# **Erie County Conservation District** Annual Report 2009 Promoting Wise Land Use Throughout Erie County













1927 Wager Road Erie, PA 16509 Ph: 814-825-6403 Fax: 814-825-6033 www.erieconservation.com Celebrating 60 Years of Conservation Efforts in Erie County

# A Message from the District Manager

The Erie County Conservation District has been working toward stimulating the future of the county in many different projects. We are finalizing a \$1.2 million American Recovery Reinvestment Act (ARRA) project which will dramatically impact seven township dirt roads in six municipalities. We have three active agriculture construction projects with additional ones scheduled to start soon. When these projects are completed, they will help improve water quality throughout Erie County.

The District continues to educate the residents of Erie County that our environment can be a friend or foe. Recent topics like storm water management, *E-Coli*, sustainable energy, and nutrient management have caught the public's attention. Through the use of solar panels we are lighting a picnic pavilion that has a storm water retention structure beneath it. Adjoining trails in a county park were constructed using Driving Surface Aggregate, an environmental road aggregate which requires minimum maintenance and recently survived a six-inch rain storm with minimal damage.

Erie County Conservation District is proud of its 60 year history in dealing with water quality and soil erosion issues which found its beginning in our agricultural community. We now deal with these same issues on a storm water impaired stream (Walnut Creek) in a highly concentrated commercial area and Nutrient Management within this same watershed because of a race track with 500 horses. We look forward to the challenges of the future to protect our environment for our children.

farl Brown

District Manager

### 2009 Board of Directors

John Hallenburg – Chairman of the Board, Public Ron Chapman– Vice Chairman, Farmer George Peters - Treasurer, Farmer Sue Moyer - Director, Public Robert Buhl – Director, Farmer Fathum Rahal – Director, Farmer Mark DiVecchio – Director, County Executive Robert Dowler – Associate Director LeRoy Gross – Associate Director

Board meetings are held the 3rd Thursday of every month at 10:00 AM at Headwaters Park - 1927 Wager Road, Erie, PA 16509

## 2009 ECCD Staff

Earl J. Brown - District Manager <u>earljbrown@erieconservation.com</u> Gene Clemente - Supervisor Technical Services <u>gclemente@erieconservation.com</u> Joseph Hudson- Watershed Specialist <u>jhudson@erieconservation.com</u> Bethany Fritz - Ag Specialist/ E&S Technician <u>bethanyfritz@erieconservation.com</u> Brian Zeppenfeld - NPSP- Specialist <u>bzeppenfeld@erieconservation.com</u> Emily Pritchard—Environmental Educator <u>emilypritchard@erieconservation.com</u> Juliet Jones - Administrative Assistant <u>eriecons@erieconservation.com</u>

John Green - DEP representative johngreen@state.pa.us

### **Environmental Education Update**

#### 2009 Erie County Envirothon

On April 23, 2009 the Erie County Conservation Districts hosted the 19<sup>th</sup> annual Erie County Envirothon. The Envirothon is devoted to educating high school students about environmental science and natural resource management. The event emphasizes the importance of environmental sensitivity while stressing a need to achieve a social, ecologic, and economic balance in life.

The event, which took place at Presque Isle State Park, attracted 16 teams from four area schools including General McLane, North East, Fort LeBeouf, and Northwestern. Each team competed to receive the highest scores in the

traditional subjects of aquatics, forestry, soils, wildlife and a current issue. The first place all-around winner was "Team

Greenflash" from North East High School. Led by their advisor John Hallenburg, the team advanced to the state competition at Bald Eagle State Park where they secured the 4<sup>th</sup> place title.

This unique and exciting event could not take place without the help of our numerous volunteers. The District would like to thank all the advisors, participating agencies, and event volunteers who dedicated their time and energy to make the event a success.

### **Environmental Education Highlights**

Erie County Conservation District is committed to an excellence in environmental education. The focus of the environmental education programs are to inform and educate citizens to take action and maintain the quality of their environment. 2009 Erie County Envirothon Winners Team Greenflash



In 2009, the District outreached to over 1000 individuals through en-

vironmental education programs and events. Highlights from those programs include:

#### Pennsylvania Sea Grant and Flagship Niagara

Educators from Pennsylvania Sea Grant invited the District aboard the Flagship Niagara for a pilot program combining maritime studies and history. The Niagara is recognized in the United States and abroad as the most authentic early 19<sup>th</sup> century replica naval vessel. Since she first set sail in 1990, this reconstruction of Commodore Oliver Hazard Perry's victorious 1813 warship and flagship has served as a setting for education and adventure. Students from multiple school districts received a once in a life time opportunity as they assisted the ship's crew by hoisting the anchor, setting sails and firing the cannon. Once the ship was underway, the students rotated through educational stations focused on maritime studies, water quality, and historical topics.

