



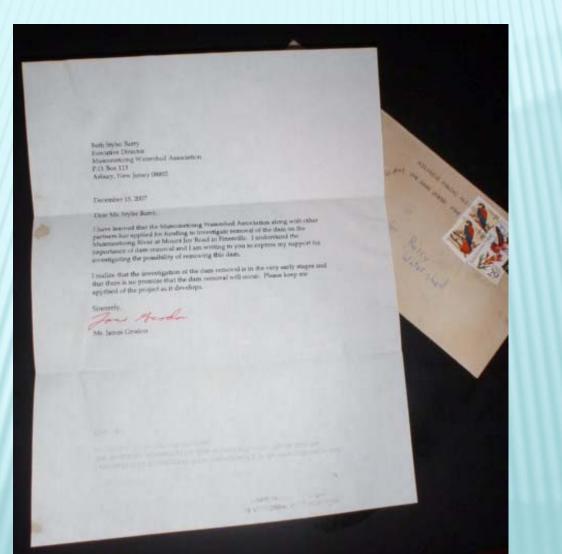
#### Gruendyke Dam

Seber Dam

#### **Riegelsville Dam**

Beth Styler Barry Presented: December 1, 2011 NJ Water Monitoring Summit









#### **Partner List**

**Natural Resources Conservation Service** – Natural Resources Conservation Service – technical assistance and possible financial assistance on riparian buffer restoration

**US Fish and Wildlife Service** – technical assistance and financial assistance from the Partners for Fish & Wildlife Program

**The National Oceanographic and Atmospheric Administration** – technical and possible financial assistance through the American Rivers-NOAA Community-Based Restoration Program.

**American Rivers** – technical, outreach, and regulatory assistance, and possible financial assistance through the American Rivers-NOAA Community-Based Restoration Partnership and other grant funding.

**North Jersey RC&D Council** – technical assistance and possible financial assistance on riparian buffer restoration.

Musconetcong Watershed Association –local landowner outreach, education, technical assistance. NJ Division of Fish and Wildlife – technical assistance on local fisheries issues.

Trout Unlimited - in-kind volunteer assistance from membership and possible limited financial assistance

National Park Service advisory and technical assistance



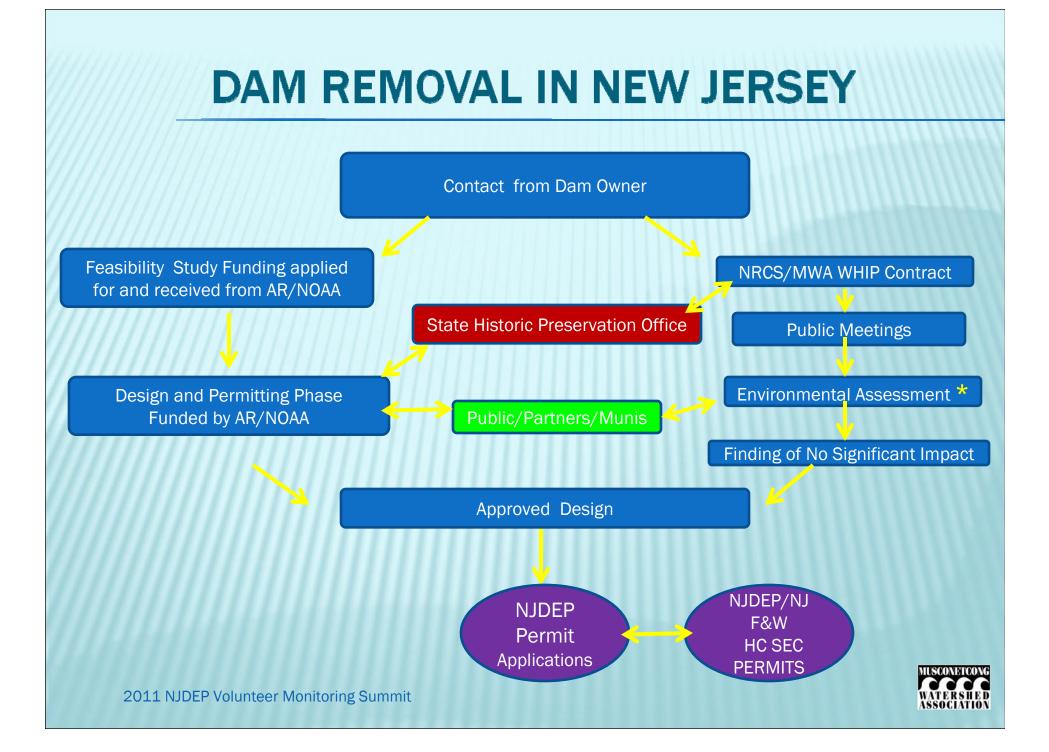




#### Funders:

- Natural Resources Conservation Services
- •USF&W
- American Rivers
- •NOAA
- Conservation Resources Inc.
- Corporate Wetlands Restoration Partnership
- National Fish and Wildlife Foundation
- Cora Brooks Foundation
- •NJ Federation of Sportsmen/Trout Unlimited/Leavens Foundation/Morris County





Environmental Assessment \*

#### No Action Alternative

Under this alternative, no further modifications would be made to the Finesville Dam. Aquatic organism passage, habitat and ecological connectivity would continue to be restricted by a manmade structure. The dam owner would continue to bear the maintenance, inspection and liability costs and risks. The dam owner will be required to maintain the dam according to requirements set forth by the NJDEP Bureau of Dam Safety and the Dam Safety Act.

