



MIFFLIN COUNTY CONSERVATION DISTRICT

2018 Annual Report

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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.

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

Board of Directors:

Cathy Haughwout, Chair
David Glick, Vice Chair
Murray Laite, Treasurer
Keith Spicher
Roy Stine
Raymond Snyder

Associate Directors
James Hostetter

Commissioner Director
Steve Dunkle



MCCD staff (l to r): Cathy Yohn, Mike Stuck, June Morningstar, Dan Dunmire, Erica Smith, Floyd Ciccolini, Trevor Weaver.

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.

Dirt & Gravel Roads Program

The Dirt and Gravel Road (D&GR) Program was created in 1997. The purpose of the program is to provide training and funding to local road owning entities to mitigate stream pollution from dirt roads. To date, the District has received a total of over \$905,000 for funding, administering, and educational events related to dirt and gravel road improvement projects in Mifflin County. The District has completed 29 projects involving 6 different townships, with total project and program costs totaling more than \$759,000, with an additional \$85,000 committed to pending projects. Through the District's Dirt and Gravel Roads Program, more than 13 miles of Mifflin County's dirt roads have been improved to demonstrate the use of environmentally sensitive road maintenance practices.

In 2015 the traditional D&GR Program was expanded to include some low volume, paved and/ or tar-chip roads under the Low Volume Roads (LVR) portion of the program. The purpose and mission of the Dirt, Gravel, Low Volume Roads (DGLVR) Program remains the same: provide training and funding to local road owning entities to mitigate stream pollution from dirt and low volume roads. To date, the District has received to date approximately \$277,000 for low volume road improvements. The District has completed a total of 7 projects and has committed over \$71,000 toward future

projects. Projects have been or are being completed in 6 different municipalities.

Erosion and Sediment 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 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.

In 2018, the District performed 22 initial and 54 follow-up E&S plan reviews encompassing 595 project acres and 49 disturbed acres. Our staff performed 45 site inspections, responded to 286 requests for technical assistance, and investigated 2 E&S related complaints.

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 2018, the District processed 0 Individual and 4 General NPDES permits in Mifflin County.

Watershed Assessment and Restoration

Upper Kish & Hungry Run 319 Grants

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 to Allensville and all of the tributaries. The Implementation Plan was written in response to impairments 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 village of Vira and through Burnham where it meets the Kish. Although a smaller watershed, 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 Watershed Implementation Plans through the Section 319 Nonpoint Source Pollution Program. To date, the District has received more than \$2.1 million in 319 and Growing Greener funds for Ag BMPs and watershed restoration efforts in the Upper Kish and over \$1.4 million for the Hungry Run Watershed. The MCCD submitted an updated Watershed Implementation Plan to the US EPA for the Upper Kish Watershed in 2018. This update included new cost estimates, priority implementation areas, and included an expanded area of the impaired watershed (extended downstream to Applehouse Road).

During 2018, the District installed the following BMPs in cooperation with local landowners through the 319 Grant program:

- Upper Kish, One project was completed.
Project #1: Construction of the following BMPs: 1- 53ft. x 76ft. Roofed Heavy Use Area

Designs are being completed for 3 additional farms in the Upper Kish watershed.



- Hungry Run, One project completed.
Project#1: Construction of the following BMPs: Installed 19 Fish Habitat Enhancement Structures along 1,320' of stream channel and installed 1,900' of Livestock Exclusion Fencing.



NFWF Chesapeake Bay Stewardship Fund Grant

The MCCD applied for another NFWF CBSF grant to continue vital stream and riparian restoration along with funding technical assistance and outreach to facilitate projects. The MCCD was awarded a \$175,000 grant in October of 2017.

In 2018 the District completed several projects through this grant implementing various stream related improvements. In 2018, the District installed 2,900 feet of livestock exclusion fencing, planted trees on approximately 6 acres of streamside area, and installed 5 fish habitat enhancement structures along 600' of stream.

NFWF grant money is available to all landowners within Mifflin County who have a demonstrated need for stream and water quality improvements. Projects are selected based on existing water quality impairments, habitat conditions, and potential nutrient and sediment reductions.

DCNR Multifunctional Riparian Buffer Grant

In 2017 the MCCD received a \$50,000 grant to install multifunctional riparian buffers throughout Mifflin County as part of a renewed effort to increase riparian forest buffer adoption by the Pennsylvania DCNR. This buffer initiative focuses on riparian forest buffers that can produce alternative uses or income for landowners.

Examples of multifunctional buffers are those used for tree crops (fruits, nuts, syrup), firewood, woody florals, or recreation.

The MCCD installed one multifunctional buffer in 2018 that totaled 2.8 acres and planted over 300 trees. The District is currently planning to install 2 more multifunctional buffers in 2019.

Chesapeake Bay Special Projects Grant

In 2017 the MCCD received a \$25,000 grant to maintain and revive existing riparian forest buffers in Mifflin County. In 2018 this grant funded the purchase of equipment and an equipment trailer to perform supplemental management of riparian buffers (mowing, trimming, mortality planting, etc.). This grant also included funds for contractor services, stream fencing, and buffer planting.

In 2018 the District purchased an equipment trailer and several small hand tools along with power equipment to assist landowners in riparian buffer maintenance. Through this grant, the District also staffed 1 part time intern/employee to assist with buffer projects and maintenance/management activities. In 2018, the District was able to assist multiple landowners in maintaining over 25 acres of riparian forest buffer. This maintenance and management is vital to long term project success!



