

Jefferson County Conservation District



2020 Annual Report



JEFFERSON COUNTY CONSERVATION DISTRICT

2020 Personnel

Board of Directors

Todd Beers, Chairman
Porter Duvall, Vice-Chairman
Allen Campbell, Sec/Treasurer
Herb Bullers, Commissioner Director
Tom McFarland, Director
Theresa Shick, Director
Terry Shields, Director

Associate Directors

Jerry Chamberlin
George Miller
Laura Lynn Yohe
Tom Kundrich
Deborah Wilson
Dennis Day

District Staff

Shaun Wessell, District Manager
Melissa Buck, Administrative Assistant
Megan Whitlatch, ACT/Nutrient Management
Carl Johnson, Resource Technician
Dana Grabowski, District Technician
Rebecca Gaston, Conservation Technician
Lexie Arkwright, Watershed Specialist



What is a Conservation District?

A Conservation District is a legal subdivision of State Government, responsible under law for conservation work within its boundaries, just as Townships and Counties are responsible for roads and other services and school districts are responsible for education. Conservation Districts were created in PA in 1945 in response to the dust bowl of the 1930s.

Conservation Districts were created to improve soil and water conservation. District program areas include erosion and sediment control on earthmoving activities, farm conservation planning, nutrient and manure management planning, environmental education, river cleanups, abandoned mine drainage abatement, and environmentally sensitive maintenance of dirt and gravel roads. The goal of Districts' activities is to make all citizens aware of the inter-relationship between human activities and the natural environment.

Districts are managed by citizens who know local problems. In Pennsylvania, a District's governing Board is comprised of six appointed Directors (3 Farmer Directors and 3 Public Directors) and one County Commissioner Director. Districts employ staff to assist Directors in carrying out their responsibilities and objectives.

The District is a nonprofit entity established by the Jefferson County Commissioners under Pennsylvania's Conservation District Law. Much of the District's effectiveness is due to its ability to coordinate local, state, and federal government resources to solve local environmental problems. District employees act as a liaison between all levels of government, environmental agencies, and the general public. The District does not have environmental regulatory authority for any of its conservation programs but strives to solve environmental problems through landowner cooperation and voluntary compliance.

How Do Districts Work?

It is the responsibility of the Conservation District Directors to plan and develop the District's programs. Directors work through District staff to develop programs that address the natural resource conservation needs of the county.

Conservation programs dealing with agriculture, past mining, stormwater, wetland protection, environmental education, and earthmoving are all high priority for the Jefferson Conservation District.

Funding for District operations is obtained from a multitude of sources, mostly State and Federal grants. Only about 15% of the District's operating budget came from the County Commissioners' general fund, which makes District programs a good investment.

State Delegated Programs

Dirt, Gravel and Low Volume Road Program

Pennsylvania's Dirt, Gravel and Low Volume Road (DGLVR) Maintenance Program provides funding to eliminate stream pollution caused by runoff and sediment from the State's comprehensive network of unpaved and low volume public roads. The Program was enacted into law in April 1997 as Section 9106 of the PA Vehicle Code, with annual funding for "environmentally sensitive road maintenance" for unpaved roads. The goal of the Program is to create a more environmentally and economically sustainable low volume road network through education, outreach, and project funding. Beginning in 2014-2015, a portion of the Program's funding was directed towards paved or sealed low volume roads with 500 vehicles per day or less. In 2020, the Jefferson County Conservation District was able to provide nearly \$580,000 in DGLVR funds to 10 different Municipalities. Carl Johnson, Resource Technician oversaw the completion of 11 Dirt, Gravel & Low Volume Road Projects.

Oliver Township – Hoffman Road



An existing, severely eroded 6-foot diameter cement box culvert was replaced with a 12-foot diameter plated arch pipe. This project stabilized a six-foot-deep scour hole, restored the stream crossing to bankfull width while maintaining aquatic organism passage.

