



**LUZERNE
CONSERVATION DISTRICT**



**2010
ANNUAL REPORT**

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Mission Statement

Conserving land and water resources in Luzerne County by promoting public awareness, providing technical assistance, and encouraging regulatory compliance.

A Brief Review of the Year

The board and staff worked hard in 2010 to accomplish our goals and objectives while dealing with several challenges.

Over the past few years, we've had to permanently streamline our operation by reducing a few staff positions and consolidating responsibilities. Added to that challenge, state funding for conservation districts was again cut, leaving us at fiscal year 1999/2000 levels.

With budget cuts within Luzerne County departments, the commissioners asked the conservation district to take over the West Nile Virus mosquito surveillance and control program. The District Board agreed, and we entered into a contract with the PA Department of Environmental Protection to operate the program in Luzerne County. This was fortunate because it allowed us to move one of our staff members into the program coordinator position, alleviating the need for a possible layoff. We also hired a seasonal staff member to assist with the program.

Despite the challenges, we were able to continue our mission of soil and water conservation in Luzerne County. The board members and staff of the Luzerne Conservation District remain dedicated to that mission and to providing efficient and effective public service to the residents and natural resources of the county.

~ Josh Longmore, District Manager

Introduction

On February 13, 1964, out of concern for the conservation of the natural, scenic, historic, and aesthetic resources of Luzerne County, Pennsylvania, the Luzerne County Commissioners established the Luzerne Conservation District.

The Luzerne Conservation District is a not-for-profit, local agency whose primary types of activities include: regulatory/voluntary compliance, technical assistance, and education/outreach. We accomplish our mission through cooperation with landowners and land users; by working with other public and private organizations; and by increasing citizen awareness of the responsibility to be good stewards of natural resources.

As one of the sixty-six conservation districts in Pennsylvania (one for each county except Philadelphia County), the Luzerne Conservation District is involved in developing local programs and implementing on-the-ground practices to protect the soil and water resources of Luzerne County. The district is led by a nine-member board consisting of community volunteers and a county commissioner. Currently, there are 9 staff members including: the District Manager, the Secretary/Bookkeeper, the Agricultural Conservation Specialist, the Resource Conservation Specialist II, the Resource Conservation Specialist I, the Watershed Program Coordinator, the Environmental Services Specialist, the seasonal Environmental Services Technician and a part-time Building and Grounds Keeper. District programs are developed and carried out to best serve the specific needs of the natural resources and people of Luzerne County.

Erosion & Sediment Pollution Control Program



Did you know that sediment is the number one pollutant, by volume, to waters of the Commonwealth of Pennsylvania? Sediment pollution is the result of erosion. While some erosion is natural, accelerated erosion (caused by human activities such as development and farming) can significantly impair watercourses and cause serious problems like drinking water pollution, fish kills, and siltation of dams and channels.

In order to ensure that proper erosion and sediment pollution control techniques are implemented within Luzerne County, the Luzerne Conservation District has been delegated the responsibility by the Pennsylvania Department of Environmental Protection (DEP) to administer the Erosion and Sediment Pollution Control Program ([Chapter 102](#)) and the National Pollutant Discharge Elimination System (NPDES) Program ([Chapter 92](#)) and to review Erosion and Sediment Pollution Control (E&S) Plans for earth disturbance activities within the county. The district also conducts related training for engineers, contractors, and municipalities; and district staff members perform site inspections of earth disturbance activities to determine compliance with the applicable state regulations. The district also responds to and investigates complaints involving erosion, sedimentation, and stormwater problems occurring during earth disturbance activities.



NOTE: State law requires that an E&S Plan, which meets the requirements of Chapter 102 (Erosion and Sediment Control Regulations), be properly designed, implemented, and available on site for all earth disturbance activities that disturb 5,000 square feet or more.

Below is a list of activities that fall under the above-mentioned programs for 2010:

Activity	Total
E&S Plan Reviews	212
NPDES General Permits	24
NPDES Individual Permits	2
Total Disturbed Acres	1097
Total Project Acres	4977
Site Inspections	306
Complaint Investigations (delegated)	82
Complaint Investigations (non-delegated, referred to other agencies)	3

E&S Program staff members had many public outreach and technical assistance contacts with the regulated community and the general public in 2010 (2,648 occurrences). The district partnered with the Wyoming and Lackawanna County Conservation Districts in hosting the 17th Annual Contractors/Engineers Workshop at Keystone College. The district also held our own MECC (Municipal, Engineer, Contractor, Conservation) Workshop, with over 100 attendees.

