

2011

Jefferson County Conservation District
ANNUAL REPORT



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814-849-7463

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Dear Friends,

The Jefferson County Conservation District was formed at the request of farmers and others in the county who were interested in the conservation of soil and water resources and land use planning. The county was declared a District by the Jefferson County Board of Commissions in October, 1946, in accordance with the provisions of the "Soil Conservation Law" of 1945, Act 217, of the Pennsylvania General Assembly. The District is a subdivision of state government and is administered by a seven-member Board of Directors. The current District Board is composed of three farmer directors, three urban directors, and one County Commissioner. Currently there are four full-time staff members. The County Conservation District, through delegation agreements with the PA Department of Environmental Protection and the PA Department of Agriculture, administers many environmental programs in Jefferson County. Some of the programs that the District staff works with include the following: Erosion and Sediment Pollution Control program, Chapter 105 Stream Encroachment, Dirt & Gravel Road, Nutrient Management, Ag Conservation Technical Assistance, and sponsoring the Jefferson/Clarion County Envirothon. The Conservation District also provides administrative duties for the Jefferson County Sewage Association and the Greater Jefferson Area Council of Governments.

The following information will highlight the District's programs and activities in 2011.

Program Administration

Funding for District staff and programs comes from several sources. The State Conservation Commission receives funding from the Department of Environmental Protection and the Pennsylvania Department of Agriculture for technical assistance and staff funding. Jefferson County and the Jefferson County Sewage Association also provide funding for staff and administrative expenses.

E&S/NPDES

Chapter 102/NPDES

The Erosion and Sediment (E&S) Pollution Control Program operates under a delegation agreement with (PADEP), Pennsylvania Code Title 25, **Chapter 102** of the Pennsylvania Clean Streams Law. At the local level, the Conservation District is responsible for specific program activities enforcing Chapter 102 and controlling erosion and sediment control for all types of earthmoving activities. Through combined efforts to ensure water quality standards and minimize sediment pollution to the Waters of the Commonwealth, the Jefferson County Conservation District has:

- Reviewed 28 E&S Control Plans for Chapter 102 Compliance.
- Conducted 63 site inspections in an effort to obtain voluntary compliance.
- Recommended 2 Individual NPDES Permits to DEP to be issued.
- Issued 2 General NPDES Permits.
- Issued 1 ESCGP-1 for Oil & Gas Activities > 5 acres (transmission lines on Compressor Station)



Shaun Wessell, E&S Tech./
Watershed Specialist

Chapter 102/NPDES (Cont'd)

The regulations included in Chapter 102 were revised in November, 2010. Sites that will disturb over one acre of land are now required to obtain an "NPDES Permit for Stormwater Discharges Associated with Construction Activities." This permit requires a detailed plan to address both sediment and erosion during construction and the long term impacts of stormwater from the site after construction. Several types of activities such as road maintenance, timbering and agricultural plowing and tillage are exempt from this permit but need to meet other requirements including having a written plan to control erosion from the site. In some cases, other types of permits may be required and this must be evaluated on a case by case basis.

For agriculture, the regulations state that the owner and the operator of the agricultural operation are jointly responsible for the development and implementation of an erosion and sediment control plan (E&S plan) that minimizes the potential for accelerated erosion and sedimentation from agricultural plowing and tillage activities. One new requirement is to address sediment generated on animal heavy use areas. (An animal heavy use area is any area where animals are concentrated to the extent that the surface of the area is not able to maintain adequate vegetation that will prevent erosion and sedimentation.) Also new is the requirement that additional controls be considered for areas adjacent to streams.

Fully implemented conservation plans prepared by a certified plan writer meet the requirement for an E&S Plan if they address all these areas of concerns. There are also several documents available to help landowners prepare plans for simple operations on their own.

Although agricultural plowing and tillage operations are exempt from obtaining permits for these activities, it is important to realize that this exemption does not include the construction of building and other support facilities on the farm. These types of earth disturbances are subject to the same permitting requirements as any off-farm activity.

Chapter 105 – Dam Safety and Encroachments Act

This state delegated program provides oversight of work in and around streams, wetlands and other bodies of water that has a potential to impact water quality, increase flooding or degrade riparian habitat. The District registers PA DEP General Permits, which authorize certain types of work including: Fish Habitat Enhancement; Small Docks & Boat Ramps; Streambank Stabilization; Utility Line or Minor Road Crossings of streams or wetlands.

21 General Permits for water obstructions and encroachments were acknowledged. 16 Chapter 105-related complaints were investigated. Information and technical assistance is available concerning permit and other requirements associated with Chapter 105 Regulations.

Act 167 Stormwater Management

The Jefferson County Conservation District has entered into working agreements with 24 Municipalities in Jefferson County to implement the Jefferson County Act 167 Stormwater Management Plan by providing assistance to these Municipalities with enforcement of their Stormwater Ordinances.

