00	201.69	1.00
200.14	0.00	200.66	0.00	201.18	0.00	201.70	1.05
200.15	0.00	200.67	0.00	201.19	0.00	201.71	1.11
200.16	0.00	200.68	0.00	201.20	0.00	201.72	1.16
200.17	0.00	200.69	0.00	201.21	0.00	201.73	1.22
200.18	0.00	200.70	0.00	201.22	0.00	201.74	1.27
200.19	0.00	200.71	0.00	201.23	0.00	201.75	1.32
200.20	0.00	200.72	0.00	201.24	0.00	201.76	1.36
200.21	0.00	200.73	0.00	201.25	0.00	201.77	1.40
200.22	0.00	200.74	0.00	201.26	0.00	201.78	1.44
200.23	0.00	200.75	0.00	201.27	0.00	201.79	1.48
200.24	0.00	200.76	0.00	201.28	0.00	201.80	1.51
200.25	0.00	200.77	0.00	201.29	0.00	201.81	1.55
200.26	0.00	200.78	0.00	201.30	0.00	201.82	1.58
200.27	0.00	200.79	0.00	201.31	0.00	201.83	1.62
200.28	0.00	200.80	0.00	201.32	0.00	201.84	1.65
200.29	0.00	200.81	0.00	201.33	0.00	201.85	1.68
200.30	0.00	200.82	0.00	201.34	0.00	201.86	1.71
200.31	0.00	200.83	0.00	201.35	0.00	201.87	1.74
200.32	0.00	200.84	0.00	201.36	0.00	201.88	1.77
200.33	0.00	200.85	0.00	201.37	0.00	201.89	1.80
200.34	0.00	200.86	0.00	201.38	0.00	201.90	1.83
200.35	0.00	200.87	0.00	201.39	0.00	201.91	1.86
200.36	0.00	200.88	0.00	201.40	0.00	201.92	1.89
200.37	0.00	200.89	0.00	201.41	0.01	201.93	1.92
200.38	0.00	200.90	0.00	201.42	0.02	201.94	1.94
200.39	0.00	200.91	0.00	201.43	0.03	201.95	1.97
200.40	0.00	200.92	0.00	201.44	0.05	201.96	2.00

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.97	2.02	202.49	3.32	203.01	9.61	203.53	13.06
201.98	2.05	202.50	3.39	203.02	9.76	203.54	13.07
201.99	2.07	202.51	3.47	203.03	9.92	203.55	13.09
202.00	2.10	202.52	3.54	203.04	10.08	203.56	13.10
202.01	2.12	202.53	3.62	203.05	10.24	203.57	13.12
202.02	2.15	202.54	3.70	203.06	10.40	203.58	13.14
202.03	2.17	202.55	3.79	203.07	10.57	203.59	13.15
202.04	2.20	202.56	3.88	203.08	10.73	203.60	13.17
202.05	2.22	202.57	3.97	203.09	10.89	203.61	13.18
202.06	2.24	202.58	4.06	203.10	11.06	203.62	13.20
202.07	2.27	202.59	4.15	203.11	11.22	203.63	13.22
202.08	2.29	202.60	4.25	203.12	11.39	203.64	13.23
202.09	2.31	202.61	4.35	203.13	11.56	203.65	13.25
202.10	2.33	202.62	4.45	203.14	11.73	203.66	13.26
202.11	2.36	202.63	4.55	203.15	11.90	203.67	13.28
202.12	2.38	202.64	4.66	203.16	12.07	203.68	13.30
202.13	2.40	202.65	4.76	203.17	12.24	203.69	13.31
202.14	2.42	202.66	4.87	203.18	12.41	203.70	13.33
202.15	2.44	202.67	4.98	203.19	12.49	203.71	13.34
202.16	2.46	202.68	5.10	203.20	12.51	203.72	13.36
202.17	2.49	202.69	5.21	203.21	12.53	203.73	13.38
202.18	2.51	202.70	5.33	203.22	12.54	203.74	13.39
202.19	2.53	202.71	5.44	203.23	12.56	203.75	13.41
202.20	2.55	202.72	5.56	203.24	12.58	203.76	13.42
202.21	2.57	202.73	5.68	203.25	12.59	203.77	13.44
202.22	2.59	202.74	5.80	203.26	12.61	203.78	13.45
202.23	2.61	202.75	5.93	203.27	12.63	203.79	13.47
202.24	2.63	202.76	6.05	203.28	12.64	203.80	13.49
202.25	2.65	202.77	6.18	203.29	12.66	203.81	13.50
202.26	2.67	202.78	6.31	203.30	12.68	203.82	13.52
202.27	2.69	202.79	6.44	203.31	12.69	203.83	13.53
202.28	2.70	202.80	6.57	203.32	12.71	203.84	13.55
202.29	2.72	202.81	6.70	203.33	12.73	203.85	13.56
202.30	2.74	202.82	6.83	203.34	12.74	203.86	13.58
202.31	2.76	202.83	6.97	203.35	12.76	203.87	13.59
202.32	2.78	202.84	7.11	203.36	12.78	203.88	13.61
202.33	2.80	202.85	7.24	203.37	12.79	203.89	13.63
202.34	2.82	202.86	7.38	203.38	12.81	203.90	13.64
202.35	2.84	202.87	7.52	203.39	12.83	203.91	13.66
202.36	2.85	202.88	7.66	203.40	12.84	203.92	13.67
202.37	2.87	202.89	7.81	203.41	12.86	203.93	13.69
202.38	2.89	202.90	7.95	203.42	12.88	203.94	13.70
202.39	2.91	202.91	8.09	203.43	12.89	203.95	13.72
202.40	2.93	202.92	8.24	203.44	12.91	203.96	13.73
202.41	2.94	202.93	8.39	203.45	12.92	203.97	13.75
202.42	2.96	202.94	8.54	203.46	12.94	203.98	13.76
202.43	2.99	202.95	8.69	203.47	12.96	203.99	13.78
202.44	3.03	202.96	8.84	203.48	12.97	204.00	13.80
202.45	3.08	202.97	8.99	203.49	12.99	204.01	13.81
202.46	3.13	202.98	9.14	203.50	13.01	204.02	13.83
202.47	3.19	202.99	9.30	203.51	13.02	204.03	13.84
202.48	3.26	203.00	9.45	203.52	13.04	204.04	13.86

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
204.05	13.87	204.57	18.36	205.09	83.19
204.06	13.89	204.58	18.95	205.10	84.86
204.07	13.90	204.59	19.56	205.11	86.54
204.08	13.92	204.60	20.20	205.12	88.24
204.09	13.93	204.61	20.87	205.13	89.94
204.10	13.95	204.62	21.56	205.14	91.66
204.11	13.96	204.63	22.27	205.15	93.40
204.12	13.98	204.64	23.01	205.16	95.14
204.13	13.99	204.65	23.77	205.17	96.90
204.14	14.01	204.66	24.55	205.18	98.68
204.15	14.02	204.67	25.35	205.19	100.46
204.16	14.04	204.68	26.21	205.20	102.26
204.17	14.05	204.69	27.10	205.21	104.07
204.18	14.07	204.70	28.01	205.22	105.89
204.19	14.08	204.71	28.95	205.23	107.73
204.20	14.10	204.72	29.91	205.24	109.57
204.21	14.11	204.73	30.90	205.25	111.43
204.22	14.13	204.74	31.91	205.26	113.30
204.23	14.14	204.75	32.95	205.27	115.19
204.24	14.16	204.76	34.01	205.28	117.12
204.25	14.17	204.77	35.10	205.29	119.07
204.26	14.19	204.78	36.21	205.30	121.02
204.27	14.20	204.79	37.34	205.31	123.00
204.28	14.22	204.80	38.50	205.32	124.98
204.29	14.23	204.81	39.69	205.33	126.98
204.30	14.25	204.82	40.90	205.34	129.00
204.31	14.26	204.83	42.13	205.35	131.02
204.32	14.28	204.84	43.39	205.36	133.06
204.33	14.29	204.85	44.67	205.37	135.11
204.34	14.31	204.86	45.97	205.38	137.17
204.35	14.32	204.87	47.30	205.39	139.25
204.36	14.34	204.88	48.68	205.40	141.34
204.37	14.35	204.89	50.09	205.41	143.44
204.38	14.37	204.90	51.52	205.42	145.56
204.39	14.38	204.91	52.98	205.43	147.69
204.40	14.40	204.92	54.46	205.44	149.83
204.41	14.41	204.93	55.97	205.45	151.98
204.42	14.42	204.94	57.51	205.46	154.14
204.43	14.44	204.95	59.07	205.47	156.32
204.44	14.45	204.96	60.66	205.48	158.46
204.45	14.47	204.97	62.27	205.49	160.61
204.46	14.48	204.98	63.92	205.50	**162.77**
204.47	14.50	204.99	65.59		
204.48	14.63	205.00	67.28		
204.49	14.86	205.01	69.00		
204.50	15.15	205.02	70.75		
204.51	15.49	205.03	72.53		
204.52	15.88	205.04	74.33		
204.53	16.31	205.05	76.16		
204.54	16.77	205.06	78.01		
204.55	17.27	205.07	79.90		
204.56	17.80	205.08	81.54		

Stage-Area-Storage for Pond B-54: Basin #54

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.89	0	0	200.41	4,051	1,813
199.90	344	2	200.42	4,057	1,854
199.91	687	7	200.43	4,064	1,894
199.92	1,031	15	200.44	4,070	1,935
199.93	1,375	27	200.45	4,077	1,976
199.94	1,718	43	200.46	4,084	2,017
199.95	2,062	62	200.47	4,090	2,057
199.96	2,405	84	200.48	4,097	2,098
199.97	2,749	110	200.49	4,103	2,139
199.98	3,093	139	200.50	4,110	2,180
199.99	3,436	172	200.51	4,117	2,222
200.00	3,780	208	200.52	4,123	2,263
200.01	3,787	246	200.53	4,130	2,304
200.02	3,793	284	200.54	4,136	2,345
200.03	3,800	322	200.55	4,143	2,387
200.04	3,806	360	200.56	4,150	2,428
200.05	3,813	398	200.57	4,156	2,470
200.06	3,820	436	200.58	4,163	2,511
200.07	3,826	474	200.59	4,169	2,553
200.08	3,833	512	200.60	4,176	2,595
200.09	3,839	551	200.61	4,183	2,636
200.10	3,846	589	200.62	4,189	2,678
200.11	3,853	628	200.63	4,196	2,720
200.12	3,859	666	200.64	4,202	2,762
200.13	3,866	705	200.65	4,209	2,804
200.14	3,872	744	200.66	4,216	2,846
200.15	3,879	782	200.67	4,222	2,889
200.16	3,886	821	200.68	4,229	2,931
200.17	3,892	860	200.69	4,235	2,973
200.18	3,899	899	200.70	4,242	3,016
200.19	3,905	938	200.71	4,249	3,058
200.20	3,912	977	200.72	4,255	3,101
200.21	3,919	1,016	200.73	4,262	3,143
200.22	3,925	1,055	200.74	4,268	3,186
200.23	3,932	1,095	200.75	4,275	3,229
200.24	3,938	1,134	200.76	4,282	3,271
200.25	3,945	1,174	200.77	4,288	3,314
200.26	3,952	1,213	200.78	4,295	3,357
200.27	3,958	1,253	200.79	4,301	3,400
200.28	3,965	1,292	200.80	4,308	3,443
200.29	3,971	1,332	200.81	4,315	3,486
200.30	3,978	1,372	200.82	4,321	3,529
200.31	3,985	1,411	200.83	4,328	3,573
200.32	3,991	1,451	200.84	4,334	3,616
200.33	3,998	1,491	200.85	4,341	3,659
200.34	4,004	1,531	200.86	4,348	3,703
200.35	4,011	1,571	200.87	4,354	3,746
200.36	4,018	1,611	200.88	4,361	3,790
200.37	4,024	1,652	200.89	4,367	3,833
200.38	4,031	1,692	200.90	4,374	3,877
200.39	4,037	1,732	200.91	4,381	3,921
200.40	4,044	1,773	200.92	4,387	3,965

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.93	4,394	4,009	201.45	4,737	6,383
200.94	4,400	4,053	201.46	4,744	6,430
200.95	4,407	4,097	201.47	4,750	6,478
200.96	4,414	4,141	201.48	4,757	6,525
200.97	4,420	4,185	201.49	4,763	6,573
200.98	4,427	4,229	201.50	4,770	6,620
200.99	4,433	4,274	201.51	4,777	6,668
201.00	4,440	4,318	201.52	4,783	6,716
201.01	4,447	4,362	201.53	4,790	6,764
201.02	4,453	4,407	201.54	4,796	6,812
201.03	4,460	4,451	201.55	4,803	6,860
201.04	4,466	4,496	201.56	4,810	6,908
201.05	4,473	4,541	201.57	4,816	6,956
201.06	4,480	4,585	201.58	4,823	7,004
201.07	4,486	4,630	201.59	4,829	7,052
201.08	4,493	4,675	201.60	4,836	7,101
201.09	4,499	4,720	201.61	4,843	7,149
201.10	4,506	4,765	201.62	4,849	7,198
201.11	4,513	4,810	201.63	4,856	7,246
201.12	4,519	4,855	201.64	4,862	7,295
201.13	4,526	4,901	201.65	4,869	7,343
201.14	4,532	4,946	201.66	4,876	7,392
201.15	4,539	4,991	201.67	4,882	7,441
201.16	4,546	5,037	201.68	4,889	7,490
201.17	4,552	5,082	201.69	4,895	7,539
201.18	4,559	5,128	201.70	4,902	7,588
201.19	4,565	5,173	201.71	4,909	7,637
201.20	4,572	5,219	201.72	4,915	7,686
201.21	4,579	5,265	201.73	4,922	7,735
201.22	4,585	5,311	201.74	4,928	7,784
201.23	4,592	5,357	201.75	4,935	7,834
201.24	4,598	5,403	201.76	4,942	7,883
201.25	4,605	5,449	201.77	4,948	7,932
201.26	4,612	5,495	201.78	4,955	7,982
201.27	4,618	5,541	201.79	4,961	8,031
201.28	4,625	5,587	201.80	4,968	8,081
201.29	4,631	5,633	201.81	4,975	8,131
201.30	4,638	5,680	201.82	4,981	8,181
201.31	4,645	5,726	201.83	4,988	8,230
201.32	4,651	5,772	201.84	4,994	8,280
201.33	4,658	5,819	201.85	5,001	8,330
201.34	4,664	5,866	201.86	5,008	8,380
201.35	4,671	5,912	201.87	5,014	8,430
201.36	4,678	5,959	201.88	5,021	8,481
201.37	4,684	6,006	201.89	5,027	8,531
201.38	4,691	6,053	201.90	5,034	8,581
201.39	4,697	6,100	201.91	5,041	8,632
201.40	4,704	6,147	201.92	5,047	8,682
201.41	4,711	6,194	201.93	5,054	8,733
201.42	4,717	6,241	201.94	5,060	8,783
201.43	4,724	6,288	201.95	5,067	8,834
201.44	4,730	6,335	201.96	5,074	8,884

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.97	5,080	8,935	202.49	5,423	11,666
201.98	5,087	8,986	202.50	5,430	11,720
201.99	5,093	9,037	202.51	5,437	11,775
202.00	5,100	9,088	202.52	5,443	11,829
202.01	5,107	9,139	202.53	5,450	11,884
202.02	5,113	9,190	202.54	5,456	11,938
202.03	5,120	9,241	202.55	5,463	11,993
202.04	5,126	9,292	202.56	5,470	12,047
202.05	5,133	9,344	202.57	5,476	12,102
202.06	5,140	9,395	202.58	5,483	12,157
202.07	5,146	9,447	202.59	5,489	12,212
202.08	5,153	9,498	202.60	5,496	12,267
202.09	5,159	9,550	202.61	5,503	12,322
202.10	5,166	9,601	202.62	5,509	12,377
202.11	5,173	9,653	202.63	5,516	12,432
202.12	5,179	9,705	202.64	5,522	12,487
202.13	5,186	9,756	202.65	5,529	12,542
202.14	5,192	9,808	202.66	5,536	12,598
202.15	5,199	9,860	202.67	5,542	12,653
202.16	5,206	9,912	202.68	5,549	12,708
202.17	5,212	9,964	202.69	5,555	12,764
202.18	5,219	10,017	202.70	5,562	12,820
202.19	5,225	10,069	202.71	5,569	12,875
202.20	5,232	10,121	202.72	5,575	12,931
202.21	5,239	10,173	202.73	5,582	12,987
202.22	5,245	10,226	202.74	5,588	13,043
202.23	5,252	10,278	202.75	5,595	13,099
202.24	5,258	10,331	202.76	5,602	13,155
202.25	5,265	10,384	202.77	5,608	13,211
202.26	5,272	10,436	202.78	5,615	13,267
202.27	5,278	10,489	202.79	5,621	13,323
202.28	5,285	10,542	202.80	5,628	13,379
202.29	5,291	10,595	202.81	5,635	13,435
202.30	5,298	10,648	202.82	5,641	13,492
202.31	5,305	10,701	202.83	5,648	13,548
202.32	5,311	10,754	202.84	5,654	13,605
202.33	5,318	10,807	202.85	5,661	13,661
202.34	5,324	10,860	202.86	5,668	13,718
202.35	5,331	10,913	202.87	5,674	13,775
202.36	5,338	10,967	202.88	5,681	13,831
202.37	5,344	11,020	202.89	5,687	13,888
202.38	5,351	11,074	202.90	5,694	13,945
202.39	5,357	11,127	202.91	5,701	14,002
202.40	5,364	11,181	202.92	5,707	14,059
202.41	5,371	11,234	202.93	5,714	14,116
202.42	5,377	11,288	202.94	5,720	14,173
202.43	5,384	11,342	202.95	5,727	14,231
202.44	5,390	11,396	202.96	5,734	14,288
202.45	5,397	11,450	202.97	5,740	14,345
202.46	5,404	11,504	202.98	5,747	14,403
202.47	5,410	11,558	202.99	5,753	14,460
202.48	5,417	11,612	203.00	5,760	14,518

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.01	5,767	14,576	203.53	6,110	17,664
203.02	5,773	14,633	203.54	6,117	17,725
203.03	5,780	14,691	203.55	6,124	17,786
203.04	5,786	14,749	203.56	6,130	17,847
203.05	5,793	14,807	203.57	6,137	17,908
203.06	5,800	14,865	203.58	6,143	17,970
203.07	5,806	14,923	203.59	6,150	18,031
203.08	5,813	14,981	203.60	6,157	18,093
203.09	5,819	15,039	203.61	6,163	18,154
203.10	5,826	15,097	203.62	6,170	18,216
203.11	5,833	15,155	203.63	6,176	18,278
203.12	5,839	15,214	203.64	6,183	18,340
203.13	5,846	15,272	203.65	6,190	18,402
203.14	5,853	15,331	203.66	6,196	18,463
203.15	5,859	15,389	203.67	6,203	18,525
203.16	5,866	15,448	203.68	6,209	18,588
203.17	5,872	15,507	203.69	6,216	18,650
203.18	5,879	15,565	203.70	6,223	18,712
203.19	5,886	15,624	203.71	6,229	18,774
203.20	5,892	15,683	203.72	6,236	18,836
203.21	5,899	15,742	203.73	6,243	18,899
203.22	5,905	15,801	203.74	6,249	18,961
203.23	5,912	15,860	203.75	6,256	19,024
203.24	5,919	15,919	203.76	6,262	19,086
203.25	5,925	15,979	203.77	6,269	19,149
203.26	5,932	16,038	203.78	6,276	19,212
203.27	5,938	16,097	203.79	6,282	19,275
203.28	5,945	16,157	203.80	6,289	19,337
203.29	5,952	16,216	203.81	6,295	19,400
203.30	5,958	16,276	203.82	6,302	19,463
203.31	5,965	16,335	203.83	6,309	19,526
203.32	5,972	16,395	203.84	6,315	19,590
203.33	5,978	16,455	203.85	6,322	19,653
203.34	5,985	16,515	203.86	6,328	19,716
203.35	5,991	16,574	203.87	6,335	19,779
203.36	5,998	16,634	203.88	6,342	19,843
203.37	6,005	16,694	203.89	6,348	19,906
203.38	6,011	16,754	203.90	6,355	19,970
203.39	6,018	16,815	203.91	6,362	20,033
203.40	6,024	16,875	203.92	6,368	20,097
203.41	6,031	16,935	203.93	6,375	20,161
203.42	6,038	16,995	203.94	6,381	20,224
203.43	6,044	17,056	203.95	6,388	20,288
203.44	6,051	17,116	203.96	6,395	20,352
203.45	6,057	17,177	203.97	6,401	20,416
203.46	6,064	17,237	203.98	6,408	20,480
203.47	6,071	17,298	203.99	6,414	20,544
203.48	6,077	17,359	204.00	6,421	20,608
203.49	6,084	17,420	204.01	6,428	20,673
203.50	6,091	17,481	204.02	6,434	20,737
203.51	6,097	17,541	204.03	6,441	20,801
203.52	6,104	17,602	204.04	6,447	20,866

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.05	6,454	20,930	204.57	6,797	24,376
204.06	6,461	20,995	204.58	6,804	24,444
204.07	6,467	21,059	204.59	6,810	24,512
204.08	6,474	21,124	204.60	6,817	24,580
204.09	6,480	21,189	204.61	6,824	24,648
204.10	6,487	21,254	204.62	6,830	24,716
204.11	6,494	21,319	204.63	6,837	24,785
204.12	6,500	21,384	204.64	6,843	24,853
204.13	6,507	21,449	204.65	6,850	24,921
204.14	6,513	21,514	204.66	6,857	24,990
204.15	6,520	21,579	204.67	6,863	25,059
204.16	6,527	21,644	204.68	6,870	25,127
204.17	6,533	21,710	204.69	6,876	25,196
204.18	6,540	21,775	204.70	6,883	25,265
204.19	6,546	21,840	204.71	6,890	25,334
204.20	6,553	21,906	204.72	6,896	25,403
204.21	6,560	21,971	204.73	6,903	25,472
204.22	6,566	22,037	204.74	6,909	25,541
204.23	6,573	22,103	204.75	6,916	25,610
204.24	6,579	22,168	204.76	6,923	25,679
204.25	6,586	22,234	204.77	6,929	25,748
204.26	6,593	22,300	204.78	6,936	25,818
204.27	6,599	22,366	204.79	6,942	25,887
204.28	6,606	22,432	204.80	6,949	25,956
204.29	6,612	22,498	204.81	6,956	26,026
204.30	6,619	22,564	204.82	6,962	26,096
204.31	6,626	22,631	204.83	6,969	26,165
204.32	6,632	22,697	204.84	6,975	26,235
204.33	6,639	22,763	204.85	6,982	26,305
204.34	6,645	22,830	204.86	6,989	26,375
204.35	6,652	22,896	204.87	6,995	26,444
204.36	6,659	22,963	204.88	7,002	26,514
204.37	6,665	23,029	204.89	7,008	26,584
204.38	6,672	23,096	204.90	7,015	26,655
204.39	6,678	23,163	204.91	7,022	26,725
204.40	6,685	23,230	204.92	7,028	26,795
204.41	6,692	23,296	204.93	7,035	26,865
204.42	6,698	23,363	204.94	7,041	26,936
204.43	6,705	23,430	204.95	7,048	27,006
204.44	6,711	23,498	204.96	7,055	27,077
204.45	6,718	23,565	204.97	7,061	27,147
204.46	6,725	23,632	204.98	7,068	27,218
204.47	6,731	23,699	204.99	7,074	27,289
204.48	6,738	23,767	205.00	7,081	27,359
204.49	6,744	23,834	205.01	7,088	27,430
204.50	6,751	23,901	205.02	7,094	27,501
204.51	6,758	23,969	205.03	7,101	27,572
204.52	6,764	24,037	205.04	7,107	27,643
204.53	6,771	24,104	205.05	7,114	27,714
204.54	6,777	24,172	205.06	7,121	27,785
204.55	6,784	24,240	205.07	7,127	27,857
204.56	6,791	24,308	205.08	7,134	27,928

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.09	7,140	27,999
205.10	7,147	28,071
205.11	7,154	28,142
205.12	7,160	28,214
205.13	7,167	28,286
205.14	7,173	28,357
205.15	7,180	28,429
205.16	7,187	28,501
205.17	7,193	28,573
205.18	7,200	28,645
205.19	7,206	28,717
205.20	7,213	28,789
205.21	7,220	28,861
205.22	7,226	28,933
205.23	7,233	29,005
205.24	7,239	29,078
205.25	7,246	29,150
205.26	7,253	29,223
205.27	7,259	29,295
205.28	7,266	29,368
205.29	7,272	29,441
205.30	7,279	29,513
205.31	7,286	29,586
205.32	7,292	29,659
205.33	7,299	29,732
205.34	7,305	29,805
205.35	7,312	29,878
205.36	7,319	29,951
205.37	7,325	30,025
205.38	7,332	30,098
205.39	7,338	30,171
205.40	7,345	30,245
205.41	7,352	30,318
205.42	7,358	30,392
205.43	7,365	30,465
205.44	7,371	30,539
205.45	7,378	30,613
205.46	7,385	30,686
205.47	7,391	30,760
205.48	7,398	30,834
205.49	7,404	30,908
205.50	**7,411**	**30,982**

Summary for Pond B-55: Basin #55

Inflow Area = 2.301 ac, 47.33% Impervious, Inflow Depth = 4.27" for Future 10 yr event
Inflow = 9.91 cfs @ 12.17 hrs, Volume= 0.818 af
Outflow = 6.59 cfs @ 12.28 hrs, Volume= 0.715 af, Atten= 34%, Lag= 6.8 min
Primary = 6.59 cfs @ 12.28 hrs, Volume= 0.715 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 194.31' @ 12.28 hrs Surf.Area= 5,422 sf Storage= 12,101 cf

Plug-Flow detention time= 141.2 min calculated for 0.715 af (87% of inflow)
Center-of-Mass det. time= 79.3 min (862.1 - 782.8)

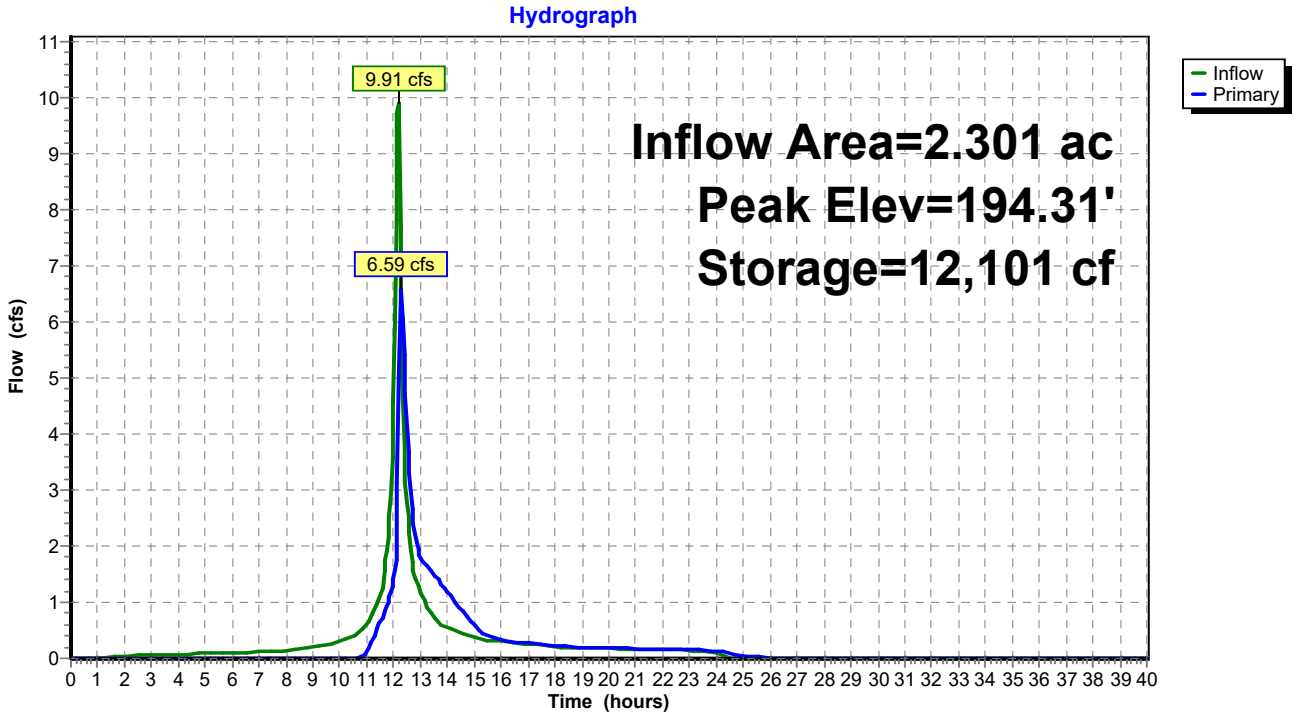
Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	**18.0" Round Culvert** L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 191.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.80'	**22.0" W x 2.5" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.82'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	195.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=6.52 cfs @ 12.28 hrs HW=194.31' (Free Discharge)
- **1=Culvert** (Passes 6.52 cfs of 10.12 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 2.18 cfs @ 5.70 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 4.34 cfs @ 2.28 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-55: Basin #55



Stage-Discharge for Pond B-55: Basin #55

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.56	0.00	192.08	0.00	192.60	0.00	193.12	0.85
191.57	0.00	192.09	0.00	192.61	0.00	193.13	0.87
191.58	0.00	192.10	0.00	192.62	0.00	193.14	0.89
191.59	0.00	192.11	0.00	192.63	0.00	193.15	0.90
191.60	0.00	192.12	0.00	192.64	0.00	193.16	0.92
191.61	0.00	192.13	0.00	192.65	0.00	193.17	0.94
191.62	0.00	192.14	0.00	192.66	0.00	193.18	0.96
191.63	0.00	192.15	0.00	192.67	0.00	193.19	0.98
191.64	0.00	192.16	0.00	192.68	0.00	193.20	0.99
191.65	0.00	192.17	0.00	192.69	0.00	193.21	1.01
191.66	0.00	192.18	0.00	192.70	0.00	193.22	1.03
191.67	0.00	192.19	0.00	192.71	0.00	193.23	1.05
191.68	0.00	192.20	0.00	192.72	0.00	193.24	1.06
191.69	0.00	192.21	0.00	192.73	0.00	193.25	1.08
191.70	0.00	192.22	0.00	192.74	0.00	193.26	1.09
191.71	0.00	192.23	0.00	192.75	0.00	193.27	1.11
191.72	0.00	192.24	0.00	192.76	0.00	193.28	1.12
191.73	0.00	192.25	0.00	192.77	0.00	193.29	1.14
191.74	0.00	192.26	0.00	192.78	0.00	193.30	1.15
191.75	0.00	192.27	0.00	192.79	0.00	193.31	1.17
191.76	0.00	192.28	0.00	192.80	0.00	193.32	1.18
191.77	0.00	192.29	0.00	192.81	0.01	193.33	1.20
191.78	0.00	192.30	0.00	192.82	0.02	193.34	1.21
191.79	0.00	192.31	0.00	192.83	0.03	193.35	1.23
191.80	0.00	192.32	0.00	192.84	0.05	193.36	1.24
191.81	0.00	192.33	0.00	192.85	0.07	193.37	1.25
191.82	0.00	192.34	0.00	192.86	0.09	193.38	1.27
191.83	0.00	192.35	0.00	192.87	0.11	193.39	1.28
191.84	0.00	192.36	0.00	192.88	0.13	193.40	1.29
191.85	0.00	192.37	0.00	192.89	0.16	193.41	1.31
191.86	0.00	192.38	0.00	192.90	0.19	193.42	1.32
191.87	0.00	192.39	0.00	192.91	0.21	193.43	1.33
191.88	0.00	192.40	0.00	192.92	0.24	193.44	1.34
191.89	0.00	192.41	0.00	192.93	0.28	193.45	1.36
191.90	0.00	192.42	0.00	192.94	0.31	193.46	1.37
191.91	0.00	192.43	0.00	192.95	0.34	193.47	1.38
191.92	0.00	192.44	0.00	192.96	0.38	193.48	1.39
191.93	0.00	192.45	0.00	192.97	0.41	193.49	1.41
191.94	0.00	192.46	0.00	192.98	0.45	193.50	1.42
191.95	0.00	192.47	0.00	192.99	0.49	193.51	1.43
191.96	0.00	192.48	0.00	193.00	0.53	193.52	1.44
191.97	0.00	192.49	0.00	193.01	0.57	193.53	1.45
191.98	0.00	192.50	0.00	193.02	0.60	193.54	1.46
191.99	0.00	192.51	0.00	193.03	0.63	193.55	1.48
192.00	0.00	192.52	0.00	193.04	0.66	193.56	1.49
192.01	0.00	192.53	0.00	193.05	0.69	193.57	1.50
192.02	0.00	192.54	0.00	193.06	0.71	193.58	1.51
192.03	0.00	192.55	0.00	193.07	0.74	193.59	1.52
192.04	0.00	192.56	0.00	193.08	0.76	193.60	1.53
192.05	0.00	192.57	0.00	193.09	0.78	193.61	1.54
192.06	0.00	192.58	0.00	193.10	0.80	193.62	1.55
192.07	0.00	192.59	0.00	193.11	0.82	193.63	1.57

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.64	1.58	194.16	4.61	194.68	11.12	195.20	12.37
193.65	1.59	194.17	4.73	194.69	11.14	195.21	12.39
193.66	1.60	194.18	4.85	194.70	11.17	195.22	12.42
193.67	1.61	194.19	4.97	194.71	11.19	195.23	12.44
193.68	1.62	194.20	5.10	194.72	11.22	195.24	12.46
193.69	1.63	194.21	5.22	194.73	11.24	195.25	12.48
193.70	1.64	194.22	5.35	194.74	11.27	195.26	12.51
193.71	1.65	194.23	5.48	194.75	11.29	195.27	12.53
193.72	1.66	194.24	5.61	194.76	11.32	195.28	12.55
193.73	1.67	194.25	5.74	194.77	11.34	195.29	12.58
193.74	1.68	194.26	5.87	194.78	11.37	195.30	12.60
193.75	1.69	194.27	6.01	194.79	11.39	195.31	12.62
193.76	1.70	194.28	6.14	194.80	11.42	195.32	12.64
193.77	1.71	194.29	6.28	194.81	11.44	195.33	12.66
193.78	1.72	194.30	6.42	194.82	11.47	195.34	12.69
193.79	1.73	194.31	6.56	194.83	11.49	195.35	12.71
193.80	1.74	194.32	6.70	194.84	11.52	195.36	12.73
193.81	1.75	194.33	6.84	194.85	11.54	195.37	12.75
193.82	1.76	194.34	6.98	194.86	11.57	195.38	12.78
193.83	1.78	194.35	7.12	194.87	11.59	195.39	12.80
193.84	1.82	194.36	7.27	194.88	11.61	195.40	12.82
193.85	1.86	194.37	7.41	194.89	11.64	195.41	12.84
193.86	1.90	194.38	7.56	194.90	11.66	195.42	12.86
193.87	1.95	194.39	7.71	194.91	11.69	195.43	12.89
193.88	2.01	194.40	7.86	194.92	11.71	195.44	12.91
193.89	2.07	194.41	8.01	194.93	11.74	195.45	12.93
193.90	2.13	194.42	8.16	194.94	11.76	195.46	13.07
193.91	2.20	194.43	8.31	194.95	11.78	195.47	13.31
193.92	2.26	194.44	8.47	194.96	11.81	195.48	13.61
193.93	2.34	194.45	8.62	194.97	11.83	195.49	13.96
193.94	2.41	194.46	8.78	194.98	11.86	195.50	14.35
193.95	2.49	194.47	8.93	194.99	11.88	195.51	14.79
193.96	2.57	194.48	9.09	195.00	11.90	195.52	15.26
193.97	2.65	194.49	9.25	195.01	11.93	195.53	15.76
193.98	2.74	194.50	9.41	195.02	11.95	195.54	16.30
193.99	2.82	194.51	9.57	195.03	11.97	195.55	16.87
194.00	2.91	194.52	9.73	195.04	12.00	195.56	17.46
194.01	3.01	194.53	9.89	195.05	12.02	195.57	18.08
194.02	3.10	194.54	10.06	195.06	12.05	195.58	18.73
194.03	3.20	194.55	10.22	195.07	12.07	195.59	19.40
194.04	3.29	194.56	10.38	195.08	12.09	195.60	20.10
194.05	3.39	194.57	10.55	195.09	12.12	195.61	20.82
194.06	3.50	194.58	10.72	195.10	12.14	195.62	21.57
194.07	3.60	194.59	10.88	195.11	12.16	195.63	22.33
194.08	3.71	194.60	10.91	195.12	12.19	195.64	23.12
194.09	3.81	194.61	10.94	195.13	12.21	195.65	23.93
194.10	3.92	194.62	10.96	195.14	12.23	195.66	24.79
194.11	4.03	194.63	10.99	195.15	12.26	195.67	25.69
194.12	4.14	194.64	11.01	195.16	12.28	195.68	26.61
194.13	4.26	194.65	11.04	195.17	12.30	195.69	27.55
194.14	4.37	194.66	11.06	195.18	12.32	195.70	28.52
194.15	4.49	194.67	11.09	195.19	12.35	195.71	29.52

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)
195.72	30.53
195.73	31.58
195.74	32.65
195.75	33.74
195.76	34.86
195.77	36.00
195.78	37.17
195.79	38.36
195.80	39.57
195.81	40.81
195.82	42.08
195.83	43.36
195.84	44.67
195.85	46.01
195.86	47.40
195.87	48.81
195.88	50.25
195.89	51.71
195.90	53.20
195.91	54.72
195.92	56.26
195.93	57.83
195.94	59.43
195.95	61.05
195.96	62.70
195.97	64.37
195.98	66.07
195.99	67.80
196.00	**69.56**

Stage-Area-Storage for Pond B-55: Basin #55

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.56	0	0	192.08	4,290	1,277
191.57	97	0	192.09	4,295	1,320
191.58	193	2	192.10	4,300	1,362
191.59	290	4	192.11	4,305	1,406
191.60	386	8	192.12	4,310	1,449
191.61	483	12	192.13	4,314	1,492
191.62	580	17	192.14	4,319	1,535
191.63	676	24	192.15	4,324	1,578
191.64	773	31	192.16	4,329	1,621
191.65	869	39	192.17	4,334	1,665
191.66	966	48	192.18	4,339	1,708
191.67	1,063	58	192.19	4,344	1,751
191.68	1,159	70	192.20	4,349	1,795
191.69	1,256	82	192.21	4,354	1,838
191.70	1,352	95	192.22	4,359	1,882
191.71	1,449	109	192.23	4,364	1,926
191.72	1,545	124	192.24	4,369	1,969
191.73	1,642	140	192.25	4,374	2,013
191.74	1,739	156	192.26	4,379	2,057
191.75	1,835	174	192.27	4,384	2,101
191.76	1,932	193	192.28	4,389	2,144
191.77	2,028	213	192.29	4,394	2,188
191.78	2,125	234	192.30	4,399	2,232
191.79	2,222	255	192.31	4,404	2,276
191.80	2,318	278	192.32	4,409	2,320
191.81	2,415	302	192.33	4,414	2,365
191.82	2,511	326	192.34	4,419	2,409
191.83	2,608	352	192.35	4,424	2,453
191.84	2,705	379	192.36	4,429	2,497
191.85	2,801	406	192.37	4,434	2,541
191.86	2,898	435	192.38	4,438	2,586
191.87	2,994	464	192.39	4,443	2,630
191.88	3,091	495	192.40	4,448	2,675
191.89	3,188	526	192.41	4,453	2,719
191.90	3,284	558	192.42	4,458	2,764
191.91	3,381	592	192.43	4,463	2,808
191.92	3,477	626	192.44	4,468	2,853
191.93	3,574	661	192.45	4,473	2,898
191.94	3,670	697	192.46	4,478	2,942
191.95	3,767	735	192.47	4,483	2,987
191.96	3,864	773	192.48	4,488	3,032
191.97	3,960	812	192.49	4,493	3,077
191.98	4,057	852	192.50	4,498	3,122
191.99	4,153	893	192.51	4,503	3,167
192.00	4,250	935	192.52	4,508	3,212
192.01	4,255	978	192.53	4,513	3,257
192.02	4,260	1,020	192.54	4,518	3,302
192.03	4,265	1,063	192.55	4,523	3,348
192.04	4,270	1,105	192.56	4,528	3,393
192.05	4,275	1,148	192.57	4,533	3,438
192.06	4,280	1,191	192.58	4,538	3,483
192.07	4,285	1,234	192.59	4,543	3,529

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.60	4,548	3,574	193.12	4,807	6,006
192.61	4,553	3,620	193.13	4,812	6,054
192.62	4,558	3,665	193.14	4,818	6,102
192.63	4,562	3,711	193.15	4,823	6,151
192.64	4,567	3,757	193.16	4,828	6,199
192.65	4,572	3,802	193.17	4,833	6,247
192.66	4,577	3,848	193.18	4,838	6,296
192.67	4,582	3,894	193.19	4,843	6,344
192.68	4,587	3,940	193.20	4,848	6,392
192.69	4,592	3,986	193.21	4,853	6,441
192.70	4,597	4,032	193.22	4,858	6,489
192.71	4,602	4,078	193.23	4,864	6,538
192.72	4,607	4,124	193.24	4,869	6,587
192.73	4,612	4,170	193.25	4,874	6,635
192.74	4,617	4,216	193.26	4,879	6,684
192.75	4,622	4,262	193.27	4,884	6,733
192.76	4,627	4,308	193.28	4,889	6,782
192.77	4,632	4,355	193.29	4,894	6,831
192.78	4,637	4,401	193.30	4,899	6,880
192.79	4,642	4,447	193.31	4,904	6,929
192.80	4,647	4,494	193.32	4,910	6,978
192.81	4,652	4,540	193.33	4,915	7,027
192.82	4,657	4,587	193.34	4,920	7,076
192.83	4,662	4,633	193.35	4,925	7,125
192.84	4,667	4,680	193.36	4,930	7,175
192.85	4,672	4,727	193.37	4,935	7,224
192.86	4,677	4,773	193.38	4,940	7,273
192.87	4,682	4,820	193.39	4,945	7,323
192.88	4,686	4,867	193.40	4,950	7,372
192.89	4,691	4,914	193.41	4,956	7,422
192.90	4,696	4,961	193.42	4,961	7,471
192.91	4,701	5,008	193.43	4,966	7,521
192.92	4,706	5,055	193.44	4,971	7,571
192.93	4,711	5,102	193.45	4,976	7,620
192.94	4,716	5,149	193.46	4,981	7,670
192.95	4,721	5,196	193.47	4,986	7,720
192.96	4,726	5,244	193.48	4,991	7,770
192.97	4,731	5,291	193.49	4,996	7,820
192.98	4,736	5,338	193.50	5,002	7,870
192.99	4,741	5,386	193.51	5,007	7,920
193.00	4,746	5,433	193.52	5,012	7,970
193.01	4,751	5,480	193.53	5,017	8,020
193.02	4,756	5,528	193.54	5,022	8,070
193.03	4,761	5,576	193.55	5,027	8,121
193.04	4,766	5,623	193.56	5,032	8,171
193.05	4,772	5,671	193.57	5,037	8,221
193.06	4,777	5,719	193.58	5,042	8,272
193.07	4,782	5,766	193.59	5,047	8,322
193.08	4,787	5,814	193.60	5,053	8,373
193.09	4,792	5,862	193.61	5,058	8,423
193.10	4,797	5,910	193.62	5,063	8,474
193.11	4,802	5,958	193.63	5,068	8,524

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.64	5,073	8,575	194.16	5,341	11,282
193.65	5,078	8,626	194.17	5,347	11,336
193.66	5,083	8,677	194.18	5,352	11,389
193.67	5,088	8,728	194.19	5,357	11,443
193.68	5,093	8,778	194.20	5,362	11,496
193.69	5,099	8,829	194.21	5,368	11,550
193.70	5,104	8,880	194.22	5,373	11,604
193.71	5,109	8,931	194.23	5,378	11,658
193.72	5,114	8,983	194.24	5,383	11,711
193.73	5,119	9,034	194.25	5,389	11,765
193.74	5,124	9,085	194.26	5,394	11,819
193.75	5,129	9,136	194.27	5,399	11,873
193.76	5,134	9,188	194.28	5,405	11,927
193.77	5,139	9,239	194.29	5,410	11,981
193.78	5,145	9,290	194.30	5,415	12,035
193.79	5,150	9,342	194.31	5,420	12,089
193.80	5,155	9,393	194.32	5,426	12,144
193.81	5,160	9,445	194.33	5,431	12,198
193.82	5,165	9,497	194.34	5,436	12,252
193.83	5,170	9,548	194.35	5,441	12,307
193.84	5,175	9,600	194.36	5,447	12,361
193.85	5,180	9,652	194.37	5,452	12,416
193.86	5,185	9,704	194.38	5,457	12,470
193.87	5,191	9,755	194.39	5,463	12,525
193.88	5,196	9,807	194.40	5,468	12,579
193.89	5,201	9,859	194.41	5,473	12,634
193.90	5,206	9,911	194.42	5,478	12,689
193.91	5,211	9,963	194.43	5,484	12,744
193.92	5,216	10,016	194.44	5,489	12,799
193.93	5,221	10,068	194.45	5,494	12,854
193.94	5,226	10,120	194.46	5,499	12,908
193.95	5,231	10,172	194.47	5,505	12,963
193.96	5,237	10,225	194.48	5,510	13,019
193.97	5,242	10,277	194.49	5,515	13,074
193.98	5,247	10,329	194.50	5,521	13,129
193.99	5,252	10,382	194.51	5,526	13,184
194.00	5,257	10,434	194.52	5,531	13,239
194.01	5,262	10,487	194.53	5,536	13,295
194.02	5,268	10,540	194.54	5,542	13,350
194.03	5,273	10,592	194.55	5,547	13,406
194.04	5,278	10,645	194.56	5,552	13,461
194.05	5,283	10,698	194.57	5,557	13,517
194.06	5,289	10,751	194.58	5,563	13,572
194.07	5,294	10,804	194.59	5,568	13,628
194.08	5,299	10,857	194.60	5,573	13,684
194.09	5,304	10,910	194.61	5,578	13,739
194.10	5,310	10,963	194.62	5,584	13,795
194.11	5,315	11,016	194.63	5,589	13,851
194.12	5,320	11,069	194.64	5,594	13,907
194.13	5,326	11,122	194.65	5,600	13,963
194.14	5,331	11,176	194.66	5,605	14,019
194.15	5,336	11,229	194.67	5,610	14,075

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.68	5,615	14,131	195.20	5,893	17,123
194.69	5,621	14,187	195.21	5,898	17,182
194.70	5,626	14,244	195.22	5,903	17,241
194.71	5,631	14,300	195.23	5,909	17,300
194.72	5,636	14,356	195.24	5,914	17,359
194.73	5,642	14,413	195.25	5,920	17,418
194.74	5,647	14,469	195.26	5,925	17,477
194.75	5,652	14,525	195.27	5,931	17,536
194.76	5,658	14,582	195.28	5,936	17,596
194.77	5,663	14,639	195.29	5,941	17,655
194.78	5,668	14,695	195.30	5,947	17,715
194.79	5,673	14,752	195.31	5,952	17,774
194.80	5,679	14,809	195.32	5,958	17,834
194.81	5,684	14,866	195.33	5,963	17,893
194.82	5,689	14,922	195.34	5,969	17,953
194.83	5,694	14,979	195.35	5,974	18,013
194.84	5,700	15,036	195.36	5,979	18,072
194.85	5,705	15,093	195.37	5,985	18,132
194.86	5,710	15,150	195.38	5,990	18,192
194.87	5,715	15,208	195.39	5,996	18,252
194.88	5,721	15,265	195.40	6,001	18,312
194.89	5,726	15,322	195.41	6,007	18,372
194.90	5,731	15,379	195.42	6,012	18,432
194.91	5,737	15,437	195.43	6,017	18,492
194.92	5,742	15,494	195.44	6,023	18,553
194.93	5,747	15,551	195.45	6,028	18,613
194.94	5,752	15,609	195.46	6,034	18,673
194.95	5,758	15,666	195.47	6,039	18,733
194.96	5,763	15,724	195.48	6,045	18,794
194.97	5,768	15,782	195.49	6,050	18,854
194.98	5,773	15,839	195.50	6,056	18,915
194.99	5,779	15,897	195.51	6,061	18,975
195.00	5,784	15,955	195.52	6,066	19,036
195.01	5,789	16,013	195.53	6,072	19,097
195.02	5,795	16,071	195.54	6,077	19,158
195.03	5,800	16,129	195.55	6,083	19,218
195.04	5,806	16,187	195.56	6,088	19,279
195.05	5,811	16,245	195.57	6,094	19,340
195.06	5,817	16,303	195.58	6,099	19,401
195.07	5,822	16,361	195.59	6,104	19,462
195.08	5,827	16,419	195.60	6,110	19,523
195.09	5,833	16,478	195.61	6,115	19,584
195.10	5,838	16,536	195.62	6,121	19,645
195.11	5,844	16,595	195.63	6,126	19,707
195.12	5,849	16,653	195.64	6,132	19,768
195.13	5,855	16,712	195.65	6,137	19,829
195.14	5,860	16,770	195.66	6,142	19,891
195.15	5,865	16,829	195.67	6,148	19,952
195.16	5,871	16,887	195.68	6,153	20,014
195.17	5,876	16,946	195.69	6,159	20,075
195.18	5,882	17,005	195.70	6,164	20,137
195.19	5,887	17,064	195.71	6,170	20,199

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.72	6,175	20,260
195.73	6,180	20,322
195.74	6,186	20,384
195.75	6,191	20,446
195.76	6,197	20,508
195.77	6,202	20,570
195.78	6,208	20,632
195.79	6,213	20,694
195.80	6,218	20,756
195.81	6,224	20,818
195.82	6,229	20,880
195.83	6,235	20,943
195.84	6,240	21,005
195.85	6,246	21,068
195.86	6,251	21,130
195.87	6,256	21,193
195.88	6,262	21,255
195.89	6,267	21,318
195.90	6,273	21,381
195.91	6,278	21,443
195.92	6,284	21,506
195.93	6,289	21,569
195.94	6,294	21,632
195.95	6,300	21,695
195.96	6,305	21,758
195.97	6,311	21,821
195.98	6,316	21,884
195.99	6,322	21,947
196.00	**6,327**	**22,010**

Summary for Pond B-56: Basin #56

Inflow Area = 1.512 ac, 31.08% Impervious, Inflow Depth = 3.85" for Future 10 yr event
Inflow = 6.03 cfs @ 12.17 hrs, Volume= 0.485 af
Outflow = 4.22 cfs @ 12.27 hrs, Volume= 0.439 af, Atten= 30%, Lag= 6.0 min
Primary = 4.22 cfs @ 12.27 hrs, Volume= 0.439 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 192.80' @ 12.27 hrs Surf.Area= 5,395 sf Storage= 5,238 cf

Plug-Flow detention time= 107.0 min calculated for 0.439 af (90% of inflow)
Center-of-Mass det. time= 56.2 min (853.8 - 797.6)

