

# Albany County Soil and Water Conservation District

## 2010 Activity Highlights



Conservation  
Education

Agricultural  
Environmental  
Management



Stormwater  
Pollution  
Prevention

## Barber Stream Restoration and Bank Stabilization Project



The Barber property is located at the intersection of NY Route 396 and the Onesquethaw-Coeymans Creek, in the Town of Bethlehem. Changes in the stream's course above and below the site had resulted in destabilization of approximately 160 linear feet of streambank on the outside of a tight bend. Rapid lateral channel migration jeopardized the driveway and home, with the stream encroaching to within eighteen feet of the Barber house. Flooding and bank erosion were also responsible for the loss of a farm outbuilding on the northeast side of Coeymans Creek. The stream was also moving closer to NY Route 396.

In 1999 the Albany County Soil and Water Conservation District (ACSWCD) was contacted to provide assistance with emergency streambank stabilization. The ACSWCD was granted funds in 2000 to address the problem, a portion of which was immediately used to pay for large rock riprap on the eroded bank. This emergency work, which armored the bank with large rock, started to fail, and the stream continued to threaten the home and NY Route 396. In 2005, ACSWCD completed the Onesquethaw Creek/Coeymans Creek Stream Stability Assessment and Conceptual Restoration Design. This document details procedures and conclusions drawn from a stream stability assessment and presents four possible alternatives for stream management.

Referencing this document and current geomorphic measurements taken by the ACSWCD and Trout Unlimited (TU) volunteers, Carl Schwartz of the US Fish & Wildlife Service (USFWS) designed a project using natural stream design.

Roy Lamberton, a volunteer from TU and the Onesquethaw-Coeymans Watershed Council (OCWC), coordinated the project and obtained necessary permits from the NYS Department of Environmental Conservation (DEC) and the US Army Corps of Engineers. The Albany County SWCD funded the excavator, Clearwater Chapter of TU funded the liability insurance, and the excavator operator was provided by USFWS. The NYS Department of Transportation provided the large rock, including delivery, needed for the structures. Volunteers from TU and the OCWC, and staff from ACSWCD and the Town of Bethlehem assisted during construction. The Barbers provided fuel and other materials. DEC's "Trees for Tribes" program of the Hudson River Estuary Program provided and planted over 200 trees and shrubs with assistance from TU and OCWC volunteers. The ACSWCD provided and planted additional sandbar willow seedlings on the banks of the stream.

The project was completed the week of August 23, 2010. The project is intended not only to stabilize this section of the stream and reduce sediment input, but will provide significant trout habitat. The final stream restoration and habitat project includes 2 rock vanes with J-hooks, 3 straight rock vanes, a bankfull-high vegetated bench, and 3 root wads. The function of the rock vanes is to push the energy of the stream away from the bank and stabilize the site, making the stream deeper and narrower. The rock vanes and root wads create habitat and hiding places for aquatic wildlife, including trout. The stable banks and increased riparian vegetation provide habitat for terrestrial wildlife while reducing erosion. The combined resources provided by all of the partners greatly reduced the cost of this relatively large project.



## Stream and Wetland Protection and Restoration



Through a collaboration with the Mohawk Hudson Land Conservancy the District worked in the townships of New Scotland and Bethlehem to conserve and enhance wetlands.

The District anticipated the creation of nesting locations, invasive species reduction, present native species enrichment, and reduced sedimentation and erosion caused by denuded streambanks. During this project the District worked with volunteers from the Land Conservancy. The invasive species at the

Schiffendecker Preserve were treated and/or removed by a Certified Pesticide Applicator. To encourage the growth of native species, Washington Hawthorne, Red Maple, White Pine and Red Oak were planted as part of the restoration planting. Barred owl and Screech Owl nesting boxes were purchased and placed at 3 different preserves. To address erosion concerns, the steep slope at the primary trail head was stabilized by installing a stairway and utilizing woodchips. Small walking bridges have also been installed to help stabilize gullies at the Swift, Normanskill West and Schiffendecker Preserves and to minimize traffic through ecologically sensitive areas.

---

## Buckingham Pond Erosion Protection Project



In 2009 the District was approached by the Buckingham Pond Conservancy group which, at the time

was a newly formed non-partisan neighborhood organization. This group was seeking information about Buckingham Ponds history and water quality. A site visit unveiled issues

regarding bank and walkway erosion that was beginning to form rills. This erosion was likely stemming from stormwater runoff coming from the road. The City of Albany and Buckingham Pond Conservancy sought funding from the District to mitigate these erosion concerns. The following year in 2010 the District Board dutifully agreed to finance the endeavor in an amount not to exceed \$2500. Through this funding the City of Albany was able to re-route the walking path at the request of the SWCD and install a drain to divert road runoff to vegetated areas. The major erosion that was repeatedly causing repair appears to have been stopped.

