

# Walnut Brook Stream Stabilization *Working Workshop*

## Raritan Township (Mine Brook Park) Dvoor Farm (Hunterdon Land Trust Alliance) Raritan Township, NJ June 22-26 2009

### Construction Dates:

Monday, June 22<sup>nd</sup> (afternoon) to Friday, June 26 (afternoon)

### A Hands-On Workshop:

This is an excellent opportunity to observe (and help) with a stream restoration project. The workshop will result in the installation of innovative streambank stabilization techniques using rock and vegetation material. Through the minimum use of rock and the maximum use of vegetation, the heavily eroded banks of Walnut Brook will be protected and restored. Instant shade techniques will be installed to address high water temperatures.

### What innovative streambank stabilization techniques are we talking about?

Two meanders will be transformed during construction, Meander #1 (470 feet long) and Meander #2 (250 feet long). Practices to be constructed along the Walnut Brook include:

- *Resistive boulders* with dormant plantings placed behind boulders and rooted vegetation planted in between rocks and baseflow;
- *Rock vanes* (3) constructed with pre-dug pools to dissipate energy, practice planted with pole plantings;
- *Locked limbs and logs* anchored in pool features to create roughness & habitat;
- *Single stone bendway weirs* (a re-directive measure)
- *Grade control structures* of rock at grade;
- *Longitudinal peaked stone toe protection* (LPSTP);
- *Silt trenches* constructed and planted with live stakes and plantings.

For a visual example of what will be constructed at this site, Go to <http://www.watchyourdirt.com/> Click on *Derrick's Blog* in the lower left and either watch the powerpoint or download.

### Participants will be given the opportunity to work...

All participants should wear a safety vest, hard hat, boots, and bring work gloves. Waders may be advisable depending on stream conditions. The emphasis of this workshop will be **WORK**. No formal classroom instruction....but there is always teaching moments with Derrick!

The first priority will be to keep the big yellow machines working!

Don't miss this excellent opportunity to observe (and help) with a stream restoration project.

Meander #1 eroding bank- June 2006



Meander #2 eroding bank- June 2006



**Volunteer Coordinator:**

Grace Messinger, North Jersey RC&D [gmessinger@northjerseyrcd.org](mailto:gmessinger@northjerseyrcd.org)  
908-735-0733 x110

Daily email updates will be sent out to interested volunteers. This email will briefly explain what has been accomplished and it will forecast the next days' work and volunteer needs. You can also call 908-735-0733 x110 to hear a recording with the latest update on project activities.

On a daily basis, volunteers will be required to sign in and will be required to complete and sign an NRCS Earth Team Volunteer form

This project is managed by North Jersey RC&D. The project is a part of a large watershed management grant 'Developing the Neshanic River Watershed Restoration Plan' led by New Jersey Institute of Technology and funded by the Division of Watershed Management of NJ Department of Environmental Protection (DEP). Additional funding for this project is provided by the New Jersey Wetland Mitigation Council.

Additional project partners include: Hunterdon Land Trust Alliance, Raritan Township, Natural Resources Conservation Service, Princeton Hydro LLC, Hunterdon County Freeholders, Hunterdon County Soil Conservation District, Hunterdon County Roads, Bridges & Engineering Department, New Jersey Water Supply Authority, South Branch Watershed Association, NJDEP Fish & Wildlife, Trout Unlimited, Beazer Homes USA and U.S. Army Corps of Engineers *Water Operations Technical Support Program* (WOTS).

Construction and stabilization work will be managed and overseen with guidance from Dave Derrick (US Army Corps of Engineers Research Hydraulic Engineer), the Natural Resources Conservation Service and Princeton Hydro LLC. Willever Excavating will be the contractor on site.

**Project & Construction Information:**

Park in Mine Brook Park parking lot off Old Croton Road (near the intersection of Old Croton Road and Route 12 in Flemington NJ 08822)

Facilities on site include port-a-potties and a covered pavilion in the park. Lunch will not be provided, drinking water will be available. Local eateries are available within a few miles of project area.