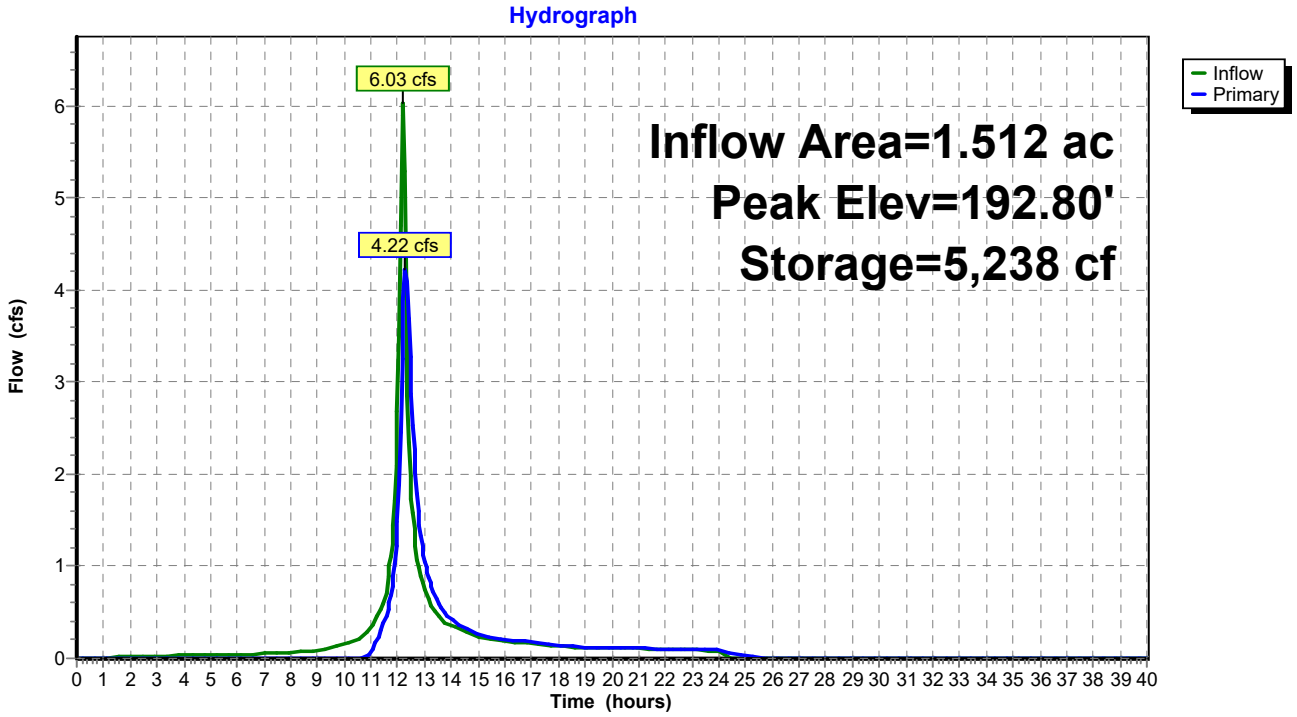
Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	**18.0" Round Culvert** L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.19'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.62'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.19 cfs @ 12.27 hrs HW=192.79' (Free Discharge)
- **1=Culvert** (Passes 4.19 cfs of 4.39 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 4.19 cfs @ 2.79 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-56: Basin #56



Stage-Discharge for Pond B-56: Basin #56

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.57	0.00	192.09	0.00	192.61	2.62	193.13	5.97
191.58	0.00	192.10	0.00	192.62	2.72	193.14	6.01
191.59	0.00	192.11	0.00	192.63	2.81	193.15	6.05
191.60	0.00	192.12	0.00	192.64	2.91	193.16	6.10
191.61	0.00	192.13	0.00	192.65	3.00	193.17	6.14
191.62	0.00	192.14	0.00	192.66	3.10	193.18	6.18
191.63	0.00	192.15	0.00	192.67	3.20	193.19	6.23
191.64	0.00	192.16	0.00	192.68	3.30	193.20	6.27
191.65	0.00	192.17	0.00	192.69	3.40	193.21	6.31
191.66	0.00	192.18	0.00	192.70	3.50	193.22	6.35
191.67	0.00	192.19	0.00	192.71	3.58	193.23	6.39
191.68	0.00	192.20	0.01	192.72	3.67	193.24	6.43
191.69	0.00	192.21	0.03	192.73	3.74	193.25	6.47
191.70	0.00	192.22	0.05	192.74	3.82	193.26	6.51
191.71	0.00	192.23	0.08	192.75	3.89	193.27	6.55
191.72	0.00	192.24	0.11	192.76	3.97	193.28	6.59
191.73	0.00	192.25	0.14	192.77	4.04	193.29	6.63
191.74	0.00	192.26	0.18	192.78	4.10	193.30	6.67
191.75	0.00	192.27	0.22	192.79	4.17	193.31	6.71
191.76	0.00	192.28	0.26	192.80	4.24	193.32	6.75
191.77	0.00	192.29	0.30	192.81	4.30	193.33	6.79
191.78	0.00	192.30	0.35	192.82	4.36	193.34	6.83
191.79	0.00	192.31	0.40	192.83	4.43	193.35	6.87
191.80	0.00	192.32	0.45	192.84	4.49	193.36	6.91
191.81	0.00	192.33	0.50	192.85	4.55	193.37	6.94
191.82	0.00	192.34	0.56	192.86	4.61	193.38	6.98
191.83	0.00	192.35	0.62	192.87	4.66	193.39	7.02
191.84	0.00	192.36	0.67	192.88	4.72	193.40	7.06
191.85	0.00	192.37	0.74	192.89	4.78	193.41	7.09
191.86	0.00	192.38	0.80	192.90	4.83	193.42	7.13
191.87	0.00	192.39	0.86	192.91	4.89	193.43	7.17
191.88	0.00	192.40	0.93	192.92	4.94	193.44	7.20
191.89	0.00	192.41	0.99	192.93	5.00	193.45	7.24
191.90	0.00	192.42	1.06	192.94	5.05	193.46	7.28
191.91	0.00	192.43	1.13	192.95	5.10	193.47	7.31
191.92	0.00	192.44	1.20	192.96	5.16	193.48	7.35
191.93	0.00	192.45	1.28	192.97	5.21	193.49	7.38
191.94	0.00	192.46	1.35	192.98	5.26	193.50	7.42
191.95	0.00	192.47	1.43	192.99	5.31	193.51	7.45
191.96	0.00	192.48	1.50	193.00	5.36	193.52	7.49
191.97	0.00	192.49	1.58	193.01	5.41	193.53	7.52
191.98	0.00	192.50	1.66	193.02	5.46	193.54	7.56
191.99	0.00	192.51	1.74	193.03	5.50	193.55	7.59
192.00	0.00	192.52	1.83	193.04	5.55	193.56	7.63
192.01	0.00	192.53	1.91	193.05	5.60	193.57	7.66
192.02	0.00	192.54	1.99	193.06	5.65	193.58	7.70
192.03	0.00	192.55	2.08	193.07	5.69	193.59	7.73
192.04	0.00	192.56	2.17	193.08	5.74	193.60	7.76
192.05	0.00	192.57	2.26	193.09	5.79	193.61	7.80
192.06	0.00	192.58	2.35	193.10	5.83	193.62	7.83
192.07	0.00	192.59	2.44	193.11	5.88	193.63	7.88
192.08	0.00	192.60	2.53	193.12	5.92	193.64	7.93

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.65	8.00	194.17	11.13	194.69	13.10	195.21	26.75
193.66	8.07	194.18	11.17	194.70	13.13	195.22	27.67
193.67	8.14	194.19	11.22	194.71	13.15	195.23	28.62
193.68	8.22	194.20	11.26	194.72	13.18	195.24	29.59
193.69	8.30	194.21	11.30	194.73	13.21	195.25	30.59
193.70	8.39	194.22	11.35	194.74	13.24	195.26	31.61
193.71	8.48	194.23	11.39	194.75	13.26	195.27	32.66
193.72	8.57	194.24	11.43	194.76	13.29	195.28	33.74
193.73	8.66	194.25	11.48	194.77	13.32	195.29	34.83
193.74	8.76	194.26	11.52	194.78	13.35	195.30	35.95
193.75	8.86	194.27	11.56	194.79	13.37	195.31	37.10
193.76	8.97	194.28	11.61	194.80	13.40	195.32	38.27
193.77	9.07	194.29	11.65	194.81	13.43	195.33	39.46
193.78	9.18	194.30	11.69	194.82	13.45	195.34	40.68
193.79	9.28	194.31	11.73	194.83	13.48	195.35	41.93
193.80	9.34	194.32	11.78	194.84	13.51	195.36	43.19
193.81	9.39	194.33	11.82	194.85	13.53	195.37	44.48
193.82	9.44	194.34	11.86	194.86	13.56	195.38	45.80
193.83	9.49	194.35	11.90	194.87	13.59	195.39	47.14
193.84	9.55	194.36	11.94	194.88	13.61	195.40	48.53
193.85	9.60	194.37	11.98	194.89	13.64	195.41	49.94
193.86	9.65	194.38	12.03	194.90	13.67	195.42	51.39
193.87	9.70	194.39	12.07	194.91	13.69	195.43	52.85
193.88	9.75	194.40	12.11	194.92	13.72	195.44	54.35
193.89	9.80	194.41	12.15	194.93	13.75	195.45	55.87
193.90	9.85	194.42	12.19	194.94	13.77	195.46	57.42
193.91	9.90	194.43	12.23	194.95	13.80	195.47	58.99
193.92	9.95	194.44	12.27	194.96	13.83	195.48	60.59
193.93	10.00	194.45	12.31	194.97	13.85	195.49	62.21
193.94	10.05	194.46	12.35	194.98	13.88	195.50	63.87
193.95	10.10	194.47	12.39	194.99	13.90	195.51	65.55
193.96	10.15	194.48	12.43	195.00	14.05	195.52	67.25
193.97	10.20	194.49	12.47	195.01	14.29	195.53	68.98
193.98	10.25	194.50	12.51	195.02	14.59	195.54	70.74
193.99	10.29	194.51	12.55	195.03	14.94	195.55	72.53
194.00	10.34	194.52	12.59	195.04	15.34	195.56	74.34
194.01	10.39	194.53	12.63	195.05	15.78	195.57	76.18
194.02	10.44	194.54	12.67	195.06	16.26	195.58	78.04
194.03	10.49	194.55	12.71	195.07	16.77	195.59	79.94
194.04	10.53	194.56	12.73	195.08	17.31	195.60	81.59
194.05	10.58	194.57	12.76	195.09	17.88	195.61	83.25
194.06	10.63	194.58	12.79	195.10	18.48	195.62	84.93
194.07	10.67	194.59	12.82	195.11	19.10	195.63	86.62
194.08	10.72	194.60	12.85	195.12	19.76	195.64	88.32
194.09	10.77	194.61	12.88	195.13	20.43	195.65	90.04
194.10	10.81	194.62	12.90	195.14	21.13	195.66	91.77
194.11	10.86	194.63	12.93	195.15	21.86	195.67	93.51
194.12	10.90	194.64	12.96	195.16	22.61	195.68	95.27
194.13	10.95	194.65	12.99	195.17	23.38	195.69	97.04
194.14	10.99	194.66	13.02	195.18	24.17	195.70	98.82
194.15	11.04	194.67	13.04	195.19	24.98	195.71	100.61
194.16	11.08	194.68	13.07	195.20	25.85	195.72	102.42

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)
195.73	104.24
195.74	106.07
195.75	107.92
195.76	109.77
195.77	111.64
195.78	113.52
195.79	115.41
195.80	117.36
195.81	119.31
195.82	121.28
195.83	123.26
195.84	125.26
195.85	127.27
195.86	129.29
195.87	131.32
195.88	133.37
195.89	135.43
195.90	137.50
195.91	139.59
195.92	141.69
195.93	143.80
195.94	145.92
195.95	148.06
195.96	150.21
195.97	152.37
195.98	154.55
195.99	156.73
196.00	**158.88**

Stage-Area-Storage for Pond B-56: Basin #56

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.57	0	0
191.58	117	1
191.59	234	2
191.60	350	5
191.61	467	9
191.62	584	15
191.63	701	21
191.64	817	29
191.65	934	37
191.66	1,051	47
191.67	1,168	58
191.68	1,284	71
191.69	1,401	84
191.70	1,518	99
191.71	1,635	114
191.72	1,752	131
191.73	1,868	149
191.74	1,985	169
191.75	2,102	189
191.76	2,219	211
191.77	2,335	234
191.78	2,452	257
191.79	2,569	283
191.80	2,686	309
191.81	2,802	336
191.82	2,919	365
191.83	3,036	395
191.84	3,153	426
191.85	3,269	458
191.86	3,386	491
191.87	3,503	525
191.88	3,620	561
191.89	3,737	598
191.90	3,853	636
191.91	3,970	675
191.92	4,087	715
191.93	4,204	757
191.94	4,320	799
191.95	4,437	843
191.96	4,554	888
191.97	4,671	934
191.98	4,787	981
191.99	4,904	1,030
192.00	5,021	1,080
192.01	5,026	1,130
192.02	5,030	1,180
192.03	5,035	1,230
192.04	5,040	1,281
192.05	5,044	1,331
192.06	5,049	1,382
192.07	5,054	1,432
192.08	5,059	1,483
192.09	5,063	1,533
192.10	5,068	1,584
192.11	5,073	1,635
192.12	5,077	1,685
192.13	5,082	1,736
192.14	5,087	1,787
192.15	5,091	1,838
192.16	5,096	1,889
192.17	5,101	1,940
192.18	5,105	1,991
192.19	5,110	2,042
192.20	5,115	2,093
192.21	5,119	2,144
192.22	5,124	2,195
192.23	5,129	2,247
192.24	5,134	2,298
192.25	5,138	2,349
192.26	5,143	2,401
192.27	5,148	2,452
192.28	5,152	2,504
192.29	5,157	2,555
192.30	5,162	2,607
192.31	5,166	2,659
192.32	5,171	2,710
192.33	5,176	2,762
192.34	5,180	2,814
192.35	5,185	2,866
192.36	5,190	2,917
192.37	5,195	2,969
192.38	5,199	3,021
192.39	5,204	3,073
192.40	5,209	3,125
192.41	5,213	3,178
192.42	5,218	3,230
192.43	5,223	3,282
192.44	5,227	3,334
192.45	5,232	3,386
192.46	5,237	3,439
192.47	5,241	3,491
192.48	5,246	3,544
192.49	5,251	3,596
192.50	5,256	3,649
192.51	5,260	3,701
192.52	5,265	3,754
192.53	5,270	3,807
192.54	5,274	3,859
192.55	5,279	3,912
192.56	5,284	3,965
192.57	5,288	4,018
192.58	5,293	4,071
192.59	5,298	4,124
192.60	5,302	4,177

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.61	5,307	4,230	193.13	5,553	7,053
192.62	5,312	4,283	193.14	5,558	7,108
192.63	5,316	4,336	193.15	5,563	7,164
192.64	5,321	4,389	193.16	5,568	7,220
192.65	5,326	4,442	193.17	5,573	7,275
192.66	5,331	4,496	193.18	5,577	7,331
192.67	5,335	4,549	193.19	5,582	7,387
192.68	5,340	4,602	193.20	5,587	7,443
192.69	5,345	4,656	193.21	5,592	7,499
192.70	5,349	4,709	193.22	5,597	7,555
192.71	5,354	4,763	193.23	5,602	7,611
192.72	5,359	4,816	193.24	5,607	7,667
192.73	5,363	4,870	193.25	5,612	7,723
192.74	5,368	4,923	193.26	5,616	7,779
192.75	5,373	4,977	193.27	5,621	7,835
192.76	5,377	5,031	193.28	5,626	7,891
192.77	5,382	5,085	193.29	5,631	7,948
192.78	5,387	5,139	193.30	5,636	8,004
192.79	5,392	5,192	193.31	5,641	8,060
192.80	5,396	5,246	193.32	5,646	8,117
192.81	5,401	5,300	193.33	5,650	8,173
192.82	5,406	5,354	193.34	5,655	8,230
192.83	5,410	5,408	193.35	5,660	8,286
192.84	5,415	5,463	193.36	5,665	8,343
192.85	5,420	5,517	193.37	5,670	8,400
192.86	5,424	5,571	193.38	5,675	8,456
192.87	5,429	5,625	193.39	5,680	8,513
192.88	5,434	5,680	193.40	5,684	8,570
192.89	5,438	5,734	193.41	5,689	8,627
192.90	5,443	5,788	193.42	5,694	8,684
192.91	5,448	5,843	193.43	5,699	8,741
192.92	5,452	5,897	193.44	5,704	8,798
192.93	5,457	5,952	193.45	5,709	8,855
192.94	5,462	6,006	193.46	5,714	8,912
192.95	5,467	6,061	193.47	5,718	8,969
192.96	5,471	6,116	193.48	5,723	9,026
192.97	5,476	6,171	193.49	5,728	9,083
192.98	5,481	6,225	193.50	5,733	9,141
192.99	5,485	6,280	193.51	5,738	9,198
193.00	5,490	6,335	193.52	5,743	9,256
193.01	5,495	6,390	193.53	5,748	9,313
193.02	5,500	6,445	193.54	5,752	9,370
193.03	5,505	6,500	193.55	5,757	9,428
193.04	5,509	6,555	193.56	5,762	9,486
193.05	5,514	6,610	193.57	5,767	9,543
193.06	5,519	6,665	193.58	5,772	9,601
193.07	5,524	6,721	193.59	5,777	9,659
193.08	5,529	6,776	193.60	5,782	9,716
193.09	5,534	6,831	193.61	5,786	9,774
193.10	5,539	6,886	193.62	5,791	9,832
193.11	5,543	6,942	193.63	5,796	9,890
193.12	5,548	6,997	193.64	5,801	9,948

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.65	5,806	10,006	194.17	6,061	13,091
193.66	5,811	10,064	194.18	6,066	13,152
193.67	5,816	10,122	194.19	6,071	13,213
193.68	5,820	10,181	194.20	6,076	13,273
193.69	5,825	10,239	194.21	6,081	13,334
193.70	5,830	10,297	194.22	6,086	13,395
193.71	5,835	10,355	194.23	6,091	13,456
193.72	5,840	10,414	194.24	6,096	13,517
193.73	5,845	10,472	194.25	6,102	13,578
193.74	5,850	10,531	194.26	6,107	13,639
193.75	5,855	10,589	194.27	6,112	13,700
193.76	5,859	10,648	194.28	6,117	13,761
193.77	5,864	10,706	194.29	6,122	13,822
193.78	5,869	10,765	194.30	6,127	13,883
193.79	5,874	10,824	194.31	6,132	13,945
193.80	5,879	10,883	194.32	6,137	14,006
193.81	5,884	10,941	194.33	6,142	14,067
193.82	5,889	11,000	194.34	6,147	14,129
193.83	5,893	11,059	194.35	6,152	14,190
193.84	5,898	11,118	194.36	6,157	14,252
193.85	5,903	11,177	194.37	6,162	14,313
193.86	5,908	11,236	194.38	6,167	14,375
193.87	5,913	11,295	194.39	6,172	14,437
193.88	5,918	11,354	194.40	6,177	14,499
193.89	5,923	11,414	194.41	6,182	14,560
193.90	5,927	11,473	194.42	6,187	14,622
193.91	5,932	11,532	194.43	6,192	14,684
193.92	5,937	11,591	194.44	6,197	14,746
193.93	5,942	11,651	194.45	6,202	14,808
193.94	5,947	11,710	194.46	6,207	14,870
193.95	5,952	11,770	194.47	6,212	14,932
193.96	5,957	11,829	194.48	6,217	14,994
193.97	5,961	11,889	194.49	6,222	15,057
193.98	5,966	11,949	194.50	6,227	15,119
193.99	5,971	12,008	194.51	6,232	15,181
194.00	5,976	12,068	194.52	6,237	15,243
194.01	5,981	12,128	194.53	6,242	15,306
194.02	5,986	12,188	194.54	6,247	15,368
194.03	5,991	12,248	194.55	6,252	15,431
194.04	5,996	12,307	194.56	6,257	15,493
194.05	6,001	12,367	194.57	6,262	15,556
194.06	6,006	12,427	194.58	6,267	15,619
194.07	6,011	12,488	194.59	6,272	15,681
194.08	6,016	12,548	194.60	6,277	15,744
194.09	6,021	12,608	194.61	6,282	15,807
194.10	6,026	12,668	194.62	6,287	15,870
194.11	6,031	12,728	194.63	6,292	15,933
194.12	6,036	12,789	194.64	6,297	15,995
194.13	6,041	12,849	194.65	6,302	16,058
194.14	6,046	12,910	194.66	6,307	16,122
194.15	6,051	12,970	194.67	6,312	16,185
194.16	6,056	13,031	194.68	6,317	16,248

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.69	6,322	16,311	195.21	6,587	19,667
194.70	6,327	16,374	195.22	6,592	19,733
194.71	6,332	16,438	195.23	6,597	19,799
194.72	6,337	16,501	195.24	6,602	19,865
194.73	6,342	16,564	195.25	6,607	19,931
194.74	6,347	16,628	195.26	6,612	19,997
194.75	6,353	16,691	195.27	6,618	20,063
194.76	6,358	16,755	195.28	6,623	20,129
194.77	6,363	16,818	195.29	6,628	20,195
194.78	6,368	16,882	195.30	6,633	20,262
194.79	6,373	16,946	195.31	6,638	20,328
194.80	6,378	17,009	195.32	6,643	20,394
194.81	6,383	17,073	195.33	6,649	20,461
194.82	6,388	17,137	195.34	6,654	20,527
194.83	6,393	17,201	195.35	6,659	20,594
194.84	6,398	17,265	195.36	6,664	20,661
194.85	6,403	17,329	195.37	6,669	20,727
194.86	6,408	17,393	195.38	6,674	20,794
194.87	6,413	17,457	195.39	6,680	20,861
194.88	6,418	17,521	195.40	6,685	20,928
194.89	6,423	17,585	195.41	6,690	20,994
194.90	6,428	17,650	195.42	6,695	21,061
194.91	6,433	17,714	195.43	6,700	21,128
194.92	6,438	17,778	195.44	6,705	21,195
194.93	6,443	17,843	195.45	6,711	21,262
194.94	6,448	17,907	195.46	6,716	21,330
194.95	6,453	17,972	195.47	6,721	21,397
194.96	6,458	18,036	195.48	6,726	21,464
194.97	6,463	18,101	195.49	6,731	21,531
194.98	6,468	18,166	195.50	6,737	21,599
194.99	6,473	18,230	195.51	6,742	21,666
195.00	6,478	18,295	195.52	6,747	21,733
195.01	6,483	18,360	195.53	6,752	21,801
195.02	6,488	18,425	195.54	6,757	21,869
195.03	6,494	18,490	195.55	6,762	21,936
195.04	6,499	18,555	195.56	6,768	22,004
195.05	6,504	18,620	195.57	6,773	22,071
195.06	6,509	18,685	195.58	6,778	22,139
195.07	6,514	18,750	195.59	6,783	22,207
195.08	6,519	18,815	195.60	6,788	22,275
195.09	6,525	18,880	195.61	6,793	22,343
195.10	6,530	18,945	195.62	6,799	22,411
195.11	6,535	19,011	195.63	6,804	22,479
195.12	6,540	19,076	195.64	6,809	22,547
195.13	6,545	19,142	195.65	6,814	22,615
195.14	6,550	19,207	195.66	6,819	22,683
195.15	6,556	19,273	195.67	6,824	22,751
195.16	6,561	19,338	195.68	6,830	22,820
195.17	6,566	19,404	195.69	6,835	22,888
195.18	6,571	19,469	195.70	6,840	22,956
195.19	6,576	19,535	195.71	6,845	23,025
195.20	6,581	19,601	195.72	6,850	23,093

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.73	6,855	23,162
195.74	6,861	23,230
195.75	6,866	23,299
195.76	6,871	23,368
195.77	6,876	23,436
195.78	6,881	23,505
195.79	6,886	23,574
195.80	6,892	23,643
195.81	6,897	23,712
195.82	6,902	23,781
195.83	6,907	23,850
195.84	6,912	23,919
195.85	6,917	23,988
195.86	6,923	24,057
195.87	6,928	24,127
195.88	6,933	24,196
195.89	6,938	24,265
195.90	6,943	24,335
195.91	6,948	24,404
195.92	6,954	24,474
195.93	6,959	24,543
195.94	6,964	24,613
195.95	6,969	24,682
195.96	6,974	24,752
195.97	6,979	24,822
195.98	6,985	24,892
195.99	6,990	24,962
196.00	**6,995**	**25,032**

Summary for Pond B-57: Basin #57

Inflow Area = 1.434 ac, 47.56% Impervious, Inflow Depth = 4.27" for Future 10 yr event
Inflow = 6.18 cfs @ 12.17 hrs, Volume= 0.511 af
Outflow = 3.18 cfs @ 12.34 hrs, Volume= 0.441 af, Atten= 49%, Lag= 9.9 min
Primary = 3.18 cfs @ 12.34 hrs, Volume= 0.441 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.98' @ 12.34 hrs Surf.Area= 5,021 sf Storage= 10,263 cf

Plug-Flow detention time= 368.2 min calculated for 0.440 af (86% of inflow)
Center-of-Mass det. time= 304.3 min (1,086.9 - 782.6)

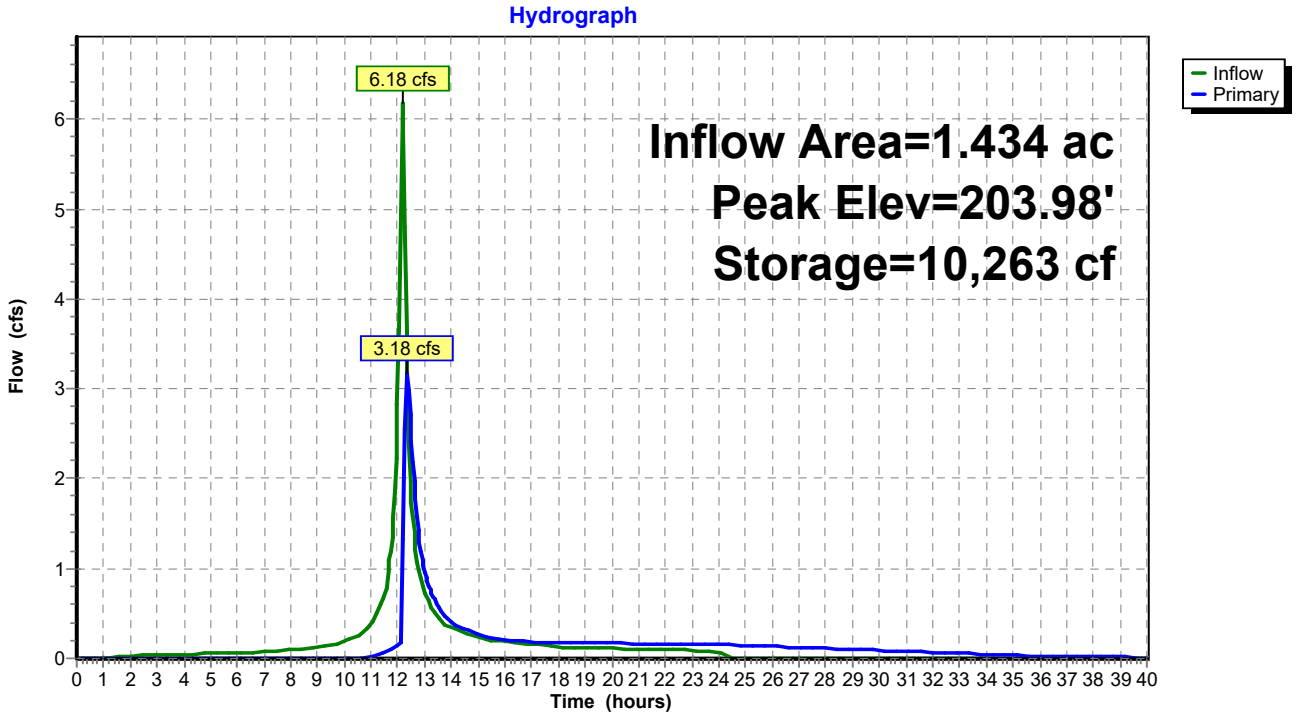
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	**18.0" Round Culvert** L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.34'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.60'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=3.15 cfs @ 12.34 hrs HW=203.97' (Free Discharge)
- **1=Culvert** (Passes 3.15 cfs of 13.05 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 5.96 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.95 cfs @ 2.00 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-57: Basin #57



Stage-Discharge for Pond B-57: Basin #57

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.11
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.11
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.11
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.11
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.11
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.11
201.36	0.00	201.88	0.00	202.40	0.01	202.92	0.11
201.37	0.00	201.89	0.00	202.41	0.01	202.93	0.11
201.38	0.00	201.90	0.00	202.42	0.01	202.94	0.12
201.39	0.00	201.91	0.00	202.43	0.01	202.95	0.12
201.40	0.00	201.92	0.00	202.44	0.02	202.96	0.12
201.41	0.00	201.93	0.00	202.45	0.02	202.97	0.12
201.42	0.00	201.94	0.00	202.46	0.02	202.98	0.12
201.43	0.00	201.95	0.00	202.47	0.03	202.99	0.12
201.44	0.00	201.96	0.00	202.48	0.03	203.00	0.12
201.45	0.00	201.97	0.00	202.49	0.03	203.01	0.12
201.46	0.00	201.98	0.00	202.50	0.04	203.02	0.12
201.47	0.00	201.99	0.00	202.51	0.04	203.03	0.13
201.48	0.00	202.00	0.00	202.52	0.05	203.04	0.13
201.49	0.00	202.01	0.00	202.53	0.05	203.05	0.13
201.50	0.00	202.02	0.00	202.54	0.05	203.06	0.13
201.51	0.00	202.03	0.00	202.55	0.05	203.07	0.13
201.52	0.00	202.04	0.00	202.56	0.06	203.08	0.13
201.53	0.00	202.05	0.00	202.57	0.06	203.09	0.13
201.54	0.00	202.06	0.00	202.58	0.06	203.10	0.13
201.55	0.00	202.07	0.00	202.59	0.06	203.11	0.13
201.56	0.00	202.08	0.00	202.60	0.06	203.12	0.13
201.57	0.00	202.09	0.00	202.61	0.07	203.13	0.14
201.58	0.00	202.10	0.00	202.62	0.07	203.14	0.14
201.59	0.00	202.11	0.00	202.63	0.07	203.15	0.14
201.60	0.00	202.12	0.00	202.64	0.07	203.16	0.14
201.61	0.00	202.13	0.00	202.65	0.07	203.17	0.14
201.62	0.00	202.14	0.00	202.66	0.08	203.18	0.14
201.63	0.00	202.15	0.00	202.67	0.08	203.19	0.14
201.64	0.00	202.16	0.00	202.68	0.08	203.20	0.14
201.65	0.00	202.17	0.00	202.69	0.08	203.21	0.14
201.66	0.00	202.18	0.00	202.70	0.08	203.22	0.14
201.67	0.00	202.19	0.00	202.71	0.08	203.23	0.15
201.68	0.00	202.20	0.00	202.72	0.09	203.24	0.15
201.69	0.00	202.21	0.00	202.73	0.09	203.25	0.15
201.70	0.00	202.22	0.00	202.74	0.09	203.26	0.15
201.71	0.00	202.23	0.00	202.75	0.09	203.27	0.15
201.72	0.00	202.24	0.00	202.76	0.09	203.28	0.15
201.73	0.00	202.25	0.00	202.77	0.09	203.29	0.15
201.74	0.00	202.26	0.00	202.78	0.10	203.30	0.15
201.75	0.00	202.27	0.00	202.79	0.10	203.31	0.15
201.76	0.00	202.28	0.00	202.80	0.10	203.32	0.15
201.77	0.00	202.29	0.00	202.81	0.10	203.33	0.15
201.78	0.00	202.30	0.00	202.82	0.10	203.34	0.16
201.79	0.00	202.31	0.00	202.83	0.10	203.35	0.16
201.80	0.00	202.32	0.00	202.84	0.10	203.36	0.16
201.81	0.00	202.33	0.00	202.85	0.10	203.37	0.16

Stage-Discharge for Pond B-57: Basin #57 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	0.16	203.90	2.32	204.42	9.54	204.94	52.24
203.39	0.16	203.91	2.42	204.43	9.71	204.95	53.72
203.40	0.16	203.92	2.53	204.44	9.88	204.96	55.23
203.41	0.16	203.93	2.64	204.45	10.05	204.97	56.77
203.42	0.16	203.94	2.75	204.46	10.22	204.98	58.33
203.43	0.16	203.95	2.86	204.47	10.39	204.99	59.92
203.44	0.16	203.96	2.98	204.48	10.56	205.00	**61.53**
203.45	0.16	203.97	3.09	204.49	10.73		
203.46	0.17	203.98	3.21	204.50	10.90		
203.47	0.17	203.99	3.33	204.51	11.19		
203.48	0.17	204.00	3.45	204.52	11.58		
203.49	0.17	204.01	3.57	204.53	12.03		
203.50	0.17	204.02	3.69	204.54	12.54		
203.51	0.17	204.03	3.82	204.55	13.09		
203.52	0.17	204.04	3.94	204.56	13.68		
203.53	0.17	204.05	4.07	204.57	14.30		
203.54	0.17	204.06	4.20	204.58	14.97		
203.55	0.17	204.07	4.32	204.59	15.66		
203.56	0.17	204.08	4.46	204.60	16.38		
203.57	0.17	204.09	4.59	204.61	17.14		
203.58	0.17	204.10	4.72	204.62	17.92		
203.59	0.18	204.11	4.85	204.63	18.73		
203.60	0.18	204.12	4.99	204.64	19.56		
203.61	0.19	204.13	5.13	204.65	20.42		
203.62	0.21	204.14	5.26	204.66	21.31		
203.63	0.25	204.15	5.40	204.67	22.22		
203.64	0.28	204.16	5.54	204.68	23.05		
203.65	0.33	204.17	5.68	204.69	23.83		
203.66	0.37	204.18	5.83	204.70	24.63		
203.67	0.42	204.19	5.97	204.71	25.49		
203.68	0.48	204.20	6.11	204.72	26.38		
203.69	0.53	204.21	6.26	204.73	27.29		
203.70	0.60	204.22	6.41	204.74	28.23		
203.71	0.66	204.23	6.55	204.75	29.19		
203.72	0.73	204.24	6.70	204.76	30.17		
203.73	0.80	204.25	6.85	204.77	31.19		
203.74	0.87	204.26	7.00	204.78	32.22		
203.75	0.94	204.27	7.15	204.79	33.28		
203.76	1.02	204.28	7.31	204.80	34.37		
203.77	1.10	204.29	7.46	204.81	35.48		
203.78	1.18	204.30	7.62	204.82	36.61		
203.79	1.26	204.31	7.77	204.83	37.77		
203.80	1.35	204.32	7.93	204.84	38.96		
203.81	1.44	204.33	8.09	204.85	40.16		
203.82	1.53	204.34	8.24	204.86	41.40		
203.83	1.62	204.35	8.40	204.87	42.65		
203.84	1.71	204.36	8.56	204.88	43.93		
203.85	1.81	204.37	8.73	204.89	45.24		
203.86	1.91	204.38	8.89	204.90	46.56		
203.87	2.01	204.39	9.05	204.91	47.94		
203.88	2.11	204.40	9.21	204.92	49.35		
203.89	2.21	204.41	9.38	204.93	50.78		

Stage-Area-Storage for Pond B-57: Basin #57

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,948	767
201.31	57	0	201.83	3,005	796
201.32	113	1	201.84	3,062	827
201.33	170	3	201.85	3,119	858
201.34	227	5	201.86	3,175	889
201.35	284	7	201.87	3,232	921
201.36	340	10	201.88	3,289	954
201.37	397	14	201.89	3,345	987
201.38	454	18	201.90	3,402	1,021
201.39	510	23	201.91	3,459	1,055
201.40	567	28	201.92	3,515	1,090
201.41	624	34	201.93	3,572	1,125
201.42	680	41	201.94	3,629	1,161
201.43	737	48	201.95	3,686	1,198
201.44	794	56	201.96	3,742	1,235
201.45	851	64	201.97	3,799	1,273
201.46	907	73	201.98	3,856	1,311
201.47	964	82	201.99	3,912	1,350
201.48	1,021	92	202.00	3,969	1,389
201.49	1,077	102	202.01	3,974	1,429
201.50	1,134	113	202.02	3,979	1,469
201.51	1,191	125	202.03	3,985	1,508
201.52	1,247	137	202.04	3,990	1,548
201.53	1,304	150	202.05	3,995	1,588
201.54	1,361	163	202.06	4,000	1,628
201.55	1,418	177	202.07	4,005	1,668
201.56	1,474	192	202.08	4,011	1,708
201.57	1,531	207	202.09	4,016	1,748
201.58	1,588	222	202.10	4,021	1,789
201.59	1,644	238	202.11	4,026	1,829
201.60	1,701	255	202.12	4,031	1,869
201.61	1,758	272	202.13	4,036	1,910
201.62	1,814	290	202.14	4,042	1,950
201.63	1,871	309	202.15	4,047	1,990
201.64	1,928	328	202.16	4,052	2,031
201.65	1,985	347	202.17	4,057	2,071
201.66	2,041	367	202.18	4,062	2,112
201.67	2,098	388	202.19	4,068	2,153
201.68	2,155	409	202.20	4,073	2,193
201.69	2,211	431	202.21	4,078	2,234
201.70	2,268	454	202.22	4,083	2,275
201.71	2,325	477	202.23	4,088	2,316
201.72	2,381	500	202.24	4,094	2,357
201.73	2,438	524	202.25	4,099	2,398
201.74	2,495	549	202.26	4,104	2,439
201.75	2,551	574	202.27	4,109	2,480
201.76	2,608	600	202.28	4,114	2,521
201.77	2,665	626	202.29	4,120	2,562
201.78	2,722	653	202.30	4,125	2,603
201.79	2,778	681	202.31	4,130	2,644
201.80	2,835	709	202.32	4,135	2,686
201.81	2,892	737	202.33	4,140	2,727

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	4,145	2,769	202.86	4,415	4,994
202.35	4,151	2,810	202.87	4,421	5,039
202.36	4,156	2,852	202.88	4,426	5,083
202.37	4,161	2,893	202.89	4,431	5,127
202.38	4,166	2,935	202.90	4,436	5,171
202.39	4,171	2,977	202.91	4,441	5,216
202.40	4,177	3,018	202.92	4,446	5,260
202.41	4,182	3,060	202.93	4,452	5,305
202.42	4,187	3,102	202.94	4,457	5,349
202.43	4,192	3,144	202.95	4,462	5,394
202.44	4,197	3,186	202.96	4,467	5,439
202.45	4,203	3,228	202.97	4,472	5,483
202.46	4,208	3,270	202.98	4,478	5,528
202.47	4,213	3,312	202.99	4,483	5,573
202.48	4,218	3,354	203.00	4,488	5,618
202.49	4,223	3,396	203.01	4,493	5,663
202.50	4,229	3,439	203.02	4,499	5,708
202.51	4,234	3,481	203.03	4,504	5,753
202.52	4,239	3,523	203.04	4,510	5,798
202.53	4,244	3,566	203.05	4,515	5,843
202.54	4,249	3,608	203.06	4,521	5,888
202.55	4,254	3,651	203.07	4,526	5,933
202.56	4,260	3,693	203.08	4,532	5,978
202.57	4,265	3,736	203.09	4,537	6,024
202.58	4,270	3,778	203.10	4,543	6,069
202.59	4,275	3,821	203.11	4,548	6,115
202.60	4,280	3,864	203.12	4,554	6,160
202.61	4,286	3,907	203.13	4,559	6,206
202.62	4,291	3,950	203.14	4,564	6,251
202.63	4,296	3,993	203.15	4,570	6,297
202.64	4,301	4,036	203.16	4,575	6,343
202.65	4,306	4,079	203.17	4,581	6,388
202.66	4,312	4,122	203.18	4,586	6,434
202.67	4,317	4,165	203.19	4,592	6,480
202.68	4,322	4,208	203.20	4,597	6,526
202.69	4,327	4,251	203.21	4,603	6,572
202.70	4,332	4,295	203.22	4,608	6,618
202.71	4,337	4,338	203.23	4,614	6,664
202.72	4,343	4,381	203.24	4,619	6,710
202.73	4,348	4,425	203.25	4,625	6,757
202.74	4,353	4,468	203.26	4,630	6,803
202.75	4,358	4,512	203.27	4,635	6,849
202.76	4,363	4,555	203.28	4,641	6,896
202.77	4,369	4,599	203.29	4,646	6,942
202.78	4,374	4,643	203.30	4,652	6,989
202.79	4,379	4,687	203.31	4,657	7,035
202.80	4,384	4,730	203.32	4,663	7,082
202.81	4,389	4,774	203.33	4,668	7,128
202.82	4,395	4,818	203.34	4,674	7,175
202.83	4,400	4,862	203.35	4,679	7,222
202.84	4,405	4,906	203.36	4,685	7,269
202.85	4,410	4,950	203.37	4,690	7,316

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,695	7,363	203.90	4,979	9,878
203.39	4,701	7,409	203.91	4,985	9,928
203.40	4,706	7,457	203.92	4,990	9,978
203.41	4,712	7,504	203.93	4,996	10,028
203.42	4,717	7,551	203.94	5,001	10,078
203.43	4,723	7,598	203.95	5,007	10,128
203.44	4,728	7,645	203.96	5,012	10,178
203.45	4,734	7,693	203.97	5,018	10,228
203.46	4,739	7,740	203.98	5,023	10,278
203.47	4,745	7,787	203.99	5,029	10,328
203.48	4,750	7,835	204.00	5,034	10,379
203.49	4,756	7,882	204.01	5,040	10,429
203.50	4,761	7,930	204.02	5,045	10,479
203.51	4,766	7,978	204.03	5,051	10,530
203.52	4,772	8,025	204.04	5,057	10,580
203.53	4,777	8,073	204.05	5,063	10,631
203.54	4,783	8,121	204.06	5,068	10,682
203.55	4,788	8,169	204.07	5,074	10,732
203.56	4,794	8,217	204.08	5,080	10,783
203.57	4,799	8,265	204.09	5,086	10,834
203.58	4,805	8,313	204.10	5,091	10,885
203.59	4,810	8,361	204.11	5,097	10,936
203.60	4,816	8,409	204.12	5,103	10,987
203.61	4,821	8,457	204.13	5,109	11,038
203.62	4,827	8,505	204.14	5,114	11,089
203.63	4,832	8,553	204.15	5,120	11,140
203.64	4,837	8,602	204.16	5,126	11,191
203.65	4,843	8,650	204.17	5,132	11,243
203.66	4,848	8,699	204.18	5,137	11,294
203.67	4,854	8,747	204.19	5,143	11,345
203.68	4,859	8,796	204.20	5,149	11,397
203.69	4,865	8,844	204.21	5,155	11,448
203.70	4,870	8,893	204.22	5,160	11,500
203.71	4,876	8,942	204.23	5,166	11,552
203.72	4,881	8,991	204.24	5,172	11,603
203.73	4,887	9,039	204.25	5,178	11,655
203.74	4,892	9,088	204.26	5,183	11,707
203.75	4,898	9,137	204.27	5,189	11,759
203.76	4,903	9,186	204.28	5,195	11,811
203.77	4,908	9,235	204.29	5,200	11,863
203.78	4,914	9,284	204.30	5,206	11,915
203.79	4,919	9,334	204.31	5,212	11,967
203.80	4,925	9,383	204.32	5,218	12,019
203.81	4,930	9,432	204.33	5,223	12,071
203.82	4,936	9,481	204.34	5,229	12,123
203.83	4,941	9,531	204.35	5,235	12,176
203.84	4,947	9,580	204.36	5,241	12,228
203.85	4,952	9,630	204.37	5,246	12,281
203.86	4,958	9,679	204.38	5,252	12,333
203.87	4,963	9,729	204.39	5,258	12,386
203.88	4,968	9,779	204.40	5,264	12,438
203.89	4,974	9,828	204.41	5,269	12,491

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	5,275	12,544
204.43	5,281	12,596
204.44	5,287	12,649
204.45	5,292	12,702
204.46	5,298	12,755
204.47	5,304	12,808
204.48	5,310	12,861
204.49	5,315	12,914
204.50	5,321	12,967
204.51	5,327	13,021
204.52	5,332	13,074
204.53	5,338	13,127
204.54	5,344	13,181
204.55	5,350	13,234
204.56	5,355	13,288
204.57	5,361	13,341
204.58	5,367	13,395
204.59	5,373	13,449
204.60	5,378	13,502
204.61	5,384	13,556
204.62	5,390	13,610
204.63	5,396	13,664
204.64	5,401	13,718
204.65	5,407	13,772
204.66	5,413	13,826
204.67	5,419	13,880
204.68	5,424	13,934
204.69	5,430	13,989
204.70	5,436	14,043
204.71	5,442	14,097
204.72	5,447	14,152
204.73	5,453	14,206
204.74	5,459	14,261
204.75	5,465	14,316
204.76	5,470	14,370
204.77	5,476	14,425
204.78	5,482	14,480
204.79	5,487	14,535
204.80	5,493	14,590
204.81	5,499	14,644
204.82	5,505	14,700
204.83	5,510	14,755
204.84	5,516	14,810
204.85	5,522	14,865
204.86	5,528	14,920
204.87	5,533	14,975
204.88	5,539	15,031
204.89	5,545	15,086
204.90	5,551	15,142
204.91	5,556	15,197
204.92	5,562	15,253
204.93	5,568	15,308
204.94	5,574	15,364
204.95	5,579	15,420
204.96	5,585	15,476
204.97	5,591	15,532
204.98	5,597	15,588
204.99	5,602	15,644
205.00	**5,608**	**15,700**

Summary for Pond B-58: Basin #58

Inflow Area = 1.649 ac, 26.80% Impervious, Inflow Depth = 3.74" for Future 10 yr event
Inflow = 6.44 cfs @ 12.17 hrs, Volume= 0.514 af
Outflow = 2.45 cfs @ 12.41 hrs, Volume= 0.451 af, Atten= 62%, Lag= 14.4 min
Primary = 2.45 cfs @ 12.41 hrs, Volume= 0.451 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.22' @ 12.41 hrs Surf.Area= 7,098 sf Storage= 10,340 cf

Plug-Flow detention time= 388.0 min calculated for 0.451 af (88% of inflow)
Center-of-Mass det. time= 329.0 min (1,131.0 - 802.0)

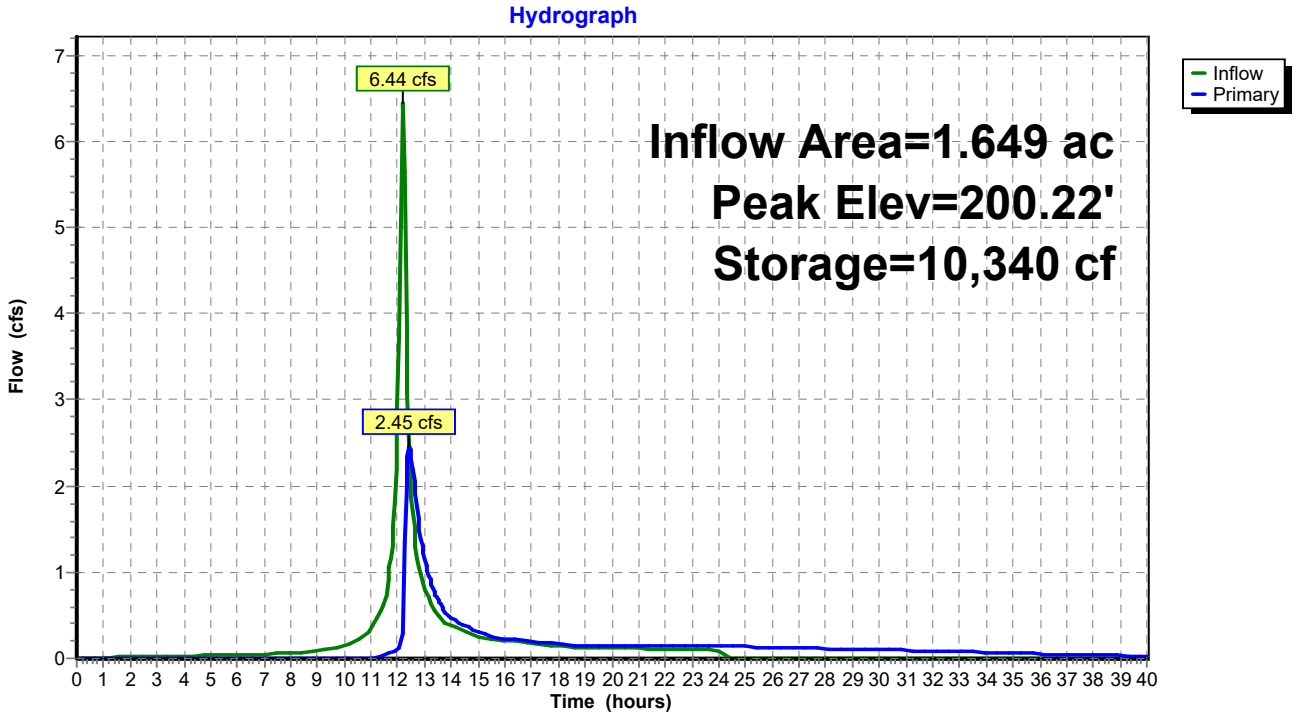
Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	**18.0" Round Culvert** L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	198.97'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	199.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	201.90'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.44 cfs @ 12.41 hrs HW=200.22' (Free Discharge)
- **1=Culvert** (Passes 2.44 cfs of 8.26 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.18 cfs @ 5.16 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 2.26 cfs @ 1.83 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-58: Basin #58



Stage-Discharge for Pond B-58: Basin #58

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
198.30	0.00	198.82	0.00	199.34	0.08	199.86	0.15
198.31	0.00	198.83	0.00	199.35	0.09	199.87	0.15
198.32	0.00	198.84	0.00	199.36	0.09	199.88	0.15
198.33	0.00	198.85	0.00	199.37	0.09	199.89	0.15
198.34	0.00	198.86	0.00	199.38	0.09	199.90	0.15
198.35	0.00	198.87	0.00	199.39	0.09	199.91	0.15
198.36	0.00	198.88	0.00	199.40	0.09	199.92	0.16
198.37	0.00	198.89	0.00	199.41	0.10	199.93	0.19
198.38	0.00	198.90	0.00	199.42	0.10	199.94	0.22
198.39	0.00	198.91	0.00	199.43	0.10	199.95	0.26
198.40	0.00	198.92	0.00	199.44	0.10	199.96	0.30
198.41	0.00	198.93	0.00	199.45	0.10	199.97	0.35
198.42	0.00	198.94	0.00	199.46	0.10	199.98	0.40
198.43	0.00	198.95	0.00	199.47	0.10	199.99	0.45
198.44	0.00	198.96	0.00	199.48	0.10	200.00	0.51
198.45	0.00	198.97	0.00	199.49	0.11	200.01	0.57
198.46	0.00	198.98	0.00	199.50	0.11	200.02	0.63
198.47	0.00	198.99	0.00	199.51	0.11	200.03	0.70
198.48	0.00	199.00	0.00	199.52	0.11	200.04	0.77
198.49	0.00	199.01	0.00	199.53	0.11	200.05	0.84
198.50	0.00	199.02	0.00	199.54	0.11	200.06	0.92
198.51	0.00	199.03	0.01	199.55	0.11	200.07	0.99
198.52	0.00	199.04	0.01	199.56	0.11	200.08	1.07
198.53	0.00	199.05	0.01	199.57	0.12	200.09	1.16
198.54	0.00	199.06	0.01	199.58	0.12	200.10	1.24
198.55	0.00	199.07	0.02	199.59	0.12	200.11	1.33
198.56	0.00	199.08	0.02	199.60	0.12	200.12	1.41
198.57	0.00	199.09	0.02	199.61	0.12	200.13	1.50
198.58	0.00	199.10	0.03	199.62	0.12	200.14	1.60
198.59	0.00	199.11	0.03	199.63	0.12	200.15	1.69
198.60	0.00	199.12	0.03	199.64	0.12	200.16	1.79
198.61	0.00	199.13	0.04	199.65	0.12	200.17	1.88
198.62	0.00	199.14	0.04	199.66	0.13	200.18	1.98
198.63	0.00	199.15	0.05	199.67	0.13	200.19	2.08
198.64	0.00	199.16	0.05	199.68	0.13	200.20	2.19
198.65	0.00	199.17	0.05	199.69	0.13	200.21	2.29
198.66	0.00	199.18	0.05	199.70	0.13	200.22	2.40
198.67	0.00	199.19	0.06	199.71	0.13	200.23	2.51
198.68	0.00	199.20	0.06	199.72	0.13	200.24	2.62
198.69	0.00	199.21	0.06	199.73	0.13	200.25	2.73
198.70	0.00	199.22	0.06	199.74	0.13	200.26	2.84
198.71	0.00	199.23	0.06	199.75	0.13	200.27	2.95
198.72	0.00	199.24	0.07	199.76	0.14	200.28	3.07
198.73	0.00	199.25	0.07	199.77	0.14	200.29	3.19
198.74	0.00	199.26	0.07	199.78	0.14	200.30	3.31
198.75	0.00	199.27	0.07	199.79	0.14	200.31	3.43
198.76	0.00	199.28	0.07	199.80	0.14	200.32	3.55
198.77	0.00	199.29	0.08	199.81	0.14	200.33	3.67
198.78	0.00	199.30	0.08	199.82	0.14	200.34	3.79
198.79	0.00	199.31	0.08	199.83	0.14	200.35	3.92
198.80	0.00	199.32	0.08	199.84	0.14	200.36	4.05
198.81	0.00	199.33	0.08	199.85	0.14	200.37	4.17