Pursuing this "No Action" alternative would create a long term financial liability for the private dam owner. Public safety concerns would continue for those using the River for swimming and boating due to the hydraulic roller effect at the dam. The visual resource of the area would remain unchanged.



Environmental Assessment \*

#### Partial Dam Removal

Partial dam removal would entail the removal of a portion of the dam leaving the ends of the existing structure to provide support to the streamside walls that extend downstream and also serve as the abutments for the Mount Joy Road Bridge. This alternative would largely restore the connectivity and aquatic integrity of the Musconetcong River to the next obstruction, the Hughesville Dam. Full passage would be restored for all fish and other aquatic species present in the river. Public safety will be improved by the elimination of the hydraulic roller effect on the downstream side of the structure.

This alternative would eliminate owner responsibility for operation and maintenance of the structure as a dam and its liability. Cultural resource, onsite stream restoration and sediment concerns would need to be addressed. Stream habitat enhancement and tree and shrub planting and other practices would be part of the project. <u>The dam would retain some of its historical perspective</u>, as some of the dam structure would remain intact and the dam <u>abutments would be undisturbed</u>.

MEMORANDUM OF AGREEMENT BETWEEN THE NATURAL RESOURCES CONSERVATION SERVICE, THE NEW JERSEY HISTORIC PRESERVATION OFFICE, THE MUSCONETCONG WATERSHED ASSOCIATION, AND Mr. JAMES GRODON (DAM OWNER) REGARDING THE FINESVILLE DAM AND FISH PASSAGE PROJECT ON THE MUSCONETCONG RIVER HUNTERDON AND WARREN COUNTIES, NEW JERSEY



Archeological Monitoring







Environmental Assessment \*

#### Action Alternatives - Partial or Full Dam Removal

There are approximately 20 homes in the Finesville vicinity which are dependent on groundwater for their water supply. Finesville, due to its historic nature, has a number of old, relatively shallow wells (less than 50 feet deep) which predate and are grandfathered under current NJDEP regulations. These regulations now require a minimum of fifty feet of well casing plus an additional twenty feet of well casing into competent rock and greater well depth (Schumacher, 2009). New wells drilled on the relatively small lots require additional casing to protect drinking water sources from nearby septic tanks, cesspools and filter fields (Colaluce, 2009). The Natural Resources Conservation Service considers this to be a socio-economic issue.



#### Environmental Assessment \*



"NRCS and MWA are committed to assessing the changes in ground water that occur as a result of the project and any resulting impacts to domestic water supply wells. This assessment will involve installing monitoring points and measuring ground water levels near the river and in selected wells prior to and subsequent to removal of the dam. "

> Monitoring Shallow Wells



Finesville Area Well Testing Participation Form Musconetcong Watershed Association

Measurement of Static Water Levels in Domestic Wells

•Testing will consist of measurement of the static (at rest) water level in select wells in close proximity to the river to establish the pre-project level.

•Well owners must cooperate by resting their wells a minimum of 8 hours prior to collection of static water levels.

•Wells must be readily accessible without the need to excavate and/or removal pumping equipment.

•Well owners who wish to cooperate must give permission to access their wells.

• A licensed New Jersey well driller will gain access to wells to be measured. Well owners must indemnify the well driller from liability.

□My well meets the prerequisites for and I am willing to comply with the requirements for Static Water Level measurement.

□My well does not meet the requirements for static water level measurement, i.e., it is deeper than 50 feet, and/or it is not accessible without excavation.

□I DO NOT wish to participate in the Static Water Level measurement program.



Finesville Area Well Testing Participation Form Musconetcong Watershed Association Total Coliform Test

Coliforms are "indicator" organisms associated with bacteriologically polluted water. Their presence in drinking water is indicative of contamination from a surface source.

•Well owners must make an appointment to allow a certified contractor to obtain a sample of well water for laboratory testing.