Surface Water Assessment Program (SWAP) Monitoring Grant

In light of the extensive work the District and its partners have done in the Upper Kish & Hungry Run watersheds, the possibility of removing these two waters from the

303(d) list of impaired waters is a distinct possibility in the future. The district has been sampling water quality in these two areas since 2014. In 2016, the District secured another three years of funding (\$72,692) for surface water quality assessment in both watersheds, extending the duration of this assessment through 2019. Surface water assessments are conducted each year during the month of May and collect a snapshot of water quality conditions through biological, physical, and chemical data. Samples were taken in May of 2018 and will be taken again in the May of 2019.



Chesapeake Bay Program

2018 marked the 29th 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.

District personnel performed 63 farm inspections as part of a new requirement with the "reboot" of the Chesapeake Bay Program. The purpose of these visits was to ensure that Mifflin County Ag producers have required Ag Erosion & Sediment Control and Manure Management plans and are in compliance with relevant environmental regulations. We also held 2 Manure Management

Plan workshops in March 2018 to help farmers complete their Manure Manuals to be in compliance with state regulations.

Nutrient Management Program

2018 completed the 21st 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 2018 the Conservation District reviewed and approved 14 nutrient management plans. Additionally, the District completed 28 annual status reviews of previously approved nutrient management plans.

Farmland 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 a percentage of the easement value, or difference between the agricultural and market values of the land, 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 5,462 farms preserved in 58 counties totaling 562,920 acres for a purchase price of over \$ 1.464 billion. In Mifflin County, there are now 24 farms preserved totaling 2,622 acres at a cost of \$2,974,291 or \$1,134 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 2018 Mifflin-Juniata Joint Envirothon was held April 25th at Lost Creek Community Park in Juniata County. The event went pretty smoothly although the weather was rainy, and we added a soil pit this year with the help of NRCS Soil Scientist Yuri Plowden and NRCS District Conservationists Melissa Erdman and Mary Smith. We also received a \$700 grant from the PA State Envirothon to use for new tables, chairs, pop-up shelter, t-shirts and awards of the top three teams.

The event had students from both counties, including teams from Juniata Sr. High, East Juniata Sr. High and Belleville Mennonite High School. Participating agencies included USDA-NRCS, DEP, DCNR-Bureau of Forestry, PA Game Commission, PA Fish & Boat Commission. Students were tested in soils and land use, aquatic biology, forestry, wildlife, and this year's current issue, "Pasture and Grassland Management".

The winning Mifflin County team, the "BMS" was coached by Bryce Clapp and was made up of Belleville Mennonite School students Emily Dunk, Jenna Dunk, Kiersten Dunk, Ben Pierce and Scott Hertzog. The first place team earned the right to compete at the State Envirothon at Susquehanna University on May 22nd and 23rd.

The District did a stream health education station at the Reeds Gap Fall Fest in October. MCCD staff also participated in the Lewistown RC&D Nature Camp, Mifflin County 6th Grade Career tours, the Mifflin County Farm Bureau 3rd Grade Ag Tour, and the 2nd annual Eco Day Celebration and Trout Release run by the Mifflin County High School - Ecology of Mifflin County class and their Trout in the Classroom program. Erica gave a presentation of the Bay watershed using the Enviroscope to the 6th grade at the Mifflin County Middle School. The Enviroscope model used for the presentation is available to teachers to check out of our environmental lending library at the District. If you would like more information about what we have available in our library, please contact our office.



Education was not limited to youth. The MCCD assisted with and/or held several educational and outreach meetings for the Ag community and the general public.

The Mifflin County Conservation District held two Manure Management Workshops in March of 2018, and a Rain Barrel Workshop at the Mifflin County Youth Fair. The District also held a public meeting at Kish Park in June to inform the public about the upcoming riparian restoration project at the park.

Woodland Owners' Association

The Conservation District played a supporting role in the Mifflin-Juniata-Perry County Woodland Owners' Association, which was formed to provide education and a means of networking to owners of private forestland in Mifflin, Juniata and Perry counties. District staff, along with DCNR Bureau of Forestry service foresters Gerald Hoy and Luke Book, serve in an advisory role on the association's steering committee, which meets regularly to plan educational programs. Several public programs and field days were held in 2018, covering the following topics: Forest Insects and Diseases Attacking our Woodlands, Your Woodland Legacy: Tools for Estate Planning, Good Warbler Habitat=Good Deer Habitat that included a woodlot tour, an Agroforestry Workshop co-sponsored by the Conservation District, and the Chesapeake Bay & Riparian Forest Buffer site visit. M-J-P Woodland Owners members also manned a booth at the 2018 Kid Connection in Lewistown on April

28th and distributed educational materials. Response to these programs has been outstanding, showing that forest landowners are truly interested in good stewardship of their land.

Other District Activities in 2018

The District continued its always popular Spring Tree Sale in 2018, 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 Chapter 102 Erosion & Sediment Control Advisory Committee, PA Cleanways of Mifflin County, the PA Envirothon Board of Directors, the PA Agroforestry Brain Trust, the Mifflin County Planning Commission, the Planning Commission Subdivision & Land Development Review Committee, and the Mifflin County Solid Waste Authority. The District welcomes these opportunities to form partnerships with local agencies, organizations, and governments to further promote conservation, and ensure the protection of our natural resources for future generations.



Mifflin County Envirothon winners (left to right) Kiersten Dunk, Jenna Dunk, Scott Hertzog, Ben Pierce and Emily Dunk.