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.38	4.30	200.90	10.88	201.42	12.74	201.94	15.30
200.39	4.43	200.91	10.92	201.43	12.78	201.95	15.71
200.40	4.57	200.92	10.96	201.44	12.81	201.96	16.15
200.41	4.70	200.93	11.00	201.45	12.84	201.97	16.63
200.42	4.83	200.94	11.04	201.46	12.88	201.98	17.14
200.43	4.97	200.95	11.07	201.47	12.91	201.99	17.68
200.44	5.10	200.96	11.11	201.48	12.94	202.00	18.26
200.45	5.24	200.97	11.15	201.49	12.97	202.01	18.86
200.46	5.38	200.98	11.19	201.50	13.01	202.02	19.49
200.47	5.52	200.99	11.23	201.51	13.04	202.03	20.15
200.48	5.66	201.00	11.26	201.52	13.07	202.04	20.83
200.49	5.81	201.01	11.30	201.53	13.10	202.05	21.53
200.50	5.95	201.02	11.34	201.54	13.14	202.06	22.26
200.51	6.09	201.03	11.38	201.55	13.17	202.07	23.01
200.52	6.24	201.04	11.41	201.56	13.20	202.08	23.78
200.53	6.39	201.05	11.45	201.57	13.23	202.09	24.58
200.54	6.53	201.06	11.49	201.58	13.26	202.10	25.39
200.55	6.68	201.07	11.52	201.59	13.30	202.11	26.27
200.56	6.83	201.08	11.56	201.60	13.33	202.12	27.17
200.57	6.98	201.09	11.60	201.61	13.36	202.13	28.10
200.58	7.13	201.10	11.63	201.62	13.39	202.14	29.05
200.59	7.29	201.11	11.67	201.63	13.42	202.15	30.02
200.60	7.44	201.12	11.71	201.64	13.45	202.16	31.03
200.61	7.60	201.13	11.74	201.65	13.48	202.17	32.05
200.62	7.75	201.14	11.78	201.66	13.52	202.18	33.10
200.63	7.91	201.15	11.81	201.67	13.55	202.19	34.17
200.64	8.07	201.16	11.85	201.68	13.58	202.20	35.27
200.65	8.22	201.17	11.88	201.69	13.61	202.21	36.39
200.66	8.38	201.18	11.92	201.70	13.64	202.22	37.54
200.67	8.54	201.19	11.96	201.71	13.67	202.23	38.71
200.68	8.71	201.20	11.99	201.72	13.70	202.24	39.90
200.69	8.87	201.21	12.03	201.73	13.73	202.25	41.12
200.70	9.03	201.22	12.06	201.74	13.76	202.26	42.36
200.71	9.19	201.23	12.10	201.75	13.79	202.27	43.63
200.72	9.36	201.24	12.13	201.76	13.83	202.28	44.92
200.73	9.53	201.25	12.17	201.77	13.86	202.29	46.23
200.74	9.69	201.26	12.20	201.78	13.89	202.30	47.57
200.75	9.86	201.27	12.24	201.79	13.92	202.31	48.96
200.76	10.03	201.28	12.27	201.80	13.95	202.32	50.37
200.77	10.20	201.29	12.30	201.81	13.98	202.33	51.82
200.78	10.37	201.30	12.34	201.82	14.01	202.34	53.28
200.79	10.45	201.31	12.37	201.83	14.04	202.35	54.78
200.80	10.49	201.32	12.41	201.84	14.07	202.36	56.30
200.81	10.53	201.33	12.44	201.85	14.10	202.37	57.84
200.82	10.57	201.34	12.47	201.86	14.13	202.38	59.41
200.83	10.61	201.35	12.51	201.87	14.16	202.39	61.01
200.84	10.65	201.36	12.54	201.88	14.19	202.40	62.64
200.85	10.69	201.37	12.58	201.89	14.22	202.41	64.29
200.86	10.72	201.38	12.61	201.90	14.25	202.42	65.97
200.87	10.76	201.39	12.64	201.91	14.39	202.43	67.67
200.88	10.80	201.40	12.68	201.92	14.64	202.44	69.40
200.89	10.84	201.41	12.71	201.93	14.94	202.45	71.16

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)
202.46	72.95
202.47	74.76
202.48	76.60
202.49	78.46
202.50	80.35
202.51	82.00
202.52	83.67
202.53	85.34
202.54	87.03
202.55	88.74
202.56	90.45
202.57	92.18
202.58	93.93
202.59	95.68
202.60	97.45
202.61	99.23
202.62	101.02
202.63	102.83
202.64	104.65
202.65	106.48
202.66	108.32
202.67	110.18
202.68	112.05
202.69	113.93
202.70	115.82
202.71	117.76
202.72	119.72
202.73	121.69
202.74	123.67
202.75	125.66
202.76	127.67
202.77	129.69
202.78	131.72
202.79	133.77
202.80	135.83
202.81	137.90
202.82	139.99
202.83	142.09
202.84	144.20
202.85	146.32
202.86	148.46
202.87	150.61
202.88	152.77
202.89	154.94
202.90	157.13
202.91	159.27
202.92	161.43
202.93	163.60
202.94	165.77
202.95	167.96
202.96	170.16
202.97	172.37
202.98	174.59
202.99	176.82
203.00	**179.06**

Stage-Area-Storage for Pond B-58: Basin #58

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.30	0	0	198.82	4,628	1,203
198.31	89	0	198.83	4,717	1,250
198.32	178	2	198.84	4,806	1,298
198.33	267	4	198.85	4,895	1,346
198.34	356	7	198.86	4,984	1,396
198.35	445	11	198.87	5,073	1,446
198.36	534	16	198.88	5,162	1,497
198.37	623	22	198.89	5,251	1,549
198.38	712	28	198.90	5,340	1,602
198.39	801	36	198.91	5,429	1,656
198.40	890	44	198.92	5,518	1,711
198.41	979	54	198.93	5,607	1,766
198.42	1,068	64	198.94	5,696	1,823
198.43	1,157	75	198.95	5,785	1,880
198.44	1,246	87	198.96	5,874	1,938
198.45	1,335	100	198.97	5,963	1,998
198.46	1,424	114	198.98	6,052	2,058
198.47	1,513	129	198.99	6,141	2,119
198.48	1,602	144	199.00	6,230	2,180
198.49	1,691	161	199.01	6,237	2,243
198.50	1,780	178	199.02	6,244	2,305
198.51	1,869	196	199.03	6,251	2,368
198.52	1,958	215	199.04	6,258	2,430
198.53	2,047	235	199.05	6,265	2,493
198.54	2,136	256	199.06	6,272	2,556
198.55	2,225	278	199.07	6,279	2,618
198.56	2,314	301	199.08	6,286	2,681
198.57	2,403	324	199.09	6,293	2,744
198.58	2,492	349	199.10	6,300	2,807
198.59	2,581	374	199.11	6,307	2,870
198.60	2,670	401	199.12	6,314	2,933
198.61	2,759	428	199.13	6,321	2,996
198.62	2,848	456	199.14	6,328	3,060
198.63	2,937	485	199.15	6,335	3,123
198.64	3,026	514	199.16	6,342	3,186
198.65	3,115	545	199.17	6,349	3,250
198.66	3,204	577	199.18	6,356	3,313
198.67	3,293	609	199.19	6,363	3,377
198.68	3,382	643	199.20	6,370	3,441
198.69	3,471	677	199.21	6,377	3,504
198.70	3,560	712	199.22	6,384	3,568
198.71	3,649	748	199.23	6,391	3,632
198.72	3,738	785	199.24	6,398	3,696
198.73	3,827	823	199.25	6,406	3,760
198.74	3,916	862	199.26	6,413	3,824
198.75	4,005	901	199.27	6,420	3,888
198.76	4,094	942	199.28	6,427	3,952
198.77	4,183	983	199.29	6,434	4,017
198.78	4,272	1,025	199.30	6,441	4,081
198.79	4,361	1,068	199.31	6,448	4,146
198.80	4,450	1,113	199.32	6,455	4,210
198.81	4,539	1,157	199.33	6,462	4,275

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.34	6,469	4,339	199.86	6,834	7,798
199.35	6,476	4,404	199.87	6,841	7,866
199.36	6,483	4,469	199.88	6,848	7,935
199.37	6,490	4,534	199.89	6,855	8,003
199.38	6,497	4,599	199.90	6,862	8,072
199.39	6,504	4,664	199.91	6,869	8,140
199.40	6,511	4,729	199.92	6,876	8,209
199.41	6,518	4,794	199.93	6,883	8,278
199.42	6,525	4,859	199.94	6,890	8,347
199.43	6,532	4,924	199.95	6,897	8,416
199.44	6,539	4,990	199.96	6,904	8,485
199.45	6,546	5,055	199.97	6,911	8,554
199.46	6,553	5,121	199.98	6,918	8,623
199.47	6,560	5,186	199.99	6,925	8,692
199.48	6,567	5,252	200.00	6,932	8,761
199.49	6,574	5,317	200.01	6,939	8,831
199.50	6,581	5,383	200.02	6,947	8,900
199.51	6,588	5,449	200.03	6,954	8,970
199.52	6,595	5,515	200.04	6,962	9,039
199.53	6,602	5,581	200.05	6,969	9,109
199.54	6,609	5,647	200.06	6,976	9,179
199.55	6,616	5,713	200.07	6,984	9,249
199.56	6,623	5,779	200.08	6,991	9,318
199.57	6,630	5,846	200.09	6,998	9,388
199.58	6,637	5,912	200.10	7,006	9,458
199.59	6,644	5,978	200.11	7,013	9,528
199.60	6,651	6,045	200.12	7,021	9,599
199.61	6,658	6,111	200.13	7,028	9,669
199.62	6,665	6,178	200.14	7,035	9,739
199.63	6,672	6,245	200.15	7,043	9,810
199.64	6,679	6,311	200.16	7,050	9,880
199.65	6,686	6,378	200.17	7,057	9,951
199.66	6,693	6,445	200.18	7,065	10,021
199.67	6,700	6,512	200.19	7,072	10,092
199.68	6,707	6,579	200.20	7,080	10,163
199.69	6,714	6,646	200.21	7,087	10,233
199.70	6,721	6,713	200.22	7,094	10,304
199.71	6,728	6,781	200.23	7,102	10,375
199.72	6,735	6,848	200.24	7,109	10,446
199.73	6,742	6,915	200.25	7,117	10,518
199.74	6,749	6,983	200.26	7,124	10,589
199.75	6,757	7,050	200.27	7,131	10,660
199.76	6,764	7,118	200.28	7,139	10,731
199.77	6,771	7,186	200.29	7,146	10,803
199.78	6,778	7,253	200.30	7,153	10,874
199.79	6,785	7,321	200.31	7,161	10,946
199.80	6,792	7,389	200.32	7,168	11,018
199.81	6,799	7,457	200.33	7,176	11,089
199.82	6,806	7,525	200.34	7,183	11,161
199.83	6,813	7,593	200.35	7,190	11,233
199.84	6,820	7,661	200.36	7,198	11,305
199.85	6,827	7,730	200.37	7,205	11,377

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.38	7,212	11,449	200.90	7,596	15,299
200.39	7,220	11,521	200.91	7,604	15,375
200.40	7,227	11,593	200.92	7,611	15,451
200.41	7,235	11,666	200.93	7,618	15,527
200.42	7,242	11,738	200.94	7,626	15,604
200.43	7,249	11,810	200.95	7,633	15,680
200.44	7,257	11,883	200.96	7,640	15,756
200.45	7,264	11,956	200.97	7,648	15,833
200.46	7,271	12,028	200.98	7,655	15,909
200.47	7,279	12,101	200.99	7,663	15,986
200.48	7,286	12,174	201.00	7,670	16,062
200.49	7,294	12,247	201.01	7,678	16,139
200.50	7,301	12,320	201.02	7,685	16,216
200.51	7,308	12,393	201.03	7,693	16,293
200.52	7,316	12,466	201.04	7,700	16,370
200.53	7,323	12,539	201.05	7,708	16,447
200.54	7,331	12,612	201.06	7,715	16,524
200.55	7,338	12,686	201.07	7,723	16,601
200.56	7,345	12,759	201.08	7,730	16,679
200.57	7,353	12,833	201.09	7,738	16,756
200.58	7,360	12,906	201.10	7,746	16,833
200.59	7,367	12,980	201.11	7,753	16,911
200.60	7,375	13,054	201.12	7,761	16,988
200.61	7,382	13,127	201.13	7,768	17,066
200.62	7,390	13,201	201.14	7,776	17,144
200.63	7,397	13,275	201.15	7,783	17,222
200.64	7,404	13,349	201.16	7,791	17,299
200.65	7,412	13,423	201.17	7,799	17,377
200.66	7,419	13,497	201.18	7,806	17,455
200.67	7,426	13,572	201.19	7,814	17,533
200.68	7,434	13,646	201.20	7,821	17,612
200.69	7,441	13,720	201.21	7,829	17,690
200.70	7,449	13,795	201.22	7,836	17,768
200.71	7,456	13,869	201.23	7,844	17,847
200.72	7,463	13,944	201.24	7,851	17,925
200.73	7,471	14,019	201.25	7,859	18,004
200.74	7,478	14,093	201.26	7,867	18,082
200.75	7,486	14,168	201.27	7,874	18,161
200.76	7,493	14,243	201.28	7,882	18,240
200.77	7,500	14,318	201.29	7,889	18,319
200.78	7,508	14,393	201.30	7,897	18,398
200.79	7,515	14,468	201.31	7,904	18,477
200.80	7,522	14,543	201.32	7,912	18,556
200.81	7,530	14,619	201.33	7,919	18,635
200.82	7,537	14,694	201.34	7,927	18,714
200.83	7,545	14,769	201.35	7,935	18,793
200.84	7,552	14,845	201.36	7,942	18,873
200.85	7,559	14,920	201.37	7,950	18,952
200.86	7,567	14,996	201.38	7,957	19,032
200.87	7,574	15,072	201.39	7,965	19,111
200.88	7,581	15,147	201.40	7,972	19,191
200.89	7,589	15,223	201.41	7,980	19,271

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.42	7,988	19,351	201.94	8,381	23,606
201.43	7,995	19,430	201.95	8,388	23,690
201.44	8,003	19,510	201.96	8,396	23,774
201.45	8,010	19,591	201.97	8,403	23,858
201.46	8,018	19,671	201.98	8,411	23,942
201.47	8,025	19,751	201.99	8,418	24,026
201.48	8,033	19,831	202.00	8,426	24,110
201.49	8,040	19,912	202.01	8,434	24,195
201.50	8,048	19,992	202.02	8,442	24,279
201.51	8,056	20,073	202.03	8,449	24,364
201.52	8,063	20,153	202.04	8,457	24,448
201.53	8,071	20,234	202.05	8,465	24,533
201.54	8,078	20,315	202.06	8,473	24,617
201.55	8,086	20,395	202.07	8,480	24,702
201.56	8,093	20,476	202.08	8,488	24,787
201.57	8,101	20,557	202.09	8,496	24,872
201.58	8,108	20,638	202.10	8,504	24,957
201.59	8,116	20,719	202.11	8,511	25,042
201.60	8,124	20,801	202.12	8,519	25,127
201.61	8,131	20,882	202.13	8,527	25,212
201.62	8,139	20,963	202.14	8,535	25,298
201.63	8,146	21,045	202.15	8,542	25,383
201.64	8,154	21,126	202.16	8,550	25,469
201.65	8,161	21,208	202.17	8,558	25,554
201.66	8,169	21,289	202.18	8,566	25,640
201.67	8,177	21,371	202.19	8,573	25,725
201.68	8,184	21,453	202.20	8,581	25,811
201.69	8,192	21,535	202.21	8,589	25,897
201.70	8,199	21,617	202.22	8,597	25,983
201.71	8,207	21,699	202.23	8,604	26,069
201.72	8,214	21,781	202.24	8,612	26,155
201.73	8,222	21,863	202.25	8,620	26,241
201.74	8,229	21,945	202.26	8,628	26,327
201.75	8,237	22,028	202.27	8,635	26,414
201.76	8,245	22,110	202.28	8,643	26,500
201.77	8,252	22,193	202.29	8,651	26,587
201.78	8,260	22,275	202.30	8,659	26,673
201.79	8,267	22,358	202.31	8,666	26,760
201.80	8,275	22,440	202.32	8,674	26,847
201.81	8,282	22,523	202.33	8,682	26,933
201.82	8,290	22,606	202.34	8,690	27,020
201.83	8,297	22,689	202.35	8,697	27,107
201.84	8,305	22,772	202.36	8,705	27,194
201.85	8,313	22,855	202.37	8,713	27,281
201.86	8,320	22,938	202.38	8,721	27,368
201.87	8,328	23,022	202.39	8,728	27,456
201.88	8,335	23,105	202.40	8,736	27,543
201.89	8,343	23,188	202.41	8,744	27,630
201.90	8,350	23,272	202.42	8,752	27,718
201.91	8,358	23,355	202.43	8,759	27,805
201.92	8,366	23,439	202.44	8,767	27,893
201.93	8,373	23,523	202.45	8,775	27,981

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

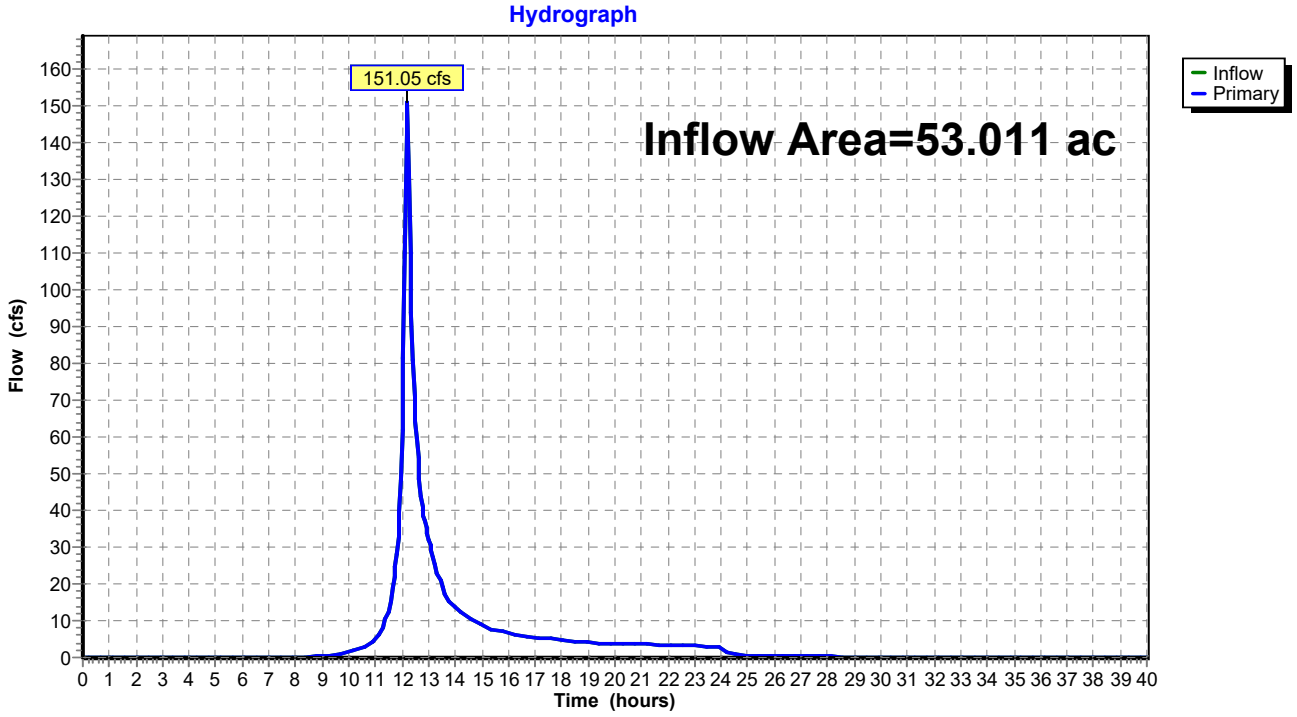
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.46	8,783	28,068
202.47	8,790	28,156
202.48	8,798	28,244
202.49	8,806	28,332
202.50	8,814	28,420
202.51	8,821	28,509
202.52	8,829	28,597
202.53	8,837	28,685
202.54	8,845	28,774
202.55	8,852	28,862
202.56	8,860	28,951
202.57	8,868	29,039
202.58	8,876	29,128
202.59	8,883	29,217
202.60	8,891	29,306
202.61	8,899	29,395
202.62	8,907	29,484
202.63	8,914	29,573
202.64	8,922	29,662
202.65	8,930	29,751
202.66	8,938	29,840
202.67	8,945	29,930
202.68	8,953	30,019
202.69	8,961	30,109
202.70	8,969	30,199
202.71	8,976	30,288
202.72	8,984	30,378
202.73	8,992	30,468
202.74	9,000	30,558
202.75	9,007	30,648
202.76	9,015	30,738
202.77	9,023	30,828
202.78	9,031	30,919
202.79	9,038	31,009
202.80	9,046	31,099
202.81	9,054	31,190
202.82	9,062	31,280
202.83	9,069	31,371
202.84	9,077	31,462
202.85	9,085	31,553
202.86	9,093	31,643
202.87	9,100	31,734
202.88	9,108	31,825
202.89	9,116	31,917
202.90	9,124	32,008
202.91	9,131	32,099
202.92	9,139	32,190
202.93	9,147	32,282
202.94	9,154	32,373
202.95	9,162	32,465
202.96	9,170	32,557
202.97	9,178	32,648
202.98	9,186	32,740
202.99	9,193	32,832
203.00	**9,201**	**32,924**

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 53.011 ac, 11.21% Impervious, Inflow Depth > 3.21" for Future 10 yr event
Inflow = 151.05 cfs @ 12.19 hrs, Volume= 14.185 af
Primary = 151.05 cfs @ 12.19 hrs, Volume= 14.185 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6



Summary for Subcatchment 51I: PDA-51 (impervious)

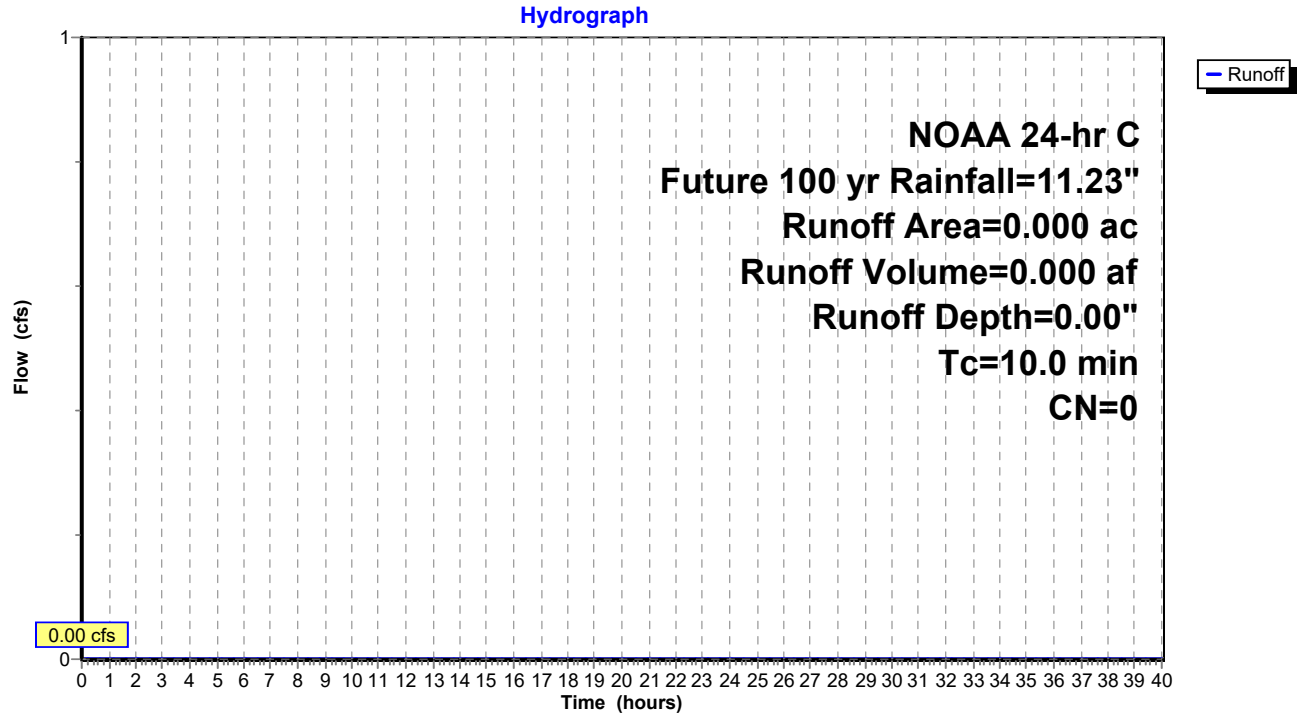
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.000	98	Roof, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 51I: PDA-51 (impervious)



Summary for Subcatchment 51P: PDA-51 (pervious)

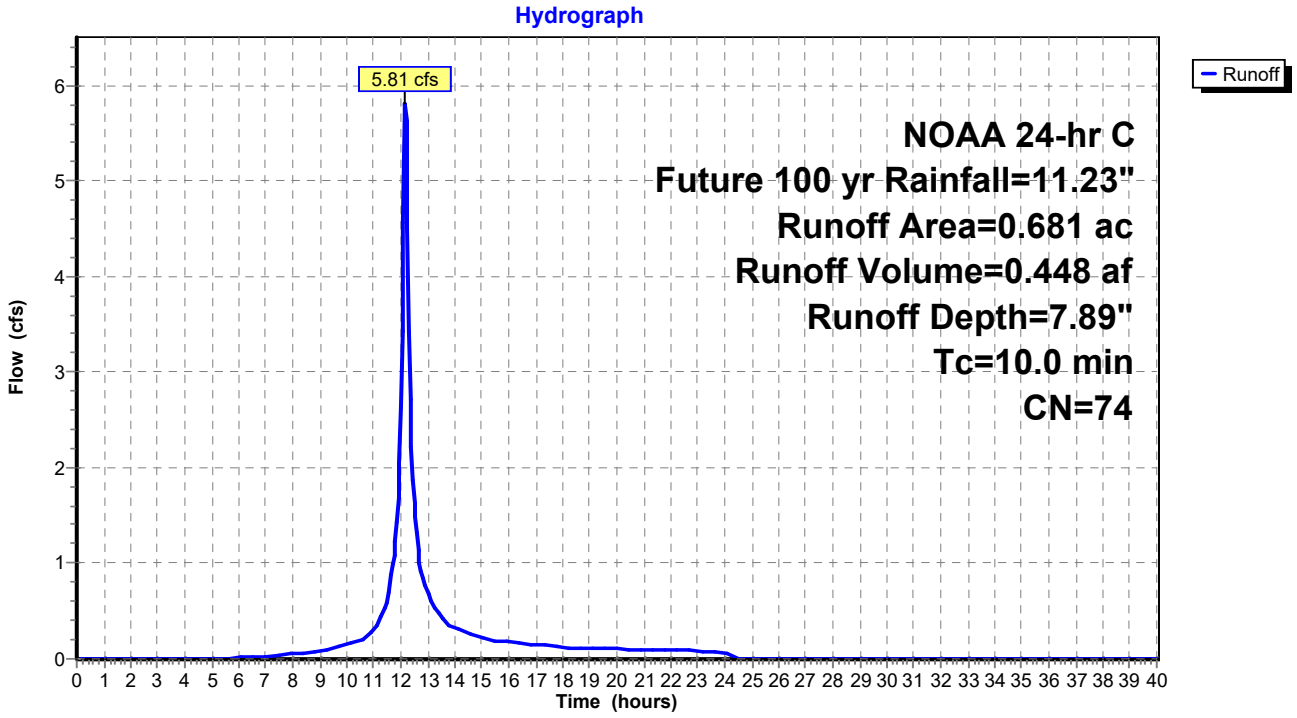
Runoff = 5.81 cfs @ 12.17 hrs, Volume= 0.448 af, Depth= 7.89"
Routed to Pond B-51 : Basin #51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.681	74	>75% Grass cover, Good, HSG C
0.681		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 51P: PDA-51 (pervious)



Summary for Subcatchment 52I: PDA-52 (impervious)

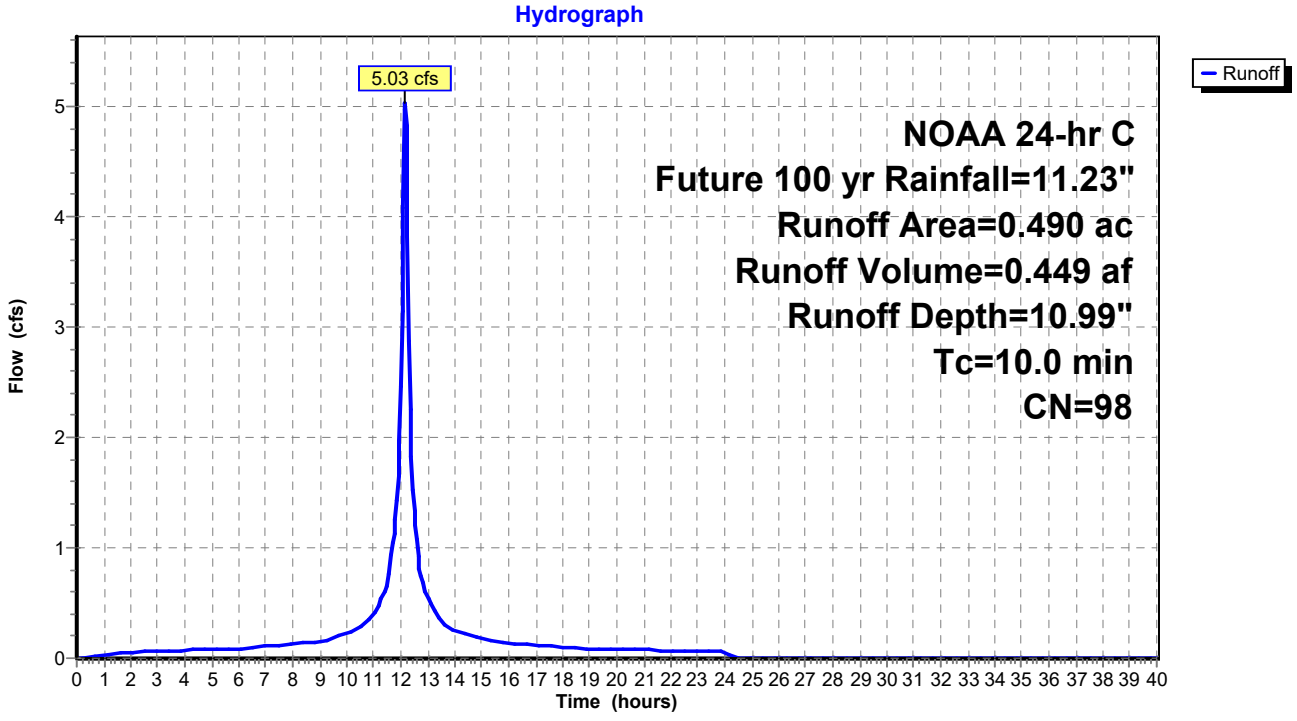
Runoff = 5.03 cfs @ 12.17 hrs, Volume= 0.449 af, Depth=10.99"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.118	98	Pavement, HSG C
*	0.339	98	Roof, HSG C
*	0.033	98	Concrete, HSG C
	0.490	98	Weighted Average
	0.490		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 52I: PDA-52 (impervious)



Summary for Subcatchment 52P: PDA-52 (pervious)

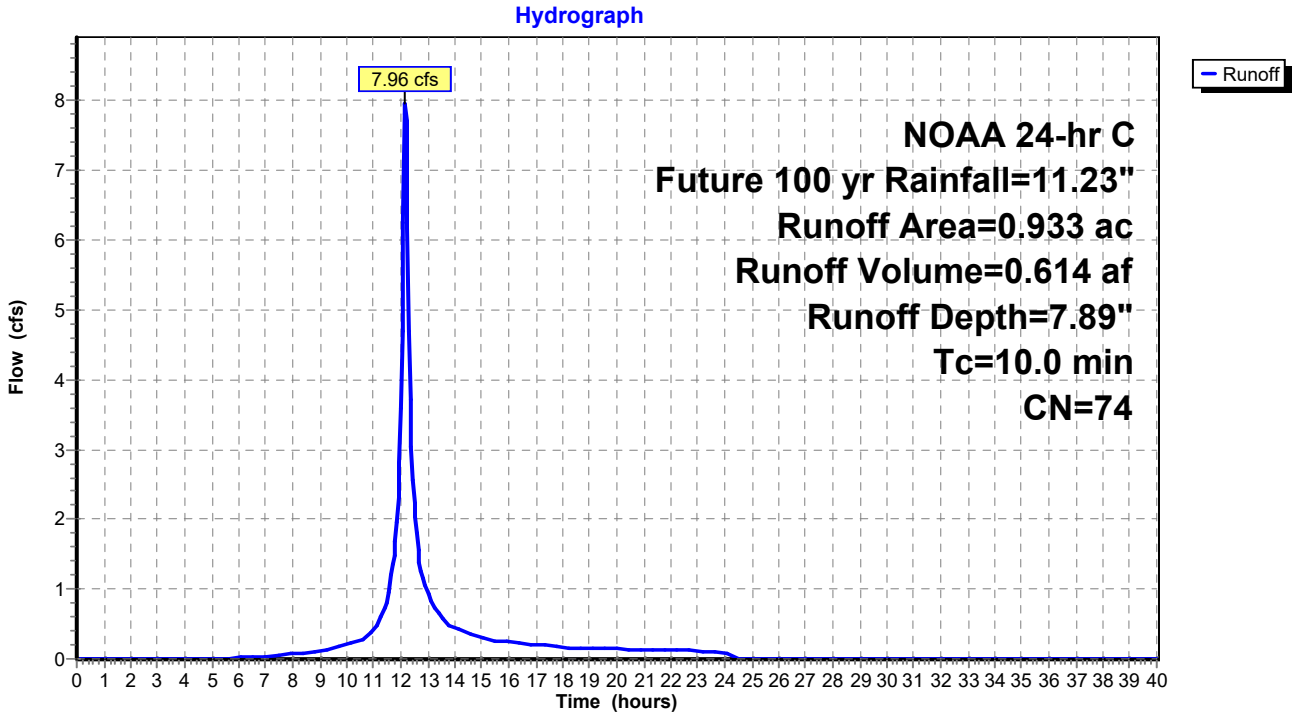
Runoff = 7.96 cfs @ 12.17 hrs, Volume= 0.614 af, Depth= 7.89"
Routed to Pond B-52 : Basin #52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.933	74	>75% Grass cover, Good, HSG C
0.933		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 52P: PDA-52 (pervious)



Summary for Subcatchment 53I: PDA-53 (impervious)

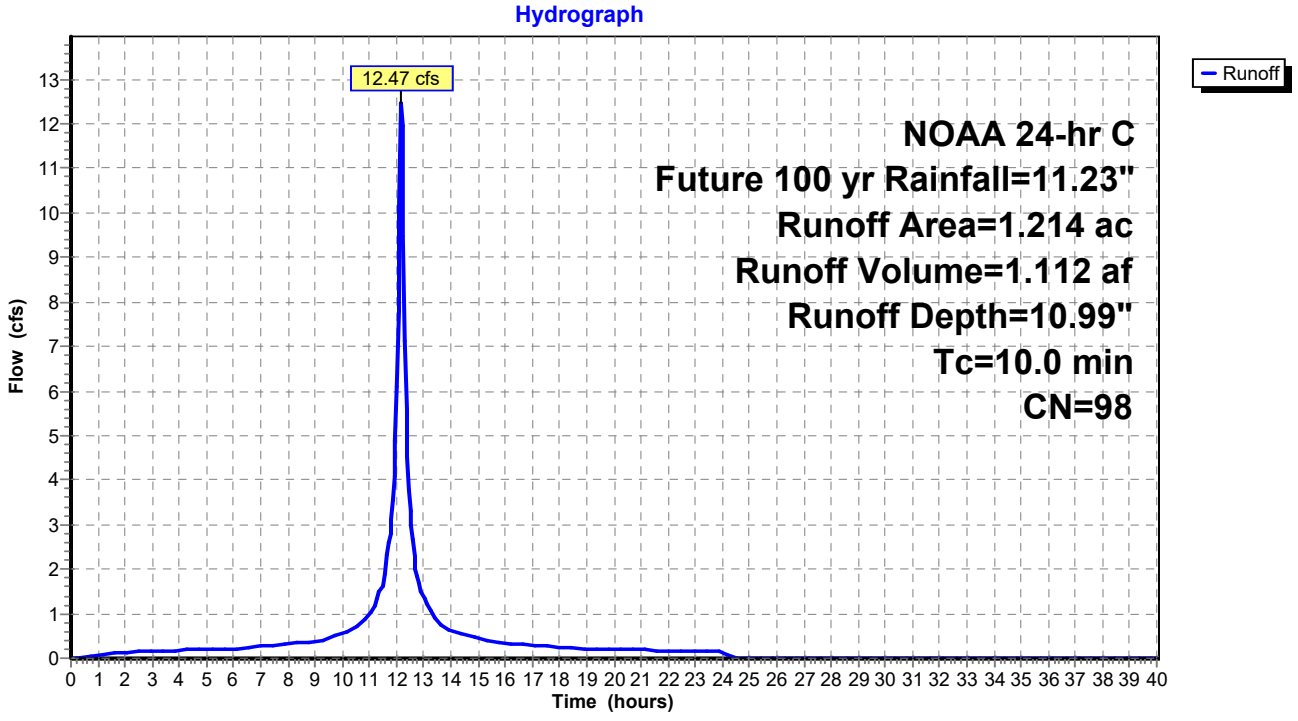
Runoff = 12.47 cfs @ 12.17 hrs, Volume= 1.112 af, Depth=10.99"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.628	98	Pavement, HSG C
*	0.450	98	Roof, HSG C
*	0.136	98	Concrete, HSG C
	1.214	98	Weighted Average
	1.214		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 53I: PDA-53 (impervious)



Summary for Subcatchment 53P: PDA-53 (pervious)

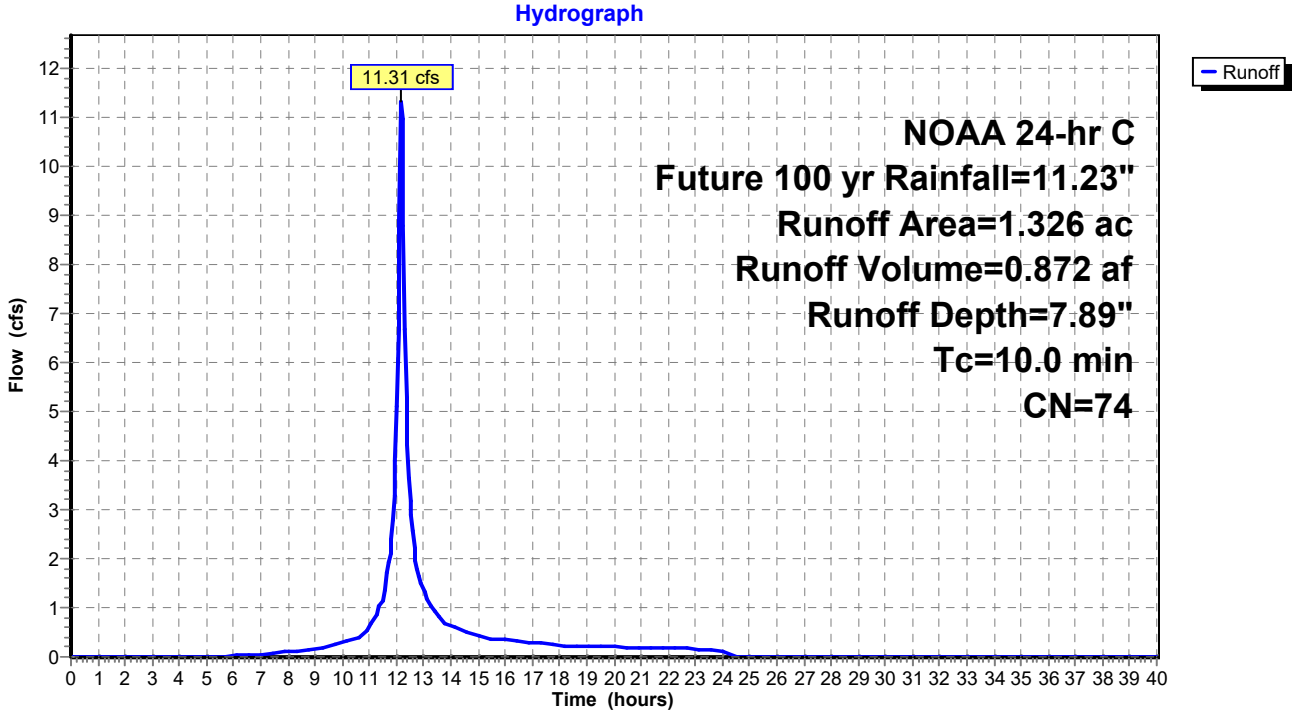
Runoff = 11.31 cfs @ 12.17 hrs, Volume= 0.872 af, Depth= 7.89"
Routed to Pond B-53 : Basin #53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.326	74	>75% Grass cover, Good, HSG C
1.326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 53P: PDA-53 (pervious)



Summary for Subcatchment 54l: PDA-54 (impervious)

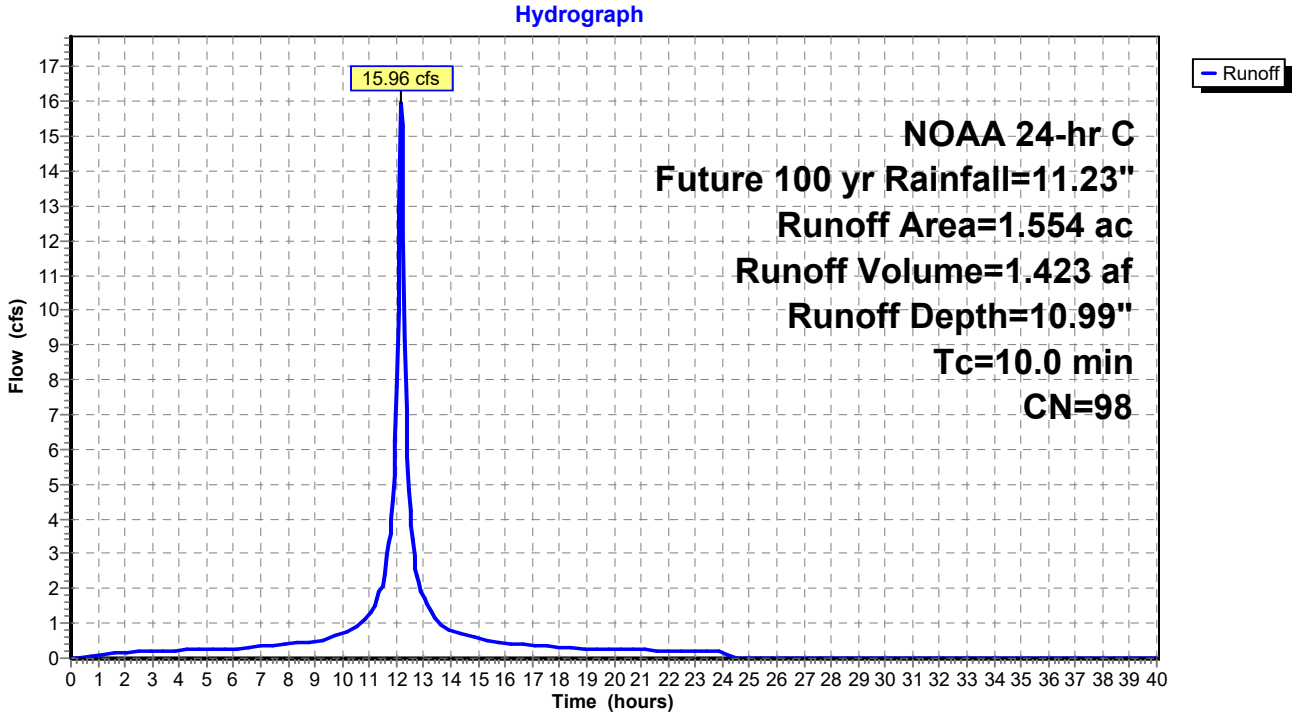
Runoff = 15.96 cfs @ 12.17 hrs, Volume= 1.423 af, Depth=10.99"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.983	98	Pavement, HSG C
*	0.361	98	Roof, HSG C
*	0.210	98	Concrete, HSG C
	1.554	98	Weighted Average
	1.554		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 54l: PDA-54 (impervious)



Summary for Subcatchment 54P: PDA-54 (pervious)

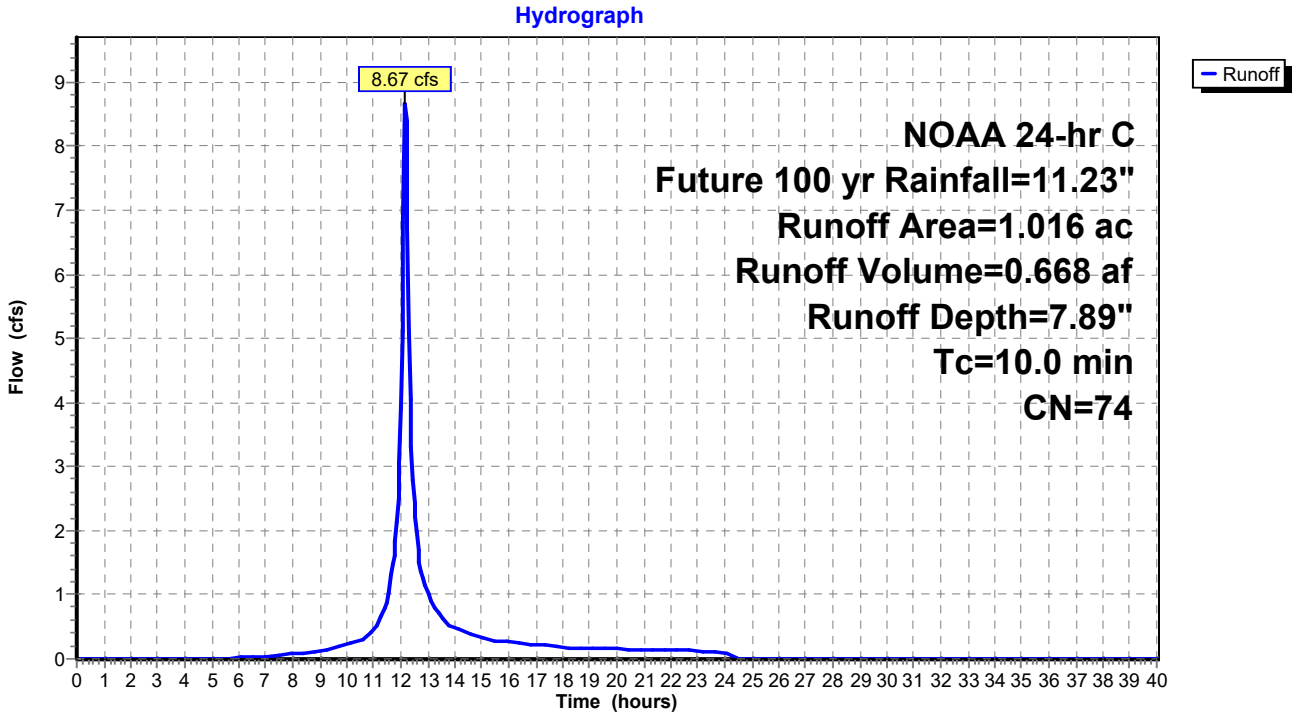
Runoff = 8.67 cfs @ 12.17 hrs, Volume= 0.668 af, Depth= 7.89"
Routed to Pond B-54 : Basin #54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.016	74	>75% Grass cover, Good, HSG C
1.016		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 54P: PDA-54 (pervious)



Summary for Subcatchment 55l: PDA-55 (impervious)

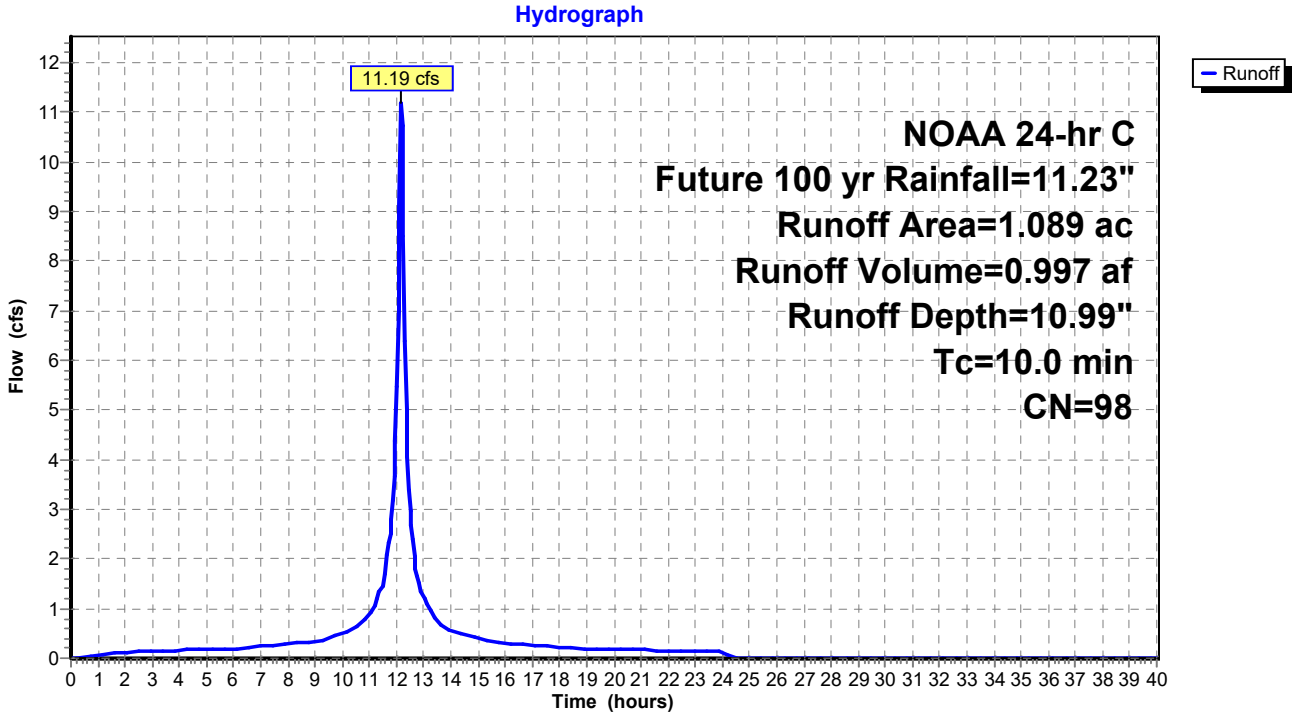
Runoff = 11.19 cfs @ 12.17 hrs, Volume= 0.997 af, Depth=10.99"
Routed to Pond B-55 : Basin #55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.467	98	Pavement, HSG C
*	0.574	98	Roof, HSG C
*	0.048	98	Concrete, HSG C
	1.089	98	Weighted Average
	1.089		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 55l: PDA-55 (impervious)



