

# The Mifflin County Conservation District

## 2011 Annual Report

### Index of Programs

- Erosion & Sediment Pollution Control
- Dirt & Gravel Roads
- Waterways Management
- Watershed Assessment and Restoration
- Chesapeake Bay
- Nutrient Management
- Agland Preservation
- Environmental Education
- Other District Activities in 2011

### District Staff:

District Manager:  
**Dan Dunmire**

Administrative Assistant:  
**June Morningstar**

Agricultural Conservation  
Technician: **Erica Smith**

Nutrient Management:  
**Mike Stuck**

Resource Conservation:  
**Floyd Ciccolini**

Watershed Specialist:  
**Andrew McDonald** (through 8/12)  
**Justin Kozak** (After 10/31)

Part-time Secretary:  
**Cathy Yohn**

The District is managed by a board of directors who know the county, its people, and the local conservation issues.

The Mifflin County Conservation District was organized in 1956 as a legal subdivision of state and local government, under the authority of Act 217, to assist the county's landowners with natural resource related concerns, and provide the technical and financial assistance to implement conservation practices on their land. There are 66 conservation districts in Pennsylvania, representing every county except Philadelphia, and nearly 3000 nationwide, dedicated to conserving our soil and water resources.

20 Windmill Hill #4  
Burnham, PA 17009  
(717) 248-4695  
[www.mifflinconservation.com](http://www.mifflinconservation.com)

### Board of Directors:

Cathy Haughwout, Chair  
Donald Baker  
Glenn Casner  
Roy Stine  
David Glick  
James Hostetter

### Associate Directors

Murry Laite,  
Jean Savitts  
Raymond Snyder

### Commissioner Director

Otis Riden

### *Conservation District Mission Statement:*

*The mission of the Mifflin County Conservation District is to conserve the county's natural resources through coordinated and professional guidance, technical assistance, and education to the landowners, public agencies, and residents of Mifflin County.*



Left to Right: Erica Smith, June Morningstar, Andy McDonald, Cathy Yohn, Mike Stuck, Dan Dunmire, Floyd Ciccolini

*From its origin as primarily an agricultural organization, the Mifflin County Conservation District has grown and diversified to become the primary contact for local natural resource concerns. Now in its 56th year of existence, the District provides assistance to citizens, landowners, organizations, agencies and local governments in critical land use decisions, water quality issues, nonpoint source pollution abatement, and other resource related areas.*

## **Dirt & Gravel Roads Program**

The Dirt and Gravel Road Program was created in 1997. The purpose of the program is to provide training and funding to local public road owning entities to mitigate stream pollution from dirt roads.

To date, the District has received a total of over \$360,000 for funding, administering, and educational events related to dirt and gravel road improvement projects in Mifflin County. The District has completed 18 projects involving 5 different townships, with project costs totaling more than \$250,000, with an additional \$66,000 committed to pending projects. Through the District, more than 5.5 miles of dirt road have been improved with and demonstrating environmentally sensitive road maintenance practices (ESMPs)

The Conservation District conducted several projects this past year involving the installation of mine belt diversion features on low traffic farm field lanes and private dirt roads. Mine belt diversions function effectively as do traditional waterbars in diverting overland flow from the roadway without creating the “speed bump” effect associated with waterbars. The District would like to thank North Star Generation, Cambria CoGen Company for their donation of used mine belting for our demonstration projects.

## **Erosion & Sediment Pollution Control Program**

The District, under delegated authority from the Department of Environmental Protection (DEP) and the State Conservation Commission, administers the Erosion and Sediment Pollution Control Program at a Level II authority under the Chapter 102 regulations and the Pennsylvania Clean Streams Law. This involves technical review of erosion control plans for earthmoving activities, project inspections, compliance activities, complaint response and public education. The purpose of this program is to protect our land and waters from accelerated erosion and the resulting sedimentation during any earth disturbance. The scope of projects reviewed by the District can range from single building construction disturbing a minimal area to massive highway projects involving hundreds of acres of disturbance.