Agricultural Conservation Program

The Agricultural Conservation Program provides technical and financial assistance for farmers and other land users to implement best management practices (BMPs) to reduce non-point source pollution to local streams within the Chesapeake Bay Watershed.

To help meet Pennsylvania’s goals set by the Chesapeake Bay 2000 Agreement, the Luzerne Conservation District (and other conservation districts within the Chesapeake Bay Watershed) developed a county specific Chesapeake Bay Tributary Strategy Implementation Plan. The plan identifies major sources of non-point source pollution within Luzerne County, and prescribes various BMPs for addressing the water quality impairments. Through this program, the district undertakes projects to implement the recommendations of the plan.

The Luzerne Conservation District also provides nutrient management planning assistance to farmers. This technical assistance helps farmers utilize nutrients from manure and fertilizers for more efficient crop production, while aiming to keep those potential pollutants out of streams and other water bodies.

In 2010, the district’s Agricultural Conservation Program work included water and manure management projects on agricultural operations, a cover crop incentives program, a soil test incentive program, educational workshops for equine owners and no-till, cover crop educational workshops for agricultural producers. Most of these projects are funded through DEP’s Chesapeake Bay Special Projects Grant Program. The district’s Agricultural Conservation Specialist continues implementing special projects from previous years. The following shows the projects that were worked on in 2010.

Special Projects:

2009/2010 Cover Crop Program	\$1,670.00
2010/2011 Cover Crop Program	\$3,940.00
2010 Equine Watering System	\$7,411.20
Streambank Restoration and Bridge Repair	\$15,000.00
Small Cattle Watering System	\$6,000.00
Rotational Grazing Fencing System	\$2,784.00
Small Scale Rotational Water System	\$3,125.00
Soil Test Incentive Program	\$100.00

Aq Conservation Specialist’s Education and Outreach Activities:

- Assisted with the district’s annual banquet
- Created 3 Farm Bureau newsletters for the Luzerne County Farm Bureau
- Held 2 Chesapeake Bay Advisory Board meetings
- Gave an Earthbox and rain barrel demonstration to 6th graders for Earth Day
- Held a “2010 Horse Course” workshop for equine producers in April at the Lehman Fire Hall
- Assisted with the Luzerne County Study Day and Envirothon
- Assisted with the planning and presentation of the NEPA Energy Expo
- Hosted the Regional Chesapeake Bay and Nutrient Management meetings
- Prepared REAP applications for 2 producers in Luzerne County
- Held an annual seedling sale for Luzerne County residents with 52 participants
- Assisted with the MECC workshop
- Held a “No-Till/Cover Crop” workshop for 52 local producers.
- Assisted with the “Your Town Design” Workshop

Watershed Stewardship Program

The Luzerne Conservation District’s Watershed Program Coordinator administers the Watershed Stewardship Program in Luzerne County. The Watershed Program Coordinator position is partly funded by a Growing Greener grant through the Pennsylvania Department of Environmental Protection. The coordinator focuses efforts on improving the quality of the county’s surface and ground water through the protection and enhancement of natural systems within the watershed.

Through the Watershed Stewardship Program, the district aids in the formation and operation of watershed associations and coalitions; provides technical assistance related to watersheds and water resources to landowners,

municipalities, and private organizations; procures funding for and administers watershed restoration projects; provides watershed education programs to various age groups; helps direct and influence local conservation issues by advising and participating on various committees and boards; and assists other district programs with various tasks and projects.

The following is information about the Watershed Program Coordinator's activities in 2010:

Education and Outreach:

- Coordinated Luzerne Conservation District Annual Banquet which profited \$22,000 that went towards education and outreach projects.
- Participated in the planning of the Northeast Regional Contractors Workshop and the district's Municipal, Engineers, & Contractors Conservation Workshop.