---

## Albany County Demonstration Rain Gardens



The sixth demonstration rain garden was installed in 2010 as a joint effort between the Albany County SWCD,

Cornell Cooperative Extension (CCE) Albany

County and the Stormwater Coalition of Albany County. The garden was installed at the Alumni House located on the SUNY Albany Campus. These gardens are constructed by CCE Master Gardeners and staff, SWCD staff and volunteers from the SUNY Campus. Rain gardens are designed to capture runoff from adjacent parking lots, roofs and other impervious surfaces, helping to prevent stormwater contamination. Stormwater picks up contaminants that come from petroleum products, fertilizers, road salt, litter and more.

## District Battery Recycling Program



Through the final stages of the District's Battery Recycling Project, we were able to collect and recycle over 1,100 pounds of dry cell batteries in 2010. While

they are a small amount of the solid waste stream they are a concentrated source of heavy metals. Through this recycling project we were striving to preserve our natural resources by keeping these batteries out of our landfills and water supplies. In just over 2 years of offering this service to the County residents, we have been able to collect over 5,700 pounds.

---

## Agricultural Tax Assessment - Soil Group Worksheets



The District continues to assist eligible landowners in filing for agricultural assessments as it relates to their farmland. As part of a statewide program, the District completes a Soil Group Worksheet, identifying the various soil types that make up a parcel of land. These soils are then categorized into soil groups, having each group valued differently for farmland assessment purposes. This allows

farmland to be assessed based on its agricultural value, rather than its full market value, keeping land in production. Many acres of our countryside would remain idle or be converted to another form of land use without this important state program. These open workable lands provide wildlife habitat, open space, natural resource diversification, employment & economic opportunities. During 2010 alone, the District completed 38 soil group worksheets totaling 2,939 acres of assessed land in Albany County; with 1,201 acres of agricultural land included.

---

## Conservation Partnerships



Conservation Districts are highly visible and effective components of a large network of governmental and non-governmental partners that promote environmental conservation and sustainability. The Albany County Soil and Water Conservation District works closely with many Local, State and Federal entities including municipalities, county offices, the Albany County Water Quality Coordinating Committee ([www.albanywater.org](http://www.albanywater.org)), Lower Hudson Coalition of Conservation Districts ([www.lhccd.org](http://www.lhccd.org)), Mohawk Hudson Land Conservancy

([www.mohawkhudson.org](http://www.mohawkhudson.org)), Hudson Mohawk Resource Conservation and Development Council ([www.hudsonmohawkrcd.org](http://www.hudsonmohawkrcd.org)), Mohawk River Basin Coalition of Conservation Districts, Cornell Cooperative Extension Albany County ([www.ccealbany.com](http://www.ccealbany.com)), Clearwater Chapter Trout Unlimited ([www.clearwatertu.org](http://www.clearwatertu.org)), NYS Department of Environmental Conservation ([www.dec.ny.us](http://www.dec.ny.us)), NYS Department of Agriculture and Markets ([www.agmkt.state.ny.us](http://www.agmkt.state.ny.us)), USDA Natural Resources Conservation Service ([www.nrcs.usda.gov](http://www.nrcs.usda.gov)), USDA Farm Service Agency ([www.fsa.usda.gov](http://www.fsa.usda.gov)), New York State Soil and Water Conservation Committee ([www.nys-soilandwater.org](http://www.nys-soilandwater.org)), Albany County Department of Transportation ([www.albanycounty.com/dpw](http://www.albanycounty.com/dpw)), Stormwater Coalition of Albany County, citizen groups, and not-for-profit organizations.

## Agricultural Environmental Management



AEM is a voluntary program that provides farm operations with a means to address natural resource concerns related to agriculture.

Through the implementation of the Agricultural Environmental Management (AEM) program, Albany County Soil and Water Conservation District staff can assess a farm's impact on natural resources and work with them to create a long-term business plan. This assessment can help document environmental stewardship, prioritize areas that present risks, identify opportunities to save money, and locate available resources to address potential concerns. By following sound agricultural practices, reducing sedimentation and carefully applying nutrients, farmers are ensuring healthy water quality levels. The District provides farmers with free assessments of their operation and works together with them to implement conservation practices that will address environmental concerns. AEM participation in the program includes more than 208 Albany County farms.