Construction sites involving more than 1 acre of earth disturbance must apply for and receive a National Pollution Discharge Elimination System (NPDES) permit prior to commencing any earthmoving activities for the discharge of stormwater from those sites. Anyone that expects to begin a construction project that may involve more than 1 acre of earth disturbance over the life of the project is urged to contact the Conservation District to determine whether or not NPDES permit coverage is required.

The Conservation District is delegated to administer the NPDES program for construction sites in Mifflin County. This includes

processing and technical review of applications and accompanying E&S plans, and regular inspections of permitted sites to ensure compliance with permit conditions. Individual NPDES permits are issued for those sites located in Special Protection watersheds, and General Permit coverage is given to all other sites. In 2011, the District processed 2 Individual and 5 General NPDES permits in Mifflin County.

In 2011, the District performed 19 initial and 44 follow-up E&S plan reviews encompassing 505 project acres and 90 disturbed acres. Our staff performed 57 site inspections, responded to 376 requests for technical assistance and investigated 9 E&S related complaints.

## **Waterways Management Program**

Another DEP delegated program that the District has administered in the past is the Chapter 105 Dam Safety and Waterways Management regulations. However, the District terminated the delegation agreement in 2001 due to lack of supportive funding from DEP. Landowners wishing to do certain activities in and along jurisdictional waters of the

Commonwealth, including streams and wetlands, should contact the DEP Southcentral Regional office. This includes for the registration and processing of general permits for those activities with minimal environmental impact. However permit applications are still available at the District office.

Even with no funding to administer the Chapter 105 program, in 2011 the District still responded to 71 requests for technical assistance and responded to several complaints, which were then referred to DEP's Chapter 105 program field staff.

## Watershed Assessment and Restoration

In 2005 the District completed a Section 319 (of the Clean Water Act) Watershed Implementation Plan for the Upper Kishacoquillas Creek Watershed, including the main stem of Kish Creek from Belleville upstream to Allensville, Little Kish Creek from the confluence with Kish Creek in Belleville to its source near White Hall, and all of the tributaries flowing into these two streams. The Implementation Plan was written because this section of the Kish Creek Watershed had been listed on the EPA 303(d) List of Impaired Waters. In 2008, a second Watershed Implementation Plan was completed for the Hungry Run watershed, which has also been listed on the 303(d) List of Impaired Waters. Hungry Run, a tributary of Kishacoquillas Creek, flows through the town of Vira and through Burnham where it meets the Kish. Although a small watershed of only 8 square miles, Hungry Run is impacted by both agriculture and urban disturbances. Sediment and nutrients are the cause of impairment, and the implementation plan addresses both agricultural and urban sources of sediment and nutrients.

Grant money is available to projects in impaired watersheds that

have EPA approved Implementation Plans. In 2007 the District was awarded \$322,814 in Federal 319 funds to restore water quality in the Upper Kish Watershed. This grant money was used to assist farmers implementing BMP's on their farms to reduce erosion and stormwater runoff and subsequently, sedimentation and excess nutrients into the stream, and the grant was closed out in 2011. In 2009 the District was awarded another \$940,253 in 319 and Growing Greener Grants to address nonpoint source pollution problems in the county. These included \$414,229 more for Ag BMPs in the Upper Kish Watershed, \$220,084 for Ag BMPs in the Hungry Run Watershed, \$226,763 for implementation of rotational grazing systems countywide, and \$79,177 to address ag-related nonpoint source pollution in the Tea Creek Watershed.

### **In 2011 the District was awarded another \$454,963 in 319 funding for Ag BMPs in the Hungry Run Watershed.**

BMPs funded and installed by these grants in 2011 included the following:

- Upper Kish: 1 mortality composting structure (poultry); 400' of stabilized cattle walkway; 2 roofwater management systems; 3 barnyard runoff control systems including 1 roofed barnyard, 1 spray irrigation system, & over 3,000 square feet of concrete & curbing; total cost \$264,289. Designs are being completed for BMPs on 4 additional farms in the Upper Kish.
- Hungry Run: 1 roof water management system, pasture & barnyard fencing, 750' of subsurface drainage, 215' of underground outlet, 1 acre of grassed waterway, 40' of rock-lined waterway, 1 water control structure, 1 cattle walkway, and 1 stabilized stream crossing; total cost \$60,275. Designs are being completed for 3 additional farms in the Hungry Run Watershed.

