

Public Scoping Meeting for Honey Lake Dam Rehabilitation Plan Agenda
Hopewell Township Municipal Building
March 24, 2010

7:00 p.m. Welcome and Introductions – William Brash,
Mercer County Soil Conservation District

7:15 p.m. - Stony Brook Watershed Plan
Honey Lake Project Purpose and Need
Greg Westfall
Water Resource Planner
USDA Natural Resources Conservation Service

USDA NRCS PL83-566 Rehabilitation Program
David Lamm
State Engineer
USDA Natural Resources Conservation Service
Need for Suitable Public Sponsor Identification by June, 2010

Target Date for Rehabilitation Plan Completion – September 2010

7:45 p.m. - Public Comments and Concerns Regarding Honey Lake Dam

8:55 p.m. – Public Comment Period Announcement
Barbara Phillips
Public Affairs Specialist
USDA Natural Resources Conservation Service

9:00 p.m. – Meeting Adjourn

Written comments by April 23, 2010 to: barbara.phillips@nj.usda.gov

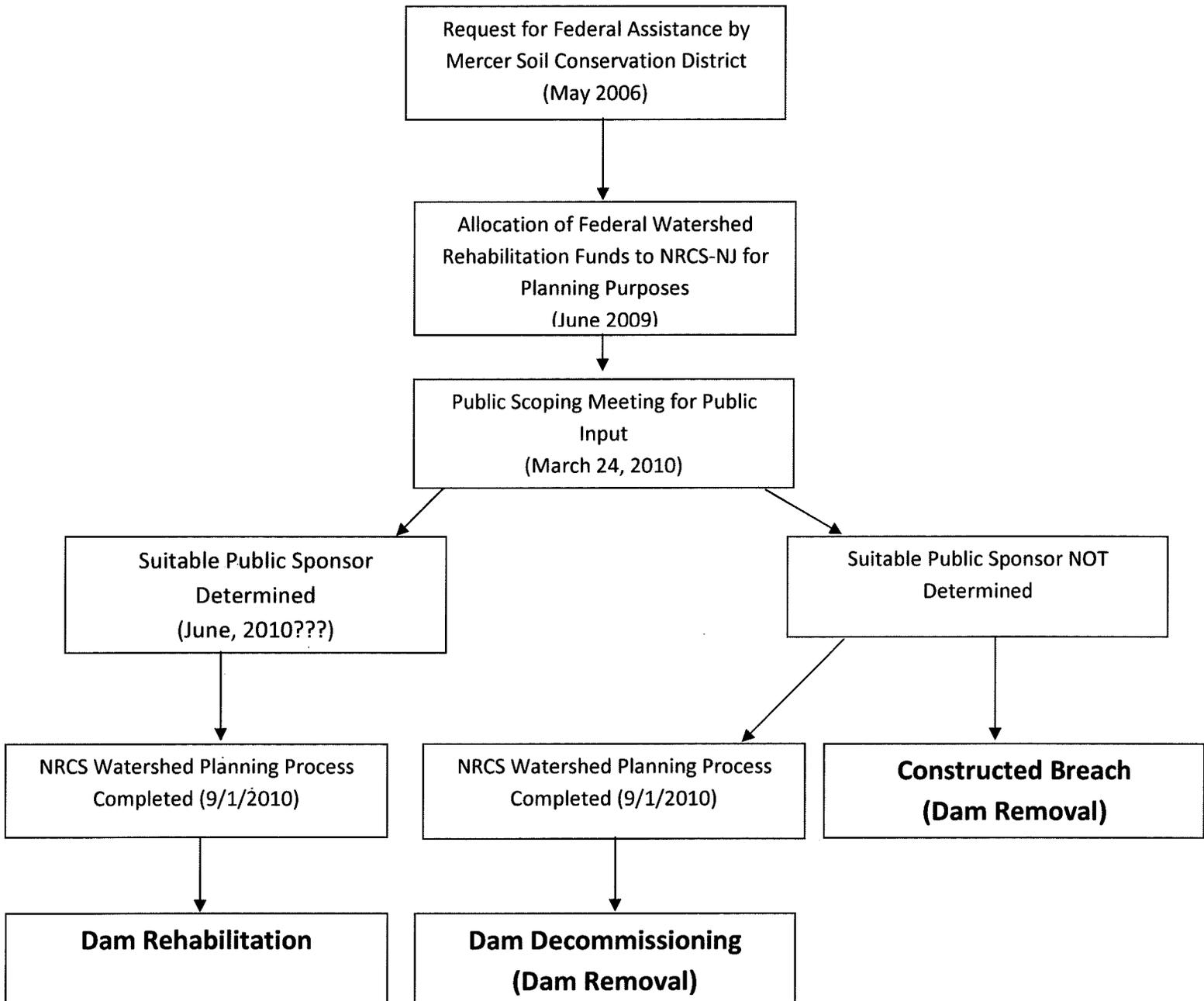
Or: Barbara Phillips, Public Affairs Specialist
USDA Natural Resources Conservation Service
220 Davidson Avenue, 4th Floor
Somerset, New Jersey 08873

