

**Princeton Farms/Hopewell Hunt
Residents Information Meeting on
Proposed Sewer Rate Increase From
\$330/Qtr to \$385.24/Qtr**

By Gale D. Downey

April 7, 2013



Questions to be Covered

- **Why the rate increase for SBRSA served residents?**
- **How does SBRSA's rate to Hopewell Twp compare to ELSA's rate to Hopewell Township?**
- **Why are ELSA service district homeowners sewer bills lower than SBRSA service district homeowners sewer district bills?**
- **What are typical infiltration flows in the communities that SBRSA serves?**
- **Why are Princeton Farms/Hopewell Hunt wastewater flows higher than other communities?**
- **What impact have homeowner and Hopewell Township repairs had since their start in the 1980's?**

How Did I Get Involved in Sewers?

- **Moved into Princeton Farms 1976 – Free Sewer Service**
- **Hopewell Twp Takes over sewer plant - formed MTUA – Sewer Fee**
- **Mid 1980's received letter from MTUA to replace lateral without any inspection data to show that our sewer lateral is leaking**
- **NJDEP sues Hopewell Twp over Performance of Princeton Farms Sewer Plant**
- **Hopewell Twp contracts with SBRSA/Special Assessment Ordinance Passed to Cover Costs of 5 mile uphill force main**
- **Ray Altieri forms Princeton Farms Homeowner Association**
- **Elected Vice-President & Chairman of Sewer Committee**
- **Hopewell Twp spends \$160K to install risers**
- **TV inspections/Riser inspections show major leaks/points of infiltration**
 - **Emergency Construction spending of \$300K repairs street leaks**
 - **Approx. 20 homeowners replace their laterals**
- **1992 Appointed Hopewell Township SBRSA Board Member by Mayor Doris Hoyer**

Hopewell Township Introduced Sewer Rate Increases In Ordinances on March 11, 2013

- Rate for the SBRSA service district is to be increased from \$330/quarter to \$385.24/quarter.
 - New annual rate then is \$1540.96/year a \$260.96/year increase
- Rate for the ELSA service district is to be increased from \$9.60 to \$11.41/1000 gallons

Since the two service districts are billed differently, how do the rates for the two different sewer districts compare?

How do these rates compare with other communities sewer service rate?

What is the long term outlook for sewer rates?

History of Princeton Farms/Hopewell Hunt Sewer Charges

Effective Date of Increase	Sewer Rate (\$/quarter)	Surcharge Rate (\$/quarter) [# of qtrs in eff.]	Comments
1/1/1988	170	- - - - -	Not Connected to SBRSA
4/1/1991	240	- - - - -	Connect to SBRSA – High Flows
4/1/2000	265	- - - - -	Hopewell Hunt Starts To Hook Up – High Flows
4/1/2004	330	59 [3]	Faulty Repairs – Very High Flows - Emergency Declared
7/1/2013	385.24	- - - - -	Separation of the sewer budget; ELSA rate inc; surplus depletion

Main Component of Sewer Rate Is Treatment Costs by Respective Regional Sewerage Authority

- Breakdown of SBRSA service district rate (\$ per quarter):
 - SBRSA Treatment Costs: 260.66
 - Hopewell O & M: 57.88
 - Debt Service: 66.70
 - Total \$385.24/Qtr
- Breakdown of ELSA service district rate (\$/1000 gallons):
 - ELSA Treatment Costs: 9.98
 - Hopewell O & M: 1.20
 - Debt Service: 0.23
 - Total \$11.41/1000 gallons

Hopewell Township Is Raising Sewer Rates Due to Depletion of Surplus (All Table Entries Are in Thousands \$)

Year	2008	2009	2010	2011	2012	2013B
Initial Surplus at Beginning of Year	537.3	600.8	798.4	915.0	1045.8	743.7
ELSA Surplus Actually Used	12.6	35.9	32.1	8.3	222.4	185.0B
SBRSA Surplus Actually Used	70.0	69.3	106.9	53.3	184.4	28.3B
Surplus Returned	146.0	302.8	255.5	192.5	104.6	N/A
Surplus at Year End	600.8	798.4	915.0	1,045.8	743.7	N/A