#### Upward Bound

In the summer of 2009, 46 students from Gannon University's Upward Bound program visited Headwaters Park for an educational program on watersheds and wetlands. Upward Bound is a federally funded education program that provides high school students better opportunities for attending college. Students with low income, those with parents who did not attend college, and those living in rural areas participate in a summer program to take college prep classes. During their day long visit to Headwaters Park, the students first explored the water of Mill Creek learning about stream biology and water quality. They then spent the afternoon beautifying park trials and facilities.

#### Great Lakes Carnival

Mill Village Elementary School hosted the Erie County Conservation District for a school wide celebration of Earth Day. The District and their participating partners presented multiple environmental education programs centered on the Great Lakes. Students gurgled like water thirsty trees, made fish fly, came face to face with alien species, and raced to win a recycling relay!

In the upcoming year, the District is set to expand their education capabilities. In 2009, the District was awarded two grants that will be utilized to outreach to school groups, scout troops, and the general public. The Department of Environmental Protection awarded the District \$10,000 for the expansion of agricultural education. Funding will enable the District to host the Mobile Agricultural Education Science Lab, present a public event titled "Taste of Harvest-Erie County", and create school programs focused on educating students about the origin of their food. In addition, the District was awarded \$4,000 from the U.S. Environmental Protection Agency for the expansion of watershed education. Funding will enable the District to create watershed curriculum for programs based out of Headwaters Park, as well as purchase the materials and equipment needed to successfully carry-out the programs.

The District is excited about the upcoming year. For information on any of our environmental education programs please contact our fun and enthusiastic environmental educator, Emily Pritchard.

# Agricultural Activities Update

The Nutrient Management Program (NMP) and the Agricultural Conservation Technical Assistance (ACT) programs provide assistance to farmers and landowners and educate them on Best Management Practices (BMPs) and more productive farming.

#### **Nutrient Management**

The Nutrient Management program had five new plans submitted and approved during 2009. This brings the total number of plans in Erie County to 24. In addition, the District also partnered with several local agencies such as Penn State Cooperative Extension and the Natural Resource Conservation Service to offer two No-Till workshops. The first was held at Ernst Conservation Seeds in Meadville. The participants were able to see a variety of equipment and hear from local farmers about how they utilize no-till on their farm. The second meeting was a field day held at the Jim Neuberger farm near McKean. Topics included composting, calculating a manure spreader, and cover crops. A soil pit was dug to view soil health and earth worms. These workshops brought over 150 farmers and agency personnel together to network and increase knowledge of no-till farming. The District plans to continue holding these workshop on a yearly basis.

#### **Farmland Preservation**

The District is involved with the Farmland Preservation program in Erie County. The program provides funds for the purchase of conservation easements from owners of quality farmland. This will allow more farmland to stay in agricultural use for perpetuity. As of December 31, 2009 there were 51 farms and approximately 6500 acres preserved in Erie County. There are several farms that are already in the process to be enrolled in the program for 2010.



#### Agricultural Best Management Program

Erie County Conservation District continues to utilize funding that was acquired through two Growing Greener Grants to launch a program to implement agricultural best management practices (Ag. BMPs) with local landowners. There are 20 landowners currently enrolled in the program we hope to implement over 40 Ag BMPs in the Lake Erie and Ohio River watersheds. In 2009, several Ag BMPs were implemented through this program that include manure storages, waterways, roof run -off controls, fencing, subsurface drainage, and heavy use protection

areas. These practices are beneficial to the environment by helping reduce soil erosion and nutrients from entering our waterways. We will continue with these efforts in 2010. We are working with additional farmers to implement more Ag BMP's in 2010.

To learn more about any of these program, contact the Agriculture Specialist, Bethany Fritz.

# Permit Updates and Activities

#### The Chapter 105– Waterway Management Program

The District's Chapter 105 program responsibilities consist of the review and acknowledgment of Chapter 105 General Permits related to the following:



--minor encroachments --compliance resolution

--complaint investigation

--assistance to private property owners and the regulated community related to waters of the commonwealth.

Waters of the commonwealth include streams, wetlands, and other bodies of water. There is no state funding for this program. However, the District has chosen to provide these services to the residents of Erie County to help streamline and expedite the permitting process, and provide continued assistance to its residents.