The Conservation District continued a working agreement with the Forest County Conservation District & Planning Department (FCCD&PD) to provide technical support to the FCCD&PD throughout the construction phase of projects. Carl oversaw the completion of four DGLVR projects in 4 different Forest County Municipalities in 2020.

Tionesta Township, Forest County – Stitzinger Road



A severely eroded ditch and washed-out roadway was repaired by building up the roadway 3 to 4 feet, installing 2 tear drop filtration systems, a new stone lined channel.

Erosion & Sedimentation Control Program

Pa. Code Title 25 Chapter 102 was created to require persons proposing or conducting earth disturbance activities to develop, implement, and maintain BMPs to minimize the potential for accelerated erosion and sedimentation during construction and plan for post construction stormwater management. Through a delegation agreement with the Department of Environmental Protection, the Jefferson County Conservation District reviews Erosion and Sediment Control Plans (E&S Plans). Each E&S plan is reviewed for technical adequacy under Chapter 102 requirements.

A federal regulation that works in conjunction with the state E&S program is the National Pollution Discharge Elimination System (NPDES) Program. This regulation requires earthmoving activities disturbing one acre or more to obtain an NPDES permit which is reviewed by the District.

In 2020, 39 Erosion and Sediment Control Plans were reviewed and approved and 11 NPDES Permits were Authorized by Dana Grabowski, District Technician. Dana, along with Conservation Technician, Rebecca Gaston conducted 101 construction site inspections while providing a total of 1,007 technical assistance contacts.



Dickinson Center, Brookville



Penn Highlands, Punxsutawney



Brockway Modernization, Brockway

Nutrient Management Program

The Nutrient Management Act (Act 38) requires Concentrated Animal Operations (CAOs) to have and implement a Nutrient Management Plan (a more in-depth version of an MMP). A CAO is an agricultural operation with 8 or more animal equivalent units (AEUs) where the animal density exceeds two AEUs per acre suitable for the application of manure on an annualized basis. (An AEU is equivalent to 1,000 lbs. of animal weight on an annualized basis). Operations that are not CAOs may voluntarily have a NMP developed. The goal of the program is to maximize use of nutrients on the farm, and to protect soil and water quality. The State Conservation Commission has oversight of the Nutrient Management Program and the District is delegated to administer Act 38 in Jefferson County. The District is responsible for reviewing and approving new and amended NMPs, conducting status reviews, investigating complaints, maintaining certification, and providing education and outreach within the community. In 2020, Megan Whitlatch, ACT/Nutrient Management Technician conducted 5 CAO annual status reviews in the county and reviewed nutrient balance sheets for an importer of chicken manure.

Technical Assistance

PA REAP: The PA Resource Enhancement And Protection (REAP) Program is a state tax credit program administered by the PA State Conservation Commission in which farmers can apply for conservation best management practices (BMPs) they implement on their farm. The District assists farmers through the application process. In the 2019-2020 REAP round, the District helped Jefferson County farmers receive \$172,717.00 in state tax credits for BMPs on their farms.

NRCS Partnership: through an NACD Grant, Megan works with the Natural Resources Conservation Service (NRCS) to develop conservation plans and provide technical assistance for farmers enrolled in NRCS funded programs. 36 conservation plans were developed through the District in 2020.

State required farm plans, including Manure Management Plans (MMPs) & Agricultural Erosion and Sedimentation Control Plans (Ag E&S Plans) are developed upon request/as time permits (note: Conservation Plans may be used to meet Chapter 102 requirements in place of an Ag E&S Plan). In 2020, the District developed 6 MMPs.

Outreach & Education

Ag Workshops/Events: The District held a Farmer Winter Workshop on February 25th in Punxsutawney. Topics of discussion included manure management plan development, CREP financial assistance, invasive weed management, and ticks & Lyme disease. We are a partner along with other organizations and local farmers in arranging the Western PA Grazing Conference each year to promote sustainable grazing practices. The conference was held March 11th & 12th in Clarion and featured Glenn Elzinga and Allen William as keynote speakers.