Grants:

- **Toby's Creek Assessment Grant**– The district received a Growing Greener Grant in the amount \$86,689 for an assessment of the Toby Creek Watershed. The primary goal of the Toby's Creek Assessment Grant is to provide comprehensive, watershed wide appraisal of the Toby's Creek watershed, which is 36.5 square miles. The assessment is focusing on evaluating stormwater management, streambank erosion, and flooding problem areas and identifying where and how Best Management Practices (BMPs) should be implemented both within and along stream corridors throughout the basin. Key locations for conservation will also be identified, and a hydrologic model will be used to demonstrate the benefits of implemented projects. Borton-Lawson was the contractor chosen to conduct this project, and its expected to completed by the spring of 2011.
- **Toby's Creek Construction Grant** - The approximately 36-square mile Toby Creek watershed is notable for the heavily-urbanized strip along the main stem Toby Creek, extending from the community of Dallas near the headwaters, through Shavertown, and finally Luzerne, Kingston and Edwardsville at the lower end of the basin. The stream has been largely channelized and relocated to alternating sides of the valley through much of this 9-mile long urbanized stretch. While the sub-basins of Trout Brook, Huntsville Creek and Brown's Creek are much less developed, these areas are now beginning to urbanize. Unfortunately, an increase in the area of impervious surface accompanying expanding development in these areas portends an increase in the occurrence and magnitude of high stream flows.

The negative effects of this legacy of land use change in the Toby Creek Watershed has been amply demonstrated during the severe storms of the last several years, most recently in late June of 2006, when this area experienced a major rain event. Before this last major storm, channels throughout the watershed were already eroded and therefore vulnerable to future extreme events. As a consequence, the storm caused severe damages in many places but especially along the developed main stem. Downtown Luzerne was especially hard.

Luzerne Conservation obtained a Growing Greener grant in the amount of \$102,362 for the design, permitting and construction of stream channel repairs at the most critical site in Luzerne Borough. The district was able to realign grant funds for on-the-ground BMPs by utilizing the PA Association of Conservation District's engineering program. This allowed the use of funds that were originally allocated for design and permitting and project oversight for project construction instead. In addition to the first grant, the district received a second Growing Greener grant in the amount of \$445,435 for the construction of the project. The project stabilized two thousand linear feet of stream that contributed massive sediment loads to downstream waters, while also helping to protect many homes and business that otherwise would not be protected from the erosion during storm events. Left over grant funds will allow for implementation of a second phase of this project, which will start in the spring of 2011 in the vicinity of Snowdon funeral home in Shavertown.

- **Lake Frances Slocum & Abrahams Creek Watershed Assessment** - Due to increased levels of eutrophication, the Luzerne Conservation District with the full support of the Pennsylvania Department of Conservation and Natural Resources (PA DCNR), Bureau of State Parks, received state funds through the Section 319(h) Nonpoint Source Management Grant Program in the amount of \$48,900 to develop a comprehensive lake and watershed management plan to restore and ultimately protect Lake Frances Slocum and its tributaries. The district's contractor, Aqua-Link, Inc., continued working on the project in 2010. The project is expected to be completed in the spring of 2011.

Technical Assistance and Training:

- Provided assistance to Toby Creek Watershed Association and Friends of the Nescopeck with outreach programs, grant opportunities, and organizational formation and sustainability.
- Provided assistance to conservation organizations including: The Conservation Coalition, National Wild Turkey Federation, Quality Deer Management Association, Pocono Northeast Resource Conservation & Development Council, and Pheasants Forever with outreach programs, habitat enhancement projects, grant opportunities, and organizational formation and sustainability.

Dirt & Gravel Roads Program

The Luzerne Conservation District administers the State Conservation Commission's (SCC) Dirt and Gravel Road Program in Luzerne County. The purpose of the Dirt and Gravel Road Program is "to fund safe, efficient, and environmentally sound maintenance of sections of dirt and gravel roads which have been identified as sources of dust and sediment pollution." Through this program, the district provides grants and technical assistance to local municipalities for work on dirt roads. Our partners in this program include: the SCC, the Natural Resources Conservation Service, the Pennsylvania Fish and Boat Commission, and Penn State University's Center for Dirt & Gravel Road Studies.

The program is designed to encourage municipalities to implement environmentally sensitive road maintenance practices on dirt and gravel roads in Luzerne County. Once a municipality has completed the required training, they are eligible to apply to the district's Quality Assurance Board for grants to fund environmentally sensitive road maintenance projects. Funding for this program is made available to districts through the State Conservation Commission.



The 2010 county-wide grant total from the district's regular Dirt & Gravel Road Program allocation was \$24,874.00. There were a total of 3 projects. Townships and agencies benefiting from these grants were:

- Jackson Township - Salansky Rd.
- Lake Township - Wesley Rd.
- PA Game Commission - Railroad Grade Rd. (in Lake Twp)

These environmentally sensitive projects included correction of drainage problems, pipe installation, resurfacing of roads, stream bank stabilization, etc. with the main focus on reducing sediment pollution to the waters of the Commonwealth.