Conservation planning is an integral part in the success of this program. Plans are customized farm by farm and based on watershed needs. A total of five conservation plans were developed in 2010, with several more working through various stages of the planning process.

The District then applies for state grants that provide up to 75% cost sharing for practice implementation. District staff applied through the NYS Agricultural Nonpoint Source Pollution and Abatement Program to mitigate issues stemming from two farms located within Albany County. Practices applied for strive to reduce the impact these farms have on their respective watersheds. This past year public health and safety was at the forefront of everyone's attention, as all agencies strive to do more with

less. In Albany County there are several surface waterbodies, many of which public drinking water or recreation is an impacted use. Our AEM Steering Committee, which includes all of our partners listed on the previous page, as well as farmers representing all sectors of the agricultural industry, can have a direct impact on the perception of farming in the community as well as the protection of natural resources by implementing practices on the farms that need the most assistance. The SWCD was successful in receiving funding on one farm in 2010 for a total of \$153,573.70 in NYS assistance.

The District also had a very integral role in the successful application and implementation of NRCS Environmental Quality Incentives Program (EQIP) projects. In fiscal year 2010, eight contracts were funded totaling \$332,244.00 in conservation assistance. The Albany County SWCD implemented over 21,000 feet of fencing as part of Rotational Grazing Systems through NYS Agricultural Nonpoint Source Pollution and Abatement Program and NRCS Programs. A 4.4 acre buffer was installed through the Conservation Reserve Enhancement Program to allow nutrients to filter lessening the impact on downstream water quality. A High Tunnel or Hoop House was installed on a vegetable farm through the Agricultural Management Assistance Program. High tunnels expand the availability of healthy locally grown crops, extend the growing season, reduce pesticide use and keep vital nutrients in the soil and increase yields.



## Technical Assistance



The mission of the Albany County Soil and Water Conservation District is to improve local land management practices and provide technical assistance to residents, landowners, and units of government throughout Albany County. The District assists county residents, municipal staff, county government staff, and others by providing a variety of information and permit assistance on stormwater management, erosion and sediment control, pond management, wetland identification, native and invasive/exotic plants identification and management, other natural resources management, and identification of soil types and characteristics. Resources made available to the public included soils maps and interpretation, USGS Topographic maps, Historic Aerial Photography, Flood Rate maps, NYS & Federal Wetlands maps, and information on pond construction and care. This assistance includes field visits as well as telephone, and in-office services.

ance to residents, landowners, and units of government throughout Albany County. The District assists county residents, municipal staff, county government staff, and others by providing a variety of information and permit assistance on stormwater management, erosion and sediment control, pond management, wetland identification, native and invasive/exotic plants identification and management, other natural resources management, and identification of soil types and characteristics. Resources made available to the public included soils maps and interpretation, USGS Topographic maps, Historic Aerial Photography, Flood Rate maps, NYS & Federal Wetlands maps, and information on pond construction and care. This assistance includes field visits as well as telephone, and in-office services.

ance on stormwater management, erosion and sediment control, pond management, wetland identification, native and invasive/exotic plants identification and management, other natural resources management, and identification of soil types and characteristics. Resources made available to the public included soils maps and interpretation, USGS Topographic maps, Historic Aerial Photography, Flood Rate maps, NYS & Federal Wetlands maps, and information on pond construction and care. This assistance includes field visits as well as telephone, and in-office services.

---

## Conservation Education



The District staff takes great pride in a vast range of educational opportunities reaching young students and citizens alike. We strive to educate the conservationists of tomorrow.

Staff members from Albany, Rensselaer, Schenectady, and Schoharie County Soil and Water Conservation Districts along with staff from the NY Power Authority and NYSDEC once again coordinated the Capital Region Envirothon. The goal of the Envirothon is to incorporate environmental studies into the curriculum and expose students to career options in conservation. As students compete to make it to the state level, they develop practical skills such as research, teamwork and public speaking. The event was held in April at the NY Power Authority's Blenheim Gilboa Power Project.

The District was also on hand to assist the Schoharie County Soil and Water Conservation District with their Conservation Field Day. A station to educate students on Water Conservation was set up and presented to over 200 students.

The Mohawk Hudson Land Conservancy invited the District to provide stormwater pollution prevention education utilizing the Enviroscape Model. This was done as part of the Trails Day event held at the Swift Preserve in Bethlehem.

The District participated in the Altamont Fair again in 2010 to provide information about District programs. We were able to be on hand to answer questions from County residents.

The SWCD was invited to present at the Albany County 4H Summer Scene Camp which was held at Ridgefield Park in Albany. The camp for inner city youth ages 7 to 12 focused on "Footprints to the Future" in 2010. The youth were challenged to gain an understanding of their daily impact on the environment through hands on activities. A District staff member utilized macroinvertebrate identification to educate approximately 60 students about water quality.