What has depleted surplus in Hopewell Township Sewer Utility

- **ELSA charge rate to Hopewell Township increased significantly in 2010**
- **SBRSA charge rate to Hopewell Township has remained basically constant over the 2009 to 2013 time period**
- **Emergency repairs/expenses were high in both the ELSA service district and SBRSA service district in 2010 to 2012**
 - Hurricanes Irene and Sandy impacts
 - High flow years in the SBRSA Service District
 - Collection systems and pump stations are aging
- **Increasing energy costs**

Communities Served by SBRSA

Member & Participant		2012 GPD	% of Flow
	Princeton Consolidated	2,980,541	32.9
	South Brunswick	3,604,204	39.8
	West Windsor	2,109,253	23.3
	Pennington Borough	225,494	2.5
	Hopewell Borough	131,224	1.5
	Total Flow	9,050,716	100.0
Member – Contract Service			
	Hopewell Township	71,823	0.8

SBSRA Sewer Bill Rate Formulas

- **Member & Participant**
 - **(Total Gallons)*(Base Charge) + Debt Service Adj.**
- **Hopewell Township Member Contract**
 - **(Total Gallons)*(Base Charge)*2**

Comparison of ELSA and SBRSA Charge Rates to Hopewell Township

- ELSA's charge rate to Hopewell Township in 2012 was slightly higher than SBRSA's charge rate to Hopewell Township

Sewer Utility Service Being Used	Base Charge Rate To Members In 2012 (\$/1000 gal.)	Charge Rate To Hopewell Twp In 2012 (\$/1000 gal.)
ELSA	-----	9.98
SBRSA	3.66	7.32

Is Hopewell Township Getting a Bad Deal From SBRSA?

- SBRSA's per gallon charge rate to Hopewell Township is slightly less than SBRSA's actual cost to treat the wastewater at the Hopewell Borough plant

	SBRSA Base Rate To Member - Participants In 2012 (\$/1000 gal.)	SBRSA 2012 Costs To Operate Hopewell Borough SBRSA Plant (\$/1000 gal.)	SBRSA Charge Rate To Hopewell Twp In 2012 (\$/1000 gal.)
SBRSA Costs To Operate Hopewell Borough SBRSA Plant	-----	7.69	-----
SBRSA	3.66	-----	7.32