Note to participants – Comments from the meeting will be recorded and the input from the audience will be summarized and, if a suitable public sponsor is identified, included in the Final Rehabilitation Plan

Technical Committee Members:

Hopewell Township – Paul Porgorzelski, Township Administrator
Mercer County Soil Conservation District – William Brash, Director
Mercer County Engineering – Gregory Sandusky, County Engineer
Princeton University – Michael McKay, Vice President for Facilities
New Jersey Department of Agriculture – Frank Minch
NJDEP Bureau of Dam Safety – Clint Oman, Senior Civil Engineer
Stony Brook Millstone Watershed Association – Jim Waltman, Executive Drctr
USDA NRCS – David Lamm, State Engineer

NRCS National Watershed Rehabilitation Program Process



Stony Brook Watershed

Honey Lake – Site 14

Public Scoping Meeting

March 24, 2010

Honey Lake Technical Committee Members

- Hopewell Township
- Mercer County Engineering
- Mercer County Soil Conservation District
- New Jersey Department of Agriculture
- New Jersey Department of Environment Protection – Bureau of Dam Safety
- Princeton University
- Stony Brook Millstone Watershed Association
- USDA Natural Resources Conservation Service

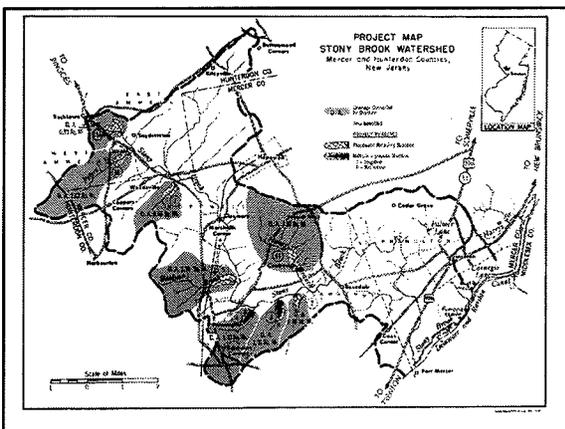


Purpose of Technical Committee

- Identify all interested stakeholders
- Give an overview of Stony Brook Watershed Plan and its original objective and status
- Gather stakeholder perspectives
- Discuss the USDA NRCS Rehabilitation Program
- Identify a sponsor (s)
- Plan for this public scoping meeting and, if a suitable public sponsor is found, follow-up meetings
- Provide feedback to NRCS and other agencies during rehabilitation planning process

Purpose of Public Scoping Meeting

- Inform Public of the issues discussed here regarding dam rehabilitation need
- Obtain public, sponsor and technical agency comments, concerns and input for development of rehabilitation plan
- Identify issues of economic, environmental, cultural, and social importance in the watershed
- Assist in identification of a *suitable public sponsor*



Facts About Stony Brook Watershed

- > Size: 30,604 Acres or 47.8 square miles
- > Location: 15% in Hunterdon County
85% in Mercer County

Objectives of Watershed Plan

(Plan Completed 1956)

- > Reduce Sedimentation to Carnegie Lake (owned by Princeton University) primary objective
- > Reduce Floodwater Damage
- > Reduce Streambank, Roadbank and other soil erosion

Watershed Plan Implementation

(Planned Measures installed 1959-1969)

- > Seven of eight planned structures were installed
- > The eighth structure was not installed due to unfavorable economics
- > Two of the structures were purchased by Mercer County Park Commission for a park with recreational facilities installed at one site in 1974.
- > Agricultural practice (contour farming, tree planting, etc) implementation

Facts on Sediment Trapping Structures

Site Number	Water Body Name	Surface Area (Ac)	Drainage Area	
			Sq. Miles	Acres
2	Willow Lake	4.0	0.4	256
3	Rosedale	12.0	1.5	960
4	Curlis	12.0	1.7	1088
5	Baldwin	18.0	2.5	1600
7	Hunts	5.6	0.66	422
11A	Amwell	10.2	0.93	595
14	Honey	27.0	3.8	2432