In 2009, the District issued 59 Chapter 105 General Permits and provided technical or administrative assistance to approximately 325 private land owners, consultants, and businesses. The district also investigated over 40 program related complaints.

#### Erosion and Sedimentation (E&S) Control and NPDES Programs

The District continues to administer the Chapter 92 and 102 programs, related to E&S and National Pollution Discharge Elimination Systems (NPDES) permitting programs. These programs have either incurred changes, or revisions that are currently being planned by the Department of Environmental Protection (DEP).

Specifically, draft revisions to the DEP's E&S Pollution Control Manual were published in the PA Bulletin in the fall of 2009. Final revisions should be completed by the end of 2010. Additionally, the NPDES PAG-2 permit, related to discharges during construction activities, expired in December of 2009. A revised PAG-02 permit was issued for a two year period while the DEP and EPA work on additional updates to this process.

In addition to the routine assistance provided to municipalities, land owners, and the regulated community, over the last year the District approved 116 E&S plans, and processed 16 NPDES permits. The following is a list of the District's primary activities under these programs:

Pre-application & pre-construction meetings
E&S plan technical review
E&S site assistance
Permit review & issuance
Educational & technical workshops

If you would like further information on the changes to these programs, please contact Gene Clemente.

# Watershed Update

#### New Watershed Specialist

The district is pleased to announce the addition of a new watershed specialist, Joseph Hudson. Mr. Hudson has a degree in environmental health and engineering. He has experience working with a private consulting firm and has been involved in watershed work for nearly ten years. Joseph has already displayed a commitment to the projects that the District currently is working on and plans for new projects in the future.

#### Watershed Restoration Projects

Two of the District's most prominent watershed restoration projects involved nearly polar opposite sites. Trout Run, located in a primarily rural and agricultural area and the second, Cascade Creek, is located in a heavily urbanized area.

The Watershed Implementation Plan for Trout Run and Godfrey Run was finalized and approved by the EPA. The plan addresses various watershed and water quality concerns within the two watersheds and details a timeline and implementation BMPs for addressing these concerns. Some of the areas of concern include eroded stream banks and failing septic systems. The next phase of this project is to find funding to implement the plan in cooperation with our partners.

(Continued on next page)

Phase II of the Cascade Creek restoration continues within Frontier Park, in cooperation with the City of Erie, PA Sea Grant, LEAF, and the SONS of Lake Erie. Site design for Phases II and III is currently under way, and implementation of Phase II is scheduled to occur during the summer of 2010. Similarly, funding for Phase III implementation has been applied for in cooperation with PA Sea Grant and PLEWA.

For more information on this project, contact Gene Clemente.

# **Coastal Zone Update**

The Coastal Nonpoint Source Pollution Specialist's (CNPP) activities include providing coordination, technical assistance, education and outreach on coastal nonpoint source (NPS) pollution issues within the Pennsylvania Lake Erie Coastal Zone Management Area. This area includes the entire Lake Erie Watershed in Erie County.



Other activities that are included in the CNPP Specialist position include:

Assist the Great Lakes Water Resource Planning Committee in identification of Critical Area Resource Plans. This provides an ongoing oversight to the states water resources with the goal of appropriate water planning in growth areas.
Coordination of the International Coastal Cleanup at Erie Bluffs State Park which was held on September 19, 2009.

Volunteers pick up trash and debris along the Lake Erie Coastline in 18 different locations.

- Represent the District in the Regional Science Consortium's Board of Directors meetings at the Tom Ridge Environmental Center.

- Assist in implementing the State Conservation Commission's Dirt and Gravel Road Environmentally Sensitive Maintenance Program.

- Update and maintain the Best Management Practices that are implemented at Headwaters Natural Resource Center.

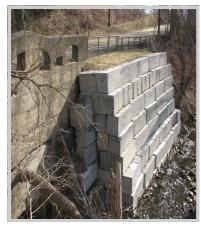
- Continue education to the public on coastal and non-point source pollution and its affects on the lake and surrounding areas.

If you would like more information about the Coastal Zone Program or would like to be a part of the 2010 Coastal Cleanup, contact Brian Zeppenfeld.

# **Other District Activities**

#### Dirt & Gravel

In 2009, the District helped fund two Dirt & Gravel road projects. The first project was on Pleasant Street in Union City. This project consisted of two phases. The issue with this road was erosion above and behind the bridge headwall. To correct this problem construction consisted of stabilized drainage outlets, road bank stabilization, stream stabilization, road



stabilization, and vegetative management.