The District also utilizes its website to educate the public as well as sending out a quarterly newsletter to over 3,800 county residents.

---

## Stream Buffer Project on Tributary to the Onesquethaw



Utilizing conservation project funding the District was able to assist a family dairy farm. One area on the farm showed

signs of nutrient runoff due to its proximity to a stream. In this location dry cows and heifers were allowed free access to a stream for drinking and wallowing. Through the Agricultural Environmental Management program it was determined that the best remediation would be

to buffer the stream from livestock access and create a Riparian Herbaceous Cover. The farmer and SWCD worked with a local fence contractor to complete the project. Twenty five hundred feet of 4 strand high tensile fencing was installed along a tributary to the Onesquethaw Creek. The SWCD is proud of this accomplishment as it has been repeatedly discussed at the Albany County Water Quality Coordinating Committee meetings and it has been recommended by the Department of Health and Trout Unlimited. Through this project the SWCD has been able to help protect the quality and integrity of this tributary as well as provide work for local contractors.

---

## Home Water Analysis Project



The District was able to purchase and distribute 50 Home Water Analysis Kits. These kits test for Bacteria, Lead, Nitrates, Nitrites, Chlorine, Iron, Copper, pH, Alkalinity, Hardness, and Pesticides. Flyers were posted in libraries and town

county encouraging residents with private wells to come to the District office to receive a kit. Each participant completed a short survey with questions regarding current water testing practices. We hope to encourage the practice of routine water testing in order to monitor household water supply and prevent or fix problems that may impact the health of residents.

---

## Erosion & Sediment Control Training



In 2010 the Albany County SWCD sponsored three 4-hour Erosion & Sediment Control (E&SC) Training Workshop as part of New York State's

regulatory Stormwater Permit Program. This was available for developers, engineers, consultants, local Code Enforcement Officers and

others in obtaining the required updates and criteria for maintaining their NYS certification. Nearly 225 people were trained by these successful workshops.

All contractors involved in earthwork activity on construction sites in New York State where at least an acre of soil will be disturbed are required to attend a four-hour Erosion and Sediment Control Workshop endorsed by the NYS Department of Environmental Conservation.

## Rain Barrel Program



Through a partnership with The New England Rain Barrel Company we continued our annual rain barrel distribution program to help

residents conserve water, save money and reduce storm water run-off. By purchasing and installing a rain barrel residents can collect and store rainwater from their roofs that would otherwise be diverted into storm drains and streams. A one inch rainfall on a 1,000 square foot roof will yield over 620 gallons of water. By

keeping this storm water from running off of a property, one can help keep the local waterways cleaner and healthier. Stormwater can carry anything that may be on a lawn, roof or parking lot including fertilizers, uncovered soil or dog droppings to the storm drain systems and then eventually to the closest stream. Many times it is the volume of stormwater that can damage a stream by eroding the bank and scouring the bottom. Rain barrel use reduces the stress on municipal water systems during the summer months and improves storm water management.

A total of 43 barrels were sold during this program in 2010.

---

## Conservation Programs



Through our spring and fall fish programs approximately 6,750 fingerlings and minnows were stocked into ponds across the county.

This total includes 50 Triploid Grass Carp. The carp sold in our sale help to alleviate the need for chemical herbicides in ponds.

Each spring the Soil and Water Conservation District holds a tree and shrub program offering

a wide variety of coniferous and deciduous tree seedlings, as well as transplants, ground covers, and wildflower seed mixes. The ACSWCD tree and shrub sale was developed to provide landowners with an affordable and convenient way to purchase trees, shrubs and wildflower seeds for conservation practices. Over 14,000 tree and shrub seedlings were distributed to Albany County residents during the 2010 Sale.

The District also offers bluebird boxes, bat houses, wood duck boxes, wren houses, bird feeders, rain gauges and "Finder" books available throughout the year.



## We look forward to continuing to serve you in 2011!

**Board of Directors** : John Santacrose (Chairman), Charles Houghtaling (Vice Chairman), Edward Kleinke, Herbert Reilly and Howard A. Shafer

**Staff** : Joseph Slezak ( Field Manager), Susan Lewis (Administrative Manager) and Peter Bayzon (Natural Resource Specialist)

For more information contact the Albany County SWCD at:  
PO Box 497, 24 Martin Road, Voorheesville, NY 12186  
Tel: 518-765-7923 - Website: [www.albanycounty.com/swcd](http://www.albanycounty.com/swcd)