- Grazing: 7 farms implementing grazing systems & pasture BMPs; total cost share \$55,302.
- Tea Creek: 8,000 linear feet of stream fencing, 4 stabilized stream crossings, 1 cattle walkway, 1 pasture watering system, & 3,430' of pasture fencing; total cost \$39,353.



In addition to agricultural resource concerns, many sections of streams in Mifflin County have unstable and eroding stream banks, excessive sediment on the stream bottom, lack of fish habitat, and other alterations that were directly or indirectly caused by human activity in the watershed, such as stormwater run-off from development. These problems prevent the stream from functioning as it should, choke out aquatic insects, and disrupt fish habitat and their food chain.

The District has been working towards restoring sections of streams so that stream banks and water flow are stable, habitat is improved, and the health of the stream system is functioning as it should. In 2010, 319 funding was pursued for a stream restoration design and stormwater mitigation project along Hungry Run by the Burnham Lions Club and the Burnham Borough First Avenue Playground. The funding for design and permitting of this project, totaling \$39,191, was awarded in 2011.



## Chesapeake Bay Program

2011 marked the 22<sup>nd</sup> year for the Conservation District's administration of the Chesapeake Bay Program. The Bay Program is a unique regional partnership leading and directing restoration of the Chesapeake Bay and its tributaries. The program works with landowners who would like to reduce sediment and nutrient runoff from their farms. In 2011, \$10,785 of Bay Program funds were utilized for the development of nine farm nutrient management plans.

Since Mifflin County's involvement in the Chesapeake Bay Program **local farmers have received \$1,12,405 in cost share funds.**

## Nutrient Management Program

2011 completed the 14<sup>th</sup> year of the conservation district's delegated agreement with the State Conservation Commission to administer Pennsylvania's Nutrient Management Law (Act 38). The district's primary responsibility is the technical review and approval of nutrient management plans that are prepared and submitted by commercial or individual planners for farms that are considered Concentrated Animal Operations

(CAOs). A concentrated animal operation is a farm with more than two animal equivalent units per acre of land suitable for manure application, with an animal equivalent unit defined as 1,000 pounds of animal weight. In addition, farms that are not legally required to comply with Act 38 may do so voluntarily. Nutrient management planning is done with nitrogen and phosphorus as the nutrients of concern. Other features of the program include odor emission regulations for certain size livestock operations and a certification program for commercial manure haulers.

In 2011, the Conservation District reviewed and approved 17 nutrient management plans. Additionally, the District completed 15 annual status reviews of previously approved nutrient management plans.

## Agland Preservation

The Conservation District serves as administrator of the Mifflin County Agricultural Conservation Easement Program. This program preserves the future of productive farmland in the county by purchasing the development rights to participating farms. Farm owners are paid the easement value, or difference between the agland and the development or market values, to keep their farms in productive agriculture. Funding for easement purchases is provided by the PA Department of Agriculture, the Mifflin County Commissioners, and in some cases, USDA. In order to be eligible, a farm must meet the following minimum criteria: (1) be located within a duly recorded Agricultural Security Area that has at least 500 acres enrolled, (2) contain at least 50% of soils which are available for agricultural production and are Capability Classes I through IV, (3) contain the greater of 50% or 10 acres of harvested cropland, pasture, or grazing lands, (4) be contiguous acreage of at least 50 acres,

unless the tract is at least 10 acres and is utilized for a crop unique to the area or is contiguous to a property which has a perpetual conservation easement in place. Farms that meet this criteria are then competitively ranked according to the Land Evaluation and Site Assessment (LESA) process. The LESA assigns points to each farm according to soils, farm productivity, development pressure, and clustering or proximity to other farms in the program. Depending on funding available, the highest ranked farm(s) receives an offer for easement purchase based on certified appraisals of the farm's agricultural and market value. Once the easement is purchased, that farm must remain in agricultural production in perpetuity.

Statewide there have been 4,243 farms preserved in 58 counties encompassing 459,007 acres at an average cost of \$2,499/acre. Locally, there are now 18 preserved farms in the county totaling 2,020 acres. The easements on these farms cost a total of \$2,168,245 or an average of \$1,073 per acre.