Summary for Subcatchment 55P: PDA-55 (pervious)

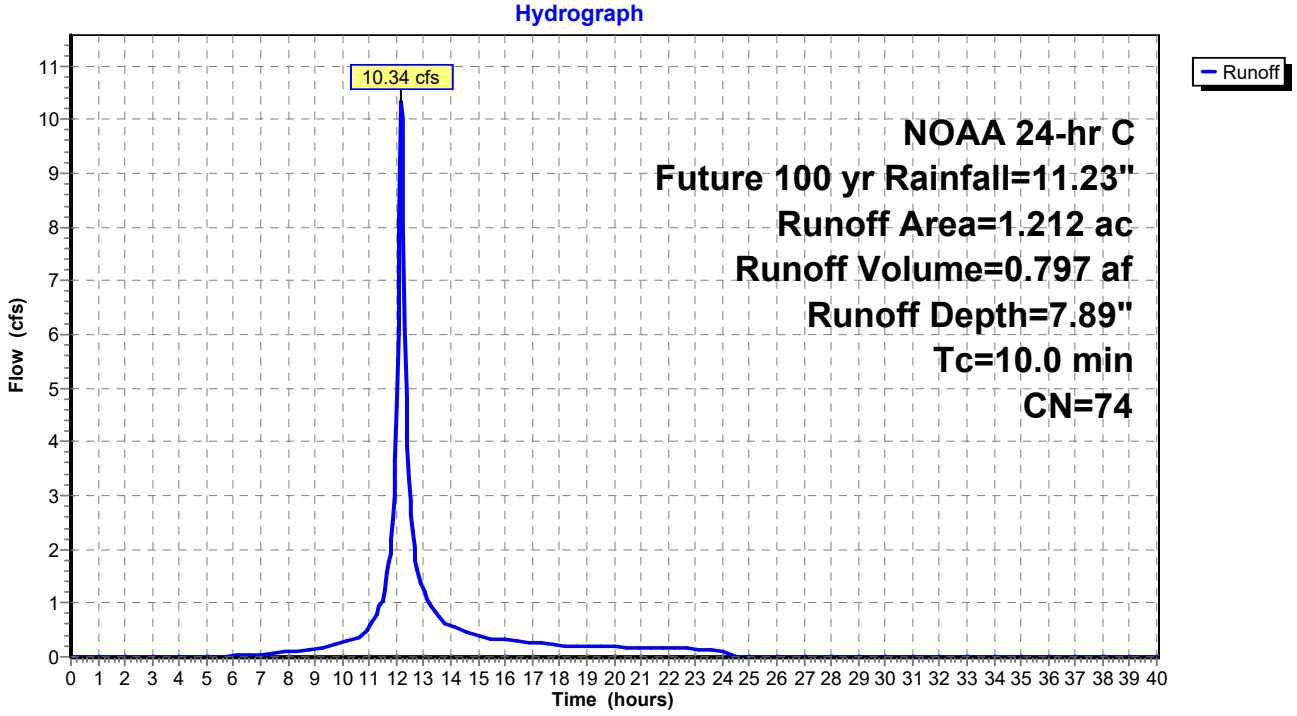
Runoff = 10.34 cfs @ 12.17 hrs, Volume= 0.797 af, Depth= 7.89"
Routed to Pond B-55 : Basin #55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.212	74	>75% Grass cover, Good, HSG C
1.212		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 55P: PDA-55 (pervious)



Summary for Subcatchment 56l: PDA-56 (impervious)

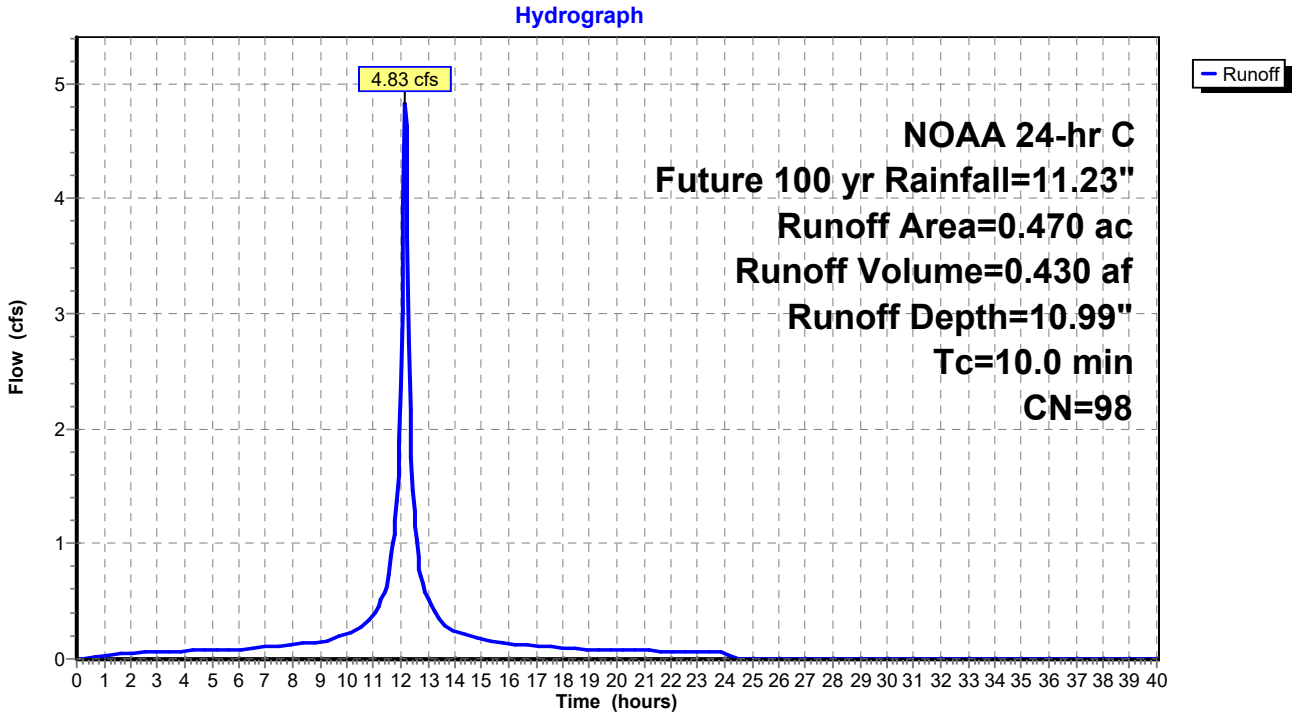
Runoff = 4.83 cfs @ 12.17 hrs, Volume= 0.430 af, Depth=10.99"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.470	98	Roof, HSG C
	0.470		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 56l: PDA-56 (impervious)



Summary for Subcatchment 56P: PDA-56 (pervious)

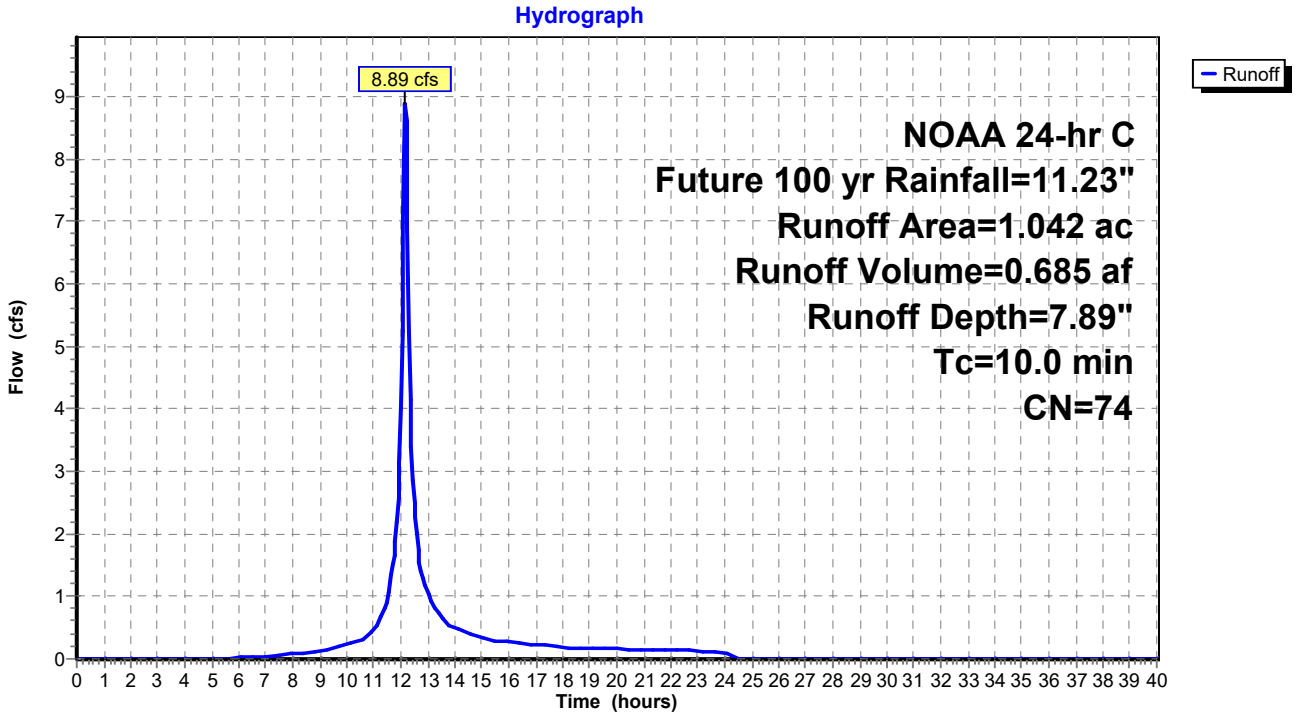
Runoff = 8.89 cfs @ 12.17 hrs, Volume= 0.685 af, Depth= 7.89"
Routed to Pond B-56 : Basin #56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.042	74	>75% Grass cover, Good, HSG C
1.042		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 56P: PDA-56 (pervious)



Summary for Subcatchment 57l: PDA-57 (impervious)

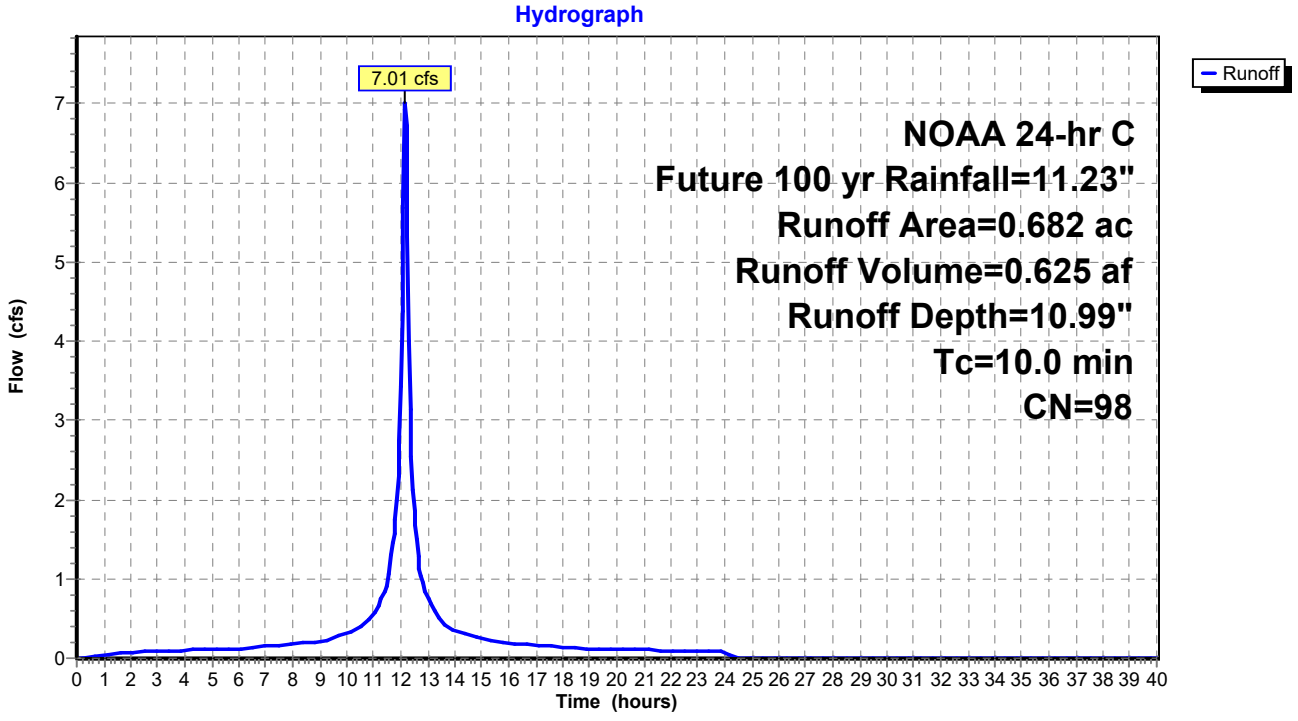
Runoff = 7.01 cfs @ 12.17 hrs, Volume= 0.625 af, Depth=10.99"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.268	98	Pavement, HSG C
*	0.378	98	Roof, HSG C
*	0.036	98	Concrete, HSG C
	0.682	98	Weighted Average
	0.682		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 57l: PDA-57 (impervious)



Summary for Subcatchment 57P: PDA-57 (pervious)

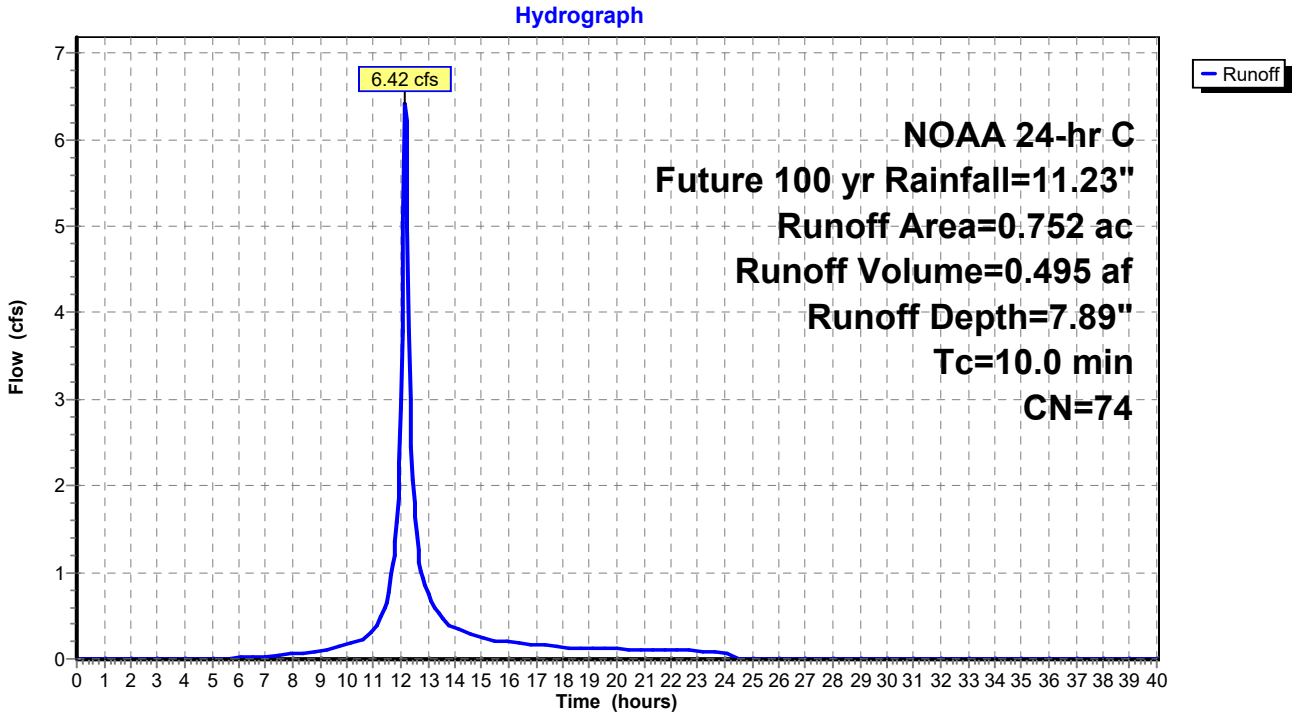
Runoff = 6.42 cfs @ 12.17 hrs, Volume= 0.495 af, Depth= 7.89"
Routed to Pond B-57 : Basin #57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
0.752	74	>75% Grass cover, Good, HSG C
0.752		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 57P: PDA-57 (pervious)



Summary for Subcatchment 58I: PDA-58 (impervious)

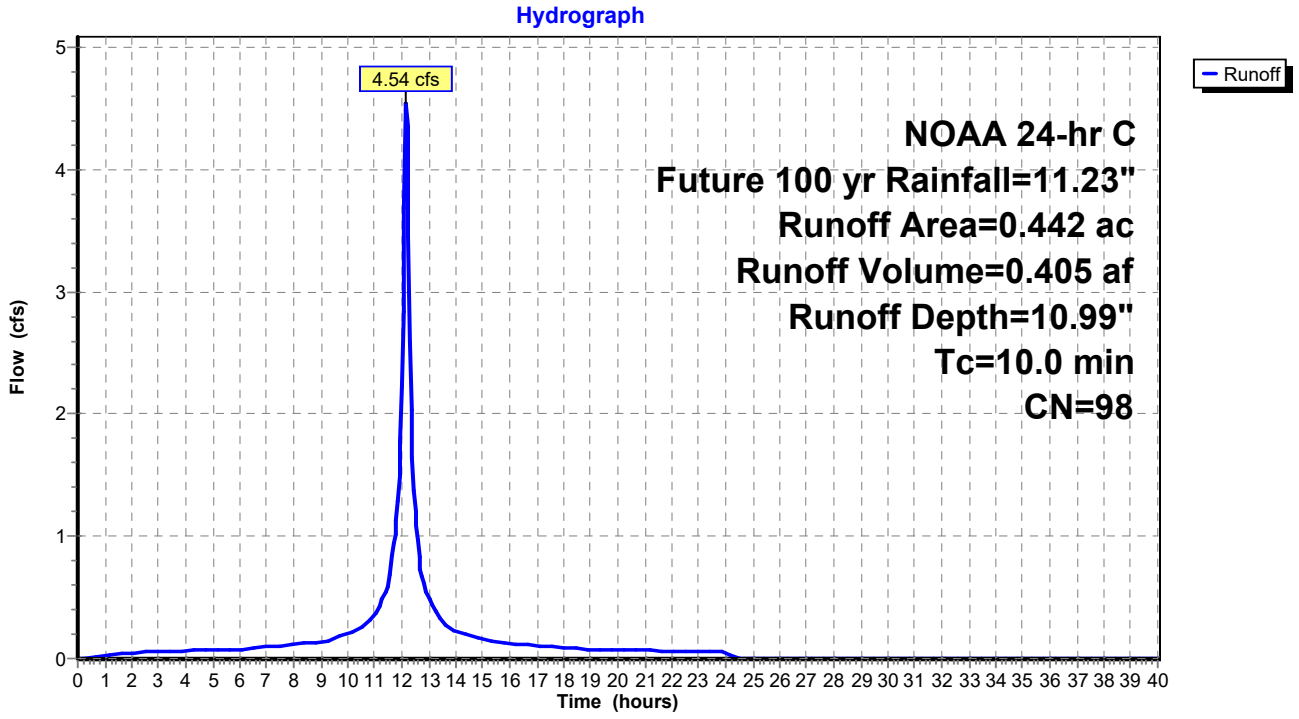
Runoff = 4.54 cfs @ 12.17 hrs, Volume= 0.405 af, Depth=10.99"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

	Area (ac)	CN	Description
*	0.442	98	Roof, HSG C
*	0.000	98	Concrete, HSG C
	0.442	98	Weighted Average
	0.442		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 58I: PDA-58 (impervious)



Summary for Subcatchment 58P: PDA-58 (pervious)

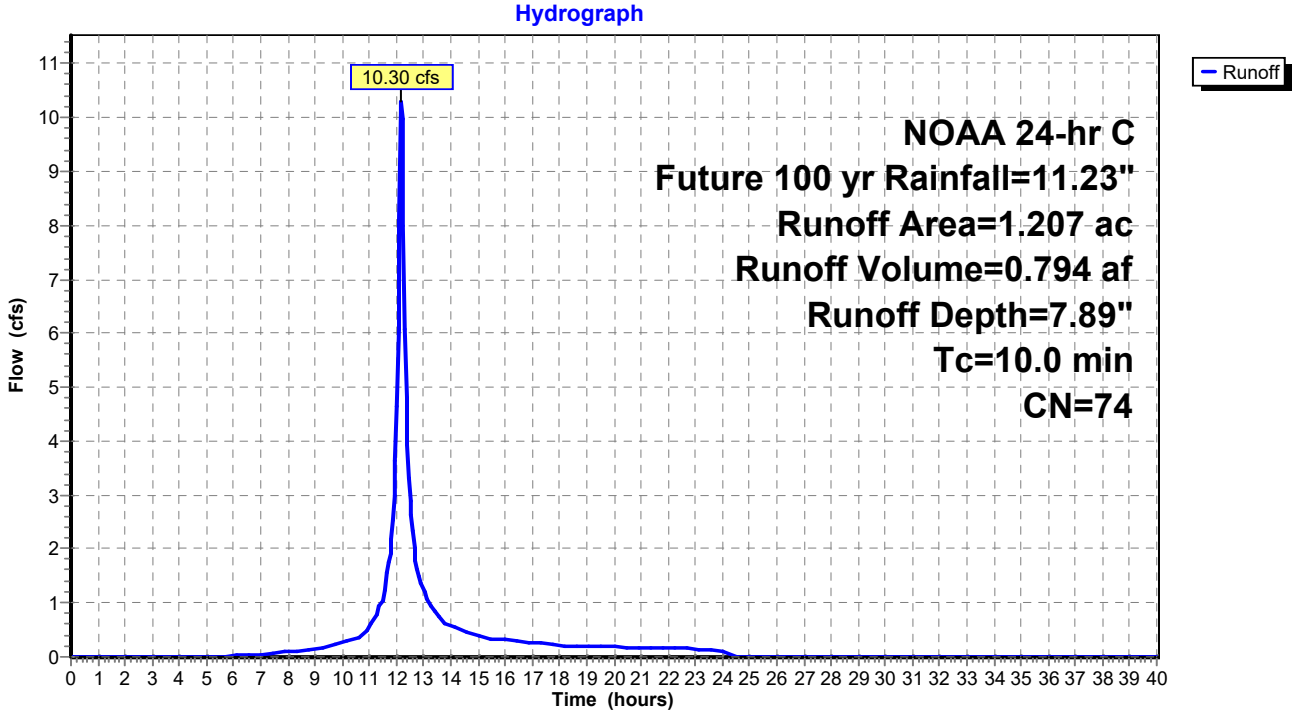
Runoff = 10.30 cfs @ 12.17 hrs, Volume= 0.794 af, Depth= 7.89"
Routed to Pond B-58 : Basin #58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
1.207	74	>75% Grass cover, Good, HSG C
1.207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment 58P: PDA-58 (pervious)



Summary for Subcatchment UPDA-6: PDA-6 (undetained)

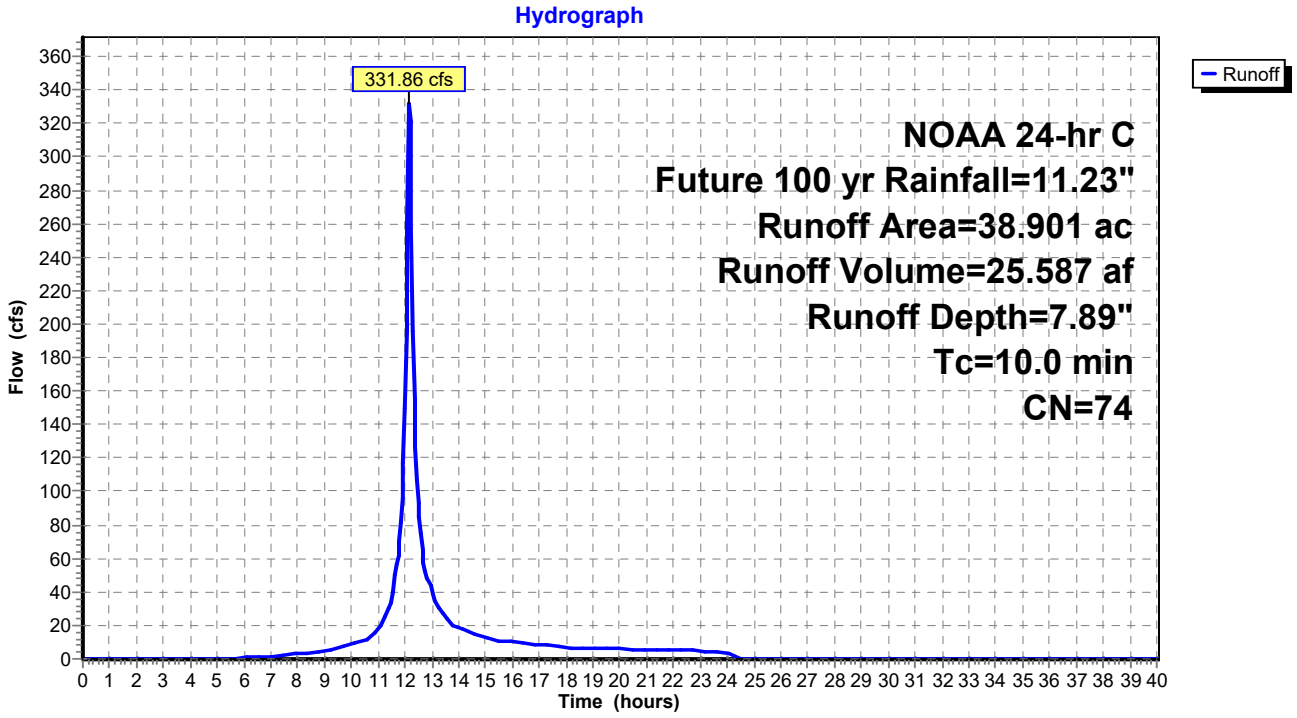
Runoff = 331.86 cfs @ 12.17 hrs, Volume= 25.587 af, Depth= 7.89"
Routed to Link PDA-6 : Proposed Drainage Area #6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
NOAA 24-hr C Future 100 yr Rainfall=11.23"

Area (ac)	CN	Description
38.901	74	>75% Grass cover, Good, HSG C
38.901		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

Subcatchment UPDA-6: PDA-6 (undetained)



Summary for Pond B-51: Basin #51

Inflow Area = 5.917 ac, 34.63% Impervious, Inflow Depth = 8.56" for Future 100 yr event
Inflow = 34.15 cfs @ 12.22 hrs, Volume= 4.222 af
Outflow = 16.08 cfs @ 12.68 hrs, Volume= 4.216 af, Atten= 53%, Lag= 27.4 min
Primary = 16.08 cfs @ 12.68 hrs, Volume= 4.216 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 188.89' @ 12.68 hrs Surf.Area= 13,375 sf Storage= 44,922 cf

Plug-Flow detention time= 34.9 min calculated for 4.211 af (100% of inflow)
Center-of-Mass det. time= 34.1 min (854.3 - 820.2)

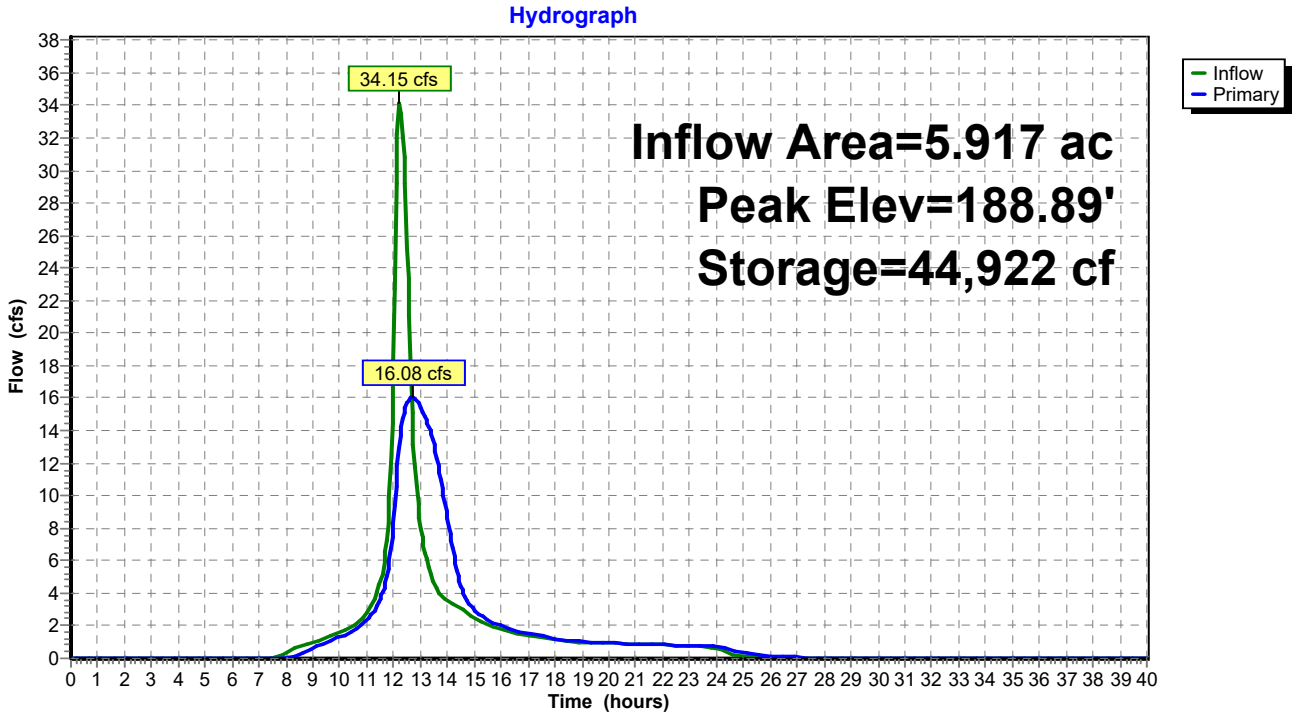
Volume	Invert	Avail.Storage	Storage Description
#1	184.00'	58,347 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
184.00	5,243	0	0
185.00	6,727	5,985	5,985
186.00	8,424	7,576	13,561
187.00	10,085	9,255	22,815
188.00	11,802	10,944	33,759
189.00	13,576	12,689	46,448
189.83	15,098	11,900	58,347

Device	Routing	Invert	Outlet Devices
#1	Primary	184.00'	**18.0" Round Culvert** L= 147.0' Ke= 0.500 Inlet / Outlet Invert= 184.00' / 182.00' S= 0.0136 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	184.05'	**48.0" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	185.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	189.80'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=16.08 cfs @ 12.68 hrs HW=188.88' (Free Discharge)
- **1=Culvert** (Barrel Controls 16.08 cfs @ 9.10 fps)
  - **2=Orifice/Grate** (Passes < 40.07 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 60.15 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-51: Basin #51



Stage-Discharge for Pond B-51: Basin #51

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
184.00	0.00	184.52	1.34	185.04	4.54	185.56	7.66
184.01	0.00	184.53	1.38	185.05	4.61	185.57	7.71
184.02	0.00	184.54	1.43	185.06	4.68	185.58	7.75
184.03	0.00	184.55	1.48	185.07	4.75	185.59	7.80
184.04	0.00	184.56	1.53	185.08	4.82	185.60	7.84
184.05	0.00	184.57	1.58	185.09	4.89	185.61	7.89
184.06	0.01	184.58	1.64	185.10	4.96	185.62	7.94
184.07	0.03	184.59	1.69	185.11	5.03	185.63	7.98
184.08	0.04	184.60	1.74	185.12	5.10	185.64	8.03
184.09	0.04	184.61	1.79	185.13	5.17	185.65	8.07
184.10	0.05	184.62	1.85	185.14	5.24	185.66	8.12
184.11	0.07	184.63	1.90	185.15	5.31	185.67	8.16
184.12	0.08	184.64	1.96	185.16	5.38	185.68	8.21
184.13	0.09	184.65	2.01	185.17	5.45	185.69	8.25
184.14	0.11	184.66	2.07	185.18	5.52	185.70	8.29
184.15	0.12	184.67	2.13	185.19	5.58	185.71	8.34
184.16	0.14	184.68	2.19	185.20	5.65	185.72	8.38
184.17	0.16	184.69	2.24	185.21	5.72	185.73	8.42
184.18	0.17	184.70	2.30	185.22	5.79	185.74	8.47
184.19	0.19	184.71	2.36	185.23	5.86	185.75	8.51
184.20	0.21	184.72	2.42	185.24	5.92	185.76	8.55
184.21	0.23	184.73	2.48	185.25	5.99	185.77	8.59
184.22	0.26	184.74	2.54	185.26	6.06	185.78	8.64
184.23	0.28	184.75	2.61	185.27	6.12	185.79	8.68
184.24	0.30	184.76	2.67	185.28	6.19	185.80	8.72
184.25	0.33	184.77	2.73	185.29	6.25	185.81	8.76
184.26	0.36	184.78	2.79	185.30	6.32	185.82	8.80
184.27	0.38	184.79	2.86	185.31	6.38	185.83	8.84
184.28	0.41	184.80	2.92	185.32	6.44	185.84	8.88
184.29	0.44	184.81	2.98	185.33	6.50	185.85	8.92
184.30	0.47	184.82	3.05	185.34	6.57	185.86	8.96
184.31	0.50	184.83	3.11	185.35	6.63	185.87	9.00
184.32	0.53	184.84	3.18	185.36	6.69	185.88	9.04
184.33	0.56	184.85	3.24	185.37	6.75	185.89	9.08
184.34	0.60	184.86	3.31	185.38	6.80	185.90	9.12
184.35	0.63	184.87	3.38	185.39	6.86	185.91	9.16
184.36	0.67	184.88	3.44	185.40	6.92	185.92	9.20
184.37	0.70	184.89	3.51	185.41	6.97	185.93	9.24
184.38	0.74	184.90	3.58	185.42	7.02	185.94	9.28
184.39	0.78	184.91	3.64	185.43	7.07	185.95	9.32
184.40	0.81	184.92	3.71	185.44	7.12	185.96	9.36
184.41	0.85	184.93	3.78	185.45	7.17	185.97	9.40
184.42	0.89	184.94	3.85	185.46	7.22	185.98	9.44
184.43	0.93	184.95	3.92	185.47	7.26	185.99	9.47
184.44	0.98	184.96	3.98	185.48	7.30	186.00	9.51
184.45	1.02	184.97	4.05	185.49	7.34	186.01	9.55
184.46	1.06	184.98	4.12	185.50	7.37	186.02	9.59
184.47	1.11	184.99	4.19	185.51	7.42	186.03	9.63
184.48	1.15	185.00	4.26	185.52	7.47	186.04	9.66
184.49	1.20	185.01	4.33	185.53	7.51	186.05	9.70
184.50	1.24	185.02	4.40	185.54	7.56	186.06	9.74
184.51	1.29	185.03	4.47	185.55	7.61	186.07	9.78

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
186.08	9.81	186.60	11.57	187.12	13.10	187.64	14.10
186.09	9.85	186.61	11.60	187.13	13.13	187.65	14.12
186.10	9.89	186.62	11.64	187.14	13.15	187.66	14.13
186.11	9.92	186.63	11.67	187.15	13.18	187.67	14.15
186.12	9.96	186.64	11.70	187.16	13.21	187.68	14.17
186.13	10.00	186.65	11.73	187.17	13.24	187.69	14.18
186.14	10.03	186.66	11.76	187.18	13.26	187.70	14.20
186.15	10.07	186.67	11.79	187.19	13.29	187.71	14.22
186.16	10.10	186.68	11.82	187.20	13.32	187.72	14.23
186.17	10.14	186.69	11.85	187.21	13.35	187.73	14.25
186.18	10.18	186.70	11.88	187.22	13.36	187.74	14.27
186.19	10.21	186.71	11.91	187.23	13.38	187.75	14.29
186.20	10.25	186.72	11.94	187.24	13.40	187.76	14.30
186.21	10.28	186.73	11.97	187.25	13.42	187.77	14.32
186.22	10.32	186.74	12.00	187.26	13.44	187.78	14.34
186.23	10.35	186.75	12.03	187.27	13.45	187.79	14.35
186.24	10.39	186.76	12.06	187.28	13.47	187.80	14.37
186.25	10.42	186.77	12.09	187.29	13.49	187.81	14.39
186.26	10.46	186.78	12.12	187.30	13.51	187.82	14.40
186.27	10.49	186.79	12.15	187.31	13.53	187.83	14.42
186.28	10.52	186.80	12.18	187.32	13.54	187.84	14.44
186.29	10.56	186.81	12.21	187.33	13.56	187.85	14.45
186.30	10.59	186.82	12.24	187.34	13.58	187.86	14.47
186.31	10.63	186.83	12.27	187.35	13.60	187.87	14.49
186.32	10.66	186.84	12.30	187.36	13.61	187.88	14.50
186.33	10.70	186.85	12.33	187.37	13.63	187.89	14.52
186.34	10.73	186.86	12.36	187.38	13.65	187.90	14.54
186.35	10.76	186.87	12.39	187.39	13.67	187.91	14.55
186.36	10.80	186.88	12.42	187.40	13.68	187.92	14.57
186.37	10.83	186.89	12.45	187.41	13.70	187.93	14.58
186.38	10.86	186.90	12.48	187.42	13.72	187.94	14.60
186.39	10.90	186.91	12.51	187.43	13.74	187.95	14.62
186.40	10.93	186.92	12.53	187.44	13.75	187.96	14.63
186.41	10.96	186.93	12.56	187.45	13.77	187.97	14.65
186.42	11.00	186.94	12.59	187.46	13.79	187.98	14.67
186.43	11.03	186.95	12.62	187.47	13.81	187.99	14.68
186.44	11.06	186.96	12.65	187.48	13.82	188.00	14.70
186.45	11.09	186.97	12.68	187.49	13.84	188.01	14.72
186.46	11.13	186.98	12.71	187.50	13.86	188.02	14.73
186.47	11.16	186.99	12.73	187.51	13.88	188.03	14.75
186.48	11.19	187.00	12.76	187.52	13.89	188.04	14.76
186.49	11.22	187.01	12.79	187.53	13.91	188.05	14.78
186.50	11.26	187.02	12.82	187.54	13.93	188.06	14.80
186.51	11.29	187.03	12.85	187.55	13.95	188.07	14.81
186.52	11.32	187.04	12.88	187.56	13.96	188.08	14.83
186.53	11.35	187.05	12.90	187.57	13.98	188.09	14.85
186.54	11.38	187.06	12.93	187.58	14.00	188.10	14.86
186.55	11.42	187.07	12.96	187.59	14.01	188.11	14.88
186.56	11.45	187.08	12.99	187.60	14.03	188.12	14.89
186.57	11.48	187.09	13.02	187.61	14.05	188.13	14.91
186.58	11.51	187.10	13.04	187.62	14.07	188.14	14.93
186.59	11.54	187.11	13.07	187.63	14.08	188.15	14.94

Stage-Discharge for Pond B-51: Basin #51 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
188.16	14.96	188.68	15.77	189.20	16.54	189.72	17.28
188.17	14.97	188.69	15.79	189.21	16.56	189.73	17.30
188.18	14.99	188.70	15.80	189.22	16.57	189.74	17.31
188.19	15.01	188.71	15.82	189.23	16.59	189.75	17.32
188.20	15.02	188.72	15.83	189.24	16.60	189.76	17.34
188.21	15.04	188.73	15.85	189.25	16.62	189.77	17.35
188.22	15.05	188.74	15.86	189.26	16.63	189.78	17.36
188.23	15.07	188.75	15.88	189.27	16.64	189.79	17.38
188.24	15.09	188.76	15.89	189.28	16.66	189.80	17.39
188.25	15.10	188.77	15.91	189.29	16.67	189.81	17.52
188.26	15.12	188.78	15.92	189.30	16.69	189.82	17.75
188.27	15.13	188.79	15.94	189.31	16.70	189.83	**18.04**
188.28	15.15	188.80	15.95	189.32	16.72		
188.29	15.17	188.81	15.97	189.33	16.73		
188.30	15.18	188.82	15.98	189.34	16.75		
188.31	15.20	188.83	16.00	189.35	16.76		
188.32	15.21	188.84	16.01	189.36	16.77		
188.33	15.23	188.85	16.03	189.37	16.79		
188.34	15.24	188.86	16.04	189.38	16.80		
188.35	15.26	188.87	16.06	189.39	16.82		
188.36	15.28	188.88	16.07	189.40	16.83		
188.37	15.29	188.89	16.09	189.41	16.85		
188.38	15.31	188.90	16.10	189.42	16.86		
188.39	15.32	188.91	16.12	189.43	16.87		
188.40	15.34	188.92	16.13	189.44	16.89		
188.41	15.35	188.93	16.15	189.45	16.90		
188.42	15.37	188.94	16.16	189.46	16.92		
188.43	15.39	188.95	16.18	189.47	16.93		
188.44	15.40	188.96	16.19	189.48	16.95		
188.45	15.42	188.97	16.21	189.49	16.96		
188.46	15.43	188.98	16.22	189.50	16.97		
188.47	15.45	188.99	16.24	189.51	16.99		
188.48	15.46	189.00	16.25	189.52	17.00		
188.49	15.48	189.01	16.27	189.53	17.02		
188.50	15.49	189.02	16.28	189.54	17.03		
188.51	15.51	189.03	16.30	189.55	17.04		
188.52	15.53	189.04	16.31	189.56	17.06		
188.53	15.54	189.05	16.32	189.57	17.07		
188.54	15.56	189.06	16.34	189.58	17.09		
188.55	15.57	189.07	16.35	189.59	17.10		
188.56	15.59	189.08	16.37	189.60	17.11		
188.57	15.60	189.09	16.38	189.61	17.13		
188.58	15.62	189.10	16.40	189.62	17.14		
188.59	15.63	189.11	16.41	189.63	17.16		
188.60	15.65	189.12	16.43	189.64	17.17		
188.61	15.66	189.13	16.44	189.65	17.18		
188.62	15.68	189.14	16.46	189.66	17.20		
188.63	15.69	189.15	16.47	189.67	17.21		
188.64	15.71	189.16	16.49	189.68	17.23		
188.65	15.73	189.17	16.50	189.69	17.24		
188.66	15.74	189.18	16.51	189.70	17.25		
188.67	15.76	189.19	16.53	189.71	17.27		

Stage-Area-Storage for Pond B-51: Basin #51

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.00	5,243	0	184.52	6,015	2,927
184.01	5,258	53	184.53	6,030	2,987
184.02	5,273	105	184.54	6,044	3,048
184.03	5,288	158	184.55	6,059	3,108
184.04	5,302	211	184.56	6,074	3,169
184.05	5,317	264	184.57	6,089	3,230
184.06	5,332	317	184.58	6,104	3,291
184.07	5,347	371	184.59	6,119	3,352
184.08	5,362	424	184.60	6,133	3,413
184.09	5,377	478	184.61	6,148	3,474
184.10	5,391	532	184.62	6,163	3,536
184.11	5,406	586	184.63	6,178	3,598
184.12	5,421	640	184.64	6,193	3,659
184.13	5,436	694	184.65	6,208	3,721
184.14	5,451	749	184.66	6,222	3,784
184.15	5,466	803	184.67	6,237	3,846
184.16	5,480	858	184.68	6,252	3,908
184.17	5,495	913	184.69	6,267	3,971
184.18	5,510	968	184.70	6,282	4,034
184.19	5,525	1,023	184.71	6,297	4,097
184.20	5,540	1,078	184.72	6,311	4,160
184.21	5,555	1,134	184.73	6,326	4,223
184.22	5,569	1,189	184.74	6,341	4,286
184.23	5,584	1,245	184.75	6,356	4,350
184.24	5,599	1,301	184.76	6,371	4,413
184.25	5,614	1,357	184.77	6,386	4,477
184.26	5,629	1,413	184.78	6,401	4,541
184.27	5,644	1,470	184.79	6,415	4,605
184.28	5,659	1,526	184.80	6,430	4,669
184.29	5,673	1,583	184.81	6,445	4,734
184.30	5,688	1,640	184.82	6,460	4,798
184.31	5,703	1,697	184.83	6,475	4,863
184.32	5,718	1,754	184.84	6,490	4,928
184.33	5,733	1,811	184.85	6,504	4,993
184.34	5,748	1,868	184.86	6,519	5,058
184.35	5,762	1,926	184.87	6,534	5,123
184.36	5,777	1,984	184.88	6,549	5,188
184.37	5,792	2,041	184.89	6,564	5,254
184.38	5,807	2,099	184.90	6,579	5,320
184.39	5,822	2,158	184.91	6,593	5,386
184.40	5,837	2,216	184.92	6,608	5,452
184.41	5,851	2,274	184.93	6,623	5,518
184.42	5,866	2,333	184.94	6,638	5,584
184.43	5,881	2,392	184.95	6,653	5,651
184.44	5,896	2,451	184.96	6,668	5,717
184.45	5,911	2,510	184.97	6,682	5,784
184.46	5,926	2,569	184.98	6,697	5,851
184.47	5,940	2,628	184.99	6,712	5,918
184.48	5,955	2,688	185.00	6,727	5,985
184.49	5,970	2,747	185.01	6,744	6,052
184.50	5,985	2,807	185.02	6,761	6,120
184.51	6,000	2,867	185.03	6,778	6,188

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.04	6,795	6,255	185.56	7,677	10,018
185.05	6,812	6,323	185.57	7,694	10,095
185.06	6,829	6,392	185.58	7,711	10,172
185.07	6,846	6,460	185.59	7,728	10,249
185.08	6,863	6,529	185.60	7,745	10,327
185.09	6,880	6,597	185.61	7,762	10,404
185.10	6,897	6,666	185.62	7,779	10,482
185.11	6,914	6,735	185.63	7,796	10,560
185.12	6,931	6,804	185.64	7,813	10,638
185.13	6,948	6,874	185.65	7,830	10,716
185.14	6,965	6,943	185.66	7,847	10,794
185.15	6,982	7,013	185.67	7,864	10,873
185.16	6,999	7,083	185.68	7,881	10,952
185.17	7,015	7,153	185.69	7,898	11,031
185.18	7,032	7,223	185.70	7,915	11,110
185.19	7,049	7,294	185.71	7,932	11,189
185.20	7,066	7,364	185.72	7,949	11,268
185.21	7,083	7,435	185.73	7,966	11,348
185.22	7,100	7,506	185.74	7,983	11,428
185.23	7,117	7,577	185.75	8,000	11,508
185.24	7,134	7,648	185.76	8,017	11,588
185.25	7,151	7,720	185.77	8,034	11,668
185.26	7,168	7,791	185.78	8,051	11,748
185.27	7,185	7,863	185.79	8,068	11,829
185.28	7,202	7,935	185.80	8,085	11,910
185.29	7,219	8,007	185.81	8,102	11,991
185.30	7,236	8,079	185.82	8,119	12,072
185.31	7,253	8,152	185.83	8,136	12,153
185.32	7,270	8,225	185.84	8,152	12,234
185.33	7,287	8,297	185.85	8,169	12,316
185.34	7,304	8,370	185.86	8,186	12,398
185.35	7,321	8,443	185.87	8,203	12,480
185.36	7,338	8,517	185.88	8,220	12,562
185.37	7,355	8,590	185.89	8,237	12,644
185.38	7,372	8,664	185.90	8,254	12,727
185.39	7,389	8,738	185.91	8,271	12,809
185.40	7,406	8,812	185.92	8,288	12,892
185.41	7,423	8,886	185.93	8,305	12,975
185.42	7,440	8,960	185.94	8,322	13,058
185.43	7,457	9,034	185.95	8,339	13,141
185.44	7,474	9,109	185.96	8,356	13,225
185.45	7,491	9,184	185.97	8,373	13,309
185.46	7,508	9,259	185.98	8,390	13,392
185.47	7,525	9,334	185.99	8,407	13,476
185.48	7,542	9,409	186.00	8,424	13,561
185.49	7,559	9,485	186.01	8,441	13,645
185.50	7,576	9,561	186.02	8,457	13,729
185.51	7,592	9,636	186.03	8,474	13,814
185.52	7,609	9,712	186.04	8,490	13,899
185.53	7,626	9,789	186.05	8,507	13,984
185.54	7,643	9,865	186.06	8,524	14,069
185.55	7,660	9,942	186.07	8,540	14,154

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
186.08	8,557	14,240	186.60	9,421	18,914
186.09	8,573	14,325	186.61	9,437	19,008
186.10	8,590	14,411	186.62	9,454	19,103
186.11	8,607	14,497	186.63	9,470	19,197
186.12	8,623	14,583	186.64	9,487	19,292
186.13	8,640	14,670	186.65	9,504	19,387
186.14	8,657	14,756	186.66	9,520	19,482
186.15	8,673	14,843	186.67	9,537	19,577
186.16	8,690	14,930	186.68	9,553	19,673
186.17	8,706	15,017	186.69	9,570	19,768
186.18	8,723	15,104	186.70	9,587	19,864
186.19	8,740	15,191	186.71	9,603	19,960
186.20	8,756	15,279	186.72	9,620	20,056
186.21	8,773	15,366	186.73	9,637	20,153
186.22	8,789	15,454	186.74	9,653	20,249
186.23	8,806	15,542	186.75	9,670	20,346
186.24	8,823	15,630	186.76	9,686	20,442
186.25	8,839	15,718	186.77	9,703	20,539
186.26	8,856	15,807	186.78	9,720	20,636
186.27	8,872	15,896	186.79	9,736	20,734
186.28	8,889	15,984	186.80	9,753	20,831
186.29	8,906	16,073	186.81	9,769	20,929
186.30	8,922	16,162	186.82	9,786	21,027
186.31	8,939	16,252	186.83	9,803	21,125
186.32	8,956	16,341	186.84	9,819	21,223
186.33	8,972	16,431	186.85	9,836	21,321
186.34	8,989	16,521	186.86	9,852	21,419
186.35	9,005	16,611	186.87	9,869	21,518
186.36	9,022	16,701	186.88	9,886	21,617
186.37	9,039	16,791	186.89	9,902	21,716
186.38	9,055	16,882	186.90	9,919	21,815
186.39	9,072	16,972	186.91	9,936	21,914
186.40	9,088	17,063	186.92	9,952	22,014
186.41	9,105	17,154	186.93	9,969	22,113
186.42	9,122	17,245	186.94	9,985	22,213
186.43	9,138	17,336	186.95	10,002	22,313
186.44	9,155	17,428	186.96	10,019	22,413
186.45	9,171	17,519	186.97	10,035	22,513
186.46	9,188	17,611	186.98	10,052	22,614
186.47	9,205	17,703	186.99	10,068	22,714
186.48	9,221	17,795	187.00	10,085	22,815
186.49	9,238	17,888	187.01	10,102	22,916
186.50	9,255	17,980	187.02	10,119	23,017
186.51	9,271	18,073	187.03	10,137	23,118
186.52	9,288	18,166	187.04	10,154	23,220
186.53	9,304	18,259	187.05	10,171	23,321
186.54	9,321	18,352	187.06	10,188	23,423
186.55	9,338	18,445	187.07	10,205	23,525
186.56	9,354	18,538	187.08	10,222	23,627
186.57	9,371	18,632	187.09	10,240	23,730
186.58	9,387	18,726	187.10	10,257	23,832
186.59	9,404	18,820	187.11	10,274	23,935