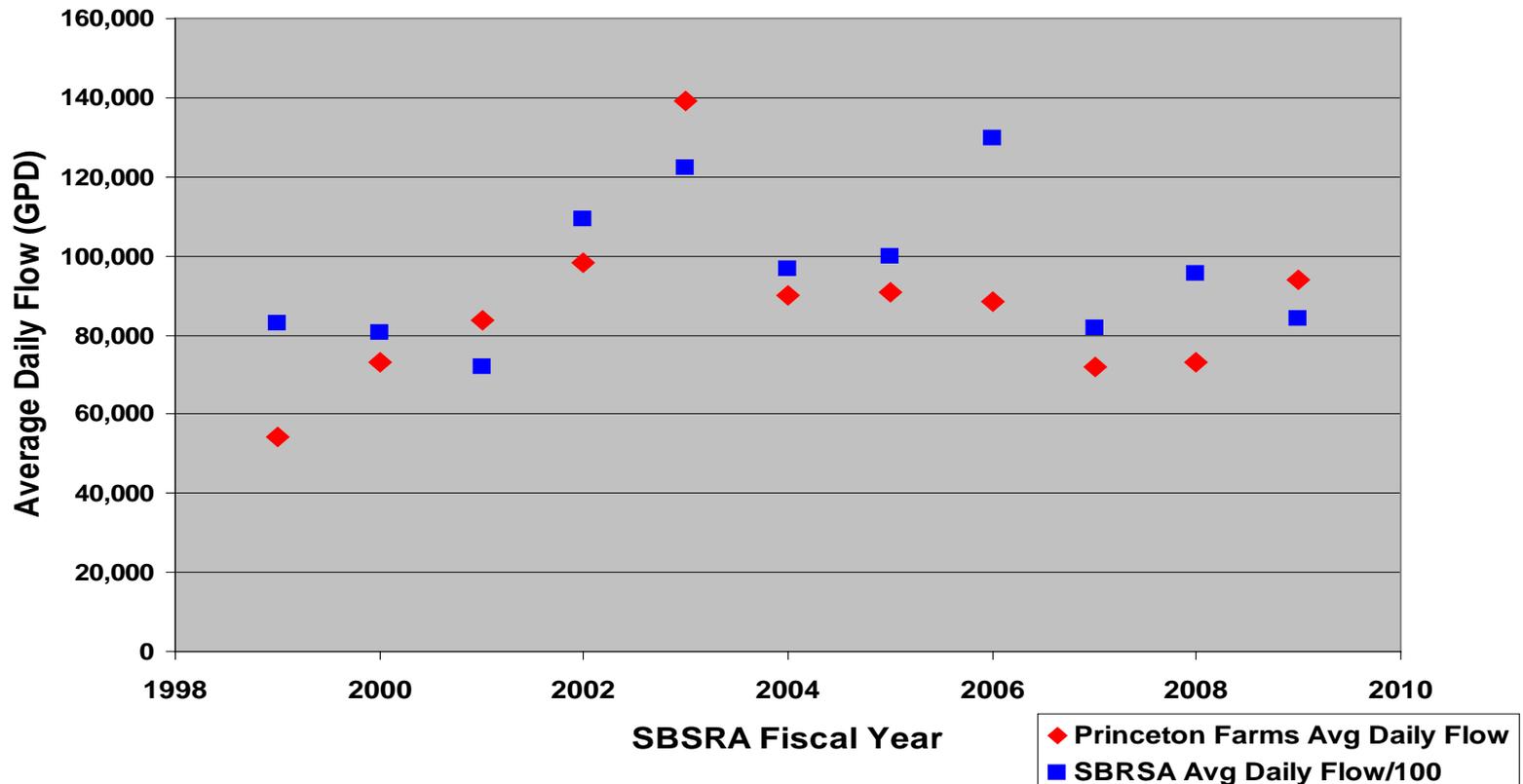
Why do Hopewell Township SBRSA district users pay a higher sewer bill than ELSA users?

Hopewell Township Sewer District	Total Gallons Treated	Number of Certified Users	Gallons Treated Per Certified User	Theoretical Gallons Per NJDEP Guidelines
ELSA 2011	79,675,000	1,651	48,259	??????
SBRSA 2011	40,360,970	211	191,284	23,104,500

- In the Hopewell Township SBRSA service district significantly more wastewater gallons are treated per user than in the Hopewell Township ELSA service district

Comparison of Princeton Farms Flow to Total SBRSA Flow

Impact of Wet Weather on Both SBRSA and Princeton Farms Average Daily Flow



Causes of more gallons of wastewater treated per certified user in SBRSA Service District than in ELSA Service District

- Princeton Farms/Hopewell Hunt consists of only single family homes (300 gpd NJDEP theoretical guideline for a single family home)
- Princeton Farms is an older community than both Hopewell Hunt and users in ELSA service district
- Very high ground water levels exist in Princeton Farms/Hopewell Hunt area during portions of the year
- Possible sump pump discharges during major rain events
- Deteriorating gaskets in collection main in Princeton Farms

How does the infiltration in the Hopewell Township SBRSA service district compare to other SBRSA served communities (*before/**after 2010 repairs)