## Environmental Education

The District continued its sponsorship of the Envirothon, an environmental education competition for senior high school students that tests their knowledge of natural resource issues. The 2011 Mifflin-Juniata Joint Envirothon was held April 21<sup>st</sup> at Reeds Gap State Park, and involved about 70 students from both counties, including teams from Indian Valley Sr. High, Juniata Sr. High, East Juniata Sr. High and Belleville Mennonite School. Participating agencies included USDA-NRCS, DEP, DCNR-Bureau of Forestry, PA

Game Commission, Community Partnerships RC&D and the PA Fish & Boat Commission. Students were tested in soils and land use, aquatic biology, forestry, wildlife, and this year's current issue, "Estuaries". The winning Mifflin County team, "BMS" from Belleville Mennonite School, was coached by Marvin Peachey and was made up of BMS students Kaitlyn Yoder, Savannah Attlesperger, Nathan Metzler, Sammy Kauffman, Seth Brubaker, David Vork. Second place was captured by the "Mighty Oaks" team from Indian Valley, and third place went to another Indian Valley team, "Terrible Pteronarcids". The first place team earned the right to compete but due to a conflict in their schedule could not attend the State's so the second place team to the State Envirothon at Susquehanna University on May 24<sup>th</sup>-25<sup>th</sup>. The District also has reached out to the area elementary schools by lending out a Wetlands Enviroscope model. Teachers may sign out the model for a week at a time to use in the classroom. The model shows students how wetlands help the environment by filtering water. The

District also has a Non-point source pollution Enviroscope that is also available to teachers in the County.

The District, in cooperation with Land-O-Lakes milk marketing cooperative and the Mifflin County School District, sponsored an Ag & Technology day on April 8<sup>th</sup> at Kish-View Farm and the David C. Yoder farm. Over 400 7<sup>th</sup> grade students from Mifflin County School District learned how the latest technology has been applied to modern agricultural production. A methane digester at Kish-View and robotic milkers at the Yoder farm were among the highlights, plus PSU Extension, NRCS, and several agribusinesses conducted other educational stations emphasizing advances in ag technology.

Education was not limited to youth. For the fifth year in a row, the District received a PACD non-point source mini grant to sponsor a Winter Ag meeting in January 2011. The event, held in Belleville, was well attended, and much of the agenda focused on the increasing emphasis on Ag compliance with existing environmental regulations. Along those same lines, District personnel began performing farm visits as part of a new requirement with the Chesapeake Bay Program. The purpose of these visits is

strictly education and outreach about environmental compliance.

The Conservation District played a supporting role in the Mifflin County Woodland Owners' Association, which was formed to provide education and a means of networking to owners of private forestland in Mifflin and surrounding counties. District staff, along with DCNR-Bureau of Forestry service forester Gerald Hoy, serve in an advisory role on the association's steering committee, which meets regularly to plan programs for the organization. Several public educational meetings and field days were held in 2011, covering topics as diverse as wildfire prevention, well water quality, and wild mushroom ID. Response to these programs has been outstanding, showing that Mifflin County's landowners are truly interested in good stewardship of their land.



2011 Mifflin County Envirothon Winning Team from BMS



Mifflin County Winter Ag. Conference, Belleville PA

## Other District Activities in 2011

The District continued its always popular Spring Tree Sale, which featured trees, shrubs and ornamentals. Proceeds of the sale go directly towards environmental education activities.

District personnel also participated in the following resource-related activities: the Pennsylvania Association of Conservation Districts (PACD), PACD Legislative Committee, PACD Conservation Committee, the Conservation District Managers Advisory Committee, the Chapter 102 Erosion & Sediment Control Advisory Committee, the Juniata Clean Water Partnership, Mifflin County Cleanways, the PA Envirothon Board of Directors, the Mifflin County Planning Commission, the Planning Commission Subdivision & Land Development Review Committee, County Solid Waste Plan Advisory Committee and the Mifflin County Solid Waste Authority. The District welcomes these opportunities to provide assistance and form partnerships with local agencies, organizations, and governments to further promote conservation, and ensure the protection of our natural resources for future generations.



**[www.mifflinconservation.com](http://www.mifflinconservation.com)**