In 2011, 128 stormwater plans were reviewed by either Conservation District staff or Geo-Tech Engineering for compliance with the municipal ordinance.

Dirt and Gravel Roads Program

Each year \$4 million is directed from the state motor vehicle license fund to prevent dust and sediment pollution by employing environmentally sound maintenance of dirt and gravel roads. Each county's allocation is based on the number and condition of dirt and gravel roads in the county. Jefferson County receives nearly \$ 38,000.00 each year. Eight (8) contracts with municipalities were signed in 2011. Projects in Beaver, Warsaw, and Knox Townships were completed.

In order to be eligible for these funds, at least one member of a municipality or eligible agency must complete a two day training program given by Penn State's Center for Dirt and Gravel Roads. The District sponsored the two-day training on March 22 and 23, 2011. To find the next training date or for more information, visit the Center for Dirt and Gravel Roads web site at <http://www.mri.psu.edu/centers/edgrs/> or call the District's Program Coordinator, Shaun Wessell, at 849-7463.

Agriculture

In November Buddy Brown joined the District Team as Nutrient Management Specialist/Agriculture Conservation Technician. Buddy is originally from Clearfield County and brings with him experience working for DEP as a Soil Scientist. Buddy works with area farmers to comply with state regulations relating to agriculture.



The Nutrient Management Act (Act 38) requires all Concentrated Animal Operations (CAO's) to develop, submit, and implement a **Nutrient Management Plan**. A Nutrient Management Plan (NMP) considers existing soil nutrient levels and nutrients needed for achieving crop yield goals. The NMP accounts for manure generated on the farm and determines a proper application rate. The NMP calculates the quantity and location of additional nutrients needed. The NMP may also recommend practices to reduce soil loss and prevent nutrients from contaminating surface and ground water.

A written **Agriculture E&S Plan** is required for any agricultural plowing or tilling over 5,000 square feet, including no-till cropping, and for animal heavy use areas such as barnyards, feedlots, loafing areas, exercise lots, etc. The Agriculture E&S Plan must include cost-effective and reasonable best management practices (BMPs) to minimize the potential for accelerated erosion and sedimentation. A Conservation Plan that meets the state regulatory requirements, often prepared with the help of the Natural Resources Conservation Service (NRCS), may be used in place of an Agriculture E&S Plan.

A written **Manure Management Plan** is required for every farm that produces or applies manure. This includes small (one horse) operations. A Manure Management Plan addresses manure application setbacks from streams, drinking water supplies, and sinkholes as well as winter manure spreading. An approved Act 38 Nutrient Management Plan may be used in place of a Manure Management Plan.

The Jefferson County Conservation District have scheduled workshops throughout 2012 to assist with writing an Agriculture E&S Plan or a Manure Management Plan. To find out when the next planning workshop will be held or for questions about an Agriculture E&S Plan or a Manure Management Plan, please contact Buddy Brown at 814-849-7463.

Special Projects/Grants

Watersheds

Phase II of the Sugar Camp Run Discharge as a Municipal Water Supply was completed. Funding provided by a CEI Growing Greener Grant was used to install access wells into the mine pool. Four access wells have been completed and are producing nearly 7,000 gpm. Phase III – treatment system design was also completed using funding from a DCED grant. An application has been submitted to Pennvest to fund Phase IV – Construction of the treatment system to treat the mine water for commercial use.



Sugar Camp Run Discharge



Access Well drilled to relocate mine discharge

The Pennsylvania Infrastructure Investment Authority (PENNVEST) awarded a grant in the amount of \$750,000 for a mine discharge treatment system to be installed in Sykesville Borough, Jefferson County. A design has been completed and construction is scheduled to begin in April, 2012.

The original Conifer Treatment System was built in 1998. The water chemistry changed in 1999. The ferric iron & aluminum in the discharge led to premature plugging of the ALD. In 2003 and 2004 rehabilitation efforts were made. Still, the system was providing very little or no treatment. A project to regrade the limestone in the ALD, and fill a portion of the settling pond with limestone to create a large limestone bed (FeAlMn bed pronounced Fel-al-men) was completed in July, 2011. Although water monitoring had showed improved pH and a decrease in iron content, heavy snow melt coupled with an extremely wet spring caused an increased flow from the discharge. Modifications were made to the limestone bed to allow for increased flows. Continued monitoring indicates that the system is functioning as expected.



Conifer Treatment System FeAlMn bed



Treatment System outfall

Watersheds (Cont'd)

A Growing Greener County Environmental Initiative Grant in the amount of \$81,326 was approved by the Jefferson County Commissioners for the implementation of environmentally sound road maintenance practices on Township roads in Jefferson County. These practices are installed to remove sources of erosion and sedimentation from local dirt and gravel roads.

Applications were distributed to all Townships in Jefferson County who had attended the two-day training and were certified. Shaun Wessell, JCCD E&S Technician, conducted site evaluations and met with Township representatives prior to meeting with the Quality Assurance Board for project selection.