The other project was on Lowe Road in Waterford Township. The issue with this road was excessive erosion in ditches and on the road surface. To correct the problem we stabilized 28,000 square feet of the ditch and added seven cross pipes along with road base.

In the fall, the Quality Assurance Board meets to review projects for the following year. There were 16 applications from municipalities. To qualify for this program, a municipality or borough must have one employee who attended a Dirt & Gravel roads training workshop. After the applications were reviewed and graded, the board approved five projects to be completed in the 2010 construction year.

**Pleasant Street Bridge Headwall** 

# American Recovery & Reinvestment Act Funding (ARRA)

Every year the District routinely contacts municipalities who have trained personnel in Environmental Sensitive Maintenance Practices to submit project applications for dirt roads. The District helps reduce maintenance on these roads by controlling erosion at or near steams or wetlands and through the use of Best Management Practices (BMP's). We often see projects that would use multiple years of funding which the District could not provide.

In April, the District was informed that American Recovery & Reinvestment Act Funding (ARRA) was available to address storm water issues outlined in the Green Reserve Project. This opportunity allowed the District to bundle seven dirt roads in six municipalities into a project with these features:

-Extensive Drainage -Full Depth Restoration (FDR)

—Latex Surfacing Agent

The drainage aspect of the project was critical because of a need to reconnect the natural hydrology of these roads that traverse streams and wetlands. The BMPs will be utilized are: additional cross pipes, under ground drainage, French mattresses, belt diverters, and vegetated turnouts. The FDR process will stabilize the road surface along with the creation of hydroscopic layer that prevents ground water from mixing with road surface materials. The latex surfacing agent will have lower environmental impacts and improve road maintainability.

All of the roads are located in sensitive areas: A high quality watershed is very close to one, several are part of scenic river watershed, and others are part of multiple wetland areas. The grant was approved in November with a total project cost of \$1.2 million. The start of construction in 2009 was delayed due to rains and early snow. Construction will begin in the spring of 2010. The District looks forward to the success of this project and hopes for more opportunities to limit road surface and ditch erosion.

### 2009 Seedling Sale & Scholarship

Each year Headwaters Natural Resource Trust and the Conservation District conduct a seedling sale. The sale started in February and we accepted orders until the end of March. Seedling pick up was on the last Friday in April at Waterford Fairgrounds. We received over 350 orders and sold approximately 25,000 seedlings.

The profit generated from the sale is used to provide scholarships for students attending college in an agricultural or environmental field. This year it was decided to provide assistance to three high school students to attend the Conservation Leadership School. The students were Alex Britt and Rebecca Petroff from North East High School, and Elise McManhon from Villa Maria High School. This

week-long program enables students to get hands on learning in conservation, wildlife, aquatics, vegetation and leadership.

Proceeds from the sale also help to fund the annual Envirothon. We look forward to exceeding our sale in the upcoming year.

### **Headwaters Park Expansion**

Headwaters Natural Resource Park was established in 1995 to provide protection to the headwaters of Millcreek, a valuable resource to Erie County. It was also established to enhance environmental education programs at the District. In 2009, the Headwaters Trust received a gift from the Greater Erie Industrial Development Corporation (GEIDC) of an additional 32 acres of land for Headwaters Park. This brings the park to approximately 70 acres.

Currently at the park, there are nature trails, conservation education, an outdoor classroom, and pavilion. Development of the new land include expanded trails, outdoor observation areas, and additional environmental education programming. The District and Headwaters Trust are excited about the park expansion. (continued on next page)



### Headwaters Park Expansion (continued from previous page)

The park is open from sunrise to sunset to all visitors with a few restrictions. The park is located adjacent to the Thomas E. Bundy Industrial Park on Wager Road. The Headwaters Natural Resource Center also houses the Erie County Conservation District.

### **Annual Meeting**

In 2009, Erie County Conservation District celebrated its 60th anniversary. To commemorate this event, the District held an annual meeting in July 2009. We invited our board members, stakeholders, and partners to thank them for their support and to provide an update of the progress the District has made in the last 60 years. During the meeting, two awards were presented. The first was to Merle and Cheryl Truesdail for Conservation Farmer of the Year and second was to Ray Showman Jr. Excavating for Contractor of the Year. The luncheon and presentations were followed by a tour of Headwaters Natural Resource Park.

The District was excited to mark this milestone and hopes the future brings expanded awareness of conservation in Erie County.



The Erie County Conservation District would like to thank all our partners and cooperating agencies for their help and support this year. We could not have had a successful year without you.

> 1927 Wager Road Erie, PA 16509 Ph: 814-825-6403 Fax: 814-825-6033 www.erieconservation.com