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
187.12	10,291	24,038	187.64	11,184	29,621
187.13	10,308	24,141	187.65	11,201	29,733
187.14	10,325	24,244	187.66	11,218	29,845
187.15	10,343	24,347	187.67	11,235	29,957
187.16	10,360	24,451	187.68	11,253	30,070
187.17	10,377	24,554	187.69	11,270	30,182
187.18	10,394	24,658	187.70	11,287	30,295
187.19	10,411	24,762	187.71	11,304	30,408
187.20	10,428	24,866	187.72	11,321	30,521
187.21	10,446	24,971	187.73	11,338	30,635
187.22	10,463	25,075	187.74	11,356	30,748
187.23	10,480	25,180	187.75	11,373	30,862
187.24	10,497	25,285	187.76	11,390	30,975
187.25	10,514	25,390	187.77	11,407	31,089
187.26	10,531	25,495	187.78	11,424	31,204
187.27	10,549	25,601	187.79	11,441	31,318
187.28	10,566	25,706	187.80	11,459	31,432
187.29	10,583	25,812	187.81	11,476	31,547
187.30	10,600	25,918	187.82	11,493	31,662
187.31	10,617	26,024	187.83	11,510	31,777
187.32	10,634	26,130	187.84	11,527	31,892
187.33	10,652	26,237	187.85	11,544	32,008
187.34	10,669	26,343	187.86	11,562	32,123
187.35	10,686	26,450	187.87	11,579	32,239
187.36	10,703	26,557	187.88	11,596	32,355
187.37	10,720	26,664	187.89	11,613	32,471
187.38	10,737	26,771	187.90	11,630	32,587
187.39	10,755	26,879	187.91	11,647	32,703
187.40	10,772	26,986	187.92	11,665	32,820
187.41	10,789	27,094	187.93	11,682	32,937
187.42	10,806	27,202	187.94	11,699	33,053
187.43	10,823	27,310	187.95	11,716	33,171
187.44	10,840	27,419	187.96	11,733	33,288
187.45	10,858	27,527	187.97	11,750	33,405
187.46	10,875	27,636	187.98	11,768	33,523
187.47	10,892	27,745	187.99	11,785	33,641
187.48	10,909	27,854	188.00	11,802	33,759
187.49	10,926	27,963	188.01	11,820	33,877
187.50	10,944	28,072	188.02	11,837	33,995
187.51	10,961	28,182	188.03	11,855	34,113
187.52	10,978	28,291	188.04	11,873	34,232
187.53	10,995	28,401	188.05	11,891	34,351
187.54	11,012	28,511	188.06	11,908	34,470
187.55	11,029	28,621	188.07	11,926	34,589
187.56	11,047	28,732	188.08	11,944	34,708
187.57	11,064	28,842	188.09	11,962	34,828
187.58	11,081	28,953	188.10	11,979	34,948
187.59	11,098	29,064	188.11	11,997	35,067
187.60	11,115	29,175	188.12	12,015	35,188
187.61	11,132	29,286	188.13	12,033	35,308
187.62	11,150	29,398	188.14	12,050	35,428
187.63	11,167	29,509	188.15	12,068	35,549

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
188.16	12,086	35,670
188.17	12,104	35,790
188.18	12,121	35,912
188.19	12,139	36,033
188.20	12,157	36,154
188.21	12,175	36,276
188.22	12,192	36,398
188.23	12,210	36,520
188.24	12,228	36,642
188.25	12,246	36,764
188.26	12,263	36,887
188.27	12,281	37,010
188.28	12,299	37,133
188.29	12,316	37,256
188.30	12,334	37,379
188.31	12,352	37,502
188.32	12,370	37,626
188.33	12,387	37,750
188.34	12,405	37,874
188.35	12,423	37,998
188.36	12,441	38,122
188.37	12,458	38,247
188.38	12,476	38,371
188.39	12,494	38,496
188.40	12,512	38,621
188.41	12,529	38,746
188.42	12,547	38,872
188.43	12,565	38,997
188.44	12,583	39,123
188.45	12,600	39,249
188.46	12,618	39,375
188.47	12,636	39,501
188.48	12,654	39,628
188.49	12,671	39,754
188.50	12,689	39,881
188.51	12,707	40,008
188.52	12,724	40,135
188.53	12,742	40,263
188.54	12,760	40,390
188.55	12,778	40,518
188.56	12,795	40,646
188.57	12,813	40,774
188.58	12,831	40,902
188.59	12,849	41,030
188.60	12,866	41,159
188.61	12,884	41,288
188.62	12,902	41,417
188.63	12,920	41,546
188.64	12,937	41,675
188.65	12,955	41,805
188.66	12,973	41,934
188.67	12,991	42,064
188.68	13,008	42,194
188.69	13,026	42,324
188.70	13,044	42,455
188.71	13,062	42,585
188.72	13,079	42,716
188.73	13,097	42,847
188.74	13,115	42,978
188.75	13,133	43,109
188.76	13,150	43,240
188.77	13,168	43,372
188.78	13,186	43,504
188.79	13,203	43,636
188.80	13,221	43,768
188.81	13,239	43,900
188.82	13,257	44,033
188.83	13,274	44,165
188.84	13,292	44,298
188.85	13,310	44,431
188.86	13,328	44,564
188.87	13,345	44,698
188.88	13,363	44,831
188.89	13,381	44,965
188.90	13,399	45,099
188.91	13,416	45,233
188.92	13,434	45,367
188.93	13,452	45,502
188.94	13,470	45,636
188.95	13,487	45,771
188.96	13,505	45,906
188.97	13,523	46,041
188.98	13,541	46,176
188.99	13,558	46,312
189.00	13,576	46,448
189.01	13,594	46,583
189.02	13,613	46,719
189.03	13,631	46,856
189.04	13,649	46,992
189.05	13,668	47,129
189.06	13,686	47,265
189.07	13,704	47,402
189.08	13,723	47,539
189.09	13,741	47,677
189.10	13,759	47,814
189.11	13,778	47,952
189.12	13,796	48,090
189.13	13,814	48,228
189.14	13,833	48,366
189.15	13,851	48,505
189.16	13,869	48,643
189.17	13,888	48,782
189.18	13,906	48,921
189.19	13,924	49,060

Stage-Area-Storage for Pond B-51: Basin #51 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
189.20	13,943	49,199
189.21	13,961	49,339
189.22	13,979	49,479
189.23	13,998	49,618
189.24	14,016	49,759
189.25	14,034	49,899
189.26	14,053	50,039
189.27	14,071	50,180
189.28	14,089	50,321
189.29	14,108	50,462
189.30	14,126	50,603
189.31	14,144	50,744
189.32	14,163	50,886
189.33	14,181	51,027
189.34	14,199	51,169
189.35	14,218	51,311
189.36	14,236	51,454
189.37	14,254	51,596
189.38	14,273	51,739
189.39	14,291	51,882
189.40	14,309	52,025
189.41	14,328	52,168
189.42	14,346	52,311
189.43	14,365	52,455
189.44	14,383	52,598
189.45	14,401	52,742
189.46	14,420	52,886
189.47	14,438	53,031
189.48	14,456	53,175
189.49	14,475	53,320
189.50	14,493	53,465
189.51	14,511	53,610
189.52	14,530	53,755
189.53	14,548	53,900
189.54	14,566	54,046
189.55	14,585	54,192
189.56	14,603	54,338
189.57	14,621	54,484
189.58	14,640	54,630
189.59	14,658	54,777
189.60	14,676	54,923
189.61	14,695	55,070
189.62	14,713	55,217
189.63	14,731	55,364
189.64	14,750	55,512
189.65	14,768	55,659
189.66	14,786	55,807
189.67	14,805	55,955
189.68	14,823	56,103
189.69	14,841	56,251
189.70	14,860	56,400
189.71	14,878	56,549
189.72	14,896	56,698
189.73	14,915	56,847
189.74	14,933	56,996
189.75	14,951	57,145
189.76	14,970	57,295
189.77	14,988	57,445
189.78	15,006	57,595
189.79	15,025	57,745
189.80	15,043	57,895
189.81	15,061	58,046
189.82	15,080	58,196
189.83	**15,098**	**58,347**

Summary for Pond B-52: Basin #52

Inflow Area = 1.423 ac, 34.43% Impervious, Inflow Depth = 8.96" for Future 100 yr event
Inflow = 12.99 cfs @ 12.17 hrs, Volume= 1.062 af
Outflow = 9.08 cfs @ 12.27 hrs, Volume= 1.014 af, Atten= 30%, Lag= 6.0 min
Primary = 9.08 cfs @ 12.27 hrs, Volume= 1.014 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 196.76' @ 12.27 hrs Surf.Area= 2,638 sf Storage= 5,605 cf

Plug-Flow detention time= 55.0 min calculated for 1.013 af (95% of inflow)
Center-of-Mass det. time= 28.5 min (809.3 - 780.8)

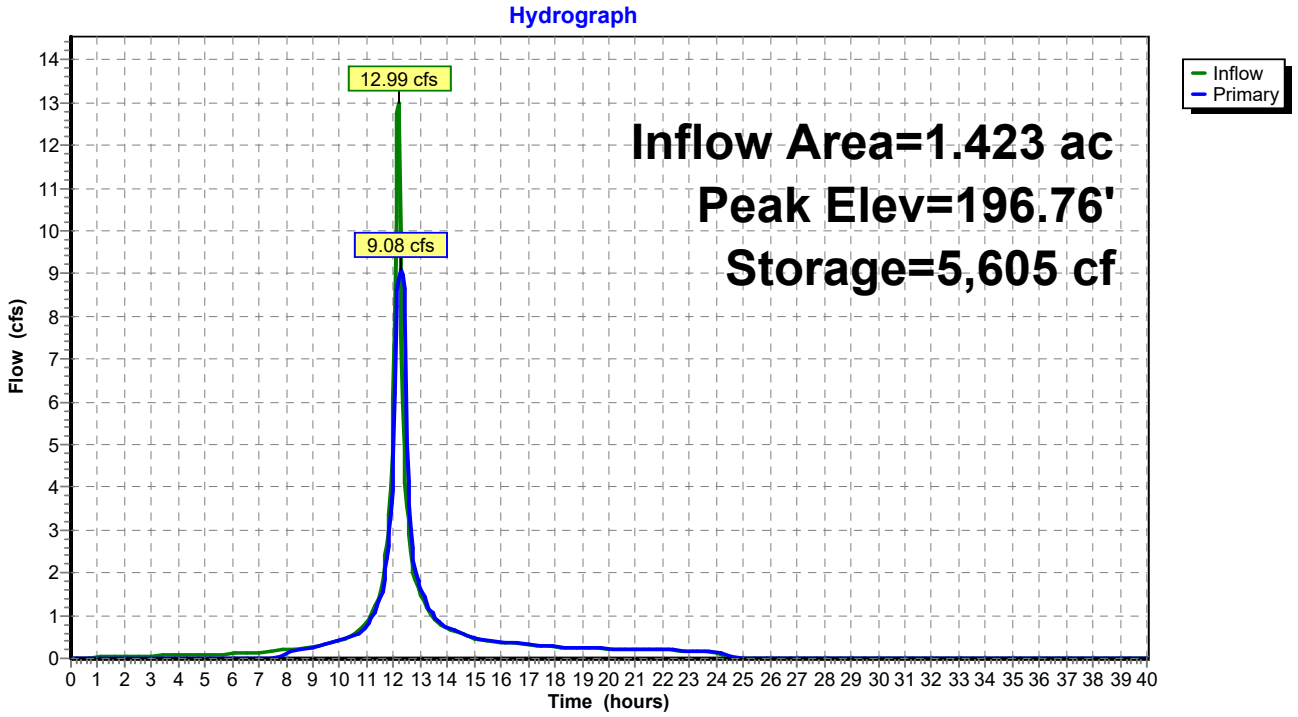
Volume	Invert	Avail.Storage	Storage Description
#1	193.00'	7,751 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
193.00	474	0	0
194.00	970	722	722
195.00	1,523	1,247	1,969
196.00	2,133	1,828	3,797
197.00	2,799	2,466	6,263
197.50	3,154	1,488	7,751

Device	Routing	Invert	Outlet Devices
#1	Primary	192.00'	**15.0" Round Culvert** L= 163.0' Ke= 0.500 Inlet / Outlet Invert= 192.00' / 191.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	195.08'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	195.72'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	197.25'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=9.06 cfs @ 12.27 hrs HW=196.74' (Free Discharge)
- **1=Culvert** (Barrel Controls 9.06 cfs @ 7.38 fps)
  - **2=Orifice/Grate** (Passes < 8.56 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 12.73 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-52: Basin #52



Stage-Discharge for Pond B-52: Basin #52

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.00	0.00	193.52	0.00	194.04	0.00	194.56	0.00
193.01	0.00	193.53	0.00	194.05	0.00	194.57	0.00
193.02	0.00	193.54	0.00	194.06	0.00	194.58	0.00
193.03	0.00	193.55	0.00	194.07	0.00	194.59	0.00
193.04	0.00	193.56	0.00	194.08	0.00	194.60	0.00
193.05	0.00	193.57	0.00	194.09	0.00	194.61	0.00
193.06	0.00	193.58	0.00	194.10	0.00	194.62	0.00
193.07	0.00	193.59	0.00	194.11	0.00	194.63	0.00
193.08	0.00	193.60	0.00	194.12	0.00	194.64	0.00
193.09	0.00	193.61	0.00	194.13	0.00	194.65	0.00
193.10	0.00	193.62	0.00	194.14	0.00	194.66	0.00
193.11	0.00	193.63	0.00	194.15	0.00	194.67	0.00
193.12	0.00	193.64	0.00	194.16	0.00	194.68	0.00
193.13	0.00	193.65	0.00	194.17	0.00	194.69	0.00
193.14	0.00	193.66	0.00	194.18	0.00	194.70	0.00
193.15	0.00	193.67	0.00	194.19	0.00	194.71	0.00
193.16	0.00	193.68	0.00	194.20	0.00	194.72	0.00
193.17	0.00	193.69	0.00	194.21	0.00	194.73	0.00
193.18	0.00	193.70	0.00	194.22	0.00	194.74	0.00
193.19	0.00	193.71	0.00	194.23	0.00	194.75	0.00
193.20	0.00	193.72	0.00	194.24	0.00	194.76	0.00
193.21	0.00	193.73	0.00	194.25	0.00	194.77	0.00
193.22	0.00	193.74	0.00	194.26	0.00	194.78	0.00
193.23	0.00	193.75	0.00	194.27	0.00	194.79	0.00
193.24	0.00	193.76	0.00	194.28	0.00	194.80	0.00
193.25	0.00	193.77	0.00	194.29	0.00	194.81	0.00
193.26	0.00	193.78	0.00	194.30	0.00	194.82	0.00
193.27	0.00	193.79	0.00	194.31	0.00	194.83	0.00
193.28	0.00	193.80	0.00	194.32	0.00	194.84	0.00
193.29	0.00	193.81	0.00	194.33	0.00	194.85	0.00
193.30	0.00	193.82	0.00	194.34	0.00	194.86	0.00
193.31	0.00	193.83	0.00	194.35	0.00	194.87	0.00
193.32	0.00	193.84	0.00	194.36	0.00	194.88	0.00
193.33	0.00	193.85	0.00	194.37	0.00	194.89	0.00
193.34	0.00	193.86	0.00	194.38	0.00	194.90	0.00
193.35	0.00	193.87	0.00	194.39	0.00	194.91	0.00
193.36	0.00	193.88	0.00	194.40	0.00	194.92	0.00
193.37	0.00	193.89	0.00	194.41	0.00	194.93	0.00
193.38	0.00	193.90	0.00	194.42	0.00	194.94	0.00
193.39	0.00	193.91	0.00	194.43	0.00	194.95	0.00
193.40	0.00	193.92	0.00	194.44	0.00	194.96	0.00
193.41	0.00	193.93	0.00	194.45	0.00	194.97	0.00
193.42	0.00	193.94	0.00	194.46	0.00	194.98	0.00
193.43	0.00	193.95	0.00	194.47	0.00	194.99	0.00
193.44	0.00	193.96	0.00	194.48	0.00	195.00	0.00
193.45	0.00	193.97	0.00	194.49	0.00	195.01	0.00
193.46	0.00	193.98	0.00	194.50	0.00	195.02	0.00
193.47	0.00	193.99	0.00	194.51	0.00	195.03	0.00
193.48	0.00	194.00	0.00	194.52	0.00	195.04	0.00
193.49	0.00	194.01	0.00	194.53	0.00	195.05	0.00
193.50	0.00	194.02	0.00	194.54	0.00	195.06	0.00
193.51	0.00	194.03	0.00	194.55	0.00	195.07	0.00

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
195.08	0.00	195.60	3.58	196.12	8.41	196.64	8.96
195.09	0.01	195.61	3.67	196.13	8.43	196.65	8.97
195.10	0.03	195.62	3.74	196.14	8.44	196.66	8.98
195.11	0.05	195.63	3.82	196.15	8.45	196.67	8.99
195.12	0.08	195.64	3.89	196.16	8.46	196.68	9.00
195.13	0.11	195.65	3.97	196.17	8.47	196.69	9.01
195.14	0.14	195.66	4.04	196.18	8.48	196.70	9.02
195.15	0.18	195.67	4.10	196.19	8.49	196.71	9.03
195.16	0.22	195.68	4.17	196.20	8.50	196.72	9.04
195.17	0.26	195.69	4.24	196.21	8.51	196.73	9.05
195.18	0.30	195.70	4.30	196.22	8.52	196.74	9.06
195.19	0.35	195.71	4.36	196.23	8.53	196.75	9.07
195.20	0.40	195.72	4.43	196.24	8.54	196.76	9.08
195.21	0.45	195.73	4.50	196.25	8.55	196.77	9.09
195.22	0.50	195.74	4.58	196.26	8.57	196.78	9.10
195.23	0.56	195.75	4.67	196.27	8.58	196.79	9.11
195.24	0.62	195.76	4.77	196.28	8.59	196.80	9.12
195.25	0.67	195.77	4.87	196.29	8.60	196.81	9.13
195.26	0.74	195.78	4.97	196.30	8.61	196.82	9.14
195.27	0.80	195.79	5.08	196.31	8.62	196.83	9.15
195.28	0.86	195.80	5.18	196.32	8.63	196.84	9.16
195.29	0.93	195.81	5.30	196.33	8.64	196.85	9.17
195.30	0.99	195.82	5.41	196.34	8.65	196.86	9.18
195.31	1.06	195.83	5.53	196.35	8.66	196.87	9.19
195.32	1.13	195.84	5.64	196.36	8.67	196.88	9.20
195.33	1.20	195.85	5.76	196.37	8.68	196.89	9.21
195.34	1.28	195.86	5.89	196.38	8.69	196.90	9.22
195.35	1.35	195.87	6.01	196.39	8.70	196.91	9.23
195.36	1.43	195.88	6.14	196.40	8.71	196.92	9.24
195.37	1.50	195.89	6.27	196.41	8.72	196.93	9.25
195.38	1.58	195.90	6.40	196.42	8.73	196.94	9.26
195.39	1.66	195.91	6.53	196.43	8.75	196.95	9.27
195.40	1.74	195.92	6.66	196.44	8.76	196.96	9.28
195.41	1.83	195.93	6.80	196.45	8.77	196.97	9.29
195.42	1.91	195.94	6.93	196.46	8.78	196.98	9.30
195.43	1.99	195.95	7.07	196.47	8.79	196.99	9.31
195.44	2.08	195.96	7.21	196.48	8.80	197.00	9.32
195.45	2.17	195.97	7.35	196.49	8.81	197.01	9.33
195.46	2.26	195.98	7.50	196.50	8.82	197.02	9.34
195.47	2.35	195.99	7.64	196.51	8.83	197.03	9.35
195.48	2.44	196.00	7.79	196.52	8.84	197.04	9.36
195.49	2.53	196.01	7.93	196.53	8.85	197.05	9.37
195.50	2.62	196.02	8.08	196.54	8.86	197.06	9.38
195.51	2.72	196.03	8.23	196.55	8.87	197.07	9.39
195.52	2.81	196.04	8.33	196.56	8.88	197.08	9.40
195.53	2.91	196.05	8.34	196.57	8.89	197.09	9.41
195.54	3.00	196.06	8.35	196.58	8.90	197.10	9.42
195.55	3.10	196.07	8.36	196.59	8.91	197.11	9.43
195.56	3.20	196.08	8.37	196.60	8.92	197.12	9.44
195.57	3.30	196.09	8.38	196.61	8.93	197.13	9.45
195.58	3.40	196.10	8.39	196.62	8.94	197.14	9.46
195.59	3.50	196.11	8.40	196.63	8.95	197.15	9.47

Stage-Discharge for Pond B-52: Basin #52 (continued)

Elevation (feet)	Primary (cfs)
197.16	9.48
197.17	9.49
197.18	9.50
197.19	9.51
197.20	9.52
197.21	9.53
197.22	9.54
197.23	9.55
197.24	9.55
197.25	9.56
197.26	9.69
197.27	9.91
197.28	10.20
197.29	10.54
197.30	10.92
197.31	11.35
197.32	11.81
197.33	12.30
197.34	12.82
197.35	13.38
197.36	13.96
197.37	14.57
197.38	15.21
197.39	15.87
197.40	16.55
197.41	17.26
197.42	17.99
197.43	18.75
197.44	19.52
197.45	20.32
197.46	21.17
197.47	22.06
197.48	22.96
197.49	23.90
197.50	**24.85**

Stage-Area-Storage for Pond B-52: Basin #52

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.00	474	0	193.52	732	314
193.01	479	5	193.53	737	321
193.02	484	10	193.54	742	328
193.03	489	14	193.55	747	336
193.04	494	19	193.56	752	343
193.05	499	24	193.57	757	351
193.06	504	29	193.58	762	358
193.07	509	34	193.59	767	366
193.08	514	40	193.60	772	374
193.09	519	45	193.61	777	381
193.10	524	50	193.62	782	389
193.11	529	55	193.63	786	397
193.12	534	60	193.64	791	405
193.13	538	66	193.65	796	413
193.14	543	71	193.66	801	421
193.15	548	77	193.67	806	429
193.16	553	82	193.68	811	437
193.17	558	88	193.69	816	445
193.18	563	93	193.70	821	453
193.19	568	99	193.71	826	462
193.20	573	105	193.72	831	470
193.21	578	110	193.73	836	478
193.22	583	116	193.74	841	487
193.23	588	122	193.75	846	495
193.24	593	128	193.76	851	503
193.25	598	134	193.77	856	512
193.26	603	140	193.78	861	521
193.27	608	146	193.79	866	529
193.28	613	152	193.80	871	538
193.29	618	158	193.81	876	547
193.30	623	165	193.82	881	555
193.31	628	171	193.83	886	564
193.32	633	177	193.84	891	573
193.33	638	183	193.85	896	582
193.34	643	190	193.86	901	591
193.35	648	196	193.87	906	600
193.36	653	203	193.88	910	609
193.37	658	209	193.89	915	618
193.38	662	216	193.90	920	627
193.39	667	223	193.91	925	637
193.40	672	229	193.92	930	646
193.41	677	236	193.93	935	655
193.42	682	243	193.94	940	665
193.43	687	250	193.95	945	674
193.44	692	257	193.96	950	684
193.45	697	264	193.97	955	693
193.46	702	271	193.98	960	703
193.47	707	278	193.99	965	712
193.48	712	285	194.00	970	722
193.49	717	292	194.01	976	732
193.50	722	299	194.02	981	742
193.51	727	306	194.03	987	751

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.04	992	761	194.56	1,280	1,352
194.05	998	771	194.57	1,285	1,365
194.06	1,003	781	194.58	1,291	1,378
194.07	1,009	791	194.59	1,296	1,391
194.08	1,014	801	194.60	1,302	1,404
194.09	1,020	812	194.61	1,307	1,417
194.10	1,025	822	194.62	1,313	1,430
194.11	1,031	832	194.63	1,318	1,443
194.12	1,036	842	194.64	1,324	1,456
194.13	1,042	853	194.65	1,329	1,469
194.14	1,047	863	194.66	1,335	1,483
194.15	1,053	874	194.67	1,341	1,496
194.16	1,058	884	194.68	1,346	1,509
194.17	1,064	895	194.69	1,352	1,523
194.18	1,070	906	194.70	1,357	1,536
194.19	1,075	916	194.71	1,363	1,550
194.20	1,081	927	194.72	1,368	1,564
194.21	1,086	938	194.73	1,374	1,577
194.22	1,092	949	194.74	1,379	1,591
194.23	1,097	960	194.75	1,385	1,605
194.24	1,103	971	194.76	1,390	1,619
194.25	1,108	982	194.77	1,396	1,633
194.26	1,114	993	194.78	1,401	1,647
194.27	1,119	1,004	194.79	1,407	1,661
194.28	1,125	1,015	194.80	1,412	1,675
194.29	1,130	1,027	194.81	1,418	1,689
194.30	1,136	1,038	194.82	1,423	1,703
194.31	1,141	1,049	194.83	1,429	1,718
194.32	1,147	1,061	194.84	1,435	1,732
194.33	1,152	1,072	194.85	1,440	1,746
194.34	1,158	1,084	194.86	1,446	1,761
194.35	1,164	1,095	194.87	1,451	1,775
194.36	1,169	1,107	194.88	1,457	1,790
194.37	1,175	1,119	194.89	1,462	1,804
194.38	1,180	1,131	194.90	1,468	1,819
194.39	1,186	1,142	194.91	1,473	1,834
194.40	1,191	1,154	194.92	1,479	1,848
194.41	1,197	1,166	194.93	1,484	1,863
194.42	1,202	1,178	194.94	1,490	1,878
194.43	1,208	1,190	194.95	1,495	1,893
194.44	1,213	1,202	194.96	1,501	1,908
194.45	1,219	1,214	194.97	1,506	1,923
194.46	1,224	1,227	194.98	1,512	1,938
194.47	1,230	1,239	194.99	1,517	1,953
194.48	1,235	1,251	195.00	1,523	1,969
194.49	1,241	1,264	195.01	1,529	1,984
194.50	1,247	1,276	195.02	1,535	1,999
194.51	1,252	1,289	195.03	1,541	2,014
194.52	1,258	1,301	195.04	1,547	2,030
194.53	1,263	1,314	195.05	1,554	2,045
194.54	1,269	1,326	195.06	1,560	2,061
194.55	1,274	1,339	195.07	1,566	2,077

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.08	1,572	2,092
195.09	1,578	2,108
195.10	1,584	2,124
195.11	1,590	2,140
195.12	1,596	2,156
195.13	1,602	2,172
195.14	1,608	2,188
195.15	1,615	2,204
195.16	1,621	2,220
195.17	1,627	2,236
195.18	1,633	2,253
195.19	1,639	2,269
195.20	1,645	2,285
195.21	1,651	2,302
195.22	1,657	2,318
195.23	1,663	2,335
195.24	1,669	2,352
195.25	1,676	2,368
195.26	1,682	2,385
195.27	1,688	2,402
195.28	1,694	2,419
195.29	1,700	2,436
195.30	1,706	2,453
195.31	1,712	2,470
195.32	1,718	2,487
195.33	1,724	2,504
195.34	1,730	2,522
195.35	1,736	2,539
195.36	1,743	2,556
195.37	1,749	2,574
195.38	1,755	2,591
195.39	1,761	2,609
195.40	1,767	2,627
195.41	1,773	2,644
195.42	1,779	2,662
195.43	1,785	2,680
195.44	1,791	2,698
195.45	1,797	2,716
195.46	1,804	2,734
195.47	1,810	2,752
195.48	1,816	2,770
195.49	1,822	2,788
195.50	1,828	2,806
195.51	1,834	2,825
195.52	1,840	2,843
195.53	1,846	2,861
195.54	1,852	2,880
195.55	1,859	2,898
195.56	1,865	2,917
195.57	1,871	2,936
195.58	1,877	2,954
195.59	1,883	2,973
195.60	1,889	2,992
195.61	1,895	3,011
195.62	1,901	3,030
195.63	1,907	3,049
195.64	1,913	3,068
195.65	1,920	3,087
195.66	1,926	3,107
195.67	1,932	3,126
195.68	1,938	3,145
195.69	1,944	3,165
195.70	1,950	3,184
195.71	1,956	3,204
195.72	1,962	3,223
195.73	1,968	3,243
195.74	1,974	3,263
195.75	1,981	3,282
195.76	1,987	3,302
195.77	1,993	3,322
195.78	1,999	3,342
195.79	2,005	3,362
195.80	2,011	3,382
195.81	2,017	3,402
195.82	2,023	3,422
195.83	2,029	3,443
195.84	2,035	3,463
195.85	2,041	3,483
195.86	2,048	3,504
195.87	2,054	3,524
195.88	2,060	3,545
195.89	2,066	3,566
195.90	2,072	3,586
195.91	2,078	3,607
195.92	2,084	3,628
195.93	2,090	3,649
195.94	2,096	3,670
195.95	2,102	3,691
195.96	2,109	3,712
195.97	2,115	3,733
195.98	2,121	3,754
195.99	2,127	3,775
196.00	2,133	3,797
196.01	2,140	3,818
196.02	2,146	3,839
196.03	2,153	3,861
196.04	2,160	3,882
196.05	2,166	3,904
196.06	2,173	3,926
196.07	2,180	3,947
196.08	2,186	3,969
196.09	2,193	3,991
196.10	2,200	4,013
196.11	2,206	4,035

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
196.12	2,213	4,057	196.64	2,559	5,298
196.13	2,220	4,079	196.65	2,566	5,324
196.14	2,226	4,102	196.66	2,573	5,349
196.15	2,233	4,124	196.67	2,579	5,375
196.16	2,240	4,146	196.68	2,586	5,401
196.17	2,246	4,169	196.69	2,593	5,427
196.18	2,253	4,191	196.70	2,599	5,453
196.19	2,260	4,214	196.71	2,606	5,479
196.20	2,266	4,236	196.72	2,613	5,505
196.21	2,273	4,259	196.73	2,619	5,531
196.22	2,280	4,282	196.74	2,626	5,557
196.23	2,286	4,305	196.75	2,633	5,584
196.24	2,293	4,328	196.76	2,639	5,610
196.25	2,300	4,351	196.77	2,646	5,636
196.26	2,306	4,374	196.78	2,652	5,663
196.27	2,313	4,397	196.79	2,659	5,689
196.28	2,319	4,420	196.80	2,666	5,716
196.29	2,326	4,443	196.81	2,672	5,743
196.30	2,333	4,466	196.82	2,679	5,769
196.31	2,339	4,490	196.83	2,686	5,796
196.32	2,346	4,513	196.84	2,692	5,823
196.33	2,353	4,537	196.85	2,699	5,850
196.34	2,359	4,560	196.86	2,706	5,877
196.35	2,366	4,584	196.87	2,712	5,904
196.36	2,373	4,608	196.88	2,719	5,931
196.37	2,379	4,631	196.89	2,726	5,959
196.38	2,386	4,655	196.90	2,732	5,986
196.39	2,393	4,679	196.91	2,739	6,013
196.40	2,399	4,703	196.92	2,746	6,041
196.41	2,406	4,727	196.93	2,752	6,068
196.42	2,413	4,751	196.94	2,759	6,096
196.43	2,419	4,775	196.95	2,766	6,123
196.44	2,426	4,799	196.96	2,772	6,151
196.45	2,433	4,824	196.97	2,779	6,179
196.46	2,439	4,848	196.98	2,786	6,207
196.47	2,446	4,873	196.99	2,792	6,235
196.48	2,453	4,897	197.00	2,799	6,263
196.49	2,459	4,922	197.01	2,806	6,291
196.50	2,466	4,946	197.02	2,813	6,319
196.51	2,473	4,971	197.03	2,820	6,347
196.52	2,479	4,996	197.04	2,827	6,375
196.53	2,486	5,021	197.05	2,835	6,403
196.54	2,493	5,045	197.06	2,842	6,432
196.55	2,499	5,070	197.07	2,849	6,460
196.56	2,506	5,095	197.08	2,856	6,489
196.57	2,513	5,121	197.09	2,863	6,517
196.58	2,519	5,146	197.10	2,870	6,546
196.59	2,526	5,171	197.11	2,877	6,575
196.60	2,533	5,196	197.12	2,884	6,603
196.61	2,539	5,222	197.13	2,891	6,632
196.62	2,546	5,247	197.14	2,898	6,661
196.63	2,553	5,272	197.15	2,906	6,690

Stage-Area-Storage for Pond B-52: Basin #52 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
197.16	2,913	6,719
197.17	2,920	6,749
197.18	2,927	6,778
197.19	2,934	6,807
197.20	2,941	6,836
197.21	2,948	6,866
197.22	2,955	6,895
197.23	2,962	6,925
197.24	2,969	6,955
197.25	2,977	6,984
197.26	2,984	7,014
197.27	2,991	7,044
197.28	2,998	7,074
197.29	3,005	7,104
197.30	3,012	7,134
197.31	3,019	7,164
197.32	3,026	7,195
197.33	3,033	7,225
197.34	3,040	7,255
197.35	3,047	7,286
197.36	3,055	7,316
197.37	3,062	7,347
197.38	3,069	7,377
197.39	3,076	7,408
197.40	3,083	7,439
197.41	3,090	7,470
197.42	3,097	7,501
197.43	3,104	7,532
197.44	3,111	7,563
197.45	3,118	7,594
197.46	3,126	7,625
197.47	3,133	7,656
197.48	3,140	7,688
197.49	3,147	7,719
197.50	**3,154**	**7,751**

Summary for Pond B-53: Basin #53

Inflow Area = 2.540 ac, 47.80% Impervious, Inflow Depth = 9.37" for Future 100 yr event
Inflow = 23.78 cfs @ 12.17 hrs, Volume= 1.984 af
Outflow = 14.54 cfs @ 12.30 hrs, Volume= 1.870 af, Atten= 39%, Lag= 7.6 min
Primary = 14.54 cfs @ 12.30 hrs, Volume= 1.870 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 203.42' @ 12.30 hrs Surf.Area= 6,294 sf Storage= 18,507 cf

Plug-Flow detention time= 82.7 min calculated for 1.868 af (94% of inflow)
Center-of-Mass det. time= 49.8 min (821.3 - 771.4)

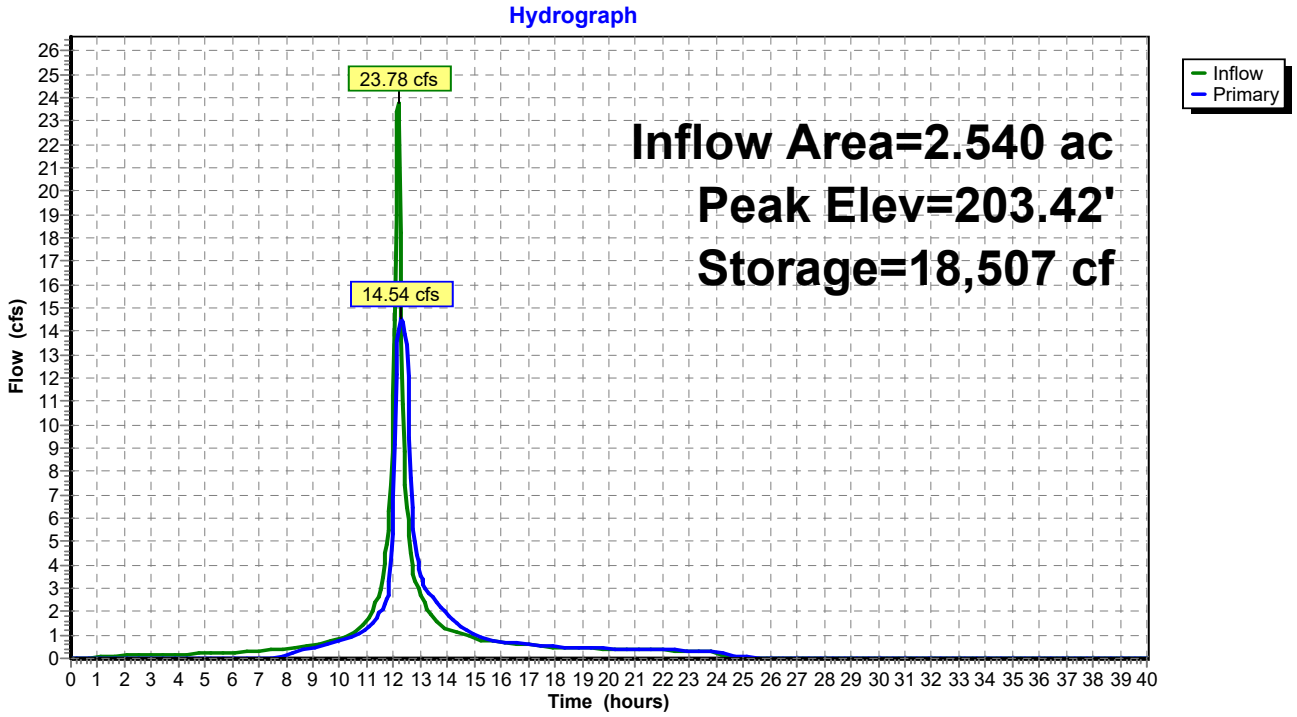
Volume	Invert	Avail.Storage	Storage Description
#1	199.75'	33,011 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.75	0	0	0
200.00	4,035	504	504
201.00	4,695	4,365	4,869
202.00	5,685	5,190	10,059
203.00	6,015	5,850	15,909
204.00	6,676	6,346	22,255
205.00	7,336	7,006	29,261
205.50	7,666	3,751	33,011

Device	Routing	Invert	Outlet Devices
#1	Primary	198.75'	**18.0" Round Culvert** L= 122.0' Ke= 0.500 Inlet / Outlet Invert= 198.75' / 198.00' S= 0.0061 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.02'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	201.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.43'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=14.53 cfs @ 12.30 hrs HW=203.42' (Free Discharge)
- **1=Culvert** (Barrel Controls 14.53 cfs @ 8.22 fps)
  - **2=Orifice/Grate** (Passes < 4.79 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 22.40 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-53: Basin #53



Stage-Discharge for Pond B-53: Basin #53

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.75	0.00	200.27	0.00	200.79	0.00	201.31	1.00
199.76	0.00	200.28	0.00	200.80	0.00	201.32	1.05
199.77	0.00	200.29	0.00	200.81	0.00	201.33	1.11
199.78	0.00	200.30	0.00	200.82	0.00	201.34	1.16
199.79	0.00	200.31	0.00	200.83	0.00	201.35	1.22
199.80	0.00	200.32	0.00	200.84	0.00	201.36	1.27
199.81	0.00	200.33	0.00	200.85	0.00	201.37	1.32
199.82	0.00	200.34	0.00	200.86	0.00	201.38	1.36
199.83	0.00	200.35	0.00	200.87	0.00	201.39	1.40
199.84	0.00	200.36	0.00	200.88	0.00	201.40	1.44
199.85	0.00	200.37	0.00	200.89	0.00	201.41	1.48
199.86	0.00	200.38	0.00	200.90	0.00	201.42	1.51
199.87	0.00	200.39	0.00	200.91	0.00	201.43	1.55
199.88	0.00	200.40	0.00	200.92	0.00	201.44	1.58
199.89	0.00	200.41	0.00	200.93	0.00	201.45	1.62
199.90	0.00	200.42	0.00	200.94	0.00	201.46	1.65
199.91	0.00	200.43	0.00	200.95	0.00	201.47	1.68
199.92	0.00	200.44	0.00	200.96	0.00	201.48	1.71
199.93	0.00	200.45	0.00	200.97	0.00	201.49	1.74
199.94	0.00	200.46	0.00	200.98	0.00	201.50	1.77
199.95	0.00	200.47	0.00	200.99	0.00	201.51	1.80
199.96	0.00	200.48	0.00	201.00	0.00	201.52	1.83
199.97	0.00	200.49	0.00	201.01	0.00	201.53	1.86
199.98	0.00	200.50	0.00	201.02	0.00	201.54	1.89
199.99	0.00	200.51	0.00	201.03	0.01	201.55	1.92
200.00	0.00	200.52	0.00	201.04	0.02	201.56	1.94
200.01	0.00	200.53	0.00	201.05	0.03	201.57	1.97
200.02	0.00	200.54	0.00	201.06	0.05	201.58	2.00
200.03	0.00	200.55	0.00	201.07	0.07	201.59	2.02
200.04	0.00	200.56	0.00	201.08	0.09	201.60	2.05
200.05	0.00	200.57	0.00	201.09	0.12	201.61	2.07
200.06	0.00	200.58	0.00	201.10	0.15	201.62	2.10
200.07	0.00	200.59	0.00	201.11	0.17	201.63	2.12
200.08	0.00	200.60	0.00	201.12	0.20	201.64	2.15
200.09	0.00	200.61	0.00	201.13	0.23	201.65	2.17
200.10	0.00	200.62	0.00	201.14	0.27	201.66	2.20
200.11	0.00	200.63	0.00	201.15	0.30	201.67	2.22
200.12	0.00	200.64	0.00	201.16	0.34	201.68	2.24
200.13	0.00	200.65	0.00	201.17	0.37	201.69	2.27
200.14	0.00	200.66	0.00	201.18	0.41	201.70	2.29
200.15	0.00	200.67	0.00	201.19	0.45	201.71	2.31
200.16	0.00	200.68	0.00	201.20	0.49	201.72	2.33
200.17	0.00	200.69	0.00	201.21	0.53	201.73	2.36
200.18	0.00	200.70	0.00	201.22	0.57	201.74	2.38
200.19	0.00	200.71	0.00	201.23	0.62	201.75	2.40
200.20	0.00	200.72	0.00	201.24	0.66	201.76	2.42
200.21	0.00	200.73	0.00	201.25	0.71	201.77	2.44
200.22	0.00	200.74	0.00	201.26	0.75	201.78	2.46
200.23	0.00	200.75	0.00	201.27	0.80	201.79	2.49
200.24	0.00	200.76	0.00	201.28	0.85	201.80	2.51
200.25	0.00	200.77	0.00	201.29	0.90	201.81	2.53
200.26	0.00	200.78	0.00	201.30	0.95	201.82	2.55

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.83	2.57	202.35	7.19	202.87	13.48	203.39	14.48
201.84	2.59	202.36	7.33	202.88	13.50	203.40	14.50
201.85	2.61	202.37	7.48	202.89	13.52	203.41	14.52
201.86	2.63	202.38	7.62	202.90	13.54	203.42	14.54
201.87	2.65	202.39	7.76	202.91	13.56	203.43	14.55
201.88	2.67	202.40	7.91	202.92	13.58	203.44	14.57
201.89	2.69	202.41	8.06	202.93	13.60	203.45	14.59
201.90	2.70	202.42	8.20	202.94	13.62	203.46	14.61
201.91	2.72	202.43	8.35	202.95	13.64	203.47	14.63
201.92	2.76	202.44	8.50	202.96	13.66	203.48	14.65
201.93	2.80	202.45	8.66	202.97	13.68	203.49	14.66
201.94	2.85	202.46	8.81	202.98	13.70	203.50	14.68
201.95	2.90	202.47	8.96	202.99	13.72	203.51	14.70
201.96	2.96	202.48	9.12	203.00	13.74	203.52	14.72
201.97	3.03	202.49	9.27	203.01	13.75	203.53	14.74
201.98	3.10	202.50	9.43	203.02	13.77	203.54	14.76
201.99	3.17	202.51	9.59	203.03	13.79	203.55	14.77
202.00	3.24	202.52	9.75	203.04	13.81	203.56	14.79
202.01	3.32	202.53	9.91	203.05	13.83	203.57	14.81
202.02	3.40	202.54	10.07	203.06	13.85	203.58	14.83
202.03	3.48	202.55	10.23	203.07	13.87	203.59	14.85
202.04	3.57	202.56	10.39	203.08	13.89	203.60	14.87
202.05	3.66	202.57	10.56	203.09	13.91	203.61	14.88
202.06	3.75	202.58	10.72	203.10	13.93	203.62	14.90
202.07	3.84	202.59	10.89	203.11	13.95	203.63	14.92
202.08	3.94	202.60	11.05	203.12	13.97	203.64	14.94
202.09	4.04	202.61	11.22	203.13	13.99	203.65	14.96
202.10	4.14	202.62	11.39	203.14	14.01	203.66	14.97
202.11	4.24	202.63	11.56	203.15	14.03	203.67	14.99
202.12	4.34	202.64	11.73	203.16	14.05	203.68	15.01
202.13	4.45	202.65	11.90	203.17	14.06	203.69	15.03
202.14	4.56	202.66	12.07	203.18	14.08	203.70	15.05
202.15	4.67	202.67	12.24	203.19	14.10	203.71	15.06
202.16	4.78	202.68	12.42	203.20	14.12	203.72	15.08
202.17	4.89	202.69	12.59	203.21	14.14	203.73	15.10
202.18	5.01	202.70	12.77	203.22	14.16	203.74	15.12
202.19	5.12	202.71	12.94	203.23	14.18	203.75	15.14
202.20	5.24	202.72	13.12	203.24	14.20	203.76	15.15
202.21	5.36	202.73	13.19	203.25	14.22	203.77	15.17
202.22	5.48	202.74	13.22	203.26	14.24	203.78	15.19
202.23	5.61	202.75	13.24	203.27	14.25	203.79	15.21
202.24	5.73	202.76	13.26	203.28	14.27	203.80	15.22
202.25	5.86	202.77	13.28	203.29	14.29	203.81	15.24
202.26	5.98	202.78	13.30	203.30	14.31	203.82	15.26
202.27	6.11	202.79	13.32	203.31	14.33	203.83	15.28
202.28	6.24	202.80	13.34	203.32	14.35	203.84	15.29
202.29	6.37	202.81	13.36	203.33	14.37	203.85	15.31
202.30	6.51	202.82	13.38	203.34	14.39	203.86	15.33
202.31	6.64	202.83	13.40	203.35	14.41	203.87	15.35
202.32	6.78	202.84	13.42	203.36	14.42	203.88	15.36
202.33	6.91	202.85	13.44	203.37	14.44	203.89	15.38
202.34	7.05	202.86	13.46	203.38	14.46	203.90	15.40

Stage-Discharge for Pond B-53: Basin #53 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.91	15.42	204.43	16.30	204.95	67.49	205.47	166.93
203.92	15.43	204.44	16.43	204.96	69.18	205.48	169.11
203.93	15.45	204.45	16.67	204.97	70.91	205.49	171.30
203.94	15.47	204.46	16.96	204.98	72.66	205.50	**173.51**
203.95	15.49	204.47	17.30	204.99	74.44		
203.96	15.50	204.48	17.69	205.00	76.24		
203.97	15.52	204.49	18.12	205.01	78.07		
203.98	15.54	204.50	18.59	205.02	79.93		
203.99	15.56	204.51	19.09	205.03	81.81		
204.00	15.57	204.52	19.62	205.04	83.46		
204.01	15.59	204.53	20.18	205.05	85.11		
204.02	15.61	204.54	20.77	205.06	86.78		
204.03	15.63	204.55	21.39	205.07	88.46		
204.04	15.64	204.56	22.03	205.08	90.16		
204.05	15.66	204.57	22.70	205.09	91.87		
204.06	15.68	204.58	23.39	205.10	93.59		
204.07	15.69	204.59	24.11	205.11	95.33		
204.08	15.71	204.60	24.85	205.12	97.08		
204.09	15.73	204.61	25.61	205.13	98.84		
204.10	15.75	204.62	26.39	205.14	100.61		
204.11	15.76	204.63	27.19	205.15	102.40		
204.12	15.78	204.64	28.06	205.16	104.20		
204.13	15.80	204.65	28.94	205.17	106.01		
204.14	15.81	204.66	29.86	205.18	107.83		
204.15	15.83	204.67	30.80	205.19	109.67		
204.16	15.85	204.68	31.76	205.20	111.52		
204.17	15.87	204.69	32.75	205.21	113.38		
204.18	15.88	204.70	33.77	205.22	115.25		
204.19	15.90	204.71	34.81	205.23	117.14		
204.20	15.92	204.72	35.87	205.24	119.07		
204.21	15.93	204.73	36.96	205.25	121.02		
204.22	15.95	204.74	38.07	205.26	122.98		
204.23	15.97	204.75	39.21	205.27	124.96		
204.24	15.98	204.76	40.37	205.28	126.95		
204.25	16.00	204.77	41.56	205.29	128.95		
204.26	16.02	204.78	42.77	205.30	130.96		
204.27	16.03	204.79	44.00	205.31	132.99		
204.28	16.05	204.80	45.26	205.32	135.03		
204.29	16.07	204.81	46.54	205.33	137.08		
204.30	16.08	204.82	47.85	205.34	139.15		
204.31	16.10	204.83	49.18	205.35	141.22		
204.32	16.12	204.84	50.56	205.36	143.32		
204.33	16.13	204.85	51.97	205.37	145.42		
204.34	16.15	204.86	53.40	205.38	147.54		
204.35	16.17	204.87	54.86	205.39	149.67		
204.36	16.19	204.88	56.35	205.40	151.81		
204.37	16.20	204.89	57.86	205.41	153.96		
204.38	16.22	204.90	59.40	205.42	156.13		
204.39	16.23	204.91	60.96	205.43	158.31		
204.40	16.25	204.92	62.56	205.44	160.45		
204.41	16.27	204.93	64.17	205.45	162.60		
204.42	16.28	204.94	65.82	205.46	164.76		

Stage-Area-Storage for Pond B-53: Basin #53

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.75	0	0
199.76	161	1
199.77	323	3
199.78	484	7
199.79	646	13
199.80	807	20
199.81	968	29
199.82	1,130	40
199.83	1,291	52
199.84	1,453	65
199.85	1,614	81
199.86	1,775	98
199.87	1,937	116
199.88	2,098	136
199.89	2,260	158
199.90	2,421	182
199.91	2,582	207
199.92	2,744	233
199.93	2,905	261
199.94	3,067	291
199.95	3,228	323
199.96	3,389	356
199.97	3,551	391
199.98	3,712	427
199.99	3,874	465
200.00	4,035	504
200.01	4,042	545
200.02	4,048	585
200.03	4,055	626
200.04	4,061	666
200.05	4,068	707
200.06	4,075	748
200.07	4,081	788
200.08	4,088	829
200.09	4,094	870
200.10	4,101	911
200.11	4,108	952
200.12	4,114	993
200.13	4,121	1,035
200.14	4,127	1,076
200.15	4,134	1,117
200.16	4,141	1,158
200.17	4,147	1,200
200.18	4,154	1,241
200.19	4,160	1,283
200.20	4,167	1,325
200.21	4,174	1,366
200.22	4,180	1,408
200.23	4,187	1,450
200.24	4,193	1,492
200.25	4,200	1,534
200.26	4,207	1,576
200.27	4,213	1,618
200.28	4,220	1,660
200.29	4,226	1,702
200.30	4,233	1,745
200.31	4,240	1,787
200.32	4,246	1,829
200.33	4,253	1,872
200.34	4,259	1,914
200.35	4,266	1,957
200.36	4,273	2,000
200.37	4,279	2,043
200.38	4,286	2,085
200.39	4,292	2,128
200.40	4,299	2,171
200.41	4,306	2,214
200.42	4,312	2,257
200.43	4,319	2,300
200.44	4,325	2,344
200.45	4,332	2,387
200.46	4,339	2,430
200.47	4,345	2,474
200.48	4,352	2,517
200.49	4,358	2,561
200.50	4,365	2,604
200.51	4,372	2,648
200.52	4,378	2,692
200.53	4,385	2,736
200.54	4,391	2,780
200.55	4,398	2,823
200.56	4,405	2,867
200.57	4,411	2,912
200.58	4,418	2,956
200.59	4,424	3,000
200.60	4,431	3,044
200.61	4,438	3,089
200.62	4,444	3,133
200.63	4,451	3,177
200.64	4,457	3,222
200.65	4,464	3,267
200.66	4,471	3,311
200.67	4,477	3,356
200.68	4,484	3,401
200.69	4,490	3,446
200.70	4,497	3,491
200.71	4,504	3,536
200.72	4,510	3,581
200.73	4,517	3,626
200.74	4,523	3,671
200.75	4,530	3,716
200.76	4,537	3,762
200.77	4,543	3,807
200.78	4,550	3,852