Additional Facts on Sediment Trapping Structures

Site Number	Water Body Name	Date Completed	O&M Sponsor
2	Willow	1959	Mercer County
3	Rosedale	1969	Mercer County
4	Curlis	1960	SCD/SBMWA
5	Baldwin	1962	NJDEP
7	Hunts	1960	SCD/SBMWA
11A	Amwell	1962	NJDEP
14	Honey	1964	SCD/SBMWA

Benefits of Implemented Watershed Plan

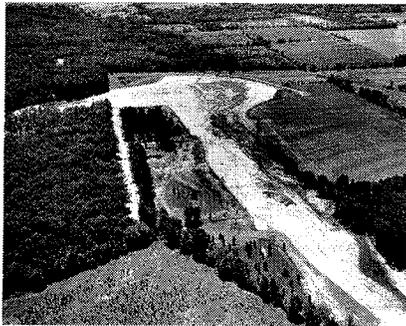
➤ Minimum of \$245,000 in average annual benefits due to:

- Reduced sediment delivery to Carnegie Lake
- Improved recreational opportunities

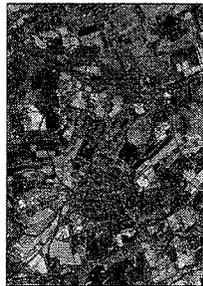
Honey Lake Relative to Watershed and other structures

- Sediment trapping structures control approximately 24 percent of the approximately 48 square mile Stony Brook watershed.
- Honey Lake drainage is the largest drainage area of any of the sediment trapping structures representing almost 40 percent (38.8 percent) of the total drainage area controlled by these structures.

Honey Lake Drained – June 1965

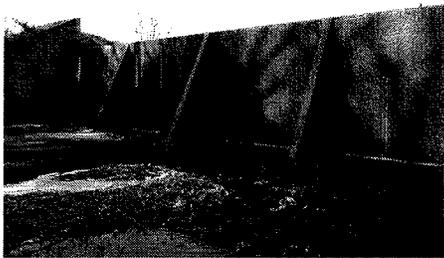


Honey Lake Watershed



Rehabilitation Needs and Other Factors Affecting Structure Longevity

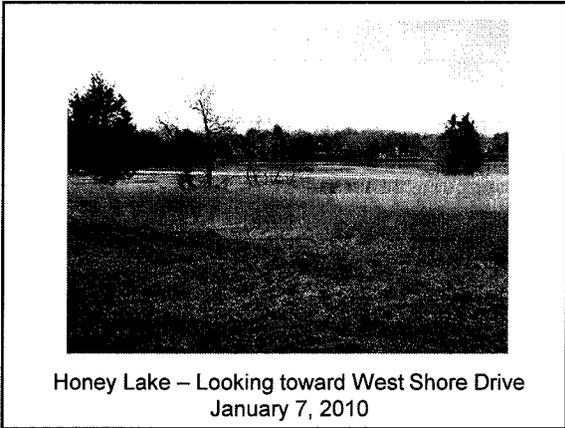
- 50 Year Design Service Life of Structures
- State Dam Safety Law identifies Honey Lake as a "High Hazard" structure due to development downstream of the dam breach "shadow". Most of the downstream development occurred following the dam construction.
 - Original design was for a low hazard dam
- NRCS Watershed Program Rehabilitation Amendments passed in 2000



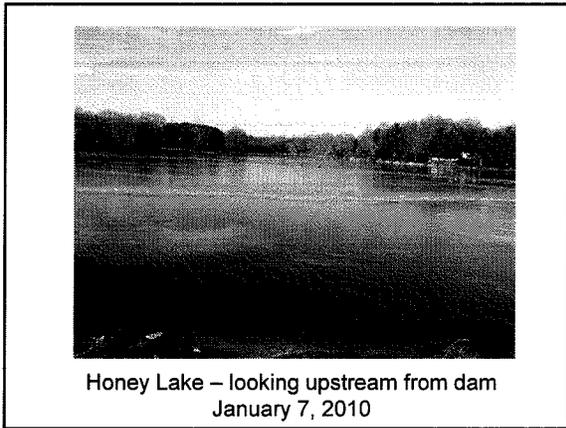
Honey Lake – Principal and Auxiliary Spillway

Why is there a need to rehabilitate structure?