Conservation Education & Outreach Program

While conservation education is an important part of most of the individual programs at the Luzerne Conservation District, we have several separate efforts to promote environmental stewardship and general

awareness of the conservation district and our programs. In 2010, some of those efforts included: an upgrade and continued maintenance of the Luzerne Conservation District website (www.luzernecd.org); our fifth Annual District Banquet; Spring Seedling Sale; and the 2010 Luzerne County Envirothon.

Annual Banquet:

In 2010 the Luzerne Conservation District held its fifth annual banquet. The event was a great success, and we were able to raise over \$22,000 to support our conservation education efforts. The banquet also included an awards ceremony in which we recognized people and organizations within our community for their conservation efforts. The following were the 2010 awardees:

Stanley M. Sowa Jr.
Conservationist of the Year Award
North Branch Land Trust

Lewis Rinehimer Conservation Farmer Award
Harry Roinick

Conservation Educator Award
Janice Leiby

Watershed Stewardship Award
Vinnie Cotrone

2009 Luzerne County Envirothon Winner
Wyoming Valley West High School
Robert Bonczewski, Advisor

2010 Luzerne County Fair Queen Recognition Award
Krista Paluski

Luzerne County Envirothon:

The Envirothon is an annual environmental competition for high school students. The Luzerne Conservation District coordinated and sponsored the 2010 Luzerne County Envirothon on May 5, 2010. The event, which was held at PPL Susquehanna Riverlands in Berwick, is for Luzerne County high school students in grades 9 – 12. Thirty-three teams of students from 11 schools were tested on their knowledge of the environment at five testing stations: Aquatics, Forestry, Soils, Wildlife, and a Current Issue, which changes each year. The 2010 Current Issue was “*Protection of Groundwater through Urban, Agricultural and Environmental Planning*”.



One hundred fifty-five students making up 33 teams from the following schools participated in the 2010 Envirothon: James M. Coughlin JSHS, Crestwood JSHS, GAR JSHS, Greater Nanticoke Area JSHS, Hazleton Area JSHS, Elmer L. Meyers JSHS, MMI Preparatory School, Northwest Area JSHS, Pittston Area JSHS, Wyoming Valley West JSHS and Wyoming Area JSHS. **The four top scoring teams were: MMI Preparatory School - Team A, First Place; Wyoming Valley West - Team A, Second Place; Crestwood - Team A, Third Place; and Wyoming Area - Team A, Fourth Place.** The first place team received a

\$250 Travel Scholarship from the Luzerne Conservation District to the Pennsylvania State Envirothon.

Partners from the following agencies staffed the various testing stations for the Envirothon: Pennsylvania Fish & Boat Commission, Pennsylvania Game Commission, Pennsylvania Department of Conservation of Natural Resources Bureau of Forestry and Bureau of State Parks.

Volunteers from the Department of Environmental Protection in Wilkes-Barre, PPL in Berwick, district staff and board members assisted with the Envirothon by monitoring teams and stations, by assisting with the scoring, and in other areas as needed. The Lands at Hillside Farms donated chocolate and white milk for the students on the day of the event, and lunch was donated by Domino's Pizza in Berwick.

West Nile Virus Program

In 2000, West Nile Virus (WNV) appeared for the first time in Pennsylvania in birds, mosquitoes and a horse. To combat the spread of WNV, which is transmitted by mosquitoes, Pennsylvania has developed a comprehensive program which includes trapping mosquitoes, collecting dead birds and monitoring horses and people statewide.

Prior to the 2010 WNV Season, Luzerne County's Environmental Special Projects Department implemented the WNV Program (2001-2009) with up to four full-time WNV technicians to perform surveillance county-wide throughout the season. This year brought many changes to the program including its transfer to the Luzerne Conservation District. Other changes included a reduction to two full-time seasonal technicians and operational changes in the program.

The West Nile Virus Control Program is designed to reduce the risk of West Nile Virus. An integrated mosquito management (IMM) program is the most effective way to prevent and control mosquito-borne disease. Such a program includes the following: surveillance, the reduction of mosquito breeding sites, community outreach and public education, and the ability to use chemical and biological methods to control both mosquito larvae and adult mosquitoes. Control measures, including the use of chemical adulticides are based on surveillance data and the risk of human disease. The WNV control program runs from early April to late October, which coincides with the active mosquito season. WNV is typically transmitted by the bite of an infected mosquito.