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.79	4,556	3,898
200.80	4,563	3,944
200.81	4,570	3,989
200.82	4,576	4,035
200.83	4,583	4,081
200.84	4,589	4,127
200.85	4,596	4,173
200.86	4,603	4,219
200.87	4,609	4,265
200.88	4,616	4,311
200.89	4,622	4,357
200.90	4,629	4,403
200.91	4,636	4,449
200.92	4,642	4,496
200.93	4,649	4,542
200.94	4,655	4,589
200.95	4,662	4,635
200.96	4,669	4,682
200.97	4,675	4,729
200.98	4,682	4,776
200.99	4,688	4,822
201.00	4,695	4,869
201.01	4,705	4,916
201.02	4,715	4,963
201.03	4,725	5,011
201.04	4,735	5,058
201.05	4,745	5,105
201.06	4,754	5,153
201.07	4,764	5,200
201.08	4,774	5,248
201.09	4,784	5,296
201.10	4,794	5,344
201.11	4,804	5,392
201.12	4,814	5,440
201.13	4,824	5,488
201.14	4,834	5,536
201.15	4,844	5,585
201.16	4,853	5,633
201.17	4,863	5,682
201.18	4,873	5,731
201.19	4,883	5,779
201.20	4,893	5,828
201.21	4,903	5,877
201.22	4,913	5,926
201.23	4,923	5,975
201.24	4,933	6,025
201.25	4,943	6,074
201.26	4,952	6,124
201.27	4,962	6,173
201.28	4,972	6,223
201.29	4,982	6,273
201.30	4,992	6,322
201.31	5,002	6,372
201.32	5,012	6,422
201.33	5,022	6,473
201.34	5,032	6,523
201.35	5,041	6,573
201.36	5,051	6,624
201.37	5,061	6,674
201.38	5,071	6,725
201.39	5,081	6,776
201.40	5,091	6,827
201.41	5,101	6,878
201.42	5,111	6,929
201.43	5,121	6,980
201.44	5,131	7,031
201.45	5,140	7,082
201.46	5,150	7,134
201.47	5,160	7,185
201.48	5,170	7,237
201.49	5,180	7,289
201.50	5,190	7,341
201.51	5,200	7,393
201.52	5,210	7,445
201.53	5,220	7,497
201.54	5,230	7,549
201.55	5,240	7,601
201.56	5,249	7,654
201.57	5,259	7,706
201.58	5,269	7,759
201.59	5,279	7,812
201.60	5,289	7,865
201.61	5,299	7,918
201.62	5,309	7,971
201.63	5,319	8,024
201.64	5,329	8,077
201.65	5,339	8,130
201.66	5,348	8,184
201.67	5,358	8,237
201.68	5,368	8,291
201.69	5,378	8,345
201.70	5,388	8,398
201.71	5,398	8,452
201.72	5,408	8,506
201.73	5,418	8,561
201.74	5,428	8,615
201.75	5,438	8,669
201.76	5,447	8,723
201.77	5,457	8,778
201.78	5,467	8,833
201.79	5,477	8,887
201.80	5,487	8,942
201.81	5,497	8,997
201.82	5,507	9,052

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.83	5,517	9,107	202.35	5,800	12,069
201.84	5,527	9,162	202.36	5,804	12,127
201.85	5,536	9,218	202.37	5,807	12,185
201.86	5,546	9,273	202.38	5,810	12,244
201.87	5,556	9,329	202.39	5,814	12,302
201.88	5,566	9,384	202.40	5,817	12,360
201.89	5,576	9,440	202.41	5,820	12,418
201.90	5,586	9,496	202.42	5,824	12,476
201.91	5,596	9,552	202.43	5,827	12,534
201.92	5,606	9,608	202.44	5,830	12,593
201.93	5,616	9,664	202.45	5,833	12,651
201.94	5,626	9,720	202.46	5,837	12,709
201.95	5,635	9,776	202.47	5,840	12,768
201.96	5,645	9,833	202.48	5,843	12,826
201.97	5,655	9,889	202.49	5,847	12,885
201.98	5,665	9,946	202.50	5,850	12,943
201.99	5,675	10,003	202.51	5,853	13,002
202.00	5,685	10,059	202.52	5,857	13,060
202.01	5,688	10,116	202.53	5,860	13,119
202.02	5,692	10,173	202.54	5,863	13,177
202.03	5,695	10,230	202.55	5,867	13,236
202.04	5,698	10,287	202.56	5,870	13,295
202.05	5,702	10,344	202.57	5,873	13,353
202.06	5,705	10,401	202.58	5,876	13,412
202.07	5,708	10,458	202.59	5,880	13,471
202.08	5,711	10,515	202.60	5,883	13,530
202.09	5,715	10,572	202.61	5,886	13,589
202.10	5,718	10,630	202.62	5,890	13,648
202.11	5,721	10,687	202.63	5,893	13,706
202.12	5,725	10,744	202.64	5,896	13,765
202.13	5,728	10,801	202.65	5,900	13,824
202.14	5,731	10,859	202.66	5,903	13,883
202.15	5,735	10,916	202.67	5,906	13,942
202.16	5,738	10,973	202.68	5,909	14,001
202.17	5,741	11,031	202.69	5,913	14,061
202.18	5,744	11,088	202.70	5,916	14,120
202.19	5,748	11,145	202.71	5,919	14,179
202.20	5,751	11,203	202.72	5,923	14,238
202.21	5,754	11,261	202.73	5,926	14,297
202.22	5,758	11,318	202.74	5,929	14,357
202.23	5,761	11,376	202.75	5,933	14,416
202.24	5,764	11,433	202.76	5,936	14,475
202.25	5,768	11,491	202.77	5,939	14,535
202.26	5,771	11,549	202.78	5,942	14,594
202.27	5,774	11,606	202.79	5,946	14,654
202.28	5,777	11,664	202.80	5,949	14,713
202.29	5,781	11,722	202.81	5,952	14,772
202.30	5,784	11,780	202.82	5,956	14,832
202.31	5,787	11,838	202.83	5,959	14,892
202.32	5,791	11,895	202.84	5,962	14,951
202.33	5,794	11,953	202.85	5,965	15,011
202.34	5,797	12,011	202.86	5,969	15,071

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.87	5,972	15,130
202.88	5,975	15,190
202.89	5,979	15,250
202.90	5,982	15,310
202.91	5,985	15,369
202.92	5,989	15,429
202.93	5,992	15,489
202.94	5,995	15,549
202.95	5,998	15,609
202.96	6,002	15,669
202.97	6,005	15,729
202.98	6,008	15,789
202.99	6,012	15,849
203.00	6,015	15,909
203.01	6,022	15,970
203.02	6,028	16,030
203.03	6,035	16,090
203.04	6,041	16,151
203.05	6,048	16,211
203.06	6,055	16,271
203.07	6,061	16,332
203.08	6,068	16,393
203.09	6,074	16,453
203.10	6,081	16,514
203.11	6,088	16,575
203.12	6,094	16,636
203.13	6,101	16,697
203.14	6,108	16,758
203.15	6,114	16,819
203.16	6,121	16,880
203.17	6,127	16,941
203.18	6,134	17,003
203.19	6,141	17,064
203.20	6,147	17,126
203.21	6,154	17,187
203.22	6,160	17,249
203.23	6,167	17,310
203.24	6,174	17,372
203.25	6,180	17,434
203.26	6,187	17,496
203.27	6,193	17,558
203.28	6,200	17,619
203.29	6,207	17,682
203.30	6,213	17,744
203.31	6,220	17,806
203.32	6,227	17,868
203.33	6,233	17,930
203.34	6,240	17,993
203.35	6,246	18,055
203.36	6,253	18,118
203.37	6,260	18,180
203.38	6,266	18,243
203.39	6,273	18,305
203.40	6,279	18,368
203.41	6,286	18,431
203.42	6,293	18,494
203.43	6,299	18,557
203.44	6,306	18,620
203.45	6,312	18,683
203.46	6,319	18,746
203.47	6,326	18,809
203.48	6,332	18,873
203.49	6,339	18,936
203.50	6,346	19,000
203.51	6,352	19,063
203.52	6,359	19,127
203.53	6,365	19,190
203.54	6,372	19,254
203.55	6,379	19,318
203.56	6,385	19,381
203.57	6,392	19,445
203.58	6,398	19,509
203.59	6,405	19,573
203.60	6,412	19,637
203.61	6,418	19,702
203.62	6,425	19,766
203.63	6,431	19,830
203.64	6,438	19,894
203.65	6,445	19,959
203.66	6,451	20,023
203.67	6,458	20,088
203.68	6,464	20,152
203.69	6,471	20,217
203.70	6,478	20,282
203.71	6,484	20,347
203.72	6,491	20,412
203.73	6,498	20,476
203.74	6,504	20,541
203.75	6,511	20,607
203.76	6,517	20,672
203.77	6,524	20,737
203.78	6,531	20,802
203.79	6,537	20,867
203.80	6,544	20,933
203.81	6,550	20,998
203.82	6,557	21,064
203.83	6,564	21,130
203.84	6,570	21,195
203.85	6,577	21,261
203.86	6,583	21,327
203.87	6,590	21,393
203.88	6,597	21,459
203.89	6,603	21,525
203.90	6,610	21,591

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.91	6,617	21,657	204.43	6,960	25,187
203.92	6,623	21,723	204.44	6,966	25,256
203.93	6,630	21,789	204.45	6,973	25,326
203.94	6,636	21,856	204.46	6,980	25,396
203.95	6,643	21,922	204.47	6,986	25,465
203.96	6,650	21,988	204.48	6,993	25,535
203.97	6,656	22,055	204.49	6,999	25,605
203.98	6,663	22,121	204.50	7,006	25,675
203.99	6,669	22,188	204.51	7,013	25,745
204.00	6,676	22,255	204.52	7,019	25,816
204.01	6,683	22,322	204.53	7,026	25,886
204.02	6,689	22,389	204.54	7,032	25,956
204.03	6,696	22,455	204.55	7,039	26,027
204.04	6,702	22,522	204.56	7,046	26,097
204.05	6,709	22,590	204.57	7,052	26,167
204.06	6,716	22,657	204.58	7,059	26,238
204.07	6,722	22,724	204.59	7,065	26,309
204.08	6,729	22,791	204.60	7,072	26,379
204.09	6,735	22,858	204.61	7,079	26,450
204.10	6,742	22,926	204.62	7,085	26,521
204.11	6,749	22,993	204.63	7,092	26,592
204.12	6,755	23,061	204.64	7,098	26,663
204.13	6,762	23,128	204.65	7,105	26,734
204.14	6,768	23,196	204.66	7,112	26,805
204.15	6,775	23,264	204.67	7,118	26,876
204.16	6,782	23,331	204.68	7,125	26,947
204.17	6,788	23,399	204.69	7,131	27,018
204.18	6,795	23,467	204.70	7,138	27,090
204.19	6,801	23,535	204.71	7,145	27,161
204.20	6,808	23,603	204.72	7,151	27,233
204.21	6,815	23,671	204.73	7,158	27,304
204.22	6,821	23,740	204.74	7,164	27,376
204.23	6,828	23,808	204.75	7,171	27,448
204.24	6,834	23,876	204.76	7,178	27,519
204.25	6,841	23,945	204.77	7,184	27,591
204.26	6,848	24,013	204.78	7,191	27,663
204.27	6,854	24,081	204.79	7,197	27,735
204.28	6,861	24,150	204.80	7,204	27,807
204.29	6,867	24,219	204.81	7,211	27,879
204.30	6,874	24,287	204.82	7,217	27,951
204.31	6,881	24,356	204.83	7,224	28,023
204.32	6,887	24,425	204.84	7,230	28,096
204.33	6,894	24,494	204.85	7,237	28,168
204.34	6,900	24,563	204.86	7,244	28,240
204.35	6,907	24,632	204.87	7,250	28,313
204.36	6,914	24,701	204.88	7,257	28,385
204.37	6,920	24,770	204.89	7,263	28,458
204.38	6,927	24,839	204.90	7,270	28,531
204.39	6,933	24,909	204.91	7,277	28,603
204.40	6,940	24,978	204.92	7,283	28,676
204.41	6,947	25,048	204.93	7,290	28,749
204.42	6,953	25,117	204.94	7,296	28,822

Stage-Area-Storage for Pond B-53: Basin #53 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.95	7,303	28,895
204.96	7,310	28,968
204.97	7,316	29,041
204.98	7,323	29,114
204.99	7,329	29,188
205.00	7,336	29,261
205.01	7,343	29,334
205.02	7,349	29,408
205.03	7,356	29,481
205.04	7,362	29,555
205.05	7,369	29,629
205.06	7,376	29,702
205.07	7,382	29,776
205.08	7,389	29,850
205.09	7,395	29,924
205.10	7,402	29,998
205.11	7,409	30,072
205.12	7,415	30,146
205.13	7,422	30,220
205.14	7,428	30,294
205.15	7,435	30,369
205.16	7,442	30,443
205.17	7,448	30,518
205.18	7,455	30,592
205.19	7,461	30,667
205.20	7,468	30,741
205.21	7,475	30,816
205.22	7,481	30,891
205.23	7,488	30,966
205.24	7,494	31,041
205.25	7,501	31,116
205.26	7,508	31,191
205.27	7,514	31,266
205.28	7,521	31,341
205.29	7,527	31,416
205.30	7,534	31,491
205.31	7,541	31,567
205.32	7,547	31,642
205.33	7,554	31,718
205.34	7,560	31,793
205.35	7,567	31,869
205.36	7,574	31,945
205.37	7,580	32,020
205.38	7,587	32,096
205.39	7,593	32,172
205.40	7,600	32,248
205.41	7,607	32,324
205.42	7,613	32,400
205.43	7,620	32,476
205.44	7,626	32,553
205.45	7,633	32,629
205.46	7,640	32,705
205.47	7,646	32,782
205.48	7,653	32,858
205.49	7,659	32,935
205.50	**7,666**	**33,011**

Summary for Pond B-54: Basin #54

Inflow Area = 2.570 ac, 60.47% Impervious, Inflow Depth = 9.76" for Future 100 yr event
Inflow = 24.63 cfs @ 12.17 hrs, Volume= 2.091 af
Outflow = 13.93 cfs @ 12.31 hrs, Volume= 1.950 af, Atten= 43%, Lag= 8.4 min
Primary = 13.93 cfs @ 12.31 hrs, Volume= 1.950 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 204.09' @ 12.31 hrs Surf.Area= 6,479 sf Storage= 21,177 cf

Plug-Flow detention time= 94.2 min calculated for 1.950 af (93% of inflow)
Center-of-Mass det. time= 55.4 min (818.7 - 763.3)

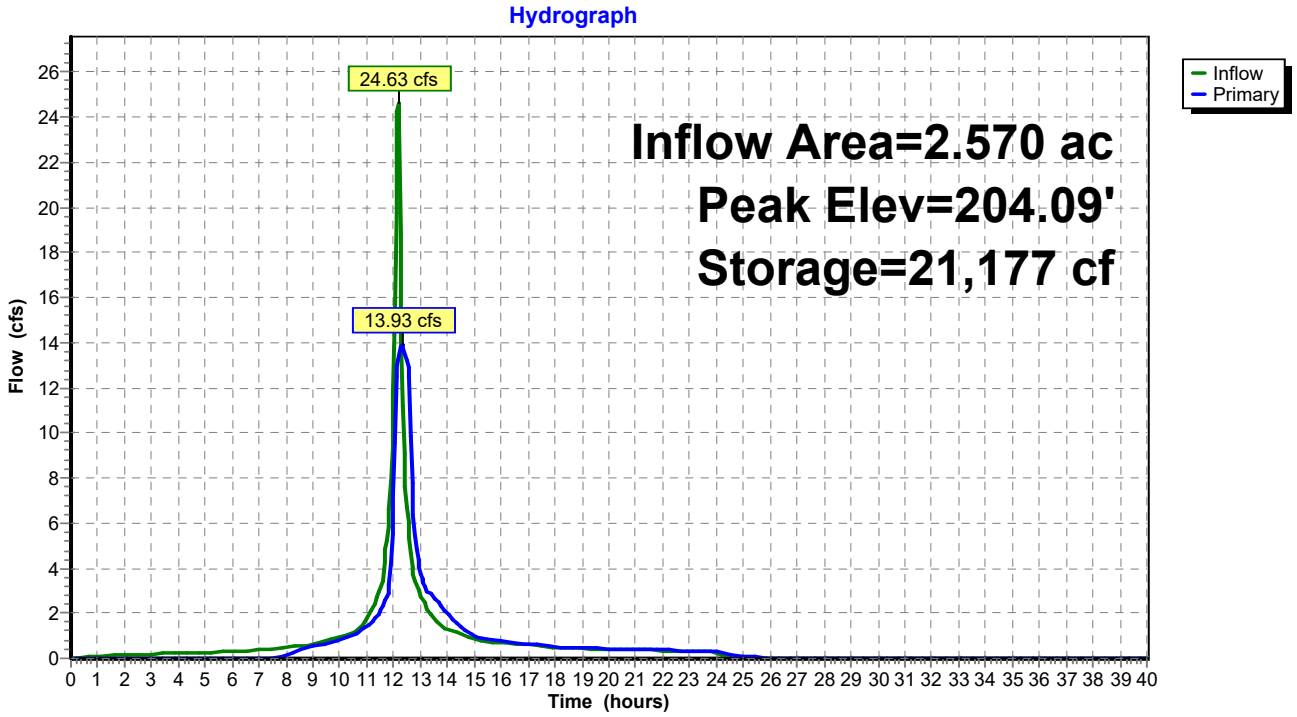
Volume	Invert	Avail.Storage	Storage Description
#1	199.89'	30,982 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
199.89	0	0	0
200.00	3,780	208	208
201.00	4,440	4,110	4,318
202.00	5,100	4,770	9,088
203.00	5,760	5,430	14,518
204.00	6,421	6,091	20,608
205.00	7,081	6,751	27,359
205.50	7,411	3,623	30,982

Device	Routing	Invert	Outlet Devices
#1	Primary	198.89'	**18.0" Round Culvert** L= 178.0' Ke= 0.500 Inlet / Outlet Invert= 198.89' / 198.00' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	201.40'	**24.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	202.42'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.47'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.92 cfs @ 12.31 hrs HW=204.08' (Free Discharge)
- **1=Culvert** (Barrel Controls 13.92 cfs @ 7.88 fps)
  - **2=Orifice/Grate** (Passes < 5.09 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 25.65 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-54: Basin #54



Stage-Discharge for Pond B-54: Basin #54

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
199.89	0.00	200.41	0.00	200.93	0.00	201.45	0.07
199.90	0.00	200.42	0.00	200.94	0.00	201.46	0.09
199.91	0.00	200.43	0.00	200.95	0.00	201.47	0.12
199.92	0.00	200.44	0.00	200.96	0.00	201.48	0.15
199.93	0.00	200.45	0.00	200.97	0.00	201.49	0.17
199.94	0.00	200.46	0.00	200.98	0.00	201.50	0.20
199.95	0.00	200.47	0.00	200.99	0.00	201.51	0.23
199.96	0.00	200.48	0.00	201.00	0.00	201.52	0.27
199.97	0.00	200.49	0.00	201.01	0.00	201.53	0.30
199.98	0.00	200.50	0.00	201.02	0.00	201.54	0.34
199.99	0.00	200.51	0.00	201.03	0.00	201.55	0.37
200.00	0.00	200.52	0.00	201.04	0.00	201.56	0.41
200.01	0.00	200.53	0.00	201.05	0.00	201.57	0.45
200.02	0.00	200.54	0.00	201.06	0.00	201.58	0.49
200.03	0.00	200.55	0.00	201.07	0.00	201.59	0.53
200.04	0.00	200.56	0.00	201.08	0.00	201.60	0.57
200.05	0.00	200.57	0.00	201.09	0.00	201.61	0.62
200.06	0.00	200.58	0.00	201.10	0.00	201.62	0.66
200.07	0.00	200.59	0.00	201.11	0.00	201.63	0.71
200.08	0.00	200.60	0.00	201.12	0.00	201.64	0.75
200.09	0.00	200.61	0.00	201.13	0.00	201.65	0.80
200.10	0.00	200.62	0.00	201.14	0.00	201.66	0.85
200.11	0.00	200.63	0.00	201.15	0.00	201.67	0.90
200.12	0.00	200.64	0.00	201.16	0.00	201.68	0.95
200.13	0.00	200.65	0.00	201.17	0.00	201.69	1.00
200.14	0.00	200.66	0.00	201.18	0.00	201.70	1.05
200.15	0.00	200.67	0.00	201.19	0.00	201.71	1.11
200.16	0.00	200.68	0.00	201.20	0.00	201.72	1.16
200.17	0.00	200.69	0.00	201.21	0.00	201.73	1.22
200.18	0.00	200.70	0.00	201.22	0.00	201.74	1.27
200.19	0.00	200.71	0.00	201.23	0.00	201.75	1.32
200.20	0.00	200.72	0.00	201.24	0.00	201.76	1.36
200.21	0.00	200.73	0.00	201.25	0.00	201.77	1.40
200.22	0.00	200.74	0.00	201.26	0.00	201.78	1.44
200.23	0.00	200.75	0.00	201.27	0.00	201.79	1.48
200.24	0.00	200.76	0.00	201.28	0.00	201.80	1.51
200.25	0.00	200.77	0.00	201.29	0.00	201.81	1.55
200.26	0.00	200.78	0.00	201.30	0.00	201.82	1.58
200.27	0.00	200.79	0.00	201.31	0.00	201.83	1.62
200.28	0.00	200.80	0.00	201.32	0.00	201.84	1.65
200.29	0.00	200.81	0.00	201.33	0.00	201.85	1.68
200.30	0.00	200.82	0.00	201.34	0.00	201.86	1.71
200.31	0.00	200.83	0.00	201.35	0.00	201.87	1.74
200.32	0.00	200.84	0.00	201.36	0.00	201.88	1.77
200.33	0.00	200.85	0.00	201.37	0.00	201.89	1.80
200.34	0.00	200.86	0.00	201.38	0.00	201.90	1.83
200.35	0.00	200.87	0.00	201.39	0.00	201.91	1.86
200.36	0.00	200.88	0.00	201.40	0.00	201.92	1.89
200.37	0.00	200.89	0.00	201.41	0.01	201.93	1.92
200.38	0.00	200.90	0.00	201.42	0.02	201.94	1.94
200.39	0.00	200.91	0.00	201.43	0.03	201.95	1.97
200.40	0.00	200.92	0.00	201.44	0.05	201.96	2.00

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.97	2.02	202.49	3.32	203.01	9.61	203.53	13.06
201.98	2.05	202.50	3.39	203.02	9.76	203.54	13.07
201.99	2.07	202.51	3.47	203.03	9.92	203.55	13.09
202.00	2.10	202.52	3.54	203.04	10.08	203.56	13.10
202.01	2.12	202.53	3.62	203.05	10.24	203.57	13.12
202.02	2.15	202.54	3.70	203.06	10.40	203.58	13.14
202.03	2.17	202.55	3.79	203.07	10.57	203.59	13.15
202.04	2.20	202.56	3.88	203.08	10.73	203.60	13.17
202.05	2.22	202.57	3.97	203.09	10.89	203.61	13.18
202.06	2.24	202.58	4.06	203.10	11.06	203.62	13.20
202.07	2.27	202.59	4.15	203.11	11.22	203.63	13.22
202.08	2.29	202.60	4.25	203.12	11.39	203.64	13.23
202.09	2.31	202.61	4.35	203.13	11.56	203.65	13.25
202.10	2.33	202.62	4.45	203.14	11.73	203.66	13.26
202.11	2.36	202.63	4.55	203.15	11.90	203.67	13.28
202.12	2.38	202.64	4.66	203.16	12.07	203.68	13.30
202.13	2.40	202.65	4.76	203.17	12.24	203.69	13.31
202.14	2.42	202.66	4.87	203.18	12.41	203.70	13.33
202.15	2.44	202.67	4.98	203.19	12.49	203.71	13.34
202.16	2.46	202.68	5.10	203.20	12.51	203.72	13.36
202.17	2.49	202.69	5.21	203.21	12.53	203.73	13.38
202.18	2.51	202.70	5.33	203.22	12.54	203.74	13.39
202.19	2.53	202.71	5.44	203.23	12.56	203.75	13.41
202.20	2.55	202.72	5.56	203.24	12.58	203.76	13.42
202.21	2.57	202.73	5.68	203.25	12.59	203.77	13.44
202.22	2.59	202.74	5.80	203.26	12.61	203.78	13.45
202.23	2.61	202.75	5.93	203.27	12.63	203.79	13.47
202.24	2.63	202.76	6.05	203.28	12.64	203.80	13.49
202.25	2.65	202.77	6.18	203.29	12.66	203.81	13.50
202.26	2.67	202.78	6.31	203.30	12.68	203.82	13.52
202.27	2.69	202.79	6.44	203.31	12.69	203.83	13.53
202.28	2.70	202.80	6.57	203.32	12.71	203.84	13.55
202.29	2.72	202.81	6.70	203.33	12.73	203.85	13.56
202.30	2.74	202.82	6.83	203.34	12.74	203.86	13.58
202.31	2.76	202.83	6.97	203.35	12.76	203.87	13.59
202.32	2.78	202.84	7.11	203.36	12.78	203.88	13.61
202.33	2.80	202.85	7.24	203.37	12.79	203.89	13.63
202.34	2.82	202.86	7.38	203.38	12.81	203.90	13.64
202.35	2.84	202.87	7.52	203.39	12.83	203.91	13.66
202.36	2.85	202.88	7.66	203.40	12.84	203.92	13.67
202.37	2.87	202.89	7.81	203.41	12.86	203.93	13.69
202.38	2.89	202.90	7.95	203.42	12.88	203.94	13.70
202.39	2.91	202.91	8.09	203.43	12.89	203.95	13.72
202.40	2.93	202.92	8.24	203.44	12.91	203.96	13.73
202.41	2.94	202.93	8.39	203.45	12.92	203.97	13.75
202.42	2.96	202.94	8.54	203.46	12.94	203.98	13.76
202.43	2.99	202.95	8.69	203.47	12.96	203.99	13.78
202.44	3.03	202.96	8.84	203.48	12.97	204.00	13.80
202.45	3.08	202.97	8.99	203.49	12.99	204.01	13.81
202.46	3.13	202.98	9.14	203.50	13.01	204.02	13.83
202.47	3.19	202.99	9.30	203.51	13.02	204.03	13.84
202.48	3.26	203.00	9.45	203.52	13.04	204.04	13.86

Stage-Discharge for Pond B-54: Basin #54 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
204.05	13.87	204.57	18.36	205.09	83.19
204.06	13.89	204.58	18.95	205.10	84.86
204.07	13.90	204.59	19.56	205.11	86.54
204.08	13.92	204.60	20.20	205.12	88.24
204.09	13.93	204.61	20.87	205.13	89.94
204.10	13.95	204.62	21.56	205.14	91.66
204.11	13.96	204.63	22.27	205.15	93.40
204.12	13.98	204.64	23.01	205.16	95.14
204.13	13.99	204.65	23.77	205.17	96.90
204.14	14.01	204.66	24.55	205.18	98.68
204.15	14.02	204.67	25.35	205.19	100.46
204.16	14.04	204.68	26.21	205.20	102.26
204.17	14.05	204.69	27.10	205.21	104.07
204.18	14.07	204.70	28.01	205.22	105.89
204.19	14.08	204.71	28.95	205.23	107.73
204.20	14.10	204.72	29.91	205.24	109.57
204.21	14.11	204.73	30.90	205.25	111.43
204.22	14.13	204.74	31.91	205.26	113.30
204.23	14.14	204.75	32.95	205.27	115.19
204.24	14.16	204.76	34.01	205.28	117.12
204.25	14.17	204.77	35.10	205.29	119.07
204.26	14.19	204.78	36.21	205.30	121.02
204.27	14.20	204.79	37.34	205.31	123.00
204.28	14.22	204.80	38.50	205.32	124.98
204.29	14.23	204.81	39.69	205.33	126.98
204.30	14.25	204.82	40.90	205.34	129.00
204.31	14.26	204.83	42.13	205.35	131.02
204.32	14.28	204.84	43.39	205.36	133.06
204.33	14.29	204.85	44.67	205.37	135.11
204.34	14.31	204.86	45.97	205.38	137.17
204.35	14.32	204.87	47.30	205.39	139.25
204.36	14.34	204.88	48.68	205.40	141.34
204.37	14.35	204.89	50.09	205.41	143.44
204.38	14.37	204.90	51.52	205.42	145.56
204.39	14.38	204.91	52.98	205.43	147.69
204.40	14.40	204.92	54.46	205.44	149.83
204.41	14.41	204.93	55.97	205.45	151.98
204.42	14.42	204.94	57.51	205.46	154.14
204.43	14.44	204.95	59.07	205.47	156.32
204.44	14.45	204.96	60.66	205.48	158.46
204.45	14.47	204.97	62.27	205.49	160.61
204.46	14.48	204.98	63.92	205.50	**162.77**
204.47	14.50	204.99	65.59		
204.48	14.63	205.00	67.28		
204.49	14.86	205.01	69.00		
204.50	15.15	205.02	70.75		
204.51	15.49	205.03	72.53		
204.52	15.88	205.04	74.33		
204.53	16.31	205.05	76.16		
204.54	16.77	205.06	78.01		
204.55	17.27	205.07	79.90		
204.56	17.80	205.08	81.54		

Stage-Area-Storage for Pond B-54: Basin #54

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.89	0	0	200.41	4,051	1,813
199.90	344	2	200.42	4,057	1,854
199.91	687	7	200.43	4,064	1,894
199.92	1,031	15	200.44	4,070	1,935
199.93	1,375	27	200.45	4,077	1,976
199.94	1,718	43	200.46	4,084	2,017
199.95	2,062	62	200.47	4,090	2,057
199.96	2,405	84	200.48	4,097	2,098
199.97	2,749	110	200.49	4,103	2,139
199.98	3,093	139	200.50	4,110	2,180
199.99	3,436	172	200.51	4,117	2,222
200.00	3,780	208	200.52	4,123	2,263
200.01	3,787	246	200.53	4,130	2,304
200.02	3,793	284	200.54	4,136	2,345
200.03	3,800	322	200.55	4,143	2,387
200.04	3,806	360	200.56	4,150	2,428
200.05	3,813	398	200.57	4,156	2,470
200.06	3,820	436	200.58	4,163	2,511
200.07	3,826	474	200.59	4,169	2,553
200.08	3,833	512	200.60	4,176	2,595
200.09	3,839	551	200.61	4,183	2,636
200.10	3,846	589	200.62	4,189	2,678
200.11	3,853	628	200.63	4,196	2,720
200.12	3,859	666	200.64	4,202	2,762
200.13	3,866	705	200.65	4,209	2,804
200.14	3,872	744	200.66	4,216	2,846
200.15	3,879	782	200.67	4,222	2,889
200.16	3,886	821	200.68	4,229	2,931
200.17	3,892	860	200.69	4,235	2,973
200.18	3,899	899	200.70	4,242	3,016
200.19	3,905	938	200.71	4,249	3,058
200.20	3,912	977	200.72	4,255	3,101
200.21	3,919	1,016	200.73	4,262	3,143
200.22	3,925	1,055	200.74	4,268	3,186
200.23	3,932	1,095	200.75	4,275	3,229
200.24	3,938	1,134	200.76	4,282	3,271
200.25	3,945	1,174	200.77	4,288	3,314
200.26	3,952	1,213	200.78	4,295	3,357
200.27	3,958	1,253	200.79	4,301	3,400
200.28	3,965	1,292	200.80	4,308	3,443
200.29	3,971	1,332	200.81	4,315	3,486
200.30	3,978	1,372	200.82	4,321	3,529
200.31	3,985	1,411	200.83	4,328	3,573
200.32	3,991	1,451	200.84	4,334	3,616
200.33	3,998	1,491	200.85	4,341	3,659
200.34	4,004	1,531	200.86	4,348	3,703
200.35	4,011	1,571	200.87	4,354	3,746
200.36	4,018	1,611	200.88	4,361	3,790
200.37	4,024	1,652	200.89	4,367	3,833
200.38	4,031	1,692	200.90	4,374	3,877
200.39	4,037	1,732	200.91	4,381	3,921
200.40	4,044	1,773	200.92	4,387	3,965

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.93	4,394	4,009
200.94	4,400	4,053
200.95	4,407	4,097
200.96	4,414	4,141
200.97	4,420	4,185
200.98	4,427	4,229
200.99	4,433	4,274
201.00	4,440	4,318
201.01	4,447	4,362
201.02	4,453	4,407
201.03	4,460	4,451
201.04	4,466	4,496
201.05	4,473	4,541
201.06	4,480	4,585
201.07	4,486	4,630
201.08	4,493	4,675
201.09	4,499	4,720
201.10	4,506	4,765
201.11	4,513	4,810
201.12	4,519	4,855
201.13	4,526	4,901
201.14	4,532	4,946
201.15	4,539	4,991
201.16	4,546	5,037
201.17	4,552	5,082
201.18	4,559	5,128
201.19	4,565	5,173
201.20	4,572	5,219
201.21	4,579	5,265
201.22	4,585	5,311
201.23	4,592	5,357
201.24	4,598	5,403
201.25	4,605	5,449
201.26	4,612	5,495
201.27	4,618	5,541
201.28	4,625	5,587
201.29	4,631	5,633
201.30	4,638	5,680
201.31	4,645	5,726
201.32	4,651	5,772
201.33	4,658	5,819
201.34	4,664	5,866
201.35	4,671	5,912
201.36	4,678	5,959
201.37	4,684	6,006
201.38	4,691	6,053
201.39	4,697	6,100
201.40	4,704	6,147
201.41	4,711	6,194
201.42	4,717	6,241
201.43	4,724	6,288
201.44	4,730	6,335
201.45	4,737	6,383
201.46	4,744	6,430
201.47	4,750	6,478
201.48	4,757	6,525
201.49	4,763	6,573
201.50	4,770	6,620
201.51	4,777	6,668
201.52	4,783	6,716
201.53	4,790	6,764
201.54	4,796	6,812
201.55	4,803	6,860
201.56	4,810	6,908
201.57	4,816	6,956
201.58	4,823	7,004
201.59	4,829	7,052
201.60	4,836	7,101
201.61	4,843	7,149
201.62	4,849	7,198
201.63	4,856	7,246
201.64	4,862	7,295
201.65	4,869	7,343
201.66	4,876	7,392
201.67	4,882	7,441
201.68	4,889	7,490
201.69	4,895	7,539
201.70	4,902	7,588
201.71	4,909	7,637
201.72	4,915	7,686
201.73	4,922	7,735
201.74	4,928	7,784
201.75	4,935	7,834
201.76	4,942	7,883
201.77	4,948	7,932
201.78	4,955	7,982
201.79	4,961	8,031
201.80	4,968	8,081
201.81	4,975	8,131
201.82	4,981	8,181
201.83	4,988	8,230
201.84	4,994	8,280
201.85	5,001	8,330
201.86	5,008	8,380
201.87	5,014	8,430
201.88	5,021	8,481
201.89	5,027	8,531
201.90	5,034	8,581
201.91	5,041	8,632
201.92	5,047	8,682
201.93	5,054	8,733
201.94	5,060	8,783
201.95	5,067	8,834
201.96	5,074	8,884

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.97	5,080	8,935	202.49	5,423	11,666
201.98	5,087	8,986	202.50	5,430	11,720
201.99	5,093	9,037	202.51	5,437	11,775
202.00	5,100	9,088	202.52	5,443	11,829
202.01	5,107	9,139	202.53	5,450	11,884
202.02	5,113	9,190	202.54	5,456	11,938
202.03	5,120	9,241	202.55	5,463	11,993
202.04	5,126	9,292	202.56	5,470	12,047
202.05	5,133	9,344	202.57	5,476	12,102
202.06	5,140	9,395	202.58	5,483	12,157
202.07	5,146	9,447	202.59	5,489	12,212
202.08	5,153	9,498	202.60	5,496	12,267
202.09	5,159	9,550	202.61	5,503	12,322
202.10	5,166	9,601	202.62	5,509	12,377
202.11	5,173	9,653	202.63	5,516	12,432
202.12	5,179	9,705	202.64	5,522	12,487
202.13	5,186	9,756	202.65	5,529	12,542
202.14	5,192	9,808	202.66	5,536	12,598
202.15	5,199	9,860	202.67	5,542	12,653
202.16	5,206	9,912	202.68	5,549	12,708
202.17	5,212	9,964	202.69	5,555	12,764
202.18	5,219	10,017	202.70	5,562	12,820
202.19	5,225	10,069	202.71	5,569	12,875
202.20	5,232	10,121	202.72	5,575	12,931
202.21	5,239	10,173	202.73	5,582	12,987
202.22	5,245	10,226	202.74	5,588	13,043
202.23	5,252	10,278	202.75	5,595	13,099
202.24	5,258	10,331	202.76	5,602	13,155
202.25	5,265	10,384	202.77	5,608	13,211
202.26	5,272	10,436	202.78	5,615	13,267
202.27	5,278	10,489	202.79	5,621	13,323
202.28	5,285	10,542	202.80	5,628	13,379
202.29	5,291	10,595	202.81	5,635	13,435
202.30	5,298	10,648	202.82	5,641	13,492
202.31	5,305	10,701	202.83	5,648	13,548
202.32	5,311	10,754	202.84	5,654	13,605
202.33	5,318	10,807	202.85	5,661	13,661
202.34	5,324	10,860	202.86	5,668	13,718
202.35	5,331	10,913	202.87	5,674	13,775
202.36	5,338	10,967	202.88	5,681	13,831
202.37	5,344	11,020	202.89	5,687	13,888
202.38	5,351	11,074	202.90	5,694	13,945
202.39	5,357	11,127	202.91	5,701	14,002
202.40	5,364	11,181	202.92	5,707	14,059
202.41	5,371	11,234	202.93	5,714	14,116
202.42	5,377	11,288	202.94	5,720	14,173
202.43	5,384	11,342	202.95	5,727	14,231
202.44	5,390	11,396	202.96	5,734	14,288
202.45	5,397	11,450	202.97	5,740	14,345
202.46	5,404	11,504	202.98	5,747	14,403
202.47	5,410	11,558	202.99	5,753	14,460
202.48	5,417	11,612	203.00	5,760	14,518

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.01	5,767	14,576	203.53	6,110	17,664
203.02	5,773	14,633	203.54	6,117	17,725
203.03	5,780	14,691	203.55	6,124	17,786
203.04	5,786	14,749	203.56	6,130	17,847
203.05	5,793	14,807	203.57	6,137	17,908
203.06	5,800	14,865	203.58	6,143	17,970
203.07	5,806	14,923	203.59	6,150	18,031
203.08	5,813	14,981	203.60	6,157	18,093
203.09	5,819	15,039	203.61	6,163	18,154
203.10	5,826	15,097	203.62	6,170	18,216
203.11	5,833	15,155	203.63	6,176	18,278
203.12	5,839	15,214	203.64	6,183	18,340
203.13	5,846	15,272	203.65	6,190	18,402
203.14	5,853	15,331	203.66	6,196	18,463
203.15	5,859	15,389	203.67	6,203	18,525
203.16	5,866	15,448	203.68	6,209	18,588
203.17	5,872	15,507	203.69	6,216	18,650
203.18	5,879	15,565	203.70	6,223	18,712
203.19	5,886	15,624	203.71	6,229	18,774
203.20	5,892	15,683	203.72	6,236	18,836
203.21	5,899	15,742	203.73	6,243	18,899
203.22	5,905	15,801	203.74	6,249	18,961
203.23	5,912	15,860	203.75	6,256	19,024
203.24	5,919	15,919	203.76	6,262	19,086
203.25	5,925	15,979	203.77	6,269	19,149
203.26	5,932	16,038	203.78	6,276	19,212
203.27	5,938	16,097	203.79	6,282	19,275
203.28	5,945	16,157	203.80	6,289	19,337
203.29	5,952	16,216	203.81	6,295	19,400
203.30	5,958	16,276	203.82	6,302	19,463
203.31	5,965	16,335	203.83	6,309	19,526
203.32	5,972	16,395	203.84	6,315	19,590
203.33	5,978	16,455	203.85	6,322	19,653
203.34	5,985	16,515	203.86	6,328	19,716
203.35	5,991	16,574	203.87	6,335	19,779
203.36	5,998	16,634	203.88	6,342	19,843
203.37	6,005	16,694	203.89	6,348	19,906
203.38	6,011	16,754	203.90	6,355	19,970
203.39	6,018	16,815	203.91	6,362	20,033
203.40	6,024	16,875	203.92	6,368	20,097
203.41	6,031	16,935	203.93	6,375	20,161
203.42	6,038	16,995	203.94	6,381	20,224
203.43	6,044	17,056	203.95	6,388	20,288
203.44	6,051	17,116	203.96	6,395	20,352
203.45	6,057	17,177	203.97	6,401	20,416
203.46	6,064	17,237	203.98	6,408	20,480
203.47	6,071	17,298	203.99	6,414	20,544
203.48	6,077	17,359	204.00	6,421	20,608
203.49	6,084	17,420	204.01	6,428	20,673
203.50	6,091	17,481	204.02	6,434	20,737
203.51	6,097	17,541	204.03	6,441	20,801
203.52	6,104	17,602	204.04	6,447	20,866

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.05	6,454	20,930	204.57	6,797	24,376
204.06	6,461	20,995	204.58	6,804	24,444
204.07	6,467	21,059	204.59	6,810	24,512
204.08	6,474	21,124	204.60	6,817	24,580
204.09	6,480	21,189	204.61	6,824	24,648
204.10	6,487	21,254	204.62	6,830	24,716
204.11	6,494	21,319	204.63	6,837	24,785
204.12	6,500	21,384	204.64	6,843	24,853
204.13	6,507	21,449	204.65	6,850	24,921
204.14	6,513	21,514	204.66	6,857	24,990
204.15	6,520	21,579	204.67	6,863	25,059
204.16	6,527	21,644	204.68	6,870	25,127
204.17	6,533	21,710	204.69	6,876	25,196
204.18	6,540	21,775	204.70	6,883	25,265
204.19	6,546	21,840	204.71	6,890	25,334
204.20	6,553	21,906	204.72	6,896	25,403
204.21	6,560	21,971	204.73	6,903	25,472
204.22	6,566	22,037	204.74	6,909	25,541
204.23	6,573	22,103	204.75	6,916	25,610
204.24	6,579	22,168	204.76	6,923	25,679
204.25	6,586	22,234	204.77	6,929	25,748
204.26	6,593	22,300	204.78	6,936	25,818
204.27	6,599	22,366	204.79	6,942	25,887
204.28	6,606	22,432	204.80	6,949	25,956
204.29	6,612	22,498	204.81	6,956	26,026
204.30	6,619	22,564	204.82	6,962	26,096
204.31	6,626	22,631	204.83	6,969	26,165
204.32	6,632	22,697	204.84	6,975	26,235
204.33	6,639	22,763	204.85	6,982	26,305
204.34	6,645	22,830	204.86	6,989	26,375
204.35	6,652	22,896	204.87	6,995	26,444
204.36	6,659	22,963	204.88	7,002	26,514
204.37	6,665	23,029	204.89	7,008	26,584
204.38	6,672	23,096	204.90	7,015	26,655
204.39	6,678	23,163	204.91	7,022	26,725
204.40	6,685	23,230	204.92	7,028	26,795
204.41	6,692	23,296	204.93	7,035	26,865
204.42	6,698	23,363	204.94	7,041	26,936
204.43	6,705	23,430	204.95	7,048	27,006
204.44	6,711	23,498	204.96	7,055	27,077
204.45	6,718	23,565	204.97	7,061	27,147
204.46	6,725	23,632	204.98	7,068	27,218
204.47	6,731	23,699	204.99	7,074	27,289
204.48	6,738	23,767	205.00	7,081	27,359
204.49	6,744	23,834	205.01	7,088	27,430
204.50	6,751	23,901	205.02	7,094	27,501
204.51	6,758	23,969	205.03	7,101	27,572
204.52	6,764	24,037	205.04	7,107	27,643
204.53	6,771	24,104	205.05	7,114	27,714
204.54	6,777	24,172	205.06	7,121	27,785
204.55	6,784	24,240	205.07	7,127	27,857
204.56	6,791	24,308	205.08	7,134	27,928

Stage-Area-Storage for Pond B-54: Basin #54 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
205.09	7,140	27,999
205.10	7,147	28,071
205.11	7,154	28,142
205.12	7,160	28,214
205.13	7,167	28,286
205.14	7,173	28,357
205.15	7,180	28,429
205.16	7,187	28,501
205.17	7,193	28,573
205.18	7,200	28,645
205.19	7,206	28,717
205.20	7,213	28,789
205.21	7,220	28,861
205.22	7,226	28,933
205.23	7,233	29,005
205.24	7,239	29,078
205.25	7,246	29,150
205.26	7,253	29,223
205.27	7,259	29,295
205.28	7,266	29,368
205.29	7,272	29,441
205.30	7,279	29,513
205.31	7,286	29,586
205.32	7,292	29,659
205.33	7,299	29,732
205.34	7,305	29,805
205.35	7,312	29,878
205.36	7,319	29,951
205.37	7,325	30,025
205.38	7,332	30,098
205.39	7,338	30,171
205.40	7,345	30,245
205.41	7,352	30,318
205.42	7,358	30,392
205.43	7,365	30,465
205.44	7,371	30,539
205.45	7,378	30,613
205.46	7,385	30,686
205.47	7,391	30,760
205.48	7,398	30,834
205.49	7,404	30,908
205.50	**7,411**	**30,982**

Summary for Pond B-55: Basin #55

Inflow Area = 2.301 ac, 47.33% Impervious, Inflow Depth = 9.36" for Future 100 yr event
Inflow = 21.52 cfs @ 12.17 hrs, Volume= 1.794 af
Outflow = 12.80 cfs @ 12.30 hrs, Volume= 1.691 af, Atten= 41%, Lag= 7.9 min
Primary = 12.80 cfs @ 12.30 hrs, Volume= 1.691 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 195.39' @ 12.30 hrs Surf.Area= 5,997 sf Storage= 18,268 cf

Plug-Flow detention time= 88.9 min calculated for 1.689 af (94% of inflow)
Center-of-Mass det. time= 56.0 min (827.8 - 771.8)

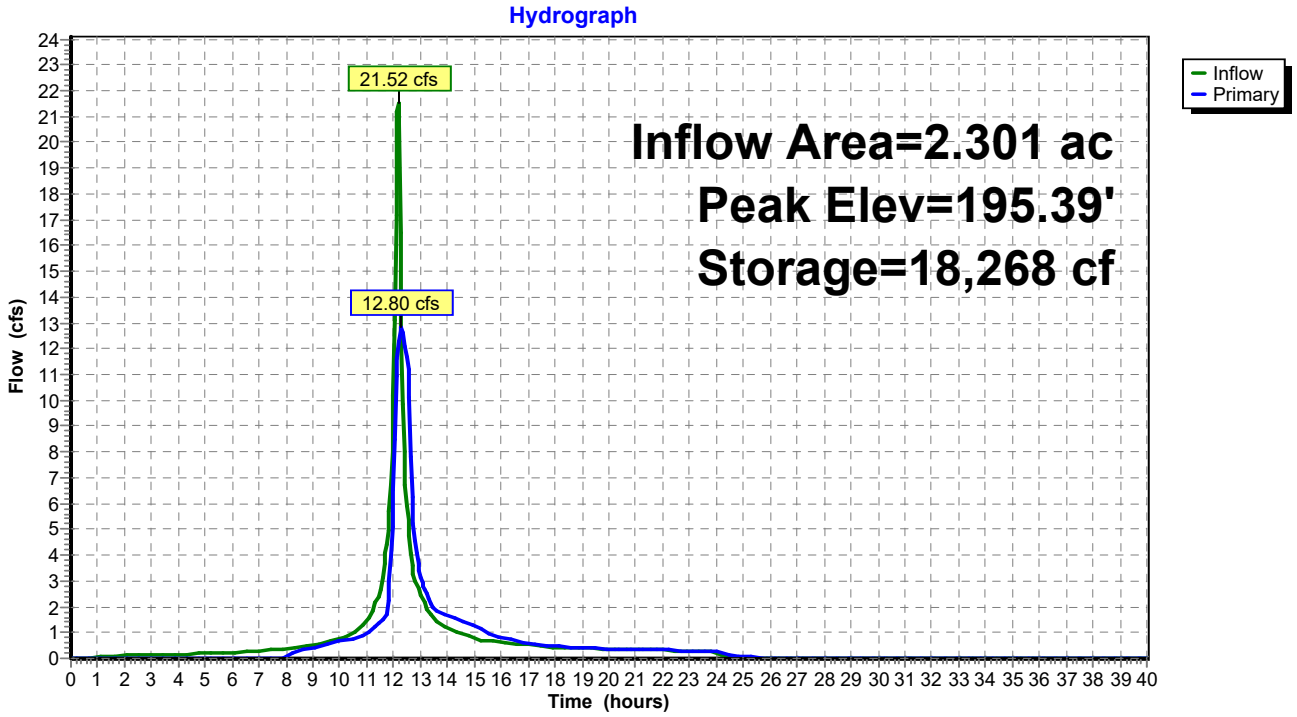
Volume	Invert	Avail.Storage	Storage Description
#1	191.56'	22,010 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.56	0	0	0
192.00	4,250	935	935
193.00	4,746	4,498	5,433
194.00	5,257	5,002	10,434
195.00	5,784	5,521	15,955
196.00	6,327	6,056	22,010

Device	Routing	Invert	Outlet Devices
#1	Primary	191.65'	**18.0" Round Culvert** L= 112.0' Ke= 0.500 Inlet / Outlet Invert= 191.65' / 191.00' S= 0.0058 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.80'	**22.0" W x 2.5" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.82'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	195.45'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=12.80 cfs @ 12.30 hrs HW=195.39' (Free Discharge)
- **1=Culvert** (Barrel Controls 12.80 cfs @ 7.24 fps)
  - **2=Orifice/Grate** (Passes < 2.90 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 23.74 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-55: Basin #55