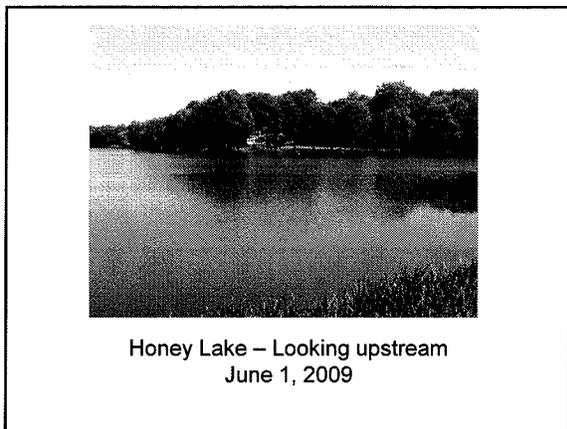
- Dam safety engineering technology has changed since structure was built (1964)
- Standard precipitation amounts have changed in an upward direction
- Need to protect the structure for the current design storm event
 - Hurricane Floyd event (1999)
 - Extreme flood event in Sussex County (2000)
 - Eighteen dams failed in Burlington County in July 2004
- Need to protect lives and property downstream of the structure in the event of structure failure



Honey Lake – Looking toward West Shore Drive
January 7, 2010



Honey Lake – looking upstream from dam
January 7, 2010



Honey Lake – Looking upstream
June 1, 2009



Honey Lake Looking toward Honey Brook Drive
January 7, 2010

PL83-566 Watershed Rehabilitation Program Features

- NRCS can provide technical and financial assistance to rehabilitate the structure

- NRCS cost share assistance available to cover up to 65 percent of rehabilitation costs

- ***Local sponsorship needed***

Rehabilitation Program Phases for Honey Lake

- Assessment – completed in August 2005

- Planning – now, plan completion dependent on identification of suitable public sponsor

- Implementation

Rehabilitation Planning at Honey Lake

- Initial problem/opportunity identification underway
- Public involvement – This public scoping meeting and follow-up public comment period and, if suitable public sponsor, future follow-up meetings
- Target date for draft plan – September 2010

Rehabilitation Planning

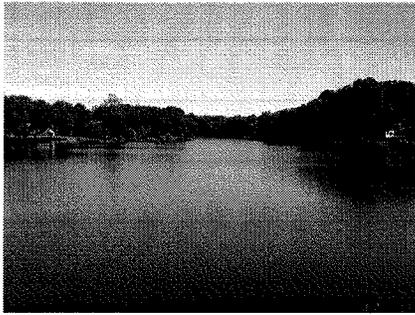
- Identification of problems
- Inventory resources
- Environmental Assessment (as required by National Environmental Policy Act or NEPA)
- Formulate, evaluate and comparison alternatives
- Selection of alternative (Sponsor or Sponsors)

Rehabilitation Planning Activities to Date

- Engineering survey of Honey Lake bathymetry and surrounding areas to determine sediment accumulation in structure
- Identification and documentation of other purposes of Lake (fire protection, groundwater recharge, impacts on property values, etc.)
- Interdisciplinary team visits to site

Initial Problems/Opportunities Identified

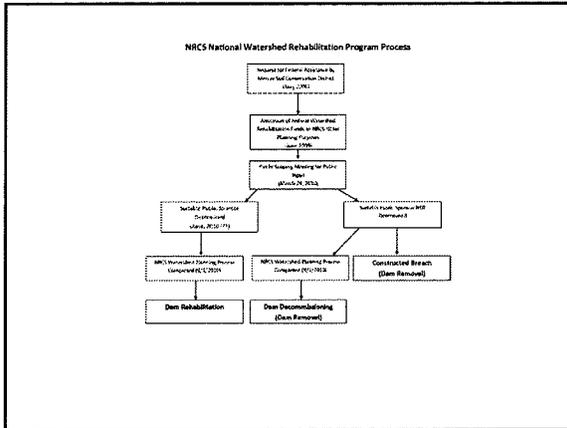
- Dam safety related issues
- Private wells recharge identified Lake as recharge reservoir (Mulhall, 2009)
- Potential fire protection use (Pinelli, 2009)
- Higher property tax assessment for land (approximately 30 percent) tied to lake view for 27 lakeside properties (Sost, 2009)
- Regional water quality basin
- No official public access



Honey Lake – June 1, 2009

Generic Planning Alternatives Under Consideration

- No Federal Action
- Decommission or breach existing dam
- Nonstructural solution (buyout, relocate downstream structures)
- Rehabilitate dam



Suitable Public Sponsor??

- > Must have eminent domain authority
- > Must have taxing authority

Sponsor Responsibilities

- > Be current in operations and maintenance of the dam
- > Provide non-federal cost-share funds (35% of the project cost)
- > Obtain permits
- > Develop new operation and maintenance agreement
- > Certify landrights
- > Provide proof of controls of downstream development
- > Develop an emergency action plan for high hazard dams

Public Comment Period

➤ Comments to be received until
April 23, 2010.

➤ Comments can be made to:

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