Flow to SBRSA Hopewell Borough Sewerage Plant From	Lowest Average Monthly Flow Last Four Years (GPD)	Highest Average Monthly Flow Last Four Years (GPD)	Highest Single Day Daily Flow (GPD)
Hopewell Borough	105,492	326,807	650,236
		243,468	378,549
		235,074	465,709
		201,023	428,097
Princeton Farms/ Hopewell Hunt	32,532	183,402*	397,611
		166,413*	297,469
		121,531**	430,368
		119,477**	353,009

Comparison of Infiltration Rates For All SBRSA Member Communities

Member & Participant		2012 Average Daily Flow GPD (Dry Year)	2011 Average Daily Flow GPD (Wet Year)	2008 Average Daily Flow GPD (An Avg Year)
	Princeton Consolidated	2,980,541	4,265,771	3,325,400
	South Brunswick	3,604,204	4,319,284	3,906,409
	West Windsor	2,109,253	2,409,234	3,307,971
	Pennington Borough	225,494	298,469	246,543
	Hopewell Borough	131,224	176,509	153,541
	Total Flow – River Road	9,050,716	10,752,565	9,548,741
Member – Contract Service				
	Hopewell Township	71,823	98,930	78,414
	Avg. Monthly Rainfall (in.)	3.25	5.43	3.92

In General Why Do Sewer Rates Differ

- Depends on what particular state one lives in
- Depends on what type of entity provides the sewer service: i.e. sewer authority; MTUA; etc.
- Depends on the economy of scale: large plant versus several small ones
- Depends on what watershed one lives in
- Depends on what the size of river or stream that receives the sewer plant's effluent and whether the stream dries up in the summer or not
- Depends on whether the entire municipality has sewer service or not
- Depends on how much of the cost of sewer service is included in the municipal tax rate versus in the individual user sewer bill
- Depends on whether the billing is on volume of potable water used or on volume of wastewater treated
- Depends on business model of sewer authority
- Depends on age of system, maintenance costs, etc.

2012 Sewer Rates For Other New Jersey Communities

Community	Number of Certified Users	Annual Sewer Rate in \$
Princeton Township	- - - - -	850
Hopewell Township – SBRSA Service	211	1320
Hopewell Township – ELSA Service	1,651	461
United Water – Arlington	619	928
New Jersey American Homestead	1,209	1026
New Jersey American – Applied Wastewater (SA)	745	1472
New Jersey American - Pottersville	109	1982

Short Term Options for Rate Reduction

- **Reduce Total Wastewater Flow**
 - **Annual Inspection During High Flow Periods**
 - **Homeowners Fix Leaking Laterals**
 - Over 85 Homeowners Have Repaired To Date
 - **Township Repairs Leaks Between Risers & Main**
 - **Township Repairs/Maintains Pump Station**
 - Bonded Capital Expenditures for SBRSA Service District by Hopewell Township from 1993 to date total \$1.3 Million
 - **Homeowners Continue to**
 - **Not Hook Up Sump Pumps to the Sewer System**
 - **Repair minor plumbing leaks, i.e. dripping faucets, running toilets, etc.**
 - **Do not drain swimming pool water to sewer system or other source of “clean” water**

Medium Term Options for Rate Reduction

- **Replace the main sewer line in Princeton Farms (Reason gaskets in joints are deteriorating)**
 - One Manhole Section at a time
 - Alternatively a major capital project to replace all of the collection main under the streets
- **Questions**
 - Can it be done affordably?
 - Should a major dig project include a hook-up to public water?
 - What is the cost of a joint project to include a public water hook-up?
 - How to pay for major capital projects?
 - How to construct in high ground water area?

Long Term Options for Rate Reduction

- **Hopewell Township Renegotiates the contract with SBRSA**
 - **Not feasible until after 2018**
 - **When Debt Service Adjustment Portion of Member-Participant Agreement Expires**
 - **Many issues to resolve here but not impossible**
 - **Trade rate relief for undertaking capital program to reduce infiltration and thus total wastewater flow to Hopewell Borough SBRSA plant**