Stage-Discharge for Pond B-55: Basin #55

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.56	0.00	192.08	0.00	192.60	0.00	193.12	0.85
191.57	0.00	192.09	0.00	192.61	0.00	193.13	0.87
191.58	0.00	192.10	0.00	192.62	0.00	193.14	0.89
191.59	0.00	192.11	0.00	192.63	0.00	193.15	0.90
191.60	0.00	192.12	0.00	192.64	0.00	193.16	0.92
191.61	0.00	192.13	0.00	192.65	0.00	193.17	0.94
191.62	0.00	192.14	0.00	192.66	0.00	193.18	0.96
191.63	0.00	192.15	0.00	192.67	0.00	193.19	0.98
191.64	0.00	192.16	0.00	192.68	0.00	193.20	0.99
191.65	0.00	192.17	0.00	192.69	0.00	193.21	1.01
191.66	0.00	192.18	0.00	192.70	0.00	193.22	1.03
191.67	0.00	192.19	0.00	192.71	0.00	193.23	1.05
191.68	0.00	192.20	0.00	192.72	0.00	193.24	1.06
191.69	0.00	192.21	0.00	192.73	0.00	193.25	1.08
191.70	0.00	192.22	0.00	192.74	0.00	193.26	1.09
191.71	0.00	192.23	0.00	192.75	0.00	193.27	1.11
191.72	0.00	192.24	0.00	192.76	0.00	193.28	1.12
191.73	0.00	192.25	0.00	192.77	0.00	193.29	1.14
191.74	0.00	192.26	0.00	192.78	0.00	193.30	1.15
191.75	0.00	192.27	0.00	192.79	0.00	193.31	1.17
191.76	0.00	192.28	0.00	192.80	0.00	193.32	1.18
191.77	0.00	192.29	0.00	192.81	0.01	193.33	1.20
191.78	0.00	192.30	0.00	192.82	0.02	193.34	1.21
191.79	0.00	192.31	0.00	192.83	0.03	193.35	1.23
191.80	0.00	192.32	0.00	192.84	0.05	193.36	1.24
191.81	0.00	192.33	0.00	192.85	0.07	193.37	1.25
191.82	0.00	192.34	0.00	192.86	0.09	193.38	1.27
191.83	0.00	192.35	0.00	192.87	0.11	193.39	1.28
191.84	0.00	192.36	0.00	192.88	0.13	193.40	1.29
191.85	0.00	192.37	0.00	192.89	0.16	193.41	1.31
191.86	0.00	192.38	0.00	192.90	0.19	193.42	1.32
191.87	0.00	192.39	0.00	192.91	0.21	193.43	1.33
191.88	0.00	192.40	0.00	192.92	0.24	193.44	1.34
191.89	0.00	192.41	0.00	192.93	0.28	193.45	1.36
191.90	0.00	192.42	0.00	192.94	0.31	193.46	1.37
191.91	0.00	192.43	0.00	192.95	0.34	193.47	1.38
191.92	0.00	192.44	0.00	192.96	0.38	193.48	1.39
191.93	0.00	192.45	0.00	192.97	0.41	193.49	1.41
191.94	0.00	192.46	0.00	192.98	0.45	193.50	1.42
191.95	0.00	192.47	0.00	192.99	0.49	193.51	1.43
191.96	0.00	192.48	0.00	193.00	0.53	193.52	1.44
191.97	0.00	192.49	0.00	193.01	0.57	193.53	1.45
191.98	0.00	192.50	0.00	193.02	0.60	193.54	1.46
191.99	0.00	192.51	0.00	193.03	0.63	193.55	1.48
192.00	0.00	192.52	0.00	193.04	0.66	193.56	1.49
192.01	0.00	192.53	0.00	193.05	0.69	193.57	1.50
192.02	0.00	192.54	0.00	193.06	0.71	193.58	1.51
192.03	0.00	192.55	0.00	193.07	0.74	193.59	1.52
192.04	0.00	192.56	0.00	193.08	0.76	193.60	1.53
192.05	0.00	192.57	0.00	193.09	0.78	193.61	1.54
192.06	0.00	192.58	0.00	193.10	0.80	193.62	1.55
192.07	0.00	192.59	0.00	193.11	0.82	193.63	1.57

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.64	1.58	194.16	4.61	194.68	11.12	195.20	12.37
193.65	1.59	194.17	4.73	194.69	11.14	195.21	12.39
193.66	1.60	194.18	4.85	194.70	11.17	195.22	12.42
193.67	1.61	194.19	4.97	194.71	11.19	195.23	12.44
193.68	1.62	194.20	5.10	194.72	11.22	195.24	12.46
193.69	1.63	194.21	5.22	194.73	11.24	195.25	12.48
193.70	1.64	194.22	5.35	194.74	11.27	195.26	12.51
193.71	1.65	194.23	5.48	194.75	11.29	195.27	12.53
193.72	1.66	194.24	5.61	194.76	11.32	195.28	12.55
193.73	1.67	194.25	5.74	194.77	11.34	195.29	12.58
193.74	1.68	194.26	5.87	194.78	11.37	195.30	12.60
193.75	1.69	194.27	6.01	194.79	11.39	195.31	12.62
193.76	1.70	194.28	6.14	194.80	11.42	195.32	12.64
193.77	1.71	194.29	6.28	194.81	11.44	195.33	12.66
193.78	1.72	194.30	6.42	194.82	11.47	195.34	12.69
193.79	1.73	194.31	6.56	194.83	11.49	195.35	12.71
193.80	1.74	194.32	6.70	194.84	11.52	195.36	12.73
193.81	1.75	194.33	6.84	194.85	11.54	195.37	12.75
193.82	1.76	194.34	6.98	194.86	11.57	195.38	12.78
193.83	1.78	194.35	7.12	194.87	11.59	195.39	12.80
193.84	1.82	194.36	7.27	194.88	11.61	195.40	12.82
193.85	1.86	194.37	7.41	194.89	11.64	195.41	12.84
193.86	1.90	194.38	7.56	194.90	11.66	195.42	12.86
193.87	1.95	194.39	7.71	194.91	11.69	195.43	12.89
193.88	2.01	194.40	7.86	194.92	11.71	195.44	12.91
193.89	2.07	194.41	8.01	194.93	11.74	195.45	12.93
193.90	2.13	194.42	8.16	194.94	11.76	195.46	13.07
193.91	2.20	194.43	8.31	194.95	11.78	195.47	13.31
193.92	2.26	194.44	8.47	194.96	11.81	195.48	13.61
193.93	2.34	194.45	8.62	194.97	11.83	195.49	13.96
193.94	2.41	194.46	8.78	194.98	11.86	195.50	14.35
193.95	2.49	194.47	8.93	194.99	11.88	195.51	14.79
193.96	2.57	194.48	9.09	195.00	11.90	195.52	15.26
193.97	2.65	194.49	9.25	195.01	11.93	195.53	15.76
193.98	2.74	194.50	9.41	195.02	11.95	195.54	16.30
193.99	2.82	194.51	9.57	195.03	11.97	195.55	16.87
194.00	2.91	194.52	9.73	195.04	12.00	195.56	17.46
194.01	3.01	194.53	9.89	195.05	12.02	195.57	18.08
194.02	3.10	194.54	10.06	195.06	12.05	195.58	18.73
194.03	3.20	194.55	10.22	195.07	12.07	195.59	19.40
194.04	3.29	194.56	10.38	195.08	12.09	195.60	20.10
194.05	3.39	194.57	10.55	195.09	12.12	195.61	20.82
194.06	3.50	194.58	10.72	195.10	12.14	195.62	21.57
194.07	3.60	194.59	10.88	195.11	12.16	195.63	22.33
194.08	3.71	194.60	10.91	195.12	12.19	195.64	23.12
194.09	3.81	194.61	10.94	195.13	12.21	195.65	23.93
194.10	3.92	194.62	10.96	195.14	12.23	195.66	24.79
194.11	4.03	194.63	10.99	195.15	12.26	195.67	25.69
194.12	4.14	194.64	11.01	195.16	12.28	195.68	26.61
194.13	4.26	194.65	11.04	195.17	12.30	195.69	27.55
194.14	4.37	194.66	11.06	195.18	12.32	195.70	28.52
194.15	4.49	194.67	11.09	195.19	12.35	195.71	29.52

Stage-Discharge for Pond B-55: Basin #55 (continued)

Elevation (feet)	Primary (cfs)
195.72	30.53
195.73	31.58
195.74	32.65
195.75	33.74
195.76	34.86
195.77	36.00
195.78	37.17
195.79	38.36
195.80	39.57
195.81	40.81
195.82	42.08
195.83	43.36
195.84	44.67
195.85	46.01
195.86	47.40
195.87	48.81
195.88	50.25
195.89	51.71
195.90	53.20
195.91	54.72
195.92	56.26
195.93	57.83
195.94	59.43
195.95	61.05
195.96	62.70
195.97	64.37
195.98	66.07
195.99	67.80
196.00	**69.56**

Stage-Area-Storage for Pond B-55: Basin #55

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.56	0	0
191.57	97	0
191.58	193	2
191.59	290	4
191.60	386	8
191.61	483	12
191.62	580	17
191.63	676	24
191.64	773	31
191.65	869	39
191.66	966	48
191.67	1,063	58
191.68	1,159	70
191.69	1,256	82
191.70	1,352	95
191.71	1,449	109
191.72	1,545	124
191.73	1,642	140
191.74	1,739	156
191.75	1,835	174
191.76	1,932	193
191.77	2,028	213
191.78	2,125	234
191.79	2,222	255
191.80	2,318	278
191.81	2,415	302
191.82	2,511	326
191.83	2,608	352
191.84	2,705	379
191.85	2,801	406
191.86	2,898	435
191.87	2,994	464
191.88	3,091	495
191.89	3,188	526
191.90	3,284	558
191.91	3,381	592
191.92	3,477	626
191.93	3,574	661
191.94	3,670	697
191.95	3,767	735
191.96	3,864	773
191.97	3,960	812
191.98	4,057	852
191.99	4,153	893
192.00	4,250	935
192.01	4,255	978
192.02	4,260	1,020
192.03	4,265	1,063
192.04	4,270	1,105
192.05	4,275	1,148
192.06	4,280	1,191
192.07	4,285	1,234
192.08	4,290	1,277
192.09	4,295	1,320
192.10	4,300	1,362
192.11	4,305	1,406
192.12	4,310	1,449
192.13	4,314	1,492
192.14	4,319	1,535
192.15	4,324	1,578
192.16	4,329	1,621
192.17	4,334	1,665
192.18	4,339	1,708
192.19	4,344	1,751
192.20	4,349	1,795
192.21	4,354	1,838
192.22	4,359	1,882
192.23	4,364	1,926
192.24	4,369	1,969
192.25	4,374	2,013
192.26	4,379	2,057
192.27	4,384	2,101
192.28	4,389	2,144
192.29	4,394	2,188
192.30	4,399	2,232
192.31	4,404	2,276
192.32	4,409	2,320
192.33	4,414	2,365
192.34	4,419	2,409
192.35	4,424	2,453
192.36	4,429	2,497
192.37	4,434	2,541
192.38	4,438	2,586
192.39	4,443	2,630
192.40	4,448	2,675
192.41	4,453	2,719
192.42	4,458	2,764
192.43	4,463	2,808
192.44	4,468	2,853
192.45	4,473	2,898
192.46	4,478	2,942
192.47	4,483	2,987
192.48	4,488	3,032
192.49	4,493	3,077
192.50	4,498	3,122
192.51	4,503	3,167
192.52	4,508	3,212
192.53	4,513	3,257
192.54	4,518	3,302
192.55	4,523	3,348
192.56	4,528	3,393
192.57	4,533	3,438
192.58	4,538	3,483
192.59	4,543	3,529

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.60	4,548	3,574	193.12	4,807	6,006
192.61	4,553	3,620	193.13	4,812	6,054
192.62	4,558	3,665	193.14	4,818	6,102
192.63	4,562	3,711	193.15	4,823	6,151
192.64	4,567	3,757	193.16	4,828	6,199
192.65	4,572	3,802	193.17	4,833	6,247
192.66	4,577	3,848	193.18	4,838	6,296
192.67	4,582	3,894	193.19	4,843	6,344
192.68	4,587	3,940	193.20	4,848	6,392
192.69	4,592	3,986	193.21	4,853	6,441
192.70	4,597	4,032	193.22	4,858	6,489
192.71	4,602	4,078	193.23	4,864	6,538
192.72	4,607	4,124	193.24	4,869	6,587
192.73	4,612	4,170	193.25	4,874	6,635
192.74	4,617	4,216	193.26	4,879	6,684
192.75	4,622	4,262	193.27	4,884	6,733
192.76	4,627	4,308	193.28	4,889	6,782
192.77	4,632	4,355	193.29	4,894	6,831
192.78	4,637	4,401	193.30	4,899	6,880
192.79	4,642	4,447	193.31	4,904	6,929
192.80	4,647	4,494	193.32	4,910	6,978
192.81	4,652	4,540	193.33	4,915	7,027
192.82	4,657	4,587	193.34	4,920	7,076
192.83	4,662	4,633	193.35	4,925	7,125
192.84	4,667	4,680	193.36	4,930	7,175
192.85	4,672	4,727	193.37	4,935	7,224
192.86	4,677	4,773	193.38	4,940	7,273
192.87	4,682	4,820	193.39	4,945	7,323
192.88	4,686	4,867	193.40	4,950	7,372
192.89	4,691	4,914	193.41	4,956	7,422
192.90	4,696	4,961	193.42	4,961	7,471
192.91	4,701	5,008	193.43	4,966	7,521
192.92	4,706	5,055	193.44	4,971	7,571
192.93	4,711	5,102	193.45	4,976	7,620
192.94	4,716	5,149	193.46	4,981	7,670
192.95	4,721	5,196	193.47	4,986	7,720
192.96	4,726	5,244	193.48	4,991	7,770
192.97	4,731	5,291	193.49	4,996	7,820
192.98	4,736	5,338	193.50	5,002	7,870
192.99	4,741	5,386	193.51	5,007	7,920
193.00	4,746	5,433	193.52	5,012	7,970
193.01	4,751	5,480	193.53	5,017	8,020
193.02	4,756	5,528	193.54	5,022	8,070
193.03	4,761	5,576	193.55	5,027	8,121
193.04	4,766	5,623	193.56	5,032	8,171
193.05	4,772	5,671	193.57	5,037	8,221
193.06	4,777	5,719	193.58	5,042	8,272
193.07	4,782	5,766	193.59	5,047	8,322
193.08	4,787	5,814	193.60	5,053	8,373
193.09	4,792	5,862	193.61	5,058	8,423
193.10	4,797	5,910	193.62	5,063	8,474
193.11	4,802	5,958	193.63	5,068	8,524

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.64	5,073	8,575	194.16	5,341	11,282
193.65	5,078	8,626	194.17	5,347	11,336
193.66	5,083	8,677	194.18	5,352	11,389
193.67	5,088	8,728	194.19	5,357	11,443
193.68	5,093	8,778	194.20	5,362	11,496
193.69	5,099	8,829	194.21	5,368	11,550
193.70	5,104	8,880	194.22	5,373	11,604
193.71	5,109	8,931	194.23	5,378	11,658
193.72	5,114	8,983	194.24	5,383	11,711
193.73	5,119	9,034	194.25	5,389	11,765
193.74	5,124	9,085	194.26	5,394	11,819
193.75	5,129	9,136	194.27	5,399	11,873
193.76	5,134	9,188	194.28	5,405	11,927
193.77	5,139	9,239	194.29	5,410	11,981
193.78	5,145	9,290	194.30	5,415	12,035
193.79	5,150	9,342	194.31	5,420	12,089
193.80	5,155	9,393	194.32	5,426	12,144
193.81	5,160	9,445	194.33	5,431	12,198
193.82	5,165	9,497	194.34	5,436	12,252
193.83	5,170	9,548	194.35	5,441	12,307
193.84	5,175	9,600	194.36	5,447	12,361
193.85	5,180	9,652	194.37	5,452	12,416
193.86	5,185	9,704	194.38	5,457	12,470
193.87	5,191	9,755	194.39	5,463	12,525
193.88	5,196	9,807	194.40	5,468	12,579
193.89	5,201	9,859	194.41	5,473	12,634
193.90	5,206	9,911	194.42	5,478	12,689
193.91	5,211	9,963	194.43	5,484	12,744
193.92	5,216	10,016	194.44	5,489	12,799
193.93	5,221	10,068	194.45	5,494	12,854
193.94	5,226	10,120	194.46	5,499	12,908
193.95	5,231	10,172	194.47	5,505	12,963
193.96	5,237	10,225	194.48	5,510	13,019
193.97	5,242	10,277	194.49	5,515	13,074
193.98	5,247	10,329	194.50	5,521	13,129
193.99	5,252	10,382	194.51	5,526	13,184
194.00	5,257	10,434	194.52	5,531	13,239
194.01	5,262	10,487	194.53	5,536	13,295
194.02	5,268	10,540	194.54	5,542	13,350
194.03	5,273	10,592	194.55	5,547	13,406
194.04	5,278	10,645	194.56	5,552	13,461
194.05	5,283	10,698	194.57	5,557	13,517
194.06	5,289	10,751	194.58	5,563	13,572
194.07	5,294	10,804	194.59	5,568	13,628
194.08	5,299	10,857	194.60	5,573	13,684
194.09	5,304	10,910	194.61	5,578	13,739
194.10	5,310	10,963	194.62	5,584	13,795
194.11	5,315	11,016	194.63	5,589	13,851
194.12	5,320	11,069	194.64	5,594	13,907
194.13	5,326	11,122	194.65	5,600	13,963
194.14	5,331	11,176	194.66	5,605	14,019
194.15	5,336	11,229	194.67	5,610	14,075

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.68	5,615	14,131	195.20	5,893	17,123
194.69	5,621	14,187	195.21	5,898	17,182
194.70	5,626	14,244	195.22	5,903	17,241
194.71	5,631	14,300	195.23	5,909	17,300
194.72	5,636	14,356	195.24	5,914	17,359
194.73	5,642	14,413	195.25	5,920	17,418
194.74	5,647	14,469	195.26	5,925	17,477
194.75	5,652	14,525	195.27	5,931	17,536
194.76	5,658	14,582	195.28	5,936	17,596
194.77	5,663	14,639	195.29	5,941	17,655
194.78	5,668	14,695	195.30	5,947	17,715
194.79	5,673	14,752	195.31	5,952	17,774
194.80	5,679	14,809	195.32	5,958	17,834
194.81	5,684	14,866	195.33	5,963	17,893
194.82	5,689	14,922	195.34	5,969	17,953
194.83	5,694	14,979	195.35	5,974	18,013
194.84	5,700	15,036	195.36	5,979	18,072
194.85	5,705	15,093	195.37	5,985	18,132
194.86	5,710	15,150	195.38	5,990	18,192
194.87	5,715	15,208	195.39	5,996	18,252
194.88	5,721	15,265	195.40	6,001	18,312
194.89	5,726	15,322	195.41	6,007	18,372
194.90	5,731	15,379	195.42	6,012	18,432
194.91	5,737	15,437	195.43	6,017	18,492
194.92	5,742	15,494	195.44	6,023	18,553
194.93	5,747	15,551	195.45	6,028	18,613
194.94	5,752	15,609	195.46	6,034	18,673
194.95	5,758	15,666	195.47	6,039	18,733
194.96	5,763	15,724	195.48	6,045	18,794
194.97	5,768	15,782	195.49	6,050	18,854
194.98	5,773	15,839	195.50	6,056	18,915
194.99	5,779	15,897	195.51	6,061	18,975
195.00	5,784	15,955	195.52	6,066	19,036
195.01	5,789	16,013	195.53	6,072	19,097
195.02	5,795	16,071	195.54	6,077	19,158
195.03	5,800	16,129	195.55	6,083	19,218
195.04	5,806	16,187	195.56	6,088	19,279
195.05	5,811	16,245	195.57	6,094	19,340
195.06	5,817	16,303	195.58	6,099	19,401
195.07	5,822	16,361	195.59	6,104	19,462
195.08	5,827	16,419	195.60	6,110	19,523
195.09	5,833	16,478	195.61	6,115	19,584
195.10	5,838	16,536	195.62	6,121	19,645
195.11	5,844	16,595	195.63	6,126	19,707
195.12	5,849	16,653	195.64	6,132	19,768
195.13	5,855	16,712	195.65	6,137	19,829
195.14	5,860	16,770	195.66	6,142	19,891
195.15	5,865	16,829	195.67	6,148	19,952
195.16	5,871	16,887	195.68	6,153	20,014
195.17	5,876	16,946	195.69	6,159	20,075
195.18	5,882	17,005	195.70	6,164	20,137
195.19	5,887	17,064	195.71	6,170	20,199

Stage-Area-Storage for Pond B-55: Basin #55 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.72	6,175	20,260
195.73	6,180	20,322
195.74	6,186	20,384
195.75	6,191	20,446
195.76	6,197	20,508
195.77	6,202	20,570
195.78	6,208	20,632
195.79	6,213	20,694
195.80	6,218	20,756
195.81	6,224	20,818
195.82	6,229	20,880
195.83	6,235	20,943
195.84	6,240	21,005
195.85	6,246	21,068
195.86	6,251	21,130
195.87	6,256	21,193
195.88	6,262	21,255
195.89	6,267	21,318
195.90	6,273	21,381
195.91	6,278	21,443
195.92	6,284	21,506
195.93	6,289	21,569
195.94	6,294	21,632
195.95	6,300	21,695
195.96	6,305	21,758
195.97	6,311	21,821
195.98	6,316	21,884
195.99	6,322	21,947
196.00	**6,327**	**22,010**

Summary for Pond B-56: Basin #56

Inflow Area = 1.512 ac, 31.08% Impervious, Inflow Depth = 8.86" for Future 100 yr event
Inflow = 13.72 cfs @ 12.17 hrs, Volume= 1.116 af
Outflow = 7.82 cfs @ 12.31 hrs, Volume= 1.069 af, Atten= 43%, Lag= 8.4 min
Primary = 7.82 cfs @ 12.31 hrs, Volume= 1.069 af
Routed to Pond B-51 : Basin #51

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 193.62' @ 12.31 hrs Surf.Area= 5,790 sf Storage= 9,818 cf

Plug-Flow detention time= 64.5 min calculated for 1.068 af (96% of inflow)
Center-of-Mass det. time= 39.9 min (823.2 - 783.3)

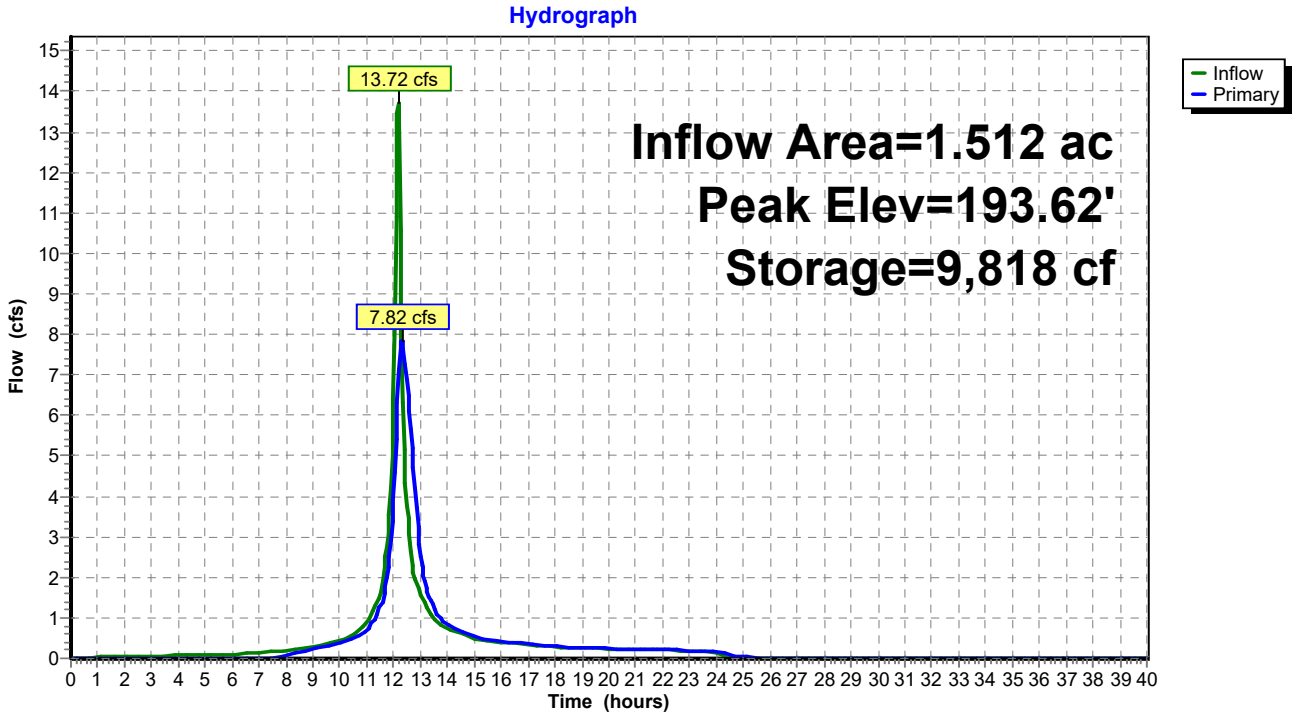
Volume	Invert	Avail.Storage	Storage Description
#1	191.57'	25,032 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
191.57	0	0	0
192.00	5,021	1,080	1,080
193.00	5,490	5,256	6,335
194.00	5,976	5,733	12,068
195.00	6,478	6,227	18,295
196.00	6,995	6,737	25,032

Device	Routing	Invert	Outlet Devices
#1	Primary	191.57'	**18.0" Round Culvert** L= 29.0' Ke= 0.500 Inlet / Outlet Invert= 191.57' / 191.42' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	192.19'	**36.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	193.62'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	194.99'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=7.80 cfs @ 12.31 hrs HW=193.61' (Free Discharge)
- **1=Culvert** (Passes 7.80 cfs of 8.28 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 7.80 cfs @ 5.20 fps)
  - **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-56: Basin #56



Stage-Discharge for Pond B-56: Basin #56

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
191.57	0.00	192.09	0.00	192.61	2.62	193.13	5.97
191.58	0.00	192.10	0.00	192.62	2.72	193.14	6.01
191.59	0.00	192.11	0.00	192.63	2.81	193.15	6.05
191.60	0.00	192.12	0.00	192.64	2.91	193.16	6.10
191.61	0.00	192.13	0.00	192.65	3.00	193.17	6.14
191.62	0.00	192.14	0.00	192.66	3.10	193.18	6.18
191.63	0.00	192.15	0.00	192.67	3.20	193.19	6.23
191.64	0.00	192.16	0.00	192.68	3.30	193.20	6.27
191.65	0.00	192.17	0.00	192.69	3.40	193.21	6.31
191.66	0.00	192.18	0.00	192.70	3.50	193.22	6.35
191.67	0.00	192.19	0.00	192.71	3.58	193.23	6.39
191.68	0.00	192.20	0.01	192.72	3.67	193.24	6.43
191.69	0.00	192.21	0.03	192.73	3.74	193.25	6.47
191.70	0.00	192.22	0.05	192.74	3.82	193.26	6.51
191.71	0.00	192.23	0.08	192.75	3.89	193.27	6.55
191.72	0.00	192.24	0.11	192.76	3.97	193.28	6.59
191.73	0.00	192.25	0.14	192.77	4.04	193.29	6.63
191.74	0.00	192.26	0.18	192.78	4.10	193.30	6.67
191.75	0.00	192.27	0.22	192.79	4.17	193.31	6.71
191.76	0.00	192.28	0.26	192.80	4.24	193.32	6.75
191.77	0.00	192.29	0.30	192.81	4.30	193.33	6.79
191.78	0.00	192.30	0.35	192.82	4.36	193.34	6.83
191.79	0.00	192.31	0.40	192.83	4.43	193.35	6.87
191.80	0.00	192.32	0.45	192.84	4.49	193.36	6.91
191.81	0.00	192.33	0.50	192.85	4.55	193.37	6.94
191.82	0.00	192.34	0.56	192.86	4.61	193.38	6.98
191.83	0.00	192.35	0.62	192.87	4.66	193.39	7.02
191.84	0.00	192.36	0.67	192.88	4.72	193.40	7.06
191.85	0.00	192.37	0.74	192.89	4.78	193.41	7.09
191.86	0.00	192.38	0.80	192.90	4.83	193.42	7.13
191.87	0.00	192.39	0.86	192.91	4.89	193.43	7.17
191.88	0.00	192.40	0.93	192.92	4.94	193.44	7.20
191.89	0.00	192.41	0.99	192.93	5.00	193.45	7.24
191.90	0.00	192.42	1.06	192.94	5.05	193.46	7.28
191.91	0.00	192.43	1.13	192.95	5.10	193.47	7.31
191.92	0.00	192.44	1.20	192.96	5.16	193.48	7.35
191.93	0.00	192.45	1.28	192.97	5.21	193.49	7.38
191.94	0.00	192.46	1.35	192.98	5.26	193.50	7.42
191.95	0.00	192.47	1.43	192.99	5.31	193.51	7.45
191.96	0.00	192.48	1.50	193.00	5.36	193.52	7.49
191.97	0.00	192.49	1.58	193.01	5.41	193.53	7.52
191.98	0.00	192.50	1.66	193.02	5.46	193.54	7.56
191.99	0.00	192.51	1.74	193.03	5.50	193.55	7.59
192.00	0.00	192.52	1.83	193.04	5.55	193.56	7.63
192.01	0.00	192.53	1.91	193.05	5.60	193.57	7.66
192.02	0.00	192.54	1.99	193.06	5.65	193.58	7.70
192.03	0.00	192.55	2.08	193.07	5.69	193.59	7.73
192.04	0.00	192.56	2.17	193.08	5.74	193.60	7.76
192.05	0.00	192.57	2.26	193.09	5.79	193.61	7.80
192.06	0.00	192.58	2.35	193.10	5.83	193.62	7.83
192.07	0.00	192.59	2.44	193.11	5.88	193.63	7.88
192.08	0.00	192.60	2.53	193.12	5.92	193.64	7.93

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
193.65	8.00	194.17	11.13	194.69	13.10	195.21	26.75
193.66	8.07	194.18	11.17	194.70	13.13	195.22	27.67
193.67	8.14	194.19	11.22	194.71	13.15	195.23	28.62
193.68	8.22	194.20	11.26	194.72	13.18	195.24	29.59
193.69	8.30	194.21	11.30	194.73	13.21	195.25	30.59
193.70	8.39	194.22	11.35	194.74	13.24	195.26	31.61
193.71	8.48	194.23	11.39	194.75	13.26	195.27	32.66
193.72	8.57	194.24	11.43	194.76	13.29	195.28	33.74
193.73	8.66	194.25	11.48	194.77	13.32	195.29	34.83
193.74	8.76	194.26	11.52	194.78	13.35	195.30	35.95
193.75	8.86	194.27	11.56	194.79	13.37	195.31	37.10
193.76	8.97	194.28	11.61	194.80	13.40	195.32	38.27
193.77	9.07	194.29	11.65	194.81	13.43	195.33	39.46
193.78	9.18	194.30	11.69	194.82	13.45	195.34	40.68
193.79	9.28	194.31	11.73	194.83	13.48	195.35	41.93
193.80	9.34	194.32	11.78	194.84	13.51	195.36	43.19
193.81	9.39	194.33	11.82	194.85	13.53	195.37	44.48
193.82	9.44	194.34	11.86	194.86	13.56	195.38	45.80
193.83	9.49	194.35	11.90	194.87	13.59	195.39	47.14
193.84	9.55	194.36	11.94	194.88	13.61	195.40	48.53
193.85	9.60	194.37	11.98	194.89	13.64	195.41	49.94
193.86	9.65	194.38	12.03	194.90	13.67	195.42	51.39
193.87	9.70	194.39	12.07	194.91	13.69	195.43	52.85
193.88	9.75	194.40	12.11	194.92	13.72	195.44	54.35
193.89	9.80	194.41	12.15	194.93	13.75	195.45	55.87
193.90	9.85	194.42	12.19	194.94	13.77	195.46	57.42
193.91	9.90	194.43	12.23	194.95	13.80	195.47	58.99
193.92	9.95	194.44	12.27	194.96	13.83	195.48	60.59
193.93	10.00	194.45	12.31	194.97	13.85	195.49	62.21
193.94	10.05	194.46	12.35	194.98	13.88	195.50	63.87
193.95	10.10	194.47	12.39	194.99	13.90	195.51	65.55
193.96	10.15	194.48	12.43	195.00	14.05	195.52	67.25
193.97	10.20	194.49	12.47	195.01	14.29	195.53	68.98
193.98	10.25	194.50	12.51	195.02	14.59	195.54	70.74
193.99	10.29	194.51	12.55	195.03	14.94	195.55	72.53
194.00	10.34	194.52	12.59	195.04	15.34	195.56	74.34
194.01	10.39	194.53	12.63	195.05	15.78	195.57	76.18
194.02	10.44	194.54	12.67	195.06	16.26	195.58	78.04
194.03	10.49	194.55	12.71	195.07	16.77	195.59	79.94
194.04	10.53	194.56	12.73	195.08	17.31	195.60	81.59
194.05	10.58	194.57	12.76	195.09	17.88	195.61	83.25
194.06	10.63	194.58	12.79	195.10	18.48	195.62	84.93
194.07	10.67	194.59	12.82	195.11	19.10	195.63	86.62
194.08	10.72	194.60	12.85	195.12	19.76	195.64	88.32
194.09	10.77	194.61	12.88	195.13	20.43	195.65	90.04
194.10	10.81	194.62	12.90	195.14	21.13	195.66	91.77
194.11	10.86	194.63	12.93	195.15	21.86	195.67	93.51
194.12	10.90	194.64	12.96	195.16	22.61	195.68	95.27
194.13	10.95	194.65	12.99	195.17	23.38	195.69	97.04
194.14	10.99	194.66	13.02	195.18	24.17	195.70	98.82
194.15	11.04	194.67	13.04	195.19	24.98	195.71	100.61
194.16	11.08	194.68	13.07	195.20	25.85	195.72	102.42

Stage-Discharge for Pond B-56: Basin #56 (continued)

Elevation (feet)	Primary (cfs)
195.73	104.24
195.74	106.07
195.75	107.92
195.76	109.77
195.77	111.64
195.78	113.52
195.79	115.41
195.80	117.36
195.81	119.31
195.82	121.28
195.83	123.26
195.84	125.26
195.85	127.27
195.86	129.29
195.87	131.32
195.88	133.37
195.89	135.43
195.90	137.50
195.91	139.59
195.92	141.69
195.93	143.80
195.94	145.92
195.95	148.06
195.96	150.21
195.97	152.37
195.98	154.55
195.99	156.73
196.00	**158.88**

Stage-Area-Storage for Pond B-56: Basin #56

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
191.57	0	0
191.58	117	1
191.59	234	2
191.60	350	5
191.61	467	9
191.62	584	15
191.63	701	21
191.64	817	29
191.65	934	37
191.66	1,051	47
191.67	1,168	58
191.68	1,284	71
191.69	1,401	84
191.70	1,518	99
191.71	1,635	114
191.72	1,752	131
191.73	1,868	149
191.74	1,985	169
191.75	2,102	189
191.76	2,219	211
191.77	2,335	234
191.78	2,452	257
191.79	2,569	283
191.80	2,686	309
191.81	2,802	336
191.82	2,919	365
191.83	3,036	395
191.84	3,153	426
191.85	3,269	458
191.86	3,386	491
191.87	3,503	525
191.88	3,620	561
191.89	3,737	598
191.90	3,853	636
191.91	3,970	675
191.92	4,087	715
191.93	4,204	757
191.94	4,320	799
191.95	4,437	843
191.96	4,554	888
191.97	4,671	934
191.98	4,787	981
191.99	4,904	1,030
192.00	5,021	1,080
192.01	5,026	1,130
192.02	5,030	1,180
192.03	5,035	1,230
192.04	5,040	1,281
192.05	5,044	1,331
192.06	5,049	1,382
192.07	5,054	1,432
192.08	5,059	1,483
192.09	5,063	1,533
192.10	5,068	1,584
192.11	5,073	1,635
192.12	5,077	1,685
192.13	5,082	1,736
192.14	5,087	1,787
192.15	5,091	1,838
192.16	5,096	1,889
192.17	5,101	1,940
192.18	5,105	1,991
192.19	5,110	2,042
192.20	5,115	2,093
192.21	5,119	2,144
192.22	5,124	2,195
192.23	5,129	2,247
192.24	5,134	2,298
192.25	5,138	2,349
192.26	5,143	2,401
192.27	5,148	2,452
192.28	5,152	2,504
192.29	5,157	2,555
192.30	5,162	2,607
192.31	5,166	2,659
192.32	5,171	2,710
192.33	5,176	2,762
192.34	5,180	2,814
192.35	5,185	2,866
192.36	5,190	2,917
192.37	5,195	2,969
192.38	5,199	3,021
192.39	5,204	3,073
192.40	5,209	3,125
192.41	5,213	3,178
192.42	5,218	3,230
192.43	5,223	3,282
192.44	5,227	3,334
192.45	5,232	3,386
192.46	5,237	3,439
192.47	5,241	3,491
192.48	5,246	3,544
192.49	5,251	3,596
192.50	5,256	3,649
192.51	5,260	3,701
192.52	5,265	3,754
192.53	5,270	3,807
192.54	5,274	3,859
192.55	5,279	3,912
192.56	5,284	3,965
192.57	5,288	4,018
192.58	5,293	4,071
192.59	5,298	4,124
192.60	5,302	4,177

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
192.61	5,307	4,230	193.13	5,553	7,053
192.62	5,312	4,283	193.14	5,558	7,108
192.63	5,316	4,336	193.15	5,563	7,164
192.64	5,321	4,389	193.16	5,568	7,220
192.65	5,326	4,442	193.17	5,573	7,275
192.66	5,331	4,496	193.18	5,577	7,331
192.67	5,335	4,549	193.19	5,582	7,387
192.68	5,340	4,602	193.20	5,587	7,443
192.69	5,345	4,656	193.21	5,592	7,499
192.70	5,349	4,709	193.22	5,597	7,555
192.71	5,354	4,763	193.23	5,602	7,611
192.72	5,359	4,816	193.24	5,607	7,667
192.73	5,363	4,870	193.25	5,612	7,723
192.74	5,368	4,923	193.26	5,616	7,779
192.75	5,373	4,977	193.27	5,621	7,835
192.76	5,377	5,031	193.28	5,626	7,891
192.77	5,382	5,085	193.29	5,631	7,948
192.78	5,387	5,139	193.30	5,636	8,004
192.79	5,392	5,192	193.31	5,641	8,060
192.80	5,396	5,246	193.32	5,646	8,117
192.81	5,401	5,300	193.33	5,650	8,173
192.82	5,406	5,354	193.34	5,655	8,230
192.83	5,410	5,408	193.35	5,660	8,286
192.84	5,415	5,463	193.36	5,665	8,343
192.85	5,420	5,517	193.37	5,670	8,400
192.86	5,424	5,571	193.38	5,675	8,456
192.87	5,429	5,625	193.39	5,680	8,513
192.88	5,434	5,680	193.40	5,684	8,570
192.89	5,438	5,734	193.41	5,689	8,627
192.90	5,443	5,788	193.42	5,694	8,684
192.91	5,448	5,843	193.43	5,699	8,741
192.92	5,452	5,897	193.44	5,704	8,798
192.93	5,457	5,952	193.45	5,709	8,855
192.94	5,462	6,006	193.46	5,714	8,912
192.95	5,467	6,061	193.47	5,718	8,969
192.96	5,471	6,116	193.48	5,723	9,026
192.97	5,476	6,171	193.49	5,728	9,083
192.98	5,481	6,225	193.50	5,733	9,141
192.99	5,485	6,280	193.51	5,738	9,198
193.00	5,490	6,335	193.52	5,743	9,256
193.01	5,495	6,390	193.53	5,748	9,313
193.02	5,500	6,445	193.54	5,752	9,370
193.03	5,505	6,500	193.55	5,757	9,428
193.04	5,509	6,555	193.56	5,762	9,486
193.05	5,514	6,610	193.57	5,767	9,543
193.06	5,519	6,665	193.58	5,772	9,601
193.07	5,524	6,721	193.59	5,777	9,659
193.08	5,529	6,776	193.60	5,782	9,716
193.09	5,534	6,831	193.61	5,786	9,774
193.10	5,539	6,886	193.62	5,791	9,832
193.11	5,543	6,942	193.63	5,796	9,890
193.12	5,548	6,997	193.64	5,801	9,948

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
193.65	5,806	10,006	194.17	6,061	13,091
193.66	5,811	10,064	194.18	6,066	13,152
193.67	5,816	10,122	194.19	6,071	13,213
193.68	5,820	10,181	194.20	6,076	13,273
193.69	5,825	10,239	194.21	6,081	13,334
193.70	5,830	10,297	194.22	6,086	13,395
193.71	5,835	10,355	194.23	6,091	13,456
193.72	5,840	10,414	194.24	6,096	13,517
193.73	5,845	10,472	194.25	6,102	13,578
193.74	5,850	10,531	194.26	6,107	13,639
193.75	5,855	10,589	194.27	6,112	13,700
193.76	5,859	10,648	194.28	6,117	13,761
193.77	5,864	10,706	194.29	6,122	13,822
193.78	5,869	10,765	194.30	6,127	13,883
193.79	5,874	10,824	194.31	6,132	13,945
193.80	5,879	10,883	194.32	6,137	14,006
193.81	5,884	10,941	194.33	6,142	14,067
193.82	5,889	11,000	194.34	6,147	14,129
193.83	5,893	11,059	194.35	6,152	14,190
193.84	5,898	11,118	194.36	6,157	14,252
193.85	5,903	11,177	194.37	6,162	14,313
193.86	5,908	11,236	194.38	6,167	14,375
193.87	5,913	11,295	194.39	6,172	14,437
193.88	5,918	11,354	194.40	6,177	14,499
193.89	5,923	11,414	194.41	6,182	14,560
193.90	5,927	11,473	194.42	6,187	14,622
193.91	5,932	11,532	194.43	6,192	14,684
193.92	5,937	11,591	194.44	6,197	14,746
193.93	5,942	11,651	194.45	6,202	14,808
193.94	5,947	11,710	194.46	6,207	14,870
193.95	5,952	11,770	194.47	6,212	14,932
193.96	5,957	11,829	194.48	6,217	14,994
193.97	5,961	11,889	194.49	6,222	15,057
193.98	5,966	11,949	194.50	6,227	15,119
193.99	5,971	12,008	194.51	6,232	15,181
194.00	5,976	12,068	194.52	6,237	15,243
194.01	5,981	12,128	194.53	6,242	15,306
194.02	5,986	12,188	194.54	6,247	15,368
194.03	5,991	12,248	194.55	6,252	15,431
194.04	5,996	12,307	194.56	6,257	15,493
194.05	6,001	12,367	194.57	6,262	15,556
194.06	6,006	12,427	194.58	6,267	15,619
194.07	6,011	12,488	194.59	6,272	15,681
194.08	6,016	12,548	194.60	6,277	15,744
194.09	6,021	12,608	194.61	6,282	15,807
194.10	6,026	12,668	194.62	6,287	15,870
194.11	6,031	12,728	194.63	6,292	15,933
194.12	6,036	12,789	194.64	6,297	15,995
194.13	6,041	12,849	194.65	6,302	16,058
194.14	6,046	12,910	194.66	6,307	16,122
194.15	6,051	12,970	194.67	6,312	16,185
194.16	6,056	13,031	194.68	6,317	16,248

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
194.69	6,322	16,311	195.21	6,587	19,667
194.70	6,327	16,374	195.22	6,592	19,733
194.71	6,332	16,438	195.23	6,597	19,799
194.72	6,337	16,501	195.24	6,602	19,865
194.73	6,342	16,564	195.25	6,607	19,931
194.74	6,347	16,628	195.26	6,612	19,997
194.75	6,353	16,691	195.27	6,618	20,063
194.76	6,358	16,755	195.28	6,623	20,129
194.77	6,363	16,818	195.29	6,628	20,195
194.78	6,368	16,882	195.30	6,633	20,262
194.79	6,373	16,946	195.31	6,638	20,328
194.80	6,378	17,009	195.32	6,643	20,394
194.81	6,383	17,073	195.33	6,649	20,461
194.82	6,388	17,137	195.34	6,654	20,527
194.83	6,393	17,201	195.35	6,659	20,594
194.84	6,398	17,265	195.36	6,664	20,661
194.85	6,403	17,329	195.37	6,669	20,727
194.86	6,408	17,393	195.38	6,674	20,794
194.87	6,413	17,457	195.39	6,680	20,861
194.88	6,418	17,521	195.40	6,685	20,928
194.89	6,423	17,585	195.41	6,690	20,994
194.90	6,428	17,650	195.42	6,695	21,061
194.91	6,433	17,714	195.43	6,700	21,128
194.92	6,438	17,778	195.44	6,705	21,195
194.93	6,443	17,843	195.45	6,711	21,262
194.94	6,448	17,907	195.46	6,716	21,330
194.95	6,453	17,972	195.47	6,721	21,397
194.96	6,458	18,036	195.48	6,726	21,464
194.97	6,463	18,101	195.49	6,731	21,531
194.98	6,468	18,166	195.50	6,737	21,599
194.99	6,473	18,230	195.51	6,742	21,666
195.00	6,478	18,295	195.52	6,747	21,733
195.01	6,483	18,360	195.53	6,752	21,801
195.02	6,488	18,425	195.54	6,757	21,869
195.03	6,494	18,490	195.55	6,762	21,936
195.04	6,499	18,555	195.56	6,768	22,004
195.05	6,504	18,620	195.57	6,773	22,071
195.06	6,509	18,685	195.58	6,778	22,139
195.07	6,514	18,750	195.59	6,783	22,207
195.08	6,519	18,815	195.60	6,788	22,275
195.09	6,525	18,880	195.61	6,793	22,343
195.10	6,530	18,945	195.62	6,799	22,411
195.11	6,535	19,011	195.63	6,804	22,479
195.12	6,540	19,076	195.64	6,809	22,547
195.13	6,545	19,142	195.65	6,814	22,615
195.14	6,550	19,207	195.66	6,819	22,683
195.15	6,556	19,273	195.67	6,824	22,751
195.16	6,561	19,338	195.68	6,830	22,820
195.17	6,566	19,404	195.69	6,835	22,888
195.18	6,571	19,469	195.70	6,840	22,956
195.19	6,576	19,535	195.71	6,845	23,025
195.20	6,581	19,601	195.72	6,850	23,093

Stage-Area-Storage for Pond B-56: Basin #56 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
195.73	6,855	23,162
195.74	6,861	23,230
195.75	6,866	23,299
195.76	6,871	23,368
195.77	6,876	23,436
195.78	6,881	23,505
195.79	6,886	23,574
195.80	6,892	23,643
195.81	6,897	23,712
195.82	6,902	23,781
195.83	6,907	23,850
195.84	6,912	23,919
195.85	6,917	23,988
195.86	6,923	24,057
195.87	6,928	24,127
195.88	6,933	24,196
195.89	6,938	24,265
195.90	6,943	24,335
195.91	6,948	24,404
195.92	6,954	24,474
195.93	6,959	24,543
195.94	6,964	24,613
195.95	6,969	24,682
195.96	6,974	24,752
195.97	6,979	24,822
195.98	6,985	24,892
195.99	6,990	24,962
196.00	**6,995**	**25,032**

Summary for Pond B-57: Basin #57

Inflow Area = 1.434 ac, 47.56% Impervious, Inflow Depth = 9.37" for Future 100 yr event
Inflow = 13.42 cfs @ 12.17 hrs, Volume= 1.119 af
Outflow = 11.46 cfs @ 12.24 hrs, Volume= 1.047 af, Atten= 15%, Lag= 4.2 min
Primary = 11.46 cfs @ 12.24 hrs, Volume= 1.047 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 204.52' @ 12.24 hrs Surf.Area= 5,332 sf Storage= 13,066 cf

Plug-Flow detention time= 207.6 min calculated for 1.045 af (93% of inflow)
Center-of-Mass det. time= 172.1 min (943.7 - 771.6)

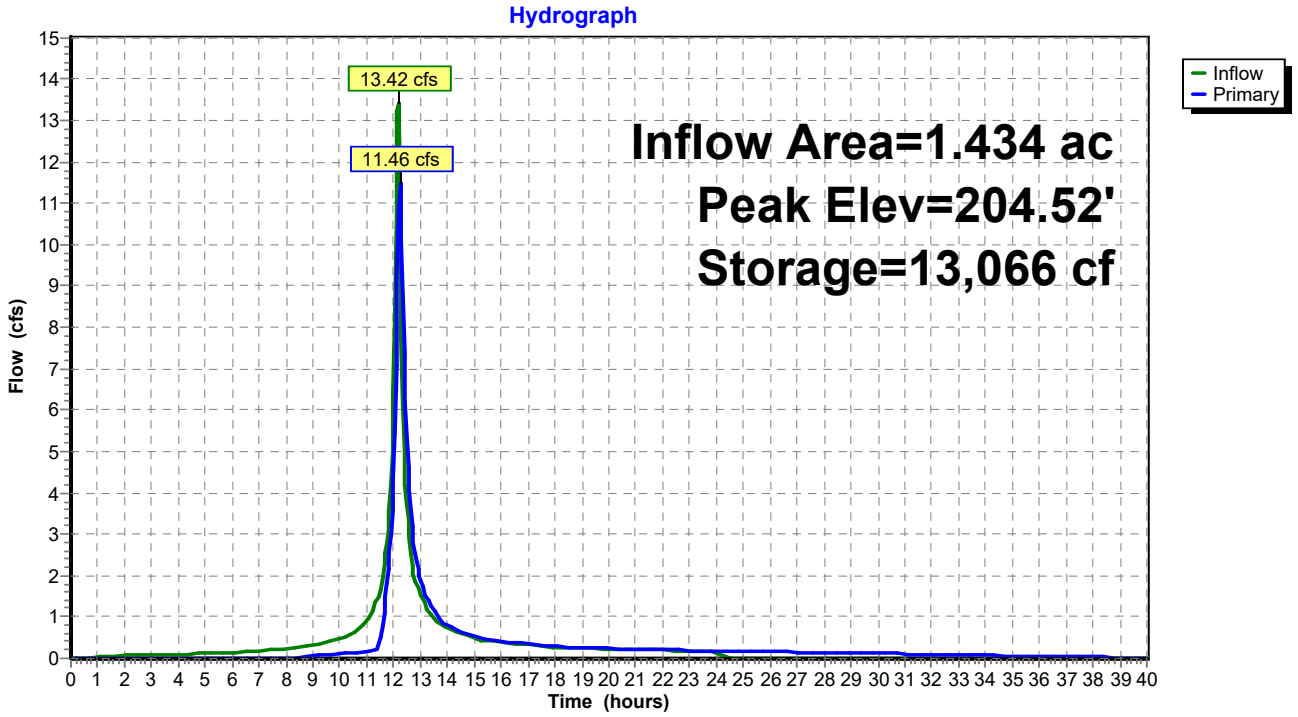
Volume	Invert	Avail.Storage	Storage Description
#1	201.30'	15,700 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
201.30	0	0	0
202.00	3,969	1,389	1,389
203.00	4,488	4,229	5,618
204.00	5,034	4,761	10,379
205.00	5,608	5,321	15,700

Device	Routing	Invert	Outlet Devices
#1	Primary	200.65'	**18.0" Round Culvert** L= 207.0' Ke= 0.500 Inlet / Outlet Invert= 200.65' / 198.00' S= 0.0128 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	202.34'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	203.60'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	204.50'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=11.27 cfs @ 12.24 hrs HW=204.51' (Free Discharge)
- **1=Culvert** (Passes 11.11 cfs of 13.81 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.24 cfs @ 6.92 fps)
  - **3=Sharp-Crested Rectangular Weir** (Weir Controls 10.88 cfs @ 3.12 fps)
- **4=Broad-Crested Rectangular Weir** (Weir Controls 0.16 cfs @ 0.26 fps)