2020 Western PA Grazing Conference



2020 Farmer Winter Workshop

Ag Newsletters

Agriculture Newsletters are developed on a quarterly basis and provide information on a variety of ag conservation topics, financial assistance opportunities, and upcoming events farmers may be interested in.

Erosion & Sedimentation/Dirt & Gravel, Low Volume Road Program Outreach

The District routinely performs technical assistance throughout the year. In 2020, 1,007 technical assistance contacts were made by either phone conversation, email, or meetings held in-office or on-site. The District continues to assist residents of Jefferson County for compliance with Chapter 102 regulations.

The District held 3 different types of workshops to address non-point source pollution. Dana coordinated a general public workshop, a Municipal workshop, and a timber harvester workshop that were presented in early 2020 (with cooperation from the Armstrong and Clarion County Conservation Districts). Topics included erosion and sediment control, stormwater management, fish and boat regulations, spring and well protection, wetland identification, and permitting. Approximately 70 people attended these workshops.



Timber Harvester Workshop 2020



Municipal Workshop 2020

Presentations & Displays

We strive to reach more students and members of the public with our programs by participating in community events, providing in-classroom demonstrations, submitting press releases to the local newspapers, posting to social media, and conducting presentations as requested.

Envirothons

Due to Covid-19, all of our 2020 Envirothon competitions were cancelled.

Outreach

Covid-19 restrictions created a new era of outreach for the District. Our in-person outreach events and workshops were limited for 2020, but environmental education is an important part of the District. There were 184 Facebook posts with an average reach of 333 people. There were a total of 32 Facebook videos regarding various environmental education topics posted, with an average reach of 250 people.



Other Workshops & Events

The Conservation District's environmental education activities target farmers, municipal officials, homeowners, teachers and students along with many other audiences. Activities range from hosting school programs, professional workshops, technical training sessions and going out in the field to provide one-on-one assistance.

Dana held a GIS for Conservation Districts webinar was held to assist other County's Conservation District staff on the use of GIS, online maps and other mapping tools during permit reviews, complaints, and inspections. Approximately 14 people attended the webinar, and it has been shared to the DEP Clean Water Academy for all Conservation Districts to view.



The District held several environmental outreach programs at the Rebecca M. Arthurs library in 2020 reaching approximately 18 children. The first program covered macroinvertebrates, ticks, and a nature story book. The second program went over animal furs, water conservation, squirrels and trees. Lexie Arkwright, Watershed Specialist, coordinated these events.



In 2020, Lexie conducted an event at Brockway High School, reaching approximately 45 students. During the visit several classes were led on a Tree Identification Hike while also discussing tick safety. A conversation about careers in the conservation field was also held.

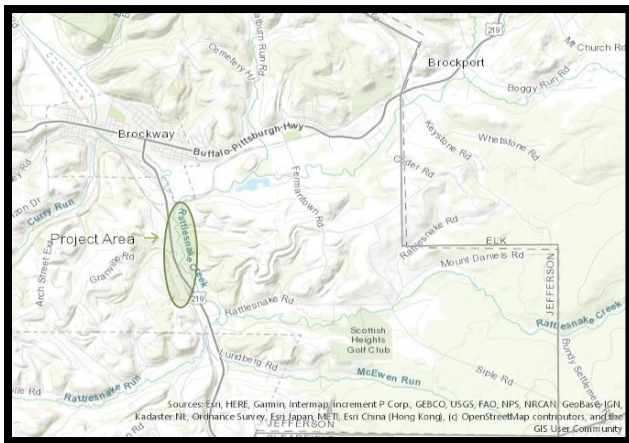
Special Projects

In 2020, the District worked on projects funded by the PA Department of Community and Economic Development, the PA Department of Environmental Protection, Stream Restoration Inc. and the Redbank Creek Watershed Trust.