Contracts were awarded to Beaver, Polk and Oliver Townships. These three projects involve adding road base and drainage improvements.



Degraded roadway



AMD Seep alongside Pansy Hollow Rd.



New Culvert Installed



Repaired road surface

Environmental Education

Jefferson-Clarion County Envirothon

Brookville High School took 1st Place in the Jefferson-Clarion County Envirothon competition and travelled on to the State Envirothon. The State competition was held at the Susquehanna University and Shikellamy State Park. Winners of the State competition advanced to the national Canon Envirothon.

Envirothons continue to offer a rewarding experience to our local students. The PA State Envirothon awarded over \$9,000 in college scholarships to first, second, and third place team members that can be used toward post secondary education.



The 2012 Jefferson-Clarion County Competition will be held at the Jefferson County Fairgrounds, on Thursday, May 3, 2012. On May 22-23, 2012, the State Envirothon will be held at University of Pittsburgh, Johnstown Campus. This event will be a two-day event. Winners from each county in the state will have the opportunity to compete in this event.

25th Anniversary – Canon Envirothon

From July 22-27, 2012, Pennsylvania will host the 25th annual Canon Envirothon at Susquehanna University, Selinsgrove, PA. Teams will come to the area from nearly every US state and Canadian province/territory, numbering close to 600 students, teachers, and others. What a great way for Pennsylvania to celebrate the Envirothon's 25th anniversary by coming back to where it all began!!!



C.G. Johnson 4th & 5th Grade Envirothon

A total of 138 students from 6 classrooms participated in the Annual 4th & 5th Grade competition. In 2011, 1st Place went to Mrs. Marshall's class. This competition has been created to provide a learning session, along with testing at each of the stations. There were activities in the areas of Agriculture, Acid Mine Drainage, D.B. Pests, Water, Recycling and a non-testing station. Each station included an instructional period where the students listened to a presentation and completed a short quiz on what they learned.

Farm Safety Day

In May, 450 second grade students attended Farm Safety Day, sponsored by Penn State Extension, at the Jefferson County Fairgrounds. Students rotated to presentations on Ag Awareness, Sun Safety, Gun Safety, Drug & Alcohol, Animal Safety, and Hidden Hazards.



Earth Day

Clarion University held an Earth Day Celebration at Cook Forest State Park where 119 high school students from Jefferson and Clarion Counties rotated to stations on Soil and Agriculture, Watersheds, Groundwater, Reptiles/Amphibians, Estuaries, Soil Conservation and Acid Mine Drainage. Staff from the Conservation presented information on Soil and Agriculture.



Brockway Field Day

On May 26th, 125 sixth grade students converged on Clear Creek State Park for a Field Day arranged for by the PA Game Commission. Throughout the day the students learned about their environment. Representatives from the Conservation District presented information on Soil and Agriculture.

Cloe Lake Watershed Education

Punxsutawney High School students learned about the watershed where they live by attending a field day at Cloe Lake near Punxsutawney, PA. The curriculum included identification of macroinvertebrates, and testing the chemical and physical parameters of Jackson Run. This annual event allows students to compare the changes in Jackson Run from year to year.



Other Environmental Education Activities

The Conservation District participated in the following workshops in 2011: Northwest Grazing Conference, Manure Hauler Certification Training, and a Project Grass Field Day.



**JEFFERSON COUNTY
CONSERVATION DISTRICT**

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DISTRICT STAFF

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Board of Directors

Herb Landes, Chair

Porter Duvall, Vice-Chair

Allen Campbell, Sec/Treas

Paul Corbin, Commissioner

Theresa Shick

Tom McFarland

Jack Corbin

**FINANCIAL STATEMENT
December 31, 2011**

Income:	\$ 91,000
County Allocation	6,800
Stormwater Plan Review Fees	9,600
E&S Plan Review Fees	4,075
Fund Raisers	117
Miscellaneous Income	127,268
PA Program Reimbursements	15,000
Clean Water Fund	1,959
Grant Income	<u>1,959</u>
Total Income	<u>\$ 266,819</u>
Expenses:	\$ 3,500
Audit Expense	2,050
Dues	207,635
Employee Salaries/Benefits	4,395
Fund Raiser Expenses	3,907
Insurance-Bonds	360
Misc. Expenses	7,050
Office Expenses	1,050
Stormwater Plan Review Exp.	6,076
Staff Expenses	29,691
Grant Expenses	<u>528</u>
Environmental Education	<u>528</u>
Total Expenses	<u>\$ 266,242</u>

Mission Statement

**The Mission of the
Jefferson County
Conservation District is to
preserve natural resources
and protect/promote the
health, safety and general
welfare of the people of
Jefferson County and to
provide technical services to
improve resource
management for the benefit
of farmers and urban
residents.**