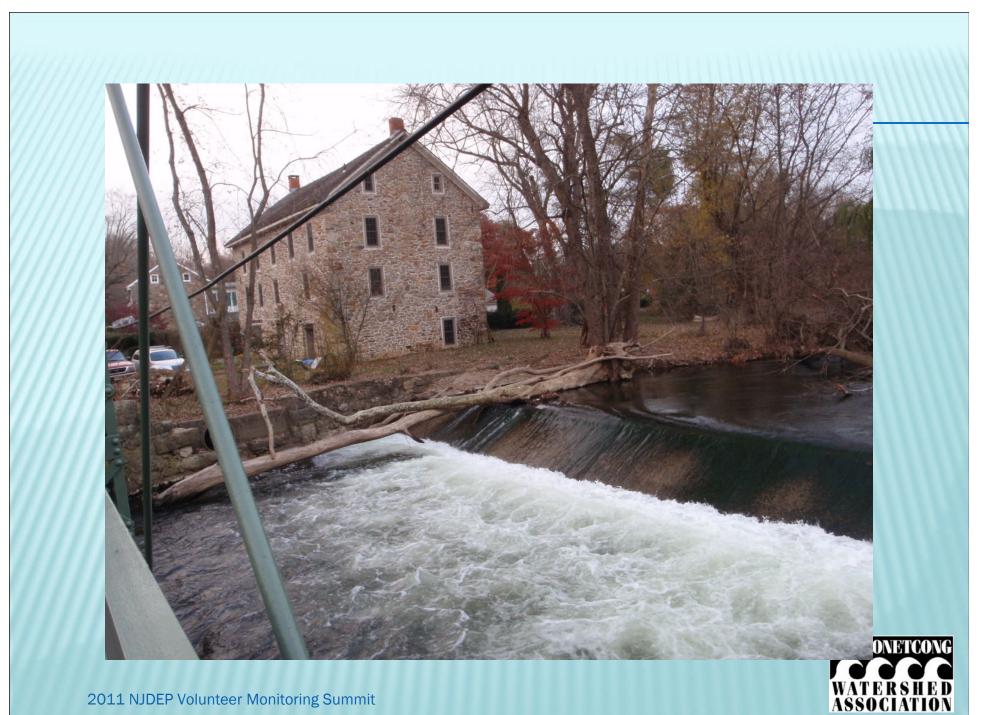
Please provide me with the contact information to schedule an appointment.I DO NOT wish to participate in Total Coliform testing



On the Finesville Dam removal we are monitoring:

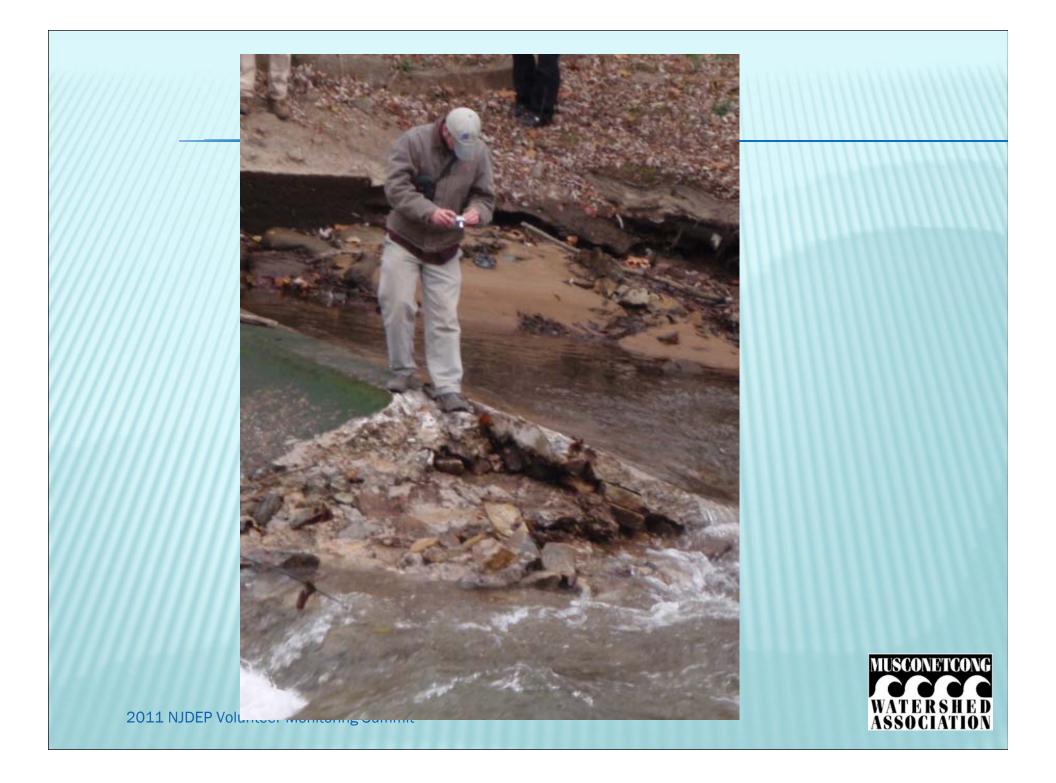
Macroinvertebrates
Chemistry
Temperature
Visual Assessment
Streambed Habitat Changes
Domestic Well Water Quality
Groundwater Changes
Archaeology/History

























UNETCONG WATERSHED ASSOCIATION

# Thank You!

#### **Musconetcong Watershed Association**

#### (908) 537-7060

beth@musconetcong.org

www.musconetcong.org