PA Department of Community and Economic Development- CFA Grant

Rattlesnake Creek Flood Mitigation

In 2020, the District contracted an Engineer to begin design work on a DCED Flood Mitigation Program funded project. This project will help reduce flooding in a one-mile section of Rattlesnake Creek by removing debris and sediment, and installing and/or replacing drainage pipes in Snyder Township, Jefferson County. Work completed will provide protection to 4 businesses and approximately 41 homes located along the project area that have had severe flooding events.



Location map



Severe Localized flooding

Stream Restoration Inc.

AMD Water Sampling:

In 2020, the Jefferson County Conservation District partnered with the Mill Creek Coalition to collect water samples from over 30 different Abandoned Mine Drainage (AMD) passive treatment systems within Jefferson County. The data collection was for Stream Restoration Inc. who led this statewide initiative to complete a 2020 Passive Treatment Snapshot, compiling all of the data on www.datashed.org



Water Sample Collection



Water Sample Collection

Growing Greener Grant:

Pine Run Watershed Agricultural Best Management Practices Implementation

The Pine Run Watershed is designated as an EPA Section 319 Priority Watershed. The Pine Run Watershed Implementation Plan (PRWIP) identifies agriculture, urban pollution and acid mine drainage as causes of nonpoint source pollution within the watershed. The PRWIP identifies livestock access to streams as the “primary contributor of NPS pollution” on several sites along the main stem of Pine Run.



Before- livestock had full access to streams



After- streambank fencing was installed, creating riparian buffers

In 2020, the District completed the installation of agricultural best managements practices on 3 farms within the Pine Run Watershed through a \$486,580.00 DEP Growing Greener Grant. Practices installed on the farms included 2 roofed heavy use area protections and manure storages, a stabilized stream crossing, livestock watering systems, and fencing for rotational grazing and to exclude animal access to waterways.



Before- livestock stream crossing



After- stabilized livestock stream crossing

Redbank Creek Watershed Trust:

Conifer Treatment Systems Maintenance

Funding from the Redbank Creek Watershed Trust was used for maintenance of the Conifer East and Conifer West AMD treatment systems in Beaver Township.

Conifer West is a passive limestone bed treatment system at an acid mine discharge site located in Conifer, Jefferson County. The treatment system was designed to precipitate (fall out in solid form) and contain iron, aluminum, and manganese solids in a manner that would allow for periodic monitoring and maintenance of the treatment system. When standing water is observed on 75% of the treatment system, it indicates that precipitate has formed over a large portion of the treatment bed and maintenance is needed. This maintenance consists of an excavator scooping and rinsing the stone allowing the precipitated minerals to slough from the stone. Once excess precipitate has been removed from the stone, subsurface treatment is restored. Subsurface treatment provides the maximum surface area of the limestone to interact with the mine discharge, which allows the system to function at its highest level.

Conifer West



Standing water prior to maintenance



Subsurface treatment after maintenance

Conifer East is a passive treatment system, consisting of a series of ponds, wetlands and a limestone channel at an acid mine discharge site located in Conifer, Jefferson County. The treatment system was designed to precipitate and contain iron, aluminum, and manganese solids in a manner that would allow for periodic monitoring and maintenance of the treatment system. Routine inspections and water sampling help determine if the system is functioning properly and when maintenance is necessary. Maintenance consists of reshaping the channel and replacing the limestone. The placement of fresh limestone re-establishes subsurface treatment. Subsurface treatment provides the maximum surface area of the limestone to interact with the mine discharge, which allows the system to function at its highest level.

Conifer East



Standing water prior to maintenance



Subsurface treatment after maintenance

JEFFERSON COUNTY CONSERVATION DISTRICT



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*"A sincere thank you from all of us here at the Conservation District
for your continued support of our programs."*