Pond B-57: Basin #57



Stage-Discharge for Pond B-57: Basin #57

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
201.30	0.00	201.82	0.00	202.34	0.00	202.86	0.11
201.31	0.00	201.83	0.00	202.35	0.00	202.87	0.11
201.32	0.00	201.84	0.00	202.36	0.00	202.88	0.11
201.33	0.00	201.85	0.00	202.37	0.00	202.89	0.11
201.34	0.00	201.86	0.00	202.38	0.00	202.90	0.11
201.35	0.00	201.87	0.00	202.39	0.00	202.91	0.11
201.36	0.00	201.88	0.00	202.40	0.01	202.92	0.11
201.37	0.00	201.89	0.00	202.41	0.01	202.93	0.11
201.38	0.00	201.90	0.00	202.42	0.01	202.94	0.12
201.39	0.00	201.91	0.00	202.43	0.01	202.95	0.12
201.40	0.00	201.92	0.00	202.44	0.02	202.96	0.12
201.41	0.00	201.93	0.00	202.45	0.02	202.97	0.12
201.42	0.00	201.94	0.00	202.46	0.02	202.98	0.12
201.43	0.00	201.95	0.00	202.47	0.03	202.99	0.12
201.44	0.00	201.96	0.00	202.48	0.03	203.00	0.12
201.45	0.00	201.97	0.00	202.49	0.03	203.01	0.12
201.46	0.00	201.98	0.00	202.50	0.04	203.02	0.12
201.47	0.00	201.99	0.00	202.51	0.04	203.03	0.13
201.48	0.00	202.00	0.00	202.52	0.05	203.04	0.13
201.49	0.00	202.01	0.00	202.53	0.05	203.05	0.13
201.50	0.00	202.02	0.00	202.54	0.05	203.06	0.13
201.51	0.00	202.03	0.00	202.55	0.05	203.07	0.13
201.52	0.00	202.04	0.00	202.56	0.06	203.08	0.13
201.53	0.00	202.05	0.00	202.57	0.06	203.09	0.13
201.54	0.00	202.06	0.00	202.58	0.06	203.10	0.13
201.55	0.00	202.07	0.00	202.59	0.06	203.11	0.13
201.56	0.00	202.08	0.00	202.60	0.06	203.12	0.13
201.57	0.00	202.09	0.00	202.61	0.07	203.13	0.14
201.58	0.00	202.10	0.00	202.62	0.07	203.14	0.14
201.59	0.00	202.11	0.00	202.63	0.07	203.15	0.14
201.60	0.00	202.12	0.00	202.64	0.07	203.16	0.14
201.61	0.00	202.13	0.00	202.65	0.07	203.17	0.14
201.62	0.00	202.14	0.00	202.66	0.08	203.18	0.14
201.63	0.00	202.15	0.00	202.67	0.08	203.19	0.14
201.64	0.00	202.16	0.00	202.68	0.08	203.20	0.14
201.65	0.00	202.17	0.00	202.69	0.08	203.21	0.14
201.66	0.00	202.18	0.00	202.70	0.08	203.22	0.14
201.67	0.00	202.19	0.00	202.71	0.08	203.23	0.15
201.68	0.00	202.20	0.00	202.72	0.09	203.24	0.15
201.69	0.00	202.21	0.00	202.73	0.09	203.25	0.15
201.70	0.00	202.22	0.00	202.74	0.09	203.26	0.15
201.71	0.00	202.23	0.00	202.75	0.09	203.27	0.15
201.72	0.00	202.24	0.00	202.76	0.09	203.28	0.15
201.73	0.00	202.25	0.00	202.77	0.09	203.29	0.15
201.74	0.00	202.26	0.00	202.78	0.10	203.30	0.15
201.75	0.00	202.27	0.00	202.79	0.10	203.31	0.15
201.76	0.00	202.28	0.00	202.80	0.10	203.32	0.15
201.77	0.00	202.29	0.00	202.81	0.10	203.33	0.15
201.78	0.00	202.30	0.00	202.82	0.10	203.34	0.16
201.79	0.00	202.31	0.00	202.83	0.10	203.35	0.16
201.80	0.00	202.32	0.00	202.84	0.10	203.36	0.16
201.81	0.00	202.33	0.00	202.85	0.10	203.37	0.16

Stage-Discharge for Pond B-57: Basin #57 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
203.38	0.16	203.90	2.32	204.42	9.54	204.94	52.24
203.39	0.16	203.91	2.42	204.43	9.71	204.95	53.72
203.40	0.16	203.92	2.53	204.44	9.88	204.96	55.23
203.41	0.16	203.93	2.64	204.45	10.05	204.97	56.77
203.42	0.16	203.94	2.75	204.46	10.22	204.98	58.33
203.43	0.16	203.95	2.86	204.47	10.39	204.99	59.92
203.44	0.16	203.96	2.98	204.48	10.56	205.00	**61.53**
203.45	0.16	203.97	3.09	204.49	10.73		
203.46	0.17	203.98	3.21	204.50	10.90		
203.47	0.17	203.99	3.33	204.51	11.19		
203.48	0.17	204.00	3.45	204.52	11.58		
203.49	0.17	204.01	3.57	204.53	12.03		
203.50	0.17	204.02	3.69	204.54	12.54		
203.51	0.17	204.03	3.82	204.55	13.09		
203.52	0.17	204.04	3.94	204.56	13.68		
203.53	0.17	204.05	4.07	204.57	14.30		
203.54	0.17	204.06	4.20	204.58	14.97		
203.55	0.17	204.07	4.32	204.59	15.66		
203.56	0.17	204.08	4.46	204.60	16.38		
203.57	0.17	204.09	4.59	204.61	17.14		
203.58	0.17	204.10	4.72	204.62	17.92		
203.59	0.18	204.11	4.85	204.63	18.73		
203.60	0.18	204.12	4.99	204.64	19.56		
203.61	0.19	204.13	5.13	204.65	20.42		
203.62	0.21	204.14	5.26	204.66	21.31		
203.63	0.25	204.15	5.40	204.67	22.22		
203.64	0.28	204.16	5.54	204.68	23.05		
203.65	0.33	204.17	5.68	204.69	23.83		
203.66	0.37	204.18	5.83	204.70	24.63		
203.67	0.42	204.19	5.97	204.71	25.49		
203.68	0.48	204.20	6.11	204.72	26.38		
203.69	0.53	204.21	6.26	204.73	27.29		
203.70	0.60	204.22	6.41	204.74	28.23		
203.71	0.66	204.23	6.55	204.75	29.19		
203.72	0.73	204.24	6.70	204.76	30.17		
203.73	0.80	204.25	6.85	204.77	31.19		
203.74	0.87	204.26	7.00	204.78	32.22		
203.75	0.94	204.27	7.15	204.79	33.28		
203.76	1.02	204.28	7.31	204.80	34.37		
203.77	1.10	204.29	7.46	204.81	35.48		
203.78	1.18	204.30	7.62	204.82	36.61		
203.79	1.26	204.31	7.77	204.83	37.77		
203.80	1.35	204.32	7.93	204.84	38.96		
203.81	1.44	204.33	8.09	204.85	40.16		
203.82	1.53	204.34	8.24	204.86	41.40		
203.83	1.62	204.35	8.40	204.87	42.65		
203.84	1.71	204.36	8.56	204.88	43.93		
203.85	1.81	204.37	8.73	204.89	45.24		
203.86	1.91	204.38	8.89	204.90	46.56		
203.87	2.01	204.39	9.05	204.91	47.94		
203.88	2.11	204.40	9.21	204.92	49.35		
203.89	2.21	204.41	9.38	204.93	50.78		

Stage-Area-Storage for Pond B-57: Basin #57

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.30	0	0	201.82	2,948	767
201.31	57	0	201.83	3,005	796
201.32	113	1	201.84	3,062	827
201.33	170	3	201.85	3,119	858
201.34	227	5	201.86	3,175	889
201.35	284	7	201.87	3,232	921
201.36	340	10	201.88	3,289	954
201.37	397	14	201.89	3,345	987
201.38	454	18	201.90	3,402	1,021
201.39	510	23	201.91	3,459	1,055
201.40	567	28	201.92	3,515	1,090
201.41	624	34	201.93	3,572	1,125
201.42	680	41	201.94	3,629	1,161
201.43	737	48	201.95	3,686	1,198
201.44	794	56	201.96	3,742	1,235
201.45	851	64	201.97	3,799	1,273
201.46	907	73	201.98	3,856	1,311
201.47	964	82	201.99	3,912	1,350
201.48	1,021	92	202.00	3,969	1,389
201.49	1,077	102	202.01	3,974	1,429
201.50	1,134	113	202.02	3,979	1,469
201.51	1,191	125	202.03	3,985	1,508
201.52	1,247	137	202.04	3,990	1,548
201.53	1,304	150	202.05	3,995	1,588
201.54	1,361	163	202.06	4,000	1,628
201.55	1,418	177	202.07	4,005	1,668
201.56	1,474	192	202.08	4,011	1,708
201.57	1,531	207	202.09	4,016	1,748
201.58	1,588	222	202.10	4,021	1,789
201.59	1,644	238	202.11	4,026	1,829
201.60	1,701	255	202.12	4,031	1,869
201.61	1,758	272	202.13	4,036	1,910
201.62	1,814	290	202.14	4,042	1,950
201.63	1,871	309	202.15	4,047	1,990
201.64	1,928	328	202.16	4,052	2,031
201.65	1,985	347	202.17	4,057	2,071
201.66	2,041	367	202.18	4,062	2,112
201.67	2,098	388	202.19	4,068	2,153
201.68	2,155	409	202.20	4,073	2,193
201.69	2,211	431	202.21	4,078	2,234
201.70	2,268	454	202.22	4,083	2,275
201.71	2,325	477	202.23	4,088	2,316
201.72	2,381	500	202.24	4,094	2,357
201.73	2,438	524	202.25	4,099	2,398
201.74	2,495	549	202.26	4,104	2,439
201.75	2,551	574	202.27	4,109	2,480
201.76	2,608	600	202.28	4,114	2,521
201.77	2,665	626	202.29	4,120	2,562
201.78	2,722	653	202.30	4,125	2,603
201.79	2,778	681	202.31	4,130	2,644
201.80	2,835	709	202.32	4,135	2,686
201.81	2,892	737	202.33	4,140	2,727

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.34	4,145	2,769	202.86	4,415	4,994
202.35	4,151	2,810	202.87	4,421	5,039
202.36	4,156	2,852	202.88	4,426	5,083
202.37	4,161	2,893	202.89	4,431	5,127
202.38	4,166	2,935	202.90	4,436	5,171
202.39	4,171	2,977	202.91	4,441	5,216
202.40	4,177	3,018	202.92	4,446	5,260
202.41	4,182	3,060	202.93	4,452	5,305
202.42	4,187	3,102	202.94	4,457	5,349
202.43	4,192	3,144	202.95	4,462	5,394
202.44	4,197	3,186	202.96	4,467	5,439
202.45	4,203	3,228	202.97	4,472	5,483
202.46	4,208	3,270	202.98	4,478	5,528
202.47	4,213	3,312	202.99	4,483	5,573
202.48	4,218	3,354	203.00	4,488	5,618
202.49	4,223	3,396	203.01	4,493	5,663
202.50	4,229	3,439	203.02	4,499	5,708
202.51	4,234	3,481	203.03	4,504	5,753
202.52	4,239	3,523	203.04	4,510	5,798
202.53	4,244	3,566	203.05	4,515	5,843
202.54	4,249	3,608	203.06	4,521	5,888
202.55	4,254	3,651	203.07	4,526	5,933
202.56	4,260	3,693	203.08	4,532	5,978
202.57	4,265	3,736	203.09	4,537	6,024
202.58	4,270	3,778	203.10	4,543	6,069
202.59	4,275	3,821	203.11	4,548	6,115
202.60	4,280	3,864	203.12	4,554	6,160
202.61	4,286	3,907	203.13	4,559	6,206
202.62	4,291	3,950	203.14	4,564	6,251
202.63	4,296	3,993	203.15	4,570	6,297
202.64	4,301	4,036	203.16	4,575	6,343
202.65	4,306	4,079	203.17	4,581	6,388
202.66	4,312	4,122	203.18	4,586	6,434
202.67	4,317	4,165	203.19	4,592	6,480
202.68	4,322	4,208	203.20	4,597	6,526
202.69	4,327	4,251	203.21	4,603	6,572
202.70	4,332	4,295	203.22	4,608	6,618
202.71	4,337	4,338	203.23	4,614	6,664
202.72	4,343	4,381	203.24	4,619	6,710
202.73	4,348	4,425	203.25	4,625	6,757
202.74	4,353	4,468	203.26	4,630	6,803
202.75	4,358	4,512	203.27	4,635	6,849
202.76	4,363	4,555	203.28	4,641	6,896
202.77	4,369	4,599	203.29	4,646	6,942
202.78	4,374	4,643	203.30	4,652	6,989
202.79	4,379	4,687	203.31	4,657	7,035
202.80	4,384	4,730	203.32	4,663	7,082
202.81	4,389	4,774	203.33	4,668	7,128
202.82	4,395	4,818	203.34	4,674	7,175
202.83	4,400	4,862	203.35	4,679	7,222
202.84	4,405	4,906	203.36	4,685	7,269
202.85	4,410	4,950	203.37	4,690	7,316

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
203.38	4,695	7,363	203.90	4,979	9,878
203.39	4,701	7,409	203.91	4,985	9,928
203.40	4,706	7,457	203.92	4,990	9,978
203.41	4,712	7,504	203.93	4,996	10,028
203.42	4,717	7,551	203.94	5,001	10,078
203.43	4,723	7,598	203.95	5,007	10,128
203.44	4,728	7,645	203.96	5,012	10,178
203.45	4,734	7,693	203.97	5,018	10,228
203.46	4,739	7,740	203.98	5,023	10,278
203.47	4,745	7,787	203.99	5,029	10,328
203.48	4,750	7,835	204.00	5,034	10,379
203.49	4,756	7,882	204.01	5,040	10,429
203.50	4,761	7,930	204.02	5,045	10,479
203.51	4,766	7,978	204.03	5,051	10,530
203.52	4,772	8,025	204.04	5,057	10,580
203.53	4,777	8,073	204.05	5,063	10,631
203.54	4,783	8,121	204.06	5,068	10,682
203.55	4,788	8,169	204.07	5,074	10,732
203.56	4,794	8,217	204.08	5,080	10,783
203.57	4,799	8,265	204.09	5,086	10,834
203.58	4,805	8,313	204.10	5,091	10,885
203.59	4,810	8,361	204.11	5,097	10,936
203.60	4,816	8,409	204.12	5,103	10,987
203.61	4,821	8,457	204.13	5,109	11,038
203.62	4,827	8,505	204.14	5,114	11,089
203.63	4,832	8,553	204.15	5,120	11,140
203.64	4,837	8,602	204.16	5,126	11,191
203.65	4,843	8,650	204.17	5,132	11,243
203.66	4,848	8,699	204.18	5,137	11,294
203.67	4,854	8,747	204.19	5,143	11,345
203.68	4,859	8,796	204.20	5,149	11,397
203.69	4,865	8,844	204.21	5,155	11,448
203.70	4,870	8,893	204.22	5,160	11,500
203.71	4,876	8,942	204.23	5,166	11,552
203.72	4,881	8,991	204.24	5,172	11,603
203.73	4,887	9,039	204.25	5,178	11,655
203.74	4,892	9,088	204.26	5,183	11,707
203.75	4,898	9,137	204.27	5,189	11,759
203.76	4,903	9,186	204.28	5,195	11,811
203.77	4,908	9,235	204.29	5,200	11,863
203.78	4,914	9,284	204.30	5,206	11,915
203.79	4,919	9,334	204.31	5,212	11,967
203.80	4,925	9,383	204.32	5,218	12,019
203.81	4,930	9,432	204.33	5,223	12,071
203.82	4,936	9,481	204.34	5,229	12,123
203.83	4,941	9,531	204.35	5,235	12,176
203.84	4,947	9,580	204.36	5,241	12,228
203.85	4,952	9,630	204.37	5,246	12,281
203.86	4,958	9,679	204.38	5,252	12,333
203.87	4,963	9,729	204.39	5,258	12,386
203.88	4,968	9,779	204.40	5,264	12,438
203.89	4,974	9,828	204.41	5,269	12,491

Stage-Area-Storage for Pond B-57: Basin #57 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
204.42	5,275	12,544
204.43	5,281	12,596
204.44	5,287	12,649
204.45	5,292	12,702
204.46	5,298	12,755
204.47	5,304	12,808
204.48	5,310	12,861
204.49	5,315	12,914
204.50	5,321	12,967
204.51	5,327	13,021
204.52	5,332	13,074
204.53	5,338	13,127
204.54	5,344	13,181
204.55	5,350	13,234
204.56	5,355	13,288
204.57	5,361	13,341
204.58	5,367	13,395
204.59	5,373	13,449
204.60	5,378	13,502
204.61	5,384	13,556
204.62	5,390	13,610
204.63	5,396	13,664
204.64	5,401	13,718
204.65	5,407	13,772
204.66	5,413	13,826
204.67	5,419	13,880
204.68	5,424	13,934
204.69	5,430	13,989
204.70	5,436	14,043
204.71	5,442	14,097
204.72	5,447	14,152
204.73	5,453	14,206
204.74	5,459	14,261
204.75	5,465	14,316
204.76	5,470	14,370
204.77	5,476	14,425
204.78	5,482	14,480
204.79	5,487	14,535
204.80	5,493	14,590
204.81	5,499	14,644
204.82	5,505	14,700
204.83	5,510	14,755
204.84	5,516	14,810
204.85	5,522	14,865
204.86	5,528	14,920
204.87	5,533	14,975
204.88	5,539	15,031
204.89	5,545	15,086
204.90	5,551	15,142
204.91	5,556	15,197
204.92	5,562	15,253
204.93	5,568	15,308
204.94	5,574	15,364
204.95	5,579	15,420
204.96	5,585	15,476
204.97	5,591	15,532
204.98	5,597	15,588
204.99	5,602	15,644
205.00	**5,608**	**15,700**

Summary for Pond B-58: Basin #58

Inflow Area = 1.649 ac, 26.80% Impervious, Inflow Depth = 8.72" for Future 100 yr event
Inflow = 14.84 cfs @ 12.17 hrs, Volume= 1.199 af
Outflow = 10.71 cfs @ 12.26 hrs, Volume= 1.132 af, Atten= 28%, Lag= 5.6 min
Primary = 10.71 cfs @ 12.26 hrs, Volume= 1.132 af
Routed to Link PDA-6 : Proposed Drainage Area #6

Routing by Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Peak Elev= 200.86' @ 12.26 hrs Surf.Area= 7,564 sf Storage= 14,967 cf

Plug-Flow detention time= 194.2 min calculated for 1.130 af (94% of inflow)
Center-of-Mass det. time= 163.5 min (950.0 - 786.6)

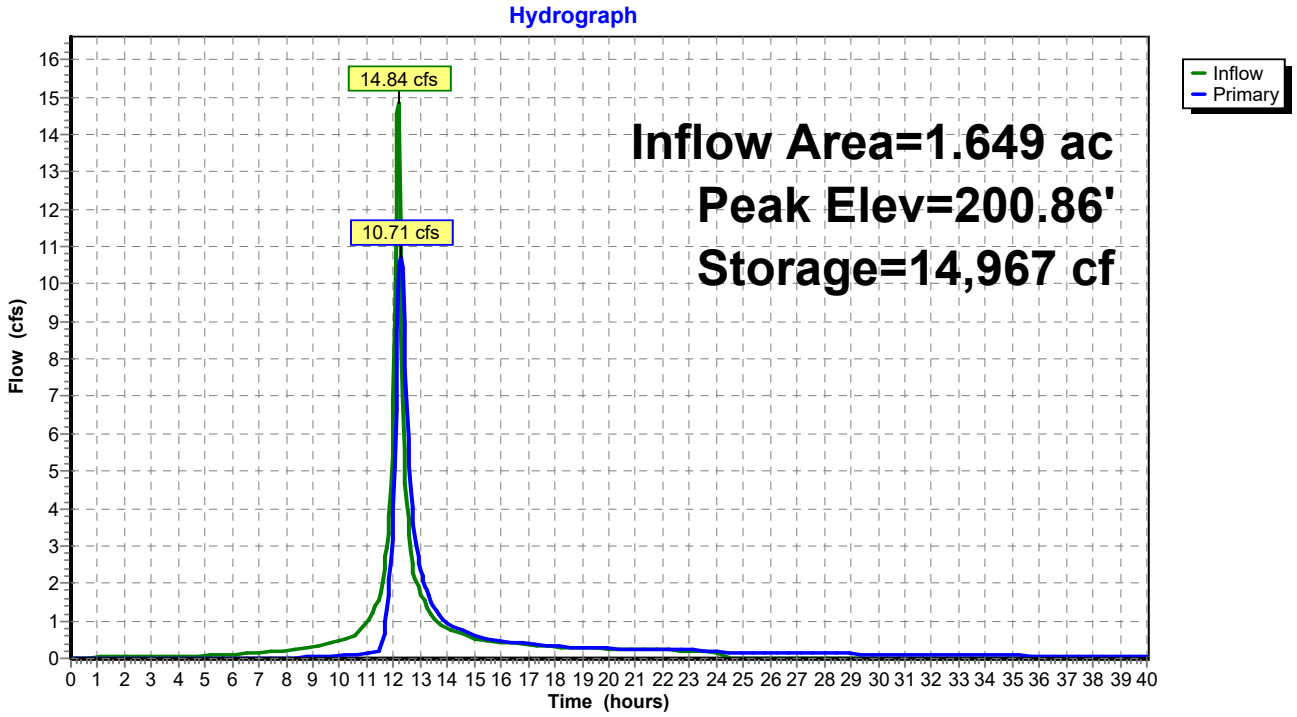
Volume	Invert	Avail.Storage	Storage Description
#1	198.30'	32,924 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
198.30	0	0	0
199.00	6,230	2,180	2,180
200.00	6,932	6,581	8,761
201.00	7,670	7,301	16,062
202.00	8,426	8,048	24,110
203.00	9,201	8,814	32,924

Device	Routing	Invert	Outlet Devices
#1	Primary	198.30'	**18.0" Round Culvert** L= 48.0' Ke= 0.500 Inlet / Outlet Invert= 198.30' / 198.00' S= 0.0063 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	198.97'	**2.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	199.91'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Primary	201.90'	**50.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=10.68 cfs @ 12.26 hrs HW=200.85' (Free Discharge)
- **1=Culvert** (Barrel Controls 10.68 cfs @ 6.04 fps)
  - **2=Orifice/Grate** (Passes < 0.22 cfs potential flow)
  - **3=Sharp-Crested Rectangular Weir** (Passes < 11.34 cfs potential flow)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond B-58: Basin #58



Stage-Discharge for Pond B-58: Basin #58

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
198.30	0.00	198.82	0.00	199.34	0.08	199.86	0.15
198.31	0.00	198.83	0.00	199.35	0.09	199.87	0.15
198.32	0.00	198.84	0.00	199.36	0.09	199.88	0.15
198.33	0.00	198.85	0.00	199.37	0.09	199.89	0.15
198.34	0.00	198.86	0.00	199.38	0.09	199.90	0.15
198.35	0.00	198.87	0.00	199.39	0.09	199.91	0.15
198.36	0.00	198.88	0.00	199.40	0.09	199.92	0.16
198.37	0.00	198.89	0.00	199.41	0.10	199.93	0.19
198.38	0.00	198.90	0.00	199.42	0.10	199.94	0.22
198.39	0.00	198.91	0.00	199.43	0.10	199.95	0.26
198.40	0.00	198.92	0.00	199.44	0.10	199.96	0.30
198.41	0.00	198.93	0.00	199.45	0.10	199.97	0.35
198.42	0.00	198.94	0.00	199.46	0.10	199.98	0.40
198.43	0.00	198.95	0.00	199.47	0.10	199.99	0.45
198.44	0.00	198.96	0.00	199.48	0.10	200.00	0.51
198.45	0.00	198.97	0.00	199.49	0.11	200.01	0.57
198.46	0.00	198.98	0.00	199.50	0.11	200.02	0.63
198.47	0.00	198.99	0.00	199.51	0.11	200.03	0.70
198.48	0.00	199.00	0.00	199.52	0.11	200.04	0.77
198.49	0.00	199.01	0.00	199.53	0.11	200.05	0.84
198.50	0.00	199.02	0.00	199.54	0.11	200.06	0.92
198.51	0.00	199.03	0.01	199.55	0.11	200.07	0.99
198.52	0.00	199.04	0.01	199.56	0.11	200.08	1.07
198.53	0.00	199.05	0.01	199.57	0.12	200.09	1.16
198.54	0.00	199.06	0.01	199.58	0.12	200.10	1.24
198.55	0.00	199.07	0.02	199.59	0.12	200.11	1.33
198.56	0.00	199.08	0.02	199.60	0.12	200.12	1.41
198.57	0.00	199.09	0.02	199.61	0.12	200.13	1.50
198.58	0.00	199.10	0.03	199.62	0.12	200.14	1.60
198.59	0.00	199.11	0.03	199.63	0.12	200.15	1.69
198.60	0.00	199.12	0.03	199.64	0.12	200.16	1.79
198.61	0.00	199.13	0.04	199.65	0.12	200.17	1.88
198.62	0.00	199.14	0.04	199.66	0.13	200.18	1.98
198.63	0.00	199.15	0.05	199.67	0.13	200.19	2.08
198.64	0.00	199.16	0.05	199.68	0.13	200.20	2.19
198.65	0.00	199.17	0.05	199.69	0.13	200.21	2.29
198.66	0.00	199.18	0.05	199.70	0.13	200.22	2.40
198.67	0.00	199.19	0.06	199.71	0.13	200.23	2.51
198.68	0.00	199.20	0.06	199.72	0.13	200.24	2.62
198.69	0.00	199.21	0.06	199.73	0.13	200.25	2.73
198.70	0.00	199.22	0.06	199.74	0.13	200.26	2.84
198.71	0.00	199.23	0.06	199.75	0.13	200.27	2.95
198.72	0.00	199.24	0.07	199.76	0.14	200.28	3.07
198.73	0.00	199.25	0.07	199.77	0.14	200.29	3.19
198.74	0.00	199.26	0.07	199.78	0.14	200.30	3.31
198.75	0.00	199.27	0.07	199.79	0.14	200.31	3.43
198.76	0.00	199.28	0.07	199.80	0.14	200.32	3.55
198.77	0.00	199.29	0.08	199.81	0.14	200.33	3.67
198.78	0.00	199.30	0.08	199.82	0.14	200.34	3.79
198.79	0.00	199.31	0.08	199.83	0.14	200.35	3.92
198.80	0.00	199.32	0.08	199.84	0.14	200.36	4.05
198.81	0.00	199.33	0.08	199.85	0.14	200.37	4.17

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
200.38	4.30	200.90	10.88	201.42	12.74	201.94	15.30
200.39	4.43	200.91	10.92	201.43	12.78	201.95	15.71
200.40	4.57	200.92	10.96	201.44	12.81	201.96	16.15
200.41	4.70	200.93	11.00	201.45	12.84	201.97	16.63
200.42	4.83	200.94	11.04	201.46	12.88	201.98	17.14
200.43	4.97	200.95	11.07	201.47	12.91	201.99	17.68
200.44	5.10	200.96	11.11	201.48	12.94	202.00	18.26
200.45	5.24	200.97	11.15	201.49	12.97	202.01	18.86
200.46	5.38	200.98	11.19	201.50	13.01	202.02	19.49
200.47	5.52	200.99	11.23	201.51	13.04	202.03	20.15
200.48	5.66	201.00	11.26	201.52	13.07	202.04	20.83
200.49	5.81	201.01	11.30	201.53	13.10	202.05	21.53
200.50	5.95	201.02	11.34	201.54	13.14	202.06	22.26
200.51	6.09	201.03	11.38	201.55	13.17	202.07	23.01
200.52	6.24	201.04	11.41	201.56	13.20	202.08	23.78
200.53	6.39	201.05	11.45	201.57	13.23	202.09	24.58
200.54	6.53	201.06	11.49	201.58	13.26	202.10	25.39
200.55	6.68	201.07	11.52	201.59	13.30	202.11	26.27
200.56	6.83	201.08	11.56	201.60	13.33	202.12	27.17
200.57	6.98	201.09	11.60	201.61	13.36	202.13	28.10
200.58	7.13	201.10	11.63	201.62	13.39	202.14	29.05
200.59	7.29	201.11	11.67	201.63	13.42	202.15	30.02
200.60	7.44	201.12	11.71	201.64	13.45	202.16	31.03
200.61	7.60	201.13	11.74	201.65	13.48	202.17	32.05
200.62	7.75	201.14	11.78	201.66	13.52	202.18	33.10
200.63	7.91	201.15	11.81	201.67	13.55	202.19	34.17
200.64	8.07	201.16	11.85	201.68	13.58	202.20	35.27
200.65	8.22	201.17	11.88	201.69	13.61	202.21	36.39
200.66	8.38	201.18	11.92	201.70	13.64	202.22	37.54
200.67	8.54	201.19	11.96	201.71	13.67	202.23	38.71
200.68	8.71	201.20	11.99	201.72	13.70	202.24	39.90
200.69	8.87	201.21	12.03	201.73	13.73	202.25	41.12
200.70	9.03	201.22	12.06	201.74	13.76	202.26	42.36
200.71	9.19	201.23	12.10	201.75	13.79	202.27	43.63
200.72	9.36	201.24	12.13	201.76	13.83	202.28	44.92
200.73	9.53	201.25	12.17	201.77	13.86	202.29	46.23
200.74	9.69	201.26	12.20	201.78	13.89	202.30	47.57
200.75	9.86	201.27	12.24	201.79	13.92	202.31	48.96
200.76	10.03	201.28	12.27	201.80	13.95	202.32	50.37
200.77	10.20	201.29	12.30	201.81	13.98	202.33	51.82
200.78	10.37	201.30	12.34	201.82	14.01	202.34	53.28
200.79	10.45	201.31	12.37	201.83	14.04	202.35	54.78
200.80	10.49	201.32	12.41	201.84	14.07	202.36	56.30
200.81	10.53	201.33	12.44	201.85	14.10	202.37	57.84
200.82	10.57	201.34	12.47	201.86	14.13	202.38	59.41
200.83	10.61	201.35	12.51	201.87	14.16	202.39	61.01
200.84	10.65	201.36	12.54	201.88	14.19	202.40	62.64
200.85	10.69	201.37	12.58	201.89	14.22	202.41	64.29
200.86	10.72	201.38	12.61	201.90	14.25	202.42	65.97
200.87	10.76	201.39	12.64	201.91	14.39	202.43	67.67
200.88	10.80	201.40	12.68	201.92	14.64	202.44	69.40
200.89	10.84	201.41	12.71	201.93	14.94	202.45	71.16

Stage-Discharge for Pond B-58: Basin #58 (continued)

Elevation (feet)	Primary (cfs)
202.46	72.95
202.47	74.76
202.48	76.60
202.49	78.46
202.50	80.35
202.51	82.00
202.52	83.67
202.53	85.34
202.54	87.03
202.55	88.74
202.56	90.45
202.57	92.18
202.58	93.93
202.59	95.68
202.60	97.45
202.61	99.23
202.62	101.02
202.63	102.83
202.64	104.65
202.65	106.48
202.66	108.32
202.67	110.18
202.68	112.05
202.69	113.93
202.70	115.82
202.71	117.76
202.72	119.72
202.73	121.69
202.74	123.67
202.75	125.66
202.76	127.67
202.77	129.69
202.78	131.72
202.79	133.77
202.80	135.83
202.81	137.90
202.82	139.99
202.83	142.09
202.84	144.20
202.85	146.32
202.86	148.46
202.87	150.61
202.88	152.77
202.89	154.94
202.90	157.13
202.91	159.27
202.92	161.43
202.93	163.60
202.94	165.77
202.95	167.96
202.96	170.16
202.97	172.37
202.98	174.59
202.99	176.82
203.00	**179.06**

Stage-Area-Storage for Pond B-58: Basin #58

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
198.30	0	0	198.82	4,628	1,203
198.31	89	0	198.83	4,717	1,250
198.32	178	2	198.84	4,806	1,298
198.33	267	4	198.85	4,895	1,346
198.34	356	7	198.86	4,984	1,396
198.35	445	11	198.87	5,073	1,446
198.36	534	16	198.88	5,162	1,497
198.37	623	22	198.89	5,251	1,549
198.38	712	28	198.90	5,340	1,602
198.39	801	36	198.91	5,429	1,656
198.40	890	44	198.92	5,518	1,711
198.41	979	54	198.93	5,607	1,766
198.42	1,068	64	198.94	5,696	1,823
198.43	1,157	75	198.95	5,785	1,880
198.44	1,246	87	198.96	5,874	1,938
198.45	1,335	100	198.97	5,963	1,998
198.46	1,424	114	198.98	6,052	2,058
198.47	1,513	129	198.99	6,141	2,119
198.48	1,602	144	199.00	6,230	2,180
198.49	1,691	161	199.01	6,237	2,243
198.50	1,780	178	199.02	6,244	2,305
198.51	1,869	196	199.03	6,251	2,368
198.52	1,958	215	199.04	6,258	2,430
198.53	2,047	235	199.05	6,265	2,493
198.54	2,136	256	199.06	6,272	2,556
198.55	2,225	278	199.07	6,279	2,618
198.56	2,314	301	199.08	6,286	2,681
198.57	2,403	324	199.09	6,293	2,744
198.58	2,492	349	199.10	6,300	2,807
198.59	2,581	374	199.11	6,307	2,870
198.60	2,670	401	199.12	6,314	2,933
198.61	2,759	428	199.13	6,321	2,996
198.62	2,848	456	199.14	6,328	3,060
198.63	2,937	485	199.15	6,335	3,123
198.64	3,026	514	199.16	6,342	3,186
198.65	3,115	545	199.17	6,349	3,250
198.66	3,204	577	199.18	6,356	3,313
198.67	3,293	609	199.19	6,363	3,377
198.68	3,382	643	199.20	6,370	3,441
198.69	3,471	677	199.21	6,377	3,504
198.70	3,560	712	199.22	6,384	3,568
198.71	3,649	748	199.23	6,391	3,632
198.72	3,738	785	199.24	6,398	3,696
198.73	3,827	823	199.25	6,406	3,760
198.74	3,916	862	199.26	6,413	3,824
198.75	4,005	901	199.27	6,420	3,888
198.76	4,094	942	199.28	6,427	3,952
198.77	4,183	983	199.29	6,434	4,017
198.78	4,272	1,025	199.30	6,441	4,081
198.79	4,361	1,068	199.31	6,448	4,146
198.80	4,450	1,113	199.32	6,455	4,210
198.81	4,539	1,157	199.33	6,462	4,275

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
199.34	6,469	4,339
199.35	6,476	4,404
199.36	6,483	4,469
199.37	6,490	4,534
199.38	6,497	4,599
199.39	6,504	4,664
199.40	6,511	4,729
199.41	6,518	4,794
199.42	6,525	4,859
199.43	6,532	4,924
199.44	6,539	4,990
199.45	6,546	5,055
199.46	6,553	5,121
199.47	6,560	5,186
199.48	6,567	5,252
199.49	6,574	5,317
199.50	6,581	5,383
199.51	6,588	5,449
199.52	6,595	5,515
199.53	6,602	5,581
199.54	6,609	5,647
199.55	6,616	5,713
199.56	6,623	5,779
199.57	6,630	5,846
199.58	6,637	5,912
199.59	6,644	5,978
199.60	6,651	6,045
199.61	6,658	6,111
199.62	6,665	6,178
199.63	6,672	6,245
199.64	6,679	6,311
199.65	6,686	6,378
199.66	6,693	6,445
199.67	6,700	6,512
199.68	6,707	6,579
199.69	6,714	6,646
199.70	6,721	6,713
199.71	6,728	6,781
199.72	6,735	6,848
199.73	6,742	6,915
199.74	6,749	6,983
199.75	6,757	7,050
199.76	6,764	7,118
199.77	6,771	7,186
199.78	6,778	7,253
199.79	6,785	7,321
199.80	6,792	7,389
199.81	6,799	7,457
199.82	6,806	7,525
199.83	6,813	7,593
199.84	6,820	7,661
199.85	6,827	7,730
199.86	6,834	7,798
199.87	6,841	7,866
199.88	6,848	7,935
199.89	6,855	8,003
199.90	6,862	8,072
199.91	6,869	8,140
199.92	6,876	8,209
199.93	6,883	8,278
199.94	6,890	8,347
199.95	6,897	8,416
199.96	6,904	8,485
199.97	6,911	8,554
199.98	6,918	8,623
199.99	6,925	8,692
200.00	6,932	8,761
200.01	6,939	8,831
200.02	6,947	8,900
200.03	6,954	8,970
200.04	6,962	9,039
200.05	6,969	9,109
200.06	6,976	9,179
200.07	6,984	9,249
200.08	6,991	9,318
200.09	6,998	9,388
200.10	7,006	9,458
200.11	7,013	9,528
200.12	7,021	9,599
200.13	7,028	9,669
200.14	7,035	9,739
200.15	7,043	9,810
200.16	7,050	9,880
200.17	7,057	9,951
200.18	7,065	10,021
200.19	7,072	10,092
200.20	7,080	10,163
200.21	7,087	10,233
200.22	7,094	10,304
200.23	7,102	10,375
200.24	7,109	10,446
200.25	7,117	10,518
200.26	7,124	10,589
200.27	7,131	10,660
200.28	7,139	10,731
200.29	7,146	10,803
200.30	7,153	10,874
200.31	7,161	10,946
200.32	7,168	11,018
200.33	7,176	11,089
200.34	7,183	11,161
200.35	7,190	11,233
200.36	7,198	11,305
200.37	7,205	11,377

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
200.38	7,212	11,449
200.39	7,220	11,521
200.40	7,227	11,593
200.41	7,235	11,666
200.42	7,242	11,738
200.43	7,249	11,810
200.44	7,257	11,883
200.45	7,264	11,956
200.46	7,271	12,028
200.47	7,279	12,101
200.48	7,286	12,174
200.49	7,294	12,247
200.50	7,301	12,320
200.51	7,308	12,393
200.52	7,316	12,466
200.53	7,323	12,539
200.54	7,331	12,612
200.55	7,338	12,686
200.56	7,345	12,759
200.57	7,353	12,833
200.58	7,360	12,906
200.59	7,367	12,980
200.60	7,375	13,054
200.61	7,382	13,127
200.62	7,390	13,201
200.63	7,397	13,275
200.64	7,404	13,349
200.65	7,412	13,423
200.66	7,419	13,497
200.67	7,426	13,572
200.68	7,434	13,646
200.69	7,441	13,720
200.70	7,449	13,795
200.71	7,456	13,869
200.72	7,463	13,944
200.73	7,471	14,019
200.74	7,478	14,093
200.75	7,486	14,168
200.76	7,493	14,243
200.77	7,500	14,318
200.78	7,508	14,393
200.79	7,515	14,468
200.80	7,522	14,543
200.81	7,530	14,619
200.82	7,537	14,694
200.83	7,545	14,769
200.84	7,552	14,845
200.85	7,559	14,920
200.86	7,567	14,996
200.87	7,574	15,072
200.88	7,581	15,147
200.89	7,589	15,223
200.90	7,596	15,299
200.91	7,604	15,375
200.92	7,611	15,451
200.93	7,618	15,527
200.94	7,626	15,604
200.95	7,633	15,680
200.96	7,640	15,756
200.97	7,648	15,833
200.98	7,655	15,909
200.99	7,663	15,986
201.00	7,670	16,062
201.01	7,678	16,139
201.02	7,685	16,216
201.03	7,693	16,293
201.04	7,700	16,370
201.05	7,708	16,447
201.06	7,715	16,524
201.07	7,723	16,601
201.08	7,730	16,679
201.09	7,738	16,756
201.10	7,746	16,833
201.11	7,753	16,911
201.12	7,761	16,988
201.13	7,768	17,066
201.14	7,776	17,144
201.15	7,783	17,222
201.16	7,791	17,299
201.17	7,799	17,377
201.18	7,806	17,455
201.19	7,814	17,533
201.20	7,821	17,612
201.21	7,829	17,690
201.22	7,836	17,768
201.23	7,844	17,847
201.24	7,851	17,925
201.25	7,859	18,004
201.26	7,867	18,082
201.27	7,874	18,161
201.28	7,882	18,240
201.29	7,889	18,319
201.30	7,897	18,398
201.31	7,904	18,477
201.32	7,912	18,556
201.33	7,919	18,635
201.34	7,927	18,714
201.35	7,935	18,793
201.36	7,942	18,873
201.37	7,950	18,952
201.38	7,957	19,032
201.39	7,965	19,111
201.40	7,972	19,191
201.41	7,980	19,271

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
201.42	7,988	19,351
201.43	7,995	19,430
201.44	8,003	19,510
201.45	8,010	19,591
201.46	8,018	19,671
201.47	8,025	19,751
201.48	8,033	19,831
201.49	8,040	19,912
201.50	8,048	19,992
201.51	8,056	20,073
201.52	8,063	20,153
201.53	8,071	20,234
201.54	8,078	20,315
201.55	8,086	20,395
201.56	8,093	20,476
201.57	8,101	20,557
201.58	8,108	20,638
201.59	8,116	20,719
201.60	8,124	20,801
201.61	8,131	20,882
201.62	8,139	20,963
201.63	8,146	21,045
201.64	8,154	21,126
201.65	8,161	21,208
201.66	8,169	21,289
201.67	8,177	21,371
201.68	8,184	21,453
201.69	8,192	21,535
201.70	8,199	21,617
201.71	8,207	21,699
201.72	8,214	21,781
201.73	8,222	21,863
201.74	8,229	21,945
201.75	8,237	22,028
201.76	8,245	22,110
201.77	8,252	22,193
201.78	8,260	22,275
201.79	8,267	22,358
201.80	8,275	22,440
201.81	8,282	22,523
201.82	8,290	22,606
201.83	8,297	22,689
201.84	8,305	22,772
201.85	8,313	22,855
201.86	8,320	22,938
201.87	8,328	23,022
201.88	8,335	23,105
201.89	8,343	23,188
201.90	8,350	23,272
201.91	8,358	23,355
201.92	8,366	23,439
201.93	8,373	23,523
201.94	8,381	23,606
201.95	8,388	23,690
201.96	8,396	23,774
201.97	8,403	23,858
201.98	8,411	23,942
201.99	8,418	24,026
202.00	8,426	24,110
202.01	8,434	24,195
202.02	8,442	24,279
202.03	8,449	24,364
202.04	8,457	24,448
202.05	8,465	24,533
202.06	8,473	24,617
202.07	8,480	24,702
202.08	8,488	24,787
202.09	8,496	24,872
202.10	8,504	24,957
202.11	8,511	25,042
202.12	8,519	25,127
202.13	8,527	25,212
202.14	8,535	25,298
202.15	8,542	25,383
202.16	8,550	25,469
202.17	8,558	25,554
202.18	8,566	25,640
202.19	8,573	25,725
202.20	8,581	25,811
202.21	8,589	25,897
202.22	8,597	25,983
202.23	8,604	26,069
202.24	8,612	26,155
202.25	8,620	26,241
202.26	8,628	26,327
202.27	8,635	26,414
202.28	8,643	26,500
202.29	8,651	26,587
202.30	8,659	26,673
202.31	8,666	26,760
202.32	8,674	26,847
202.33	8,682	26,933
202.34	8,690	27,020
202.35	8,697	27,107
202.36	8,705	27,194
202.37	8,713	27,281
202.38	8,721	27,368
202.39	8,728	27,456
202.40	8,736	27,543
202.41	8,744	27,630
202.42	8,752	27,718
202.43	8,759	27,805
202.44	8,767	27,893
202.45	8,775	27,981

Stage-Area-Storage for Pond B-58: Basin #58 (continued)

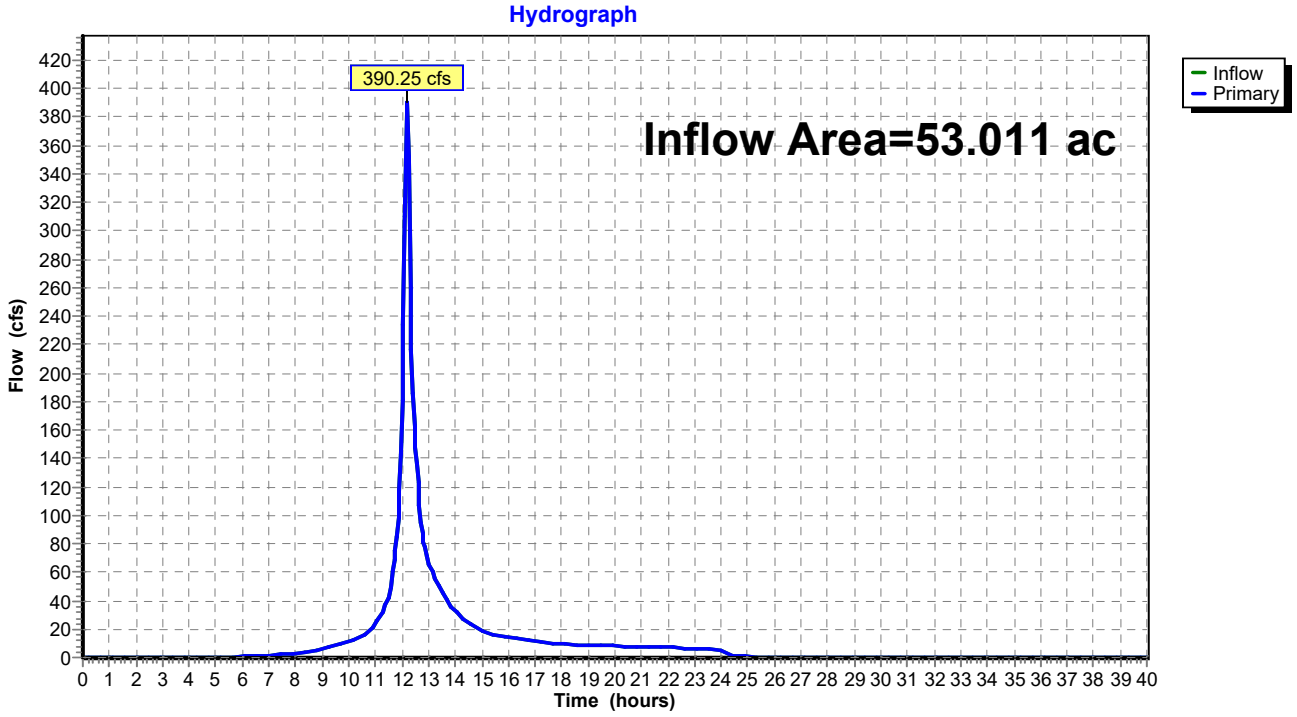
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
202.46	8,783	28,068
202.47	8,790	28,156
202.48	8,798	28,244
202.49	8,806	28,332
202.50	8,814	28,420
202.51	8,821	28,509
202.52	8,829	28,597
202.53	8,837	28,685
202.54	8,845	28,774
202.55	8,852	28,862
202.56	8,860	28,951
202.57	8,868	29,039
202.58	8,876	29,128
202.59	8,883	29,217
202.60	8,891	29,306
202.61	8,899	29,395
202.62	8,907	29,484
202.63	8,914	29,573
202.64	8,922	29,662
202.65	8,930	29,751
202.66	8,938	29,840
202.67	8,945	29,930
202.68	8,953	30,019
202.69	8,961	30,109
202.70	8,969	30,199
202.71	8,976	30,288
202.72	8,984	30,378
202.73	8,992	30,468
202.74	9,000	30,558
202.75	9,007	30,648
202.76	9,015	30,738
202.77	9,023	30,828
202.78	9,031	30,919
202.79	9,038	31,009
202.80	9,046	31,099
202.81	9,054	31,190
202.82	9,062	31,280
202.83	9,069	31,371
202.84	9,077	31,462
202.85	9,085	31,553
202.86	9,093	31,643
202.87	9,100	31,734
202.88	9,108	31,825
202.89	9,116	31,917
202.90	9,124	32,008
202.91	9,131	32,099
202.92	9,139	32,190
202.93	9,147	32,282
202.94	9,154	32,373
202.95	9,162	32,465
202.96	9,170	32,557
202.97	9,178	32,648
202.98	9,186	32,740
202.99	9,193	32,832
203.00	**9,201**	**32,924**

Summary for Link PDA-6: Proposed Drainage Area #6

Inflow Area = 53.011 ac, 11.21% Impervious, Inflow Depth > 8.10" for Future 100 yr event
Inflow = 390.25 cfs @ 12.18 hrs, Volume= 35.802 af
Primary = 390.25 cfs @ 12.18 hrs, Volume= 35.802 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node DP-3

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

Link PDA-6: Proposed Drainage Area #6



APPENDIX 4
DRAINAGE AREA MAPS

V:\081391 - Nursery Road-Hopewell\081391-01-001 (ENG) - Venue at Hopewell SP\Engineering\Engineering Plans\02 Site Plans\081391-DP-DDM.dwg 12/19/24 04:49:49PM, anthony.godoleta, LAYOUT:NJ-2436

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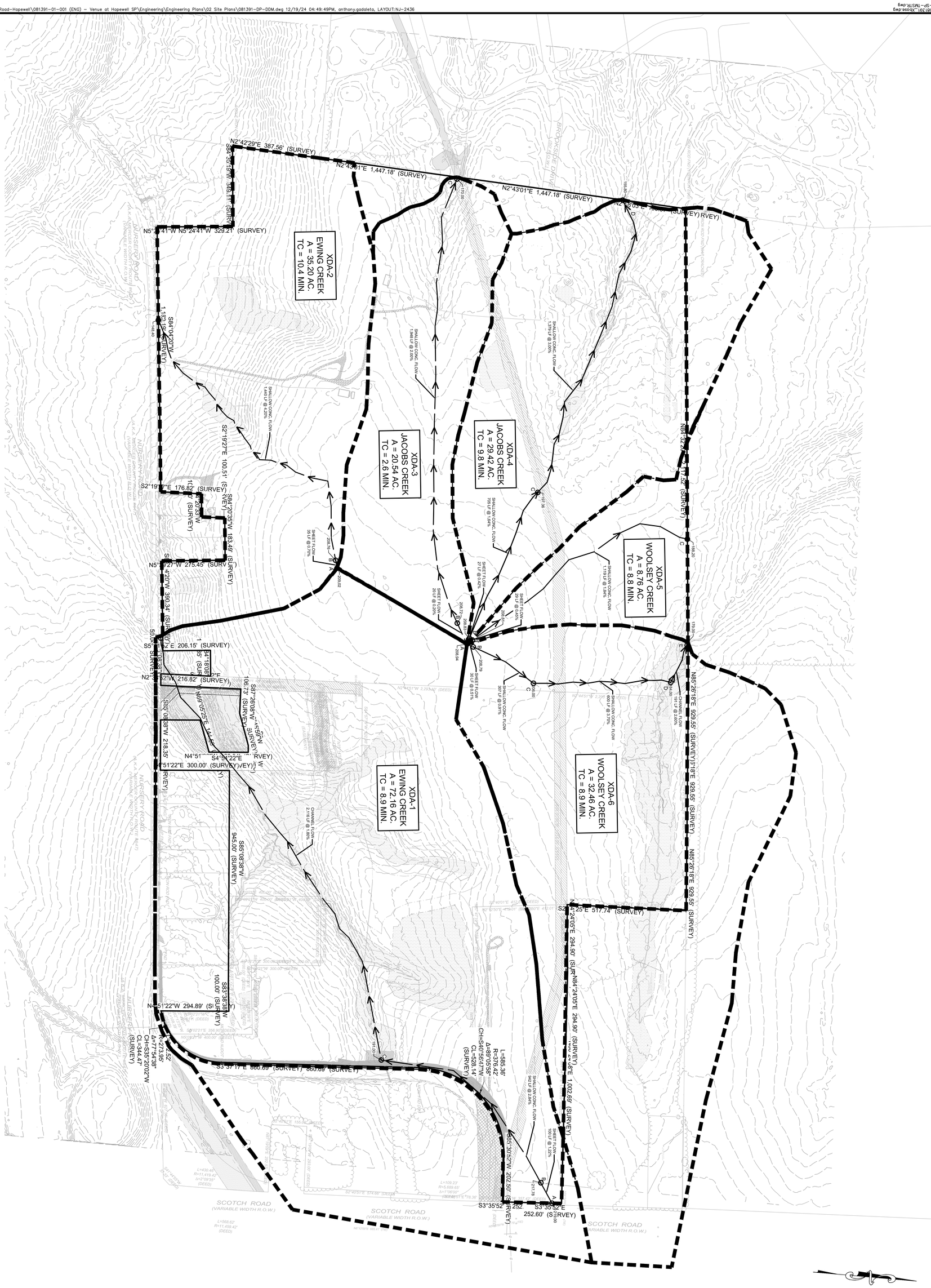

SHEET No. 1 OF

PRELIMINARY AND FINAL MAJOR SUBDIVISION &
PRELIMINARY AND FINAL SITE PLAN FOR
VENUE AT HOPEWELL

EXISTING DRAINAGE AREA MAP

BLOCK 93, LOTS 19, 20, 45.01, 46 & 60
TOWNSHIP OF HOPEWELL, MERCER COUNTY, NEW JERSEY

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NJ Certificate of Authorization No. 24GA28222600

SEAN A. DELANY, N.J. Professional Engineer, Lic. 24GE04447100

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PRELIMINARY AND FINAL MAJOR SUBDIVISION &
PRELIMINARY AND FINAL SITE PLAN FOR
VENUE AT HOPEWELL

PROPOSED DRAINAGE AREA MAP

BLOCK 93, LOTS 19, 20, 45.01, 46 & 60
TOWNSHIP OF HOPEWELL, MERCER COUNTY, NEW JERSEY

SHEET No.
OF

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