During the 2010 WNV Season (April 1 - October 15) a different approach was taken in implementing the program. Trapping and complaint data from previous years was used to identify areas with historically high mosquito breeding activity. Preemptive larval control and surveillance trapping was implemented at those sites. Using larval control to treat the historically known breeding areas was effective in reducing numbers late into the summer and early fall, when WNV is at its highest minimum infection rate (MRI). This was the main focus of the program until the virus was found in mosquito samples trapped in the county on August 4th. At that point, intensive larval control, trapping, and some minimal pesticide spraying were focused to sites where WNV-positive samples were found. Formerly, the preferred treatment to mitigate peak season numbers involved spraying pesticides in urban communities in Luzerne County during peak WNV season. However the early season change in methodology proved effective in keeping the MRI low throughout August and enabled the Luzerne Conservation District to minimize spraying pesticides throughout urban communities in the county.

In 2010 the Luzerne Conservation District effectively implemented the WNV Program in Luzerne County, partnering with DEP and making multiple public outreach contacts. Increased surveillance activities identified 18 positive samples, whereas only 2 positive samples were found in 2009. Fifteen of the positive WNV samples were found during the month of August. During the 2010 WNV season, the state of Pennsylvania reported 29 human cases of WNV. Although several mosquito WNV positives were collected in Luzerne County, no human cases were reported, mainly due to the proactive larval habitat treatment approach that was practiced to control adult mosquito numbers.

2010 WNV Positives

Statewide:	Luzerne County
Positive Samples = 1,113	Positive Samples = 18
Human Cases = 29	Human Cases = 0

2010 Luzerne Conservation District Board of Directors

Timothy Ference, Chair
Commissioner Stephen Urban, Vice-Chair
Timothy J. Connolly, Jr., Secretary/Treasurer
Joseph Boiwka
Leonard J. Burger, Jr.
William Letwinsky
Rebecca Lipka
Bruce Trumbower
Carl Urbanski

Associate Directors:

Rob Andrews
Jack Hanish

The Luzerne Conservation District Board of Directors holds monthly meetings on the second Thursday of each month at 6:00 PM at the district's office located at 325 Smiths Pond Road, Shavertown, PA 18708. The public is welcome to attend.

2010 Luzerne Conservation District Staff

Joshua Longmore, District Manager
Heather Berlew, Resource Conservation Specialist II
Keith George, Resource Conservation Specialist I
Amber Martin, Environmental Services Technician
Shawn Rybka, Watershed Program Coordinator
Amy Salansky, Agricultural Conservation Specialist
Aaron Stredny, Environmental Services Specialist
Jenn Verry, Secretary/Bookkeeper
Ron Jesse, Building & Grounds Keeper

Nominating Organizations

The following organizations have been approved by the State Conservation Commissioner to nominate people to serve on the Luzerne Conservation District Board of Directors. Nominations are given to the Luzerne County Commissioners, and the commissioners appoint district directors from the names provided:

Anthracite Scenic Trails Association
Bloomingdale Grange #536
Greater Wyoming Valley Audubon Society
League of Women Voters, Luzerne County Chapter
Luzerne County Farm Bureau
Luzerne County Federation of Sportsmen
Luzerne County Ponoma Grange
Northeastern Pennsylvania Herpetological Society
Pennsylvania Environmental Council, North East Office
Penn State Cooperative Extension, Luzerne County Office
North Branch Land Trust
Western Pocono Chapter of Trout Unlimited

Cooperating Agencies and Personnel

Partnerships are an extremely important part of successful natural resource stewardship. The Luzerne Conservation District works with many individuals and organizations to accomplish our shared conservation goals. The following individuals work closely with the district staff and board:

Richard Maculaitis, District Conservationist
USDA Natural Resources Conservation Service

Shane Kleiner, Conservation District Field Representative
Peter Tarby, Chesapeake Bay Field Representative
PA Department of Environmental Protection, Northeast Regional Office

Ben Hardy, Luzerne County Service Forester
PA Department of Conservation & Natural Resources, Bureau of Forestry

We also have numerous partners within the following agencies:

PA Association of Conservation Districts
PA Department of Agriculture
PA Department of Conservation & Natural Resources
PA Department of Environmental Protection
PA Environmental Council, Northeast Office
PA Fish & Boat Commission
PA State Conservation Commission
Penn State Center for Dirt & Gravel Roads Studies
Penn State Cooperative Extension
Pennsylvania Game Commission
Pocono Northeast Resource Conservation & Development Council
USDA Farm Service Agency



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